



**Promotional Webinar on Benefits of Thermal Integrity Profiling for USERS  
and Review of Top and Bottom Roll-off Adjustments**

**Who should attend:**

Current analysts and reviewers of thermal integrity profile data. Geotechnical, structural and construction engineers; contractors, researchers and students interested in or having the need for a full integrity analysis of drilled deep foundations, including evaluation of the concrete cover outside the reinforcing cage.

**When: Wednesday January 30, 2019**

**Certificate of Participation**

This session will begin 9:00 am (New York Eastern Time) and last 1 ½ to 2 hours long. This program corresponds to 1.5 to 2 Professional Development Hours. A Certificate of Participation documenting the number of hours of instruction (PDH) will be provided to those that take a short quiz at the end of the webinar. Check with your engineering board of registration for their continuing education requirements.

The session will begin at 9:00 am Eastern (New York Time) and typically last 1.5 hours. Sessions may last up to a maximum of 2 hours depending on the number of questions from participants. Questions from participants have to be submitted during the webinar in written form (use chat-box or email) and will either be discussed during the seminar or in personal communication depending on the general interest of the question.

**You will have the opportunity to learn from Mr. Daniel Belardo without having to leave your desk.**

**Lecture:** Danny manages GRL's Thermal Integrity Profiling projects around the country. He is a graduate of The Ohio State University with double majors in Business Administration and Construction Systems Management. Danny honed in his project management skills at the Cleveland Innerbelt Bridge Project, where he first observed GRL performing integrity testing services with TIP while working for Walsh Construction.

**Learning Objective:**

- Provide an overview of applying TOS and BOS adjustments to TIP data
- Review current state-of-practice guidelines for applying these adjustments
- Evaluate drilled shaft and pile integrity in the top and bottom regions
- Describe the basic principles of integrity evaluation using thermal measurements
- Collect data by various methods
- Evaluate eccentricity of cage alignment in the shaft
- Evaluate the measurements for local defects (in cross section or concrete quality)
- Describe the conversion process of temperature to effective shaft radius
- Recommended time window for testing after casting concrete
- Compare and contrast the advantages of thermal measurements, conventional Crosshole Sonic Logging (CSL), Low Strain Integrity Testing, and Gamma-Gamma testing of drilled shafts and ACIP/CFA piles.

**Syllabus:**

- Review temperature distribution in an idealized shaft
- Review necessary information and details to collect in the field
- Review updated TOS and BOS adjustment parameters and guidelines
- Review application of these adjustments using TIP-Reporter
- Motivation for integrity testing
- Advantages and limitations of CSL, Low Strain Integrity Testing, Gamma-Gamma and Thermal testing
- Principles of thermal measurements
- Interpretation of test data
- Test procedures
- Comparisons of Thermal and CSL/Gamma-Gamma results
- Examples / Case studies'
- Review mid-shaft adjustments and when they are applicable
- Review sample data and case histories



**Quality Assurance for Deep Foundations**

**Promotional Webinar on Benefits of Thermal Integrity Profiling for USERS  
and Review of Top and Bottom Roll-off Adjustments  
(Please email form to [Registration@pile.com](mailto:Registration@pile.com))**

1 session of at least 1.5 hours on January 30 at 9:00 AM New York Eastern Time

Registration must be received on or before January 24, 2019

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: (who will be receiving webinar log in instructions) \_\_\_\_\_

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