

New Chillers and HVAC Upgrade

Valley Mall

Hagerstown, MD



The Project:

CJL Engineering provided a system assessment, and then designed a Chilled Water Plant and HVAC upgrade to the 35-year-old Valley Mall. The 680,000 sq. ft. shopping mall is owned by Pennsylvania Real Estate Investment Trust (PREIT).

CJL Engineering Design Solutions:

- One of the existing 1,100-Ton chillers was removed, while the second was retained for emergency use. Two new, higher efficiency (0.62 KW/ton) nominal 900-Ton chillers were added.
- A new Primary / Secondary system of chilled water pumping was added for energy savings.
- The upgraded plant design incorporated new chilled water distribution piping to accommodate a 30,000 sq. ft. addition ongoing at the time of the project.
- New Variable Frequency Drives
- Condenser water pumps installed
- The existing central station air-handling units serving the concourse and middle-mall tenants were also upgraded
- Weather proof unit casings and make functional non-operational outside air dampers. Replace control valves.
- Replace vortex dampers with CFD units to save energy

