UPDATED DEVELOPMENT PLAN & STRATEGY FOR A NEW TWIN PAD ARENA COMPLEX IN THE CITY OF PENTICTON

REPORT | SEPTEMBER 2025

SPM

MAD
MEIKLEJOHN ARCHITECTURAL DESIGN STUDIO INC

ICC
International
Coliseums Company

CONTENTS

EXECUTIVE SUMMARY

In 2017, Sierra Planning and Management led a multi-disciplinary effort to develop a concept of a new twin pad addition to the west side of the South Okanagan Events Centre (SOEC). The consulting team developed an associated business plan, which included an assessment of capital costs, likely operating costs and revenues, an understanding of potential partnerships that could help underpin the revenue expectations for the new facility, and a strategic assessment of the implications for city ice needs. Part of the strategic assessment included the potential options for the decommissioning of ice in the Memorial Arena, as well as the McLaren Arena and the associated savings that would accrue from those decisions.

In 2024, Sierra Planning and Management, together with sub-consultants International Coliseums Company (ICC), and Meiklejohn Architectural Design Studio (MAD), have been retained by the City of Penticton to update the development plans and undertake further analysis of a future strategy for the provision of ice services in the city.

This report is comprised of three parts: Part A Project Antecedents, Part B Current Work Program and Results, and Part C Recommended Plans.

Part A: Project Antecedents

Part A provides an overview of the work previously conducted by the consulting team and highlights findings and recommendations that inform current work program and results.

The consulting team conducted two studies - Arena Feasibility Study (2017) and Arena Financial Analysis & Funding Strategy (2019). Section 2 of the report revisits the original plans and funding success and the 2019 Twin Pad Arena Business Plan; overviews prior work on the Memorial Arena and provides an account of changes and consistencies between the earlier reports and the current report.

The first two phases concluded with recommendations for the development of a twin-pad arena, conversion of the Memorial Arena to a dry-use facility, and decommissioning of the McLaren Arena.

Building upon the previous work, this Phase 3 report provides a detailed analysis and update of capital plans and project needs, examines alternative scenarios of scale, design and site location.

This report is undertaken with a different framework in mind:

- Renovation of Memorial Arena to a dry-use facility is deemed cost prohibitive and as such this analysis assumes the removal of the arena through demolition with preservation of building elements to preserve the immense heritage and pride in the building retain the physical history of the building.
- This study explored the recreational potential associated with the McLaren Arena building. The inclusion of plans for residential development coupled with the development of a twin pad ice arena and pickleball complex, should be viewed as a statement of intent until such time as there is evidence that the twin pads will be constructed, funded and operated at profit by the private sector.
- It is assumed that the existing approach to operation of the City's arenas is maintained – namely the use of a third-party manager to operate the SOEC, OHTC and Memorial Arena. With the replacement of the Memorial Arena and the addition of one or more new arenas on the SOEC site, it is assumed that the new arenas would be managed in a similar manner.
- In contemplating the replacement of the existing City-owned facilities, there is a considerable risk involved in relying on private market solutions for which the City is provided little or no control (e.g., with regard to ice allocation, meeting community needs, etc.). Ultimately, the City would not be able to ensure the ongoing financial sustainability of a private venture.
- The assessment of operational performance and ice time utilization contained in the 2019 business plan remains relevant. Despite the impacts of the Pandemic, the demand for ice time has bounced back, rendering the estimates that were provided in 2019 as being of continued relevance.

Part B: Current Work Program and Results

COMMUNITY ICE NEEDS

The report provides a detailed analysis of demand for indoor ice, including historic growth and updated projections for the City of Penticton, RDOS and market area population; indoor ice utilization; and future standard of indoor ice provision.

The report investigates the community need for indoor ice and multi-use facilities. Population growth in RDOS is projected to continue over the next 20 years, with Penticton reaching 53,000 residents by 2041. Based on the official population estimates for Penticton, one new ice surface will be needed by 2041 to sustain the current level of service. With such anticipated growth appropriate planning for future indoor and outdoor recreation facilities is required.

Recognizing the regional nature of indoor ice facilities, this report analyses the population and indoor ice supply in the City of Penticton and the Market Area. The analysis demonstrates the need for at least one new arena based on the City population and two new ice surfaces based on the Market Area growth projections by 2041. The additional need is likely to emerge by 2031 and 2036 at the latest.

The analysis of the current and projected utilization by major user groups (including Okanagan Hockey Group, Penticton Minor Hockey Association, etc.) demonstrates an increasing demand for higher quality facility and ice time.

In recognition of the regional dynamics, it is reasonable for the City to recognize the following as prioritization:

- Replace the two existing aging arenas;
- Prepare for the need to add an additional ice pad to the City's supply at some point within the next 10 years – based primarily on the City's population growth.

SITE ANALYSIS AND OPTIONS CONSIDERED

Options Considered

Building on the analysis of the current and future demand and supply and stakeholder consultations, the consulting team conducted a detailed review of the SOEC Campus site, focusing on a range of alternatives.

Through discussion with the City's Steering Committee, it was established that the preferred location for any new arena complex is the SOEC campus. It was generally expressed that limited lands exist of sufficient size elsewhere in the City without requiring the purchase of land.

Earlier reports have addressed the limitations on the planning for the SOEC campus because of the existence of covenants regarding commercial uses on site. However, the analysis contained herein is specific to the development of the arenas. The only exception to this is the potential opportunity for hotel commercial development on site associated with the Casino as part of a broader, albeit separate, development on the SOEC Campus.

Two options were developed by the project team, both of which reflect the challenges and opportunities of the site.

- **Build to Replace the Memorial Arena and the McLaren Arena**, as both are considered (as documented in earlier reports commissioned by the City) to be beyond their useful life as hockey arenas, and,

- **Build to Future Need**, whereby the conceptual options for the SOEC campus include the provision of three additional indoor ice surfaces.

In all options, Memorial Arena is decommissioned for ice.

The approaches can be summarised as follows:

1. **Build to Replace: Cost-Minimization**
   - Decommission Memorial;
   - Retain McLaren for Hockey/Skating, etc. as-is;
   - Build on additional ice surface at SOEC;
   - Safeguard footprint & services to enable expansion by 1 pad in the future; and
   - Curling Club remains in-situ.

2. **Build to Replace: Value Accretion**
   - Decommission Memorial;
   - Decommission McLaren;
   - Relocate Curling to McLaren;
   - Build twin-pad at SOEC in single phase; and
   - Realize site value of curling club lands as partial funding.

3. **Build to Future Need**: Future proofing by adding a third ice surface and decommissioning McLaren and Memorial as indicated in the approach 2 above.

Partial solutions are rejected. It is recommended that **the minimum that the City should entertain is the Build to Replace-Value Accretion solution**, which includes building a standalone twin ice facility next to (and potentially connected via pedestrian link with) the SOEC.

The other approach investigated was to build out the SOEC to accommodate growth – by providing a third new ice arena in addition to the twin pad.

Alternative Site Plans Assessed

The report provides a detailed assessment of two alternative site plan options developed from a site design and building footprint perspective:

Option A: New Twin Pad Adjacent to the SOEC

- Layout proposes twin rinks building located to the East of the SOEC.
- A future third rink could be added to the twin rinks building should demand require the addition.
- Parking lots will remain to the East and South of the SOEC.
- Site access is via two 'Gates' – A&B.
- A new roundabout will connect the parking areas.

Option B: Twin Pad to the South of the SOEC

- Layout proposed twin rinks building located to the South of the SOEC.
- A future third rink could be added as a new standalone structure. This would be located to the East of the SOEC.
- Parking lots will remain to the East and South of the SOEC.
- Site access is via two 'Gates' - A&B.
- A new roundabout will connect the parking areas.

Accommodating a Triple Pad

Building to the immediate west of the SOEC can result in the development of a triple pad complex as shown in basic diagrammatic form. This does create some additional challenges to servicing the SOEC back of house itself but with careful design the loading area requirements for both the SOEC and the Penticton Trade and Convention Centre can be achieved.

While the option of building at the front of the SOEC Campus – developing a twin rink aligned with Highway 97 – was ultimately not pursued but the report includes diagrams associated with this option.

Part C: Recommended Plans

RECOMMENDED SCALE OF PREFERRED OPTION FOR DEVELOPMENT

Preferred Option

The analysis of need demonstrates the advantages of developing a total of three new indoor ice surfaces and decommissioning both the Memorial and McLaren Arenas. The additional need is likely to emerge by 2031 and 2036 at the latest. Assuming the earlier trigger point, the capacity to build three pads as a single phase would represent an efficiency to both process and capital cost. It would also create efficiencies at an operational level and bolster the opportunity for additional economic impacts from commercial and community ice use sooner rather than later.

The preferred option comprises the following:

- Decommissioning and demolition of Memorial Arena.
- Decommissioning McLaren Arena as a public ice rink utilized for public skating, hockey, figure skating, and any other sports save and except for curling.
- Construction of a twin pad facility to the immediate west of the SOEC building.

Additionally, for active consideration the following is recommended:

- Repurposing McLaren Arena as a six-sheet curling facility.
- Decommissioning the existing curling club building and sale of the property (with improvements remaining) to the Casino. The sale value should reflect the highest and best use of the lands which is likely to include a significant increase in density on the site.

Site Development Issues and Resolution

The consulting team undertook further detailed assessment of site planning opportunities based on confirmation of the location of the twin pad arena to the west of the SOEC building. This created the need to assess the most appropriate configuration of access to the site and circulation within the site.

The site plan also considers the recent purchases that the City has made of lands to the west of the SOEC. The design includes a potential long term road alignment which opens up further lands for development. The report outlines principal changes envisioned for the site, including the following:

1. Closure of Alberni Street is immediate with development of the twin-pad.
2. Access will remain from Highway 97 with servicing access to the rear of the building from Westminster Avenue. The pedestrian crossing is to be retained in this location.
3. Future City road network linking the parking lot in front of the new arena to Westminster Avenue and providing access roads that define future development parcels. Note that this represents a future vision for development and intensification of lands in the vicinity of the site. It does not represent a decision of the City to pursue redevelopment of these lands at this time.
4. There will likely be a need for traffic management improvements as a result of both the location of development and the more intensified use of the site as a whole. Traffic, broader transportation and parking impacts should be subject to Transportation Impact Assessment as part of the next steps in detailed design and planning.
5. New hard and natural landscaping as required on the overall site.
6. Replacement of Memorial Arena with additional surface parking.
7. The existing lift station will be relocated to a point closer to Highway 97. It is understood from discussions with the City that expansion is desirable in order to improve services in this area of the City and promote further development.

Proposed Functional Space Program

The functional space program to accommodate the new twin pad design includes several important aspects:

- A total of 75,000 square feet gross floor area (GFA).
- Fixed seating surrounding rink 2 to represent more of a feature rink in comparison to rink 1 that would be strictly for community use with a minimal number of seats, which may include only portable bleacher seats.
- A provision for offices for two of the key community user groups.
- A significant provision for the OHA of some 13,000 square feet (including office space of approximately 10,000 square feet).
- With the demolition of Memorial Arena and the loss of dedicated change rooms for the OHA these dedicated rooms will be provided within the new twin pad arena.
- All space provided to the OHA will be fully funded by the OHA itself and does not represent a capital or operating cost to be borne by the City.

ORDER OF MAGNITUDE CAPITAL COSTS

The report details **potential scale of capital costs for the preferred option – the twin-pad community arena**. The estimate of costs includes the costs of demolition of Memorial Arena as well as the development of surface parking in its place.

	Estimated Facility Area	Total Project Cost Est.	
	Sq.Ft.	Sq.Ft.	Total
Twin Pad Arena Cost	74,908	$935	$70.1M
Twin Pad Arena Cost (incl. Lift Station Relocation)	74,908	$949	$71.1M

The estimates exclude the costs associated with the demolition of the existing Casino in the circumstance where the curling club is relocated to McLaren Arena.

Plans For Mclaren Arena include the development of a six-sheet curling facility. The report details the order of magnitude capital costs for the McLaren Arena conversion of $6.9M. This is based on the development of one additional ice sheet, the conversion of the existing changing room and office areas on the western flank of the building to locker space and with amenities that would meet the requirements of the curling club, and building a two-level addition overlooking the facility.

IMPLEMENTATION

The Implementation section outlines a recommended approach to implementation, highlights the need for policy development, and discusses governance of the new arenas and capital funding options.

The consulting team recommended approach is meeting not only replacement but future ice needs by considering the ability of the future design of the new building to allow for expansion by an additional pad (based on the analysis of indoor ice need over the next 5 years). Undertaking a Traffic Impact Assessment (TIA) in respect of both the proposed twin pad option, a future triple pad building, and the potential additional development adjacent to the existing Casino.

With regard to governance of the new arenas recommendations include maintaining existing third-party management approach and undertaking a fundamental review of the City's current and future governance of the arenas and the ability of this model to meet the needs.

Regarding policy development, the most important element in any consideration of governance is the ability of the City to maintain maximum control over ice allocation, pricing and the application of subsidy-related policies.

- Should the twin pad project proceed, it is recommended that the City undertake a detailed update to its ice allocation policy – separately for each of the community arenas (OHTC and the new twin pad) and for allocation overall.
- Similarly, the City should develop more robust policies governing the pricing of community ice. Pricing should consider the ability of user fees to help pay for the long-term financing costs of the City's investment and/or fund the development of necessary capital reserves to enable future year building lifecycle investment.
- While this report demonstrates the importance of maintaining commercial use of the ice, but the growth in need for ice in future years is community driven.

Once the development plans as proposed in this report are confirmed by the City along with its preferences related to the management of the facilities, annual financial operating plans laid out in the 2019 report (including projected operating costs and revenues and net operating deficits) should be updated for the City's community arenas as whole.

The consulting team recommends prioritizing the project and, as the next step, developing a holistic capital funding plan for all priority projects.

The City should seek to achieve the following schedule of implementation:

- Summer 2025 - Receive study. Approval to proceed to preliminary design. Approval of Development Cost.
- By December 31, 2025 - develop a capital funding program that outlines in sufficient detail the sources of funding for the project including the anticipated long-term debt and annual sources of funding to defray debt (the period of each source of funding measured in years expected to vary by funding source).
- 2026-2027 – Preliminary design, site exploratory work, funding strategy, etc.
- 2028 – Design of the facility likely to be undertaken via a Progressive Design Build (IPD) approach.
- 2028-2030 – Facility construction.

Based on this schedule, opening by the fall of 2030 is an aggressive schedule but should be targeted.

Identifying the project as subordinate to other high priority projects tends to reduce the impetus for crafting a funding plan.

To successfully evolve a funding plan that creates an acceptable balance between tax-supported debt and other funding sources, the City should identify the development of a new arena complex as a joint top priority for funding.

The recommendation of this report is to approve the recommended development plans in principle, subject to the development of a capital funding plan, commencing immediately.

It is precisely because there is competition for municipal debt capacity and other municipal revenues that necessitates a model of municipal capital funding that ensure the timing for each priority project is maintained and with it, access to capital funding over the debt retirement.

The report discusses potential funding sources including Infrastructure funding opportunities by upper-level governments and other upfront capital funding sources, and a range of capital funding sources that should be assessed for their likelihood.

These and other sources as may be identified through a due diligence effort immediately following the approval of this report.

The report includes for purposes of discussion funding alternatives to the traditional model of municipal ownership and operation, including Private sector funding of capital costs; Private Sector Build and Lease Back to City (Lease to Own); and Municipal capital and operating cost sharing with surrounding municipal jurisdictions (assumed as unlikely).

Further analysis of these options can be provided by the consulting team if the City is interested in alternative finance and procurement (AFP) methods for the project.

1. INTRODUCTION AND RETAINER

1.1 Purpose of the Report

Sierra Planning and Management, together with sub-consultants International Coliseums Company (ICC), and Meiklejohn Architectural Design Studio (MAD), have been retained by the City of Penticton to update the development plans and undertake further analysis of a future strategy for the provision of ice services in the city.

This report builds upon work previously completed by the consulting team, which recommended the development of a twin-pad arena, conversion of Memorial Arena to a dry-use facility, and decommissioning of the McLaren Arena. The work carried out resulted in the development of the following reports:

- Phase 1: Arena Feasibility Study (2017); and
- Phase 2: Arena Financial Analysis & Funding Strategy (2019).

The purpose of this study is to examine alternative scenarios of scale, design and site location to provide Council with the appropriate information to make an informed decision regarding the strategy for decommissioning existing arenas and building new replacement facilities.

1.2 Relevance of Earlier Work

Two previous consulting assignments, completed in 2017 and 2019 respectively, were undertaken by the current consulting team that is comprised of the following firms:

- Sierra Planning and Management (lead consultant);
- International Coliseums Company (ICC);
- Meiklejohn Architectural Design Studio (MAD), project design architect and local architectural firm in Penticton; and
- Greyback Construction (construction cost specialist), providing input on the order of magnitude capital cost estimates.

The initial work undertaken in 2017 involved the general assessment of options for development at the South Okanagan Event Centre (SOEC) and arrived at the recommendation for a twin-pad addition to the site. While certain aspects of the work differed from the current assignment – such as the exclusion of any future use considerations for McLaren Arena and Memorial Arena, the core of the work including the development of a twin pad design, remains valid.

At the time of writing in 2017, the opportunity to consider the relocation of the BC Hockey offices to the new building was an active consideration in the design of the concept, as was including the space needs of the Okanagan Hockey Academy (OHA). While the potential for the offices of BC Hockey no longer exists for the building, the needs of the OHA are still as relevant as they were eight years ago.

In 2019, Sierra Planning and Management led the same team in a more detailed assessment of the opportunity for improved levels of service and a funding plan associated with developing the twin pad facility. Many of the recommendations and all the analysis contained in that report remains relevant to this current update of capital plans and project needs which is the subject of this report.

1.3 Report Limitations

The contents of this report and its analysis is based, in part, upon a range of primary and secondary sources. Sierra Planning and Management endeavours to ensure the accuracy of all secondary sources of information but cannot warranty the accuracy of secondary source material. If secondary source information is inaccurate or incomplete, Sierra Planning and Management, International Coliseums Company (ICC), and Meiklejohn Architectural Design Studio (MAD), will not be held liable for original errors in data.

The report and the information contained within it is prepared specifically for the purposes as laid out in this report. Reliance on information and opinion contained in this report for other purposes is not recommended. The contents of this report should not be extracted in part from the entire report without the permission of Sierra Planning and Management.

PART A: PROJECT ANTECEDENTS

2. PROJECT HISTORY

2.1 Original Plans and Funding Success

In 2017 Sierra Planning and Management led a multi-disciplinary effort to develop a concept of a new twin pad addition to the west side of the SOEC, and an associated business plan, which included an assessment of capital costs, likely operating costs and revenues, an understanding of potential partnerships that could help underpin the revenue expectations for the new facility, and a strategic assessment of the implications for city ice needs. Part of the strategic assessment included the potential options for the decommissioning of ice in the Memorial Arena, as well as the McLaren Arena and the associated savings that would accrue from those decisions.

Subsequently, the City was successful in achieving approximately $6 million in Federal Gas Tax capital funding, which was required to be dedicated toward the proposed development.

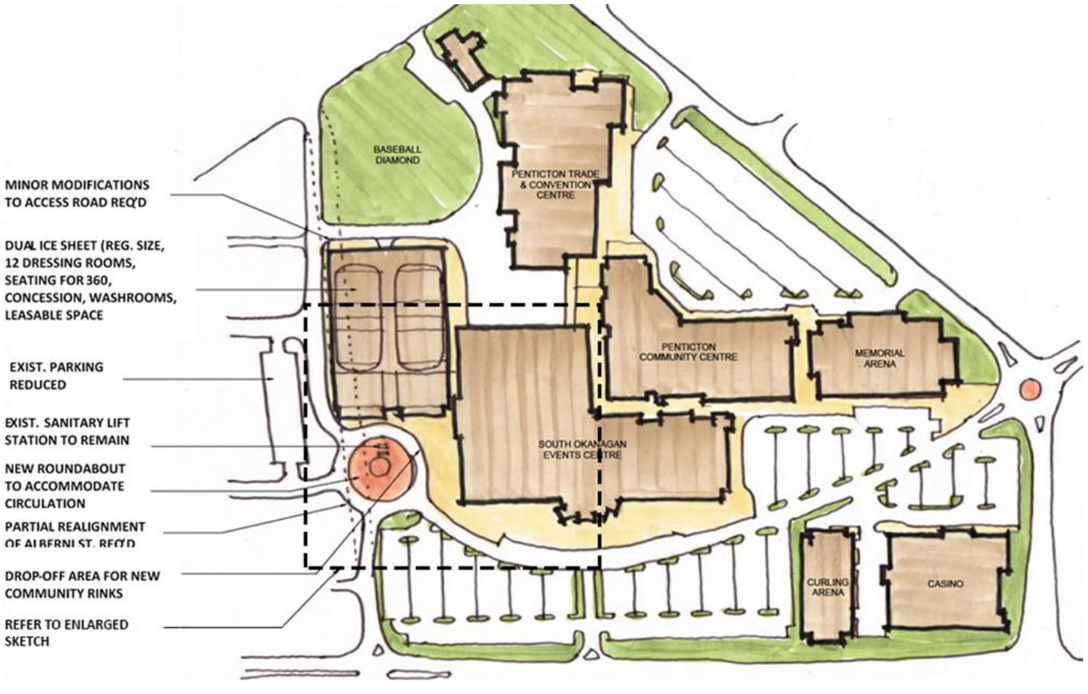
Notwithstanding the degree of reporting that was undertaken at the time, the City was unable to develop a capital plan to implement the development projects because of pressing infrastructure needs in the City more broadly. However, the City is now focusing its attention on several key classes of asset, one of which is the city's arena portfolio.

2.2 2019 Twin Pad Arena Business Plan

As part of ongoing work in 2018/2019, Sierra Planning and Management led the same team in developing an adaptive re-use strategy for the Memorial Arena and an overall next level drill-down into the financial feasibility of developing a twin pad arena complex. This latter study included several rounds of public consultation to more fully understand the opportunities for adaptive reuse of the Memorial Arena, as well as ongoing discussions with prospective tenants, users and other partners regarding the development of new state-of-the-art ice arenas in the city.

The twin pad arena business plan project is further described below, while a description of the prior work completed for the Memorial Arena re-use strategy is provided in the following section of the report.

Exhibit 1. Business Plan Preferred Option Concept Plan: Site Plan



Building upon the previous work completed by the consulting team and the City of Penticton's Arena Task Force (ATF), the business plan provides a schematic analysis of the revenue and cost potential and presents a funding strategy for investment in a new twin-pad arena at the SOEC.

Specifically, the business plan addresses the following key items, identified by the ATF as pre-requisite to implementing the proposed plan and to assist in planning for change:

- Analyzes the market and revenue opportunities (not undertaken as part of the initial work);
- Reviews the operational efficiencies that are anticipated to arise from alternative methods of both design and delivery of the facilities, and their operations;
- Further details the likely capital costs associated with the Memorial Arena dry floor use opportunities, supported by stakeholder consultation;
- Identifies the total lifecycle costs associated with the proposed changes to the City's recreation infrastructure (decommission, new build and renovation); and
- Presents a strategy regarding potential funding for the balance of the project's capital needs.

Recommended Development Program

As part of the business plan, an evaluation of options was undertaken, and a preferred option was identified to move forward. This option involved keeping the two existing arenas operational (but performing minimal repairs) until the new twin pad is built and operational, at which point McLaren Arena would be decommissioned, and Memorial Arena would be converted to a dry surface for use by lacrosse, pickleball and others.

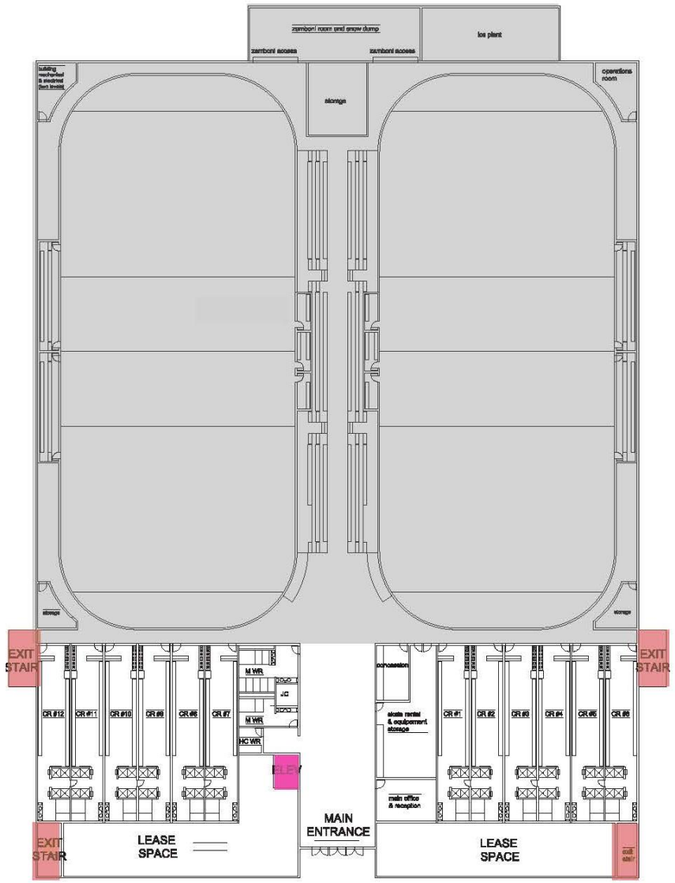
The recommended development program for the twin pad includes the following elements:

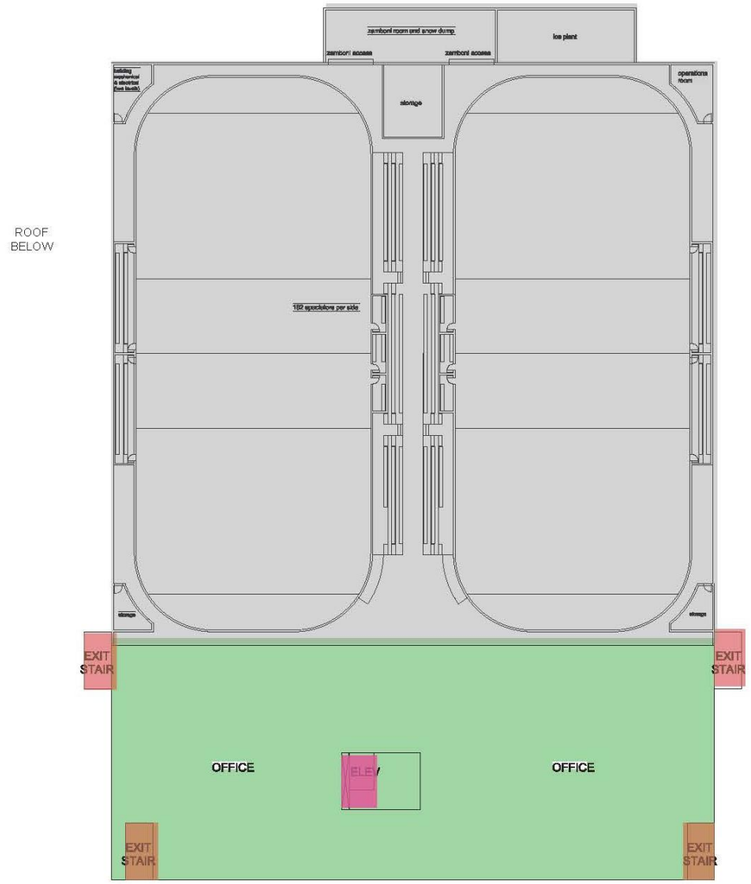
- Spectator capacity of 360 (combined);
- 12 full dressing rooms;
- Concession, skate shop, lobby, office/reception, storage, washrooms;
- Building services – mechanical, electrical and refrigeration rooms;
- Building height of 40’ to accommodate possible offices for interested groups;
- Option for a single pad to be developed: and
- Option to build an atrium linkage between the facilities, providing additional programmable space.

Capital Costs

As part of this work, capital costs for the Twin Pad alone (excluding Memorial) were developed at an order of magnitude level (Class D estimate, +/- 25%). These are inclusive of all costs identified by the consulting team (based on costs provided by Greyback Construction), and total $33,542,174. For the purposes of costing, the 2nd floor (office space), as identified in the recommended option, was removed and provided as a line item separate from the grand total. The atrium link and the bridge have also been provided as separate line items. These additional items total $13,608,000 (2018 dollars).

Exhibit 2. Business Plan Preferred Option Concept Plan: Arena Floor Plan





EXIT STAIR

ELEVATOR LOBBY

OFFICE

ICE RINK

BUILDING SUMMARY:
OFFICE SPACE: 18,000 SQ.FT

Total Life Cycle Costs

The business plan includes a detailed assessment of lifecycle costing associated with the entire ice facilities at the SOEC, and the proposed new twin pad addition (based on the identified order of magnitude cost estimates). This was based on information provided by the City regarding its asset management reporting of remaining life expectancy for building systems, as well as experience of the consulting team and fieldwork to review the buildings in greater detail.

The following provides a summary of the total life cycle costing, including capital and operating, for the facilities when considered together.

Exhibit 3. Business Plan Summary of Total Life Cycle Costing

	Component	Capital Cost	20 Year Lifecycle Cost
A	New Twin Pad Addition	$28,611,811	$7,553,518
B	Memorial Arena	$7,508,248	$8,212,362
C	McLaren Arena (Decommissioning)	$1,000,000	-$4,165,734
D	SOEC (Shown for information only)	-	$29,415,660
	Total (A+B+C)	$37,120,059	$11,600,146
	Grand Total (A+B+C):	**$48,720,205**	

Based on the above, for a 20-year lifecycle period the total cost of ownership (deficit and lifecycle) on an annual basis is calculated at $559,000; for a 40-year replacement lifecycle projection, this rises to just under $1 million per annum.

In comparing the figure for the new twin pad (and Memorial Arena dry use) to the two existing arenas in their current operation (McLaren and Memorial) the following should be noted:

- The deficit of the twin-pad is expected to be slightly lower than the combined current deficits of the two existing arenas and could be significantly reduced if revenues are enhanced and costs are reduced through integration with existing SOEC operations.
- The lifecycle costs of the twin-pad, at $377,000 per annum, is a sizeable improvement from that of the two existing arenas combined, at over $600,000 per annum. Additionally, the twin pad, being a new building will not draw down on these costs for a number of years.
- Despite Memorial Arena being a conversion, it remains an older building as part of the City's inventory of facilities, with an estimated lifecycle cost of approximately $380,000 per annum. This amount, plus a likely operating deficit, remains the City's responsibility along with the costs of ownership of the twin pad.

Together these buildings have a combined cost of ownership (based on all the revenues and operating cost projections if borne out) of $1.05 million annually.

Proposed Implementation Plan

The business plan identifies the ways and means by which implementation can occur, and operational efficiencies can be achieved through consolidating ice facilities on the SOEC Campus. The relative benefits of alternative methods of operating the facility forms part of this assessment – *City-owned and operated* vs. *third party management* vs. *rolling into the existing operations* with the range of cost savings which may arise from that.

The financial projections of operating performance included in the business plan are based on operations at a normalized state and founded on several key assumptions which are critical to understanding the future operating risks associated with this investment.

Twin-Pad Arena

The resulting projections of operating costs and revenues for the twin-pad arena are based on a standalone operation with higher staffing costs; this results in an annual deficit of just under $200,000 and climbs based on the assumption of an annual inflation of both costs and revenues. Should there be an integration of operations with the main SOEC and Okanagan Hockey Training Centre (OHTC) rinks, the opportunity to eliminate a duplication of effort in terms of higher cost management functions is apparent. This could save in the order of $100,000 per annum, thereby reducing this deficit significantly.

The revenue opportunities assessment identified that there is a potential demand for office and training centre space – in the order of up to 20,000 sq. ft. This would be a lease from a group (e.g. Okanagan Hockey Group (OHG)), but there is currently no agreement to this either from the OHG or the City. Accordingly, it is a decision that should be taken based on the agreement of an acceptable business case for all parties.

Memorial Arena

The initial 2017 analysis had assessed the likely reduction in annual operating costs from current levels (and high utility costs) based on the removal of ice. The business plan provides potential operating revenues for the dry-use facility based on a conservative assessment of potential utilization and modest charges for rental of the entire court floor. This amounts to approximately $87,000 per annum based on prime-time use, indicative of a deficit similar to the current deficit based on operation by Spectra (now Oak View Group (OVG)).

Exhibit 4.Resulting Net Operating Income for New Twin Pad Complex

Item		Year 1	Year 5	Year 10	Year 15	Year 20	Year 25
Escalation	0.03%	1.00	1.13	1.30	1.51	1.75	2.03
Revenues							
Ice Rentals		$520,861	$586,234	$679,606	$787,850	$913,334	$1,058,804
Sporting / Non-Sporting Events		$26,000	$29,263	$33,924	$39,327	$45,591	$52,853
Tournaments		$144,000	$162,073	$187,887	$217,813	$252,505	$292,722
Sponsorship / Advertising		$85,000	$95,668	$110,906	$128,570	$149,048	$172,787
Ancillary Revenue		$107,762	$121,287	$140,604	$162,999	$188,960	$219,057
Total Revenues		$883,623	$994,525	$1,152,928	$1,336,559	$1,549,438	$1,796,224
Expenses							
Management		$123,500	$139,000	$161,139	$186,805	$216,558	$251,050
Wages and Benefits		$481,099	$541,482	$627,725	$727,706	$843,611	$977,976
Utilities		$352,000	$396,179	$459,280	$532,432	$617,234	$715,544
Supplies and Equipment		$110,000	$123,806	$143,525	$166,385	$192,886	$223,607
Other Expenses		$32,500	$36,579	$42,405	$49,159	$56,989	$66,066
Total Expenses		$1,066,599	$1,200,467	$1,391,670	$1,613,327	$1,870,288	$2,168,177
Net Operating Position		**($182,976)**	**($205,941)**	**($238,743)**	**($276,768)**	**($320,850)**	**($371,953)**

2.3 Prior Work on Memorial Arena

Recommended Concept Option

As a sub-component of the business planning for a twin-pad arena, concept options and costing were developed for re-use of Memorial Arena as a dry-use facility with the removal of ice.

The preferred concept was to remove many of the interior partitions and only keep the minimum number of enclosed rooms required for change rooms, storage rooms, offices, washrooms, and mechanical and electrical service rooms. This provides the maximum floor area for the least cost. The expanded and glazed openings on all sides of the building would open the facility to natural light and be much more welcoming than the current building. The front door at the east end adjacent to the kitchen and lounge would be maintained through these alterations and would be the controlled point of entry during special events. The bleachers would be removed to maximize the floor area and the concourse on the upper floor would be retained for use as a walking track and for a viewing concourse.

This option was preferred as it maximizes the use of the open floor area and allows most of the sports courts to be centred below the glulam arched ceiling. The existing elevator and stair lobby would be retained but a portion of the second floor would be removed to open the space to the natural light entering through the existing glazed wall on the east side.

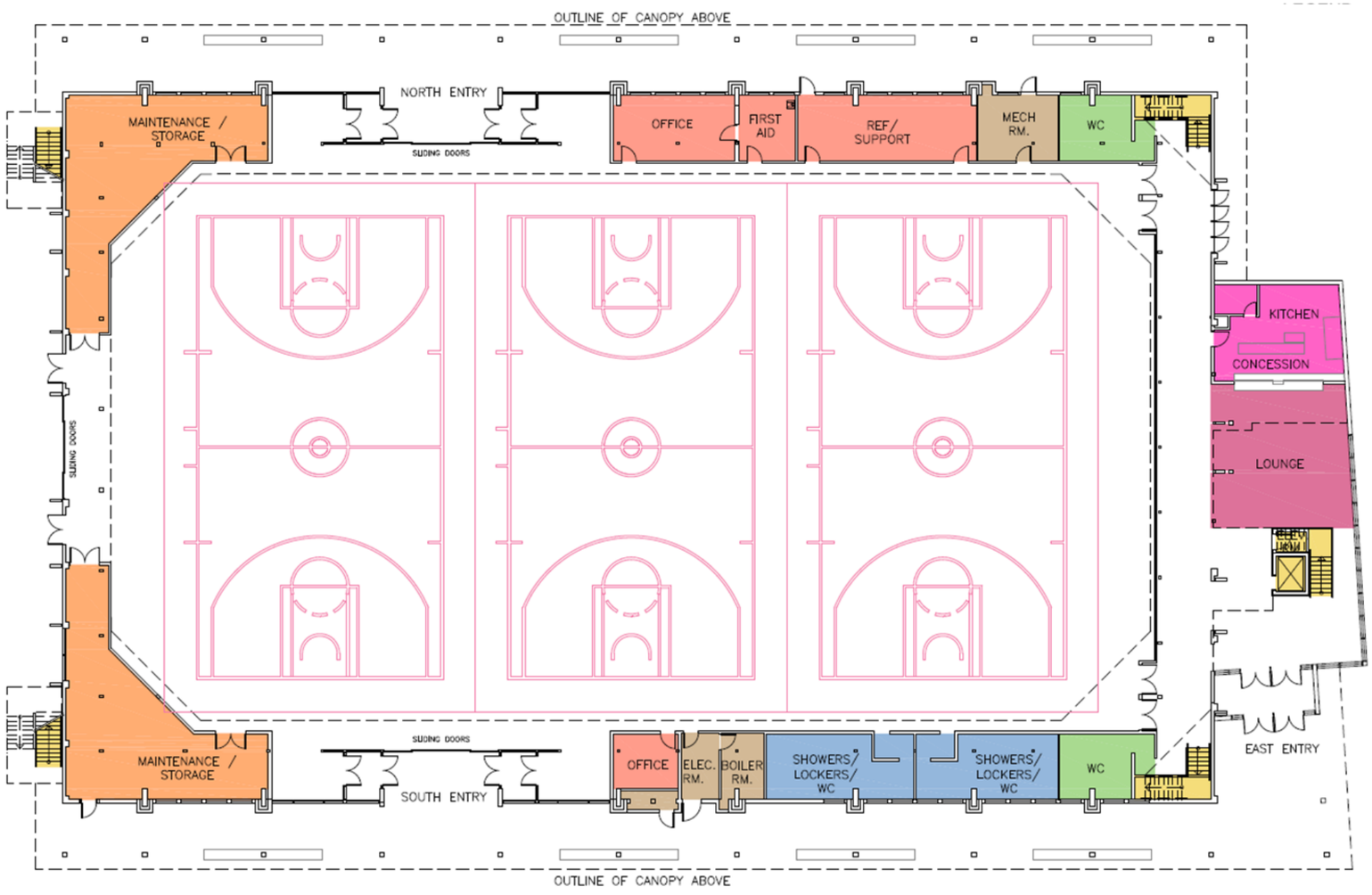
Other options reviewed included:

- An option that adds a mezzanine on the east end of the building adjacent to the main entry and provides more viewing area on both the ground floor and the upper floor. It has the least impact on the sports court layouts but does not provide any more space for indoor activities.
- An option that adds a mezzanine on the north side of the building and could also be added on the south side of the building. Of the two mezzanine options, it has the most impact on the sports court layouts but provides additional indoor activity space.

Capital Costs

The order of magnitude capital cost for the development of the preferred option, as shown below, was estimated to be approximately $7.5 million in 2018 dollars.

Exhibit 5. Proposed Ground Floor Plan for Memorial Arena (showing basketball set-up)



2.4 Changes and Consistencies Between Earlier Reports and Current Report

The current report is undertaken with a different framework in mind:

- Renovation of Memorial Arena to a dry-use facility is likely cost prohibitive and as such this analysis assumes the removal of the arena through demolition.

- Just as was indicated in the earlier work, this does not mean that the immense heritage, pride and emotional attachment to the arena should be lost. Quite the contrary. The option exists, as we detailed in the business plan for the project in 2019, to provide opportunities to retain the physical history of the building. This can include the retention and preservation of key features of the building, used in the development or fit-up of the new venues. Anything from the sale of wood used in the building (such as bleacher seats) to aesthetic treatment of the new facility, its dressing rooms and other spaces with decorative finishes that promote the legacy and history of the Memorial Arena.

- The future of McLaren Arena should be finally determined through this exercise. This study should confirm whether there is recreational potential associated with the building. Further, it is assumed that disposition of the building and lands is not acceptable to the City.

- The pre-existence of an application for re-zoning (now approved) of the site adjacent to the Canadian Tire does not impact the recommendations of this report. Specifically, the inclusion of plans for residential development coupled with the development of a twin pad ice arena and pickleball complex, should be viewed as a statement of intent until such time as there is evidence that the twin pads will be constructed, funded and operated at profit by the private sector.

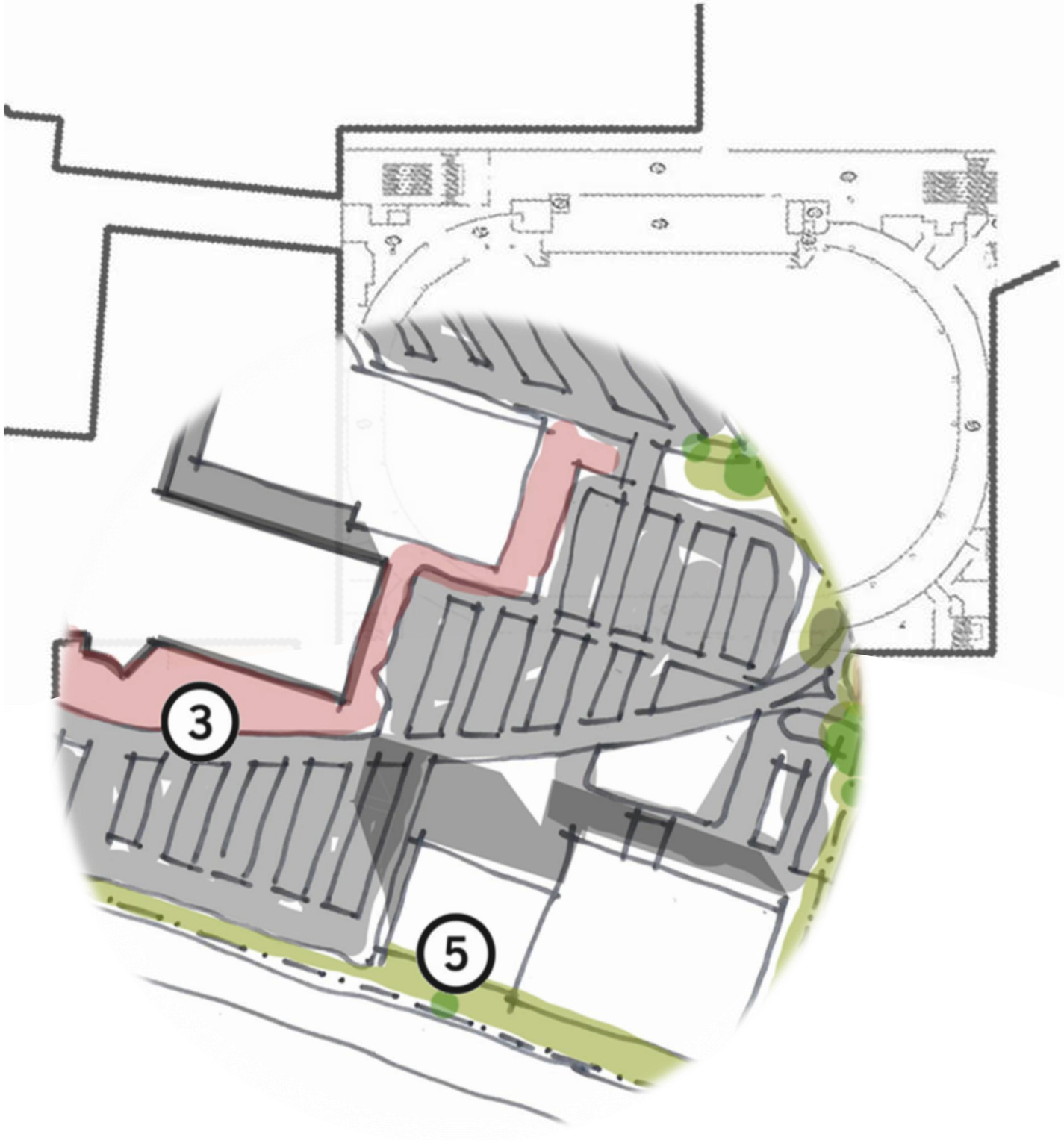
- Because these private rinks would not, in all likelihood, be developed at the required standard of municipal ice facilities, and would not be subject to the allocation policies for ice time that the City itself adheres to, in collaboration with the operator of the SOEC, OHTC and Memorial Arena (OVG), it should not be assumed that any private rink will meet the existing community need. Much depends on access to a facility, priorities for access, pricing, and the degree of control that the City would have in ensuring ice time is available to its user groups at affordable (subsidized) rates. This implies a partnership with the private provider. Because of the risk associated with this considering the pressing need to contemplate replacement of the existing City-owned facilities, this report assumes that the two private rinks do not meet the operational needs of the City.

- Whether these rinks are developed or not is less important than whether the operation of the rinks meets all the needs of the City without undue risk to the future of ice supply in the city. Given the economic impact associated with the City's arenas, there is a considerable risk involved in relying on private market solutions for which the City is provided little or no control – and ultimately would not be able to ensure the ongoing financial sustainability of a private venture.

- It is assumed that the existing approach to operation of the City's arenas is maintained – namely the use of a third-party manager to operate the SOEC, OHTC and Memorial Arena. With the replacement of the Memorial Arena and the addition of one or more new arenas on the SOEC site, it is assumed that the new arenas would be managed in a similar manner.

- The assessment of operational performance and ice time utilization contained in the 2019 business plan remains relevant. Despite the impacts of the Pandemic, the demand for ice time has bounced back, rendering the estimates that were provided in 2019 as being of continued relevance.

PART B: CURRENT WORK PROGRAM & RESULTS



3. COMMUNITY ICE NEEDS

3.1 Penticton Indoor Ice Supply - Distinguishing Between Community and Other Use

Indoor ice supply within the region is 3.5 ice surfaces. The City offers 4 arenas featuring 4 ice surfaces (as shown).

Additional to the City supply, the single pad located at the Summerland Arena Complex and Curling Club is reasonably included because of its proximity.

While this nominally suggests a City and immediate region supply of 5 ice surfaces, the available community supply of ice should be viewed as less.

The available City-only **current supply** is estimated at **2.5 ice surfaces,** and **the City-plus immediate region at 3.5 ice surfaces.**

Why these discounts in the available community ice supply?

- The SOEC is considered an event centre with a mandate for commercial events over community use. Any future business plan for the SOEC would, likely endorse the focus as being maximization of event centre commercial events days. This is likely notwithstanding commitments each year to serve, where possible, the needs of the community organizations for ice time, as well as non-ice community events.
- The Okanagan Hockey Academy utilizes about 50% of the time at the OHTC. Therefore, the OHTC is counted as 0.5 ice surface.

This report recognizes that the school utilizes much of its ice time during what would ordinarily be seen as non-prime time – but it does not exclusively do so. Tournaments, additional ice time requirements and the normal dynamics of ice allocation over the course of a season for a multi-ice pad operation such as the SOEC are a structural reality for future ice needs planning. To count the arena as a fully available community ice surface is, in our view, inaccurate and inadvisable.

Accordingly, the SOEC is removed from the inventory of community ice. It is not recommended, under any scenario, to consider this facility as one in which a greater level of community ice use is possible. Clarity of purpose extends not only to the commercial mandate of the event centre but to a clear and unequivocal recognition by the City of the importance of the other ice surface needs. These needs include both meeting current and future community ice needs and the potential to improve, extend and maintain the positive economic impacts associated with sport tourism and the ongoing operations of the OHA.

The current supply is the number of dedicated ice surfaces that are available for community sports. SOEC prioritizes larger events, and the ice surface is therefore limited for the community use.

To reaffirm for the purposes of assessing future ice needs, the current supply of community ice is deemed to be 2.5 sheets in the City of Penticton plus an additional 1 sheet in the nearby community of Summerland.

It is recognized that the availability of ice in Summerland for residents of the City of Penticton is likely somewhat limited due to the reality of how minor hockey is organized. However, the demand and supply for ice is fundamentally regional in nature. It is not exclusively framed by municipal boundaries. As such, Summerland is included in the supply.

Why is discounting the supply of ice arenas important?

- The provision of ice is fundamentally about meeting community need;
- Community need is estimated based on utilization as well the application of provision standards based on expected population growth. This is the case irrespective of whether the analysis is conducted at the level of the City or a regional trade area; and
- The commercial operations of the OHA and the SOEC are not a function of community population growth – they represent the export of hockey and event-related services to a broader market. The required ice time is a commercial benefit which is not related to community growth.

3.2 Indoor Ice as Economic Development

Fundamentally, the City of Penticton is in the enviable position of having a strong community-focused sports culture, evident in the commitment to minor ice sports, as well as a well-developed ice sports economy.

The OHA and the SOEC, combined, provide significant economic impact for the City as a whole and maintaining this impact should be a priority alongside the provision of ice to meet community needs.

Collectively, these two drivers of ice demand should both be prioritized in future infrastructure development strategies.

We hasten to add that this does not mean developing ice at rates which are beyond the capacity of the City to fund, and which results in significant excess capacity. Rather, it is about developing as appropriate to maintain modern, efficiently programmed facilities, and developing an ice allocation strategy that ensure the needs of community use and commercial use are satisfied.

Exhibit 6. City of Penticton Indoor Ice Supply Plus Summerland

Arena	Address	Amenities	Main Users	Observations
1. South Okanagan Events Centre (SOEC)	853 Eckhardt Ave W, Penticton	Ice surface NHL size: 85' x 200' With the capability of expanding to Olympic size (100' x 200') Seating capacity: 5,000	- Major tenant - Penticton Vees - Priority bookings for major events, shows, concerts.	- Priority bookings for major events, shows, concerts. - **Not counted as a dedicated ice surface** available for community sport.
2. Okanagan Hockey Training Centre (OHTC)	679 Wade Ave W, Penticton	Ice surface NHL size: 85' x 200' Seating Capacity: 400	- Okanagan Hockey Training School (46% of booked hours, 2022)	- The arena is adjacent to the SOEC. - A year-round dedicated ice surface. - Primary user Okanagan Hockey Training School.
3. Penticton Memorial Arena	399 Power St, Penticton	Ice surface size: 80' x 180' Office space (Penticton Minor Hockey Association) Change rooms Seating Capacity: 2,212	- Penticton Minor Hockey Association - Penticton Minor Lacrosse - South Okanagan Jr. B Flames	- Ice surface **can be used year-round** (equipped with a heating system to prevent permafrost build up); **however, operates as dry floor in the Spring months** to accommodate lacrosse groups. - **Ice Surface** is **available from July 1 to mid-March.** - Ice surface / dry floor **not available 2 weeks end of March** (ice surface removal and dry floor preparation) and **2 weeks end of June** (ice surface preparation). - The facility has reached end of its useful life.
4. McLaren Arena	1350 King St, Penticton	Ice surface size: 80' x 180' Office space (Glengarry Figure Skating Club) Seating Capacity: 200 Change rooms	- Glengarry Figure Skating Club - City of Penticton public programing and skate lessons	- **Ice Surface** is available **from July 1 to mid-March** (no heating system to prevent permafrost build up). - **Dry Floor** is available **from April 1 to mid-June**. - Low ceiling height limits the use by lacrosse groups. - The size of ice surface and change rooms and limited seating capacity limits the use of ice surface for hockey games. - The facility has reached end of its useful life.
5. Summerland Arena Complex and Curling Club	8820 Jubilee Road, Summerland		- Ice surface size: 85' x 200'	- Part of a large recreation complex including, fitness and Aquatic Centre

SPM, Data sources: 2017-2019 projects and 2024 Penticton Arena Analysis by GDH Solutions

3.3 Review of Utilization

Organization of Hockey

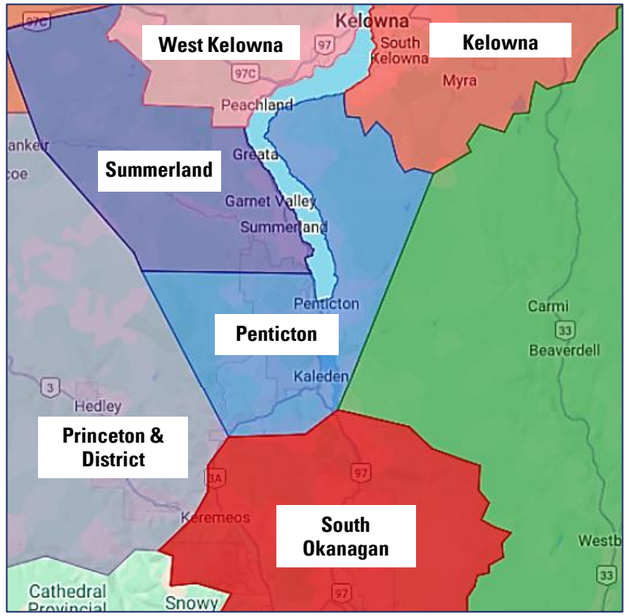
Local minor hockey association boundaries are set by Hockey Canada members. Under the Okanagan-Mainline Amateur Hockey Association (OMAHA) umbrella, there are individual minor hockey associations – both Penticton and Summerland are distinct and separate organizations. OMAHA Member Associations include:

- Penticton,
- Princeton,
- South Okanagan,
- Summerland,
- West Kelowna,
- Kelowna,
- Chase,
- Clearwater,
- Greater Vernon,
- Kamloops,
- Lillooet,
- Logan Lake,
- Lumby,
- Merritt,
- North Okanagan,
- Revelstoke,
- Salmon Arm,
- Sicamous,
- Winfield, and
- Thompson-Cariboo.

In operational terms, the associations work well together with well developed protocols for ensuring that the number and range of hockey teams and playing opportunities in both associations are blended with the demands for participation. Where there is a workable solution to enable players to register for programs in each district to enable the maximization of opportunities for the children and youth to participate, this is actively pursued.

What this also means is that the organization of minor hockey associations does not create a significant inefficiency in the allocation of ice time or differences in the level of service between these communities.

Exhibit 7. Hockey Geography



SPM, Data source: MHA, B.C. Hockey
https://www.bchockey.net/member-info/mha

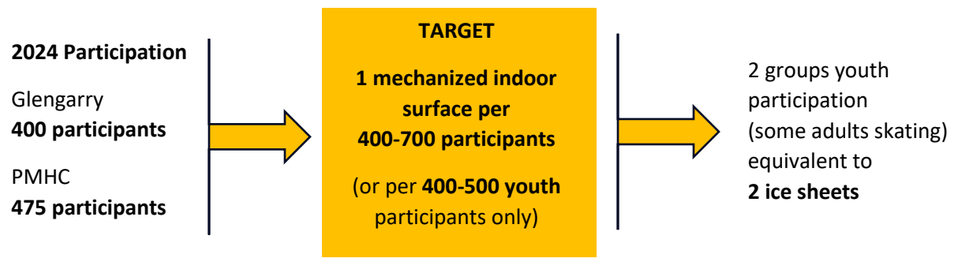
Utilization by Major Users

The assessment of participation - how may people are part of organizations involved in using the arenas is also a metric by which to estimate demand. Utilization estimated in numbers of registered participants was 400 (Glengarry Figure Skating Club) and 475 (PMHC) registered participants in 2024 (as shown in a graphic below).

Historically, according to the City's Arena Analysis report the following has occurred:

- Glengarry Figure Skating Club membership has increased significantly from 150 registered in 2010 to 301 by 2015 and 400 by 2024.
- PMHC registration has been steady and consistent over time – ranging from 450 in 2010 to 540 in 2022 and currently at 475 persons.
- Lacrosse has grown by about a third from 93 registered in 2010 to 152 as of 2022.

Exhibit 8. Standard Based on Participation & Ice Needs, Penticton



Utilization expressed as hours by group shows that the OHA and Penticton Minor Hockey are the main users of the Penticton arenas, followed by Glengarry Figure Skating Club. Rentals and other uses are the highest in McLaren Arena (51%). This is summarized in the following exhibit.

Exhibit 9. OHTC Arena - Utilization Hours Summary

OHTC Arena	AVG 2022 & 2023	%
Okanagan Hockey Group	1,391	53%
Penticton Minor Hockey Association	513	20%
Other Users	726	28%
Total Hours (less ice maintenance)	**2,630**	**100%**

SPM, Data: Penticton Arena Use Analysis, 2024, GDH Solutions.

Exhibit 10. Memorial Arena - Utilization Hours Summary

Memorial Arena	AVG 2022 & 2023	%
Penticton Minor Hockey Association	897	41%
Okanagan Hockey Group	575	26%
Other Users	716	33%
Total Hours (less ice maintenance)	**2,188**	**100%**

SPM, Data: Penticton Arena Use Analysis, 2024, GDH Solutions.

Exhibit 11. McLaren Arena - Utilization Hours Summary

McLaren Arena	AVG 2022 & 2023	%
Glengarry Skating Club	715	33%
Penticton Minor Hockey Association	338	16%
Other Users	1,092	51%
Total Hours	**2,144**	**100%**

SPM, Data: Penticton Arena Use Analysis, 2024, GDH Solutions.

Historic Utilization – Prior Analysis (published 2019)

The consulting team previously assessed use at each of the three arenas (OHTC, McLaren and Memorial) that have a community and commercial ice mandate (which excludes the SOEC as primarily commercial). The historic use is presented below.

Based on data provided by Spectra (prior to merger with OVG) and the City of Penticton, the annual utilization rates for Memorial Arena, OHTC Arena and McLaren Arena were estimated. This is based on booking reports for a typical "peak" month (i.e., February, November) and extrapolated over the current 9-month operational period between July 1st to March 31st.

The hours booked took into consideration the fact that both the Memorial and OHTC Arenas are 100% booked on a daily basis during July and August (7am to 11pm) for OHA Summer Camps.

The available hours identified below assume that ice is available for 16 hours per day an average of 21 weekdays and 9 weekend days per month. For the purposes of this analysis, prime-time ice is considered to include:

- 4:00 pm to 11:00 pm Monday to Friday (weekdays); and
- 7:00 am to 11:00 pm on Saturday and Sunday (all day on weekends).

The estimated annual utilization rates for **2017 and 2018** for the three arenas are detailed in the adjacent tables.

The ice usage for the SOEC is not included in the following analysis due to the fact that it operates as an event centre and will remain as such after the development of a new twin-pad facility.

Exhibit 12. Memorial Arena - Estimated Annual Utilization (%)

	2017			2018		
Memorial Arena	**Hrs Booked**	**Hrs Available**	**% Utilization**	**Hrs Booked**	**Hrs Available**	**% Utilization**
Prime Time	1,933	2,571	75%	1,933	2,571	75%
Non-Prime Time	1,201	1,701	71%	1,071	1,701	63%
Total Time	**3,134**	**4,272**	**73%**	**3,004**	**4,272**	**70%**

SPM, Data source: Spectra

Exhibit 13. OHTC Arena - Estimated Annual Utilization (%)

	2017			2018		
OHTC Arena	**Hrs Booked**	**Hrs Available**	**% Utilization**	**Hrs Booked**	**Hrs Available**	**% Utilization**
Prime Time	1,810	2,571	70%	1,805	2,571	70%
Non-Prime Time	1,041	1,701	61%	994	1,701	58%
Total Time	**2,852**	**4,272**	**67%**	**2,799**	**4,272**	**66%**

SPM, Data source: Spectra

Exhibit 14. McLaren Arena - Estimated Annual Utilization (%)

	2017			2018		
McLaren Arena	**Hrs Booked**	**Hrs Available**	**% Utilization**	**Hrs Booked**	**Hrs Available**	**% Utilization**
Prime Time	2,141	2,571	83%	2,516	2,571	98%
Non-Prime Time	464	1,701	27%	403	1,701	24%
Total Time	**2,604**	**4,272**	**61%**	**2,918**	**4,272**	**68%**

SPM, Data source: City of Penticton

This historic data are not comparable like for like with the following analysis by GDH Solutions for the 2022/23 period due to a differing method. However, both approaches show that for an extended period of time, the rinks at the SOEC campus and the McLaren Arena have operated as indispensable contributions to meeting the demand for ice time from both commercial and community users.

This is particularly clear with respect to non-prime time use. Whereas many municipalities experience low use in their arenas during the typical day-time period of 8 am to 4 pm, the City of Penticton is consistently registering high use. Moreover, this is not confined to the fall and winter periods.

Ice Schedule

As it relates to ice schedule, the following exhibit identifies the prime time (PT) and non-prime time (NPT) usage of the arenas during all seasons. It is important to note that both McLaren and Memorial Arenas are converted to dry use venues in the spring. McLaren is converted to ensure that ice is removed from the facility to minimize the risk of the slab heaving due to permafrost – a recognition of the inherent inefficiency of the building compared to a modern facility that would include sub-grade/underfloor heating.

Memorial is converted to a dry slab in the spring to meet the need for box lacrosse – the high ceiling and size of the boarded slab being more effective for box lacrosse compared to McLaren.

As a result, there is a degree of compaction in the spring when both community and commercial demands for ice remain evident – as only two ice surfaces remain in use – the SOEC and OHTC ice arenas – in the Spring. By July 1st of each year, all four arenas have ice so that ice is available unrestricted from July to April each year.

Overall Utilization – Latest Reporting

Based on the data provided by the City's Report into Penticton Arena Use Analysis (January 2024), the level of use is relatively high for summer – notably high in the non-prime time period consistent with either academy or other camp-related use. Based on this, it appears that the provision of summer ice is reflective of a demand for ice. The retention of all 4 arenas in use in July and August may also represent an attempt to avoid compaction. Based on the data, it is not possible to easily conclude that a more efficient allocation of ice time would result in reducing the need for all 4 arenas to be fully operational by July 1 – if the goal is to accommodate all users without unnecessary compaction of demand.

Level of Service

The provision of ice in the spring and summer in Penticton reflects the existence of commercial needs for ice emanating from the SOEC and the OHA. Nevertheless, by July all four arenas offer ice for rent.

This represents a high level of service in the City. While noting this, it is assumed that this remains the expected level of service in the City. In terms of meeting overall year-round needs, whether summer ice is provided or not represents a discussion around cost and willingness to subsidize ice users during the traditional off-season.
In Penticton, the commercial operations of the SOEC and academy and their economic impact necessitate a policy of supporting ice provision during the shoulder seasons as well as during the summer.

Exhibit 15. Penticton Arena Use Summary (2022-2023)

Facility	Fall	Winter	Spring	Summer
McLaren	PT 86% NPT 56%	PT 81% NPT 71%	PT 36% NPT 0%	PT 56% NPT 51%
Memorial	PT 99% NPT 32%	PT 83% NPT 28%	PT 79% NPT 0%	PT 29% NPT 51%
OHTC	PT 78% NPT 38%	PT 85% NPT 43%	PT 58% NPT 54%	PT 29% NPT 74%
SOEC	PT 70% NPT 61%	PT 63% NPT 51%	PT 49% NPT 50%	PT 24% NPT 61%

SPM, Source: Gabi Haas (GDH Solutions), January 2024 Penticton Arena Use Analysis

Note: McLaren and Memorial Arenas are dry use venues in Spring.

3.4 Recognizing Economic Impact

The financial economic impact of the SOEC is based on its primary role as an event centre, as is the impact associated with the Penticton Trade and Convention Centre (PTCC). However, while these operations will conceivably benefit from the addition of two or more state of the art community ice arenas – as it relates to overall hosting capacity for major events, the focus of economic impact here relates to the dual role that a new arena development has for the City – both in a community service function, and arguably the primary function, and as a source of maintaining and enhancing economic impact related to the sport tourism market in general.

In this regard, we do not itemize the OHA as the essential rationale for expanding the supply of ice in the City. However, the importance of this operation, along with that of the SOEC, is an important reason to maintain the availability of ice for what we refer to as commercial ice operations.

Over the years, the OHA has conducted assessments of economic impact. That which the consulting team is aware of relates to impacts from a decade ago – 2015/16. The estimated total impact (some of which is recognized as overlapping with the impacts also reported for the SOEC) is in the order of $18 million per annum in terms of total spending. To caution, estimates of this nature are total economic impacts in terms of multiple rounds of spending rippling through the wider regional, provincial and national economies.

However – and importantly – direct spending from operations which include the academy, the accommodations, the visiting families accompanying players, and the tournaments, results in annual direct spending of $6 million generally within the City and certainly within the region.

While the consulting team did not undertake that analysis and can only report findings as presented, we have undertaken numerous other such assessments. The general scale of impact is reasonable, particularly from a group that operates year-round, includes in-term accommodations for academy students and runs additional multi-week camps for visiting players.

As an alternate example, the impact of the Andrews Hockey Academy on the east coast (Prince Edward Island), as smaller operation that is primarily summer seasonal was estimated by Sierra Planning and Management to have an annual direct (Island only) impact of $3.5 million. This was also for the similar 2015-2016 period.

Notwithstanding the dated nature of these impact assessments, the operations of commercial ice in the City through uses such as an academy will continue to represent significant economic impacts. These impacts represent an important reason in support of at least replacing the failing arenas in the City.

More likely, given the competition between commercial and community use of the existing ice that can reasonably be expected as the City and region grows, adding net additional ice (more than simply replacing the two arenas) represents a better solution. And it does so primarily to meet community related needs, but with the overall benefit of ensuring that the ongoing operations of the ice for commercial purposes is also accommodated – at least to the current level of commercial demand.

3.5 Population Analysis

To better understand current and future community needs it is important to identify population change trends as well as projected population growth in Penticton and in the larger region. The following analysis focuses on historic population change between 2011 and 2021, projected population growth in the City of Penticton and Okanagan-Similkameen Regional District and estimates the current and future population in market areas that are specific to the future Penticton multi-use sport, recreation and event centre.

Historic and Future Population Change

The population of Okanagan-Similkameen Regional District (RDOS) has been increasing. Penticton population of 36,885 represents 41% of RDOS population and has been on the rise, like RDOS. Based on the census data between 2011 and 2021, RDOS added nearly 9,500 population or increased by 8.6% and Penticton added over 4,000 population or increased by 9.3%.

Exhibit 16. Historic Population Growth (2011-2021)

Population (Census)	2011	2016	2021	5-Year Change	10-Year Change
RDOS	80,742	83,022	90,178	8.6%	11.7%
Penticton	32,877	33,761	36,885	9.3%	12.2%

SPM, Data sources: Statistics Canada Census, 2016, 2021

Both RDOS and Penticton population is projected to continue increasing in the next 20 years.

The City of Penticton, Housing Needs Assessment (2023) projects the population to increase to nearly 53,000 by 2046.

Population projections developed by the City of Penticton, RDOS and B.C. Government are summarized in the following exhibit.

Exhibit 17. Official Population Projections (2021-2046)

Population	2021	2026	2031	2036	2041	2046
RDOS (1)	90,178*	94,304				
RDOS (2)	93,002**	96,396	100,73	104,220	108,763	112,834
Penticton (3)	36,885					52,953

* Census 2021; ** 2021 Population Projections – source: B.C. Stats BC Population Estimates & Projections.

SPM, Data sources:

(1) RDOS Housing Needs Assessment 2021 (Based on 2016 Census data);

(2) B.C. Stats BC Population Estimates & Projections, B.C. Government; and

(3) City of Penticton, Housing Needs Assessment, 2023.

3.6 Defining Market Areas

A Market Area represents a catchment area of the facility, which includes all existing and potential users of the facility. The Penticton Arena Market Area extends beyond Penticton (which comprises a Service Area, where services are provided and paid for by the municipality) and areas beyond Penticton, which includes all potential users of the facility who reside outside of the municipality.

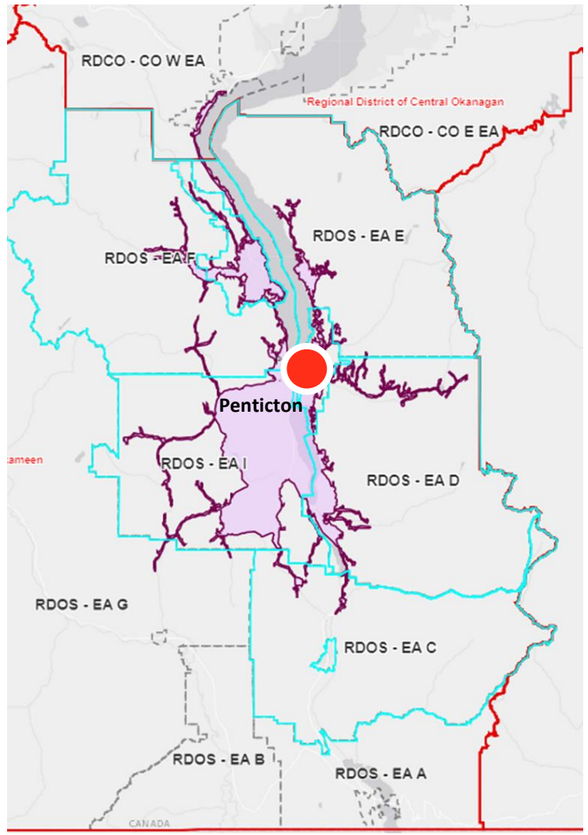
For greater clarity, Penticton is the Service Area of its arenas and other recreation facilities, within which the municipality provides and funds services to the residents, including space rentals and public programs. Service Area population supports their municipal facilities through resident tax base and other fees and charges. It is important to note that regional recreation facility operations may be shared by several municipalities – in such cases several municipalities would constitute the facility's Service Area.

The Market Area population resides outside of the Facility Service Area (within a reasonable distance) and do not have the same connection to facilities being potential users of facilities such as arenas or multi-use centres. The Market Area supports the facility by paying rental or other fees, organizing or attending events and generating sport tourism and tourism economic benefits, for example, tournaments and other events.

This report defines two market areas. The primary Penticton Arena Market Area comprises areas within a 30-minute drive time distance and the secondary Market Area – areas within 45-minute drive. Both are shown and defined in the adjacent exhibits.

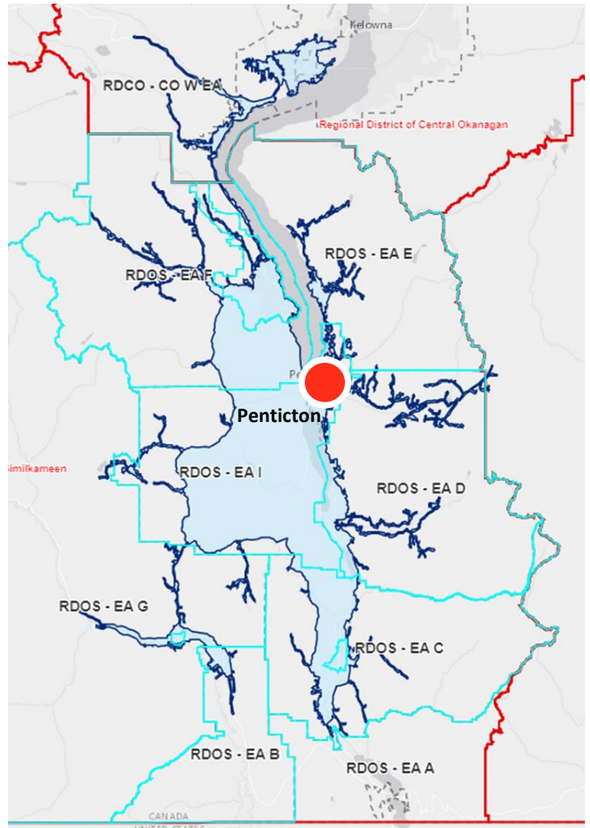
The primary Market Area (shown below) includes Penticton and reaches areas in Summerland, Electoral Areas D, E, F and I, and Peachland in RDCO-CO.

Exhibit 18. Penticton Arenas - Primary Market Area: 30-minute Drive



The secondary Market Area is following includes RDOS Electoral Areas (EA): B, C, D, E, F, G, I, and reaches West Kelowna in RDCO-CO.

Exhibit 19. Penticton Arenas - Secondary Market Area: 45-minute Drive



SPM Data source: ESRI Business Analyst drive time area analysis, 2025.

3.7 Market Area Population & Ice Supply

The Market Area population was estimated for both Market Areas using the ESRI Business Analyst proximity analysis tool and population projections.

The primary Market Area population is estimated at 63,981 in 2021. The secondary Market Area population is estimated at 113,364, nearly twice as large as the primary Market Area.

Both Market Areas are projected to grow projected to grow in the next 20 years. Detailed population estimates are provided below.

Exhibit 21. Market Area Population Projections

Market Area Population	30-minute Drive Area	45-minute Drive Area
2021 (Census)	63,981	113,364
2023	67,347	120,042
2026	71,376	125,714
2028	73,377	129,410
2033	77,670	138,203
2031	76,043	134,725
2036	79,959	143,090
2041	83,517	150,836
2043	84,762	154,407

SPM, Data Source: ESRI Business Analyst drive time area analysis, 2025

The current supply of indoor ice is 3.5 ice surfaces within 30-minute drive and 6.5 ice surfaces within 45-minute drive (as shown in the following exhibits).

Exhibit 22 Current Indoor Ice Supply - Secondary Market Area

30-minute drive area includes 3.5 ice surfaces available for community sports:

- 2.5 ice surfaces in Penticton
- 1 in Summerland

1. **Penticton Arenas**
   2.5 ice surfaces
2. **Summerland Arena Complex & Curling Club**
   1 NHL size ice surface (200'X85')

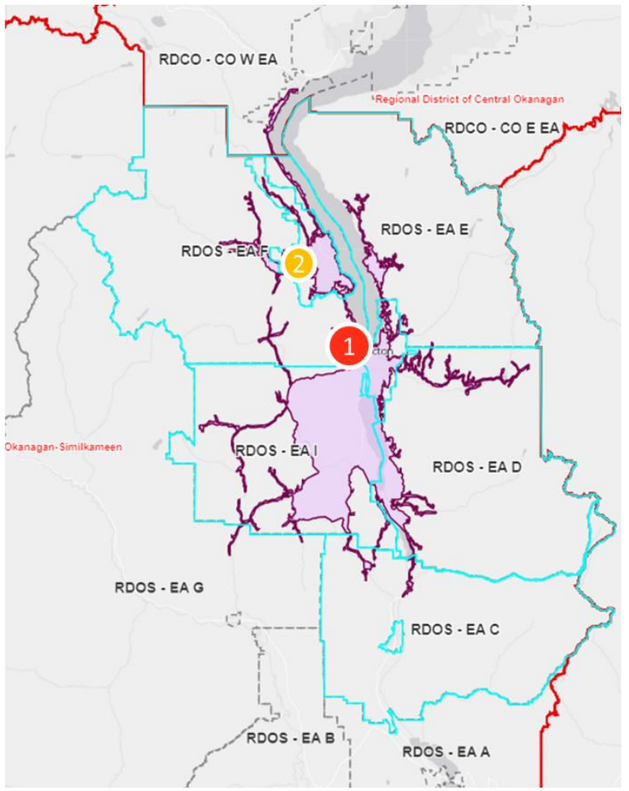
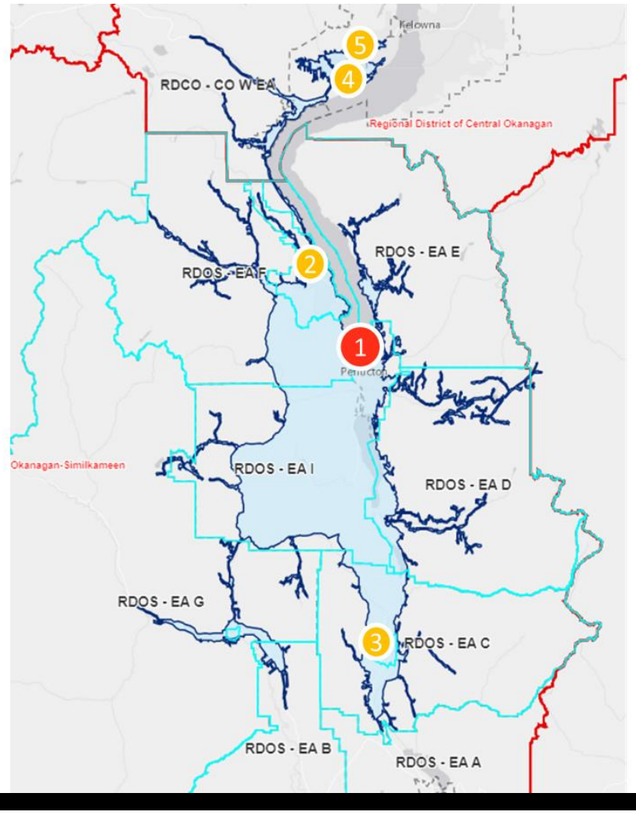


Exhibit 20. Current Indoor Ice Supply - Primary Market Area

45-minute drive area includes 6.5 ice surfaces available for community sports:

- 2.5 ice surfaces in Penticton
- 1 in Summerland,
- 1 in Oliver
- 2 in West Kelowna

1. **Penticton Arenas**
   2.5 ice surfaces
2. **Summerland Arena Complex & Curling Club**
   1 NHL size ice surface (200'X85')
3. **Oliver & District Arena**
   1 ice surface
4. **Jim Lind Arena,** West Kelowna
   1 NHL size ice surface (200'X85')
5. **West Kelowna Hockey Centre**
   1 ice surface



3.8 Level of Service Analysis

City of Penticton as the Service Area

Based on the official population estimates for Penticton, the current level of service is 1 ice surface per 14,754 population. One new ice surface will be needed by 2041.

Exhibit 23. Ice Supply and Provision Standard in Penticton

	2021	2031	2041	2046
Penticton Population	36,885	42,620	49,240	52,953
Current Level of Provision	1 ice surface per 14,754 population			
Regional Needs	2.5	2.9	3.3	3.6
Existing Supply	2.5	2.5	2.5	2.5
Surplus (Deficit)		**-0.4**	**-0.8**	**-1.1**

SPM, Data Source: 2021 and 2046 population City of Penticton, Housing Needs Assessment, 2023; 2031 and 2041 population - Sierra estimate based on the average growth rate.

30 Minute Drive-Time Service Area

Large arenas and multi-use centres are regional level facilities. To estimate the current supply level and future needs for indoor ice, regional population was estimated to establish the existing level of service or population per facility (in this case, population per arena).

The underlying assumptions are that the number of ice surfaces remains unchanged, while the population is growing (as shown with the above projections). The analysis demonstrates that:

- within the 30-minute market area, at 1 ice surface will be required sometime between 2031 and 2041; and
- within the 45-minute market area 1 new ice surface will be required by 2031 and at least 2.4 new ice surfaces by 2043.

These are detailed in the adjacent tables.

Exhibit 24. Ice Supply and Provision Standard in the Primary Market Area: Current & Future

30-min Drive Area	2021	2023	2026	2031	2041	2043
Market Area Population	63,981	67,347	71,376	76,043	83,517	84,762
Current Level of Provision	1 ice surface per 18,280 population					
Regional Needs	3.5	3.7	3.9	4.2	4.6	4.6
Existing Supply	3.5	3.5	3.5	3.5	3.5	3.5
Surplus (Deficit)		**-0.2**	**-0.4**	**-0.7**	**-1.1**	**-1.1**

SPM, Data source: Population Estimates - ESRI Business Analyst, 2025

The 30-minute drive area standard (1 ice surface per 18,280 population) is lower than the city standard based on the City's official population projections. However, it is appropriate to use this lower standard for estimating a regional need. Applying the City's provision standard (based as it is on City population only) would over-estimate the current level of service enjoyed by residents as it fails to recognize the use of the City's arenas by residents elsewhere in the region.

45 Minute Drive-Time Service Area

Exhibit 25. Ice Supply and Provision Standard in the Secondary Market Area: Current & Future

45-min Drive Area	2021	2023	2026	2031	2041	2043
Market Area Population	113,364	120,042	125,714	134,725	150,836	154,407
Current Level of Provision	1 ice surface per 17,441 population					
Regional Needs	6.5	6.9	7.2	7.7	8.6	8.9
Existing Supply	6.5	6.5	6.5	6.5	6.5	6.5
Surplus (Deficit)		**-0.4**	**-0.7**	**-1.2**	**-2.1**	**-2.4**

SPM, Data source: Population Estimates - ESRI Business Analyst, 2025

An analysis of the 45-minute drive-time also suggests that an additional single ice pad is warranted in the broader service region within the next 5 to 10 years.

Interpretation

In recognizing the regionality of ice demand, there is a legitimate question as to how all municipal jurisdictions together should support the capital and operating costs of a new facility that serves an entire region.

Without weighing into the discussion of inter-municipal cost sharing, it is evident that planning for the region would potentially generate a need for additional arena infrastructure earlier than if the City were only to meet the needs of its population. In short, the areas surrounding the City are growing faster than the City.

In recognition of these regional dynamics, it is reasonable for the City to recognize the following as prioritization:

- Replace the two existing aging arenas;
- Prepare for the need to add an additional ice pad to the City's supply at some point within the next 10 years – based primarily on the City's population growth.

4. SITE ANALYSIS AND OPTIONS CONSIDERED

4.1 Range of Considerations

The following provides a detailed review of the site – its constraints and opportunities from a building footprint design and site development context. The analysis of the SOEC campus is focused on a range of alternatives. Earlier reports have addressed the limitations on the planning for the SOEC campus because of the existence of covenants regarding commercial uses on site. However, the analysis contained herein is specific to the development of the arenas. The only exception to this is the potential opportunity for hotel commercial development on site associated with the Casino as part of a broader, albeit separate, development on the SOEC Campus.

Additionally, through discussion with the City's steering committee it was established that the preferred location for any new arena complex is the SOEC campus. It was generally expressed that limited lands exist of sufficient size elsewhere in the City without requiring the purchase of land. Industrial lands – to the extent they exist for development - would more properly be retained for employment uses that generate property tax revenues rather than public uses. Furthermore, the operational advantages of consolidating development at the SOEC are potentially significant, as well as the benefits for sport tourism hosting events.

Two options were developed by the project team, both of which reflect the challenges and opportunities of the site.

4.2 Key Assumptions

The options analysis presented here is based on two alternative approaches –

- **Build to Replace** the Memorial Arena and the McLaren Arena, as both are considered (as documented in earlier reports commissioned by the City) to be beyond their useful life as hockey arenas, and,
- **Build to Future Need**, whereby the conceptual options for the SOEC campus include the provision of three additional indoor ice surfaces.

In all options, Memorial Arena is decommissioned for ice.

Under a Build to Replace scenario, the key attributes of this approach can be further broken down into:

- Minimizing cost at the risk of failing to meet growing needs and to rake advantage of economies of scale; and
- Maximizing value through a single project to replace but not add to the supply of ice in the City.

The approach can be summarised as follows:

1. **Build to Replace: Cost-Minimization**
   - Decommission Memorial
   - Retain McLaren for Hockey/Skating, etc. as-is
   - Build on additional ice surface at SOEC
   - Safeguard footprint & services to enable expansion by 1 pad in the future
   - Curling Club remains in-situ

2. **Build to Replace: Value Accretion**
   - Decommission Memorial
   - Decommission McLaren
   - Relocate Curling to McLaren
   - Build twin-pad at SOEC in single phase
   - Realize site value of curling club lands as partial funding

3. **Build to Future Need:** Future proofing by adding a third ice surface and decommissioning McLaren and Memorial as indicated in B above.

4.3 Partial Solutions Are Rejected

Approach 1 above – minimizing the amount of change by addressing only the primary problem of a failing Memorial Arena does not meet the challenges that the City faces with the continued operation of McLaren Arena. Nor does it address in any way the future need for ice that is expected.

By focusing only one replacement of Memorial Arena through a single pad addition – presumably, an addition (not standalone) to the SOEC – the City will ultimately experience higher costs for the addition of at least a second rink in the medium term. Breaking out the project to reduce capital costs in this incremental way is not advisable and will result in higher capital costs overall.

Based on our experience, the minimum that the City should entertain is the **Build to Replace -Value Accretion** – solution, which includes building a standalone twin ice facility next to (and potentially connected via pedestrian link with) the SOEC.

The other approach investigated was to build out the SOEC to accommodate growth – by providing a third new ice arena in addition to the twin pad.

4.4 Alternative Site Plans Assessed

Provided below from a site design and building footprint perspective are the two options:

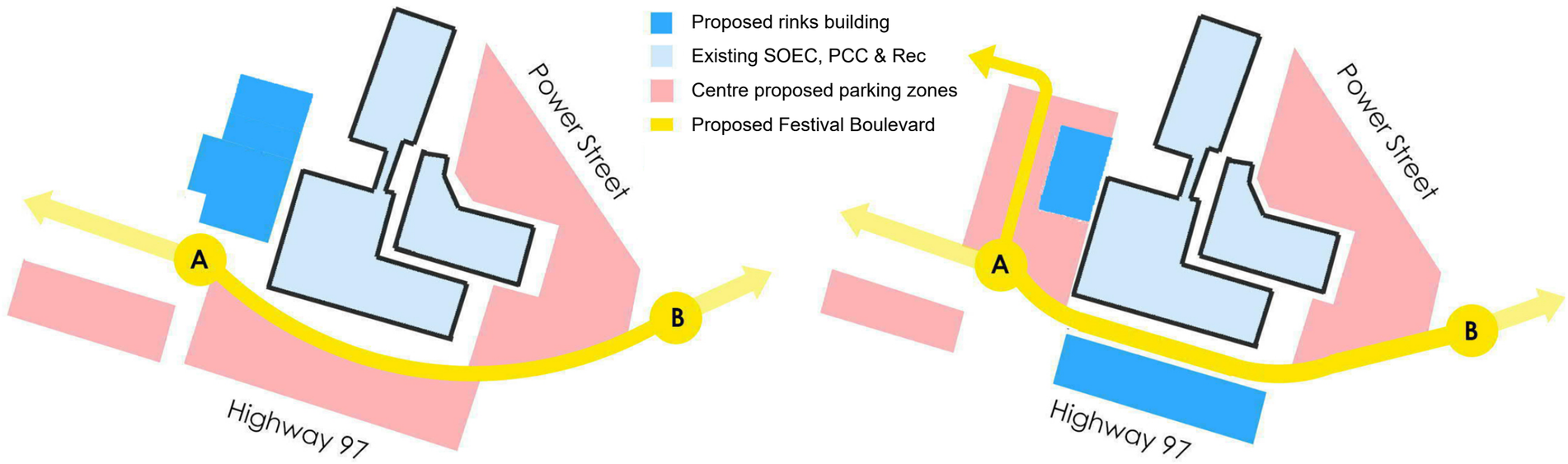
Option A: New Twin Pad Adjacent to the SOEC

- Layout proposes twin rinks building located to the East of the SOEC.
- A future third rink could be added to the twin rinks building should demand require the addition.
- Parking lots will remain to the East and South of the SOEC.
- Site access is via two 'Gates' – A&B.
- A new roundabout will connect the parking areas.

Option B: Twin Pad to the South

- Layout proposed twin rinks building located to the South of the SOEC.
- A future third rink could be added as a new standalone structure. This would be located to the East of the SOEC.
- Parking lots will remain to the East and South of the SOEC.
- Site access is via two 'Gates' - A&B.
- A new roundabout will connect the parking areas.

Exhibit 26. Conceptual Site Plans – Twin Pad



Accommodating a Triple Pad

Building to the immediate west of the SOEC can result in the development of a triple pad complex as shown in basic diagrammatic form. This does create some additional challenges to servicing the SOEC back of house itself but with careful design the loading area requirements for both the SOEC and the Penticton Trade and Convention Centre can be achieved.

In this diagram, a lacrosse field is added. The opportunities for this development include:

- Maximizes site potential.
- Expands car parking provision (with the decommissioning of Memorial Arena).
- Allows for phased construction - potentially.
- Allows for an efficient building form.
- Allows for an indoor connection between the twin rink and SOEC.

Note the hotel shown as an option at the site of the curling club would represent the likely highest and best use of the lands but would require the curling club to be relocated.

This site plan has the following challenges:

- Requires relocation of sewer infrastructure.
- Would likely require a public vote on the removal of Peach Park.
- Requires the removal of Alberni Street between Creston Avenue and Vernon Avenue.
- Access to the rear of SOEC would be reduced in size.

Exhibit 27. Conceptual Site Plan – Triple Pad

A new twin or triple rink building situated to the west of the SOEC offers the potential to connect to the SOEC via an upper level. The adjacent diagram includes the building that could contain either a twin pad arena plus a relocated curling facility, or a triple pad arena.

In this diagram Alberni Street is completely removed. New roundabout provides access to Creston Ave. South and West parking areas and link road to Gate B.

In this location the proposed twin rink building will have a strong visual impact when viewed from the new Gate A access point. A public plaza to the South of the new building will link with the current pedestrian space that runs along the South of the SOEC.

The floor plan detail of this scenario would potentially include the following:

1. Highway access point to remain in current location. Site roundabout as per Urban Systems Intersection Improvements Draft Report Option 01.
2. Secondary site access point from Power Street to remain as existing.
3. South parking area and pedestrian space to front of SOEC to remain as current configuration.
4. Green edges to site to remain and be enhanced.
5. Proposed location for hotel.
6. Access to rear of new rink building and SOEC via Vernon Avenue.
7. Loading and semi-truck turning area to remain as existing.
8. Pedestrian link to Westminster Avenue retained.
9. New tripe rink building. Future Lacrosse facility to North of new ice centre.

Note: The red line on the diagram shows the sewer line and lift station.

Exhibit 28. Conceptual Site Plan – Twin Pad with Space for Curling

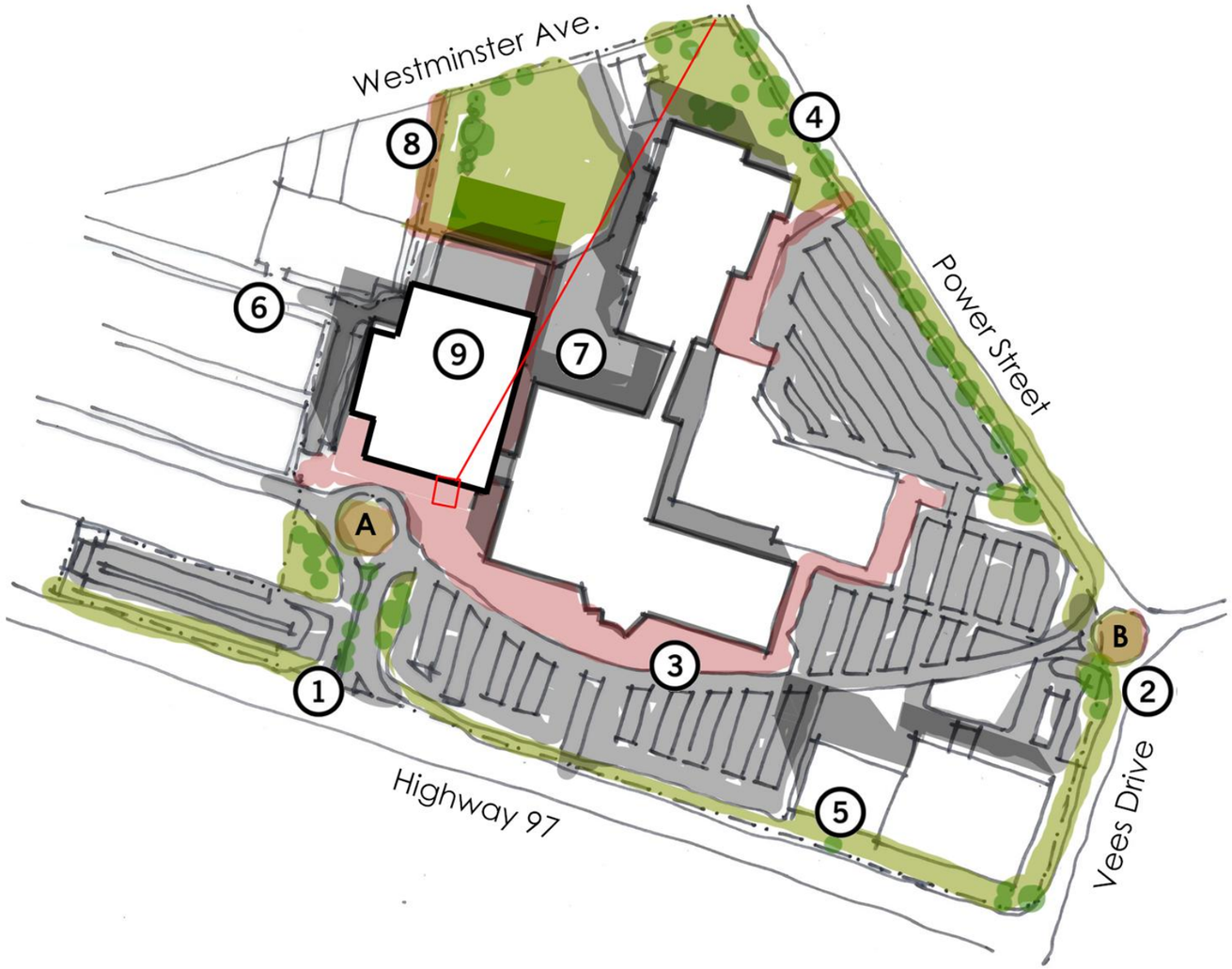
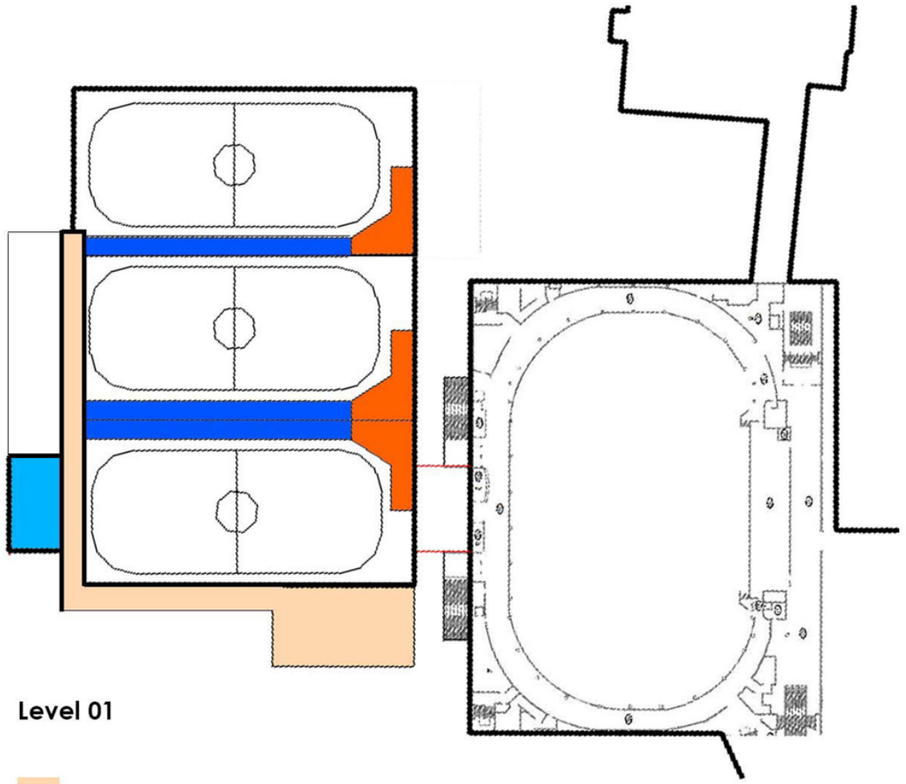
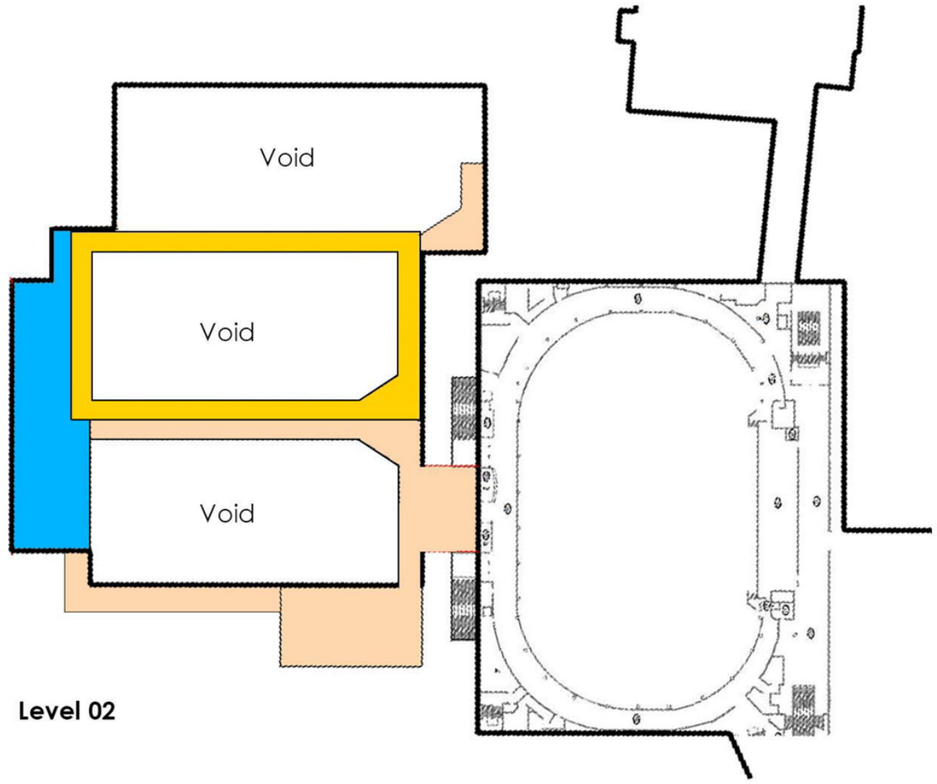


Exhibit 29.Floor Plans – Triple Pad



Level 01



Level 02

- Public rink spaces
- Hockey Academy
- Changerooms
- Service areas
- Arena seating

Building at the Front of the Campus

This option was ultimately not pursued but developing a twin rink aligned with Highway 97 would generate a visual image as shown at right. In this option:

1. Alberni Street is to remain.
2. New site access road, roundabout and access points to parking zones.
3. New site street between existing SOEC building and twin rinks building.
4. New twin pads building. The south face of the building will accommodate the principal entrance and provide large space for logo.
5. New hotel building connected to the Casino.

Exhibit 30. Key Plan

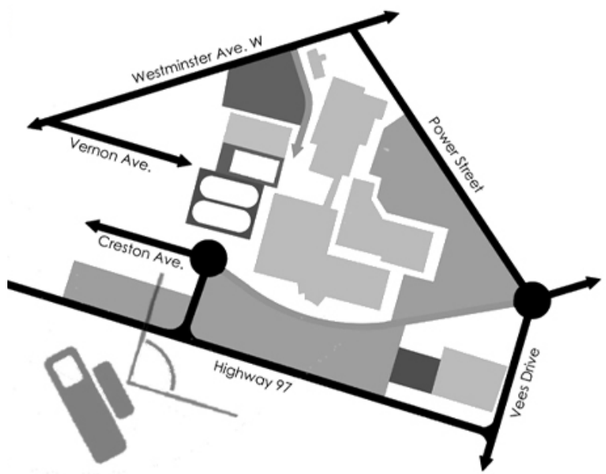


Exhibit 31. Rendering - Twin Pad to the South

A new twin rink building located to South of SOEC with an option for a third pad to the west of the SOEC main building will give the community rinks a strong visual presence and offer a potential advertising elevation for use by the SOEC which will face the highway.

A new semi-pedestrianized street will be formed between the SOEC and the twin rinks building. This new street space will offer events and rink drop off and could be closed to vehicular traffic during large events.

Carefully designed elevation treatment to the new rink building could offer animation to this space, visually linking the new rink surface with the public realm.

Parking areas will be divided into East and West, accessed form gates A&B respectively.

1. Highway access point to remain in current location. Site roundabout as per Urban Stems Intersection Improvements Draft Report Option 01.
2. Secondary site access point from Power Street to remain as existing.
3. Proposed location for twin rink building.
4. East parking area accessed from Gate B. East parking linked to existing rec center parking area.
5. Green edges to site to remain and be enhanced.
6. Proposed location for hotel.
7. Access to rear of new rink building and SOEC via Vernon Ave. Redesigned parking area will allow for semi-truck access and turning.
8. New pedestrianized street.
9. Future third rink located in new building to East of SOEC.

Note: The red line on the diagram indicates line of sewer and lift station. This option would negate the requirement for the relocation of this infrastructure.

Exhibit 32. Conceptual Site Plan – Twin Pad to the South

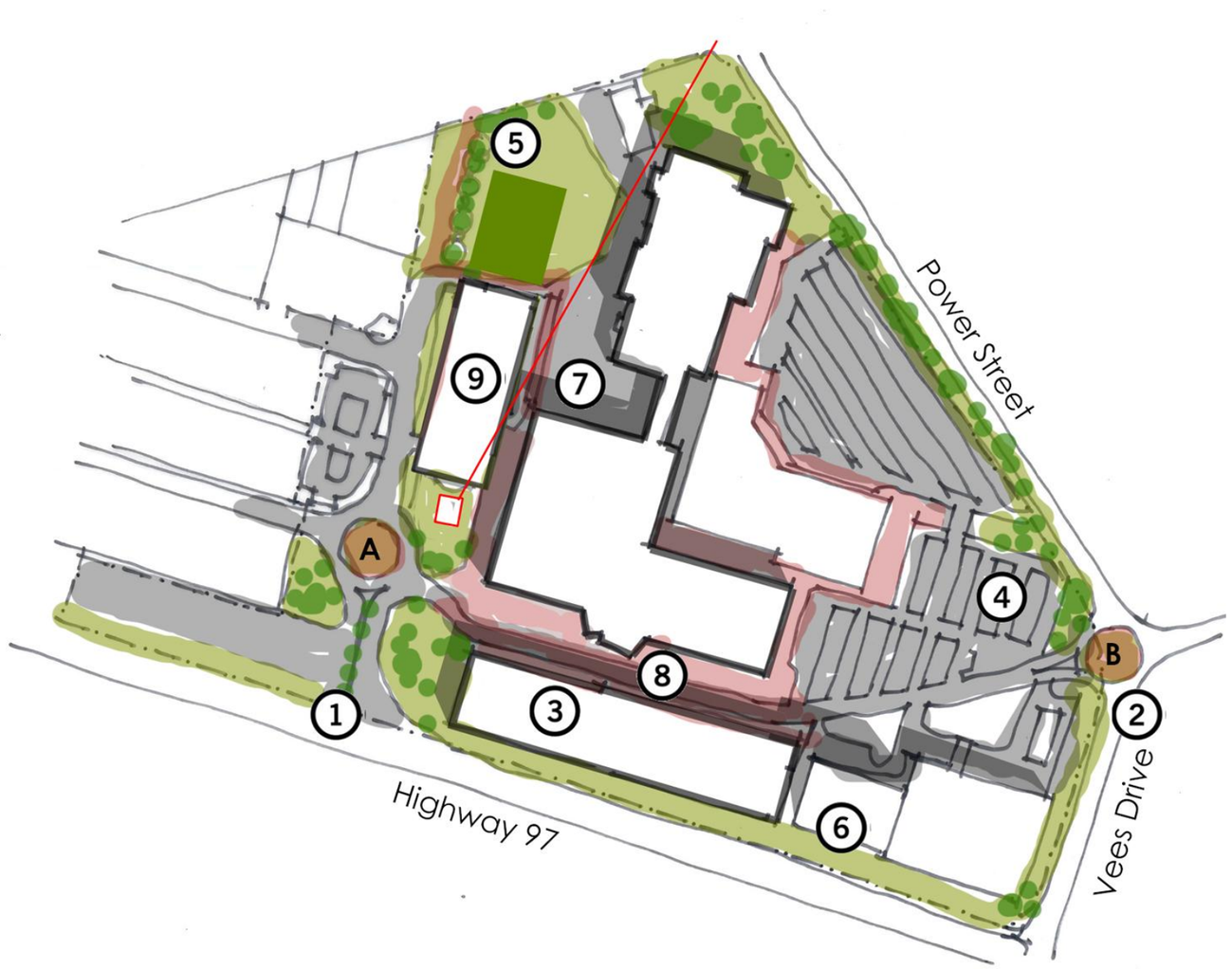
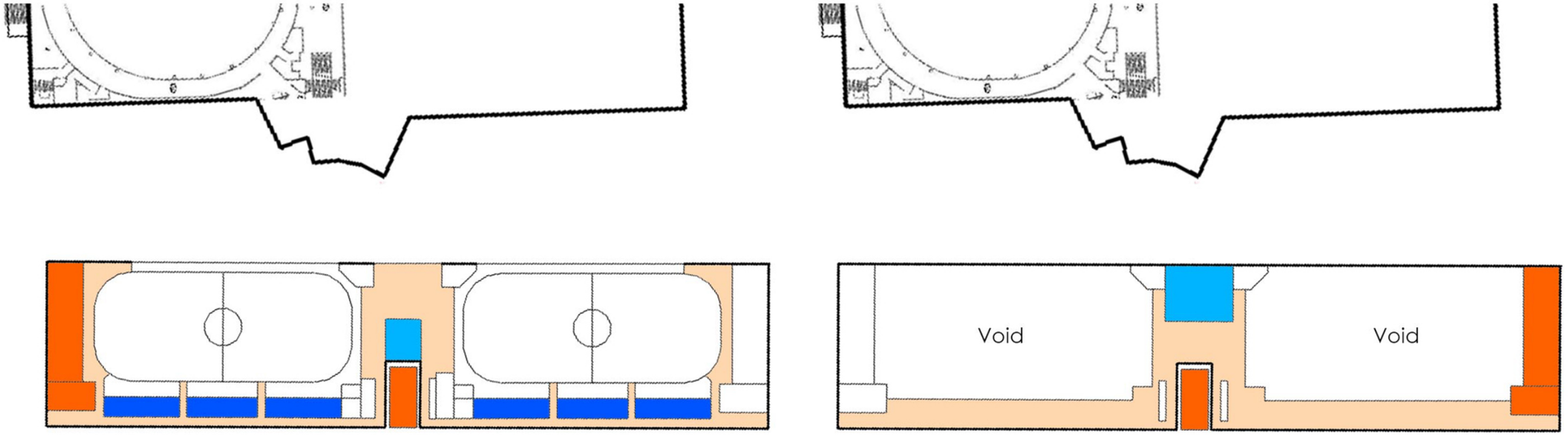


Exhibit 33. Floor Plans – Twin Pad to the South



Level 01

Level 02

- Public rink spaces
- Hockey Academy
- Changerooms
- Service areas

PART C: RECOMMENDED PLANS

5. RECOMMENDED SCALE OF PREFERRED OPTION FOR DEVELOPMENT

5.1 Preferred Option

The analysis of need demonstrates the advantages of developing a total of three new indoor ice surfaces and decommissioning both the Memorial and McLaren Arenas. The additional need is likely to emerge by 2031 and 2036 at the latest. Assuming the earlier trigger point, the capacity to build three pads as a single phase would represent an efficiency to both process and capital cost. It would also create efficiencies at an operational level and bolster the opportunity for additional economic impacts from commercial and community ice use sooner rather than later.

The capital costs of development are significant as identified subsequently in this report. Considering this and given that the need for an additional rink is subject to future population growth - albeit growth that is expected in the near term - the balance of the report addresses the preferred option is being the development of a twin pad facility at the SOEC complex.

The preferred option comprises the following:

- Decommissioning and demolition of Memorial Arena.
- Decommissioning McLaren Arena as a public ice rink utilized for public skating, hockey, figure skating, and any other sports save and except for curling.
- Construction of a twin pad facility to the immediate west of the SOEC building.

Additionally, for active consideration we recommend the following:

- Repurposing McLaren Arena as a six-sheet curling facility.
- Decommissioning the existing curling club building and sale of the property (with improvements remaining) to the Casino. The sale value should reflect the highest and best use of the lands which is likely to include a significant increase in density on the site.

The following sections provide further details regarding the preferred option.

5.2 Site Development Issues and Resolution

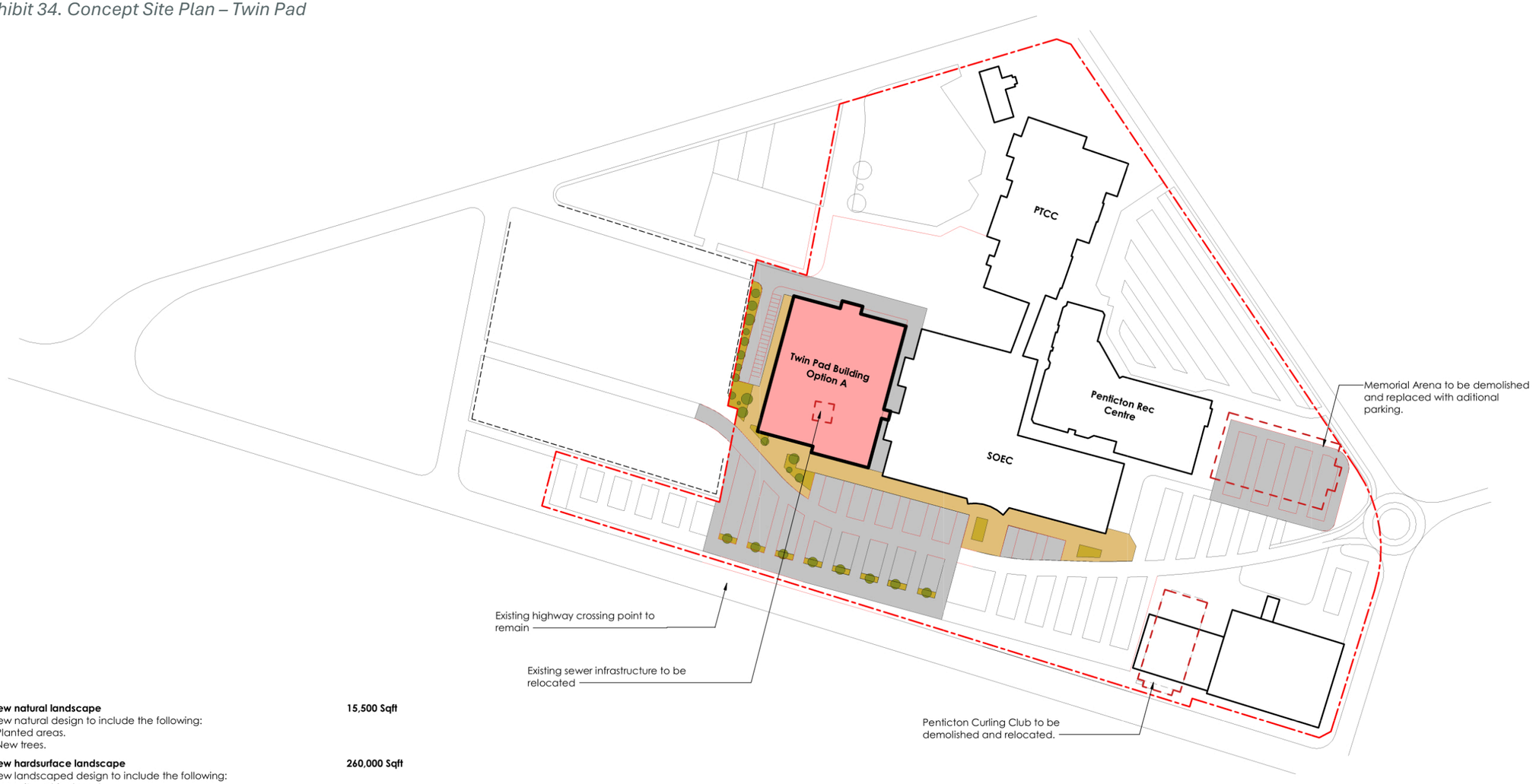
The consulting team undertook further detailed assessment of site planning opportunities. This was based on confirmation of the location of the twin pad arena to the west of the SOEC building. This created the need to assess the most appropriate configuration of access to the site and circulation within the site.

The consulting team also reached out to the City's retained transportation consultant - Urban Systems - for without prejudice discussions regarding the merits of changes to the road network.

The site plan also considers the recent purchases that the City has made of lands to the west of the SOEC. The design includes a potential long term road alignment which opens up further lands for development. The principal changes envisioned for the site are shown on the following exhibit and summarized below:

1. Closure of Alberni Street is immediate with development of the twin-pad.
2. Access will remain from Highway 97 with servicing access to the rear of the building from Westminster Avenue. The pedestrian crossing is to be retained in this location.
3. Future City road network linking the parking lot in front of the new arena to Westminster Avenue and providing access roads that define future development parcels. Note that this represents a future vision for development and intensification of lands in the vicinity of the site. It does not represent a decision of the City to pursue redevelopment of these lands at this time.
4. There will likely be a need for traffic management improvements as a result of both the location of development and the more intensified use of the site as a whole. Traffic, broader transportation and parking impacts should be subject to specific assessment (Transportation Impact Assessment) as part of the next steps in detailed design and planning.
5. New hard and natural landscaping as required on the overall site.
6. Replacement of Memorial Arena with additional surface parking.
7. The existing lift station will be relocated to a point closer to Highway 97. It is understood from discussions with the City that expansion is desirable in order to improve services in this area of the City and promote further development. Accordingly, the relocation is both possible in principle but represents a cost for relocation that is attributable to the project. Expansion itself is not a project cost, but relocation would not be required were it not for the conflict with the siting of the arenas.

Exhibit 34. Concept Site Plan – Twin Pad



New natural landscape **15,500 Sqft**
New natural design to include the following:
- Planted areas.
- New trees.

New hardsurface landscape **260,000 Sqft**
New landscaped design to include the following:
- New site vehical roads.
- New parking stalls.
- New sidewalks.
- All associated hard surface drainage.

New paving **45,100 Sqft**
New hard landscaped design to include the following:
- New paving to pedestrian plaza and entrance areas.
- Urban ladscape features such as street lighting, benches and cycle stands
- All associted surface drainage.

Note: Additional parking is located on the western flank of the building and consideration will need to be given as to whether this dead-ends or links to the parking in the southern portion of the site.

PRELIMINARY NOT FOR CONSTRUCTION

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CONCEPT SITE PLAN - OPTION A (DRAWING TITLE) | 2025 (DATE) | 1 : 1500 (HALFSIZE PLOT; REDUCE SCALE BY 50%) | 002 (DRAWING NUMBER)

Penticton Twin Pads Study | 24.275 (PROJECT NUMBER)

5.3 Proposed Functional Space Program

The following outlines the functional space program that the consulting team has developed to accommodate the new twin pad design. Several important aspects of this design include the following:

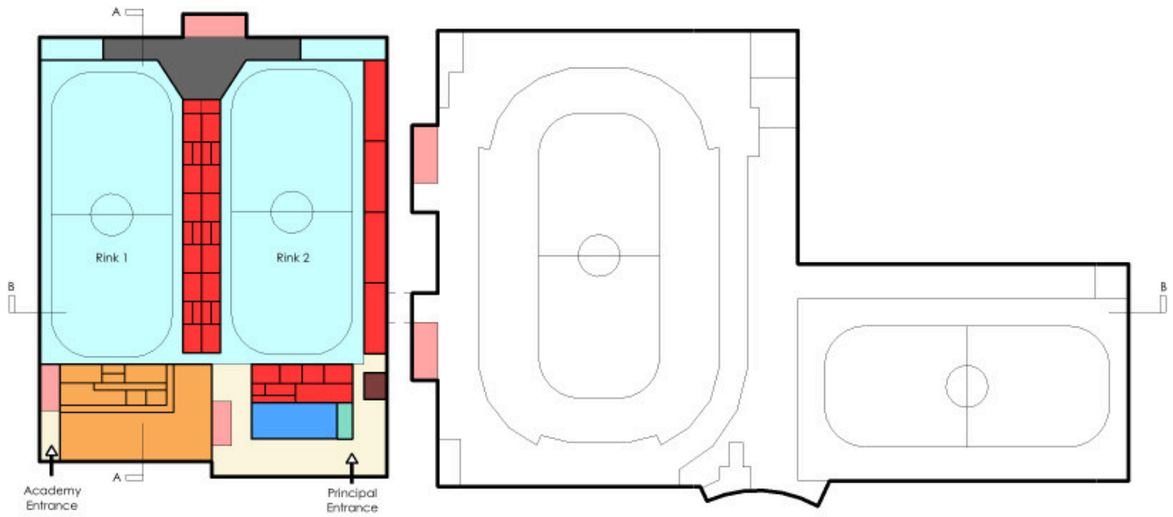
- A total of 75,000 square feet gross floor area (GFA).
- Fixed seating surrounding rink 2 to represent more of a feature rink in comparison to rink 1 that would be strictly for community use with a minimal number of seats, which may include only portable bleacher seats. In our view, it is important that with the decommissioning of Memorial Arena there is at least a capacity to host higher-order games with some level of spectator amenity in at least one of the rinks. We recognize that the main event centre building is a large venue, but based on our research and consultation is apparent that there is a struggle to secure sufficient access to that facility to host community level games. Therefore, we recommend that detailed consideration is given to ways to improve seating and viewing within the twin pad arena.
- A provision for offices for two of the key community user groups.
- A significant provision for the OHA of some 13,000 square feet. This includes office space of approximately 10,000 square feet which is over and above their existing office space under lease within the main event centre building complex. The 10,000 square feet addition represents a net increase in this space, not a replacement of their existing space.
- With the demolition of Memorial Arena and the loss of dedicated change rooms for the OHA these dedicated rooms will be provided within the new twin pad arena.
- All space provided to the OHA will be fully funded by the OHA itself and does not represent a capital or operating cost to be borne by the City.

The functional space diagram is provided on the following page.

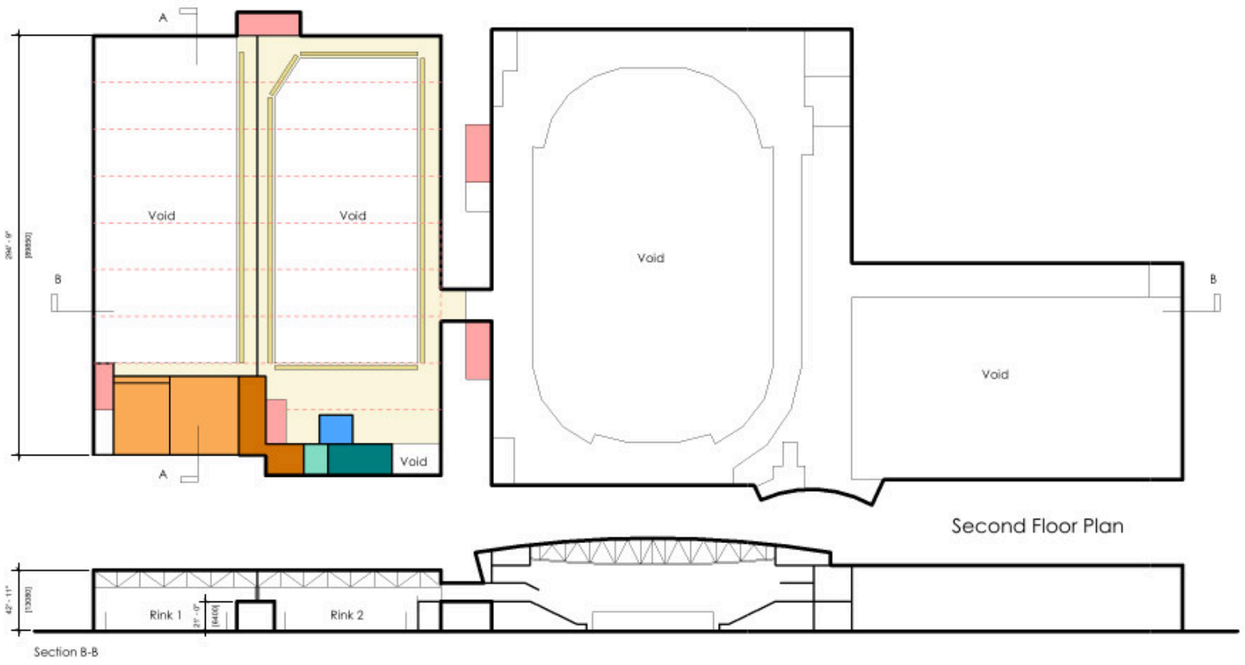
Exhibit 35. Functional Space Diagram – Twin Pad

Recommended Option
Building Footprint - 74,908 Sqft

	Fixed Seating Fixed seating surrounding rink 2 and single side of rink 1.	**1600 Sqft**
	Concourse/ Lobby/ Vestibule/ Viewing areas Entrance lobby space have significant full height curtain walling system. All circulation areas to have concrete floors. Second level circulation to have glass balustrade to edge of voids.	**24,370 Sqft**
	Vertical circulation Concrete stairs and single elevator. Principal stair from entrance lobby to be designed as architectural feature and incorporate principal building elevator.	**6200 Sqft**
	Public Toilets WC facilities to be divided into male, female and accessible. WC facilities to be robust in design.	**2000 Sqft**
	Concession / Merchandise Food and Beverage concessions spaces. Spaces to be fit out only allowing tenant to design space. Merchandise space to be designed as retail outlet.	**1000 Sqft**
	Broadcast Facilities Centrally located room to be designed to have high level audible insulation.	**300 Sqft**
	Players/ Performers/ Officials Rooms Skate sharpening room. Players changing and locker rooms. Separate referee room with independent WC and shower facility.	**9885 Sqft**
	Event Support Including Rinks and Storage Ice surface 1 & 2. Spaces to be designed with fully equipped ice rink to include all boards, benches, playing surface, scoring benches etc. Separate lockable storage room with external access. External loading area.	**44,300 Sqft**
	Administrative Office and administration areas to be designed to commercial office quality level. Second level spaces to have large window openings. Ground level administration area to be designed with feature entrance desk.	**650 Sqft**
	PMHA & Glengarry FS Offices and Board Room	**1600 Sqft**
	Okanagan Hockey Academy	**13,000 Sqft**
	Building Support Mechanical rooms and ice plant. Central location for ice cleaner with external access.	**3446 Sqft**
	Total	**108,351 Sqft**



Ground Floor Plan



Second Floor Plan

Section B-B

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PRELIMINARY NOT FOR CONSTRUCTION

CONCEPT BUILDING PLANS - RECOMMENDED OPTION (DRAWING TITLE) | 2025 (DATE) | 1" = 50'-0" (HALFSIZE PLOT: REDUCE SCALE BY 50%) | 003 (DRAWING NUMBER)

Penticton Twin Pads Study | 24.275 (PROJECT NUMBER)

6. ORDER OF MAGNITUDE CAPITAL COSTS

6.1 Basis for Capital Costs

Capital costs represent indicative estimates (or Order of Magnitude Estimates – OME) of likely cost based on the scale and nature of construction. Costs include the building, site development (allocation), landscaping and parking additions, project soft costs and contingencies.

Costs are developed at the Class D (pre-design) level of precision which suggests the benefit of including a project cost contingency of 20 to 25%.

The OME capital costs represent reasonable estimates of cost based on unit rates known to be accurate for the current period (Q2 2025). Unit costs represent hard construction costs inclusive of general contractor overhead and profit but are exclusive of the range of soft costs that are part and parcel of development projects. An allocation for soft costs is provided to arrive at an estimate of total project capital costs.

Within these estimates, site development costs are also added. It is assumed that there are no extra-ordinary site development costs resulting from environmental conditions or geotechnical conditions or for other reasons. Estimates of cost include relevant contingencies to account for the fact that limited information is available at this pre-design stage of planning.

The design and resulting estimates of capital are intended to meet the estimated market potential for a high quality, 40-year building, developed as part of a major expansion of the SOEC campus. The capital costs are reflective of the overall recommendations of this report. This includes ensuring that costs are not under-estimated as a basis for future planning.

Finally, a reasonable estimate of capital costs is required for any funding plan that is developed for discussion with government.

6.2 Site-Related Development Costs

Until such time as design is progressed with on-site due diligence of site conditions, the estimation of site-related development costs is assumed based on a workable site that does not pose abnormal physical development constraints.

The estimates of capital cost exclude any allocation for extra-ordinary site-related development costs over and above the inclusion of an overall project contingency budget to reflect these and other unknowns prior to more detailed site engineering and design.

It will be the decision of the City as to whether to budget another order of magnitude contingency in addition to the estimates provided, based on any expected complications associated with the site. As the site was developed for the SOEC, the City has access to good intelligence on the nature of soil conditions and the implications for development.

The development of any site has three major areas of concern with regards to the overall costs to the project. The significance of these issues will depend on the site in question.

1. The bearing capacity of the subsurface soils;
2. The occurrence of groundwater at shallow levels of the property; and
3. The possible environmental condition of the site.

The next steps involve a more refined assessment of site conditions and the implications for capital costs in terms of site preparation, grading and foundation engineering. If soil condition is poor, the building may require enhanced foundations to be engineered. The foundation options would include the possibility of piers or caissons. Because of this, an additional cost for foundations, concrete and steel should be anticipated. Until a complete geotechnical report has been completed for the selected site, a firm cost estimate for the foundations cannot be estimated. Regarding any site with a shallow water table, the site may require dewatering.

6.3 OHA-Related Capital Costs

The estimate of capital costs provided includes the space dedicated for the OHA. However, these costs – to include the relative share of all capital costs including site-related costs, building construction costs, project soft costs and contingencies are then itemized and can be removed from the overall budget for which the City is liable.

This report does not address the matter of cost sharing; this is an issue that will need to be resolved through discussion with the relevant parties. It would be appropriate to assess a cost share based on the cost of the building, but not necessarily costs related to demolition and other site development.

6.4 Contingency and How it Works

Capital cost estimates represent an order of magnitude estimate (OME) of probable capital costs based on the scale and composition of uses in the building. As such, it represents a Class D estimate[1] of capital costs which is the first and most preliminary of cost estimates that accompany concept development. This type of cost estimate is also referred to as a pre-design estimate of costs. As such, it is appropriate to add a contingency factor to the resulting cost estimates. In this case, a reasonable contingency provision is in the order of an additional 25%.[2] The anticipation is that, as the project is subject to more design refinement, and more details regarding site related costs are known, this overall cost contingency can be reduced.

Subsequent costing of the project can occur if and when the project moves beyond the design concept stage. A Class C estimate of costs equates to approximately a 33% level of design development, a Class B costing at the 66% level of design development, and a Class A costing at the time of completed tender documents. By that time, the expected accuracy of costs is within 5 to 10% of the eventual bid prices.

In summary, capital costs are inclusive of:

- Construction hard costs;
- Soft costs – these include all associated fees for surveying, site testing, design, engineering, overhead, administration and bonding, permitting, legal and project management, and construction contingency, etc.;
- Furniture Fixtures and Equipment (FF+E);
- Additional (Class D) design and construction contingencies; and
- Allocations for site development inclusive of site grading, earthworks, services emplacement, storm water management, landscaping, access and internal roadways, lighting, etc.

Accordingly, the costs presented represent an estimate (including any relevant allocations for site works) of **total project cost including contingency**.

[1] The capital cost estimates do not include non-recoverable HST costs. In British Columbia, 100% of the GST portion of net payable HST is refundable to municipalities, along with 75% of the provincial part of the HST. At this time, we have excluded HST from the analysis because of the preliminary nature of the capital costing and the use of a high contingency factor.

[2] Note that Class D contingencies are often referred to in terms of **+/-** 25%. For initial planning purposes, a more reasonable method involves establishing a total project cost per sq. ft., **plus** a contingency (25%) that may be reduced or confirmed as the design process is refined. Note that some government grant applications require higher contingency estimates in order to fully mitigate potential cost risks and/or ensure that the necessary one-time funding envelope is not exceeded. In our opinion, 25% is a reasonable estimate in order to provide a meaningful assessment of cost.

6.5 Order of Magnitude Capital Costs of Twin-Pad Development

Based on the inclusions identified above, the estimated capital cost of development is shown in the adjacent exhibit.

The estimate of costs includes the costs of demolition of Memorial Arena as well as the development of surface parking in its place. The estimates exclude the costs associated with the demolition of the existing Casino in the circumstance where the curling club is relocated to McLaren Arena.

The costs associated with renovating McLaren Arena as a curling facility are provided in the section which follows.

The original cost estimates developed by Greyback are provided in the appendices.

Exhibit 36. Order of Magnitude Capital Costs – Twin Pad

Item Description	Takeoff Qty	Takeoff Unit	Total Unit Price	Grand Total
Hard Construction Costs				
1. Hard Costs Outside of Base Building				**$7,688,105**
Shell Building (Site & Soil Upgrade Related)	74,908	Sq.Ft.	$76	$5,688,105
Demolition of Memorial Arena and the placement of +/- 120 parking spaces (paved, striped and landscaped)				$2,000,000
2. Hard Costs Base Building (Per Sq.Ft. Summary)	**74,908**		**$466**	**$37,832,648**
#01 Vertical Circulation	3,890	sqft	$50	$194,500
#02 Concourse / Lobby / Viewing Area's	24,370	sqft	$75	$1,827,750
#03 Toilets	1,496	sqft	$275	$411,400
#04 Concession / Merchandise	1,120	sqft	$300	$336,000
#05 Media Facilities	300	sqft	$150	$45,000
#06 Players / Officials Rooms	9,885	sqft	$200	$1,977,000
#07 Event Support inc Rinks, Plant & Storage	44,300	sqft	$153	$6,765,000
#08 Admin	2,240	sqft	$225	$504,000
#09 Building Support	3,446	sqft	$250	$861,500
#10 Okanagan Hockey Academy	13,000	sqft	$225	$2,925,000
#11 Shell Building (Full Envelope & Basic Foundation	74,908	sqft	$294	$21,985,498
TOTAL HARD CONSTRUCTION COSTS	**74,908**		**$608**	**$45,520,753**
Soft Costs				
3. Twin Pad Furniture, Fixtures & Equipment			**14.3%**	**$5,396,981**
Twin Pad Furniture, Fixtures & Equipment	1.00		$5,396,981	$5,396,981
4. Other Soft Costs			**9.8%**	**$4,470,624**
Building Permits	1.00	lsum	$567,000	$567,000
City Connection Fees	1.00	lsum	$75,000	$75,000
Consultant Services	1.00	lsum	$3,000,000	$3,000,000
Development Cost Charges	1.00	lsum	$728,624	$728,624
Transformer & Base	1.00	lsum	$100,000	$100,000
TOTAL SOFT COSTS	**74,908**		**$132**	**$9,867,605**
TOTAL CAPITAL COSTS	**74,908**		**$739**	**$55,388,358**
Contingency for Class D Order of Magnitude Estimate (Cumulative)				
1. Design and Pricing			15.0%	$8,308,254
2. Construction			10.0%	$6,369,661
Total contingency			**26.5%**	**$14,677,915**
GRAND TOTAL FOR TWIN PAD ARENA	**74,908**		**$935**	**$70,066,273**
Additional Cost of Lift Station Relocation*				$1,000,000
GRAND TOTAL FOR TWIN PAD ARENA (incl. Lift Station Relocation)	**74,908**		**$949**	**$71,066,273**

*Note: The relocation of the lift station is costed at an additional $1 million (based on the City estimates).

7. PLANS FOR MCLAREN ARENA

7.1 Rationale for Converting McLaren Arena

Potential plans to renovate McLaren Arena have several important benefits.

1. Prior work on the potential future use for McLaren Arena has routinely bumped up against a realization that this site is not one that can be simply disposed of to the private sector for alternative forms of development. The arena operates as part of a broader neighborhood park and as such is best retained as part of the public realm. Disposing of the arena for development while retaining the park is probably not ideal from a real estate, planning or community benefit perspective.

2. The second benefit is that the McLaren building itself represents an older facility which with careful renovation can still play an important role in serving the needs of the city as a public recreation venue. Specifically, if the facility were reconfigured to accommodate curling this would enable the existing curling facility on the SOEC campus to be redeveloped. The purpose of such redevelopment would be to unlock the inherent land value associated with the existing curling site and to enable either a hotel or other development associated with the Casino - potentially an expansion. If the land on which the curling club sits was sold, sale proceeds can support the development plans for new ice; and if the Casino expands operations or a hotel is developed on this site, incremental property tax revenue accrues to the City, again as a means to help fund the new arenas. Should Casino operations benefit from these developments, the City's share of proceeds may also increase – assuming the agreement between the City and Casino facilitates such an arrangement. Further analysis is required to determine if this is a feasible funding strategy. Such analysis is out of scope of this report.

It should be noted the consulting team ruled out the possibility of retaining McLaren Arena as a primary hockey venue in order to limit the development at the SOEC to one new arena to replace Memorial Arena. As noted earlier in this report this cost minimalization approach does not have long term benefit to the City and was therefore rejected.

7.2 Proposed Development Plan

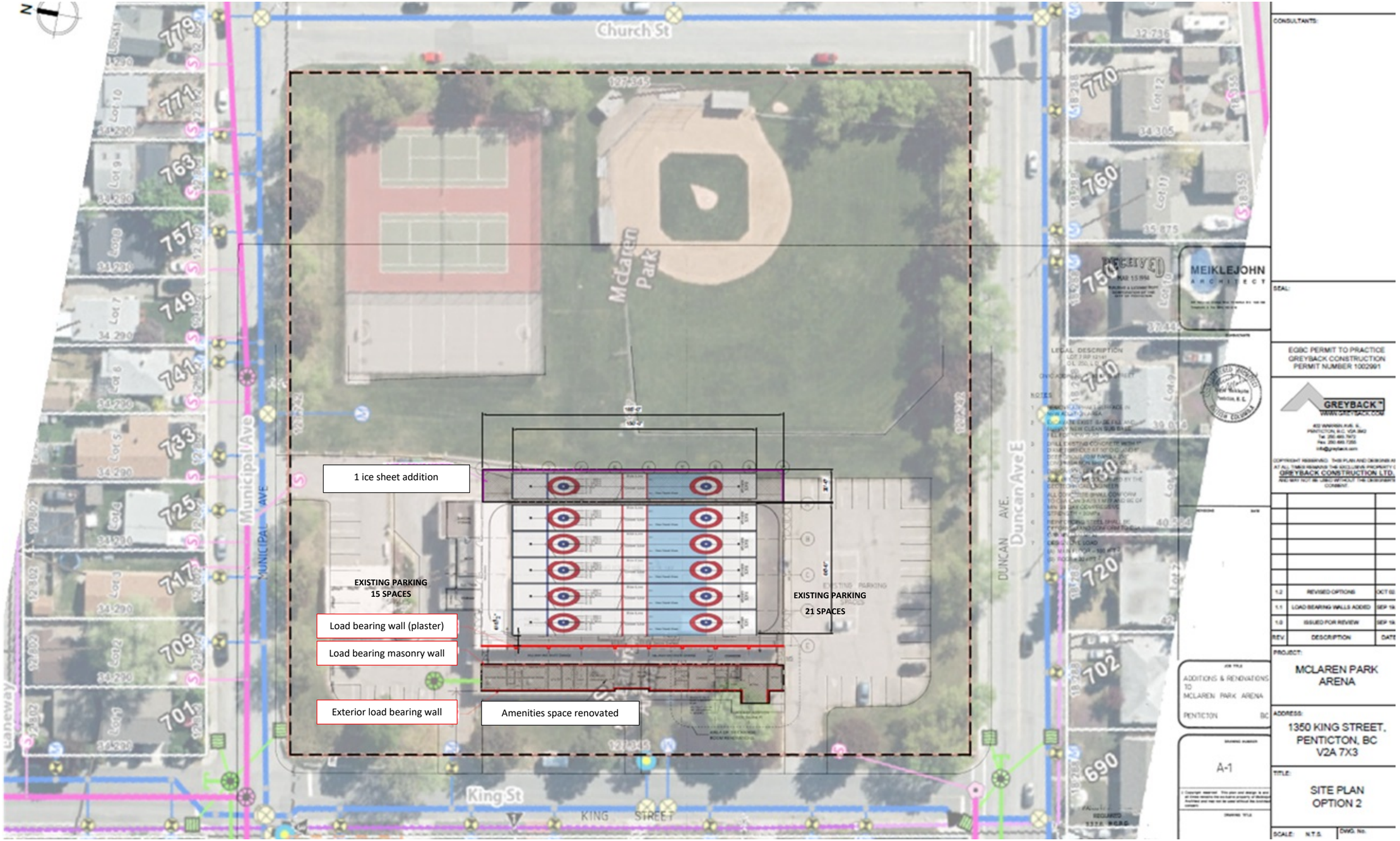
The consulting team developed several design alternatives for the renovation and expansion of McLaren Arena to include curling.

The existing building can accommodate renovation to accommodate five curling sheets, with relatively little renovation required.

Additional curling sheets will necessitate an expansion of the building envelope, and a number of options could be considered – up to 7 sheets.

The following plan-view diagram demonstrates a six-sheet curling rink facility plan. The proposed plan maintains a single storey design with the existing changing room and office areas on the western flank of the building to be converted to locker space and other amenities.

Exhibit 37. Curling Rink - 6 Sheets



7.3 Capital Costs of Conversion

The following outlines the estimated order of magnitude capital costs for the conversion of McLaren Arena. This is based on the development of a six-sheet facility maintaining a single storey design with the existing changing room and office areas on the western flank of the building to be converted to locker space and other amenities, per the requirements of the curling club, and building a two-level addition overlooking the facility.

The costing provided is for a 6-sheet curling rink with new amenity space:

- Building addition to existing skating rink, matching building materials and construction methods, to accommodate **one** additional sheet of curling ice (for a total of **6 sheets in total**).
- A two-level (5,568 sf) addition to South end of existing rink.
- Renovation/conversion of existing amenity space attached to existing rink.
- New asphalt parking with angled parking at area of old amenity space.
- Includes connection into the existing refrigeration plant assumed to be adequate to support the expansion.

Exhibit 38. Order of Magnitude Capital Costs – McLaren Arena

Item Description		Grand Total
Hard Construction Costs		
1. Hard Costs		**$5,233,808**
Building addition to existing skating rink, matching building materials and construction methods, to accommodate **one** additional sheet of curling ice		
5,568 sf two-level addition to South end of existing rink		
Renovation/conversion of existing Amenity space attached to existing rink		
New asphalt parking with angled parking at area of old amenity space		
Includes connection into the existing refrigeration plant assumed to be adequate to support the expansion		
TOTAL HARD CONSTRUCTION COSTS		**$5,288,822**
Soft Costs		
2. McLaren Arena Furniture, Fixtures & Equipment	**7.5%**	**$392,536**
Furniture, Fixtures & Equipment	$392,536	$392,536
3. Other Soft Costs	**7.5%**	**$392,536**
TOTAL SOFT COSTS		**$785,071**
TOTAL CAPITAL COSTS		**$6,018,879**
Contingency for Class D Order of Magnitude Estimate (Cumulative)		
1. Design and Pricing	10.0%	$601,888
2. Construction	5.0%	$331,038
Total contingency	**15.5%**	$932,926
GRAND TOTAL FOR MCLAREN ARENA		**$6,951,805**

8. IMPLEMENTATION

8.1 Meet Not Only Replacement But Future Ice Needs

As outlined in this report, the development of a twin pad arena facility to replace the City's two older arenas may appear to be a replacement-only strategy but the reality that a new building can be expected to offer a considerably higher level of service to all users – particularly and if need be, by supplying spring ice at a higher level than at present. The needs of lacrosse should be addressed if Memorial Arena is removed.

Beyond the development of the twin pad arena, the analysis of need points to the likely requirement for a third pad to meet both city and regional needs in the next 5 years.

It is the City's choice as to whether it chooses to target a twin pad project or pursue a single-phase triple pad project. There are advantages of the latter and our development plans provide for this. However, given the scale of funding likely, and the ability of a new building to improve ice utilization compared to the two older arenas, the City would be acting reasonably to pursue the twin pad project and defer on the expansion to include a third pad.

It is highly recommended to consider the ability of the future design of the new building to allow for expansion by an additional pad; and therefore, scale the building systems including ice plant accordingly, and ensure that site planning and circulation (including loading) are all workable at the larger scale of development.

The reality of parking compaction is generally limited to peak demand period where many of the campus activities are occurring at the same time – SOEC function, PTCC use, Community Centre operations (including pool) and operations of the community rinks. It remains the case that as development proceeds and could potentially include the expansion of the Casino or related development on the site, there should be further assessment of parking options. Rather than sterilize land on the periphery for parking, the consideration should include other options including structured parking. This may represent a future priority and is not attributable alone to the twin or triple pad development, but it the result of the overall intensification of development at the campus.

We recommend that a Traffic Impact Assessment (TIA) is undertaken in respect of both the proposed twin pad option, a future triple pad building, and the potential additional development adjacent to the existing Casino.

8.2 Governance of the New Arenas

Maintain Existing Third-Party Management Approach

Currently the City has direct operational control over McLaren Arena. The City owns all ice arenas in the City. The plans proposed in this report would remove McLaren Arena from operation by the City.

The City therefore should undertake a fundamental review of its current and future governance of the arenas and the ability of this model to meet the needs of the two primary drivers – the economic impacts of commercial ice use, and the sustained and growing demand for community access to ice, itself with not insignificant economic impact potential.

As noted previously in this report, the current operation of Memorial Arena and the OHTC arena by OVG has produced a well-respected system of fair and equitable access to the ice and a level of utilization that meets a wide range of demand for ice use.

The operation of the new twin pad with the existing third-party management model is a reasonable approach. Adopting a different operator is certainly possible but would not be expected to generate the overall efficiencies that a single operator could achieve.

Policy Development

The most important element in any consideration of governance is the ability of the City to maintain maximum control over ice allocation, pricing and the application of subsidy-related policies.

A commercial operator of the City's arenas and the SOEC does not equate to or replace the function of the City's recreation services function. This report has made clear the importance of maintaining commercial use of the ice, but the growth in need for ice in future years is community driven.

Should the twin pad project proceed, it is recommended that the City undertake a detailed update to its ice allocation policy – separately for each of the community arenas (OHTC and the new twin pad) and for allocation overall. **The allocation policy will ensure the necessary balance in access to ice is achieved and will require the commercial operator to comply with these allocation provisions. In no way should the management responsibility of all the City's arenas by provided to a commercial operator without the clear safeguards provided by a priority-based community ice allocation framework.**

Similarly, the City should develop more robust policies governing the pricing of community ice. This is particularly important as a consequence of municipal investment in new arena infrastructure. A full cost recovery analysis should be undertaken to determine the overall level of subsidization of user rates, with a view to establishing firm and long-term policies regarding pricing according to different uses of the ice and for different users. Pricing should also consider the ability of user fees to help pay for the long-term financing costs of the City's investment and/or fund the development of necessary capital reserves to enable future year building lifecycle investment.

As part of the overall funding plan for the arena, user fees are a relevant consideration. For example, what is an appropriate rental rate to charge for-profit ice users? What is the appropriate rental rate to apply to regional tournaments, adult leagues and other events in the community arenas (including other non-sport events). Policies to address the funding of the arenas, access to the arenas, pricing and policies regarding variable levels of subsidization are all connected. The development of new arena infrastructure should include robust policy development regarding governance of the arena portfolio, the role and responsibilities of a third-party management firm as it pertains to community recreation services (related to ice), operational cost recovery targets and a three-year rolling operational business plan for the entire portfolio – approved by the City and to be implemented by the management firm.

Operating Estimates

Section 1 of this report includes reference to projected operating costs and revenues and net operating deficits undertaken as part of the 2019 report for the twin pad project. The central tenets of that analysis remain relevant. Once the development plans as proposed in this report are confirmed by the City along with its preferences related to the management of the facilities, annual financial operating plans should be updated for the City's community arenas as whole.

8.3 Capital Funding Plan is the Next Step

Prioritize the Project and Develop a Holistic Capital Funding Plan for All Priority Projects

The recommendation of this report is to approve the recommended development plans in principle, subject to the development of a capital funding plan. The work necessary to develop the funding plan should commence immediately. To successfully evolve a funding plan that creates an acceptable balance between tax-supported debt and other funding sources, the City should identify the development of a new arena complex as a joint top priority for funding.

The City should seek to achieve the following schedule of implementation:

- Summer 2025 - Receive study. Approval to proceed to preliminary design. Approval of Development Cost.
- By December 31, 2025 - develop a capital funding program that outlines in sufficient detail the sources of funding for the project including the anticipated long-term debt and annual sources of funding to defray debt (the period of each source of funding measured in years expected to vary by funding source).
- 2026-2027 – Preliminary design, site exploratory work, funding strategy, etc.
- 2028 – Design of the facility likely to be undertaken via a Progressive Design Build (IPD) approach.
- 2028-2030 – Facility construction.

Based on this schedule, opening by the fall of 2030 is an aggressive schedule but should be targeted.

Identifying the project as subordinate to other high priority projects tends to reduce the impetus for crafting a funding plan. Regardless of whether the project is designated as the City's top infrastructure project or not, it is advisable to develop a funding plan for all priority projects together. It is precisely because there is competition for municipal debt capacity and other municipal revenues that necessitates a model of municipal capital funding that ensure the timing for each priority project is maintained and with it, access to capital funding over the debt retirement period – whether this is 20, 25 or 30 years.

Upper-Level Grant Funding

The 2019 report identified the primary grant funds available – principally the Investing in Canada Infrastructure Program (ICIP) established under the bilateral agreement between the Government of Canada and the Province of British Columbia some years earlier. That funding source was to conclude by 2027 when all projects would have to be completed. Whether this funding program has renewed life, was replaced by other heavily marketed programs – such as the Green and Inclusive Community Buildings Program – is a matter that should be researched as part of the next phase of work, and following the decision of Council to adopt the preferred development plan established in this report.

Notwithstanding the lifecycle of both Federal and Provincial infrastructure grant programs, and the research needed to define the eligibility of the proposed project under any such program, all grant programs are speculative. Other upfront capital funding should be investigated and could include determination of whether there are other sources of guaranteed municipal infrastructure funding that could be redeployed to this project. As of the 2019 report, discussion with City administration indicated that there are no available sources of annual capital funding from upper levels of government that would be capable of being redirected to this project.

The basis of a funding plan can therefore be expected to include the following:

1. Long-term debt that may be required represents the net unfunded capital after accounting for all upfront capital sources. It is assumed that debt can be achieved based on low interest loans and favourable amortization periods and other conditions per Municipal Finance Authority of British Columbia (MFABC). As of 2019, the BC Community Charter specified that the amortization period of long-term loans may range from 5 to 30 years.
2. The application of a range of other funding potential applied on an annual basis to defray the annual costs of the long-term debt.

Annual Funding Sources

Following the approval of the development concept, coupled with a commitment to develop the project with an opening date no later than the fall of 2028, a range of capital funding sources should be assessed for their likelihood:

- Development Levies (including a determination whether recreation projects are eligible and whether the City is willing to commit future annual development cost charges to the project).

- Determination of whether Destination Marketing Fees can be used to support capital.

- User Group Registration and/or Rental Fee Surcharges.

- Naming Rights (but recognizing these are generally applied to operations to reduce annual operating deficits).

- Redirection of Casino Revenue Support – this is a mainstay of funding that we would assume could be applied to the project. The source has been used to retire the debt associated with the SOEC. We would expect that the funding can be applied to the project to a significant degree unless the City has already committed such funding to other capital priorities. It is also important to note that the City can borrow against the future revenue contribution from the Casino – as of 2019, this was a maximum of $26 million. With an expanded Casino, the potential for financing against the City's share of revenues may be higher.

- Sale of land upon which the existing curling club is located.

- Future property tax increments generated by additional development in the vicinity of the project (such as hotel development).

- Capital cost avoidance associated with decommissioning existing facilities – the closure and demolition of Memorial Arena will save the City the costs of necessary and expensive lifecycle costs associated with maintaining the aging arena.

- Other sources as may be identified through a due diligence effort immediately following the approval of this report.

Funding Alternatives

For the purposes of discussion, there are alternatives to the traditional model of municipal ownership and operation. Examples include the following:

1. Private sector funding of 100% of capital costs in exchange for guaranteed rental of facility by the City over long term at market rate;

2. Private Sector Build and Lease Back to City (Lease to Own); and

3. Municipal capital and operating cost sharing with surrounding municipal jurisdictions (assumed as unlikely).

Further analysis of these options can be provided by the consulting team if the City is interested in alternative finance and procurement (AFP) methods for the project.

APPENDIX A
DETAILED COST ESTIMATES

CSI	Item Description	Takeoff Qty	Takeoff Unit	Total Unit Price	Grand Total
	1. Hard Costs Outside of Base Building	74,908.00		75.93	5,688,105.00
	Shell Building (Site & Soil Upgrade Related)	74,908.00	sqft	75.93	5,688,105.00
	2. Cost Per Sqft Summary	74,908.00		466.01	34,907,648.00
	#01 Vertical Circulation	3,890.00	sqft	50.00	194,500.00
	#02 Concourse / Lobby / Viewing Area's	24,370.00	sqft	75.00	1,827,750.00
	#03 Toilets	1,496.00	sqft	275.00	411,400.00
	#04 Concession / Merchandise	1,120.00	sqft	300.00	336,000.00
	#05 Media Facilities	300.00	sqft	150.00	45,000.00
	#06 Players / Officials Rooms	9,885.00	sqft	200.00	1,977,000.00
	#07 Event Support inc Rinks, Plant & Storage	44,300.00	sqft	152.71	6,765,000.00
	#08 Admin	2,240.00	sqft	225.00	504,000.00
	#09 Building Support	3,446.00	sqft	250.00	861,500.00
	#11 Shell Building (Full Envelope & Basic Foundatio	74,908.00	sqft	293.50	21,985,498.00
	3. Twin Pad Furniture, Fixtures & Equipment				4,979,718.00
	Twin Pad Furniture, Fixtures & Equipment	1.00	lsum	4,979,718.00	4,979,718.00
	4. Soft Costs & (By Others) Outside of Budget				4,470,624.00
	Building Permits	1.00	lsum	567,000.00	567,000.00
	City Connection Fees	1.00	lsum	75,000.00	75,000.00
	Consultant Services (6.5% of	1.00	lsum	3,000,000.00	3,000,000.00
	Developement Cost Charges	1.00	lsum	728,624.00	728,624.00
	Transformer & Base	1.00	lsum	100,000.00	100,000.00
	5. Okanagan Hockey Academy				2,925,000.00
	#10 Okanagan Hockey Academy	13,000.00	sqft	225.00	2,925,000.00
	xxx Hard Costs Outside of Budget (COP)				
	Boulevard Trees	1.00	lsum		
	Lift Station and Related	1.00	lsum		
	New Street Work	1.00	lsum		
	Offsite City Sidewalk & Curb/Gutter	1.00	lsum		
	Upgrades to Site Services	1.00	lsum		
	xxx Not included in Budget				
	Construction Contingency	1.00	lsum		
	Modifications to Existing Site Lighting or Storm	1.00	lsum		
	Repaving of Parking Area (Patch Only)	1.00	lsum		
	Signage & Artwork	1.00	lsum		
	Work Related to existing Arena	1.00	lsum		

GREYBACK™
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402 Warren Avenue East
Penticton, BC V2A 3M2
Phone: (250) 493-7972
Fax: (250) 493-7255

December 16, 2024,

City of Penticton
171 Main Street
Penticton BC, V2A 5A9

Attention: Kelsey Johnson

Re: McLaren Park Arena Curling Conversion/Renovation

Greyback Construction Ltd. is pleased to provide a Class D budget for the following work listed below:

6 Sheet Curling Rink with New Amenity Space South End……$5,233,808.00

- Consultants (Architectural, structural, electrical, Mechanical)
- Building addition (175x20') to existing skating rink, matching building materials and construction methods, to accommodate **one** additional sheet of curling ice
- Includes connection into the existing refrigeration plant assumed to be adequate to support the expansion
- 5,568 sf two level addition to South end of existing rink
    - Concrete slab on grade and foundations
    - Wood framed walls, floor and roof
    - Metal cladding & built-up roofing
    - Aluminum storefront windows
    - Carpet and Laminate flooring on gypcrete topping
    - Painted drywall
    - Lockers & Benches to changing area
    - Passenger elevator
    - Mechanical & Electrical as required.
- Demo of existing Amenity space attached to existing rink
- New asphalt paving with angled parking at area of old amenity space
- Renovate / Modify existing skating rink to accommodate 5 sheets of curling ice
    - Demo Existing Hockey Related Materials and Equipment
    - Demo Openings Through Existing Arena Walls to Change Area
    - Bleacher Modifications
    - Structural Upgrades at Openings
    - Cosmetic modifications
    - Mechanical & Electrical as required.

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Not Included:

- Building Permit costs
- Construction escalation for more than one year
- Items relating to the curling rink or bar
- FF & E
- Contingency
- GST

Please do not hesitate to call if you have any further questions.

Yours truly,
Greyback Construction Ltd.