Grand Forks Community Centre
PHASE 1 REPORT

DECEMBER 2, 2019

Urban arts
Architecture Urban Design

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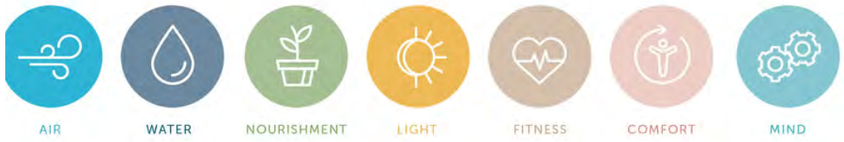
APPENDIX C: RISK ASSESSMENT WORKSHEET

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COMMUNITY VISION

THE WELL BUILDING STANDARD™

SEVEN CONCEPTS FOR HEALTHIER BUILDINGS



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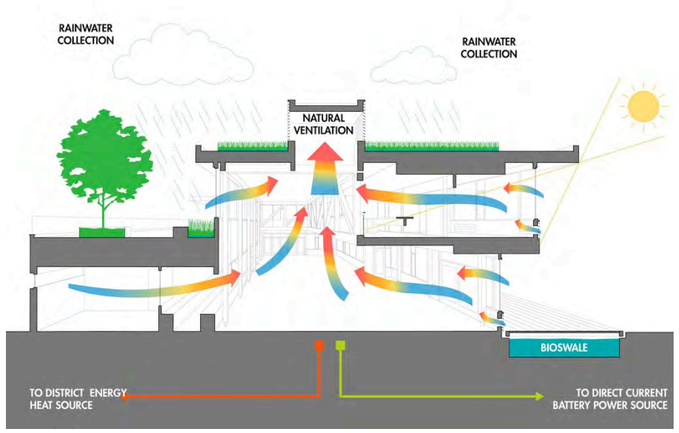


Community Garden/Green Roof/ Support local agricultural industry

"Healthy Building that supports participation"



Support Festivals and events



Passive Design Strategies



Accessible and inclusive

COMMUNITY VISION

The City of Grand Forks (CGF), Regional District of Kootenay Boundary (RDKB) and local residents worked together to create a vision for the Community Centre. The guiding principles for the facility are as follows:

1. REFLECT THE ETHOS OF GRAND FORKS

- Create a place that reflects the Grand Forks and environs community;
- Establish a Food-Centric - "Feed-Local" approach to reflect community culture;
- Explore technology and build for the future;
- Create a new CGF identity for the community that can be used throughout the City and is anchored to the Community Centre;
- Create a place of social, economic and environmental resilience providing a home for everyday and a refuge in times of crisis;
- Support economic development of the region through the provision of a community venue that can host events and attract new residents and tourists;
- Build partnerships to create a facility that is built by the community for community, and
- Demonstrate environmental stewardship that is in harmony with the land, building on the agrarian heritage.

2. ONE ROOF - CONTINUITY OF SPACE, PLACE + SERVICES

- "One-roof Hub" - Work in concert with other buildings on the site to create a campus of play, gathering, celebrating and healing;
- "One-Stop Shop" - the buildings are currently silos with little connection in the public realm - this is an opportunity for connectivity between buildings AND programs;
- Create flow and connection between the buildings creating an environment that is inviting to wander through;
- Consider as a campus for activity - such as agricultural events, Fall Fair, markets;
- Include visibility from Central Avenue to establish the facility as an emblem of the community;
- Ensure there is adequate parking; and
- Consider all uses of the site, future renewal of existing buildings - a Recreation Master Plan approach.

3. CREATE A GATHERING PLACE FOR ALL

- Support the community events such as Fall Fair, Lobsterfest, Agricultural events;
- Design a multi-generational, multi-cultural, inclusive and accessible place for all;
- Create a place for the Youth;
- Support wellness - a healthy place for social and physical participation and healing;
- Create a place of imagination and inspiration;
- Create a place of social connectivity;
- Include spaces within highly visible and transparent to promote activity and connection; and
- Build for future generations.

4. INCLUDE A VARIETY OF FLEXIBLE MEETING SPACES

- Design for 250 - 300 person events in a Community Hall;
- Include flexible multi-purpose rooms for 30-40 persons;
- Consider a dividable hall or separate the stage for flexibility;
- Include places for children inside and out;
- Support gathering such as conferences, ceremonies; presentations, weddings, funerals and graduation;
- Support informal sports including pickleball, badminton, dancing, aerobics, zumba, yoga and carpet bowling;
- Include multi-purpose space that can be used as an Emergency Operations Centre (EOS);
- Create collaborative cultural space, and
- Expand use through indoor/outdoor continuity.

5. CREATE A SUSTAINABLE BUILDING THAT DEMONSTRATES THE LOVE OF THE LAND:

- Demonstrate environmental sustainability that works with the climate of the valley;
- Include a passive design approach - orient the building to maximize benefits of the micro-climate;
- Harvest the power of the sun;
- Include renewable energy;
- Consider harvesting excess energy from the pool;
- Consider a community garden on the roof;
- Facilitate daylighting and also screen spaces from hot summer sun; and
- Use local materials - feature wood.

6. SUPPORT RESILIENCE

- Accommodate the Emergency Operations Centre, and ensure that the space is available for as long as they need it;
- Hall could also function as a Reception Centre;
- Undertake economically responsible development that is right sized for the community;
- Include a back-up Generator; and
- Future-proof - include lots of power and capacity for digital technology.

7. INVEST IN YOUTH

- Create space for youth activities - indoor sports, maker/ creation/gaming, recording, garage band practice and lounging;
- Create a safe place for youth; and
- Facilitate connection with seniors and elders.

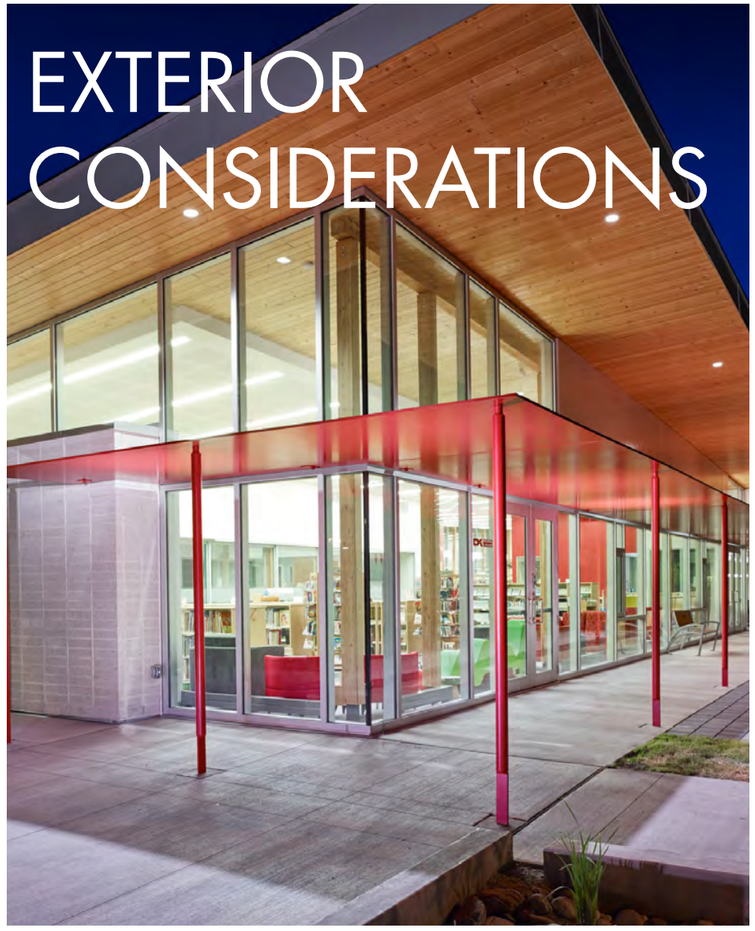
8. CREATE A HEALTHY PLACE

- Address loneliness and create mental wellness through a place for social connectivity;
- Create health through participation;
- Include multi-purpose space for health programs to support preventative health care;
- Consider office space for health services such as foot care, mental health;
- Create a place that feeds the spirit and the body; and
- Establish a smoke free environment.

9. CONSIDER ONGOING OPERATIONS

- Right size the facility to balance future needs with operational costs (maintenance, energy and staffing);
- Create durable and robust building to minimize maintenance;
- Include passive energy strategies to reduce operations costs and maintenance;
- Harvest excess heat from existing buildings; and
- Consider connecting to the Aquatic Centre for combined supervision and connection,

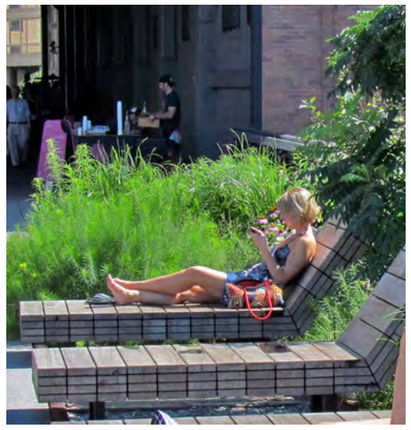
EXTERIOR CONSIDERATIONS



Indoor/Outdoor Connectivity



Sheltered Gathering



Place to linger



"Solar Power + Green Roofs"



Musical Events



Support the Fall Fair

Support the Fall Fair



Welcoming Front Porch



"Multi-Generational"

Community Court

"VIBRANT AND ACTIVE"



Agricultural Events/Farmers Market

SPACE NEEDS

The following spaces and places will support the vision for the Grand Forks Community Centre:

1. SPATIAL QUALITIES
- Welcoming and warm;
- Natural materials;
- Naturally lit spaces;
- Incorporate acoustics;
- Connect spaces so people can view into the Hall; Could be 2 storeys to provide a gradation of privacy (particularly for the EOC).

2. Transparency + Visibility
- Visible from Central Ave to act as emblem for the community;
- Display activities within;
- Visual connection inside between the spaces to promote cross pollenation.

3. Exterior Spaces and Places
- Connect to other buildings on the site to create a "Hub";
- Enhance existing public realm - add gathering spaces to linger, community court, routes through the site;
- Welcoming front porch and entry;
- Sheltered outdoor gathering area; and
- Include community gardens - consider the cultivating the roof for pot industry!

4. Entry
- Spacious welcoming entry;
- Consider including a cafe for cross pollenation and to add vitality;
- Include displays and art from the Gallery, Museum, and Indigenous community; and
- Consider including a circular gathering space.

5. Hall
- Design to accommodate 250-300 persons in a banquet celebration;
- Define the size by the proposed activities - and project into the future;
- Banquets and events are the primary needs such as weddings, celebrations, graduation, funerals, and community events;
- Size to accommodate informal recreation activities such as pickle ball, badminton, zumba, dance, yoga;
- Accommodate trade shows, public presentations, lectures, performances;
- Include a stage for dance, performances and flexibility;
- Accommodate a bar - permanent or temporary;
- Carefully consider the acoustics, and
- Run efficiently to create a good source of revenue.

6. Kitchen
- Commercial kitchen that is a community kitchen;
- Accessible to all;
- Place to make jams;
- Place to hang out - classes, seniors groups; and
- Accommodate caterers.

7. Multi-Purpose Space
- Include a variety of scale of meeting rooms for a wide range of functions from break-out rooms, classes, lectures, clubs, cards etc;
- Use as learning spaces - can partner with Selkirk College for Adult Education; and
- Design for use by the Emergency Operations Centre (EOC).

8. Maker/Hacker Space
- Include space for creation, inspiration and imagination to attract youth and support ongoing learning for all ages.

9. Youth Space
- Create spaces to attract youth and provide a place for them to hang out; and
- Include Maker/Creation/Recording space (see above) and/or lounge area.

10. Service Spaces
- Provide traditional and gender neutral washrooms;
- Consider child size sinks and fixtures; and
- Consider including lockers, showers and change facilities.

11. Additional Spaces to consider
- Gymnastics space,
- Potential Offices for Health providers - particularly senior care (palliative services, foot care, counselling), or relocated RDKB offices, or Recreation offices (from Arena), and
- Cafe/Retail in the Lobby.



Generous lobby with space to hang out



Consider a cafe in the Lobby

INTERIOR SPACES



"Use Local Wood"

Celebrations, Banquets, Catered events



"250 - 300 person event space"

Adjustable Space

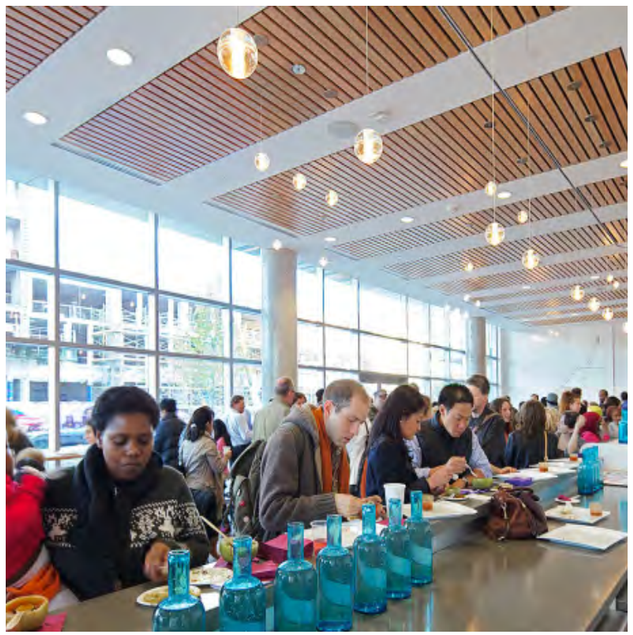


Multi-Purpose Community Space



"Right size the kitchen"

Commercial Kitchen



And a Kitchen that works for community



"Include Dividers and Stage"

INTERIOR SPACES



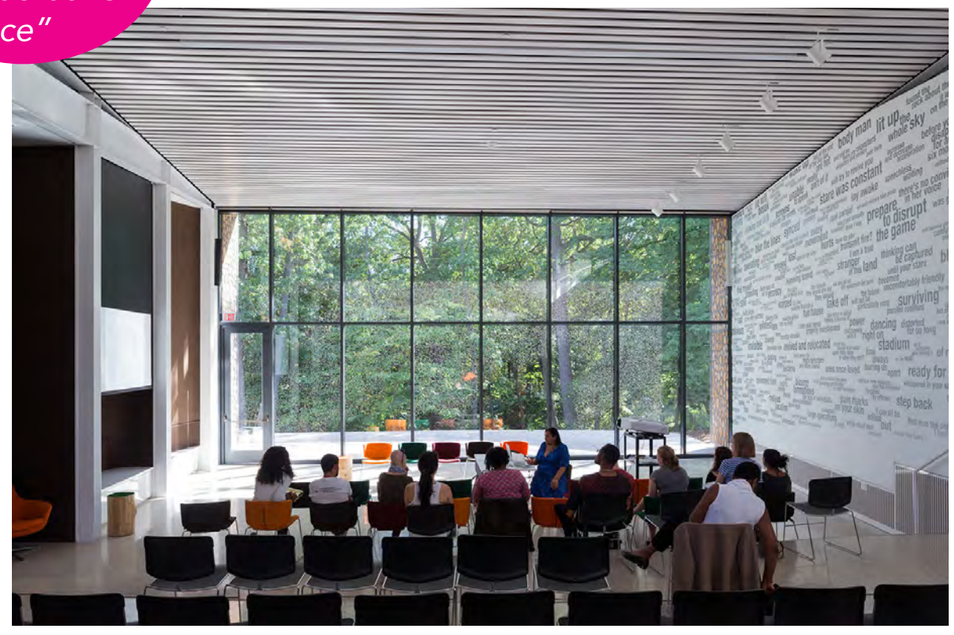
Flexible meeting space with access to natural light.





Creation Space for all ages

"Creative Hacker Space/ Collaborative Space"



Presentation Space



Light filled healthy environment



Wired meeting space

"Lots of Power for EOC"



Staff Kitchen/Meeting

PROGRAM

PROGRAM

The following program was established through the visioning workshop and further developed in the programming workshop. The Program is comprised of the base program and an optional add-on flexible shell space. The base program includes the public spaces, community center, administration and support spaces and has a total gross area of 13,153 sf (1,222m2)

The optional program is a 2,500 sf (232m2) shell space that may be used as a Flexible Office Suite, and/or a Wellness Suite. It will be operated on a cost-recovery basis, with renovations to be done by the tenant. Possible programs may include office use by the City, RDKB, or by individual practitioners, or as a cooperative work space. Wellness program may include massage, counseling, or a movement studio (yoga, pilates, physio, etc.). The inclusion of the Flexible tenant space builds in flexibility, creates the potential for positive synergies with businesses, increasing the vibrancy and vitality of the site and bring a greater flow of people to the community centre.

BASE PROGRAM

	SPACE REQUIREMENTS	Area		Occupant	Notes
1	**PUBLIC SPACES**				
1.1	Entry Vestibule	70	6.5		Airlock vestibule
1.2	Lobby	300	27.9	37	Includes linear closet coat area, circulation and 6 lounge chairs. Consider fireplace or art in lounge area
1.3	Café (Servery)	145	13.5	1	Servery/café area approximately 16' x 9' with expresso area, 6 lin ft grab+go coolers, cash till and back counter prep zone only. Food prepared elsewhere - reheat capacity only. Beverage fridge.
1.4	Café (Servery)	190	17.7	15	Tables and chairs for 12 - 6 x 2 ganging and 4 perch at counter in window.
1.5	Retail Display Units	150	13.9	4	4 units @ 12 sq ft and circulation space
1.6	Community Display Units	20	1.9	1	12 lin ft 20" deep for retail or art
1.7	Universal Washroom	48	4.5	N/A	1 Universal
1.8	Universal Shower Room	66	6.1	N/A	1 Universal
	TOTAL PUBLIC SPACES	989	92	58	
2	**COMMUNITY CENTRE**				
2.1	Hall	4264	396.1	417	Size 52' x 82'. Divide into two 52' x 41' 290 persons banquet 416 persons for lecture or events 14' deep stage area with capability to be separated from main hall space
2.2	Chair Storage	290	26.9		
2.3	General Storage	200	18.6		
2.4	AV Closet	20	1.9		
2.5	Community Kitchen	450	41.8	4	
2.6	Pantry	100	9.3		
2.7	Walk-in Cooler	0	0.0		
2.8	Bar/Servery Area	100	9.3	1	
2.9	Garbage + Recycling	190	17.7		
2.10	Washrooms	650	60.4		Male: 4 stalls required (1 Barrier free) Female: 9 stalls required (1 Barrier free) May be designed to accommodate gender neutral use.
2.10	Meeting Room	200	18.6	10	Small meeting room for groups, clubs, board meetings Include video conference capacity
2.11	Hacker/Maker Space	400	37.2	20	16' Linear portable tables/counter with printers and equipment with storage for supplies below. Space for class of approximately 16 persons at portable tables.
2.12	Conference Room/EOC	1000	92.9	50	Meeting/Training 30 persons. Accommodate EOC for 40 persons at 3' linear workspace/shared worktables. Include sink area & lockable storage for Tech equipment.
	TOTAL COMMUNITY CENTRE	7864	731	503	

3	**ADMINISTRATION - Small suite to suit Recreation Offices + Reception**				
3.1	Reception/Work-station	100	9.3	1	At junction or overlooking lobby to function as meet and greet for facility
3.2	Workroom / Copier	100	9.3		
3.3	General storage room	120	11.1		
3.4	Open office	252	23.4	3	Open area with 3 work stations
3.5	Meeting Room				Use Flex and meeting rooms above
3.6	Staff Room	120	11.1	6	Kitchenette with full size fridge, dishwasher, microwave. Used by building staff and for EOC.
3.7	Staff Washroom (Unisex)	48	4.5		Accessible WC unit stall, 1 toilet, 1 sink, change table
3.8	Server Room	48	4.5		Back-up power for EOC
	TOTAL ADMINISTRATION	788	73	9	
	TOTAL NET AREA EXCL SUPPORT	**9641**	**896**	**569**	
4	**SUPPORT SPACES**				
4.1	Mechanical / Electrical (4.5% net)	434	40.3		
4.2	Janitor Room	43	4.0		1 Sink
4.3	Back-up Generator	N/A	N/A		Include back-up generator for EOC on site in external enclosure. Size T.B.C.
	TOTAL SUPPORT SPACES	477	44	0	
			57.6		
	TOTAL NET AREA	10118	940		
	GROSS AREA	3035	282		Circulation / Walls 1:1.30
	TOTAL GROSS AREA	**13153**	**1222**	**569**	

OPTIONAL

5	***COST-RECOVERY TENANT SPACE***				
5.0	*Flexible Tenant Suite*	*2273*	211.2	*1*	*Shell space with renovations by tenant, operated on a cost-recovery basis. May be used as a Flexible Office suite and/or Wellness suite by multiple tenants or a single tenant.*
	TOTAL TENANT SPACE	*2273*	*211*	*1*	
	TENANT SPACE GROSS AREA	*227*	*21*		*Circulation / Walls 1:1.10*
	TOTAL GROSS AREA	***2500***	***232***	***1***	

DESIGN GUIDELINES

EXTERIOR DESIGN GUIDELINES

The following list incorporates feedback gathered from community through the Vision and Program Workshop. It provides strategies on how the Community Vision can be supported by the site and exterior environment.

INCLUSIVE + WELCOMING

- Provide welcoming entry and intuitive wayfinding on site, allowing visitors to orient themselves;
- Consider physical mobility in and around the site. Ensure all outdoor gathering spaces are barrier free and have a variety of seating options (i.e. chairs and benches with and without arms);
- Provide welcoming outdoor gathering spaces encouraging people of all ages to hang out and linger;
- Adhere to CPTED (Crime prevention through environmental design) principles to create a safe environment for all;
- Use glazing strategically on exterior to act as a beacon and showcase activities within.

CONNECTIVITY

- Consider connections with the skate park;
- Provide south facing community plaza, optimally connected to the hall;
- Reinforce connection with existing buildings on site (Arena, Pool);
- Reinforce connection with the park to the south, allowing new community centre to support the Fall Fair and other outdoor events.

SUSTAINABLE

- Highlight sustainable building and landscaping elements - making them a feature and educational component;
- Reduce hardscaping on site, ensuring runoff goes into the ground rather than city's system;
- Incorporate Electric Vehicle charging stations
- Collect rainwater on site for use for food roof and toilets;
- Include food roof - an accessible garden space;
- Provide xeriscaping with local drought resistant plants;
- Support bees with pollinator friendly plants, and consider including hives on rooftop garden;
- Include passive design principles in terms of orientation, compact building form and strategically placed openings to capture daylight.

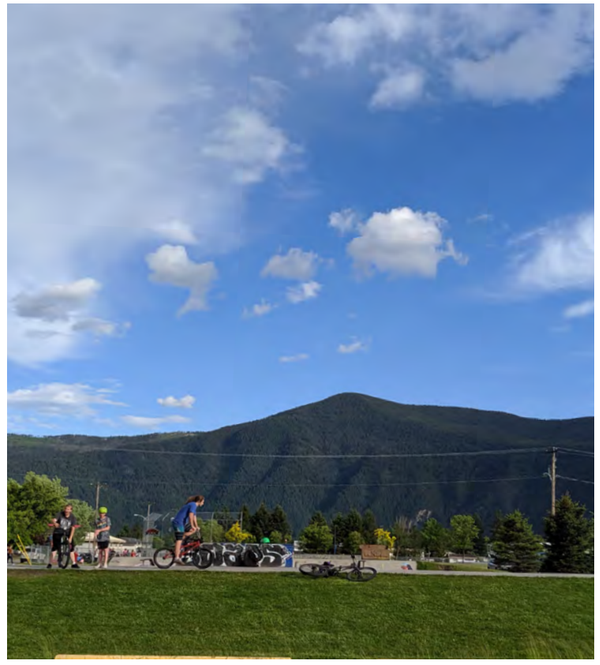
PROMOTE WELLNESS

Promote physical, social and mental wellness through the design of spaces by including the following:

- Promote social connectivity through informal gathering spaces, encouraging people to lounge, talk and linger;
- Include weather protection for outdoor gathering spaces;
- Support play - include landscaping features that encourage interaction and capture the imagination;
- Create usable walking space around the building, use well connected pathways to connect to recreation spaces on the site, sports fields adjacent the site and beyond;
- Reinforce connection to the surrounding landscape. Preserve and capture mountain views;
- Include food gardens to support agricultural + food culture and promote nutrition.

MATERIAL + FORM

- Select sustainable and locally sourced materials;
- Incorporate water - physically or symbolically - as water is a significant force in the community;
- Embrace the ethos of Grand Forks with innovative use of local materials;
- Use a warm palette featuring wood;
- Use durable, easily maintained materials that age well.



Reinforce connection with site - capture views



Building as a sustainable showcase



Welcoming entry, gathering places, connected paths throughout the site to encourage movement

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INTERIOR DESIGN GUIDELINES

The following list incorporates feedback gathered from community through the Vision and Program Workshop. It provides strategies on how the Community Vision can be supported by the interior environment.

INCLUSIVE + WELCOMING

- The building shall be physically and socially accessible and welcoming to people of all ages;
- Provide a welcome entry with visual connectivity to spaces within;
- Consider the needs of the visually, hearing and physically challenged as well as those facing mental health issues;
- Design to the highest standards of accessibility;
- Consider gender neutral washrooms;
- Provide intuitive layout of spaces that are easy to navigate for people of all ages and abilities;
- Provide spaces for youth, encouraging them to make it their own and linger.

INCORPORATE FLEXIBILITY

- Include spaces that can support a variety of activities and gatherings of various sizes;
- Provide adequate and well designed storage allowing for multi-purpose spaces to support a variety of functions;
- Seamlessly integrate technology so power/data is available when and where needed;
- Design spaces to allow them to spill out into circulation spaces to increase capacity and functionality;
- Utilize movable partitions in hall to support a variety of gathering sizes;
- Utilize movable, modular furnishing in lobby and meeting spaces to support a variety of activities.

SUSTAINABLE

- Incorporate storm water management, passive systems and efficient plumbing and lighting fixtures;
- Select materials that are local and environmentally conscious;
- Consider building as learning environment - showcase sustainability through interaction;
- Maximize efficiencies between existing buildings - consider heat from swimming pool as an energy source.

PROMOTE WELLNESS

Support physical, social and mental wellness through the design of spaces by including the following:

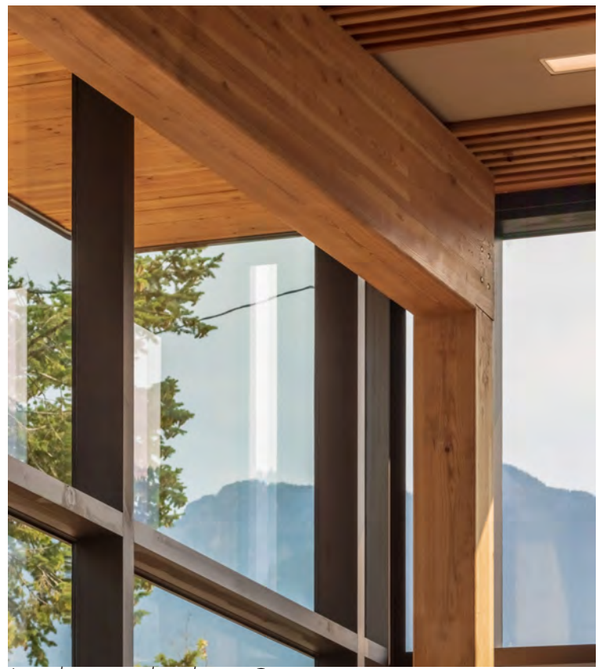
- Promote social connectedness through informal gathering spaces adjacent to circulation;
- Maximize access to daylight and views;
- Provide natural ventilation;
- Provide connection to a variety of outdoor spaces;
- Encourage movement by having stair as a central feature for upper levels.
- Create a space for celebration + food events;
- Community Kitchen to be accessible to all to promote healthy eating.

EFFECTIVE/EFFICIENT

- Maximize synergies between programs;
- Create flexible spaces to support a variety of activities and functions;
- Utilize a compact efficient building form, and minimize jogs in the building envelope;
- Ensure visual connection between spaces to maximize efficiency of building staff. Consider lock off areas for portions of building operating at different hours;
- Promote partnerships between organizations (i.e. food services)

MATERIAL + FORM

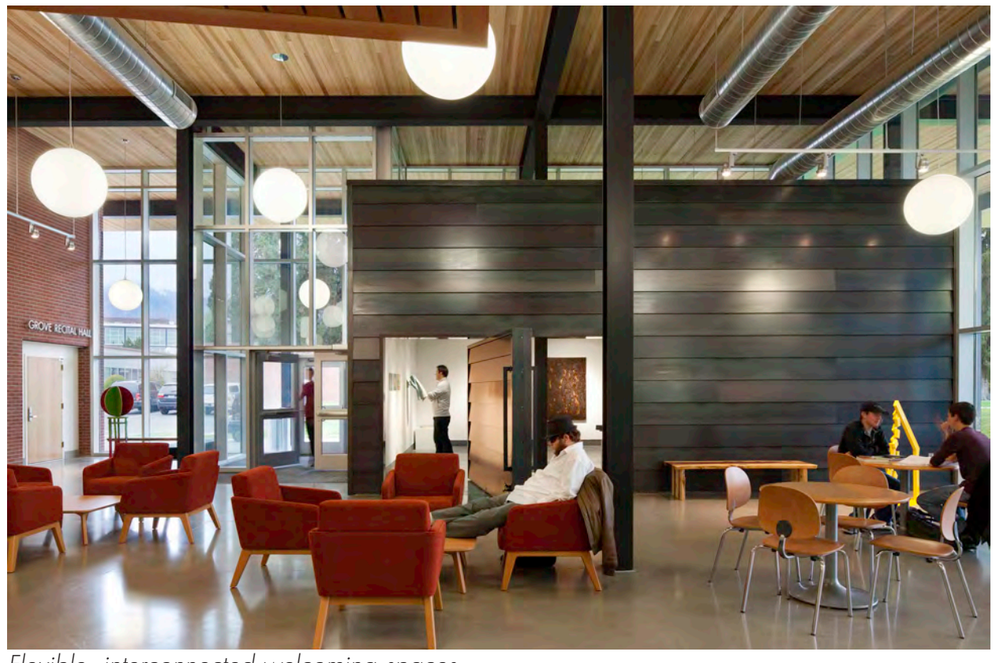
- Select sustainable and locally sourced materials;
- Embrace the ethos of Grand Forks with innovative use of local materials;
- Use a warm palette featuring wood;
- Use durable, easily maintained materials that age well;
- Utilize a compact efficient building form;
- Select cozy, comfortable furnishings.



Local material palette. Capture views.



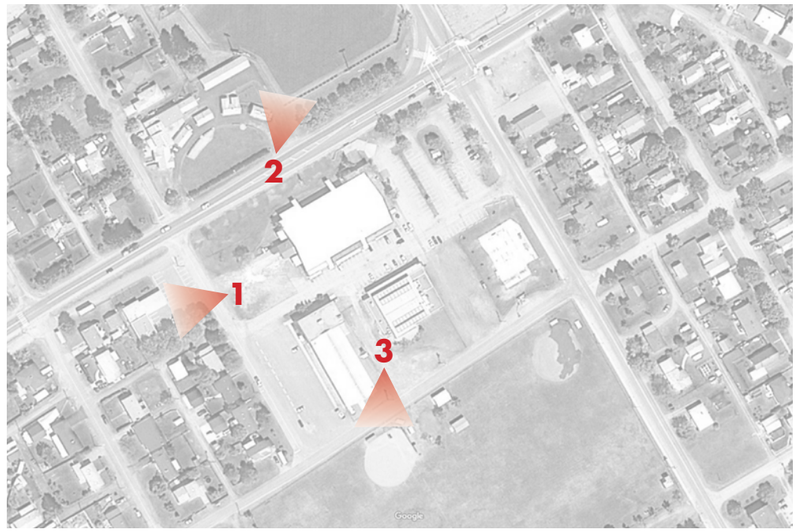
Durable east to maintain materials, adequate storage, modular furniture to increase flexibility

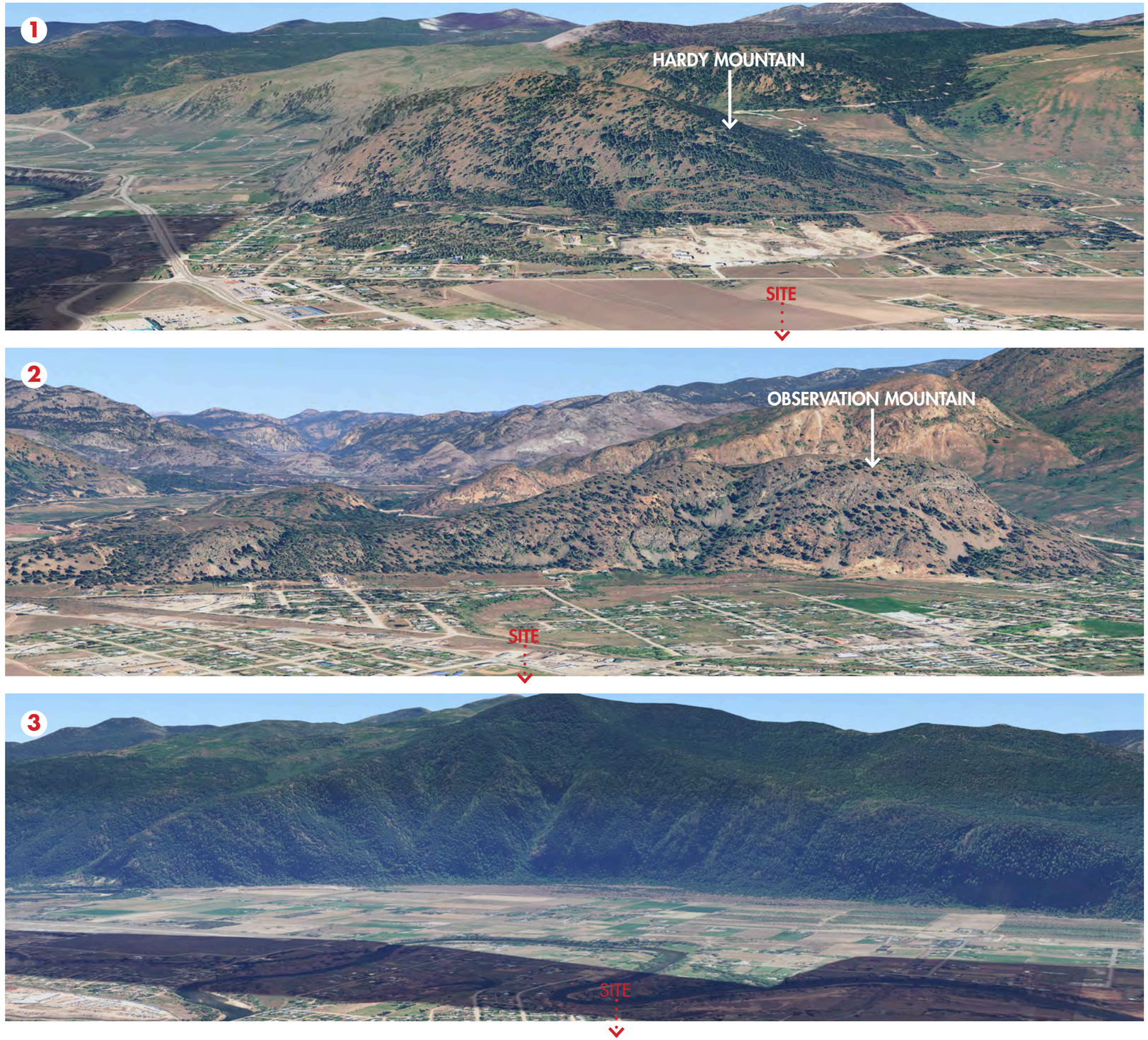


Flexible, interconnected welcoming spaces

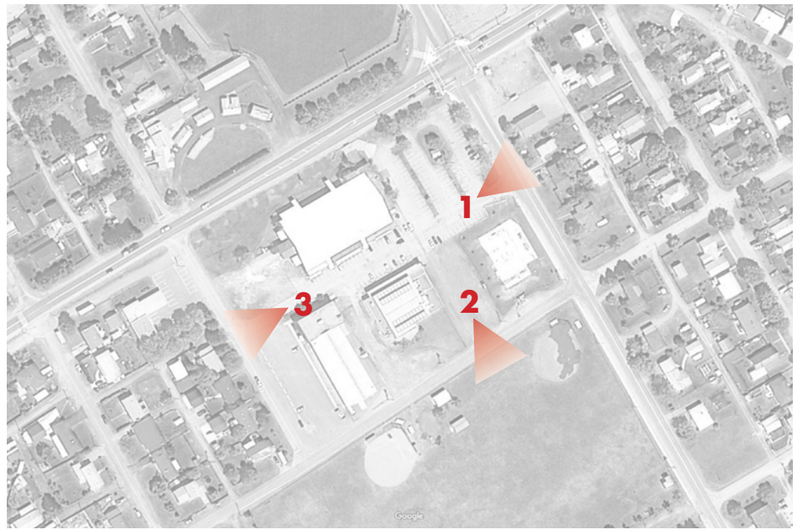
SITE ANALYSIS + STRATEGIES

CONTEXT

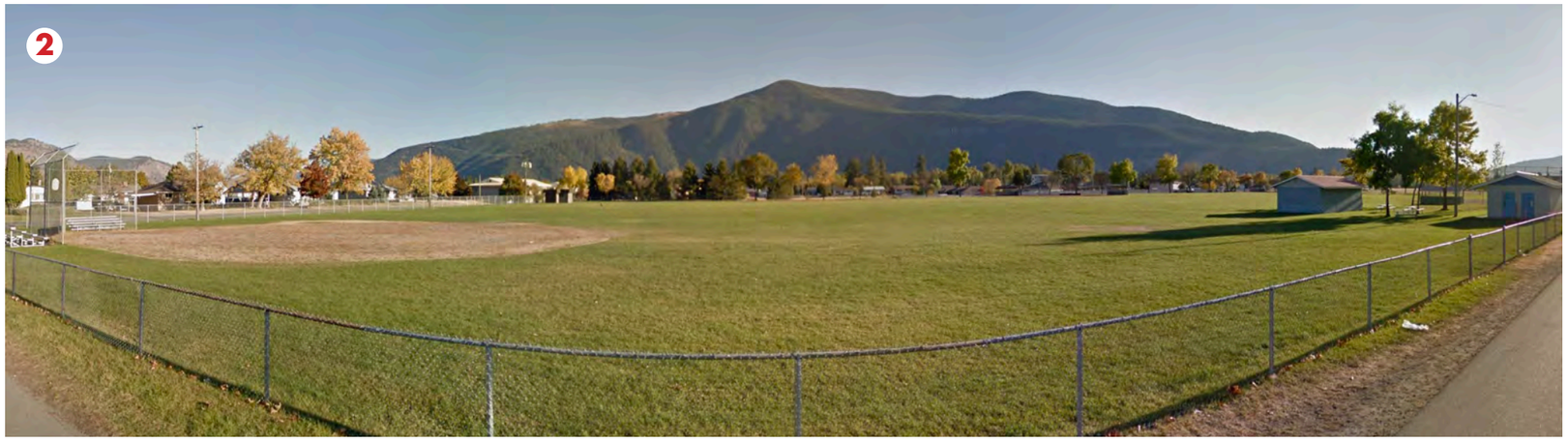

1
2
3


1
HARDY MOUNTAIN
SITE
2
OBSERVATION MOUNTAIN
SITE
3
SITE

SITE VIEWS OUT

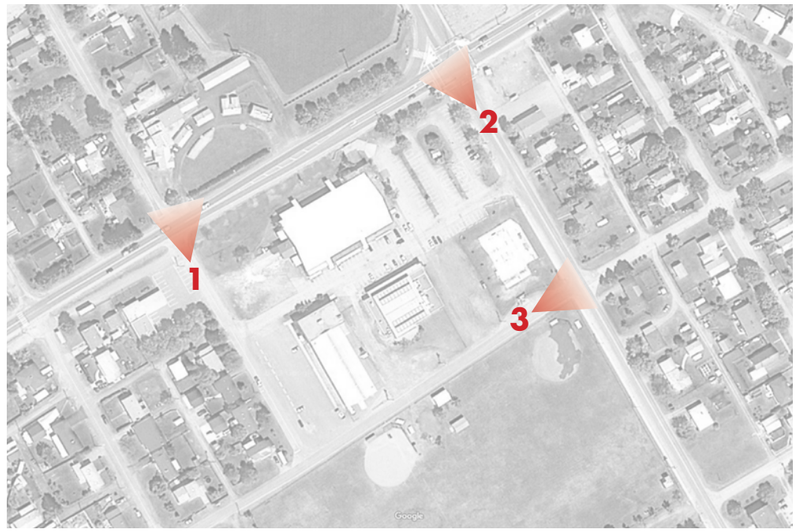




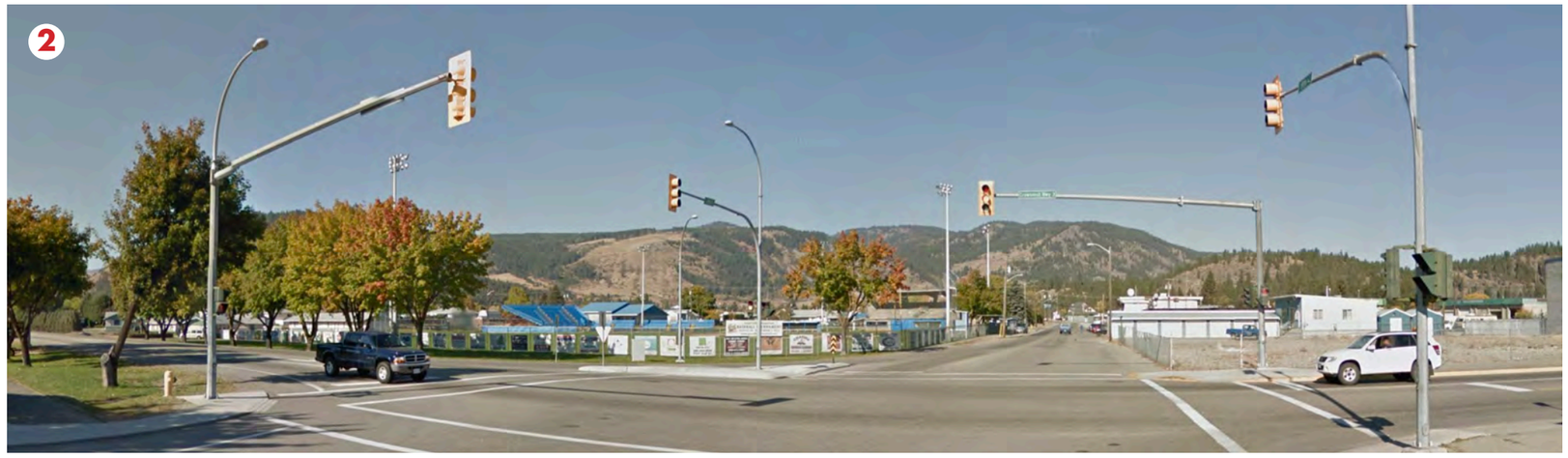




SITE VIEWS OUT









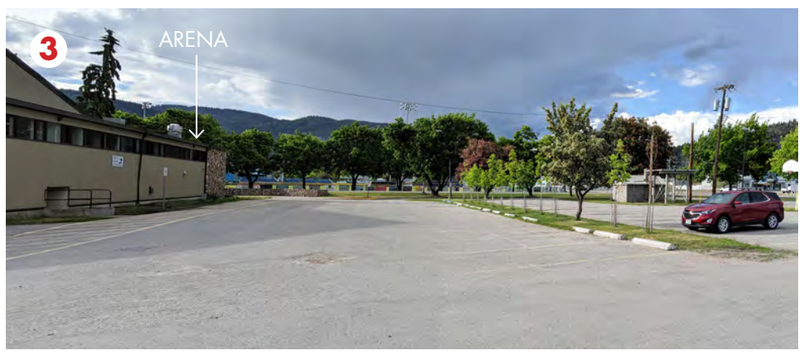
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SITE VIEWS IN

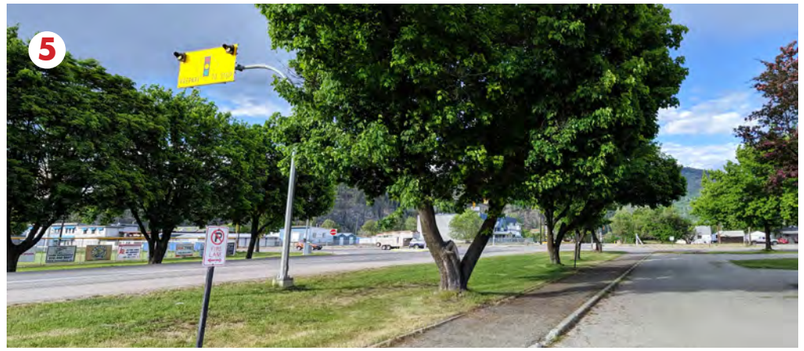












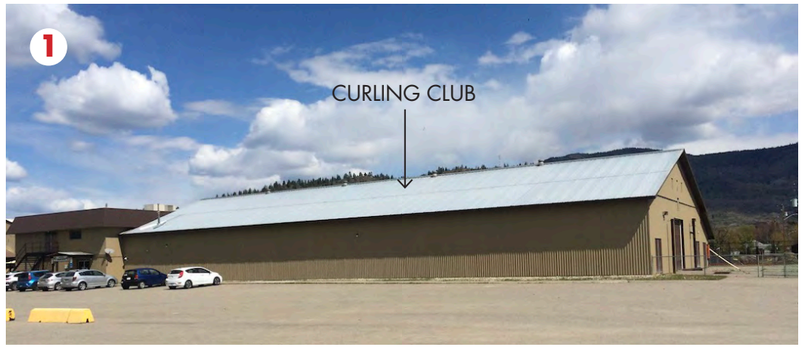






SITE VIEWS IN













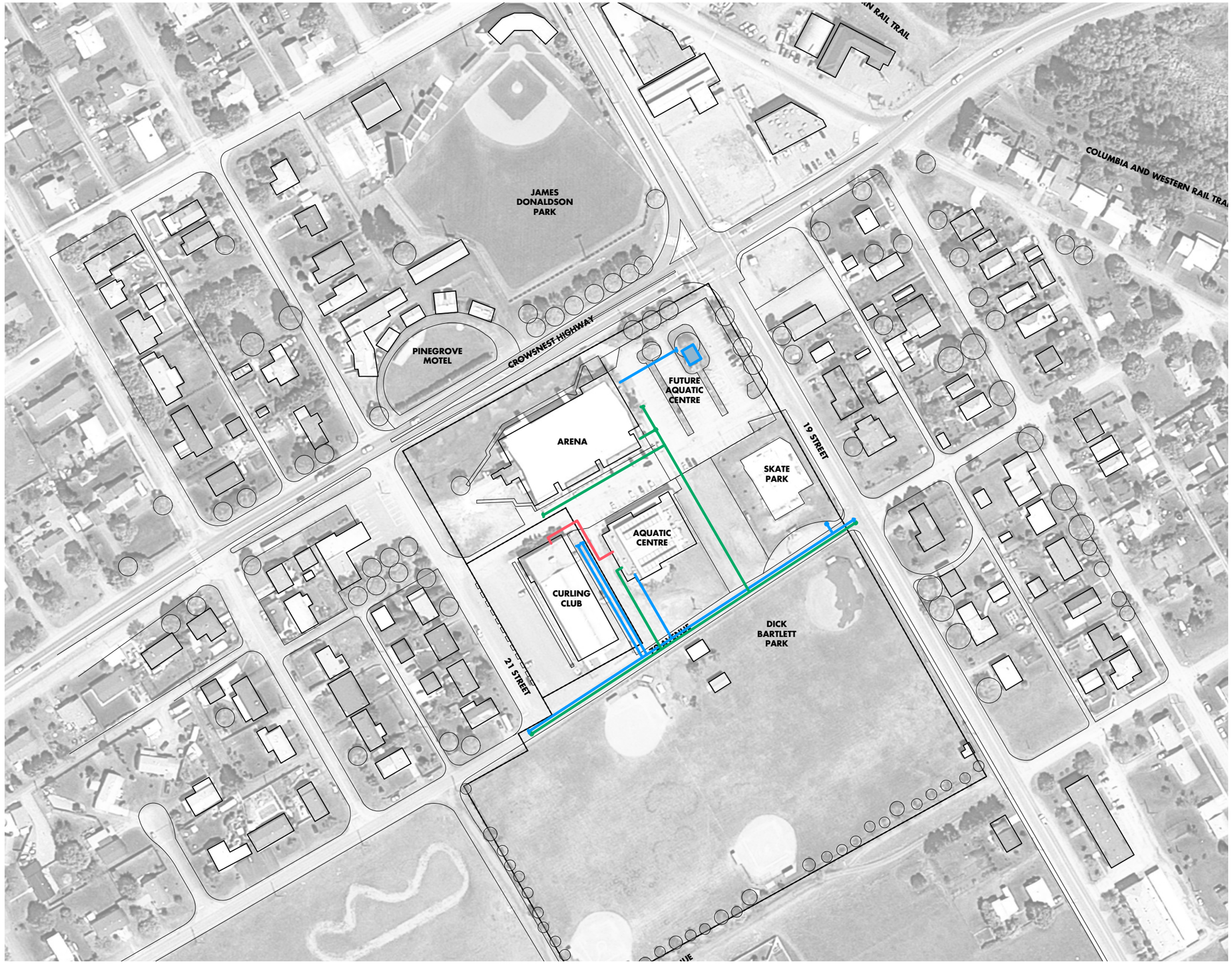






Grand Forks Community Hall
Urban Arts Architecture 2019 12 02

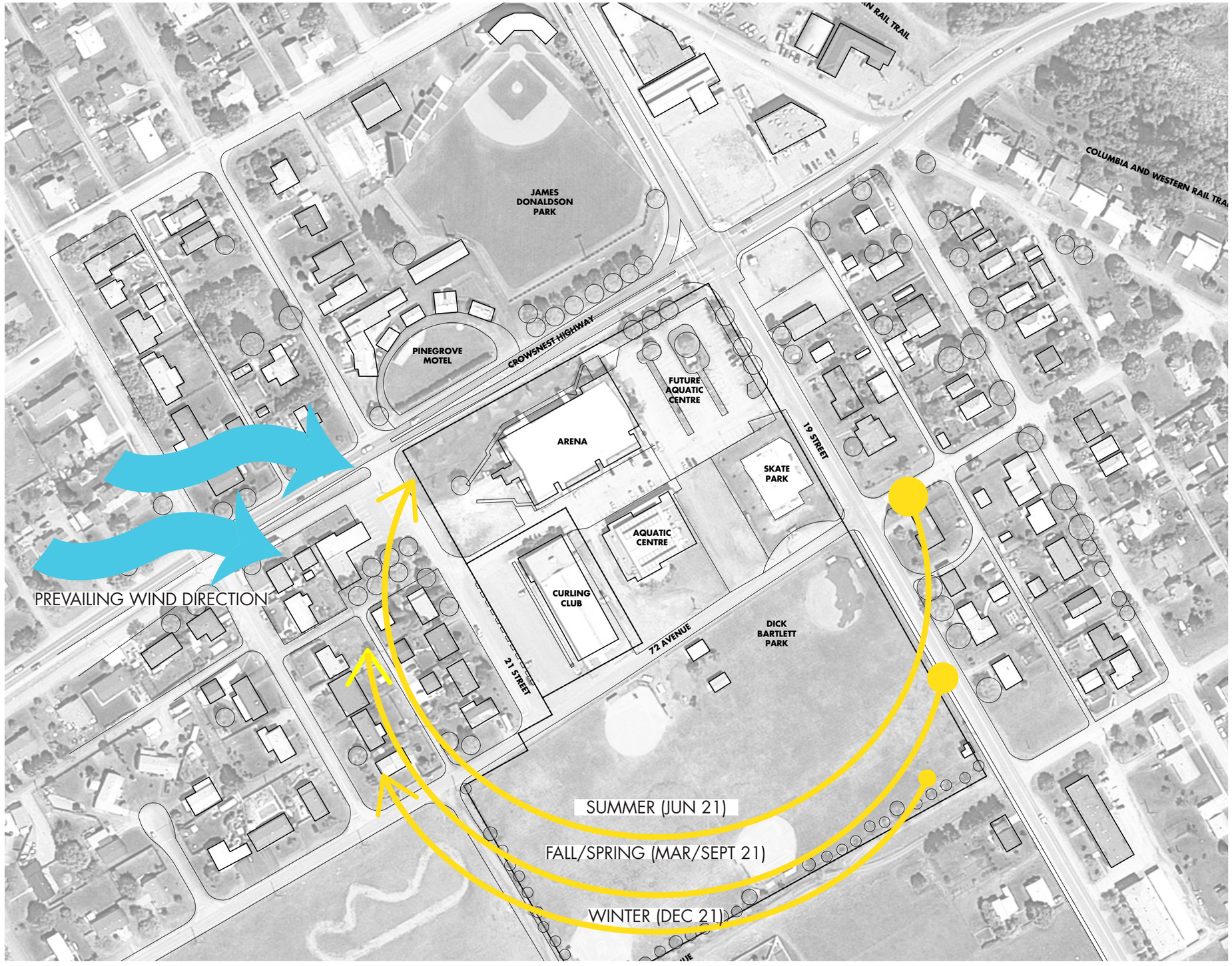
SERVICES



WATER SUPPLY
GAS SUPPLY
SANITARY SERVICE

0′ 100′ 200′ 400′

MICRO CLIMATE



0′ 100′ 200′ 400′

ACCESS

The is located to the south of the Crowsnest Highway, which leads to downtown to the northeast and toward Almond Gardens to the southwest.

Vehicle access to the site is provided off of 19th street and 21st street. The southwest corner of the site has no defined curb and allows the large asphalt surface in front of the curling club to be accessed off 72nd ave.

The sidewalk network is discontinuous, located on the east side of the site only. The Columbian and Western Rail Trail is in close proximity, and could tie into a complete sidewalk network.



VEHICLE ROUTE

SITE ACCESS (VEHICLE)

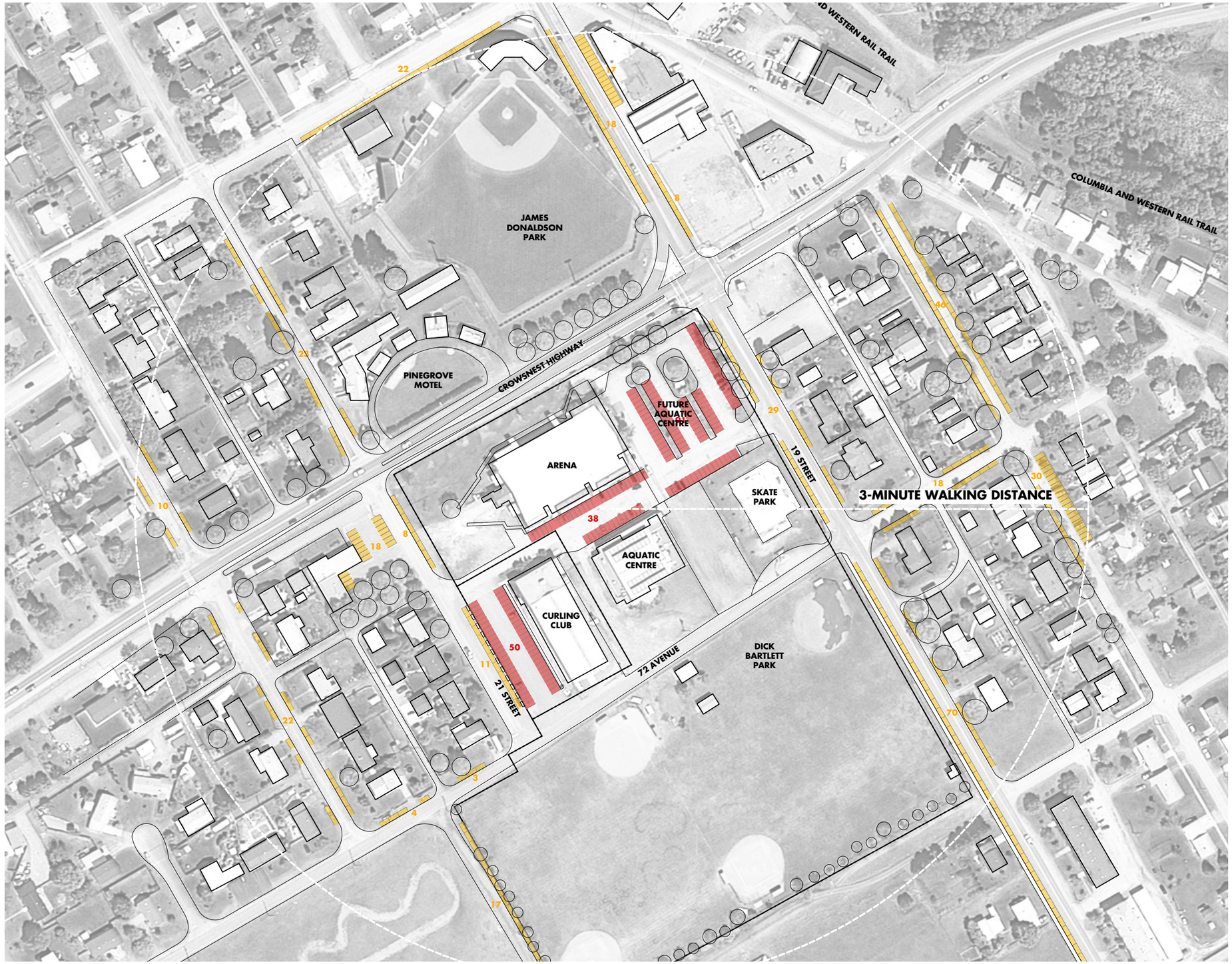
PEDESTRIAN ROUTE (SIDEWALK/TRAIL)

PRIMARY BUILDING ENTRANCE

SECONDARY/SERVICE ENTRANCE

0′ 100′ 200′ 400′

PARKING



	ON-SITE PARKING	179
	3-5 MIN STREET PARKING	
	(NORTH OF CROWSNEST)	98
	(SOUTH OF CROWSNEST)	276

0′ 100′ 200′ 400′

Grand Forks Community Hall
Urban Arts Architecture 2019 12 02

GREEN SPACE

The site is located in close proximity to three green/parkspaces.

James Donaldson park, located to the north is a premiere baseball field and home to the annual Grand Forks International Baseball tournament.

Dick Bartlett park to the south across 72nd access. This spaces has recreational baseball diamonds and is the location of the Grandforks Fall Fair.

The Columbia + Western Rail Trail to the northwest provide a linear greenspace with bike and pedestrian access in close proximity to the site.



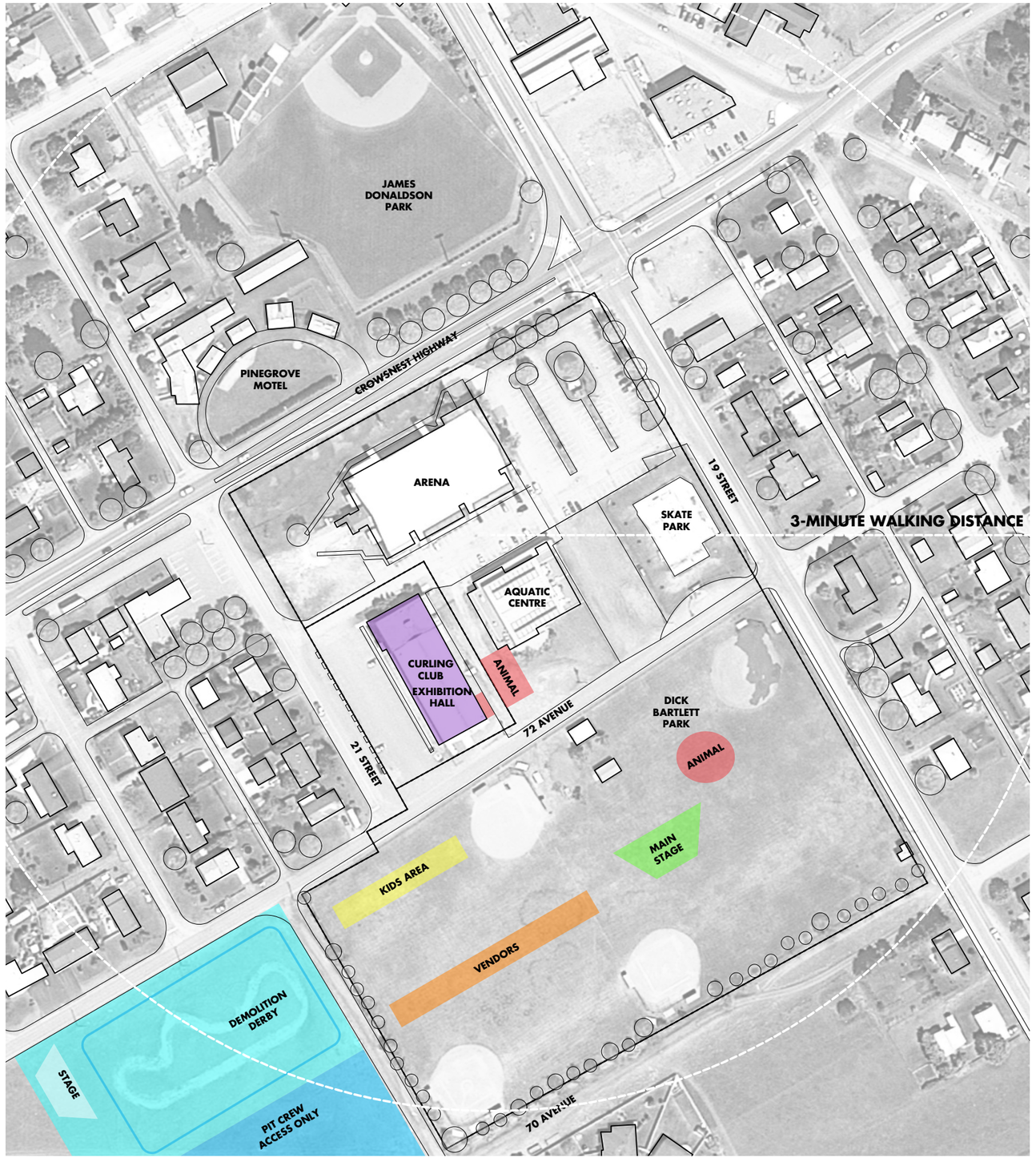
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FALL FAIR

The Grand Forks & District Fall Fair Society is a non-profit organization that promotes agriculture, horticulture, crafts, arts, hobbies, home cooking and food preservation through presentation of an annual Fair. The Society cooperates with public and private agencies, government departments and other groups and organizations interested in the purpose of the society.

The local curling rink, located at the park, is rented to us for storage space, office use, and for 3 days out of the year our Fall Fair event location. It is transformed into an agricultural exhibit hall for residents of the community to display their accomplishments. The remaining areas are utilized for local vendors, an entertainment stage, an animal exhibition, and most recently a demolition derby showcase.

The Fall Fair is a grassroots event that brings the community together and celebrates the history, the culture, and unity for the benefit and overall wellness of the community.









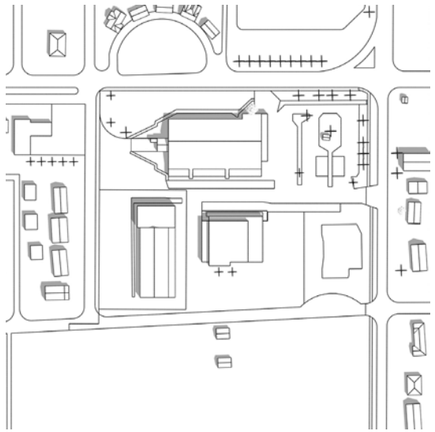


DEVELOPABLE AREA

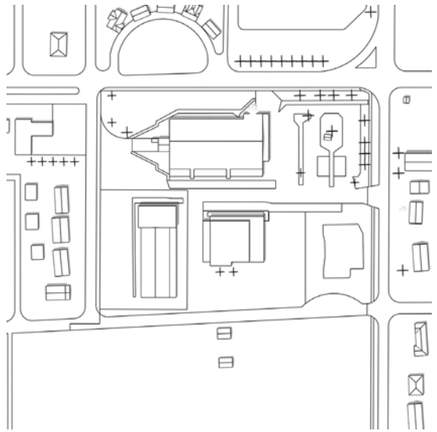


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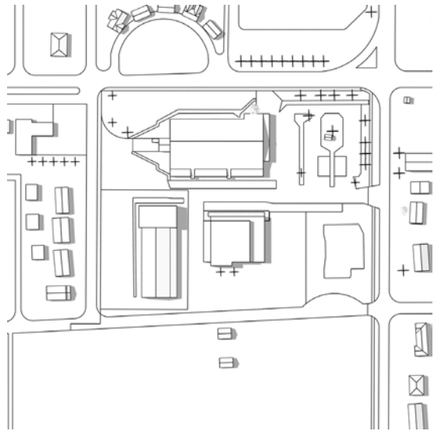
SHADOW STUDY



SUMMER SOLSTICE 9:00am



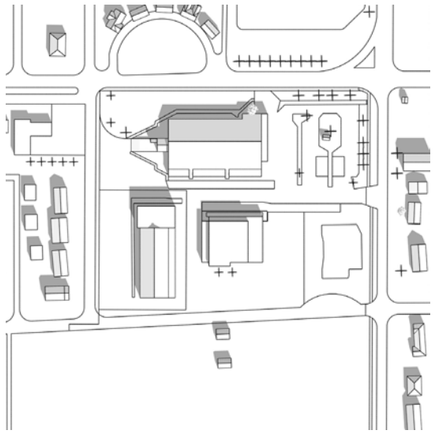
SUMMER SOLSTICE 12:00pm



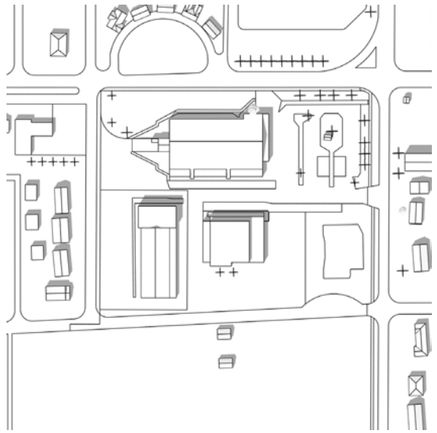
SUMMER SOLSTICE 3:00pm



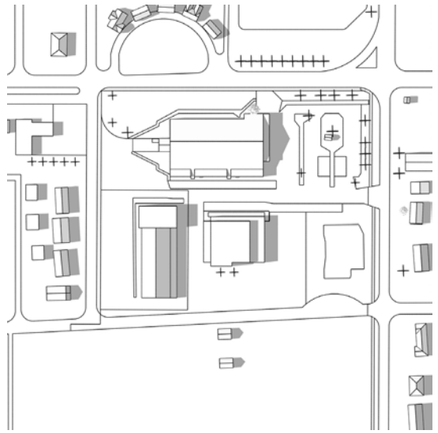
SUMMER SOLSTICE 6:00pm



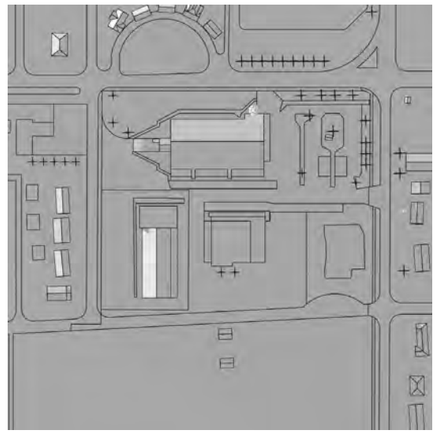
EQUINOX 9:00am



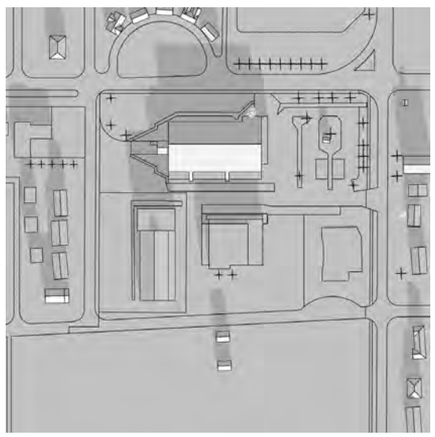
EQUINOX 12:00pm



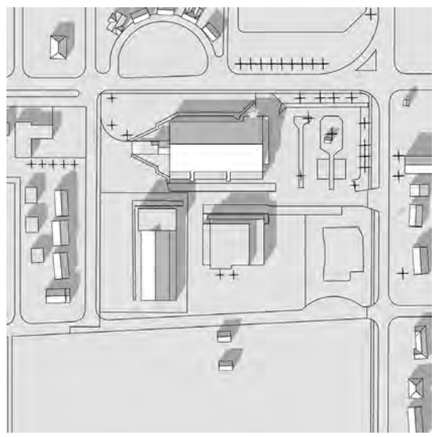
EQUINOX 3:00pm



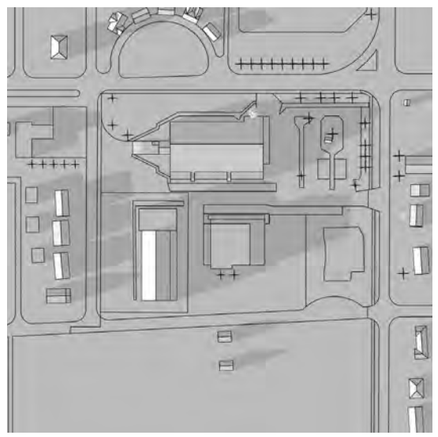
EQUINOX 6:00pm



WINTER SOLSTICE 9:00am



WINTER SOLSTICE 12:00pm

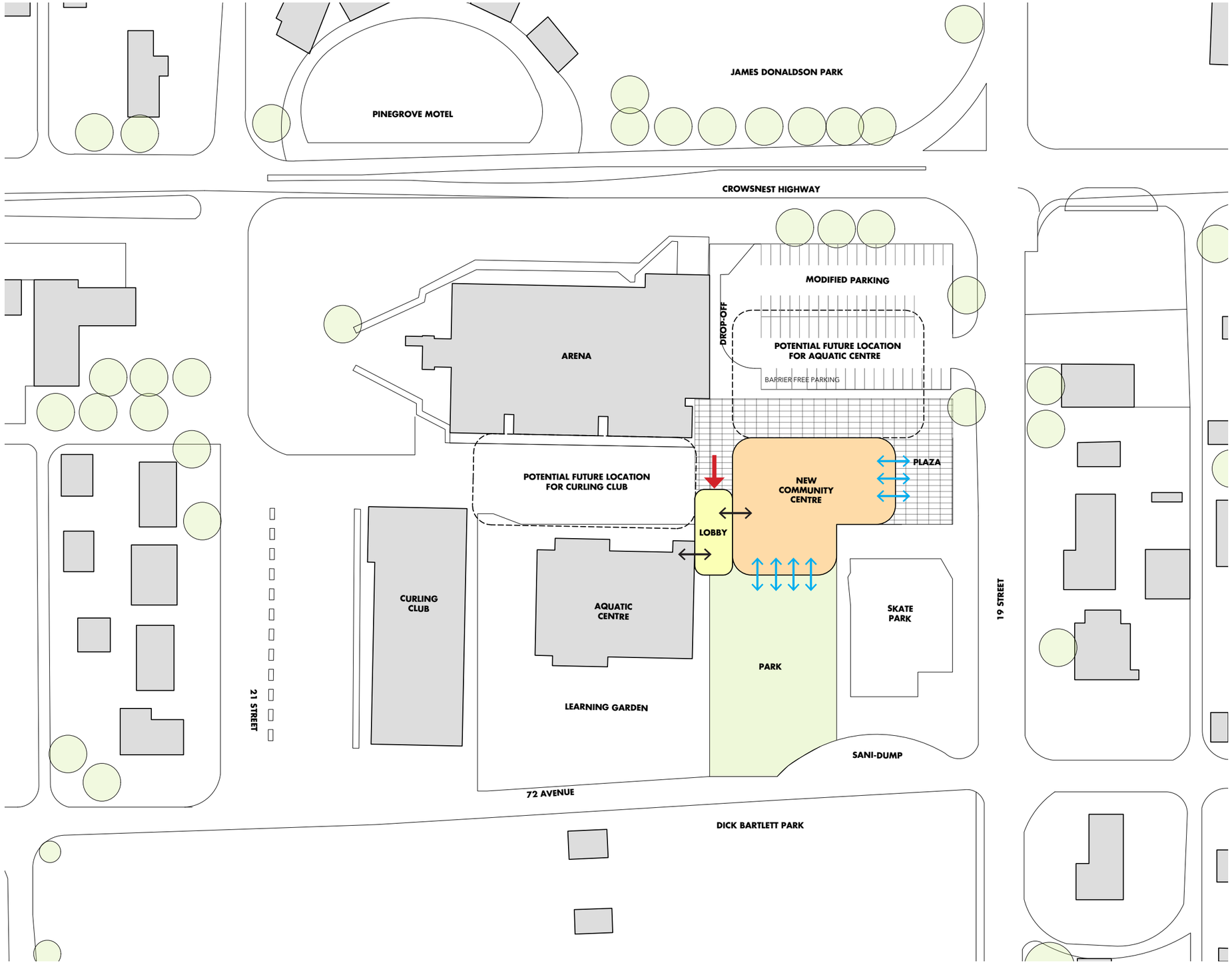


WINTER SOLSTICE 3:00pm

SITE STRATEGY
OPTION 1 PHASE 1

The construction of the new Community Centre and potential first phase of the renovation/ redevelopment of amenities on site includes the following:

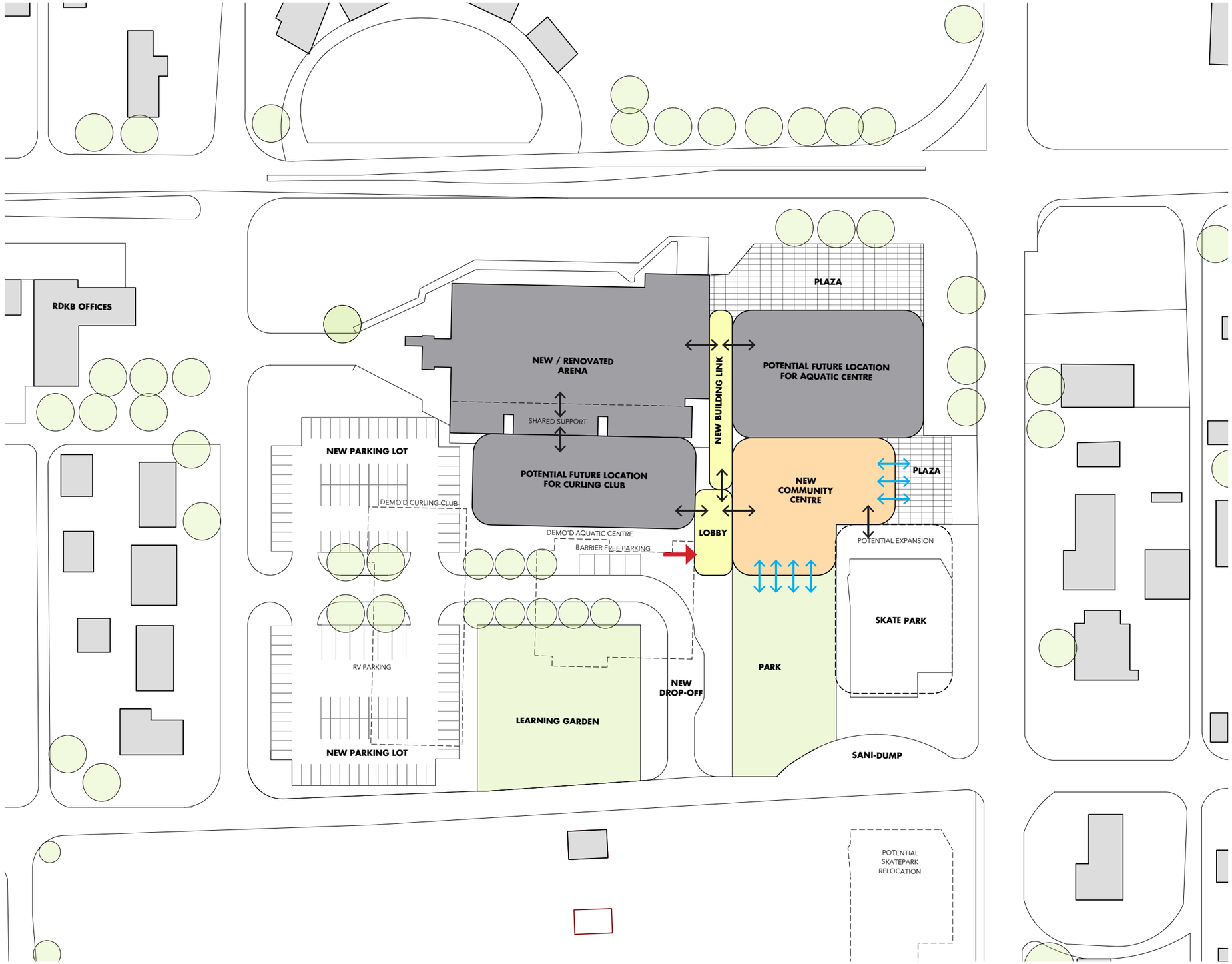
- Lobby links the existing Aquatic Centre to the new Community Centre, while allowing the Aquatic Centre to remain operational during construction.
- A generous plaza/parkspace to the south of the community centre allows for program areas to spill out to the exterior and reinforces the connection to Dick Bartlett Park.
- The community Centre serves as a beacon to the North West Anchoring the site.
- Existing surface parking on the northwest corner of the site is modified to suit, creating a drop-off area, barrier free parking, and an entrance plaza.



SITE STRATEGY
OPTION 1 PHASE 2

The potential second phase of the site development includes the following:

- Renovation of the existing Arena. Add building link (circulation atrium) to connect to the new Aquatic Centre and Community Centre.
- Build a new Aquatic Centre on the northeast corner of the site. This location will allows the existing Aquatic Centre to remain operational during construction. The location on site will increase visibility from the Crowsnest Highway. The location enhances the street presence of the site with the new Aquatic Centre serving as a beacon. Natural light from the north is optimal for the Aquatic Centre.
- The circulation/building link connects public space on the north and south side of the site and reinforces the connection to the greenspace surround the site.
- Demolish the existing Aquatic Centre and build a new Curling Club adjacent the arena to maximize the synergies between the programs.
- Demolish the existing Curling Club.
- Create an enhanced parking/ entry area with drop-off zone, barrier free parking and entry forecourt
- Relocate the Skate Park to Dick Bartlett Park if required for expansion / inclusion of anchor tenant.



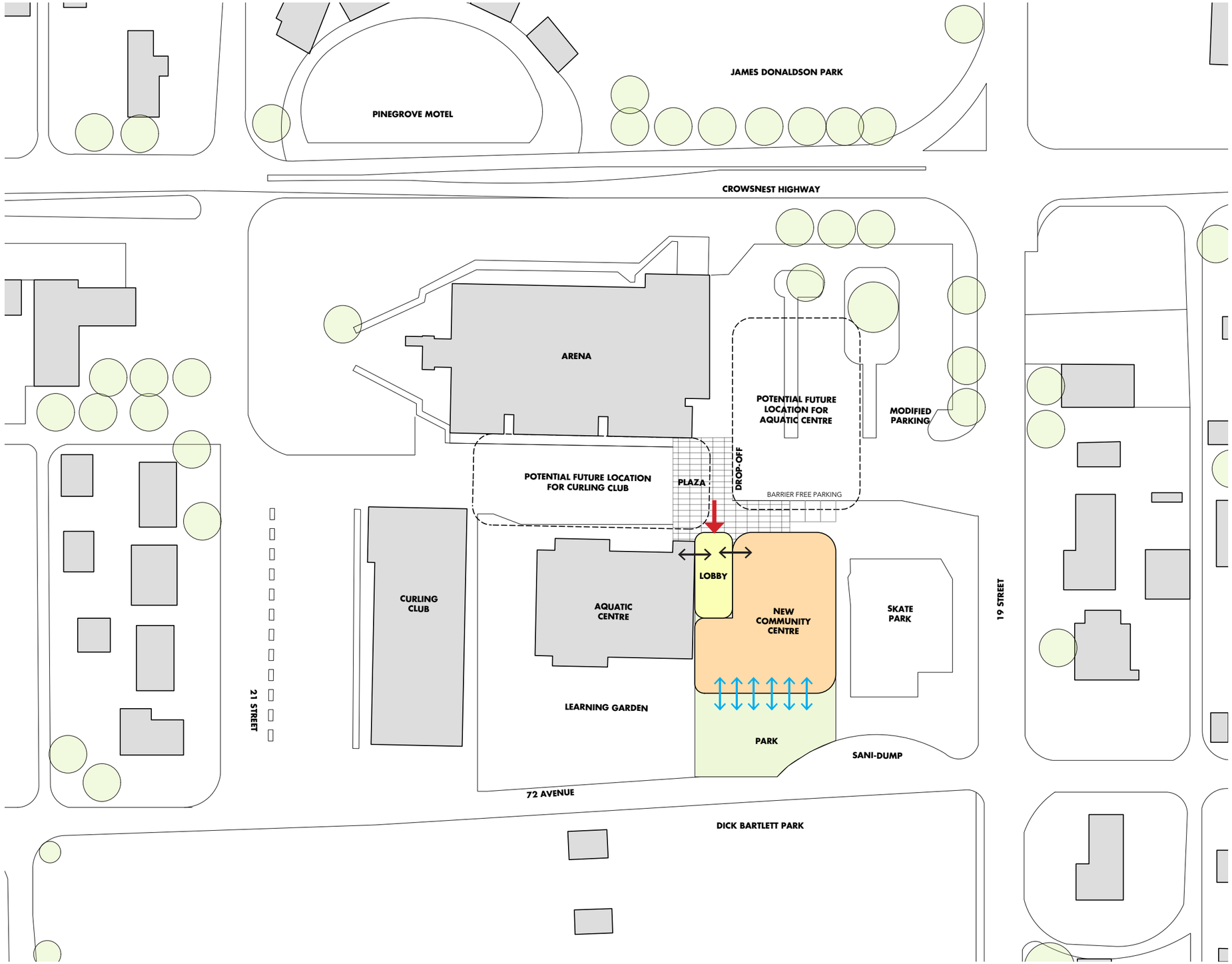
Primary Entrance
Connection to Exterior
Key Connection

0′ 100′ 200′

SITE STRATEGY
OPTION 2 PHASE 1

The construction of the new Community Centre and potential first phase of the renovation/ redevelopment of exciting amenities on site includes the following:

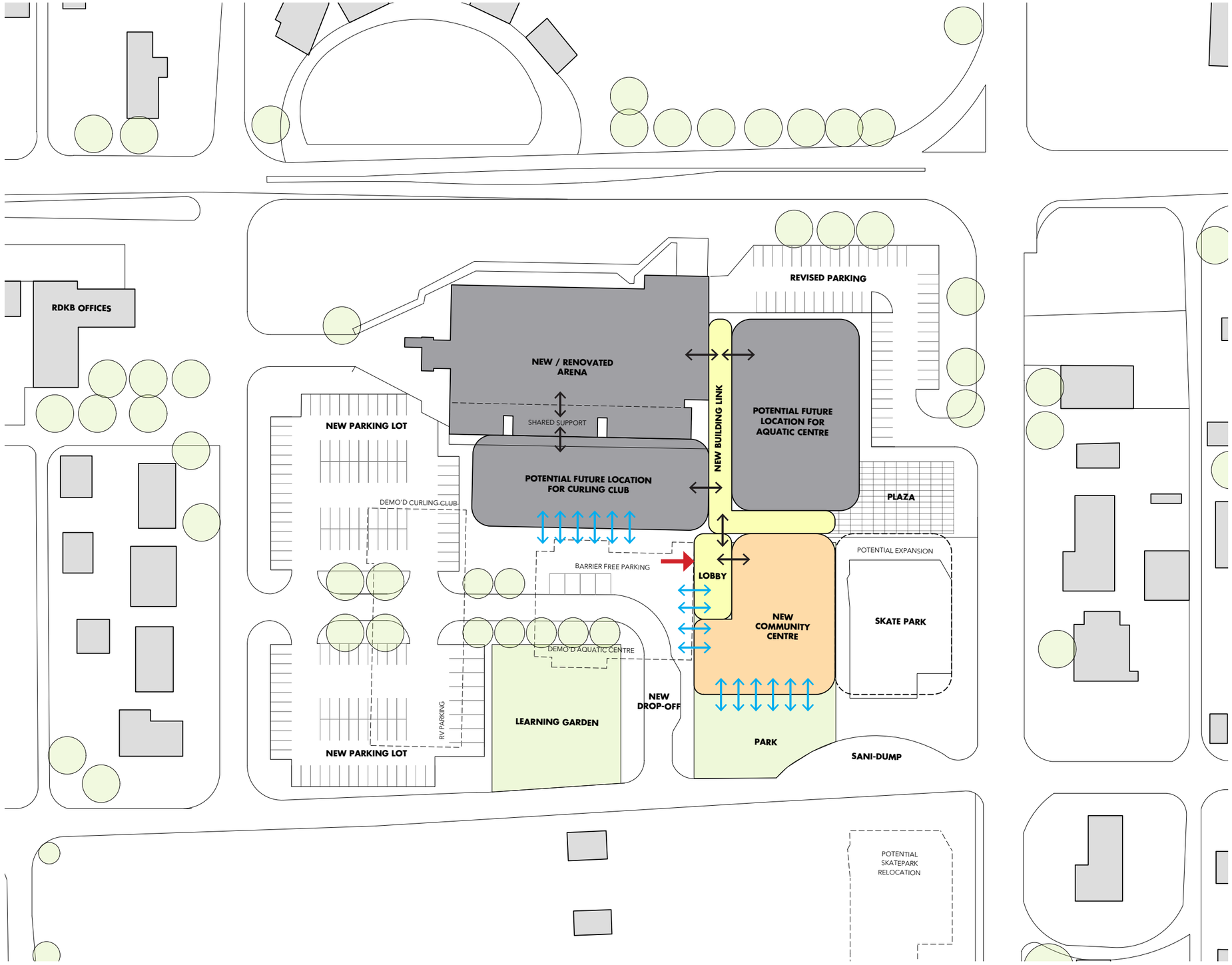
- Lobby links the existing Aquatic Centre to the new Community Centre, while allowing the Aquatic Centre to remain operational during construction.
- A plaza/parkspace to the south of the community centre allows for program areas to spill out to the exterior and reinforces the connection to Dick Bartlett Park.
- The existing surface parking on the north-west corner of the site is maintained, with minor modifications to create a drop-off zone, barrier free parking and entry area.



SITE STRATEGY
OPTION 2 PHASE 2

The potential second phase of the site development includes the following:

- Renovation of the existing Arena. Add building link (circulation atrium) to connect to the new Aquatic Centre and Community Centre.
- Build a new Aquatic Centre on the north-east corner of the site. This location will allows the existing Aquatic Centre to remain operational during construction. The location on site will increase visiblity from the Crowsnest Highway Natural light from the north is optimal for the Aquatic Centre.
- Demolish the existing Aquatic Centre and build a new Curling Club adjacent the arena to maximize the synergies between the programs.
- Demolish the existing Curling Club.
- Create an enhanced parking/ entry area with drop-off zone, barrier free parking and entry forecourt.
- Create parking on the north east corner of the site.
- Relocate the Skate Park to Dick Bartlett Park if required for expansion / inclusion of anchor tenant.



Primary Entrance
Connection to Exterior
Key Connection

0′ 100′ 200′

SUSTAINABILITY

SUSTAINABLE GOALS WORKSHOP REPORT
INTEGRAL GROUP

This document represents a summary of key aspects of the discussion that occurred during the May 23rd workshop. The insight and knowledge shared in this workshop will be integrated into recommendations for the City of Grand Forks Community Centre Sustainability Strategy.

Building upon the visioning workshop, conducted by UAA, to identify a common vision and set of guiding principles for the Community Centre design, this workshop served to establish common sustainability-focussed aspirations for the Grand Forks Community Centre project. The goal was to introduce a range of sustainability requirements and possibilities and to ultimately identify key targets and strategies to address sustainability and resilience for the long-term of the building and site.

Attendees of this workshop included members from the City, the consultant team (Urban Arts and Integral Group), and members of Regional District Kootenay Boundary associations. The workshop began with a short presentation on sustainability requirements from provincial and regional jurisdictions, as well as examples of similar projects that achieved key targets of interest to the group. Through facilitated discussion in the workshop, the group identified common goals and potential targets and strategies. We have collated feedback from the workshop below and developed the first draft of a Strategy Matrix that identifies key goals and strategies for the project as well as high-level ranges for capital and operational costs.

Workshop Feedback + Results
To begin the workshop, participants were asked to give one word that came to mind when thinking of sustainability. While participants sought to use unique words, the results can be grouped together to Illustrate the key goals for the project and City of Grand Forks:

- **Energy Security:** Renewable, Solar
- **Future Planning:** Long Term, Longevity, Generation, Resilient
- **Responsible Planning:** Finance, Affordable, Feasible, Necessary

The City of Grand Forks has a target to reduce carbon emissions by 33% by 2030 (from 2007 levels) and the Regional District Kootenay Boundary requires buildings to meet a LEED Gold equivalent level of sustainable design and operation. With these targets in mind, the City of Grand Forks Sustainable Community Plan focusses on three key areas: (building for) Long Term, Conserve Water and Energy, Food (security), with priority placed on flood and drought resilience in response to an increase in major flooding and frequent drought conditions in recent years.

The visioning workshop identified critical community and design goals for the building that echo the discussion in the sustainable goals workshop:

- Resilience
- Social Connectivity
- Food Security
- Renewable Energy/Passive Design
- Healthy Place
- Connection to Land – reflect Agrarian roots
- “One Roof” Connection to other buildings – synergy of programs, sharing resources, adaptable

The group agreed to specific goals and strategies that support a holistic approach for the building that must be functional but also meaningful and inspiring. Also, the building must fulfill the following:

- Must be financially feasible – so as not to take steps backwards
- Leverage city programs and community groups to contribute to sustainable initiatives
- Do not achieve targets for the sake of certification
- Use the building to inspire, engage with and connect with community
- Be authentic - “Practical solutions to complex problems”
- Rooted in food culture – “Food Roof” – accessible rooftop garden
- Incorporate health and wellbeing throughout the design
- Use local materials and services where possible
- Consider energy and water security
- Design for future generations

Throughout the discussion, it became clear that the site of the proposed building should undergo a master planning exercise to ensure that strategies implemented in this project can be carried over to other buildings on site and maximize the opportunity to create a community hub for recreation and events while meeting increasingly stringent energy and water targets in future.

The Strategy Matrix has been developed to help the group define critical priorities (must haves for the project) with a list of secondary priorities (nice to haves) with a master planned approach in mind. Priorities include rough order of magnitude cost for capital investment and long-term operational Impacts. The goal is to quantify the benefits of strategies to support the dialog with and buy-in from the community as the project takes shape.

During a workshop on September 18, 2019, the building committee worked together to evaluate the sustainable strategies and identify those with the highest value for the project (ranked 1 through 3 with 1 being the highest value). Following the workshop, UAA added a high level magnitude of cost for capital investment and operations. Refer to Appendix B for the Sustainable Strategy Matrix.

Next Steps:
1. Identify synergies with certification programs
2. Incorporate final strategies in to project design
3. Monitor and measure success of strategies throughout the life of the building

RISK ASSESSMENT

RISK ASSESSMENT

In order to set the project up for success, it's necessary to consider the risks and establish a mitigation plan to address the areas of highest risk.

During a risk assessment workshop on September 18, 2019, the building committee reviewed potential risks. The probability of risk occurrence and the impact on the project (both ranked as High, Medium or Low) were identified.

The identified risks are categorized as follows:

- **Project Approval** - Includes the public, Council and RDKB.
- **Funding** - Impacts sources of initial funding and project cost.
- **Resources** - Impacts the ability to complete the project on schedule and on budget.
- **Site** - Impacts the site preparation, remediation, schedule and budget.
- **Climate** - impacts the ability to complete the scope of work on schedule.
- **Design** - Impacts the facilities functionality, operations and user experience.
- **Procurement** - Impacts procurement of the design team, consultants, services and FF&E.
- **Schedule** - Impacts the Master Project Schedule.
- **Operation** - Impacts the ease of operation, life cycle, maintenance and energy costs
- **Stakeholder** - Impacts stakeholder involvement and satisfaction in the project.

The following table highlights the project risks that have the highest impact on the project success and the preliminary mitigation strategies.

Refer to Appendix C for the complete Risk Assessment Worksheet. This worksheet is intended to be a living document, to document and plan mitigation strategies for risks at the various project stages.

Mitigation of risk is an ongoing project process. Identifying risk early allows time to develop strategies and implement procedures to eliminate or reduce risk. Developing an open, transparent and inclusive project process from the outset of the project is the first step in ensuring community buy-in and facilitating approval for the project.

HIGH RISK SUMMARY TABLE

Project Risk Assessment	Risk Evaluation		Preliminary Risk Mitigation Plan
	Probability	Impact	
PROJECT APPROVAL			
Failure of referendum for project approval and/or borrowing referendum	M	H	-Success is related to cost – ensure right size of project so costs are within reason. -Identify community leaders who can be project champions. -Create strategic marketing package, incorporating lessons learned from swimming pool referendum. -Secure multiple funding sources for greater success and prepare for longer timeline if required to secure funding.
Lack of Council approval	M	H	-Ensure distribution of costs is fair between City + RDKB. -Ensure council is part of the process in all project stages. -Ensure operational costs are managed. -Secure multiple funding sources for greater success. Prepare for longer timeline if required to secure funding.
Lack of RDKB approval	M	H	-Ensure operational costs are managed. -Secure multiple funding sources for greater success.
FUNDING			
Timely fundraising (grants & donations)	M	H	-Develop a clear understanding of the grant process and apply as early as possible. Ensure sufficient project resources to manage grant process. -Establish a fundraising plan, goals + objectives. Reach out to champions in the community and local industry early to secure support and funding.
RESOURCES			
Availability of qualified **Construction Manager / Contractor**	H	H	-Determine procurement method and if proceeding with Construction Management, engage construction manager early. -Perform market sounding to determine construction market capacity. Market project and ensure it is well known to construction industry.
Availability of **local labour** (Contractors + Trades)	H	H	-Perform market sounding to determine construction market capacity. -Market project and ensure it is well known to construction industry.
Availability of local materials, equipment	M	H	-Foster relationships with local trades throughout the contract. -Connect with local industry (Interfor, Rockwool, etc) and capitalize on existing knowledge.
Available resources for project manager / RDKB / City representative (Owner's team)	M	H	-Select procurement method suited to the City/RDKB's priorities during construction. -Request internal resources as part of council approval for the project.
SITE			
Impact of construction on aquifers.	L	H	-Ensure containment protocol and strategies are specified by civil consultant. -Ensure contractor has site management protocol.
PROCUREMENT			
Choosing the right procurement method	L	H	-Create a development corporation (between City + RDKB) to develop RFP. -Review risks/advantages and disadvantages of different procurement methods. Review in conjunction with market conditions.
SCHEDULE			
Delay due to required site / utility works	L	H	-Involve BC Hydro early in the process.
Delay due to Contractor lack of trades experience	M	H	-Perform market sounding of local capabilities and other available resources.
STAKEHOLDER			
Insufficient project engagement with public and elected officials	L	H	- Host open house and gather public input and feedback. - Manage expectations with public engagement and stakeholder management.

COSTING

COST SUMMARY

A Class D cost estimate was prepared by LTA Consultants for the Grand Forks Community Centre. A Class 'D' program estimate with a level of accuracy of +/-25% 18 times out of 20.

The City of Grand Forks and the Regional District of Kootenay Boundary (RDKB) is looking at the feasibility of constructing a new Community Centre in Grand Forks, BC.

The new building comprises a single storey, or part single storey/part two storey structure with a gross floor area of approximately 13,156ft2. Programming for the new facility includes the following:

- Public spaces including main entrance lobby, café, and washrooms;
- Community Centre including a large hall, community kitchen, meeting room, hacker/ maker space, conference room, washrooms and associated ancillary storage spaces;
- Administration spaces including open office spaces, workroom, meeting room, filing storage spaces, staff room and washrooms.

Please note, the optional Flexible Tenant Space has not been included in this class 'D' program estimate.

Site development work in this program estimate is based on 'Site Strategy Option 1 Phase 1'. Site work will include general site clearance, removal of existing hard paving's', reorientation of the existing parking lot, new plaza paving, landscaping, site improvements, and full site servicing. We note that 'Site Strategy Option 1 Phase 1' would be cheaper, as the existing parking would be maintained.

The total estimated construction cost (excluding GST) is $9,012,201.
The total estimated soft costs (excluding GST) is $1,269,807.
The total estimated project cost (excluding GST) is $10,282,008.

Escalation
Over the past twelve months, we have experienced a construction market condition in British Columbia that has resulted in construction costs rising by approximately 12% to 15% across public sector projects. As the demand for construction services remains high across residential, commercial and institutional sectors of the market, we can expect costs to continue to rise at the rate of approximately 6% to 8% for the foreseeable future. Please note, no allowance has been included in this estimate for forward escalation/market condition contingency, as the schedule for the approval process required to move the project into the detailed design, tender and construction phases has not been determined. However, we caution that an allowance of at least 6% to 8% per annum should be budgeted for the year, based on the current economic climate. Please refer to our comments under the 'Contingency' and 'Market Conditions' sections of this report for further information.

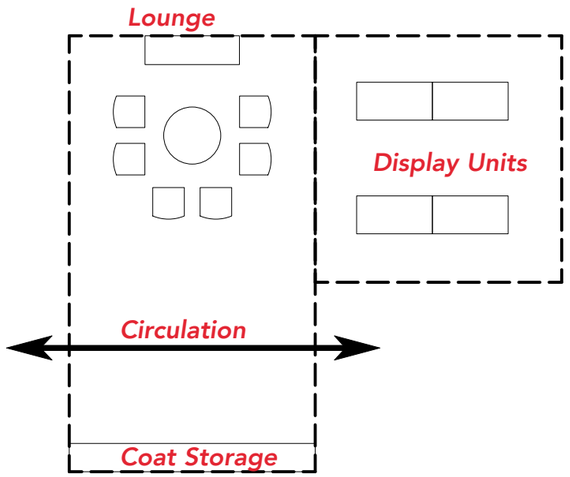
Refer to Appendix D for full Cost Estimate Report.

SUMMARY OF ESTIMATED PROJECT COSTS

MAIN SUMMARY OF ESTIMATED PROJECT COSTS

			m^2	ft^2
		Gross Floor Area	1,222.21	13,156
Description		**Estimated Value**	**$/m²**	**$/ft²**
HARD COSTS				
Net Building Cost		$7,353,054	$6,016.19	$559
Site Development		$1,659,147	$1,357.50	$126
Off-Site Costs - **Specifically Excluded**		Excluded	$0.00	$0
ESTIMATED CONSTRUCTION COSTS (Excluding GST)		**$9,012,201**	**$7,373.69**	**$685**
GST	0.00%	Excluded	$0.00	$0
ESTIMATED CONSTRUCTION COSTS (Excluding GST)		**$9,012,201**	**$7,373.69**	**$685**
SOFT COSTS				
Land				
Property Purchase & Associated Taxes		Excluded	$0.00	$0
Legal Fees		Excluded	$0.00	$0
Design Consultants Fees				
Architects Fees		$450,610	$368.68	$34
Structural Engineers Fees		$78,859	$64.52	$6
Mechanical Engineers Fees		$66,214	$54.18	$5
Electrical Engineers Fees		$49,935	$40.86	$4
Civil Consultants Fees		$75,000	$61.36	$6
Landscaping Consultant Fees		$20,000	$16.36	$2
Geotechnical Engineers Fees		$20,000	$16.36	$2
Miscellaneous Consultants Fees		$90,122	$73.74	$7
Quantity Surveying Fees		$58,579	$47.93	$4
Owners Costs				
Owners Project Management Fees		$270,366	$221.21	$21
Development Cost Charges		Excluded	$0.00	$0
Building Permit Fees		$90,122	$73.74	$7
Course of Construction Insurance		Excluded	$0.00	$0
Equipment				
Loose Furniture, Furnishings and Equipment	0.00%	Excluded	$0.00	$0
ESTIMATED SOFT COSTS (Excluding GST)		**$1,269,807**	**$1,038.94**	**$97**
GST	0.00%	Excluded	$0.00	$0
ESTIMATED SOFT COSTS (Excluding GST)		**$1,269,807**	**$1,038.94**	**$97**
ESTIMATED PROJECT COSTS (Excluding GST)		**$10,282,008**	**$8,412.63**	**$782**

APPENDIX A:
ROOM DATA SHEETS

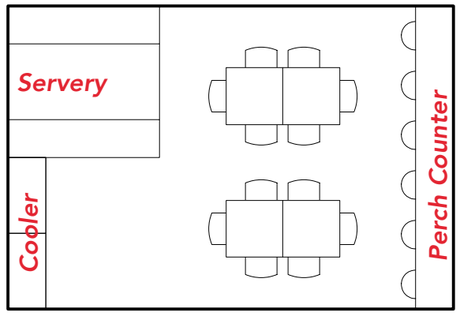




LOBBY

GENERAL DESCRIPTION:
Welcoming entry, gathering space for circulation and informal gathering. May be double height space. The lobby provides a connection between various program areas including the cafe, hall, meeting areas and Office Area.

SIZE (NASM):	27.9m2 (300sf) Lobby + 15.8m2 (170sf) Display
DIMENSIONS:	N/A
HEIGHT:	4.5m minimum (may include double height space)
OCCUPANT LOAD:	37 persons (Lobby) + 5 people (Display)
ADJACENCIES:	Direct Access: Entry Vestibule, Hall, Cafe Close Proximity: Office Area, Washrooms, Meeting Room, Hacker/Maker Space
FINISHES:	Floor: Polished Concrete Walls: GWB, Wood Accent/Acoustic panels Doors: N/A Ceiling: Exposed Structure, Skylight
MILLWORK:	• Linear Coat Storage • Retail Display Units (mobile podiums) • Community Display (linear wall display)
LIGHTING:	Natural Light: Required Light Fixtures: integrated lighting system with structure; accent lighting for art.
SPECIAL REQUIREMENTS:	• Fireplace (T.B.D.) • Digital Display Screens • Power: Wall receptacles at strategic locations • Plumbing: Water Fountain
FURNITURE/EQUIPMENT:	• Lounge seating for 6





CAFE

GENERAL DESCRIPTION:
Servery/café area with coffee counter, 6 lin ft grab+go coolers and beverage fridge, cash till and back counter prep zone. Food prepared elsewhere - reheat capacity only. Includes seating at modular tables for 12 and a perch counter at window.

SIZE (NASM):	13.5m2 (145sf) Servery + 17.7m2 (190sf) Eating Area
DIMENSIONS:	Servery 16' x 9'
HEIGHT:	3.6m minimum Seating Area, 2.7m Servery
OCCUPANT LOAD:	1 (Servery) + 15 (Seating Area)
ADJACENCIES:	Direct Access: Lobby Close Proximity: Administration, Washrooms, Exterior
FINISHES:	Floor: Polished Concrete Walls: GWB, Wood Accent/Acoustic panels Doors: Sliding Security Grille at counter Ceiling: Exposed Structure, GWB (Acoustic)
MILLWORK:	• Servery counter • Perch counter at window
LIGHTING:	Natural Light: Required Light Fixtures: integrated lighting system with structure; accent lighting for art.
SPECIAL REQUIREMENTS:	• Fireplace (T.B.D.) • Digital Display Screens • Power: Wall receptacles at strategic locations, Power for coolers + Appliances • Plumbing: Sink, handwash sink, Plumbed Coffee Line, Floor Drain, Dishwasher
FURNITURE/EQUIPMENT:	• Modular Cafe Tables • Seating for 12-14 • Beverage Cooler • Coffee Machine • Cash Machine/IPad • Dishwasher • Sink + Handwash Sink • Microwave/Warming Oven

ENTRY VESTIBULE

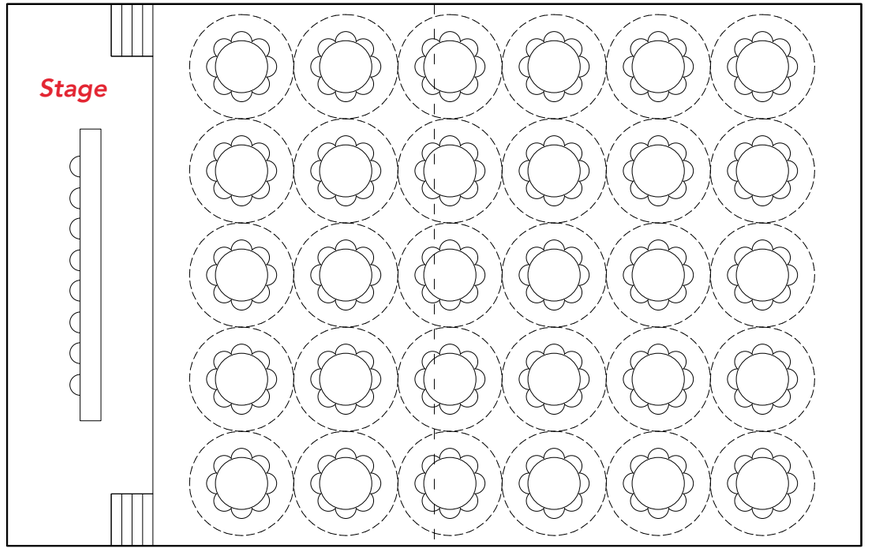
GENERAL DESCRIPTION:
Airlock Vestibule with 2 sets double doors on Automatice opener.

SIZE (NASM):	6.5m2 (70sf)
DIMENSIONS:	Minimum Depth: 1.8m
HEIGHT:	2.7m minimum
OCCUPANT LOAD:	N/A
ADJACENCIES:	Direct Access: Lobby, Exterior
FINISHES:	Floor: Tile/ Polished Concrete, Recessed Entry Mat Walls: GWB, Storefront Glazing Doors: Aluminum with Glazing Ceiling: GWB
MILLWORK:	• Recessed Display with Notice Board
LIGHTING:	Natural Light: Required Light Fixtures: Recessed lighting
SPECIAL REQUIREMENTS:	• Auto Opener • Recessed Entry Mat
FURNITURE/EQUIPMENT:	N/A

UNIVERSAL WASHROOM + SHOWER ROOM

GENERAL DESCRIPTION:
Universal barrier free washroom with toilet + lavatory. Universal barrier free shower room with toilet, lavatory and shower. Shower use by community in emergency situations as well as end-of trip facilities.

SIZE (NASM):	Washroom: 4.5m2 (45sf) Shower: 6.1m2 (66sf)
DIMENSIONS:	Washroom: 1.8m x 2.5m Shower: 1.8m x 3.4m
HEIGHT:	2.8m minimum
OCCUPANT LOAD:	N/A
ADJACENCIES:	Direct Access: Circulation Close Proximity: Lobby, Cafe, Administration, Hall
FINISHES:	Floor: Tile/ Polished Concrete Walls: GWB, Tile (Shower) Doors: Solid Core Wood Door Ceiling: GWB
MILLWORK:	• N/A
LIGHTING:	Natural Light: Not Required Light Fixtures: Recessed lighting
SPECIAL REQUIREMENTS:	• Power: Wall receptacle • Plumbing: Shower, Toilet, Lavatory, Toilet
FURNITURE/EQUIPMENT:	• Washroom accessories: Grab bars, hooks, toilet paper dispenser, soap dispenser, paper towel dispenser and/or hand dryer, waste bin, etc. • Shower accessories: Curtain + Rod, Shower seat, recessed soap holder, etc.

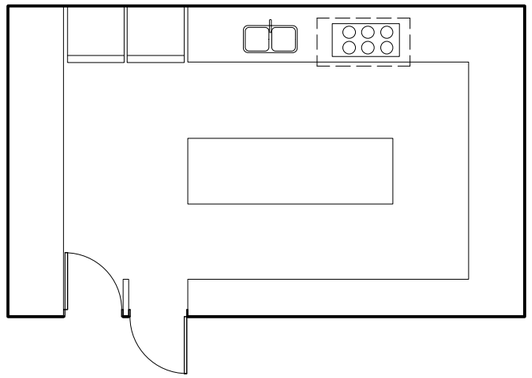




HALL

GENERAL DESCRIPTION:
Multi-purpose supports gatherings of 290 persons for banquets, and up to 416 people for lectures or events. Dividable into two spaces with folding acoustic wall. Includes a raised stage area (14’ deep) that can be separated from the main hall area. Located adjacent to the Lobby with capacity to open up on to the space. Connect to gathering area at the exterior.

SIZE (NASM):	396m2 (4264sf)
DIMENSIONS:	15.8m (52’) x 25m (82’)
HEIGHT:	4.5m minimum
OCCUPANT LOAD:	417
ADJACENCIES:	Direct Access: Lobby, Exterior, Bar/Servery Close Proximity: Community Kitchen, Washrooms, Chair Storage
FINISHES:	Floor: Spring floor system with resilient or wood flooring Walls: GWB, Wood Accent/Acoustic treatment Doors: Soid Core wood door with Vision Panel Ceiling: Exposed Structure, acoustic panels
MILLWORK:	• Under stage storage • Bench at perimeter
LIGHTING:	Natural Light: Required Light Fixtures: integrated lighting system with structure; adjustable lighting at stage
SPECIAL REQUIREMENTS:	• Folding acoustic wall to divide space + separate stage • Projector and Screen • Power: Wall receptacles at strategic locations, recessed floor outlets • Sound System + Speakers
FURNITURE/EQUIPMENT:	N/A

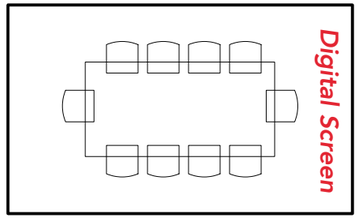




COMMUNITY KITCHEN

GENERAL DESCRIPTION:
Kitchen for preparation of food and catering of events. Located adjacent the Hall. May includes pantry and may include walk-in cooler.

SIZE (NASM):	Kitchen: 41.8m2 (450sf) Pantry: 9.3m2 (100sf) Walk-in Cooler: T.B.D.
DIMENSIONS:	15.8m (52') x 25m (82')
HEIGHT:	3.0m minimum
OCCUPANT LOAD:	4
ADJACENCIES:	Direct Access: Hall, General Circulation Close Proximity: Servery/Bar, Exterior
FINISHES:	Floor: Sealed Concrete Walls: Tile, GWB Doors: double acting with vision panel Ceiling: T-Bar
MILLWORK:	• Upper and Lower Cabinets, stainless steel countertop • Island with stainless steel countertop + storage
LIGHTING:	Natural Light: Preferred Light Fixtures: integrated lighting system with structure; adjustable lighting at stage
SPECIAL REQUIREMENTS:	• Power: Power for appliances, above counter for small appliances. • Plumbing: hand sink, double sink with goose-neck faucet, floor drain, dishwasher, waterline for coffee
FURNITURE/EQUIPMENT:	Commercial Kitchen Standard: • Oven (x2)/stove-top with fume hood • Fridge/Freezer • Dishwasher • Microwave • Coffee Machines • Small appliances T.B.D. • Ventilation System (Commercial Standards) • Movable Stainless Steel racks in Pantry



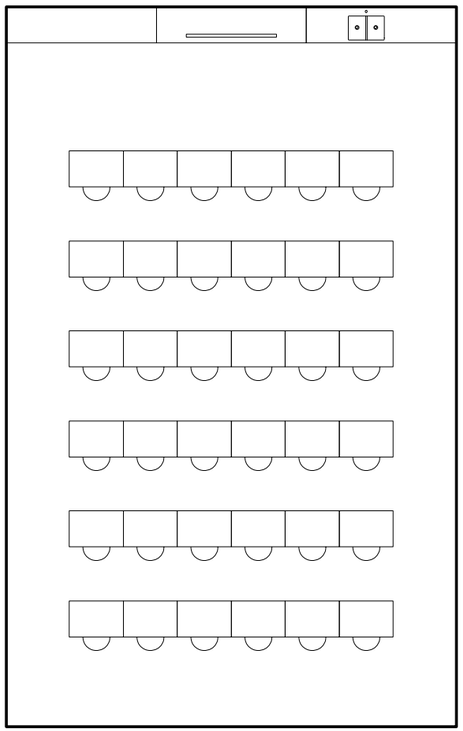


MEETING ROOM

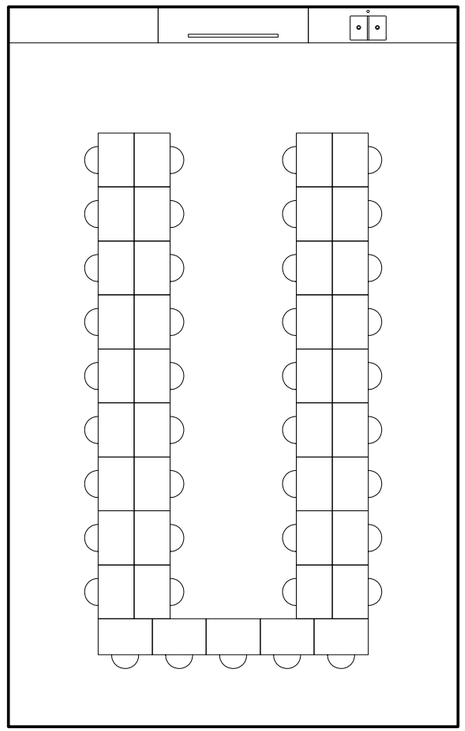
GENERAL DESCRIPTION:
Meeting room for 10 people, to be used by groups, clubs, and by staff. Include Digital Screen and Video Conferencing Capability (T.B.D.)

SIZE (NASM):	18.6m2 (200sf)
DIMENSIONS:	5.5m (18') x 3.4m (11')
HEIGHT:	3.0m minimum
OCCUPANT LOAD:	10
ADJACENCIES:	Direct Access: General Circulation Close Proximity: Lobby, Administration, Washrooms
FINISHES:	Floor: Carpet Tile, Resilient Walls: GWB, Include backpainted glass for writing surface Doors: Soid Core wood door with Vision Panel or sidelight Ceiling: Acoustic Tile
MILLWORK:	N/A
LIGHTING:	Natural Light: Desirable Light Fixtures: Recessed fixture, with controls for presentation
SPECIAL REQUIREMENTS:	• Digital Display Screen • Video Conferencing (T.B.D.) • Back-painted Glass writing wall, strategically located • Power: Integrated power/data in table
FURNITURE/EQUIPMENT:	• Meeting table + 10 Chairs

Training Configuration



EOC Configuration

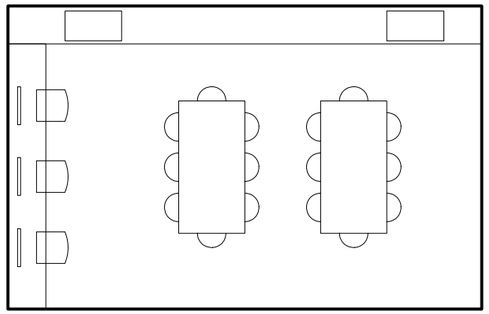




CONFERENCE ROOM (EOC)

GENERAL DESCRIPTION:
Meeting/Training room for 36 persons. Can accommodate EOC (Emergency Operations Centre) for 40 perons at 3' linear workspace/shared tables. Include sink area and lockable storage for tech equipment.

SIZE (NASM):	92.9m2 (1000sf)
DIMENSIONS:	12.1m (40') x 7.6m (25')
HEIGHT:	3.0m minimum
OCCUPANT LOAD:	50
ADJACENCIES:	Direct Access: General Circulation Close Proximity: Administration, Staff Room, Staff WC
FINISHES:	Floor: Carpet Tile Walls: GWB, Include backpainted glass for writing surface Doors: Soid Core wood door with Vision Panel or sidelight Ceiling: Acoustic Tile
MILLWORK:	• Full height lockable cabinet for tech equipment • Kitchenette with base cabinet + upper storage
LIGHTING:	Natural Light: Required Light Fixtures: Recessed fixture, with controls for presentation
SPECIAL REQUIREMENTS:	• Digital Display Screens • Back-painted Glass writing wall, strategically located • Power: Integrated in floor to suit a variety of table configurations, standard wall outlets to suit, power for digital screens • Plumbing: Sink
FURNITURE/EQUIPMENT:	• Mobile rectangular meeting/training tables + 40 chairs

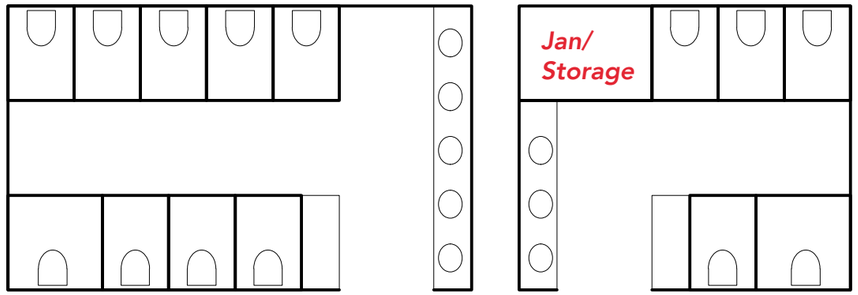




MULTI-PURPOSE HACKER/MAKER SPACE

GENERAL DESCRIPTION:
Multi-purpose meeting/activity room with Maker capacity. Include linear counter for printers/equipment with storage below. Include computer work counter. Movable work tables can accommodate a class of up to 16 people.

SIZE (NASM):	37.2m2 (400sf)
DIMENSIONS:	7.6m (25') x 4.8m (16')
HEIGHT:	3.0m minimum
OCCUPANT LOAD:	20
ADJACENCIES:	Direct Access: General Circulation Close Proximity: Lobby, Meeting room, Washrooms
FINISHES:	Floor: Sealed Concrete Walls: GWB, Include back painted glass for writing surface Doors: Solid Core wood door with Vision Panel Ceiling: Acoustic Tile/ GWB/ Exposed Structure
MILLWORK:	• Lower cabinets for equipment/storage • Computer work counter • Full height lockable cabinet for equipment storage
LIGHTING:	Natural Light: Required Light Fixtures: Recessed /suspended fixtures
SPECIAL REQUIREMENTS:	• Ventilation as required for equipment • Back-painted Glass writing wall, strategically located • Power: Integrated power/data in at counter
FURNITURE/EQUIPMENT:	• Equipment T.B.D. May include 3d printer, sewing machine, desktop laser cutter, etc. • Mobile work tables - durable finish • 15 Chairs

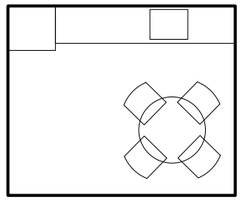




WASHROOM

GENERAL DESCRIPTION:
General facility washrooms for men and women. Design to support future gender neutral use (T.B.D.)

SIZE (NASM):	Female: 37.2m2 (400sf) Male: 24.5m2 (264sf)
DIMENSIONS:	T.B.D.
HEIGHT:	2.8m minimum
OCCUPANT LOAD:	N/A
ADJACENCIES:	Direct Access: General Circulation Close Proximity: Janitor, Hall, Lobby
FINISHES:	Floor: Sealed Concrete/Tile Walls: Tile, GWB Doors: Solid Core Wood doors at stalls Ceiling: GWB
MILLWORK:	• Vanity counter
LIGHTING:	Natural Light: Preferred but not required Light Fixtures: Recessed downlights
SPECIAL REQUIREMENTS:	• Mirror • Power: Housekeeping power as required • Plumbing: Lavatories, toilets, floor drain
FURNITURE/EQUIPMENT:	• Washroom accessories: Grab bars, hooks, toilet paper dispenser, soap dispenser, paper towel dispenser and/or hand dryer, waste bin, etc.

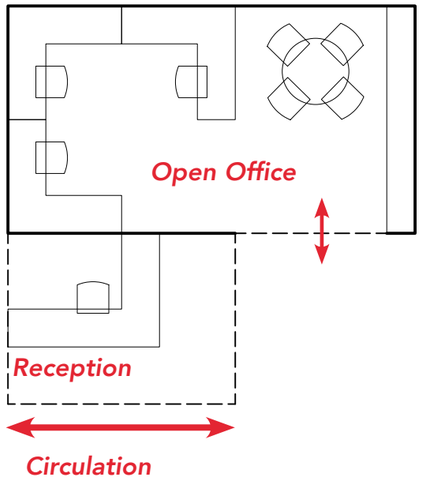


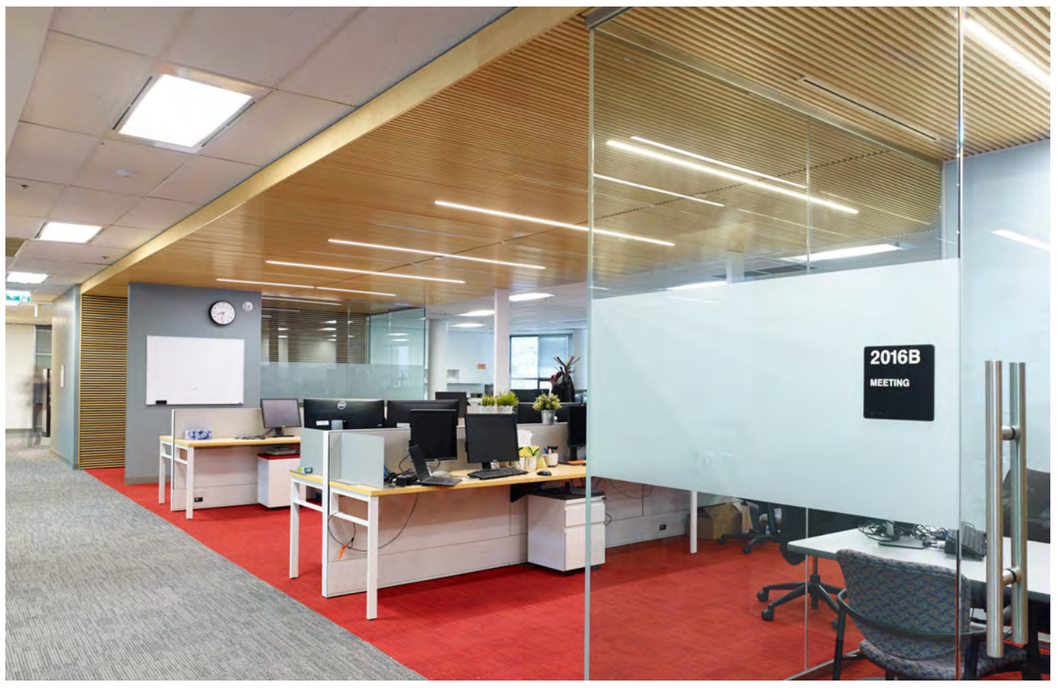
STAFF ROOM

GENERAL DESCRIPTION:
Kitchenette with full size fridge, dishwasher, microwave + coffee machine. May be used as an informal meeting area. Used by building staff and for the EOC.

SIZE (NASM):	11.1m2 (120sf)
DIMENSIONS:	T.B.D.
HEIGHT:	3.0m minimum
OCCUPANT LOAD:	3
ADJACENCIES:	Direct Access: Open Office Close Proximity: Lobby, Copy/Workroom
FINISHES:	Floor: Resilient Walls: Tile or backpainted glass backsplash, GWB Doors: Solid Core wood door with vision panel Ceiling: GWB/Acoustic Tile
MILLWORK:	Kitchenette with upper + lower cabinets
LIGHTING:	Natural Light: Preferred Light Fixtures: Recessed LED fixtures, under cabinet lighting
SPECIAL REQUIREMENTS:	• Power: Counter height outlets, power for appliances • Plumbing: Sink, Dishwasher, water line for coffee
FURNITURE/EQUIPMENT:	• Fridge • Microwave • Dishwasher • Coffee Machine



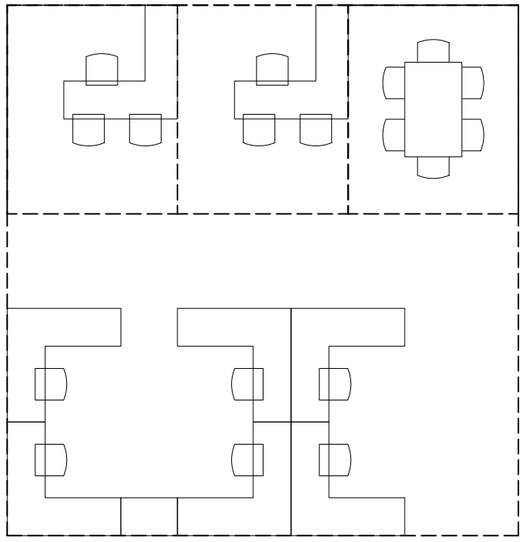


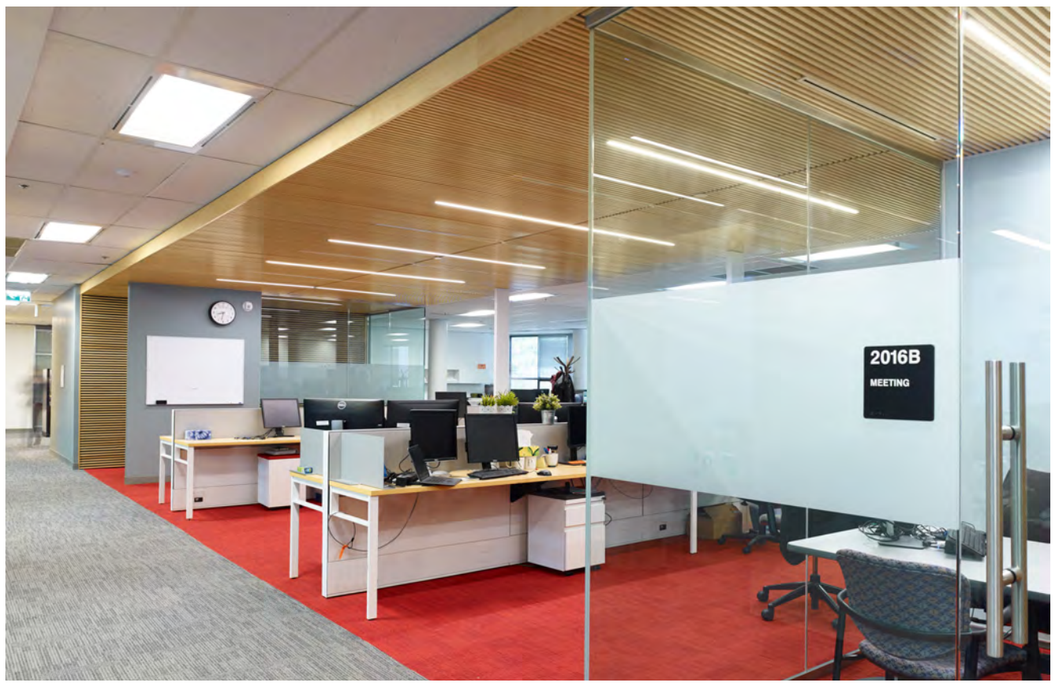


RECEPTION + OPEN OFFICE

GENERAL DESCRIPTION:
The reception is to be located within view of the entry and to serve as a meet and greet to the facility as well as a reception to the office suite and contains a workstation. May be an eddy in the lobby. The open office contains three workstations to accommodate Recreation staff.

SIZE (NASM):	Reception: 9.3m2 (100sf) Open Office: 23.4m2 (252sf)
DIMENSIONS: HEIGHT:	T.B.D. 3.0m minimum
OCCUPANT LOAD:	3
ADJACENCIES:	Direct Access: Reception / Workstation Close Proximity: Lobby, Staff Room, Staff Washroom, Copy/Workroom
FINISHES:	Floor: Carpet Tile Walls: Tile, GWB Doors: Include Solid Core wood door with vision panel to close off office area. Ceiling: Acoustic tile
MILLWORK:	N/A
LIGHTING:	Natural Light: Required Light Fixtures: Recessed LED fixtures
SPECIAL REQUIREMENTS:	• Power: Wired Workstations + standard wall outlets
FURNITURE/EQUIPMENT:	• System furniture workstations + Task chairs • Lockable storage/filing cabinets • Informal meeting table with 4 chairs





FLEX OFFICE SUITE (OPTIONAL)

GENERAL DESCRIPTION:
Flexible Office Suite to may be used by the City departments with a good programmatic fit with the Centre such as DMAF and EcDev. Office suite of 70.1m2 (755sf) supports 6 open office workstations and up to 3 closed offices/meeting rooms of 9.3m2 (100sf) each. The office suite may share reception with the facility + recreation staff. If this program is included increase the staffroom 50% (60sf) and add one additional single occupancy Staff Washroom.

SIZE (NASM):	Reception: 70.1m2 (755sf)
DIMENSIONS:	T.B.D.
HEIGHT:	3.0m minimum
OCCUPANT LOAD:	9
ADJACENCIES:	Direct Access: Reception Close Proximity: Rec Offices, Staff Room, Copy/Workroom
FINISHES:	Floor: Carpet Tile Walls: Tile, GWB Doors: Include Solid Core wood door with vision panel to close off office area. Ceiling: Acoustic tile
MILLWORK:	N/A
LIGHTING:	Natural Light: Required Light Fixtures: Recessed LED fixtures
SPECIAL REQUIREMENTS:	• Power: Wired Workstations + standard wall outlets
FURNITURE/EQUIPMENT:	• System furniture workstations + Task chairs • Lockable storage/filing cabinets • Meeting Table + Chairs

APPENDIX B:
SUSTAINABLE STRATGY MATRIX

GOAL	TARGET	STRATEGY	VALUE (1, 2, 3)	ORDER OF MAGNITUDE COST (Low, Medium, High)	
				CAPITAL	OPERATIONAL
ENERGY + CARBON					
Reduce energy demand for the building and site for future buildings	Strive for Net-Zero design	Apply Passive Design principles	1	M	Savings
		Draw heat and cooling from existing arena and pool	✓	N/A	N/A
		Right-size HVAC equipment	1	No Cost	Savings
	Use renewable energy sources on site	Install solar photovoltaics to offset energy demand	1	M	L
		Install a wind tree as a demonstration project to power site lighting	2.15	M	L
	Optimize operational maintenance + function	Involve building operations team in design and construction process	1	No Cost	Savings
		Consider long-term operational impacts of design	1	L	Savings
		Educate building users on energy reduction strategies	1.15	L	Savings
		Identify other energy efficiency opportunities for **new buildings**	1	L	Savings
		Identify energy efficiency opportunities for **existing buildings**	2	M	Savings
Reduce carbon emissions at the building, site and community levels	Reduce GHG emissions by 33% by 2030 (as compared to 2007 levels)	Collect and analyse energy and emissions reductions to track progress	✓	L	Savings
	Encourage the use of low-emissions, active modes of transportation	Replace City fleet vehicles and equipment with low-emissions options (alternative fuels, electric)	✓	M	Savings
		Create a corporate bike share program for traveling to meetings	3	M	M
		Creative incentives for employees who walk or bike to work	1	L	L
		Promote carpooling to the building to reduce SOV use	1	L	N/A
	Consider biofuels as an alternative fuel source	Use pellet/wood chips to power boiler/furnace	Conduct study separately	L	L
WATER EFFICIENCY + MANAGEMENT					
Reduce potable water use for the building and site	No irrigation	Use captured rainwater for irrigation	1	L	L
		Design xeriscaped landscape that requires low or no irrigation	1	L	L
	Use high efficiency water fixtures	Select high-efficiency flush and flow fixtures for new building	1	L	Savings
		Replace existing building flush and flow fixtures	✓	L	Savings
	Reuse pool water and arena ice water	Conduct a feasibility study to investigate opportunities	3	L	L
	Community engagement	Educate the community on water-saving strategies	✓	L	L
Manage stormwater for the site	Maintain pre-runoff conditions on site: ensure stormwater goes back to the ground rather than into the City's limited storm system	Reduce hardscape on site (asphalt, concrete)	1	Savings	L
		Install water-retention features such as a pond or swales	1.15	L	L
ECOLOGY + BIOPHILIA					
Incorporate biophilic design	Design the building to incorporate biophilic strategies and connect to the rest of the site	Connect the indoor to the outdoor through courtyards and gardens	1	L	L
		Bring in natural light through windows and orientation	1	L	L
		Useable walking space around the outside of the building. Connect to paths, sidewalks and other recreation areas.	1	L	L
		Ensure the development connects to the skatepark	2.5	N/A	N/A
Directly connect to nature	Incorporate nature-based elements where possible	Use local forestry industry materials	1	L	L
		Create an accessible roof for connection to exterior	1.5	M	M
		Install a food-based garden	3	M	L
		Select deer and other animal-proof plants	✓	L	Savings
		Encourage a vibrant bee culture by planting pollinator-friendly plants	✓	L	L
		Grow cannabis in a safe and educational way	✓ Learning Garden	L	L
Conservation leadership	Be a leader in conservation principles and practice	Make the site a demonstration site for conservation principles and action	3	L	L
		Conduct mapping of waterways and other natural elements	3	L	N/A
		Naturalize more areas of turf on site and adjacent public lands	NO	N/A	N/A
WASTE MANAGEMENT					
Reduce facility waste and divert as much waste as possible	Implement a robust waste management plan	Develop a waste management plan for the entire site, including existing buildings	✓	L	L
		Install accessible and highly visual bins to capture compost, recycling and waste	1	L	M
		Create a recycling hub on site to collect electronic waste, batteries, etc.	NO	N/A	N/A
		Reuse compost on-site	NO	N/A	N/A
		Educate the community on recycling and compost best practices	✓	L	L
Reduce construction waste and divert as much waste as possible	Implement a robust construction waste management plan	Reuse materials wherever possible	1	L	L
		Minimize waste when cutting and installing products	✓	L	Savings
		Divert and sort as much construction waste as possible	✓	L	N/A
BUILDING RESILIENCE					
Apply financially sound decision-making for capital and operational costs	Plan for long-term lifecycle of the building	Design the building structure to last for 50+ years	1	M	Savings
	Plan for operations and maintenance	Develop a long term strategy for operations and maintenance (eg capital plan, etc.)	1	L	Savings
		Develop a retrofit plan for the existing buildings on site	NO	N/A	N/A
	Build in revenue opportunities	Develop building program to support revenue-generation	1	L	Savings
Design for flexibility	Design for future	Design infrastructure to support future technology needs	1	L	L
	Design for flexibility	Design the building to have flexible and adaptable spaces	1	L	Savings
Design for durability	Design for emergency	Select materials that are wildfire resilient	2	L	L
		Install a generator for backup energy in times of emergency	1	M	L
	Select durable materials	Select natural and local materials that are durable	1	L	Savings
	Minimize materials	Specify exposed concrete floors and other strategies to eliminate additional material use and wear (eg carpet or linoleum installed on top of concrete slab)	1 Where appropriate	L	Savings
HEALTH, WELLNESS + SAFETY					
Diversity and inclusion	Support diversity	Design a building that is sensitive to and representative of cultural diversity, respect for Indigeneity	1	L	L
	Ensure building is accessible by all	Incorporate accessibility and inclusivity throughout the building	1	L	L
	Support community groups	Create opportunities for entrepreneurs and community groups to showcase activities and/or sell products and services	1	L	M
Healthy by design	Incorporate healthy design strategies throughout the building and site	Specify healthy materials	1	L	L
		Design in access to daylight	1	L	L
		Incorporate nature through materials selection	1	L	L
		Incorporate nature through greenspace within the building (i.e. green wall, planters, etc.)	3	M	M

GOAL	TARGET	STRATEGY	VALUE (1, 2, 3)	ORDER OF MAGNITUDE COST (Low, Medium, High)	
				CAPITAL	OPERATIONAL
		Design in community gathering/social spaces	1	L	L
Community and occupant safety	Implement interior and exterior strategies to create safe surroundings	Ensure occupants are comfortable when alone	✓	L	L
		Extend levels of lighting to limit anti-social behavior in less-populated areas both inside and outside of the building	3	L	L
		Incorporate a robust security system and plan to connect to existing buildings	1	L	M
		Incorporate accessible wayfinding and building signage to support senior and disabled occupants	✓	L	L

APPENDIX C:
RISK ASSESSMENT WORKSHEET

RISK ASSESSMENT WORKSHOP

Project: **Grand Forks Community Centre Feasibility Study**

Date: Sept 18, 2019

Location: Community Futures Boundary Offices

Project Risk Assessment	Risk Evaluation		Preliminary Risk Mitigation Plan
	Probability	Impact	
PROJECT APPROVAL			
Failure of referendum for project approval and/or borrowing referendum	M	H	-Success is related to cost – ensure right size of project so costs are within reason. -Identify community leaders who can be project champions. -Create strategic marketing package, incorporating lessons learned from swimming pool referendum. -Secure multiple funding sources for greater success and prepare for longer timeline if required to secure funding.
Lack of Council approval	M	H	-Ensure distribution of costs is fair between City + RDKB. -Ensure council is part of the process in all project stages. -Ensure operational costs are managed. -Secure multiple funding sources for greater success. Prepare for longer timeline if required to secure funding.
Lack of RDKB approval	M	H	-Ensure operational costs are managed. -Secure multiple funding sources for greater success.
Council Changing Priorities	L	M	-Ensure project remains on City's strategic plan with continual communication and engagement with council
RDKB Changing Priorities	L	M	-Ensure project remains on RDKB's priorities with continual communication and engagement.
FUNDING			
Limited availability of funding and grants	L	M	-Risk is low as there are currently numerous grants available within the targeted area. -Ensure the project incorporates items required to achieve grant points.

Project Risk Assessment	Risk Evaluation		Preliminary Risk Mitigation Plan
	Probability	Impact	
Timely fundraising (grants & donations)	M	H	-Develop a clear understanding of the grant process and apply as early as possible. Ensure sufficient project resources to manage grant process. -Establish a fundraising plan, goals + objectives. Reach out to champions in the community and local industry early to secure support and funding.
Construction cost escalation	H	M	-Include projection of cost escalation in Class D Cost Estimate with realistic project timeline. Develop a total project budget. Include considering construction market information based on local conditions.
Limited availability of operational funding contribution by City + RDKB	L	✓	-This is tied to the approval process and will be outlined in the Bylaw if referendum is approved.
Funding agreement between Regional District and City	L	L	-Low risk as there is precedence of City and RDKB working together. -Manage expectations and establish an agreement over operating budget.
Lack of budget left for FF&E	H	L	-Establish budget early and keep separate during construction. -Include FF&E budget in early cost estimates.
Lack of quality assurance due to schedule constraints	M	M	-Invest in planning & preparation. Identify potential schedule constraints related to funding and align work and required steps accordingly.
Funding and physical moving process	L	L	-Low risk of moving Rec offices.
RESOURCES			
Availability of qualified **Construction Manager / Contractor**	H	H	-Determine procurement method and if proceeding with Construction Management, engage construction manager early. -Perform market sounding to determine construction market capacity. Market project and ensure it is well known to construction industry.
Availability of **local labour** (Contractors + Trades)	H	H	-Perform market sounding to determine construction market capacity. -Market project and ensure it is well known to construction industry.
Availability of local materials, equipment	M	H	-Foster relationships with local trades throughout the contract. -Connect with local industry (Interfor, Rockwool, etc) and capitalize on existing knowledge.

Project Risk Assessment	Risk Evaluation		Preliminary Risk Mitigation Plan
	Probability	Impact	
Availability of internal Project Management resources	M	L	-Ensure delivery method is suitable for staff capability + capacity.
Bonding levels limit local contractors	L	L	-It's anticipated that bonding levels will be suitable for the contractor required to deliver the project.
Availability of Consultants (field reviews + letter of assurance)	L	L	-Include availability as critical component of RFP. Review carefully projected approach to field review.
Available resources for project manager / RDKB / City representative (Owner's team)	M	H	-Select procurement method suited to the City/RDKB's priorities during construction. -Request internal resources as part of council approval for the project.
Limited experience in industry with passive house standards / certification / Step code 4	M	M	-Capitalize on existing knowledge of trades and industry (Rockwool) -Retain experiences consultants and contractors.
SITE			
Undiscovered geotechnical issues (soil viability)	L	M	- Conduct Geotechnical investigations as early as possible so any required remediation can be scheduled and accounted for in the budget.
Undiscovered site conditions	L	M	- Conduct Geotechnical investigations and environmental analysis to determine water table, soil contaminants and hazardous material assessments as early as possible so any required remediation can be scheduled and accounted for in the budget.
Undiscovered contamination of soil	L	M	- Soil has been tested on site. Ensure test location include all areas impacted by construction and retest again if required. Account for any remediation necessary in budget and schedule.
Impact of water table on construction.	L	L	- Conduct Geotechnical investigations and environmental analysis to determine water table, soil contaminants and hazardous material assessments as early as possible so any required remediation can be scheduled and accounted for in the budget.
Impact of construction on aquifers.	L	H	-Ensure containment protocol and strategies are specified by civil consultant. -Ensure contractor has site management protocol.
High costs for site servicing	L	M	-Ensure site development is included in cost estimate based on existing site servicing and conditions.

Project Risk Assessment	Risk Evaluation		Preliminary Risk Mitigation Plan
	Probability	Impact	
Off site work (e.g. parking, road improvements)	L	L	-Assess cost of off-site work and determine whether works will be included into the current project or defined as a separate project.
Site safety and public accessibility during construction	H	L	-Review contractor's site safety record with a track record of managing site safety and access to the site. -Ensure adequate bonding and insurance .
CLIMATE			
Delay due to seasonal weather/ crews diverted for flood/wildfire/mitigation	L	L	-Allow sufficient time in schedule according to historical weather conditions. Schedule critical processes during favorable months and build contingency into schedule for unforeseen circumstances.
Losses / Damage during construction due to seasonal weather	M	L	-Ensure contractor has insurance to cover losses/damage.
Climate adaptation of the building	H	L	-Build to passive design standards to mitigate effects of climate change on the building. Ensure quality assurance checks during design and construction.
DESIGN			
Accessibility and inclusivity of building	H	L	-Ensure user groups in engaged throughout the process to ensure the building is a place for all. -Design and building to the highest standard of accessibility.
Limited access to pool/arena during construction	H	L	-Phase and locate building to limit disruption to existing buildings. -Clearly communicate revised access plan and manage public expectations.
Flexibility to accommodate future technology needs	L	L	-Hire a qualified design team to ensure technological needs are met.
PROCUREMENT			
Choosing the right procurement method	L	H	-Create a development corporation (between City + RDKB) to develop RFP. -Review risks/advantages and disadvantages of different procurement methods. Review in conjunction with market conditions.
SCHEDULE			
Delay due to required site / utility works	L	H	-Involve BC Hydro early in the process.

Project Risk Assessment	Risk Evaluation		Preliminary Risk Mitigation Plan
	Probability	Impact	
Delay due to Contractor lack of trades experience	M	H	- Perform market sounding of local capabilities and other available resources.
OPERATION			
Failure to achieve joint operating agreement	L	L	- Engage both entities in a collaborative process to develop a joint operating agreement early on in the process, Sign agreement before RFP.
Difficulty with establishing governance strategy and recruiting volunteers (board and staffing)	L	L	- Determine how and by whom the facility is to be run (regional service? Contracted out?) engage the appropriate party.
Difficulty recruiting volunteers (board and staffing)	M	M	- Enhance community engagement and involvement to secure long-term volunteerism.
STAKEHOLDER			
Increasing tax rates for businesses	H	M	- Undertake an open, transparent process and ensure that all citizens are informed and understand tax parameters to encourage support and ensure that they vote with knowledge.
Opening hours do not meet public expectations	H	L	- Manage expectations with public engagement and stakeholder management
Public expectation of increased service levels	H	L	- Manage expectations with public engagement and stakeholder management
Insufficient project engagement with public and elected officials	L	H	- Host open house and gather public input and feedback. - Manage expectations with public engagement and stakeholder management.
Lack of stakeholder integration (inclusion of health program)	M	L	- Prepare strategy for engaging various use groups. Integrate stakeholder groups into a collaborative design process.
Expectations re: amount of parking	M	L	- Prepare strategy for engaging various use groups. Integrate stakeholder groups into a collaborative design process.
Use of Community Kitchen	H	L	- Concern is risk of under-utilization of kitchen. Create a clear access policy. Design programming to support use.
Seniors Use of Hall (Have recently found new facility)	L	M	- Engage seniors' group throughout the process in a collaborative design process.

APPENDIX D:
COST BREAKDOWN

GRAND FORKS COMMUNITY CENTRE, GRANDFORKS, BC

CLASS 'D' PROGRAM ESTIMATE

November 7th, 2019

LTA Consultants Inc
Professional Quantity Surveyors
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INTRODUCTION

The City of Grand Forks and the Regional District of Kootenay Boundary (RDKB) is looking at the feasibility of constructing a new Community Centre in Grand Forks, BC.

Urban Arts Architecture has been retained to prepare a Design Feasibility Study Report, which includes a functional program for the new facility.

The new building comprises a single storey, or part single storey/part two storey structure with a gross floor area of approximately 13,156ft^2. Programming for the new facility includes the following:

- Public spaces including main entrance lobby, café, and washrooms;
- Community Centre including a large hall, community kitchen, meeting room, hacker/maker space, conference room, washrooms and associated ancillary storage spaces;
- Administration spaces including open office spaces, workroom, meeting room, filing storage spaces, staff room and washrooms.

The program includes for a café with servery/kitchen, utilising standard residential style appliances, for basic food preparation only. Additionally, the program also includes a commercial kitchen component, with commercial equipment, commercial exhaust, commercial appliances and cooler. ***Please note, the optional Flexible Tenant Space has not been included in this class 'D' program estimate.***

Site development work in this program estimate is based on 'Site Strategy Option 1 Phase 1'. Site work will include general site clearance, removal of existing hard paving's', reorientation of the existing parking lot, new plaza paving, landscaping, site improvements, and full site servicing. We note that 'Site Strategy Option 1 Phase 1' would be cheaper, as the existing parking would be maintained.

LTA Consultants Inc. has been retained by Urban Arts Architecture to prepare a class 'D' program estimate.

We have structured this report to include the following:

- Main Summary of Estimated Project Costs (page S1). This summary sets out the total estimated project costs. The summary indicates the project hard costs for the community centre building (Net Building Cost), as well as the site development costs. Project soft costs for design consultants, regulatory costs and equipment are also identified on this summary;
- Detailed Program Estimate. Please refer to pages A1 – A3 in the back-up to this report for further information;

Please note, no allowances are included in the estimate for Off-site Servicing Costs and Utility Upgrades, Land Costs, Development Cost Charges (if applicable), equipment costs, and financing costs.

Escalation

Over the past twelve months, we have experienced a construction market condition in British Columbia that has resulted in construction costs rising by approximately 12% to 15% across public sector projects. As the demand for construction services remains high across residential, commercial and institutional sectors of the market, we can expect costs to continue to rise at the rate of approximately 6% to 8% for the foreseeable future. ***Please note, no allowance has been included in this estimate for forward escalation/market condition contingency, as the schedule for the approval process required to move the project into the detailed design, tender and construction phases has not been determined. However, we caution that an allowance of at least 6% to 8% per annum should be budgeted for the year, based on the current economic climate. Please refer to our comments under the 'Contingency' and 'Market Conditions' sections of this report for further information.***

DOCUMENTATION & INFORMATION

We have been provided with the following documentation and information for the preparation of this class 'D" program estimate:

- Draft Phase 1 Report prepared by Urban Arts Architecture;

BASIS OF THE ESTIMATE

Budget Estimate

We have reviewed the drawing documentation and information provided to establish the scope and extent of the work.

From the documentation and information provided, we have prepared the enclosed class 'D' program estimate. Where no information was available, we have made reasonable assumptions and stated this in the backup to this report.

Project Procurement and Pricing

Pricing for this project is based upon our opinion of current fourth quarter 2019 standard construction industry market costs for this type of institutional project in Grand Forks, BC. It has been assumed that the project will be procured on a fixed stipulated 'lump sum' contract basis, from a competitive bidding field of at least three competent General Contractors. It has also been assumed that a competitive bidding field of at least three competent sub-contractors for each trade will tender for the work and that there will be no 'sole source' bids.

This class 'D" program estimate attempts to establish a fair and reasonable price for the proposed work and is not intended to be a prediction of 'low bid'.

Contingency Reserves

A Design Contingency Allowance of 10% has been included. This allowance is a reserve of funds in the construction estimate to cover unforeseen items during the design phase that do not change the project scope. This allowance is ultimately absorbed into the designed and quantified work as more detailed information becomes available and is, therefore, normally reduced to zero at the tender stage.

An Escalation Contingency Allowance of 0% has been included in this estimate. This allowance is a reserve of funds in the construction estimate to cover price increases in construction costs due to changes in market conditions between the date the estimate is prepared and the date the tender is called. ***Refer to the comments in the introduction to this report.***

A Construction Contingency of 5% is included in this estimate. This allowance is a reserve of funds in the construction estimate to cover unforeseen items during the construction period which will result in change orders. This contingency is not intended to cover changes in the scope of the work.

Market Conditions

The current Construction Market in Western Canada is very active to the extent that many projects, at the tender stage, are suffering from a lack of interest from General Contractors as well as Sub-trades. Lack of competitive interest will have an effect on the tendered bottom line and will very likely not reflect the estimated value contained in this report.

Level of Accuracy

This is a preliminary class 'D' program estimate with a level of accuracy of +/-25% 18 times out of 20.

GST

The Goods and Services Tax (GST) is **specifically excluded** from the estimate.

Excluded Items

The following items are **specifically excluded** from the class 'D' conceptual estimate:

- GST;
- Land and Associated Purchase Costs;
- Financing Costs;
- Development Cost Charges;
- Course of Construction Insurance;
- Off-site Costs and Utility Upgrade Costs;
- Optional Tenant Space;
- Special Foundations and/or Ground Improvement Work;

- Demolition of Existing Building Structure;
- Removal and/or Remediation of Hazardous Materials;
- Loose Furniture, Furnishings and Equipment;
- Forward Escalation Contingency Allowance;
- Future Unknown Effects on Materials Pricing due to International Trade Disputes, Embargos and Tariffs;
- Portering, Relocation and Temporary Accommodation.

LIFE CYCLE COST ANALYSIS

A Life Cycle Cost Analysis has been prepared for the options based on a time frame of 50 years. Please refer to Pages LCC 1-3 in schedule 'A' of this report for further information regarding the assumptions and rates used for the calculations.

REPORT QUALIFICATIONS

This report has been prepared for Urban Arts Architecture (UAA) and is for their exclusive use only. The information contained in this report must be treated as confidential and may not be disclosed, reproduced or permitted to be disclosed to any party, without the express written consent of LTA Consultants Inc.

This report is based on the documentation and information provided to us by UAA and its representatives at the date the report is issued. LTA Consultants Inc. does not accept accountability for information that has not been provided to us, or was not available at the time of preparing this report.

LTA Consultants Inc. is a firm of Professional Quantity Surveyors and is not qualified to provide planning and design services.

SCHEDULE 'A'
MAIN SUMMARY OF ESTIMATED PROJECT COSTS

MAIN SUMMARY OF ESTIMATED PROJECT COSTS

Description		Estimated Value	$/m²	$/ft²
		Gross Floor Area	1,222.21	13,156
HARD COSTS				
Net Building Cost		$7,353,054	$6,016.19	$559
Site Development		$1,659,147	$1,357.50	$126
Off-Site Costs - **Specifically Excluded**		Excluded	$0.00	$0
ESTIMATED CONSTRUCTION COSTS (Excluding GST)		**$9,012,201**	**$7,373.69**	**$685**
GST	0.00%	Excluded	$0.00	$0
ESTIMATED CONSTRUCTION COSTS (Excluding GST)		**$9,012,201**	**$7,373.69**	**$685**
SOFT COSTS				
Land				
Property Purchase & Associated Taxes		Excluded	$0.00	$0
Legal Fees		Excluded	$0.00	$0
Design Consultants Fees				
Architects Fees		$450,610	$368.68	$34
Structural Engineers Fees		$78,859	$64.52	$6
Mechanical Engineers Fees		$66,214	$54.18	$5
Electrical Engineers Fees		$49,935	$40.86	$4
Civil Consultants Fees		$75,000	$61.36	$6
Landscaping Consultant Fees		$20,000	$16.36	$2
Geotechnical Engineers Fees		$20,000	$16.36	$2
Miscellaneous Consultants Fees		$90,122	$73.74	$7
Quantity Surveying Fees		$58,579	$47.93	$4
Owners Costs				
Owners Project Management Fees		$270,366	$221.21	$21
Development Cost Charges		Excluded	$0.00	$0
Building Permit Fees		$90,122	$73.74	$7
Course of Construction Insurance		Excluded	$0.00	$0
Equipment				
Loose Furniture, Furnishings and Equipment	0.00%	Excluded	$0.00	$0
ESTIMATED SOFT COSTS (Excluding GST)		**$1,269,807**	**$1,038.94**	**$97**
GST	0.00%	Excluded	$0.00	$0
ESTIMATED SOFT COSTS (Excluding GST)		**$1,269,807**	**$1,038.94**	**$97**
ESTIMATED PROJECT COSTS (Excluding GST)		**$10,282,008**	**$8,412.63**	**$782**

SCHEDULE 'B'
OPTION 'D'

Item	Description	Addition or Renovation	Level of Renovation	Quantity	Unit	Gross Floor Area (m^2)	Lump Sum Allowance	Demolition Unit Rate	Structural Unit Rate	Architectural Unit Rate	Mechanical Unit Rate	Electrical Unit Rate	Total Unit Rate	ESTIMATED CONSTRUCTION COST
	BUILDING COSTS - OPTION D													
	Base Building													
	Base Building Shell - (Includes Building Grossing) - 1.5 Storey Structure	New				**1,222.21**		0	900	1,000	215	200	2,315	$2,829,418
	Improvements													
1.0	PUBLIC SPACES													
1.1	Entry Vestibule	New				8.45		0	0	1,200	450	200	1,850	$15,640
1.2	Lobby	New				36.27		0	0	800	400	200	1,400	$50,778
1.3	Café	New				17.55		0	0	1,600	400	200	2,200	$38,610
1.4	Café	New				23.01		0	0	1,400	400	200	2,000	$46,020
1.5	Retail Display Units	New				18.07		0	0	1,300	400	200	1,900	$34,333
1.6	Community Display Units	New				2.47		0	0	1,800	400	200	2,400	$5,928
1.7	Universal Washroom	New				5.80		0	0	950	1,100	250	2,300	$13,333
1.8	Universal Shower Room	New				7.93		0	0	950	1,100	250	2,300	$18,239
2.0	COMMUNITY CENTRE													
2.1	Hall	New				514.93		0	125	750	600	300	1,775	$914,001
2.2	Chair Storage	New				34.97		0	0	300	200	150	650	$22,731
2.3	General Storage	New				24.18		0	0	300	200	150	650	$15,717
2.4	AV Closet	New				2.47		0	0	300	200	1,000	1,500	$3,705
2.5	Community Kitchen	New				54.34		0	0	950	600	400	1,950	$105,963
2.6	Pantry	New				12.09		0	0	500	200	150	850	$10,277
2.7	Walk-in Cooler	New				0.00		0	0	0	0	0	-	$0
2.8	Bar/Servery Area	New				12.09		0	0	1,400	900	300	2,600	$31,434
2.9	Garbage + Recycling	New				23.01		0	0	300	200	150	650	$14,957
2.1	Washrooms	New				78.52		0	0	1,000	950	250	2,200	$172,744
2.1	Meeting Room	New				24.18		0	0	700	400	800	1,900	$45,942
2.1	Hacker/Maker Space	New				48.36		0	0	600	400	250	1,250	$60,450
2.1	Conference Room EOC	New				120.77		0	0	650	450	300	1,400	$169,078
3	ADMINISTRATION													
3.1	Reception/Work Station	New				12.09		0	0	800	400	200	1,400	$16,926
3.2	Workroom/Copier	New				12.09		0	0	800	400	200	1,400	$16,926
3.3	General Storage Room	New				14.43		0	0	300	200	150	650	$9,380
3.4	Open Office	New				30.42		0	0	400	325	250	975	$29,660
3.5	Meeting Room	New				0.00		0	0	700	400	800	-	$0
3.6	Staff Room	New				14.43		0	0	950	1,100	250	2,300	$33,189
3.7	Staff Washroom (Unisex)	New				5.85		0	0	950	1,100	250	2,300	$13,455
3.8	Server Room	New				5.85		0	0	300	200	1,000	1,500	$8,775
E	SUPPORT SPACE													
4.1	Mechanical / Electrical (4.5% net)	New				52.39		0	75	250	250	150	725	$37,983
4.2	Janitors' Closet + Storage	New				5.20		0	0	450	750	250	1,450	$7,540
4.3	Back-up Generator	New				0.00		0	0	0	0	0	-	$0
	Total New Area (CGSM)					**1,222.21**								
	Building Grossing													
	Building Grossing (0%)	New				0.00		0	0	200	150	100	-	$0
	Total New Area (BGSM)					**1,222.21**								
	Check	New				0.00								
	Sub-Total													**$4,793,129**

Item	Description	Addition or Renovation	Level of Renovation	Quantity	Unit	Gross Floor Area (m^2)	Lump Sum Allowance	Demolition Unit Rate	Structural Unit Rate	Architectural Unit Rate	Mechanical Unit Rate	Electrical Unit Rate	Total Unit Rate	ESTIMATED CONSTRUCTION COST
	Building Lump Sum Allowances - Addition													
	HC Accessible Elevator	New		1	l/s		$50,000						-	$50,000
	Commercial Kitchen Equipment	New		1	l/s		$175,000						-	$175,000
	Solar Panel Component - Allowance	New		1	l/s		$120,000						-	$120,000
	Emergency Generator	New		1	l/s		$125,000						-	$125,000
	Sub-Total													**$5,263,129**
	General Contractors Overhead												12.00%	$631,575
	General Contractors Fee												8.00%	$471,576
	Phasing Allowance												0.00%	$0
	Design Contingency Allowance												10.00%	$636,628
	Escalation/Inflation Contingency Allowance												0.00%	Excluded
	Construction Contingency Allowance												5.00%	$350,145
	ESTIMATED BUILDING COST													**$7,353,054**
	Location Factor												0.00%	Included
	ESTIMATED BUILDING COST													**$7,353,054**

Item	Description	Addition or Renovation	Level of Renovation	Quantity	Unit	Gross Floor Area (m^2)	Lump Sum Allowance	Demolition Unit Rate	Structural Unit Rate	Architectural Unit Rate	Mechanical Unit Rate	Electrical Unit Rate	Total Unit Rate	ESTIMATED CONSTRUCTION COST
	ON SITE AND OFF SITE COSTS													
	On-Site Development - Option 1													
	Site Preparation Work													
	Demolition of Existing Buildings - **assumed not required**			1	l/s		$0						-	$0
	Clearing and Grubbing			2,750	m^2		$5						-	$13,750
	Breaking out existing hard paving - allowance			2,000	m^2		$25						-	$50,000
	Oversite Leveling and Grading/Site Preparation -			4,750	m^2		$25						-	$118,750
	Miscellaneous Site Demolition Allowance			1	l/s		$1,500						-	$1,500
	Site Improvements													
	Parking area (re oriented)			2,000	m^2		$65						-	$130,000
	Concrete Curbs			185	m		$95						-	$17,575
	Line painting			1	l/s		$3,500						-	$3,500
	Plaza Paving			2,000	m^2		$165						-	$330,000
	Miscellaneous patching paving and sidewalks			1	l/s		$50,000						-	$50,000
	Outdoor Patios - allowance			100	m^2		$250						-	$25,000
	Covered Canopy to Outdoor Patio			50	m^2		$950						-	$47,500
	Miscellaneous Pads and Bases			1	l/s		$5,000						-	$5,000
	Site Signage			1	l/s		$15,000						-	$15,000
	Miscellaneous Site Furniture/Flagpole/Fencing			1	l/s		$25,000						-	$25,000
	Miscellaneous retaining walls			1	l/s		$5,000						-	$5,000
	Landscape - allowance			1	l/s		$65,000						-	$65,000
	Site Servicing Mechanical and Electrical													
	Domestic Water - Allowance			1	l/s		$20,000						-	$15,000
	Storm Sewer Allowance			1	l/s		$125,000						-	$85,000
	Sanitary Sewer Allowance			1	l/s		$15,000						-	$15,000
	Gas - **assumed by Utility**			1	l/s		$0						-	$0
	Hydro Service Connection - Allowance			1	l/s		$75,000						-	$75,000
	Site Electrical Allowance			1	l/s		$25,000						-	$15,000
	Telus/Cable - Allowance			1	l/s		$5,000						-	$5,000
	Site Lighting - Allowance			1	l/s		$75,000						-	$75,000
	Off-Site Costs													
	Off-Site Costs - Roads and Paving - **Specifically Excluded**			1	l/s		Excluded						-	$0
	Off-Site Costs - Site Servicing - **Specifically Excluded**			1	l/s		Excluded						-	$0
	Sub-Total													**$1,187,575**
	General Contractors Overhead												12.00%	$142,509
	General Contractors Fee												8.00%	$106,407
	Phasing Allowance												0.00%	$0
	Design Contingency Allowance												10.00%	$143,649
	Escalation/Inflation Contingency Allowance												0.00%	Excluded
	Construction Contingency Allowance												5.00%	$79,007
	ESTIMATED SITE DEVELOPMENT COSTS													**$1,659,147**
	Location Factor												0.00%	Included

Item	Description	Addition or Renovation	Level of Renovation	Quantity	Unit	Gross Floor Area (m^2)	Lump Sum Allowance	Demolition Unit Rate	Structural Unit Rate	Architectural Unit Rate	Mechanical Unit Rate	Electrical Unit Rate	Total Unit Rate	ESTIMATED CONSTRUCTION COST
	ESTIMATED SITE DEVELOPMENT COSTS													$1,659,147
	ESTIMATED TOTAL CONSTRUCTION COST - BUILDING AND SITE													$9,012,201

SCHEDULE 'C'
LIFE CYCLE COST ANALYSIS

SUMMARY OF AREAS

Description	Community Centre
Addition ($m^{2)}$	1,222.21
Renovation (m^2)	-
Total GFA (m2)	**1,222.21**

OPERATING COSTS

Annual Operating Budget ($/$m^2$) -	$60.00
Annual Electrical Consumption ($/$m^2$)	$8.00
Annual Gas Consumption ($/$m^2$)	$3.75

LIFE CYCLE COST ASSUMPTIONS

Base Year	2019
Study Period (Years)	50
Discount Rate (%)	5.0%
Price Escalation Rate (%) - (Average)	5.0%

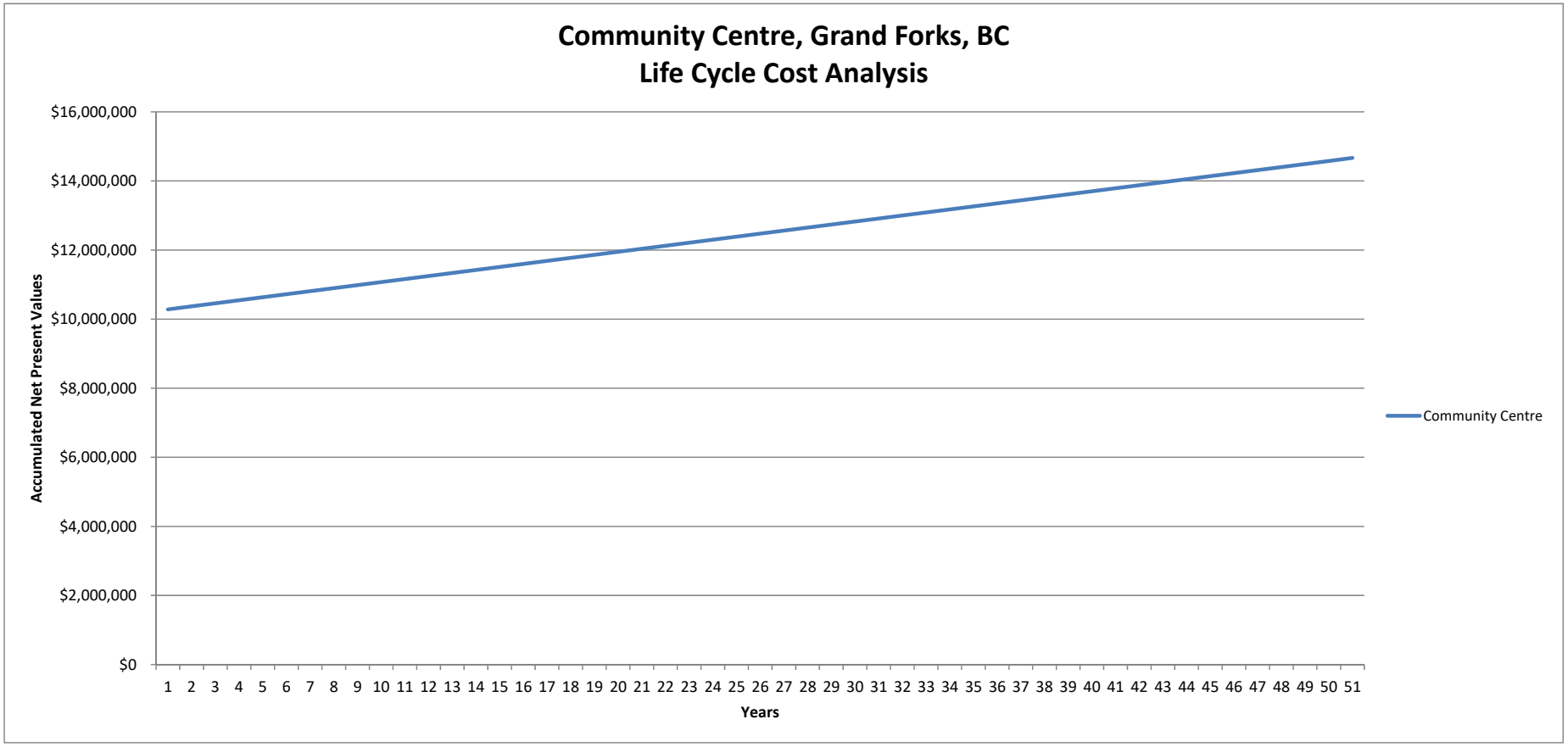
NPV AT THE FOLLOWING OPERATING YEARS

	Community Centre
Gross Floor Area (m^2)	1,222
Year	
0	$10,282,008
5	$10,720,476
10	$11,158,944
20	$12,035,880
30	$12,912,817
40	$13,789,753
50	$14,666,689

Notes:

1) The Net Present Value (NPV) at year 50 represents the total current cash value of all estimated expenses for the facility, including the initial capital cost, as well as the on-going maintenance/operational costs, over the 'life cycle' of the building (40 years);

2) A discount rate of 5%, and price escalation rate of 5%, has been used for all options;


Community Centre, Grand Forks, BC
Life Cycle Cost Analysis
Accumulated Net Present Values
$16,000,000
$14,000,000
$12,000,000
$10,000,000
$8,000,000
$6,000,000
$4,000,000
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Years
Community Centre