

# Servus Place Expansion Analysis

## Aquatics Expansion

2016



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## PURPOSE

The purpose of this report is to address the Council Motion to present SERV-007: Servus Place Expansion that has been re-scoped to “include an expansion of the water park to include a lane swimming pool and change room expansion.”

## OVERVIEW

Servus Place is a highly successful community facility and is a significant investment in the health, wellness and economic development of St. Albert. The facility is hitting capacities in many areas and requires repurposing and expansion in order to accommodate the increased demands of the community and plan for future community growth.

Usage of the Landrex Water Play Centre (LWPC, Landrex) has remained consistently high since the opening of Servus Place. Based on the current facility traffic, approximately every third person that enters Servus Place utilizes the Landrex Water Play Centre.

Aquatics	'10	'11	'12	'13	'14	'15
Water Play Centre Users	265,633	252,069	270,159	267,813	270,270	272,531

High satisfaction of the LWPC is continually heard from the community with an 88% satisfaction ranking and a 93% importance rating through the 2014 Customer Satisfaction Survey. In the same survey, along with the Fitness Centre, the Landrex Water Play Centre was identified as the two amenities that need improvement with more lane swimming and an expansion to the pool being some of the requested improvements. In order to preserve the high customer satisfaction and continue to meet community need, a continued investment in the facility is paramount.

As identified in the Recreation Master Plan, by looking to enhance and expand Servus Place before building new, St. Albert will extend community use, ensure that existing service levels are maintained and programs currently subscribed to can continue to be offered, while providing cost savings, staffing efficiencies, and other economies of scale.



## BACKGROUND

Servus Place is the City of St. Albert's most heavily used recreation facility with approximately 930,000 visitors annually. Since opening, usage of the facility has grown dramatically and is now reaching capacity for utilization due to space limitations.

Recognizing the increased pressures being put on the facility, as well as the growing and changing recreation needs and priorities of St. Albert residents, a long-term conceptual plan called *Servus Credit Union Place – A Plan for the Future*, was developed in 2012 by CEI Architecture Planning Interiors and the Workun Garrick Partnership. This plan serves as the basis for this work.

At the direction of City Council, in 2016, the Workun Garrick Partnership, in collaboration with Vic Davies Architects, was commissioned to expand on the overall concept and provide a more detailed design and cost estimate relative to proceeding with the project which comprises expanding the Landrex Water Play Centre.

## SCOPE OF WORK

The scope of work included:

- An expansion of the existing Pool Area to include lane swimming. Two options have been presented for this expansion.
  - Option One – Accommodates additional lane swimming.
  - Option Two – Accommodates additional lane swimming and aquatics programs.
- An expansion of the existing Pool Change Rooms to accommodate the increased bather load.

The consultant provided a plan for the expansion of the Change Rooms and two options for expansion of the Pool Area. Either option includes same finishes, a decrease to the staff areas, and the same project schedule.

## POOL AREA EXPANSION – OPTION ONE

### Summary of Changes

- An extra-wide (2.1m) 4-Lane, 25m long cool water Lap Pool will be provided for dedicated lane swimming.
- Extra Storage Rooms will be provided to accommodate additional equipment and tools required for Pool maintenance.
- The existing Mechanical Room will be expanded to accommodate the extra water and heating requirements that the new Pools will entail and additional HVAC due to the area of expansion.
- Allow expansion outside of the existing facility walls.

This option provides increased capacity for lane swimming, providing potential opportunities to accommodate swim club needs for additional lanes.

### Square Footage

	Current Square Footage	Proposed Square Footage	Comments
Pool Area	12,748	18,690	47% increase
Mechanical & Storage	1,852	2,239	21% increase
Pool Staff Area	990	732	26% decrease
Change Rooms	3,553	4,262	20% increase
<b>TOTAL</b>	<b>19,143</b>	<b>25,923</b>	<b>35% increase</b>

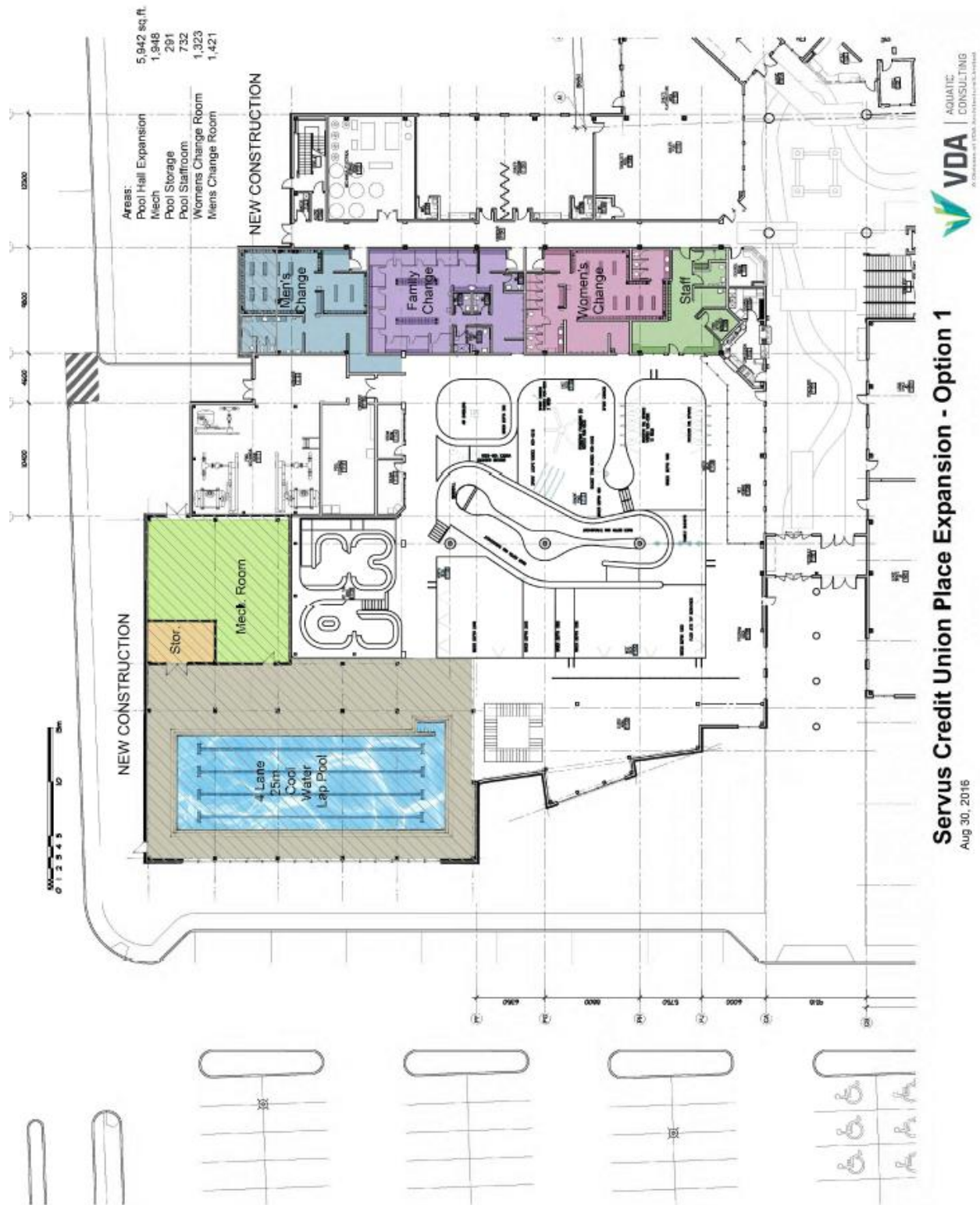
### Construction Estimate

The preliminary construction estimate for Option 1, based on the scope of work noted above, is **Eight Million Three Hundred Seven Thousand Two Hundred dollars (\$8,307,200.00)**, excluding GST as per the Preliminary Cost Report prepared by Turner & Townsend.

There is an **estimated 20% or \$1,660,000** for expenses including Professional Consultant Design Fees, Specialist Consultant Design Fees, Legal Fees and Expenses, Project Management Fees, Furniture, Furnishings and Equipment and any additional project Soft Costs.

There will be additional costs incurred for project management, dedicated staffing resources, and lifecycle contribution which will be further identified through development of the project charter for this project

## Revised Floor Plan – Option One





## Operating Assumptions – Option One

### *Operating Impacts*

1. A formal assessment has not been conducted to clearly define the aquatic needs for the community.
2. The operating model for the new pool will be based on spontaneous lane swimming activity as opposed to a programmed pool.
3. Conceptual designs have not been vetted through affected internal and external stakeholders.

### *Program Impacts*

1. A 4 lane, 25 metre cool water lane pool will increase capacity to accommodate up to 20 additional lane swimmers at one time.
2. This option does not provide for any additional swim lessons or programming.
3. Increased capacity for lane swimming provides potential opportunities to accommodate swim club needs for additional lanes, directly at Landrex Water Play Centre or through relocation of spontaneous lane swimmers from Fountain Park Recreation Centre.
4. The lane pool will be regulated to a lower temperature (28 degrees) which is not conducive to lesson or fitness programs (32 degrees).



### ***Financial Impacts***

5. Based on the proposed renovation, there is capacity for an increase in usage; however, any increase of membership or day admission as a result of the expansion is difficult to equate.
6. A 25-30% increase in overall operating budget expenses is projected including:
  - a. Lifeguards – An estimated 200 additional lifeguard hours/week will be required to monitor the lane pool based on a spontaneous use model.
  - a. Maintenance – Some additional building maintenance staffing/staffing hours will be required for regular and annual maintenance.
    - i. The expansion will require a separate water treatment system facility to be constructed as the current system cannot accommodate the additional requirements.
  - b. Chemicals – Estimate up to a 30% increase above current expenses.
  - c. Utilities – Additional costs will occur and will be factored in as part of the Utility Model.
  - d. Custodial – Additional staffing hours and supplies will be required to clean, particularly with the expanded change room facilities.
  - e. Lifecycle – Expansion of the Fitness Centre will require additions to the Servus Place Lifecycle Plan.





## POOL AREA EXPANSION – OPTION TWO

### Summary of Changes

- An extra-wide (3.0m), 2-Lane, 25m long cool water Lap Pool will be provided for dedicated lane swimming.
- A 4-Lane, 15m long warm water Flexible/Teaching Pool complete with a moveable floor will be provided for a variety of functions.
- Extra Storage Rooms will be provided to accommodate additional equipment and tools required for Pool maintenance.
- The existing Mechanical Room will be expanded to accommodate the extra water and heating requirements that the new Pools will entail and additional HVAC due to the area of expansion.

This option provides increased capacity for lane swimming, as well as accommodating existing wait lists for Learn-to-Swim programs in the Flexible/Teaching pool.

### Square Footage

	Current Square Footage	Proposed Square Footage	Comments
<b>Pool Area</b>	12,748	20,864	64% increase
<b>Mechanical &amp; Storage</b>	1,852	2,390	29% increase
<b>Pool Staff Area</b>	990	732	26% decrease
<b>Change Rooms</b>	3,553	4,262	20% increase
<b>TOTAL</b>	19,143	28,248	48% increase

### Construction Estimate

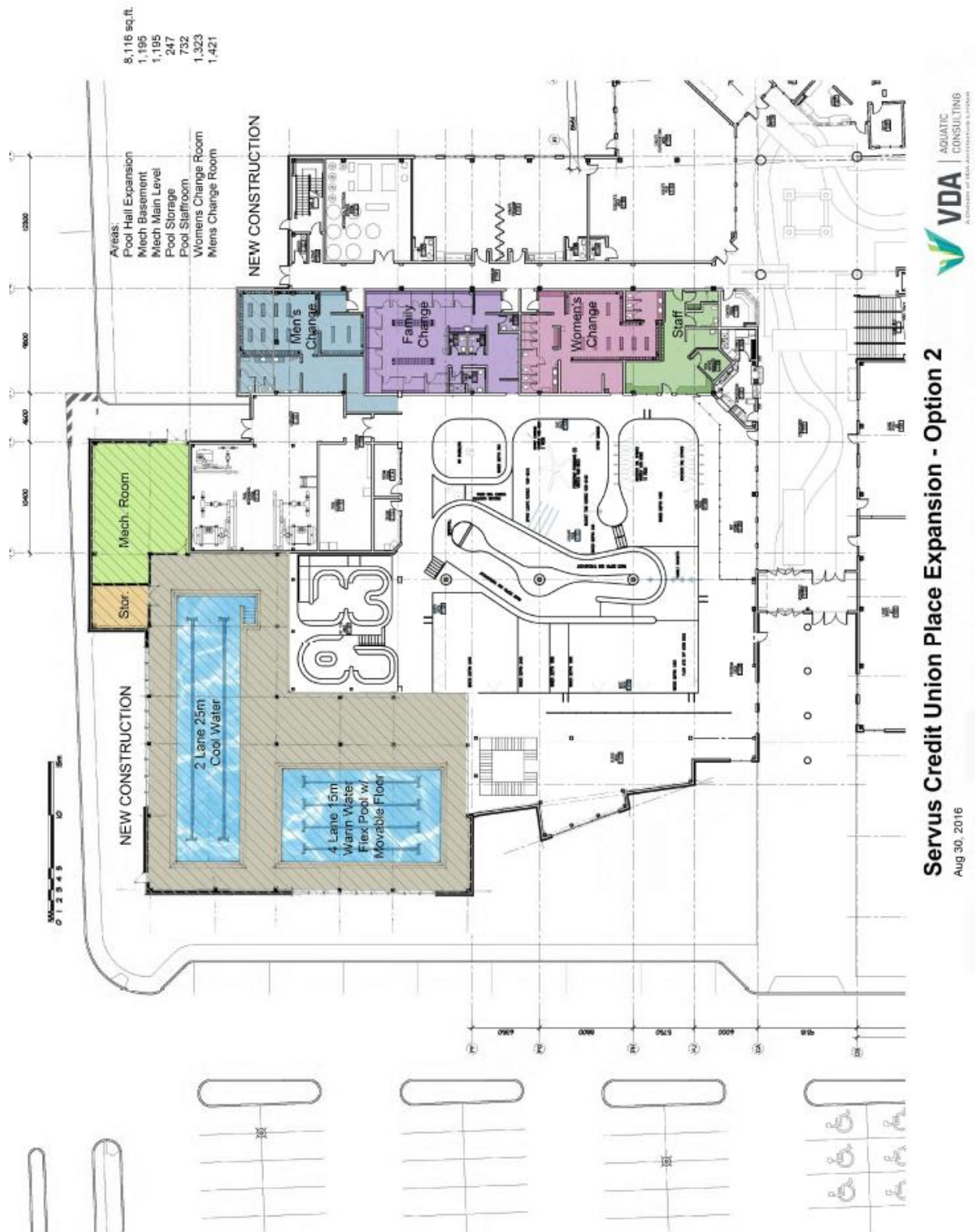
The preliminary construction estimate for **Option 2**, based on the scope of work noted above, is **Eleven Million Fifteen Thousand and Four Hundred Dollars (\$11,015,400)**, excluding GST as per the Preliminary Cost Report prepared by Turner & Townsend.

There is an **estimated 20% or \$2,243,000** for expenses including Professional Consultant Design Fees, Specialist Consultant Design Fees, Legal Fees and Expenses, Project Management Fees, Furniture, Furnishings and Equipment and any additional project Soft Costs.

There will be additional costs incurred for project management, dedicated staffing resources, and lifecycle contribution which will be further identified through development of the project charter for this project

	2018	2019	Total
<b>Project Budget</b>	\$1,101,500	\$12,156,900	\$13,258,400

## Revised Floor Plan – Option Two



## Operating Assumptions – Option Two

### *Operating Impacts*

1. A formal assessment has not been conducted to clearly define the aquatic needs for the community.
2. The operating model will be based on spontaneous lane swimming in the two lane lap pool, and a combination of programming and spontaneous activity in the 4-Lane, 15m warm water Flexible/Teaching Pool.
3. Conceptual designs have not been vetted through affected internal and external stakeholders.

### *Program Impacts*

4. The 2 lane, 25 metre lap pool would increase capacity to accommodate more spontaneous lane swimming for the community. With the wider lane design (3.0m), up to 12 people could be accommodated in the lap pool at any given time. The lane pool will be regulated to a lower temperature (28 degrees) which is conducive to lane swimming, not lessons or fitness programs (32 degrees).
5. Increased capacity for lane swimming provides potential opportunities to accommodate swim club needs for additional lanes, directly at Landrex Water Play Centre or through relocation of spontaneous lane swimmers from Fountain Park Recreation Centre.
6. A 4-Lane, 15m long warm water Flexible/Teaching pool with a moveable floor presents a multitude of programming options, including swim lessons, fitness, and other aquatic related activities.
  - o Swim Lessons – Between 5 and 7 classes could be offered simultaneously in the Flexible/Teaching pool at a time which equates to approximately 250 programs per session or a 25% increase in the number of aquatic program hours offered to the community.
    - i. The size and depth of the tank will accommodate most types of swim lesson programs currently offered at Fountain Park, and specifically could accommodate Preschool and Swimmer 1-2 levels which are currently in highest demand.
    - ii. Currently this age range represents the highest demand and experiences the longest waiting lists. The expansion of the teaching pool would result in more lessons and registrant openings that would exceed the numbers currently on waiting lists.
  - b. Fitness Programs – A variety of additional and new aquatic fitness programs such as paddleboard-yoga, high intensity aqua fit, etc. could be accommodated, expanding the benefits to Servus Place program users and members.

7. Public swim/ Spontaneous Use
  - a. During high volume spontaneous or non-programmed periods, the Flexible/Teaching pool could be utilized to provide expanded spontaneous use/public swim users. The expanded area would increase the capacity for spontaneous non programmed swim by approximately 25% or 100 – 110 bathers.
  - b. Spontaneous lane swimming could also be offered in the Flexible/Teaching pool for individuals favoring a warmer temperature lane swim.

### ***Financial Impacts***

8. Based on the proposed renovation, there is capacity for an increase in usage; however, any increase of membership or day admission as a result of the expansion is difficult to equate.
9. A 30-35% increase in overall operating budget expenses is projected including:
  - a. Staffing
    - i. Lifeguards – An estimated 230 additional lifeguard hours/week will be required to monitor the new pools.
    - ii. Program Instructors- Program fees offset Instructor staff expenses
    - iii. Aquatic Programmer – Additional time allocation, not additional staff, will be required
  - b. Maintenance – Some additional building maintenance staffing/staffing hours will be required for regular and annual shutdown maintenance.
    - i. The expansion will require a separate water treatment system facility be constructed as the current system cannot accommodate the additional requirements.
  - b. Chemicals – Estimate up to a 30% increase above current expenses.
  - c. Utilities – Additional costs will occur and will be factored in as part of the Utility Model.
  - d. Custodial – Additional staffing hours and supplies will be required to clean, particularly with the expanded change room facilities.
  - e. Lifecycle – Expansion of the Fitness Centre will require additions to the Servus Place Lifecycle Plan.
  - f. Program Supplies – Higher Initial costs for start up and then an annual budget for replacement, low costs
2. Lesson fee revenue – Any additional Aquatics programs that would be offered at Landrex would be offered at cost + 25% based on a 60% fill rate.

## CHANGE ROOM EXPANSION - OPTION 1 AND 2

### Summary of Changes

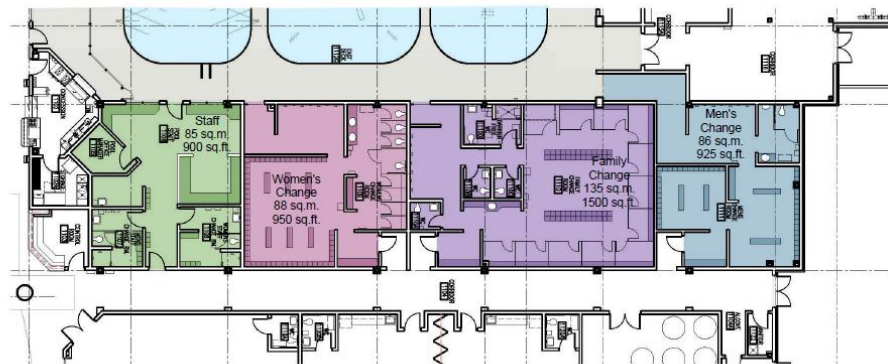
- The existing Pool Change Rooms – particularly the Men's and Women's Change Rooms - will be modified and expanded by 20% to accommodate the anticipated increase in bather load.
- The existing Pool Staff Areas will be decreased to accommodate the expanded Pool Change Rooms.

### Square Footage

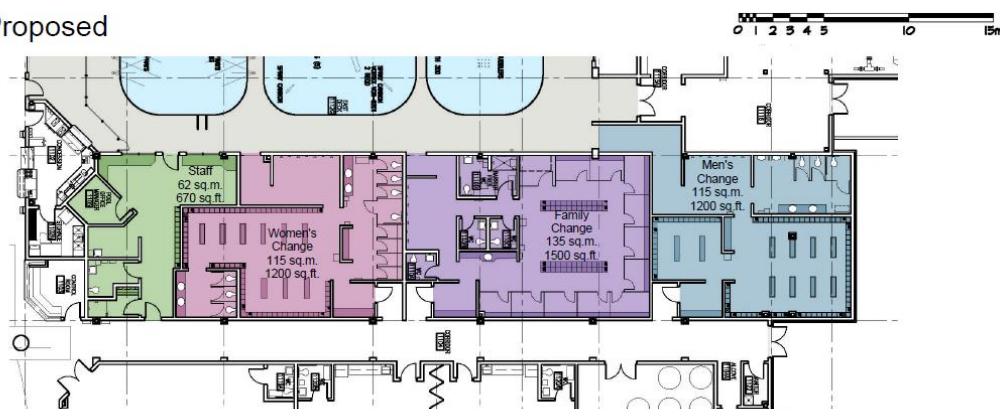
	Current Square Footage	Proposed Square Footage	Comments
<b>Pool Staff Area</b>	990	732	26% decrease
<b>Change Rooms</b>	3,553	4,262	20% increase
<b>TOTAL</b>	<b>4,453</b>	<b>4,994</b>	<b>12% increase</b>

### Map

Existing



Proposed



Servus Credit Union Place Expansion

May 31, 2016

VDA AQUATIC CONSULTING  
A Division of VDA Architecture Limited



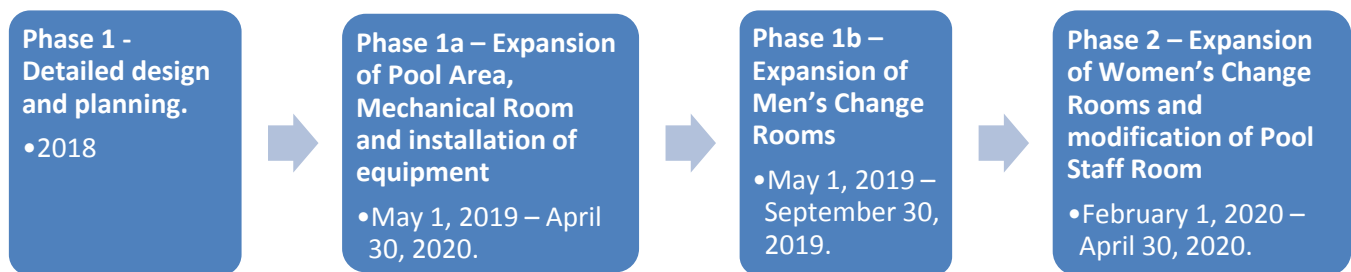
## Proposed Finishes

- Pool tank: Tiled Concrete
- Pool deck, including Storage Room: Tile
- Change Room flooring: Tile
- Mechanical Room floor: Sealed Concrete.
- Structure: Epoxy Painted Structural Steel.
- Pool Ceiling (Exposed): Epoxy Painted Metal Deck.
- Walls: Epoxy Painted Concrete Block.
- Lockers: to match existing.
- Toilet Partitions: to match existing.
- Exterior Walls: 4" Insulated Metal Panel
- Change Room Ceilings: Epoxy Painted GWB

## PROJECT SCHEDULE

It is recommended that the project be completed in four phases to ensure proper planning and provide as little interruption as possible to the existing facility and programs.

Detailed design would be completed in 2018. Construction would be anticipated to start in early to mid-2019 with completion in early 2020. A tentative construction schedule is as follows:



## **ADDITIONAL INFORMATION TO CONSIDER**

### **Construction Costs of Stand Alone Facilities**

To construct a stand alone aquatics facility similar to Fountain Park Recreation Centre at 2016 pricing is estimated at the construction costs of approximately \$35 million depending on the amenities + 20% for soft costs. The example quoted is a current facility under construction in Alberta with the following amenities:

- 8 lane, 25 metre pool
- Leisure/wave pool
- Hydra Therapy pool
- Swirl Pool
- Sauna
- 2 water slides

### **Fountain Park Recreation Centre – Leisure Pool Peninsula**

The peninsula between Competition Pool and Leisure Pool from FPRC serves many purposes. It was added to the Leisure Pool as part of the facility construction that occurred in 2000.

The peninsula was installed as a permanent fixture, solid concrete barrier. To remove would involve concrete sawing the peninsula in sections, estimated at an approximate cost of \$150,000 and 1.5-2 months to perform the work.

FPRC would require closure due to the dust and contamination. As it is a permanent fixture, pool tank structural integrity could be impacted. It would be necessary to contract architectural and structural engineering services in order to remove the peninsula properly and minimize impact to the existing pool basin.

Removing of the peninsula would allow for either:

- Offer one additional swim program or;
- Add in one lane of swimming.

Removal of the peninsula would have the following negative operating impacts:

- Aqua fitness classes would not longer be able to be offered as currently the cove area is used for the instructor who can safely and efficiently move around while teaching. The pool deck is too narrow and there are too many obstructions (pillars) that it would be a safety hazard.
- Without the barrier between the dive-tank area and the shallow area, there is a risk to users and of the Leisure Pool when accommodating mixed program uses such as Dive Club and Learn to Swim lessons.
- An additional lane in the Leisure Pool may not be desirable to lane swimmers as it is maintained at a warmer temperature than traditional lane pools and is thusly less desirable for lane swimmers.
- The diving board would not be able to be used during public swim as the absence of a solid barrier dividing the shallow area from the dive tank presents a safety issue.
- With the peninsula in place, the large blue slide is able to be used safely as it has the exit location is controlled. If the peninsula were to be removed, the exit would no longer be controlled and it would be unsafe to use. There is not currently another location that the slide could be relocated to within Fountain Park that would provide for safe usage.
- The peninsula is a key element in the successful lifeguarding of Fountain Park as it provides better visibility and acts as an access point into the Leisure Pool. Removing the peninsula may delay the lifeguard response time in getting to a distressed swimmer.

