REFERENCE GUIDE FOR LIFT PLAN

This guide is divided up into sections corresponding to the lift plan worksheet.

The purpose of the worksheet is produce a framework for consistent lift plans, reducing unknowns & minimizing the need for real-time changes to mobile crane operations.
# REFERENCE GUIDE FOR LIFT PLAN

Fill out each lift plan worksheet completely and provide all required supporting documents to expedite the review of the proposed lift plan.

## Section 1

### Please fill out completely.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Company Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Specify the project name as described in the contracting documents.**

**Specify the major facility the operation will take place and where with reference to the facility the operation will take place.**

## Section 2

### Description of Lift:

*(Goal of operation, how operation will be performed, where it will occur)*

Provide:
- A summary of what is **goal of the operation**
- How the operation will be performed
- Where it will occur.

## Section 3

### Please Check Off & Include the Following Documents:

- [ ] Written Lift Description (above)
- [ ] Rigging sketch w/component detail
- [ ] Orientation of Crane to the Load - sketch
- [ ] Spreader Beam / Lifting drawing (w/engineering)
- [ ] Sketch showing C/G of Load - side view
- [ ] Layout Plan
- [ ] Overhead view of Operation - sketch
- [ ] CRANE’S LOAD CHART, WITH APPLICABLE WEIGHTS HIGHLIGHTED ATTACHED.

**Purpose:** provide documents to the lift plan.

*The sketches may be hand drawn. The operation area sketches should show the dimensions of the crane’s footprint and relative distances to pick up and set points. The rigging sketches should show sling lengths, angles and capacities of components including attach points.*
### Section 4

**Crane Configuration**

<table>
<thead>
<tr>
<th>Crane Manufacturer</th>
<th>Model/Serial or equipment #</th>
</tr>
</thead>
</table>

- **Hoisting Point:**
  - Main Boom
  - Jib
  - Extension
  - Aux. Boom head

- **Hoisting:**
  - Over side
  - Over front
  - Over rear

- **Set Up:**
  - Boom assembly requirements
  - Assist Crane Required?  
    - Yes
    - No
  - Attach Lift Plan

- **Layout Area Required:**
  - Length
  - Width

- **Outrigger or track positions:**
  - Extended
  - Mid
  - Retracted
  - Tires
  - Pick & Carry

- **Boom Length (ft.):**
  - **Boom Angle (deg.):**
  - **Jib or Extension Length (ft.):**
  - **Offset:**

### Section 5

**Determining Gross Capacity (from Load Chart)**

- **Max Load Radius:** ft. or Angle
- **Pick-up:** ft. or Angle
- **Set-down:** ft. or Angle

- **Crane Capacity at max. Radius:**
  - Over rear (lbs):
  - Over side (lbs):
  - Over front (lbs):

- **Maximum boom length for operation (ft.):**

- **Required Counterweight:**
  - Weight (in lbs):

- **Gross Capacity:**

  Provide the most limiting gross capacity based on the boom length and radius at the pick-up or set-down locations which ever is more limiting. 
  List radius in feet or boom angle depending on which the manufactures uses in their capacity chart.

### Section 6

**Hoist Capacity**

- **Rope diameter & type:**
- **Wire rope limit (in lbs.):**
- **Line pull per part:**

- **Number of parts:**

- **Hoist Capacity:**

  List the diameter and type of wire rope either the crane manufactures designation or the wire rope construction.
  List the number of parts of line.
  Provide the limits of the hoist system based on most restrictive combination.
  List the line pull based on the layers of wire rope on the drum usually the last unless special circumstances exist.
**Section 7**

**Rigging**

Rigging connection to load:  
- Fixed point ☐  
- Free connection ☐  
Connection point capacity: ______________

Lifting beam/Spreader required:  
- Yes ☐  
- No ☐  
Sling Material: ___________ Sling Size/Capacity: ___________ No. of slings: ___________

Minimum sling angle (deg): _______ Beam/Spreader capacity: _______ Maximum force on sling legs (lbs): _______

Type of Hitch:  
- Basket ☐  
- Choke ☐  
- Vertical ☐  
Connecting hardware capacity (lbs): ___________

Is the load capable of absorbing the additional lateral loading?  
- Yes ☐  
- No ☐  
Total Rigging weight: ___________
**Section 9**

**9. Area of Operations**

Crane ground bearing pressure (psf): ________________

Outrigger matting / blocks req: □ Yes □ No

Matting necessary for ground conditions (dimensions): ____________

Wheel mounted crane: Traveling w/boom erected? □ Yes □ No

Max Boom Length for Travel (based on Manufacturers limitations): _____________________________

Clearance from Overhead Obstructions (ft.): ________________

Swing Clearance: □ Greater than 2 ft.

Head room requirements: ____________

Head room remaining: ____________

Overhead Powerlines: □ Yes □ No

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**Section 10**

**Wind Limitations**

Record Crane wind restriction from the load chart: ________________

Maximum wind allowable with load: ________________

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**Section 11**

**Crew**

How many personnel are required, what are their jobs, where will they be located, and what actions should they take in the event of foreseeable emergencies?

Lifting Supervisor: ________________________________

Signature: ________________________________