

ENTRY FORM



DVASE 2022 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

| | | | |
|--------------------------|---|-----------------------------|--|
| Buildings under \$5M | | Buildings Over \$100M | |
| Buildings \$5M - \$15M | | Other Structures Under \$1M | |
| Buildings \$15M - \$40M | x | Other Structures Over \$1M | |
| Buildings \$40M - \$100M | | Single Family Home | |

| | |
|--|--|
| Approximate construction cost of facility submitted: | \$26 Million |
| Name of Project: | University Meeting and Guesthouse, University of Pennsylvania |
| Location of Project: | Philadelphia, PA |
| Date construction was completed (M/Y): | 09/2021 |
| Structural Design Firm: | Keast & Hood |
| Affiliation: | All entries must be submitted by DVASE member firms or members. |
| Architect: | Deborah Berke Partners |
| General Contractor: | Target Building Construction |

Company Logo (insert .jpg in box below)



Important Notes:

- Please .pdf your completed entry form and email to bsagusti@barrhorstman.com.
- Please also email separately 2-3 of the best .jpg images of your project, for the slide presentation at the annual virtual presentation 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.

To accommodate the university's need for expanded meeting areas and short-term residences for distinguished visiting guests, 3808-3810 Walnut Street was renovated and expanded by 9,000 SF with an addition to the south side of the building, and now serves as the university's new Meeting and Guesthouse. The addition and complete renovation create the experience of an upscale venue and residence for visitors while maintaining the historic north elevation of the Victorian style twins that are synonymous with West Philadelphia architecture.

Keast & Hood was engaged in the 2018 feasibility study of the building's renovation and retained once again for the full project and its expanded scope. The project scope includes a new entrance vestibule and reception area on the south side of the building, a multipurpose event space, executive conference room, guest offices, bathrooms, catering support space, residential guestrooms / suites, common areas, staff offices, and an exterior veranda area suitable for outside events. The site was high profile, located next to the President's house and shared some utilities requiring that the basement remain in operation throughout the project.

The project's structural scope is complicated in that a number of structural floor and wall systems are utilized throughout the building's existing construction as well as its renovation and addition. Engineers needed to knit multiple systems together in order to create flat floorplates and continuous walls throughout the structure. To accommodate residential units and suites on the upper levels, engineers re-supported existing wood floors and added CMU elevator and egress stair shafts which doubled as shear walls. The first floor, which houses the main entrance, is comprised of structural steel framing and a concrete slab in order to support a new terrazzo floor system as well as give the feel of a solid structure and not the flexibility that often comes with aged wood floor systems. The basement, which was originally sloped, was leveled requiring the use of underpinning pits to extend selected sections of the original masonry walls. For the new exterior walls, cold form steel was used to support the terracotta façade.

Additional structural scope includes design and support for an expanded fourth floor and roof, support of roof mounted MEP equipment, framing modifications for new floor and roof openings and infills. In addition, various openings were created in the existing central bearing wall in order to facilitate communication between the two sides of the building as well as creating a large opening which facilitated the installation of a large conference room.

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



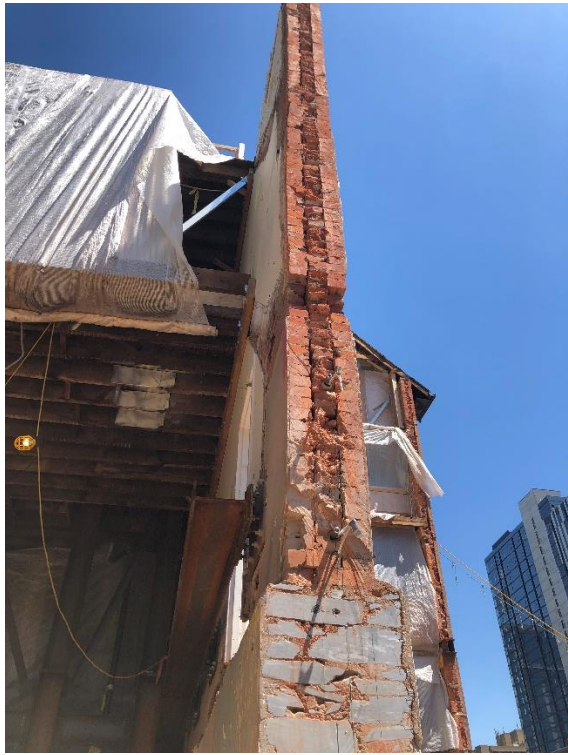
Above: Final photograph of the new University Meeting and Guest House, showing the incorporated original twin facades facing Chestnut Street.
Below: Overview of the new Meeting and Guest House showing the large addition and terracotta façade.





The design called for a large portion of the existing building to be retained. Selective demolition left the brick bearing wall which engineers had to knit the new steel framing and CMU stair tower into.





Above: Existing bearing wall retained



Above: Engineers knitted together the existing bearing wall and the new walls with anchors

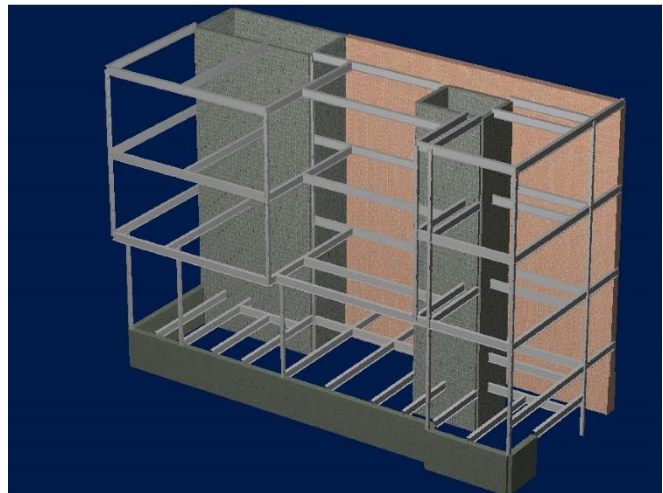


Left: Integration of the masonry for both buildings. Engineers reconstructed the shear walls using the new east stair and elevator tower.



Left: Overall showing the multiple building systems, the existing masonry, the new steel framing, the CMU elevator shaft and stair tower, as well as the wood floor infills being installed.

Right: Isometric to show how the steel framing would work together with the stairwell, elevator shaft, and existing masonry.



Left: The wood floor going in with the steel framing to match the retained wood floors of the existing Victorian and create a seamless transition between the old and new.



Above and Below: Overview of the building before the terracotta panels are added




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 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? YES NO

Submitted by:

| | | |
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