Structural Category

1. Imifabi – Benwood, WV

   Year: 2000 - 2015

   Imifabi is an industrial facility that mills talc rocks to a powder type consistency. Vaughn, Coast & Vaughn, Inc has been the structural engineer for Imifabi for renovations and expansion of their plant. Structural designs performed at this site includes support framing for five talc silos, 45,000 square feet by 35 feet tall talc storage building, loading dock, 5,000 square feet by 80 feet tall mill expansion, steel pile foundation, compressor deck and multiple internal support structures for dust collectors, dryers and miscellaneous equipment.

2. Social Security Building – Wheeling, WV

   Year: 2004
   10,000 square feet single story building
   Foundation: reinforced concrete footings with reinforced light weight concrete masonry walls
   Floor: concrete slab on grade
   Walls: light gage metal framing with cast stone and brick veneer
   Roof: Wood trusses with wood sheathing and metal roof.

   Architect: Shaeffer and Madama, Wheeling, WV
   Structural Engineer: Vaughn, Coast & Vaughn, Inc., St. Clairsville, OH
   Contractor: Walters Construction, Wheeling, WV

3. FedEx Customer Service Facility – Fox Commerce Park, Belmont County, OH

   Year: 2005
   9,260 square feet single story building, 15 feet eave height
   Foundation: reinforced concrete footings and walls
   Floor: concrete slab on grade
   Building: Pre-engineered metal building, moment frame type

   Architect: Siebieda and Associates, Bellaire, OH
   Structural Engineer: Vaughn, Coast & Vaughn, Inc., St. Clairsville, OH
   Contractor: Walters Construction, Wheeling, WV

   3. Staley Communications, Wheeling, WV

   Year: 2005
   Renovation of 100+ year old three story, 25,000 square feet, warehouse into an office and service facility.

   Existing construction: Multi-wythe brick walls; industrial framing with wood timber posts, beams and joists; wood floors.

   Structural engineering: analysis and modifications to existing wood framing system for new use; design of two masonry stair towers and masonry elevator shaft. The existing timber beams required modifications to support new floor loads. A flitch beam type design utilizing steel plates attached to the sides of the existing wood beams was employed for construction.

   Architect: Shaeffer and Madama, Wheeling, WV
   Structural Engineer: Vaughn, Coast & Vaughn, Inc., St. Clairsville, OH
   Contractor: Walters Construction, Wheeling, WV

4. Lutheran Church, Wheeling, WV

   Year: 2005
   Structural renovation of existing timber roof truss in 19th century church.

   An existing timber truss spanning 50 feet and 18 feet in height supported the roof, ceiling joists and 24 feet diameter dome overtop of the sanctuary. Over the years, water had accessed the bearing end of the truss permitting a fungal dry rot to develop at this location. This end of the truss decayed and dropped 4 to 5 inches in elevation, placing the truss in a precariously, unstable position. The end of the truss was repaired with structural steel channels and lifted back to its original position.

5. Sanitary Engineering Facilities

   Over the years, Vaughn, Coast & Vaughn, Inc. has prepared many structural designs for sanitary engineering structures such as aeration tanks, clarifiers, filters, pumping stations, operations buildings, retaining walls and the like.