**Critical Lift Plan**

Person requesting lift: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Dept/Div: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lift location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Person in charge of lift: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The person in charge must be present during the entire critical lift and be qualified to answer questions and resolve any problems that might arise during the lifting operation.

Reason for critical lift (check all that apply):

\_\_\_\_ Load is greater than 85 percent of mobile crane rated capacity, or greater than 90 percent of

rated fixed crane capacity.

\_\_\_\_ Two or more cranes/booms are required or special hoisting/rigging equipment will be used.

\_\_\_\_ There is a potential for release of hazardous materials due to collision or upset of load.

\_\_\_\_ It poses a high risk of injury or damage to personnel, property, or natural resources due to

location and/or space constraints.

\_\_\_\_ Damage would result in excessive costs or delay to the schedule.

\_\_\_\_ Other (explain on a separate sheet and attach)

**Crane**

Crane type \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Manufacturer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Model No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Capacity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Max operating wind speed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (no lifts at more than 25 mph)

Date of last Annual Inspection \_\_\_\_\_\_\_\_

Date of last calibration of instruments \_\_\_\_\_\_\_\_\_

**Operator(s)**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Certificate expiration date \_\_\_\_\_\_\_\_\_\_\_\_

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Certificate expiration date \_\_\_\_\_\_\_\_\_\_\_\_

**Support Personnel**

\_\_\_\_ Forklift operator Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ Signaler Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ Rigger Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Load Description and Weight**

Item(s) to be lifted: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Load Weight Calculations***

Certified weight scale: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other source/calculation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Weight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Weight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Calculation work sheets must be attached to this Plan and have a PE stamp or be signed off by the person in charge.

**Critical Lift Plan (cont’d)**

**Center of Gravity**

Location of center of gravity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The center of gravity must be marked onto the load. Attach a drawing that shows how it was determined.

**Rigging Equipment and Attachments**



|  |  |  |  |
| --- | --- | --- | --- |
| **Equipment/Attachment** | **Last Date** | **Rated Capacity** | **Weight (lb)** |
|  | **Inspected** | **(lb)** |  |

 Slings

Shackles

 Lifting rings

Eyebolts

 Rigging hooks

Load block/Jib

 Spreader bars

Below the hook lift devices

**Total Weight of Load, Rigging, and Attachments** Calculation source: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Total Weight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Relationship of Lifting Equipment to the Load**

Maximum Operating Radius: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Planned Operating Radius: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Allowable load at maximum lift radius anticipated (from Load Chart): \_\_\_\_\_\_\_\_\_\_\_

Ratio of lift to allowable load: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Clearance between boom and lift: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Clearance to surrounding facilities/utilities: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Clear path for load movement: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ground Area**

Soil-bearing capacity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Source: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mats required: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Size and number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Underground utilities location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ratio of soil-bearing capacity to actual: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Lifting Operation**

Attach a detailed drawing to scale showing the Set-Up Area, Lifting Area, Load Placement Area, and Sling Attachment Points w/sling angle reduction factor.

**Critical Lift Plan (cont’d)**

**Lift Approval Signatures**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Professional Engineer/ Qualified Person

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Person in Charge (PIC) (Critical Lift)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Operator of Equipment (Critical Lift)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Responsible Manager or Designee

**Pre-Lift Meeting**

Date: \_\_\_\_\_\_\_\_\_Time: \_\_\_\_\_\_\_\_\_ Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Critical Lift Plan (cont’d)**

**Rigging Sketch**

Sketch the rigging configuration and identify the following:

* Lift points
* Shackles/swivel eyes
* Slings, sling angles, and sling loads
* Accessories
* Capacities
* Center of Gravity

**Critical Lift Plan (cont’d)**

**Load Path Sketch**

Sketch the load path for limited access or complex lifts.

Include all relevant aspects such as load height, obstructions, and crane speeds.