

Harlem-Roscoe Fire Protection District Station No. 1 Renovation

ROSCOE, IL



wenty years ago, the Harlem Roscoe FPD transformed a grocery store into its Head-quarters Station. Over that time, the facility served the district well, but was no longer meeting the district's operational needs, showing signs of age and did not properly reflect the district's image – it didn't look like a firehouse.

It was time for a thorough renovation. The District had three goals for the project: improve street presence, upgrade living quarters and improve energy efficiency.

Before

Improve Street Presence:
The building exterior was replaced and large windows shaped like traditional fire house bay doors and a tower element were added, giving the building a true civic presence. A new entry plaza now faces Main Street and a new lobby houses a museum to showcase the rich

history of the 100-year-old District.

Upgrade Living Quarters: Once dark and cavernous, two additions provide natural daylight and added bunkroom space for today's firefighters and future full-time firefighters as the FPD continues its transition from a volunteer district to full-time. Color and finishes offer a bright, comfortable home away from home. The district also has a longstanding tradition with its annual dinner event where they prepare and serve more than 2,000 meals for the community. The kitchen was renovated to better serve the existing staff and accommodate this annual event. A complete interior renovation resulted in a new floor plan with streamlined access to the bays while improving building flow and operational efficiency.

Official Project Name: Harlem-Roscoe Fire
Protection District Station No. 1 Renovation
Project City/State: Roscoe, IL
Date Completed: February 1, 2014
Fire Chief: Donald Shoevlin
Project Area (sq.ft.) 28,500
Total Cost: \$4,200,000
Cost Per Square Foot: \$147.36
Architect/Firm Name: FGM Architects Inc.
Website: www.fgmarchitects.com
Design Team: Andy Jasek, AIA, Principal-in-Charge; Jason Estes, AIA, Project Manager;
Louise Kowalczyk, AIA, LEED AP, Project
Designer; Annabella Orlando, AIA, LEED AP
BD+C, Project Architect; Steve Welter, PLA,

Improve Energy Efficiency Mechanical systems were replaced with energyefficient units. Energy-efficient ventila-

ASLA, LEED AP BD+C, Landscape Architect

tion, LED lighting, natural light and ventilation create a welcoming and comfortable interior environment. The high-performing systems and improvements to the building envelope, walls and roof make this building meet LEED certification standards.

The renovated station now takes its righteous place as a true beacon of the community.





Atascocita VFD Headquarters/ **N.W. Smith Training Center** ATASCOCITA, TX



he new home of the Atascocita Volunteer Fire Department is the result of a highly collaborative effort between the fire department and the design team. The project consisted of transforming an aging and abandoned former school and church facility into a state-of-the-art administrative, training and EMS response center.

The facility's design addresses the need for a true headquarters for the county Emergency Services District (ESD), which represents one the fastest growing areas in the Greater Houston, TX, area.

Key aspects of Site Development include:

- Dramatic overall aesthetic improvement to the existing structure for the community's benefit (especially including the directly adjacent multifamily residential population and the middle school located directly across the street).
- The opening of a secondary vehicle

Before

access point from the street.

- The landscaping beautification and expansion of the parking area, including a designated and permitted helicopter landing zone.
- Provision of covered parking for department vehicles.

Enhancing features include:

- The facility is designed for multiple uses, accommodating administrative offices, department-wide training, community functions and emergency response.
- State-of-the-art vehicle bay exhaust system, emergency generator and hurricane force rating.
- Sustainable building strategies, including building mechanical automation systems, site and building re-use,

Official Project Name: Atascocita VFD Headquarters/N.W. Smith Training Center Project City/State: Atascocita, TX Date Completed: August 1, 2013 Fire Chief: William Bivens Project Area (sq.ft.) 11,030 Total Cost: \$1,747,950 Cost Per Square Foot: \$158.47 Architect/Firm Name: Joiner Partnership, Inc. Website: www.joinerarchitects.com Design Team: Carl Joiner, AIA - Project Executive, Ricardo Martinez, AIA - Project Architect, Chad Joiner - Director of Construction, Civil Engineering - Jones + Carter, Structural Engineering - Matrix Structural Engineers, M/E/P Engineers - DBR **Engineering Consultants**

and natural day lighting.

The Atascocita Volunteer Fire De-

partment's new headquarters makes a lasting statement to the community that the ESD and the department are committed to being trusted stewards of public funds by choosing to renovate an existing structure, reducing project costs while improving the community's visual landscape and ability to respond to local emergencies.







ritical to any public fire station project is garnering the required community support necessary to move forward. In 2006, voters defeated a proposal to replace the district's existing 70-year-old career/volunteer station with a new, modern (and modern looking) state-of-the-art facility. The district and their architect undertook an extensive multi-year Failure Mode & Effects Analysis (FMEA) to identify, quantify and address the reasons for public opposition to a new station.

A major issue with the community was the desire to keep the aesthetics of the existing station intact, renovate it and create an addition that closely resembled it. The architect worked in concert with the community, adjacent neighbors and fire district to address this and other pertinent issues. In 2010, during the depths

of the country's recession, with a renovation/addition design solution in-hand, 25 public meetings, 20 existing facility tours and countless hours of one-on-one outreach, voters overwhelmingly approved the project.

Following LEED guidelines and utilizing as many existing materials as possible (brick, maple floors, and salvaged doors), we created a state-of-theart, fully-sprinklered facility, completely redesigning every square foot of the existing structure. The old bays became a classroom, offices were converted to bunker areas and the underutilized basement became a fitness area. The new addition included modern, properly sized bays, bay support spaces such as decon, SCBA, firematic storage and work room, communications room, line officers and chief's offices and inte-

grated active training components directly off the bays.

Critical to the success was an outstanding client with a handson fire chief and the support of the community. The result has been broadly praised by the public and adjacent neighbors, proving that an early setback can create opportunity for something far better than originally imagined.



Official Project Name: Niskayuna Fire District No. 1

Project City/State: Niskayuna, NY Date Completed: March 9, 2012 Fire Chief: Dale Lingenfelter Project Area (sq.ft.) 19,900 Total Cost: \$3,400,000 Cost Per Square Foot: \$170.85

Architect/Firm Name: Pacheco Ross

Architects, P.C.

Website: www.pra-pc.com

Design Team: David J. Pacheco, AIA Project Manager/Designer; Dennis A. Ross, AIA Project Architect; Katrina N. Pacheco, Project Captain; Ed Woerhle, Chairman, Board of Fire Commissioners; Tom Nappi, Building Committee Chairman; John Fitzmaurice, Clerk; AKW Consulting, Craig Maloney, P.E.; Structural

MHProfessional Engineering; MEP

ABD Engineers, Civil



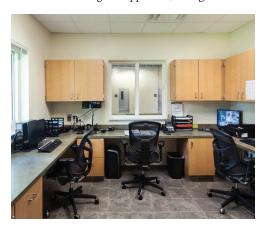
Hillsborough County Fire Rescue Station #14 Addition & Renovations TAMPA, FL



illsborough County Fire Rescue closed its 1969 vintage Fire Rescue Station No. 14 in November 2010. Its 10.8-foot high overhead doors could no longer accommodate modern apparatus and the bunk area, day room, and toilet facilities were in substandard condition.

Because of its ideal location within its service area, the county decided to fund the renovation of the facility. The improvements included the demolition of an earlier 1,520-square-foot addition that housed open dormitory style bunks and a gang toilet/shower room. A 940-square-foot addition provided six private bunks with built-in desks and lockers, two private toilet/shower rooms and an EMS office.

All of the original apparatus, living,





and operations areas were extensively renovated and remodeled. The most significant part of the renovation was raising the existing, precast concrete, double-tee roof framing 24 inches over the apparatus area using hydraulic house-moving equipment.

This enabled the installation of 12-foot high, overhead sectional doors and the restoration of drivethrough operation for the two bays which corrected the station's biggest shortcoming.

An NFPA 13-compliant fire sprinkler system was installed throughout the station. The HVAC, plumbing, and electrical systems were completely replaced with high-efficiency components. All interior and exterior finishes were renovated and the exterior

Official Project Name: Hillsborough County Fire Rescue Station #14 Addition & Renovations Project City/State: Tampa, FL Date Completed: February 14, 2014 Fire Chief: Ronald Rogers Project Area (sq.ft.) 6,775 Total Cost: \$1,471,919 Cost Per Square Foot: \$217.26 Architect/Firm Name: John Cutler Kelly, AIA/ FleischmanGarcia Architecture Website: www.fleischmangarcia.com Design Team: John Cutler Kelly, AIA/ Principal-in-Charge/FleischmanGarcia Architecture; Jeffrey E. Pelszynski/Project Manager/FleischmanGarcia Arrchitecture; Chris Weddle, PE/Civil Engineer/Aurora Civil Engineering; Alyson Utter, ASLA/Landscape Architect/Anderson-Lesniak Limited; Michael E. McCarthy, PE/Structural Engineer/McCarthy & Associates, Inc.; Stanley P. Newton, PE/Mechanical, Electrical, Plumbing Engineer/Engineering

masonry walls were reinforced for enhanced hurricane resistance. The kitchen, dining/dayroom, station office and captain's bunk were completely remodeled and a public restroom was provided.

Matrix, Inc.

The renovated station accommodates seven shift personnel. It was reopened in February 2014 and is now the busiest station in Hillsborough County Fire Rescue's 43 station system.



Philipstown North Highlands Fire Station COLD SPRING. NY



esponding to community concerns about cost, the North Highland Engine Co. 1 commissioners looked to reuse as much as possible of their 9,000-square-foot 1970's metal building to create a state-of-the-art, masonry station with a minimum 75-year usable life. Although the skin and mechanical systems were dilapidated, the foundation, slab, and structural frame were sound.

Originally programmed for 23,900square-foot the project was cut back before going to the voters, and then again after a defeated referendum. The final 16,679-square-foot scheme was considered "bare bones". With a limited budget, it was essential to squeeze every penny out of the existing structure and site work while still addressing training



needs, meeting NFPA standards, and the requirements of being an outer perimeter Radiological DeCon Center for Indian Point Nuclear Power Plant.

The entire original structure was saved, including foundation and slabs. A new building was built around the original,



with the original structure holding up 60% of the roof, saving \$430,000 (9% of the total cost). Two double-deep drive-through bays were added in Phase One, allowing the department to operate out of the station throughout construction. Public access to the department's Little League field was also maintained throughout construction.

The station supports an active training program that is both didactic and practical. A multi-purpose meeting/training room seats 100 for in-house classes, county training, and NRC radiological response

training. The department's commitment to member physical fitness is supported by the exercise room. The apparatus bay mezzanine has an integrated bailout window and confined space extrication hatch. The large rear parking area allows frequent truck and hose exercises.

The most salient aspect of this project is that it salvaged a significant value from an otherwise wholly unacceptable, dead-ended, existing station to become a facility that will serve its community for decades to come.

Official Project Name: Philipstown North
Highlands Fire Station
Project City/State: Cold Spring, NY
Date Completed: March 15, 2010
Fire Chief: Joseph Hyatt (North Highlands
Engine Company No. 1)
Project Area (sq.ft.) 16,679
Total Cost: \$4,179,000
Cost Per Square Foot: \$251
Architect/Firm Name: Mitchell Associates

Architects
Website: www.mitchell-architects.com
Design Team: Robert Mitchell, AIA,
Architect-in-Charge; Tom Lee, Project
Manager; Craig Maloney, Structural
Engineer Bergmann Associates, Inc.,
Civil and Mechanical Engineers; George
Lisikatos, Chair of the Board of Fire
Commissioners; John Van Tassel,
Commissioner