ENTRY FORM

DVASE
2018 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

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

Approximate construction cost of facility submitted:	$8 million
Name of Project:	House Renewal - 11 Riverview Harvard University
Location of Project:	Cambridge, MA
Date construction was completed (M/Y):	August 2017
Structural Design Firm:	CVM Professional
Affiliation:	All entries must be submitted by DVASE member firms or members.
Architect:	Beyer Blinder Belle
General Contractor:	Consigli Construction Co., Inc

Company Logo (insert .jpg in box below)

cvm

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.

Harvard University

11 Riverview

A historically-significant structure constructed in 1899, Harvard University renovated this colonial revival house as part of its River House renovation program. Faced with significant structural distress as well as a need to preserve the original structure, CVM developed a strategy that included lifting the house to construct new foundations and reinforcing and strengthening the existing wood structure to address all other deficiencies and support the building's new program.

The original wood framed structure was founded on rubble stone basement walls. Surveys of the structure revealed severe settlement and deterioration of the stone walls. There were also signs of distress in the wood framed walls and floors as a result of the foundation settlement. Because the structure, located on Harvard's campus, is the oldest wood framed building along the Charles River, demolishing the dilapidated structure was not an option. CVM was tasked with developing a plan to restore and rehabilitate the structure, including a full replacement of the foundations.

Relocating the wood framed structure during construction of the foundations was considered, but a suitable temporary location for the structure was not available. Instead, to remove and place the foundations, the entire wood framed structure above the foundation walls was lifted in place approximately 3'-0". Prior to lifting the structure, an engineered shoring system was installed to brace the existing walls against lateral forces while the structure was in the lifted position. Also prior to fully lifting the structure, the existing wall and floor framing was brought back to level and plumb by slowly jacking discrete portions of the structure.

A series of temporary concrete foundations were placed around the structure to be used as foundations for the lifting jacks. The temporary foundations were also used as anchor points for tying down the structure to resist uplift forces while the structure was elevated. New reinforced concrete foundations were constructed below the structure with steel embed bearing plates to allow fastening of the existing heavy timber sill plates with steel angles lagged into the sill plates and welded to the bearing plates.

Once the existing structure was in place on the new foundations, a full rehabilitation of the building was completed. The construction included reinforcing of existing wood connections, installation of new stairs from the basement up to the attic and the construction of a 2 story, steel and cold formed metal framed addition, with a full basement.

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


WOLFE
60
WOLFE
60

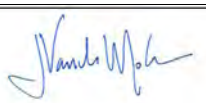

WOLFE
ROLFE 40

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:

Print name:	Signature:	Date:
Jeff VanderMolen, SE		04.09.18

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