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editorial

Completeness of Construction Documents

By Joseph C. Gehlen, P.E., S.E. CASE Chair

In mid-July, at our Summer CASE meeting, I had the opportunity to work with and observe engineers with incredible passion for our profession trying to make a difference in the quality of construction documents. Under the direction of Tom Wosser, CASE National Guidelines Committee Past Chair, CASE has published a document called *A Guideline Addressing Coordination and Completeness of Structural Construction Documents*. The purpose of our summer meeting was to get our committees together to strategize and develop plans on how to deliver the Guidelines' message.

It costs time for everyone in the process... time that is normally unrecoverable and certainly not budgeted in our fees. This coupled with bidding and change order strategies by contractors, sub-contractors and suppliers can lead to claims for delays and dollars.

The CASE Guideline provides suggestions and commentary on how the SER can achieve quality construction documents, addressing responsibilities within the design team, communication, coordination, completeness, dimensions, process and quality management. It also includes sample checklists that can be used in the quality assurance process.

I know there are some who question whether the Guideline would become our enemy in court battles. Though not considered a standard, could it possibly be construed as a level of expected care if we don't pay attention to the message? My response is that structural construction documents, in general, need to improve in coordination and completeness. The Guideline provides recommendations for how the engineer can be more proactive in the process.

"...recommendations to the structural engineers of record on ways to improve the process and achieve a level of quality in their documents..."

This document is the culmination of a number of years of labor by the Guidelines Committee. Their goal was to evaluate the conditions of structural documents and make recommendations to the structural engineers of record on ways to improve the process and achieve a level of quality in their documents... a level of quality that is desired, and often expected, by certain segments of the construction industry.

Through personal knowledge, I know it is difficult to be fully coordinated, dimensioned and complete when you consider fees, schedules, project and code complexities and lack of direction and management of the project by our clients. As the engineer responsible for document quality, it is often a struggle to get information you need, in the time you need it. Once collected, you still must apply the information to your documents, and still have time for coordination with other disciplines and perform a quality review.

Perhaps the steel industry has pushed back on our industry the most, due to the nature of the detailing and fabrication process; however, all of the construction industry is affected in some way by lack of complete information. Solving coordination problems and responding to RFI's due to lack of information during construction is not the time to resolve these issues.

"...structural construction documents, in general, need to improve in coordination and completeness."

CASE is working with its committees, and construction industry representatives, to arrange seminars and presentations directed toward different elements of our industry to get the word out. I believe if structural engineers implement the recommendations found in the Guideline, and make a concerted effort to improve document quality, everyone in the construction industry would benefit. That would mean happier contractors and happier owners, which would mean happier clients and ultimately more respected and happier structural engineers!

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