

CEE 595 – Geotechnical Engineering Seminar

Wednesday, September 27, 2017
4:30PM, Newmark Lab 1311

ACIP PILE IN-PLACE EVALUATION Lessons Learned in Re-Starting a Stalled Project

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Abstract

This presentation introduces Langan's approach to evaluate the in-place conditions for an auger cast-in-place (ACIP) foundation system of a halted construction project. The high-profile project involved numerous city agencies, and, while halted, became a community "eye-sore" as a stalled project. When Langan was engaged for this confidential project, the lead Agencies and Ownership were prepared to completely re-design the foundation; abandon over 500 installed piles; relocate the proposed building and start over. The questions regarding the installed foundation elements were primarily due to inconsistencies in the pile installation documentation. This presentation will discuss Langan's strategy, and the approach taken to provide an alternative to abandoning the installed foundation. Langan lead the team through a process to understand "what do we have that's good," and install nothing more or less than what was needed to provide a foundation system satisfactory to the Owner, regulatory Agencies, and the Designers.

We will present the methodology developed to document each installed pile, and the comparison of the automated grouting records to the field installation logs prepared by the controlled inspection agency. During Langan's involvement, we prepared design calculations and eventually created a full-scale proof-test and non-destructive testing program for the installed piles. We will elaborate on safety factors, and explore the philosophy that construction uncertainties are diminished once the respective foundation elements are installed. Ultimately, the project was able to move forward, with multiple stop work orders lifted, and only a limited number of replacement piles required



Speaker's Bio

Mr. Jared M. Green is a Senior Associate in the New York City office of Langan. He holds licenses as a Professional Engineer in the States of New York, Pennsylvania and Connecticut. Mr. Green, as a geotechnical engineer, has acquired wide-ranging, multi-disciplined, consulting and construction related practical experience. By many, he has been referred to as a problem solver at heart. Mr. Green has spent the last 14 years working on challenging, landmark projects in all the boroughs of New York City.

Mr. Green obtained his Master of Science in Civil Engineering (Geotechnical Focus) from the University of Illinois Urbana – Champaign and his Bachelor of Science in Civil Engineering from Syracuse University. He is the past chair of the American Society of Civil Engineers – Metropolitan Section – Geotechnical Institute chapter and he also serves on the Micropile Technical Committee of the Deep Foundations Institute. He resides in Flemington, New Jersey and is very active in his community and his church. He serves as the First Elder (Associate Pastor) of the First Bilingual Seventh-day Adventist Church.

Mr. Green is happily married to his beautiful bride and is the father of their three amazing children