

ENTRY FORM



DVASE 2019 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		Other Structures Over \$1M	
Buildings \$40M - \$100M		Single Family Home	

Approximate construction cost of facility submitted:	13.5 million
Name of Project:	Stable Lofts @ 631 North Broad Street
Location of Project:	631 North Broad Street, Philadelphia, PA 19130
Date construction was completed (M/Y):	January, 2019
Structural Design Firm:	Bala Consulting Engineers, Inc.
Affiliation:	All entries must be submitted by DVASE member firms or members.
Architect:	Canno Design
General Contractor:	Venco Building Group

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 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.

631 North Broad was an existing three-story masonry building built in 1867. The building started as the historic E. Hart Stable, transformed into a motor car showroom, served most recently as an art gallery, and is now a seven-story mixed-use apartment building with roof deck and 5,000 square foot ground floor retail space.

The existing building consisted of exterior clay-brick masonry bearing walls, wood roof trusses, wood joist floor framing, heavy timber girders and cast iron columns.

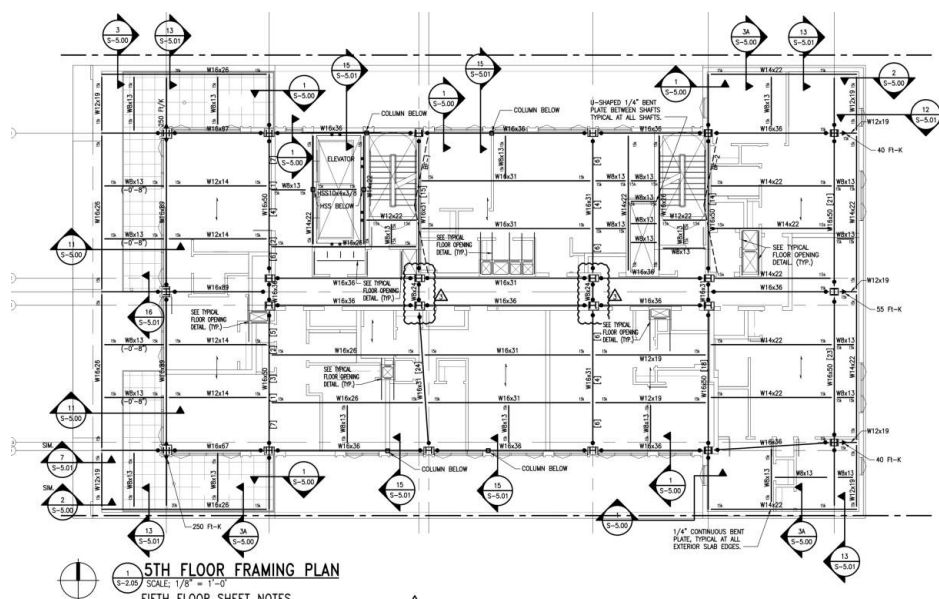
Key structural aspects of the project included (1) temporary/permanent structural bracing, (2) structural demolition, and (3) vertical expansion/new construction. Three separate building permits were required for each.

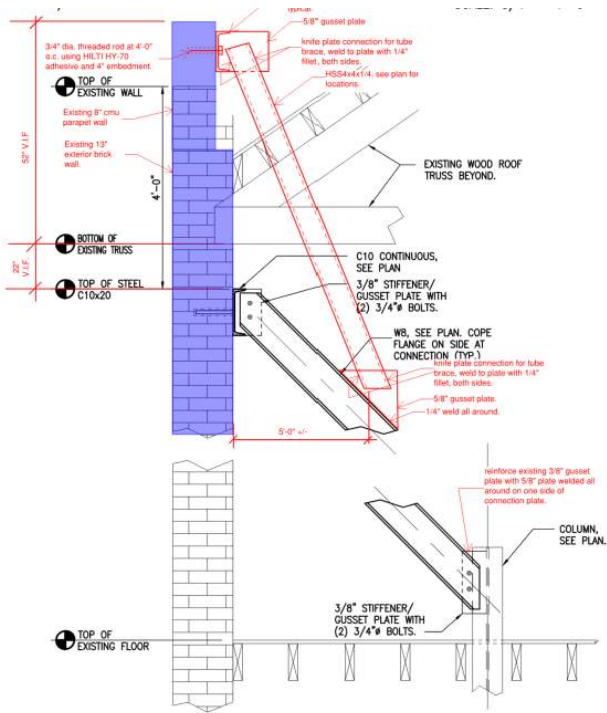
Meetings between the owner, general contractor, steel erector, engineer and architect helped drive the most cost-effective construction sequence of this building.

New foundations and a structural steel frame are built within the existing building structure to temporarily brace existing clay-brick masonry walls (to remain) and allow structural demolition of the existing 2nd, 3rd, and roof structure. Structural demolition of the existing floor levels was required to permit new floor levels at different elevations and for the vertical expansion of the steel framed structure to seven stories.

Additional design items included:

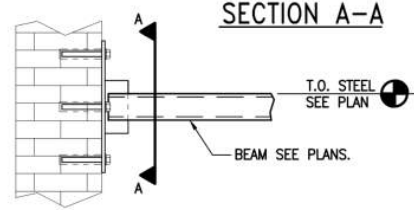
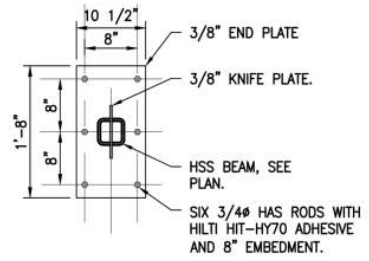
- 1) Underpinning the existing foundation in the southeast corner of the building for a mechanical space.
- 2) Rebuilding the top portion of the existing masonry wall that was deteriorated from weathering and moisture.
- 3) Assisting in the rebuilding and support for a new front pediment to match the existing that needed to be removed during demolition for safety reasons.
- 4) helical anchor and pile cap foundation design for bad soil conditions in the northeast corner of the building.
- 5) Very close coordination and guidance for contractors, subcontractors, owner, and architect during the temporary bracing and structural demolition process of the construction.
- 6) PECO vault elevated slab design over basement mechanical space.





SECTION AT TEMPORARY WALL BRACING
 SCALE: 3/4" = 1'-0"





18
S-5.01

**SECTION AT HSS END PLATE
CONNECTION TO WALL**

SCALE: 3/4" = 1'-0"







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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