

Project Newsletter

SOUTH NIAGARA HOSPITAL

August 2024
Issue 4

In This Issue

Project Goal:
Operational Excellence

WELL: A Canadian First

**Meet the Operational
Readiness Team**

Construction Update

*Photo: Building construction has
moved above ground, with crews now
working on the first three floors.*



Excellence in Operations

As one of six project goals for the South Niagara Hospital, Operational Excellence highlights a design that supports patients, families, caregivers, staff and physicians in receiving and providing safe and quality care, both in the facility and beyond into the community. It will strive to make the hospital a place where all individuals are equipped with the appropriate tools and access to information required for the right care at the right place and time. As Niagara Health works to achieve operational excellence, there are many exciting aspects of the South Niagara Hospital that will help us reach this goal.

Single-Patient Rooms

Every patient room in the South Niagara Hospital will be completely private, giving patients and their families increased space to receive care in a comfortable setting, while also improving infection prevention and control. Each room will have a private washroom, wardrobe cabinet with lock-pad for peace of mind, and an Integrated Bedside Terminal that acts like a personal tablet, giving patients easy access to control room elements such as temperature and lighting. These added features will help enhance patient autonomy and significantly improve the overall patient and family experience.

Workplace Efficiencies

The hospital was designed to be flexible and responsive to the ever-changing needs of the

healthcare environment. It is near impossible to predict what the needs of the hospital will be in 10, 20, or even 50 years, so the plans include room for flexibility and expansion, both within the hospital and on the site.

Rooms in the hospital, such as procedure rooms, exam rooms and patient rooms, were all designed to be standardized and universal to help improve efficiencies, reduce errors, and allow for flexibility that will make it easy to adapt to changing demands and future growth.

From a workplace perspective, office spaces were designed to be open-concept and fluid, with standardized spaces to allow any staff member to use any workstation. This allows for increased adaptability and supports future flexibility between departments as they grow or shrink. Another beneficial feature of the open-office set-up is that it allows more workstations to access windows and natural daylight, creating a healthier workplace environment.

Outbreak and Disaster Planning

The early design phase for the South Niagara Hospital was happening in parallel with the COVID-19 pandemic, making it clear that advanced pandemic and surge planning (an increased demand for hospital resources) was a priority. Features such as decontamination areas, double door vestibules that can create negative pressure or anterooms, and segregated traffic routes are some examples of pandemic planning that have been incorporated in the design.

A disaster management plan was also developed. In the event of a CBRNE incident - an emergency involving chemical, biological, radiological or nuclear materials, possibly combined with explosives - the site layout has incorporated space for a CBRNE containment zone.

Hospital Highlight

The South Niagara Hospital was designed to be accessible for all. The use of tactile walking strips, braille on signs and handrails, reduced sensory rooms, animal relief areas, and assisted listening devices are all examples of the many accessibility features that have been incorporated. ■



**Patient, Family &
Staff Experience**



Connectedness



**Operational
Excellence**



Sample of a patient bedroom from the South Niagara Hospital high-fidelity mock-up. This picture showcases an Integrated Bedside Terminal for patient and family use, as well as a charting station for clinical use. Image is for illustrative purposes only, as details are subject to change.

Integrated Technology

The South Niagara Hospital will be a state-of-the-art facility with a greater integration of modern technology, including 100-per-cent wireless infrastructure, Niagara Health Navigator and Virtual Care integrations, helping to improve operational efficiencies and the overall patient experience.

Niagara Health is currently in the process of creating a new Hospital Information System (HIS), which will be incorporated into the South Niagara Hospital. This modern information system will manage electronic medical records and healthcare data to help improve the safety, quality and consistency of patient care across the health system and in the community. All rooms at the South Niagara Hospital where staff are interacting with patients, such as patient bedrooms or examination rooms, will be equipped with charting stations for clinical use. This will allow staff and physicians to quickly access and update records right at the patient's side, improving efficiencies and patient safety. Patient bedrooms will also feature an electronic whiteboard that will be integrated into the HIS. Details such as appointment and meal times, care provider names and discharge information can be automatically sent from staff terminals to patient

rooms, helping to keep patients informed and provide them with important information about their care plans.

In addition to the HIS, the South Niagara Hospital will have a number of smart hospital features, such as a nurse-call system that is capable of two-way calling between patients to nurses in any location. It will also know the location of nursing staff within the unit. The nurse-call system and fire system will be integrated into the Public Address system, so staff will no longer have to call the switchboard for CODE Blue (cardiac arrest), White (violent person) or Red (fire) events.

Smart beds are another exciting feature of the new hospital. Beds will be capable of wirelessly sending bed statuses to nursing stations. For example if a patient were to fall out of bed, nurses would be notified and able to quickly assist. Integration will also improve patient safety, where patients at risk of elopement or wandering can be monitored to minimize the risk of CODE Yellow (missing patient) situations. ■

Look at past and future issues of the South Niagara Hospital Project Newsletter to learn more about each project goal, and how they are shaping the hospital design.



**Accessibility and
Inclusiveness**



**Environmental
Leadership**



**Adaptable, Flexible
and Responsive**

A Canadian First


The South Niagara Hospital is on-track to be the first WELL-certified hospital in Canada, as a building that prioritizes the health and well-being of the people who use it.

For many people, the word hospital often conjures thoughts of illness and injury, but what if we could change that? What if we could make a hospital a place that supports health and wellness, instead of a place of sickness?

During the visioning phase for the South Niagara Hospital (SNH), this was the feedback that the Project Team collected from the community. It sparked the design inspiration to make the hospital feel like a place of wellness, and helped set the goal to make the SNH the first WELL-certified hospital in Canada.

Governed by the International WELL Building Institute, the WELL-certification program directly aligns with the vision for the SNH. WELL is a scientifically developed and independently verified tool to help design buildings and measure their impact on the health and well-being of the occupants. Organized around 10 concepts of health and wellness - air, water, nourishment, light, movement, thermal comfort, sound, materials, mind and community – WELL is a program that details design and operational guidelines specifically focused on generating health and wellness outcomes for the people using the building. Features such as an emphasis on natural daylight, access to gardens and outdoor spaces, and improved air quality, help to make the built environment healthier and more enjoyable for the people who are using it.

WELL building features will also offer a significant benefit to staff and physicians - the people who are working in and using the building every single day. WELL benefits go far beyond just design however, and also include how the building operates and the organizational culture. Features such as a staff gym and team rooms, walking paths, ergonomic workstations with height adjustable desks, healthier food offerings and more access to natural daylight are only a few examples of the many wellness features that will improve the workplace environment. This will be a key tool in helping to improve workplace satisfaction, and will aid Niagara Health's efforts to recruit and retain healthcare professionals.

 **We're creating a healthier, more enjoyable atmosphere for all those who will be using the building."**

"By incorporating WELL features into our new hospital, we're prioritizing the health and wellness of our staff and patients. We're creating a healthier, more enjoyable atmosphere for all those who will be using the building," said Izabela Cawricz, Director, Interiors and Furniture, Fixture and Equipment.

WELL is recognized worldwide throughout the architectural industry. The SNH project has been registered with the International WELL Building Institute and is applying to be pre-certified. The final certification review will take place after the building opens in 2028, when an independent WELL certifier reviews submitted documentation and also visits the site to confirm the building meets WELL requirements. Niagara Health will have to recertify every three years. ■

Hospital Highlight

There will be 14 gardens and terraces throughout the South Niagara Hospital building, in addition to multiple walking paths throughout the property. Available for staff and public use, these gardens and trails help bring building users closer to nature, which has been shown to improve overall health and well-being. ■



AIR | Breathe easy

- Enhanced air quality and air testing
- Smoke-free environment (interior and exterior)
- Ventilation Effectiveness
- Construction Pollution Management
- Design Healthy Envelop and Entryways
- Microbe and Mold Control



WATER | Drink up

- Fundamental and Enhanced Water Quality
- Water Contaminants Thresholds
- Legionella Control Plan
- Handwashing Support



NOURISHMENT | Dig in to wholesome foods

- Ensure Fruit and Vegetable Availability
- Promote Fruit and Vegetable Visibility
- Provide Nutritional Information
- Implement Nutritional Transparency
- Limit Refined Ingredients
- Promote Healthy Nutritional Messaging
- Implement Healthy Menu Design
- Include Designated Eating Space
- Support Special Diets (i.e. gluten-free, vegan, etc.)



LIGHT | Soak it in

- Light Exposure and Education
- Visual Lighting Design
- Glare Control
- Electric Light Quality



MOVEMENT | Keep moving

- Design Active Building and Communities
- Support Visual and Physical Ergonomics (i.e. height adjustability, ergonomic education, etc.)
- Design Aesthetic Circulation Networks
- Physical Activity Opportunities
- Physical Activity Spaces and Equipment
- Exterior Active Design
- Physical Activity Promotion



THERMAL COMFORT | Get comfortable

- Support Thermal Performance
- Monitor Thermal Parameters
- Ensure Thermal Comfort
- Manage Relative Humidity



SOUND | Attune your focus

- Manage and Limit Background Noise Level
- Manage Acoustical Privacy
- Support Sound Absorption



MATERIALS | Be assured

- Fundamental Material Precautions (i.e. Limit or Restrict Asbestos, Lead and Mercury)
- Hazardous Material Abatement
- Waste Management
- Manage Pesticides
- Implement Acceptable Cleaning Practices
- Long-Term Emission Control (interiors)
- Short-Term Emission Control
- Material Transparency



MIND | Stay centered

- Mental Health Promotion
- Access to Nature
- Mental Health Support
- Support Stress Management Programs
- Provide Restorative Outdoor Spaces
- Tobacco Prevention And Cessation
- Substance Use Education and Services



COMMUNITY | Connect with others

- Health and Wellness Awareness
- Integrative Design
- Occupant Survey
- Health Services and Benefits
- Health Promotion – Promote Culture of Health
- Community Immunity
- New Parent Support (Leave)
- Design Lactation Room
- Accessibility and Universal Design
- Emergency Preparedness
- Community Access and Engagement

Meet the Operational Readiness Team

With the design process for the South Niagara Hospital nearing completion, the Operational Readiness Team is starting to turn their attention towards transitioning to the new site.

From hospital design to move-in day and everything in between, our Operational Readiness Team is involved in almost every aspect of the South Niagara Hospital Project. The group of five clinical and transition specialists is led by Andrea Nguyen, Director, Service Planning and Operational Readiness, who joined the Project Team more than four years ago.

Nguyen started her career as a Registered Respiratory Therapist at a hospital in Toronto. She spent time working as a project manager for Agnew Peckham and Associates and the Ministry of Health in the Health Capital Investment Branch, and then later at Sinai Health as a Senior Manager of Master Planning. This combined experience has given her a unique set of skills that have proven to be instrumental to the planning of the South Niagara Hospital Redevelopment Project.

“This is such an important project for Niagara Health and our region, and I’m honoured to be part of the incredible team that is bringing it all together,” said Nguyen. “With this new hospital we’ll have the ability to streamline processes, improve patient care

and provide a better overall patient and staff experience. Our staff will benefit from working and collaborating in newer spaces with better equipment. And we’ll have a more integrated care environment where we’ll be able to continue to expand on the mandate of our new Hospital Information System.”



Andrea Nguyen, Director, Service Planning and Operational Readiness.

As a group, the Operational Readiness Team brings experience working in the hospital environment in various roles, such as nursing, respiratory therapy and diagnostic imaging. The range of experience and first-hand knowledge of the care and service environment of the hospital gives them an important foundation when it comes to guiding the planning and design of a new hospital so that it achieves our visions of operational excellence.



Members of the Operational Readiness Team at the groundbreaking ceremony for the South Niagara Hospital. From left: Lucy Batt, Andrea Nguyen, Anastasia Adriyanta, Nathalie Stewart, Nicole Bindoo, and Carmen Cernusca

Typically with other hospital projects, the Operational Readiness Team is brought on much later in the process after the design is fully finished. With the South Niagara Project, the decision was made to establish this team early, and this has already proven to be a positive change. The team has been able to play a much larger role in ensuring the hospital design process is going to meet the needs of our staff, patients and community. Now operational readiness teams are being brought on earlier in other projects across the province as well, such as in Ottawa, Windsor and Kitchener-Waterloo.

“From the very beginning, our Operational Readiness Team has been able to support Niagara Health staff, patients and the community to think about how we want to use, experience and provide care in the spaces in our new hospital. This focus will be imperative to ensuring we have the right people, in the right places and the right environments when we move into the building in 2028,” said Nguyen. “By having the team on the project early, we won’t have to make changes to the design decisions later on, because we thought about operations the whole time we were designing.”

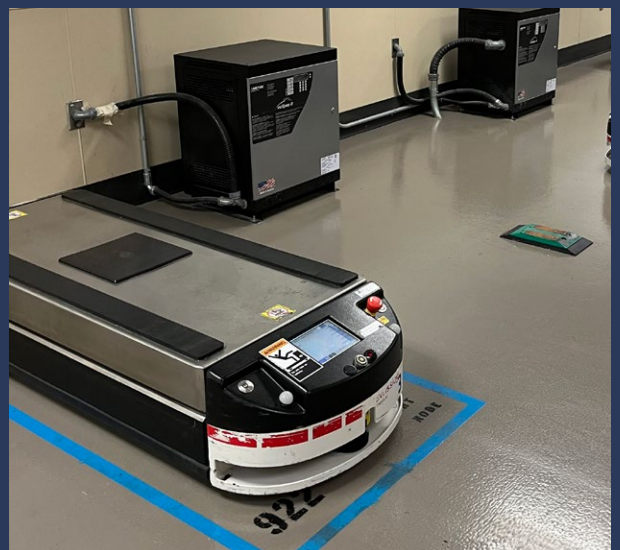
To date, the Operational Readiness Team has been focusing on the hospital design, but in a few months, they will shift their focus to operational readiness. As an organization, Niagara Health will soon have to start thinking about what care will look like in the new hospital. The team will help guide the organization as they develop new work plans for human resources, budgeting, programs and services. They will also be responsible for the major task of preparing our Niagara Health teams to transition care from their current environments to the new hospital. This will include evolving our processes, policies and practices, educating staff and physicians about the hospital and equipment, and training teams to work in the new spaces. They will also need to plan to transition patients and services to the new hospital site.

As we get closer to the hospital opening in 2028, there will be new opportunities for people to become involved in the project. More staff and physicians will be needed to take part in the operational readiness plan. Announcements will be sent internally as opportunities become available. There will also be a need for more patient partners to get involved. Anyone who is interested in learning more about how to become involved can contact the project team at

southniagaraproject@niagarahealth.on.ca. ■

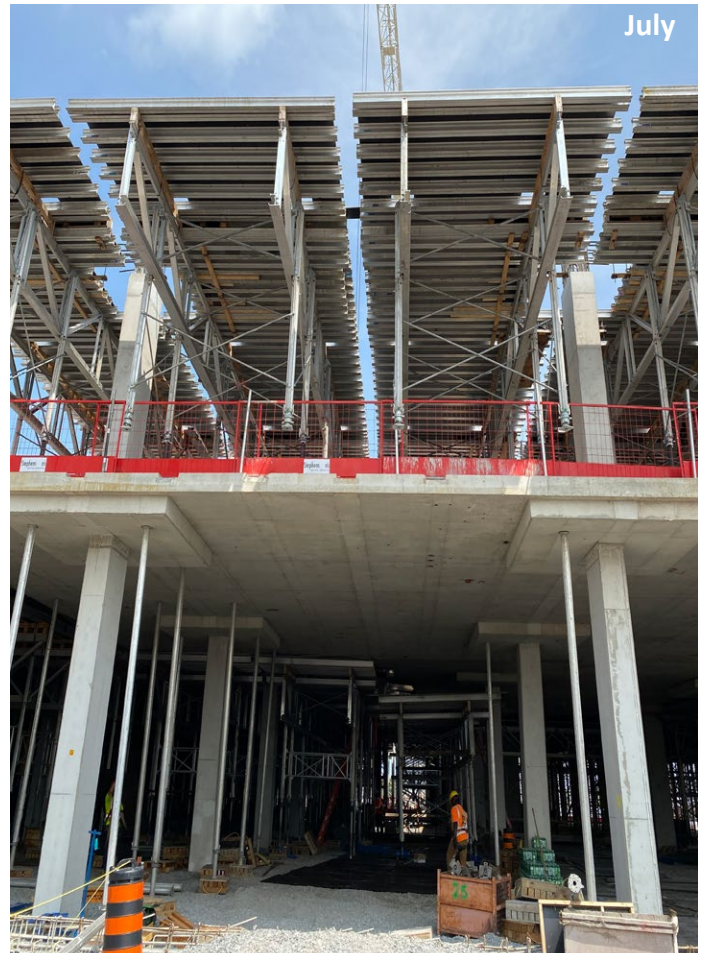
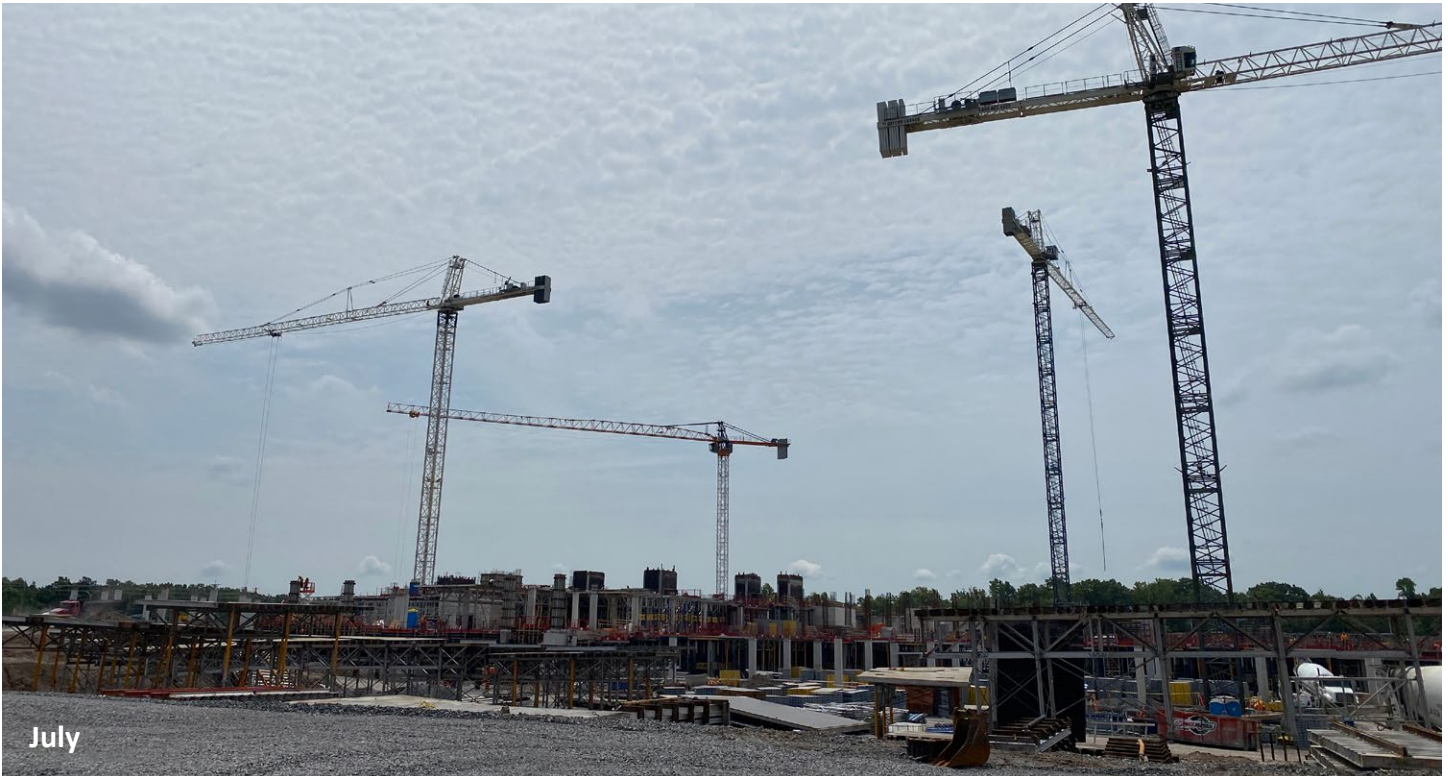
Robot Power

The South Niagara Hospital will incorporate exciting modern technology to aid staff and improve workplace efficiencies. An Automated Transportation System (ATS) will be used to move supplies and materials in an efficient and autonomous way. Staff will load Automated Guided Vehicles (AGV) with carts containing materials such as food trays or linens. They will then be sent to their destination, moving autonomously along designated paths and elevators. When they arrive, they will be met by staff who will unload the carts and distribute items as needed. A similar process occurs with Autonomous Mobile Robots (AMR). These armoured robots will transport and deliver items such as medications safely and securely to medication rooms. Staff with secure access will be able to unlock and unload the robots before sending them to their next destination. At 1.3-million-square-feet and 12 storeys, the South Niagara Hospital is a very large building, and the ATS will be a major benefit to staff. It will significantly improve workplace efficiencies and reduce the physical strain and time spent by staff to transport materials. ■



Sample of an AGV from another Ontario Hospital.

CONSTRUCTION ZONE



Construction has been progressing as scheduled. Concrete work on the majority of the exterior foundational walls is now complete with suspended slab concrete work continuing on the first three floors. Elevator shafts and stairwells are taking shape, and the majority of the site services have been completed, including waterlines, stormwater and sanitary sewers. Electrical work is also progressing well. Currently more than 200 workers are on-site daily.

Above: Prefabricated forms are assembled on the ground level, then moved into place by the cranes (right). This allows crews to work on multiple levels at once. ■

Niagara Health Foundation and Community Support South Niagara Hospital

The Niagara Health Foundation is proud to support the South Niagara Hospital through the It's Our Future campaign. Join over 40 Founding Donors and contribute to this integral part of our connected healthcare system.

Your generous support is an investment in your community, and will allow Niagara Health staff access to the very best tools and equipment. Donate today at ItsOurFuture.com.

niagarahealth
foundation

Help support
the future of
Healthcare
in Niagara

Donate today at
ItsOurFuture.com



365 Days of Construction

A year since the groundbreaking ceremony, on July 18 the South Niagara Hospital Project marked its first full year of construction. See the incredible progress that has been made to date.



July 2023



September 2023



SNH Project Team members tour the construction site.



Members of Niagara Health's Executive Team toured the site with Directors from the SNH Project Team to mark the first year of construction.

August 2024



August 2024



SOUTH NIAGARA HOSPITAL

Coming Summer 2028



We are transforming the way healthcare is delivered in Niagara, and the South Niagara Hospital is going to play a significant role in these positive changes.

Located in Niagara Falls at the corner of **Montrose and Biggar roads**, the **1.3-million-square-foot facility** will offer a full scope of hospital services, including emergency, critical care, diagnostic, therapeutic and surgical services, as well as **Centres of Excellence in complex care, wellness in aging and stroke.**

We are working towards building the **first WELL-certified hospital in Canada**, with features that focus on the health and well-being of staff, volunteers, patients, families, caregivers and all hospital users.

The hospital will also feature an **Indigenous healing space and garden** that was designed with Indigenous partners to create culturally safe and welcoming areas for Indigenous Peoples.

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CONNECT WITH US

- For questions about the project: southniagaraproject@niagarahealth.on.ca
- For business opportunities and community involvement: snh@ellisdon.com
- Visit our website: www.niagarahealth.on.ca/site/south-niagara-hospital-project

Approximately
1.3 Million square feet.

Featuring Centres of
Excellence in **complex**
care, **wellness in aging**
and **stroke.**



74% increase
in MRI diagnostic capacity



Accommodate 7,400
more senior wellness visits



469 single patient bedrooms
156 more beds for the region



Accommodate 20,000
more emergency visits



45 hemodialysis stations
12 additional for the region



Reduce
wait times