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Item No. 4

**Halifax Regional Council
September 23, 2008
Committee of the Whole**

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY: 

Wayne Anstey, Acting Chief Administrative Officer

DATE: July 22, 2008

SUBJECT: **Mainland Common Masterplan - Review and Update**

ORIGIN

- 1992 Mainland Common Master Plan (Robert Parker and Associates)
- 1998 Major Recreation Complex Report (Burke/Oliver Consultants Ltd)
- 2004 Indoor Recreation Facility Master Plan Report
- August 12, 2008 - Council approved Mainland Common Centre Project
- August 20, 2008 - Open House Mainland Common Draft Masterplan

RECOMMENDATION

It is recommended that Regional Council approve the update to the 1992 Mainland Common Master Plan as attached to this report.

BACKGROUND

Mainland Common Masterplan

The Mainland Common is a municipally owned land assembly in Mainland North Halifax. The undeveloped lands were purchased to provide for the recreation needs of the former City of Halifax. The original Mainland Common Masterplan was approved by Halifax City Council in 1992 and reflected a number of conditions at that time. In general, the plan;

1. was to be implemented as needed over a fifty year period and reflected an anticipated build out of the surrounding community (Clayton Park West) of 30 years past the plan's adoption.
2. did not take into account present or future recreation facilities in adjacent communities and assumed that all recreation investment by the City of Halifax should be located within its boundaries. The Mainland Common was one of the last locations which remained within the boundaries of the former city able to meet those recreation needs.
3. reflected demographic and recreation trends as well as facility standards of the time.
4. assumed a stable status quo condition for schools, libraries, recreation centres and other public facilities in the community.
5. stated there needed to be a balance of active and passive recreation to provide for community needs
6. recommended buildings and infrastructure should be of a high quality and be linked by a language of common materials and standards
7. established itself as a guide post by which to evaluate future needs and opportunities of the community

The result was that the plan, while good in principle, was both ambitious and crowded. It did acknowledge that the identified uses reflected the needs of the day and there would be opportunities to substitute one use for another. It did not reflect the wholesale change in demographics that has occurred, nor the substantial changes in recreation trends (Burke Oliver Report). Importantly, it did not;

1. foresee the complete build-out of Clayton Park West within twelve years (as opposed to the anticipated thirty year build-out) nor the final configuration of that community which in 1992 was an undeveloped woodland.
2. recognize the willingness of users to travel between communities to utilize facilities (Indoor Recreation Facilities Masterplan).

3. anticipate municipal amalgamation and the efficiencies gained by all facilities in Halifax County being part of one system and operated by one municipal unit,

Since amalgamation, Regional Council has acted to place a number of much needed public facilities on the Mainland Common which were not envisioned at the time of the plan adoption. These include Halifax West High School, a double all weather field (the equivalent of six natural turf fields), the Keshan Goodman Library, and an indoor soccer facility which was built as a temporary structure with a limited lifespan on the site of a more ambitious soccer building . These developments have been substitutions for other built structures or outdoor facilities which are not in high demand or can be accommodated elsewhere in HRM. Often final location of these new buildings within the Common was driven by servicing and cost limitations associated with the site.

Staff undertook an internal review of the 1992 Mainland Common Masterplan. The objective was to update the plan, to record currently built facilities and develop an approach reflecting the need for flexibility within a rapid growth area and the requirements of a much expanded catchment area. The plan review approach was to append the original plan thus permitting retention of the principles and direction of the 1992 study.

DISCUSSION

Mainland Common Masterplan Review

The 2007 review of the Mainland Common Masterplan (Attachment 1) has found that the intent and principles of the original 1992 Masterplan have remained intact. A few of the more important principles are:

1. strategically locating facilities located within one of the fastest growing areas in the core area of Halifax (HRM)
2. facilities accessible by major highways, arterial routes and transit to serve the larger region
3. a balance of passive and active recreation separated into designated areas
4. widely spaced public buildings set in a campus like arrangement
5. use of similar high quality materials for buildings (with the exception of the current Soccer Nova Scotia Building)
6. protection of remaining environmentally sensitive areas
7. retention of a natural woodland character over a designated portion of the site
8. a traffic pattern which does not impact established communities
9. property acquisitions related to an entrance to the west and to the south
10. divestment of surplus lands to fund necessary infrastructure and servicing needs of the common.

The plan review recommends that Council anticipate future needs of the community and the region by articulating locations for “Opportunity Sites” rather than being as entirely definite in its uses as

the 1992 Masterplan was. To that end the revised plan provides opportunities for:

1. expansion of the Keshan Goodman Library
2. expansion of Halifax West High School
3. Mainland Common Centre Complex

Defined but unclaimed opportunity sites could also accommodate future:

1. Ice Rinks
2. A 50-meter pool
3. A larger Indoor Soccer Facility
4. Improved vehicular and public transit circulation through the site

As well as sites for other unforeseen recreation needs of the citizens of HRM.

BUDGET IMPLICATIONS

There are no budget implications associated with this recommendation at this time. Council is being asked to approve an update to the 1992 Mainland Common Plan. Any future projects on the site would be subject to Council approval through budgeting processes.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

Recommendation 1 - Council could choose not to append the Mainland Common Masterplan Review to the 1992 Mainland Common Masterplan but rather engage in a full planning exercise to develop a new plan for the Mainland Common. This is not recommended because the review by staff and public input through the Open House on August 20th as well as the Community Facility Masterplan process is deemed to be sufficient.

ATTACHMENTS

Attachment 1 - Mainland Common Masterplan Review Final Report

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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Chapter 1: Introduction

1. Scope

This project is an interim update to the Mainland Common Master Plan prepared in 1992 for the, then, City of Halifax. The reason and timing for this update is threefold.

- I. The previous 1992 Master Plan, for numerous reasons, has become outdated and many of the recommendations are no longer appropriate. Guided by the previous planning concept, how can we respond to a changing context and program by building on the infrastructure and facilities that have been put in place? How can we preserve areas for passive recreation and environmental sensitivity?
- II. Pressure to incorporate new public facilities and uses requires a careful investigation to determine the capacity and capability of the Common to accommodate the wish list of new uses.
- III. Finally, given the immediate program for requested new facilities in the Common, where are they best situated and in what

configuration? What are the opportunities and limitations? What needs to be protected? What is the carrying capacity of the Common for new facilities?

Ekistics and **DSRA Architects** were retained by HRM to prepare this interim update. The team met with key members of HRM staff on several occasions to discuss recreational needs and requirements, and to determine development opportunities and constraints. This report presents our site analysis, a revised program, and our recommendations for the Mainland Common.

One of the challenges is that needs of the municipality are constantly changing. Therefore the plan must remain flexible enough to accommodate these possible eventualities.

2. Background

2.1. Natural History of the Mainland Common

The Mainland Common encompasses 160 acres situated in a coastal lowland of heavily glaciated

terrain littered with erratics and consisting of quartzite ridges intervening poorly drained swamps and swales. The area lies on the contact between quartzite and slate bedrock units. In addition, the area is adjacent to the South Mountain Batholith, so there are areas of exposed granite bedrock on-site. The bedrock may be covered by a thin mantle of coarse-textured till, but in many places bedrock and glacial erratics are exposed on the surface.

Soil in this area is well-drained and stony, and is part of the Halifax soil series. In low areas of restricted drainage, the soil may be poorly-drained; classified as the Danesville series.

In well-drained areas, vegetation associations may include American Beech, Yellow Birch, Red Maple, White Birch, Red Spruce, White Pine, Balsam Fir, and Sugar Maple. In more poorly-drained areas, White Birch, Tamarack, Black Spruce, Poplar, and Alder dominate.

Wetlands on the site occur mainly along the drainage courses which bisect the site. When the site was purchased by the City of Halifax, it was still in a relatively natural state. Evidence of human activity included woodlot tree-cutting, some trails, and several camp sites.¹

Hydrology:

The Mainland watershed is about 68 acres in size at its outfall on Lacewood Drive, with an average basin slope of 0.079, a basin length of 3627', a maximum flow distance of 4550', and a perimeter of 13,000'. Currently, much of the watershed is in a relatively natural condition. A low-lying wetland is located near the basin centroid. A second wetland is located 200' downstream of the first wetland, and a small brook joins the two wetlands. The brook has no defined path through the first wetland but water exits in the second wetland in a defined channel which subsequently empties into an engineered armour-stone

retention area in front of the new library. There are no fish in these watercourses as a result of past urbanization stormwater practices. The stream channel has an average width of about 5' and a bankfull depth of about 10" on average. The channel follows a deranged drainage pattern through bedrock cobbles and a relatively wide floodplain. As is the case for most rivers, bankfull discharge is exceeded on the 1Q1.5 (1.5 year, 24 hour) recurrence interval. Much of this lower valley can be considered riparian fringe about 200' wide. The riparian fringe is inhabited by a broad representation of high quality vegetation.

Stormwater Management

In 2001, Ekistics was retained by HRM to complete a stormwater assessment of the Mainland Common watershed and the impact of the new Mainland Common School on stormwater flows. In particular, they commented on the capacity of the storm sewers in front of the library where a double catch basin (with 2.1 sq.ft. grate openings) is located in the bottom of a dry detention pond. This area in front of the library marks the outflow of the Mainland Common watershed. The surcharge height of the pond is about 12' and it provides 3,800 cu.yd's of detention.

The report found that:

*"assuming 50% clogging, these two catch basins will pass up to **40 cfs** (total) at surcharge depth. The catch basins pass discharge through a 36" conc. storm sewer. Assuming that the slope of the pipe is 2%, the storm sewer allows about **94 cfs** of discharge. So the 36" pipe is not the limiting criteria."*

Using a TR-55 model to predict the impact of the new high school, the consultants found that *"the 100-year pre-development peak discharge is **40 cfs** while the 100-year post-*

¹ Mainland Common Master Plan, Robert Parker Associates Ltd., 1992.

development peak discharge is **53 cfs**. The 5-year pre-development peak discharge is **7 cfs** while the 5-year post-development peak discharge is **12 cfs**. While the post-development run-off for the 100-year event (53 cfs) exceeds the capacity of the grate inlets at 50% clogging (40 cfs), the existing detention pond should provide adequate storage to minimize surcharging for the 100 yr event. This assumes that the pipe systems downstream of the 36" concrete pipe can handle the 40 cfs flows."

Clearly, stormwater management will be an important consideration for future development in the catchment. **All future developments should maintain pre-development hydrological conditions by implementing stormwater practices which emphasize sound stormwater management techniques.**

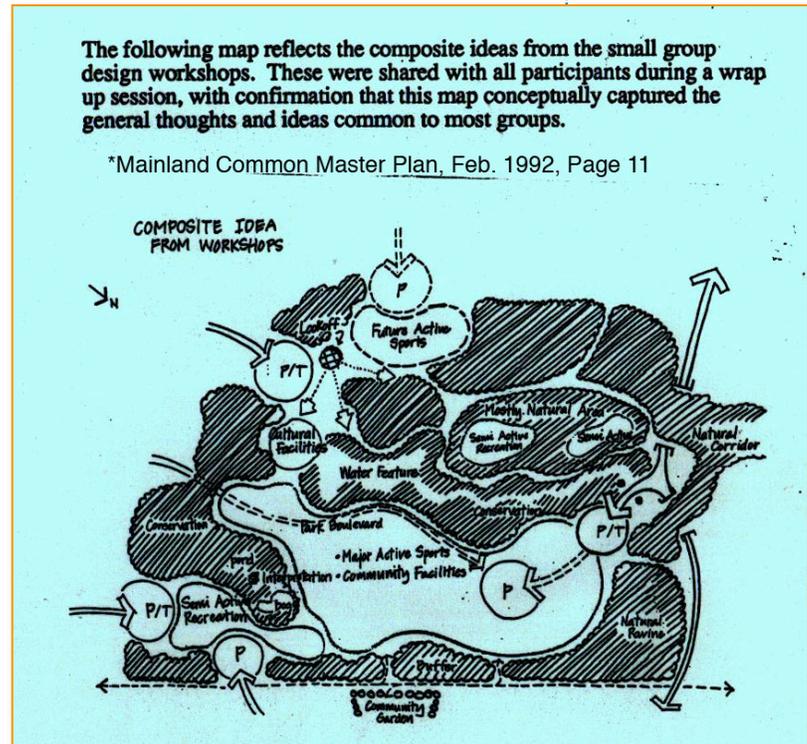
2.2. Recreation Planning

In 1985, the City of Halifax prepared a Mainland Common Study which anticipated the need for community recreation and open space in the rapidly expanding neighbourhoods west of Fairview (what is now Clayton Park). As a result, about 160 acres of land were purchased in the Mainland North planning area to serve not only the expanding residential neighbourhoods, but the entire City of Halifax and the broader region.

In 1992, Robert Parker Associates Ltd. completed the **Mainland Common Master Plan** for the City of Halifax. This document outlined a vision for the Mainland Common as a central location for sport, recreational, cultural, and nature appreciation activities for the City. An extensive public consultation resulted in agreement that a successful design would balance active uses with passive uses and conserve as much of the natural environment as possible. In addition, the common would be accessible to people of all levels of ability and income. These agreements were reflected in a

conceptual plan resulting from the public design workshops (see **figure 1.1**).

figure 1.1. Mainland Common masterplan 1992.



The report recommended a three-phase, 50 year master plan of development to complete the necessary infrastructure to support the proposed activities.

In 1998, Burke/Oliver Consultants Ltd. completed a **Recreation Needs Assessment and Siting Study** for the Halifax Regional Municipality. The purpose of the study was to determine recreation needs for the HRM and identify a site for a major recreation complex. Based on public consultation, the study recommended against a single multi-purpose facility. Instead, most recreation facilities should be distributed to local centres. Other facilities that are more expensive to build and operate would be located in a location optimal for regional use; the Mainland Common. These central facilities would include an arena, a pool and fitness centre, and a library. The study recognized a growing interest in walking as a recreational activity with a proposed fitness trail and connection to a regional trail system.

The **Halifax Regional Plan** (30 November 2005) does not speak directly to the Mainland Common, but it does set the framework for park development and environmental protection in the HRM. The plan *“aims to foster the development of an integrated system of natural areas, parks, trails and corridors to maintain ecosystem health and preserve HRM’s quality of life.”* Emphasis is placed on a network of connected open space that serves many functions. *“The parks serve the recreation needs of a growing population and the trail system, which is developing throughout*

In addition to concern about stormwater management, the Regional Plan also recognizes the function of stream corridors as wildlife habitat.

Alternative modes of transportation are also supported by the Regional Plan; trail systems are important not only to link open spaces, but as elements of active transportation, linking outdoor recreation areas, communities, employment areas, and public transit centres.

The Burke/Oliver report suggested a change in direction for the

Mainland Common, but other changes have also occurred. Planning for surrounding land uses is more complete. The construction of Lacewood Drive is finished and the extension of Parkland Drive, a collector road, gives access to the western side of the common lands, and will eventually extend to Dunbrack Street, intersecting at a point south of Main Street. Several facilities have also been built in the Common. The library recommended in the Burke/Oliver report has been built; part of the common land has

been dedicated to use by the new Halifax West High School; and an indoor soccer training facility has been built. In addition, minor changes in the boundary of the common have been made as community planning for the area has developed. The Regional Plan places greater emphasis upon the trail system as part of a park system and as an integral component of an active transportation

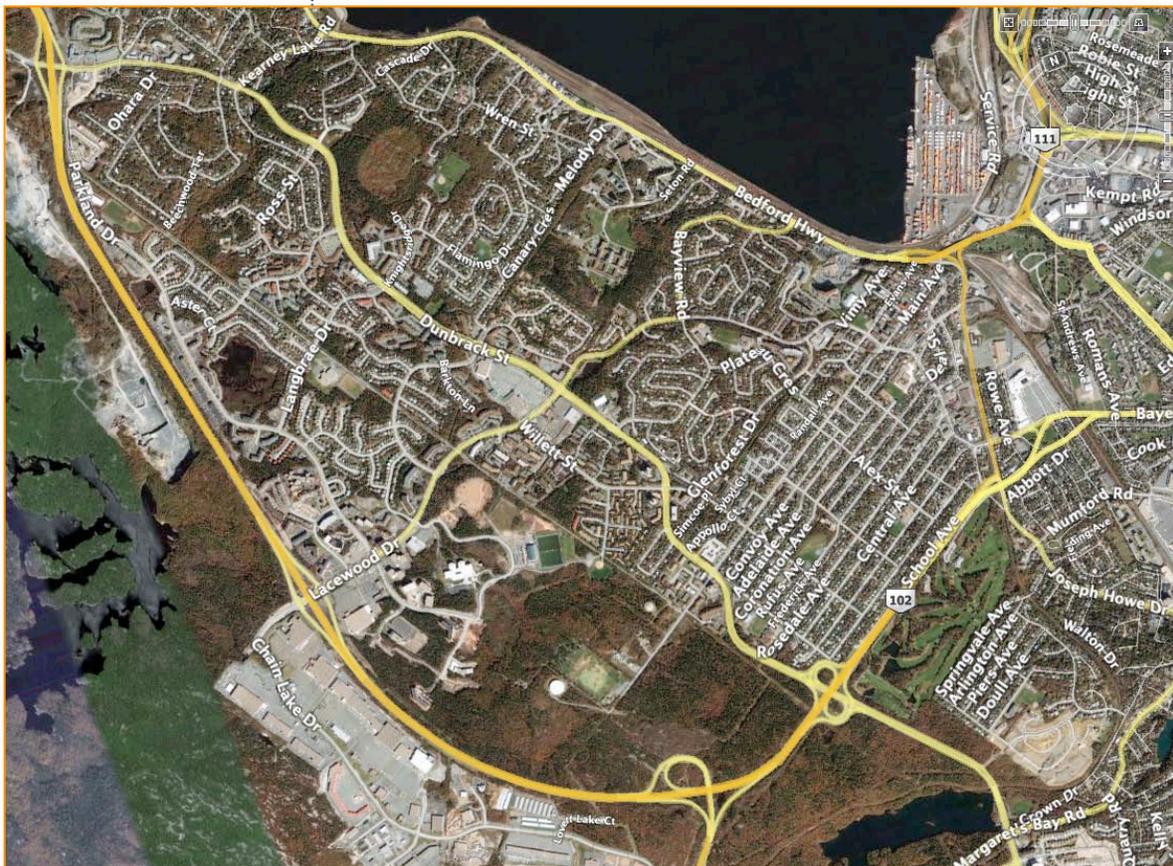


figure 1.2. Site Context

HRM, provides critical linkages between communities and these outstanding natural and historical features which serve HRM.” Municipal parks are spaces dedicated to recreation and leisure pursuits. The Regional Plan gives emphasis to the protection of water resources by preserving wetlands and watercourses, and buffer zones around them. To be effective, vegetation and soil within buffer zones should be protected.

system. The Regional Plan also places emphasis on environmental quality, particularly regarding stream corridor protection.

In 2004 a site suitability analysis was carried out by HRM planners and again separately that same year by Sperry and Partners. The rationale for site selection and eventual findings have informed this study.

Finally, current interest in hosting the Canada Games requires an analysis of the extent to which the Mainland Common can respond to facilities requirements for these events.

2.3. Moving Forward

The Mainland Common Master Plan provided a good starting point for planning the Mainland Common, but the changes discussed here indicate the need for revisions to the plan. The program and site plan must be reconsidered based on changes in recreational needs, changes to the common and its context, and a changing approach to recreation planning.

3. Study Method

In consultation with the Steering Committee, the study approach for this project was developed to:

1. Agree on a general approach to this review of the Mainland Common Plan;
2. Identify potential recreational uses and their site requirements;
3. Review site suitability for potential uses, with consideration of context;
4. Identify planning principles and guidelines;
5. Articulate a vision for the Mainland Common;
6. Prepare conceptual plans for future development of the Mainland Common; and
7. Document the work in a brief report.





Chapter 2: Approach

1. The Starting Place

Previous planning work on the Mainland Common provides a good foundation for the current work. This is intended to be an update of the existing plan that is necessitated by changes in context and program.

From the Parker Plan (1992), we have several important starting places. It is built upon an excellent site analysis, which identifies opportunities and constraints for recreational development. The public consultation provided a prioritized list of desired uses and a conceptual plan, which can guide the current work. The concept plan was informed by community agreement on a few essential approaches. First, there should be a balance between development and natural areas that ensures human enjoyment and protection of environmentally sensitive areas. Second, there should be a balance between programmed and casual active recreational areas. Third, the common should be accessible to all.

The Burke/Oliver report contributes the idea that the Mainland Common is the optimal location for certain high-cost facilities that, by their nature, must serve the region. **While the parks regional role is important, the Mainland Common should also serve the surrounding local community and should be connected to the surrounding neighbourhoods and the region through a regional trail system.**

Several site suitability reports have also been reviewed and incorporated as part of this project including the 2004 Sperry & Partners assessment and the 2004 HRM Site options Analysis summary report for the Mainland Common Recreation Centre.



The HRM Regional Plan reinforces the need for an integrated park system that includes parks, connecting trails, and corridors to protect ecosystem health. It also emphasizes the idea that healthy natural systems and access to open space are necessary to the preservation of the quality of life in our communities.

Hosting the Canada Games offers a new opportunity for facility development, as well as guidance in facility programming and design.

The challenge with a report of this nature is that today's facility program may change in the future, rendering some of the findings and recommendations in this report obsolete (as was the case for the 1992 report). The other challenge is that the order of development (facility phasing) may also alter the site suitability of future facilities due to proximal synergies between facilities. These challenges aside, this exercise provides a useful roadmap for the eventual development and preservation of the Mainland Common.

b. Regional Plan

As noted, the Regional Plan emphasizes the need to foster and develop a fully integrated park system to promote, preserve, and enhance the quality of life within the Halifax Regional Municipality. This park system will encompass a comprehensive system of parks, connecting trails, and natural wildlife corridors.

The Regional Plan also stresses the importance of sustainability to ensure the viability of municipal infrastructure. Based upon Clayton Park's mix of low to medium population and retail density, this area (which includes the Common) has been identified as a Suburban Local Centre.

Through their conglomeration of allied activities, Suburban Local Centres such as the Mainland Common, will provide a focal point for these recreational activities for both the immediate neighbourhoods and adjacent Regional areas.

Basic criteria to determine the location and the subsequent development of significant recreational amenities should include:

- Sustainability with respect to appropriate population densities,
- Appropriate local and regional demographics, and
- Potential to enter management agreements with external partners

The Mainland Common's strategic location between the existing recreational facilities in Bedford and the Peninsula, provides justification for the site to receive significant amenities proposed. Additionally, the Common's proximity to the Halifax West High School, the Keshen Goodman Public Library, and the **new soccer facility** within the site itself serve to amplify its potential as a centralized recreational area.

To this end, the Mainland Common proposed site program of a pool, an arena, an upgraded soccer facility, and a fieldhouse is warranted. The need to move forward with these amenities has been accelerated by the Canada Games, as well as tremendous growth in the area.

3. Site Suitability

3.1. Constraints

The Mainland Common Master Plan (1992) includes a suitability analysis that is largely based on physical and biophysical factors. Since then, the Common itself has changed with the introduction of several facilities and roadways. The context has also changed, as Lacewood Drive has been completed and Thomas Raddall Drive and Regency Park Drive extend into the study area. Detailed planning for most of the surrounding lands has also been completed.

With some revision to show later developments, and the addition of contextual information, the Mainland Common Master Plan (1992) site analysis can serve well as the basis for current site planning.

This site analysis shows areas of varying sensitivity to development, with an emphasis on water features and buffer zones around them. Steep slopes and high quality vegetation are also limiting factors. According to this analysis, about half of the site has good development potential and would be appropriate for major facilities or fields; one quarter has moderate development potential and would be appropriate for low impact activities in a natural landscape; and one quarter has low development potential, or high potential for conservation.

This analysis does not show occurrences of pyritic slate on site, and indications to date suggest that this will not be a problem. However, since there is reason to believe that there might be incursions of this material, appropriate testing should precede any development work. The plan also does not show the extent of the infilling undertaken during the last twenty years with potentially unsuitable foundation materials.

Power Utility

Existing NSPI utility poles extend along Thomas Raddall Drive between Lacewood Drive and Regency Park Drive. Additional utility poles will not be required to service this area, however the proposed facilities could represent a significant load on the existing power plant. All subsequent planning must include an initial analysis of the current system's capacity with respect to projected load of the respective facility.

Water and Sewer

The potential for intense development within the remaining undeveloped Mainland Common lands is extremely limited because of inadequate water supply. Although the Halifax Regional Water Commission maintains a reservoir at the high point in this area of the HRM, the water pressure in the vicinity of the tank is insufficient to provide a safe, reliable service. Essentially, any lands above the 130 m elevation are considered to be unserviceable. Consequently, there is limited available

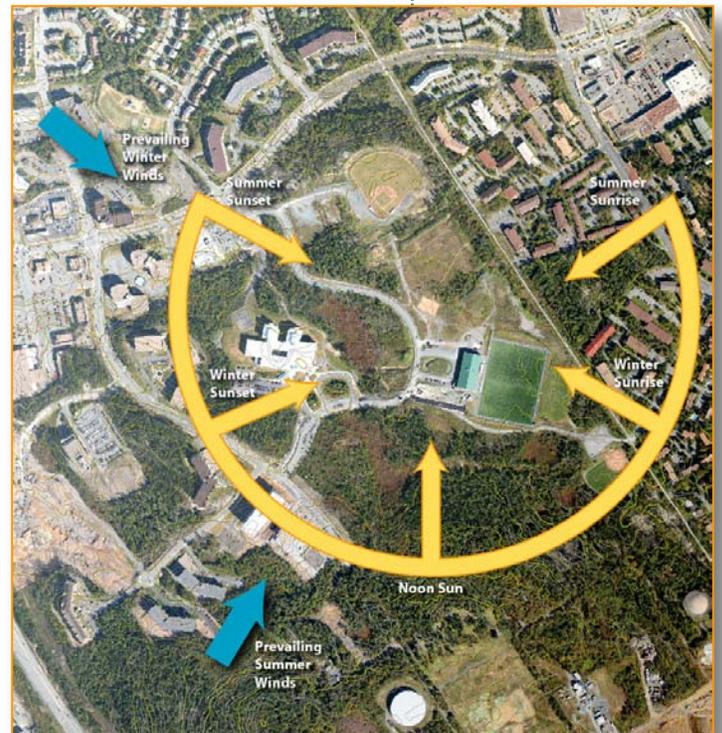


figure 2.1. Site Microclimate

water service for buildings, irrigation, drinking water stations, and other potential potable water requirements within this area.

The sanitary sewer capacity within the vicinity of the Commons is being absorbed by adjacent developments. Although the recent Mount Royal development to the south has opened up access to stormwater and sanitary systems on the east side of Northwest Arm Drive/Dunbrack Street, the downstream capacity within this system will become a limiting factor to the future expansion of facilities within the Common. The sanitary sewer along Lacewood Drive is of sufficient capacity to support development along its frontage. However, as this frontage develops (the new pool complex and recreation facility, and planned commercial development along Lacewood), this system's available capacity will also become a limiting development factor.

Stormwater

The existing wetland system in the Common has been designated as a wetland/watercourse by the Department of Environment and Labour and therefore cannot be used as a stormwater management device.

Stormwater management is considered to present a significant obstacle to any future development that involves significant change to the area's surface water regime. Specifically, any alteration of its infiltrative capacity and time of concentration of stormwater runoff must be carefully considered.

In addition, storm sewer capacity in the Lacewood Drive vicinity is already over-taxed. The introduction of large flows into that system will not be possible without huge investments in new downstream infrastructure through developed lands.

3.2. Opportunities

Street access is available on three sides, from Lacewood Drive, Regency Park Avenue, and Main Avenue. In addition, a major trail passes by the north eastern side of the parkland following the power transmission corridor. Of note, a major regional park is planned for lands to the west of Highway 102. Emphasis in this park will be on preservation and protection of natural heritage, access to fresh water recreational resources, and a large wilderness area.

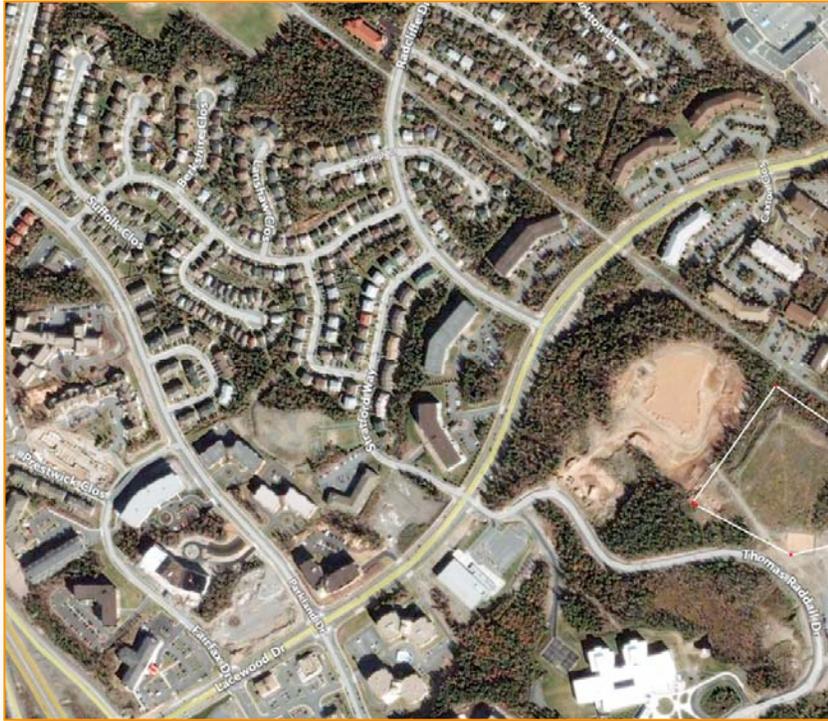
Implementation of earlier plans has begun with the introduction of several facilities and roadways within the Common. Notably, these include the Keshen Goodman Public Library, the **Indoor Soccer facility**, and the new Halifax West High School. Planning is also in progress for the pool and community centre. After some discussion and investigation about the most suitable location, the Lacewood Drive address is accepted as the most appropriate location with accessible services, proximity to bus routes, and visibility on Lacewood.

The opportunity exists to rationalize the Lacewood entrance into the Mainland Common via Thomas Raddall Drive. A signalized access to the Mainland Common via a realigned Thomas Raddall Avenue is a real opportunity.

There is also ample opportunities to preserve the natural landscape to the south east for passive recreation. Since much of this area does not have suitable water pressure for future development, the

area should be preserved as a nature park.

Clayton Park's existing population density, and mix of retail, grocery, and specialized commercial spaces will help make the Mainland Common a social space, similar to Point Pleasant Park and the Halifax Common. This potential will only be amplified by potential local development of new commercial and residential areas.



4. Park Model

There are two approaches for locating new facilities in the Mainland Common. The first approach is the multi-purpose, single roof facility model (e.g.: Cole Harbour Place); the second approach is the campus model approach, where several smaller facilities are placed in the Common. The opportunities and constraints of each approach is presented below.

4.1. Multi-purpose, single roof facility (Cole Harbour Place)

Opportunities

- Provides multi-purpose uses all under one roof, creating synergies between uses and sharing of resources.
- Can be a small cost savings by aggregating uses if the site will accommodate the facility easily. Otherwise, the cost savings are negligible.

Constraints

- Provides challenges for 'single point of sale' or controlled access points to all uses in the building.
- Requires significant, consolidated land area to implement (usually between 12-16 acres).
- Future additions are challenging unless plans for the additions are considered in the original design.
- The amount of parking is considerable, creating a need for a large parking lot surrounding the facility. Walking distances can become excessive for outlying parking stalls.

- Changes in topography make construction and accessibility a challenge.
- The scale of the building and parking is so large that the concept of a facility set amongst nature is challenged.
- Requires the organization and support of all uses which will be incorporated in the facility. This level of organization is a considerable hurdle to single roof facility development.

4.2. Campus Model

Opportunities

- Many independent facilities fit into a park-like setting more easily than one large facility.
- Facilities can be built independent of each other requiring significantly less organization between stakeholders.
- On difficult terrain, the buildings and ancillary facilities can be sited to fit the terrain - better reducing site costs.
- Many smaller facilities use the land more efficiently than one large facility.
- Trees and natural features can be preserved more easily.
- The campus model is advocated in the original Mainland Common Plan.

Constraints

- There are less synergies between uses than the single roof approach.
- There may be overlaps in services which add to development expenses and administration costs.

To demonstrate the scale of the multi-use, single roof facility approach on the Mainland Common, Cole Harbour Place is shown overlain on the Mainland Common at the same scale (see **figure 2.2**). The scale of such a facility would be a real challenge (spatially and logistically) for the Common. The approach is also not consistent with the approach documented in the 1992 plan.

The general consensus amongst the project stakeholders is that the **campus model** approach, for the reasons listed above, is better suited to the mainland Common and is more consistent with the original 1992 plan.



figure 2.2. Cole Harbour Place overlain on the Mainland Common as a point of reference.

5. Planning and Design Principles

This revision of the Halifax Common Master Plan is guided by a number of planning and design principles, including:

Image and Identity

The Mainland Common should reflect, but have a distinct identity within, the larger HRM recreation system. This will help people know that they have arrived at the Common, and when they leave it. Excellent design will help establish the distinctive character of the Common. It will also demonstrate that it is a special place deserving special interest and care. The Common can also contribute to neighbourhood identity, as a centre of activity, or a place to meet others, for example.

Access

All people should have access to the Common, including its recreational areas, activities, services, and facilities, regardless of age, interest, income, cultural background, physical challenges, or membership in organized sports. This means that the Common will contribute to a healthy community and will be an attraction to residents and visitors alike. It also means that the Common should be well-served by public transportation.

Comfort

The Common should provide certain amenities for the comfort of visitors. Obvious examples include picnic areas, seating areas, shelters, waste receptacles, and rest rooms. Canteen facilities should also be considered.

Resource Conservation

Recreation areas should be designed to allow enjoyment of the natural environment while protecting natural and cultural heritage resources. This may mean that access to the natural environment is limited, or that it is accommodated in special places. Conservation areas provide an opportunity to interpret significant natural features as well as native flora and fauna, and offer information on the importance of conserving natural open space.

Efficiency

Design of playing fields for recreational activities should focus on minimizing maintenance requirements, efficient siting of supporting facilities, ensuring environmentally sustainable maintenance practices, and designing multi-purpose year round facilities.

Adaptability

Recreation facilities should be planned to allow for flexible use and adaptability to future needs and requirements. This also means that a particular part of the Common might be used for different seasonal uses.

Civic Presence

The presence of other public facilities, such as schools, libraries, and transportation hubs increases the potential for accessibility and a lively social space that increases the potential for planned or unplanned meetings and socialization.

Connectivity

The Common should be easy to get to, and provide a starting place for other activities. This means that the Common should be linked to surrounding neighbourhoods and to other recreation areas. Connectivity should focus on active transportation rather than on automobiles.

Legibility

The layout of the Common should be easy to understand so that visitors have a clear understanding of where they are, where facilities are, and how to get where they want to go.

Clear sight lines to landmarks, an articulated hierarchy of streets, lanes trails, and pathways, as well as signage, can all contribute to legibility.

Safety

Planning and design for safety include almost all of the other principles set out here. A place that is cared for, accessible, heavily used, connected to its surroundings, and legible will have many of the prerequisites for safety. Yet, there are particular things that should be considered to plan for safety. For example, activity areas can be clustered and located so that they are visible to each other and from access roads, making surveillance possible. Major trails should be planned so that they are visible from other activity areas or access roads. There should always be choices about how to approach or leave particular destinations. Circulation of pedestrians and vehicles should be encouraged in order to increase the number of “eyes on the street.” If evening use will be encouraged, then good lighting design will be essential to improve night-time legibility. The central concern will be an even level of lighting in activity areas and main circulation routes for pedestrian safety.

6. Vision

The Mainland Common will be:

6.1. Community Centred

The Mainland Common will be a strong expression of HRM commitment to protect open space and parks, including recreation and conservation areas, as a key ingredient to community development. As the community evolves, the Mainland Common master plan requires review and revision to ensure continued access to recreational facilities, parks, natural landscapes, and traditional activities which the community has enjoyed.

6.2. People Oriented

Development of the Mainland Common Master Plan will contribute to the physical and mental well-being of HRM residents. Development will create leisure and active recreation opportunities for people all ages, abilities, and interests. The passive open space system will be an effective catalyst for the development of community social networks and complement the active transportation network.

6.3. Environmentally Sound

The Mainland Common Master Plan will support the conservation and enjoyment of environmentally sensitive areas within the Mainland Common. Management of natural areas will respond effectively to challenges posed by neighbouring development, existing recreation infrastructure, soil conditions, topography, and waterways. The Mainland Common Master Plan will afford members of the community opportunities to make lifestyle choices that enhance healthy living while simultaneously respecting and enhancing ecosystem health.

6.4. Culturally Responsive

The Mainland Common Master Plan will play a key role in conserving the Mainland Common's central role as the cultural and recreation centre of Halifax West by preserving and enhancing community access to the Mainland Common and creating recreational facilities and passive recreation areas which represent the diversity of landscape types and human activities sought in the community. Vital cultural institutions such as the Keshen Goodman Public Library and Halifax West High serve to strengthen the role of the Mainland Common.

6.5. Livable Community

The Halifax Mainland Common will contribute to the livability of the neighbouring communities. Creating and supporting sufficient active and passive amenities on the Mainland Common is critical to developing a recreational space that will enhance usage of the Mainland Common and justify the public investment in its development.

6.6. Economically Viable

Continued planning for the Mainland Common will allow HRM to manage the efficient development of new recreational and open spaces as needed. These new facilities may be developed by HRM alone or in conjunction with other public and/or private partners. As new passive open space is developed, the Mainland Common Master Plan will outline where and how this type of park is developed for the long term health of the Mainland Common and to best serve the interests of the community. The open space master plan will also help to ensure that investment in park, trails, recreation and cultural facili-

ties, and conservation areas contributes to the long term development of the entire park and recreation system in HRM.

6.7. Educational

The Halifax Common will provide substantial open space within the centre of Halifax West. Trail access will provide opportunity for people to learn about the natural environment and its functions, and about the flora and fauna that inhabit the area. The proximity of the school and the library offers an excellent site for a repository of information on the Mainland Common Plan, the landscape, and its value. Interpretation is an important way to protect the natural environment.

6.8. Sustainable

Sustainable development will help ensure the long term economic, social, and environmental viability of the Mainland Common as the primary recreational space for Halifax West. In many ways, all of elements of this vision contribute to sustainable development. Nevertheless, sustainability requires continued attention to ensure an appropriate balance between developed areas and natural areas. In general, environmentally sensitive areas are inappropriate for development as they are more expensive to develop and any subsequent development would have negative adverse impacts on the site. Ecological protection also extends to protecting sensitive areas and the surrounding communities from the impact of recreational development. Stormwater management is a particular concern.



Chapter 3: The Plan

The following chapter outlines the proposed Mainland Common Master Plan. The facilities program for the master plan was provided by the steering committee for inclusion and consideration in the plan. The Facility program is described below.

1. Facility Program

1.1. Community Centre Requirements

- Changing areas, offices, fitness centre, community services
- 25,000 sq.ft.

1.2. Pool Requirements

- Leisure pool, 25 m pool, recreational tank
- 40,000 sq.ft.

1.3. Soccer Centre Requirements

- Soccer field, changing rooms, fitness area, reception area, offices
- 80,000 sq.ft. with ancillary facility of 20,000 sq.ft.

1.4. Fieldhouse Requirements

- Gymnasium, sports centre, dance studio, equipped with storage and ancillary facility.
- 52,000 sq.ft.



Clearly, these program elements may change as the Mainland Common develops in the future. They do, however, provide a planning framework for understanding the distribution and relationship of future facilities in the Common. The master plan needs to be flexible enough to incorporate these program elements, while providing a rationale for future development in the Common to guide future land use decisions.

2. The Plan

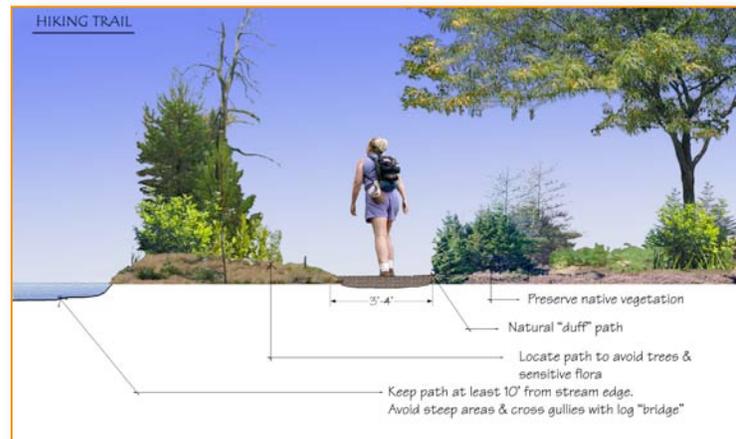
The following is a description of the site development master plan for the Mainland Common. The master plan provides a rationale for the siting and consideration of the various program elements described in the facility program above. The plan can be broken down into four components: the Passive Recreation Reserve, Environmentally sensitive areas, open space network, and active recreation facilities.

2.1. Passive Recreation Reserve

The passive recreation reserve consists of two large areas of undeveloped natural areas. This includes the area south east of Thomas Raddall Drive and the large parcel north-east of the current soccer facility which fronts on Willet Drive. Both these areas were identified as preservation areas in the original 1992 master plan. Generally speaking, these areas would be suitable for hiking trails and low impact interpretation.

Willet Drive Reserve

The long term best use of the recreation reserve north east of the soccer facility needs to be determined in association with the local community. The proximity to Willett Street means the property is accessible and easily serviced. Ultimately, a portion of the property may be well served by recreation facility development and expansion in the future. However, the local community may desire to see this parcel protected as a passive recreational reserve. HRM should work with the community to determine the highest and best use of this parcel in the future. If the land is developed for facilities, the question of whether this area should be connected to the remainder of the Common via a road is an even larger issue. Clearly the local traffic impacts would need serious consideration.



Regency Park Reserve

The cost of extending Regency Park Drive will create some pressure to find development parcels to offset road costs. We recommend that the City consider identifying the eastern corner of Thomas Raddall Drive - Regency Park Drive as a potential facility site of roughly 5 acres in size. The remainder of this passive recreation reserve should be preserved as natural open space in perpetuity. Since most of this land lies above the 130m contour line (unserviceable because of low water pressure), there should be little appetite for expanding facilities into this area.



HRM should prepare a management plan to ensure the long term integrity of the passive recreational reserves. This would include trail and passive resource best practices, resource preservation, and watershed management strategy. HRM should coordinate this strategy with community input.

figure 3.1. Passive Recreation Reserve

2.1. Environmentally Sensitive Areas (ESA's)

There are several environmentally sensitive areas which occupy the lower elevations of the Common. A string of wetlands and streams bisect the Common property running in a north-west orientation. While these areas do not provide fish habitat (due to downstream stormwater structures which limit passage), they do provide significant wildlife and plant habitat. A stormwater management plan for the common should enforce the no net runoff approach to all new development in the Common. This would require a combination of stormwater practices including roof storage, stormwater filtration parking lots, stormwater ponds, etc. The Halifax West school was designed using the no net runoff approach due to the sensitivity of the nearby wetlands and streams. The school has 4" of storage on the roof, half the parking lot drains to a subsurface infiltration bed under a sports field to the west, and the other half drains to a infiltration trench which empties into a stormwater pond on the edge of the wetland. The consultants (Ekistics) demonstrated quantitatively to the Department of Environment that there was no post development change in runoff prior to construction. Similar practices should be implemented for all new facilities in the Common. A habitat survey of the wetlands was completed for the 1992 report and is likely still valid today.

figure 3.2. Environmen-
tally Sensitive Areas



2.2. Open Space Network

The open space network should form the background of the pedestrian walking experience in the Common. All existing and new facilities should be directly accessible via the open space network. Many of the trail networks already exist on the Common and are well used. **These trails need to be formalized and preserved to ensure that new facilities are not constructed which eliminate parts of the open space network.** All facilities should make provisions for the formal

Chapter 3

incorporation of trail networks as part of the exterior program of the facilities.

In the **Passive Recreation Reserve** and **ESA** areas, these trails could be simple 3' wide duff trails. In the facility areas, the trails could be formalized as 6-11' wide asphalt or crusher dust networks. Mixed trails should use 11' and 6' should be used for pedestrian trails. The layout could tie into walkway systems, sidewalks or parking lot stormwater drainage systems.

All trails should be sensitively routed to minimize disruption of environmental features. Trail siting should also be considerate of not impeding stormwater flow.

c. Active Recreation Reserve

The active recreation reserve area includes the lands fronting on Thomas Raddall Drive.

With the exception of a few localized ESA's, this area has been disturbed for the better part of 20 years. The land surrounding the Soccer facility has been used as a fill dumpsite by the City of Halifax for over 30 years. Consequently, the geotechnical stability of the fill in this area is questionable and may result in higher development prices. The extent of this fill was never mapped but its probable extent is shown on **figure 3.4**.

As was discussed earlier, the most suitable approach for integrating active recreation facilities in this area is campus model over the single roofed-multipurpose facility approach. This model would see the development of pavilion style buildings in the park, linked by open space networks and separated by open space preserves and 'green' parking areas. The green parking areas would include heavily planted islands and possibly stormwater islands to store runoff. Storm sewer conveyance is not a viable option unless naturalized stormwater ponds are placed at the outfalls. Existing vegetation should be preserved as much as possible in the active recreation



figure 3.3. Open Space Network

figure 3.4. Probable extent of questionable fill.



area to maintain the park-like setting.

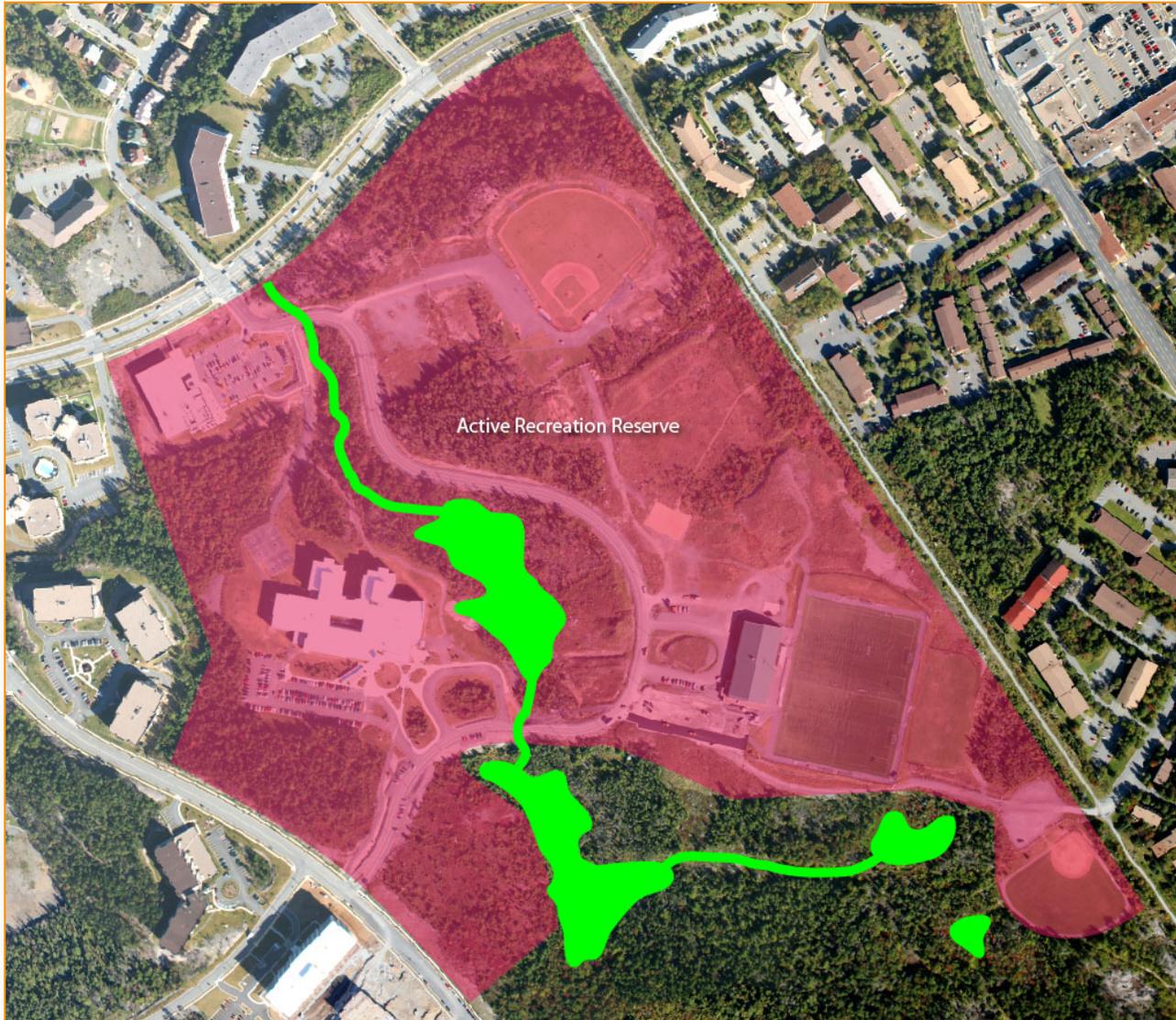


figure 3.5. Active recreation Reserve

Circulation

Thomas Raddall Drive currently exits to Lacewood at Stratford Way near the Keshen Goodman Library. The master plan shows Thomas Raddall drive realigned to meet the driveway entrance of the apartment building on Lacewood. This would form a good bus drop off loop between the current exit and the proposed new exit. It would also allow the library parking lot to be expanded. This new signaled intersection would provide direct access to the new facilities and approximately 1000 car parking lots needed to service the new facilities. The alignment would also minimizing the stacking problem in the library due to the parking lot exit so close to the intersection. The depressed wooded area in the middle of this proposed loop could either be preserved or turned into an expanded stormwater pond (or both). If the stormwater pond enlargement is eventually warranted, it should be designed as a naturalized stormwater facility as opposed to the engineered detention area that currently exists in front of the library.

The single lane bridge near Halifax West High School is currently a significant deterrent to increased traffic in the Common. This bridge may need to be upgraded to a dual lane bridge in the future to accommodate the increased traffic. The option of making Thomas Raddall Drive one-way (for part or all of it) is not practical. All new facilities will be accessible off of Thomas Raddall drive. The current 22' width with a 3' gravel shoulder is adequate for a road in a park. The road should not be over-engineered beyond its current design. Wherever possible in the future, ditches alongside the road should be designed as grassy swales to maximize stormwater uptake (see Appendix A).

The Pool and Community Centre Site

After some discussion, there is a consensus that the pool and community centre belong close to Lacewood Drive, accessible to transit and with a high profile on Lacewood. This location also has positive synergies with the school and library. While the topography may be challenging to other forms of development, the pool development might actually benefit from the existing valley in this area. In 2005, there was discussion about locating the pool facility close to the soccer stadium. The challenges with this location include: the synergies with surrounding uses are not as positive, the distance from a transit stop on Lacewood is a limitation (Metro Transit will not use Thomas Raddall Drive due to its horizontal and vertical alignment and due to the one way bridge), the safety and security of this site is not as good as the Lacewood site, the questionable nature of the structural fill in this area makes the costs associated with the site less predictable, and the proximity to services are not as favourable.

Parking for the facility should be placed behind the building instead of between Lacewood and the new building. This parking lot would be usable for both the existing baseball field and the pool complex. The parking lot should be designed to capture and store stormwater runoff using a variety of green parking lot solutions (infiltration solutions are not well suited to the Mainland Common). The parking lot should provide space for about 220 cars over and above what is needed for the baseball field. A planted green buffer should separate the parking lot from Thomas Raddall Drive. Ideally, the parking lot should be elevated above Thomas Raddall Drive to minimize visibility.

An environmental investigation of this area by Jacques Whitford, shows unusually high arsenic concentrations exceeding the CCME residential guidelines in some areas and smaller concentrations of petroleum hydrocarbons. These will need to be capped under the parking lot of the future facility. Removal of fill from this site is not a cost effective option, so the eventual grading plan must reflect this.

There have been some discussions of incorporating an outdoor water park as part of the pool complex. Any such facility is best suited to this area out of plain view from Lacewood but close to the facility and any connecting greenway.

Soccer Facility Site

The extent of a 100,000 sq.ft. soccer facility limits its placement to the general area around the current subway building. The facility also needs to be located close to the existing \$3 million dollar all weather turf field.

There are two viable options which need further investigation before definitive conclusions can be drawn about the optimal design and configuration.

Option 1

Option 1 would build the facility overtop the existing subway soccer building. Under this scenario, parts of the administrative area may be able to be reused or the entire facility could be removed and reconstructed. This option would remove about 150 existing gravel parking spaces (about 300 spaces currently serve the existing soccer facility and staff indicate that the parking lot is consistently full). The new facility would need about 300 additional parking spaces for a total of about 600 spaces. 600-700 spaces could be accommodated just north of the new facility. The newly asphalted 150 car parking lot south of the existing soccer facility would be preserved in this option. The temporary road connection

between this parking lot and Westridge Drive should be preserved as an emergency access point into the Mainland Common for the foreseeable future. This option would provide ample room for an additional 60,000-80,000 sq.ft. facility with associated additional parking in the future (essentially relocating the footprint of the current Subway facility).

Option 2

Scenario 2 would preserve the existing subway building and a new facility would be linked to the north side of the existing building. The location of the existing administrative part of the building on the south side, and the ability to connect it to the new facility north of the current gym, would be a challenge to this approach. However, this could be overcome by careful design. The parking scenario would mirror the scenario described above.

As this project moves forward, the project architects will need to work with the various stakeholders to determine the most feasible option. The master plan shows option 1, however, option 2 may be equally feasible.

FieldHouse Site

The fieldhouse has some synergies with the pool and community centre. There is ample room for this facility just south of the proposed pool site. Therefore the proposed FieldHouse should be located as part of the Community Recreation Centre on Lacewood.

Additional Development Sites

As discussed, this master plan responds to current program requirements for the Mainland Common as identified by HRM in late 2006. Undoubtedly, there will be additional program requirements for the Mainland Common in the future, and while the carrying capacity of the Common (assuming the current program is developed) will not have been reached, the developable land base will begin to be challenged in the coming years. The master plan identifies several additional possible development scenarios, including parcels which will accommodate a library expansion, opportunity sites south of the existing library, an 80,000 sq.ft. footprint on the corner of Thomas Raddall Drive and Regency Park Drive, a 30,000 sq.ft. footprint just east of the lower wetland reserve and, depending on how the new soccer facility is configured, a 60,000 sq.ft. footprint north of the soccer complex.

Like the proposed development sites, these sites may be limited by geotechnical constraints, environmental constraints, and water and sewer capacity challenges. Beyond these identified sites, further development in the common will be extremely challenging and counterproductive to the original goal of the common: to provide ample opportunities for recreation to HRM residents in a park-like setting.

Mainland Common Master Plan

Halifax, Nova Scotia

Opportunities Plan 2008

Date: February 2008

