Crane Lift Plan

Instructions

1. The Crane Use Planning Process has two parts:
   - ✓ **Crane Lift Plan**
   - ✓ **Crane Daily Safety Review**
2. A Crane Lift Plan is required for every crane lift on a Dimeo project – see OSHA Subpart CC for definition of crane.
3. Critical crane lifts, if authorized, may have to be reviewed by a professional engineer (the contractor shall budget for the PE review) – see page 2, section 2 of the Crane Lift Plan for a list of critical lifts.
4. Crane Lift Plans must be submitted at least 48 hours (2 business days) prior to crane mobilization – 5 days for critical and helicopter lifts.
5. Crane Lift Plans must be based on worst case % of capacity (i.e. gross deductions / chart capacity) for each specific crane configuration and location and activity (for example: unload a delivery truck is a separate activity from erecting steel).
6. The Crane Lift Plan may be valid for more than one day, as long as the configuration, location, and parameters used for developing "worst case" condition have not changed. Use multiple lift plans for multiple locations.
7. All rigging devices *MUST* bear the name of the manufacturer and identify WLL and be certified as to their capacity. Custom-fabricated devices (lifting beams, spreader bars, etc) may be acceptable with proper PE stamp or proof testing as required by applicable standards. Capacities shall be marked and legible on all such devices.
8. Work that is not anticipated in the Crane Lift Plan, but may arise due to site conditions (moving equipment, loading materials onto floors, etc) must be reviewed with Dimeo in advance. Changes affecting crane configuration and / or location may require the Crane Lift Plan to be amended.
9. The subcontractor is responsible to visit the site prior to the lift date to review crane setup location and documentary information pertaining to the site, which is maintained by Dimeo. This information is also provided as part of the construction documents. The subcontractor is responsible (determining adequacy, supplying and installing) for all supporting material (as defined within 29 CFR 1926.1402) necessary for the crane lift.
10. The Subcontractor is responsible to obtain all information that is necessary to develop a power line safety plan.
11. The Subcontractor is responsible to train all personnel involved in the use of the crane, for example: Rigging, Signaling, Crane Operation and Assembly / Disassembly.
12. **The Subcontractor must provide the following information along with the Crane Lift Plan:**
    - ☐ Competent person designation forms for Rigger, Signal Person
    - ☐ Rigger and Signal Person training certification, OSHA 10 cards.
    - ☐ Jurisdictional Registration, for example: FAA permit,
    - ☐ JHA for truck load /unload, boom conflicts, public protection, Etc.
    - ☐ JHA for power line encroachment
    - ☐ Logistics plan
    - ☐ Weight of material – bill of lading, calculation, manufacturers product data sheet, etc.
    - ☐ Rigging plan
13. **The Crane Company must provide the following information as a supplement to the Crane Lift Plan:**
    - ☐ Competent / qualified person designation forms for operator and A/D supervisor
    - ☐ Worker credentials – license, medical certification, OSHA 10 cards
    - ☐ Load chart (complete with notes)
    - ☐ Range chart
    - ☐ Dimension illustration and specifications for crane
    - ☐ Lightning and wind restrictions (from operators manual)
    - ☐ Crane dimensions and area (quadrant) of operation diagram
    - ☐ Provide copy of annual 3rd party inspection certification and report – see Crane Lift Plan for requirements (Note: The inspector shall be certified with the CCAA – see www.CCAAweb.net local resources)
    - ☐ Scaled site plan and elevation drawings
    - ☐ JHA for Assembly/Disassembly of crane and severe weather
    - ☐ Jurisdictional Registration, for example: State of CT Fire Marshal Annual Registration
14. The crane activity shall comply with the Site Specific Safety & Loss Control Program (SSS&LCP).

No warranty or certification of the suitability of this plan is provided by Dimeo. It is the responsibility of the Subcontractor and Crane Contractor to ensure that they and their employees are qualified, competent, properly equipped and properly trained to perform the activities outlined in this plan. Further, to ensure that the equipment (i.e. crane and rigging) is inspected and utilized in accordance with this plan and in a manner that complies with OSHA and the manufacturer operator's manual, for example.

Crane Lift Plan

1. Lift Plan Responsible Persons

Project Name:	Date of Lift:	Lift Location:	
Subcontractor's Name:			
Contact Name:	Contact Number:		
Crane Company's Name:			
Contact Name:	Contact Number:	Operator ID:	A/D Supervisor ID:

2. Crane Information

Make:	Model:	S/N:	Capacity (tons):

Date Manufactured:	Does lift involve (if any box is checked, lift is critical)?	☐ ≥75% chart capacity ☐ Dual crane ☐ Personnel basket	☐ Two hooks ☐ Traveling with Load ☐ Other (refer scope)	☐ Over public space ☐ Tripping load

Carrier Information	Boom Information	Jib Information	
☐ Truck	☐ Telescoping ☐ Lattice	Jib deployed? ☐ No ☐ Yes – is it ☐ Fixed or ☐ Luffing	
☐ Rough Terrain	Block capacity (tons)	Block capacity (tons)	Offset: °
☐ All Terrain	# of Parts Line:	# of Parts Line:	Boom and Jib - Combined Length (ft):
☐ Crawler Block	Line Pull (lbs)	Line Pull (lbs):	
☐ Other	Working Boom Length (ft):	Jib length (ft):	

Power Line Encroachment Review		FAA Permit Review
Max working radius (ft): .	plus ½ length of load (ft):	Max working boom tip elevation (as assembled) in ft:
Will max working radius (plus ½ length of load) be within 20' of an overhead power line? ☐ No ☐ Yes		Will max vertical boom elevation exceed 200' above existing site elevation? ☐ No ☐ Yes
If yes, provide power line voltage:		If yes, provide FAA permit no.:
If yes, provide power line safety JHA - see OSHA subpart CC		

Outrigger Configuration / Distributed Load	
☐ Fully Extended ☐ Fully Retracted	Crane cribbing dimensions?
☐ Intermediate ☐ Rubber (PSI)?	Distributed Ground Bearing Pressure (PSF)?

Crane Condition				
Was crane idle >3 months since annual inspection?		Is crane a lattice boom?		Note regarding 3rd party inspection: If crane has been idle for longer than 3 months since last 3rd party annual inspection (inspection), or if crane being A/D is a lattice boom a new inspection certification and report must be provided post A/D). Exception: hydraulic crane with stowed jib that was included in the current annual 3rd party inspection. Inspector must be certified with CCAA (www.CCAAweb.net).
☐ No	☐ Yes	☐ No	☐ Yes	

3. Itemization of Crane Chart and Load Deductions

Weight of Heaviest Load (lbs):		Comment:
Rigging (lbs):		Comment:
Jib (lbs):		Comment:
Jib Hook (lbs):		Comment:
Hook Block (lbs):		Comment:
Load Line (lbs):		Comment:
Other (lbs):		Comment:
Gross Deductions (lbs):		Comment:

4. Lift Summary

Max Working Radius	Boom Angle	Gross Deductions	Chart Capacity	% of Capacity (Gross Deductions / Chart Capacity)

Crane Lift Plan

5. Load Characteristics	
Will this crane lift plan cover multiple picks?	☐ No ☐ Yes - explain:
Description of load(s) creating highest % of capacity (i.e. worst case load):	
Dimensions of load(s) creating highest % of capacity (height x width x length): ☐ Other dimensions, as follows:	
Weight of load creating highest % of capacity (lbs)? ☐ Calculation provided with rigging diagram ☐ Manufacturer product data sheet provided	
How will the Center of Gravity (COG) of the load be determined? ☐ Manufacturer data sheet – see attached ☐ Calculation – see attached ☐ In Field – explain below:	
Will any load be upended? ☐ No ☐ Yes (If yes, provide stability evaluation from manufacturer or PE)	

6. Rigging Information:		
List rigging components - be specific: manufacturer, number of pieces, description, size, length, capacity and component weight (NOTE: Job built equipment must be engineered and proof tested per OSHA 29 CFR 1926.251(a)(4)).		
Identify the minimum capacity component:	Capacity (lbs)?	
Rigging diagram		☐ see attached

7. Crane Location/Clearances	
a. Provide a to-scale plot plan showing crane location, adjacent buildings, pipe racks, and other significant obstructions within load swing radius. Indicate direction and span of swing	☐ see attached
b. Provide a to-scale elevation plan depicting crane, adjacent structures, and load	☐ see attached
c. What is the horizontal distance from the crane center pin to the nearest structure?	ft.
d. What is the minimum clearance from boom to highest point of structure during a pick?	ft.
e. What is the minimum clearance from load to highest point of structure during a pick?	ft.
f. What is the minimum distance from boom to load during a pick?	ft.
g. Has site been reviewed (actual and documentary information) as part of the development of this crane lift? ☐ Yes (and, no further information required) ☐ Yes (and, the following add'l information requested):	
h. Will the crane setup (or load) area be within zone of influence of foundation or underground facility? ☐ No ☐ Yes - explain what additional measures will be taken to establish proper support for crane:	
j. Describe signaling method: ☐ Hand ☐ Voice ☐ Voice with hands free radio for operator ☐ Other – explain:	

- ❖ Non-compliance with any part of this Crane Lift Plan will be grounds for immediate cessation of work and possible permanent removal from the site.
- ❖

Signatures	
Crane Company Responsible Person Signature:	Subcontractor Responsible Person Signature:

Daily Crane Safety Review

A suitable Daily Inspection Form may be substituted by the Crane Operator.

Date of Safety Review:	

Crane Information					
Make		Model		S/N	

The Following Items are in the Crane Cab:				
☐ Operators Manual including load chart and notes	☐ FAA permit and / or CT registration, if applicable	☐ Weather report	☐ 3rd party annual inspection report	☐ Completed daily inspection sheet, last three monthly inspection reports
☐ Copy of Crane Lift Plan	☐ Fire Extinguisher	☐ Equipment modification inspection completed, if applicable – see 29 CCR 1926.1412 (a) for requirements	☐ Post assembly inspection completed – see 29 CFR 1926.1412 (c) for requirements	☐ Copies of last three monthly inspection reports – see 29 CFR 1926.1412 (e) for requirements

Check the Following to ensure adequacy of condition and function:				
☐ Control mechanisms	☐ Control and drive mechanisms	☐ Air, hydraulic, and other pressurized lines.	☐ Hydraulic system – fluid levels	☐ Hooks and latches
☐ No broken or fogged glass	☐ Tires – condition and inflation	☐ Wedge Socket/Becket Properly Installed	☐ Ground conditions – under outriggers / supporting foundation, ground water accumulation	
☐ Wire rope reeving	☐ Wire rope – see 29 CFR 1926.1413 for requirements	☐ Electrical system	☐ Degree of level position is within tolerances specified by chart notes – pre and post shift and following each move	
☐ Hydraulic outrigger and stabilizer jacks – integral holding system	☐ Boom Angle Indicator	☐ Boom stops (lattice boom crane)	☐ Jib stops – if jib is deployed	☐ Horn
☐ Foot pedal locks, if applicable	☐ Crane level indicator	☐ Hand signal chart posted	☐ FAA markings, if required	☐ Warning decals
☐ Swing radius barricade	☐ Boom hoist limiting device	☐ LMI	☐ Potential conflicts with other booms have been mitigated through JHA	
☐ Backup / travel alarm working	☐ Anti-two Block Operational	☐ Brake test – load >90% of line pull	☐	☐

Confirm the following additional items:				
☐ Crane Configuration is per Crane Lift Plan	☐ Crane operating parameters (radius, load, location, etc.) is per Crane Lift Plan	☐ Voice communication – hands free required for radio	☐ Visual communication – line of site	☐ Taglines in Use
☐ Overhead load hazard exposure to other workers (except essential to load handling) has been mitigated through JHA				

Notes:

Name of person conducting safety review:	Signature: