

PROJECT PEER REVIEW

IMPACTS PROJECT QUALITY AND OWNER SATISFACTION

Building Owners rarely have the time to scrutinize adequately a set of drawings and specifications submitted to them for review. The task is usually delegated to staff that may possess a limited understanding of the nature of construction documents and may have insufficient experience in reviewing them in a systematic manner.

An Owner trusts the design team to incorporate all requested aspects and detailed requirements in the project documents; yet has limited means to verify the project's design completeness until the building is constructed. On complex projects, the communication of hundreds of requirements and preferences directed from Owner to the Architects and Engineers can be a great challenge. Yet, instead of painstakingly confirming this information with an Owner, designers are prone to assume that even a cursory review by an Owner constitutes "project approval".

To avoid this situation, a formal peer review process is an alternative to consider. Experienced professionals review the A/E's documents and verify compliance with the Owner's intent. This thorough review brings the details to the forefront, allowing the Owner to make informed choices before the elements are "cast in stone."

For an idea of the benefits of a review, here are some commonly uncovered items:

Drawings:

- Notes, abbreviations, keys and legends which refer to items or conditions which are not a part of the project
- Inadequate or incorrect drawing notes, labels, drawing cross-references, elevation marks, section cuts, etc.
- Conflicting ceiling height information
- Inadequate dimensioning for contractor layout or for code/standards compliance
- Structural drawings that don't recognize special equipment loads
- Incomplete building envelope or roof details.

Details and Finishes:

- Inappropriate hardware for functional requirements
- Window sill heights set too high for wheel chair bound patients
- Finishes and details selected without concern for cleaning, hygiene or wear.

Equipment Coordination:

- Conflicts between fixed items and moveable items; e.g. zone valves hidden by carts
- Confusion regarding Owner and Contractor responsibilities for furnishing and installing equipment
- Equipment missing and not accommodated by services.



Mechanical, Electrical, Plumbing:

- Plumbing and electrical coordination with equipment; emergency power provision
- Fixture selection without regard to patient or staff needs
- Improper thermostat locations
- Limited access for maintenance and service.

Specifications:

- Incomplete or poorly edited specifications; sections covering work not included in the project
- Poor definition of phasing requirements and sequencing of the work
- Inadequate cautions regarding infection control procedures and dust protection in demolition and construction of occupied areas.

On a large project, the multi-disciplinary team may include specialty areas including civil engineering, fire protection, automated trans-port, cost estimating, mechanical and electrical engineering.

Our experience in providing peer review services has proven the benefits that this “extra pair of eyes” oversight can have on project quality. The Owner increases understanding of the project and makes improved choices about its details. The Contractor receives improved documents and bids with greater certainty due to less concern for “hidden” scope.

