

Equipment Reliability Begins Here



**Professional
Consulting and
Engineering**

**Vertical
Transportation
Consultants**

When do I do a modernization?



Choose to Repair

- ▶ Parts are readily available
- ▶ Repairs are covered in your maintenance contract
- ▶ Long-term shutdowns are minimal
- ▶ You just can't afford to do the mod

Choose to Modernize

- ▶ Parts are Obsolete
- ▶ Repair costs are higher than replacements
- ▶ Reliability is decreased
- ▶ Safety is a concern
- ▶ Codes are significantly outdated

A hand is visible at the top of a large, tall pile of crumpled white paper. The paper is piled high, reaching up to the hand, and is the central focus of the left side of the slide. The background is a light blue gradient.

Lifecycle of a modernization

- ▶ Surveying the property to obtain all information needed for a specifications and any premaintenance items.
- ▶ Preparing the specifications and premaintenance list to give to the existing service contractor and all other bidders.
- ▶ Sending specifications and premaintenance out for bid to three to five contractors and reviewing property/site.
- ▶ Receiving all bids and preparing a bid analysis.
- ▶ Interviewing two or three contractors.
- ▶ Writing the AIA contract.
- ▶ Contractor surveying the property for engineering of materials.
- ▶ Drawing approvals and ordering of materials.
- ▶ Lead time of materials and the starting of the project.

Survey

- ▶ During the survey, all materials that are needed to be replaced, repaired, refurbished, retained, added, and/or adjusted will be identified.
- ▶ This will provide the information needed to write a specification to create a level playing field.





Specifications and Premaintenance

- ▶ The specifications and premaintenance is the scope of work that all contractors will bid on. This creates an even bidding process as well as identifies all items that need to be replaced, adjusted, or added to the elevator to bring it up to current code and provide a comfortable, reliable, and most importantly, a **SAFE** form of transportation.
- ▶ The premaintenance items will identify any shortcomings of the current contractor that should have been addressed during their maintenance visits.
- ▶ If specifications are not sent out and bids are not solicited, you may get various scopes of work.

Request for Proposals (RFP) and Contractors visit

- ▶ Owner approves Preliminary Specification to ensure it meets their needs and finalize document.
- ▶ Owner selects contractors to receive RFP, with guidance from Consultant, if needed.
- ▶ Contractors are given an opportunity to inspect / view the equipment. Consultant should manage this to answer questions and clarify objectives.
- ▶ Bids will be returned to owner/owner's representative, not to the consultant.





Review Bids and Interview Contractors

- ▶ The Consultant will prepare a bid analysis that includes all contractor's pricing, schedules, alternates, and any exceptions.
- ▶ Once reviewed with Owner/Owner's representative, the top Contractors are identified.
- ▶ The top contractors will be called for an interview. This can take one to two hours per contractor and identifies the contractor that will best fit the project.

AIA Contract

- ▶ Most projects utilize an AIA Contract form.
- ▶ The AIA contract will consist of:
 - ▶ Scope of work
 - ▶ Project scheduling with milestone markers
 - ▶ Schedule of payments
 - ▶ Down payment percentage
 - ▶ All exceptions from the contractor
 - ▶ Liquidated damages asked for by the owner/owner's representative.
 - ▶ The AIA contract will be signed by the contractor, the Owner and the Consultant.



Contractor's survey of equipment and shop drawings

- ▶ The contractor will need access to gather the information needed to properly engineer and size the materials needed.
- ▶ This includes (but not limited to):
 - ▶ Machine room
 - ▶ Car top
 - ▶ Hoistway
 - ▶ Elevator pit
- ▶ Once done, shop drawings will be created and submitted for approval.
- ▶ Consultant approves for code compliance and feasibility.
- ▶ Owner/Owner's Representative verifies colors and materials that are visible to the public.

Lead times and schedules

- ▶ Specifications: 2 to 4 weeks
- ▶ RFP and receiving of Bids: 4 to 6 weeks
- ▶ Bid analysis and interviewing of contractors: 2 to 3 weeks
- ▶ AIA contract: 2 to 4 weeks
- ▶ Surveying of property: 1 week per type of elevator specified or deviation of units
- ▶ Drawing approvals: 1 week per type of elevator specified or deviation of units
- ▶ Ordering of materials: 16 to 20 weeks
- ▶ Elevator out of Service: Hydraulic elevator 4 to 7 weeks
- ▶ **Total** lifecycle of a Hydraulic elevator modernization (with limited slowdowns) **32 weeks - 8 months**
- ▶ Elevator out of Service: Traction elevator 10 and up depending on number of floors. About 1 week per floor added on for building over 10 openings.
- ▶ **Total** lifecycle of a Traction elevator modernization (with limited slowdowns) **40 weeks - 10 months.**
- ▶ **After all this the contractor may not have a team available to start the job right away.**





MHI-Consulting, Inc.

appreciates you taking the time to meet with us!

Any questions?

