

# GEO notes

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## News and Information for the Construction Industry

We are pleased to announce that William J. Frank, P.E. has joined us. Bill is a structural engineer with B.E. and M.S. degrees from Manhattan College and Lehigh University respectively. His skills and over 16 years experience in the design and construction of large highway and bridge projects and as a resident engineer strengthen our ability to serve and expand our services to clients, especially contractors. With this enhanced structural capability we will continue to assist our clients with the design of sheeting, shoring, underpinning, value engineering, foundation engineering, constructibility reviews and temporary structures.

## Designing for Constructibility

**Constructibility is the integration of design with construction.** The designer should ask "How is my design going to be affected by the sequence and method of construction? How will it be bid and built? What problems and stresses may be experienced during intermediate stages?"

**Constructibility problems can create delays and claims which may adversely affect the entire team of owner, designer, and contractor.**

**Contractor Dave Chapman, P.E., of Blakeslee, Arpaia and Chapman has a rule of thumb that "every additional dollar you spend to identify a problem before you bid the job will save \$10 if not discovered until the job is bid and \$100 if discovered after the work starts".**

**What can be done? According to Art Gruhn, P.E., Construction Administrator for ConnDOT, communication is the key.** "We recently implemented a program of constructibility reviews with the Connecticut Construction Industry Association for complex projects. In addition to in-house reviews, we sit down with contractors and review the plans before the design is finalized. It is an open and voluntary process. This input has identified problems prior to construction."

The process can be more or less formal. Sometimes a simple phone call to a contractor during design to discuss constructibility issues can pay big dividends during bidding and construction.



Staged construction: Stamford Railroad Station



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