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### ***Q&A in ACI Concrete International***

ASCC is looking to advance the implementation of constructability concepts for concrete construction. Case studies by the Construction Industry Institute (CII) cited cost reductions of between 6 and 23 percent, benefit/cost ratios of up to 10 to 1, and significant schedule reduction. Now we want to hear from ASCC concrete contractors about the use of constructability to reduce costs and schedules in their projects. This information will be beneficial in getting owners and design professionals more committed in making constructability a priority for every project.

CII indicates the fundamental priority of implementing constructability is to incorporate a full-time constructability manager into the project planning phase. CII found that an effective constructability program includes the following:

- Disciplined Constructability Meetings
- Constructability Coordinator Review of Design Drawings
- Constructability Input in Purchase Orders

The conclusions from one case study (1) are shown below.

Approximately \$1 million was spent in up-front staffing of the leadership team for constructability. This included all staff support from the constructability manager down to the craft superintendent level. This investment amounted to just 0.7% of the budget but contributed significantly to the nearly 9% project savings with a benefit/cost ratio of 13 to 1.

The team met or exceeded all the project goals:

- Safety: 1,605,000 work hours with zero recordable injuries
- Environmental: Zero reportable incidents
- Cost: Over 8% below budget
- Field Productivity: 5% better than plan
- Schedule: On-time completion and start-up
- Rework: Total engineering and construction rework slightly above 2%
- Client Satisfaction: Confidence for pursuing future similar projects

This is the kind of data we need to convince owners, and the engineering community of the significant rewards of projects designed with constructability in mind. If you can share a case study, please send your information to [bsuprenant@asconline.org](mailto:bsuprenant@asconline.org) or call me to discuss at 800-331-0668.

<sup>1</sup> "Constructability Implementation Guide", James T. O'Conner, Construction Industry Institute, December 2006.