



## Columbia University - Public Safety

Columbia University renovated the 1st floor of the building located at 575 West 131st Street to house the Public Safety Command Center. The building required new infrastructure to accommodate the project scope. EP Engineering designed complete MEP systems to modernize the existing building including an upgraded water and gas service, first floor air handlers, a central fire alarm system for the 4 story building and new boiler plant.

### Challenges:

- Existing water and electrical service entered the building in the same location.
- Columbia had to upgrade the entire building infrastructure for future use.
- Water services did not have required backflow prevention devices.
- Access from the building MER to the building outdoors was limited.

### Achievements:

- Provided and relocated POE of new 3" gas service to a new cellar location compliant with Con Edison requirements.
- Designed condensing boiler plans consisting of (2)285 MBH gas fired boilers (N+1 configuration) to serve the entire building heating and domestic water load. Space for an additional module was left for future plant expansion. Boilers will be direct vented to the exterior of the building roof for both combustion intake and exhaust.
- Utilized energy recovery ventilators to maximize energy efficiency and serve the 24/7 facility.
- Coordinated shafts and ductwork risers thru 3 existing floors to the roof for AHU economizer, intake and purge.

### Locations:

575 West 131st Street  
New York, NY 10027

### Project Size:

26,500 SF

