



Rochester Fire Station No. 2 was old, small and inappropriately located. Council agreed to a new facility if the fire department included the police department's PSAP and the emergency management department's EOC.

The nine-acre relocation site was at the intersection of two major roadways. The city planned to sell the most valuable portions for retail use, so a new street was planned bisecting the property to enable development. The new road had to align with existing curb cuts, follow the road-



way design guidelines and avoid ravines. The only leftover parcel was a 2.44-acre steeply sloping site.

The north portion of the building serves as the public entrance and contains a museum, conference room and rest-room. There are four drive-through appa-



ratus bays, an EMS supply depot, the arson evidence room and a specialty shop that conducts hose/ladder testing. For peace and quiet, the living spaces face away from the future retail. The eat-in kitchen and patio have dramatic southeast views. There are four firefighter and two officer dorm rooms with windows opening onto a wooded area.

The steep topography allows a separate lower-level entry for the access restricted EOC and PSAP. Since the EOC will be used for city training when not activated, access is restricted between the levels without impeding emergency egress.

The station is planned to house firefighters fresh from the academy, so it includes many training features for continued learning. There is study space in each



bunkroom. A five-story tower contains rappelling tie-offs inside and out, roof access, “windows” at the second through fourth floors, removable railings, stair runs with removable treads, a manhole and a standpipe with sprinkler head. A mezzanine off the tower provides access to a balcony, doors to the apparatus bay for drills during inclement weather, and space for obstacle props.

Official Project Name: Rochester Fire Station No. 2

Project City/State: Minneapolis, MN

Date Completed: April 27, 2015

Fire Chief: Greg Martin

Project Area (sq.ft.) 31,220

Total Cost: \$7,785,099

Cost Per Square Foot: \$249.36

Architect/Firm Name: BKV Group

Website: bkgroup.com

Design Team: BKV Group: Craig Carter, Brady Halverson, Margaret Lafferty, Tom Olson, Meaghan de la Rosa. Bruce Schwartzman; **McGhie & Betts:** Dave Morrill, Bill Tointon; **MEP Associates:** Alan Mennecke, Gary Olson, Lee Tapper; **WSN:** David Kane, Bruce Meadows; **Rochester Fire:** Chief Greg Martin, Curt Pronk, Vance Swisher, Ken Jones, Firefighter Advisory Committee





The new Public Safety Facility in Conway, SC, showcases the region's "low-country" style and character, while giving the city a state-of-the-art fire and police complex. Additionally, site considerations were paramount to the design of this facility. Great care was taken to preserve the heavily wooded lot of old-growth live oak trees, including designing the facility to wrap around and showcase these beautiful trees.

The new two-story structure houses the police department headquarters on the second floor, and the fire department



headquarters on the first floor. Combining the two departments into a single public safety facility, allows for a joint use of common areas such as training rooms, conference rooms, day room, physical fitness area and communications. Additionally, the shared facility utilizes a joint public entrance and lobby. The design helped the city to save a considerable amount of money and space over having two separate facilities. This fire department houses five truck bays with a work shop and a mezzanine for equipment storage.

The city owned a large and beautiful site that was the home of a dilapidated hospital that needed to be demolished to make way for the public safety facility. The site also contained a large number of old-growth live oak trees that would need to be preserved. During the design process it was decided that the new structure would need to closely mirror the L-shape of the original hospital in order to preserve the natural beauty of the site.

The building design is representative of the low-country style and character. Due to its coastal location, the structure



is designed to withstand 130-plus mph winds and has impact-resistant glazing and hardened exterior walls to resist damage by hurricanes. The elevation of the site was raised to prevent the possibility of flooding.

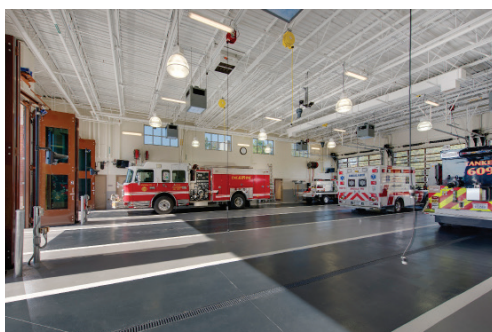


Official Project Name: Conway, SC, Public Safety Facility
Project City/State: Conway, SC
Date Completed: Nov. 1, 2014
Fire Chief: Rick Baker
Project Area (sq.ft.): 26,963
Total Cost: \$4,703,965
Cost Per Square Foot: \$174.46
Architect/Firm Name: Stewart-Cooper-Newell Architects
Website: fire-station.com
Design Team: Architect of Record: Stewart-Cooper-Newell Architects;
Construction Manager: Chancel Builders; **Civil:** DN Engineering, Inc.; **P/M/E:** Optima Engineering;
Structural: Kyzer & Timmerman Structural Engineers



Loudoun County, VA, is located in close proximity to Washington, D.C., and is experiencing exponential growth. The Public Safety Center located on five acres is a key component to the transformation of this community. This facility is the home of Loudoun County Fire and Rescue #9, Arcola Volunteer Fire Department and the Fire Marshal's office.

The firehouse consists of a three-bay drive-through with bi-fold exit doors and sectional overhead return doors. All dirty work areas, workshops, decontamination area, hose storage and PPE storage areas are placed remotely from the living quarters. The PPE storage is designed with a self-contained HVAC system that directs cool supply air up and through the gear and is exhausted through a heat exchanger. A training tower is included as part of the design to allow for upper level extraction, rappelling station, high rope rigging, and stair training for hose work.



The bunks are divided into separate spaces that coordinate with the specific apparatus being used by the personnel, to allow for localized station alerting.

The Fire Marshal's office contains both plans review/inspection services and arson investigation, including the bomb squad. Areas include apparatus bay space for secure storage of specialized equipment and vehicles, evidence storage, explosives storage (remote from building), interview and investigation offices. The facility also



includes administrative offices, bunkrooms, and a K9 kennel and runs for the detection dogs.

The central entrance to the building leads to a large meeting room for use by the fire service, volunteers, and is open for community use. A covered rear parking area is used by the volunteers for their child seat-installation program.

Designs to achieve LEED Silver certification the facility includes geothermal heating/cooling, radiant floor heating in the bays, water harvesting for use in training and vehicle wash-down.

Official Project Name: Brambleton Public Safety Center
Project City/State: Brambleton, VA
Date Completed: Dec. 12, 2014
Fire Chief: W. Keith Brower Jr.
Project Area (sq.ft.): 22,000
Total Cost: \$6,517,972
Cost Per Square Foot: \$296.27
Architect/Firm Name: Bignell Watkins Hasser Architects, PC
Website: bigwaha.com
Design Team: Architect/Interiors: Bignell Watkins Hasser Architects;
Structural Engineer: Adtek Engineers, Inc.; **MEP Engineer:** RMF Engineering; **Civil Engineer:** Stantec Consulting Services



The new emergency response Training Center for the Community Volunteer Fire Department is a shared-use facility providing community space, training for fire and EMS personnel, and an EMS apparatus bay, all located on an existing fire station site, allowing for shared use of the communication tower, generator, fueling station and other amenities.

The original fire station, which was designed by the same design team over a decade earlier, also received interior and exterior renovations to synthesize its exterior aesthetic with the new structure, provide solar shading to existing glazed areas, and modernize security and building systems.



Key aspects of site development include:

- Increased parking and developed landscaping area
- Improved site circulation, including vehicular access behind the existing fire



station to access both adjacent streets on the corner lot

- Addition of accessible fueling station for emergency response apparatus

Enhancing features include:

- State-of-the-art driving simulator
- Highly integrated technology delivery of audio/visual systems in both the large and small conference rooms areas
- Flexible arrangement of large conference space through movable partition and flexible furniture
- Two-story volume pre-function space acts as lobby and circulation core

Official Project Name: Community VFD Training Center

Project City/State: Houston, TX

Date Completed: April 21, 2015

Fire Chief: Steve Fowler

Project Area (sq.ft.): 12,270

Total Cost: \$4,487,306

Cost Per Square Foot: \$366

Architect/Firm Name: Joiner Architects

Website: joinerarchitects.com

Design Team: Carl Joiner, AIA;

Joby Copley, AIA; **Construction**

Administration: Chad Joiner;

General Contractor: Durotech;

Civil: Jones and Carter; **Structural:**

Matrix Structural Engineers;

MEP: DBR Engineering Consultants

to accommodate various functions, capacities and programs, including community organizations and events

The Community Volunteer Fire Department's new addition to its existing flagship fire station and administrative offices provides a regionally accessible training center that is designed and equipped to provide 21st-century training in a variety of formats and settings to emergency response personnel on a single site with separate fire and EMS stations.