

UHHS Geauga Regional Hospital

Design Build Project • Chardon, OH

Fast action ensured a cool summer and delivered superior quality to the environment of care.

University Hospitals Geauga Medical Center began formal operations in 1959. The hospital has more than 750 employees and 165 spirited volunteers to serve its patients. Currently, the hospital is implementing a master plan in conjunction with University Hospitals Health System that calls for aggressive growth.

Challenge

University Hospitals Geauga Medical Center faced aging cooling equipment as summer 2007 approached. With the chilled water plant already exceeding its life expectancy by ten years, the hospital did not have the capacity or redundancy necessary in a mission critical facility. The chilled water plant was in danger of needing to supply cooling tonnage above its threshold. The hospital decided it needed to make proactive improvements to maintain a comfortable environment of care for its patients and staff members. From the beginning, Geauga Medical Center worked with Gardiner to discover the most efficient, reliable, and cost effective options that would allow the hospital to continue delivering critical health care services.

Solution

Gauga Medical Center and Gardiner worked together to design a central chilled water plant that included updating an undersized cooling tower, installing a new larger chiller while maintaining other pieces of equipment. Gardiner proposed a new highly efficient centrifugal chiller with greater capacity sized to handle the cooling needs of the entire hospital and suggested an overhaul of the existing CVHE chiller, which also helped to improve the necessary capacity and redundancy. Now the CVHE chiller is used as a back up system. These engineering considerations include EarthWise capability, promote future system growth, and increase capacity and redundancy. With the hospital on board, Gardiner began building a customized control system utilizing a Summit Building Automation System and Chiller Plant Management Software to optimize operation. Most importantly, this plan targeted a seamless transition between cooling systems, which meant continuous comfort for staff and uninterrupted care for patients.



Geauga Medical Center • Chardon, OH

University Hospitals Geauga Medical Center is a non-profit acute care facility providing a full-range of services to residents in Geauga, Ashtabula, Cuyahoga, Lake, Portage, and Trumbull counties in Northeast Ohio. The hospital is an affiliate of University Hospitals, comprised of a broad network of primary care physicians, specialists, outpatient centers, hospitals and related health care delivery services.

Building Specifications

Building Type

Health Care Facility

Constructed

1952

Facility Size

300,000 sq. Ft.
250 Beds

Property Owner & Manager

University Hospitals

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Results

The existing relationship between Geauga Medical Center and Gardiner allowed for fast action when the hospital's central plant services were nearing the end of their useful life. By being proactive, the hospital prevented any potential loss of revenue and upheld its promise of providing access to the highest quality healthcare to its patients. Now the facility's cooling equipment operates efficiently, which saves energy and ultimately reduces cost. With the project completed, Geauga Medical Center will continue to collaborate with Gardiner to make the most of their updated technologies.

“Gardiner has been very responsive and helpful throughout the duration of this project. They did all they could as a team to understand our needs and worked hard with us to assure uptime of all mission critical systems.”

John Calderwood



Systems Overview

Chilled Water Plant System Renovation

- Optimize Delivery of Chilled Water
- Expand Management Reporting
- Archive Data for Risk Management
- Measure Infrastructure with Software
- Minimize Human Interface

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For more information on Gardiner Solutions, visit
www.WHGardiner.com or contact us at 440.248.3400