State College Area High School

State College, PA

Owner: State College High School Construction Contractor: Massaro CM

Services

Architect: Crabtree, Rohrbarugh &

Associates

Structural/MEP Engineer,

Lighting/Security Consultants: Centerpoint

Engineering

Civil/Landscape Engineer: ELA Group Food Service Consultant: McFarland

Kistler & Associates



Image: Massaro Construction

Building: South Building

Project Delivery Method: Design- Bid- Build

Organizational Structure: Construction

Manager Agency W/ Multiple Prime Contracts **Dates of Construction:** October 2015- August

2017

Total Construction Costs: \$101,235,000

Architecture:

- 3 Stories
- 488,200 Gross Square Feet
- 4 Pods- Consists of- Classrooms, Break Out

Rooms, Mini-Meeting Rooms, Bathrooms

 Exterior Facade: Aluminum Storefront System and Manufactured Brick Material

Structural System:

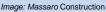
- Foundation- Typical Spread Footing
- Main Structure- Masonry Bearing Walls
- Flooring Support- K & LH Series Steel Joists
- Slab-on-Grade- 3000 PSF Concrete
- Elevated Slabs- Composite Metal Deck w/ Fiber Reinforcement w/ 3000 PSF Concrete
- Interior Wall Structure: Metal Stud Walls

Sustainability System:

- LEED Gold Certified
- Increased Roof R-Values
- Green Roof System
- Solar Array System
- High Performance MEP Systems
- Construction Waste Management

MEP Systems:

- HVAC System- Water Source Heat Pumps
- Classrooms to be Served by 3.5 Ton Units w/ **Ductwork Distribution to Ceiling Diffusers**
- Large Rooftop Units for Common Areas such as Cafeteria and Library
- Hot Water to be Distributed at 140 Degrees Fahrenheit
- Hot Water Return System Controlled by Occupancy Schedule
- Two New Separate Electrical Services- 400A, 480V, 3-Phase, 4-Wire
- Sustainable Design in Lighting- Mounted Occupancy Sensors, Day-Light Harvesting, and Time On/Off Control





Bryce Burkentine Senior Thesis Dr. Chimay Anumba **Construction Management** http://bryceburkentine.wix.co m/2016maethesis

