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## K-12 Projects

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### Onondaga Nation School

Nedrow, NY

Client: NYS Office of General Services

RAN provided services to the Onondaga Nation School to ensure that the students and staff would be safe in the event of a fire. The school wanted answers on if the existing fire alarm systems could be salvaged or if it needed to be replaced. The services provided by RAN included an initial site visit and survey of the facility to gather information needed for the fire alarm system. This information helped RAN reach a decision that the existing fire alarm system needed to be replaced. RAN provided the school with the appropriate documents and drawings to be used to install a new fire alarm system, which required a voice type alarm to allow manual voice paging. The system can also be coordinated with each fire/security zone, rather than simplified horn/strobes sounding throughout.



### James Monroe Elementary

Edison, NJ

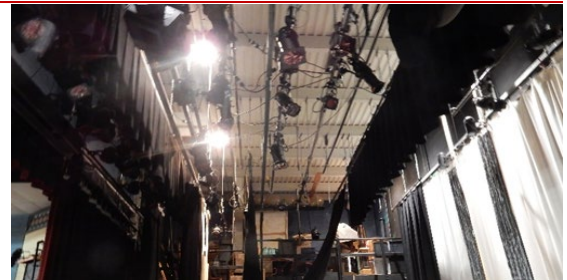
Construction Cost: \$230,000 Size: 67,000 sq-ft

James Monroe Elementary School is a public elementary school located in Edison, NJ. RAN Fire Protection Engineering designed the complete fire protection system for the James Monroe Elementary School. Numerous architectural features within the building posed challenges to develop adequate sprinkler protection. RAN was able to use their extensive knowledge in fire dynamics to develop a coordinated layout that not only blended in with the building's architectural features, but also reduced the sprinkler demand to avoid the installation of a costly fire pump.

### Goshen High School Stage

Goshen, NY

Goshen Central High School is a state school that educates students in grades 9-12. RAN was retained for fire protection engineering design services of a new sprinkler system for the stage renovations, the first floor, fire pump room, and basement. This project required a standpipe/sprinkler system designed and sealed by a registered professional engineer, coordinated with the floor layout and other building systems. Hydraulic calculations were performed for NFPA 13 compliance of the standpipe and sprinkler system.



### Ross St School

Woodbridge, NJ

Size: 36,000 sq-ft

RAN Fire Protection Engineering provided fire protection engineering design services for a sprinkler system at the new Ross Street School. The proposed school building is approximately 36,000 ft<sup>2</sup> which was built in two phases. The function of the Phase I was to review, develop and implement the investigative study parameters and further investigate the system code issues, and site utilities. Phase II consisted of design development of the sprinkler system, construction documents, and construction administration.

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### Kingston High School

Kingston, NY

Construction Cost: \$285,000 Size: 94,000 sq-ft

RAN Fire Protection Engineering was retained to update the Kingston High School Field House sprinkler system. RAN performed a code analysis on the existing fire protection system to make sure that everything was compliant with NFPA standards. It was discovered that a fire pump was needed based on hydraulic calculations of the existing system. A new fire pump and existing system modifications were designed.



### Ogdensburg Free Academy

Ogdensburg, NY

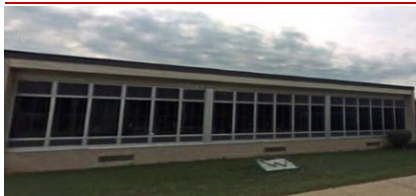
Construction Cost: \$240,000 Size: 88,300 sq-ft

Ogdensburg Free Academy is a public high school in Ogdensburg, NY. Approximately 750 students in grades 7<sup>th</sup> through 12<sup>th</sup> attend the high school. When the auditorium at the Ogdensburg Free Academy underwent major renovations and upgrades including upgrades to the fire protection system, RAN Fire Protection Engineering provided design and consultation services. RAN provided the design of a new sprinkler system. The designs included arbitration with local Code Enforcement Officials to ensure that the proposed building fire protection strategy would meet their life safety goals. It also included a variance to directly address the fire department's pre-incident suppression tactics.

### AW Becker & PB Coeymans Phase 3

Size: 10,000 sq-ft

Engineering design services was required for Phase 3 of two elementary schools located Ravena-Coeymans-Selkirk Central School District. RAN proposed to provide construction documents and construction administration services for the modification of an existing fire sprinkler system of approximately 5,000 ft<sup>2</sup> within each building.



### Woodbrook Elementary School

Edison, NJ

Size: 25,000 sq-ft

Woodbrook Elementary School is a highly rated public elementary school located in Edison, NJ. RAN was retained to perform fire protection design services. The fire protection designs consisted of fire sprinklers and piping, as well as their layouts. The designs also contain hydraulic calculations to ensure that the systems worked properly.

### AW Becker Elementary Library

RAN provided fire protection engineering consulting services to AW Becker Elementary Library. The scope of services included a site visit to observe the existing field conditions and sprinkler system and perform hydraulic calculations. RAN also answered comments and questions provided by other personnel.



## K-12 Projects



### St. Kateri School Schenectady, NY

Saint Kateri Tekakwitha Parish School is a private elementary school for children in pre-k to 5<sup>th</sup> grade. RAN Fire Protection Engineering provided review and analysis of fire protection drawings. Additionally, RAN reviewed the working drawings to verify agreement with the design intent and stamp them in

compliance with SED regulations for design delegation.

### Albany MS- 50 N Lark Albany, NY

RAN proposed to document the existing fire protection system within the scope of work area and provide design drawings and hydraulic calculations for the necessary fire protection system modifications. RAN's basic services were divided into two phases "Construction Documents" and "Construction Administration Services".

The "Construction Documents" phase included Fire Protection design drawings, development of written specifications, and the final set of construction documents. The Fire Protection design drawings contained hazard classifications of the project area, sprinkler, and piping locations in compliance with NFPA 13, hydraulic calculations, and design criteria that meets requirements.

The "Construction Administration Services" phase included response to Bidders' questions and RFI's, issuance of addenda, review of contractor bid, submittals, and shopping drawings, and site visits during construction and preparation.



### NYS Education Department Code Consulting Term New York State

RAN Fire Protection Engineer's President, Doug Nadeau, provided code consulting for school districts throughout New York State. Through this term, code consulting services were provided for school districts in 35 counties. This is slightly more than half the counties located in New York State. These code consulting services varied depending on the school district's request and the circumstances regarding the need for the consulting services. This term has given RAN's president extensive experience in code consulting services specifically for the K-12 market.

