

**MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD ELECTRONICALLY
FROM CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON
MONDAY, JANUARY 31, 2022**

REPORT

11. Harry Jerome Community Recreation Centre Financial Strategy
– File: 05-1705-01-0001/2022

Report: Chief Financial Officer, January 21, 2022

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Chief Financial Officer, dated January 21, 2022, entitled “Harry Jerome Community Recreation Centre Financial Strategy”:

THAT the Harry Jerome Community Recreation Centre Financial Strategy, as presented, be endorsed.

CARRIED UNANIMOUSLY



Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
FINANCE DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Larry Sawrenko, Chief Financial Officer

Subject: HARRY JEROME COMMUNITY RECREATION CENTRE
FINANCIAL STRATEGY

Date: January 21, 2022 File No: 05-1705-01-0001/2022

The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.

RECOMMENDATION

PURSUANT to the report of the Chief Financial Officer, dated January 19, 2022, entitled "Harry Jerome Community Recreation Centre Financial Strategy";

THAT the Harry Jerome Community Recreation Centre Financial Strategy, as presented, be endorsed.

ATTACHMENTS

1. Report of the Deputy Director, Strategic & Corporate Services dated March 31, 2021, entitled "Harry Jerome Community Recreation Centre – Project Approval" (CityDocs 2042867)

SUMMARY

The Harry Jerome Community Recreation Centre ("HJCRC") project received Council approval to proceed at the Regular Council meeting of April 12, 2021. The HJCRC project was planned to be significantly funded upfront through the disposition of the Harry Jerome Neighbourhood Lands ("HJNL") and through a dedicated levy.

This report details a new financial strategy for completing the project that combines low-cost, short-term financing from the Municipal Financing Authority ("MFA") with contributions from a dedicated levy, Development Cost Charges ("DCCs") and Community Amenity Contributions ("CACs") – enabling construction of the replacement recreation centre to begin in 2022. Under the proposed new Financial Strategy, the City

would delay disposition of the HJNL until completion of the new recreation centre in 2025, and use the proceeds to repay the MFA loan.

The total funding required for the HJCRC capital program is unchanged at \$226.3 million, which includes \$181 million for the recreation centre. To date, \$92.2 million (40%) has already been secured through completion of a land lease agreement for Phase 1 of the HJNL. In November 2021, the City terminated its Offer to Lease for Phase 2 of the HJNL as a result of the developer not meeting a key contractual term of the agreement – prompting Council's request for a new Financial Strategy for the project.

In developing the new strategy, staff were guided by Council's direction to limit any impacts on City taxpayers. Key features of the Financial Strategy include:

- Taking advantage of low interest rates offered by the MFA through a short-term loan that is well within the limits of the City's borrowing capacity, while still leveraging the value of the HJNL lands as part of the longer-term strategy;
- The new strategy avoids burdening City taxpayers as it will enable staff to recommend a 2022 budget that limits the increase in property tax to 3.75%. This increase is less than 2021 and within the average range of increases brought in by other Metro Vancouver municipalities.
- The existing HJCRC will stay open and operating during the construction phase;
- Project scope and timelines are unchanged – a replacement recreation centre can still be completed in 2025.

As the City of North Vancouver's largest ever infrastructure project, replacement of the 56-year-old HJCRC provides an opportunity to create a vibrant new community hub in the area of Lonsdale Avenue and East 23rd Street that will include new spaces for seniors and recreation clubs, upgrades to the Mickey McDougall Community Recreation Centre and a new community park.

Planning and design work is underway, including assessing proposals from suppliers who will deliver various aspects of construction, which will get underway later this year

BACKGROUND

The HJCRC project received Council approval to proceed at the Regular Council meeting of April 12, 2021. A copy of the Council resolution and supporting report is included as Attachment 1. Staff are proceeding with a Class A cost estimate and will bring this estimate to Council once available.

The HJCRC project was planned to be significantly funded upfront through the disposition of the HJNL. In addition to funding from land disposition, the HJCRC program is also funded through a dedicated levy. On November 19, 2021, the City terminated its Offer to Lease for the second phase of the HJNL as a result of the developer not meeting a key contractual term of the agreement. As such, the land transaction scheduled for phase two will not take place on January 31, 2022.

With approximately \$92 million dollars in place for the construction of the recreation centre and other amenities, Council passed a resolution on November 22, 2021 that the current recreation centre would remain open while the project to deliver the new HJCRC moves forward, with anticipated completion in 2025.

With the termination of the phase two Offer to Lease, a revised Financial Strategy is now required for the HJCRC capital program.

This strategy will inform the capital and operating budget which will be considered by Council in February.

DISCUSSION

The total funding required for the HJCRC capital program is \$226.3 million. The projects in this larger program are:

- Construction of a new HJCRC
- Relocation and construction of a new North Vancouver Lawn Bowling Club and lawn bowling facilities;
- Relocation of the Flicka Gymnastics Club;
- Upgrades to the Mickey McDougall Community Recreation Centre;
- Relocation and construction of a new Silver Harbour Centre;
- Relocation of Centennial Theatre electric power; and
- Delivery of a New Community Park on the HJNL.

Of the required funding, \$92.2 million (40%) has already been secured. The secured funding is comprised of:

	(\$ millions)
Tax Levy*	24.6
Contributions**	13.7
HJNL Land Lease Phase I	50.4
Parks DCC Reserve	3.5
TOTAL	92.2

* Currently \$2.6M per year

**1441 St. Georges Density Transfer (\$5.6M) and 150 8th Street East Community Amenity Charge (\$8.1M)

Financial Strategy

The Financial Strategy makes use of a number of solutions available to the City, including the use of external debt. The overall strategy is summarized in the following table, with details provided below:

Capital Appropriations by Year

(\$ millions)	Total	Prior	2022	2023	2024	2025	2026	2027
Total	226.3	38.4	166.3	11.5	3.1	6.2	0.4	0.4

Funding Sources

(\$ millions)	Total	Prior	2022	2023	2024	2025	2026	2027
1) Amenity levy	35.0	24.6	2.6	2.6	2.6	2.6	-	-
2) Contributions (CAC and Density Sale)	13.7	13.7	-	-	-	-	-	-
3) MFA loan – draws	117.0	-	110.0	7.0	-	-	-	-
3) MFA loan – repayment	(122.8)	-	(0.6)	(1.7)	(2.3)	(118.2)	-	-
4) Accumulated surplus	5.4	-	5.4	-	-	-	-	-
5) DCC Parks	3.5	0.1	-	-	0.5	2.9	-	-
6) Internal borrowing – draws	4.6	-	-	2.2	2.4	-	-	-
6) Internal borrowing – repayments	(5.1)	-	-	(0.1)	(0.1)	(4.9)	-	-
7) HJNL dispositions	217.4	50.4	-	-	-	167.0	-	-
Total	268.7	88.8	117.4	10.0	3.1	49.4	0.0	0.0

Surplus	42.4	50.4	1.5	0.0	0.0	43.2	42.8	42.4
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¹ Amenity Levy

The City began collecting property taxes dedicated to a new HJCRC in 2013. The annual amount has increased from \$400K in 2013 to the current \$2.6 million; \$24.6 million has been collected to date. The annual \$2.6 million is planned to continue as a funding source through project completion in 2025, for a total of \$35.0 million. The Financial Strategy recommends continuation at this level of contribution and does not propose any additional tax funding.

² Contributions

At its Regular Council Meeting held July 23, 2018, Council endorsed that the Community Amenity Contributions for 150 East 8th Street, \$8.1 million, and the proceeds of density sale for 1441 St. Georges Avenue, \$5.6 million, be allocated to the capital program. Allocations of additional contributions are not included in the plan.

³ MFA Loan

It is estimated that the City has borrowing capacity of up to \$117 million within its assent-free zone. The Financial Strategy recommends full use of this borrowing capacity as short term financing. MFA short-term borrowing rates are currently 0.99%. MFA's short term loans must be repaid within 5 years.

Details of the MFA loan process are being presented to Council in a separate report.

⁴ Accumulated Surplus

The Council approved policy on Maintenance and Use of Accumulated Surplus specifies that the City's unappropriated accumulated surplus be maintained between 5% and 10% of total operating revenues; excess accumulated surplus may be used to fund capital projects.

At 11.9%, the City's December 31, 2020 accumulated surplus is currently in excess of policy requirements. The financial strategy allocates \$5.4 million of excess accumulated surplus to fund the HJCRC capital program. This allocation will leave the City's accumulated surplus at 7.5% of total operating revenues, which remains within policy guidelines.

⁵ Development Cost Charges - Parks

Development Cost Charges ("DCCs") are monies collected from developers to offset some of the costs associated with servicing growth. The City revised its DCC program in 2016 to include provisions for City-wide parkland development. DCC funds can be used for 49.5% of eligible costs.

The Financial Strategy recommends use of DCC funding for qualifying HJCRC park improvements, including the development of a new community park on the HJNL.

⁶ Internal Borrowing

The strategy recommends use of internal borrowing from the City's Tax Sale Land Reserve ("TSLR"); the City's largest reserve available to fund capital works, to close remaining up front funding gaps. Planned borrowing is modest at \$4.6 million and all borrowed funds would be repaid with interest.

7 HJNL Dispositions

The disposition of the remaining HJNL continues to be an important component of the overall Financial Strategy. This disposition is now planned for 2025 at a value of \$167 million. The value is based on current real estate market conditions and would be affected by changes in the market. Sensitivity analysis shows that, even if the site were disposed of at a value 25% less than currently expected, sufficient proceeds to retire the MFA loan and repay internal borrowing in 2025 would still be available.

Risk Management

It's also recommended that the City preserve financial capacity to be able to respond to unexpected events, should they occur. As such, the Financial Strategy includes the recommendation to maintain a minimum balance of \$20 million in the TSLR to provide a financial "safety net". The level of borrowing included in the Financial Strategy maintains the balance of the Tax Sale Land Principal Reserve Fund above this threshold.

FINANCIAL IMPLICATIONS

A key component of this strategy is minimizing impact of the HJCRC on other parts of the capital and operating budget, so as to make the project manageable financially for taxpayers. Draft Preliminary Capital and Operating Plans that integrate with this recommended financial strategy, preserves internal capacity to deliver the HJCRC capital program, and continues to advance Council's Strategic Plan is to be considered by Council as follows.

1. January 31, 2022 – Harry Jerome Financing Strategy, and HJCRC Loan Authorization Bylaw
2. February 14 2022 – Draft Preliminary Capital Plan
3. February 28, 2022 - Draft Preliminary Operating Plan
4. March 28, 2022 – Final Capital and Operating Plans
5. April 4, 2022 – Financial Plan Bylaw readings
6. April 11, 2022 – Financial Plan Bylaw adoption

If the Harry Jerome Capital program is funded via the above Financial Strategy, it can be accommodated within a 3.75% tax rate increase for 2022. The recommended 3.75% increment is expected to include 1.75% for operating costs (below current general inflation levels) and an additional 2% for capital (consistent with allocations in 2017 and earlier; taxes funding capital have increased below inflationary levels starting in 2018). The recommended tax rate increment is subject to change through Council's consideration during the steps listed above.

INTER-DEPARTMENTAL IMPLICATIONS

The successful delivery of the HJCRC capital program and this Financial Strategy will require effort and support from all City departments, as well as the North Vancouver Recreation and Culture Commission.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

The replacement of the HJCRC supports Council's vision to be the Healthiest Small City in the World and multiple objectives of the OCP, including:

- Goal 5.2, support, enhance and maintain recreation as a vital aspect of a healthy community, and
- Goal 5.3, provide a variety of public spaces for community engagement and stewardship.

RESPECTFULLY SUBMITTED:



Larry Sawrenko
Chief Financial Officer

**MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD ELECTRONICALLY FROM
CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON
MONDAY, APRIL 12, 2021**

PRESENTATION

Harry Jerome Community Recreation Centre – Project Update – Deputy Director,
Strategic and Corporate Services

The Deputy Director, Strategic and Corporate Services and Paul Fast, Architect, HCMA Architecture + Design provided a PowerPoint presentation regarding the “Harry Jerome Community Recreation Centre – Project Update” and responded to questions of Council.

REPORT

20. Harry Jerome Community Recreation Centre – Project Approval
– File: 02-0800-30-0028/1

Report: Deputy Director, Strategic and Corporate Services, March 31, 2021

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Deputy Director, Strategic and Corporate Services, dated March 31, 2021, entitled “Harry Jerome Community Recreation Centre – Project Approval”:

THAT staff be directed to proceed to the pre-construction phase of the Harry Jerome Community Recreation Centre (HJCRC) project, including completion of the following:

- Construction documents
- Class A estimate
- Site servicing plan
- Construction sequencing plan;

THAT staff report back with a Class A estimate and seek approval to proceed with tendering of the HJCRC construction contract;

AND THAT staff be authorized to consolidate the two land parcels that make up the HJCRC lands (Parcel ID Numbers 009-034-811 and 009-034-862).

CARRIED

Councillor Back, Councillor Bell and Councillor Valente are recorded as voting contrary to the motion.



 Department Manager	 Director <i>kw EP</i>	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
STRATEGIC & CORPORATE SERVICES DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Heather Reinhold, Deputy Director, Strategic & Corporate Services

Subject: HARRY JEROME COMMUNITY RECREATION CENTRE – PROJECT APPROVAL

Date: March 31, 2021 File No: 02-0800-30-0028/1

The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.

RECOMMENDATION

PURSUANT to the report of the Deputy Director, dated March 31, 2021, entitled “Harry Jerome Community Recreation Centre – Project Approval”:

THAT staff be directed to proceed to the pre-construction phase of the Harry Jerome Community Recreation Centre (HJCRC) project including completion of the following:

- Construction documents
- Class A estimate
- Site servicing plan
- Construction sequencing plan;

THAT staff report back with a Class A estimate and seek approval to proceed with tendering of the Harry Jerome Community Recreation Centre construction contract;

AND THAT staff be authorized to consolidate the two land parcels that make up the Harry Jerome Community Recreation Centre lands (Parcel ID Numbers 009-034-811 and 009-034-862).

ATTACHMENTS

1. HJCRC Design Report ([Citydocs 2036460](#))

2. Excerpt from March 2, 2020 Council Report entitled “Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects” ([Citydocs 2036214](#))
3. Summary of Advisory Body Resolutions ([Citydocs 2036301](#))

SUMMARY

The redesign phase for the Harry Jerome Community Recreation Centre (HJCRC) project is now complete (see Attachment #1). The new HJCRC will be designed to the highest accessibility standards and will be a people-oriented community gathering place. HJCRC will be integral to providing opportunities for residents of all ages, ethnicities, abilities and interests to live healthy, active and connected lives.

The new HJCRC will include a diverse indoor and outdoor program including:

- Gymnasium
- Fitness Centre and Outdoor Fitness Space
- Multi-Purpose Rooms
- Art Space
- Youth Area
- Preschool and Early Years Space
- Community Kitchen
- Main Atrium & Inner Courtyard
- Small and Large-scale Indoor Social Spaces
- Food and Beverage Service (shell space)
- Aquatic Program
 - Leisure Pool
 - 25m 10-lane Pool with springboards (ability to install a future 5m platform)
 - Hot Pools
 - Sauna and Steam Rooms
- Arena Program
 - NHL sized Ice Rink
 - 500 Spectator Seats (~300 fixed / 200 flexible)
- Outdoor Program
 - Central Plaza & Green Space
 - Skatepark
 - Multi-Activity Court
 - Nature Play Area
 - Green Necklace (multi-use trail connection)
- Public Art
- Parking
 - 270 underground parking stalls (includes 18 dedicated Silver Harbour stalls)

The project is on track with construction to commence in June 2022 and with project completion in 2025. The cost of HJCRC is estimated at \$181.7M (+/-15%) that includes a \$28.7M contingency and allowances for offsite city and utility works. Staff are seeking approval to proceed with the pre-construction phase. Staff will report back to Council with a Class A estimate and to seek approval prior to the tendering of construction works.

BACKGROUND

The existing HJCRC has served the community well since 1966. The existing facilities are now at the end of their functional life. The replacement of the existing community recreation centre is a stated priority of City Council and much work has been completed.

In 2017/2018, based on Council direction and public / stakeholder input, a schematic design was completed. In 2019/2020, risk mitigation and project refinement were explored. The City's Community Recreation Strategy "A Healthy City for All – The Role of Community Recreation" was endorsed. This strategy confirmed the City's vision to create a healthy city for all, established goals for community recreation and included a decision-making framework for significant community recreation projects.

In March 2020, Council directed staff to undertake a redesign effort based on the endorsed program informed by the Community Recreation Strategy prioritization framework (summarized in Attachment #2). The redesign effort was to include a review of all program component sizes, building form and materiality to ensure the overall cost effectiveness of the project. The redesign effort is now complete.

DISCUSSION

The HJCRC project embodies the City's vision to create a healthy city for all. The Centre is intended to serve all residents through a variety of services, to connect people and to improve the health and wellness of individuals and families. The Centre will draw residents of all ages and abilities to explore, create, play, exercise, train, learn, relax, rehabilitate and connect.

The vision for a new HJCRC, which has been developed and refined based on feedback from the public and Council is:

"The Harry Jerome Community Recreation Centre will be a welcoming, vibrant social heart of the community.

It will foster individual and collective wellness by providing opportunities to participate in a variety of organized and casual activities. The centre will empower community members to enjoy healthy, active and connected lives.

HJCRC Design Principles:

The HJCRC design embodies the principles of equity, social inclusion, wellness, security, adaptability, environmental responsibility and fiscal responsibility. These principles are woven throughout the building design, surrounding landscape and planned operation and service provision.

The premise for the design is to provide for an inclusive experience throughout the facility – both indoors and outdoors – where one can both experience and view a range of activities and opportunities. The building and landscape provide energetic and contemplative spaces, where individual and collective experiences can occur. Spaces are

flexible, allowing for adaptation to changing needs. Fundamental to the overall design is the concept of universal accessibility and inclusion; the HJCRC will achieve Gold certification through the Rick Hansen Foundation Accessibility Certification (RHFAC) program.

Embedded throughout the design is a focused approach on climate responsive sustainable design. The HJCRC has a highly complex building program, with a mixture of energy intensive uses such as pools and an ice rink. By employing leading edge energy conservation strategies as well as extensive heat recovery for re-use within the facility (see below), the carbon intensity of the new HJCRC has been reduced by ~81% compared to the existing facility.

Additionally, as HJCRC represents a significant investment in community recreation, every component of the design has been approached with measured consideration to maximize community outcomes while minimizing financial risk.

HJCRC Project Component Description:

The HJCRC project will deliver a broad and varied program. The redesign phase reflects the March 2020 Council endorsed program as well as the 2018 Functional Program, with refinements made for operational considerations and cost effectiveness as outlined below.

Atrium, Interior Courtyard and Plaza

The atrium and interior courtyard represent the organizing structure for the building and sets out an intuitive wayfinding and orientation experience for HJCRC. The atrium provides a welcoming reception and social area along with opportunities for spontaneous and programmed activities and celebrations both indoor and outdoor. Whether visitors arrive by car, transit, bike or foot, they will enter into the main atrium. Included within the atrium is a shell space for a food and beverage service adding to the overall social experience. It is anticipated that during the construction phase, a Request for Proposal process will be undertaken, seeking an operator that aligns with the vision for the Centre. It is expected that the tenant will be responsible for tenant improvements to meet their operational requirements.

The interior courtyard, connected to the main atrium, provides a visual connection to many activities and creates a green heart that the building is organized around. The interior courtyard allows for views throughout the centre, allows for fresh air and encourages spontaneous informal activities.

The plaza will serve a number of purposes; main entry, outdoor gathering area, event venue, program area and allows for active and passive play.

Multi-Purpose, Community Kitchen and Arts

The multi-purpose rooms accommodate activities such as social gatherings, programs, events, meetings and presentations. These adaptable spaces of different sizes are located throughout the facility and at key locations adjacent to the main atrium. The community kitchen will support healthy living programs and opportunities for cross-cultural experiences using food as a medium. The arts component, with appropriate materials, spaces, tools and equipment, provides for a variety of arts programs and services.

Aquatics

The aquatic component will accommodate a broad range of aquatic activities through provision of:

- Large leisure pool with beach entry, tot's area, lazy river and a variety of active water features
- 25m 10 lane tank with diving springboards and the ability to add a future 5M platform
- Two hot pools – a larger one supporting families & therapy activities and a smaller one for adults
- Sauna and steam rooms
- Change facilities supporting both universal and gendered spaces
- Space both on and off-deck for viewing

As part of the redesign phase, with further review of the operational and safety requirements, the previously contemplated movable bulkhead in the 25m pool tank has been removed. This changes the pool size requirement from 26.5m to 25m.

In recent conversations with aquatic stakeholders, the request for inclusion of a 5 metre diving platform was restated, along with an offer to pay part or all of the cost. As this request does not fundamentally alter the design of the aquatic component, an allocation for future provision has been integrated.

Arena

The arena will accommodate activities such as public skate, lessons, hockey, sledge hockey, figure skating and ringette. Non-ice season (dryland) activities, including community events, summer camps, lacrosse, in-line skating and ball hockey can also be accommodated. Features of the arena space include:

- NHL size ice rink
- Five change rooms
- Skate rental shop
- Officials Room
- Spectator seating for 500 (~300 fixed / 200 flexible)
- Ice re-surfacer / mechanical support

In recent conversations with arena stakeholder groups, it was confirmed that the provision of 500 spectator seats would be provided through a combination of fixed and flexible seating. This seating arrangement allows for flexibility and for the space to adapt to a variety of uses. Significant effort has been undertaken to ensure all spaces are designed for maximum use throughout the facility. In keeping with this approach, a separate lockable storage area has been provided adjacent to one change room for arena stakeholder use. This will ensure that the adjacent change room is usable to both arena stakeholders as well as the public.

Gymnasium

This component will provide a full sized gymnasium with storage to support many activities such as volleyball, badminton, indoor soccer, basketball, pickleball, fitness classes, community gatherings, events and rentals.

The previously endorsed program contemplated two gymnasiums, however, in consideration of alternative gym space available in schools and other recreation centres, and in order to reduce the size and cost of the centre, one gymnasium was eliminated.

Fitness Area

The fitness component is located on the second level and will include strength, conditioning, stretching and rehabilitation equipment and space. There will also be an adjacent outdoor area that can be used by fitness centre users and for programs.

Preschool and Early Years Spaces

This component is located on the second level, with at-grade access to an outdoor natural play area and accommodates a licensed part-time preschool and the Early Years program space. The secure separate exterior play area will be shared between both programs and will be open to the public after-hours.

Youth Area

This component is located on the second floor, with at-grade access to the outdoor active recreation zone with the multi-activities court and the skatepark. This spatial relationship creates a new indoor/outdoor youth zone, providing for a wide variety of activities and services of interest to youth.

Informal Gathering & Recreation

Community recreation centres play an important role as social and connection hubs, as well as providing for non-programmed recreation. Careful attention has been given to this role for HJCRC. There are a variety of spaces that will foster socializing, relaxation, spectating, play and creativity without having to register for a program or a specific activity. These spaces are integrated throughout the facility at different scales.

Skatepark & Active Zone

A new skatepark will occupy the north-east corner of the site, framing the outdoor active zone. The design of the skatepark was informed by the 2018 user input process. The design includes a raised viewing / hangout area which cascades down into a central area populated with features including rails, ledges, ramps, banks and flatbars. A variety of heights and levels of difficulty are included. The skatepark will be similar in size to the existing skatepark.

Parking

The new design for HJCRC provides 270 parking stalls within a single level parkade (and includes an allocation of 18 stalls dedicated for Silver Harbour). The 270 parking stall provision exceeds bylaw requirements and is reflective of the anticipated HJCRC and Centennial Theatre parking demand estimated in the project's updated Transportation Study. In an effort to reduce overall GHG emissions, the facility will incorporate 8 electric vehicle charging stations with the infrastructure to allow more in the future if warranted.

The following transportation demand management measures will be considered to reduce parking demand at the facility and any potential spillover parking impacts onto neighbourhood streets:

- Development of an overflow parking plan for special events that will explore use of off-street parking in the surrounding area

- Introduction of on-site pay parking within the HJCRC parkade
- Adjusting on-street parking regulations in the broader neighbourhood to ensure sufficient parking is available for residents and visitors

The consideration for pay parking and adjustment of on-street parking regulations will be reviewed through an area wide parking plan that is anticipated to be undertaken closer to the opening date. An update will be provided to Council.

East 23rd Street & Green Necklace:

The design of East 23rd Street, between Lonsdale and St. George’s, has been updated to enhance the pedestrian scale of the streetscape, better integrate the Green Necklace and to facilitate the single entrance to the HJCRC parkade and the shared loading area with Centennial Theatre.

The Green Necklace has been designed with separated pedestrian and cycling paths, integrated with the signalized mid-block crossing. The mid-block crossing has been designed with consideration of pedestrian safety, vehicular queuing, intersection functionality as well as creating a clear and legible connection between the park to the south of 23rd Street and the front entrance to the new HJCRC.

The changes to the East 23rd Street design, parkade access and parking provision were reviewed in context of the updated Transportation Study. It was confirmed that these changes will result in acceptable urban traffic operations along Lonsdale Avenue, East 23rd Street, St. George’s Avenue and other streets in the vicinity of the facility during peak hours on opening day and out to 2030. The study update has identified, however, that future accommodation of transit priority measures along Lonsdale Avenue in this area (e.g., a northbound bus-only lane or queue jump lane) may reduce the functionality of the Lonsdale Avenue and 23rd Street intersection. When transit priority interventions are implemented in this area, the City may need to explore strategies to maximize the functionality and level of service of the intersection for all users.

Public Art:

A public art plan based on the redesign is under development. The regular process for public art will be followed, with advancement as soon as possible to ensure incorporation of public art into the overall site and facility design. Funding for public art, in the amount of \$500,000, is included within the project budget.

Climate Responsive Sustainable Design:

The design of HJCRC embeds energy conservation strategies as well as extensive heat recovery for re-use within the facility to reduce carbon intensity. A summary of design strategies and energy conservation measures are outlined below. The HJCRC meets the BC Energy Step Code and exceeds the NECB (National Energy Code for Buildings) 2015 Total Energy Use Intensity baseline by 49.5%.

Design Strategies & Energy Conservation Measures:

Envelope	Highly insulated walls, roofs & floors
	Double glazed windows, argon filled, low e-coating/reflectivity coating
	Airtightness targets as per Energy step code

Mechanical Systems	Heat recovery from wastewater, general process heat, refrigeration systems and ventilation exhaust
	Enhanced humidity measurement and control to reduce energy requirements
	Inblue filtration system for aquatic component to reduce energy requirements and increase water quality
	Variable speed pumps for all mechanical pumps to reduce energy demand
	Connected to LEC and will benefit from future potential diversification of LEC system
	Water conserving plumbing fixtures
Refrigerants	CO2 refrigeration for arena allowing for a high level of heat recovery
Electrical Systems	Daylighting through architectural form to reduce lighting loads
	Efficient lighting fixtures (LED) with automated controls

Throughout the pre-construction phase, continued focus on the following sustainable design features will be undertaken:

- Further refine envelope efficiencies including window-to-wall ratio (currently at 41%)
- Integrate exterior shading to control interior heat gain
- Further refine air tightness target

HJCRC Site & Zoning Considerations:

At the site planning level, the HJCRC design uses the site and surrounding land use to maximize integration with the neighbourhood and to maximize cost effectiveness. The facility has been designed as a two story facility, with one full level of underground parking. The large-scale program elements are located along the northern boundary, where they are partly absorbed into the steeply sloping site, and the more active, finer grained elements front East 23rd Street.

Lot Coverage & Setbacks:

To facilitate efficient and cost effective layout for HJCRC, an increase to the allowable site coverage as well as a reduction to the lot setbacks is required. The site coverage as contemplated in the design will result in 55% lot coverage (40% currently permitted) which still allows for a public plaza, multisport court, play area, skatepark and landscape areas fronting all four property boundaries as well as meeting the City’s stormwater management requirements. The reduced lot setbacks (5.6m to the west and 1m to the north instead of the existing 7.62m required setback) allow for the most efficient building layout and responds to the surrounding urban context with tighter setbacks contemplated along the Trans-Canada highway frontage as well as Lonsdale Avenue.

A companion report is being brought forward with respect to the Zoning Bylaw Amendments to allow for variances to lot coverage and lot setbacks.

Bike Parking & Facilities:

The provision of bike facilities to support and promote cycling by the public and staff are integral to the facility design, with public bike facilities located at the main entrance and throughout the site, as well as alternate access into the parkade for weather protected bike parking adjacent to the elevators and main stairs. The zoning bylaw requires that all public

bicycle parking is located within 15m of the main entrance to the principle building; a variance is requested to ensure that outdoor programming – such as the skatepark and youth zone – located farther than 15m from the entrance have adequate bike parking.

Secure bike parking for staff is being provided at a level of 1:1 for the anticipated staffing levels. This will result in 45 secure bike parking spaces. This is less than required by the zoning bylaw (60 spaces). In addition, all secured bike parking will be provided in one room, which exceeds the bylaw limit by 5 spaces. Accommodating an additional 5 bikes in the secure room will permit the most efficient and legible layout for secured bicycle parking.

A companion report is being brought forward with respect to the Zoning Bylaw Amendments to allow for a variance to secure (staff) bike parking and end of trip facilities.

Lot Consolidation:

To allow for the HJCRC centre to be built, the two lots that currently make up the HJCRC lands need to be consolidated (see Figure 1 below). The two parcels are both within Comprehensive Development Zone CD-165. The lot comprised of Norseman Field was set aside for park purposes (Bylaw 894) in 1928 and states that the park can be used for “park, recreation and other public purposes”.

With consolidation, the single consolidated lot will have Centennial Theatre, HJCRC and Silver Harbour Seniors’ Activity Centre all located on the same lot. The Silver Harbour facility is anticipated to be structured under a land lease which can occur within the framework of the consolidated lot structure.

Figure 1: Existing HJCRC Parcels



HJCRC Advisory Body Review:

The HJCRC project was brought forward to the following advisory bodies for review and discussion:

- Integrated Transportation Committee (Feb 3 and March 3, 2021)

- Advisory Design Panel (Feb 17 and March 17 2021)
- Advisory Committee on Disability Issues (March 18 2021)

Resolutions of support from ITC and ADP are included in Attachment #3. During the pre-construction phase, ongoing input from a sub-committee of ACDI will be sought on detailed design items pertaining to enhanced accessibility.

Silver Harbour Seniors' Activity Centre:

The Silver Harbour Seniors' Activity Centre is located as a stand-alone building with integrated underground parking located in the prominent south-east corner of the HJCRC site. A stand-alone building provides Silver Harbour with autonomy for operations, while the proximity provides for enhancement of both the Silver Harbour and HJCRC program. The design of the Silver Harbour facility is currently in process in collaboration with Silver Harbour and updates to Council will be provided as this process continues.

FINANCIAL IMPLICATIONS

HJCRC Cost Estimate:

A Class B estimate was prepared by a Professional Quantity Surveyor based on the design as included in Attachment #1. The Class B estimate is based on current day considerations of construction on the North Shore, world market uncertainties and recent escalation rates. The Class B estimate represents project costs +/- 15%. The estimated cost for the new HJCRC is as follows:

HJCRC Building Construction	\$ 114,953,000
Onsite Works	\$ 14,220,500
Offsite Works	\$ 6,331,100
Soft Costs (consultants, CNV staffing, insurance)	\$ 12,447,600
Permits and DCC's	\$ 2,172,200
Furniture, Fixtures and Equipment	\$ 2,881,600
Contingencies & Escalation	
Soft Cost Contingency	\$ 260,000
Design Contingency 5%	\$ 6,958,800
Construction Contingency 5%	\$ 7,069,900
Escalation Contingency 9.7%	\$ 14,401,300
HJCRC TOTAL*	\$ 181,696,000

** Does not include the Silver Harbour Seniors' Activity Centre component which is yet to be confirmed – in progress.*

Class B Costing Assumptions:

Within the HJCRC Class B cost estimate, there are a number of assumptions that have been included that are important to address.

Project Timeline:

Construction is assumed to start in June 2022. Any deviation from this timeline will impact the escalation rate and overall cost estimate. Staff are currently exploring construction sequencing with consideration of potentially advancing site preparation and some site

servicing works to improve the overall project timeline. An update to Council will be provided if advancement of early works can be facilitated. There is funding included within the 2021 capital plan that anticipates this potential. A request for funding appropriation will be sought if construction sequencing proves advantageous.

Market Conditions:

Currently the construction industry has experienced significant cost increases due to COVID-19, changes in production, delivery and material costs, uncertainties around Canada-US trade relations. Despite the impact of COVID-19, there continues to be robust construction activity in the region and a resulting general shortage of skilled labour. As a reflection of current market conditions, this Class B estimate is noted at +/- 15% as opposed to the often used Class B estimate range of +/- 10%.

Project Contingencies:

Within the Class B estimate, a contingency strategy is being implemented to address escalation of the market, changes during construction and during design development. The amount of approximately \$28.7M is being held as part of the overall project budget. As part determining the Class B estimate, the Quantity Surveyor reviewed recent market pricing trade by trade to estimate different escalation rates for different trades which created a blended escalation rate.

Site-Servicing & Off-Site Works:

The site servicing and off-site transportation upgrade costs included within the estimate (which total \$4.7M) are provided at a Class D level (+/-20%) based on recent CNV Engineering projects and will be refined in coordination with CNV Engineering and the redevelopment of the Harry Jerome Neighbourhood Lands in the coming months.

In addition, upgrades to BC Hydro service are required for the HJCRC site and area. The Class B estimate accounts for the BC Hydro design fee as well as a placeholder estimate of \$2.1M provided by BC Hydro for the service upgrade. (Note: In previous cost estimates, the cost for the BC Hydro service upgrade was noted as anticipated scope but not included.) Staff will advance the design work in coordination with review of area wide cost sharing. It is anticipated that BC Hydro will complete the design work at the same time as the construction documentation is complete.

Silver Harbour:

It is anticipated that the Silver Harbour component will occur on the same timeline as the HJCRC project. To align construction of the Silver Harbour facility with HJCRC, confirmation of the process with Silver Harbour will need to be confirmed by the end of May 2021 to allow sufficient time to complete the construction documents for tendering this work along with HJCRC.

The Silver Harbour project will have a proportionate allocation of costs for the parking structure, site works and site servicing components of the project. Should the Silver Harbour project not advance on the same timeline, the HJCRC budget will need to be adjusted to account for this shared scope. In addition, the HJCRC mechanical and parkade designs, and associated budgets, would need to be adjusted to account for an alternate approach.

HJCRC Funding Structure & Approach:

A significant project such as HJCRC requires the City to plan strategically. The funding structure for HJCRC will see the the project financed primarily through the revenue from leasing and redevelopment of the existing HJCRC lands. The financial structure for this project enables the City to have funding in place during construction and will mitigate much of the financial risk. This funding structure necessitates the closing of the existing HJCRC as of December 31, 2021 (see below).

In addition to revenue from the redevelopment of the existing HJCRC lands (the Harry Jerome Neighbourhood Lands), annual increases to the City's operating budget were implemented in 2013, specifically for the HJCRC project. This allocation is approximately 4% of the City's property tax levy and provides \$2.6M per year on an ongoing basis. This funding allocation will support expenses associated with HJCRC.

The funding for HJCRC redevelopment is included within the 2021-2032 Capital Plan as summarized below. An allocation of \$6.4M is included for 2021. Early works, such as site preparation and potentially some site servicing, may be advanced. An appropriation report will be brought forward for Council approval prior to tendering of any of these early works. The HJCRC construction project will not be tendered until full funding is in place.

Harry Jerome Funding Summary

Cumulative Annual Contributions to Civic Amenity Reserve	\$ 32.4
Contributions - 2 Projects (CAC and Density Sale)	\$ 13.7
Land lease - HJNL Net of Non-Recreational Amenities & Exp	\$ 153.8
Park DCC Reserve	\$ 3.2
Affordable Housing Reserve	<u>\$ 5.8</u>
Total Funding	\$ 208.9
Appropriated To Date	<u>\$ (22.6)</u>
Total 2021-2030 Capital Plan Funding Available	\$ 186.3

2021-2030 Capital Plan Funding Requested

Harry Jerome Community Recreation Centre	\$ 157.4
Silver Harbour Seniors Activity Centre	\$ 13.0
Mickey McDougall - Feasibility Study & Building Upgrades	\$ 1.4
New Community Park - HJNL	<u>\$ 6.5</u>
	\$ 178.3

Funding Excess (Shortfall) 2021-2030 Capital Plan	\$ 8.0
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The Plan assumes funding for HJCRC of \$157.4M beyond amounts already appropriated. As a result of the Class B estimate this need has increased by \$16.3M to \$173.7M reducing the \$8.0M funding excess noted above to an \$8.3M funding shortfall.

Funding Excess (Shortfall) 2021-2030 Capital Plan	\$ 8.0
HJCRC Cost Escalation Required Add'l Funding	<u>\$ 16.3</u>
Revised Funding Excess (Shortfall) 2021-2030 Capital Plan	\$ (8.3)

The funding required for the full project scope will be updated as part of the 2021 revised budget process to reflect the most up to date cost estimate at that time (Fall 2021).

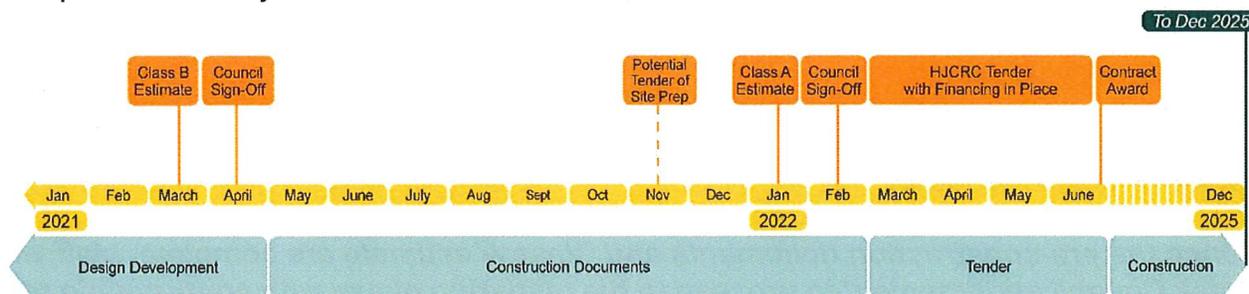
Finance will work with the HJCRC team as the project progresses, and there is greater certainty around various assumptions, to develop funding strategies for the shortfall.

HJCRC Operating Budget:

The operating cost estimate for the new HJCRC has been updated to reflect the current design and functional program and is estimated by NVRC staff to be a net cost of approximately \$1.9 – \$2M per year; an increase of \$500,000 - \$600,000 more than the 2021 operating budget for the Harry Jerome, Memorial and McDougall facilities. The revised estimate considers the operating budget analysis work done previously by a consultant, along with NVRC’s experience operating community recreation centres in North Vancouver. While the new facility will be highly efficient, the main cost drivers are due to increased staffing related to the larger facility (for cleaning, set-up, take down, program planning and supervision) as well as increased lifeguarding associated with the larger aquatic component. There is a modest increase in utilities accounted for. Net operating costs are difficult to accurately project because of the variability of revenues which help to offset operating expenses.

NEXT STEPS:

The City is on track with HJCRC construction to begin in mid-2022, and with delivery of the new HJCRC in 2025. In order to meet this timeline, there are still many critical steps to complete. The major milestones are outlined in the timeline below:



Pre-Construction Phase

With Council’s approval of this report, pre-construction documents will be prepared, including construction documents, Class A estimate, site servicing plan and construction sequencing plan. It is anticipated that this phase will take approximately 10 months to complete. Once this next phase is underway, it is important to note that any changes to program or design will significantly increase the cost and delay the project timeline. As part of the construction documentation phase, the following key tasks will be completed:

Construction Manager

The City’s external project management firm has advised use of the Construction Management at Risk project delivery method. A Construction Manager (CM) is anticipated to be engaged in May 2021 to provide pre-construction services, including independent cost estimating, constructability reviews, transparent tendering administration and construction risk mitigation strategies. After tendering, the CM will provide a proposal for a single fixed cost construction contract that incorporates the supplier and trade contracts that are required for construction. Acceptance of this proposal is at the City’s sole

discretion. Should the proposal not be deemed acceptable, the City can proceed independently with a contract of the City's choosing.

The benefits of involving a CM during the design phase are numerous, including:

- Increased cost estimating accuracy for the project
- Reduced change orders during construction
- Reduced tendering risk
- Ability to enable early work (e.g. demolition and site preparation)

Construction Sequencing Review:

Concurrent with the HJCRC construction document phase, review of construction sequencing for site preparation and site servicing works will be undertaken. The construction sequencing review will evaluate options for advancing site preparation and / or site servicing works. This work would advanced only with Council approval through funding appropriation from the 2021 Capital Plan.

Cost Review:

A Professional Quantity Surveyor will be engaged to undertake project estimates at two key milestones - mid-point construction document stage (50% design) and towards the end of construction document stage (90% design). This will ensure that as more detail is developed, the scope continues to be aligned within the project budget. Ultimately a Class A estimate (+/-5 to 10%) will be prepared based on completed construction drawings and detailed specifications contained in the tender documents.

Commissioning Agent:

As part of leading edge and sustainable development, a commissioning agent will be engaged to provide professional advice with regards to the operations of the technical systems within this facility.

Once the pre-construction documents and Class A estimate are complete, staff will seek Council endorsement to proceed to the tendering phase with confirmation that all required funding is in place.

HJCRC Project Governance

To date, the City of North Vancouver has been managing the HJCRC project, led by the Strategic & Corporate Services department, with the support of multiple City departments and the North Vancouver Recreation and Culture Commission. As the project moves into pre-construction, the need for greater project oversight has been met with an external professional project management firm retained for duration of project (with a phased award of scope). Over the next few months, an updated project governance structure will be formalized, with an update provided to Council. The governance structure will confirm the framework for administrative review, strategic guidance and Council decisions.

Regular Project Reporting

Regular updates on the HJCRC project will be provided to Council and the public going forward. With commencement of construction, Council will receive regular monthly reports, including progress to date, planned activities, project schedule, budget summary, project risks and a fun facts section. To ensure transparency for the project, monthly reports will also be posted to an updated HJCRC project website for the public.

Existing HJCRC Closure Plan:

The existing HJCRC, Memorial Community Recreation Centre and Mickey McDougall Community Recreation Centre will close at the end of 2021 so that the redevelopment work can begin. This process will be consistent to the process undertaken during the closure and construction of the Delbrook Community Recreation Centre.

North Vancouver Recreation and Culture Commission staff are currently working on the closure plan, recognizing need to manage with reduced amenities until 2025. The closure plan includes the following scope of work:

- Closure notice to organizations with space use agreements in the existing facilities. (Completed)
- Review of how regular rental groups (sport organizations/community groups) may be accommodated in other community recreation facilities.
- Review of NVRC program participation numbers and determination of priority programming.
- For priority programming, review whether alternate programming options exist and/or potential to accommodate in alternate locations.
- Review staff impact. Examine opportunities for reassignment or relocation.
- Inventory all furniture, equipment and supplies. Determine what can and should be stored. Arrange for moving and storage. Consider what equipment will be unusable if stored for four years and determine appropriate action.

An update to Council will be provided by NVRC on the progress of the closure planning in the coming months.

INTER-DEPARTMENTAL IMPLICATIONS

Project coordination and input has been undertaken with every City department, LEC and staff from the North Vancouver Recreation and Culture Commission. This report has been developed in consultation with Finance, Planning & Development and NVRC.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

The replacement of HJCRC will contribute to health and wellness opportunities within our community, inspiring residents to be active and connected to their community throughout their life.

RESPECTFULLY SUBMITTED:



Heather Reinhold

Deputy Director, Strategic & Corporate Services



DISCOVER YOUR PATH
at the new
Harry Jerome
Community
Recreation
Centre
TO WELLNESS

HARRY JEROME COMMUNITY RECREATION CENTRE DESIGN DEVELOPMENT REPORT

Issued | March 2021



"This project will dramatically impact our community for the good. I fully support this project and can't wait for it to open!"

Community Member

Community & Stakeholder Engagement

Table of Contents

1.0	Executive Summary	5
1.0	Executive Summary	6
2.0	Project Background	9
2.1	Site Analysis	10
3.0	Design Response	19
3.1	The Vision	20
3.2	Form & Character	24
3.3	Spatial Layout	26
3.4	Materials	32
3.5	Concept Renders	34
3.6	Landscape Design	44
3.7	Sustainability	48
3.8	Cost Analysis	53
3.9	Project Schedule	54
4.0	Next Steps	57
4.0	Next Steps	58

PROJECT CONSULTANTS

ARCHITECTURAL



LANDSCAPE



STRUCTURAL



MECHANICAL



ELECTRICAL



CIVIL



ACOUSTIC



QUANTITY SURVEYOR



SKATE PLAZA



CODE



1.0 Executive Summary

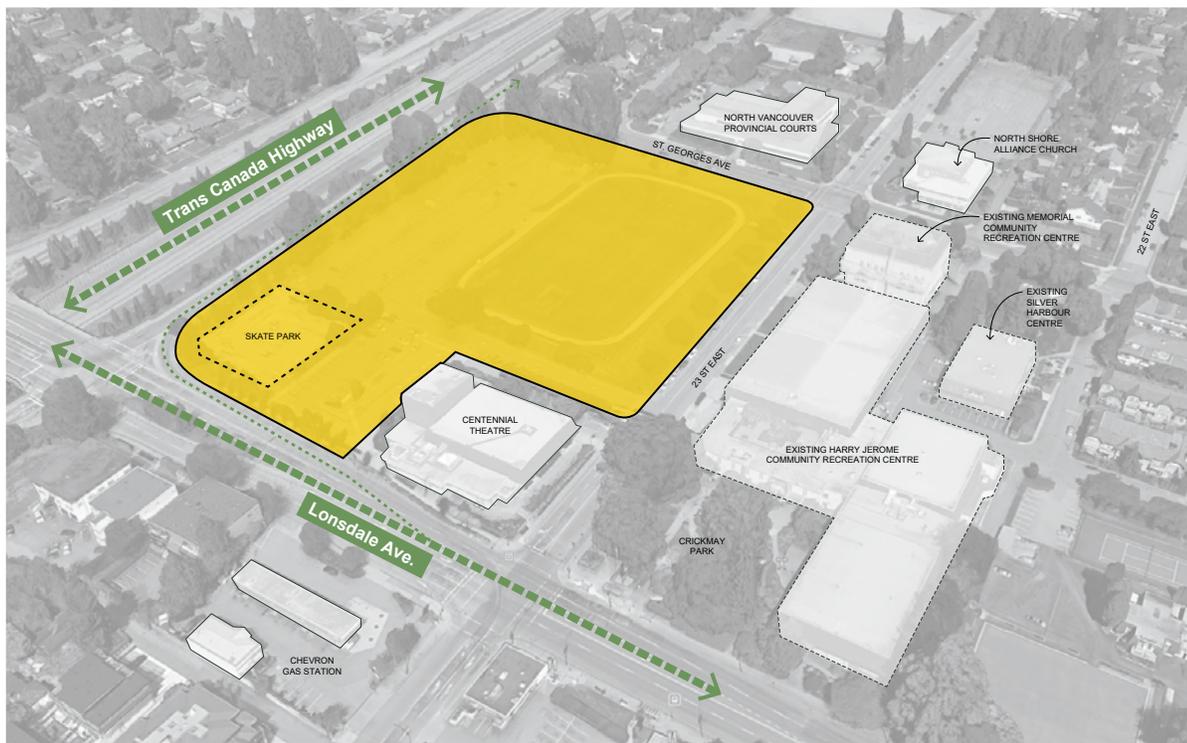
1.0 Executive Summary

The City of North Vancouver engaged HCMA Architecture + Design to revise the design for a new Harry Jerome Community Recreation Centre (“HJCRC”) which is intended to replace the City’s existing recreation facility. The new HJCRC will be constructed on the site located north of East 23rd Street between Lonsdale Avenue and St. Georges Avenue. The Centre is intended to be a focal point for the community; where residents and visitors of all ages and backgrounds come together to connect, experience, play, learn, socialize and celebrate.

In 2019, the City of North Vancouver underwent a community recreation needs assessment and developed a community recreation strategy entitled “A Healthy City for All – The Role of Community Recreation”. With this new prioritization framework in place, program components of the Harry Jerome Community Recreation Centre were reviewed and prioritized. In March 2020, Council endorsed a reduced project scope that aligned with the Needs Assessment.

This report documents the re-design process that was completed between April 2020 to March 2021 in response to the revised project scope. Biweekly project development team meetings that included the design consultant group and staff representatives from various departments within the City and NVRCC. Beyond this working group, stakeholder and advisory group engagement was employed to enhance the quality of the design solution. This engagement provided feedback that helped establish the character of the building as well as its relationship to adjacent open space and surrounding neighborhood. Careful consideration was given to re-plan the site and find design efficiencies for the endorsed reductions in project scope.





As part of the design process, the project vision statement and principles were revised to closer align to the city's updated values outlined in the recreation strategy. The vision, principles, goals and strategies continue to define the project brief and be used to guide decision making throughout the project.

THE VISION

"The Harry Jerome Community Recreation Centre will be a welcoming, vibrant, social heart of the community.

It will foster individual and collective wellness by providing opportunities to participate in a variety of organized and casual activities.

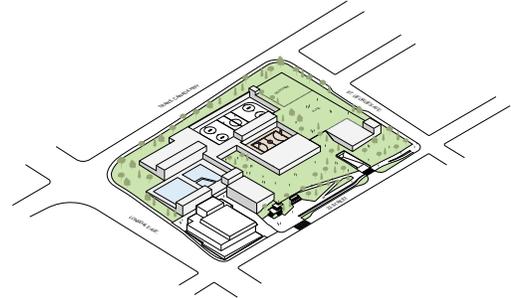
The centre will empower community members to enjoy healthy, active, and connected lives."

The selected site for the new HJCRC faced numerous constraints including a 10m grade change across the site, a large building program that fills most of the site, and limited options for vehicular site access. Following an extensive test-fit exercise, a building massing solution was agreed upon that had the greatest potential to achieve our project vision. This massing option was selected due to the following advantages:

- Integrated green space throughout building
- Create programmed outdoor spaces in south and east portions of the site
- Large animated daylight circulation space and opportunities for in-between spaces
- Views to green courtyards from programmed space
- Aquatics prominence on Lonsdale

A number of key design strategies were used to help the facility be a good neighbor and responsive to its context while creating a welcoming and vibrant heart for the community. The key strategy was in breaking apart the massive building footprint and allowing nature, light and casual activity to occur in the heart of the facility. This strategy also helped to:

- Break down massing to establish neighborhood scale on 23rd St.
- Establish key social spaces as anchors
- Maximize indoor – outdoor connections

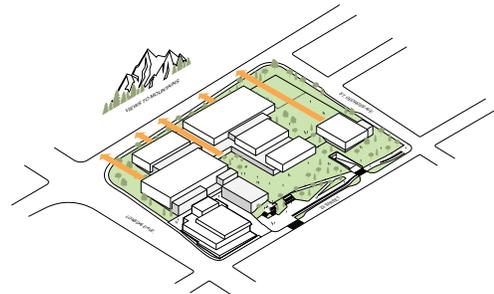


The building will also have a significant impact in the City's climate action plan as the existing Harry Jerome Recreation Centre is the largest contributor to the City's greenhouse gas emissions footprint. The new HJCRC design will reduce the carbon intensity of the project by approximately 81% compared to the existing facility and achieve a Total Energy Use Intensity 49% better than NECB 2015 baseline. Other sustainable efforts include maximizing heat recovery on-site through CO2 refrigeration, highly insulated building envelope, extensive natural daylight, innovative low energy pool filtration system and electric vehicle and bike charging.



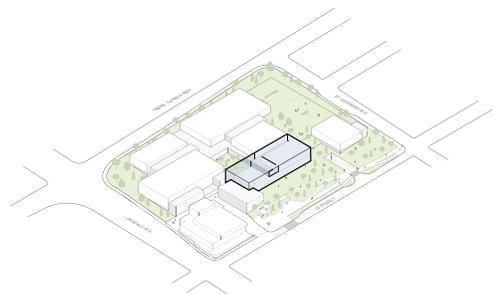
CAPITAL COSTING ANALYSIS

It is anticipated that the total project capital costs for the HJCRC will be approximately \$181.7 million based on a Class B cost estimate conducted in March 2021. The cost estimates have allowed for \$14.3million in contingencies and \$14.4 million in escalation. The project cost does not include the Silver Harbour Seniors' Activity Centre component which is yet to be confirmed – in progress.



NEXT STEPS

The next stage in this process would see the project through detailed design and into construction. We would recommend considering hiring a construction manager at this point if it is the preferred construction delivery method.



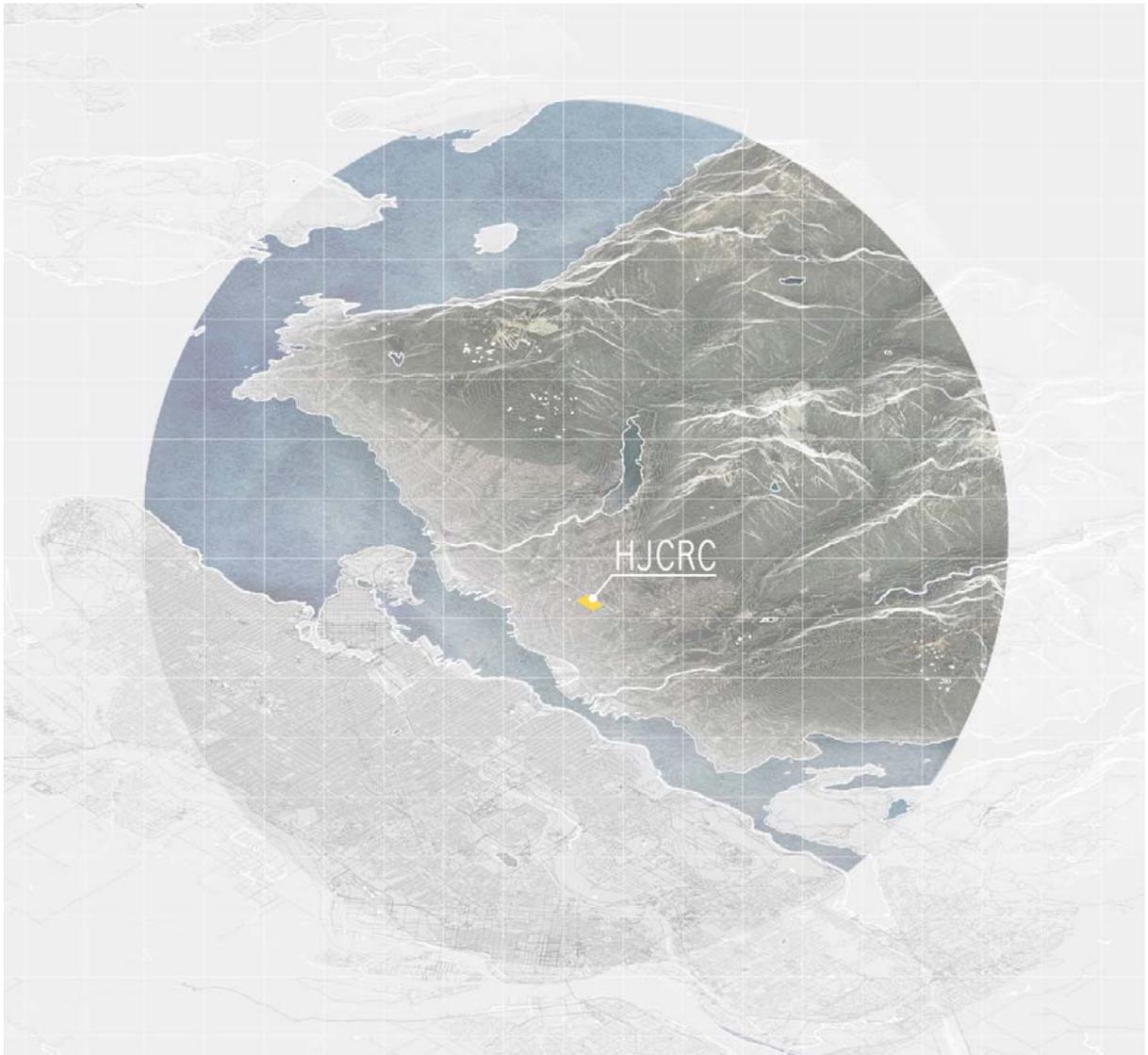
2.0 Project Background

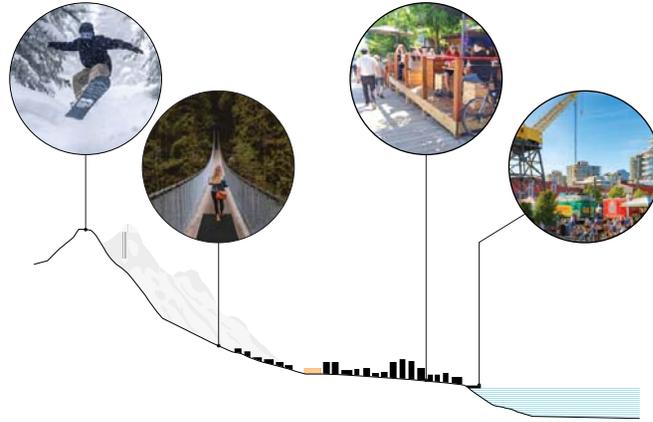
2.1 Site Analysis

2.1 Site Analysis

2.1.1 Regional Scale

The selected site for the project is located in North Vancouver near the Upper Levels Highway, north of 23rd Street E between Lonsdale Avenue and St. Georges Avenue. It is situated on a prominent corner of upper Lonsdale that acts as a gateway to the City. The site is uniquely located almost directly in the middle between North Vancouver's mountains and ocean. This defining location and context is well positioned to provide a meaningful and connected facility that bolsters a sense of place. The site also offers a key landmark to the city's proposed urban greenway that encircles the urban centre of the City (Green Necklace).



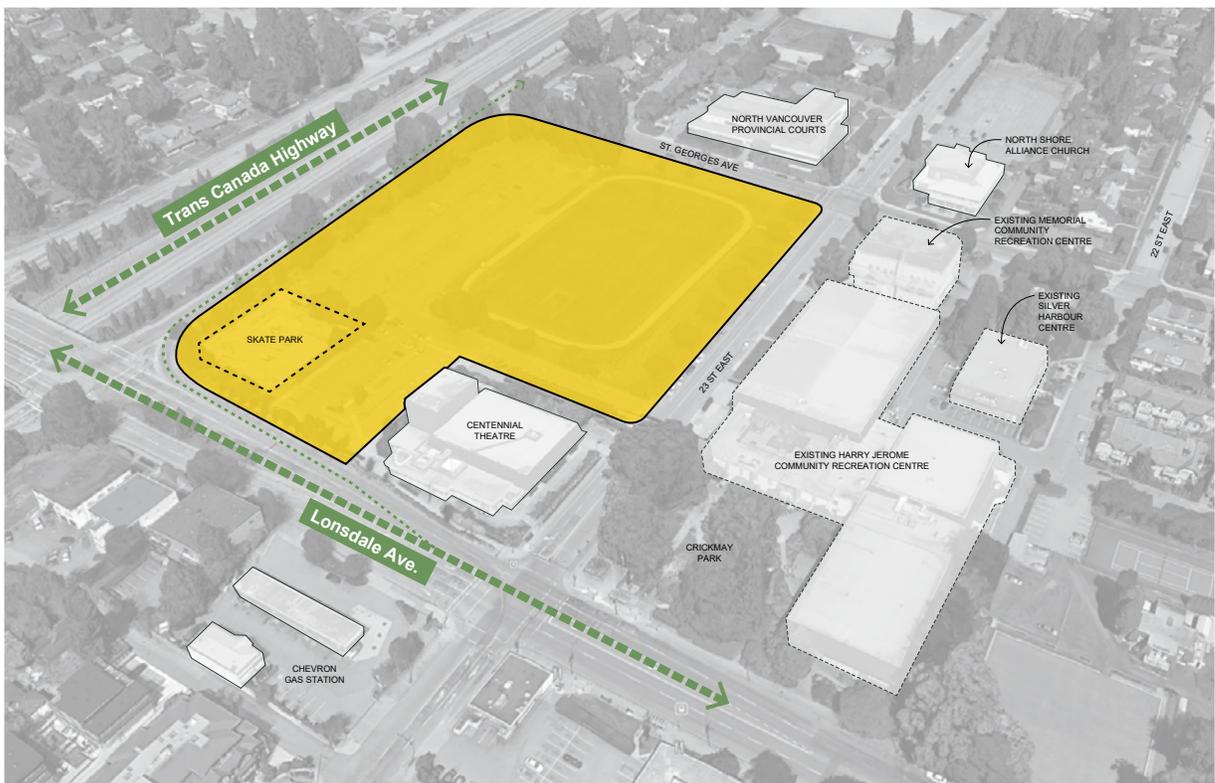


2.1.2 Site Scale

South of the site is the existing HJCRC, which is intended to be demolished and commercial and residential development to take its place. This future development is called the Harry Jerome Neighborhood Lands (HJNL) and includes an expansive new public park of approximately 1.0 ha that builds on the existing Crickmay park. The proposed development provides a mix of housing types, commercial space, and additional amenities.

Public transit to the site is frequent along Lonsdale Avenue with the nearest bus stop locations south of 23rd Street E on either side of Lonsdale Avenue. Vehicular site access is challenging with the proximity of the Upper Levels Highway to the north, a major arterial road to the west and two minor arterial roads on the south and east.

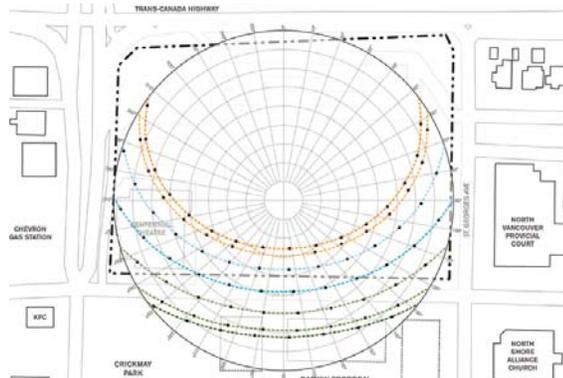
The project location shares a site with the Centennial Theatre and City Skate Park and therefore needs to function jointly with them. The skate park will be reconfigured and incorporated into the new community recreation centre design. The theatre will remain and should be welcomed and celebrated in the layout of the new HJCRC facility.



▲ Site context diagram

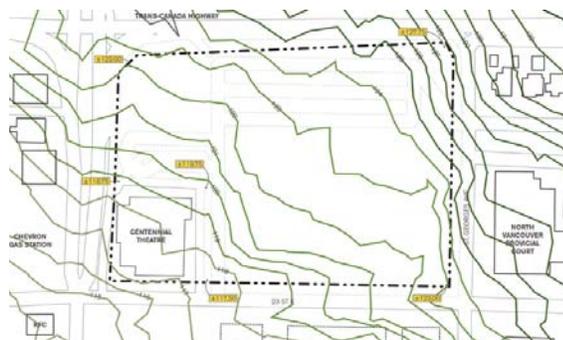
SUN ANALYSIS

This shows the orientation of the sun between sun rise and sun set throughout the year. In the winter the sun is as low as 35 degrees and in the summer as high as 72 degrees.



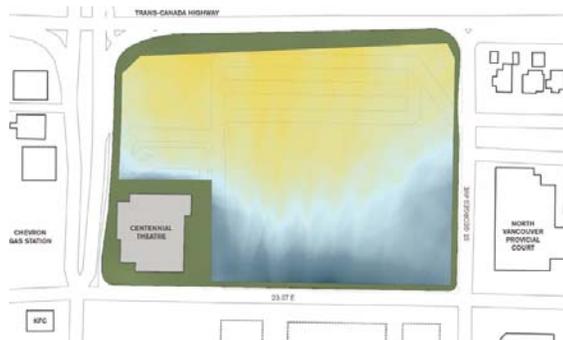
TOPOGRAPHY ANALYSIS

Site topography shows a 10m grade change from north-east to southwest. This site topography will impact the wind patterns as well as rainwater management.



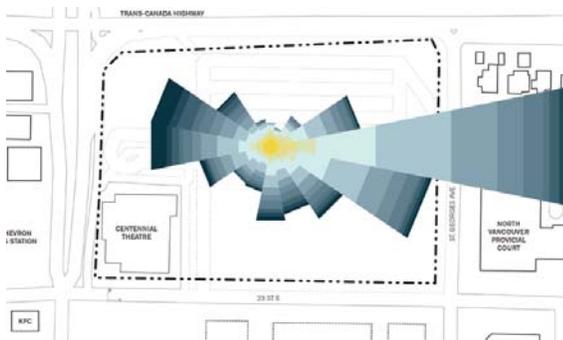
SHADOW ANALYSIS

Annual shading analysis shows how surrounding proposed buildings will impact the sun reaching our site at ground level. The northern part of the site remains in direct sun light continually while the southern part is shaded.



WIND ANALYSIS

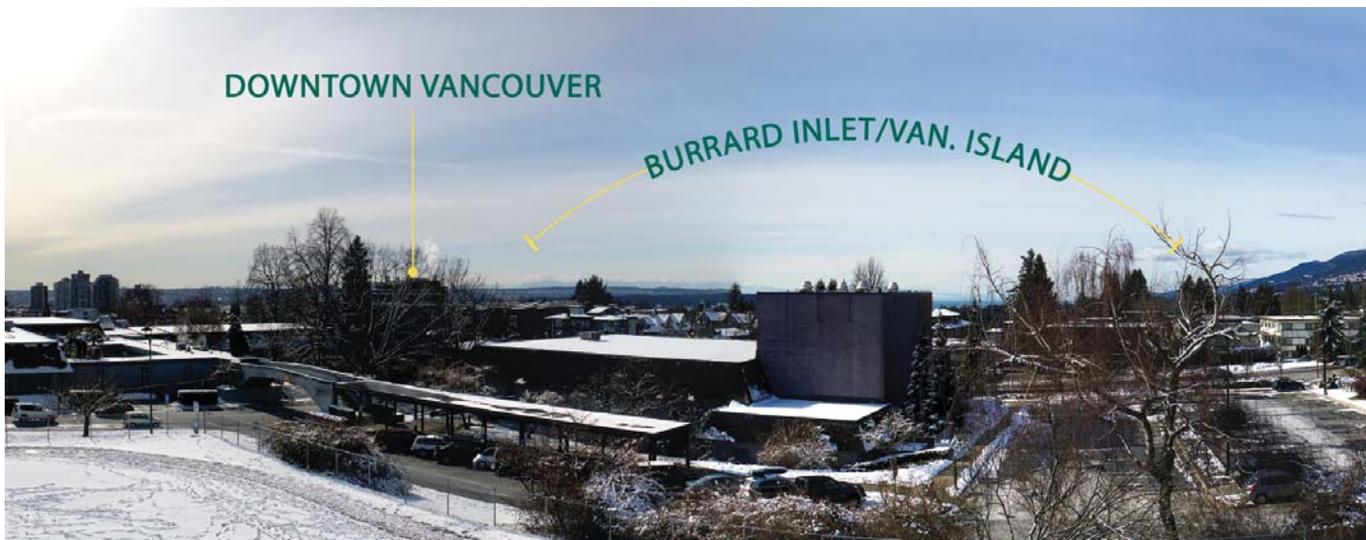
Annual wind analysis shows the prevailing winds coming from the east while occasionally a strong wind from the west will occur.

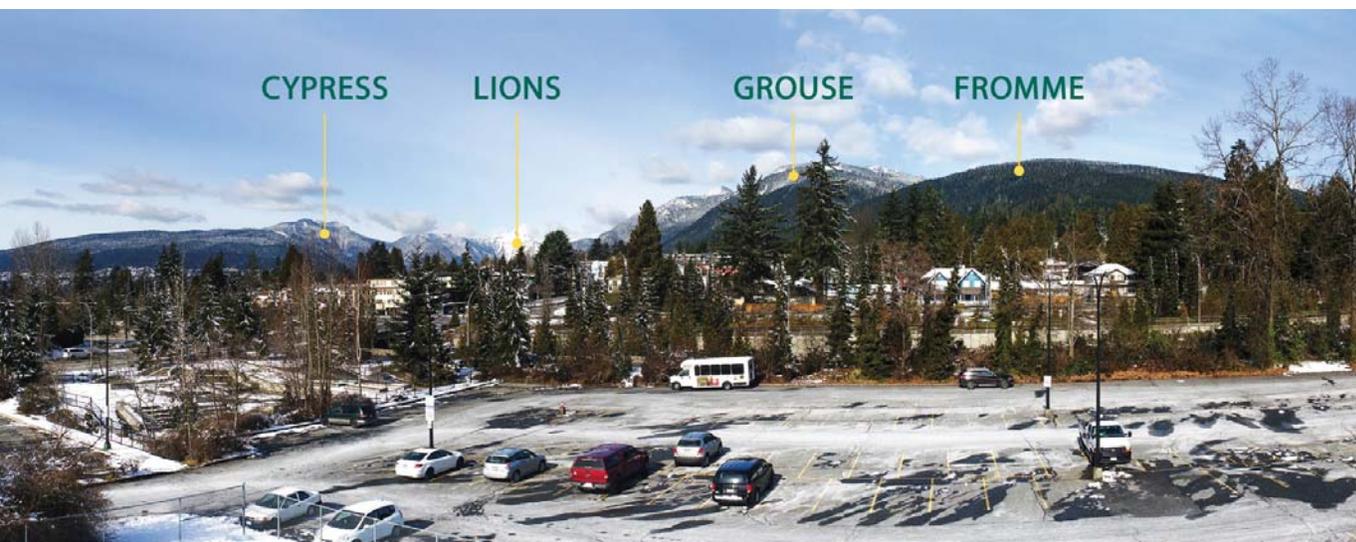
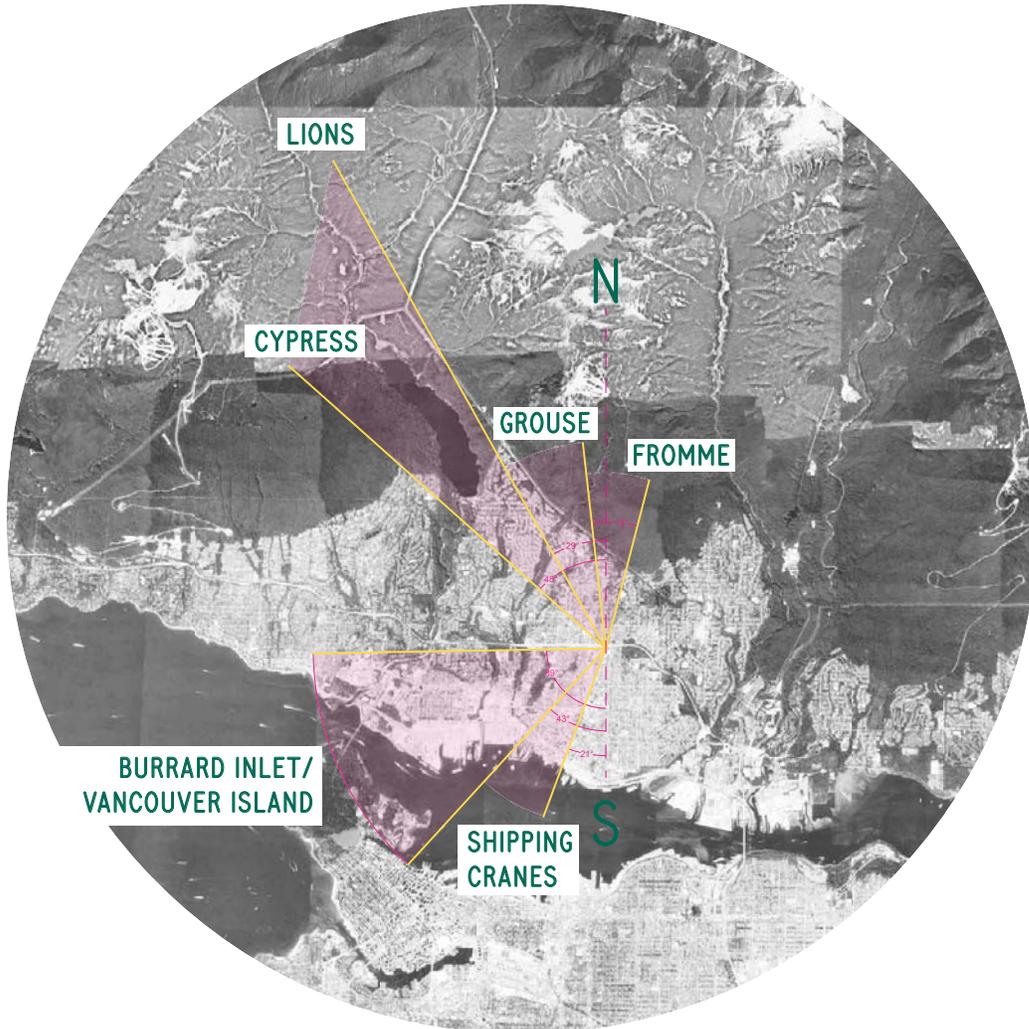


2.1.3 Views

Given the terrain of the North Shore, the project site offers views both towards the mountains and the ocean. Capitalizing on these views from our site will reinforce a sense of place and enhance wellness for visitors to the community recreation centre.

Using drone imagery, we were able to establish actual views from each floor level of the proposed community recreation centre. These drone images informed key spatial planning decisions to capitalize on views from various points throughout the building and site.





2.1.4 Site Constraints

2.1.4.1 PROGRAM AREA AND VOLUME

With a large facility program area, and many programs requiring high ceiling heights (e.g.: aquatic centre, gymnasium, and arena), the available site area is nearly fully covered by building. Strategic location and stacking of large program components require exploration to create opportunities for outdoor activities and landscaping.

2.1.4.2 ENTRANCES + ACCESS

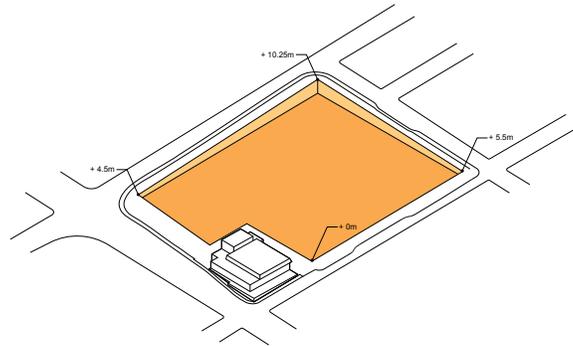
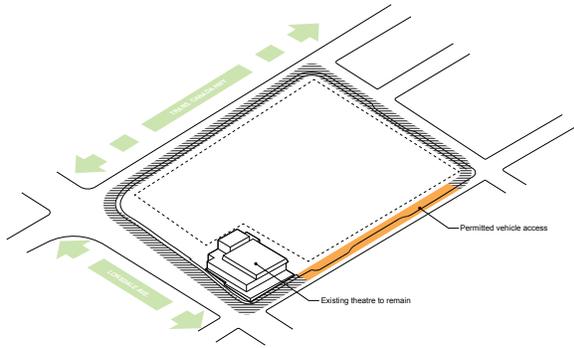
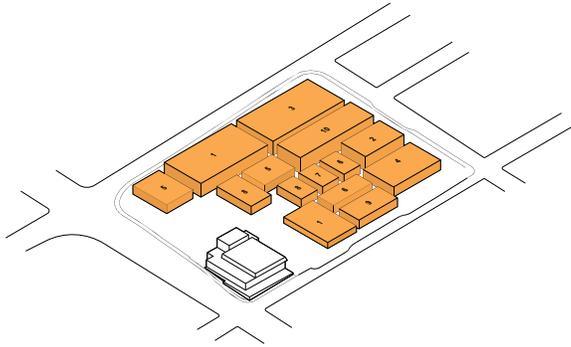
While the proximity to major transportation thoroughfares provides opportunities for multiple modes of transit, the adjacency to the Upper Levels Highway and Lonsdale Avenue restrict the direct access to the site from these busy roadways. Available area for vehicular access onto the site remain only along the south property line (23rd Street E), including a lay-by and pedestrian crossing.

2.1.4.3 SITE TOPOGRAPHY

Located on a slope midway between ocean and mountain, the site presents a greater than 10m grade change from south-west to north-east. With site access available from the south and east edges of the site, building entrance and floor levels must respond in relation to the adjacent grades. Program components with high ceiling requirements will require strategic location within the site to maintain an appropriate relationship with the scale of the surrounding neighbourhood.

2.1.4.4 LOT CONSOLIDATION & VARIANCES

The Centennial Theatre and Norseman Park lots are planned to be consolidated into one combined property that holds Centennial Theatre, Harry Jerome Community Recreation Centre and Silver Harbour Senior's Activity Centre. Concurrently, a rezoning application is underway for variances to lower staff secure bike parking requirements to reflect the number of facility staff; increase the allowable secure bikes per room; increase the allowable distance between short-term bike parking and the principle entrance; reduced setbacks on the north and west sides of the property; and increase the allowable lot coverage to accommodate the three facilities on one consolidated lot.



3.0 Design Response

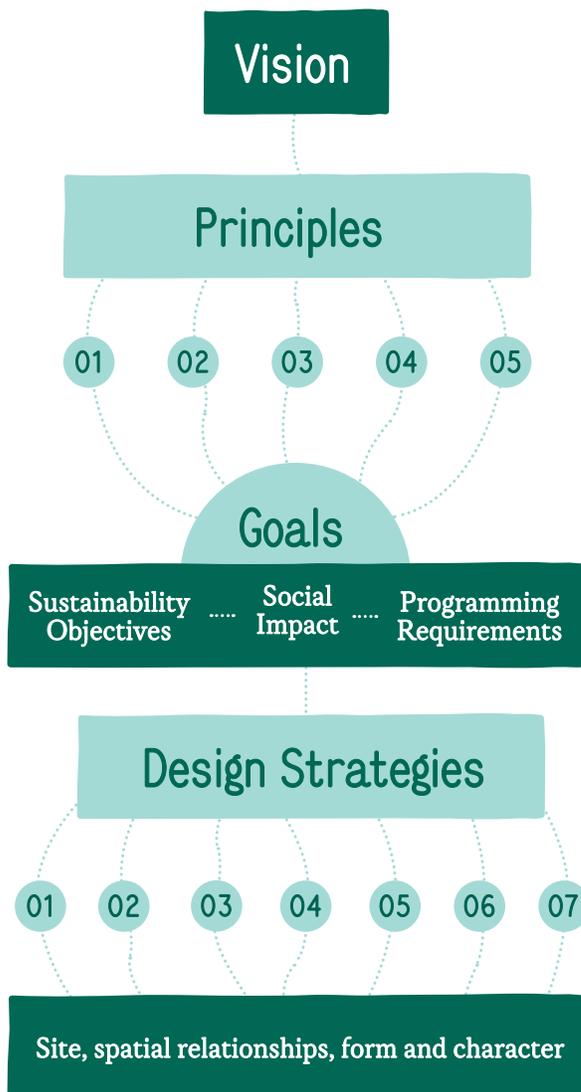
- 3.1 The Vision
- 3.2 Form & Character
- 3.3 Spatial Layout
- 3.4 Materials
- 3.5 Concept Renders
- 3.6 Landscape Design
- 3.7 Sustainability
- 3.8 Cost Analysis

3.1 The Vision

“The Harry Jerome Community Recreation Centre will be a welcoming, vibrant, social heart of the community.

It will foster individual and collective wellness by providing opportunities to participate in a variety of organized and casual activities.

The centre will empower community members to enjoy healthy, active, and connected lives.”



VISION STRUCTURE

The project vision was formulated through the exploration of three components: Social Impact, Environmental Sustainability, and Programming, including consideration of the project's financial parameters.

The purpose of the vision statement and development of principles and goals is to set the over arching project direction and intent, which can then be used to guide future decision making. Listed below are explanations of the terms we use in this section of the report:

- **Vision:** the role of the vision statement is to declare the HJCRC's purpose and aspirations. It informs the supporting principles, goals and strategies.
- **Principle:** a high level aspiration or value which can guide and inspire goals, strategies and actions across spectrum of policies, designs or actions.
- **Goal:** a general or specific desired outcome associated with principles
- **Design Strategy:** a container for a set of actions intended to fulfill stated goals

THE HARRY JEROME COMMUNITY RECREATION CENTRE WILL BE...

Equity

01 Accessible to all, with freedom and opportunity to participate in a variety of casual and structured activities.

Social Inclusion

02 An inclusive place that draws people together and fosters strong social connections between the diverse communities of North Vancouver.

Secure

03 A welcoming and safe environment that clearly communicates it's okay to be who you are, and promotes ease of use.

Adaptable

04 Responsive to evolving community needs which creatively shape a broad range of recreation and cultural activities.

Wellness

05 Supportive of individual and community wellness through physical, social, and creative pursuits. A connection to the natural environment is deeply valued in achieving this.

Environmental Sustainability

06 A global example of social and environmental sustainability and resilience.

Financially Responsible

07 Responsible to the City's financial outlook and economic conditions by designing within its boundaries.

Goals

How can we realize this vision? By working towards 4 key goals. These goals can be assigned with associated metrics that can later be used to measure success.

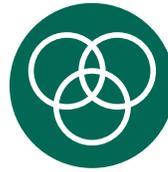


GOAL 1
Empower community members to enjoy healthy, active, and connect lives

The design of the new HJCRC will foster a vibrant sense of place and community that will continue to strengthen over time. Its design will attract and welcome people, and support positive individual and shared experiences.

Themes for assessment metrics:

Sense of place and belonging
Social and cultural life
Connectivity and imageability



GOAL 3
Provide for diverse users now and in the future

The new HJCRC will promote access and belonging for all. It will creatively respond to community needs as they evolve through adaptable and innovative design and governance.

Themes for assessment metrics:

Community resilience
Sense of place and belonging
Access, health, and safety



GOAL 2
Redefine perception of recreation to promote wellness in the community

The new HJCRC will embody the full spectrum of recreation by creating a variety of dynamic spaces that actively support expanding notions of physical, mental, and social wellness. It will promote progressive synergies between recreational, cultural, and intergenerational uses to support lifelong discovery and development. The sum will be greater than its parts.

Themes for assessment metrics:

Social and cultural life
Personal development and enjoyment
Access, health, and safety



GOAL 4
Support the city's climate action plan targets

The City's 2011 Corporate Climate Action Plan set a target of a 25% reduction below 2007 levels by 2020. As the existing HJCRC accounts for 27% of the City's overall corporate greenhouse gas emissions, there is an opportunity to demonstrate leadership and significantly reduce corporate GHG emissions. The redevelopment of HJCRC has long been a key component of the City's corporate Climate Action Plan.

Themes for assessment metrics:

Refer to the Sustainability Report in appendix 6.6.

Design Strategies

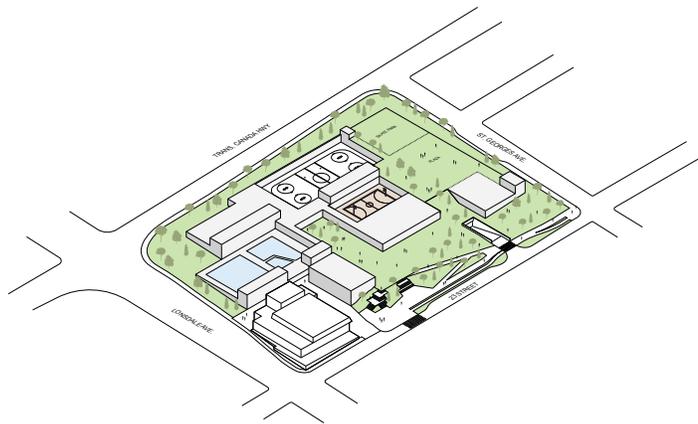
These goals will be achieved through a variety of strategies which will directly be used to guide the design.

- 01 Create a welcoming and animated arrival space.
- 02 Design in features for delight and celebration of community identity and unique setting.
- 03 Ensure access for all through safe arrival, variety of seating, legibility of space and circulation, and ease of use.
- 04 Strong visual and physical connections both within the facility and to the wider community.
- 05 Create spaces of a variety of scales and openness for user comfort.
- 06 Create flexible and adaptable spaces that promote a range of both specific and broad programming as well as informal, temporary, and formal uses.
- 07 Connect to and integrate outdoors (build on the unique North Vancouver identity and express through physical form).
- 08 Enhance and connect to urban fabric.
- 09 Use materials and technology that contribute to a positive experience for all.

3.2 Form & Character

3.2.1 Building Massing

A number of key design strategies were used to help the facility be a good neighbour and responsive to its context while creating a welcoming and vibrant heart for the community. The key strategy was in locating the multiple program components around a central courtyard to allow for nature, light, and casual activity to connect all users of the facility.



STEP 1

- Base massing is embedded into the site, accommodating a majority of the large program elements as an extension of the landscape
- Locate large program areas next to highway and larger blank walls next to steep slopes
- Locate smaller program areas next to residential zone of 23rd Street E

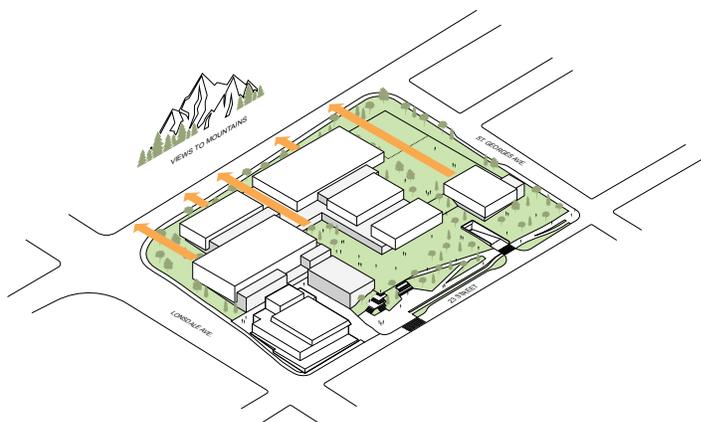


STEP 2

- Upper massing is broken to allow views, daylight, and natural ventilation
- Establish outdoor recreation zone facing St. Georges Ave
- Respect the existing and future connection points to Centennial Theatre (users and loading) efficiency

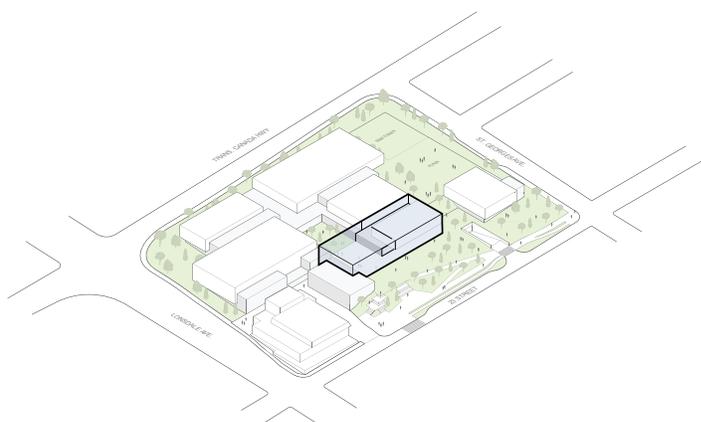
STEP 3

- Establish visual connections to mountains



STEP 4

- Maximize transparency and indoor/outdoor connection between civic plaza, atrium, and courtyard
- Establish civic plaza facing 23rd Street E with connections to the Green Necklace



3.3 Spatial Layout

3.3.1 Design Response

The intention is to create a new community hub that builds on the success of the existing community recreation centre by relocating, expanding, and upgrading the current amenities.

The community recreation centre's main entrance, landscaped plaza, and primary pedestrian site access is off 23rd Street E. The plaza also connects with the existing Centennial Theatre to create a new, shared public space.

As a result, the larger program components have been sited along the northern edge of the site next to the Highway and the smaller, more modular program components have been located to the south where a finer grain is required to respond to surrounding residential neighbourhood.

One level of vehicle parking is located below grade at Level -1. The parkade is accessed off 23rd Street E and has an internal connection up into the main lobby of the facility. The parking level also serves Centennial Theatre and provides an accessible and friendly route for patrons to walk to the entrance of the theatre.

3.3.2 Plan Layout

3.3.2.1 BUILDING ORGANIZATION

The building is organized over 3 levels which include:

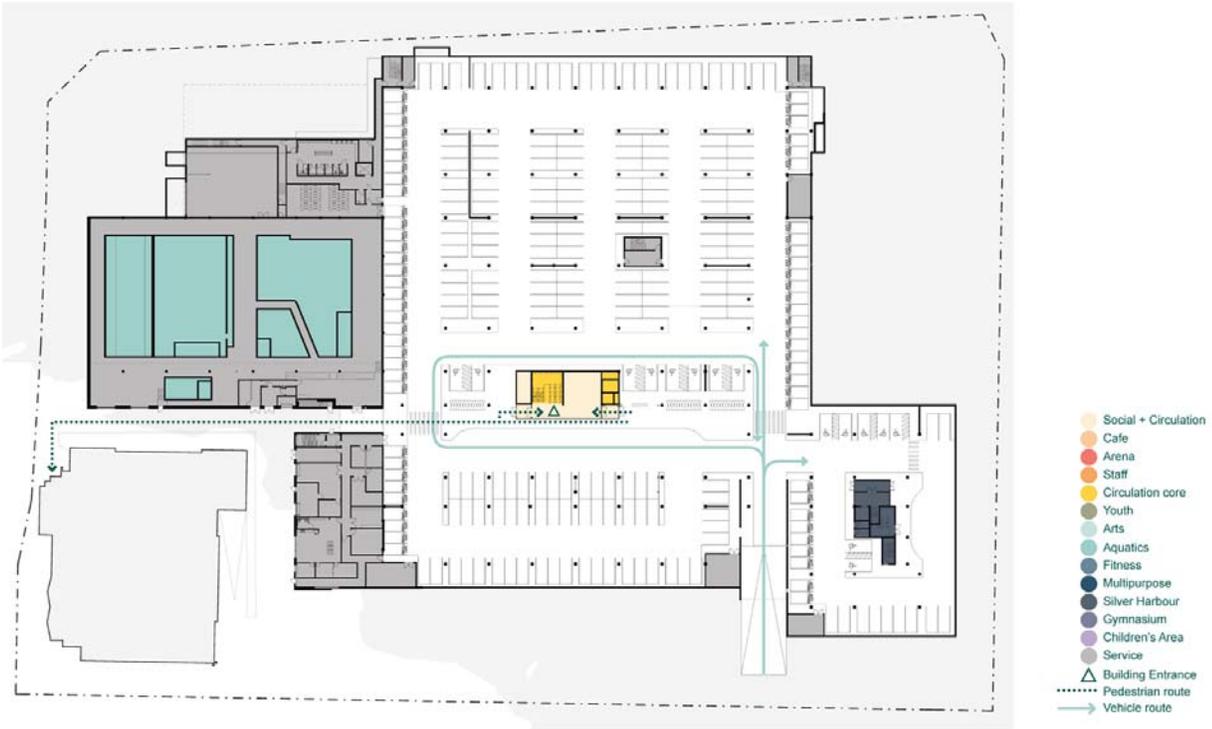
- Level -1: Below ground
- Level 1: Partially below ground
- Level 2: Above ground

The building program is organized across the levels as follows:

- Level -1: Parkade and Op's & Maintenance
- Level 1: Aquatics Centre, Arena, Gymnasium, Multi-Purpose Areas, Arts Studio, and Seniors' Centre
- Level 2: Fitness Centre, Multi-Purpose Areas, Staff, Children's Areas, Youth Centre, and Seniors' Centre

3.3.2.2 CENTRAL PLAZA, ATRIUM, AND INTERIOR COURTYARD

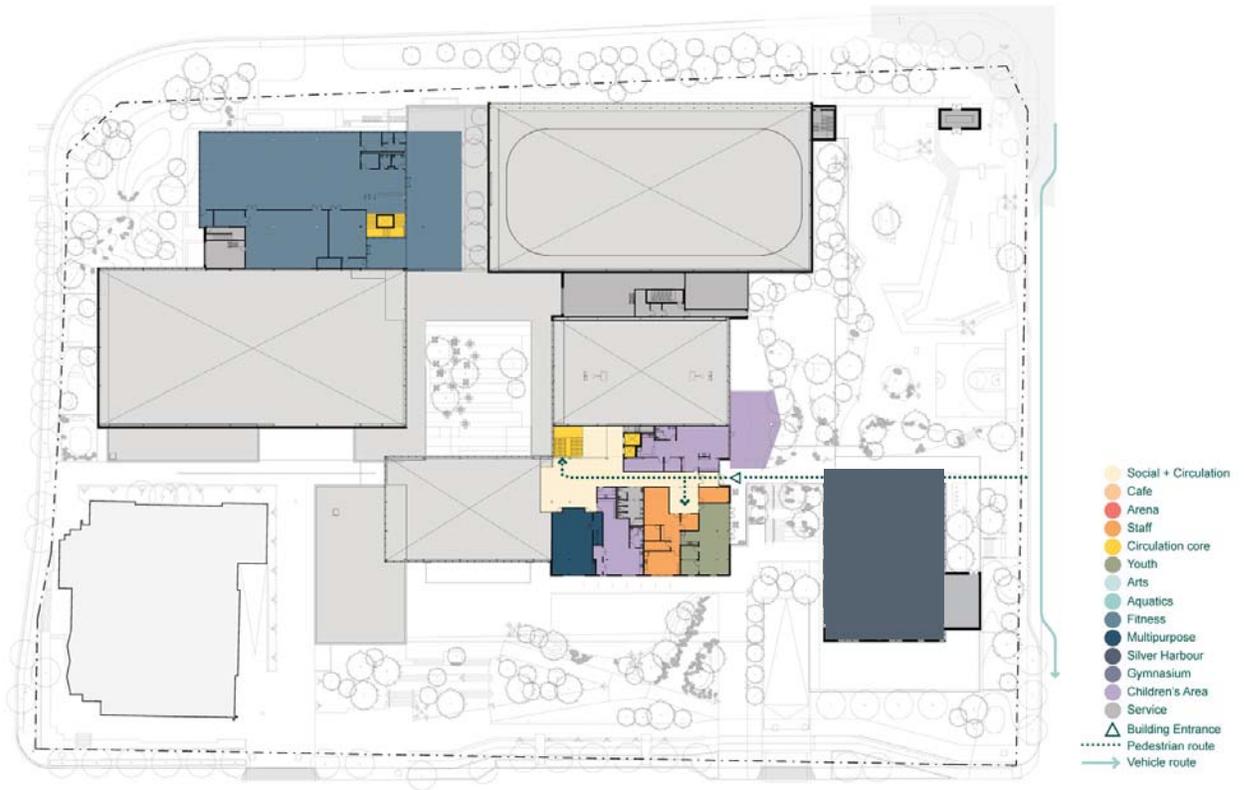
The plaza, atrium and interior courtyard, which represent the organizing structure for the building, sets out an intuitive wayfinding and orientation experience for HJCRC. The main atrium is the social heart of the centre, providing a welcoming reception area and opportunities for spontaneous and programmed activities and celebrations both indoor and outdoor. Whether you arrive by car, bike, foot or slide, you enter into the main atrium. The interior courtyard, connected to the main atrium, allows for views throughout the centre, connects users to a variety of activities, allows for fresh air and supports spontaneous informal activities.



▲ Level -1 Plan



▲ Level 1 Plan



▲ Level 2 Plan

3.3.2.3 CONTROL POINTS

The main reception desk is located in the atrium to directly observe the main entrance, atrium, and concession areas. Reception also has sight lines to the associated elevator and internal circulation bounding the courtyard that connects to the aquatic centre, skate shop, and gymnasium. The formal control point (controlling paid versus non-paid access) is situated further inwards of the building, adjacent to the aquatics change rooms, and is assisted by various control turnstiles throughout the building to allow as much public (non-paid) access to building areas as possible.

3.3.2.4 BUILDING ACCESS & USER CIRCULATION

The colour-coded plan illustrates the building layout and spatial relationships between the different program components. Open circulation has been consolidated into the casual programming zones which primarily surround the courtyard. Stairs and elevator cores are located in these zones to connect the building levels.

At Level 1, circulation is accessed from the landscaped plaza via the entrance atrium. The atrium connects to both the internal circulation and the Level -1 parkade where there is a dedicated drop off zone. North of the lobby is a circulation route that encompasses the courtyard, leading to Aquatics, Fitness, Arena, Gymnasium, Multi-purpose Areas, and Art Studio. Access to paid-only areas is restricted via a control desk or turnstiles.

At Level 2, a secondary entrance from the east connects into the Youth Centre, Children's Areas, and Multipurpose Areas. An open stair, slide, and elevator core connects to Level 1 to access the remainder of facility.

3.3.2.5 ORGANIZED AND CASUAL PROGRAMMING, OUTDOOR SPACE

The building plan has been organized into three zones which include: organized programming, casual programming, and outdoor space.

Organized programming consists of the components of the building area program which includes an aquatic centre, fitness centre, arena, gymnasium, seniors' centre, and rooms for various community programs.

The casual programming zones have been designed as an intermediate space between outdoor and indoor activity, and the concept of the space is deeply embedded in the project Vision and Principles (see subsection 3.1 The Vision). These zones provide circulation, informal social and recreation space, areas for spectator viewing, and facilitate active surveillance throughout the Recreation Centre.

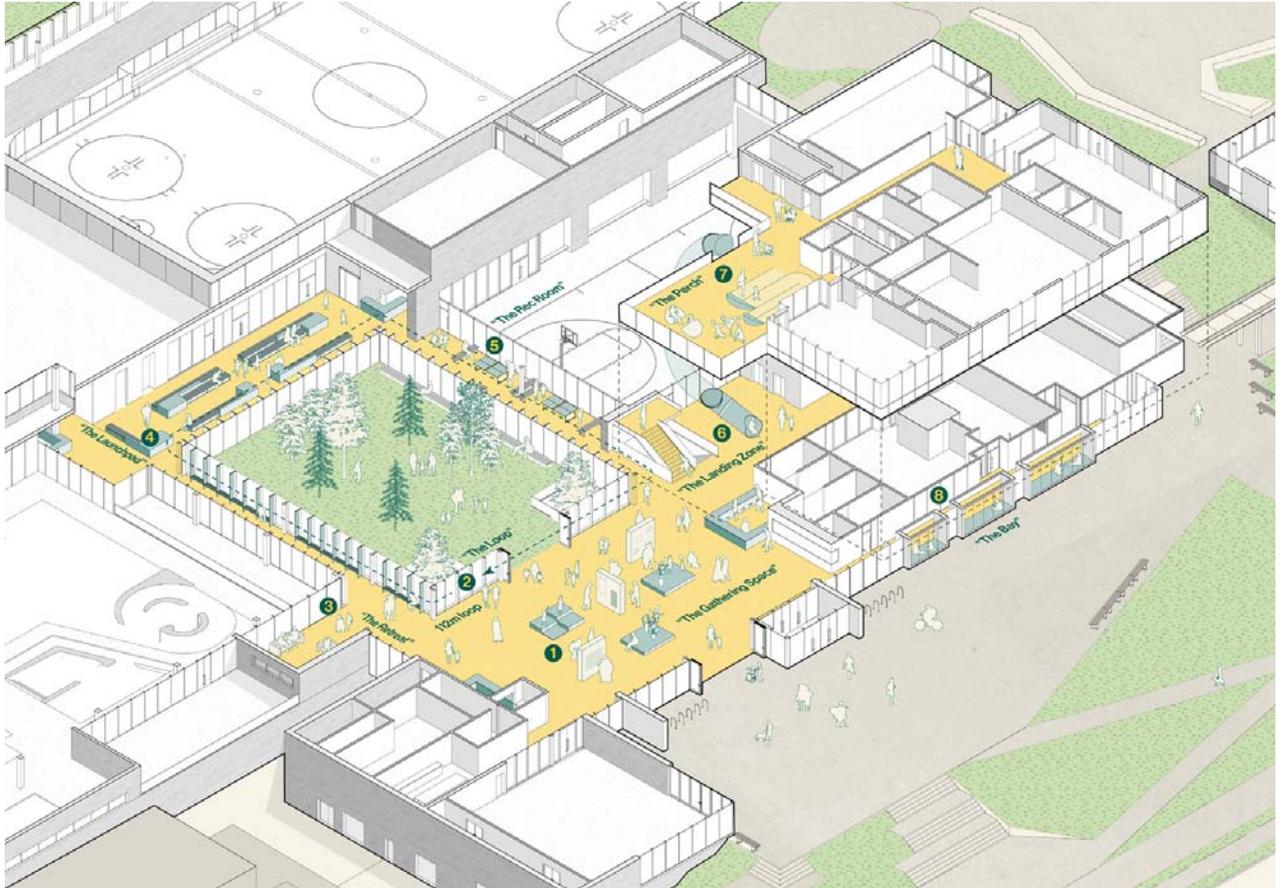
At the center of the site is the outdoor space which is accessible to all and forms the heart of the facility. The outdoor space connects and adds to the casual programming zones, defines the building mass, and brings natural daylight, nature, and views into the centre of the building.

3.3.2.6 LEVEL DIFFERENTIAL

Due to existing site levels, grade increases from the base of plaza steps to the property line at the north-east corner of the site along St. Georges Avenue and the Highway (refer to subsection 2.2.4 Site Constraints). This level differential allows access into the building multiple levels.

The level change between the SW and NE corners of the site is accommodated between the Recreation Centre and Seniors' Centre where grade is softened with planting and stepped paving. This change in level creates two entrances on two levels: a primary entrance off the plaza at 23rd Street E and a secondary entrance facing east towards St. Georges Avenue. Both entrances provide universal access to the building and outdoor in-between spaces. In addition, this level differential allows the parkade and service cores at Level -1 to be concealed underground.

Large, high ceiling program components are embedded into grade moving towards the north of the site. This helps to reduce the physical and visual impact of large program volumes and solid frontage.



▲ In-between/Social Spaces

- The Gathering Place – large scale space for community gathering and social events
- The Loop – 110m interior walking loop with resting benches around the courtyard
- The Retreat – multi-purpose space with quiet acoustic treatment providing sensory retreat
- The Launchpad – staging area for public skates and space for quieter study and reading
- The Rec Room – hang out area next to the Gymnasium with space for table tennis and foosball
- The Landing zone – touchdown space for the slide that connects the children’s programming on Level 2 with the ground floor
- The Perch – overlook with soft furniture for lounging, people watching and for kids to run around and blow off some steam
- The Bay – quiet window seats for resting, reading or chats with a friend

3.3.2.7 SITE ACCESS

The proximity of the site to the major transportation thoroughfares of the Upper Levels Highway and Lonsdale Avenue restricts direct access into the site (refer to subsection 2.2.4 Site Constraints).

The design of 23rd Street E (between Lonsdale and St. George's) enhances the pedestrian scale of the streetscape, integrate the Green Necklace, and facilitates both the single entrance to the HJCRC parkade and the shared loading with Centennial Theatre.

The Green Necklace has been integrated as a key feature, designed as separated pedestrian and cycling paths integrated with the signalized mid-block crossing. The mid-block crossing has been designed with consideration of pedestrian safety, vehicular queuing, intersection functionality as well as creating a clear and legible connection between the parkland to the south of 23rd Street E and the front entrance to the new HJCRC.

3.3.2.8 VIEWS

The building has been designed to maximize views towards outwards and in between program spaces. Externally, the arrangement and orientation of spatial volumes allow views towards mountains to the north and through the courtyard.

Internally, the casual programming zones and courtyard are highly glazed to maximize visual connections. At each level, these zones provide spectator or casual viewing into main program areas; allowing users to connect with the activity and function of the building.

3.3.2.9 OPERATIONS

The Operations and Management (O&M) facility is located at Level -1 in the SW corner (behind the theatre) and is accessed via a vehicular or pedestrian route off 23rd Street or from inside the parkade.

The O&M facility houses the loading dock, maintenance storage, garbage storage, workshop, and staff offices.

Adjacent to the O&M facility is pool mechanical and the parkade, with various service cores distributed throughout linking Levels 1 and 2. In addition to this, there is a dedicated refrigeration, mechanical, and electrical core for the Ice Arena on Level 1.

For significant repairs and replacement, access to service cores can be gained via the Level -1 parkade or from a restricted loading area off the highway on-ramp. This restricted loading area also serves as an exit route for the ice resurfacers.

3.3.2.10 CENTENNIAL THEATRE

Integration with the existing Centennial Theatre has been an integral part of the design process as it both neighbours the development site and shares car parking facilities with the Recreation Centre. At level 1, the theatre connects directly to the proposed plaza, providing shared outdoor space with the community facility. Directly off the plaza is a dedicated stair and elevator core that links to Level -1 of the shared parkade.

3.4 Materials

Materiality has been chosen in relation to the following parameters:

- Visual appearance
- Contextual appropriateness
- Durability & maintenance
- Cost efficiency

The building envelope consists of: Concrete block cladding, corrugated metal cladding, clear glazing, obscured glazing (whether 3D such as OkaTech or 2D frit), and wood structure & soffits.

Concrete block, as a natural and heavy element, is established as the cladding material for spaces submerged into the sloping landscape. These spaces are typically on lower floors, require less daylight, or encompass mechanical rooms. Concrete block is a durable and cost-efficient product with a texture suitable to its natural context.

Above the concrete base, cladding material transitions into crisp, rectangular forms of corrugated metal and vertical glazed curtain wall; volumes perched lightly and individually shifting off its base below. Curtain wall glass was used strategically throughout the facility to concentrate its use where most impactful to achieve the desired quality of light and transparency (overall glazing is 41%). More glass was used in gathering spaces with indoor-outdoor connections while reduced on the blank walls of large 2 storey components. Intentional use of obscured glazing further filters each programs' exposure to light and exterior views during the day, while reversing its expression as a glowing beacon of light during the night.

The atrium roof features an exposed wood structure with full-height curtain wall encompassing its space and adjacent casual programming zones below, maximizing visibility into social spaces to create visual connections between program areas. Additionally, the underside of cantilevered forms is clad with a wood soffit; this warmer material complementing the landscape design and links to a community characterized by its natural environment.



①



②



③



④



⑤



⑥

LEGEND

- ① Concrete Block
- ④ Obscured Glass
- ② Corrugated Metal
- ⑤ Wood
- ③ Glass
- ⑥ Nature



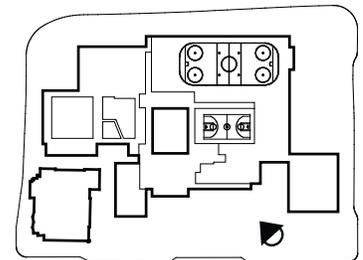


3.5 Concept Renders

The following concept renders show key views of the proposed HJCR.

▲ Concept Render - Exterior view from 23rd Street E

Crossing 23rd Street E, you can see the dramatic roof cantilever hovering above. Multi-purpose rooms and offices peer down from the second level beside an atrium glowing with warmth, beckoning you inside. The landscaped entrance plaza feels lush and natural.



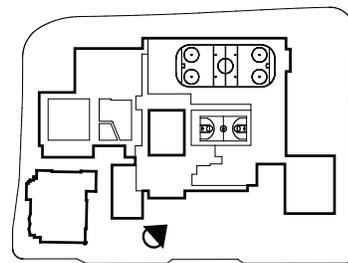
VIEW KEY





▲ Concept Render - Exterior view from within the plaza

The entrance plaza can be compared to a clearing in the trees – an open area that offers flexibility for a wide range of outdoor activities. You can see various groups gathering in the plaza, filtering through an open atrium, and the courtyard beyond. Multi-purpose rooms cantilever from the second floor.



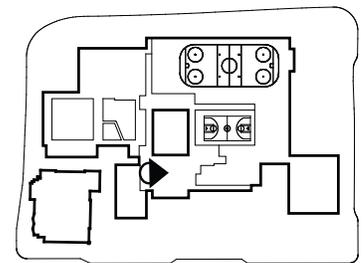
VIEW KEY





▲ Concept Render – Interior view from within the atrium

The social heart of the building invites interaction and play. A welcoming and flexible space that blurs the boundary of indoor and outdoor. To the left of the image, you see into the courtyard, which offers a lightwell connecting to the Level -1 parkade. Activities in the second floor multi-purpose room and mezzanine can be witnessed from below.



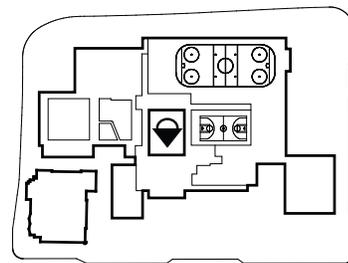
VIEW KEY





▲ Concept Render – Exterior view from within the courtyard

The atrium and surrounding circulation glows with warmth on a rainy day. The courtyard offers a natural reprieve from building functions and program – a connection back to nature.



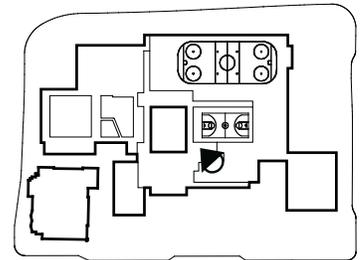
VIEW KEY





▲ Concept Render – Interior view from the Welcome Centre

A community is welcomed into the vibrant social heart of the building, with play structures dispersed throughout. A spiral slide sits adjacent to the main stair, allowing a playful way to connect from the second level. Gymnasium and courtyard activities can be seen beyond. The atrium to the left offers a cafe to enjoy a treat while providing views into the aquatic centre.



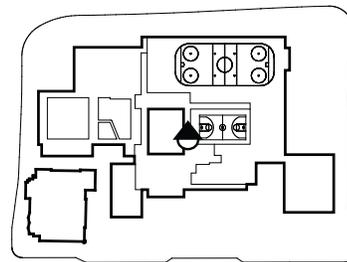
VIEW KEY





▲ Concept Render – Interior view adjacent to a corridor

A casual place to meet, play some games, or relax by yourself. You can see various activities from different program spaces such as the courtyard, arena, and gymnasium.



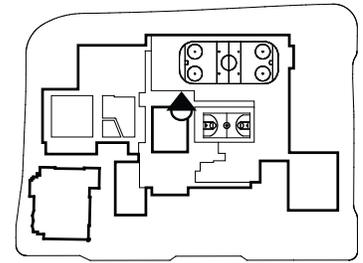
VIEW KEY





▲ Concept Render – Interior view from the skate change area

Soft daylight filters into the arena as you enjoy an afternoon on the ice. The adjacent multi-purpose room offers a gathering space with a fireplace to warm up. Spectators can watch from the adjacent seating area and beyond, tree tops and the North Shore mountain peaks can be seen.



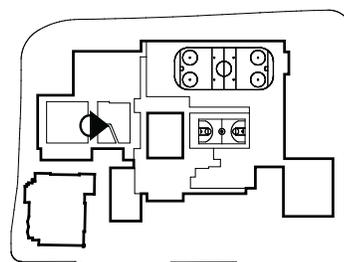
VIEW KEY





▲ Concept Render - Interior view from within the Aquatic Centre

The zero-entry leisure pool provides play space and leisure swimming for all ages (lap pool behind viewer). Framed views of the courtyard beyond are prominent from within the aquatic centre. A wellness area to the right expands to an exterior south-facing patio, and the fitness centre looks down from above on the left.



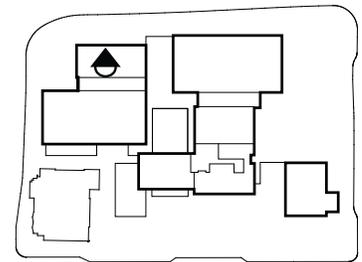
VIEW KEY





▲ Concept Render – Interior view from within the fitness centre

Surrounded by elevated views to the North Shore Mountains, multiple exercising options are offered on the second floor from studio classes to individual strength training. A covered outdoor fitness space is directly accessible from the fitness centre.



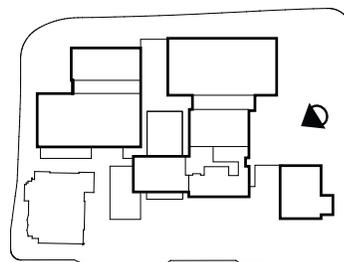
VIEW KEY





▲ Concept Render – Exterior view from active recreation zone

Vibrant and active play zones span across the outdoor program, providing casual activities and sports for all ages and abilities. Towards the left, a second level entrance connects from St. Georges Avenue via a walk adjacent to the Silver Harbour Seniors' Centre. Towards the right, concrete seating transitions into an outdoor skatepark.



VIEW KEY



3.6 Landscape Design

The open space design is driven by a diverse program of active and passive outdoor recreational spaces. It is inspired by the character of North Vancouver through the use of native and adaptive planting, and materials including wood and stone.

A large south-facing entry plaza provides a welcoming front porch for the community to gather, as well as a lawn for everyday activities, larger gatherings of up to two-thousand people, or a stroll before heading over to the Centennial Theatre. This space is directly connected to an interior atrium with views to a central courtyard that provides visitors to the building natural light, views of nature and a tranquil place to sit.

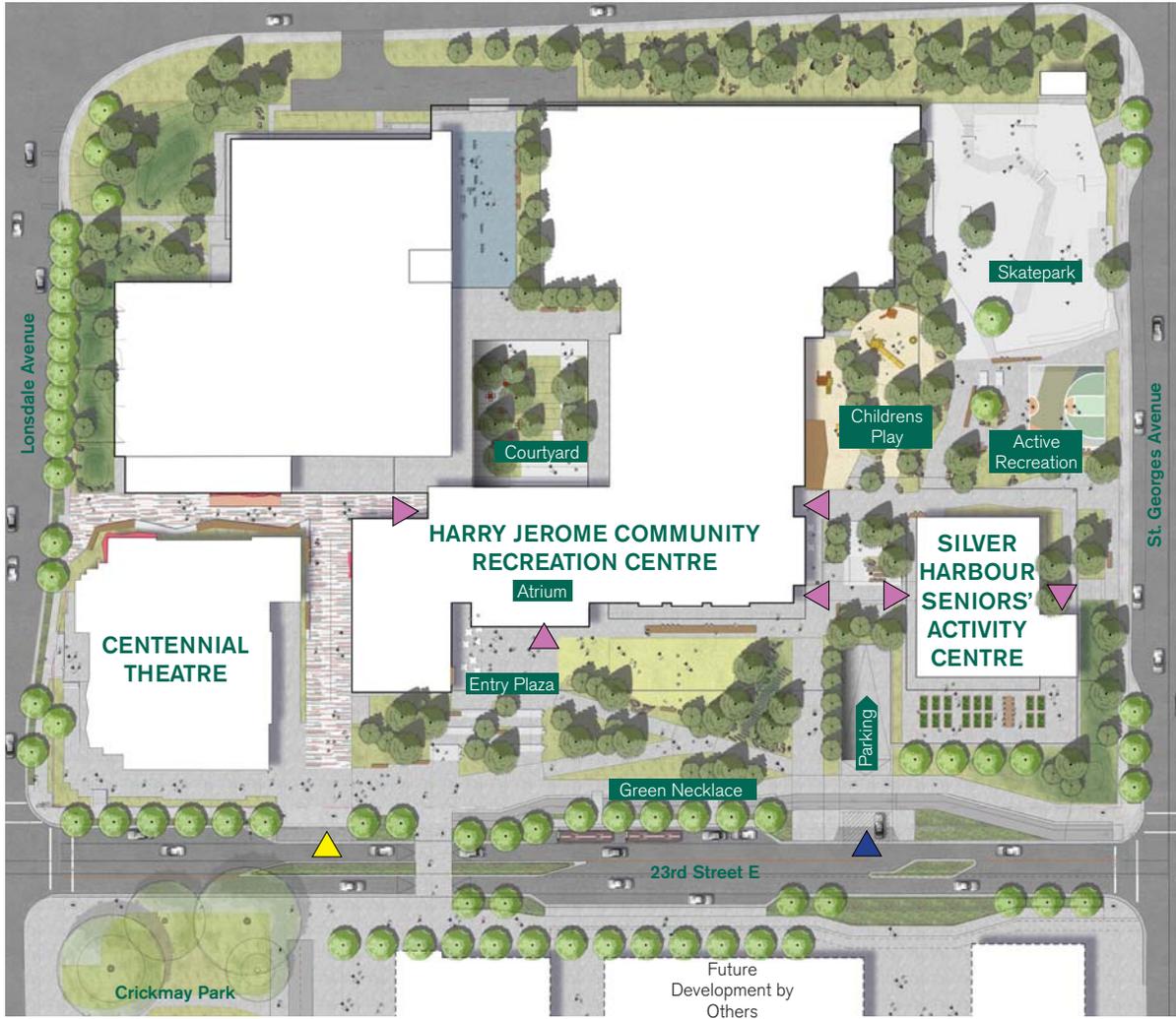
The North-East corner of the site supports an array of vibrant and diverse community functions fostering social interaction and an outdoor active lifestyle; it is a space where parents can meet while their children play, and where people of all ages can talk between basketball games or between rides through the skatepark.

Visitors to the Silver Harbour Seniors' Activity Centre can go outside for a chat or sit on the sunny south-facing social porch. Connections from the seniors centre to the recreation centre have been carefully thought out to provide direct access between the two facilities.

The design and programming of the community recreation center's open space creates an array of opportunities to foster strong social connections between members of North Vancouver's diverse community.



Upper Levels Highway on-ramp



▲ Landscape Plan

- ▲ Building Entrances
- ▲ Parkade Vehicle Entrance
- ▲ Service Vehicle Access

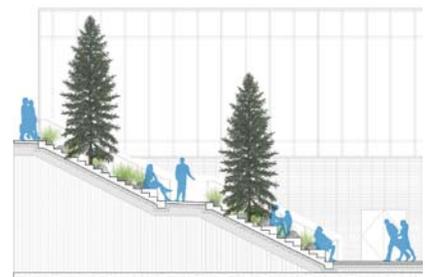




▲ Entry Plaza



▲ Section 1 - Stairs up to Entry Plaza



▲ Section 2 - Stairs to Active Recreation Zone

Upper Levels Highway on-ramp



▲ Active Recreation Zone

3.7 Sustainability

The City has adopted aggressive climate action targets to reduce greenhouse gas emissions and the existing Harry Jerome Recreation Centre is the largest contributor to the city's overall emissions footprint. As a result, climate responsive sustainable design is a priority within the project vision and principles.

In 2018, a set of performance targets and aspirational goals were proposed as part of the project Sustainability Design Vision Report to guide design direction and decision making for the HJCRC. While performance targets other than code requirements have not been formally adopted, current design does respond to a range of aspirations set out in the report, and others more recently articulated by the City.

ENERGY EFFICIENCY AND OPERATIONAL GREENHOUSE GAS EMISSIONS (GHGS)

The City of North Vancouver requires application of Step 1, of the BC Energy Step Code, which supports energy efficient design and good airtightness. The Step Code does not include performance targets for emissions. The existing recreation centre produces approximately 46 kg of CO₂e/m².y and accounts for 29%* of the City's corporate building greenhouse gas emissions. As such, the redevelopment of the Harry Jerome community center is identified as critical to meeting the City's GHG reduction targets of 80% below 2007 levels by 2040 and achieving net zero or 100% emissions reductions by 2050. To achieve this goal, the project would need to aggressively reduce emissions, estimated at a 93-95% reduction from the existing facility.

The Harry Jerome Community Recreation Centre has a highly complex building program, with a mixture of energy intensive uses such as pools and ice rinks. Despite these challenges, staff and design team pursued a design approach that reduces the carbon intensity

of the project by approximately 81% compared to the existing facility, according to the preliminary energy model.

The preliminary energy model report (dated March 10, 2021) estimates the following:

- Thermal energy demand (TEDI): 49.9 kWh/m².y
- Total Energy Use Intensity (TEUI): 377 kWh/m².y (49.5% better than NECB 2015)
- Green House Gas Intensity (GHGI): 8.5 kgCO₂e/m².y (81% reduction from the existing recreation center)

Note that the project is currently modelled to perform relatively well compared to the code minimum energy requirements, but efficiencies and emissions reductions that align with the demands of climate responsive design require further improvement.

The intensity of the aquatic and ice programs of the project necessitate emphasis on efficient mechanical systems to aggressively reduce energy demand and eliminate emissions. To accomplish this, a comprehensive heat recovery approach has been employed, whereby recovered heat from the arena CO₂ refrigeration system is transferred via chillers to end uses such as pool heating, domestic hot water generation, and space heating. This substantially reduces the amount of heat required from external sources. In addition, the heat recovery chiller plant produces that heat at very high efficiency and will operate at an efficiency 4 to 6 times better than a conventional system. These strategies contribute to substantial reduction in annual energy use from the building code requirements.

A summary of design strategies and energy conservation measures contributing to performance include:

Envelope	Highly insulated walls, roofs and floors
	Double glazing, argon filled, with low e-coating and reflectivity coating
	Airtightness test to be conducted per Energy step code requirement for quality control
Mechanical Systems	Heat recovery from natatorium exhaust and building relief/exhaust to ventilation air
	Inblue filtration system for the pool
	Water conserving plumbing fixtures including low flow sink faucets with metered sensors and high efficiency flush valve toilets with sensor activated flush
	Variable speed pumping for heating, cooling, brine systems and pool system pumps
	Dew point calculations for humidity control in natatorium
Refrigerants	CO2 refrigeration system for ice rink. CO2 systems have a Global Warming Potential (GWP) of 1, compared to a GWP of 1000-4000 for more traditional refrigerants.
Electrical Systems	Daylighting
	Efficient lighting fixtures (LED) with automated controls

OPPORTUNITIES

While project is reducing operational carbon emissions significantly, reducing emissions more than 90% compared to the existing facility is challenging given the district energy connection to the LEC, which uses a carbon intensive natural gas fuel source. As the LEC system is diversified in the future, HJCRC carbon intensity will improve. With the current reliance on natural gas, improving emissions depends upon further reducing energy demand. As design continues, this includes evaluating envelope efficiencies including the window-to-wall ratio, considering exterior shading to control interior heat gain, assessing thermal bridging, and setting a more ambitious air tightness target. Note that these strategies have co-benefits including improving indoor comfort.

Embodied carbon emissions are also a stated priority for the City. While no specific target for reduction is set, the design currently proposes use of some low carbon structural material in the form of mass timber as part of the roof system. Increasing the use of wood in the project, exploring low carbon concrete (high SCMs and/or Carbon Cure), and using low impact insulation are immediate opportunities to improve the embodied carbon performance. Setting a clear reduction goal relative to

a baseline is the best way to inform design accordingly. Several valid methods and tools to measure embodied carbon using Life Cycle Analysis (LCA) are available in the market to inform design progress.

Zero Carbon Building – Design (ZCB Design) certification is available through the Canada Green Building Council (CaGBC). The pursuit of this certification is part of the City's current evaluation of their overall GHG reduction strategies. ZCB certification has low energy requirements that do not account for building types that include pools or arenas. The CaGBC is currently reviewing their energy requirements for these types of buildings and the project team will continue to explore opportunities to achieve this certification as clarity on energy targets emerge.

At this stage of design development, a significant emphasis has been placed on building performance and climate responsive design relative to operational energy and carbon. The strategies to address sustainability and climate are in progress in other critical areas, summarized in the following table, including opportunities to further address performance as design progresses:

Category	Design Vision/Guidance	Current Progress	Opportunities
Location + Transportation	Minimize the need for automobile use and be a catalyst for non-auto mode transportation.	270 parking spaces shared between Centennial Theatre, HJCRC, and Silver Harbour.	Dedicate some parking to car-share use.
		45 secured and covered bike spaces rec, 8 Silver Harbour, 25% supplied with electrical outlets. 100 short term bike spaces mostly covered.	
		End of trip facilities and showers provided in rec and Silver Harbour.	
	Realize EV charging location.	13% (36/270) of parking stalls supplied with a Level 2 electric vehicle charging stations	
Water + Rainwater	Maximize water and rainwater re-use on site	Low flow fixtures	Consider water reuse strategies that target pool water, grey water and rainwater to the significant potable water consumption of the rec centre.
		Low irrigation demand planting, efficient irrigation with rain sensor and weather station.	Use a non-potable water source for irrigation.
		Rainwater currently managed with a detention tank at South portion of parking lot; some infiltration provided with rain gardens and small green roof area.	Consider additional Low Impact Development (LID) strategies to manage rainwater on site.
Landscape and Biodiversity	N/A	Parking is located underground.	
		Minimized hardscape	Set clear goals for hardscape and measure impact of emissivity.
		Green roof	Measure heat island and water management impact of green roof area, consider expanding green roof area.
		Reflective TOP roofing	Confirm SRI value of roof and evaluate hardscape SRI values.

		Use of native and adaptive vegetation.	Measure amount of native/ adaptive planting; measure biomass density index to understand climate management potential.
		Minimize uplighting on exterior	Adopt BUG rating
		Bird friendly design strategies applied.	Adopt a design standard for Bird Friendly Design (CSA, City of Vancouver, other).
Materials + Indoor Quality	Design for a 50 year life time, with durable and easily maintained/replaced products. The building shall commit to community health in its design, construction and operation	Glazing at the atrium and interior courtyard introduces daylight and views at the core of the building.	Set an embodied carbon reduction target of at least 10% below a baseline to evaluate low impact material selection. Require low emitting materials per LEED to be applied on interior. Prioritize materials that report environmental impact through EPDs, or material ingredient reporting with HPDs or other third party verified transparency programs. Require air flushing or testing before occupancy (refer to LEED v4.1).

SUMMARY

Building and site systems at HJCRC have the potential to be well integrated and offer exceptional co-benefits for long term, high performance, low carbon, and climate responsive design. Setting clear performance goals and establishing metrics will support decision-making accordingly and accountability within the design team and project stakeholder group. Considering third party verification programs offers both accountability, thresholds of performance, and established methods of measurement, that can result in better performance as well as public recognition.

Project performance across categories will benefit from the following as design is refined:

- A comprehensive envelope study to evaluate passive opportunities to control energy demand (thermal bridging, solar heat gain, shading and daylight).
- Evaluating opportunities to conserve and/or reuse potable water.
- Better address rainwater management with more low impact development strategies.
- Evaluate potential for the landscape to maximize carbon management and improve building performance and comfort by reducing heat island effect.
- Evaluating the embodied carbon of materials and setting a target for reduction.
- Setting a materials health and transparency benchmark to address emissions and health impacts.

Sustainability

```
graph TD; S[Sustainability] --- A[81% carbon intensity reduction from existing recreation centre]; S --- B[Electric car and bike charging]; S --- C[Maximized daylighting]; S --- D[Highly insulated building envelope]; S --- E[Heat recovery chiller plant 4-6 times more efficient than conventional systems (CO2 refrigeration)]; S --- F[Future consideration for Zero Carbon Building – Design]; S --- G[49% better total energy demand than NECB 2015 baseline]; S --- H[Integrated project commissioning of major building systems]; S --- I[Innovative low energy pool filtration system (InBlue)];
```

81% carbon intensity reduction from existing recreation centre

Electric car and bike charging

Maximized daylighting

Highly insulated building envelope

Heat recovery chiller plant **4-6 times** more efficient than conventional systems (CO2 refrigeration)

Future consideration for Zero Carbon Building – Design

49% better total energy demand than NECB 2015 baseline

Integrated project commissioning of major building systems

Innovative low energy pool filtration system (InBlue)

3.8 Cost Analysis

A class B cost estimate was prepared based on the review of the re-design information provided for the new construction of the Harry Jerome Community Recreation Centre in North Vancouver, BC. The estimate was priced in Q1, March 2021 local unit rates and assumed a construction start date of June 2022. Class B construction cost estimates are typically +/- 10-15% in accuracy with many variables influencing the final construction price including the current uncertainty and volatility of the market. Supply chain issues currently being experienced may have unknown (short and long term) impacts on pricing levels and anticipated projected construction escalation.

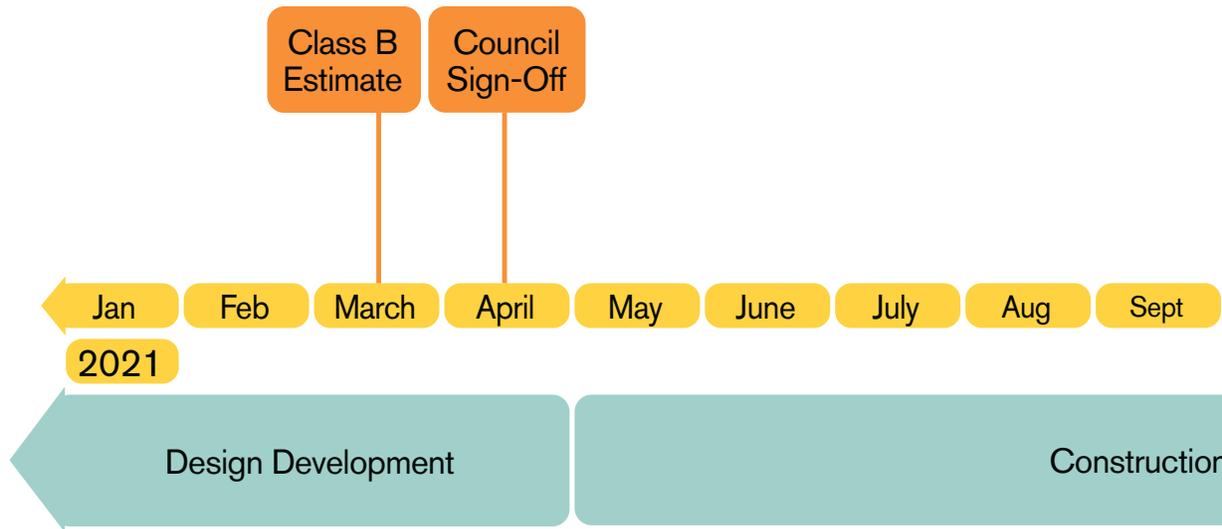
HJCRC Cost Summary

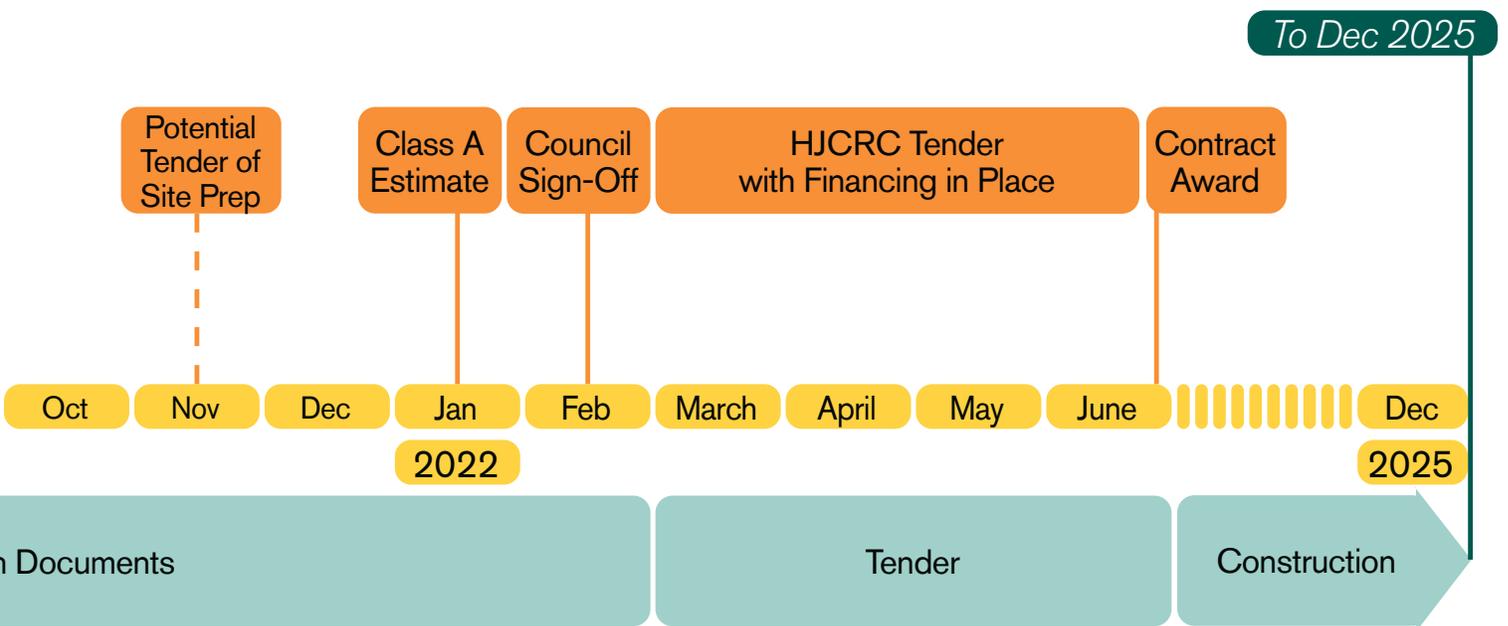
CLASS B ESTIMATE

\$153,006,000	Construction + Soft Costs
\$28,690,000	Contingencies + Escalation
<hr/>	
\$181,696,000	Total Project Cost

3.9 Project Schedule

The HJCRC project has completed the re-design phase and will continue into construction documents after council sign-off. The construction document phase will take 10 months and conclude with the next Council sign off in February 2022 and project tendering to occur shortly after. There is opportunity to tender the site prep work in advance which could occur in Nov 2021. The construction phase is scheduled to start in June 2022 and is anticipated to continue for 3 years, completing in 2025.





4.0 Next Steps

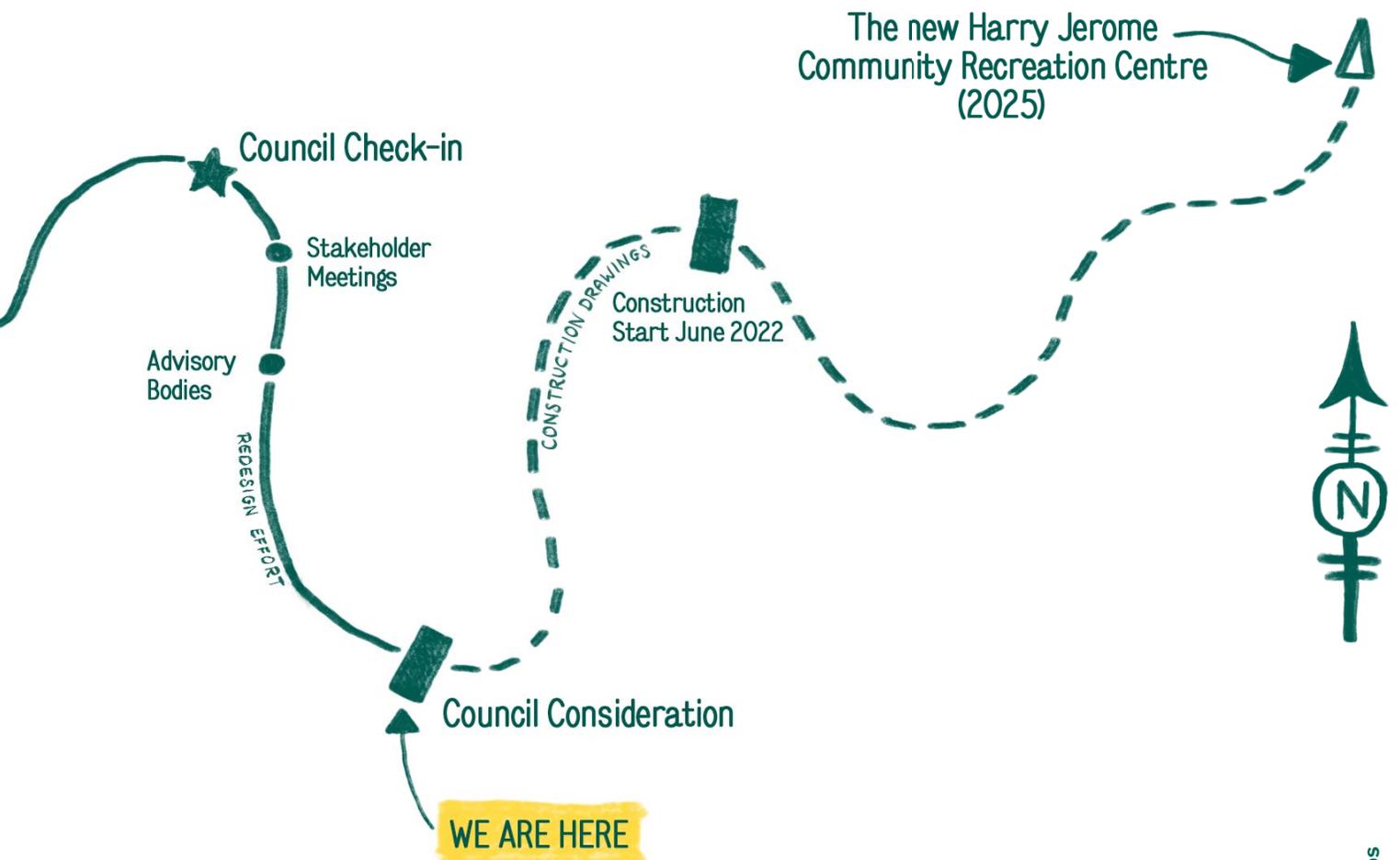
4.0 Next Steps

The next stage of this project is to proceed to is to proceed to detailed design and on to construction. We would advise the release of this design development report and continue into the next stage.

As part of the next stage, we would recommend the City of North Vancouver consider hiring a construction manager if it is the preferred construction delivery method.

The team should also consider further investigations into sustainability opportunities and continue to find collaborative ways to further reduce GHG emissions.







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MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON MONDAY, MARCH 9, 2020

REPORT

12. Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects – File 02-0800-30-0002/1

Report: Director, Strategic and Corporate Services, and Deputy Director, Strategic and Corporate Services, March 2, 2020

Moved by Councillor McIlroy, seconded by Councillor Hu

PURSUANT to the report of the Director and Deputy Director, Strategic and Corporate Services, dated March 2, 2020, entitled “Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects”:

THAT, based on the Community Recreation Strategy prioritization process, the recommended Harry Jerome Community Recreation Centre scope, inclusive of the following components, be endorsed:

- Community Recreation Centre Program
 - Gyms 1 and 2
 - Fitness Space
 - Multi-Purpose Rooms
 - Art Spaces
 - Youth Area
 - Preschool Space
 - Community Living Room
- Aquatic Program
 - Leisure Pool
 - 26.5m 10-lane Pool
 - Diving Boards 1m and 3m
 - Hot Pool and Amenities
- Arena Program
 - Ice with 500 seats
- Outdoor Program
 - At-grade Multi-Activity Court
 - Skatepark
- Associated Project
 - Silver Harbour Seniors Activity Centre;

THAT staff be directed to redesign the Harry Jerome Community Recreation Centre project based on the recommended component scope and for overall cost effectiveness, including:

Continued...

MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON MONDAY, MARCH 9, 2020

12. Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects – File 02-0800-30-0002/1

- Removal of rooftop uses
- Reduction of south building from a 4-storey to a 3-storey configuration
- Reducing windows throughout
- Review of component size, building form and materiality;

THAT staff be directed to pursue the investigation of higher sustainability targets, with consideration to financial impacts, as part of the redesign effort for Harry Jerome Community Recreation Centre;

THAT staff's recommendation is to continue, as previously directed by Council, to work with Flicka Gymnastics, on a cost-share basis; to update cost estimates for both a full renovation and a purpose built facility at Mickey McDougall; to develop cost estimates based on existing square footage and an enhanced facility; to develop a letter of support from Mayor and Council; and, request Flicka Gymnastics to report back on a fundraising plan;

THAT existing Harry Jerome Community Recreation Centre funding be reallocated for the purpose of funding the redesign phase and internal and external project management related to Harry Jerome Community Recreation Centre and associated projects;

THAT staff be directed to provide 350 underground parking stalls as part of a revised design for the Harry Jerome Community Recreation Centre for cost effectiveness;

AND THAT staff report back with an updated Harry Jerome Community Recreation Centre design, renewed Class B estimate with financing plan and an updated project schedule.

Council separated the vote on the recommendation, as follows:

Moved by Councillor Bell, seconded by Mayor Buchanan

THAT, based on the Community Recreation Strategy prioritization process, the recommended Harry Jerome Community Recreation Centre scope, inclusive of the following components, be endorsed:

Continued...

MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON MONDAY, MARCH 9, 2020

12. Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects – File 02-0800-30-0002/1

- Community Recreation Centre Program
 - Gyms 1 and 2
 - Fitness Space
 - Multi-Purpose Rooms
 - Art Spaces
 - Youth Area
 - Preschool Space
 - Community Living Room

- Arena Program
 - Ice with 500 seats
- Outdoor Program
 - At-grade Multi-Activity Court
 - Skatepark
- Associated Project
 - Silver Harbour Seniors Activity Centre.

CARRIED UNANIMOUSLY

Moved by Councillor Bell, seconded by Mayor Buchanan

THAT, based on the Community Recreation Strategy prioritization process, the following components be endorsed:

- Aquatic Program
 - Leisure Pool
 - Diving Boards 1m and 3m
 - Hot Pool and Amenities.

CARRIED UNANIMOUSLY

Moved by Councillor Bell, seconded by Mayor Buchanan

THAT, based on the Community Recreation Strategy prioritization process, the following component be endorsed:

- Aquatic Program
 - 26.5m 10-lane Pool.

CARRIED

Councillor Back, Councillor Bell and Councillor Valente are recorded as voting contrary to the motion.

Continued...

MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON MONDAY, MARCH 9, 2020

12. Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects – File 02-0800-30-0002/1

Moved by Councillor Bell, seconded by Mayor Buchanan

THAT staff be directed to redesign the Harry Jerome Community Recreation Centre project based on the recommended component scope and for overall cost effectiveness, including:

- Removal of rooftop uses
- Reduction of south building from a 4-storey to a 3-storey configuration
- Reducing windows throughout
- Review of component size, building form and materiality.

CARRIED

Councillor Bell and Councillor Valente are recorded as voting contrary to the motion.

Moved by Councillor Bell, seconded by Mayor Buchanan

THAT staff be directed to pursue the investigation of higher sustainability targets, with consideration to financial impacts, as part of the redesign effort for Harry Jerome Community Recreation Centre;

THAT staff's recommendation is to continue, as previously directed by Council, to work with Flicka Gymnastics, on a cost-share basis; to update cost estimates for both a full renovation and a purpose built facility at Mickey McDougall; to develop cost estimates based on existing square footage and an enhanced facility; to develop a letter of support from Mayor and Council; and, request Flicka Gymnastics to report back on a fundraising plan;

THAT existing Harry Jerome Community Recreation Centre funding be reallocated for the purpose of funding the redesign phase and internal and external project management related to Harry Jerome Community Recreation Centre and associated projects;

THAT staff be directed to provide 350 underground parking stalls as part of a revised design for the Harry Jerome Community Recreation Centre for cost effectiveness;

AND THAT staff report back with an updated Harry Jerome Community Recreation Centre design, renewed Class B estimate with financing plan and an updated project schedule.

CARRIED UNANIMOUSLY

Continued...

MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON MONDAY, MARCH 9, 2020

12. Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects – File 02-0800-30-0002/1

Moved by Councillor Bell, seconded by Councillor Valente

THAT the following words be added under the “Arena Program” section:

- Curling Facility.

DEFEATED

Mayor Buchanan, Councillor Girard, Councillor Hu and Councillor McIlroy are recorded as voting contrary to the motion.

For clarification, the motion reads as follows in its entirety:

PURSUANT to the report of the Director and Deputy Director, Strategic and Corporate Services, dated March 2, 2020, entitled “Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects”:

THAT, based on the Community Recreation Strategy prioritization process, the recommended Harry Jerome Community Recreation Centre scope, inclusive of the following components, be endorsed:

- Community Recreation Centre Program
 - Gyms 1 and 2
 - Fitness Space
 - Multi-Purpose Rooms
 - Art Spaces
 - Youth Area
 - Preschool Space
 - Community Living Room
- Aquatic Program
 - Leisure Pool
 - 26.5m 10-lane Pool
 - Diving Boards 1m and 3m
 - Hot Pool and Amenities
- Arena Program
 - Ice with 500 seats
- Outdoor Program
 - At-grade Multi-Activity Court
 - Skatepark

Continued...

MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON MONDAY, MARCH 9, 2020

12. Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects – File 02-0800-30-0002/1

- Associated Project
 - Silver Harbour Seniors Activity Centre;

THAT staff be directed to redesign the Harry Jerome Community Recreation Centre project based on the recommended component scope and for overall cost effectiveness, including:

- Removal of rooftop uses
- Reduction of south building from a 4-storey to a 3-storey configuration
- Reducing windows throughout
- Review of component size, building form and materiality;

THAT staff be directed to pursue the investigation of higher sustainability targets, with consideration to financial impacts, as part of the redesign effort for Harry Jerome Community Recreation Centre;

THAT staff's recommendation is to continue, as previously directed by Council, to work with Flicka Gymnastics, on a cost-share basis; to update cost estimates for both a full renovation and a purpose built facility at Mickey McDougall; to develop cost estimates based on existing square footage and an enhanced facility; to develop a letter of support from Mayor and Council; and, request Flicka Gymnastics to report back on a fundraising plan;

THAT existing Harry Jerome Community Recreation Centre funding be reallocated for the purpose of funding the redesign phase and internal and external project management related to Harry Jerome Community Recreation Centre and associated projects;

THAT staff be directed to provide 350 underground parking stalls as part of a revised design for the Harry Jerome Community Recreation Centre for cost effectiveness;

AND THAT staff report back with an updated Harry Jerome Community Recreation Centre design, renewed Class B estimate with financing plan and an updated project schedule.



Department Manager	Director	CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
STRATEGIC & CORPORATE SERVICES DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Barb Pearce, Director, Strategic & Corporate Services
Heather Reinhold, Deputy Director, Strategic & Corporate Services

Subject: PRIORITIZATION OF HARRY JEROME COMMUNITY RECREATION
CENTRE COMPONENTS AND ASSOCIATED PROJECTS

Date: March 2, 2020 File No: 02-0800-30-0002/1

The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.

RECOMMENDATION:

PURSUANT to the report of the Director and Deputy Director, Strategic & Corporate Services, dated March 2, 2020, entitled "Prioritization of Harry Jerome Community Recreation Centre Components and Associated Projects":

THAT based on the Community Recreation Strategy prioritization process, the recommended Harry Jerome Community Recreation Centre scope, inclusive of the following components, be endorsed:

- Community Recreation Centre Program:
 - Gym 1 & 2
 - Fitness Space
 - Multi-Purpose Rooms
 - Art Spaces
 - Youth Area
 - Preschool Space
 - Community Living Room
- Aquatic Program
 - Leisure Pool
 - 26.5m 10-lane Pool
 - Diving 1m & 3m
 - Hot Pool & Amenities

- Arena Program
 - Ice with 500 seats
- Outdoor Program
 - At-grade Multi Activity Court
 - Skatepark
- Associated Project
 - Silver Harbour Seniors Activity Centre

THAT staff be directed to redesign the Harry Jerome Community Recreation Centre project based on the recommended component scope and for overall cost effectiveness, including:

- Removal of rooftop uses
- Reduction of south building from a four storey to three storey configuration
- Reducing windows throughout
- Review of component size, building form and materiality;

THAT staff be directed to pursue the investigation of higher sustainability targets, with consideration to financial impacts, as part of the redesign effort for Harry Jerome Community Recreation Centre;

THAT staff's recommendation is to continue, as previously directed by Council, to work with Flicka, on a cost-share basis, to update cost estimates for both a full renovation and a purpose built facility at Mickey McDougall; develop cost estimates based on existing square footage and an enhanced facility; develop a letter of support from Mayor and Council; and request Flicka to report back on a fundraising plan;

THAT existing Harry Jerome Community Recreation Centre funding be reallocated for the purpose of funding the redesign phase and internal and external project management related to Harry Jerome Community Recreation Centre and associated projects;

AND THAT staff report back with an updated Harry Jerome Community Recreation Centre design, renewed Class B estimate with financing plan and an updated project schedule.

ATTACHMENTS:

1. Council endorsed Community Recreation Strategy - "A Healthy City for All: The Role of Community Recreation" dated February 2020 ([Doc#1881918](#))
2. HJCRC & Associated Project Component Summary List ([Doc#1887951](#))
3. HJCRC & Associated Project Decision-Making Framework Summary ([Doc#1887973](#))
4. Council Report (report only), dated February 25, 2019, entitled "Harry Jerome Community Recreation Centre Update: Potential Cost Reductions and Enhanced Project Management Measures" ([Doc#1888301](#))
5. Council Report (report only), dated July 18, 2018, entitled "Flicka Gymnastics Relocation – Next Steps" ([Doc#1888298](#))
6. Correspondence from Flicka Gymnastics dated May 23, 2019 ([Doc#1888863](#))

PURPOSE:

To confirm the component scope and next steps for Harry Jerome Community Recreation Centre (HJCRC) and associated projects based on the Community Recreation Strategy decision-making framework.

BACKGROUND:

On February 24, 2020, Council endorsed the Community Recreation Strategy – “A Healthy City for All: The Role of Community Recreation” (Attachment #1).

The Community Recreation Strategy confirms the vision and goals for community recreation in the City and includes a decision-making framework to help prioritize significant community recreation projects in the City.

As confirmed through the Community Recreation Strategy, the City’s vision is to create a healthy city for all. Quality community recreation, comprised of the built and natural environment, programs, and services, inspires residents to be active and connected to their community throughout their life. All community recreation programs, services and amenities must work to improve the health and wellbeing of individuals, foster a sense of belonging and strengthen community capacity.

DISCUSSION:

For the past several years, the scope for replacement and enhancement of HJCRC and associated projects has been reviewed and debated. Making decisions related to the redevelopment of such a significant community recreation project has been challenging.

In the past, when working to confirm project scope, the focus has generally been on which components to exclude, and in retrospect, often without context of the broad range of amenities that were being included in the HJCRC.

In order to maximize the contribution of a new HJCRC towards meeting our goals for community recreation, while being fiscally responsible, the four-step prioritization process, as outlined in “A Healthy City for All: The Role of Community Recreation” has been undertaken. The prioritization process has been completed for each of the individual HJCRC components and associated projects and is summarized below. (For a comprehensive summary of all components and associated projects, see Attachment #2.) Program or space components that would be essential in any replacement of HJCRC, such as administration space, circulation space and parking, were not included in the prioritization process. Parking is however discussed with respect to refinements for overall cost effectiveness further below.

As part of undertaking the prioritization process, inputs from a variety of sources were considered: public and stakeholder input from the past several years; detailed stakeholder input gathered in the development of the HJCRC Functional Program; North Vancouver Recreation and Culture Commission (NVRCC) utilization data and needs assessment; and experience derived from operating the existing and other facilities.

As noted in “A Healthy City for All: The Role of Community Recreation”, the prioritization process is somewhat subjective and it is anticipated that not all stakeholders will agree with the prioritization of specific amenities. It is important to note that all components have value, however prioritization is necessary due to financial and space capacity.

SUMMARY OF PRIORITIZATION PROCESS:

A summary of the prioritization process is outlined below; a more detailed summary of Step Two and Step Three is included as Attachment #3.

STEP ONE: How well does an amenity meet our goals?

Two overarching goals for community recreation in the City have been confirmed. For an amenity to be considered for replacement, enhancement or new, the amenity must significantly meet the following goals:

- *Improve health & wellbeing of individuals*
 - Provide opportunities for all to be active and creative; regardless of age, ability and identity
 - Enable life-long active living, physical literacy, play and creativity
 - Ensure equitable access through opportunities that are physically, financially and socially accessible
 - Provide opportunities for skill development
 - Promote and enable the benefits of being in nature

- *Foster sense of belonging & strengthen community capacity*
 - Promote inclusion; enable the celebration of diversity in ethnicity, age, ability and gender
 - Build community spirit and pride
 - Provide safe, welcoming spaces, places and experiences that allow people to connect to one another
 - Develop leadership and build community capacity
 - Facilitate environmental and community stewardship

All of the HJCRC and associated project components substantially meet our goals for community recreation and thus were advanced in the prioritization process. The comparative extent to which components meet our goals were further assessed as part of Step Three.

STEP TWO: Do we have the right amount and range of amenities?

To assess if we have the right amount and range of amenities, each component was reviewed in consideration of the five demand indicators: Use of Amenities; Community Priority; Group Preference; Participation Trends & Demographics, and Comparative Supply.

The summary of demand indicator ratings represent the ideal course of action if there were no constraints. The demand indicator summary ratings can be found in Attachment #3. All components were then advanced to Step Three for overall prioritization.

STEP THREE: How do we prioritize delivery of enhanced or new amenities?

Building on Step Two, to best maximize the contribution of HJCRC towards meeting our community recreation needs, within the constraints, each of the components was further assessed through four prioritization criteria: Contribution to Community Recreation Goals; Financial Impact; Flexibility, Adaptability and Non-Exclusivity; and Expected Economic Impact. This step was completed for all amenities recommended for replacement, enhancement or new. Based on the cumulative decision-making framework, a summary of the prioritized list of components can be found in Attachment #3.

Based on the prioritization process, the recommended HJCRC component scope, grouped by amenity type, is outlined below.

RECOMMENDED HJCRC COMPONENT SCOPE
Community Recreation Centre Program
Gym 1 & 2
Fitness Space
Multi-Purpose Rooms
Art Spaces
Youth Area
Preschool Space
Community Living Room
Aquatic Program
Leisure Pool
26.5m 10-lane Pool
Diving 1m & 3m
Hot Pool & Amenities
Arena Program
Ice with 500 Seats
Outdoor Program
At-grade Multi Activity Court
Skatepark
Associated Project
Silver Harbour Seniors Activity Centre

Summary of Items Not Recommended for Inclusion within HJCRC:

Items not recommended for inclusion within the HJCRC scope, with supporting considerations, are as follows:

- **53m 8-lane Pool:**

A 53m 8-lane Pool ranks high based on demand indicators and ranks the same as a 26.5m 10-lane Pool for all criteria, with the exception of Use of Amenities. While a 53m 8-lane pool offers increased physical capacity for concurrent users, there is a likelihood for this to create an oversupply of aquatic space in North Vancouver. In addition, it is highly anticipated that the 53m 8-lane Pool would be used only a small portion of the time in the 53m configuration. (See Attachment #4)

When further assessing a 53m 8-lane Pool against the overall prioritization criteria, it is the Financial Impact that lowers the ranking below a 26.5m 10-lane Pool.

A 53m 8-lane Pool will cost more to construct and will cost more to operate than a 26.5m 10-lane Pool.

An enhanced replacement of the existing 25m Pool, along with the provision of a new Leisure Pool, will best meet the City's desired outcomes overall within the financial reality.

- **Rooftop Track / Walking Circuit:**

While the track / walking circuit ranked high within the overall prioritization process, costs incurred in locating this component on the roof results in it not being recommended for inclusion. Furthermore, as outlined in Attachment #4, this recommendation has been made with the context of alternate walking provisions available through the Green Necklace and the track amenities at Sutherland and Fen Burdett.

- **Skatepark Roof**

The July 2018 HJCRC scope included a partially covered skatepark. As part of the user engagement process, a partial roof was a compromise between either full or no roof options. A skatepark roof has a relative high capital cost, can always be added as a future component, and it is therefore recommended that this component be removed from project scope.

- **Rooftop Sports Court (Racquet):**

While there is a desire to replace the existing four tennis courts on site, the cost premium of locating it on the roof results in this amenity not being recommended for inclusion. As outlined in Attachment #4, the rooftop sports courts would also be constrained in size and accessibility, reducing the use, flexibility and adaptability. A future project could integrate additional tennis / sports courts, at-grade, elsewhere in the City.

- **Curling:**

The inclusion of curling has had considerable discussion and review over the past number of years. Curling would be a new amenity. When considered through the decision-making framework, demand indicators overall do not rate high for curling. The use of a curling facility is comparatively less than many other amenities and there are limited numbers of City residents engaged in the activity (there are options available to participate in the sport within the Metro region). In addition, the participation trends from Curl BC for Canada, BC and Lower Mainland indicate a modest decline in curling over the past decade and a lower percentage of participation by Canadians than in the past.

In consideration of the prioritization criteria, curling does contribute to achieving the goals set for community recreation, but the financial impact of curling is the most significant factor for it not being recommended for inclusion. Curling has a high capital construction cost as well as high ongoing operating costs (see Attachment #4). Lastly, curling takes up sizable area on a constrained site, and the amenity is an exclusive-use facility during the at least half of the year.

- **Diving 5m:**

A 5m diving component had been included in the most recent (July 2018) project scope. This would be a new amenity not currently provided in HJCRC. It did not rank high in looking at demand indicators. As the 5m diving component would be utilized by a small segment of pool users, increase capital costs and can be accessed in other communities, it is recommended that this component be removed from project scope.

- **Pool Slide:**

A pool slide has been included in the project scope to date as a replacement of the existing slide. In terms of consideration through the prioritization matrix, it has been highlighted that use is limited from an accessibility standpoint, it is open only a portion of operating hours and has high capital and operating costs (due to staffing implications). In review, alternatives could be provided at a lower cost and with greater flexibility through mobile play features and smaller scale slides that do not need to be staffed. In keeping with the prioritization recommendation, staff recommend that the pool slide be removed from project scope.

STEP FOUR: Next Steps & Taking Action!

In order to advance the HJCRC project, a redesign process related to component scope and overall cost effectiveness is required.

HJCRC Design Refinements for Cost Effectiveness:

With Council direction to undertake a redesign process, staff will work to incorporate the component updates as well as revisions for overall cost effectiveness. These revisions would include the following costs savings as previously identified in the March 22, 2019 report (Attachment#4): the removal of rooftop uses; reduction of the south building form from a four storey to three storey configuration; and a reduction of windows throughout.

In addition, opportunities to minimize costs through the refinement of component areas, building form and materiality throughout the whole building will be made. A number of components that are considered core to a new HJCRC (inclusive of Silver Harbour) are enhancements over the existing program. With a necessary focus on cost effectiveness, component sizing will be reviewed, and revised where possible, through the redesign process. Incorporation of the highest accessibility standards (Rick Hansen Foundation Accessibility Certification "Gold") will continue to be incorporated. Updates will be included in the redesign report back to Council.

Lastly, a means to reduce overall cost would be to reduce the parking provision. It is staff's recommendation not to reduce parking, even with a reduction in overall program. The current provision of 403 underground parking stalls is a direct replacement of the existing on and off-street parking currently utilized by the existing HJCRC and Centennial Theatre. However, in efforts to reduce overall project cost, and to reflect a reduction in previous contemplated scope, an allocation of ~350 stalls would represent a replacement of the current on-site parking (344 stalls). It should be noted, that the majority of existing on-street parking will not be reinstated. Should Council wish to include a reduction in underground parking, the following recommended could be included:

THAT staff be directed to provide 350 underground parking stalls as part of a revised design for HJCRC for cost effectiveness;

Project Timing:

It is anticipated that the redesign process, inclusive of an update to the Class B cost estimate, will take 6-8 months to complete. Staff will then report back with an updated design, cost estimate, project schedule and financing plan for Council's consideration. As part of reporting back, the project will be evaluated for consistency with the Zoning Bylaw and any required variances (ex. lot coverage, setback, etc.) would be brought forward for Council consideration. Lot consolidation will be completed as well.

Project Team:

In order to proceed with workload and to integrate a more in-depth construction and sequencing review, internal and external project management will be integrated as part of the project team.

Sustainability Targets:

Currently the design for HJCRC incorporates a number of comprehensive green building strategies and sustainability initiatives, with an expected 50-60% reduction in GHG's over the existing facility.

With Council direction, and in coordination with LEC, the redesign phase will explore the opportunity for on-site heat recovery to further reduce carbon intensity with a goal of working towards further reducing carbon emissions.

Next Steps Flicka Gymnastics

Flicka Gymnastics is a non-profit society that provides both recreational and competitive recreational gymnastics. Flicka has rented space at HJCRC, at a subsidized rate, in the since 1999.

As outlined in the July 18, 2018 report (Attachment#5), a feasibility study for the Mickey McDougall site was completed and Flicka indicated their support of a basic renovation option for the City-owned Mickey McDougall building. The intention with this scenario was for the City to lease the building to Flicka and for the City to undertake landlord improvements, which were to be financed through the City's Project Plan (separate from HJCRC funding). Flicka would then be responsible for tenant improvements to optimize the building for their needs. There is no provision for financial contribution to more significant capital investments at this time.

Upon further review, Flicka has determined that this option does not meet their needs and would substantially increase their operating costs. As outlined in their letter of May 23, 2019 (Attachment #6), Flicka has indicated that if a new gymnastics facility is not provided within the new HJCRC, their organization's preference is to obtain a purpose-built facility (such as Mickey McDougall) with significantly more square footage than currently occupied in HJCRC. A secondary option would be an extensively renovated building that meets these enhanced needs (such as Mickey McDougall). Flicka has indicated a willingness to fundraise for and then operate a new/renovated facility, and a commitment from Council for either a long-term land lease or building lease is required to begin this process.

As part of undertaking the overall prioritization process, staff assessed the Flicka Gymnastics component through the decision-making framework. In summary, the existing facility is well used, there is existing demand within the community and it does respond to demographic and participation trends.

In order to support provision of gymnastics, staff's recommendation is to continue to work, on a cost share basis, with Flicka to:

- Update cost estimates for both a purpose built facility and a full renovation;
- Develop cost estimates based on existing square footage and an enhanced facility;
- Develop a letter of support from Mayor and Council;
- Request Flicka to report back on a fundraising plan.

FINANCIAL IMPLICATIONS:

The current Class B estimate for HJCRC that was completed in February 2019, is no longer current. Present day indication does not show a softening of construction costs. It is understood that to proceed with a new HJCRC, scope and cost reductions will be required for all components, amenities and features.

The redesign effort will focus on the scope and cost reductions. Once complete, a design update to Council will include an updated Class B estimate, financing plan and project schedule for Council's consideration. The redesign effort and integration of internal and external project management can be accommodated within existing appropriated project funding. Funds that were previously appropriated for construction documentation, site servicing and demolition, will be reallocated to redesign efforts and project management. The anticipated cost for the redesign period is approximately \$700,000. The anticipated cost for internal (3 years) and external (pre-construction phase) project management is \$780,000. Additional funding for construction documentation, site servicing and demolition will likely be required and a request will be included as part of the design update to Council.

A grant application has been made to the "Investing in Canada's Infrastructure Program" (ICIP). A decision is anticipated in early spring. Staff will update Council on any updates or outcomes of the grant application process.

INTER-DEPARTMENTAL IMPLICATIONS:

Strategic & Corporate Services, Engineering, Parks & Environment and North Vancouver Recreation and Culture Commission staff collaborated on the prioritization of the HJCRC and associated project components.

CORPORATE PLAN AND/OR POLICY IMPLICATIONS:

The replacement of HJCRC will contribute to health and wellness opportunities within our community, inspiring residents to be active and connected to their community throughout their life.

STRATEGIC PLAN IMPLICATIONS:

Renewal of HJCRC plays a significant role in contributing to achieving Council's vision of the Healthiest Small City in the World.

RESPECTFULLY SUBMITTED:



Barb Pearce
Director, Strategic & Corporate Services



Heather Reinhold
Deputy Director, Strategic & Corporate Services

HJCRC - SUMMARY OF ADVISORY BODY RESOLUTIONS

Integrated Transportation Committee:

At their regularly scheduled meeting on February 3, 2021, the Integrated Transportation Committee received a presentation from the HJCRC Design Team (City staff and consultants) regarding the above mentioned. Following review and discussion, the following motion was made:

THAT the Integrated Transportation Committee has reviewed and supports the Harry Jerome Community Recreation Centre project and makes the following additional comments:

- The committee notes the importance of the active transportation connections, design of the 23rd Street frontage, and surrounding off-site improvement;
- The committee recommends that the City continue to advocate for improved active transportation connection across the Highway;
- The committee appreciates staffs' diligence in returning to clarify the secure bike parking for employees and are in support of the proposed amendment.

The recommendations of the Integrated Transportation Committee do not, in any way, represent Council and/or staff approval or rejection of this proposal.

CARRIED UNANIMOUSLY

Advisory Design Panel:

At their meeting on March 17th, 2021 the Advisory Design Panel reviewed the above application and endorsed the following resolution:

It was regularly moved and seconded

THAT the Advisory Design Panel has reviewed the Harry Jerome Recreation Centre application and recommends approval of the project. The Panel commends the applicant for the quality of the proposal and their presentation.

The recommendations of the Advisory Design Panel pertain only to site-specific design and site planning considerations and do not, in any way, represent Council and staff approval or rejection of this project.

CARRIED UNANIMOUSLY

How can the Harry Jerome Community Recreation Centre help **inspire residents to be active and connected to their community?**

Harry Jerome Community Recreation Centre

Vision

“The Harry Jerome Community Recreation Centre will be a welcoming, vibrant social heart of the community.

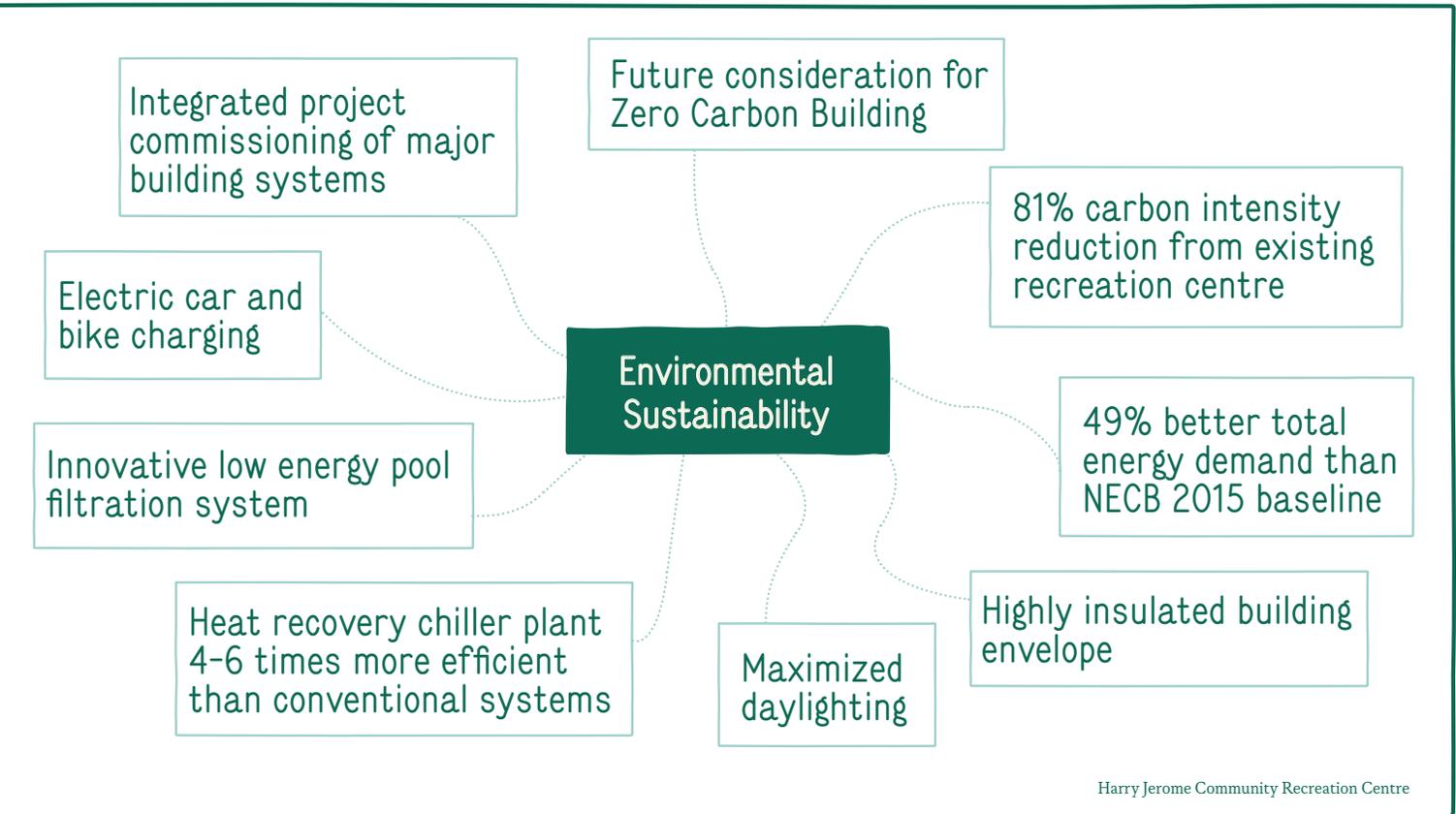
It will foster individual and collective wellness by providing opportunities to participate in a variety of organized and casual activities.

The centre will empower community members to enjoy healthy, active, and connected lives.”

Harry Jerome Community Recreation Centre

Principles

THE HARRY JEROME COMMUNITY RECREATION CENTRE WILL BE...



Universal Design

hcma

In-house accessibility specialists.

hcma is seeking feedback from NS ACDI through meetings during design and preparation of construction documents.

**North Shore
Advisory
Committee on
Disability
Issues**

Rating system to help measure accessibility of sites and promote increased access through Universal Design principles.

**Rick Hansen
Foundation
Accessibility
Certification**

National Building Code score: 35%
RHFAC Accessibility Certified score: 60%+
RHFAC Accessibility Certified Gold score: 80%+

Designated RHFAC Professionals who have undergone formal training and passed a standardized professional exam.

Harry Jerome Community Recreation Centre

Project Location



Harry Jerome Community Recreation Centre

Project Context



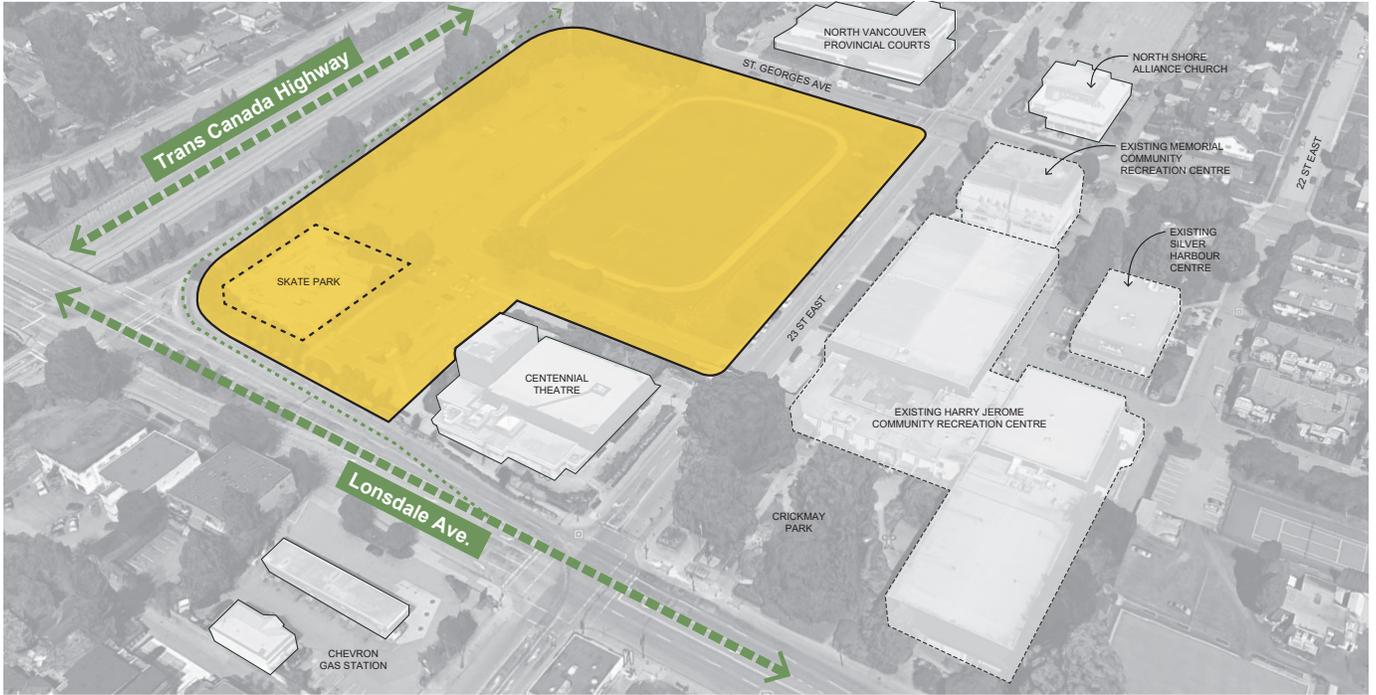
Harry Jerome Community Recreation Centre

City of North Vancouver



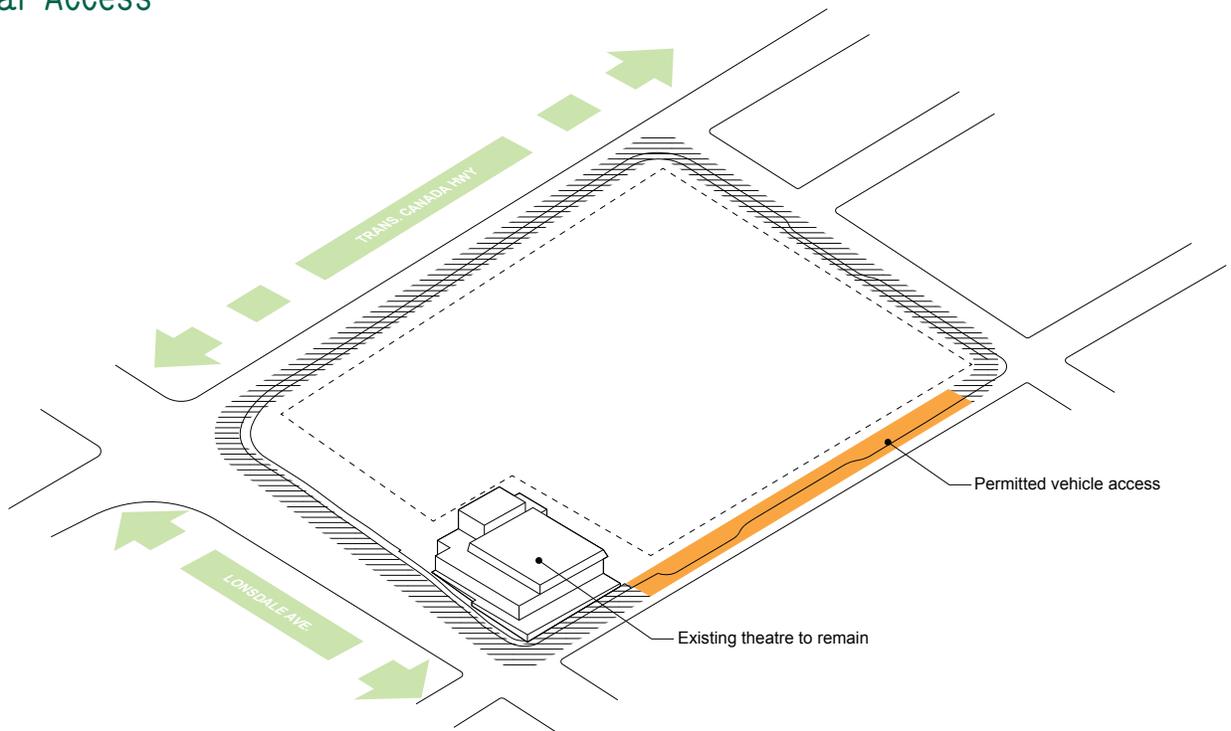
Harry Jerome Community Recreation Centre

Site Context



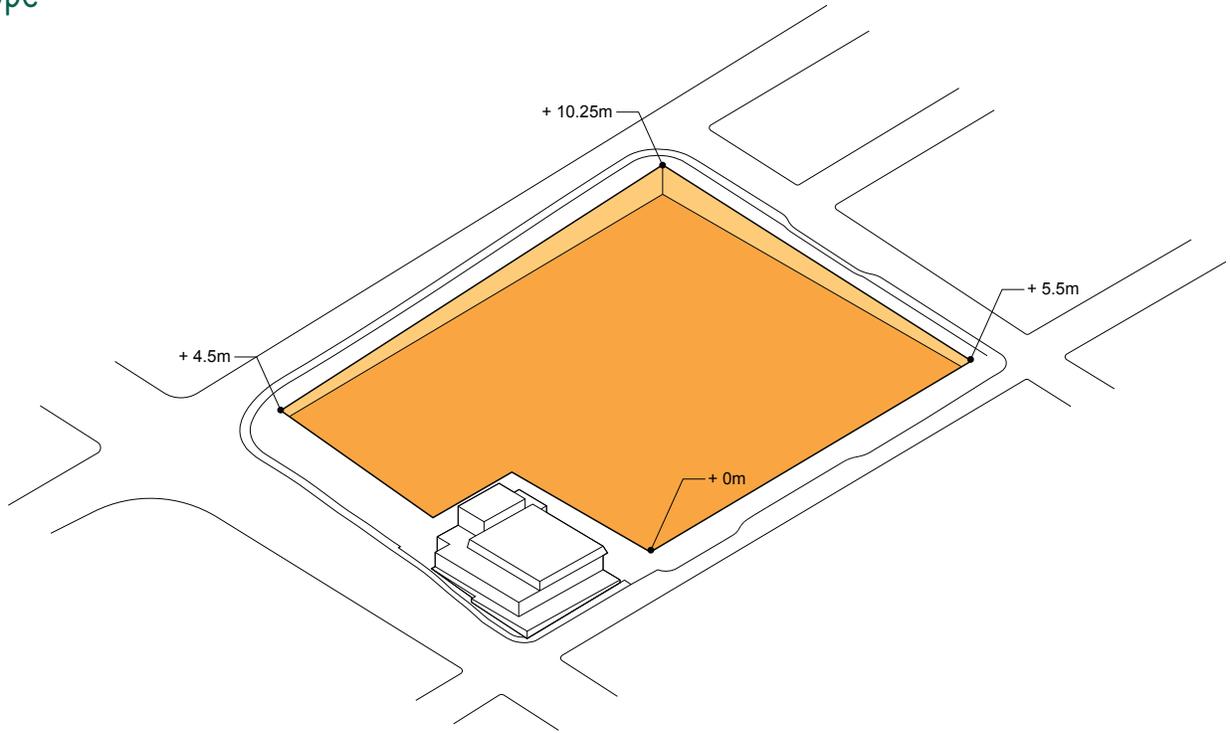
Harry Jerome Community Recreation Centre

Vehicular Access



Harry Jerome Community Recreation Centre

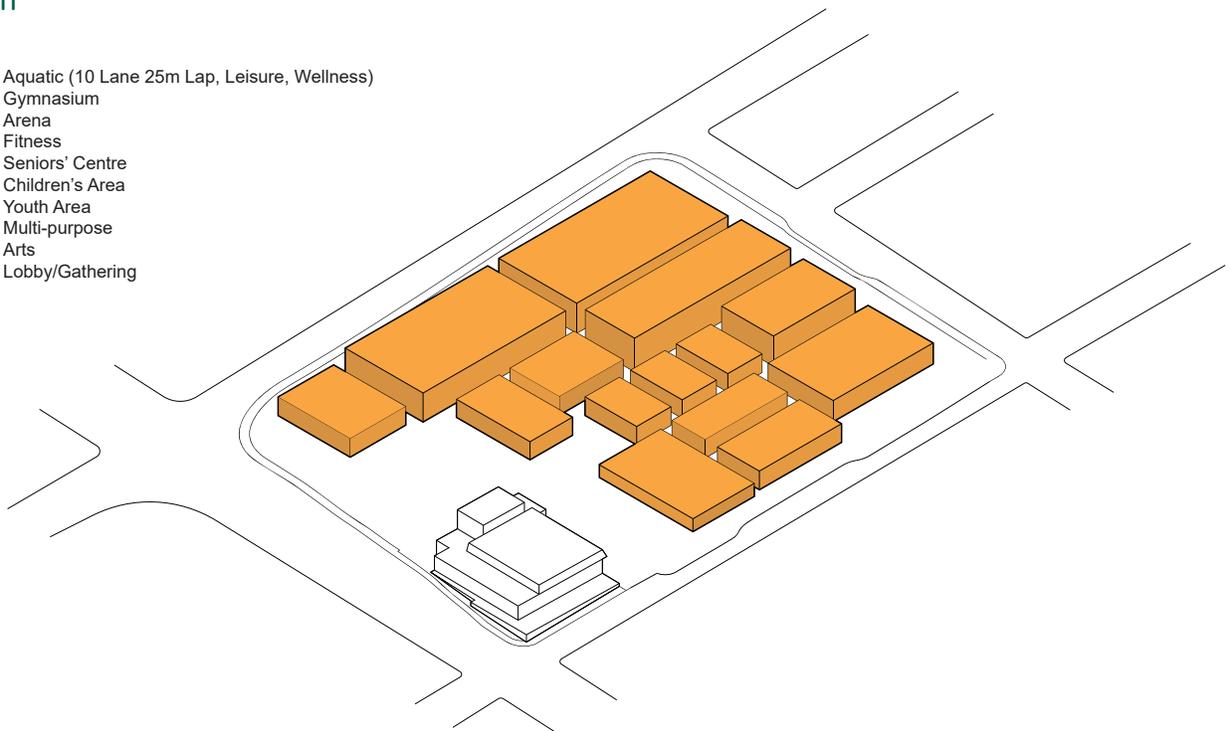
Site Slope



Harry Jerome Community Recreation Centre

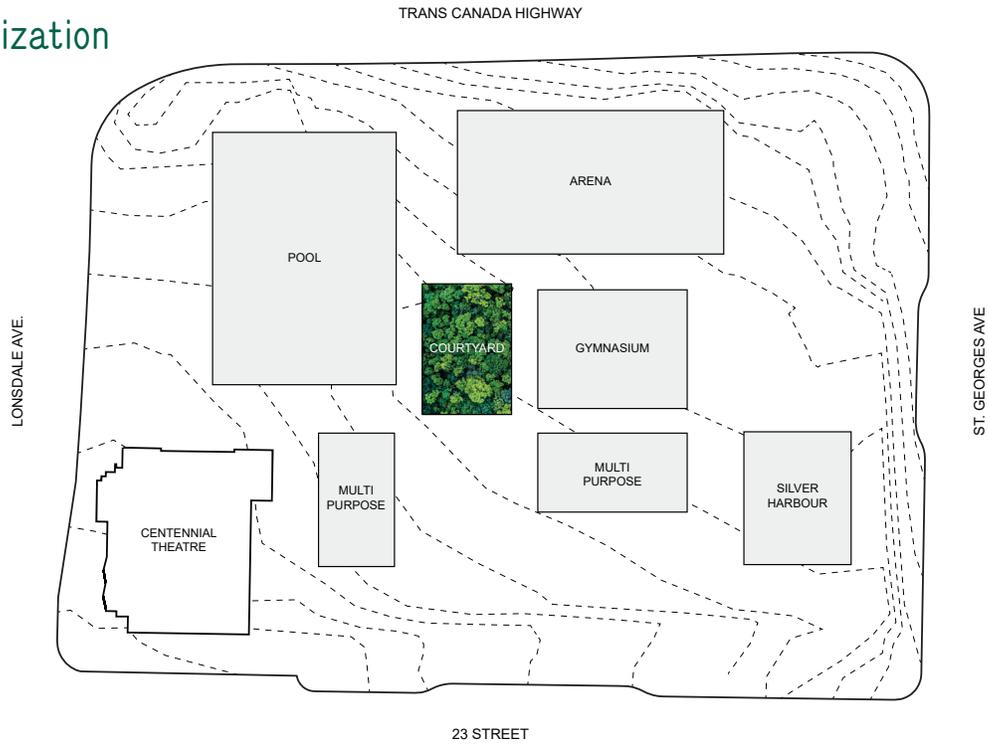
Program

- Aquatic (10 Lane 25m Lap, Leisure, Wellness)
- Gymnasium
- Arena
- Fitness
- Seniors' Centre
- Children's Area
- Youth Area
- Multi-purpose
- Arts
- Lobby/Gathering



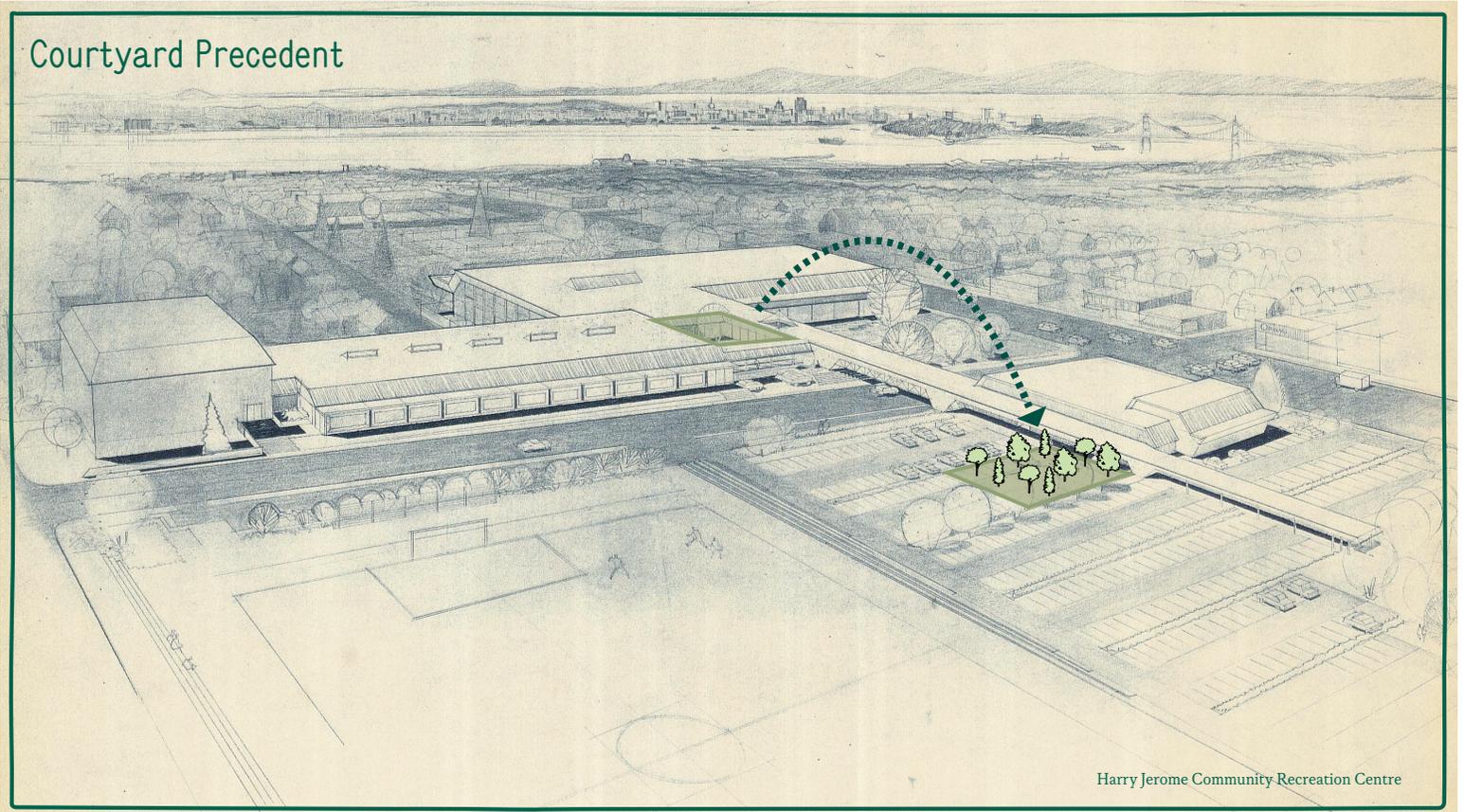
Harry Jerome Community Recreation Centre

Building Organization



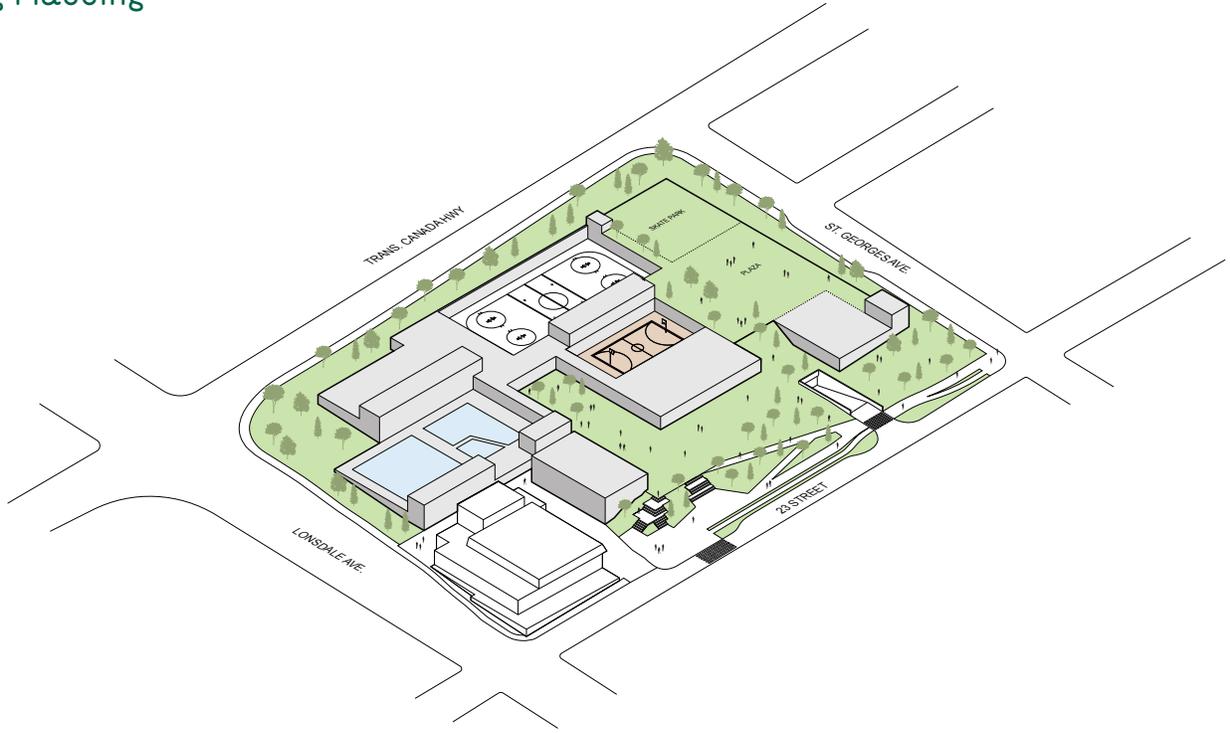
Harry Jerome Community Recreation Centre

Courtyard Precedent



Harry Jerome Community Recreation Centre

Building Massing



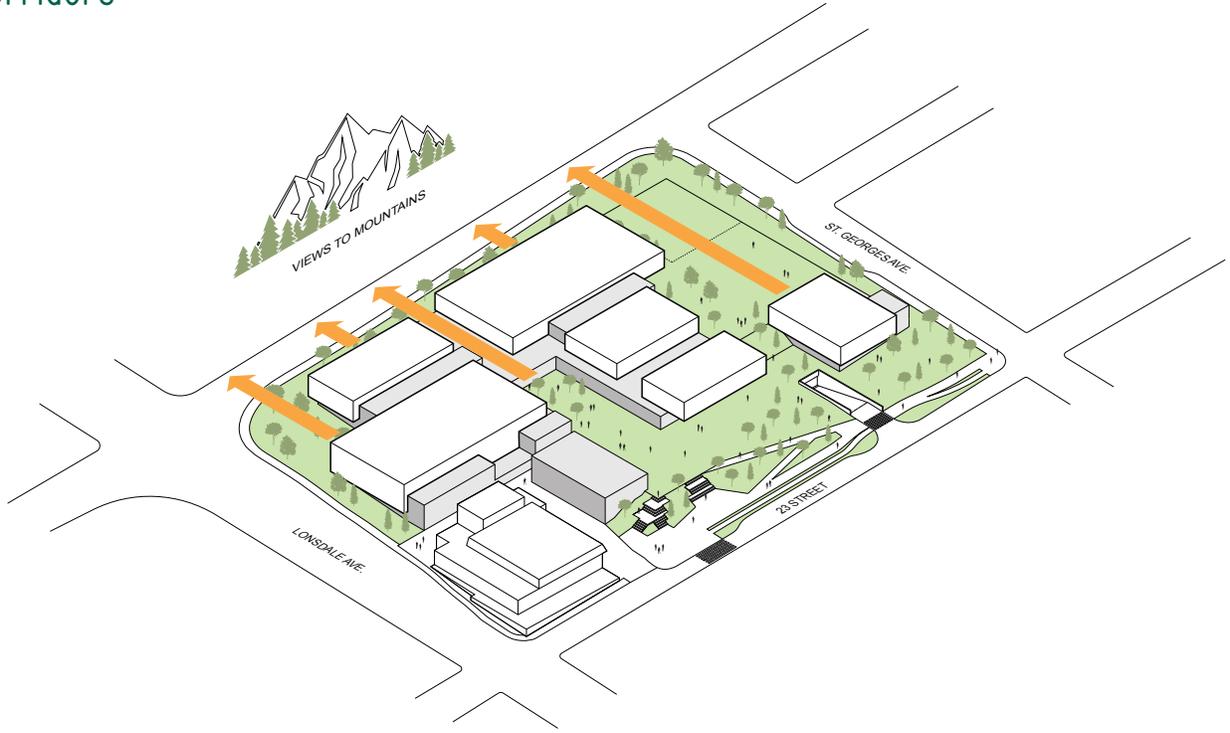
Harry Jerome Community Recreation Centre

Building Massing



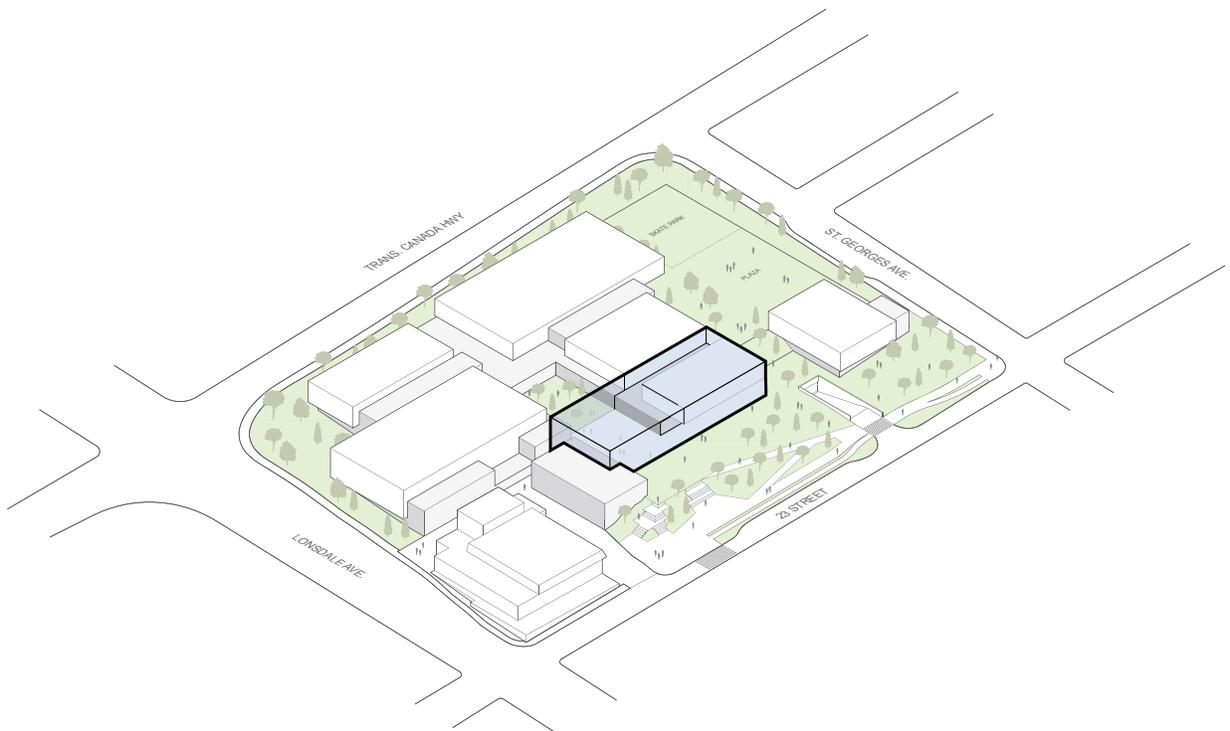
Harry Jerome Community Recreation Centre

View Corridors



Harry Jerome Community Recreation Centre

Atrium



Harry Jerome Community Recreation Centre

Landscape - Site Plan



Legend

- 1. Green Necklace
- 2. Outdoor Gathering Space
- 3. Atrium
- 4. Courtyard
- 5. Outdoor Fitness
- 6. Skatepark
- 7. Active Recreation Zone
- 8. Nature Play
- 9. Social Porch
- 10. Recreation/Culture Connector
- 11. Rain gardens

- Building Entrances
- Parkade Vehicle Entrance
- Service Vehicle Access

Harry Jerome Community Recreation Centre

Landscape - Outdoor Program



Central Gathering Space

- Plaza and lawn
- Main entry
- Southern exposure
- Everyday
- Events

Softscape Area

- Fits 300 people sitting
- Fits 600 people standing

Hardscape Area

- Fits 1300 people standing

- Green Necklace Pedestrian Path
- Green Necklace Separated 2-way Cycling Path (3.0m)

Harry Jerome Community Recreation Centre

Landscape - Outdoor Program



- ① **Skatepark**
 - Stakeholder involvement
 - Newline skatepark - designers
 - Urban plaza style
 - Visible from street



- ② **Active Recreation Zone**
 - Integrated with skatepark
 - Hangout / gathering space
 - Basketball, table games
 - Connected
 - Visible from street



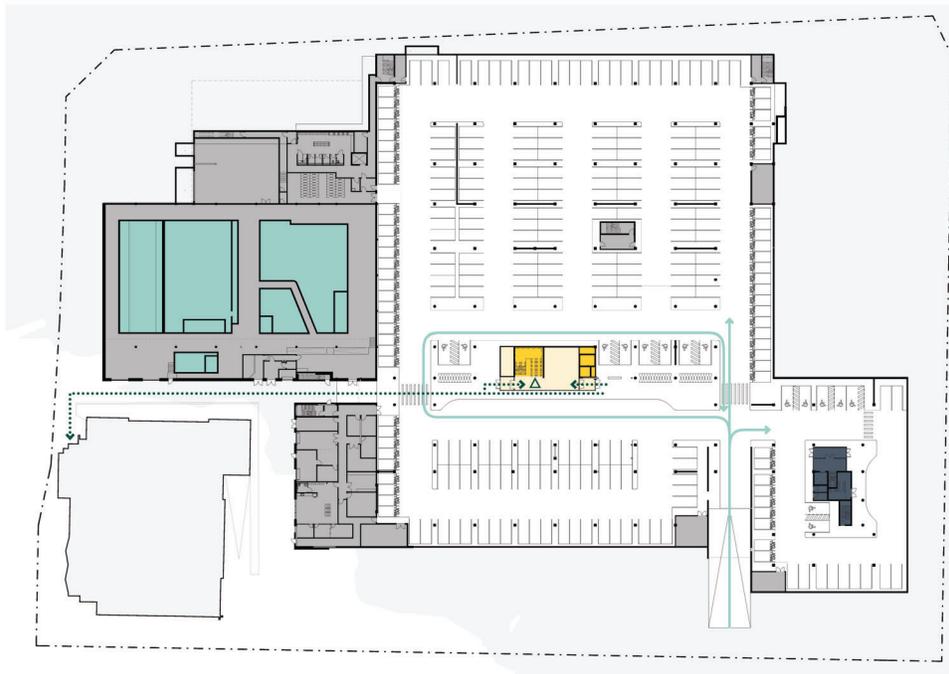
- ③ **Nature Play**
 - Natural materials (logs, boulders, planting)
 - Structure and unstructured play
 - Variety of age groups
 - Woodland playground



- ④ **Feature Bench**

Harry Jerome Community Recreation Centre

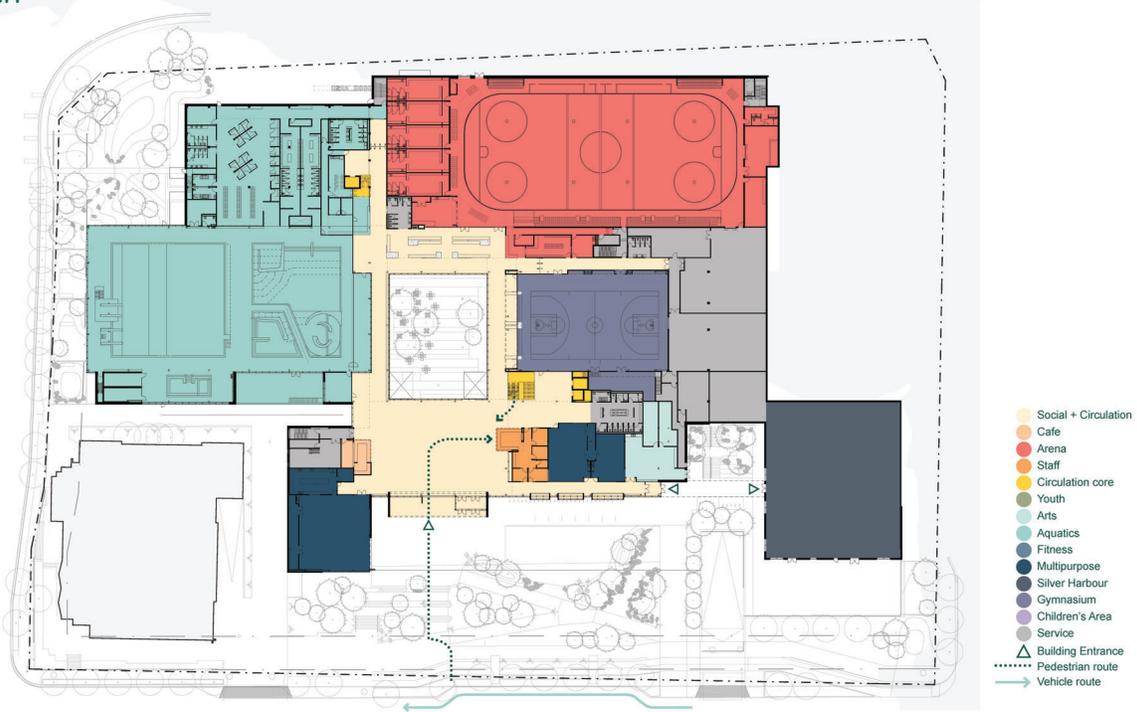
Level -1 Plan



- Social + Circulation
- Cafe
- Arena
- Staff
- Circulation core
- Youth
- Arts
- Aquatics
- Fitness
- Multipurpose
- Silver Harbour
- Gymnasium
- Children's Area
- Service
- ▲ Building Entrance
- Pedestrian route
- Vehicle route

Harry Jerome Community Recreation Centre

Level 1 Plan



Harry Jerome Community Recreation Centre

Level 2 Plan



Harry Jerome Community Recreation Centre

The In-Between Spaces



Harry Jerome Community Recreation Centre



Exterior View from 23rd Street



Exterior View from Entry Plaza



Atrium



Courtyard

The Landing Zone



The Rec Room



Harry Jerome Community Recreation Centre

Prepping for the Skate



Harry Jerome Community Recreation Centre

An Early Morning Swim



Harry Jerome Community Recreation Centre

Afternoon Workout



Harry Jerome Community Recreation Centre

Summer Sunshine



Harry Jerome Community Recreation Centre

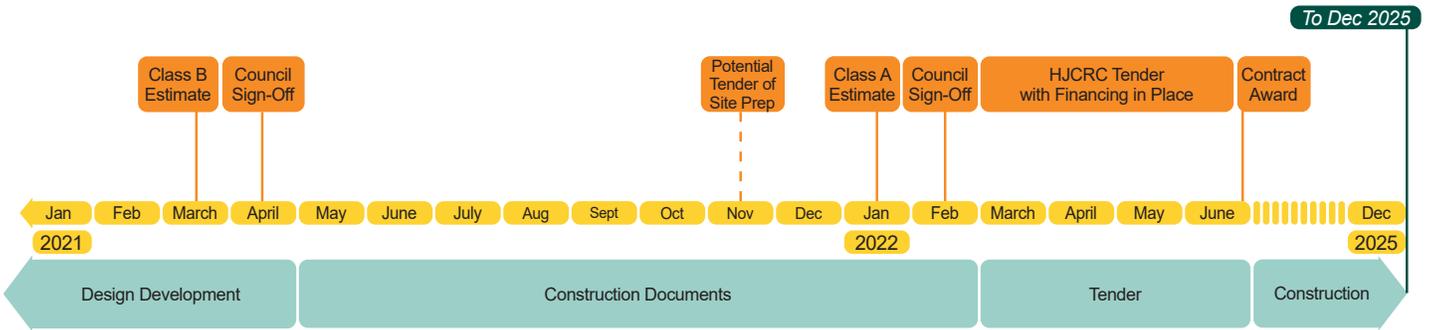
Costing Summary

**HJCRC
Cost
Summary**
CLASS B ESTIMATE

HJCRC Building Construction	\$114,953,000
Onsite Works	\$14,220,500
Offsite Works	\$6,331,100
Soft Costs	\$12,447,600
Permits and DCC's	\$2,172,200
Furniture, Fixtures, and Equipment	\$2,881,600
Contingencies & Escalation	
Soft Cost Contingency	\$260,000
Design Contingency (5%)	\$6,958,800
Construction Contingency (5%)	\$7,069,900
Escalation Contingency (9.7%)	\$14,401,300
HJCRC TOTAL	\$181,696,000

Harry Jerome Community Recreation Centre

Project Schedule



HJCRC Next Steps

