

Project Management for Maintenance Managers and Supervisors

Abstract

The project manager course for maintenance managers and supervisors is designed to give the front line maintenance leader the basic project management skills which will enable them properly develop and manage the key components of the project management process which will include items like: scope of work, progress charting, cost estimating, the bidding process, preconstruction meetings, day to day managing of projects, review and update meetings, and project closing. This course will be meaningful for any member of the organization who is part of the project management team. The course can be taught in one or two days depending on the amount of hands on exercises.

Program Outline

1. Scope of Work

- Interviewer requester
- Question to the void
- Develop the scope of work
 - i. Major tasks
 - ii. Minor tasks
- Approval of scope
- Create specifications for quality
 - i. Parts and equipment
 - ii. Labor and methods
- Determine resources
 - i. Contract or in-house
- Develop order of magnitude schedule
- Develop order of magnitude cost estimate
- Anticipate customer expectations
- Consider using commissioning process
- Established change order process

2. Gantt Charts

- Gantt chart fundamentals
 - i. Forward, backward, and inside-out
- Completed for all projects
- Tracked on Microsoft Project or similar product
- Divided into major and minor tasks
- Assign responsibilities
- Assign durations
- Determine completion and critical dates
- Update and revise as needed
- Communicated weekly to management and customer

3. Develop Detailed Cost Estimate
 - Convert order of magnitude cost estimate
 - Seek quotes on purchased items
 - Obtain quotes or estimates on contracted expenses
 - Develop labor costs estimates for in-house labor
 - Consider engineering or design costs
 - Estimate overages or contingency amounts
4. In-house or Contracted Labor
 - Discuss strategy with management
 - Do you have manpower available
5. Pre-construction Meeting for In-house Projects
 - Discuss scope
 - Discuss schedule
 - Discuss responsibilities
6. Bid Package for Contracting
 - Scope of work
 - Drawings
 - Equipment Specifications
 - Work schedule
 - Contract terms
 - i. Payment schedules
 - ii. Bonuses
 - iii. Penalties
 - iv. Work approval process
7. Bidding and Contracting Process
 - Bid meetings
 - i. Develop bidders list
 - ii. Agenda
 - iii. Packages
 - iv. Tours
 - v. Question and answer periods
 - vi. Addendum documents
 - vii. Determining successful bidder
8. Pre-construction Meeting
 - Review above as necessary
 - Agree on schedules
 - Assign key managers on both sides
 - Approve setup, work, staging, storage, and waste areas

9. Weekly and Monthly Review Meetings

- Agenda
- Location
- Required attendance
- Distribute minutes of discussions

10. Update Gantt Charts

- Update on regular basis
- Maintain baseline Gantt chart
- Require Gantt charts from contractors

11. Project Closing

- Resolve all punch list items
- Complete commissioning
- Create or ensure as built drawings are complete
- Obtain all documentation
 - i. Manuals, parts lists, recommended preventive maintenance
- Resolve all accounting issues
- Sign off approval
 - i. Accounting, engineering, maintenance, user or operator