ENTRY FORM



DVASE 2018 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

| Buildings under \$2M | Buildings Over \$100M | Х |
|--------------------------|-----------------------------|---|
| Buildings \$2M-\$10M | Other Structures Under \$5M | |
| Buildings \$10M - \$30M | Other Structures Over \$5M | |
| Buildings \$30M - \$100M | Single Family Home | |

| Approximate construction cost of facility submitted: | \$185 Million |
|--|--|
| Name of Project: | The Alexander |
| Location of Project: | 1601 Vine Street, Philadelphia, PA |
| Date construction was completed (M/Y): | May 2018 |
| Structural Design Firm: | The Harman Group, Inc. |
| Affiliation: | All entries must be submitted by DVASE member firms or members. |
| Architect: | BLT Architects (Executive Architect) Robert A.M. Stern Architects, LLP (Consulting Design Architect |
| General Contractor: | LF Driscoll Company/BIG-D Construction Joint Venture |

Company Logo (insert .jpg in box below)



Important Notes:

- Please .pdf your completed entry form and email to <u>bsagusti@barrhorstman.com</u>.
- Please also email separately 2-3 of the best .jpg images of your project, for the slide presentation at the May dinner and for the DVASE website. Include a brief (approx. 4 sentences) summary of the project for the DVASE Awards Presentation with this separate email.

Provide a concise project description in the following box (one page maximum). Include the significant aspects of the project and their relationship to the judging criteria.

Acting as a bridge between Center City and North Philadelphia, The Alexander, a mixed-use development adjacent to the new Mormon Temple is a 483,000 square foot multi-unit residential complex with a 31-story residential cast in place concrete tower over a three-story podium and three levels of underground parking. The tower features 264 rental apartments ranging from studios to three-bedrooms. The podium includes 13 three-story townhouses and ground level retail space. Amenities include an indoor swimming pool, six green roofs, an observation deck and amenities terrace; fitness and business centers; and three levels of underground parking 140,000 square feet.

A new mid-block street through the site between the Meetinghouse and the residential building allows access to the residential tower, provides important service functions for the meetinghouse and creates a pedestrian-friendly environment.

Structural challenges included designing the basement levels as a bathtub construction with rock anchors due to hydrostatic pressures from a shallow ground water table. Sloping columns, 5 ½-foot-deep transfer girders and 20 to 36" transfer slabs were used to align different column grids between the stacked residential, amenities, retail and parking layouts. Post-tensioning was utilized in parking level slabs for additional durability and tower floors at the slab edges to stiffen for heavy loading due to pre-cast façade elements.

The Harman Group was the structural engineer and parking consultant on this project.

• The following 5 pages (maximum) can be used to portray your project to the awards committee through photos, renderings, sketches, plans, etc...





Drive through between Meeting House and Tower



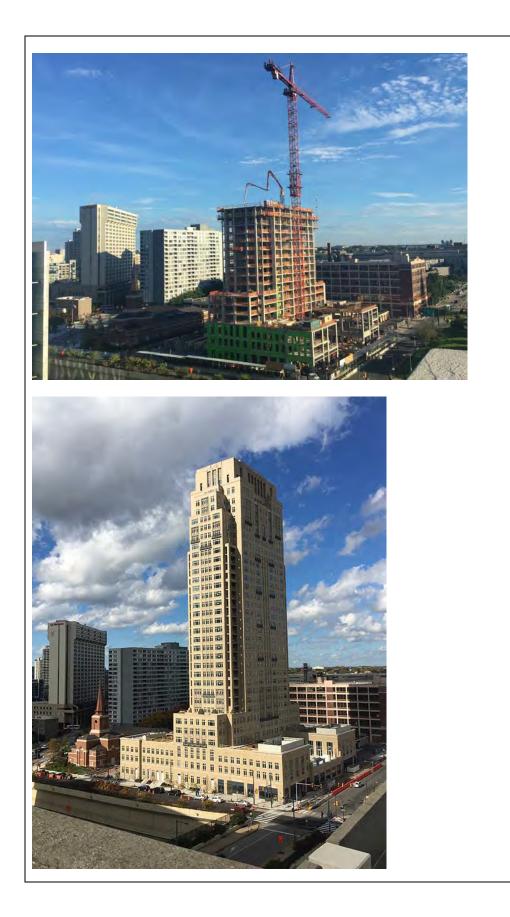
Post-tensioned parking levels



Transfer Girders



Bottom of Transfer Girders after completion



By signing, signatory agrees to the following and represents that he or she is authorized to sign for the structural design firm of record:

All entries become the property of DVASE and will not be returned. By entering, the entrant grants a royalty-free license is granted to DVASE to use any copyrighted material submitted.

If selected as an award winner, you may be offered the opportunity to present your project at a DVASE breakfast seminar. Would you be willing to present to your colleagues? If **YES NO**

Submitted by: Print name: Signature: Date: Todd Campbell, PE April 9, 2018 Submitting Firm: The Harman Group, Inc. Mailing address: 900 West Valley Forge Road, Suite 200 King of Prussia, PA 19406 Email: Telephone: Fax: tcampbell@harmangroup.com 610-337-3360 610-337-3359