

# GEATAIN ENGINEERING

## CASE STUDY-PRESIDENTIAL TOWERS



### BACKGROUND

The Presidential Towers located at 315 West 70<sup>th</sup> Street is an establish co-op in New York's Lincoln Square neighborhood. The stylish Upper West Side building was constructed in 1963, is 16 stories, and provides many amenities to its residents. The building is heated by Consolidated Edison district steam which feeds on a very old heat exchanger to provide hydronic heating. A heat timer controls property temperature. Domestic Hot Water is supplied by old tankless heaters. Two-eight compressor Multistack chillers provide cooling, and two cooling towers are located on the western part of the rooftop. Ventilation is supplied by belt-driven coil ventilators and mushroom exhaust fans. The heating system insulation is in poor condition. The belt-driven ventilators are aged, and lighting is severely outdated.

### HOW GEATAIN ENGINEERING HELPED

- Analyzed building operations to determine precise recommendations to improve occupancy comfort, streamline operations and lower carbon emissions.
- Followed a specific methodology to determine existing conditions and the most critical HVAC equipment to design the most effective BMS system.
- A lighting assessment was performed to identify over-lit areas to optimize light bulb replacements.

### BENEFITS

- Advanced heating controls show real time energy usage and historic trends to help identify savings opportunities.
- Natural daylighting supplements the need for artificial lighting and improves occupant health-wellness.



### CHALLENGES

- Many of the systems in the building such as heating and domestic hot water are antiquated with certain equipment being in poor condition and rusted.

### SOLUTIONS

- PTAC insulation.
- Real time energy management.
- Condensate recovery.
- Roof ventilator timers.
- Faucet/shower aerators.
- LED lighting.
- Clean coils-hallway fan.

### FIVE YEAR SAVINGS

\$ 695,500

For more information,  
email [tjm@geatain.com](mailto:tjm@geatain.com)