## Site Concept Plan



## Design Methodology and Considerations

The project is being executed using Design, Bid, Build construction methodology.

Construction of the recreation complex will incorporate, where economically feasible (considering both operating and capital cost), options that will lessen the impact of the building on the environment. Some of the items that are being considered include:

- Solar panels
- Energy efficient lighting (LED, natural light)
- Use of storm water ponds for on-site irrigation
- Drought resistant grass species on sport fields.
- Recycling of heat generated from ice plants to provide heat in other areas of the building (including future aquatic centre).

The recreation complex will be constructed to follow LEED<sup>®</sup> principles. Designing facilities in the most environmentally friendly way possible can lead to significant reduction of the environmental impacts of construction and operation. It can be more costly in terms of capital; therefore, detailed cost-benefit analysis may be required prior to ultimate decision making on some mechanical and facility design decisions. Other green design principles, such as ensuring facility patrons have transportation options (e.g. future public transit, active transportation) and associated support amenities (e.g. bike racks) and design to promote physical activity (i.e. making stairwells more appealing alternatives to elevators) should also be considered in community facility provision.

The facility will also need to be designed in such a manner that is appropriate to the site.

• Geo-thermal heating.

