MUSKOKA ALGONQUIN HEALTHCARE

November 22, 2019

Capital redevelopment and having a solid plan for the future has never been more vital for Muskoka Algonquin Healthcare (MAHC) than it is today. With two aging full-service community hospitals that are 55 and 41 years old in declining condition, MAHC's ability to continue to meet our patients' needs is significantly impacted by space challenges that are affected by unprecedented growing occupancy rates and new standards of care for safety. Our proposal, which has received significant support locally, will be one of the most critical and largest infrastructure projects that will be imperative for the future wellbeing of our catchment area and the thousands of seasonal residents and visitors that MAHC services each year. Having recently been awarded the highest rating of *Accredited with Exemplary Standing* from Accreditation Canada, MAHC is excited to build on this achievement of best-in-class standards with a Stage 1 Proposal that ensures MAHC is best positioned to be responsive to the ever-changing health care landscape.

MAHC's planning process to arrive at a final Stage 1 Proposal spanned a 26-month timeframe, was thoughtful, inclusive, collaborative, and community- and system-focused to look beyond the MAHC organization. It involved a Task Force that was comprised of a broad membership, including municipal representatives at the decision-making table. This engagement structure provided the MAHC Board of Directors confidence that the endorsed service delivery model and infrastructure approach are deeply supported by both the organization and the communities we serve. As per the parameters of our planning agreement with the Ministry, this stage of planning included a thorough consideration of the use of one or both of the current facilities. All of this work has resulted in a determination that the only model that ensures access to health care for our catchment area is to maintain a two-site hospital model and redevelop Two Acute Sites in Bracebridge and Huntsville. This was unanimously supported by the Task Force that carefully weighed the challenges of renovation and expansion against the option of two new builds. Our research, along with feedback from staff, physicians and the broader community through stakeholder engagement, has validated that new builds are the most appropriate redevelopment approach. We have arrived at this future vision by working together and we are highly encouraged that our partners and our greater communities are behind these future plans, as evidenced by our local municipalities passing formal motions of support in principle for the local share portion. With the Ministry's support of MAHC's redevelopment project, we can strengthen our reputation of providing outstanding integrated health care, and achieve the single largest investment in acute care in Muskoka – a $560 million legacy for future generations.

Stage 1 planning has reaffirmed that our Emergency Departments and diagnostic services are half the size they should be to handle today's volumes, and cannot accommodate the projected future growth. For more than two years, our occupancy rates have outpaced our bed capacity, with peak periods exceeding 140%. MAHC's proposal to increase inpatient capacity by 61 beds will allow the organization to manage projected future volumes, improve system flow, and end the hallway health care that has become our unfortunate reality. It will also allow MAHC to operate as per best practice, and meet

standards for contemporary health care that are not possible in the current facilities. Currently, both sites lack a sufficient number of wheelchair accessible washrooms and only 15% of our rooms are private, which fails to meet best practice standards for infection control and safe patient care. We are committed to keeping staff and patients safe, but our current physical realities threaten this commitment. Our facilities, built 41 and 55 years ago, are difficult to adapt to new models of care and technology, accessibility requirements, and jeopardize our patients' right to privacy and confidentiality.

The proposed addition of stroke rehabilitation beds and MRI technology in the future will enhance care closer to home and ensure the widespread catchment we serve has access to advanced diagnostics, and programs and services that are responsive to their needs and are appropriate to deliver in our environment. At the same time, we believe our Facility Development Plan is flexible enough to allow continued evaluation of how programs and services are arranged across a two-site model. We are committed to refining our plan at each stage of the capital planning process to meet evolving technology, best practice, system integration and community needs.

High-quality care and safety that meets exemplary standards continue to be MAHC's top priorities. The continuation of a two-site approach guarantees community support, positions MAHC for growth and flexibility, enables access and protects the region from erosion of care, and facilitates the recruitment and retention of qualified health care providers to enhance program and service development. A future service delivery model that provides for new acute care hospitals in Huntsville and Bracebridge best enables MAHC to keep staff and patients safe in the long term.

Over the past seven years, MAHC has worked collaboratively with the community, health care providers and municipal leaders to arrive at a model that aligns our future vision with one that our communities also support. It is imperative to keep this momentum that we have accomplished moving forward. We urge the Capital Investment Branch to expedite advancing our work to Stage 2 of the capital planning process. Our facilities can't wait many more years for an approved future direction, and our staff, patients and those we will serve in the future deserve facilities that enable better, safer care. We look forward to your review of this Stage 1 Proposal and would be pleased to provide any clarification at your convenience.

Yours in health,

Philip Matthews, Chair, Board of Directors

Natalie Bubela, CEO

MUSKOKA ALGONQUIN HEALTHCARE

STAGE 1: PROPOSAL

PART A: EXECUTIVE SUMMARY

NOVEMBER 2019

i. Executive Summary

Introduction

Community hospitals have always had an essential role to play as a key part of an integrated, collaborative, and sustainable system of care. Muskoka Algonquin Healthcare (MAHC) provides residents of the region and surrounding areas with access to high quality health care services close to home. MAHC will continue in its role of improving access to care and of supporting and enhancing a healthy community. It will continue to maintain effective linkages with larger centres and with community and primary care providers, thereby not duplicating health care services in the community at the hospital level. Having recently been awarded the highest rating of 'Accredited with Exemplary Standing' by Accreditation Canada, MAHC seeks to match its excellence in care with the facilities required to support clinical function in the shorter and longer term.

MAHC has long been working with the North Simcoe Muskoka (NSM) LHIN, Orillia Soldiers Memorial Hospital (OSMH), Collingwood General and Marine Hospital (CGMH), Royal Victoria Regional Health Centre (RVRHC), Georgian Bay General Hospital (GBGH), Waypoint, and other health care partners, to continually develop new and innovative ways of delivering health care services to their communities in the future. These services will be designed to meet the future health care needs of Muskoka and area residents and align with the NSM LHIN's Integrated Health Services Plan (IHSP), and the Patients First: Action Plan for Health Care.

This Master Program for the MAHC Capital Redevelopment Project has been built on previous planning work completed by the organization since 2011. It has been advanced by the extensive and ongoing exploration by MAHC to define its future role within an evolving health care system and ensure its viability and flexibility to accommodate future change. It reflects substantial engagement with staff, community, and municipal leaders in an effort to reflect a solution that derives the best outcome and a sustainable future for MAHC's patients and their families.

The health care system as a whole is moving toward increased community resources, better integration of community services, mental health, and primary health care, better coordination of care (both from a technology and care perspective), and a more appropriate use of hospital resources. This Master Program therefore aims to respond to both internal and external forces in the short and long-term – providing the best possible solution for Muskoka and area, within the constraints of a publicly-funded system.

Special challenges being faced by rural, community hospitals include (but are not limited to):

- limited access to health care professionals or specialists
- challenges in providing services to a fluctuating population (including high volumes of seasonal residents) while maintaining our quality commitment
- shrinking and/or finite funding in the face of rising costs and inflation
- lower visit volumes (small volumes and/or lack of critical mass for specialty programs)

- recruitment and retention of doctors and skilled staff, as well as maintaining clinical expertise in small volume programs/ services
- aging facilities.

In addition to the above, MAHC acknowledges current changes occurring in the health care landscape that include:

- technology advancements/increased use of health analytics and patient-centric diagnostics
- changes in scope of practice (e.g. increased role of community-based care, advanced paramedics providing care in the home vs hospital-based care)
- increasing consideration for the impact of social determinants of health
- changing demographics and aging populations with more complex needs
- provincial spending on hospitals will not grow; funding will flow to innovative strategies, and to care provided in the community
- Ministry of Health & Long-Term Care focus on primary health care in the community with major investments in Family Health Teams (FHT)/Health Hubs/HealthLinks/Nurse Practitioners/ Nursing Stations (e.g., Rosseau)/care in the home
- increased focus on mental health and addictions, and its impact on other clinical service use
- hospitals must be resourceful and continue to collaborate and integrate with community service providers
- diagnostic and treatment technology is changing rapidly, but at a cost
- barriers to accessing regional health centres for specialized care, for example mental health
- Alternate Level of Care (ALC) patients impacting flow
- impact of Ontario Health Teams on system of care
- hospitals are focusing on high-need, specialized care that can't be provided elsewhere.

In consideration of the health system priorities and future directions, MAHC established the following key objectives that were fundamental to the development of the Master Program:

- to create partnerships in the provision of care in support of a sustainable, accessible and coordinated system of care
- to reduce inappropriate admissions to hospital through innovative programs
- to plan flexibility and capacity into the organization, thereby both sites will support future changes in the scope of service provision and service volumes without undue capital investment
- to plan options for delivering changes to health care, which are sustainable and efficient, while aiming to provide care close to home.

It is assumed that changes in the scope of service provision, service volumes, and locations of service delivery will occur as MAHC continues to work on the appropriate consolidation and integration of health services across its sites, and amongst its community partners. This further illustrates the need for partnerships and flexibility in planning – to accommodate changes both known and unknown.

Background

In 2011, MAHC began a capital planning process in response to the organization's need to update current facilities to address significant deficiencies in space, service/department locational adjacencies, and mechanical ventilation (HVAC) systems. Increasingly, MAHC's aging physical infrastructure is challenging the organization on a daily basis to provide safe, efficient, and quality health care in the shorter and longer term. Aging infrastructure, in combination with consistent overcapacity due to population growth (and a high number of seasonal residents which exceed the permanent population) have made redevelopment essential for the future viability of high quality, close to home health care for Muskoka residents. For that reason, redevelopment has been a key pursuit of the organization for almost a decade.

In 2012, MAHC submitted a Pre-Capital Submission to the Ministry of Health and Long-Term Care (MOHLTC) and the NSM LHIN. Subsequently, the MOHLTC requested that MAHC develop a Master Program and Master Plan to more fully inform future decision making on use of sites and facilities. This required an updating of the 2012 Pre-Capital Submission, based on the outcomes of the master programming and planning process, and was resubmitted in the fall of 2015.

While the revised Pre-Capital Submission was under review and discussion, master programming/planning continued. MAHC staff, physicians, key stakeholders and consultants worked collaboratively to define the short- and long-term goals, future vision, and service model for the organization, to best meet the needs of the community, the priorities of the governing bodies, and continue to provide the highest quality of care.

Led by a Steering Committee comprised of Board members, senior administration, physicians, foundation representatives, and community stakeholders, master planning considered a number of future options, both reusing the existing site(s), and/or consolidation of the two sites onto one greenfield site. Through considerable consultation (internal and external) data analysis, and clinical modelling, it was ultimately determined that a centrally located, single hospital would be the recommended future service delivery model.

Following this recommendation, there remained some local uneasiness about a single-hospital solution for Muskoka. As part of the NSM LHIN endorsement of the 2015 revised Pre-Capital Submission, direction was given to facilitate additional engagement of internal and external stakeholders, including the local municipalities and politicians, to further explore models, options and ultimately achieve a greater comfort level with the future direction of MAHC. This was echoed by the MoHLTC, who also supported a reconsideration of a one-site model and recommended further exploration of solutions that would ensure consistency in local health access and support by the communities served by the organization. To that end, a comprehensive 'Task Force' was developed, with

broad representation, to reconsider the future service delivery model, conduct additional consultation, and expand the criteria by which the options were analyzed, in light of all potential impacts – both within the organization and across the communities it serves.

The Task Force was comprised of MAHC Board members, administration and hospital medical staff, hospital foundations and auxiliaries, primary care providers, municipal representatives, representatives of Muskoka and Area Health System Transformation (MAHST), the NSM LHIN, and a patient advisor from the greater Muskoka community.

The role of the Task Force was to oversee the overall planning for the Stage 1 A and B Proposal, receiving information and providing input at key milestones, as well as providing recommendations to the MAHC Board with respect to the final outcomes of planning. Over the course of the project, they have met approximately 30 times, have observed/ participated in numerous planning workshops with interdisciplinary stakeholders, and participated in community engagement sessions. Final recommendations by the Task Force are therefore informed, introspective, and highly consultative.

The renewed Stage 1 planning also included additional community consultation at various stages in the planning process, and via a number of approaches – including internal and external information sessions, feedback surveys, and workshops/focus groups (with key stakeholders). Broad engagement and communication was a goal and focus of the Stage 1 planning, both in the interests of transparency and a thoughtful outcome. *Note:* details of this engagement have been included elsewhere in this report.

At the conclusion of this renewed planning process for the Stage 1 report – with the additional consultation, exploration, and consideration complete – the Task Force ultimately made the recommendation for a Two Acute Sites model, which was subsequently endorsed by the MAHC Board.

Other Planning Studies Undertaken

In addition to the required data analysis inputs to the Stage 1 report, several additional studies/reports were solicited by MAHC and the Task Force, as supporting documentation. This included the following:

- *Capital Cost Estimates* (completed by Hanscomb) – preliminary estimates per model, based on space projections, to inform potential capital and local share implications
- *Operating Cost Estimates* (completed by Preyra Solutions Group) – high level, order of magnitude cost forecasts for each model, based on the programs/services to be included under each scenario
- *Human Resources Impact Report* (completed by MAHC) – to consider the challenges and benefits of each model with respect to projected availability of human resources, turnover and recruitment, ability to manage change, etc.
- *Travel Times Analysis* (completed by Preyra Solutions Group) – to further work completed for the Pre-Capital Submission and Master Program; to understand the impact of shifting and/or consolidating programs/services across sites;

Note: Muskoka residents currently have among Ontario's longest average travel times to access acute care (22 minutes), therefore this study was of key importance for siting of services; please see the *Appendices* section of this report for more detail

- *Siting Report* (completed by Stantec) – describing the options for building and/or renovating facilities based on the proposed models, to inform the evaluation process; the study was focused on the architectural and engineering aspects of siting, and did not include considerations related to land use, community planning, clinical and social impact, etc.
- *Land Use & Community Planning Analysis* (completed by Urban Strategies Inc.) – due to the concern regarding moving services outside of their current location (either to another site or to the community) a land use study was commissioned by MAHC, to study the viability of locations outside of the current Bracebridge and Huntsville sites. *Note:* the analysis considered related planning frameworks, but also municipal feedback
- *Economic Impact Analysis* (completed by Urban Metrics) – to assess the potential impact of each of the models from an economic development perspective.

Purpose of a Master Program

A Master Program represents the first stage of the capital planning process. The purpose of this high level, pre-design document is to explore the future roles, approaches for service delivery, and strategies for collaboration and partnerships in order to develop an overall understanding of the type, amount and configuration of space needed to properly support patients and staff in the future. This information allows informed judgments to be made about the future facilities and their related sites. In addition, information that is documented in the Master Program will inform the subsequent stages of planning, including the development of the Master Plan, as well as the more detailed Functional Program.

The development of a Master Program requires extensive planning expertise and the contributions of both internal and external Health Service Provider (HSP) stakeholders. It considers the interplay between program/service elements and physical/cost elements, conducts analyses of multiple development options, and identifies a preferred physical solution in a Facility Development Plan. The Master Program is an early step in the planning and design process. More detailed material and continued/increased involvement of staff is part of the subsequent planning stages of functional programming and architectural design.

This Master Program builds on earlier MAHC planning initiatives including:

- the 2012-2014 Strategic Plan and subsequent refreshed 2015-2018 Strategic Plan; *Note:* a new Strategic Plan was completed in 2019 and has/will also be utilized in planning
- Pre-Capital Submission October 2012; revised and resubmitted in 2015
- Master Program/Plan developed in 2015; revised and submitted in February 2016.

The MAHC Master Program is divided into two sections: Service Delivery Model (scope of service descriptions and options for future service delivery) and the Spatial Requirements (design criteria and space projections). *Note:* these two sections loosely correspond to the Part A and Part B aspects of the Stage 1 submission, relatively speaking.

Service Delivery Model

The objectives of the Service Delivery Model include:

- studying/developing an innovative and sustainable model of integrated care
- defining a facility that supports and enhances key partnerships, to best meet the health care needs of residents of the Muskoka Census Division and East Parry Sound communities in a rural area
- contributing to local health system integration and a unified patient and family-centred system of care, in keeping with the MAHST report and the goals of the Ontario Health Team model
- providing services to accommodate projected needs-based demographic change and increased acuity of patients; reducing wait times for care and ending hallway medicine
- defining health services and model(s) of service delivery that support the NSM LHIN IHSP and Care Connections plan, and MOHLTC initiatives
- being consistent with the requirements of Provincial Agencies such as Cancer Care Ontario and Ontario Renal Network.

The Service Delivery Model section is comprised of three sub-sections:

A) Program Parameters
B) Master Program Components
C) Options for Service Delivery.

In combination, these three sections describe the current and future state of programs/services for MAHC and the potential scenarios by which these services may be provided in the built environment(s).

Section A) Program Parameters provides background and overarching principles and assumptions for the project to serve as a foundation for the subsequent planning work.

Section B) Master Program Components details the current and future service provision (programmatic and workload) under the scenario by which acute and ambulatory services continue to be provided across both sites (and therefore not consolidated). It therefore describes a future scenario closest to the existing state of MAHC.

Section C) Options for Service Delivery details the advantages and disadvantages of the various models of future service provision considered. The space implications for each scenario are then tested in the *Spatial Requirements* section.

Spatial Requirements

The objectives of the Spatial Requirements section include:

- providing high-level space requirements to align with the proposed service delivery model
- studying the long-term implications of future changes in service provision and related space requirements
- providing a framework to address short- and long-term space and facility issues and workflow
- providing facilities that meet infection prevention and control standards and reflect best practice and evidence-based design
- ensuring privacy and dignity of patients.

Note: for this study, space requirements have been developed for the following two options:

1. **Two Acute Sites** – maintaining inpatient, emergency and surgical services across both sites
2. **Inpatient Site/Outpatient Site** – distributing workload across both sites by consolidating the majority of inpatient activity at one site, and outpatient activity at the other (both with related supports, as applicable).

As previously detailed, a 'One Hospital' model was previously examined, however was dismissed due to a widespread disagreement with shifting MAHC hospital care from its current sites to a 'centralized', undefined location that would service all communities. This sentiment was held for a number of reasons, chief among them being the perceived consequences of moving services out of Bracebridge and Huntsville or centralizing all services in either location, leaving one of the existing sites vacant. It was thought that this:

- could disadvantage the communities that were being vacated (e.g. from an employment, economic development, and growth sense)
- could add travel time to patients and staff (given the large, remote areas that make up the catchment area)
- through single siting services, could reduce access to services for a proportion of patients now more distant from their closest hospital site
- could present difficulties in the ability to find a suitable site given the restrictions imposed by the local environment (i.e. site servicing, travel routes, population patterns, land use planning)
- could create issues of retention of existing staff and physicians
- would create uncertainty around the ability/desire for the municipalities to provide additional infrastructure was not certain.

It should be noted that this discomfort was not unanimous but was vocal enough that it was believed that the project would not be sufficiently supported by the local communities and the municipalities the organization serves. For this reason and with the support of the Ministry of Health Capital Branch, the Task Force

spent more time focused on analyzing two-site options and a one-site option was not included as a focus of this renewed study.

Planning Context

The Master Program describes the current and future role and scope of clinical support, administrative, and general support services for MAHC. It also includes projected activity resource requirements and facilities implications for the future provision of programs and services at MAHC.

Note: estimates of future FTE requirements to support the future service delivery model have been included in section 1.2 Human Resources Plan.

Planning Horizons

The planning horizons (as discussed and confirmed with the MoHLTC) are based on needs anticipated in the years 2024/25, 2031/32, 2036/37, and 2046/47.

Notes & Assumptions on the Future Provision of MAHC Health Services

In the future, MAHC will continue to provide a full complement of acute care hospital-based clinical services, for its catchment area, as well as for the seasonal residents, and the significant tourist population that vacations in Muskoka each summer, as discussed in the following pages.

MAHC will continue to identify opportunities for efficiencies and consolidation of appropriate clinical and other services, in an effort to:

- achieve clinical best practices and program critical mass integration of clinical disciplines
- to provide seamless care coordination with primary care services
- to reduce avoidable admissions and length of stay.

Note: ensuring sufficient human resource capacity within the region to support these transitions will be fundamental.

Strategies for future delivery of MAHC's acute care hospital-based services that align with evidenced-based practices will include:

- patient and family-centred care/patient experience
- care provided close to home
- reduced wait times
- cessation of hallway medicine
- reduced numbers of ALC patients
- integration/collaboration of health care services across hospital/community organizations providing continuity of care
- services moving into the community
- campus of care models
- step-up/step-down medical/surgical care beds

- management of chronic disease
- health promotion and disease prevention.

Assumptions for Planning MAHC's Future Clinical Services

Key assumptions used for planning the future Ambulatory Care Services at MAHC include:

- reduction in some hospital-based ambulatory clinics, assuming that some outpatient care will increasingly be provided by primary care and community services
- Paediatric Clinic, Prenatal/Antenatal Clinic, Diabetes Education, Cytology, Outpatient Dietitian, Microbiology, Seniors Assessment and Support Outreach Team, and Pacemaker clinic will shift to the community (assuming the required planning and supports are in place)
- MAHC will continue to develop and offer ambulatory services in the acute-care setting focusing on high-risk, complex patients, and linked to inpatient care. These programs will complement - not duplicate - services provided in the community
- provide enhanced ambulatory clinics focused on the community's needs (e.g., chronic disease management and prevention, dementia and mental health) and continued coordination with community partners
- Chemotherapy Services will remain on one site
- effectively use human resources through appropriate team-based care and skill mix, and flexibly using available treatment space resources.

Assumptions used for planning future ***Emergency Services*** at MAHC include:

- maintain two Emergency Departments, with anticipated workload assumed at an approximate 50/50 division, based on current volumes
- reduce low acuity Emergency Department (ED) visits (Canadian Triage Assessment Scale [CTAS] Level 4/5). The impact of this planned change will likely translate to a higher overall acuity of patients presenting at the ED
- assume that the increasing number of initiatives in the community by family physician offices, nurse practitioner clinics, Home & Community Care, etc., will continue to enhance support for patients in the community and at home
- to improve wait times for less urgent CTAS 4 and non-urgent CTAS 5 patients, the ED will continue to incorporate a fast track ("See and Treat") area
- assumed these and other initiatives being developed will further reduce hospital workload over time.

Assumptions used for planning future ***Inpatient Services*** (refer to Inpatient Services Bed Summary Table on the next page) at MAHC include:

- generally, continue to support the health care strategies of reducing admission and readmission rates to hospital and reducing lengths of hospital stays for admitted patients. Over time, this may include the use of 'virtual

medicine', to allow for remote monitoring of patients in their home and better manage the flow of patients and health care resources

- provide a service delivery model that maximizes patient and family-centred care/experience and clinical efficiencies where nursing staff are decentralized to smaller clusters of inpatient beds
- contribute to the elimination of 'hallway health care', through improved service coordination, use of integrated technology, and improved care transitions across the health care continuum
- post-acute services (e.g. Complex Continuing Care [CCC] and Stroke Rehabilitation) will be single sited
- reduce Intensive Care Unit (ICU) bed utilization by low acuity patients by improving the occupancy capabilities of the future general medical and surgical beds so that ICU beds are no longer needed/used for surge capacity
- develop step-down/-up services supported by bed allocation to provide the appropriate 'right care' in the ICU
- reduce ALC days in hospital and assist in identifying opportunities for collaborative system improvement
- maintain flexible staffing assignment of the Medical/Surgical inpatient beds; beds have been allocated to both sites based on a 36-bed operational model, for maximum efficiency and flexibility
- continue to decrease the number of inpatient surgical cases as appropriate
- focus medical/surgical inpatient care on community needs, including increased care of older patients
- align the Maternal/Child model of care across the two sites. Develop a labour delivery recovery post-partum (LDRP) care model
- increase CCC services to support demographic growth demand, factoring current utilization rates.

Table: Inpatient Services Bed Summary

	2016-17		2024-25		2031-32		2036-37		2046-47	
	SMMH	HDMH	SMMH	HDMH	SMMH	HDMH	SMMH	HDMH	SMMH	HDMH
Program / Service, All Beds	**59**	**37**	**67**	**66**	**79**	**78**	**90**	**88**	**117**	**117**
Medicine	36	28	37	42	42	50	48	57	60	76
Surgical	incl.	incl.	5	5	6	6	7	6	8	9
Critical Care	4	5	5	5	6	6	6	7	8	9
Stroke Rehabilitation *	n/a	n/a	-	12	-	14	-	16	-	21
Obstetrics / LDR Suite / PP	3	4	1	2	1	2	1	2	1	2
Complex Continuing Care	16	-	19	-	24	-	28	-	40	-

** Subject to NSM LHIN approval*

Assumptions used for planning future ***Surgical Services and Endoscopy*** at MAHC include:

- reduce the rate of screening endoscopies due to the adoption of best practice guidelines
- continue to perform cataract surgery and endoscopy procedures at MAHC, not by independent clinics in community locations
- General Surgery (including Endoscopy) will be allocated equally between the two acute sites; Urology and other surgical specialties such as ENT and gynaecological procedures will be single sited
- use the main ORs for more major surgical cases, assume minor surgical procedures (lumps and bumps) and cataracts will be performed in an ambulatory surgical centre at MAHC.

Options for Service Delivery Overview

MAHC is close to its limit in improving efficiencies in service delivery through creative endeavours. As indicated in previous submissions, its physical resources continue to be a serious impediment in providing a contemporary health care environment that will support:

- changes required for improved service delivery models
- patient needs for privacy/confidentiality
- staff needs for a supportive work environment
- efficiencies in service delivery
- incorporation of new technology into clinical care
- enforcement of evolving infection prevention and control standards
- provision of a safe patient and family-centred environment.

Through a series of interactive workshops, Task Force meetings (approximately 30 in total), and report sharing, options were explored for providing MAHC's future clinical services model. All options considered balancing the clinical benefits with the patients' needs, aligned with operational efficiencies and the organization's strategic directions.

Each of the workshop sessions distributed the attendees (over 80 invited) into sub-groups to examine how services should be distributed across two sites, with consideration of several factors – both qualitative and quantitative in nature. In this way, the options could be tested and vetted through a group of diverse perspectives, priorities and insights.

The workshops provided an open forum for information sharing and discussion, whereby the consulting team brought forward data and experience gained from past project work, to be applied to the local context. Using the breakout groups to test the opportunities/possibilities of each scenario (full service acute sites, or inpatient/outpatient focused) the option under discussion was then refined into a summarizing option that best reflected the consensus – to be further tested against metrics such as service volume, staffing models, critical mass, and other factors.

The workshops can be outlined as follows:

1. **Common Ground** – a level-setting workshop to provide an understanding of current and future state, demographic indicators, MAHC activity trends and utilization (current and future), travel time data, and innovation and technology trends. *Note:* a subsequent follow-up data session was held with Preyra Solutions Group (PSG) and ED and Surgical Services staff and physicians, to look at key data related to those respective areas
2. **Inpatient/Outpatient Model Workshop** – to confirm data and discuss options under a scenario by which one site would focus on inpatient programs/services and the other would provide the vast majority of outpatient programs/ services. Discussions regarding what support services would be required to support such a model, and what opportunities/constraints would be envisioned were key to this session
3. **Two Acute Sites Model Workshop** – similar in design to the inpatient/outpatient workshop, this session considered an optimized two acute site model, with an emphasis on program/service consolidation, and moving services to the community, where applicable
4. **Compare and Contrast** – the final workshop took the summary versions of the previous workshops and evaluated them against one another, refining them further to best evaluate how each could meet the future needs of the community and organization. Discussions occurred regarding current and future challenges, including recruitment and retention, critical mass and capacity, infrastructure and space limitations. Pros and cons of both models were considered under a variety of success indicators and against the overall guiding principles.

Variations to the two-site service delivery model were explored extensively with the intent of ensuring appropriate services in each of the communities and, at the same time, offering access to services that have sufficient volumes to maintain clinical expertise that can also be operated efficiently. As much as possible, service integration with other providers was explored and factored into the workload projections. Service redesign in terms of reducing ALC patients, lower admission rates, and shifting to community and outpatient care were all factored into the future service models.

A series of evaluation criteria, informed through community engagement, were established to assist the decision makers with the model selection process. The criteria addressed operational benefits, community and government support, sustainability, capital cost, growth potential and opportunities to develop an integrated campus of care service model.

Workshop Outcomes

In all workshop sessions, care close to home, the communities' strong connections to their local hospitals and the related fundraising opportunities within the local communities, the travel distances to care, clinical outcomes, staffing and equipment efficiencies, and current lack of convenient public transportation were discussed.

Once the workshops had been completed, a public meeting was held in the community, to provide the local citizens and business owners the opportunity to

speak with the Task Force members – via oral presentation or written submission. The intention was to solicit feedback prior to any final recommendation regarding future models. Approximately 140 people attended the meeting, with 16 people presenting their comments and an additional 100 (approximately) submissions provided for Task Force and Board review and consideration. This community feedback was in addition to the other methods of communication and engagement previously outlined in MAHC's pursuit of transparency and robust community consultation.

Key themes from the community's perspective included (but were not limited to):

- access to care, in particular emergency care (e.g. ED and obstetrics)
- the community's preference for two full services acute care sites
- community will to support renovation of existing facilities
- community sentiment regarding the need for operating funding that matches operating need
- view that community hospitals have a unique role and responsibility in promoting economic development and opportunity
- the existence of a hospital in a community is inextricably linked to where people want to live, build businesses and provide like-minded services (e.g. other health care providers).

After extensive study, deliberation, engagement, and review, the Task Force unanimously came to the recommendation for a **Two Acute Sites** model, as the preferred service delivery model for MAHC. This was later endorsed by the MAHC Board of Directors, to be included in the Stage 1 proposal, as detailed herein. The Two Site model reflects a model highly supported by staff, physicians, and the community served, and affirms MAHC's commitment to a redevelopment approach that *benefits all at the expense of none*.

Reasons the Two Acute Sites model was recommended and endorsed for the future include (but are not limited to) the following:

- provides the best patient- and family-centred care by keeping care close to home, in alignment with NSM LHIN and MOHLTC direction; *Note:* MAHC patients currently experience one of the highest average travel times for acute care in the province at 22 minutes (as documented in the Travel Times Analysis)
- of the proposed options, garners the greatest level of community and municipal support, which provides higher likelihood for success of the project, including financing
- provides the best access to care, through continuing to provide programs/ services in an 'urban setting' with higher relative population density, public transportation, and through the provision of emergent services in multiple locations (e.g. ED and obstetrics)
- ensures the viability of the acute care system across Muskoka and area
- provides a model that is flexible to accommodate future change
- is positioned to meet the community's needs today and in the future

- addresses land use planning and site servicing issues related to facility development.

Single-Sited vs Dual Sited Programs/Services

Over the course of planning, numerous discussions were held regarding single siting vs dual siting the various programs and services of MAHC. These conversations built upon the existing dialogue within the organization, who have long been evaluating their programs and resources in the pursuit of efficient, high quality care.

The master programming volume projections and consultant-led workshops provided additional context to MAHC's internal discussions, allowing for a deeper discussion regarding critical mass, required clinical supports, and the viability of services in the shorter and longer-term. Through exploration and scenario modeling, the conditions under which programs/services could be single sited were thoroughly considered by clinicians, staff, and other stakeholders.

It should be noted that many of MAHC's program/services are already largely single sited – with specialized services provided on one site, but core services provided at both, to support other related programs. For example, within the surgical program, specialized surgeries are currently single sited (and will remain so in future) however, general surgery is provided at both sites to support the ED and Obstetrics program, among others. It is anticipated therefore that some services will have a 'main department' at one site, with a presence at the other site to support overall operations and coverage.

With regards to future outlook, all programs and services were considered for single siting. In cases where it was determined the services must be provided at both sites in future, it was due to reasons including (but not limited to) any combination of the following factors:

- travel times for urgent/emergent services whereby single siting could compromise patient safety and outcomes (e.g. Emergency, Obstetrics)
- maintaining a critical mass of 'close to home' services in the local community
- staff efficiency, and/or cost savings in dual siting (e.g. dual siting provides additional workload for physicians/clinicians while on site, and becomes a driver of outpatient activity, or the critical mass of activity required to justify their presence on-site to support other programs)
- requirement of services to support other programs/services (e.g. diagnostic services to support ambulatory clinics and ED; surgical having a clinical linkage to Obstetrics for c-sections)
- single siting certain services would result in additional transfers for patients needing services at the other site – impacting patient experience and health, transportation costs, patient length of stay, etc.
- sufficient volume projected to justify splitting the service without compromising efficiency – providing better patient access, and supporting related programs where applicable (e.g. sufficient activity to justify mammography at both sites, also allowing for support of both EDs)

- desire for equity between the two sites, for patient access and long-term community viability
- risk to local share by having a substantial difference in the robustness of services at the two sites
- belief that it would negatively impact recruitment and retention of staff to not provide a robust portfolio of services at one of the sites.

Lastly, while single siting some programs and services makes good sense on some fronts, having some programs/services dual sited has benefits as well. The dual sited nature of some services provides the advantage of being able to flex operations to accommodate surges, outbreaks, and unforeseen operational challenges. In the past during times of emergency issues or renovations MAHC has been able to flex programs such as Obstetrics, MDRD, and even emergency department care to the alternate site to allow for uninterrupted care to the community. The proposed model also allows for the ability to share and flex staff and physician coverage back and forth as needed.

Table: Single Sited and Dual Sited Programs/Services Summary

Program/Service	Current State	Future State
Emergency Department	dual sited	dual sited
Endoscopy	dual sited	dual sited
Diagnostic Imaging	dual sited	dual sited
Core Laboratory	dual sited	dual sited
General Surgery	dual sited	dual sited
Obstetrics	dual sited	dual sited
Inpatient Beds	dual sited	dual sited
Intensive Care (ICU)	dual sited	dual sited
Specialty Surgery (e.g. Cataract, Urology, Gynaecology)	single sited	single sited
Specialty Programs (e.g. Chemotherapy, Dialysis, Pathology)	single sited	single sited
Non-Core Lab Services	single sited	single sited
Nuclear Medicine	single sited	single sited
Interventional Radiology	single sited	single sited
Diagnostic Assessment Centre (for OBSP)	single sited	single sited
Complex Continuing Care	single sited	single sited
Stroke Rehabilitation Unit *(new)*	---	single sited
MRI *(new)*	---	TBD (single or dual)

Workload Summary

Following is the summary table of the current and projected workload for MAHC's clinical and diagnostic services:

Table: Current & Projected Workload

	Actual 2016/17	Projected 2024/25	Projected 2031/32	Projected 2036/37	Projected 2036/37
Ambulatory Care					
Diabetes visits	1,537	---	---	---	---
Dialysis treatments	3,183	3,982	4,659	5,174	6,436
Fracture Clinic visits	1,151	1,237	1,297	1,341	1,437
Chemo/Medical Day Care/Remicade visits	3,513	4,196	4,822	5,216	6,178
Surgical Clinic Visits	1,532	1,721	1,888	1,986	2,210
Systemic Therapy treatments	1,459	1,714	1,902	1,956	2,071
Emergency Services					
CTAS 1	124	139	151	163	188
CTAS 2	5,720	6,329	6,902	7,304	8,201
CTAS 3	19,195	20,937	22,678	23,958	26,806
CTAS 4	18,296	19,266	19,266	19,266	19,266
CTAS 5	852	899	899	899	899
ED visits - total	*44,187*	*47,570*	*49,896*	*51,590*	*55,361*
Maternal/Child					
Births (excl. c-sections)	195	204	212	205	200
Inpatient Services					
Medical/Surgical beds	64	89	104	118	153
Critical Care beds	9	10	12	13	17
Stroke Rehabilitation beds	----	12	14	16	21
Obstetrics (incl. postpartum beds)	7	3	3	3	3
Complex Continuing Care beds	16	19	24	28	40
Surgical Services					
Surgical Suite:					
- Inpatient cases	604	675	725	748	794
- Outpatient cases (incl. cataracts)	3,027	3,402	3,740	3,947	4,405
Endoscopy cases	4,916	5,372	5,596	5,648	5,754
Cardiorespiratory Services					
Non-invasive procedures	2,977	3,480	3,976	4,360	5,290

	Actual 2016/17	Projected 2024/25	Projected 2031/32	Projected 2036/37	Projected 2036/37
Diagnostic Imaging Services					
General Radiography exams	35,305	39,782	44,259	47,560	55,496
Mammography/OBSP exams	5,941	6,629	7,195	7,643	8,684
CT Scanning exams	10,486	11,946	13,118	14,495	17,128
Ultrasound exams	16,707	19,448	22,119	24,209	29,232
Echo exams	814	960	1,104	1,216	1,490
Nuclear Medicine exams	1,782	2,102	2,418	2,664	3,260
MRI exams	---	TBD	TBD	TBD	TBD
Clinical Laboratory Services					
Anatomic Pathology procedures	70,214	522,450	576,486	610,356	689,059
Clinical Microbiology procedures	79,762	---	---	---	---
Core Lab procedures	419,444	2,193,625	2,427,285	2,596,493	2,994,329
Cytopathology procedures	4,541	---	---	---	---
ECG procedures	13,583	15,282	16,654	17,682	20,031

Note: Please see the respective Master Program Component sections for further detail.

2.1 Service Support Infrastructure Report

2.1 Executive Summary

2.1.1 Summary

The Stage 1 Proposal is the second step in the capital planning process, as prescribed in the MOHLTC-LHIN Joint Review Framework. It follows the Pre-Capital submission and incorporates program/service planning and physical infrastructure planning.

The Stage 1 Muskoka Algonquin Healthcare proposal is presented in two volumes.

2.1.2 Part A Overview

Part A includes the program/service planning. It is included as a separate volume, and comprises the following section:

- **1.0 Service Delivery Model Report**

2.1.3 Part B Overview

Part B follows here, and includes the physical infrastructure planning to execute the Service Delivery Model described in Part A. It comprises 3 Sections:

- **2.0 Service Support Infrastructure Report**
- **3.0 Options Analysis**
- **4.0 Facility Development Plan**

2.1.4 Spatial Requirements

Overall, to accommodate the proposed service delivery model and associated workload, the master program reflects an overall increase in space (CGSF) as follows:

- Current (both sites combined): 182,216 CGSF (includes out-buildings at HDMH)
- Projected based on Master Program Selected Service Delivery Option:
  - 2024/25: 270,960 CGSF, 50% increase
  - 2031/32: 299,686 CGSF, 66% increase
  - 2036/37: 325,924 CGSF, 80% increase
  - 2046/47: 397,614 CGSF, 118% increase

- Projection of beds increase:

	2016-17		2024-25		2031-32		2036-37		2046-47	
	SMMH	HDMH	SMMH	HDMH	SMMH	HDMH	SMMH	HDMH	SMMH	HDMH
Program / Service, All Beds	**59**	**37**	**67**	**66**	**79**	**78**	**90**	**88**	**117**	**117**
Medicine	36	28	37	42	42	50	48	57	60	76
Surgical			5	5	6	6	7	6	8	9
Critical Care	4	5	5	5	6	6	6	7	8	9
Stroke Rehabilitation*			0	12	0	14	0	16	0	21
Obstetrics / LDR Suite / PP	3	4	1	2	1	2	1	2	1	2
Complex Continuing Care	16		19	0	24	0	28	0	40	0

2.1.5 Multi-year Infrastructure Plan and Technical Building Assessment

The Technical Building Assessment reports indicated that both the South Muskoka Memorial Hospital and Huntsville District Memorial Hospital condition, according to the FCI condition index, is poor. As such, the current infrastructure provides challenges as the hospitals are approaching significant life-cycle renewal of major building systems in the upcoming years.

Due to the existing condition of the existing facilities, the total capital investment that is required to maintain the facilities is significant. This cost makes any long-term reuse of the facilities inadvisable.

Deferring capital investments would cause significant challenges in providing quality care for patients.

A significant amount of capital investment is projected in 10 years which adds pressure to proceed with the larger facility redevelopment projects. Deferring the opening of the new facilities would potentially force the expenditure of significant costs.

2.1.6 Existing Site Evaluation

Muskoka Algonquin Healthcare (MAHC) is a multi-site healthcare organization providing acute care services at the Huntsville District Memorial Hospital (HDMH) in Huntsville and the South Muskoka Memorial Hospital (SMMH) in Bracebridge. MAHC is located within the District Municipality of Muskoka and is part of the North Simcoe Muskoka Local Health Integrated Network (NSM LHIN).

<u>Huntsville District Memorial Hospital (HDMH) Site</u>

The Huntsville District Memorial Hospital is located within the Town of Huntsville, just outside of the downtown core.

The site is bounded by Highway 60 on the west and south, Muskoka District Road Hwy 3 on the East and Earls Road to the north. All site access occurs from Muskoka District Road Hwy 3, with a seasonal road access to Earls Road to the north. A helipad is located north of the hospital building.

The site slopes down towards Fairy Lake, in a south-east direction. There is approximately a 32 meter change in grade from the top of the site to the bottom.

The ideal development site is to the east beside the existing hospital. The ideal development site is at similar grade to the current hospital, along the same ridge.

Expanding to the north or south is not ideal due to the steepness of the hill.

The HDMH site is suitable for redevelopment in terms of size and location. However, the challenge in redeveloping this site is the proportion of currently available site area that has a high degree of topographic variation. These factors limit hospital redevelopment opportunities and require careful consideration.

South Muskoka Memorial Hospital (SMMH) Site

The South Muskoka Memorial Hospital is centrally located within the Town of Bracebridge, west of Highway 11.

The site is bounded by Liddard Street to the north, Aubrey Street to the east, Ann Street to the south and a ravine to the west. Primary access occurs from Ann Street and is used by the public and emergency vehicles. Secondary access occurs from Liddard Street and is used by staff and service vehicles. A helipad is located north of the building near Liddard Street.

The site of the existing South Muskoka Memorial Hospital site is mainly flat, with only a 5 meter grade change over the buildable site, sloping towards the south. There is a significant slope at the ravine along the south west border of the site.

The most ideal development location for the South Muskoka site is to the northwest towards Liddard Street as it is large enough to accommodate the scale of construction and is the least impact to homes along Aubrey Street.

Generally, the SMMH site will provide challenges for redevelopment. The size of the lot is below contemporary standards for health care facilities of the contemplated size. Nevertheless, the location and topography of the site are suitable for use and redevelopment

2.1.7 Options for Development

Three interactive workshops that were held with clinicians and the community care partners in October, November, and December 2018. These workshops focused on location of the departments and the critical adjacencies between departments, including circulation of the staff and public throughout the facilities.

Design Guiding Principles were developed by MAHC's Capital Plan Development Task Force to help guide the options as they were developed.

The Design Guiding Principles include:

- Aligns with the goals of the MAHC organization
- Supports Patient- and Family-Centered Care
- Promotes Health and Wellness
- Facilitates Operational Excellence
- Facilitates Future Flexibility
- Enables Innovation
- Enables Environmental Sustainability
- Promotes Community Connection and System Integration
- Meets the 'Quadruple Aim'

In developing options based on the established Design Guiding Principles, decisions regarding the long-term redevelopment of existing facilities required careful consideration.

Options that were not pursued included:

- Greenfield Site for the Huntsville District Memorial Hospital - the current property did not appear to impose any significant limitations on redevelopment options.
- Heavy Renovation - this option was not pursued due to the complexity of renovating the existing buildings while trying to operate a hospital and upgrading existing services.

Options studied included:

<u>South Muskoka Memorial Hospital (SMMH) Site Options:</u>

- *Renovation and expansion of current building* – Utilize a portion of the existing hospital and expand to the north with the construction of an addition toward Liddard Street. The main public access would be off of Liddard Street with separate entrances for Emergency and Main Entrance. Currently, the design proposes a helipad on the roof of a 4-storey building.
- *New, replacement building on current land* – Completely replace the existing hospital with a new building in the northwest corner of the property toward Liddard Street. Following construction, the existing building would be completely removed. The main public access would be off of Ann Street. Currently, the design proposes a helipad on the roof of a 4-storey building. To achieve this option, the new hospital would be built and moved into, and then the old building removed.
- *New build on new land* – Construct a new two-storey hospital on a different piece of land located somewhere within the urban centre of Bracebridge. If this option is selected, a separate process for site selection would be undertaken, ensuring the property has two-road access with proximity to Highway 11 on 30 to 40 acres of serviced land.

Huntsville District Memorial Hospital (HDMH) Site Options:

- *Renovation and expansion of current building* – Utilize a portion of the existing hospital and expand to the east beside the existing hospital and south toward Muskoka Road 3. The main public access would be from Frank Miller Drive with an additional road access north, adjacent to the new Fairvern development. Currently, the design proposes a 3-storey building.
- *New, replacement building on current land* – Completely replace the existing hospital with a new building oriented east of the existing building. Following construction, the existing building would be completely removed, and parking would be built where the building was. The main public access would be off of Frank Miller Drive with an additional road access north, adjacent to the new Fairvern development. Currently, the design proposes a 3-storey building. To achieve this option, the new hospital would be built and moved into, and then the old building removed.

2.1.8 Options Analysis

The preferred options recommendation is the result of 12 months of comprehensive study by the 23-member Task Force, which with board representation including local physicians, both hospital foundations and auxiliaries and municipal representatives from north and south Muskoka, East Parry Sound and the District of Muskoka evaluated five different ways to redevelop the Two Acute Sites service delivery model.

The options under consideration are as follows:

South Muskoka Memorial Hospital (SMMH)

- Renovation and expansion of current building;
- New, replacement building on current land; and
- New build on new land.

Huntsville District Memorial Hospital (HDMH)

- Renovation and expansion of current building; and
- New, replacement building on current land.

The five options were analyzed according to criteria based on the Design Guiding Principles and qualitative criteria.

The evaluation used a scoring system. A score of 1-3 had been considered:

1 = low adherence to Design Guiding Principles

2 = moderate adherence to Design Guiding Principles

3 = high adherence to Design Guide Principles

The development option evaluation process produced scores for each of the options.

The Renovation/Expansion Option, for both the SMMH and HDMH sites, scored the lowest for several reasons:

- The existing building is constrained by low floor to floor heights and dense column grids that will limit the ability to achieve contemporary room layout, clinical flow and adjacencies.
- The location available for growth is (in the case of HDMH) furthest from the existing physical plant, which would require costly engineering connection solutions, or the construction of additional spaces.
- Due to the siting of the existing buildings, age of the buildings, and both the building shape and internal configuration, there are limited locations to expand, and those available are not in ideal locations from a clinical or technical point of view.
- Renovation would cause significant disruption during construction, both at a site level and internal hospital level.
- Phased approach would delay achieving all of the capacity needs in a timely manner, putting continued pressure on maintaining hospital operations and patient care for the community.
- It is primarily due to the existing building condition being the least flexible to accommodate future growth.

The Replacement on Current Land, for both SMMH and HDMH, and New Build on New Land, score relatively higher. A new building would provide the best opportunity to meet the needs of the community in a timely manner. Also, a new building would provide the most optimal layout for future growth options while also supporting environmental sustainability, promoting health and wellness, promoting community connection and system integration impact on recruitment and retention.

The evaluation demonstrated a new hospital on the existing Huntsville site, and a new hospital on new land in Bracebridge for the South Muskoka site best support the high-quality patient- and family-centered care MAHC strives to deliver now and in the future. As MAHC services a broad geography with an aging population that would need a robust model of care that is currently at over overcapacity. The existing hospitals face additional space challenges while meeting new standards of care. The preferred options are considered the most appropriate redevelopment approach that best enables innovation, future flexibility and operational excellence, among other findings of the options analysis and scoring.

2.1.9 Recommendation

It is the recommendation of the Board of Directors the following building design options for the future redevelopment of the Muskoka Algonquin Healthcare Two Acute Sites service delivery model are as follows:

- New hospital build on current land for the Huntsville site
- New hospital build on new land for the South Muskoka site

The preferred options scored the highest following the Task Force's evaluation process with Community/ Foundations/ Municipal leaders engaged and supportive of the project. The evaluation demonstrated a

new hospital on the existing Huntsville site and a new hospital on new land in Bracebridge for the South Muskoka site best support the high-quality patient- and family-centered care MAHC strives to deliver now and in the future. High-quality care and safety that meets exemplary standards continue to be MAHC's top priorities. The preferred options also best enable innovation, future flexibility and operational excellence, among other findings of the options analysis and scoring.

2.1.10 Facility Development Plan

The preferred development options have been further developed and costed demonstrating the 10 and 20 year build out requirements. A project cost estimate and project schedule have been generated for the options.

The preferred options are:

SMMH - New build on new land

A new full service acute care hospital would be built on a greenfield site. The building would have 1 level below ground and 2 levels above ground with a mechanical penthouse. The new hospital would be constructed with systems and materials typical of current hospital construction. All spaces internally would be designed with current standards for size, location and adjacency to other departments. Site work would need to occur to provide the required vehicular circulation and parking around the buildings on the site.

This design locates primary diagnostic and treatment spaces in a two-storey wing with Emergency Services and Diagnostic Imaging on the Level 1 and Surgical Services on the Level 2.

The basement level houses services and loading functions which serves the upper floors through vertical circulation cores.

The public enters into an atrium space. The in-patient wing can be access through a public corridor located adjacent to the atrium space.

The hospital would be designed with energy efficient systems and target LEED Silver.

At completion, the existing hospital would be decommissioned and MAHC would assist community partners to find affiliates for the existing Bracebridge site.

HDMH - New, Replacement on current land

A new full service acute care hospital would be built on the existing site adjacent to the existing hospital. The building would be a slab on grade with 3 levels above ground with a mechanical penthouse. The new hospital would be constructed with systems and materials typical of current hospital construction. Views of the adjacent lake would be maximized through the siting of the building. All spaces internally would be designed with current standards for size, location and adjacency to other departments. The existing building, once the hospital function moves out would be demolished. Extensive site work would need to occur to maintain site access during construction and provide the required vehicular circulation and parking around the existing and new buildings on the site.

This design locates primary diagnostic and treatment spaces in a two-storey east wing with Emergency Services and Diagnostic Imaging on the Level 1 and Surgical Services on the Level 2.

The basement level is where the staff enters and houses services and loading functions which serves the upper floors through vertical circulation cores.

Main public entrance is located at the south-east corner of the diagnostic and treatment block. The public enters into an atrium space. The in-patient wing can be access through a public corridor located north of the atrium space.

The hospital would be designed with energy efficient systems and target LEED Silver.

2.1.11 Cost Estimate

The cost estimate developed for the preferred option is as follows:

MAHC Cost Estimate	SMMH New Build on New Land	HDMH New Build on Current Land
Total Construction Costs	$185,978,700	$193,879,200
FF&E / IT	$34,400,000	$36,100,000
Project Ancillaries & Other	$53,928,200	$56,226,000
Total Project Costs	$274,306,900	$286,205,200
	MAHC TOTAL	**$560,512,100**

NOTE: MAHC cost estimate driven by reduction in Furniture, Fixtures & Equipment and IT

Combined MAHC Total	
Total Local Share	$129M
Transfer of Assets from Existing Hospitals	($35M)
Foundations' Commitment (2x10M)	($20M)
Approximate Local Share Balance	$74M

2.1.12 Schedule

The schedule in the report represents an initial draft. It is for an integrated MoHLTC/IO project delivery from the Stage 1 Proposal to Occupancy.

The schedule assumes that each site is developed in parallel. More work will be done to refine and finalize the details in the next stage of the project (in Stage 2).