

## Bronx Criminal Court Complex

Bronx, New York

### ***Project Description***

GENESYS ENGINEERING, P.C. is the commissioning provider for the construction of a new 750,000 ft<sup>2</sup> criminal courthouse in Bronx County. This project includes the installation of new heating and cooling systems, including:



- Three new chillers
- Three new boilers
- 36 air handling units
- Over 600 variable air volume (VAV) boxes
- New Building Management System

GENESYS has witnessed, performed and documented pre-functional inspections and functional testing of all major HVAC equipment, and managed and documented all deficiencies. GENESYS has also provided the critical oversight for verifying that any deficiencies identified during testing are corrected and worked directly with the construction management team toward resolution of deficiencies.

### ***Project Challenges***

There are multiple primes on this project, which required significant coordination for testing of equipment and correction of deficiencies. In addition, the sheer number of systems being installed, as well as the complexities of the equipment and the sequences of operation, made effective planning for executing inspections and testing paramount to the project success.

#### Services:

Commissioning Authority  
Commissioning Agent

#### Total Project Cost:

\$700 million

### ***Benefits and Value***

- GENESYS' comprehensive inspections and testing identified deficiencies that if left uncorrected would have resulted in significant operational and energy exposures for the facility.
- Inspections and testing of variable air volume boxes revealed a significant failure rate of the boxes. As a result, the sampling rate was increased and GENESYS is verifying the proper functionality of the boxes to provide a comfortable environment for the occupants.
- GENESYS has provided additional troubleshooting services related to the operation of variable air volume boxes and condenser water pumps.