



NOVEMBER 13, 2012

# COLD LAKE ENERGY CENTRE MASTER PLAN REPORT

**Stantec** Architecture

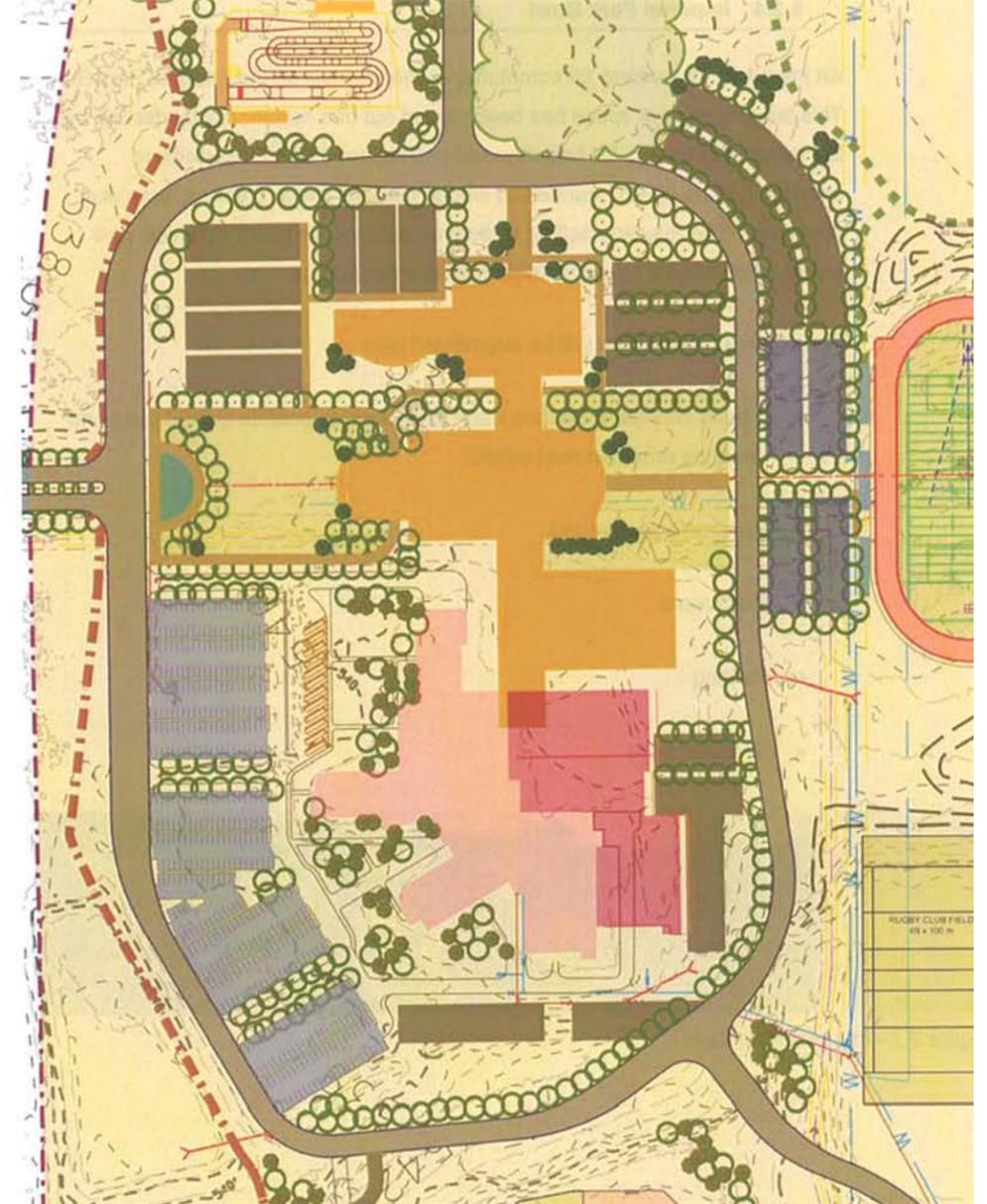
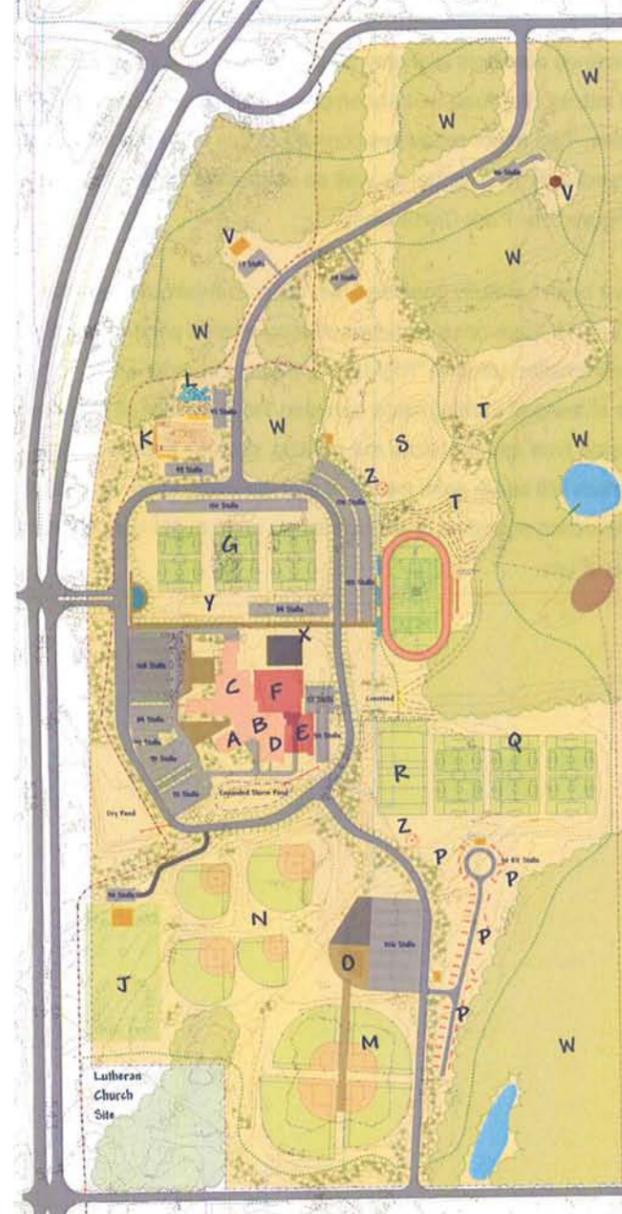




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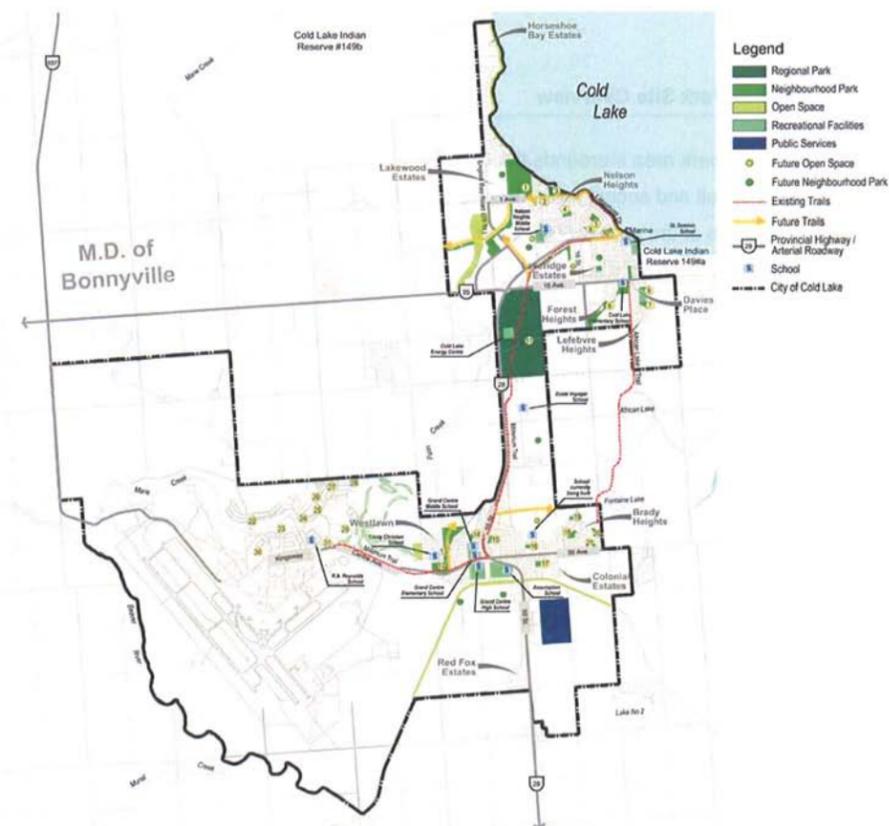


Reference: EIDOS-Imperial Park Master Plan Update 2009

## 1. Introduction

### 1.1 TRI-CITY AMALGAMATION

Originally three communities, Cold Lake was formed by merging the Town of Grand Centre, the Town of Cold Lake, and Medley (Canadian Forces Base 4 Wing) on October 1, 1996. Grand Centre was renamed Cold Lake South, and the original Cold Lake is known as Cold Lake North. Because of its origins, the area is also known as the Tri-City. The newly-created municipality achieved City status on October 1st 2000 (Order in Council #354/2000).



Reference: EIDOS-Imperial Park Master Plan Update 2009

### 1.2 BACKGROUND

In February 2010 Stantec Architecture Ltd. was retained by the City of Cold Lake to complete two related design exercises (a) Master Plan concept & (b) Arena Design, at the Imperial Park Energy Centre site. During the spring and early summer of 2010 Stantec Architecture Ltd.'s design team had several meetings with the City's Administration, Steering Committee, and Stakeholders to discuss the project and planning. The result of the findings and to address to the community needs it was proposed to develop and expand the Cold Lake Energy Centre Campus. The expansion plan included a 1700 seat Ice Hockey Area built over about 93,500 square feet which has been constructed during 2010-12 and is in its final stages of completion.

#### Population

The population of the City of Cold Lake according to its 2012 municipal census is 14,400 a 3.4% increase over its 2009 municipal census population of 13,924. The analysis of this population by age group shows that 65.35% are below the age of 34 years and 34.65% above 34 years. The major users of the facility will be in the age group of 5 years to 19 years and constitute 27% of the population. There appears a clear need for increased Sports facilities required for this young generation in the community.

#### Connecting the community through Sports and Recreation:

Cold Lake has a variety of sports, including:

- Hockey (Home to the Cold Lake Ice, Junior B Team) & (Home to the Cold Lake Freeze, Minor Hockey Teams)
- Lacrosse (Home to the Cold Lake Heat, Minor Lacrosse Teams)
- Volleyball (Assumption and CLHS Royals)
- Football (CLHS Royals)
- Basketball (Assumption and CLHS Royals)
- Soccer (indoor and outdoor)
- Baseball
- Rugby (Assumption Crusader's and CLHS Royals combined team and Cold Lake Penguins Men's RFC)
- Hapkido
- Tae Kwon Do (unified tae kwon do, and occasionally International Tae kwon-Do Federation or World Tae kwon do Federation)
- Figure Skating (Cold Lake Figure Skating Club) & (Norlight Skating Club)
- Downhill Skiing (Kinosoo Ridge Snow Resort)
- Dancing (Pirouette School of Dance with award winning dance team, Fame Dance (Located at the Energy Centre)
- Mixed Martial Arts (Team Sparta)
- Roller Derby (Lakeland Lady-killers Roller Derby League)
- Swimming (Cold Lake Marlins Swim Club)
- Powerlifting (Cold Lake Bar Benders)
- Gymnastics (Lakeland Gymnastics Club)

Stake holders of the development at the Cold Lake Energy Center who had commented during the development of the Ice Hockey Arena include the Cold Lake Ice, the Cold Lake Figure Skating Club and Cold Lake Minor Hockey, Portage College and the Northern Lights School Division, The Chamber of Commerce, the Cold Lake Entertainment Society and the Agricultural Society and most importantly also the residents of City of Cold Lake.



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### 1.3 EXPANSION VISION & PLANNING PRINCIPALS

Expansion Vision of Imperial Park states " The vision of Energy Center Campus is conceived in future as a campus like interconnected set of functions surrounded by Ring road to promote multiple access opportunities on multiple building faces"

"The central location of the cold lake energy centre coincides with a civic imperative to unite previously separate parts of the community."

In synchronizing the Imperial parks vision The Cold Lake Energy Centre is growing as a mix of facilities and institutions benefiting the community. The spirit of "uniting" is carried further through a connecting "Link" or the north-south axis. Different user group buildings are planned to be on east and west of the Link. Currently there are unique entrances for Cold Lake High School, Energy Centre, Portage College, Existing Field House and the newly built arena.

The future field house, Gymnastic Centre, Twin Arena, Aquatic Centre, Future field civic and Municipal building, future library and Arts Centre are planned across the central link which will be kept open for growth as it grows on the north part of the City.

The second major axis providing a grand entrance to future municipal hall and library buildings will be placed East-West and continue over the exiting entrance road from highway 28.

#### Programmatic items on Master Plan:

Keeping aligned with the Imperial Park Master Plan, Stantec presented a master plan which included the following as a multiyear development of recreational facilities to support the growing needs of Tri- City

The programmatic items on the master plan includes the block programming and layout of the following areas:

Ice Hockey Arena – 93,500 SF

Future Field House - 41,230 SF

Storage rooms :

Gymnasium - 18,292 SF

Cold Lake Twin Arena 54,906 SF

Aquatics Centre - 40,350 SF

Future Municipal & Civic Building

Future Library and Arts Centre

Associated parking

Associated Site grading and Development

Associated Deep and Shallow utilities



**1.4 PHASED DEVELOPMENT**

**Phase 1 :**

Arena expansion is scheduled to be completed February 2013



**Phase 2:**

Future Field House - 41,230 SF

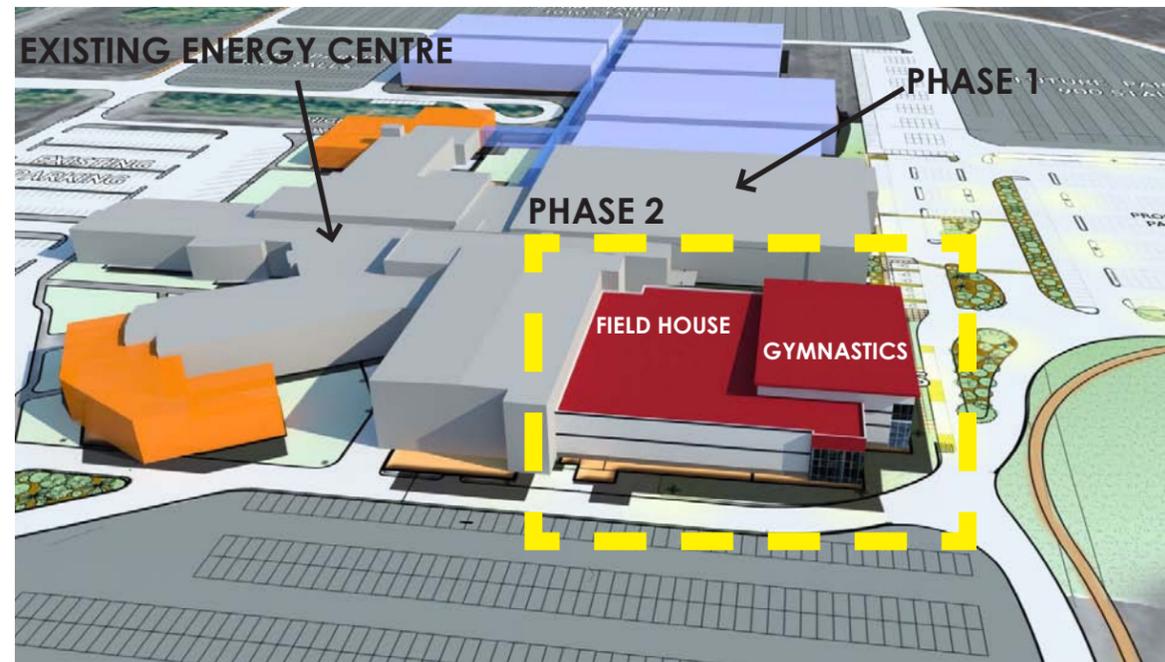
- A second field house
- Including approx. 14,360 SF of connector link area.
- Including Running Track
- 341 Parking Stalls

Storage rooms :

- 2 storage buildings one
- Storage building adjoining the existing field house and
- Storage building adjoining the future gymnastics centre

Gymnasium - 18,292 SF

- Gymnastics facility
- Including approx. 8,920 sf of connector link area.
- 170 Parking Stalls



# COLD LAKE ENERGY CENTRE

## MASTER PLAN REPORT

Associated Site grading and Development

Associated Deep and Shallow utilities

Once the Ice Hockey Arena is complete the communities next choice for logical growth is to build the new Field House Gymnastics centre and Storage Buildings.

The Twin field house is mirrored on the existing field house and this will provide a central observation gallery at the upper level of the field houses.

Gymnastics Centre will be planned to accommodate the heights required for trampoline and uneven parallel bars and be little proud in height than the field house. Major Stakeholder for Gymnastics Centre include :

Based in Cold Lake, the Lakeland Gymnastics Club has been home to some of the region's most promising gymnastics enthusiasts of all ages. Incorporated in 1986, This not for profit organization Lakeland Gymnastics currently resides at the Cold Lake Seniors Society Centre located in Cold Lake North

Other stakeholder include the various dance groups like the Pirouette School of Dance is a registered Not for Profit Society that provides qualified dance education in the Cold Lake area for Classical Ballet, Pointe, Tap, Jazz, Lyrical, Musical Theatre, Creative Movement, Parent and Tot, Hip Hop, Ukrainian, Stretch and Strength, Contemporary, Swing/Jive and variety in a positive, fun and professional atmosphere

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**Future Phases :**

Cold Lake Twin Arena 54,906 SF

- An additional 300 seat 2nd NHL sized ice hockey arena with support spaces.
- Including provision for small artificial ice area and a Climbing Wall.
- Including 20,880 ft<sup>2</sup> of Connector link area
- Including Skybox Lounge , Meeting rooms/multi-purpose spaces/Banquet rooms
- 510 Parking Stalls

Aquatics Centre - 40,350 SF

- Including approx. 17,502 sf of connector link area.
- Including for pool equipment – slides, wave pool, lazy river, etc.
- 225 Parking Stalls
- Aquatics Centre, Climbing wall, Leisure ice, Lounge Areas

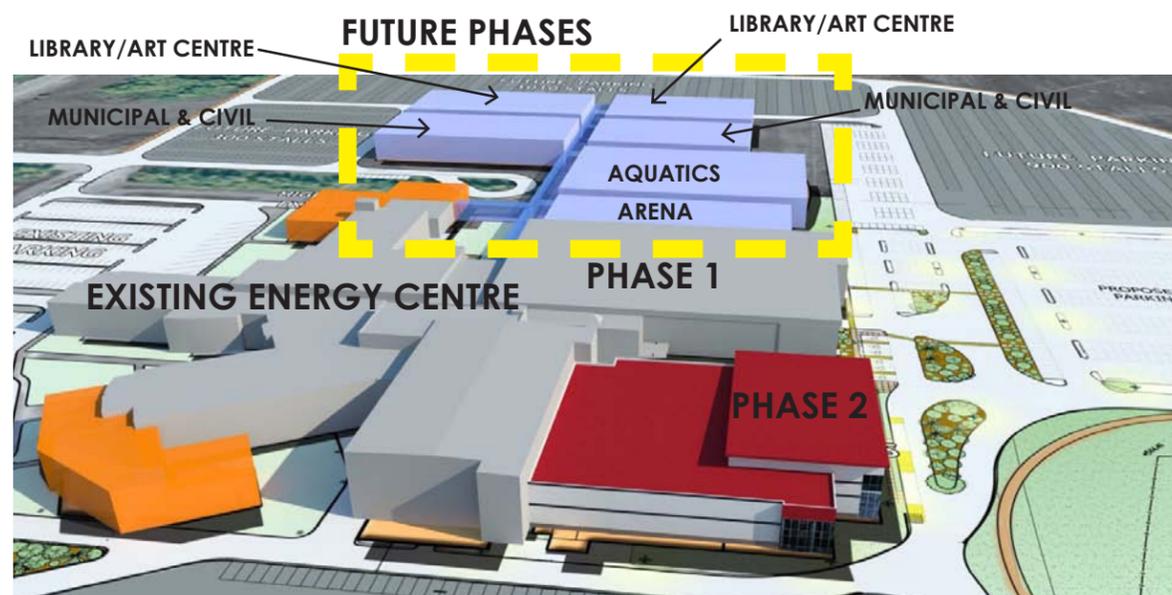
Associated Future parking

Associated Future Site grading and Development

Associated Future Deep and Shallow utilities

As the Energy Centre is a shared campus, it was also deemed necessary to briefly examine the expansion potential of a number of the other areas or future uses proposed for this site. This includes the attached Cold Lake High School (Northern Lights School Division #69) and Portage College, as well as the longer range municipal facilities contemplated for the site as part of the previous Imperial Park Master Plan. The master plan identified inclusion of

- Future Municipal & Civic Building
- Future Library and Arts Centre



# COLD LAKE ENERGY CENTRE

## MASTER PLAN REPORT

### 2. EXISTING SITE

#### 2.1 COLD LAKE ENERGY CENTRE BACKGROUND

The Cold Lake Energy Centre is a dynamic facility full of energy and activity located within the Imperial Park. Imperial Park is approximately 120- hectare parcel of land donated by Imperial Oil in 1995 to the former towns of Cold LAKE & Grand Centre. The restrictive caveat exists on the disposition of the land and the land parcels are dedicated to public, not for profit social and recreational purposes.

The Cold Lake Energy Centre is located on a lot parcel of 1, 210, 136 square meters and identified as Part section SW,, ¼ Sec 14, TWP 63, Range 2, Meridian W4M. The land falls under the City of Cold LAKE Land use by-law 382-lu-10 / 12.191P : Imperial Park District

It is a shared facility between the Parks & Recreation, Portage College and Cold Lake High school. Multiple activity nodes surround and interlink with the core Energy Centre to provide a campus feel while balancing the needs of Educational, Cultural and Recreational activities

The purpose of the Imperial Park District is to provide for public parks, recreation facility, schools, colleges, and associated services in accordance with Imperial Park master plan.

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**2.2 SITE ZONING (LAND USE BYLAW)**

**12.19 IP IMPERIAL PARK DISTRICT**

**(1) Purpose**

The purpose of this district is to provide for public parks, recreation facilities, schools, colleges and associated services in accordance with the Imperial Park Master Plan.

**(2) Uses**

PERMITTED	DISCRETIONARY- DEVELOPMENT OFFICER
Accessory building and use	Child care facility
Parking garage or lot	Commercial school
Participant recreation, indoor	Communication tower
Participant recreation, outdoor	Eating and drinking establishment
Public buildings and services	Exhibition grounds
Public park	Flea market
Public utility	Private clubs
Spectator entertainment	Retail, convenience
Tourist campsite	Temporary building
	Temporary or special events (seven continuous days or more)

**(3) Regulations**

All site requirements shall be as required by the Development Authority. The guiding principle for development within this district shall be the Imperial Park Master Plan.

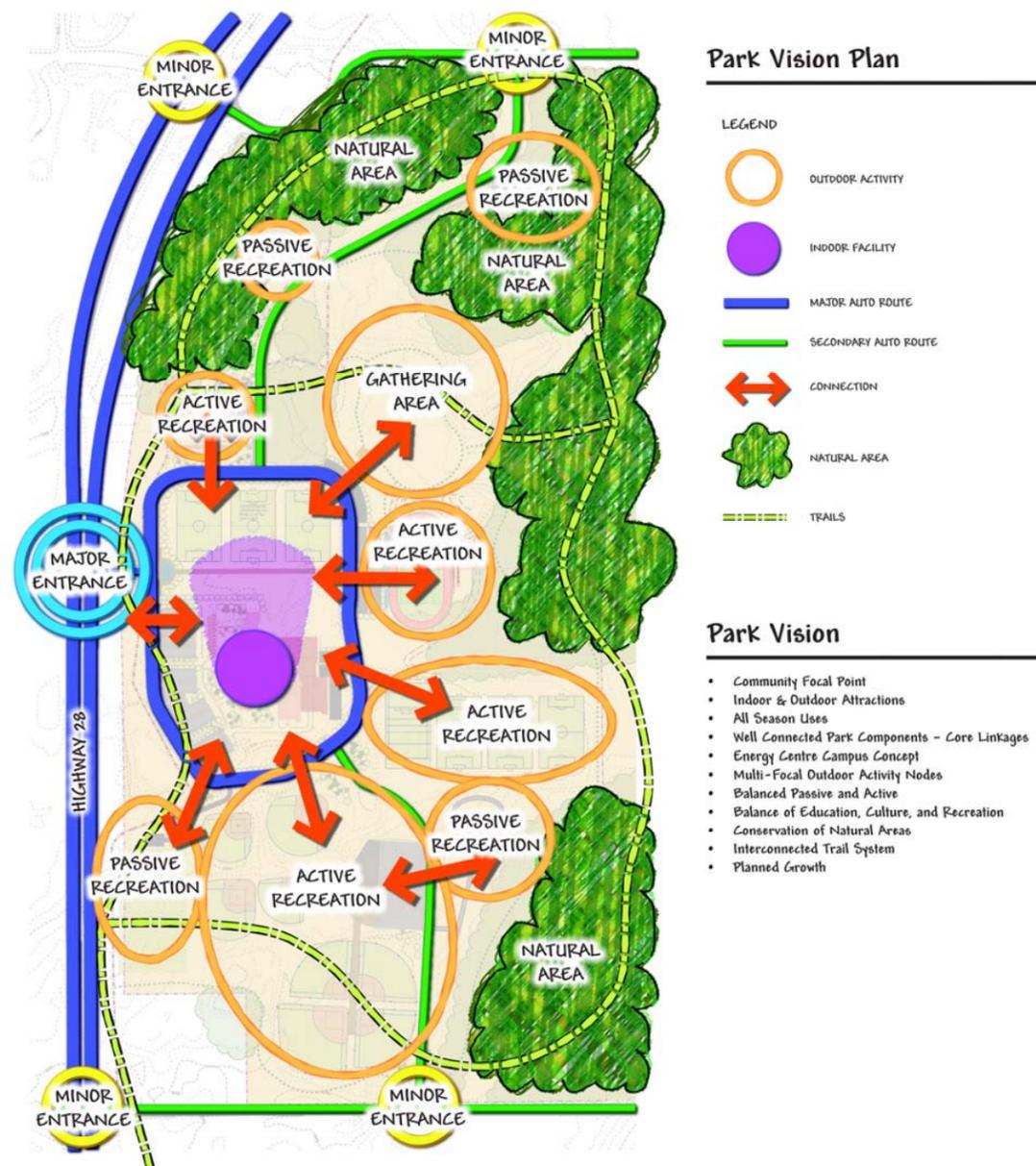
**(4) Other Site Development Regulations**

- (a) For Land Use Regulations refer to PART 3
- (b) For General Regulations refer to PART 6
- (c) For Urban Design and Building Appearance refer to PART 8
- (d) For Landscaping refer to PART 9
- (e) For Parking Requirements refer to PART 10
- (f) For Signs refer to PART 11

Reference: The City of Cold Lake Land Use Bylaw

**2.3 IMPERIAL PARK MASTER PLAN**

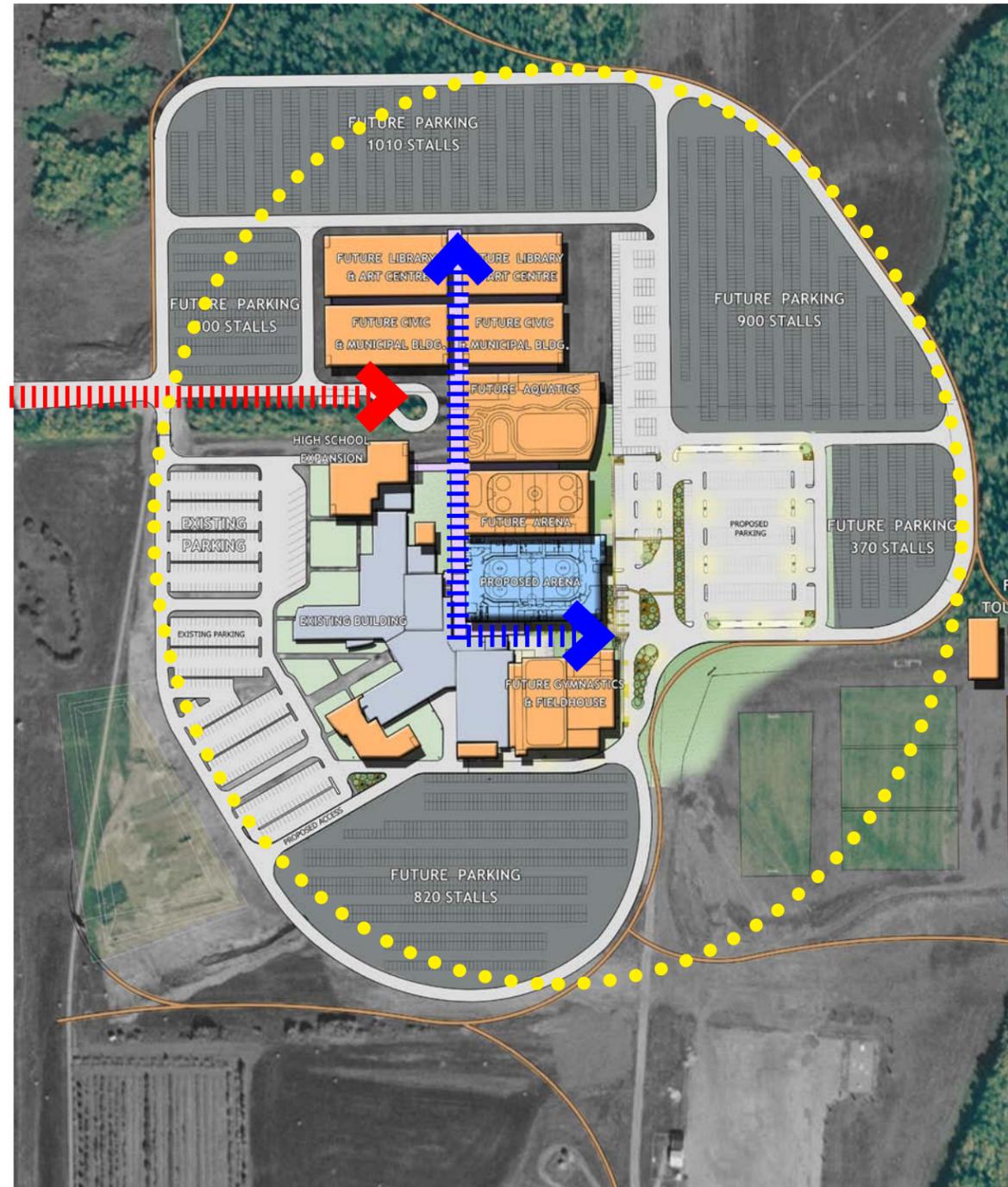
The Imperial Park 2009 Master Plan incorporates information gathered from the community consultation, process, the inventory analysis, demographics of the community, reviews of comparable facilities and analysis of alternatives. Initially a Park vision in words and schematic graphics was developed, subsequently, the Master Plan was created and component areas were further detailed.



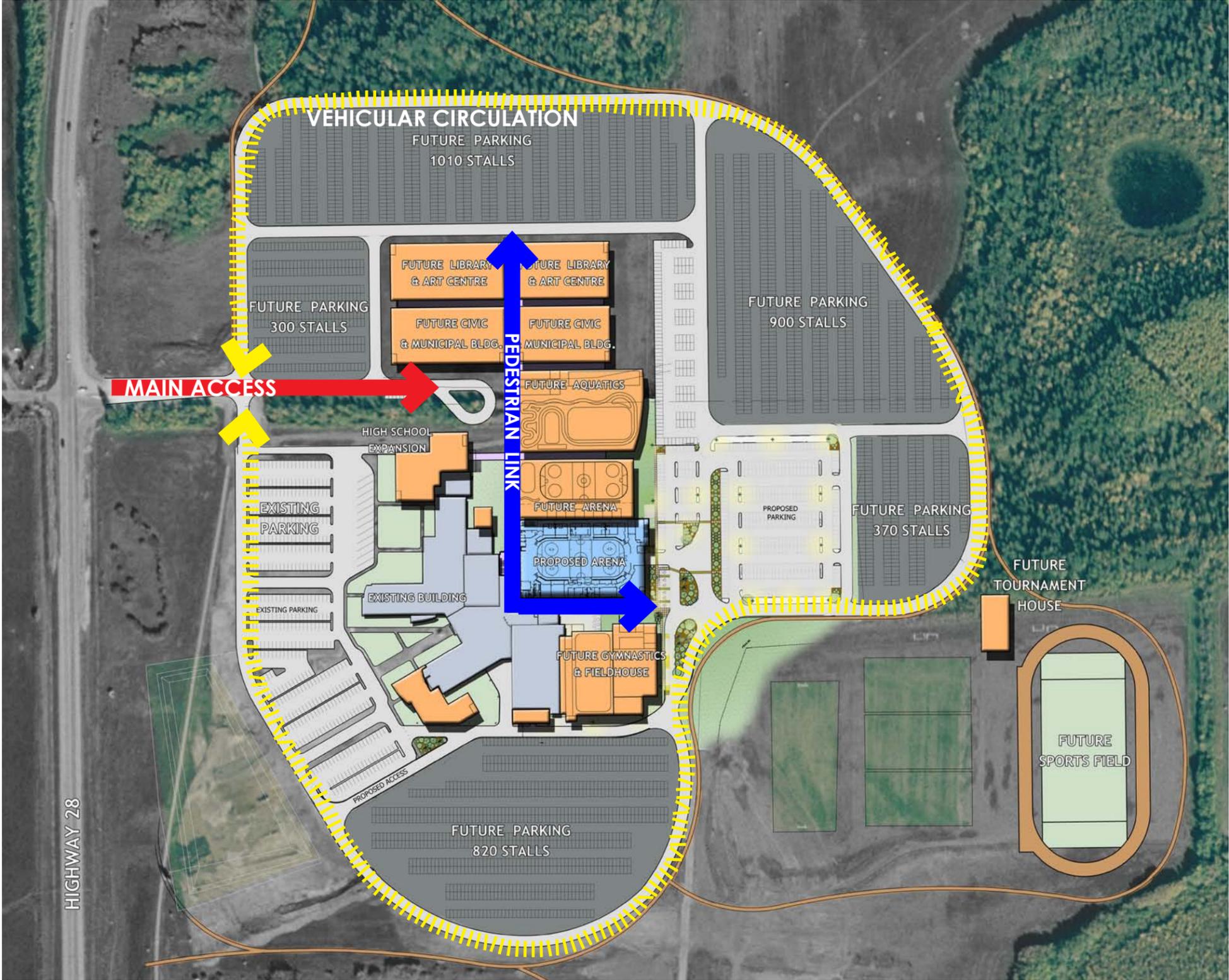
Reference: EIDOS-Imperial Park Master Plan Update 2009

**3. MASTER PLAN**

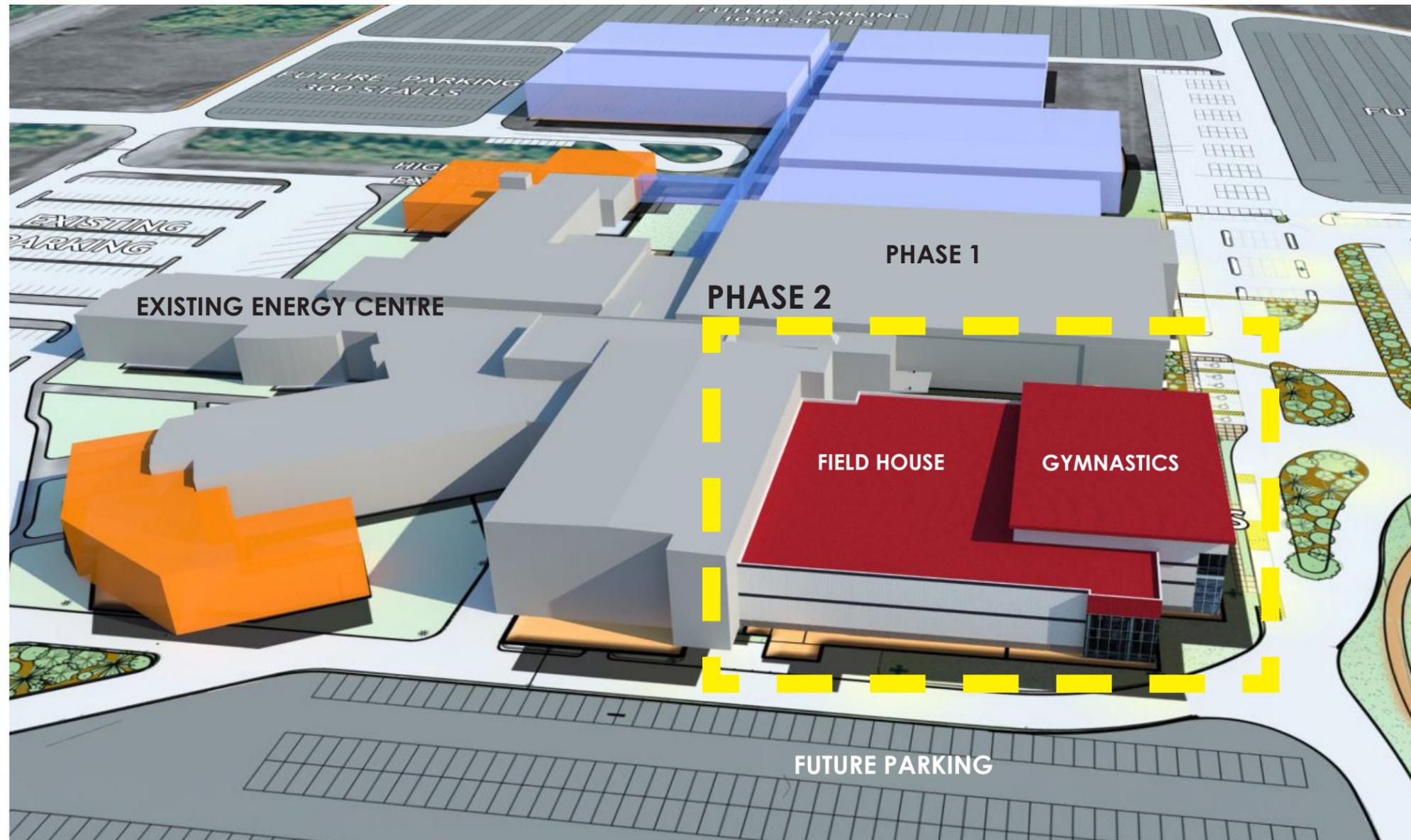
**3.1 PLANNING CONCEPT & SIGNIFICANT LANDMARKS**



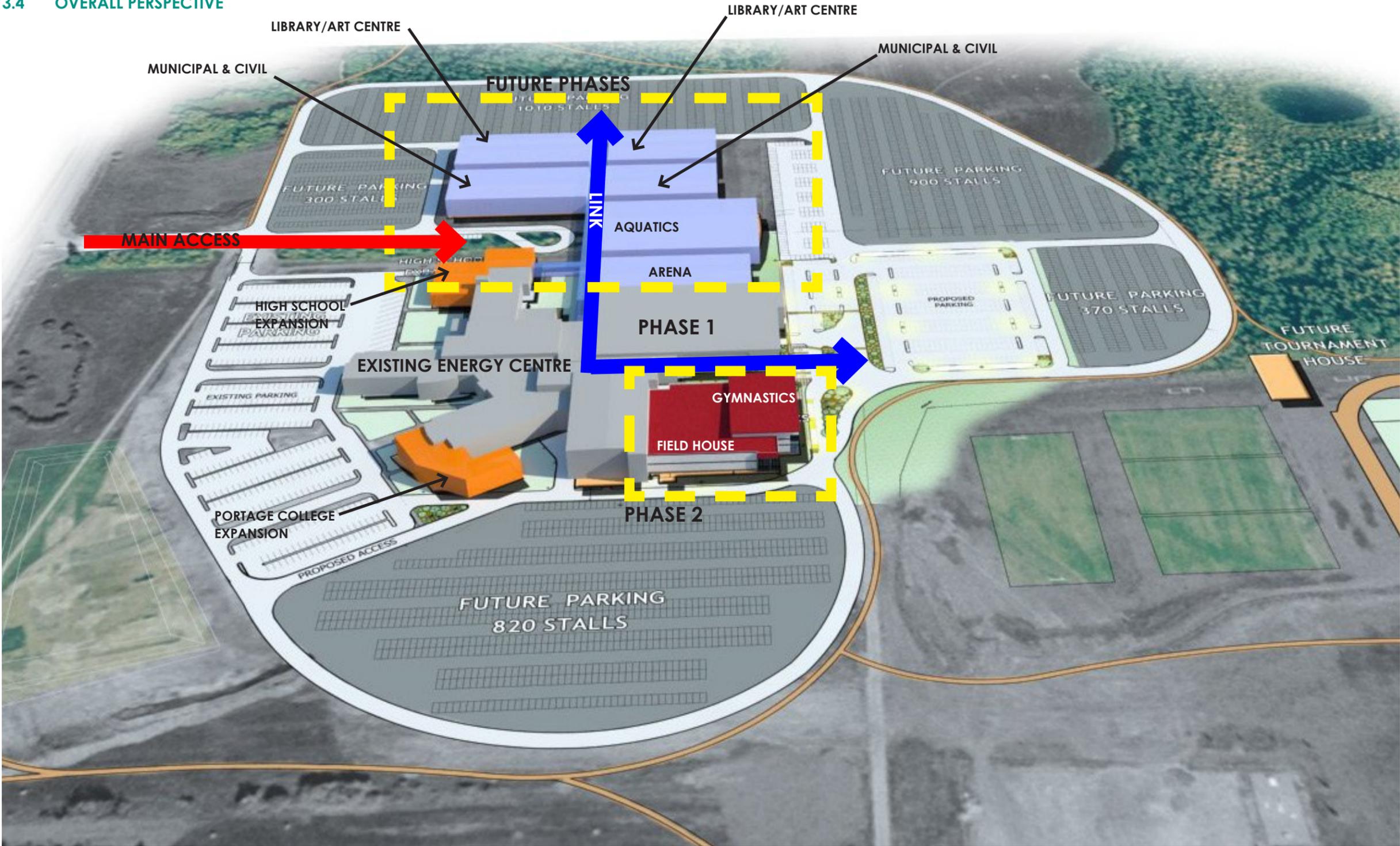
3.2 ACCESS, VEHICULAR CIRCULATION & PARKING



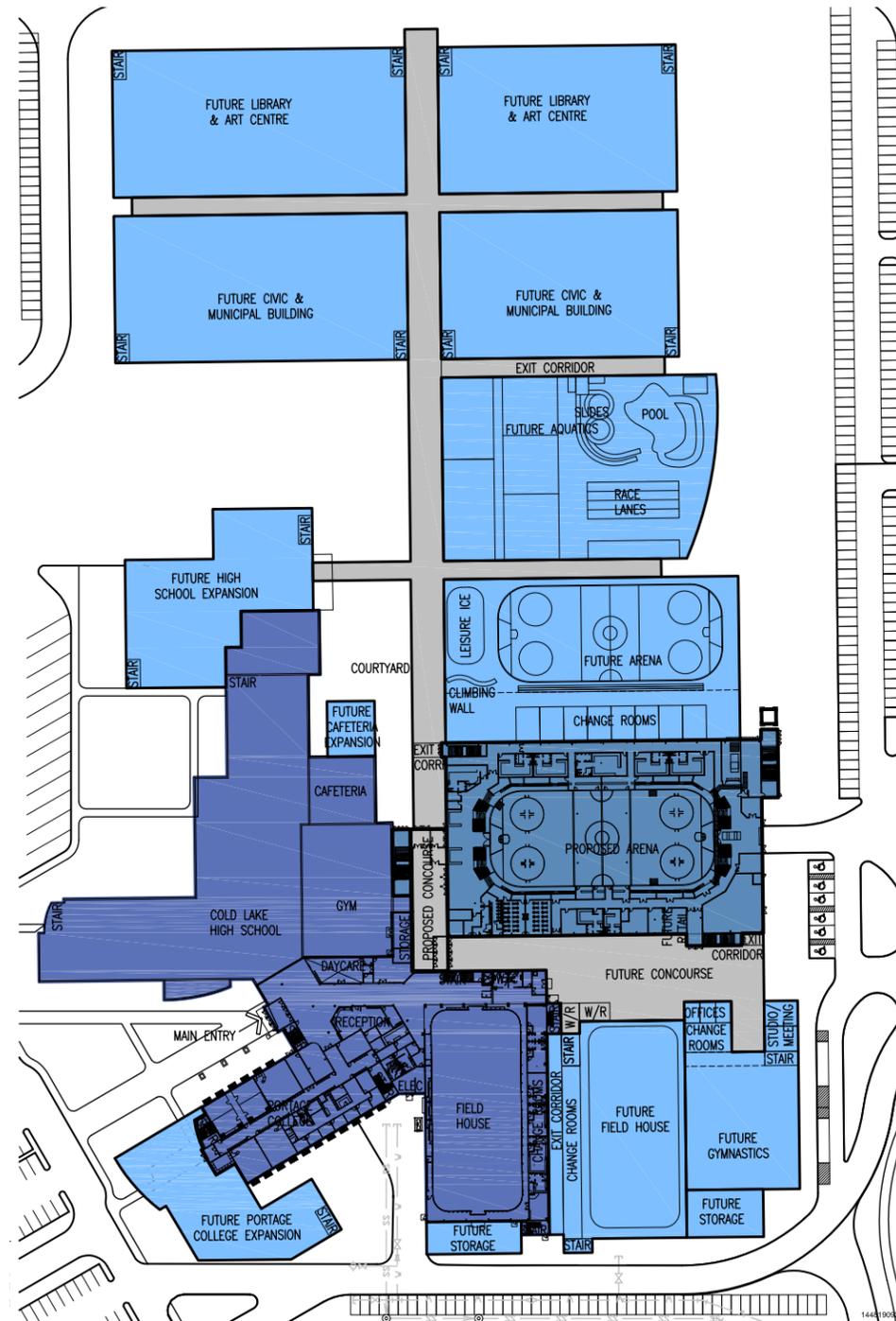
## 3.3 FIELD HOUSE & GYMNASICS CENTRE LOCATION



3.4 OVERALL PERSPECTIVE



### 4. PROPOSED LAYOUTS



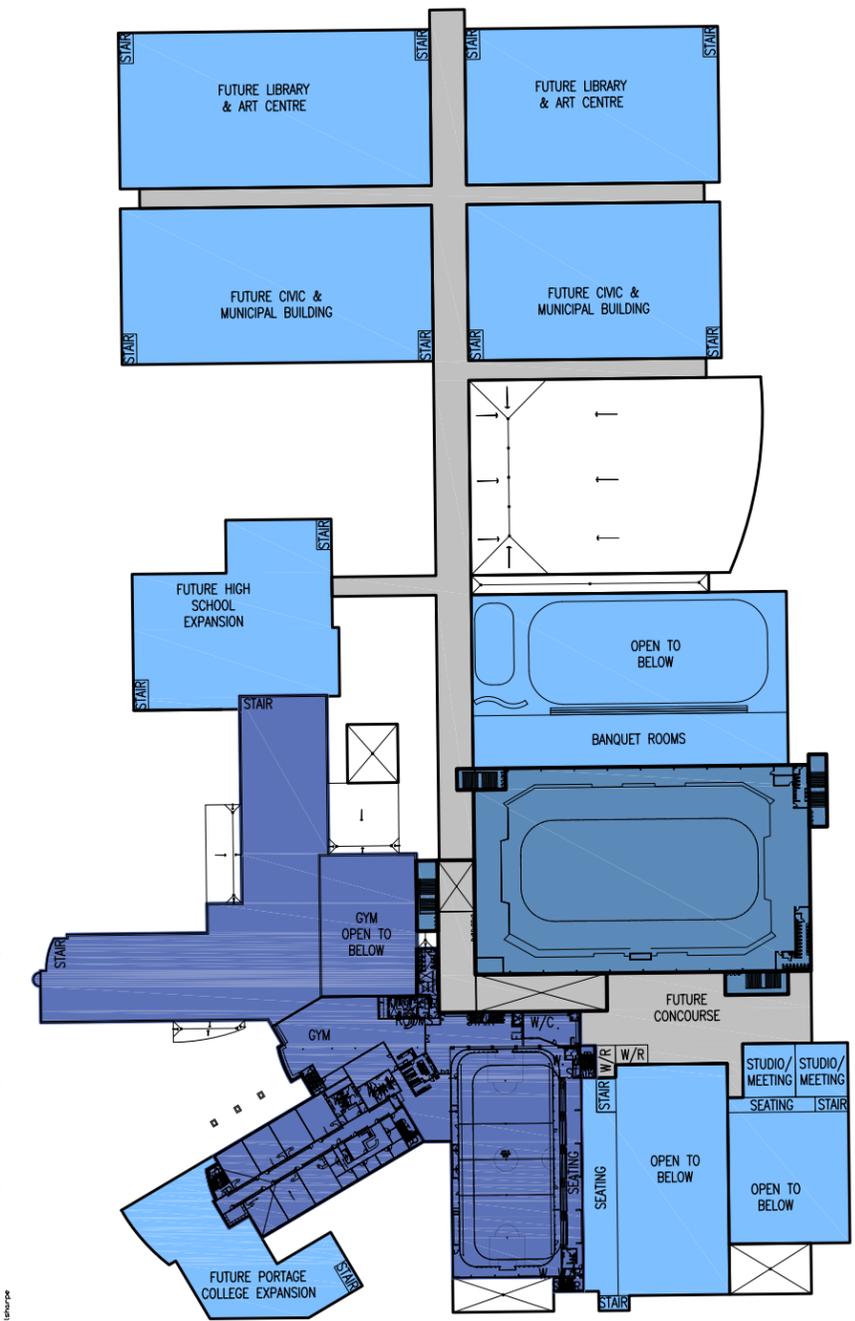
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- LEGEND**
- EXISTING BUILDING
  - CORE CIRCULATION
  - PROPOSED ARENA DEVELOPMENT
  - FUTURE BUILDING

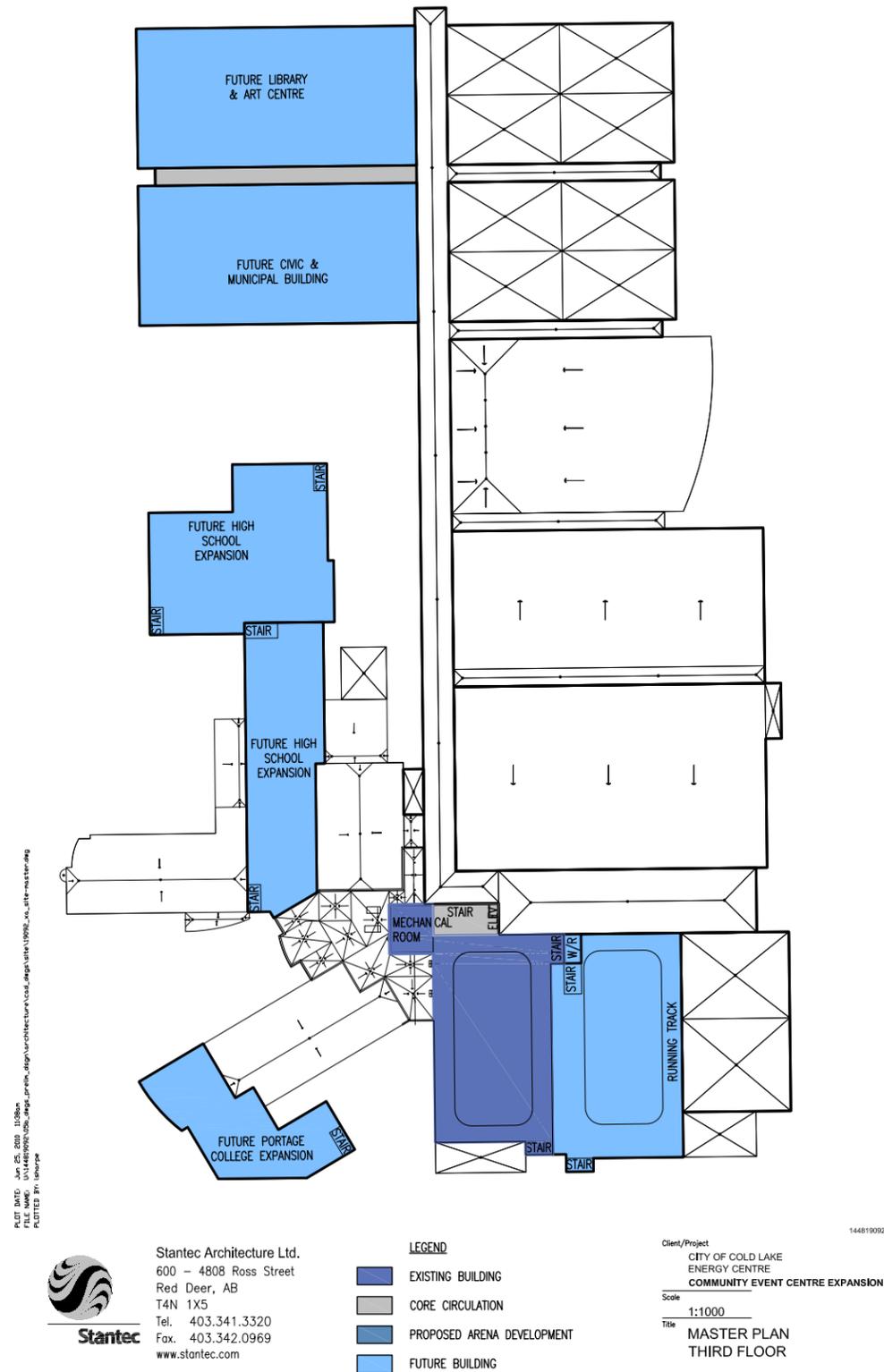
Client/Project  
CITY OF COLD LAKE  
ENERGY CENTRE  
COMMUNITY EVENT CENTRE EXPANSION  
Scale  
1:1000  
Title  
MASTER PLAN  
MAIN FLOOR



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Client/Project  
CITY OF COLD LAKE  
ENERGY CENTRE  
COMMUNITY EVENT CENTRE EXPANSION  
Scale  
1:1000  
Title  
MASTER PLAN  
SECOND FLOOR



6. OPINION OF PROBABLE COST



January 18, 2011

Doug Parrish ACP MCIP
General Manager of Public Services
City of Cold Lake, AB.
Ph: 780-594-4494 ext. 7929
Fx: 780-594-3480

Re: Cold Lake Energy Centre Master Plan Budget Update for Future
(Field House, Gymnasium, Arena and Aquatics Centre)
Cold Lake, AB

Dear Doug,

We are pleased to present budget numbers for the future Cold Lake Energy Centre Master Plan based on Site Plan S-1 and Site Plan notes provided by Stantec Architecture Ltd. These budget numbers are based on historical costs of similar type construction as well as best guess interpretation of intent. There has been no inclusion for material and labour escalation or unexpected/unforeseen events.

Budget numbers have been extrapolated from previous projects that included the Cold Lake Community Events Centre Arena (currently under construction), Brooks Arena completed December 2009, North Battleford CUPLEX Field House (currently under construction), Rimbey Aquatics Centre completed April 2010, Foothills Field House – Capital Cost Projection, and Hanna Community Services Building completed July 2010.

The following building budgets are a result of the costing exercise.

It should be noted that the costs for the associated parking areas have been derived from the existing Community Events Energy Centre construction costs and are included in the Asphalt square foot numbers. The additional concourse area costs include the associated parking stall count.

General Condition costs are based on current construction forecasts from the Cold Lake Energy Centre Arena currently under construction.

Future Cold Lake Arena 54,906 SF \$15,850,000 excl. G.S.T. or approx. \$288.77/ft2

- 1. Includes additional fill material due to lower grade.
2. Includes provision for small artificial ice area.
3. Includes for Climbing Wall.
4. Includes 20,880 ft2 of Connector link area
5. Includes Skybox Lounge
6. 510 Parking Stalls

Future Aquatics Centre - 40,350 SF \$21,148,000 excl. G.S.T., or approx. \$524.12/ft2

- 1. Includes approx. 17,502 sf of connector link area.
2. Includes addition fill due to lower grade.
3. Includes for pool equipment – slides, wave pool, lazy river, etc.
4. 225 Parking Stalls

Future Field House - 41,230 SF \$9,433,000 excl. G.S.T., or approx. \$228.80/ft2

- 1. Includes approx. 14,360 sf of connector link area.
2. Includes Running Track
3. 341 Parking Stalls

Future Gymnasium - 18,292 SF \$5,893,000 excl. G.S.T., or approx. \$322.16/ft2

- 1. Includes approx. 8,920 sf of connector link area.
2. 170 Parking Stalls

Additional Costs Anticipated

Water Main through site

Approximately 127lm of water line to relocate due to elevation changes would cost approximately:
\$61,000

Gas Main through site

Re-locate 930 lm of existing gas line for an approximate cost of:
\$250,000

These items would have to be completed prior to the Aquatics centre Start.

Exclusions

- Design Consultants Fees
G.S.T.
Contingency
Winter Conditions
Hazardous, deleterious or buried material

# COLD LAKE ENERGY CENTRE

## MASTER PLAN REPORT

We trust this meets with your approval and we look forward to working on your project.

Sincerely,  
**Scott Builders Inc**



Rick Henderson C.E.T., GSC, Associate QS, LEED AP™  
 Chief Estimator

- CC: Kent O'Conner, Project Manager SBI
- CC: Hans te Stroete, Vice president Business Development, SBI
- CC: Doug Parrish, City of Cold Lake
- CC: Graeme Leadbeater, Stantec
- CC: Dinesh Burad, Stantec

**COLD LAKE ENERGY CENTRE MASTER PLAN**  
 DRAFT

18-Jan-12

	Future Cold Lake Arena	Future Field House	Future Aquatics	Future Gymnasium
Cost/Budget	\$ 13,633,791	\$ 7,997,383	\$ 19,313,528	\$ 5,001,033
Gross Floor Area - SF	54,906	41,230	40,350	18,292
Site - M2	15,300			
Duration	14 mos	10 mos	24 mos	10 mos

Description	Future Cold Lake Arena	Future Field House	Future Aquatics	Future Gymnasium
GE	\$ 30.60	\$ 29.10	\$ 71.38	\$ 76.53
Sewer	\$ 8.40	\$ 1.00	\$ 1.00	\$ 2.25
Dewatering	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.10
Sitework	\$ 7.25	\$ 7.25	\$ 7.25	\$ 7.25
Bollards	\$ 0.11	\$ 0.11	\$ 0.11	\$ 0.25
Landscaping/Fence	\$ 1.00	\$ 1.00	\$ 1.00	\$ 5.00
Asphalt/Gravel	\$ 27.87	\$ 24.82	\$ 16.72	\$ 27.88
Curbs/Sidewalks	\$ 4.75	\$ 4.75	\$ 4.75	\$ 4.75
Car Plugs	\$ 0.40	\$ 0.40	\$ 0.40	\$ 2.00
Crossings	\$ -	\$ -	\$ -	\$ -
Temp Barriers	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.04
Formwork	\$ 7.00	In conc supply	In conc supply	In conc supply
Rebar	\$ 5.37	In conc supply	In conc supply	In conc supply
Conc Supply	\$ 5.50	\$ 13.00	\$ 35.00	\$ 25.00
Conc Accessories	\$ 8.20	In conc supply	In conc supply	In conc supply
Pre-Cast	\$ 7.50	In conc supply	In conc supply	In conc supply
Masonry	\$ 15.00	\$ 12.00	\$ 15.00	\$ 20.00
Pre-Engineered Bldg	\$ 20.25	\$ 22.00	\$ 22.00	\$ 25.00
Struct & Misc Steel	\$ 18.30	\$ 15.00	\$ 15.00	\$ 5.00
Millwork/Carpentry	\$ 2.15	\$ 0.85	\$ 5.00	\$ 0.85
Thermal & Moisture	\$ 9.25	\$ 7.25	\$ 12.00	\$ 7.25
Doors/Windows	\$ 7.50	\$ 3.50	\$ 10.00	\$ 3.50
Drywall/ACT	\$ 3.80	\$ 11.00	\$ 15.00	\$ 11.00
Flooring	\$ 2.25	In above	In above	In above
Painting	\$ 1.82	In above	In above	In above
Specialties	\$ 1.25	\$ 2.80	\$ 2.00	\$ 3.50
Equipment	\$ 2.10	\$ 6.25	\$ 200.00	\$ 15.00
Audio Visual	\$ 1.65	N/A	N/A	N/A
Dasher Boards	\$ 2.35	N/A	N/A	N/A
Seating	\$ 0.50	\$ 0.50	\$ 1.00	\$ 2.00
Rink Floor	\$ 4.90	N/A	N/A	N/A
Acoustics	\$ 1.80	N/A	N/A	N/A
Elevator	\$ -	\$ 2.10	\$ -	\$ -
Mechanical	\$ 28.00	\$ 21.00	\$ 29.00	\$ 21.00
Electrical	\$ 11.45	\$ 8.25	\$ 15.00	\$ 8.25
Sub Total	\$ 248.31	\$ 193.97	\$ 478.65	\$ 273.40
Total from Above	\$ 13,633,791	\$ 7,997,383	\$ 19,313,528	\$ 5,001,033
ADDERS				
Connector Link Area	\$ 2,088,000	\$ 1,436,000.00	\$ 1,750,200.00	\$ 892,000.00
Additional Fill	\$ 38,635		\$ 84,359.32	
Synthetic Ice	\$ 50,000.00			
Climbing Wall	\$ 45,000.00			
<b>Total</b>	<b>\$ 15,855,426</b>	<b>\$ 9,433,383</b>	<b>\$ 21,148,087</b>	<b>\$ 5,893,033</b>
Cost/ft2	\$ 288.77	\$ 228.80	\$ 524.12	\$ 322.16



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**Stantec** Architecture

