

Commissioning during the Construction Phase

*Don Little CxAP, LEED™ AP
Commissioning Manager
Jacobs Facilities Group*

Commissioning Goals

- Reduce construction costs
- Improve quality of the delivered project
- Reduce lifecycle costs
- Eliminate problems at turnover
- Provide an adequate training program and system documentation

Owners Responsibilities

- Clearly convey the criteria for success provided in the Owners Project Requirement Document
- Review how the Design Team achieves success using this criteria
- Provide owner input during the Construction Document review
- Continually verify the construction process is meeting the design goals in the OPR
- Verify that O&M Staff are trained and have adequate documentation to operate the Building

Owner's Quality Delivery process

- Must define the end goal
- Work done right the first time
- Each individual worker is responsible for quality.
- Verification of work using Construction Checklists
- Functional Performance Tests
- Training of maintenance staff.
- Focus on the life of a building

Owners Process

- Commitment
- Support
- Resources

Commissioning Plan

Activities during the Construction Phase

- Test Procedures and forms
- Integration of Cx. activities in construction schedule
- Roles and Responsibilities of team members and addition of new members
- Specialists used during this phase
- Activities for specific systems and assemblies
- Changes to the communication channels and procedures

Cx activities during construction

- Pre-bid Conference
- Coordinate the Owners Rep in Cx activities
- Update the Owners Project Requirements
- Update the Cx Plan
- Verify Submittals
- Schedule Cx activities
- Develop Functional Performance Tests
- Verification
- Turnover

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National Conference on Building
Commissioning

Commissioning Team Meetings

- Consistent meetings to maintain progress of the project
- Clear Documentation of meeting
- Team should be able to make decisions and commitments
- Be consistent with time and duration

Site Visits

- Verify installed components and systems meet Owners Project Requirements
- Identify Construction Process problems and Issues
- Identify team members used in Site visit
- Update the Issues log

Functional Testing

- Approved Written Procedures, results shall be witnessed and recorded
- Document deviations in writing
- Resolve all issues prior to starting or re-starting tests
- Upon completion of witnessing or verifying test complete documentation

Training

- Meet with O&M Staff to ascertain skill levels needed to maintain new installed Components and Systems
- Owner to select trainees
- Review and Approve Training Material as per Contract Documents
- Witness Training taking place

Commissioning Report

- Documented Tasks and Activities during the Construction Phase
- Update the Owners Project Requirements, including failed tests that have been accepted
- Evaluations of Systems after Functional Testing
- Complete Construction Checklists and verify summary
- Results of the completion of the Issues Log

Systems Manual

- Update the Systems Manual
- Incorporate test procedures and results
- Training plan, and Records
- Submittal Reports
- Updated Issues Log
- Document any changes to the Basis of Design during the Construction Process