

STAFF REPORT

SUBMITTED BY: Chris Frotten

DATE: October 7, 2019

SUBJECT: New Recreation Centre Building Location

ORIGIN

Since May 2018, we have been working with SNMArchitect to develop a design for a replacement of the 50-year-old Recreation Centre building. One decision that remains pending and is required to be made to move forward is the location of the new building.

At the August 19, 2019 Committee of the Whole meeting, the possibility of attaching the new building to the arena was discussed. In order to make a final decision, Council requested an exact description of the upgrades required to attach the new building to the arena and the exact costs associated with these upgrades.

BACKGROUND

On September 12th, Cam and I met with Ted Mitchell, Architect with SNMArchitect, and a mechanical engineer and we visited the arena to assess the building and extent of potential upgrades needed to attach both buildings together.

In discussing our logic of attaching both buildings together, it was determined that connecting both buildings with a shared entrance would achieve our goal of “attaching” both buildings together and would, upon their initial review, require minimal upgrades to the arena.

Following the meeting, Ted provided amended designs and cost estimates to reflect Options B and C being joined to the arena with a shared entrance. Those amended designs and cost estimates are attached.

DISCUSSION

Architectural Perspective

SNMArchitect to elaborate at meeting.

Mechanical/Electrical Perspective

SNMArchitect to elaborate at meeting.

Recreation Perspective

From the Recreation Department's perspective, either location would provide the same service to residents. The design of the new building is their primary interest as that will influence the programs they are able to offer and the functionality/practicality of the building.

That being said, if the new building was to be connected to the arena with a shared entrance, the department raised the following points:

- A number of parking spaces would be lost.
- It would be further from the playground.

Building Inspection/Development Perspective

Under the building code of Canada this would still be considered all one building and **not** two separate buildings as there is no distinct spacial separation between the two structures as they would still be attached by the entrance. According to the National Building Code of Canada, a building area is defined as *"the greatest horizontal area of a building above grade within the outside surface of exterior walls or within the outside surface of exterior walls and the centre line of firewalls."* Therefore, where the roof line and building would not clearly stop at the entrance, connection or passageway, it would be considered one building.

The building code goes on to say that a building must be fully sprinklered, be designed and installed as per the NFPA 13 standard. These references in the National Building Code of Canada 2015 show a building must be sprinklered throughout and the sprinkler system must be designed and installed to the standard. This is the same with any sprinklered building not just ours. Here are just a few references that may help explain the requirement of a building being sprinklered:

3.2.2.18 Automatic Sprinkler System Required

1) Except as permitted by Sentence (2), an automatic sprinkler system conforming to the requirements of Articles 3.2.4.7., 3.2.4.8, 3.2.4.9. and 3.2.5.12. shall be installed through a building regulated by one or more of Articles 3.2.2.20., 3.2.2.21., 3.2.2.22., 3.2.2.23., 3.2.2.24., 3.2.2.26., 3.2.2.27., 3.2.2.29., 3.2.2.31., 3.2.2.33., 3.2.2.36., 3.2.2.37., 3.2.2.38., 3.2.2.39., 3.2.2.40., 3.2.2.41., 3.2.2.42., 3.2.2.43., 3.2.2.44., 3.2.2.45., 3.2.2.46.

2) If a storey in a building or a floor area is required to have an automatic sprinkler system installed throughout in accordance with one or more of Articles 3.2.2.20. to 3.2.2.90. or Section 3.3, the automatic sprinkler system shall also be installed throughout all lower storeys in the building notwithstanding permission in Articles 3.2.2.20 to 3.2.2.90 to construct one or more of those storeys without installing automatic sprinkler protection. (See Note A-3.2.2.18.(2).)

3.2.5.12. Automatic Sprinkler Systems

1) Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems." (See Note A-3.2.5.12.(1).)

If the new building was a free-standing building separate and not connected to the arena and depending on the overall size of it, it may not have to be sprinklered.

The being said, one option that could be looked into to avoid having to sprinkler the new building is having a fire protection engineer determine whether the entrance could have a fire shutter (similar to a firewall) installed that would separate or lock down the 2 separate parts of the building in the event of a fire or a fire alarm going off. This would be a way of compartmentalizing the 2 separate parts. This may mean that a sprinkler system is not needed in the new building. A fire wall is defined as a "type of fire separation of non-combustible construction that subdivides a building or separates adjoining buildings to resist the spread of fire and that has a fire-resistance rating as prescribed in this Code and has structural stability to remain intact under fire conditions for the required fire-rated time."

In this case, you would also have to assess that the adequate number of exits would remain for each separate building. If not, there would be an incremental cost in adding exits to each building to meet that standard.

As noted in the Recreation Perspective, a number of parking spaces would be lost which would potentially require additional parking spaces to be constructed as per our land use by-law. It is difficult to determine the amount at this point, but our by-law requires that there be one parking space per 100 square/feet of building space, excluding hallways, vestibules, washrooms and closets. Therefore, if both buildings were a combined 30,000 sq./ft. (minus exclusions), we would require 300 parking spaces.

BUDGET IMPLICATIONS

The incremental costs of connecting both buildings together with shared entrance would be the following:

Cost of Entrance

Heating	\$7,500
Ventilation	\$39,000
Stormwater/Drainage	\$8,500
Lighting, Power, Etc.	\$15,000
Fire, Sprinklers	\$50,000
Total	\$120,000

Additional Arena Costs

Additional Fire Exits (Possible) \$10,000

LEGAL IMPLICATIONS

N/A

PUBLIC CONSULTATION/COMMUNICATIONS

In March, we hosted a public engagement meeting to discuss the wants and needs of the community in regard to the new recreation centre building. A lot of good feedback was collected at that meeting as has driven the elements which have been included in draft designs. Once a decision on the location has been made and one design has been chosen, we intend to engage the public again before finalizing the design.

RECOMMENDATION

Over the past year, there have been many conversations regarding the design of the new recreation centre building without making a final decision on the location. In order to finalize a design for the new building, a decision on the location must be made.

Based on the findings of the architect and the mechanical engineer and the regulations of the National Building Code, it seems to be possible to connect both buildings together by a shared entrance without too many costly upgrades to the arena.

There is no doubt that there are synergies between both buildings and connecting them with a shared entrance may encourage more usage of both buildings. For example, a young child or a parent may try a recreation program in the new recreation centre while their child or sibling plays hockey, rather than wait/watch in the arena.

That being said, connecting both buildings with a shared entrance would eliminate a number of parking spaces which could create traffic issues and may require additional spaces to be constructed. There may be possibilities of extending the parking lot where the existing building is but then you would be running into substantial costs.

In terms of a formal recommendation, I believe either locations would properly serve our residents as it does not impact the design of the building.

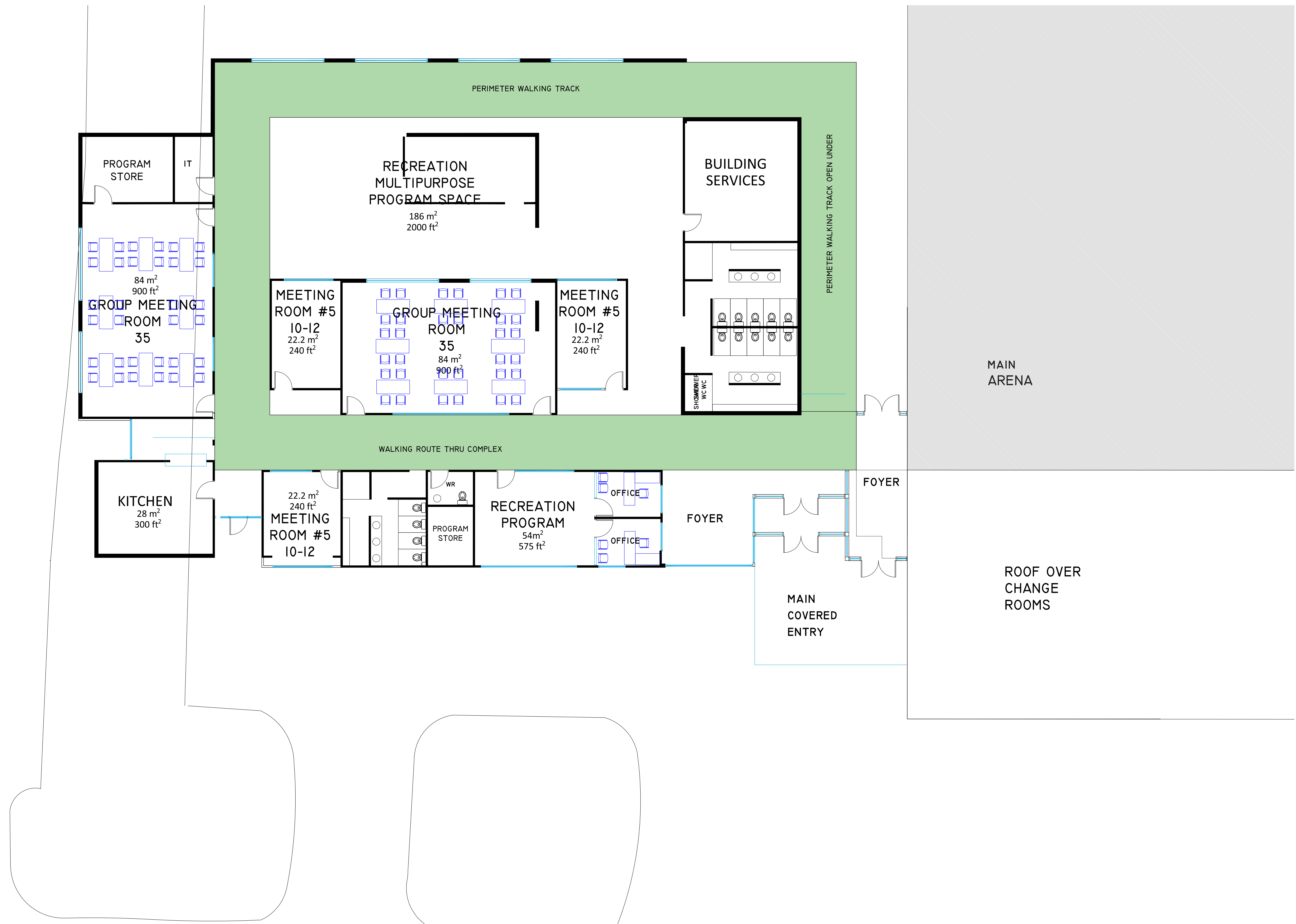
SUGGESTED MOTION

Move to build the new Recreation Centre building at the location of the existing Recreation Centre building.

Move to build the new Recreation Centre building next to the arena and attach both buildings together with a shared entrance.

ATTACHMENTS

- SNMArchitect Design Options B and C

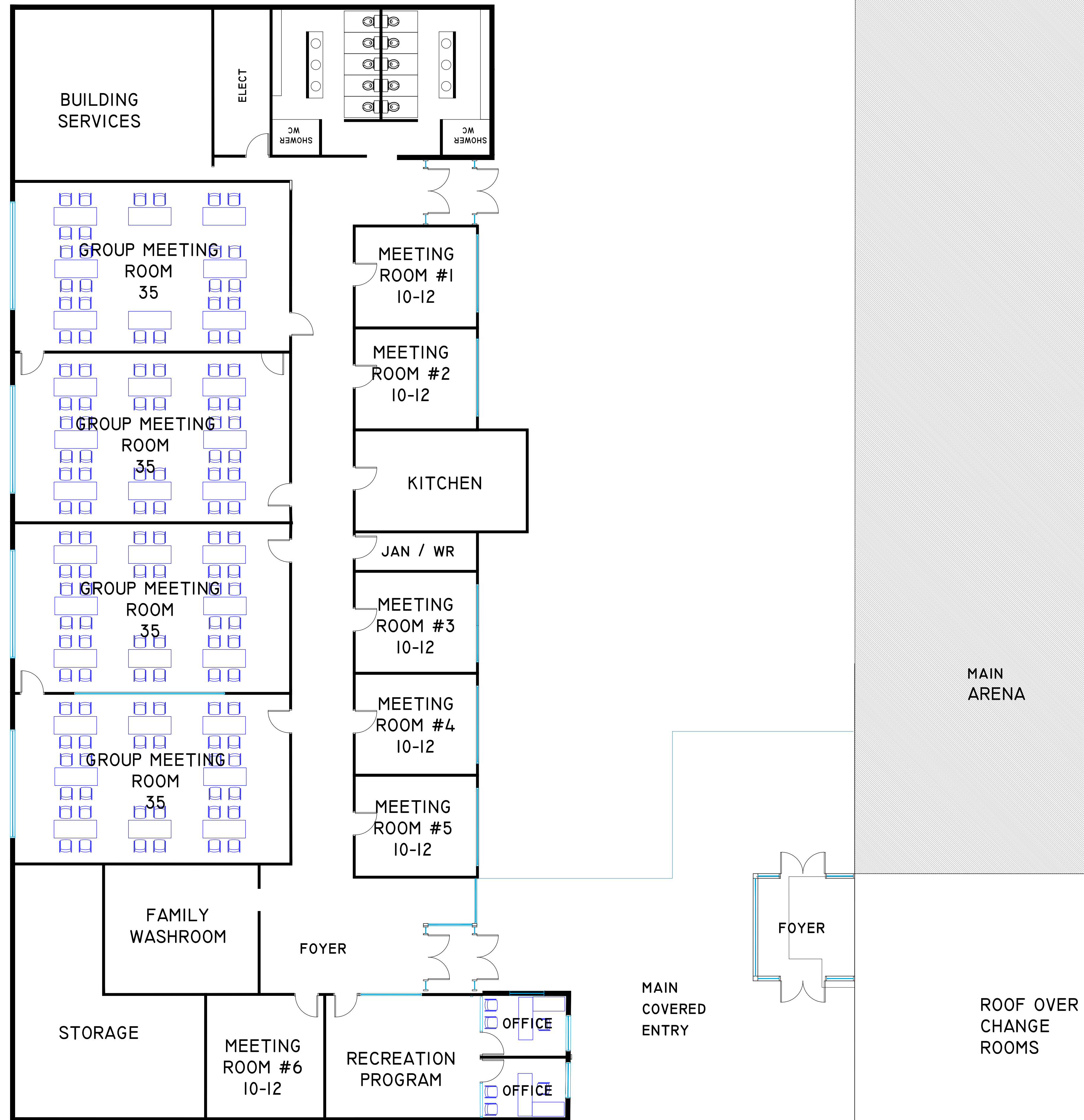


**RECREATION BUILDING
PROGRAM COMPARISON 2019**



		OPTION B		
		MULTIPURPOSE & WALK TRACK (577m2)		
		Ceiling Heights 20' / 15' / 10'		
		Qty		Sq.Ft.
1	Assembly Spaces	7		6,220
1.1	Sports Programming Space Basketball 100 x 66' Multi-Purpose 40' x 50	1	2,000	\$ 2,000
1.2	8' Walking Track around perimeter Wide loop corridor	1	1,700	\$ 1,700
1.3	Group Meeting Space for 35	2	900	\$ 1,800
1.4	Meeting Room for 10-12 (12' x 20')	3	240	\$ 720
2	Recreation Program Delivery Spaces	2		\$ 400
2.1	Open Office and Team Work Area	1	250	\$ 250
2.2	Private Office	1	150	\$ 150
3	Washrooms / Utilities	7		\$ 1,300
3.1	Washrooms w/ Showers Opt A - 1240 persons = 8 males / 15 females Opt B - 770 persons = 6 males / 12 females Opt C - 624 persons = 6 males / 11 females	3	260	\$ 780
3.2	Unisex / Family Washroom / Barrier Free	2	80	\$ 160
3.3	Janitor	1	60	\$ 60
3.4	Kitchen	1	300	\$ 300
4	Storage	5		\$ 780
4.1	Recreation Program Storage	1	300	\$ 300
4.2	Chairs & Table Storage	1	200	\$ 200
4.3	Program Storage Room (10'x10')	2	100	\$ 200
4.4	Recycling / Waste Sorting	1	80	\$ 80
	Sub-Total Net Areas			\$ 8,700
	Circulation Factor	15%		\$ 1,307
Altus Group Class 'D' Estimate for Recreation Centre Architectural and Engineering				\$ 3,519,180
5	Building Services Costs for Breezeway			
5.1	Heating of the breezeway			\$ 7,500
5.2	Ventilation- additional for lobby/common areas			\$ 39,000
5.3	Plumbing - stormwater and drainage			\$ 8,500
5.4	Lighting, power and life safety			\$ 15,000
TOTAL BUILDING SERVICES				\$ 70,000
6	Fire Protection, power, fire alarm and Life Safety			
6.1*	Fire Protection - sprinklers for recreation centre			\$ 75,000
6.2	Power, Fire Alarm and Life Safety for breezeway			\$ 50,000
TOTAL ELECTRICAL				\$ 125,000
TOTAL BUILDING SERVICES ESTIMATE				\$ 195,000
TOTAL BUILDING COSTS				\$ 3,714,180
General Requirements and Contingencies				\$ 259,993
TOTALS				\$ 3,974,173

* This an extension of the existing arena system



**RECREATION BUILDING
PROGRAM COMPARISON 2019**



		OPTION C		
		MULTIPURPOSE SPACES ONLY (468m2)		
		Ceiling Heights 15' / 10'		
		Qty		Sq.Ft.
1	Assembly Spaces	11		5,040
1.1	Sports Programming Space Basketball 100 x 66' Multi-Purpose 40' x 50			
1.2	8' Walking Track around perimeter Wide loop corridor	1	0	0
1.3	Group Meeting Space for 35	4	900	3,600
1.4	Meeting Room for 10-12 (12' x 20')	6	240	1,440
2	Recreation Program Delivery Spaces	2		400
2.1	Open Office and Team Work Area	1	250	250
2.2	Private Office	1	150	150
3	Washrooms / Utilities	7		1,300
3.1	Washrooms w/ Showers Opt A - 1240 persons = 8 males / 15 females Opt B - 770 persons = 6 males / 12 females Opt C - 624 persons = 6 males / 11 females	3	260	780
3.2	Unisex / Family Washroom / Barrier Free	2	80	160
3.3	Janitor	1	60	60
3.4	Kitchen	1	300	300
4	Storage	5		730
4.1	Recreation Program Storage	1	300	300
4.2	Chairs & Table Storage	1	150	150
4.3	Program Storage Room (10'x10')	2	100	200
4.4	Recycling / Waste Sorting	1	80	80
Sub-Total Net Areas				7,470
Circulation Factor			20%	1,494
Altus Group Class 'D' Estimate for Recreation Centre Architectural and Engineering				\$ 3,108,230
5	Building Services Costs for Breezeway			
5.1	Heating of the breezeway			\$ 7,500
5.2	Ventilation- additional for lobby/common areas			\$ 39,000
5.3	Plumbing - stormwater and drainage			\$ 8,500
5.4	Lighting, power and life safety			\$ 15,000
TOTAL BUILDING SERVICES				\$ 70,000
6	Fire Protection, power, fire alarm and Life Safety			
6.1*	Fire Protection - sprinklers for recreation centre			\$ 75,000
6.2	Power, Fire Alarm and Life Safety for breezeway			\$ 50,000
TOTAL ELECTRICAL				\$ 125,000
TOTAL BUILDING SERVICES ESTIMATE				\$ 195,000
TOTAL BUILDING COSTS				\$ 3,303,230
General Requirements and Contingencies				\$ 231,226
TOTALS				\$ 3,534,456

* This an extension of the existing arena system