

# 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	✓	Other Structures Over \$1M	
Buildings \$40M - \$100M		Single Family Home	

Approximate construction cost of facility submitted:	\$25M
Name of Project:	Abessinio Stadium
Location of Project:	1 St. Rocco Way Wilmington, DE 19802
Date construction was completed (M/Y):	November 2020
Structural Design Firm:	<b>Thornton Tomasetti</b>
Affiliation:	<b>All entries must be submitted by DVASE member firms or members.</b>
Architect:	ABHA Architects; Crawford Architects
General Contractor:	Whiting-Turner

Company Logo (insert .jpg in box below)



### Important Notes:

- Please .pdf your completed entry form and email to [bsagusti@barrhorstman.com](mailto: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.

Located in historic Brandywine Park originally opening in 1922 with renovations in 1956 and 1972, Baynard Stadium at Salesianum School in Wilmington, DE was in need of significant upgrades following the south side bleachers being condemned as structurally unsafe in 2016, which eliminated nearly half of the stadium seating capacity. An agreement between Salesianum and the City of Wilmington followed by a \$16-million dollar donation by Rocco and Mary Abessinio in 2018, led to the demolition of Baynard Stadium and the construction of the new state-of-the-art Abessinio Stadium. The \$25-million 4,000 seat capacity not only serves as an athletic facility for Salesianum School, but also an open-access public facility and office building for Delaware State Parks and local community groups as part of the state park system. The fast-track project began design in early 2019 and Opening Night festivities were held on November 13, 2020.

### **Project Scope**

- New four-story 60-ft tall steel framed grandstand building with bleacher seating
  - 5,000 sq ft ground floor offices for State Parks
  - 2,500 sq ft Level 1 athletic storage space with (2)-1,250 sq ft lower concourse wings
  - 2,500 sq ft Level 2 home team locker room plus coaches offices
  - 2,500 sq ft Level 3 community room and press box with (2)-1,250 sq ft upper concourse wings
- New single story 3,200 sq ft open web steel joist on masonry bearing wall restroom facility below main grandstand bleachers
- New two-story 30-ft tall open web steel joist on masonry bearing walls concourse building conventional steel framed structure to create 6,500 sq ft of programing for visiting team locker room, ATI physical therapy offices and concessions.
- New main entrance grand stair plus extensive site work concrete design
- New 2,600 sq ft pre-engineered maintenance buildings
- New 15-ft tall rooftop canopy structure on top of the grandstand building
- North side visitor bleachers structure

### **Project Highlights**

Close collaboration between the construction team and the design team was the name of the game for this athletic complex project. Originally designed as a concrete structure in schematic design and design development, the structural system was changed to an all steel structure due to schedule and budget factors. Another schedule and sequencing change involved early construction of the masonry stair and elevator enclosures as free-standing elements prior to the start of steel erection, which prompted a design change from an all-steel lateral system to a combined masonry shear wall plus steel moment frame lateral system.

Use of multiple construction types was another common element in the design of the facility. Gravity systems included conventional steel framing systems at the main grandstand building to open web steel joists on masonry bearing wall systems at the concourse and public restroom facilities. Lateral systems included steel moment frame plus masonry shear walls. Changes in site grading from open ground access at the south to grade at Level 1/Track Level necessitated 15-ft tall concrete retaining walls at the north side of the grandstand and concourse building structures due to early backfilling requirements for construction scheduling. Other structural features included 30-ft tall freestanding masonry wind/screen walls along the sides of the grandstand bleachers, masonry backup and lintel design for various brick arches, cast stone support engineering, and site work concrete design for main entrance grand stair plus ramps and site retaining walls around the track.

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



*Grandstand Building South Elevation*

COURTESY OF ABHA ARCHITECTS



*Grandstand Building North Elevation*

COURTESY OF ABHA ARCHITECTS



*Grandstand Building Southwest Elevation with Main Entrance Grand Stair*

COURTESY OF ABHA ARCHITECTS



*Grandstand Building Northwest Elevation with Freestanding Masonry Screen Wall*

COURTESY OF ABHA ARCHITECTS



*Grandstand Building Southeast Elevation*

COURTESY OF ABHA ARCHITECTS



*Concourse Building Northwest Elevation*

COURTESY OF ABHA ARCHITECTS



*Grandstand Building Southeast Elevation Construction*



*Grandstand Building Northwest Elevation Construction with Bleacher Piers*



*Freestanding Masonry Screen Wall Construction with Concourse Building Construction in Background*



*Concourse Building South Elevation Construction*

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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