
Federal General Services Administration

JFK Federal Office Building

Boston, MA

Client: US General Services Administration

The JFK Federal Building was designed by Walter Gropius in 1961 and was named in honor of John F. Kennedy who was assassinated in 1963. The building consists of twin 26-story high-rises and a lower 4-story building. RAN was retained to design fire alarms for the twin 26 story high-rise buildings. The scope of services provided by RAN included design of new detection devices and notification appliances throughout the entire building. Existing fire controls and programming were modified to activate and monitor the new equipment.

Notification appliance power booster panels were installed on each of the 26 floors next to an existing fire alarm riser cabinet and each booster panel includes an addressable monitor module. The previous conventional smoke detectors and pull stations were replaced with addressable smoke detectors and pull stations.

RAN engineers developed a design that allowed for a phasing construction that would meet NFPA standards and codes at all times. This was required because the building was fully occupied with 11 different agencies and the thousands of workers.

Construction Cost: \$1,500,000 Size: 26 Stories



GSA Burlington NOAA ISA

Burlington, VT

Client: edm

The SSA trust fund building was constructed in 1972 and contains 7842 GSF in a single level structure. 22 parking spaces are located on the premise for the building also.

RAN Fire Protection Engineering was retained to provide fire protection engineering services. RAN designed fire protection drawings, as well as performed hydraulic calculations. They classified hazards within the building area and included them in the drawings. Sprinkler and piping locations in compliance with NFPA 13 were also included in the system design drawings.

A fire alarm system was also designed for the GSA Building.



Federal General Services Administration

Ogdensburg Federal Patrol Building

Ogdensburg, NY

Client: US General Services Administration

Services Provided:

- Designed a Performance-Based Fire Protection System
- Life Safety Systems Design
- NFPA 101A Alternative Approach to Life Safety

The Robert C. McEwen U.S. Custom House is the oldest building in Ogdensburg, New York and the oldest within the General Services Administration's building inventory. Constructed in 1809–1810, the building is closely linked to the development of Ogdensburg and shipping along the St. Lawrence River.

The U. S. Custom House is a fine example of the utilitarian buildings constructed in native limestone in the late 18th and early 19th centuries in the Ogdensburg region. The building interior dates entirely from 1937, when a complete remodeling was undertaken to provide offices for the U.S. Customs Service. Vestiges of the 1809–1810 structure remain in transverse load-bearing masonry walls, the closets under the eaves of the third floor, and the original beams.

This project included a complete overhaul of the building's fire protection and life safety systems utilizing NFPA 914 Code for the Fire Protection of Historic Structures and NFPA 101, Life Safety Code. RAN Fire Protection Engineering served as the lead fire protection engineer for the project. Due to the limitations associated with the historic nature of the building, alternative design approaches were necessary to provide an adequate level of life safety. A performance-based fire protection design was incorporated into the project. The design was based on the anticipated fire severity predicted by fire modeling. A final cost-effective design that addressed the specific hazards in the buildings was accomplished.

Construction Cost: \$150,000 Size: 40,000 sq-ft



Federal General Services Administration



J.W. McCormack Federal Office Building

Boston, MA

Client: edm

The John W. McCormack Federal Office Building is a 22-story building that was rededicated to John W. McCormack in 1972. The building contains a post office, Courthouse, and federal offices, and 75% of the building is original. This emphasizes that the building is historical and important to preserve. RAN completed the design for renovations to the J.W McCormack Building in Boston, MA. This project was turned around quickly to the Environmental Protection Agency in order to stay on the tight construction schedule. RAN delivered a detailed fire sprinkler design and provided oversight for life safety planning of the space. RAN was also supplied with a significant amount of water even when new plumbing fixtures reduced water consumption by approximately 642,000, which is 32% over code requirements. RAN's designs helped keep the enclosed 10,290,000 cubic feet and 600,000 floor space protected from fires.

Construction Cost: \$500,000 Size: 16,000 sq-ft

GSA O'Neill Social Security Administration Office of Quality Reassurance

Boston, MA

Client: edm

The Thomas P. O'Neill Federal Building is comprised of an 11-story high-rise and a 5-story low-rise. These buildings are connected by a five-story interior courtyard, which is covered by a continuous skylight. These buildings were also named after Thomas Phillip "Tip" O'Neill, Jr., who was a Representative from Massachusetts, but was born in Cambridge. RAN Fire Protection Engineering provided professional design and engineering services to produce a feasibility study. Construction documents were produced that were necessary for the build-out of the new space on the 9th floor of the O'Neill Federal Building. The documents were code compliant and included all the fire protection requirements that were mentioned in the GSA criteria for the fire protection engineer on the project.

Construction Cost: \$1,500,000 Size: 14,000 sq-ft



Federal General Services Administration

GSA Conte Bldg Infrastructure FA Pittsfield, MA



Image source: <https://www.google.com/>

The Silvio O. Conte Federal Building was completed in 1977 and occupies approximately 1.15 acres and contains 26,860 RSF. RAN Fire Protection Engineering completed the construction documents containing all fire protection designs, drawings, and all other related documents. RAN's main focus for this project was replacing and upgrading the current fire alarm system with a new FACP. It was not necessary to replace the whole system, instead the installation of a new fire alarm control panel adjacent to the existing panel was the first step in upgrading the fire alarm system. Following the installation of the new control panel, the existing Initiating device circuits were monitored, and existing notification appliance circuits were connected to the new FACP. The next step in the upgrade was providing new area notification appliances to provide visible and audible notification throughout public areas within the building. Finally, the existing remote annunciation panel located in the lobby was replaced with the new FACP.

Burlington Courts Reconfiguration Burlington, VT

The Burlington Federal Building USPO and Courthouse is located in Burlington, Vermont's largest city, a few blocks east of Lake Champlain and a few blocks west of the University of Vermont campus. The property is situated within a commercial and residential neighborhood on the edge of Burlington's CBD. The building was constructed in 1960 and contains 147,860 GSF within 6 stories plus a basement. 110 parking spaces are located on the premise to accommodate the building. The Federal Building is one of three Vermont locations for the United States Federal Courts second circuit. The building accommodates Courtrooms and Judges' Chambers, FBI, and other Court related agencies.

RAN provided fire protection services to the building for the construction of the new Judge's Chamber, as well as renovation of chamber and district court office space. The scope of services included the design and review of EFL drawings for the new Judges' Chamber, as well as the district court office space.



Image source: <https://www.google.com/>

Federal General Services Administration

JFK VA 14, 15, & 16 Floors *Boston, MA*



The JFK Federal Building was designed by Walter Gropius in 1961 and was named in honor of John F. Kennedy who was assassinated in 1963. The building consists of twin 26-story high-rises and a lower 4-story building.

RAN provided an EFI for the inspection and evaluation of the existing conditions of the JFK Federal Building. The EFI was used to understand the state of the buildings systems and determine if there were any adjustments or updates that need to be made. RAN completed the EFI and provided all the information and documents that were found and created.

McMahon Building System *New Haven, CT*

In 2016, RAN secured a project to design new fire alarm and mass notification systems for five federal buildings in New Haven, Connecticut. The building contained aging fire alarm systems of various manufacturers. The building included offices, courthouses, parking garages, a historic building, and a high rise. For all buildings, RAN developed design criteria and Construction Documents for replacement of all fire alarm systems with a new integrated mass notification system. The mass notification system provided audible and visual notification to occupants throughout the buildings, including selective paging through a detailed overall sequence of operations. Additionally, a bi-directional amplification (BDA) system was designed to facilitate emergency responder radio coverage throughout the buildings. The nature of historic courthouses provided an added challenge to the project, such as the Richard C. Lee United States Courthouse which was built over 100 years ago. Due to its historical significance and the unique use of marble throughout the building, RAN worked closely with architects specializing in historical buildings. This partnership helped to ensure the historical features of the building were preserved.



Federal General Services Administration

GSA Conte Bldg VA Clinic *Pittsfield, MA*



Image source: <https://www.google.com/>

The Silvio O. Conte Federal Building was completed in 1977 and occupies approximately 1.15 acres and contains 26,860 RSF. This two-story building is located in the western edge of downtown Pittsfield and is home to the US Department of Veterans Affairs, which is one of the largest integrated health care systems in the US.

RAN provided provision of the EFI for the inspection and evaluation of the existing conditions of the 2nd floor at the Conte building. The EFI was used to determine if the site was an ideal location for the VA Outpatient Clinic. In addition, evaluations of the existing floors and systems were conducted in order to understand the extent of the supporting conditions for the new clinic.