Derrick Planning and Preparation



General Planning

- What loads need to be picked, and where are they to be placed?
- Have governing weights been verified?
- Has Master Rigger and Derrick provider been determined?
- What derrick and winch are available?
- What power is required?
- Where will the derrick be positioned?
- Where can the winch be positioned to allow adequate fleet angle?
- Where will deflector sheaves be needed and how will they be mounted?
- Calculate and tabulate reactions from the derrick and winch for all lifting conditions (loads, radii, swing angles).
- How will the derrick and winch reactions be supported on the building?
- What is the access and means for assembling and disassembling the derrick?
- How will the derrick boom be secured in high winds or lowered for inspection/maintenance?
- What pedestrian and traffic controls are needed during derrick operations?

Planning for Existing Buildings

- Seek drawings of the existing building.
- · Consult with the building EOR.
- Determine if invasive probing and reinforcement are necessary for support of loads.
- Consider the effect of uplift reactions under the mast and sill.
- What are the means to get derrick and winch to the roof and back to the ground?
- What is the access to get equipment in place?
- Where elevators are being used, is size and capacity adequate?
- Coordinate with active building including vacating spaces under the load path.
- How will the integrity of the building envelope be maintained?
- Possibly utilize existing column stubs, or leave column stubs for future reinstallation of the derrick.

Planning for New Building

- What existing construction equipment can be utilized for assembly?
- How will the derrick be removed?
- Submit imposed loads early to the project team to allow for reinforcement to be designed into the framing.
- The economy of engaging the strength of multiple floors to support the derrick loads can be weighed against the cost of reinforcing.
- Determine what leave-outs are needed to accommodate the derrick, its operation, assembly and disassembly.
- Submit layout and operational details to the project team for coordination with schedule and other trades.