January 2018 DVGI/SEI Dinner Meeting

**SPEAKER:** Quentin D. Rissler, P.E., Bridge Dept. Program Manager, Larson Design Group & Phil Carper, Project Manager, Road-Con, Inc.

**TOPIC:** PA Turnpike NB-355 Bridge Replacement Project

**DATE:** Tuesday, January 16th, 2018

**LOCATION:** Valley Forge Casino Resort Hotel, Parkview Ballroom 1160 First Avenue, King of Prussia, PA 19406

**TIME:** 5:30 PM Social Hour, 6:30 PM Dinner and 7:15 PM Presentation

***Registration and Payment Online at [https://www.picatic.com/event15137726815122](https://www.picatic.com/event15137726815122)***

The PA Turnpike NB-355 Bridge Replacement Project required that two new mainline bridges be replaced with only a single weekend closure of the Northeast Extension mainline. Road-Con teamed with Larson Design Group to design and construct temporary support structures for the bridge construction adjacent to the existing bridge so that the new bridge could be rolled into place during the weekend closure. The project also included constructing new abutments with micro-piles in front of the old abutments while the existing bridge was still in service.

**ABOUT THE SPEAKERS:**

Quentin D. Rissler, PE is a program manager in the Bridge Department of Larson Design Group in their Lititz, PA office. Quentin graduated from Worcester Polytechnic Institute and has 25 years’ experience including more than a 10 year history of providing construction engineering services to Road-Con. Phil Carper has 20 years of experience in heavy civil construction and is currently a Project Manager at Road-Con, Inc. Phil is a graduate of Penn College Of Technology.

One Professional Development Hour (PDH) will be provided for this dinner meeting.
The New NY Bridge (Tappan Zee Bridge Replacement) is a $3.14B Design-Build project with the New York State Thruway Authority. The project consists of the design and construction of two new 3-mile long multiple span structures that carry I-87/287 across the Hudson River between Rockland and Westchester Counties. The first span of the new twin-span bridge opened on August 24, 2017. The second bridge is scheduled to be complete in 2018. The new bridge is being designed and constructed to last 100 years without major structural maintenance. The 1,100 pipe pile foundations for the new crossing are up to 6 feet in diameter, and are designed to accommodate future bus rapid transit, light rail or commuter rail. The bridge was designed and is being constructed by Tappan Zee Constructors, LLC (TZC), a consortium of Fluor, American Bridge, Granite, and Traylor Bros. HDR is the lead designer and major sub-consultants include GZA, Buckland & Taylor and URS.

This presentation addressed the high capacity deep foundations used to support the new bridge superstructure. The nominal resistance of these piles is up to 31,135 KN (7,000 kips). The remaining portions of the bridge are designed to be supported on 3-ft and 4-ft diameter, open-ended steel pipe piles, about half of which are friction piles in the deep glacial lake varved clay deposit. The required nominal resistance of the friction piles is up to 19,125 KN (4,300 kips).

ABOUT THE SPEAKER:
Bob Palermo is a Senior Vice President with GZA GeoEnvironmental has 40 years of experience with in geotechnical engineering for bridges, buildings and underground construction. Bob was the Lead Geotechnical Engineer on the Tappan Zee Constructors (TZC) design-build team for the Mario Cuomo Memorial Bridge (formerly New NY Bridge) project, where he was responsible for the subsurface exploration program, foundation design, pile load test program and instrumentation monitoring of the existing Tappan Zee Bridge during pile installation for the new bridge.

Some of Bob’s other project experience includes the rehabilitation of the Queens Boulevard Bridge in Queens, the Second Avenue Subway and No.7 Line Subway Extension in Manhattan, the Central Artery/ Tunnel project in Boston and the Carolina Bays Parkway in Myrtle Beach, SC. Bob is a registered professional engineer in 19 states.
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ANNOUNCEMENTS

Upcoming GSI Webinars for 2018
(1.5 PDH/each upon completion of exam)

11:30 AM—1:00 PM (Eastern Time)

Topics, Dates and Registration at www.geosynthetic-institute.org/webinar.htm

Cost: GSI Members $200; Nonmembers $250

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HAVE DVGI PUBLISH YOUR ARTICLE, ADVERTISEMENT, OR JOB POSTING

- Do you have an interesting article on a project or individual in your organization that you would like to have published in the DVGI newsletter?
- Would you like to get the word out about a job opening, new venture, etc. to our membership via the newsletter?

Please submit your articles or news items for consideration in the next edition of the newsletter or get in touch about our reasonably-priced advertising by contacting Theresa Loux (tloux@aeroaggregates.com).

DVGI Merchandise Available for Purchase

Coffee mugs ($8) and lapel pins with the DVGI logo ($5) are available for purchase. See Russ Preuss if you are interested in purchasing either of these items.

ASCE/G-I Members:
Read past and present issues of Geo-Strata magazine online at www.asce.org
MEMBER SPOTLIGHT

Robert Crawford, P.E.
James J. Anderson Construction Company Inc., DVG1 Board Web Advisor

Bob Crawford is the Chief Engineer of the Structures Division for James J. Anderson Construction Co., Inc. of Philadelphia. Bob has spent his 30 year career as a junior engineer, project engineer, assistant chief engineer and now, chief engineer working in and around the Philadelphia area with a concentration on heavy highway, transit and bridge projects. Bob has been Chief Engineer at JJA for the past ten years. During his career, Bob has overseen construction to completion of several of PennDOT’s largest I-95 reconstruction projects including Sections RS2 (Allegheny to Levick), RS3 (Cottman to Academy) and 25M (Route 420 to Ridley Park). He currently oversees the on-site construction operations for PennDOT’s I-95 Girard Interchange Reconstruction where JJA is the prime construction contractor for Sections GR0, GR1, GR2, GR3 and GR4 with an aggregate contract amount of $670 Million.

Bob has a BS and MS in Civil Engineering from Drexel University and is a licensed Professional Engineer in seven states.

Q: What got you first interested in the geo-world?
A: As an undergraduate civil engineering student at Drexel, I enrolled in an introductory soil mechanics course taught by a crazy professor from Boston with a very dry sense of humor, both qualities which were necessary since he was a diehard Red Sox fan. Anyway, his passion for soil mechanics came out in every class, so I determined if he was as passionate about soil mechanics as he seemed, and was having that much fun teaching it, it might be something I could enjoy as well.

Q: What is your favorite thing about your Alma Mater (Drexel)?
A: The comradery. Our civil engineering class was only 28 people but we all still keep in touch and almost everyone shows up to every gathering.

Q: What is something about yourself that would surprise us?
A: I was a pretty good jazz trombone player in high school and college. Not so much, now.

Q: What advice would you give to students studying a geo-profession?
A: Learn and trust the basics. All the new FEM and LRFD technology is tremendous and improves our ability to design with speed and economy, but all the new technology has its basis on what Terzaghi, Casagrande, Skempton and Bowles taught us. If you know the fundamentals they put forth, you can manage the wealth of information all the new technology affords you.

Q: What aspect of your job do you enjoy the most?
A: The wide range of people a contractor has interaction with when putting a design into its steel and concrete final condition for the taxpayer. On any given day, I get to meet and discuss a project with the geotechnical designer, the structural designer, the city planner, the traffic design engineer and the facility owner, all with the common goal of bringing a new facility to life for the beneficial use of the public.

Q: What is the most challenging aspect of your job?
A: See the previous response!

Q: What is your favorite project at JJA that you have been a part of?
A: Of course the Girard Interchange Reconstruction. JJA and I began here in 2009 with the first of what would end up as five successive contracts. Each one progressed the rebuild of I-95 and the surrounding neighborhood a little further than the last. To have been part of the reconstruction from 2009 until hopefully 2021, I will get to see the finished product in total and how it completes this portion of the interstate up top as well as improving the neighborhoods of Fishtown and Port Richmond underneath.

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JOB POSTING

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GEOTECHNICAL ENGINEER
VALLEY FORGE, PA AND MARLTON, NJ OFFICES

JOB DESCRIPTION

Overview:
Throughout our 100-year history, Gannett Fleming has been an innovator and leader on a global level, providing world-class services in engineering, consulting, design, program, and construction management. With more than 60 offices worldwide, we are consistently ranked among the nation’s most prestigious engineering firms.

Our Geotechnical Practice is currently seeking a self-motivated Geotechnical Engineer or Engineering Geologist, possessing 0-4 years of related experience, to join the Valley Forge, PA or Marlton, NJ offices.

Responsibilities:

- Perform geotechnical calculations for various projects and facilities including, but not limited to, shallow and deep foundations, retaining structures, tieback anchors, soil nails, slope stability design and/or stabilization.
- Assist in the preparation of geotechnical reports and documentation, correspondence, design details and drawings, proposals and specifications.
- Execute subsurface investigations in support of geotechnical design and evaluation efforts, including test boring inspection, installing and monitoring instrumentation, and other data collection activities as required.
- Compile and manage geotechnical data and prepare typed boring logs and subsurface profiles.
- Provide construction observation support during the construction phase of projects.

Qualifications:

- Master’s Degree with a Geotechnical, Geological Engineering, or Applied Geosciences focus required.
- 0-4 years of related experience, EIT/GIT certification preferred.
- Project experience with bridges, roadways, retaining walls, towers, embankments, reinforced slopes, ground improvement, pavement design, and soil and/or rock slope mitigation is preferred.
- Experience with common geotechnical/geological software programs such as gINT, SLIDE, SLOPEW, LPILE, GROUP, GRLWEAP,
- Experience with AutoCAD, MicroStation and ArcGIS is a plus.
- Geotechnical field experience including test boring inspection
- Some travel required for reconnaissance, inspection and construction observation activities

If you are interested in joining our team please send cover letter and resume to Ara Mouradian (amouradian@gfnet.com).
Geotechnical Engineer

Job Description

TRC Companies, Inc. is an engineering, consulting, and construction management firm that provides integrated services to the Environmental, Energy, Infrastructure, Transportation and Real Estate markets. Our multi-discipline project teams provide turnkey services to help our clients implement complex projects from initial concept to delivery and operation. A broad range of commercial, industrial, and government clients depend on us for customized and complete solutions to their toughest business challenges.

TRC is seeking a Geotechnical Engineer for our Mount Laurel, NJ office. Primary responsibilities will include preparing calculations, reports or sections of reports, and supporting documentation under the supervision of senior technical staff, inspection and logging of site investigation activities, assisting with laboratory testing of soil and rock, and visual classification of soil and rock. Additional responsibilities may include assisting with pile dynamic analysis (PDA), construction vibration monitoring, and quality control testing of earthwork and foundation construction. Applicant’s qualifications should include good oral and written communication skills, the ability to work independently or in a team setting, willingness to travel and an interest in the geosciences. AutoCad or Microstation experience is helpful, but not required. Training will be provided for all aspects of the job responsibilities.

The successful candidate will be a member of TRC’s Geotechnical Engineering Group, headquartered in our Mount Laurel, NJ office. The group and consists of a geotechnical engineering division, a full-service drilling division, an ASTM/AASHTO accredited soil mechanics and concrete testing laboratory, a PDA testing and vibration monitoring component, and a commercial construction inspection division, all of whom work together to provide high-quality and cost-effective geotechnical design solutions for a wide range of project applications. Typical projects include industrial processing facilities, airports, mooring structures, municipal wastewater treatment facilities, power generation and transmission projects, low to high-rise residential developments and office complexes, multi-story parking facilities, highways and bridges. Currently, our service area is primarily located within PA, NJ, NY, VA, WV, OH, DE, DC, and MD, and MA.

Qualifications

- BSCE required, MSCE in Geotechnical Engineering a plus.
- Zero (0) to four (4) years of relevant work experience.
- Demonstrated verbal and written communication skills, willingness to travel and ability to work independently and in a team setting are essential.

TRC offers a competitive salary and benefits package. For additional information, or to submit a resume, contact Melissa Gillespie at mgillespie@trcsolutions.com.
EVENTS AND CONFERENCES

Society of Highway Engineers Present The Delaware River Joint Toll Bridge Commission’s Scudder Falls Bridge Replacement Project - 1 PDH
I-95 Scudder Falls Bridge Replacement

Questions:
Samantha Schultz (sshultz@caoepe.com) or Diana Perez (dperez@caoepe.com)

Speakers: Roy W. Little, PE, Chief Engineer and Kevin M. Skeels, PE, Assistant Chief Engineer, Delaware River Joint Toll Bridge Commission (DRJTC)

Date/Time: Wednesday, January 17, 2018
Cocktails 6:00 PM, Dinner 7:00, Meeting Presentation 8:00

Location: Radisson Hotel, Valley Forge 1st Avenue and Gulph Road Valley Forge, PA

Fees: $40 through January 11 ($25 for government employees and students), $50 January 12th and after and at the door

RSVP: PLEASE NOTE - RESERVATIONS MUST BE MADE THROUGH DELAWARE VALLEY SECTION, ASHE.
The Philadelphia Section will NOT be accepting any reservations for this meeting.
Reservations can be made as follows:

- By mail - please send your check with the names of attendees to Delaware Valley Section ASHE, c/o Contractors Association, 1500 Walnut Street, Suite 1105, Philadelphia, PA 19102.
- By fax - please fax the names of attendees to the Contractors Association, 215-546-2259, with payment to follow.
- By e-mail - please e-mail the names of attendees to Samantha Schultz (sshultz@caoepe.com) or Diana Perez (dperez@caoepe.com) with payment to follow.
- By PayPal - Click here for Link to PayPal Payment Option.

Payment will be accepted at the door with no penalty for faxed and e-mailed reservations received before the RSVP deadline. "Express" self-service registration is available for those using PayPal, which will allow you to skip the registration line.

Click here for RSVP

EWR Presents "Using GIS and Enterprise Data Management to Manage Your Capital Assets" - 1.0 PDH

The presentation will explore using GIS and enterprise data management to manage your capital assets, and focus on solutions that can be provided to the water and wastewater industries. Please feel free to contact Eric Lindhult (215-852-0068, or Eric.Lindhult@gmail.com) for any general questions.

Speakers: Raymond Lees and Brett Milburn - Langan Engineering and Environmental Services

Date/Time: January 24, 2018, 5:30pm-8pm

Location: Pepper’s: 239 Town Center Rd, King of Prussia, PA

Fees: $30 per person; $25 per Student or Government Employee

RSVP: Please RSVP by 5:00 on Monday, January 22nd. RSVP via online reservations. PayPal is available for this event.
EVENTS AND CONFERENCES

**SWANApalooza 2018**
Denver, Colorado
March 5-7, 2018
SWANApalooza.org

**IFCEE 2018**
March 5-10, 2018 | Orlando, Florida USA

**GEOTECHNICAL EARTHQUAKE ENGINEERING AND SOIL DYNAMICS V**
AUSTIN, TEXAS | JUNE 10–13, 2018

**Geo-Congress 2019**
Philadelphia, Pennsylvania | March 24–27, 2019
College of Engineering
TEMPLE UNIVERSITY

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