

New York State Society



# The Drawingboard

#### April 2012

Volume 12, Number 04

### In This Issue

- President's Message
- Meeting Notice
- NYC Rules Update
- DEP Stromwater Guidelines
- GWB
- Design-Build
- DOB Notices
- Environmental Awards
- Job Postings
- Professional Services and Sponsors

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### President's Message

#### By George Tavoulareas, P.E. President <u>gltpe@msn.com</u>

Special inspections are conducted during the building construction process to verify that work is being done in accordance to approved plans and specifications. The NYC Construction Codes designate third parties as approved agencies to perform tests or inspections of materials and equipment, construction-related activities and qualification of specified personnel. Many of our members and architects perform these inspections and hence, ensure that the work is being done in accordance with the approved construction documents. These inspections ensure that buildings are constructed in a safe manner and hence, protect the public. The City of New York through the NYC Dept of Buildings has issued a proposed amendment:

#### http://www.nyc.gov/html/dob/downloads/rules/1\_RCNY\_101-03\_prom\_details\_date.pdf

to existing Rule 1RCNY 101-06:

http://www.nyc.gov/html/dob/downloads/rules/1\_RCNY\_101-06.pdf

The effective date for this amendment is May 13, 2012. Last year our society along with several other technical societies responded and commented on this proposed rule. Unfortunately, the City did not adhere to our recommendations for improvement and decided to promulgate the rule last week. In summary, this rule now requires special inspection agencies to be registered with the DOB and pay exhorbitant fees, creates three classes of special inspection agencies, requires accreditation for Class 1 agencies resulting in more exhorbitant fees to outside entities, requires a NYC business address, professional liability insurance, allows tradespeople to practice engineering, etc. Furthermore,

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the agency structure language in its current form allows any corporate structure to perform special inspections and this will foster illegal practice and rubber stamping. Pursuant to NYS Education Law [with very limited exception of some grandfathered general business corporations] under NYS education law section 7209 (6), general business corporations and other general business entities cannot offer to provide professional engineering services. In short, since the performance of these special inspections is considered the practice of engineering by the NYS Education Department any individual or entity engaged in performing these inspections must either obtain a Certificate of Authorization from the NYS Education Dept. or be Professional Engineer practicing as a sole Registered Architects and authorized Architectural proprietor. Entities can also perform these special inspections. The PE or RA must be the owner of the entity performing the special inspections, not just a full time director. Our Society opposes any corporate entity that is not authorized by the NYS Education Dept. to practice engineering or architecture and perform special inspections.

Furthermore, the exorbitant fees engineers now need to pay to perform these inspections is outrageous and is a bad idea in a very bad economy. Government shouldn't be imposing fees (taxes) and stifling economic activity. These fees will only be passed on to homeowners and eventually will limit the number of license design professionals doing this work and increase construction costs in NYC. As we all know, many license design professionals and the construction industry in NYC are hurting financially. Engineers and other license design professionals are barely scraping by to make ends meet. This new rule will create another layer of bureaucracy, limit the pool of license design professionals and promote illegal practice. I urge you to contact the mayor's office and demand that they reconsider this rule.

We will discuss this rule at our next general membership meeting which is scheduled for April 26, 2012at 6:15 pm in Ft. Totten.

### Next General Membership Meeting

The next general membership meeting will be held on Thursday April 26, 2012 at 6:15pm. AT 422 Weaver Ave in Ft.Totten, NY

Admission is \$10 for NSPE members and \$20 for non-members

1 PDH Fuel Oil Storage Systems

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# NYC Rules Update

Proposed Rules and ADOPTED rules Governing the City of New York can be viewed at:

#### http://www.nyc.gov/html/nycrules/html/proposed/proposed.shtml

### **DEP Stormwater Guidelines**

As many of you are aware, DEP's stormwater performance standard was published on January 4,2012. Additional information can be found on DEP's website. At the same time, DEP published the Guidelines for the Design and Construction of Stormwater Management Systems. Both the rule and companion guidelines were the result of an extensive collaborative effort and your invaluable input. These guidelines will be continually updated to reflect any future changes to stormwater rules and the latest technologies and best practices. These guidelines will also include a system calculator to assist developers and licensed professionals in determining space requirements for the most appropriate system when DEP's stormwater performance standard takes effect in July 2012.

### VARIABLES

## **Maintaining Bridges, Building Bridges**

During a visit with her father to the George Washington Bridge in New York City when she was but a little girl, Andrea Giorgi Bocker, P.E., asked her father, who was the manager of the bridge, how she'd be able to build something as grand as the span that connects Washington Heights to Fort Lee, New Jersey.

Any engineer knows the simple answer to such a profound question.

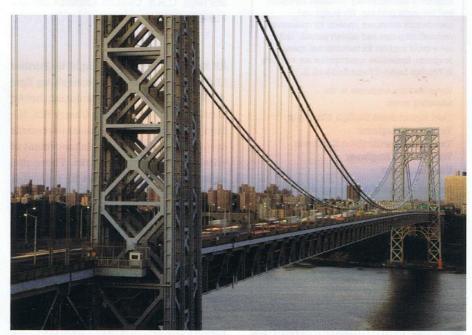
"He said, 'you have to be a civil engineer,' and that was my quest from then on," says the NSPE member.

It took a few decades, and a robust body of work comprising nearly every facet of the Port Authority of New York and New Jersey, but Bocker made it back to the bridge as engineer of construction of the structure and its adjacent bus station. In that role, she's overseeing the bridge's first full rehabilitation—including replacement of all 592 of its suspender ropes and four main cables—in its 80-year history. It's a \$1 billion project in one of the busiest construction and transit markets in the world.

Bocker grew up almost in the shadow of the bridge, at least when her dad brought her to visit his job site. Her youthful fascination with the built environment led to early enrollment at Manhattan College to earn her civil engineering degree and, later, her engineering license. Stops in the Port Authority's aviation design, rail design, tunnels and bridges, and security bureaus preceded her work on the George Washington Bridge. She helped secure the first CAD-based project for the Authority, and eventually, in 2001, transferred to the bridge's management team.

"When I stood on the bridge back in the day, I never thought I could stand on it and be working, but somehow, it all fell into place," she says.

She's in charge of the \$1 billion project, which the Port Authority says will generate 3,600 jobs and \$1.1 billion in regional economic activity. The bridge supports more than 300,000 vehicle trips per day



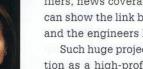
THE GEORGE WASHINGTON BRIDGE IN NEW YORK CITY IS UNDERGOING A \$1 BILLION REHABILITATION-ITS FIRST FULL REHABILITATION IN ITS 80-YEAR HISTORY. THE PROJECT WILL BE OVERSEEN BY NSPE MEMBER ANDREA GIORGI BOCKER, P.E.

and is the busiest bridge in the world, according to the Authority.

"I think it's incredible to be a part of working at a civil engineering landmark and to be a steward for my time here," she says.

she says. High-profile work that affects the lives of hundreds of thousands of people every day can serve as the perfect poster project for a public that doesn't readily identify engineering with progress, Bocker says. When the profession can connect what an engineer does to improvements in people's everyday lives, they might evolve their view of road maintenance in general, and engineering specifically.

"I think [the public] focuses more on 'this work is stopping me from where I need to be' rather than 'wow, this bridge will be good for another 100 years,'" she says. Of course, most notice changes in the bridge when construction begins. More communication—the Authority communicates with its customers and patrons via



ANDREA GIORGI BOCKER, P.E. fliers, news coverage, and other means can show the link between improvements and the engineers behind them.

Such huge projects—and Bocker's position as a high-profile, female engineer can not only burnish the profession's standing in the minds of the public. They can also bridge the gap between young people and the wonders of engineering, like they did for Bocker when she was young. That's why she connects with local school children and university students through regular education events at the Authority and a mentoring program she helps direct at her alma mater.

"The joy of my life is when somebody comes to me and says 'I went to engineering school because of what you told me,'" she says.

Of her many accomplishments, those sentiments stick out, she says.

"That's the most rewarding of all, that I shared that passion."

### **PE REPORT**

# New York Authorizes Design-Build On Select Infrastructure Projects

New York Governor Andrew Cuomo signed legislation on December 9 permitting the use of design-build for the infrastructure projects of several state agencies and authorities. The authorization aims to spur economic growth through improving deteriorating infrastructure, but it fails to require qualifications-based selection to procure design services.

The legislation (S.50002/A.40002), effective immediately, applies to design and construction projects over \$1.2 million at the New York State Thruway Authority; the Department of Transportation; the Office of Parks, Recreation, and Historic Preservation; the Department of Environmental Conservation; and the New York State Bridge Authority.

The agencies can select a proposal using "best value," which is defined as awarding services to the firm based on quality, cost and efficiency, price, and performance criteria. The criteria that can be used by the agency to award the proposal include the following:

- The quality and timeliness of the contractor's performance on previous projects, in addition to the level of customer satisfaction;
- The contractor's record of performing past projects on budget and minimizing cost overruns;
- The contractor's ability to limit change orders and ability to prepare appropriate project plans;
- The contractor's technical capacities and the qualifications of the contractor's key personnel; and
- The contractor's ability to assess and manage risks and minimize risk impact.

The New York State Society of Professional Engineers and other organizations that advocate for qualifications-based selection of design services will work with the agencies to ensure they understand the benefits of QBS and to make sure that certificates of authorization are part of the selection process.

Since 1995, the National Society of Professional Engineers has formally endorsed the option of using designbuild in the public sector as a way to expedite projects. Additionally, NSPE advocates the use of QBS on design-build projects, whether at the federal, state, or local level. Read NSPE's position on design-build in the public sector by going to www. nspe.org/IssuesandAdvocacy/TakeAction/ index.html and clicking on "Position Statements."



# **UPCOMING CHANGE**

## Special Inspection Agencies: Requirements to Register

Special Inspection Agencies must be registered with the Department of Buildings by November 13, 2012. Online registration begins May 14, 2012.

#### **Registration Classes**

There are three special inspection classes: Class 1, Class 2 and Class 3. Each class is defined based on the scope of work the Special Inspection Agency will perform under <u>1 RCNY §101-06</u>.

#### **Qualifications**

All Special Inspection Agencies must ensure that the special inspectors employed by the agency meet the qualification requirements set forth in Appendix A of <u>1 RCNY §101-06</u>.

#### **Accreditation**

Special Inspection Agencies must obtain accreditation for all Class 1 inspections by May 13, 2013.

#### Insurance

Special Inspection Agencies must obtain insurance to perform special inspections. Registered architects and professional engineers must have \$500,000 in professional liability insurance. At least \$1,000,000 per occurrence general liability insurance is already required for licensed trades. All Special Inspection Agencies must have workers' compensation insurance or a waiver.

#### Service of Process

All Special Inspection Agencies must maintain a New York City address or have an agent in New York State to accept service.

#### Agencies' Composition

A special inspection agency must have one full-time primary director and can have up to four alternative full-time directors. The directors must not be an employee of any other agency that provides special inspection or testing services.

To learn more about Special Inspection Agency requirements, see <u>1 RCNY §101-06</u> or visit the <u>OTCR section</u> page on our website.



# **UPCOMING CHANGE**

## Special Inspection Agencies: Registration Deadline + Filings

The amended Special Inspector and Special Inspection Agencies Rule becomes effective May 13, 2012. Under <u>1 RCNY §101-06</u>, agencies performing special inspections must be registered with the Department by November 13, 2012. The Department will begin online registration May 14, 2012.

### Compliance + TR1 Filings

- Special Inspection Agencies with projects permitted on or after November 5, 2012 must be registered to perform inspections.
- On or after November 5, 2012, the Special Inspection Agency number must be included on the TR1 when identifying responsibility and certifying completion of inspections.
- The applicant of record must identify the special inspection requirement on the TR1 prior to approval.
- The Special Inspection Agency must identify responsibility of the special inspections prior to permit and certify completion of the special inspections prior to sign-off.

#### **Registration Fees**

| Initial:     | \$200                             |
|--------------|-----------------------------------|
| Renewal:     | \$90                              |
| Endorsement: | \$30 per Special Inspection Class |

#### **Insurance**

A Special Inspection Agency must obtain insurance to perform special inspections. All Special Inspection Agencies must have workers compensation insurance or a waiver. Registered architects and professional engineers must have professional liability insurance. Licensed tradespeople must have general liability insurance.

Learn more about Special Inspection Agency requirements at the <u>OTCR section</u> of the Department's website at nyc.gov/buildings.

## NYS Environmental Excellence Awards

Get visibility and recognition for your outstanding, innovative and sustainable projects or programs that are improving and protecting New York's environmental resources and contributing to a viable economy.

Eligible projects are those that demonstrate significant environmental benefits achieved by:

- manufacturing process improvements;
- cutting-edge pollution prevention technologies;
- green infrastructure projects;
- waste reduction and recycling efforts;
- initiatives to reduce greenhouse gas emissions;
- innovative initiatives to "green" businesses, schools, farms, recreational facilities and hospitality facilities;
- innovative wind, solar and biomass projects;
- energy efficiency improvements; and
- creative natural resource/habitat protection or restoration efforts;

*To get application materials and learn more about the award program, please go to DEC's website athttp://www.dec.ny.gov/public/945.html* 

*Contact the DEC's Pollution Prevention Unit at* (518) 402-9469 *or at* <u>eeawards@gw.dec.state.ny.us</u>

Applications must be completed and post marked no later than Friday May 18, 2012

#### CITY OF NEW YORK Queens Borough President CITYWIDE JOB VACANCY NOTICE

Civil Service Title: Consulting Engineer Title Code No: 20835 Division/Work Unit: Topographical Unit Number of Positions: 1 Hours/Shift: Workload Driven

Salary: Commensurate with experience

#### JOB DESCRIPTION

Serve as Chief Consulting Engineer providing oversight and technical assistance to the Borough President's Topographical Bureau. These functions include a variety of activities which assist both governmental agencies and the general public, such as: (1) Review and approve and sign street acquisition and damage maps for Department of Transportation (DOT) and Department of Environmental Protection (DEP); (2) Review and approve street alteration maps; (3) Review and ensure the maintenance of survey monument information; (4) Review and ensure maintenance of street grade and elevation data for the Borough; (5) Issuance of street house numbers and the management of the topographical record room; (6) Present new revenue stream ideas and develop the fee structure for topography services and a system to collect, maintain and reconcile said fees; and (7) Work with the Office of Management and Budget, the Comptroller's Office and other Borough President's Offices to ensure that the fee structure and collection system is compatible and appropriate. (8) Oversight of capital project implementation and act as Borough President's representative on the progress of said projects. (9) Represent Borough President at meetings and resolve issues as directed for office.

#### **QUALIFICATION REQUIREMENTS**

A valid New York State License as a Professional Engineer is required. In addition candidates must have six (6) years of full-time paid experience in civil, mechanical electrical, chemical or air pollution control engineering work

#### TO APPLY, PLEASE SUBMIT RESUME TO:

#### SUSANNE MARCHETTI, DIRECTOR OF PERSONNEL Office of the Borough President 120-55 Queens Boulevard, Suite 249 Kew Gardens, NY 11424

| <b>POST DATE:</b> | <b>POST UNTIL:</b> | JVN#:         |
|-------------------|--------------------|---------------|
| February 22, 2012 | FILLED             | 2012-013-0019 |
|                   |                    |               |

The City is an Equal Opportunity Employer. New York City Residency Required.

### City of New York DEPT. OF DESIGN & CONSTRUCTION Citywide Job Vacancy Notice

| <b>Civil Service Title:</b> MECHANICAL ENGINEER   | <b>Level:</b> 02   |                     |  |
|---|--|---------------------|--|
| Title Code No: 20415  | Sode No: 20415   Salary: \$67,922.00/\$78,110.00-\$94,363.00 |                     |  |
| <b>Office Title:</b> Material Testing/Fabrication Engineer  | Work location: 30-30 Thomson Ave L I City Qns                |                     |  |
| <b>Division/Work Unit:</b> Safety & Site Support/Quality Assurance  | Number of Positions: 1                                       |                     |  |
| Hours/Shift: 35 hrs.  |  |                     |  |
| Under the direction of the Deputy Director or Director, the candidate will supervise overall activities of the Materials Testing & Fabrication Inspection Unit; a group of engineers, technicians and inspectors, ensuring that all materials and products used in DDC capital construction projects conform to DDC specifications and performance requirements. Performs inspections of materials manufacturing and assembly plants nationwide; and coordinates consultant and in-house inspectors performing quality assurance inspections at multiple locations worldwide. Documents inspections and composes comprehensive reports of all aspects of the inspections; including plant operations and final product quality; performs materials inspections and audits. Coordinates inspection requests and assigns consultant and in-house inspectors as necessary. |  |                     |  |
| Qualification Requirements   A valid New York State Professional Engineer's License and four years of full-time experience in mechanical engineering. A master's degree in mechanical engineering from an accredited college will be accepted as equivalent to one year of the full-time experience in mechanical engineering.   Special Note:   In addition to above qualification requirements, to be eligible for placement in Assignment Levels II and III, individuals must have at least one year within the last three years of experience as a major contributor or a project leader on a complex project requiring additional and specific expertise in the disciplines needed to design or construct the project.   Valid NYS Driver License is required. NYC Residency is not required.  |  |                     |  |
| vanu 1016 Driver Electise is required.  |  |                     |  |
| <b>Essential Skills</b><br>A valid New York State Professional Engineer's License is required, as well as ten years construction-related experience is<br>required. Certification as Certified Welding Inspector (CWI) with a working knowledge of ASME and AWS Codes; training in<br>Radiographic Testing (RT), Ultrasonic Testing (UT) and current certification as American Concrete Institute(ACI) level I is<br>preferred. Knowledge of ASTM, API, AWWA, ACI and AASHTO standards is preferred.  |  |                     |  |
| To Apply:   Anilexa Gonzalez - Recruitment Coordinator   NYC Department of Design and Construction   ATT: JVN # 850-2012-99816   30-30 Thomson Avenue - 4th Floor   Long Island City, NY 11101 OR   You may Fax your resume to (718) 391-1608 OR   You may E-mail your resume as a Microsoft Word attachment to: interrecruitment@ddc.nyc.gov   Please send your resume only once; you will receive confirmation of receipt.   To find out more about DDC, visit our website at: www.nyc.gov/ddc  |  |                     |  |
| <b>Post Date:</b> 04/11/2012  | Post Until: filled   | JVN: 850-2012-99816 |  |

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