

North America's first fully digital hospital

Humber River Hospital



CUSTOMER REQUIREMENTS

Humber River Hospital, one of Canada's largest regional acute care hospitals, serves a catchment area of more than **850,000** people in the northwest Greater Toronto Area.

Although long praised for its commitment to high quality patient care, almost 10 years ago the hospital embarked on an important transition—one that took it from a hospital constrained by the limitations of aging technologies and building philosophies, to a facility nationally and globally recognized as a world **leader in hospital planning and design**.

The new, **fully digital** hospital provides in-patient and out-patient care, including cancer, cardiac and critical care, emergency services, dialysis, bariatric surgical services, women's and children services, diabetes and mental health programs.

Plan Group installed several **Electrical** systems and our **ICAT** (Information Communications and Automation Technologies) business unit integrated a number of these systems.

PLAN GROUP'S SOLUTION

As part of its contract, Plan Group provided:

Electrical design and build services

Infrastructure and systems including; power distribution, branch power, lighting, emergency power distribution, UPS, dynamic glass (electrified tinting of glass panels), Stryker operation room articulating arms and lighting protection.

ICAT design and build services

Infrastructure and systems including; fibre network, structured cabling, BAS wiring, fire alarm, access control, close circuit TV, RTLS (patient wandering, infant abduction, asset tracking, staff presence), unified communications, distributed antenna system, nurse call, audio visual, digital signage and Wayfinding.

Integration and automation including; master systems integrator, enterprise service bus (middle ware between all clinical, business and building systems), automated workflows for electrical, mechanical, lighting, dynamic glass, fridges and freezers and materials management, alarm systems (ie nurse call, RTLS alarms and code call) and control systems (ie lighting, temperature and dynamic glass).



CUSTOMER BENEFITS

As the first fully digital hospital in North America, Humber River Hospital uses the most current technologies possible to enhance all aspects of quality care delivery, improving efficiency, accuracy, reliability and safety.

The digital vision successfully aligns the physical and digital characteristics of the hospital, which enables a new level of staff and patient experience through workflow automation.

As a result, the patient journey throughout the Hospital is highly visible, easier to navigate, more interactive and significantly more patient-centred.

PLAN GROUP'S HOSPITAL SECTOR EXPERTISE

Plan Group is the largest multi-disciplinary company in Ontario and one of the largest in Canada.

Plan Group has proven expertise in hospital construction/refurbishment projects.

Over the last 10 years, Plan Group has worked on six major healthcare facilities and is actively involved in five more.

IN SHORT

Contract Type Design-Build-Finance-Maintain / Client: Infrastructure Ontario / Project Manager: PCL Constructors Canada / General Contractor: Plan Group / Start of contract: June 2012 / End of contract: October 2015 / Peak workforce: 455 July 2014 / 1.8 million square feet / 30 acre site / 14 storeys / 656 beds / 80% single patient rooms / 24 operating rooms / 114,000 admissions per year due to expanded Emergency Department / 26 hospital departments / \$1.75 billion.