

# **APPENDIX 'L'**

## **Feasibility Study**

**FINAL REPORT**  
**FEASIBILITY STUDY**  
**VILLAGE OF GRAND MANAN**  
**AQUATIC CENTRE AND WELLNESS FACILITY**  
**GRAND MANAN, NEW BRUNSWICK**



**Prepared For:**

Village of Grand Manan  
4-1021 Route 776  
Grand Manan, NB  
E5G 4E5

**Prepared By:**

Silk Stevens Limited  
Design and Consulting Engineers  
35 Main Street  
St. George, NB  
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**December 2016**

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**FINAL REPORT  
Feasibility Study  
Aquatic Centre and Wellness Facility  
No. 16-10-044**

December 15, 2016

Rob MacPherson, CAO  
Village of Grand Manan  
4-1021 Route 776  
Grand Manan, NB  
E5G 4E5

**Subject: Feasibility Study - Grand Manan Aquatic Centre and Wellness Facility**

Dear Mr. MacPherson:

Please find attached, the Feasibility Study for a new Aquatic Centre and Wellness Facility on Grand Manan, New Brunswick. We look forward to discussing our report with you, Council and the Recreation Director.

It was a pleasure working with you and your staff on this project. Please do not hesitate to contact us if you have any questions or require any additional information.

Sincerely,

**K. L. (Krissy) Kinney, EIT**  
Project Engineer  
Silk Stevens Limited

**D. N. (Dave) Stevens, P. Eng.\***  
Senior Engineer  
Silk Stevens Limited

*\* Licenced in YK, BC, AB, SK, MB, NB, NS, PE and NL*

cc: P. MacKenzie - Comeau MacKenzie Architecture  
A. Lipski - AquaPro Aquatic Design Inc.

## Executive Summary

The following is a summary of the final report on the feasibility of a new Aquatic Centre and Wellness Facility for the Village of Grand Manan. It is intended to be a brief but comprehensive synopsis of the results of our assessment, highlighting key findings and recommendations.

The study team consisted of Silk Stevens Limited (Design and Consulting Engineers), Comeau MacKenzie Architecture, AquaPro Aquatic Design Inc. and the Village of Grand Manan's Recreation Director. The objective of the Feasibility Study was to develop affordable Aquatic Centre and Wellness Facility designs that responded to the multi-generational needs of Island residents, its industries and visitors. Preliminary design concepts and order of magnitude capital and operating costs were prepared for consideration of the municipal Council.

Based on the initial programming results, the facility would optimally include the following elements: 5-lane lap pool; childrens pool; physiotherapy pool; water slide; hot tub and sauna; physiotherapy rooms; spectator area with supplemental pool deck area; a walking track; ancillary; support and revenue spaces. Numerous potential user groups were identified including seniors, families with children, industry groups (such as fishing and aquaculture), institutional groups (such as schools and hospitals), as well as visitors to the Island communities and temporary workers. These potential user groups were contacted and asked what their potential needs and uses would be which led to the above programming recommendation.

Having a good understanding of the potential user groups *wants and needs* from the assessment phase, preliminary programming statements were developed, which eventually resulted in the following 3 options:

**Option 1** – A 45,000 sq. ft. 2-story facility, including 5-lane lap pool, children's pool, physiotherapy pool, water slide, hot tub and sauna, physiotherapy rooms, spectator area with supplemental pool deck area, a walking track, ancillary services, support and revenue spaces. Estimated project capital cost of \$9.9 million.

**Option 2** – A 25,000 sq. ft. 1-story facility, including 5-lane lap pool, children's pool, water slide, spectator area, a walking track, ancillary services, support and revenue spaces. Estimated project capital cost of \$7.1 million.

**Option 3** – A 17,500 sq. ft. 1-story facility, including 5-lap main pool, children's pool, water slide, spectator area, ancillary services, support and revenue spaces. Estimated project capital cost of \$5.7 million.

Option 1 met all of the needs and wishes of Island residents and businesses. Option 2 included significant reductions in the dry-side services and amenities, eliminated the physiotherapy pool and hot tub, but still maintained the walking track. Option 3 further

eliminated the walking track. Based on review of the options presented relative to the needs and wishes of Island residents, Council decided to proceed to explore the most cost effective design and develop operating costs for Option 2.

The estimated project capital costs of \$7.1 million dollars for Option 2 were based on an energy efficient building envelope, HRV's, using the excess capacity of the existing geothermal field and heat pumps (currently used at the existing Community Centre), adding an additional geothermal field and new heat pumps, designing to take advantage of as much borrowed (natural) light as possible, incorporating passive solar assistance, using all LED lighting w/ motion and automatic set-back switches, incorporating VFD's and premium efficiency motors on all pumps, using UV in addition to chlorine, regenerative media filters (to reduce backwashing) and a very good quality pool cover.

Most of the above energy saving items will require a larger initial capital investment but will have a positive impact toward lowering future operating costs. Involving volunteers to the greatest extent possible, sharing management staff as well as operations and maintenance staff between the existing Community Centre and proposed Aquatic Centre and Wellness Facility has also been assumed. Based on these assumptions and the design features described above, including the size of the facility and its functions, and allowing for good design, excellent quality finishes with an overall focus on energy conservation, the estimated operating costs are not expected to be lower than \$340,000 per year.

By incorporating energy efficiency in the building design and equipment selection, it is estimated that over 250,000 kWh/yr of energy consumption can be avoided annually. This is equivalent to approximately 200 metric tonnes of offset carbon dioxide per year which is a significant reduction in greenhouse gas (GHG) emissions. This is equivalent to taking over 40 passenger vehicles off the road each year (saving the equivalent of 85,000 L of gasoline) or enough energy to supply over 30 Island homes. If these initiatives are implemented, Island residents will be able to take much pride in their contribution to Canada's commitment to reduce GHG emissions globally, while enjoying a modern, efficient and high quality Aquatic Centre and Wellness Facility.

## 1.0 Introduction

Grand Manan Island has an area of 137 km<sup>2</sup> and is the largest and most remote of the 3 major islands at the entrance to the Bay of Fundy in Atlantic Canada. It is 24 km long and 10 km wide at its widest point. It is accessible year-round by ferry from Blacks Harbour 27 km away and the economy is primarily driven by fishing, aquaculture and tourism.

The Island has a population of about 2500 - chiefly in the villages of North Head, Grand Harbour and Seal Cove. The last census indicated that there were 1,045 households, of which 23% had children. Over 75% of the population is 20 years of age and older with virtually no unemployment on the Island and many employers looking for workers. Approximately 17% of the population is over 65 years of age and many of the local residents at retirement age still work. Many of the non-residents include retired seniors who spend their summers on Grand Manan.

Village Council would like to have a year-round Aquatic Centre and Wellness Facility for the use and enjoyment of Island residents, businesses, institutions and visitors. This feasibility study discusses the needs and wishes of the Island residents related to indoor aquatic activities and overall health and wellness, and presents various options related to building and operating it, including capital and operating costs.

## 1.1 Background

The Community Centre at 1021 Route 776 opened in 2011 and includes municipal offices, the Boys and Girls Club, an indoor arena and small fitness room. As requested, the study team considered this site as the location for the proposed Aquatic Centre and Wellness Facility. This site has many cost advantages as the municipality already owns the land, existing services and other infrastructure is already present, and management, operation and maintenance resources can be shared between the existing Community Centre and proposed Aquatic Centre and Wellness Facility. The study team looked at the feedback received during the community consultation phase of the feasibility study and looked at ways to best use this existing site considering, site access and event parking, future expansion of the site for other complimentary sports, recreation and wellness facilities (sports fields, play centres, BMX park, walking trails, etc.). And, the location is centrally located for the convenience of Island residents and various potential user groups.

The existing Grand Manan outdoor pool is more than 50 years old, at the end of its service life and is very expensive to operate and maintain. It operates approximately 10 weeks per year and is highly utilized. A new year-round indoor aquatic facility would serve Island residents year round, be much more efficient to operate; and provide additional services to Island families and businesses for sports, leisure and training purposes.

## 2.0 Scope of Work

Silk Stevens Limited committed to the following scope of work based on a proposal submitted on July 4, 2016:

- 1.) Needs assessment;
- 2.) Preparation of affordable Aquatic Centre and Wellness Facility concepts;
- 3.) Attend an open Council meeting; and
- 4.) Prepare capital and operating cost estimates.

### 2.1 Site Visit

A site visit was conducted on August 22, 2016 by David Stevens, P. Eng. and Krissy Kinney, EIT from Silk Stevens Limited to look at the existing Community Centre site and discuss project objectives and potential user groups with Rob MacPherson, CAO. The existing Community Centre site is 17 acres in size with approximately 4 acres currently in use. The southern part of the parcel is a wooded area with a marshy area to the east. Due to the marshy conditions to the east (behind the existing Community Centre) being unsuitable for construction, it was Silk Stevens' recommendation to purchase the land parcel (PID 01285956) to the south. This additional land would be an additional 6.5 acres of good ground and would improve site access as well as allow for various new construction layouts, expansion of the existing geothermal field, new event parking, etc.. Besides adding additional project construction options, and lowering the overall project cost, the additional land would also improve the visibility of the proposed Aquatic Centre and Wellness Facility from one of the most travelled roads on Grand Manan.

The proposed site plan layout and lot recommendation is shown on Drawing C-01 – Existing Conditions Site Plan and C-02 – Proposed Site Development Plan in Appendix 'I' of this report.

### 2.2 Needs Assessment

In late July 2016, the needs assessment for the project began with an initial meeting with the Village, recreation committee and key stake holders to discuss the primary project objectives. It was clearly understood that the proposed facility would be important municipal infrastructure serving the Island communities, its residents young and old, businesses, traditional fisheries and aquaculture industries, RCMP and Coast Guard, who currently go “off island” for services including certification for “working on the water” as well as visitors to the Island. As a part of the assessment, community engagement by means of telephone surveys, Facebook ads and newspaper articles and discussion in open session at the August Council Meeting helped raise awareness of the project and its potential impacts. All of feedback received was summarized and preliminary programming statements were developed. The survey results are summarized in Appendix III.



## 2.3 Programming for Preliminary Concepts

Programming is the process whereby potential user group *needs and wants* are sorted and prioritized as a means to recommend programs and facilities to meet those needs and wants. The resultant facility design concepts become the basis for the model upon which facility capital and operating costs are prepared. The preliminary programming statements consider all of the suggestions and comments from the community consultations. Additional programmatic elements are added to improve profitability and cashflow for the finished project.

Based on the initial programming results the proposed facility would ideally include the following elements:

- ✓ 5-lane lap pool;
- ✓ ancillary children's pool;
- ✓ physiotherapy pool;
- ✓ water slide;
- ✓ hot tub and sauna;
- ✓ physiotherapy rooms;
- ✓ event and multi-purpose rooms;
- ✓ spectator area with supplemental pool deck area;
- ✓ a walking track;
- ✓ fitness area;
- ✓ support and revenue spaces; and
- ✓ mechanical, electrical and equipment rooms.

### 2.3.1 Option 1: Two-Story Facility With Walking Track

Option 1 was derived from all of the user group needs and wants. A 45,000 square foot, 2 storey facility including a 5-lane lap pool, ancillary children's pool, water slide, hot tub and sauna, physiotherapy pool, physiotherapy rooms, spectator area with supplemental pool deck area, a walking track, fitness area, ancillary support and revenue spaces, and mechanical and electrical rooms. This facility has the pool suite on the lower level with the upper level for wellness looking down onto the aquatic facility.

The total estimated project capital cost estimate of this option, including site services, parking, etc. is estimated at \$9.9 million dollars. The preliminary concept plan and budget is attached in Appendix 'II'.

### 2.3.2 Option 2: One-Story Facility With Walking Track

Option 2 was developed to reduce the overall capital and operating costs by downsizing (where possible) without completely eliminating any of the core aquatic or wellness functions. Based on feedback from the Village and the Recreation Department the plan was adjusted to a single level 25,000 square foot facility including a 5-lane lap pool,

ancillary children’s pool, water slide, spectator area, a walking track, and ancillary, support and revenue spaces.

This option has removed the upper level of the facility and the lower level dry-side footprint is significantly reduced. The walking track, now on the lower level, runs through the main lobby and the physiotherapy pool was eliminated altogether, requiring a shared use with one of the 2 remaining pools. Elimination of 1 pool reduces the mechanical and filtration footprint and overall facility operating cost. Overall this option will have a higher utilization of every square foot of the facility, but will require more scheduling for shared uses. It also has less revenue potential from renting some of the rooms that were eliminated.

The total estimated project capital cost estimate for this option, including site services, parking, etc. is estimated at \$7.1 million dollars. The preliminary concept plans and budget is shown in Appendix ‘II’.

### **2.3.3 Option 3: One-Story Facility With No Walking Track**

This option was developed to further reduce capital and operating costs. However, it required cutting the walking track completely out of the project in order to make any meaningful reductions. Without the walking track the overall footprint was reduced to a 17,500 square foot facility including a 5-lane lap pool, ancillary children’s pool, water slide, spectator area, and minimal ancillary, support and revenue spaces.

The total estimated project capital cost estimate for this option, including site services, parking, etc. is estimated at \$5.7 million dollars. Preliminary concept plans were not created for this option as the elimination of the walking track was determined to be unacceptable and this option received no further consideration.

## **3.0 Operating Costs for Option 2: One-Story Facility With Walking Track**

Option 2 was identified as the preferred option. It addressed the minimum needs of Island residents related to a year-round facility and would be accessible to every Island resident, business, institution and visitor. The operating costs for this option are discussed in the following sections.

### **3.1 Overall Operating Costs**

Based on the size of the facility and its functions, operating costs were prepared based on good design, excellent quality materials/finishes and equipment with a focus on energy conservation. The order of magnitude costing for operations is estimated to be \$340,000 per year based on projected 2019 dollar values:

a) Staffing Expense .....	\$ 242,500
b) Energy Costs .....	\$ 35,200
c) Maintenance, Repair and Chemicals .....	\$ 50,000
d) Asset Renewal Fund .....	<u>\$ 12,300</u>
	\$ 340,000

In providing estimates of probable cost, the Consultant has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Suppliers or any Contractor's method of pricing, and that estimates of probable costs are made on the basis of the professional judgment and experience. The Consultant makes no warranty, express or implied, that the bids or the negotiated cost presented in this report will not vary from the estimate of probable cost.

### 3.1.1 Staffing Requirements

It is expected that 3 full time operations staff and 2 full time lifeguards will be required to operate the proposed Aquatic Centre and Wellness Facility (Option 2).

The certified Pool Operator will also be the full time Building Caretaker splitting their time between the swimming pool and other normal building maintenance duties. There would also be a full time cleaning position for the entire building including the pool areas, changing rooms and the wellness facilities. We have assumed that any part time staff required thereafter would be volunteers or existing Recreation and Community Centre staff as suggested in discussions with the Village and current Recreation Director thus not having an impact on operating costs. A further cost reduction measure, often utilized in public pool facilities, is to assign the lifeguards some cleaning responsibilities for periods when they are underutilized.

The Aquatic Centre lifeguard staffing requirements are based on guidelines from the Canadian Lifesaving Society. For recreational swim area water surfaces of 400 square meters or less, the following table shows the minimum recommended lifeguard requirements:

<b>Number Of Bathers On The Deck And In The Pool</b>	<b>Minimum Number Of Lifeguards On Deck, On Duty</b>
0-40	1
41-80	2
81-140	3
141-200	4
200 and beyond	1 additional lifeguard for each additional 100 bathers or fraction thereafter

It is important to note that when there is only one lifeguard on duty, the facility operator shall ensure that there is at least one other individual on the premises who is within call of the lifeguard and who is able to provide emergency assistance when requested.

Our estimate of the lifeguard staffing requirements is based on the facility being open 12 hours per day with the minimum number of bathers (0-40) in each of the pools at any one time; which will require a minimum of 2 lifeguards on duty at all times during operating hours.

In summary, the total staffing requirements and salaries are estimated as follows:

<b>Staffing Full Time Positions</b>	<b>Annual Salary</b>
Pool Operator and Building Caretaker	\$40,000
Cleaning Staff	\$40,000
Aquatics Manager/Supervisor (spare lifeguard)	\$ 62,500
Lifeguards (2)	\$ 100,000

### 3.1.2 Energy Costs

The proposed Aquatic Centre and Wellness Facility (Option 2) is estimated to have an annual energy demand in the order of 620,000 kWh/yr. This includes energy for heating, cooling, de-humidification, lighting, and miscellaneous plug loads. This would equate to about \$62,100/year in total energy costs, based on an electrically heated building.

Based on the estimated capacity of the existing geo-thermal system, the existing ground loops would support four 8-ton heat pumps. All 4 heat existing heat pumps present in the existing Community Centre would not be enough to meet the energy requirements at the proposed Aquatic Centre and Wellness Facility during the winter months.

The floor area for the proposed facility is greater than the floor area that is currently being heated by the existing geothermal heat pumps. And, the Aquatic Centre portion (i.e. the Pool Hall) of the proposed facility would have an energy intensity considerably greater than the existing Community Centre currently served by the heat pumps. Therefore, even if the entire capacity of the existing heat pumps was available, it would not be sufficient to heat the proposed Aquatic Centre and Wellness Facility.

If heat pumps (and a new geothermal field) are utilized in the final design of the new Aquatic Centre and Wellness Facility, the total energy consumption could be reduced to about 414,000 kWh/yr or \$41,400/yr. This represents a saving of about \$20,700/yr. Further energy saving equipment such as heat-recovery ventilation, LED lighting, passive solar design, and low-consumption fixtures could lead to another 10-15% reduction in energy usage, or a further savings of up to 62,100 kWh/yr or \$6,200/yr.

By incorporating energy saving features into the design, approximately 200 metric tonnes of carbon dioxide can be offset per year. By designing for an energy efficient building envelope, using energy efficient equipment and energy efficient systems, etc., it is estimated that over 250,000 kWh/yr of energy consumption can be avoided annually which is a significant reduction in GHG emissions. This is equivalent to taking over 40 passenger vehicles off the road each year (saving the equivalent of 85,000 L of gasoline) or enough energy to supply over 30 Island homes.

### **3.1.3 Maintenance and Repair**

It is estimated that the annual pool chemicals and typical equipment repairs will be \$50,000 per year. It is advised that a maintenance/replacement fund of 4% of annual operating cost is also maintained. These funds are typically not required in the first few years of operating a new facility, but it is a good practice to set aside funds annually to cover any unforeseen or larger upkeep repairs that will be required over time (e.g. regrouting, major equipment repairs/replacement, etc.).

Although not broken out in the attached cost estimate, a spare parts inventory will be maintained for typical wear items on the main equipment including pumps, filtration systems, etc. that may not be available on the Island or have a long delivery time and could disrupt delivery of service.

## **3.2 Revenue and Income Sources**

It is important to note that the operating cost estimates included above in Section 3.1 do not include any potential sources of income including memberships, user fees, rental income, concessions, sponsorships, etc. Municipal pool facilities often require an operating subsidy, regardless of community size, community per capita income or facility usage. Admissions, event sales, retail/training and membership revenues contribute to offset the operating expense. And the remainder of the operating expense are usually provided by the municipality through an adjustment in the Municipal Tax Rate. Provincial operating grants, and private, corporate and service-club fees can also be used as sources of revenue or facility income.

## **3.3 Green Energy and Environmental Initiatives**

### **3.3.1 Wind power**

The municipality of Grand Manan is currently exploring participation in a proposed wind-power installation, on the Island, and this could potentially have a positive impact through direct supply of energy and/or operating capital revenues through wind-power user fees. Although it is uncertain of the exact impact a proposed wind-power installation could have on the Island's economy, it could have a positive impact on the proposed Aquatic Centre and Wellness Facility, and is worthy of mentioning.

## **4.0 Closing**

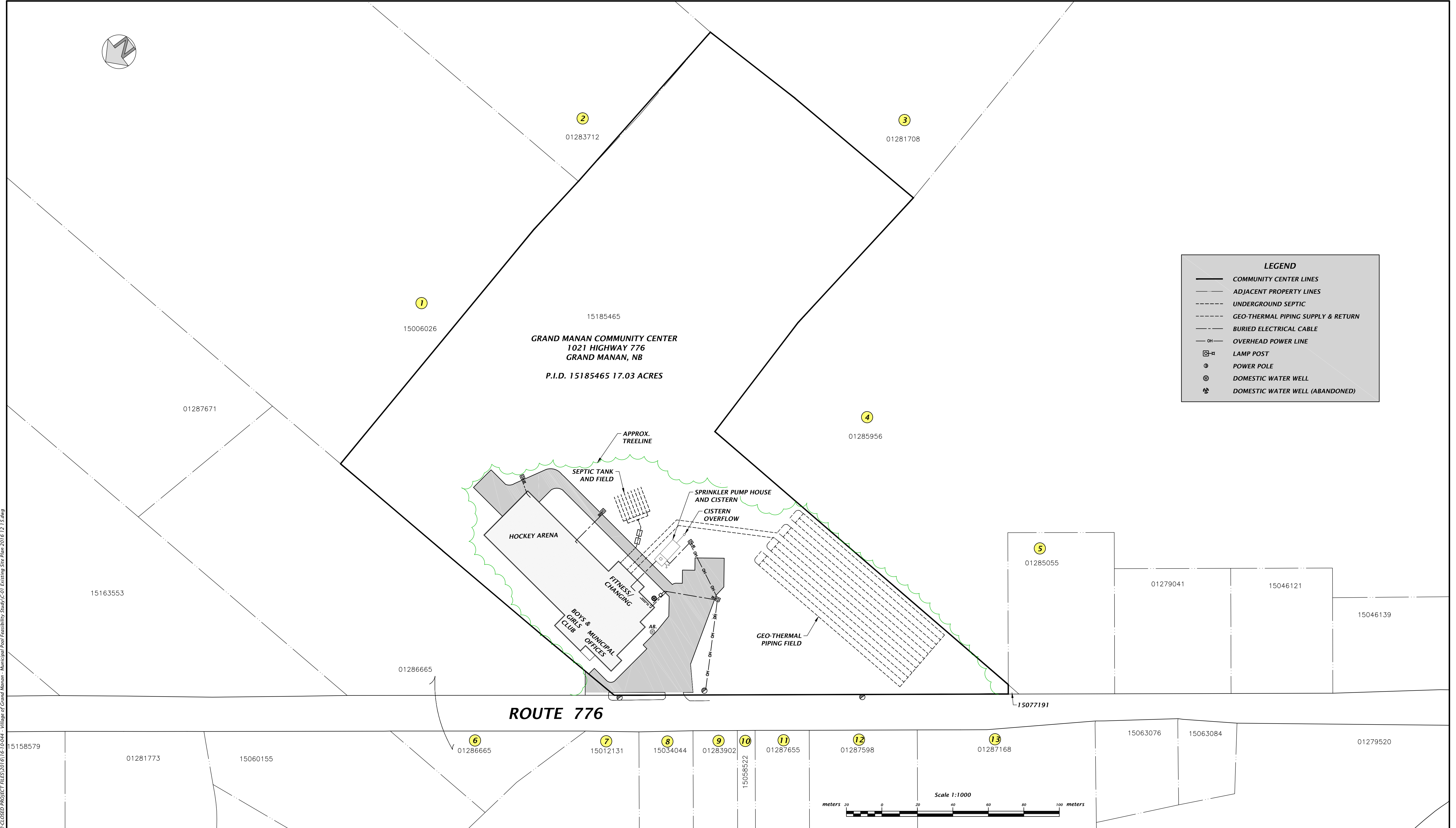
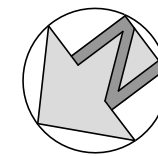
The proposed Aquatic Centre and Wellness Facility effectively responds to the multi-generational needs and wants of Island residents, it's industries, businesses, institutions and visitors. The availability of year-round aquatic programs and wellness services will have a positive impact on all of the Island communities and is expected to have a high level

of participation in events hosted there as well as day-to-day utilization. It will contribute positively to all Islanders physical and mental health and wellness. It will support effective management of chronic health problems within the society on the Island and allow residents that require physiotherapy the option to stay home for these services. Other intangible but undeniable benefits of a community Aquatic Centre and Wellness Facility include an increase in community spirit, additional full and part-time jobs for young people, training (without leaving the Island) for Marine Emergency Duty (MED) certification required to work in most fishery and aquaculture jobs, as well as dive training (without leaving the Island) for recreation or work.

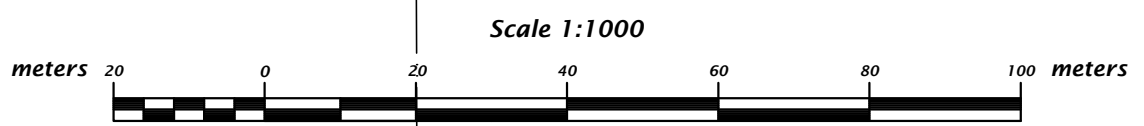
Both the Province of New Brunswick and the Government of Canada have recognized the role of wellness as a key foundation block for reduction in the rising rate of healthcare costs; and both the Provincial and Federal levels of government have expressed a willingness to support this important project for the Island of Grand Manan.

# Appendix 'I'

Site Plans



LEGEND	
	COMMUNITY CENTER LINES
	ADJACENT PROPERTY LINES
	UNDERGROUND SEPTIC
	GEO-THERMAL PIPING SUPPLY & RETURN
	BURIED ELECTRICAL CABLE
	OVERHEAD POWER LINE
	LAMP POST
	POWER POLE
	DOMESTIC WATER WELL
	DOMESTIC WATER WELL (ABANDONED)



PRINTED: 2016-09-10 2:12:00 PM PROJECT FILES\2016\16-10-044 - Village of Grand Manan - Municipal Pool Feasibility Study\C-01 Existing Site Plan 2016 12 15.dwg

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DESIGNED BY	K.L.K.
DRAWN BY	J.D.D.
CHECKED BY	D.N.S.
DATE	AUGUST 12, 2016
SCALE	AS SHOWN

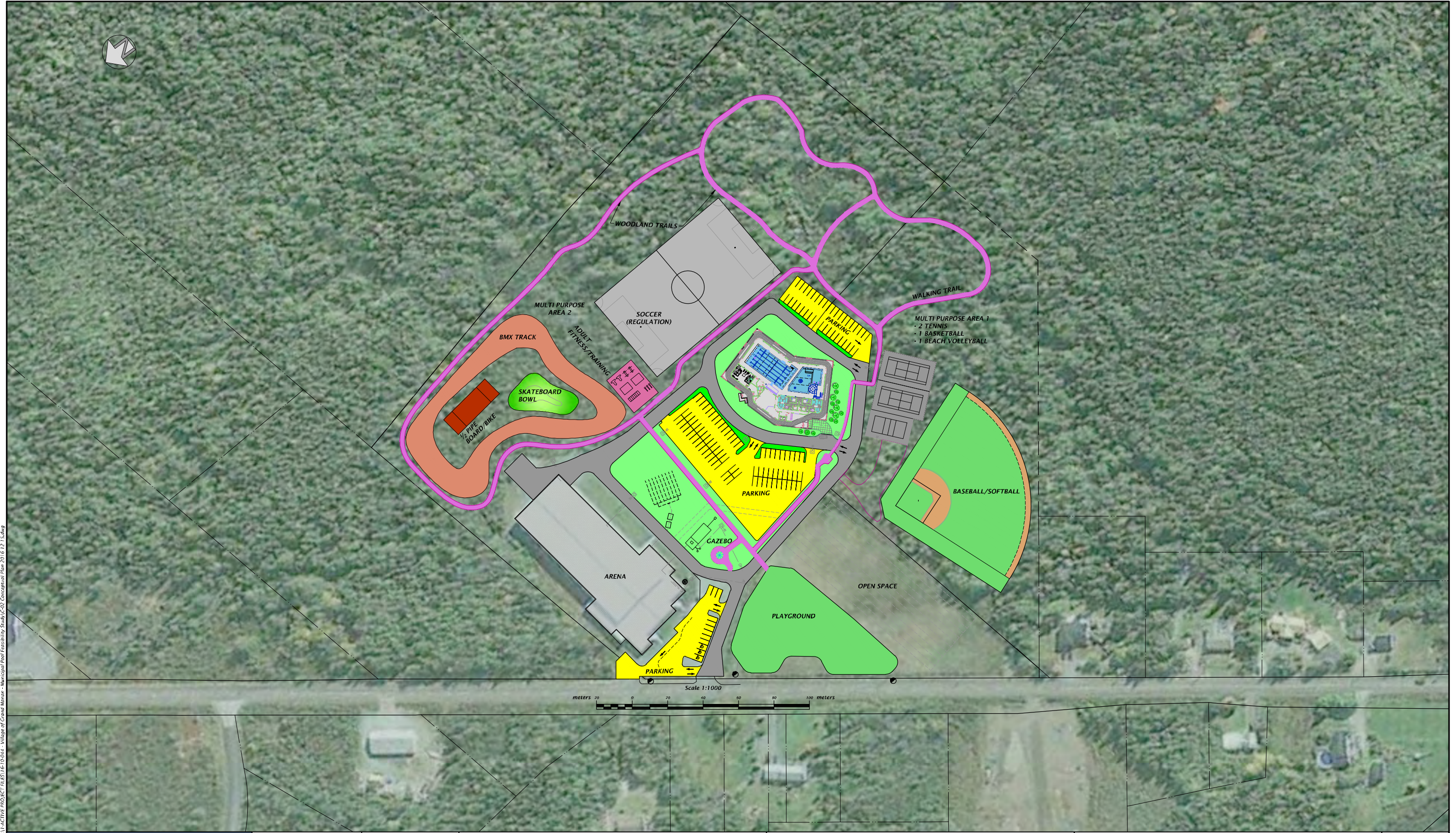
CLIENT	MUNICIPALITY OF GRAND MANAN
ISSUED TO:	ROB MacPHERSON, CAO
BY:	DAVE STEVENS, P. ENG.

PROJECT	PROPOSED AQUATIC CENTRE AND WELLNESS FACILITY
JOB NO.	16-10-044

DRAWING TITLE	EXISTING CONDITIONS SITE PLAN
REV.	DESCRIPTION

DRAWING NO.	C-01
SHEET NO.	1 OF 2





PRINTED: 2016-12-15 2:11 ACTIVE PROJECT FILES: 16-10-044 - Village of Grand Manan - Municipal Pool Feasibility Study (C-02 Conceptual Plan 2016 12 15.dwg)


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DRAWN BY	J.D.D.
CHECKED BY	D.N.S.
DATE	AUGUST 12, 2016
SCALE	AS SHOWN

CLIENT	MUNICIPALITY OF GRAND MANAN
ISSUED TO:	ROB MacPHERSON, CAO
BY:	DAVE STEVENS, P. ENG.

PROJECT	PROPOSED AQUATIC CENTRE AND WELLNESS FACILITY
JOB NO.	16-10-044

DRAWING TITLE	PROPOSED SITE DEVELOPMENT PLAN
REV.	DESCRIPTION
△	

DRAWING NO.	C-02
SHEET NO.	2 OF 2

# Appendix 'II'

Concept Plans and Budgets

# OPTION 1

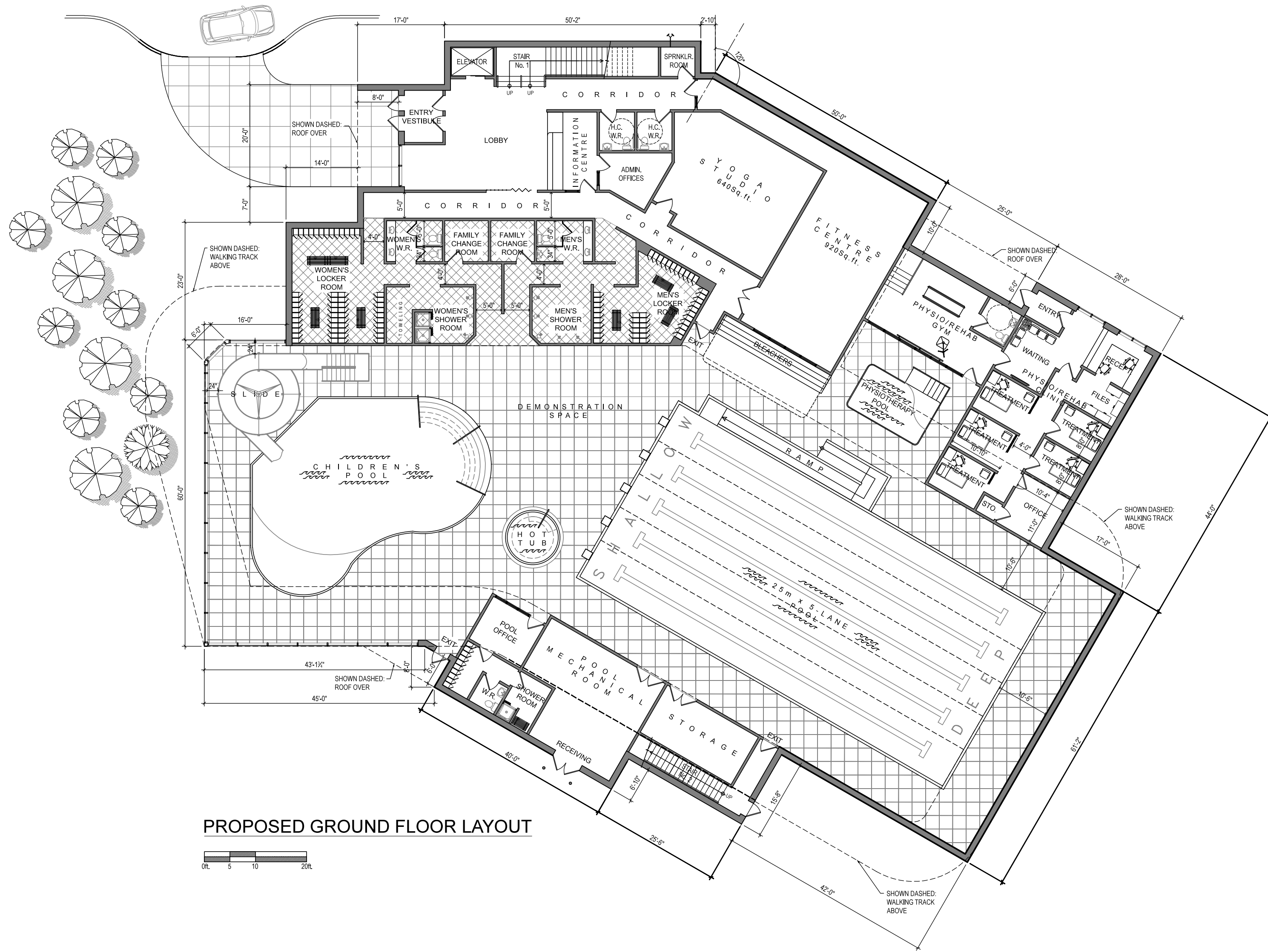
**Comeau  
MacKenzie  
Architecture**

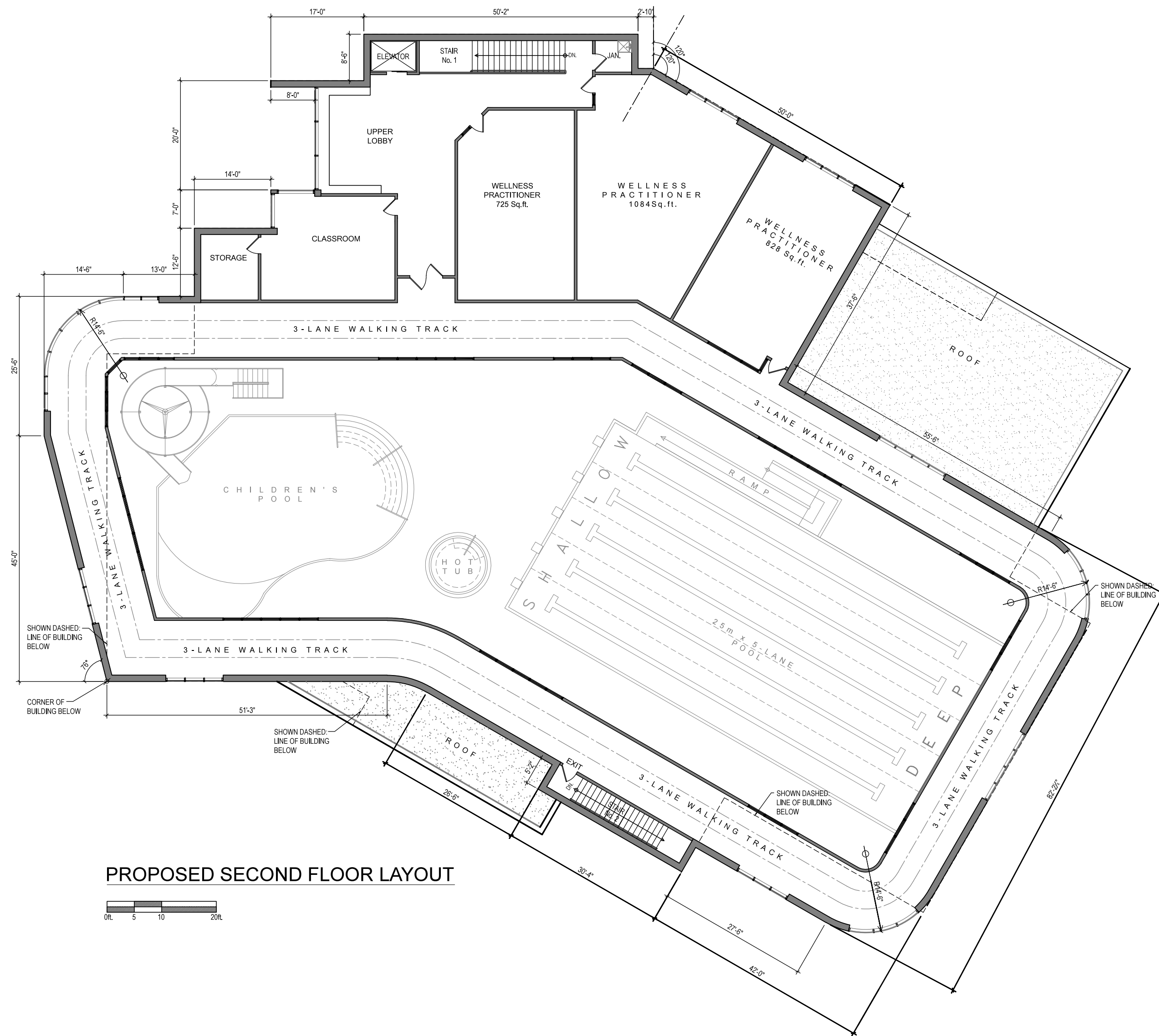
**VILLAGE OF GRAND MANAN  
GRAND MANAN AQUATIC & WELLNESS CENTRE**  

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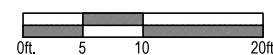
**PRELIMINARY CONSTRUCTION ESTIMATE  
(CONFIDENTIAL)  
September 12, 2016**

A.	Site development, clearing and grubbing, building pad prep, bulk excavation and bulk fill, landscape, paving and parking .....	\$590,000
B.	Site services: Domestic water well, fire protection water cistern, power and communications .....	167,500
C.	Pool suite: Pool tanks, equipment systems and devices, including water slid, pool deck finishes, aquatic equipment .....	2,474,000
D.	Architectural: Building enclosure, walking track, shower & locker suite, finished public spaces, wellness spaces, commercial space for tenant improvement, service spaces .....	<u>5,814,732</u>
	Subtotal:	\$9,046,232
	Schematic Design Level Contingency - 10%	<u>904,623</u>
	Preliminary Construction Estimate	<u>\$9,950,855</u>





PROPOSED SECOND FLOOR LAYOUT



# OPTION 2

Comeau  
MacKenzie  
Architecture

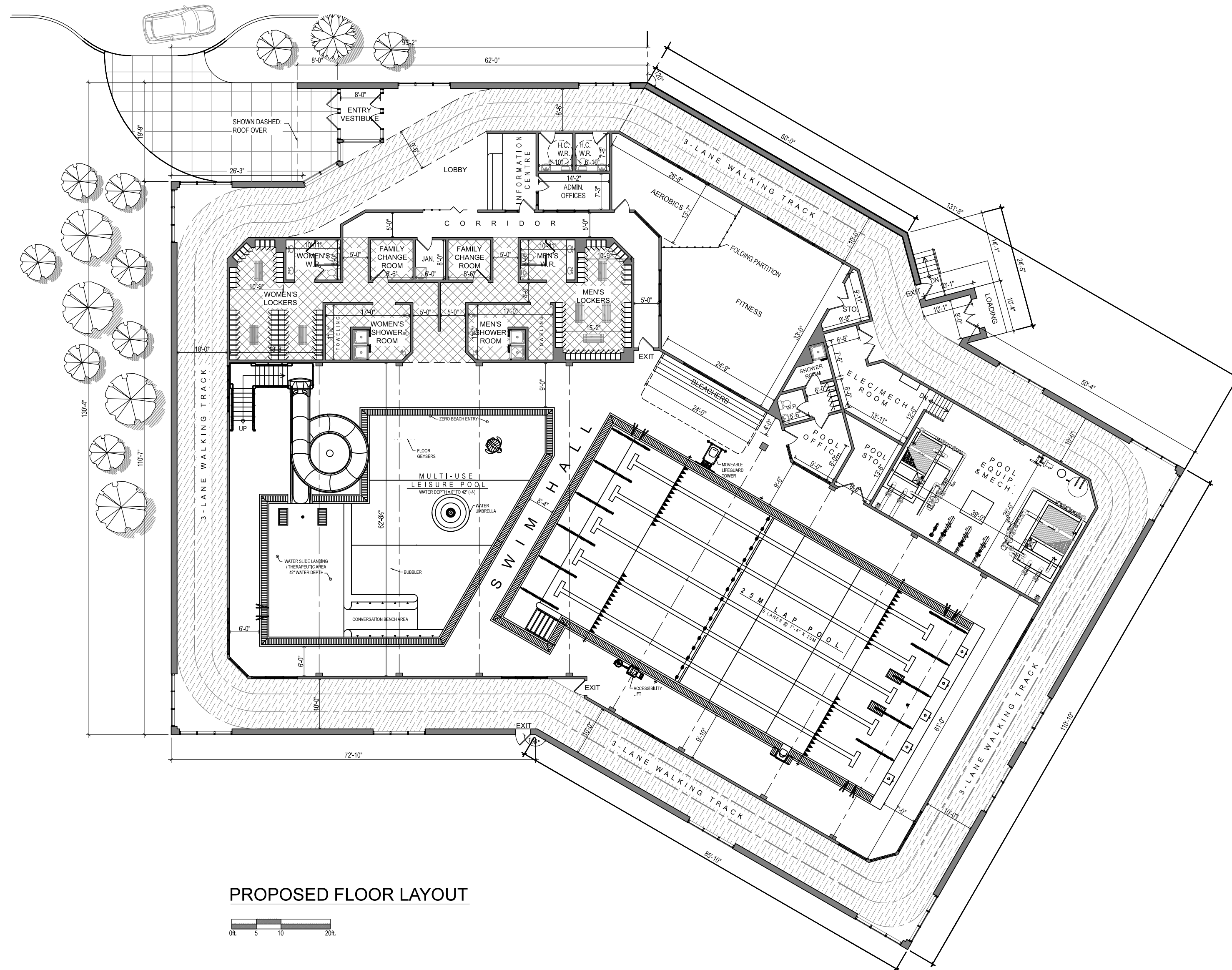
VILLAGE OF GRAND MANAN  
GRAND MANAN AQUATIC & WELLNESS CENTRE

OVERALL PROJECT COST ESTIMATE

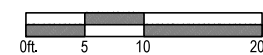
(CONFIDENTIAL)

October 24, 2016

A.	Site development, clearing and grubbing, building pad prep, bulk excavation and bulk fill, landscape, paving and parking . . . . .	\$405,000
B.	Site services: Domestic water well, power and communications . . . . .	110,000
C.	Pool suite: Pool tanks, equipment systems and devices, including water slid, pool deck finishes, aquatic equipment . . . . .	2,474,000
D.	Architectural: Building enclosure, walking track, shower & locker suite, finished public spaces, wellness spaces, commercial space for tenant improvement, service spaces . . . . .	<u>2,575,000</u>
	Subtotal:	\$5,564,000
	Schematic Design Level Contingency - 10%	<u>556,400</u>
	<b>Preliminary Construction Estimate:</b>	<b>\$6,120,400</b>
E.	Related project costs:	
1.	Pre-design: Survey and geotechnical, environmental . . . . .	15,000
2.	Consultant team: Architect, structural engineer, mechanical and electrical consultants - AANB Recommended Fee: Recreation Building 11.2% @ \$6.1M . . . . .	683,200
3.	Special consultant: Pool & recreation, civil . . . . .	140,000
4.	Construction monitoring, inspection and testing, commissioning . . . . .	102,000
5.	Contingency and disbursements on project costs . . . . .	<u>56,000</u>
	<b>TOTAL PROJECT COST ESTIMATE:</b>	<b><u>\$7,116,600</u></b>



PROPOSED FLOOR LAYOUT



# Appendix 'III'

Survey Summary Results



Date Contacted	Comments
July 20, 2016 (P & E)	<p>Would like to see a pool with the the feature of having the bottom which goes up and down. This helps service more needs and for different levels of water. Will try to find info on system and send to SSL. * Geriatric population: we believe it's important to include a therapy pool with increased water temperature and enough space to accommodate different exercises. It's recommended to have a graded entry with handrails on both sides for safety purposes. This would enable pool accessibility for ambulatory clients and wheelchair users.</p> <ul style="list-style-type: none"> <li>* Stairs: for safety it would be a good idea to include non-slip strips at the edges of each step so that users are able to recognize the end of a step so to prevent accidents</li> </ul>
July 22, 2016 (E)	<ul style="list-style-type: none"> <li>* Access to main pool: A hydraulic pool lift would allow for wheelchair users to have access to the pool</li> <li>* Pediatric population: A therapy area of the pool which includes a moveable platform (inferior &lt;--&gt; superior). This would allow for water depth control so that different ages and levels of mobility can be accommodated. Like the idea for the geriatric population, this population would benefit from an increased water temperature.* Change rooms: It's important to ensure each space is wheelchair accessible with handrails (i.e. bathrooms, separate changing rooms, showers, entrances to the pool. For families of children with mobility issues, adjustable changing tables or beds large and strong enough to accommodate children of different ages and sizes would be more inclusive.</li> </ul>
July 22, 2016 (E)	<ul style="list-style-type: none"> <li>* Location of pool: Depending on the location of the pool, it would be beneficial to have elevator access</li> <li>* Storage: Ensuring there are built in storage bins/units for pool equipment around the pool. This will allow for decreased clutter around the pool. Also keeping items visible will increase the chance of them being used.</li> <li>* Seating for bystanders: For parents/guardians or kids there to watch lessons etc. It's important that this area is accessible and inclusive. Avoid barriers such as metal bars which may inhibit interactions.</li> </ul>
July 25, 2016 (P)	<p>Would like to see a walking track with lanes so all walkers with different speeds can use the same area. Sometimes elderly people get startled when someone comes up too fast from behind so nice to have lots of room to pass.</p>
July 25, 2016 (P)	<p>Does not see any special requirements. Most of their training is through fire fighters, RCMP, etc.</p>
July 26, 2016 (P)	<p>Important that all ages are included (from prenatal to senior groups). Would be nice to have space/offices for professionals from away (trainers, therapists, etc.) Space to hold classes, yoga, etc. Also would like a kiddie pool for sanitary and safety reasons</p>
July 27, 2016 (E)	<p>Inclusive for all age groups, use for in-patients and out-patients. Important to have a heated pool for therapy and rehabilitation. Would be best if it was separate and has parallel bars for stability.</p>
July 22, 2016 (E)	<p>Would like to work there permanently and have office space there if possible</p>
July 20, 2016 (VM)	
July 28, 2016 (VM)	
July 20, 2016 (E & VM)	
July 20,2016 (E & VM)	<p>Members of crews require Marine Emergency Duties (MED) training. Once you have the certification its good for life. Generally 10-12 people require the training from Grand Manan Annually (2 days in classroom and 1 day in the water). Currently Holland College, PEI staff instruct the course out of the St. John aquatic center. Suggested if the course was held on Grand Manan there would be savings of having 1 person travel opposed to 10-12 as well as the rental cost for the pool would be (likely) significantly cheaper. All of charlotte county would be able to attend the training.</p>
July 20, 2016 (VM)	
August 9, 2016 (E)	<p>This type of facility would be a great asset. They do MED training during the slow winter months. Currently have to travel to St. John which is expensive and time consuming. Would be nice to have training rooms to accomiadate ~30 people . This would be used for training which is hard to find on the island. Could be used for MED, first aid and other courses.</p>
July 25, 2016 (VM)	<p>Would like to be able to hold her phys-ed classes there. Would be nice to have a lifeguard program. Really interested in having a walking track as there are no side walks on Grand Manan. Would be nice for moms with strollers, etc. and for safety.</p>
July 25, 2016 (VM)	<p>A indoor pool needs to be 50m long and 15m wide for 5 swimming lanes. In Saint John they have a bulk head which separates 2, 25m long pools. One being more shallow for different uses. There needs to be an anchor system at the deep end for starting blocks which need to be removable. Also if there are plans to have diving boards (not used for the swim team) they need to be easily removable for swim team meets.</p>
July 25, 2016 (VM)	
	<p>MED2A instructor for passenger vessel safety. All students in the area currently have to go to Holland College in PEI for such training. Gives certification to work on tugboats, water taxis, etc.</p>
July 26, 2016 (P)	<p>Deep end at Strathcona gardens is 10' deep would be nice to have a bit deeper. When only using 1 lane for training, there is not much room from where the slope ends to the deep part of the pool. Would be nice to have the slope end soon as possible to have most deep space as possible. Facility provides a large rubber mat for their equipment (tanks, weights, etc.) so it doesn't damage the pool. Be sure to have soft weights/belts so they do not damage the pool if dropped.</p>
July 25, 2016 (VM)	