

Industrial

Finch Chipper Rm Wood Rm

Glens Falls, NY

Size: 21,500 sq-ft

The project involved the retrofit of a sprinkler system within the existing facility. The sprinkler system design was designed in four “phases” for protection of the Chipper Room, Wood Room, Office Area, and Storage Area. The total square footage of the sprinkler retrofit area was about 21,500 square feet.

It was assumed most of the sprinkler systems would be dry pipe systems, per FM Global requirements and based on site ambient conditions. It was anticipated that a new fire pump would be required to supply the water demand of the new sprinkler systems. The site contained an existing 500 gpm fire pump.

Based on current NFPA-13 requirements and FM Global recommendations, it was estimated that the indoor sprinkler demand will be at least 900 to 1,000 gpm, exceeding the capacity of the existing fire pump. Therefore, a new fire pump was required.

Sprinkler system drawings were provided by RAN, and showed sprinkler locations, mains, and branch lines per NFPA 13 and FM Global requirements. Hydraulic calculations of sprinkler systems per NFPA 13 and FM Global requirements with final shop drawing hydraulic calculations were also provided by RAN. RAN also designed a fire alarm control panel(s)/system extension to monitor the new sprinkler systems, as required by NYS Fire Code.



SABIC

Selkirk, NY

Construction Cost: \$500,000 Size: 60,000 sq-ft

RAN provided special hazard consulting services for a performance-based design for the Resin structure at SABIC. The scope of services for this project involved the development of performance criteria for the 4 existing deluge systems and the design of 2 new deluge systems for protection against flammable liquid fires within the structure. Fire modeling was required to identify the worst-case pool fire, including the prediction of deluge system activation. RAN was able to establish the fire suppression requirements which included a code analysis, hydraulic calculations, and the establishment of acceptance criteria for the performance-based design. RAN was also involved in the design/build process.

Wheelabrator

North Andover, MA

RAN Fire Protection Engineering provided consulting services to aid in the variance process. The intention of the variance is to allow for omission of fire sprinklers within the new 8,800 square foot building. In order to do so, RAN had to review the state building and fire codes to determine the level of fire protection required. RAN also provided additional or alternative fire protection options in lieu of fire sprinklers to enhance the variance case.



Industrial



General Electrical Waste Storage Area Schenectady, NY

RAN Fire Protection Engineering provided fire protection consultation and code services. The intent was to classify the Waste Storage Area in reference to New York State Building Code, NFPA, and FM Global. The analyses determined that the existing sprinkler system was inadequate and a new sprinkler system was required to accommodate the storage of 55 gallon drums of flammable liquids and combustible solids.

Cleaner's Supply Powers Road Building Conklin, NY

RAN Fire Protection Engineering provided fire protection engineering consulting and design services for the modifications of fire sprinklers for Cleaner's Supply. The design implemented an early suppression fast response sprinkler system in the warehouse area of the building and a double interlock pre-action sprinkler system in the computer and server room on the second floor.



Schluter Systems Plattsburgh, NY

Cost: \$150,000 Size: 20,500 sq-ft manufacturing; 26,000 sq-ft storage facility

RAN Fire Protection Engineering was contracted to the Schluter Warehouse, where products were being stored and shipped, to provide construction documents as well as construction administration services.

The construction documents submitted were fire protection design drawings, as well as fire alarm drawings. RAN provided hazard classification drawings, a sprinkler and piping location plan, hydraulic calculations, and assist with arbitration if necessary. The sprinkler and piping location plan and hydraulic calculations were designed to follow NFPA 13 and FM Global if necessary. The fire alarm designs included manual fire alarm device initiation, alarm notification appliance location, and device monitoring of the sprinkler system. The manual fire alarm initiation systems were designed to be compliant with NFPA 72, and the alarm notification appliance location was compliant with NFPA 72 and ADA.

RWs Manufacturing Inc Queensbury, NY

RAN Fire Protection Engineering was retained for consulting services for the Queensbury location of RWS Manufacturing INC. When on site, RAN Engineering provided field observations of the facility and considered the hazard levels associated with the facility. RAN provided an evaluation of the existing fire protection systems and constructed a final report of their findings.



Industrial



Wheelabrator Refuse Pit Fire Suppression System

North Andover, MA

RAN Fire Protection Engineering provided consulting services for the evaluation of Wheelabrator Refuse Pit in North Andover, MA. RAN provided the review of the potential fire suppression options and alternative fire detection options. Based on the findings, RAN generated a report with the recommended fire suppression options, while keeping budget information in mind.

Weidmann Electrical Technology

St. Johnsbury, VT

Weidmann Electrical Technology is an electrical solution provider for energy products such as transformers. They apply their knowledge during the design, development, and operation process that helps them be a leading company in electrical solutions. RAN Fire Protection Engineering provided lead fire protection engineering and consulting services for this project. The scope of the project was to provide a sprinkler system for a new building and to provide a gaseous fire suppression system for a ground floor hydraulic room with a volume of roughly 20,000 cubic feet.



Hexion

Norco, LA

Construction Cost: \$500,000 Size: 32 Structures

RAN engineers performed a hazard evaluation and risk analysis in 32 of the structures at this Momentive site. The project scope involved observing the existing fire protection systems, including fixed fire systems, fire alarm, and fire department operations. The water demand of all of the fixed fire protection systems were also reviewed. RAN also evaluated all existing fire pumps and determined the required water supply for each pump. After all observations were made, RAN provided a final report on the existing conditions of the fire protection systems and the suggested upgrades.

Farrell Oil Company

West Hurley, NY

The main function of the building was to house combustible and flammable liquids at a potential capacity of 90,000 gallons. The building code allowed for the storage of much less than what they were storing. RAN provided code equivalency for Farrell Oil Company and developed a solution that would allow the project area to retain its function through building upgrades.



Industrial



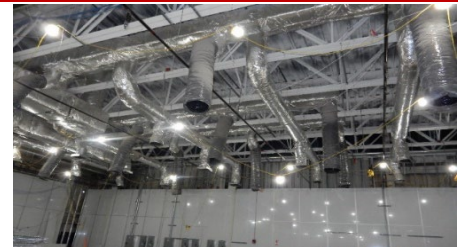
136 Fuller Road *Albany, NY*

RAN proposed to document the existing fire protection system, document the current fire hazards present within the facility, determine the current requirements for the fire protection system and determine the adequacy of the existing fire protection system. The purpose of this study was to determine if the existing 150,000 gallon water tower can be removed without affecting the fire protection system. The scope of services provided by RAN included a site visit to document

the existing sprinkler system, review New York Building Codes, New York State Fire Codes, and NFPA 13 to determine design criteria, and review the possibility of removing the 150,000 gallon water tower. Additional services were offered by RAN as desired.

GE Bldg 66 Schenectady *Schenectady, NY*

The scopes of services for this project included code consulting, evaluation of existing fire protection systems, review of compliance with internal and external standards, site visits during construction, meetings, and existing system documentation, development of design criteria, review of submittals and drawings, and assisting in determining pipe sizing for the sprinkler systems. Additional services were offered and provided as needed.



Camoplast Soldieal

Plattsburgh, NY

Construction Cost: \$315,000 Size: 84,000 sq-ft

Camso, formerly known as Camoplast Soldieal, is a privately owned Canadian company that manufactures products for off-road vehicles. They serve material handling, construction, agriculture, and powersport industries with their products. RAN Fire Protection Engineering performed consulting services for the sprinkler system demand requirements in the existing warehouse. RAN engineers reviewed the warehouse storage arrangement, performed a code

compliance evaluation, and evaluated the water supply for the existing sprinkler systems in the warehouse areas limited to the anticipated hydraulically most remote areas.

Polarome

Newark, NJ

Construction Estimate: \$200,000 Size: 7,300 sq-ft

Polarome project included design of a high expansion foam suppression system for the production area and a main fire pump building at the Polarome Newark facility. The Production Area included a 7,300 square foot area constructed of unprotected light steel, which stored and processed flammable and combustible liquids. The level of the existing fire protection for the Production Area needed complete redesign to meet NFPA Standards.



A high expansion foam suppression system was designed to be implemented without major interruption to the continuity of operations within the Production Area. This allowed for an easy installation. The system was designed for containment, to limit property damage at the facility.

Industrial



Schluter UMR Renovations

Plattsburgh, NY

Size: 3,400 sq-ft

RAN Fire Protection Engineering was retained to provide construction documents and construction administration services. RAN designed sprinkler and piping drawings, as well as performed hydraulic calculations. They classified hazards within the building area and included them in the drawings. After the drawings were completed, RAN provided their construction administration services.

GSP 347 Fire Pump Removal

Dalton, MA

RAN Fire Protection Engineering performed fire protection engineering design services. The intent of the services was to develop Construction Documents for the removal of the existing fire pump system at GSP Building 347 after the installation of a new water supply. The Contract Drawings included language that requires the Contractor to install the new water supply and perform a hydrant flow test prior to removal of the existing fire pump. The scope of services included reviewing applicable State Fire Code and NFPA standards also.



Von Roll Bldg 14 Equipment Protection

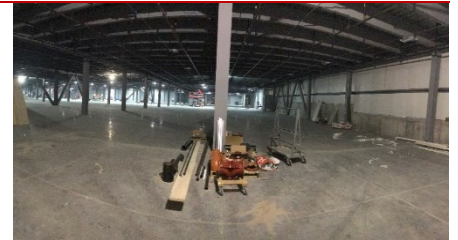
Schenectady, NY

RAN Fire Protection Engineering performed fire protection engineering consulting services for the evaluation of the new fire protection equipment in Building 14. The scope of services included reviews of available drawings, evaluation of the equipment, hazardous area classification, and development of a written memo. The scope of services was applied to the mica line equipment, ballistic machine, and multitask towers.

Schluter Bldg 3 Expansion

Plattsburgh, NY

The intent of the consulting services was to develop 30% project completion drawings in order to establish the design criteria for the automatic sprinkler system within the proposed addition to Building 3. This included review of the existing building fire pump and sprinkler system, review of State Codes, and review of NFPA-13 to develop the sprinkler design criteria. The consulting services also included the discussing potential storage arrangements and materials with the facility.



TDC Norsk Titanium

Plattsburgh, NY

RAN Fire Protection Engineering performed fire protection engineering consulting services for the evaluation of the proposed modifications to the BFG Building for the Norsk Titanium tenant. The intent of the scope of services was to determine the level of fire protection required within the building. This included active fire protection systems, fire alarm systems, fire walls, fire rated construction, etc. This included review of the existing building sprinkler system, review of State Codes, and review of NFPA standards to develop fire protection design criteria. The consulting services also included discussing potential storage arrangements and materials with the facility.