

**C.A. Pippy Park
Master Plan**

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ACKNOWLEDGEMENTS

The C. A. Pippy Park Commission expresses its sincere appreciation to the many organizations and individuals who contributed to the formation of this Master Plan. Space does not permit a listing of all these; however, the Commission is appreciative of all the input it received. In particular, the Commission would like to thank those individuals who took time from their busy schedules to participate in the public consultation process.

The Grand Concourse Authority also deserves special recognition for their efforts in this process. They administered the process up to and including the compilation of a draft Master Plan from which this final Master Plan document has been developed. In doing so, they generously contributed well beyond the scope of the original terms of reference for this project. Their assistance and contribution is greatly appreciated.

EXECUTIVE SUMMARY

The last comprehensive rewrite of the Park's Master Plan was conducted in 1992. In March of 1998, an external consultant was engaged to review the 1992 plan. He concluded that there was no need to change the plan at that time, but that once a number of issues that were being contemplated at the time, i.e. boundary changes, were resolved, a thorough review should be undertaken. Subsequently, the Commission decided that a comprehensive review was required for the next planning cycle as per the requirements under the Act.

To this effect, the Commission engaged the services of the Grand Concourse Authority to prepare a draft Master Plan. The process that followed consisted of three phases: a scoping exercise; resource inventory and public participation; analysis and draft plan preparation. In the intervening period between the formulation of the draft plan and the preparation of this document, the Commission conducted an extensive review and revision of the original draft.

The predominant findings of the above process are:

- A) There are significant gaps in the resource inventory, which must be addressed to allow for the proper management of the Park, especially in light of the increased and often conflicting demands on the Park's land base.
- B) The controls on developments both private and public must be updated and strengthened to meet today's standards.
- C) The Commission must secure a sound financial base to allow it to fulfil its legislated responsibilities. Innovative partnerships must be forged to achieve this.
- D) That amongst the public, there is a strong desire to add emphasis to the conservation and recreational components of the Commission's mandate.
- E) That the Park lacks a cohesive identity and that steps must be taken to correct this and to inform the public of the amenities that the Park has to offer.

To address the above, the Commission has revised a number of its existing policies with respect to development and environmental controls and has formulated a number of new policies to address the above points. Thirteen (13) specific objectives have been identified to address these issues. These objectives are not exhaustive by any means, but have been limited to what is thought to be achievable within the current planning period. Priorities have been assigned to those objectives, which will provide the Commission with the financial means to implement/achieve all of the stated objectives and policies.

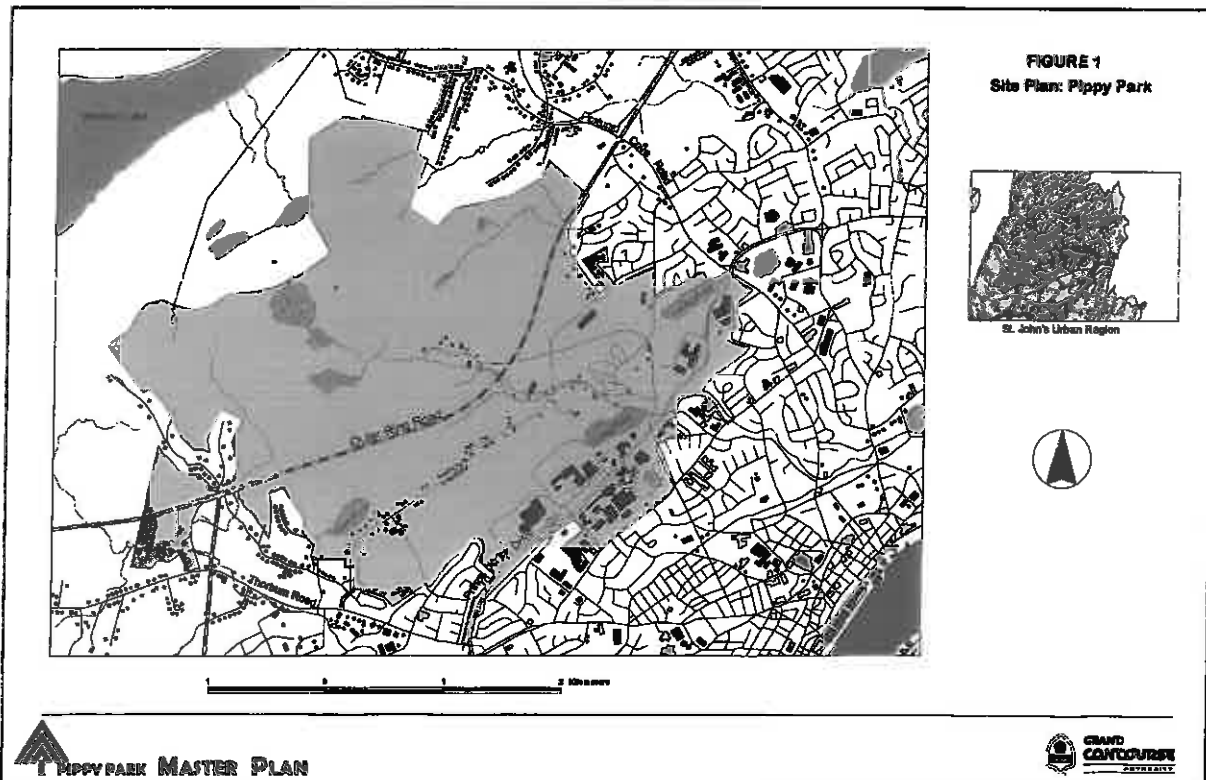
1.0 INTRODUCTION

1.1 Background and Location

In the late 1950's, the dispersal of Provincial Government functions throughout the City of St. John's and the lack of room for expansion of University Facilities at Fort Townsend, prompted the Provincial Government to begin construction on the Confederation Building and the new Memorial University campus.

Following construction in the early 1960's, it was decided that the land surrounding both institutions needed to be protected to ensure that their future growth could occur in pleasant and spacious surroundings, which were publicly owned. In 1968, following a significant donation of land from local businessman, Chesley A. Pippy, the Pippy Park Commission Act was passed, and C. A. Pippy Park was officially established. The Act gave the Commission the power to control development and to maintain the area in a "park-like" setting.

The Park is bounded approximately by Prince Philip Drive in the southeast, Thorburn Road in the southwest, Portugal Cove Road in the northeast and the Windsor Lake watershed in the northwest (see Figure 1). It encompasses over 1200 hectares of varied habitats ranging from urban development to near pristine conditions. Institutions and facilities within its boundaries include: the Provincial Government headquarters, Memorial University of Newfoundland, College of the North Atlantic, the National Research Council's Institute for Marine Dynamics, the Health Sciences and Janeway Children's Hospital Complexes, the St. John's Arts and Culture Centre.

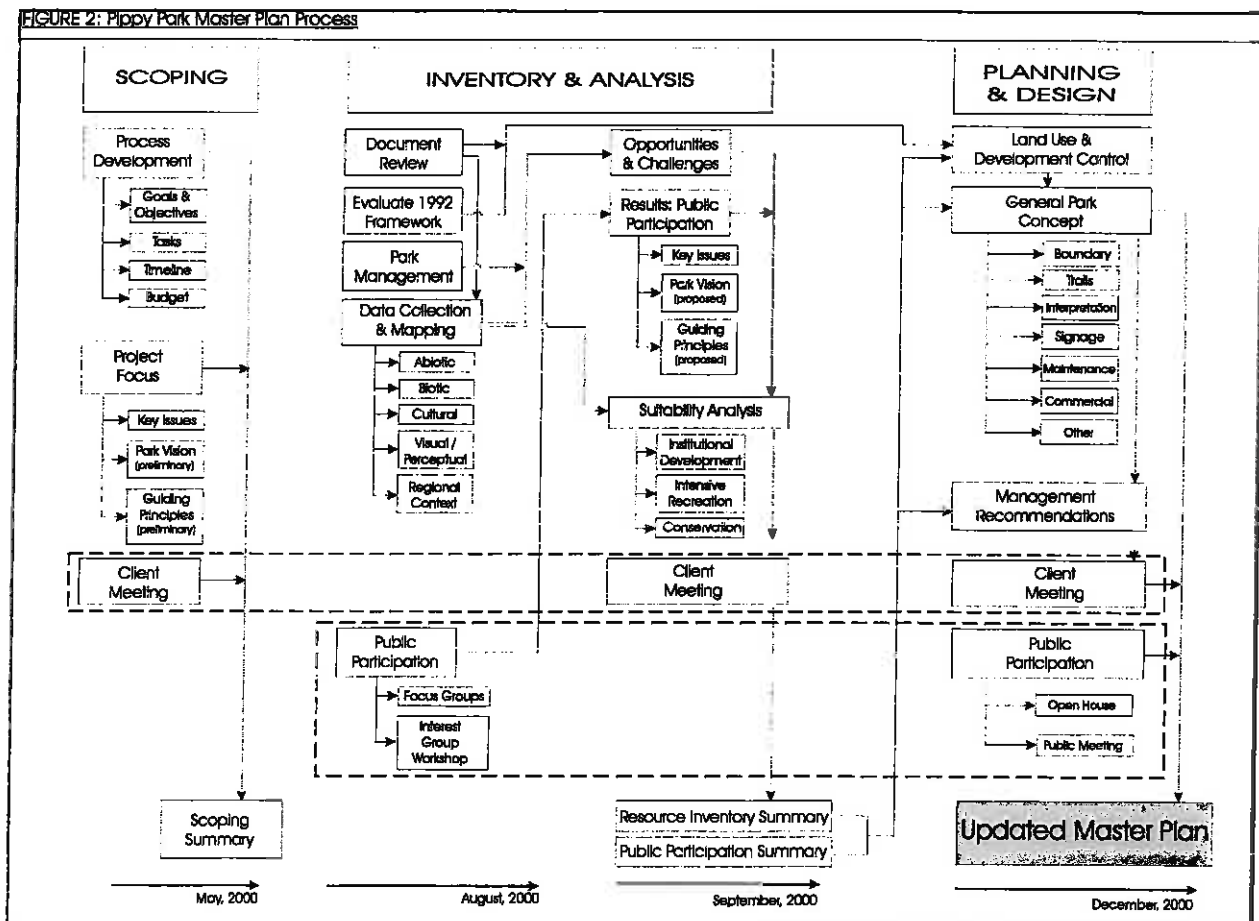


1.2 Master Plan Requirement

As per the C. A. Pippy Park Commission Act, the Commission is empowered to prepare a Master Plan which is to be reviewed every five (5) years. The previous Master Plan was approved in 1992 and; hence, this review is somewhat overdue. Further, since the 1992 Plan, the Outer Ring Road has been constructed and Park boundary changes have been made which should be taken into consideration in the revised Master Plan.

1.3 The Planning Process

The process that was followed to produce this final document involved three phases as outlined in Figure 2. Phase I was essentially a scoping exercise to identify project goals and objectives and to elucidate the key issues, Park vision and guiding principles. Phase II included the compilation of a resource inventory (Appendix 1) and its analysis as well as a public participation program both of which are included as appendices. Phase III consisted of presenting various options for consideration and public review and the summation of all three culminated in the final document as presented.



Throughout the entire process, comparisons were made to five (5) other urban parks (Mont St. Hilaire Biosphere Reserve, Montreal; National Capital Greenbelt, Ottawa; Downsview Park, Toronto; Wascoma Centre, Regina; Nose Hill Park, Calgary). Where possible, this document drew on the strengths of these parks and their experiences.

As noted above, a public consultation process was conducted and facilitated by Dr. Alistair Bath. It consisted of a series of ten (10) focus group meetings and an all-day workshop consisting of members of various interest groups. The key issues and values noted in the process are summarized in Table 1. A complete report is contained in Appendix 2.

Focus Groups	Interest Group Workshop	Pippy Park Commission	City of St. John's
Awareness	Ecological Place	Information / Interpretation Centre	Residential Properties
Interpretation Programs	Strong Boundaries	Travel Trailer Park	Commercial Activity
Signage	Place of Contemplation	Residential Community	Institutional Land Needs
Urban encroachment / development	Leisure Activities	Signage	Purpose of Park & Commission
Management	Education & Family	Maintenance of Roads / Trails	Trails Within the Park
Protection / Conservation	Forest Management	Partnerships	Development Control Procedures
All not served	Public Involvement		Park Signage Policy
	People Using Place		Transparency of Park Commission Activities
	Heritage		Surplus Lands
	Economic Sustainability		City Involvement in Planning
	Facilities		Park Gateways
	Student Employment		Waterways & Wetlands
	Accountability		Municipal Watershed
			Land Use Impact Assessments
			Public Consultation

2.0 RESULTS

Throughout the Commission's review process, several issues continuously came to the forefront of all discussions. Essentially, they are summarized as follows:

- A) The original land bank mandate of the Park is as relevant today as it was at the time of the Park's founding. The recent construction of the Health Sciences Complex, the Janeway Children's Hospital and extensions to the College of the North Atlantic and Memorial University are all evidence of the need to bear the land bank mandate in the forefront of our considerations.
- B) The Park contains some of the most important symbols of the Province's culture - political, historical, cultural, educational and natural. Its management should highlight these symbols and draw from them in formulating its strategic direction.
- C) That publicly, there is a strong desire to maintain the Park as a "near natural" recreational area to serve a broad spectrum of recreational needs.

- D) That the Park lacks a cohesive identity that is limiting it from achieving the level of service expected by the public.

While there was a consensus of support for the above, several other issues received significant attention and must be taken into consideration. These include:

- i) The need for increased sensitivity and understanding in dealing with residents of the Park.
- ii) The need for a viable sound financial base for the Park's management and operations.
- iii) The need to preserve, in as much as possible, a natural area including its native flora and fauna, to provide a place of contemplation and escape from the effects of urbanization.

3.0 THE MASTER PLAN

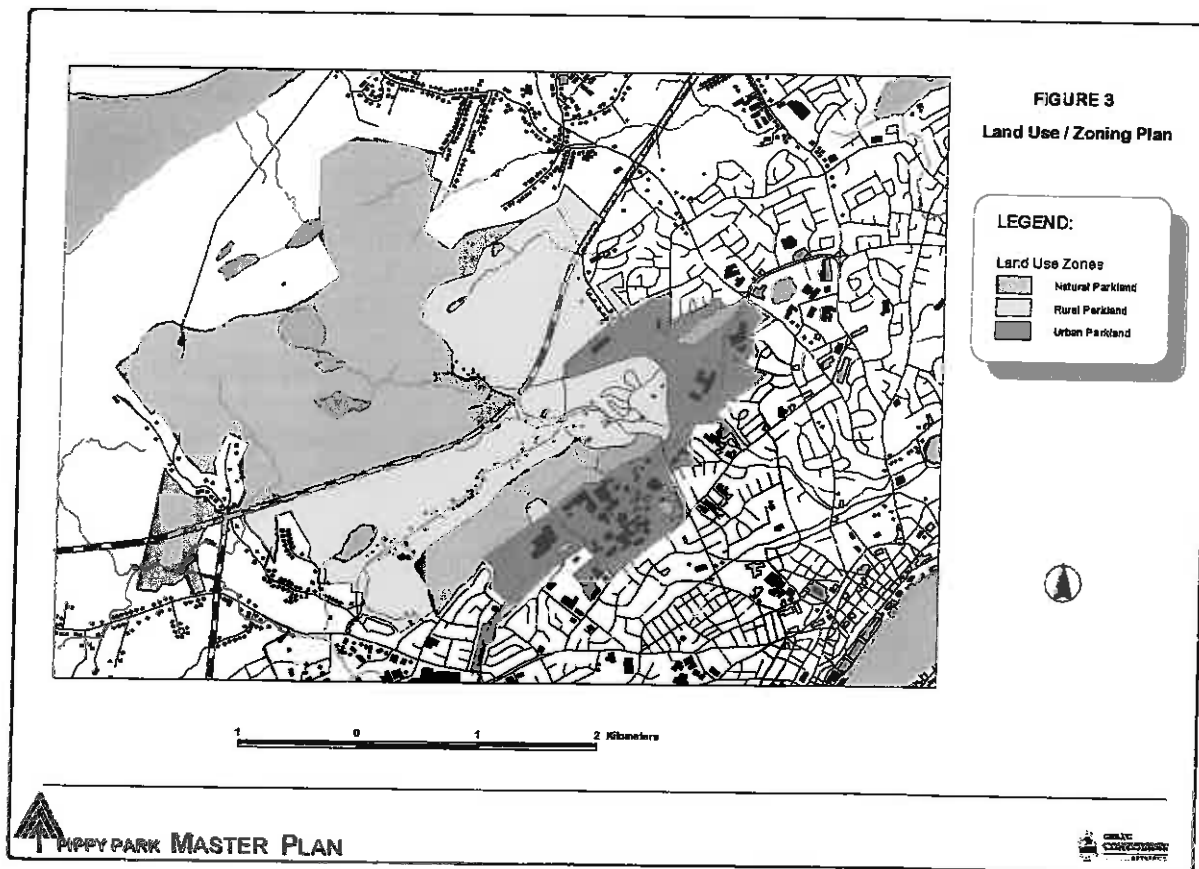
While this current Master Plan is based largely on the analysis of the resource inventory and the public input received from focus groups and workshops, it also draws heavily upon the previous Master Plans and their thirty plus years of Park history and experience. Indeed, the five basic principles described in the original Master Plan of 1968 continue to direct and support the work of the Commission. These principles can be summarized as:

- A) C. A. Pippy Park is part of the overall park system for the City and the Province relating Park to land to development.
- B) Elements relate to each other in a distinctive Park identity – where open space separates each element.
- C) Uses must be restricted in light of the basic principles and goals as a whole.
- D) The Park will be a repository and symbol of the character and life of Newfoundland and Labrador.
- E) Each function – government, education, recreation, culture and research relates to others clearly and practically.

It is possible to see congruence of these historical principles with the results of the recent review process. Careful and thoughtful planning together with preservation of the natural character of the land and promotion of the Park's unique identity remain at the forefront of Commission deliberations. Ultimately, the Park is to provide an integration zone between the urban and natural areas to the south and north of its respective boundaries.

3.1 Land Use Zoning

Due in large part to geography and topography of the Park area, there is an evident pattern of development from intensive in the South to light in the North. Three land use zones (Figure 3) have been designated which reflect the nature of the land base and ultimately what services can be provided. The three (3) zones are: 1) Urban Parkland 2) Rural Parkland and 3) Natural Parkland. For management purposes, the escarpment to the north of Long Pond has been included within the Natural Parkland zone. The steep slopes of the escarpment dictate that this area would be very sensitive to environmental disturbance and hence, unsuitable for development or intensive recreational use.



3.2 Permitted Uses

The Commission has considered this issue in depth and has concluded that it is not in the best interests of the Park or its users to formulate a specific set of permitted uses or restrictions for each zone. Currently, the Province as a whole is undergoing a significant population demographic transition which will undoubtedly result in changing public demands both in institutional and recreational requirements. If the Park is to meet the current and future needs of the public then some flexibility in this area is required. However, the Commission is proposing as a general policy that the level of restrictions will increase on both developmental and

recreational activities as one approaches the northern boundary. The portion of the Park within the St. John's watershed zone will be managed to maintain the area, in as much as possible, in a pristine state.

Applications for developments outside of the watershed area will be evaluated by the Commission on a case-by-case basis and weighted against the land use designation. i.e. urban, rural or natural.

In addition to this general policy, the Commission has adopted the following policies:

3.2.1 Residential Development

Throughout the public consultation process, the Commission received numerous comments from private property owners residing in the Park. Most of those who did comment felt that the development restrictions, that had been placed on them in the past, were too severe and were a detriment to them maintaining their residences and upgrading them to current standards. The Commission has therefore, decided to revoke the previous guidelines on renovations and will instead deal with requests on an individual case-by-case basis. In some instances where circumstances warrant, demolition of existing structures and replacement reconstruction will be permitted. Any application for renovation or reconstruction must be accompanied by a detailed landscaping plan. While the previous emphasis on land assembly has waned to some degree, an increased focus will be placed on maintaining a "park-like" atmosphere.

3.2.2 Institutional Development

One of the major purposes of the C. A. Pippy Park is to provide a park setting for public buildings and their associated parking areas, services and utilities. Although a relatively large urban zone has been defined to accommodate institutional development, concern is mounting with respect to the amount of space required for parking. While the Park encompasses a large land area, servicing limitations greatly diminish the amount of available land for institutional development. Excessive surface parking jeopardizes the ability to maintain a park setting and will no doubt increase future development costs. Future developments should incorporate designs for either underground parking or above ground parking structures. Where this is not feasible, then the parking area shall not be greater than 80 percent of the gross floor area of the building and shall be designed as a number of smaller parking lots interspersed with landscaping. Attempts shall be made to preserve and incorporate the natural vegetation into the landscaping design. Any proposed development will have to provide a detailed landscape plan by a professional landscape architect and will have to be approved by the Commission before any development takes place.

3.2.3 Science and Technology Zone

Universities around the world have explored and, in many instances, have formed partnerships with private sector corporations involved in research and development. The synergies created

through such arrangements have proven to be of tremendous benefit to Universities in creating research opportunities, attracting highly qualified staff and providing opportunities for Doctoral candidate research. The Commission has considered the possibility of establishing a Science and Technology zone and is of the opinion that this would be consistent with one of the mandates of the Park, which is for the enlargement of education opportunities. In view of this, the Commission will pursue this concept with the appropriate sector of Memorial University. Should the feasibility of a Science and Technology Park be established, the Commission may establish the appropriate zoning within the term of this Master Plan.

3.2.4 Recreational Development

A primary objective of the Park is to provide recreational activities for residents of the Province. In doing so, several factors must be taken into consideration, i.e.:

- A) The land use zoning.
- B) Pippy Park is Provincial in scope and its management must reflect this.
- C) The need to conserve a natural space in the midst of ever expanding urban development.
- D) The impact any development will have on the Park environment.

In light of this, the Commission has adopted the following general policies:

- A) Intensive Recreational Developments will be confined to the Urban Park zone. The Commission will not actively pursue intensive recreational developments, i.e. ballfields, swimming pools, large concert facilities, etc. but will entertain applications from other participating parties for such developments.
- B) Recreational activities within the Rural zone shall be compatible with maintaining the agricultural history of the area and its rural nature.
- C) The Natural Park zone shall be managed primarily for the pursuit of solitary or small group activities. i.e. Hiking, horseback riding, cross-country skiing, etc.
- D) Due in part to the loss of large open green spaces within the City, provisions should be made to encourage greater winter use of the golf course for winter activities such as sliding, snowboarding, skiing or snowshoeing.
- E) Except for management purposes, motorized vehicles such as snowmobiles, ATVs, powerboats shall be prohibited.

3.2.5 Agricultural Usage

Much of the land base, which now comprises C. A. Pippy Park, was once the site of pioneer agricultural enterprises and established between 1800 and 1850. These farms, which once supplied St. John's with fresh produce, have all but disappeared. The Commission feels that every effort should be made to preserve this aspect of our cultural heritage and would like to see the existing farms continue as viable agricultural operations. To this end, the Commission will ensure that its policies are consistent with this objective and will lend what support it can to existing operations.

3.2.6 Environmental Protection

The maintenance of a "park-like" setting within such a diversified land base dictates that a thorough review process be conducted for each specific development initiative. The following guidelines are therefore, not intended to replace specific assessments but rather to provide general guidance for initial development planning stages.

- Pippy Park contains the headwaters of a number of the City's main waterways. Wherever possible a 100-metre buffer shall be maintained on either side of waterways.
- Floristic inventories should be conducted prior to work undertaken that would result in any ground disturbance. Particular attention should be paid to identifying any rare, endangered or unique vegetation.
- The infilling or disturbance of wetland within the Park shall not be permitted without the expressed written consent of the Commission. Applications for developments adjacent to a waterway or a wetland must be accompanied by a report detailing any hydrologic effects on the waterway or wetland and a plan for mitigative measures.
- Development within the Natural Park zone must take into consideration the effect of habitat fragmentation especially with respect to the avifauna of the Park. Provisions shall be made to ensure that sufficient habitat remains for all resident species.
- The Commission and participating parties shall keep abreast of new environment-friendly technologies and employ these as appropriate in their activities. In keeping with this, biological controls as opposed to chemical controls will be employed whenever possible for landscape maintenance.
- Within the "Natural Park" zone reforestation or planting shall be done utilizing native species.
- The introduction of any exotic aquatic or terrestrial species into the Park shall be prohibited.
- Any major development proposed for the Rural or Natural Land Use zone may be subjected to a full Environmental Assessment under the Provincial Environmental Assessment Act.

- Native vegetation should be utilized whenever possible for landscape design within the Urban and Rural zone.

4.0 MANAGEMENT

As noted earlier several issues associated with the management of the Park were raised in the review process. These are described in terms of Park: ensuring greater transparency of Park related activities, funding mechanisms and partnerships.

4.1 Identity

During the scoping and public consultation process of formulating this Master Plan, it was revealed that C. A. Pippy Park, and the amenities it offers, are not well known amongst the public at large. A number of reasons for this situation were postulated and have been addressed as follows:

4.1.1 Leadership Role

The Commission's original mandate, to manage and control development of the land contained within the Park boundaries, is probably more vital today than at its inception. Since the creation of the Commission, the numbers of participating partners within the Park area has increased substantially. The most recent entrant to the Park is the Janeway Children's Hospital.

In some instances, land has been transferred from the Crown to the respective partner and they have instituted their own landscaping and maintenance programs. While this has proven beneficial in most instances, there is a need to co-ordinate the activities of all participating partners to ensure consistency of themes and policies throughout the Park area. It is only through such an approach, that the Park will be able to maintain itself as a recognizable entity. To this end, the Commission will structure a Committee, representing all participating parties, to address this issue. One of the primary objectives of the Committee is to develop a Landscape Master Plan for the Park.

4.1.2 Signage

Two (2) major issues were noted with respect to signage. Firstly, it was noted that the boundaries of the Park are not identified, particularly at the major entrances to the Park. Many people traverse the Park daily and are yet unaware of its existence. Secondly, while there is an abundance of signs within the Park boundary, few recognize the existence of the Park as its own entity. Consequently, there is a lack of awareness that many of the amenities that are enjoyed on a daily basis are due to the Park's existence.

It is imperative that the above situations be remedied. The Commission is of the firm belief that the continued maintenance and improvement of the amenities within the Park's boundaries depend on strong public support. Awareness must be the first step in obtaining that support.

To that end, the Commission will develop, in consultation with its partners, a signage policy that will provide consistent recognition throughout the Park. Further, the Commission will create clearly designated entrances or gateways for the main points of entry to C. A. Pippy Park.

4.1.3 Promotions

In examining the issue of the state of public awareness of C. A. Pippy Park, the Commission reviewed the role of the current Pippy Park Promotions Committee. Essentially, this group is composed of representatives of the different organizations operating within the Park. It functions as a volunteer organization and is usually involved with the promotion of specific activities within the Park. While the Commission is extremely appreciative of the work of this Committee, it is of the opinion that it could greatly benefit from the services of a formal Public Relations Committee, operating within prescribed Terms of Reference. The primary focus of such a formal structure would be directed towards the creation and dissemination of information concerning the Park itself, as well as the operation of the Commission. As such, the Committee would work closely with the existing Promotions Committee to avoid any possible duplication of effort. The Commission will, within the term of this Master Plan, develop detailed Terms of Reference for a formal Public Relations Committee and will do so in consultation with the existing group.

4.1.4 Visitor Centre

With the establishment of the Outer Ring Road as the main route into the City, there is no central focus point for visitors entering the City/Park. The construction of a Visitor/Welcome Centre in the vicinity of the off-ramp from the Outer Ring Road to Allandale Road has been suggested. The Commission is supportive of this concept, as it would certainly raise the profile of the Park. Funding support however, would be required from several major partners to realize this objective. In light of this, the Commission will ascertain if there is sufficient support from the various levels of Government to proceed with this initiative.

4.2 Ensuring Transparency

Many of the Commission's transactions are a matter of public record. Under the C. A. Pippy Park Commission Act, a financial audit is conducted annually and tabled before the House of Assembly. The audit automatically becomes a public document. The Commission publishes an Annual Report, which summarizes the major activities of the Commission that is available upon request. In addition, a Committee consisting of residents and landowners within the Park area has been established, a representative of which sits on the Commission.

Other efforts to provide transparency include public hearings held for the Park boundary review, a public consultation program for the development of the current Master Plan, the results of which are being incorporated within this Plan.

These measures in themselves result in a high degree of transparency of Commission activities. In considering additional measures to address the perception that there could be greater transparency, the Commission has decided on the following:

- A) That it will expand its participation with the Landowners and Residents Committee.
- B) That it will formally constitute a Pippy Park Public Relations Committee (described in Section 4.1.3). One of the roles of that Committee will be to disseminate information on the Commission's operations and activities.
- C) That it will, when funding permits, develop a comprehensive program of advertising and promotion for the Park.

These measures should, when implemented, inform the public of the decisions and operations of the Commission in a more transparent manner.

4.3 Funding

Throughout the planning process, it was apparent that there is a need for a sound financial basis to enable the Commission to institute the recommendations it received from the public and its partners. It was equally apparent that the public desired a management approach that favoured individual or small group, extensive recreational opportunities. Clear direction was received that the Park should avoid staging large carnival-type activities that would draw large numbers of people for specific events. Given Government's most recent direction that the Commission should explore options to become financially self-sufficient and the public expectations of the Park, financing the Park's operations will continue to be a challenging exercise.

In light of comments received, the Commission will examine revenue-generating options that are in accordance with the expressed public sentiment. Activities noted in the consultation process include:

- A) Provision of a visitor centre including a craft shop and restaurant.
- B) Expansion of the Travel Trailer Park.
- C) Re-establishment of the children's petting farm.
- D) Provision of horseback riding facilities.
- E) Establishment of a Heritage farm and various other cottage-type businesses.

- C) Develop a consistent signage policy for the Park.
- D) Develop a consistent landscape theme for the developed areas of the Park.
- E) Establish a sponsored memorial gardening program.
- F) Complete the resource inventory for the Park. In particular (i) land ownership (ii) flora and (iii) avifauna.
- G) Investigate the feasibility of establishing a foundation as a mechanism whereby individuals and corporations can contribute to the development of the Park.
- H) Initiate discussions with potential partners regarding the development of a therapeutic/recreation program at the Kelly Farm whilst preserving its heritage values.
- I) Rationalization and upgrading of the trail system to include separate hiking, horseback riding and mountain bike trails. (non-motorized mountain bikes)
- J) Establish an official Public Relations Committee to oversee the development of a comprehensive advertising and promotions program for the Park.
- K) Develop an amphitheatre within the Park for the staging of various events.
- L) Investigate funding partnerships that would lead to the development of a Visitor Centre Complex.
- M) Examine the feasibility of developing cabins along Nagle's Place.

6.0 SUMMARY

Former Premier J. R. Smallwood had a vision of Pippy Park as a “Great Park”. Although in the minds of many people who know little of the Park, this vision has not yet been realized, the opportunity still exists. Pippy Park still contains a large tract of natural area that is connected to the ecological systems of the larger region. It contains a vibrant community of residents and volunteers who are passionate about, and committed to, the Park. Recent developments in the southern part of the Park are attracting more visitors, and highlighting the important symbols of our culture that represent a central feature of the Park.

Master Plan 2003 presents a place to seize these and other opportunities, and to address significant challenges such as urban encroachment and uncoordinated planning and development. The long-term vision that began with the formation of the Park, of a place where humans and nature co-exist and prosper is continued in this Plan. Pippy Park must retain its important connections to the regional system of protected areas and other natural ecological systems. It must be a place where people gather to take part in vigorous outdoor activity, or escape in quiet contemplation. It must be a place where residents and visitors can learn about the history of this Province and its capital City. It must be a place where residents can enjoy the prosperity associated with appropriate economic development.

Pippy Park is a significant landscape within the City, the region, and the Province. With an appropriate balance of conservation and development, it can be a model to the whole country and the world of how connections between humans and nature can be re-established and strengthened for the benefit of both. It can be a “Great Park”.

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Introduction

The primary goal of the Pippy Park Master Plan is to develop a park concept, and produce a Master Plan document that will guide development of the park over the next ten years and beyond. Decisions made during the Master Planning process are directed by (i) input from the public, various interest groups, and park management, and (ii) by a thorough understanding of the resource base of the park. This report provides the latter. Figure 1 illustrates how the resource inventory component fits into the entire process. This report describes all of the resource information gathered by the Grand Concourse Authority (GCA) prior to the preparation of concepts. The bulk of this information has been incorporated into the GIS database as map layers. It includes abiotic (eg. topography, elevation, geology, microclimates), biotic (eg. flora, fauna), cultural (eg. heritage sites, trails, existing land use), and visual / perceptual (eg. landscape character units, significant views, prominent features) data. It also describes how the resource base of Pippy Park relates to the wider region.

These data will be examined in detail below. Their implications for park planning, concept development, and future management will also be addressed.

Planning Sessions

Two planning sessions held under the guidance of Professor Jim Taylor, a landscape architect and planning consultant from the University of Guelph, helped set the context for the resource inventory work. Some key issues were identified, the planning process was developed, and a helicopter inspection provided a preliminary understanding of the land base and important spatial relationships. Some planning for, and discussion of, specific inventory items was also done.

Meetings and Interviews

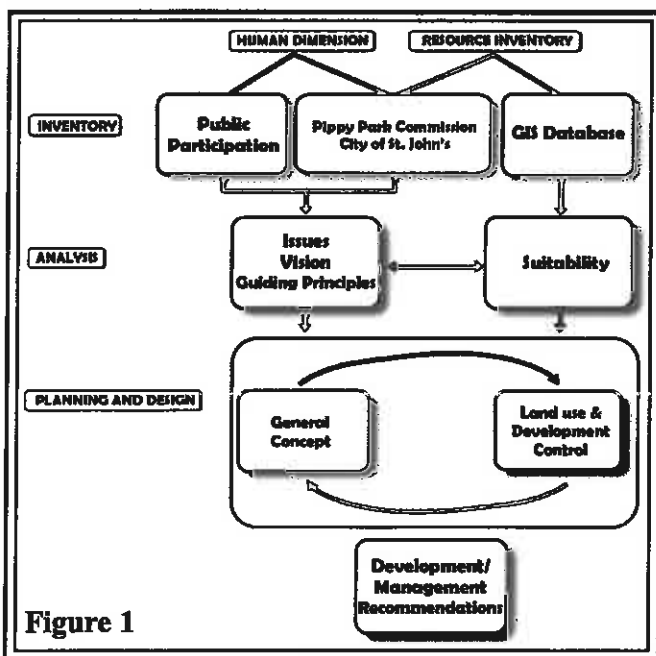
There were several meetings with knowledgeable individuals and individuals with particular expertise in relation to the park. Interviewees included: Mike Manning, of the Friends of Pippy Park; Don Steele, of the Natural History Society; Lara Maynard, a graduate student of Folklore at MUN; Maura Mannion, of the Pippy Park Heritage Committee; Brian Penney, formerly of the Fluvarium; and Dr. Jo Shawyer, Professor of Geography at MUN. Many of these individuals have had a strong connection to the park for many years. They were helpful in providing specific information about abiotic, biotic, or cultural features in the park, in providing context, identifying issues, and providing leads to other information sources.

Document and Literature Review

Another source of information regarding the park is written texts and other documents. Although much of this research relied heavily on secondary sources, some primary sources of information were examined as well. For example, research at the MUN Folklore Archives (MUNFLA) uncovered some old articles that describe the area as it once existed. Documents such as the Journal of the General Assembly of Newfoundland 1844 and 1864 note conditions and construction on roads and bridges of the area. The Diocesan Magazine, January, 1937 Vol. XLVII No. II also deals with the area. The purchase of Rostellan farmland, by the Church of England Orphanage and additional descriptions of the orphanage land are discussed.

Field Checks

To ensure that our mapping was as accurate as possible, field checks were carried out over much of the park. Checks were done for infrastructure (checking the accuracy of mapped buildings), flora (checking the location of vegetative groups), and heritage sites (remnants of past infrastructure in the Pippy Park area). The visual / perceptual analysis also required site visits to assess a variety of views and character units.



Methodology

Work on the resource inventory has been varied with planning sessions, meetings and interviews, document and literature review, field checks, air photo examination and analysis, and GIS mapping and database development.

Air Photo Examination and Analysis

Several sets of air photos were examined, including a group of 18 photos of the region from the mid 1990s, and two collages of photos from the same time period (one in color and the other in black and white). A set of air photos from 1948 was also examined.

The collage air photos, along with the group of 18, were useful in identifying trails, existing infrastructure and plant regions within the park. Information was mapped straight from the air photos and areas that were deemed necessary for field checks were identified.

The 1948 air photos were useful for several reasons. Firstly, they were excellent for showing past infrastructure such as buildings and roads. This enabled the GCA to accurately map areas on a cultural/ historical map layer. Examples of this "heritage infrastructure" that was mapped was the Halliday Farm to the south of Elizabeth Avenue, and the Burnt Pinch Road, which is located to the south of Fogarty's Wetland. Secondly, these air photos were used for comparing changes in vegetative cover of the park area. One can see where natural vegetation is once again dominating after years of cultivation.

GIS Mapping and Database Development

After collecting information through interviews, reading materials, and air photo analysis, all information that could be mapped was put into the GIS database. The GIS system used (Arcview GIS) allowed all information to be converted to a common projection and datum and to be inserted as individual layers. The layers of information, representing abiotic, biotic, and cultural data, was used to perform spatial, suitability and a variety of other types of analysis.

Limitations

Despite the fact that the inventory provided a great deal of information regarding Pippy Park, certain limitations should be noted. These include limitations in the information that was accumulated as well as in the method in which it was gathered.

Reliance on Secondary Sources

The first limitation that should be noted is the lack of time available for an in depth research of Pippy Park. Because of this, there was more emphasis placed on talking with individuals who had already gathered relevant information rather than spending a large amount of time in libraries and archives searching for material first hand. Also, for the same reason, secondary documents were used much more than primary materials even though the ideal method

of research would consist of an examination of these primary documents.

Quality and Quantity of Previous Research

From our review of secondary sources, it was clear that little research had been done in several subject fields within Pippy Park, and that what work had been done was primarily general in nature. There is little that shows specific location of flora, fauna and heritage for mapping. Several people have spent a great deal of time and energy researching the heritage of the park (Dr. Jo Shawyer for example), but much of this work has either only recently been done or is still in the process of being completed.

Results

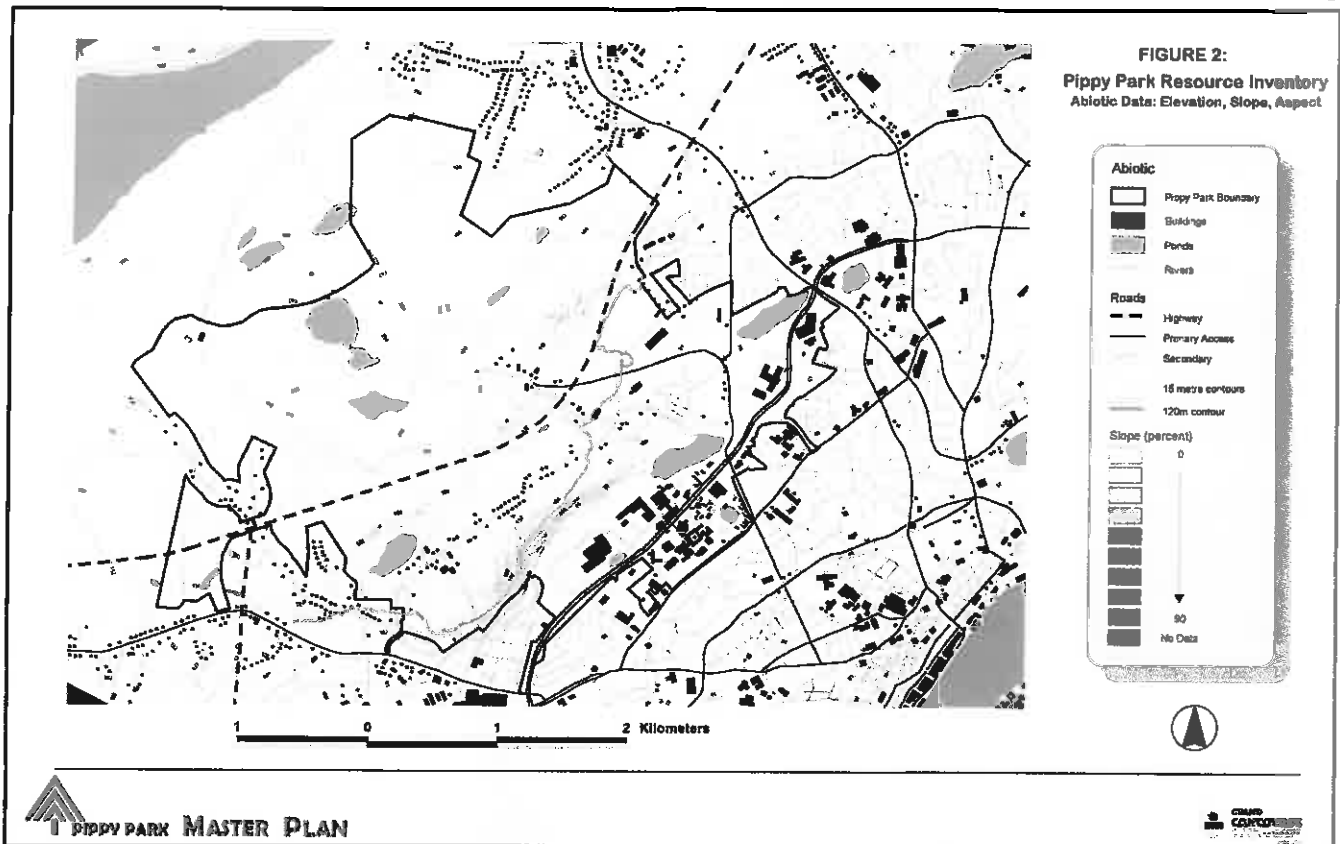
Various features of the biophysical and cultural landscape were described and mapped on a local and regional scale. These features, listed in Table 1 below, are grouped into abiotic, biotic, and cultural components.

Table 1: Resource Inventory Features

Component	Feature
Abiotic	Elevation
	Slope
	Aspect
	Topographic Features
	Hydrology
	Environmentally Sensitivity
	Microclimate: Wind
	Geology & Soils
Biotic	Vegetation / Ground Cover
	Rare / Unique Flora
	Terrestrial fauna
	Avifauna
	Aquatic Fauna
Cultural	Heritage Sites
	Municipal Infrastructure
	Trails
	Parkland / GCA Infrastructure
	Proposed New Development
Visual/ Perceptual	Landscape Character Units
	Views & Screening
	Experiential Features

Abiotic– Elevation, Slope & Aspect (Figure 2):

Elevation and slope are important to study for several reasons. The biggest reason is to distinguish areas that are able to support development and to determine what degree of development is feasible. Currently, water can be



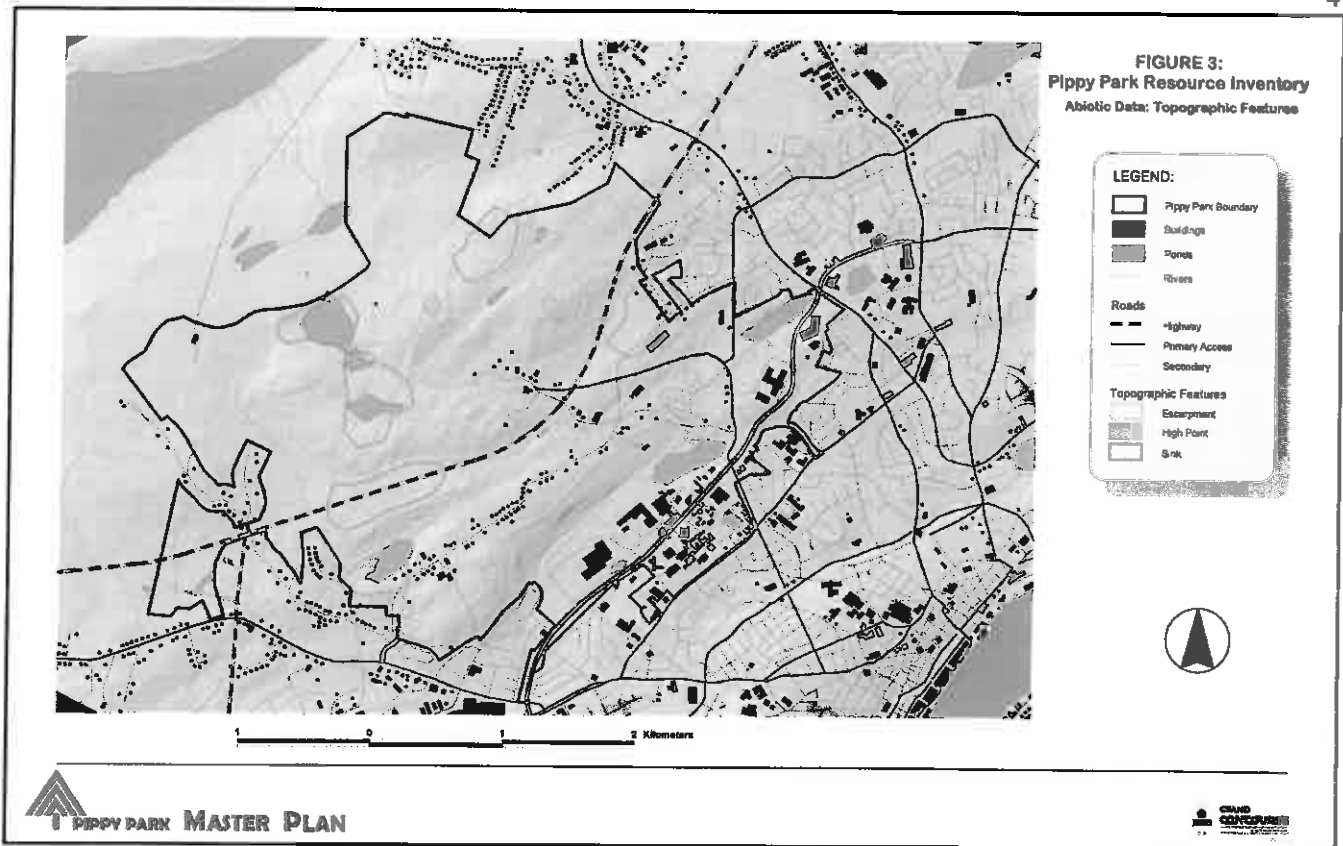
supplied to any area within the park that lies below the 120 metre contour line. "A pumping system coupled with a reservoir would be required to raise this limit" (C.A. Pippy Park Commission). It is therefore realistic to focus any possible future development below the 120 metre contour line. In the same regard for development, slope must fall within certain levels to make such activities possible. The unpublished 1981 and 1992 Pippy Park Master Plans suggest that areas with a slope from 0% to 10% are suitable for development as long as they do not negatively affect the visual significance of the area or open up a sensitive area to human disturbance. The 1981 C.A. Pippy Park Master Plan Report (Proctor and Redfern Limited, 1981) says that slopes between 10% and 20% are suitable for small scale construction although this sentiment is not shared in the 1992 Master Plan, which states that "lands with slopes greater than 10% can be considered to be escarpments and unsuitable for development" (C.A. Pippy Park Commission, p.11). Either way, what is clear is that more study would be necessary if any development were to go in an area of greater than 10% slope. Trail development must also consider the degree of slope of an area. "Construction of trails along gradients of greater than 20% will require significant improvements such as steps, the use of switchbacks, and/or erosion control measures" (Grand Concourse Authority, p.12). Elevation can also play a role in the microclimates of the region. Higher levels of fog, increased levels of wind and cooler temperatures are more common in the higher

elevations of the park than in the lower elevations. Slope and aspect also relate to microclimates. Eastern and northeastern facing slopes can be more temperate and sheltered from the wind making these areas more favorable for development or recreational activities. On the other hand, a slope with more of a westerly or southwesterly aspect is left open to the prevailing winds and may therefore be more uncomfortable for people located in these areas.

It should be remembered, however, that the winds of this area frequently shift. Although westerly and southwesterly winds dominate, they only make up the wind direction 47% of the time (Jackson, pp.16-17). This means that the wind will be blowing from another direction more than half of the time and no matter where development occurs within the park, people will have to deal with the wind.

Abiotic— Topographic Features (Figure 3):

Identifying topographic features is "useful in determining suitable locations for scenic viewpoints through which trails may pass" (Grand Concourse Authority, p.11). This information can also be used to determine the best locations for such things as an interpretation centre. There are several steep slopes and high points that give access to spectacular views. These views will be discussed later in this report.



Generally, the topography of Pippy Park is rugged. The high points in the park are among the highest anywhere in the city with the highest of these being located in the northern regions of the park. Pippy Park is made up of two step-like ridges that run in an east-west direction with the second, northern ridge situated higher than the first. "The ridges have steep slopes on the southern sides and moderately rolling slopes on the northern sides" (Grand Concourse Authority, p.11).

The first of these slopes is named Mount Scio and it is found directly north of MUN, the Health Sciences Centre, and Long Pond. The ridge rises steeply and its maximum height ranges from 75 to 100 metres. There is a plateau at the top of the ridge which contains several bodies of water and marshy areas. The second ridge rises another 40 to 60 metres above the plateau and its slope is more gradual. The plateau of this ridge is rough with some marshy areas and bodies of water.

Abiotic— Microclimate: Winds

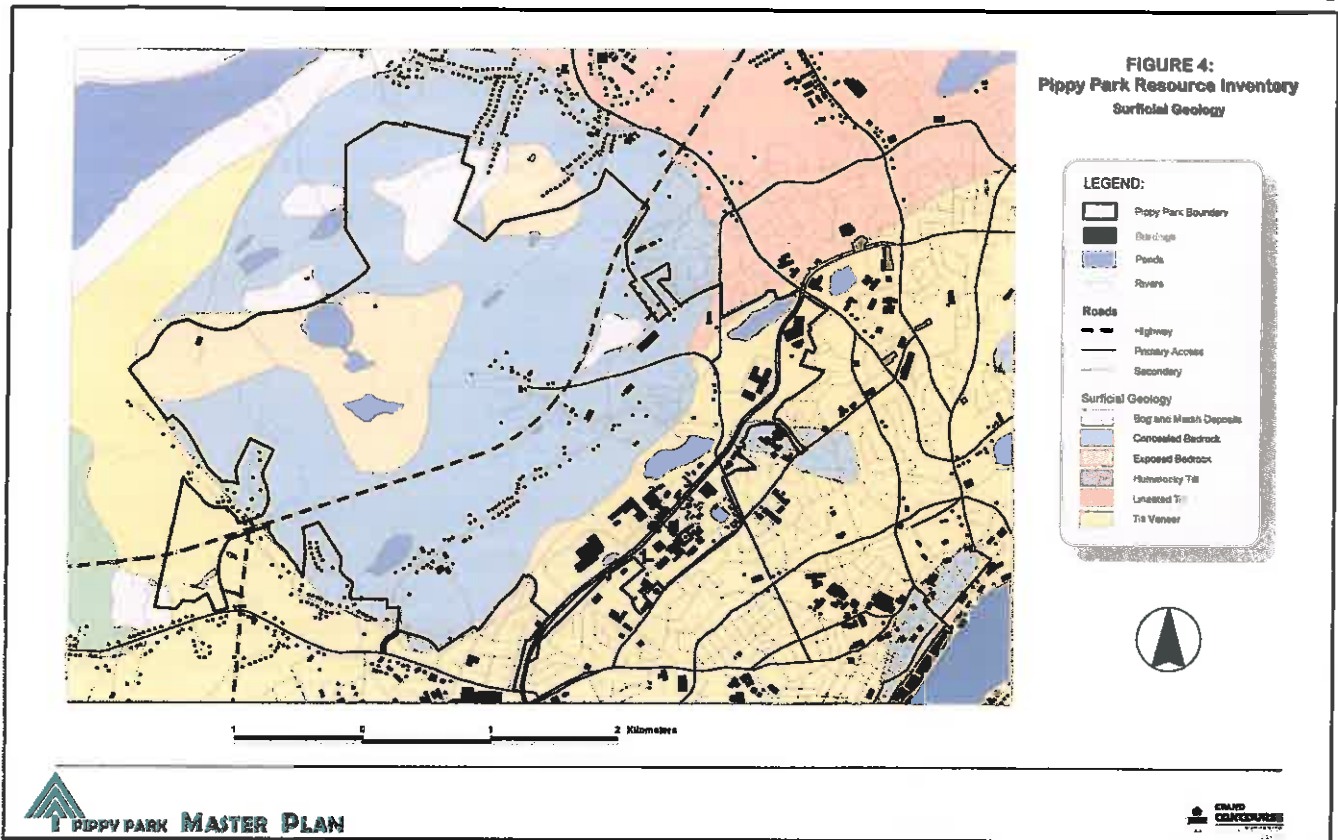
"According to Proctor, Redfern, Bousfield, and Bacon, Limited (1969) the most dominant climatic feature of the Pippy Park region is the prevailing westerly or southwesterly wind. This wind is of sufficient strength and constancy to cause stunted growth and windthrow in

the park's vegetation (Proctor and Redfern Limited, 1981)" (Grand Concourse Authority, 1997, p.14). Besides affecting vegetation, these prevailing winds can also impact on people as they partake in recreational activities within the park. For example, it is more pleasurable to picnic or camp in a sheltered area that is warmer and less windy than it is in an area that is open to the wind. The aspect of slope and the type of ground cover/ vegetation in an area are the primary factors to consider when assessing susceptibility to wind.

Abiotic— Geology & Soils (Figure 4):

Understanding the geology and soils of the Pippy Park region enables one to understand much of what can be seen in the area today as well as in the past. The geology directly effects drainage of the area and it can also influence the type and amount of groundcover that overlies it. The type and quantity of soil plays a major role in the type of vegetation the region can maintain, especially when coupled with the geology.

The ridges of the area are a result of tectonic folding and where the folds peak there is very little to no soil. Any soil deposits are within the folds between the ridges. The soil is largely made up of localized glacial drift and, due to its relative lack of movement, it is poorly sorted and contains a large number of boulders and rough stony material. A one to three foot layer of soil overlies much



of the glacial drift and this would largely be the result of decomposing plant material. This soil is generally classified as being thin and infertile. New vegetation has a difficult time in establishing itself and past agricultural practices required a great deal of labor and fertilization (Procter, Redfern, Bousfield & Bacon, 1969).

The rock found in this area is among the oldest in Newfoundland and interestingly, it has more in common with rocks found in Africa than with those of the rest of North America. The area of the Island of Newfoundland that includes and is east of the Burin Peninsula and Bonavista Bay was at one time attached to the African continent. When the continents drifted apart, 200 million years ago, this fragment of the African continent remained attached to North America. This also happened in Nova Scotia, and in parts of New Brunswick and the northeastern United States (Colman-Sadd and Scott, 1994).

Abiotic—Hydrology (Figure 5):

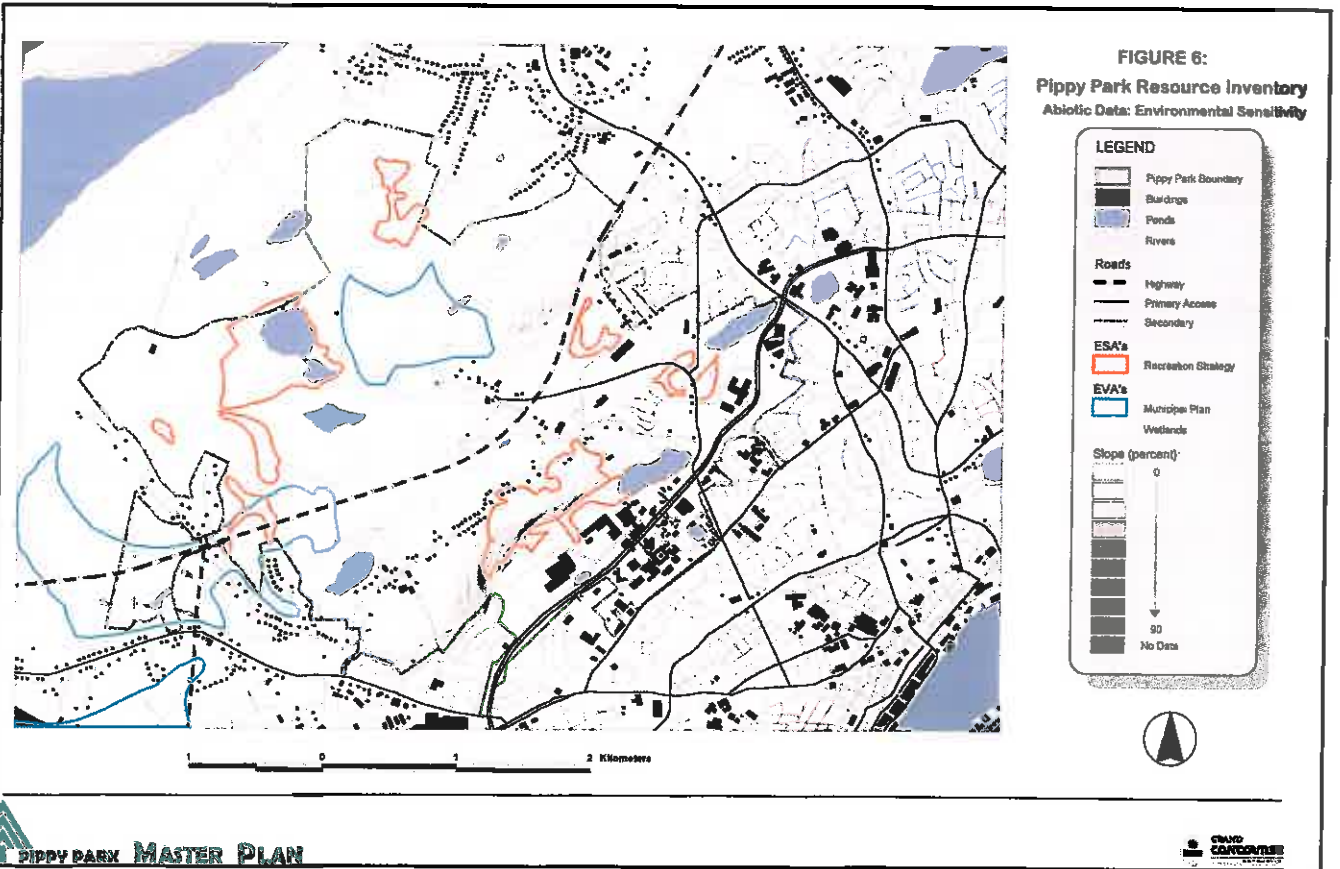
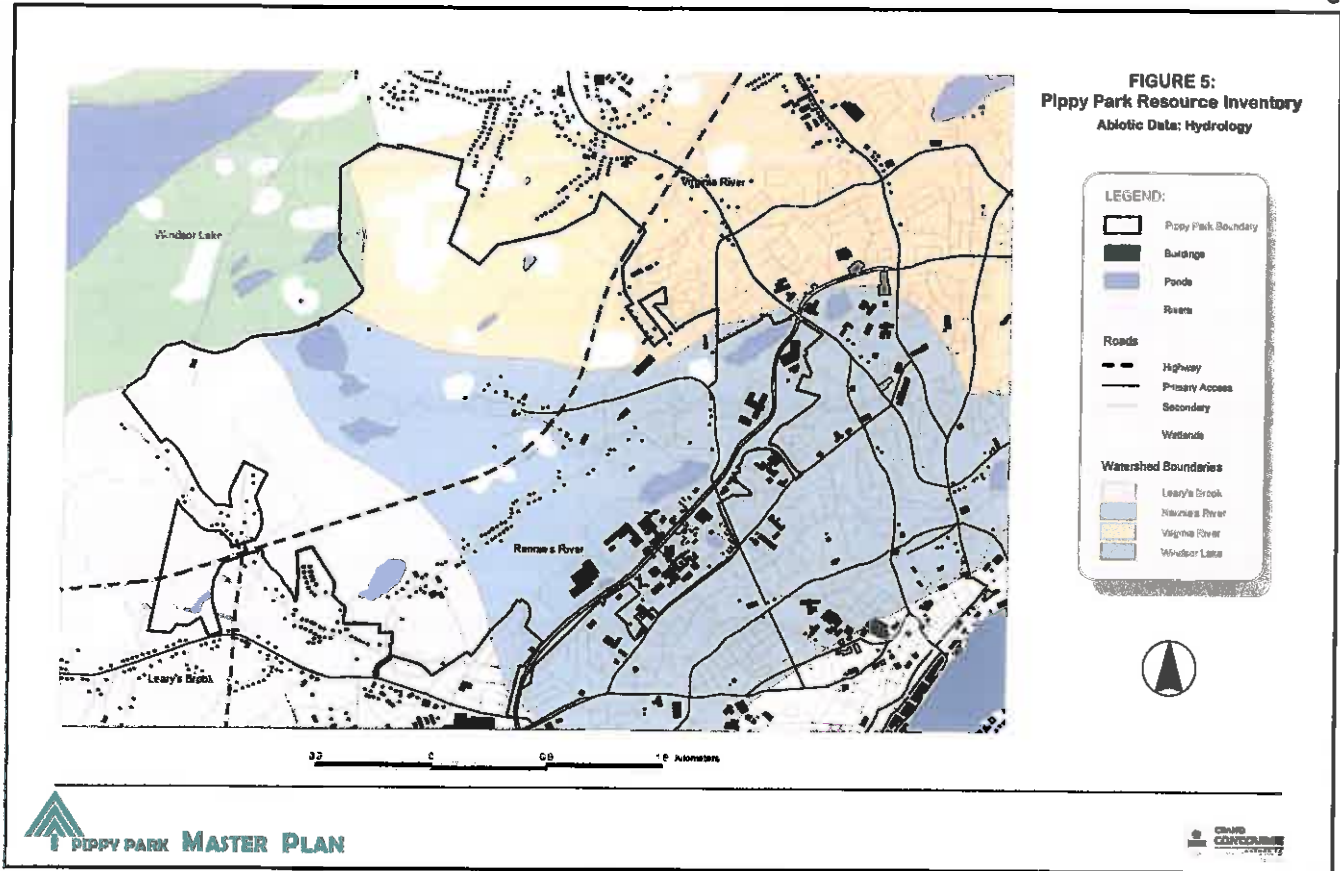
Pippy Park contains the headwaters of three major watersheds — Leary's Brook, Rennie's River and Virginia River. It also borders the important Windsor Lake watershed which is the main water supply for the City of St. John's. It must be a primary objective of any development that is done within the park (whether the

construction of a building or the upgrading of a trail) to maintain proper drainage through these watersheds, and to ensure that there are no negative impacts on water quality. Diverting or damming the natural course of drainage could have serious consequences to the environment of the area. Flooding of properties and/or environmentally sensitive areas could occur as could the damage or destruction of environmentally sensitive areas within the region. The headlands of these watersheds are very important because what happens in these headlands impacts the entire river systems, and thus, much of the eastern and central part of the City.

Within these watersheds are several key rivers, ponds, and wetlands that drain the area and store water. They perform an important flood control function and help to regulate water quality. They also provide suitable habitat for a variety of species. Many of the water bodies, brooks and streams are important for fish spawning and many species of waterfowl, aquatic insects, and aquatic animals depend on a well maintained water system.

Abiotic—Environmental Sensitivity (Figure 6):

A biological assessment map that was prepared as part of the 1981 Master Plan review identified a number of areas within Pippy Park as being Environmentally Sensitive



Areas (ESAs) (Proctor and Redfern, 1981). For example, the area west of, and bordering on, Big Pond and Middle Pond, is home to sensitive micro alpine vegetation. The Long Pond wetland is identified as an ESA because it contains sensitive nesting grounds for various species of avifauna (Manning, Steele, 2000). Wetlands and steep slopes are also associated with these ESA's.

Another designation, environmentally valuable area (EVA), is applied by the St. John's Municipal Plan to a number of areas in the City, including several in and around Pippy Park. Development proposals for these lands must be accompanied by a Land Use Impact Assessment and must follow specific development guidelines.

Highly sensitive areas are found to the west of Big Pond and Middle Pond (micro alpine vegetation), to the east of Groves Road (1 hectare of open shrub and 6 hectares of black spruce), and along the western portion of Long Pond (the Long Pond Wetland). A moderately sensitive area that may be affected by a change to the watershed is north of Groves Road (bog with larch as a dominant species and balsam fir and black spruce as the subdominant species). Also, the rare European leopard marsh orchid is located within this area.

Two highly sensitive areas are located in the watershed that drains into Long Pond. One of these areas make up the wetland that surrounds the area of the Higgin's Line / Allandale Road intersection. The other is a wetland located to the north of the Marine Institute. A five hectare wetland is found to the north of Ridge Road and it would qualify as a highly sensitive ecological area as well. There is a 12 acre highly sensitive area that basically lies in the centre of the northernmost watershed. It is dominated by open shrubs, black spruce and larch.

Biotic— Vegetation / Groundcover (Figure 7):

The types of vegetation that grow in this area naturally are limited as is the species of crops that can be farmed here. In areas of poor drainage, marsh vegetation dominates while elsewhere the limited number of tree species include spruce, balsam fir, poplar, larch, and white birch. During the 1930s and 40s there appears to have been a fair amount of logging in the park area because there is now evidence of second growth and natural thinning in the forest which would occur after substantial logging (Steele, 2000). Soils are one of four factors that play a role in what tree species are found where. Climate, elevation and slope are also important. For example, deciduous trees are mainly found

at lower elevations and on southern facing slopes while coniferous trees dominate elsewhere. Agriculturally, due to the poor soils and short growing season, only hardy crops such as potato, carrot, turnip and cabbage grow with much success.

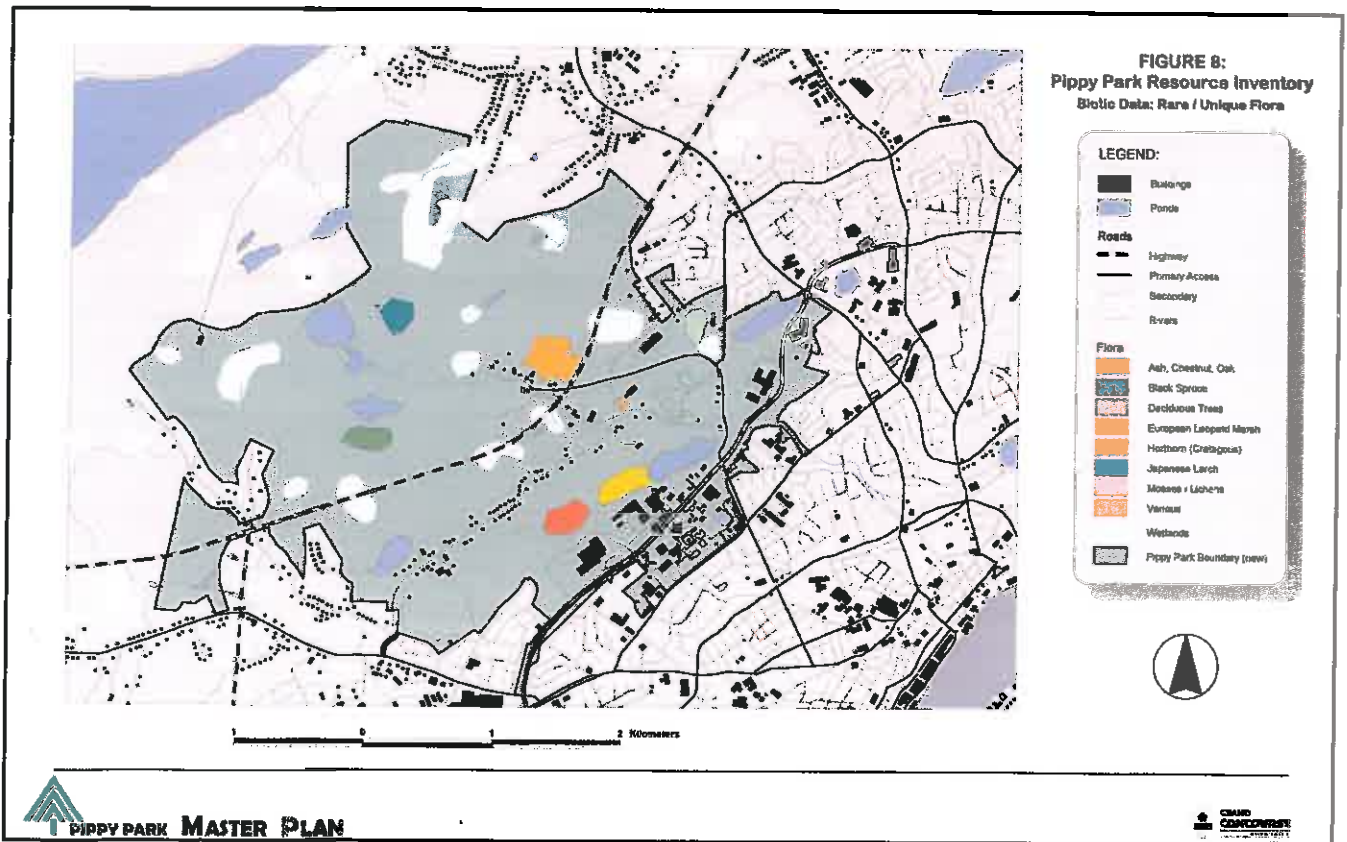
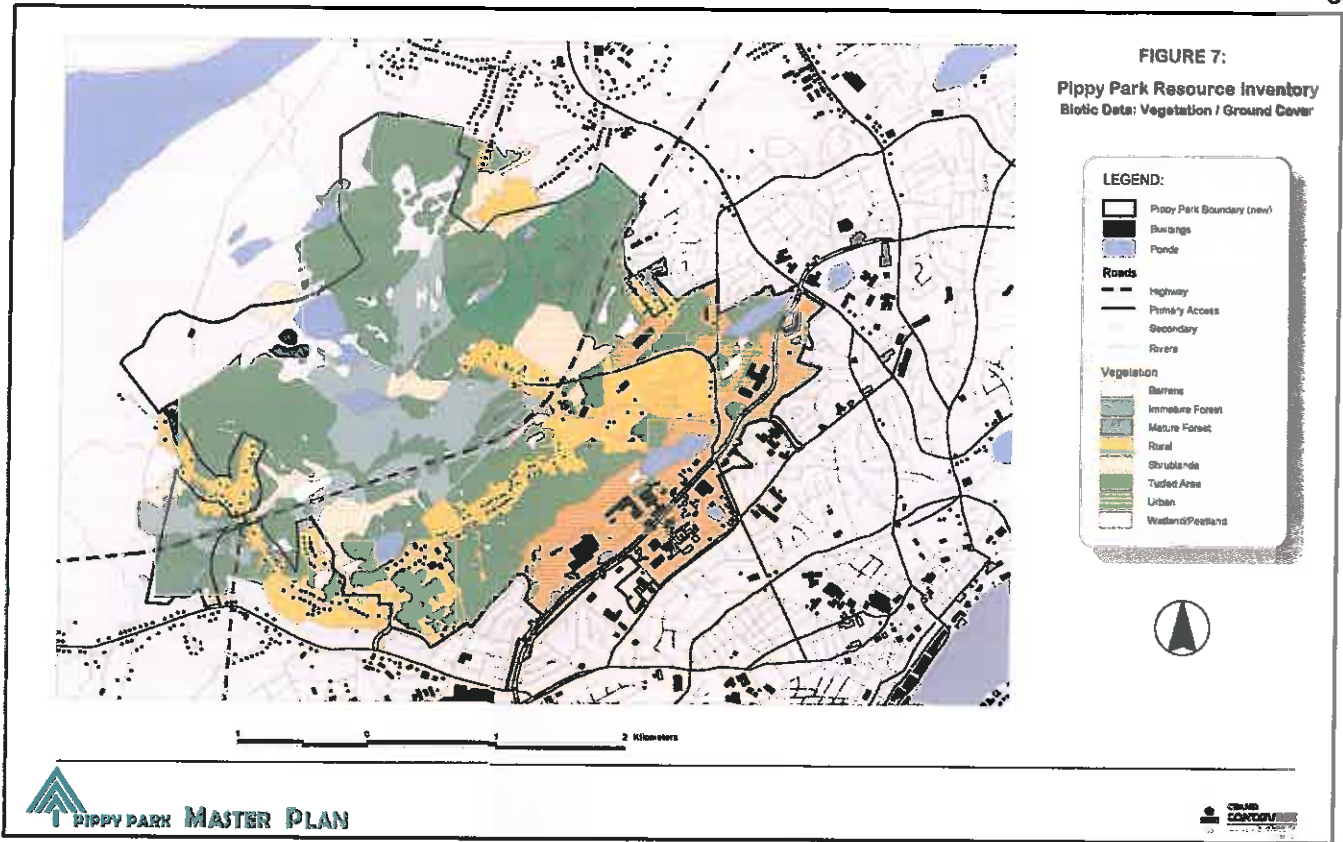
The GCA has prepared a vegetation / ground cover map that shows that Pippy Park's ground cover can generally be divided into two areas with the Outer Ring Road as the border. To the south of the Outer Ring Road, the majority of the land within Pippy Park is either urban or rural in nature with some scattered wetlands / peatlands and some mature forest along the slopes of Mount Scio. To the north of the Outer Ring Road, there is a great deal more wilderness. Both mature and immature forests dominate the area while shrublands and areas of wetlands / peatlands are scattered throughout. Each of these ground cover classifications have been defined by the GCA. Briefly, their characteristics are as shown in Table 2.

Table 2: Ground Cover Classification

Ground Cover Classification	Characteristics
Barrens	Low lying groundcover & mosses. Shrubs form clusters on the slopes.
Mature Forest	8-10m high trees that are spaced 1.5m apart on average and include a sparse groundcover.
Immature Forest	Open woodland of boreal species with a dense understorey of seedlings.
Shrublands	A transition area with clustered shrubs and evergreens.
Peatlands	An area dominated by moss, grasses, sedges, and herbaceous plants underlain by varying depths of peat.
Wetlands	An area of grasses and other low-lying growth with some peat and open water.
Turfed Areas	Mown grass with pockets of shrubs and woodlands.
Urban	An area dominated by institutional buildings and substantial roads with small pockets of various types of vegetation.
Rural	A transition areas from urban to wilderness. Made up of private residents, farms, and a campground with large fields consisting of grasses, shrubs and trees.

Biotic— Rare / Unique Flora (Figure 8):

Throughout Pippy Park there are areas of significant flora. These may be patches of vegetation that are rare or



patches that are unique in that they are located in an area that is not natural to that particular species.

The area to the west of Long Pond is an important wetland that has been identified as an ESA. Manna grass, which is rare, is seen both here and around Kent's Pond as well. It was introduced for cattle fodder. Cat tails are also introduced to the area (Manning, 2000).

West of the Long Pond Marsh is the Kelly Farm. This area has several interesting introduced trees. Some of the ash here are among the tallest in eastern Newfoundland. There is a sweet chestnut tree in the area that is the only one in Newfoundland. Three English oaks, that grow at the farm grew from seeds that came from Government House. Pat Kelly's relative was a gardener there. There are also red oak and poplar trees growing here.

To the northwest of the Kelly Farm is a rock outcrop. Located in the middle of the forest of Mount Scio, this outcrop is home to several interesting species of mosses and lichens (Manning, 2000).

The remnants of a hawthorn (*Crataegus*) is found near the top of Nagle's Place. This is a thorny type of bush with berries on it. It is not native to Newfoundland but was a common species planted by British farmers.

The area south of Ridge Road has many deciduous trees (dogberry, birch, alder) and few evergreen trees. This is somewhat unusual and may be a result of a large amount of cutting within these woods by the early residents of this area. Most of the first settlers at Ridge Road were relocated victims of a large fire in the Sand Pits area (in the vicinity of present day Health Sciences Centre) that occurred in the early 1930s.

After the fire of 1961, there was a great deal of replanting of trees. The main species planted are not the ones that are native to the area however. Black spruce were planted in the area to the south of Left Pond while Japanese larch were planted in the area of the WWII search light, which is northeast of Middle Pond / Big Pond, near the high point of the park (Manning, Shawyer, 2000).

There are few known rare plant species within Pippy Park. The European leopard marsh orchid is the only one identified in our inventory. How these flowers came to the area is up for debate. It is likely that they came from South England (from the areas of high migration to Newfoundland). The flowers could have been in the hay that was brought with farm animals or their seeds could have been ingested by the animals and deposited with their waste. It is known that the Halliday farm that operated in the area was a holding area for livestock that

was shipped from England (Manning, 2000).

Biotic— Terrestrial Fauna

There are several species of animals found within Pippy Park including muskrat (found in or near the water), moose, red fox, short-tailed weasel, mink, snowshoe hare, shrew, meadow vole (field mouse), and beaver (Silvester).

Although voles are found in the park, they are rarely seen. Signs of voles, such as grass tunnels under the snow, are most often seen during the spring. Shrews are also found throughout the park while house mice and rats are common in fields (Steele, 2000).

Muskrats are mainly found around water bodies in the park. Mink prey on muskrat and are also found in these areas. Both populations fluctuate over the years as high levels of muskrat mean increased food for mink. When the mink have killed enough muskrat, their population also drops, due to a lack of food. Hare are found mainly in the Three Pond Barrens and, like the muskrat, their population can fluctuate (Steele, 2000).

Biotic— Avifauna

There are a variety of flying animals within the park area. Most of these are birds but there are also a number of little brown bats that live here as well. There are a variety of species of birds that are found hunting and nesting in the Pippy Park area. Several rare species of birds have also wound up in the park when they have been blown off course during migratory flights. The Long Pond Marsh, as well as other water bodies and wetlands in the park, represents very important habitat for this wide variety of birds.

Included in the list of birds within Pippy Park is the Osprey which has been found nesting at Oxen Pond and to the southwest of Left Pond, as well as on Portugal Cove Road. The Osprey are regularly seen fishing in Long Pond (Steele, 2000).

Ducks nest at all of the ponds within the park. Some ducks can nest far up into the woods, so any modification of the woodland may impact on their habitat. During the hunting season, ducks accumulate at Long Pond (and in all likelihood other ponds within the park). There may be as many as 300-400 within the Long Pond area during this season (Steele, 2000).

Burton's Pond now has a bubbler that keeps the water on the pond from freezing. This attracts a large number of

ducks to the area. Exotic ducks can be found at Burton's Pond during the winter. Among these are: The American and European Widgeon; the American Bittern (which has nested within the park on occasion); Wood Duck (although it is hard to tell from domestic ducks); the Greater and Lesser Scaup. Almost any kind of duck can be found in the area from time to time but the main community of ducks in the area are Pintail, Mallard and Black Ducks (Steele, 2000). Herons and Egrets can be seen in Pippy Park from time to time as well. They are most often seen in the Fall or early Spring (Steele, 2000).

Biotic— Aquatic Fauna

There are several different species of aquatic fauna in the Pippy Park region, most of which are species of fish but there are also some frog species within the park.

Fogarty's Wetland is a good area for the green frog. These frogs used to be abundant throughout the park area. Thousands used to be present at Long Pond and tadpoles were seen in Nagle's Brook. The frogs used to be seen on the Parkway during a rainy night, 20 years ago (Steele, 2000). Today, Fogarty's Wetland is the last remaining area within the park where these frogs can regularly be seen. In order to ensure the green frog's survival, Fogarty's Wetland must be well maintained.

Fish are found throughout the ponds and rivers of Pippy Park. Long Pond originally supported a population of eastern brook trout and saw the introduction of rainbow trout in the late 1800s. By the early 1900s, there was an introduction of brown trout with all three species of trout still living in Long Pond by as late as the 1930s. By the time the 1970s came about, only brown trout remained in the pond (Silvester).

Brook trout are the only fish species native to Oxen Pond. By 1884 European brown trout (German brown trout) are introduced and today, both species of trout remain. Trout spawn in the fall in shallow streams with gravel bottoms (Silvester).

Biotic— Insects

There are several insects of varying species in the park. These include several species of beetles, flies, mayflies, water bugs, spittlebugs and aphids, stinging insects, moths and butterflies, dragonflies and damselflies, and grasshoppers (Silvester).

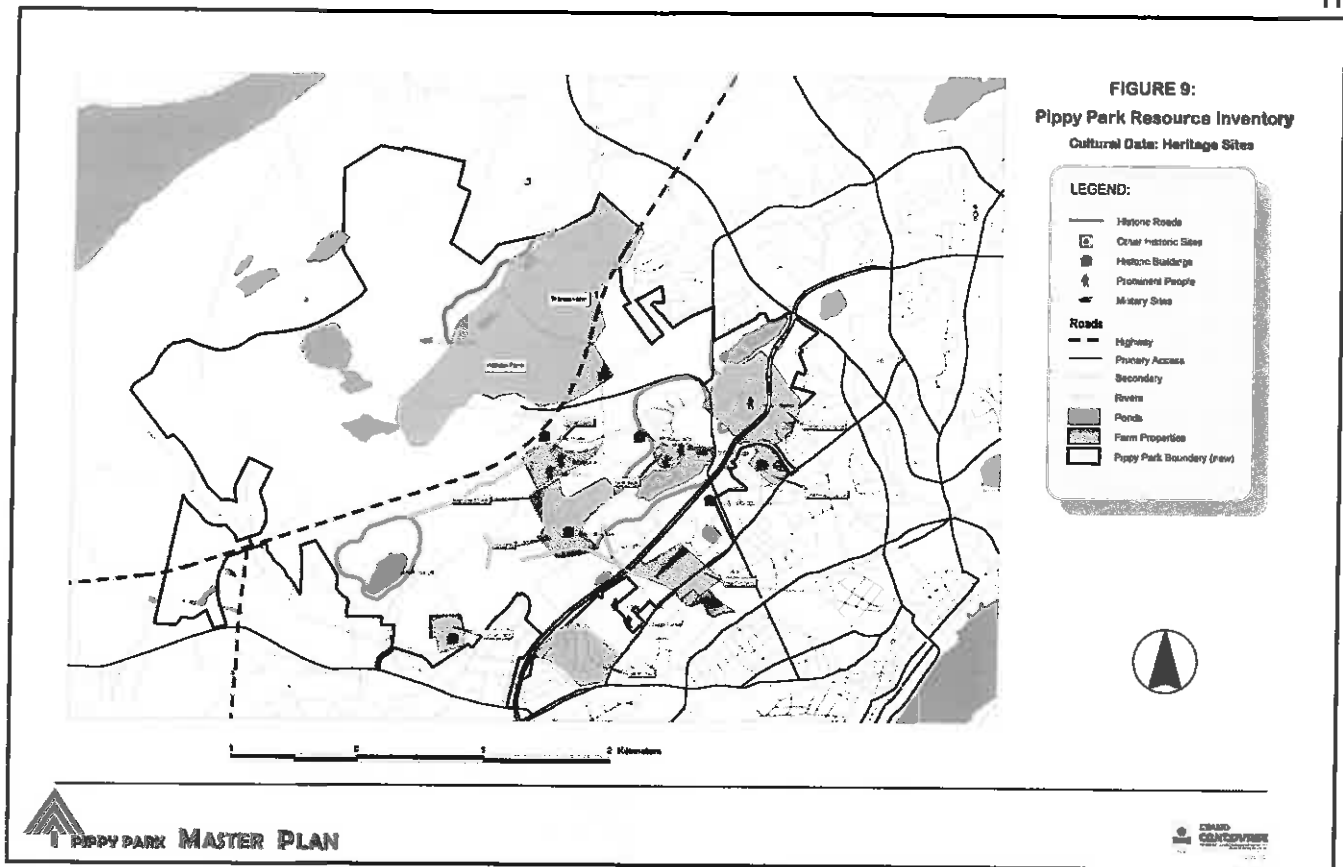
Cultural— Heritage Sites (Figure 9):

There are numerous areas within Pippy Park that are significant in terms of heritage. Most of these areas have not been properly identified and a great majority of the public know little about any of the park's heritage. Through interviews and research, and with considerable assistance from the Heritage Committee, the GCA has compiled a list of these cultural heritage sites.

There are several houses within the park that should be distinguished as heritage sites because of their age or architectural design. Examples of these include: the Carter house (built in 1845); Shaugurue house (a late 19th century wooden house); MacDonald house (a 19th century two story house with a late Georgian mansard roof); the O'Brien house (a saltbox that was built in 1854 with a central chimney); and the Casey-Kelly house (a traditional style farm house that was originally built in the 1840's and renovated in the 1920s) (Kearney Guigne, p.8).

There are also several properties and areas of land that should be considered for heritage distinction (at least by way of history boards describing the history of the area) even though there is little physical evidence of their history. These lands are mainly located in and around Long Pond. It was along the northern side of the pond that North Bank was found. This was a country residence that dated back to the 1840s. It took up much of the land between the present day fluvarium and the sliding hill. Today, all that remains are a few foundations and remnants of the garden. Other activities that occurred in the Long Pond area that could be interpreted include: a fox farm; a fish hatchery; logging (as early as the 1690s); ice collection; picnicing; camping; and hunting. Land grant maps for the early to mid 1800s "identify a number of pathways around the pond which were traditionally used by early settlers, including a 20 foot public pathway surrounding the pond and which makes up a portion of today's walking trail in the area" (Guigne, p.77). There was also the property known as Rostellan. This land, which was a farm owned by William Carson, included land that ran approximately from Rennie's River in the south to Kent's Pond in the north and it dates back to 1815. This was one of the earliest farmed properties in the region.

Agriculturally, the Pippy Park region is of significant historical importance. Farms developed here in the early 1800s. The Freshwater Valley, the farming area that included the Pippy Park region, was one of the largest early suppliers of milk, carrot, turnip, cabbage, and potato for the City of St. John's. Today, there are three remaining examples of the original farms and farming infrastructure



in Pippy Park (The O'Brien Farm, the Kelly Farm, and John Carter's Mount Scio Savory Farm). Each of these, especially the O'Brien and Kelly farms, have the potential for use as places to be used to teach people about the history of Newfoundland agriculture.

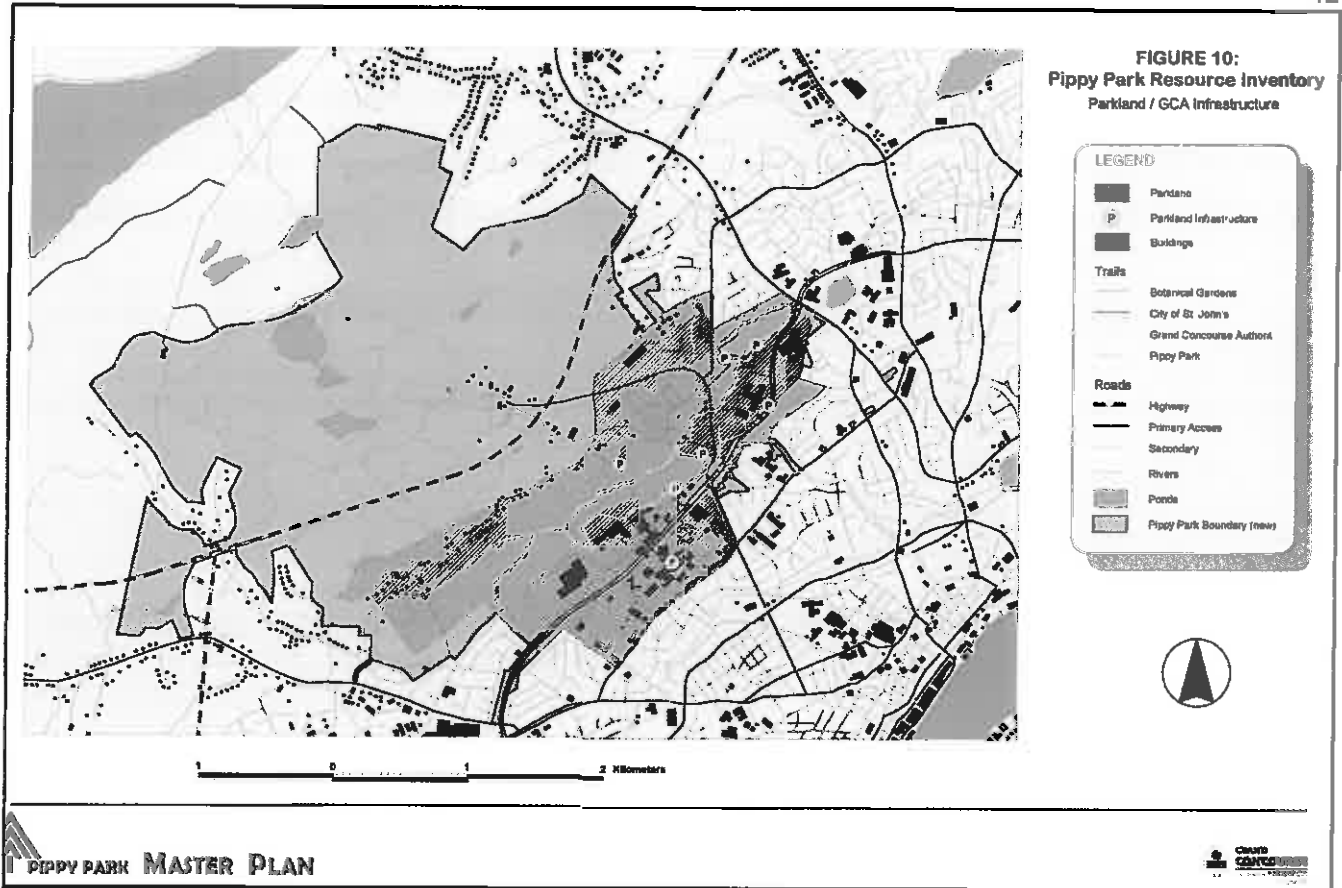
The site of the Arts and Culture Centre was also an area of significant historical interest. It started, like so many other properties of the region, as a farm. By 1935, the site had two Church of England Orphanages located on it, one for boys and the other for girls. The orphanages stood until the building of the Arts and Culture Centre. Today there is a line of trees that can be seen on the property that were planted by the original owner of the land, John Steer. This line of trees runs from the Arts and Culture Centre and goes as far as Burton's Pond (Mannion, 2000).

There are also remnants of past roads that still exist within the park. These should be noted and appropriately interpreted. Such roads include Burnt Pinch Road (which is located south of Fogarty's Wetland and was likely an old military road that might date back as far as the 1700s), and Sunday Road (which was built by a Mount Scio landowner (William Fogarty) between 150 and 200 years ago). There was also the Sand Pits Road. The sand was used "for the construction of many houses still existing in St. John's" (White, 1990, p.155). There were also "cannon balls and musket shot from the days of English troops

stationed here up to the 1800s" (White, 1990, p.155). This military use continued on to the First and Second World Wars and the famed rifle range was sometimes called the Butts. Gerald Kelly says that "the Sand Pits Road started at the end of Newtown Road just below Empire Avenue, and wended its way to Sandy Bottom (Long Pond), the Kelly acreage, to the Sand Pits and the rifle range, and continued west past the helicopter pad at the Health Sciences Centre to Oxen Pond Road" (White, 1990, p.156). Other streets that have interesting histories include: Oxen Pond Road, Westerland Road, Nagle's Hill, Mount Scio Road, and Burton's Pond.

Cultural— Property Lines

The land of Pippy Park has a complicated system of ownership which is currently the subject of a comprehensive surveying and mapping project. The area is a combination of modern property lines and old land grants that date back to the early 1800s. The GCA has possession of a Land Grant Map, (supplied by Maura Mannion), but the surveying and mapping of existing property information is still ongoing. This modern property map must be completed before final location of future developments, including trails or other more substantial types of infrastructure, can be determined.



Cultural— Trails, Parkland / GCA Infrastructure (Figure 10):

The C.A. Pippy Park Trail Development Plan: Phase I: Trail Inventory and Assessment (1997) suggests a growing popularity of trail recreation activities such as walking, birding, and cross-country skiing. It also identifies increased concern over the number and condition of trails in Pippy Park (Grand Concourse Authority, p.3). This document maps and describes the trails within Pippy Park and assesses soil condition, user comfort, trail routing and trail uses for more than 400 segments of trail in the study. Signage was noted as being poorly designed, in disrepair, and sparsely distributed along the trails (Grand Concourse Authority, p.iv). As a result of the large number of trails and inadequate signage, it is difficult for trail users to locate themselves, or to find their way from one known location to another (Grand Concourse Authority, p.25).

There are several GCA trails and walks either entirely or partially located within Pippy Park. The majority of these GCA walks are described in detail and have been documented within the GCA's Walker's Handbook. Such details as time to walk the trail and its length are given. Also given are links, rest stops and historic information along the trail. The formal, well-groomed GCA trails

provide a level of comfort and safety that is not found on the trails in the northern wilderness part of the park. This level of trail development may or may not be suitable in the wilderness area.

Table 3: GCA Walks Within the Park Boundaries

Kent's Pond Walk	Elizabeth Avenue to Prince Philip East
Elizabeth Avenue to Prince Philip West	Kent's Pond to Long Pond Walk
Long Pond Walk	Long Pond to Oxen Pond Walk (under construction)
West Wing Walk (not in Handbook)	Marine Institute Walk (not in Handbook)
Rennies River Trail	MUN Visitor Walk
Oxen Pond to Wishingwell Walk (to complete in 2001)	

Parkland makes up much of the lower portion of the park and includes such institutions and buildings as: the Confederation Complex; MUN; the Marine Institute; Pippy Park Headquarters; the College of the North Atlantic (CNA); the Arts & Culture Centre; the Art Gallery of Newfoundland & Labrador; the NRC Institute for Marine Dynamics; the Fluvarium; the Health Sciences Centre; the Aquarena; and the CBC Television studios. It is seen as a setting for Government, the University, and Healthcare and its goal is to link and integrate all the individual walkways and landscaping, into a well-organized, and well-interpreted network.

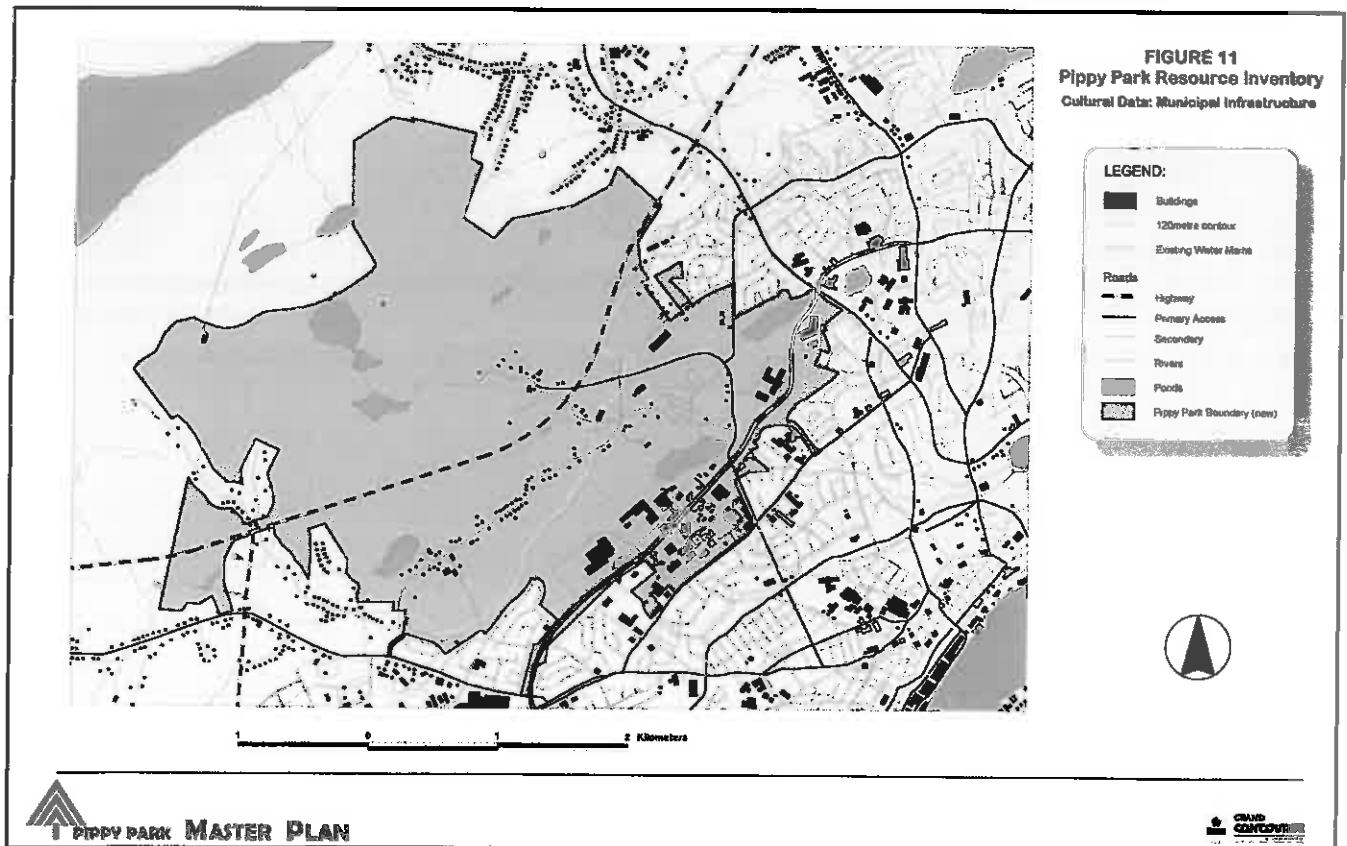
Parkland projects completed and ongoing include the GCA walkways noted above, the Coat of Arms and Exploration Walk at Confederation Complex, Gateways and Vistas, and Memorial University's Visitor Walk. Other projects are planned and the Parkland concept has been endorsed by the City, by Memorial University, the Provincial Government, the Pippy Park Commission and all other partners.

120 metre contour line without pumping. MUN, the Health Sciences Centre, and the Arts & Culture Centre are all connected to a large system of water mains that run throughout the institutes. A water main also runs south from the Portugal Cove Road/ Prince Philip Parkway intersection and connects both the Marine Institute and the Confederation Complex. Another water main runs along Allandale Road and it connects the Trailer Park, the Confederation Complex and the College of the North Atlantic (CONA). Mount Scio Road, the most densely populated residential area within the park, is not hooked to the City water mains. Nagle's Hill and the golf course are also not connected to the water mains as they are located above the 120 metre contour line. The 1992 Master Plan notes that no distribution and collection services of water and sewage will be provided in the park, except in the designated urban areas (C.A. Pippy Park Commission, p.18). This will be a limiting factor in any possible future developments if they are planned to be located outside of an urban area. Although the GCA does not currently have the location of storm and sanitary sewers, it can be assumed that they run in a similar pattern to the water mains.

Cultural— Municipal Infrastructure (Figure 11):

Municipal infrastructure within the park consists of water mains, sanitary sewers, storm sewers and roads. Water mains are found within the southern limits of the park and City water cannot be brought to any area that is above the

The municipal road network in Pippy Park includes Allandale Road, Ridge Road, Nagle's Hill Road, Nagle's Place, Mount Scio Road, part of Higgin's Line, part of Oxen Pond Road, and the western portion of Parker Pond Road. These roads are maintained by the City of St.



John's but it is the policy of the 1992 Master Plan that any work done shall be subject to Environmental Impact Assessments as the Pippy Park Commission may see fit (Pippy Park Commission p.19). Also, according to the 1992 Master Plan, these roads must remain within particular Commission guidelines. These guidelines state that:

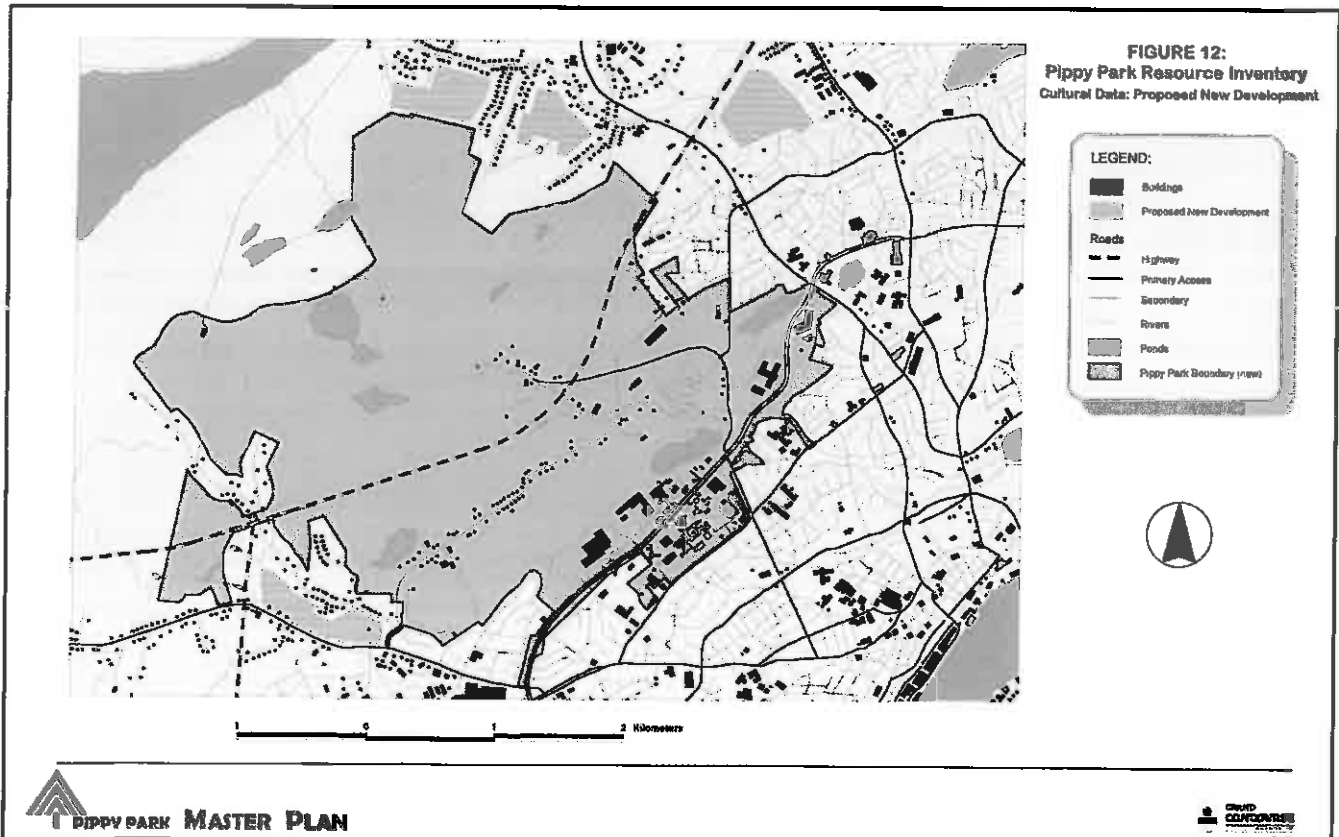
- Design features must compliment rather than detract from the ambience of the Park.
- Adequate grade separated crossings will be provided to permit park users and wildlife to move from one part of the Park to another; Clearing must be restricted to the essential minimum and off-site works will be restricted to existing cleared areas;
- Drainage patterns must be maintained; Landscaping will be in keeping with the natural vegetation and terrain of the adjoining areas of the Park. (Pippy Park Commission, p.24).

Also, any construction work on roads shall involve the services of a landscape architect to maintain a high standard of landscape design (Pippy Park Commission, p.25).

Cultural– Proposed New Development (Figure 12):

The Pippy Park Master Plan will need to take any proposed future developments into account. There are several areas within the park that are more likely to need space for expansion. These areas include:

- **MUN–** The new University Centre was completed in 2000, construction of the field house is currently underway to the east of the Aquarena, and expansion of the Health Science Centre, to house the new Janeway wing is ongoing. Although major new developments are not anticipated in the short term, future expansion needs might be accommodated by building over existing parking areas. The university also owns much of the land along the southern slope of Mount Scio Hill to the west of Long Pond.
- **Confederation Complex–** Although there are currently no plans for new development here, expansion may be necessary in the future. It might be possible to expand the complex on site by building on top of some of the existing parking. Underground parking could be used in this case.
- **Trailer Park–** Expansion or enhancement of the Trailer Park is an issue that the planning team has been asked to address. An increase in the number of serviced sites, increased laundry and washroom services, along with additional recreational activities within the trailer park area are all possible future developments to be considered.



The construction of cabin facilities along Nagle's Place is another possibility for the trailer park area.

- **Housing**— Although there is currently no plans for new development of housing within the park, there are possible developments at Gloucester Street and Airport Heights that would need to be taken into account as far as proper buffering at the park/ residential boundaries.

For any of these new developments that may occur within and around the park, an assessment of how the surrounding area would be affected is necessary.

Visual / Perceptual— Experiential Features
(Figure 13):

A series of landmarks and nodes are located throughout Pippy Park. The nodes are areas where people congregate. This is important information to consider when developing concepts for Pippy Park since particular infrastructure, such as an interpretation centre, is best situated in an area where people gather.

Landmarks are prominent features that are found within the park. Landmarks that are noted by the GCA are: the VOWR radio tower (which is seen as one drives along the west end of the Prince Philip Parkway); the Fluvarium (a uniquely shaped building on the north shore of Long Pond); the Confederation Complex (which stands out as one of the most recognizable landmarks in St. John's); and

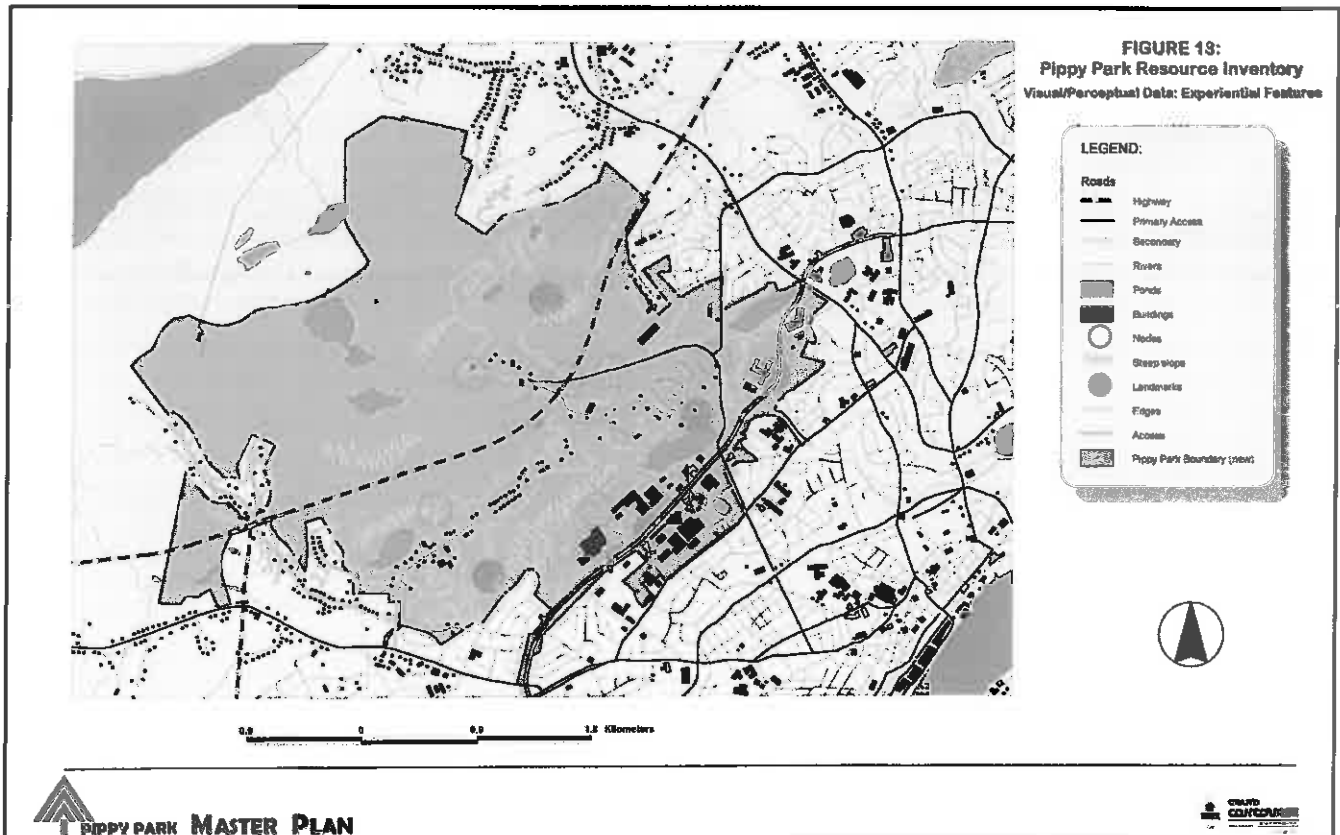
the Pippy Park Golf Clubhouse (which sits at one of the highest points of the City and can be seen from all over St. John's).

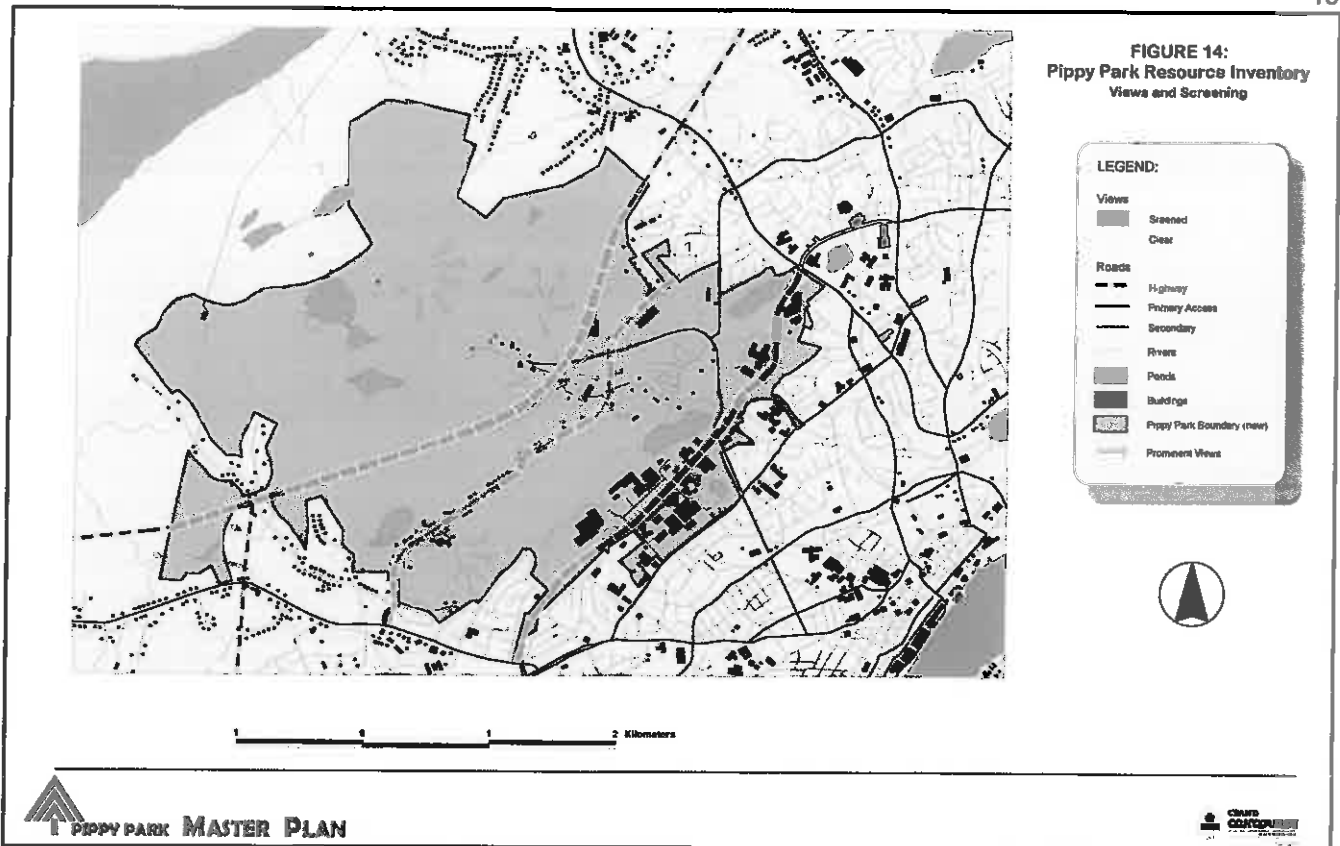
Visual / Perceptual— Views and Screening
(Figure 14):

Examination of topography and degree of slope suggested where prominent internal and external views were located. Extensive field checking provides a clear picture of where these views are realized, and where they are screened by vegetation or infrastructure.

Examination of views provided important information that was used when planning for such things as built infrastructure, recreation spaces, and trails. Along the Prince Philip Parkway, there are several views, both open and intermittently screened, of Mount Scio, Long Pond, Kent's Pond, and of the open area to the south of the Confederation Complex. From the Confederation Complex, there are some external views looking southwest, southeast, northeast, and north-northeast.

Along Mount Scio Road, external views looking over the city towards the southwest, southeast and east can be seen from Mount Scio House (The Pippy Park Headquarters). As one travels along Mount Scio Road, there are open and





intermittently screened views looking in virtually every direction either towards the city or up towards the Outer Ring Road. There are also two lookout areas along the western section of Mount Scio Road that give good external views. They are found at Oxen Pond (with long views looking towards the south, medium views towards the east and short views looking southwest and northeast), and at the VOWR Radio Tower (with long views looking south and east and medium views looking towards the northeast).

The Outer Ring Road has limitations in the views that it offers of St. John's because of screening either via trees or embankments. There are some internal views looking north that are situated immediately east of the Groves Road area. Also, views of the east end of St. John's can be seen at a crest of the highway located to the west of the Allandale Road off-ramp and also west of the Portugal Cove off-ramp. The stretch of the Outer Ring Road that is east of the Allandale Road off-ramp also gives some good long distance views of the downtown and east end of the City. There are two areas within the Three Pond Barrens that allow for external views of the City in just about any direction (there are only short views looking towards the north). These are located at the peak to the east of Middle Pond and at the Golf Course. The peak to the west of Big Pond lends itself to some short and medium views.

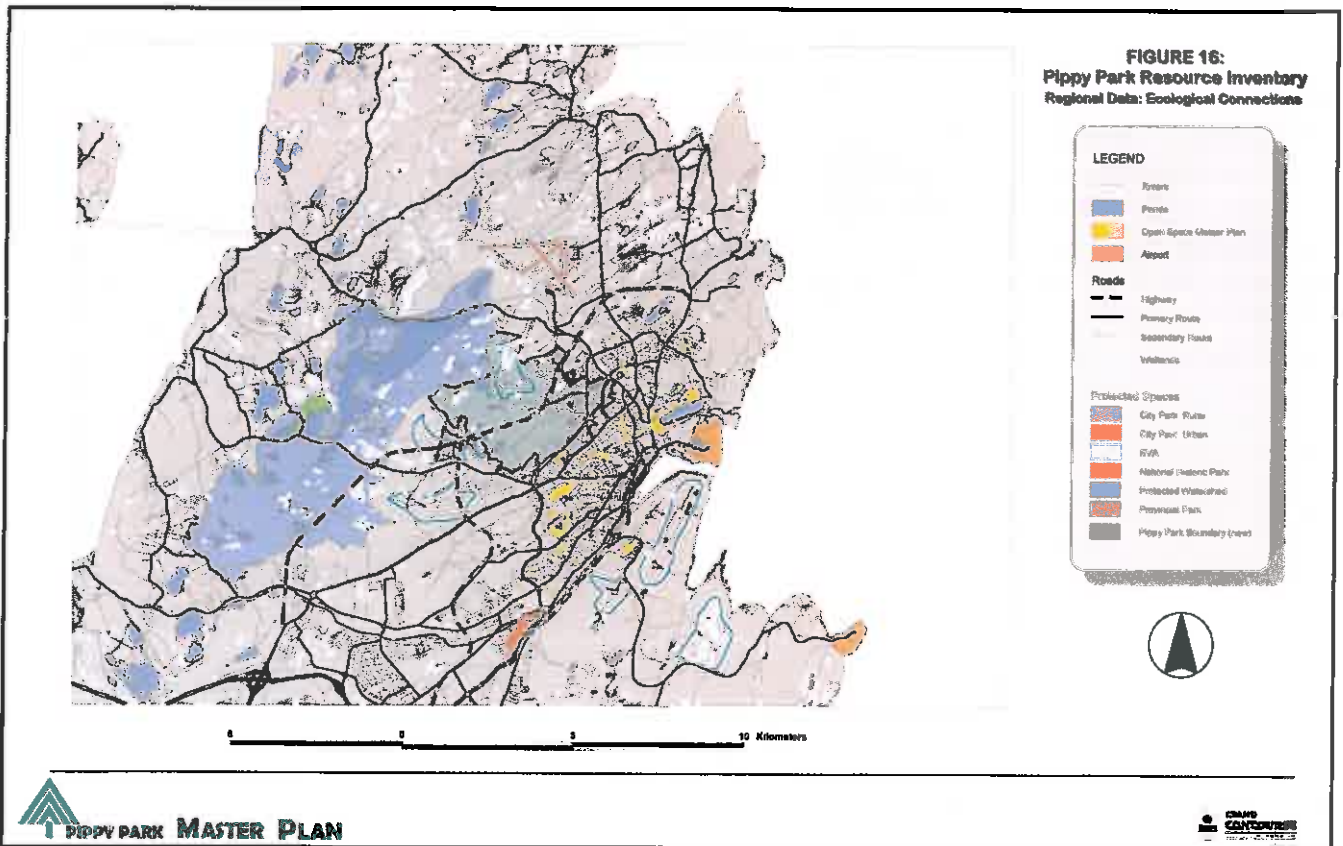
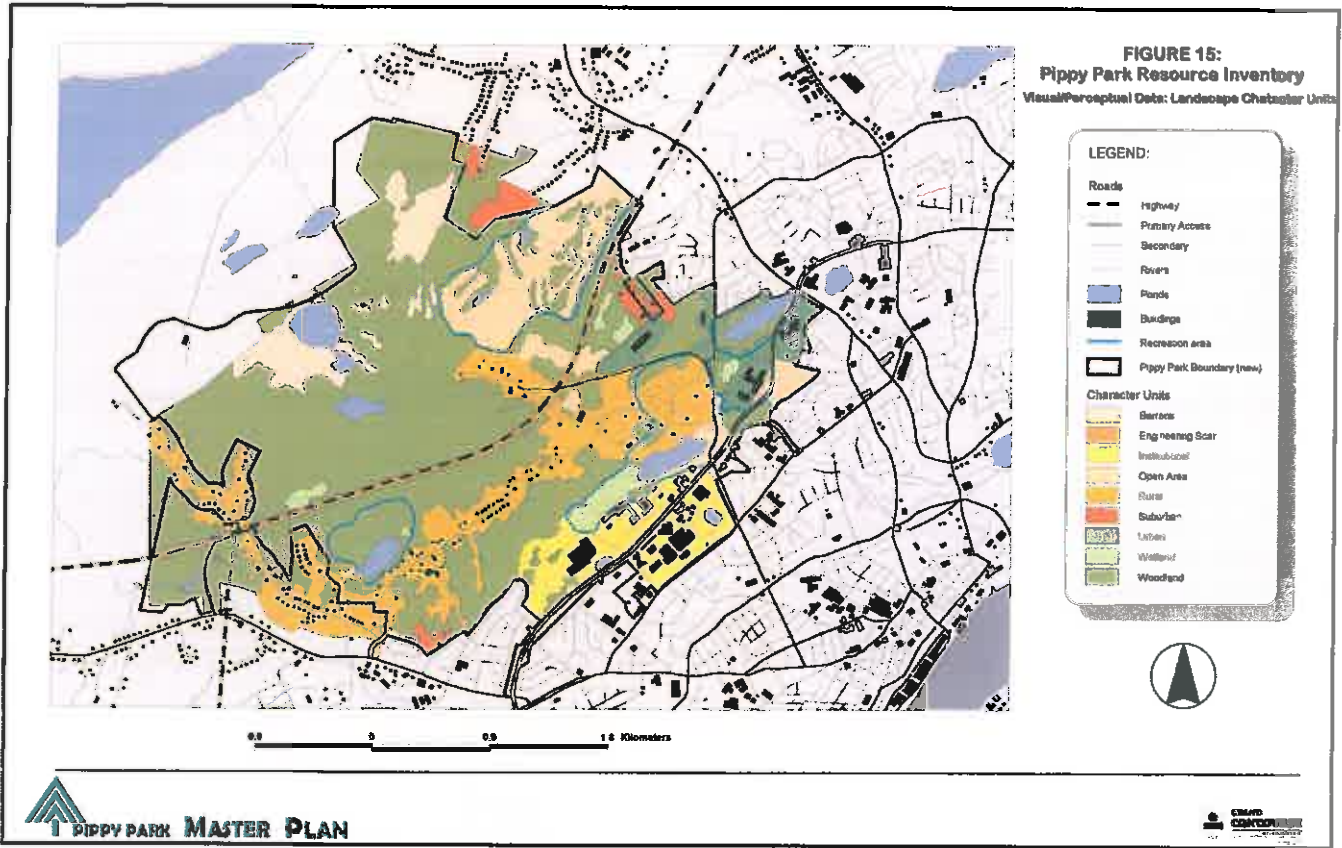
Visual / Perceptual— Landscape Character Units (Figure 15):

A landscape character unit describes the characteristics a given area of land may have from a perceptual point of view, taking vegetation, infrastructure, landform and other factors into account. Several landscape character units have been identified within Pippy Park. Layers of institutional / urban, rural, and woodland dominate the part of the park below the Outer Ring Road. These are interspersed with pockets of wetland, suburban, and open area. The northern part of the park is dominated by woodland with patches of barrens, open areas (golf course), suburban land, and rural land.

Regional Context— Park Access

Main road access to the park comes from the Outer Ring Road, the Prince Philip Parkway, Mayor Ave/Bonaventure Ave/Allandale Road, and Higgin's Line. The Bifurcation Road, currently under construction, will bring large numbers of people into the west end of the park.

There are also several GCA walks throughout the City that bring pedestrians to the park. The most prominent of these include the Rennie's River Trail, the Elizabeth to Courtyard Link, and a combination of the Virginia River to Kenny's Pond walk with the Kenny's Pond Walk itself.



The Virginia River Walk, when completed and linked to Airport Heights, will bring people into the northeast part of the park.

Regional Context— Ecological Connections (Figure 16):

Within the region there are several small parks, playgrounds, and other open spaces. There are also two National Historic Parks (Signal Hill and Cape Spear), three Urban City Parks (Bowring Park, Victoria Park and Bannerman Park), and a Rural City Park (the Rotary Sunshine Park). On a large scale, opportunities for connection to the broader system of provincial parks and protected spaces exists throughout the Avalon Peninsula and Eastern Newfoundland. These connections provide ecological links that help sustain the biodiversity of Pippy Park, and bring it into the urban core.

Summary

Pippy Park is rich in diversity. The northern section is largely made up of wilderness and it combines mature and immature forests with shrublands and wetlands. Backwood trails provide access to Big Pond, Middle Pond and Left Pond and also bring hikers to lookouts with spectacular views of St. John's. One is likely to cross paths with hares, fox and a variety of birds while there is also an opportunity to view a variety of plant life. Also, Pippy Park's public golf courses are situated in the northeastern section of the park.

The southern section of the park is more rural and urban in nature. Long Pond, Kent's Pond and Burton's Pond are all developed with GCA walks while the southern slope of Mount Scio remains as a mature forest on the periphery of the urban city. Mount Scio Road is a large rural strip that lies within the park and there are several private residents and farms situated there. A Botanical Garden and a campground as well as some playgrounds and a Fluvarium are all located in the southern section of the park. An urban / institutional area is located in the far south and southeastern portions of the park. This area is the home of the Provincial seat of Government, Memorial University and The Health Sciences Centre and it makes up the main core of the ongoing Parkland project that will, when complete, highlight and link these and other institutions in the area.

It is important to have a thorough inventory as the information that is gathered during this stage of the

process, coupled with the results of the public participation component, is the background used that helps build the concepts of the Pippy Park Master Plan. Gathering information about Pippy Park also enables the GCA planners and designers to assess land suitability for the three main land uses of the park (Institutional Land Banking, Wilderness Conservation, and Recreation).

The GIS database containing the information described in this report represents a tremendous resource, not only for developing concepts for the current master planning process, but also for ongoing planning and management of Pippy Park. The database includes a comprehensive array of abiotic, biotic, and cultural data about Pippy Park and the surrounding region. However, significant gaps remain. Every effort should be made to fill these gaps. Future research efforts should focus on:

- microclimate, especially related to wind and its effects;
- soils mapping;
- hydrology: water quality;
- terrestrial fauna: populations, distribution, habitat;
- avifauna: nesting sites, migration routes;
- aquatic fauna: spawning areas;
- forest / vegetation classification;
- heritage: continue ongoing research;
- property ownership: complete ongoing research;

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