

MILL OF KINTAIL MASTER PLAN



"All life and expression of life which is art is linked together. Wherever there is life there is soul.

The body is the expression of the soul."

Dr. R. Tait McKenzie

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1.0 INTRODUCTION

The Mill of Kintail Conservation Area is Mississippi Valley Conservation's (MVC) foremost property. It represents the only fully operational and staffed conservation area within the watershed. The Mill of Kintail Conservation Area, also referred to as the Mill, offers a unique blend of local cultural history incorporated into a natural setting. The site is host to a Museum, Education Centre, nature trail network, multiple all-season and seasonal facilities, and supports guided and self-guided outdoor appreciation opportunities. The Mill is an important asset to MVC providing a visible public presence for the Conservation Authority to residents and visitors to the eleven municipalities which it serves.

1.1 Purpose of a Master Plan

The Mill of Kintail Master Plan will be used to guide the overall management of the site. It may be reviewed or amended throughout its lifespan to address changing issues or conditions. The plan reflects the intent of MVC to conserve and maintain the natural and cultural features associated with this property, while providing opportunities for visitors to participate in passive outdoor recreation and nature appreciation opportunities.

2.0 PROPERTY CONTEXT

The Mill is located approximately six kilometres north-west of Almonte, within the Town of Mississippi Mills (see Figure 1). The Mill is accessible to a large population of people within Eastern Ontario, as it is approximately 60 kilometres from downtown Ottawa, and approximately 145 kilometres from downtown Kingston. The site is also close to smaller communities, including Arnprior, Pakenham, Carleton Place, Perth and Smiths Falls.

2.1 Property Description

The Mill is within a rural landscape that is comprised of rural residences, agricultural fields, and mixed forests. The Indian River flows through the southern portion of the property providing a natural division between the developed southern portion and the forested area to the north of the river. The 150 acre (68 ha.) property is bounded to the north by Bennies Corners Road and to the west by Ramsey Concession 8 Road. The site contains multiple buildings, including: a stone farmhouse and associated accessory buildings; the Cloister and Education Centre; an historic gristmill (now the Museum); public seasonal washrooms; an internal road network and parking facilities; a series of all-season hiking/skiing/snowshoeing trails; and, a playground. The Mill property also houses an Observatory operated by the Royal Astronomical Society of Canada (RASC).

Figure 1
Regional Context



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2.2 Land Use and Adjacent Land Use

2.2.1 The Mill of Kintail

Under the Mississippi Mills Official Plan (OP), the Mill is designated as Parkland and Open Space. This designation recognizes that rural parkland, waterfront areas, and open spaces are essential to the overall character, quality of life and health of the community.

The OP recognizes that parkland and open spaces are valued for a variety of reasons, as they provide:

- Active recreational areas for sport activities, festivals and community events;
- Playgrounds for tots and youth;
- Passive areas for leisure and nature appreciation;
- Open space linkages for recreational trails, bicycle paths and pedestrian ways;
- Natural areas; and,
- Green open spaces

The Mill fits well within this land use designation. It is a valuable natural area offering nature trails, outdoor exploration opportunities, while also supporting community-related special events.

The OP's goals and objectives for parkland and open spaces include the promotion and development of public open spaces so that they service the outdoor appreciation, leisure and quality of life needs of local communities. The Mill is a community-based Conservation Area that can further realize its importance by continuing to contribute to the quality of life for expanding local urban areas. Urban growth and population expansion means natural spaces will become more vital for passive recreation opportunities, nature conservation, and contributing toward the general health and well-being of the population.

Under the Town of Mississippi Mills Zoning By-law, the Mill is zoned Institutional (I). Examples of permitted uses within this zone include: a church, school, museum, community centre, a public use, and buildings and uses accessory to a permitted use. The Mill is recognized as a public use and a museum, and the buildings on site are accessory to these uses.

2.2.2 Adjacent Lands

The lands adjacent to the Mill are designated in the OP as Agriculture and Rural land uses, and are within a Rural – Agriculture overlay. These same lands are zoned Rural and Agricultural under the Zoning By-law.

Both the Rural zoning and OP designation are intended to allow crop production, raising of livestock, forestry uses, maple syrup production, and orchards while permitting single detached dwellings with an agriculture association, non-farm residential dwellings, and

Figure 2

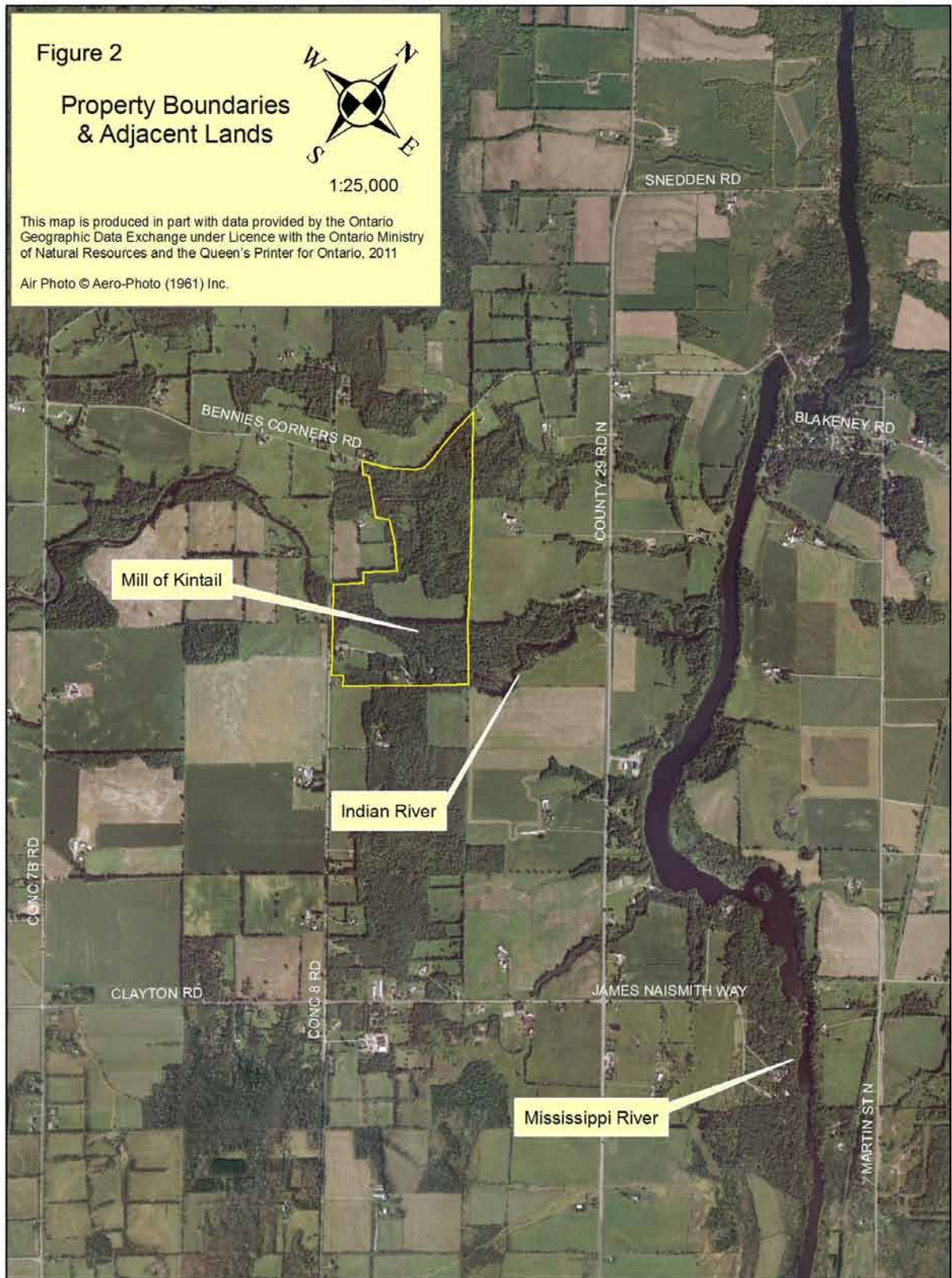
Property Boundaries
& Adjacent Lands



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small scale rural commercial and industrial enterprise. There is also a focus on conservation and management of the natural environment.

The Agricultural zoning and OP land use designation have been applied to provincially significant prime agricultural areas, which are predominantly characterized as having soils within Classes 1 to 3 of the Canadian Land Inventory. The OP recognizes that traditional rural uses of land are allowed to continue to take place. These uses are notably agricultural uses, conservation and management of the natural environment, forestry, orchards, maple syrup production, pit and quarry operations, and rural recreational activities. The Agricultural designation limits development activities on agricultural lands to those which are compatible with or supportive of the agricultural industry.

The OP Rural-Agriculture Overlay identifies locally significant agricultural lands that are situated outside of the Agricultural designation. These areas are generally relatively small isolated pockets.

The current adjacent land uses complement the Mill property, as the low-density residential uses, agricultural uses, and existing woodlots help maintain the natural and cultural integrity of the site.

The Mississippi Mills agricultural industry is one of the largest in Lanark County. In the last 30 years there has been a fundamental change in the rural area with the influx of non-farm residential development. This has put pressure on the available agricultural lands. The OP notes a significant influx of residents in the rural areas, living on severed non-farm residential lots and in rural estate subdivisions. Natural spaces such as the Mill help preserve and maintain the character of the rural landscape and support outdoor appreciation opportunities for this new population. MVC will encourage compatible land uses adjacent to the Mill property, and continue to promote the benefits of rural and natural landscapes through programming, marketing, and messaging.

2.3 The Man Behind the Mill

Dr. R. Tait McKenzie was born in Ramsay Township in 1867 and went on to become a world renowned surgeon, physical educator and sculptor. He was a pioneer of rehabilitative medicine bringing help to countless disabled soldiers during World War I. Always an athlete, McKenzie's interest in physical education was nurtured in Montreal where he was horrified by how much city life deprived an individual of physical activity. He supplemented physically demanding summer and part-time jobs with athletics. As an undergraduate at McGill University, McKenzie won the all-round gymnastic championship and was the Canadian intercollegiate high jump champion. He promoted the need for an active and healthy lifestyle that focused on an all-round balance of mind and body - a radical idea at the time. Today, these themes are still very relevant in a society concerned with obesity and spiraling health care costs.

2.4 Property History

The Mill of Kintail is a unique combination of an historical asset that conveys the fascinating stories of Dr. R. Tait McKenzie within a tranquil natural setting.

McKenzie's relationship with the Mill of Kintail began in 1931 when he acquired the former Baird's Mill to use as a summer home and studio. Over the next seven years he restored the gristmill building (originally of the 1830's era) and grounds until his death in 1938. Both McKenzie and the Mill of Kintail are fundamental features of Ottawa Valley heritage.

McKenzie constructed a dam in the Indian River near the gristmill to create a large upstream pond. The property was landscaped with stone walkways, old mill stones, pioneer wares, and herb and flower gardens. The Mill of Kintail was named after the McKenzie clan ancestral home in Scotland, which also inspired the property's landscaping designs.

The property remained in his family until 1952 when it was sold to Major James Leys, who as a great admirer of Dr. McKenzie, turned the Mill into a memorial to McKenzie. Leys acquired artifacts from McKenzie's life, including many sculptures, and displayed them in a museum on the Mill property. In 1967 the Cloister-on-the-Hill was built both as a centennial project and a commemoration of Dr. McKenzie's birth date.

In 1972 the 33 acre site was acquired by Mississippi Valley Conservation (MVC) who agreed to maintain the McKenzie Memorial. An adjacent 133 acre farm was later purchased. During 1986, 33 acres of the farm property were sold and an additional 17 acres including a stone building at the Ramsey Concession 8 entrance—now the Gatehouse—was acquired. This consolidated the site to the present day size of 150 acres.

MVC partnered with the Dr. James Naismith Basketball Foundation in 2010 to temporarily host the Naismith exhibit in the Mill of Kintail Museum. Naismith is credited with inventing the game of basketball while working at the University of Kansas in the USA. He grew up in Ramsay Township and was lifelong friends with Dr. McKenzie. The inclusion of the Naismith Museum at the Mill further contributes to its cultural significance in the community.

3.0 Planning Context

1988 Master Plan

The 1988 Master Plan document offers some insight into the planning and management concerns that existed at the time, the directions proposed to address these issues, and the outcomes that have been realized in the subsequent 20 years. A primary focus of the plan addressed the proposed uses and designs for what was then the newly acquired 'Gatehouse' building. This acquisition was seen as an opportunity to provide improved

Figure 3

Property Detail
North side



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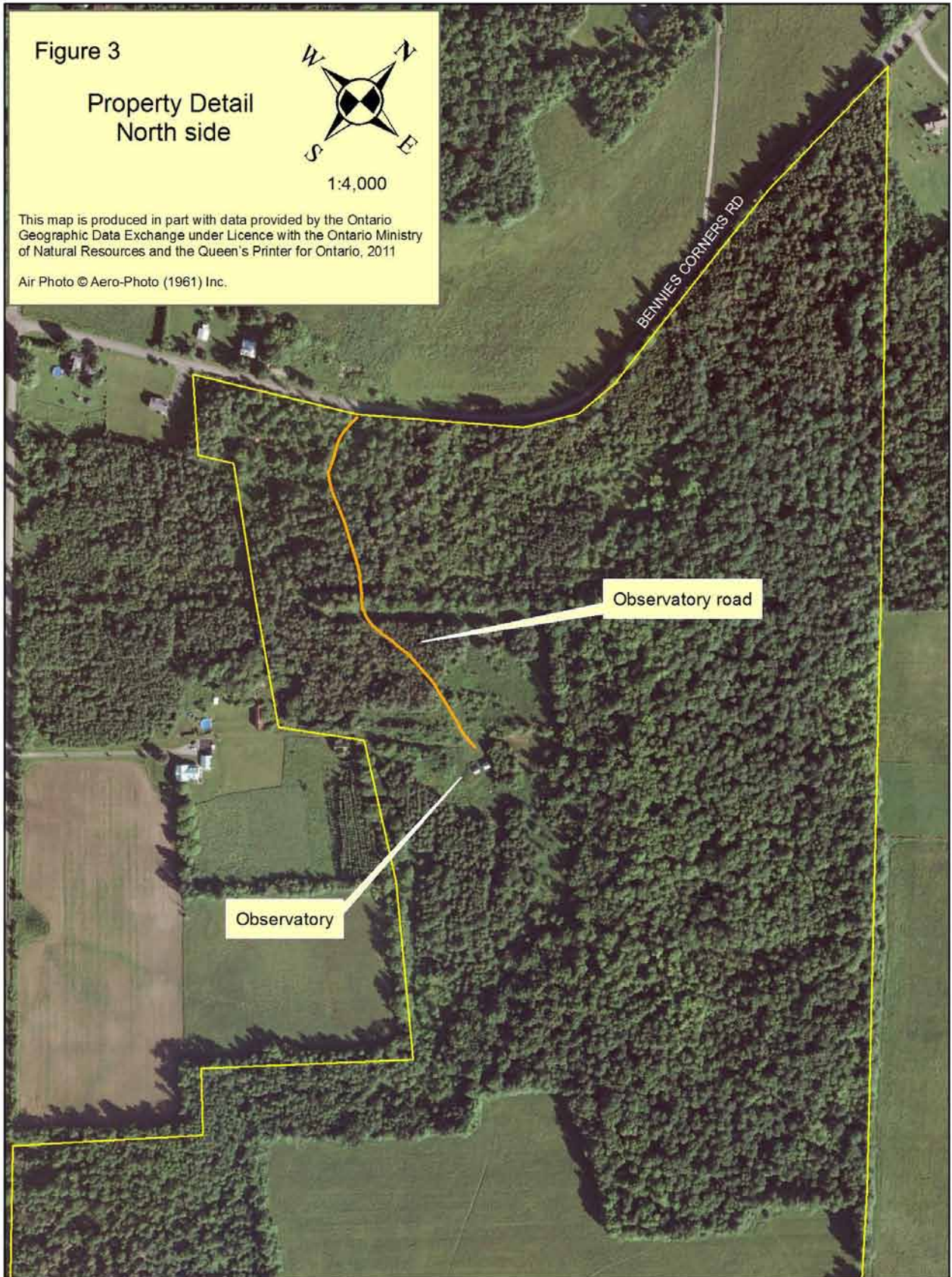


Figure 4

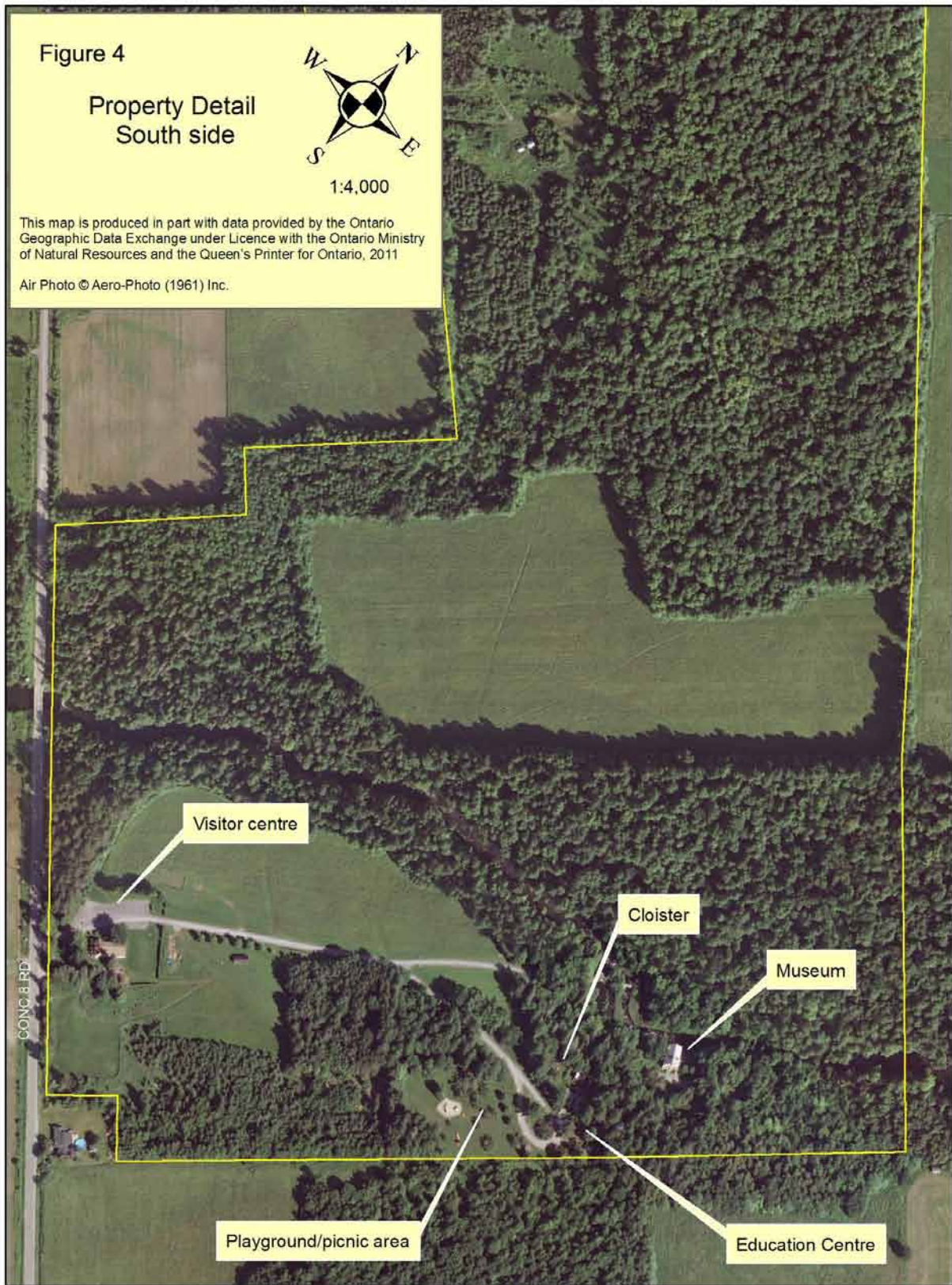
Property Detail
South side



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visitor reception and a means to expand the education programs—which at the time were believed to have outgrown the existing Education Centre.

The primary objectives of the plan included:

- ◆ Continued development of the outdoor interpretive program
- ◆ Provision for passive recreation opportunities (primarily trail based)
- ◆ Preservation and interpretation of the Mill building
- ◆ Interpretation programs related to the life, times and work of Dr. R. Tait McKenzie
- ◆ Development of the Gatehouse project

Over twenty years later after the creation of the first Master Plan, the outdoor interpretive program and historic interpretation of site features remain key functions of the site, and passive recreation opportunities still hold very good potential. However, the Mill and Education Centre facilities still pose some logistical challenges for year-round interpretive opportunities, as do the quality and location of public washroom facilities. The Mill's main entrance and Gatehouse are challenged in terms of functionality and proximity to other site features and facilities. There are also some traffic flow issues — both pedestrian and vehicular—with the main entrance. Many site visitors by-pass the main parking lot and drive further into the property to park.

Other changes since 1988 include:

- ◆ Trail improvement using grants made available after the ice storm of 1998
- ◆ Growth and diversification of education and museum programming
- ◆ Aging of buildings and site infrastructure with limited investments in lifecycle and capital improvements
- ◆ Growth of special events
- ◆ Overflow artifact storage

4.0 MASTER PLAN GOALS

The Mill of Kintail contains a unique blend of cultural resources within a natural environment setting. It offers a plethora of outdoor learning, passive recreation, and nature appreciation opportunities, as well as spaces for quiet reflection. The Master Plan vision establishes the primary role of the Mill of Kintail.

In December of 2007, a consultation with Mill of Kintail stakeholders was held. A proposed planning vision and master plan goals were presented along with a description and analysis of the existing service offered. There was a clear consensus that the existing services and programs being offered at the Mill are appropriate to the setting and the mandate of MVC and that in general they should continue. There was also agreement that various challenges related to site layout - primary building use, and revenue generation—are hindering the realization of the site's potential. These challenges are discussed throughout this document.

4.1 Vision

The Mill of Kintail Conservation Area is a site full of activity where visitors are learning, appreciating nature and local cultural history, enjoying opportunities to become physically active, and are inspired to incorporate these values into their regular lives. The Mill of Kintail Conservation Area will continue to provide these opportunities and experiences, and conserve the natural and cultural resources that make these opportunities possible.

4.2 Goals and Objectives

It is the overall goal of this Master Plan to provide continued conservation and management of historical buildings and natural resources, interpret local history, and provide high-quality educational and recreational experiences in an outdoor setting. The Mill captures the essence of rural living in the Ottawa Valley, as it holds hayfields, mature forests, and a section of the Indian River corridor.

Throughout Dr. R. Tait McKenzie's life, his philosophies directly related to the connection between physical and mental well-being. He was a believer in the health benefits of rural living and both encouraged and participated in fitness activities within an outdoor setting. Dr. McKenzie spent his childhood exploring local forests, fields, and rivers, which ultimately led him to pursue a career in the medical field, then capturing the essence of the human mind, body and spirit through his art and sculptures. Dr. McKenzie was also highly involved with organized groups such as the Boy Scouts. The Mill property houses the Museum dedicated to the works of Dr. McKenzie and will continue to provide this venue for public appreciation of his art, and embrace his philosophies of healthy living in the rural environment.

Natural spaces provide health benefits through fitness activities, as well as being areas for quiet reflection, and interaction with and appreciation of nature. As healthy ecosystems and water contribute to overall human health, it is imperative that these types of areas are accessible to the public. Using its natural resources, the Mill will offer facilities such as trails and group gathering areas, and maintain the natural woodlots, rivers, and fields. MVC will convey and interpret messages important to the organization and to the environment as a whole such as, property stewardship practices, woodlot conservation, and water quality maintenance. Visitors can take away the message of healthy lifestyles through outdoor exercise, and practice the learned environmental values on their own property.

The following outlines the specific objectives for the management of the Mill of Kintail:

- ◆ *Increase all-season level of service, including education, cultural appreciation, and both guided and self-guided outdoor recreation opportunities, for local residents and visitors to the region.*

Actions: The Mill will be fully operational on a day-use basis during the peak summer season which extends from May 1st until Thanksgiving. The site will continue to offer limited services and programming during the shoulder seasons. Focus will be placed on enhancing year-round visitation, and programming and services may be increased during the shoulder seasons should the Mill experience sufficient visitation. Examples of these service increases include: providing essentials such as parking, site orientation information, and basic trail maintenance and maintaining washrooms facilities. Site use, including trail access, is currently permitted year-round, and suitable indoor and outdoor facilities will be made available at a scale that supports programming and activities.

- ◆ *Promote the history of the site and Dr. R. Tait McKenzie's vision and values in a way that is relevant to today's visitors. Encourage the appreciation of local cultural history through programming and activities.*

Actions: Provide integrated cultural, educational and recreational activities and programming focused on the environment, nature and well-being. Maintain the historical character of the site and provide conservation of the historical buildings. Provide facilities for the display and storage of significant cultural artifacts. Promote landscapes that represent the cultural significance of the site. Encourage the growth and diversity of the Museum collection to portray other cultural elements unique to the rural Ottawa Valley.

- ◆ *Fulfill MVC's mandate of promoting the conservation, restoration and management of natural resources*

Actions: Offer education programs, special events and interpretive information delivered by MVC and partners, on topics such as flood plain, riparian corridors, and water quality. Engage in activities that effectively convey the interests of MVC related to conservation, restoration, and management of natural resources. Enhance important ecological values, and use 'green' approaches to site operation.

- ◆ *Broaden the sources and amounts of revenue from activities that complement the primary functions of the site to financially support core programs*

Actions: Provide facilities and logistical support for conferences, festivals, other special events, and site rentals. Increase public awareness of the Mill of Kintail Conservation Area in order to encourage passive use of the site. Encourage use of the site and facilities by organized outdoor and fitness-related groups. Provide seasonal staff at the Gatehouse building to monitor traffic flow and site user fees. Encourage the growth of the gift shop, rental facilities, and other sources of on-site revenue generation.

- ◆ *Strengthen relationships with the community at large.*

Actions: Partner with local museums and cultural heritage agencies, educational, environmental, cultural and recreational organizations. Develop programs and activities with and for the local community.

5.0 SITE RESOURCES

5.1 Biophysical Resources

5.1.1 Indian River

The Indian River offers a tranquil and scenic setting within the Mill property. It continues to be a key focal point and one of the primary scenic attractions. The river serves as a natural travel corridor for fish, birds and mammals. The river also represents flood plain, riparian corridors, and water quality contributing to the MVC water-based mandate and programming. It serves as a primary resource to explain and demonstrate natural shorelines and buffers. Messages related to these topics will be interpreted through educational signage along the trail network, guided interpretive programs and festivals, and self-use interpretive information.

5.1.2 Geology

The Mill contains rock of igneous, sedimentary and metamorphic origin, but is primarily underlain with metamorphic rock with igneous intrusions. The metamorphic rocks are mainly gneisses and schists, but some marble and volcanic rocks occur. The sedimentary sandstone is remnant of the Champlain Sea era. The Mill (Museum) and the Baird's house (Gatehouse) were both constructed using local sedimentary sandstone.

Soils consist predominantly of sandy loam and silt loam, which is suitable for a wide variety of crops, and supports pasture and hay. There are some sandy loam/rock complexes present that are not suitable for agriculture, but valuable for wildlife, and forestry.

5.1.3 Vegetation

Common deciduous tree species within the Mill include maple, elm, beech, basswood, birch, oak, and ash, while a large percentage of the coniferous forest cover consists of white pine, red pine, white spruce, hemlock, balsam fir, and white cedar. There is a sugar maple/beech forest community which may have been managed for maple syrup production. There are hedgerows of black cherry, hawthorn, hard maple, and white elm. Two hayfields are found within the property, and hay continues to be harvested from these fields today. Some areas that were previously hayfields are starting to become overgrown with grasses and shrubs, and some—in the vicinity of the Observatory—have been replanted with various pine trees. Common shrubs within the old fields include hawthorn, sumac, and juniper.

5.2 Cultural Resources

5.2.1 Buildings

Two of the key historical figures associated with the Mill are John Baird, an enterprising pioneer, and Dr. Robert Tait McKenzie. Baird originally erected what is currently known as the Gatehouse to serve as a general store and provide accommodation to his employees. This building occupies a prominent location along Ramsay Concession Road 8 at the entrance to the Mill property. Baird also operated the gristmill which now houses the Museum. Dr. McKenzie purchased and renovated both buildings during the 1930's. The Gatehouse (former store) housed his employees and visitors. The gristmill served as a summer home and studio.

Both the Gatehouse and Museum buildings are constructed of coursed rubble sandstone that represents good examples of Lanark County stone vernacular. Under the Ontario Heritage Foundation Act the municipality has enacted By-laws in recognition of the architectural value and historical interest of both the Museum and Gatehouse buildings. According to the By-law, the most significant features of the buildings to be retained are the overall appearance of the exterior facades including, the stonework, door and window openings, and the verandah on the Gatehouse. The rear addition to the Gatehouse and the interior of both buildings are not part of the designation as they do not add to the building's historical or architectural significance.

Past alterations to the Museum include: restoration from a gristmill to residence; partial removal of the fourth floor and addition of dormer windows; replacement of large loading doors on the south side of the building with a large window; replacement of a third floor window with a door and a staircase to provide studio access; and installation of a main floor fireplace.

Other buildings of interest on the site include the Cloister-on-the-Hill, Pioneer Cabin, Boy Scout Cabin, and the Carriage Shed (behind Gatehouse), none of which has an historical designation

5.2.2 Landscapes

One of the cultural landscapes of interpretive interest is a memorial geological rock garden built in 1967 for Dr. R. Tait McKenzie. The year was a double centennial of Canadian Confederation and Dr. McKenzie's birth. A small area suggestive of a ravine was cleared for the geological rock garden with boulders added from the Canadian Shield as a special project to mark that year at the Mill. The site contains over 20 specimens of various rocks.

Other cultural landscapes associated with the Mill property include fields, remnant orchards, and fence lines. These features add to the visual character of the site and are reminders of past cultural influences.

Ethel McKenzie is known for her herb and perennial gardens that she maintained on site. Staff is encouraged to research what these gardens looked like, and recreate these gardens around the Museum to add to the historical landscapes of the Mill.

6.0 INTERNAL ZONING

Site features of the Mill are complex and varied, ranging from buildings with significant cultural heritage value, to former cultivated land, woodlots, and river corridor habitat. The following zone categories are intended to recognize the diversity of the site and afford protection to sensitive areas, while perpetuating the cultural essence and importance of the site. Future development and recreational needs were also considered in the development of the zoning categories. These zones are designed to fulfill the goals and objectives of the site.

6.1 Natural Features of Interest Zone (NFI)

Nature Features of Interest (NFI) zones are intended to identify and afford protection to the most unique, significant and sensitive species and landscapes within the Mill. NFI's contribute to the overall site diversity and are valuable educational and interpretive tools.

Activities within NFI zones will be minimized, or restricted altogether to avoid degradation of the overall quality of the natural features. Permitted uses may include minimal nature trails with the overall intent for these areas to remain in their natural state.

6.1.1 NFI 1 Indian River Corridor

The Mill of Kintail gristmill was originally constructed along the banks of the Indian River because of the ideal fall in river elevation at this site. The river in this particular area consists of a series of multiple rapids, pools and riffles, and remains in a predominantly natural state. The Indian River headwaters are Clayton and Taylor Lakes and it empties into the Mississippi River to the east of the Mill property.



Indian River

Figure 5

Zoning




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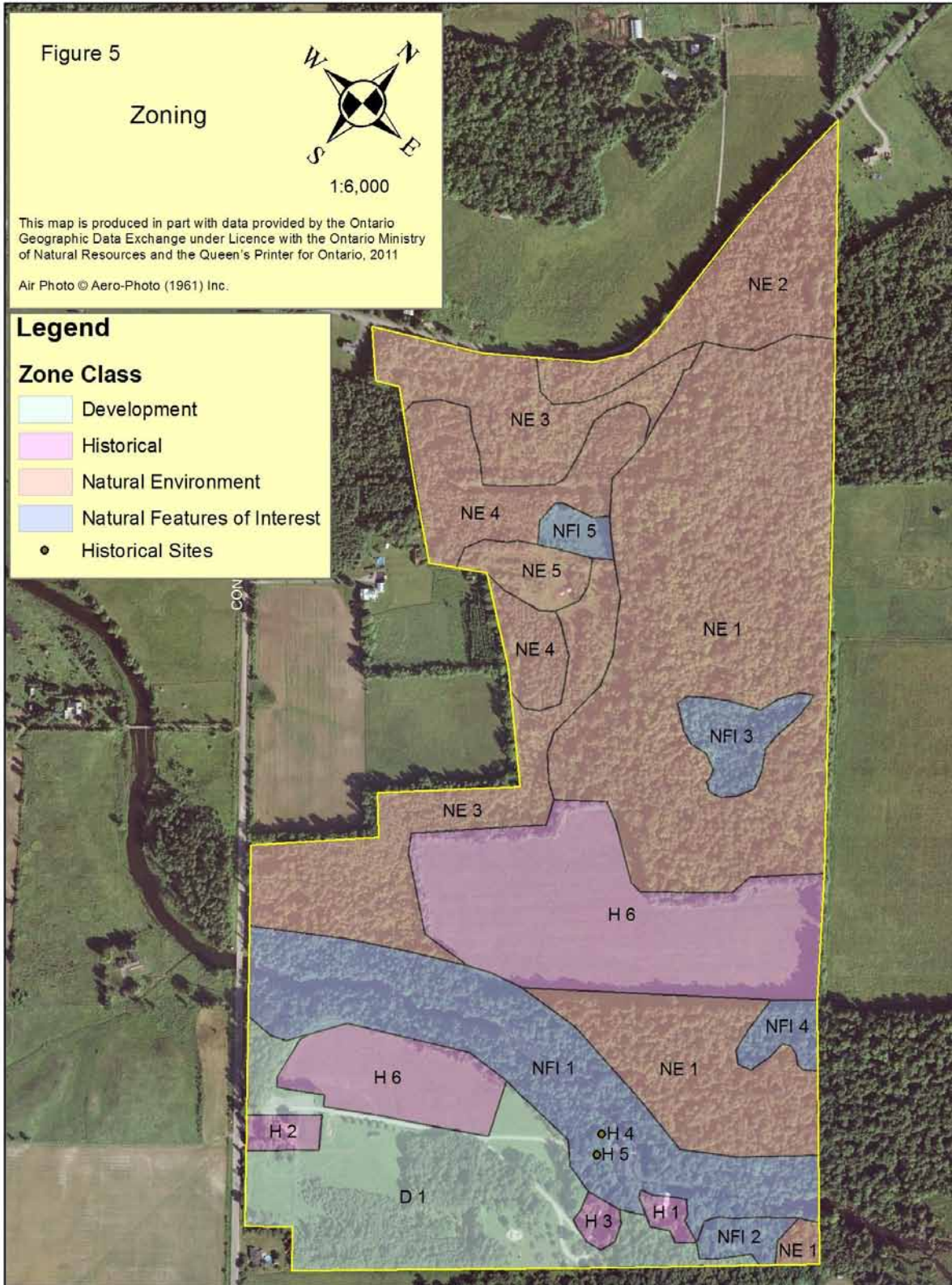
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Legend

Zone Class

-  Development
-  Historical
-  Natural Environment
-  Natural Features of Interest
-  Historical Sites



The Indian River is the single feature that has the most direct link to MVC's water-related mandate, and as such has the highest interpretation value. Within the Mill property the river is well buffered with natural vegetation along its length, primarily Hemlock mixed forest and Sugar Maple deciduous forest. The river corridor also contains a small meadow marsh. The Indian River is therefore an ideal demonstration area for natural river corridors.

The overall water quality of the river is considered to be very good. Significant plant species along the corridor include Bur-reed Sedge, Hitchcock's Sedge, Waterleaf, and Zigzag Goldenrod. A Blanding's Turtle, a Species at Risk, was identified along the river corridor during the spring of 2011. Maintaining the river corridor in a natural state is paramount in order to perpetuate the habitat for such aquatic-related Species at Risk.

Natural watercourses and good water quality are both highly valued by MVC, and it is within its mandate to help conserve and manage water resources within the Mississippi River watershed, this includes the Indian River. Therefore it is important to afford as much protection as possible to the Indian River within the Mill property. Activities and facilities within the NFI 1 zone will be limited and minimized as much as possible in order to mitigate negative influences on the Indian River. Within 30 metres of the Indian River new facilities will be limited to interpretive trails, scenic viewing areas and educational / scientific study areas (e.g. stream study). Minor river crossings will be permitted within this zone to facilitate access to the northern portion of the property. Any new buildings or structures in the vicinity of the river must be located a minimum of 30 metres from the water. New construction must also comply with the MVC Section 28 Regulation policies under the *Conservation Authorities Act*. Section 28 Regulations are intended to address concerns related to development around watercourses including natural hazards such as flood plain and unstable slopes.

The Indian River corridor is a sensitive area within the Mill site, and as such, vegetation removal will be minimized and limited to activities such as trail maintenance and essential hazard and diseased tree removal.

MVC will encourage a similar natural corridor management approach of the Indian River along its length to where it connects to the Mississippi River to the east. This natural corridor will benefit water quality and provide a natural linking corridor for wildlife movement between the two river systems.

6.1.2 NFI 2 White Cedar Mixed Swamp

Located in the south-east corner of the property is a small swamp. It is dominated by White Cedar, Black Ash, Hemlock, Basswood, and Balsam Fir. This vegetation community is particularly sensitive because it is very wet with considerable standing water, and therefore sensitive to any development or disturbance such as heavy foot traffic. The interesting and diverse ground flora includes such ferns and grasses as: Sensitive Fern, Bulblet Fern, and Fowl Manna Grass. Significant Species include Rough Sedge and Triploid Wood Fern.

No new development, including buildings or trails, is proposed for this zone.

6.1.3 NFI 3 Sandstone Ridge

This feature is located along the eastern side of the property and is adjacent to and within direct view of the Forest Hike trail. The sandstone ridge is a good example of a sandstone geologic formation and adds a scenic interpretive element to the trail. The hiking trail adjacent to it will continue to provide access to this interesting feature so that the ridge can be appreciated and interpreted. The rock formation will remain intact and undisturbed.

6.1.4 NFI 4 Fresh-Moist Sugar Maple Deciduous Forest

Supporting one of the most significant plant communities on the property, this predominantly deciduous forest is located along the eastern property line. The NFI 4 zone contains diverse forests that support several significant plant species. The area is low-lying with wet humusy soil dominated by Sugar Maple, White Ash, and Black Ash. Significant plant species include *Carex cephaloidea* (Sedge), Goldie's Fern, Cut-leaved Toothwort, Gray's Sedge, Hairy Sedge, Plantain-leaved Sedge, Bur-reed Sedge.

The winter ski trail that currently travels through this sensitive area will be decommissioned and rehabilitated (see Trails Section 8.5.5). No new trails are planned for this area.

6.1.5 NFI 5 Monarch Meadow

This area is an abandoned group camping area. The site consists of open fields, some trees and shrubs and remnants of the former campground, including vault privy toilets. These toilets have fallen into disrepair and will be removed from the site.

The open field of the old campground is now largely filled with goldenrod and milkweed plant species. These plants are essential food sources for the Monarch butterfly throughout various stages of its lifecycle. Nationwide, the Monarch currently has an estimated population from millions to over one billion individuals. Due to a steady population decline, as of April, 2010 the Monarch Butterfly has been listed as a species of Special Concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

The Special Concern designation applies to wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats. The most sensitive stage of its annual cycle, and therefore most identifiable threat, is overwintering. There are two main overwintering areas for the Monarch: the Oyamel Fir forests of Central Mexico, where 90% of the population overwinters, and coastal regions of California. The overall area of these sites is relatively small, and threats, especially from logging in the Oyamel Fir forests, are sufficient to suggest that the species could become Threatened in the near future.

A field survey conducted by MVC staff determined that the Monarch Butterfly is using this area for reproducing and to feed. As a means of providing essential habitat for butterflies, such as the Monarch, the former group camp fields will be allocated and managed to maintain naturally occurring goldenrod and milkweed plants. This is also an important area to showcase and interpret species at risk, and convey valuable stewardship messages to the general public on how to maintain similar habitats in their own backyard.

A loop will be added to the hiking trail extending the network around the Monarch Meadow in order to provide access to this area with the intent of helping to foster an appreciation of habitat preservation for Species at Risk. The area will be signed with interpretive panels identifying the importance of this habitat. A habitat management strategy will be developed to ensure the long-term perpetuation of Monarch Butterfly habitat (milkweed and goldenrod) in this area. The area will also be monitored to determine if this is an effective strategy to support the Monarch Butterfly populations.

Should demand require a group camping facility in the future, this form of development can be provided in a more easily accessible area within the Development 1 zone.

6.2 Natural Environment Zone (NE)

The intent of the NE area is to focus on maintaining natural features and landscapes, but also allow passive recreation activities, such as hiking. The majority of the trails already fall within NE zoned areas, and trails remain the primary recreational focus within the NE area.

Traditional rural activities, such as maple syrup production, and land management practices such as forest plantation management will be allowed within the NE area. Maple syrup production is more appropriately conducted by staff as a demonstration practice rather than a commercial one. When implementing these practices, special attention will be given as to not impact sensitive wildlife, both plants and animals, within this zone.

6.2.1 NE 1 – Upland Maple Forest

This NE area contains the majority of the moderately mature forest and covers a large portion of the property. The zone is based on a large Sugar Maple forest, dominated by Sugar Maple trees but also containing some Basswood, White Ash, Black Maple, and Beech. This area supports a large portion of the Mill's trail network as it is one of the largest zones for the property and offers a scenic, tranquil setting for trails. These trails will be allowed to continue.

6.2.2 NE2 - Coniferous Forest

This forest community is dominated by White Cedar, which is growing in very dense stands. The diversity of species is quite low here, and there is very little undergrowth. This area was investigated for its potential to support a trail expansion; however, due to

the density of tree growth, it would require a fair amount of tree clearing and/or branch limbing to provide suitable access. While a trail loop through this area would provide a hiking experience different from the remainder of the property, trail expansion through this area would only be feasible if coordinated with a forest management project.

6.2.3 NE3 – Transitional Forest

This area contains former pastures that are naturally regenerating into young forests, and include tree species such as White Ash, Red Ash, White Cedar, Black Cherry, White Spruce, White Elm, Sugar Maple, and White Pine. This is a good area to interpret and demonstrate forest succession. The northernmost forest contains abandoned orchards which add an interesting mix to the forest component.

A double-track access trail to the Observatory and hayfield travels through this zone, as well as the NE1 and NE4 zones. This access trail will be allowed to remain, and no upgrades to it are currently planned. The portion of trail leading to the hayfield will continue to be maintained as a double track trail, and as part of the overall hiking trail network.

6.2.4 NE4 – Cultural Plantation

These are areas of formerly cultivated fields and pastures that have been planted with a mixture of coniferous and deciduous tree species, such as Red Pine, Hybrid Poplar, Black Locust, Austrian Pine, White Spruce, White Pine and Scots Pine. While they demonstrate a common land reclamation technique - as with most plantations - wildlife diversity is low. Forest management practices could be employed here to increase the diversity of these areas by encouraging the growth of mixed forest species.

6.2.5 NE5 Observatory

A working Observatory operated by the Royal Astronomical Society of Canada (RASC) is situated within this zone. The Observatory is a positive addition to the site as night sky interpretation offers a unique and interesting element to outdoor education. The RASC will be encouraged to contribute to the overall outdoor education programming through theme-appropriate events. The RASC will be consulted on how to partner resources in a mutually beneficial manner.

The site immediately surrounding the Observatory is relatively open, but supports some shrubby and herbaceous plant growth. Custodial maintenance of the grassed area around the Observatory will be the responsibility of the RASC. No other vegetation removal is planned for this area. Some trimming of trees may be permitted to better facilitate viewing of the night sky; however, this, along with any vegetation removal or landscaping, must be in consultation with and approved by MVC management.

6.3 Historical/Cultural Zone (H)

Historical/Cultural zones and sites identify cultural resources of interest found within the Mill. These areas represent the cultural history and human use of the Mill property and bring forward Dr. R. Tait McKenzie's influences. The intent of this zone is to perpetuate the existence of these features, including landscapes, buildings, and associated landscaping or buffers around the buildings.

Due to their small size some of the areas designated as Historical/Cultural are represented as a site, as opposed to a full zone, and appear on the zoning map as a point. Each of these sites adds to the cultural richness of the Mill, and has historical and interpretive value.

Landscaped areas surrounding the historical buildings will be maintained and/or reinstated to blend the characteristics of the historical building facades with historically appropriate stone walkways, and herb and flower gardens.



Example of Historic Landscaping at the Mill

There is at least one abandoned historical refuse pile associated with the Mill. There are also several ground depressions situated throughout the site, which may indicate old building foundations or pit/prospecting mines. An archeological evaluation and inventory of the Mill property will be encouraged. This may reveal new cultural sites and artifacts that may be scattered throughout the site. Any new sites of importance or locations of found artifacts will be recorded and mapped.

6.3.1 H1 The Mill of Kintail Museum

Constructed during the 1830's the Mill of Kintail gristmill building - now a museum owned and operated by MVC - portrays Dr. R. Tait McKenzie's life and work. The Museum is also currently hosting the Dr. James Naismith collection. The Museum will continue to provide a unique example of an early gristmill structure, and the surrounding landscapes will reflect its historical era. These landscapes will include recreations of early gardens associated with the McKenzie residence and offer opportunities for quiet reflection along the scenic Indian River. In order to achieve this, MVC will solicit the assistance of local horticultural groups, especially for recreating Ethel McKenzie's perennial and herb gardens - the importance of which will be interpreted.

The exterior of the Museum building will be maintained in a historically appropriate condition in accordance with the Mississippi Mills By-law under Ontario Heritage Act. Any new buildings, structures or landscaping changes in the immediate vicinity of the Museum shall not detract from the historical visual character of this building



Mill of Kintail Museum

Most importantly, the Mill of Kintail Museum will continue to function as a Museum, representing not only the connection with Dr. R. Tait McKenzie, but interpreting other facets of local rural culture and living. MVC staff will continue to look for opportunities to expand the Museum, and to partner with other local cultural museums.

6.3.2 H2 Gatehouse / Visitor Centre

Constructed by Scottish pioneer John Baird during the 1830's, this building was originally used by Baird as a store and to house his employees. While under ownership by MVC, this building has more recently been referred to as the Gatehouse.

Historically appropriate landscaping and gardens surrounding the building will be maintained. Any new buildings, structures or landscaping changes within the H2 zone shall not detract from the historical visual character of this building.

No exterior work will be completed on the Gatehouse that will affect its heritage designation under the Ontario Heritage Act. Neither the interior nor the newer addition constructed onto the back of the original stone building are a part of this heritage designation, and may be changed, retrofitted or renovated as needed. However, any renovation will maintain the historical character of the building.



Mill of Kintail Gatehouse / Visitor Centre

6.3.3 H3 Cloister

The Cloister-on-the-Hill is a special spiritual place open to nature. Major James Leys was behind the construction of the Cloister in 1967 to commemorate the double centennial of Canada's confederation and the birth of Dr. R. Tait McKenzie. The Cloister is used primarily for hosting special events and ceremonies such as spiritual services and weddings. It will continue this function.



Cloister-on-the-Hill

The Cloister offers an interesting architectural structure representative of medieval era European architecture. While not sharing the same heritage designation as the Museum and the Gatehouse, the overall facade of the Cloister will be maintained in a similar manner that will conserve its historic-style facade and design.

Landscaping around the Cloister, including pathways, seating areas and gardens will be maintained in a historically appropriate manner consistent with the gardens and landscapes associated with the Museum and Visitor Centre.

A Pioneer Cabin is also situated within this zone. This building has been imported to the Mill and has no direct historical connection to the site. However, the historical appearance of the building is complementary to the cultural landscaping of the Cloister area and is considered appropriate within this Historical zone.



Pioneer Cabin

6.3.4 H4 Ethel's Poetry Site

This site is believed to be the location that inspired Dr. R. Tait McKenzie's wife Ethel to compose her poetry creations. This is convincing as Ethel's Poetry Site is one of the most scenic spots at the Mill of Kintail overlooking the Indian River.



Ethel McKenzie's Poetry Site

The poetry site will be dedicated to commemorating Ethel and her creative work inspired by the Mill. It will provide an area for the same opportunities of quiet scenic reflection for visitors as Ethel would have experienced living here. The poetry site will also continue to interpret Ethel's writings and poetry.

6.3.5 H5 Geologic Garden

As with the Cloister, the geological garden was constructed by Major James Leys in 1967 to commemorate the double centennial of Canada's confederation and the birth of Dr. R. Tait McKenzie - both which occurred in 1867.

This garden is becoming overgrown and is not easily identifiable to the general public. As a commemorative garden, effort will be given to maintain and clearly identify the site. Proper interpretive signage is required in order to effectively relay its message to the public.

A partnership with local geological groups will be encouraged in order to help identify and interpret the geologic garden.

6.3.6 H6 Hayfields

These field areas are currently used on a seasonal basis for the harvesting of hay. While the hayfields are not historically significant they do represent a cultural element typical of the surrounding rural landscape. They offer some aesthetic variety to the landscape and could serve as a site for demonstrating local agricultural practices such as sustainable hay harvesting. The fields also offer habitat for field nesting birds and small mammals, such as field mice, meadow voles, and shrews. The small mammals are in turn food sources for raptors, such as hawks and owls.

The practice of hay harvesting will be permitted to continue by those with prior authorization by MVC management staff; however, some best management practices may be required to be implemented as to not impact local field nesting birds. This may require seasonal timing restrictions of hay harvesting. The hayfields should be monitored to determine if any sensitive field birds are associated with this zone.

A portion of hayfield south of the Indian River has been included in a Development Zone. This area is reserved for future parking expansion in order to help consolidate infrastructure facilities within the site. Harvesting of hay may continue within this allocated parking area until the time when it is developed.

6.4 Development Zone

The intent of the Development Zone is to serve as the primary area to accommodate infrastructure including roads, parking lots, buildings, structures, picnic and play areas, and education and maintenance oriented facilities. Development of the Mill of Kintail

will be restricted, for the most part, to the land south of the Indian River. This will help prevent fragmentation of the larger forested areas to the north of the river.

Facilities situated within the Development Zone may be removed, upgraded or replaced as needed, except where cultural or significant natural heritage features will be negatively impacted.

A landscape / site plan will be created to direct the overall development of this zone, and to identify preferred locations of future buildings, structures and landscape changes.

6.4.1 D1 Main Corridor

This area contains the primary entrance to the site, access road, and all primary buildings, and play areas. Any future building development or expansion, or road development, including parking facilities, will occur within this area. The aesthetics and flow of the entrance is particularly important as serves as the gateway to the site and creates the first impression to visitors.

Included within this zone is a small section of hayfield, plantation and a natural mixed forest. In particular, the portions of hayfield and tree plantation that have been designated to be included within the D1 zone have relatively low biological diversity and development impacts on these features would be marginal. The allocated section of hay field is suitable for a new parking area, thereby helping to consolidate facilities in close proximity to the Museum and Education Centre.

Any development and/or new buildings within this area must consider historic building aesthetics and blend with the historical visual character. Vegetation removal must be limited to what is necessary for building envelopes and no areas shall be unnecessarily cleared.



Main Access Road Corridor

7.0 RESOURCE MANAGEMENT

7.1 Natural Resources, Inventory, Research and Monitoring

The Mill provides a good example of a riverine corridor, along with mixed forest habitat, coniferous forest, and deciduous forest typically found within the Ottawa Valley.

Comprehensive inventories assist with making informed site management decisions, and help protect sensitive natural heritage, cultural, historical, and geological features. MVC will encourage participation in ecological, geological and cultural research activities conducted by staff, educational institutions, specialized interest groups, and other qualified professionals.

A life science inventory was completed by David J. White during the summer of 2009. This report is titled *A Life Science Study and Assessment of the Mill of Kintail Conservation Area*. The purpose of this study is to support the completion of this plan and to identify significant natural heritage features and species. By doing so, the site can be managed in a way that allows these features to prosper. The inventory considered the botanical resources of the Mill and was used to help establish the internal site zoning configuration.

Additional inventories completed by MVC staff for the purpose of this plan include a fish inventory of the Indian River during the summer of 2009. The size and age of the sample fish caught suggests that the Indian River provides suitable breeding, forage, and sheltered areas to support fish throughout their lifecycle. Also conducted was a spring 2009 bird inventory by MVC staff, and a compilation of wildlife sightings by the education staff. This information was also intended for site zoning purposes and identification of sensitive features or species. While the Mill woodlots are not considered to be extensive habitat for forest interior bird species, identification records do indicate that some interior species use the Mill. This is important as the Mill woodlots serve as a migration stop-over or as nesting habitat for these sensitive bird species. Further inventory work is recommended to clarify whether or not any woodlots within the Mill support nesting habitat for interior forest bird species.

Benthic macro invertebrate samples were collected from the Indian River using Ontario Stream Assessment Protocol (OSAP) and Ontario Benthic Bio monitoring (OBBN) techniques on October 20, 2009. A traveling kick and sweep method was used for the sampling. Benthos species have varying tolerances of organic pollution. The level of organic pollution present in the water is a direct indicator of water quality. Using Hilsenhoff index calculations, the overall water quality condition of the Indian River at the Mill site is good, but some organic pollution is probable.

The naturally vegetated banks of the Indian River within the Mill directly contribute to overall water quality. Trees and shrubs lining the river banks provide shade which helps to cool the river water and provide relief to wildlife during hot summer months. Cooling the water also reduces algae bloom outbreaks. Shoreline plants help prevent erosion and

intercept sediment and nutrients contained in overland runoff before entering the river. The vegetated shoreline within the Mill property directly contributes to reducing organic pollution therefore improving overall water quality of the Indian River. Shoreline plants, especially fruit and seed producing plants, benefit local wildlife by providing food and habitat. Woody debris adds important protective cover for fish, reptiles and amphibians.

All site management activities will be designed to sustain or improve the overall water quality of the Indian River.

Further inventories that are recommended to achieve a better understanding of site resources include detailed bird, mammal, insect, and herptiles (amphibians and reptiles) inventories. Any new records of Species at Risk found within the Mill boundaries must be well documented and mapped. This information should also be shared with the provincial Ministry of Natural Resources Natural Heritage Information Centre. Where any new development is proposed, such as the construction of new buildings, structures, or new outdoor sites to complement the education program, a reconnaissance-level natural heritage and cultural review will be completed in order to ensure these values will not be negatively impacted. Future minor additions or changes to the trail network may also occur with the support of a reconnaissance-level life science inventory. Any changes to trail configuration will be designed to avoid sensitive features. The reconnaissance-level inventories must be completed by a MVC staff or other qualified professionals prior to any new development on site requiring clearing of native vegetation.

Considering the historical agricultural practices that surround the Mill property, its use as a gristmill site, and as a residential area, the completion of archeological inventories throughout the property, such as digs to locate artifacts, will be encouraged.

7.2 Species at Risk and Other Sensitive Wildlife

The life science inventory completed by David J. White identified Butternut (*Juglans cinerea*) to be found in four locations within the Mill property. The Butternut tree is an Endangered Species and therefore protected under the *Endangered Species Act, 2007*. Butternut is still a relatively common tree in eastern Ontario, but is suffering decline due to a fungal disease called Butternut canker. The Butternut trees within the Mill property will be formally evaluated by a qualified professional to determine if any are considered to be retainable. The recommended buffer by the provincial Ministry of Natural Resources (MNR) for the protection of retainable Butternut is currently a 25 metre radius around the bole, or trunk, of the tree. Within this radius the MNR recommends that no new activities should be introduced that negatively affect the root system of the tree including excavations, grading or paving. All known and any newly discovered Butternut will be mapped to ensure adequate protection is provided to the species and their habitat.

The Monarch butterfly is considered to be a species of Special Concern. Monarch butterfly benefit from plant species such as milkweed and goldenrod that are found in relative abundance at the Mill. The management of Monarch Butterfly habitat within the Mill is discussed further in the Zoning Section 6.1.5.

Blanding's Turtle, a Threatened species, has been observed by MVC staff along the Indian River corridor within the Mill of Kintail. Continued monitoring for this species is encouraged. Sightings and confirmed nesting areas will be mapped in an effort to determine how this species is utilizing the Indian River corridor within the Mill boundaries.

Two species of plants within the Mill are regarded as being regionally significant (rare within Eastern Ontario), and thirteen native plants are significant at a local scale. Many of these significant species have been included within the NFI zone, the most restrictive site zoning designation.

Continued inventorying of the Mill property will help identify new Species at Risk occurrences, and therefore help protect critical habitat.

7.3 Vegetation Management

The overall intent of vegetation management for the property is to retain forested areas in order to perpetuate the natural succession of forest communities.

Tree removal will generally be limited to trail maintenance, and essential hazard tree removal in areas used regularly by Conservation Area staff and the general public. Tree removal will be assessed based on the immediate danger of the hazard tree and intensity of public use in that particular area. Standing dead trees will be removed if they pose a safety risk, otherwise these trees will be left in place as wildlife habitat. Consideration will be given toward leaving as much lower trunk of hazard trees as possible to be used as wildlife habitat. Cut hazard trees and wind thrown trees within designated NE and NFI areas will be left to decompose unless they pose a threat to health and safety, interfere with maintenance operations, or if the build-up of woody debris poses a wildfire hazard. Plantation pine trees that are removed during a plantation management/thinning process may be used as lumber for on-site maintenance projects. Brush cuttings will be left to deteriorate or composted on site. Limbed branches may be chipped and used for maintenance projects.

Due to the small size of the site and proximity to private property and the threat to human health and safety, all wildfires shall be suppressed.

Insect and disease infestations will be controlled where they pose a threat to the greater forest communities and adjacent lands. Non-chemical and species specific controls will be used whenever possible.

Some forest management will be permitted in limited areas in order to demonstrate sustainable forest management practices, or other rural living practices, such as maple syrup production. It is not the intent of forest management to permit commercial-scale tree harvesting or full scale maple syrup production.

A vegetation management strategy is recommended to evaluate the health of the pine plantations on site. This study will determine if thinning or other management is required, or if the stands should remain in their current state.

A vegetation management strategy is also recommended for the Monarch Meadow. Currently, goldenrod and milkweed – upon which the Monarch is dependent - are regenerating naturally within the open meadow. However, some management of the meadow to ensure the long-term continuation of this habitat may be required.

Existing hayfields within the Mill property will be tended seasonally to allow for local hay production and to demonstrate Ottawa Valley rural living practices. Best management practices, such as appropriate timing of harvesting as to minimize impacts on field nesting birds, will be encouraged.

Planting of native species for any site rehabilitation is encouraged. This includes trail rehabilitation, planting of open areas, rehabilitation of the stream study area, shoreline stabilization of the Indian River, and management of the Monarch Meadow.

Mowing of the Mill property, other than for seasonal harvesting of hay and trail maintenance, will primarily be focused within the Development Zone. Mowing will be permitted along roads, around existing buildings and walkways to maintain vehicular and pedestrian safety, and to maintain playground and picnic areas. An overall reduction of mowed areas will be encouraged where possible.

Nuisance plant species, such as poison ivy and stinging nettle, will only be controlled or removed in essential locations where they could be a safety concern to visitors.

7.4 Control of Invasive Species

Non-native invasive species are those not naturally found in Ontario. These species can spread easily and quickly and adversely affect the habitat they invade ecologically. These species will not be intentionally introduced to the site. Garden plant species that are aggressive and have the potential to spread quickly throughout the site will not be used for landscaping purposes or for historical garden recreations.

Some best management practices for preventing the spread of invasive plant species include: maintaining as much intact forested area as possible with limited fragmentation and reducing mowing in grassed areas and along forest edge areas.

7.5 Fishing, Hunting and Pets

Pets are permitted within the Mill of Kintail provided that they are leashed and properly supervised at all times.

Recreational fishing, commercial fishing, and commercial bait harvesting are not permitted along the Indian River within the Mill property boundaries. The hunting of all game and commercial fur harvesting is prohibited within the Mill property boundaries.

The control of nuisance animals will be permitted where there is an immediate threat to human health and safety or to Mill property. The removal of animals will be conducted in accordance with provincial guidelines and regulations.

7.6 Waste Management

Garbage and recycling programs are currently managed by site staff, and are collected road-side by the municipality. MVC will continue to employ recycling programs and make collection bins convenient and readily available for visitors and staff. This may require an increased commitment in collecting and sorting recyclables; however, seasonal summer staff should be able to contribute to this program during peak visitation periods with negligible increased costs to the operations department.

Sewage from buildings is currently treated using private on-site sewage disposal systems. The collection of sewage from septic tanks and vault privies is contracted out, and sewage is disposed off-site. A new centralized comfort station would help reduce the number of vault privies needed on site.

Waste consisting of natural materials, such as leaves, grass clippings, brush, will be reused or composed onsite where feasible and appropriate.

Other solid waste, such as pet waste, will be removed from the site for composting or disposal.

Options related to composting food waste will be explored. However, this practice is not particularly enticing in a publicly used area as composting facilities can attract nuisance wildlife behavior from raccoons and bears. Proper wildlife-proof compost containers may be required.

7.7 Industrial / Commercial Uses

The following uses are not permitted within the Mill of Kintail:

- Commercial forestry. Permitted forestry practices will be related to essential hazard tree removal, or for forest management purposes to improve forest community health.

- Extraction of aggregate or topsoil for commercial purposes.
- Commercial hydroelectric power.

Green energy sources, such as from geothermal, wind and solar will be encouraged where possible for on-site purposes within the Mill of Kintail. Alternative energy sources must maintain an esthetic compatibility with all other site characteristics.

7.8 Commemorative Plantings

Chairman's Way consists of a length of planted memorial trees that acknowledges the contributions of past MVC Chairmen. This series of trees currently lines the main access road past the Visitor Centre. These plantings may continue along this road corridor as planting space allows. Other commemorative plantings will be reviewed by MVC management and may be permitted provided that suitable planting area exists.

Alternative planting areas to Chairman's Way will be reviewed based on demand. Should space restrictions require new planting areas, the hayfield near the main site entrance is a preferred location as the open space will provide suitable growing conditions for young sapling trees. The interior hayfield would serve as a suitable alternative location for commemorative plantings for the same reason. A lined corridor configuration could be implemented in the interior hayfield as this would create a defined pathway corridor crossing the field.

Native tree species indigenous to the Mill are preferred for all tree plantings.

8.0 OPERATIONS and VISITOR SERVICES

8.1 Visitation

As local communities continue to grow, so will the demand for nearby and natural publically accessible green spaces that support outdoor activities. In this sense, the value of the Mill is still being realized. The historic buildings, hiking trails, scenic vistas, and manicured grounds all make the Mill a popular attraction to people wishing to use the property for special events and outdoor experiences. The Museum is a draw to visitors in itself as it provides a unique collection of local art and artifacts. The Mill of Kintail will continue to encourage visitation by those searching for passive outdoor recreation and fitness opportunities, as well those simply searching for areas to experience quiet reflection in a scenic natural setting.

In order to gain a better impression of visitor use of the site, an up-to-date survey is needed. The last formal visitor surveys completed for the Mill were during 1987 and 2000. These surveys suggest that the majority of visitors come from an 80km radius, and most fall into the 40+ age category. During 1996, a traffic counter identified 10,000 vehicle occurrences for the year. While this number also includes staff trips and summer camp drop-off and pick-up occurrences, this data represents consistent use of the property. The types of visitors that frequent the Mill include: families, local residents,

organized groups (school groups, summer camp), and visitors attending special events (weddings, water festival, Kintail Country Christmas). The surveys indicate that people who visit the Mill are interested in hiking the trails, exploring the manicured grounds, and visiting the Museum. It is unknown how many people visit the Mill specifically for snowshoeing or cross-country skiing, other than as part of an organized school or fitness groups; however, there is often evidence of this type of trail use during the winter in the form of snowshoe and ski tracks. An updated visitor and trail user survey will help provide the following:

- Determine if there is any change in visitor demand or use of the site;
- Determine type of trail use; and,
- Determine what demographics to target for marketing purposes.

The Museum offers an interesting initial attraction for visitors but once they arrive the natural setting entices them to explore further and extend their visit. The Mill also offers an accessible destination for seniors and families with young children to explore interesting features such as gardens, the Cloister, a bridge over the river, etc. The trail network offers a good opportunity for casual exploration of the property and complements the other attractions well. Recreational activities including walking, snowshoeing, and cross-country skiing are all popular. Facilities such as the play structure, picnic tables and the Joy of Effort Trail fitness stations are added attractions.

The Mill of Kintail hosts a wide range of special events including: MVC Board of Directors meetings, staff and public meetings, weddings, social teas, fundraisers, gallery exhibitions, and organized fitness-oriented activities. Special events create opportunities to bring new visitors to the site and entice return visits from those who have visited in the past. Special events can be separated into two categories: 1) Events that tie directly into the mandate of MVC and have an education element and / or help build supporters of the site. Revenue generation often results from this type of visitation. An example of this includes the water festival. 2) While compatible with the setting the event may not have a direct tie to the mandate of the site; however, generate revenues that are used to support site activities. Weddings, meetings, and organized picnics are examples.

Compatible special events will continue to be encouraged in order to bring new visitors to the site, encourage return visitation, continue to build a loyal constituency, and to help generate revenues that can be used to support core programs. MVC's core mandate messages will be interpreted to all visitors through signage and other self-use information sources. The Visitor Centre facility will increase its use and flexibility to accommodate a range of group activities and special events. While many of the large group events are outdoor-focused during a specific time of the year (May 1 to Thanksgiving), the availability of the Visitor Centre during the shoulder and winter months will help cater to off-season group activities and events.

The ability to support large special events in the central core of the site is somewhat compromised by the quality of basic services, such as a formal comfort station, easy access to potable water and hand washing facilities, lack of kitchen facilities, and coverall tents that are nearing the end of their lifecycle. While kitchen facilities are available in the Visitor Centre, a centralized comfort station will help alleviate some of the washroom and hand washing facility problems. A permanent covered shelter serviced by electricity will help offset the heavy use of the large tents. It is anticipated that providing these essential services will increase the attractiveness of the Mill for large group activities and special events.

8.2 Operations and Recreation Management

A site operations plan will be developed to guide the day-to-day management of the Mill and will include budget, staffing, maintenance, enforcement, and emergency services.

The Mill is a year-round functioning site. It is fully operational on a day-use basis during the peak summer season (May 1 to Thanksgiving), and offers reduced services during the shoulder and winter months. There is public interest in using the Mill on a year-round basis, as visitors continue to access the site to walk the grounds and trail network during all seasons. The hosting of special events and education programming are also popular uses of the Mill during all seasons. Based on this, the Mill will continue to operate with varying levels of services year-round.

Allowances for overnight use, for example to support group camping, night sky viewing parties, etc., will be reviewed on an individual basis and must be approved in advance by MVC management. An abandoned group camp is situated within the northern portion of the property adjacent to the Observatory. It is far removed from any other facilities. This former camping area will be permanently closed. Should the demand require a new group camping facility, this will be established within the Development 1 Zone. Any new camping areas will be geared toward organized group use only. Camping and campfires other than within a designated area is prohibited. Open campfires, where permitted, will adhere to local fire regulations.

During the peak summer season, traffic flow and day pass fee collection will be controlled at the main entrance by a combination of the self-use permit station, and a seasonal attendant (summer staff member). Improved site orientation and other visitor information will be provided by Visitor Centre staff. Season passes for year-round access to the Mill will be promoted and sold. The site admittance fee structure may be reviewed to establish separate peak season and shoulder season admission fees. During the off-season a self-use day pass payment system will be utilized, and site orientation and visitor information will primarily be provided on a self-serve basis.

The Visitor Centre will serve as the principal administrative building, and will remain open year-round. Main-floor facilities including washrooms, multi-purpose room and gift shop will be made available to the public. The second-storey rooms will predominantly be accessible to MVC staff and serve as winter office space.

Visitor orientation at the Visitor Centre, main parking area, and trail heads is currently inadequate, and the full potential for informal interpretation opportunities, such as interpretive panels situated along the self-guided trails, is still to be realized. This is an important requirement in order for first time visitors to fully experience the entire site.

Designated trail activities for the Mill include walking, hiking, running, snowshoeing, and cross-country skiing. While the trail system is accessible for snowshoeing and cross-country skiing during the winter season, the trails are not currently groomed or track-set specifically for these uses. This can be reviewed further should sufficient demand require groomed trails, or should an organized group such as a local ski club wish to enter into a trail maintenance agreement. Until such time that they are redesigned or rerouted, hazardous trails will be closed during the winter months. An accessible trail loop will be implemented and maintained to accommodate wheelchairs and strollers during all seasons other than winter.

There is good fundraising capacity through the Mississippi Valley Conservation Foundation (MVCF), which can add vital capital funding for essential projects such as washroom improvements or infrastructure upgrades. The MVCF is a charitable organization whose mission is to raise funds and provide volunteer support for the conservation and education programs of the Mississippi Valley Conservation Authority. The Foundation is dedicated to conserving the lands, wildlife and water environments of the Mississippi Valley and to preserve places of outstanding natural and cultural significance. The MVCF will therefore play a significant role in the operation of the Mill on a year-round basis, and for much needed improvements to the site.

8.2.1 Education Programming

The Mill of Kintail is MVC's primary location for launching outdoor education programs, and the site supports an Education Coordinator who is responsible for program development. The intent of the educational programming is to foster an appreciation of nature and to increase awareness of conservation values and the natural environment through an outdoor learning setting. Programming will encourage outdoor play and skill development through activities such as hiking and snow shoeing, and target areas of the Ontario science curriculum through such means as habitat and wildlife studies. MVC's mandated interests, including water quality and flood plain management are also important themes. Outdoor educational experiences will continue to be offered year-round as site attendance demands it. Programs are delivered from the Education Centre, the Visitor Centre, and through exploration of the site's trails, forests, fields, and river corridor. The successful development of new initiatives, such as the Water Festival, has resulted in new funding support for programming.

The goals of Conservation Authority outdoor education are to:

- Complement the school curriculum and enhance classroom lessons by providing students with the opportunity to participate in hands-on activities in both an indoor and a physically active outdoor environment;

- Communicate the goals, objectives and programs of the Conservation Authority; and,
- Inspire an appreciation of natural resources, and create an awareness of conservation and proper management of resources in the watershed.

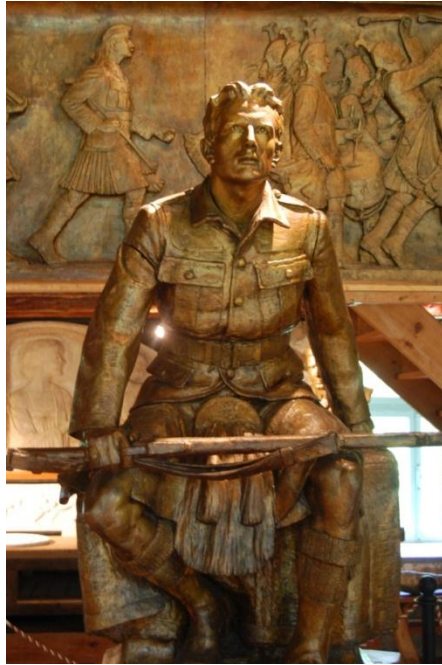
Educational programming fits well with MVC's conservation mandate and the vocation of the site, and helps expose new audiences to the Mill's natural features. The challenge for the education program is to increase year-round programming and visitation, and diversify special events and types of groups that these programs attract. Group education programs are important for attracting visitation to the Mill and this will continue to be encouraged. Educational programs focus on two audiences: primary level school visits with water-based themes as well as themes directly tied to the educational curriculum; and, day camps for kids between the ages of 8 and 14 during both summer vacation and winter March break. The school visits attract groups from as far away as Renfrew and Kanata, while the day camps primarily attract more local participants. An education strategy will be developed to identify new programming opportunities and new target groups.

The Mill has the capacity to offer both guided and self-guided outdoor interpretative experiences. Guided experiences include the aforementioned summer camp and school group programming. Interpretive signage is currently limited and self-guided educational information for casual visitors, such as drop-in programs, are unavailable. To respond to this, increased self-guided interpretation of site features will be provided through information signage, booklets, and brochures. This interpretive information can address not only key features of interest associated with the Mill, but also MVC's core mandate related to water conservation. These resources will be made available at the Visitor Centre once it becomes fully operational.

Mobile programming to schools and other institutions will continue to be offered during shoulder months in an effort to convey natural history, watershed awareness, and other Conservation Authority messaging to residents within MVC's watershed.

8.2.2 Museum Programming

The primary purpose of the Mill of Kintail Museum is to promote the life and accomplishments of Dr. R. Tait McKenzie. This is achieved through the conservation and display of the Museum collection, which is comprised of Dr. McKenzie's personal works and era-appropriate artifacts. The Conservation Area as a whole provides an opportunity for visitors to experience the environment that inspired Dr. McKenzie and the art that he created. The Museum will also strive to represent Dr. McKenzie's philosophies and aspects of rural living. This can be achieved by accommodating special exhibits and partnering with similar rural museums that reflect Dr. McKenzie's philosophies.



Part of R. Tait McKenzie Exhibit

The overall goals of the Museum programming are to ensure professional development of the Museum and its collection, offer quality exhibits, increase community support, and enable further collection and artifact development.

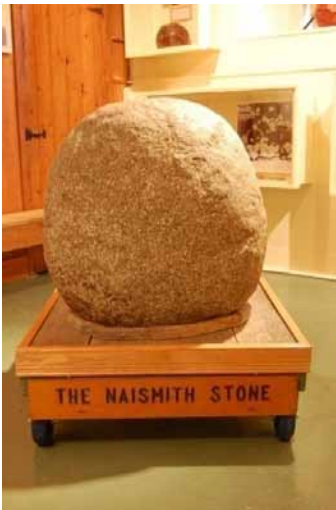
The Museum Curator position provides the ability to manage the Museum and develop new initiatives including partnerships with other local museums and new historical education programming initiatives. An example of this includes the revolving exhibits of local artist's work in the Museum Gallery. The Museum Curator and summer staff together are responsible for interpretation duties, and a Museum Committee provides advice to the Curator and MVC's Board of Directors.

The Museum is currently host to the James Naismith exhibit, who is credited as being the founder of basketball. Given the historical friendship of McKenzie and Naismith, this is a natural merger of collections. The Mill Museum benefits from such collection mergers as it attracts new visitors and offers a more diverse cultural experience. Similar compatible partnerships with other local museums and other opportunities that portray elements of rural Ottawa Valley cultural history will be explored as to further increase the cultural experience at the Mill. A museum collection strategy will be developed to prioritize the acquisition and expansion of the McKenzie and Naismith exhibits.

The R. Tait McKenzie Memorial Trust receives funds as charitable donations, and all monies are to be expended on the Mill of Kintail Conservation Area for maintenance, operation, and development of the site.

Museum interpretation will continue to consist of a mix of self-use and guided opportunities. Museum interpretive activity is currently seasonally based, and the collection is open to public viewing during peak summer operating periods. The primary reason for this is due to the high operating costs of the Museum during winter months.

While many artistic pieces are on display at the Museum, many overflow items are stored at the Visitor Centre in a controlled environment. The collection display and storage capacity needs to be reviewed, especially if future mergers with other museums will be pursued. A new storage facility for overflow artifacts is a consideration but will be entirely dependent on funding. Mergers with other local museums may help contribute to the funding for such a building.



Collection Merger with James Naismith Museum

While the exterior of the Museum is protected under a historical designation, the interior is not. The Museum interior may be upgraded and modified as needed in order to better meet the needs of expanding exhibits. Any interior modifications, however, should continue to portray a period appropriate appearance.

8.3 Staffing

Currently, the Mill of Kintail houses two permanent staff on a year-round basis, including the Education Coordinator and Museum Curator. A permanent seasonal operations staff member is dedicated to the site during the peak operating period and part of the shoulder period. These three long-term positions are further supported by operations staff based out of the MVC headquarters office, and summer staff who are engaged in the operations of the Museum, delivery of summer day camp, and overall maintenance of the site. The Mill staff is managed by the Community Relations Coordinator, and the Operations staff is managed by the Operations Supervisor, both who are also based out of the MVC headquarters office. There is a strong base of local volunteers willing to play a significant role in the operation of the site (e.g. gardening and trail maintenance) and help deliver special events. All of the Mill employees, MVC headquarter support staff, and

volunteers make the best of limited resources to deliver innovative and effective programming, and make the Mill an attractive and scenic destination.

With the addition of year-round museum, education, and long-term seasonal operations staff, there will be increased opportunities to:

- acquire, maintain and display new exhibits,
- increase year-round educational/outreach programming,
- support special event programming,
- maintain and care for the site,
- offer more visible on-site staff presence year-round; and,
- offer increased involvement with community associations.

8.4 Services

8.4.1 Gift Shop and Food Services

Currently, a gift shop for the Mill is located within the Museum. The sale of basic refreshments and small gift items are provided here. The expansion of the gift shop into the Visitor Centre is encouraged in order to increase access to visitors and to help generate much needed revenue for the site. This revenue can in turn be directed back into museum and education programming, as well as site maintenance. Possible retail items could include: nature-themed gifts (bird identification guides), MVC paraphernalia, beverages, and dried healthy snacks.

8.4.2 Rental Facilities

The Mill is already host to group activities and special events. Large party tents, the multi-purpose room at the Visitor Centre, and the Cloister are currently available on a rental basis to support these activities and events. A large permanent covered outdoor structure, such as a pavilion, would complement the education program, group outdoor activities, festivals, and other special events, and could be offered for use on a rental basis. The revenue generated through the rental of this facility for private functions can be used to maintain the structure as well as help recover capital costs.

Group-oriented facilities, such as the Cloister, coverall tents, and multi-purpose room, will be marketed and promoted to encourage further usage of the Mill by large groups and to host special events and activities.

8.4.3 Fitness

In keeping with the site vision of providing opportunities for people to become physically active and enjoy nature and cultural related outdoor experiences, expansion of outdoor fitness opportunities will be explored. Options can include expanding the play structure area and introducing new activities to the Joy of Effort Trail. Organized group activities such as fitness boot camps, skiing, snowshoeing, hiking, and other exercise or outdoor

skills development groups are encouraged to use site facilities. The Visitor Centre multi-purpose room is a suitable facility to serve as a staging point for these activities.

8.4.4 Conservation Practices

MVC endorses environmentally sustainable practices, and will encourage the reduction of energy use overall, and where feasible, will utilize energy from green sources such as solar. Efficient outdoor lighting fixtures, including those used to conserve the night sky, shall be adopted whenever feasible. The importance of conservation practices will be conveyed to visitors of the Mill through signage and other interpretive materials.

8.5 Infrastructure, Trails and Facilities

8.5.1 Gatehouse / Visitor Centre

The main front portion of the Gatehouse experienced a period being rented as a private residence, and is now used for winter office space and storage. The rear multi-purpose room - which is a newer addition to the rear - is used to accommodate a variety of events including MVC Board of Directors meetings, staff meetings, winter education programming, group fitness activities and seasonal special events. The basement is used for archival/artifact storage and as a resource library. Since its acquisition, the concept of a fully functioning Gatehouse was never realized, and overall, the building is underutilized on a daily basis, particularly during the peak season. Another key problem is its lack of identity. The building is not easily recognized as being part of the Mill property as it does not function as a formal Gatehouse.

A typical functioning Gatehouse would normally house front-line staff that greet and provide site-related information to Mill visitors. The intent of this plan is to provide direction for the conversion of the Gatehouse into a functioning multi-purpose Visitor Centre. The concept is to make the Gatehouse building a more integral component for the functionality of the site. It will become a Visitor Centre with orientation and interpretation information related to the Mill and MVC. When visitors arrive on site their visit will begin at this location. During the hours of operation, which may vary seasonally, visitors will be greeted by a conservation area employee and have the opportunity to pick up maps or information to guide their visit and view exhibits that introduce the site and the role of MVC. Outside of normal operating hours (or if a visitor chooses to not enter the building) there will be an information kiosk with all of the information required to guide a visit to the site (maps, visitor information, regulations etc.).

The Visitor Centre will be multifunctional with the following primary roles and service levels:

Roles:

- ◆ Visitor orientation and information

- ◆ Staff office space
- ◆ Education program support
- ◆ Multi-purpose special event, exhibit and public rental space

Proposed Service levels:

- ◆ Staffed reception desk using staff and volunteers (operational hours to be determined)
- ◆ Site orientation (maps, pamphlets, program descriptions etc.)
- ◆ Site interpretation (permanent exhibits, history)
- ◆ Introduction to the role of MVC and material relevant to mandate
- ◆ Purchase of materials (passes, maps, souvenirs)
- ◆ Outside orientation (signage, kiosk/trailhead for when the Visitor Centre is closed)
- ◆ Indoor public washrooms (existing) and outdoor vault privies adjacent to the parking area

In order to achieve this transformation, the building will be converted from a private residence in order to serve more of a traditional Gatehouse function. The rear multi-purpose room will be used as a staging point for programs, activities and events. The Gatehouse will be re-named the Visitor Centre in order to more accurately reflect its multi-purpose nature.

A similar course of action (transformation of the Gatehouse) was also identified in the 1988 Mill of Kintail Master Plan. While this concept was tried previously, the Visitor Centre was not successful in its early attempt. The lack of building identity - people not recognizing it and therefore not associating it with the Mill property – conspired against its success. Currently, the lack of heated indoor working space and washroom facilities, logistical problems related to the front entry of the Mill and overall traffic flow, the lack of a winter education program facility, and the need to encourage more group visitors to the Mill all necessitate another attempt at converting this building. It is expected that stationing seasonal staff at the Visitor Centre, and increasing signage and building visibility will be fundamental to its success.

During the summer months, the Visitor Centre will house seasonal staff who will provide site interpretive information, collect parking and admission fees, and assist with directing traffic flow. It is anticipated that monitored parking will help with parking pass compliance and therefore the recovery of some lost revenue. The building will provide general meeting space for employees, partners, and stakeholders, and provide informal work space on the first floor to allow staff to combine reception function with regular duties during periods where visitation is low (e.g. late fall and early spring).

The main floor front portion of the Visitor Centre will be used to accommodate interpretive and site orientation information, as well as other resource material related to MVC's mandate. Expanding the gift shop into the Visitor Centre and offering a heated multi-purpose building with washroom and kitchen facilities for rent to large groups will also help with revenue generation. The expanded Visitor Centre gift shop could include refreshments, dry food items - for example dried fruit and granola - trail maps, wildlife

identification guides, and other MVC paraphernalia. The gift shop will be staffed primarily by seasonal summer employees during peak the season of operation. The upstairs portion of the original house offers former bedrooms that will be used as office and workspace by MVC staff. This will solve the winter work space problem for education and museum staff.

The Visitor Centre will become the reception and departure point for all winter education programs whereas the Education Centre will continue to function as the location for the summer day camp. Space for the storage of packs and for program equipment (e.g. snowshoes) will be required in the basement of the Visitor Centre.

The heated Visitor Centre washrooms will be open to the public year-round during regular hours of operation, which may assist with reducing the number of required vault privy toilets on the site. The rear multi-purpose room will continue its function of hosting meetings, special events, educational programs and group fitness activities. Expansion of the Museum's artifact collection related to Drs. R. Tait McKenzie and James Naismith, in addition to collection mergers with other local museums may require a new independent storage building for overflow artifacts. Moving these artifacts from the Visitor Centre basement will free up space for outdoor rental and school group equipment storage, and for gift shop storage.

It is suggested that the Visitor Centre concept be implemented for a 5 year period, after which time its effectiveness should be reviewed again. Should the functionality as a Visitor Centre determined not to be practical, other options for the building should be pursued. A possible alternative is the disposal of the Visitor Centre building in order to generate revenue for other projects, building construction, and/or maintenance of the site. With this revenue, a new centralized multi-purpose building that will house an all-season Education Centre and all-season washrooms could be constructed. Also at this time the effectiveness and ongoing need for a functional multi-purpose room will be examined.

8.5.2 Education Centre

The Education Centre currently consists of a 7.3 metre by 10.7 metre (24 feet by 35 feet) prefabricated building placed on a pier foundation. Program development is somewhat limited by this building. This building is too small to accommodate groups larger than 20 children, and it is a seasonal building that is not winterized and can only be used from spring to fall. It has limited access to running water, has no integrated toilets - which are constraints for year-round usage - and relies on coverall tents for a sheltered lunch space. This building is satisfactory for summer use as it adds an aesthetic "cabin in the woods" feel; however, it is not practical during winter months. As described in section 8.5.1 the Visitor Centre will serve as the primary facility for supporting winter educational programming as it is heated, has accessible washrooms, and working space for education and museum staff.



Education Centre

An expansion of the seasonal Education Centre, or a complete replacement with a new larger all-season building, is required. A stand-alone permanent covered shelter would help add space to support group programs, and a new centralized comfort station would provide heated washroom facilities with running water, which would further support the education program.

8.5.3 Education Stream Study Area

Part of the outdoor learning experience, particularly for school groups and summer camps, is to view and examine local wildlife. The stream study program allows children to discover and learn about specific aquatic organisms living in the Indian River that are indicators of the health and diversity of our natural water systems. A designated stream study area is situated along the Indian River at the easternmost border of the Mill property. This stream study area allows easy and safe access to the river by school-aged children. The concern with this area is that with large group numbers, stream study participants can unknowingly wander onto adjacent private land. This raises an issue regarding liability and trespassing. In order to rectify this situation the Mill of Kintail property boundary at this location needs to be clearly located and identified. Several old fences already exist in this area, but a single clear boundary marker is required.

The stream study site is also experiencing soil compaction resulting from heavy use. The shoreline, however, appears to remain in a relatively stable state. Confining large number of study participants to a small area can often accelerate shoreline bank erosion so this area needs to be routinely monitored. Naturalization or stabilization measures should be implemented as needed. Another solution is to expand the stream study area by acquiring



Stream Study Area

lands adjacent to the stream study area. This will also help keep stream study participants on MVC owned land. Land acquisitions are further addressed in Section 9.0. The adjacent lands immediately to the east of the Mill offer a low river bank height and therefore a preferred area for easy access to the river. The easy access may be part of the reason people generally gravitate to the adjacent lands.

8.5.4 Trails

There are currently more than seven kilometers of trails offered at the Mill (see Figure 5). The trail network is designed to accommodate multi-purpose usage, and is accessed for such activities as hiking, snowshoeing and cross-country skiing. The network also serves a key function in the delivery of outdoor education and fitness programs. Trails not only provide opportunities for fitness-oriented activities, but are also an avenue for nature appreciation and quiet scenic reflection and viewing opportunities.

The current trail network extends throughout much of the site with the majority located within the northern portion of the property. The trails travel through such diverse areas as forests, fields and the Indian River corridor and offer a means to interpret the unique and interesting biological and geological features of the Mill. The trails are of low difficulty, as the terrain for the most part is relatively level with no significant elevation changes or climbs. Some areas are slightly more technical in nature than others with some mixes of rocks and tree roots across the trails.

The current trail configuration is somewhat of a complex system that offers many route options. Each trail was originally developed to support a distinct function and to help alleviate potential user conflict; however, the complexity of options can also work to its disadvantage as there are obvious navigational and signage hurdles. The life science

study that was prepared in support of this plan suggests that the complexity of the trail network may create unnecessary fragmentation of the forest, and that the winter trail in particular, travels through a wet area that is sensitive to foot traffic. With this in mind, the trail network will be restructured to a more simplified, less fragmented configuration. A stacked loop trail network is proposed for the portion of Mill property north of the Indian River. This revised configuration will be based on existing trails in order to minimize any new clearing, and new connections will be added to create a simpler layout. Some redundant trails will be permanently closed and rehabilitated. This simpler configuration is expected to be more user-friendly, while also reducing maintenance hours and signage costs. A conceptual reconfiguration is illustrated on Figure 6; however, the final design may vary slightly from that depicted in this illustration. The final route will be confirmed on the ground and will be dependent on the ease of linking existing trails as well as the routes that will have the least amount of impact.

Trail Access

The Joy of Effort Trail and the Riverside Trail are easily accessible from the main roads and parking facilities located on the south side of the Indian River. Access to trails in the northern part of the property is provided by a bridge crossing the Indian River near the Museum. This single crossing provides a controlled access point to the northern trail network. A more centralized parking area (see Section 8.5.7) will provide better access to the river crossing and therefore to the stacked loop trail network. A single controlled access is preferred in order to effectively monitor the flow of pedestrian traffic to the northern trail loops. This access bridge will be upgraded or replaced as needed and as funding permits.



Trailhead river crossing

Figure 6

Existing Trail Network



1:6,000

This map is produced in part with data provided by the Ontario Geographic Data Exchange under Licence with the Ontario Ministry of Natural Resources and the Queen's Printer for Ontario, 2011

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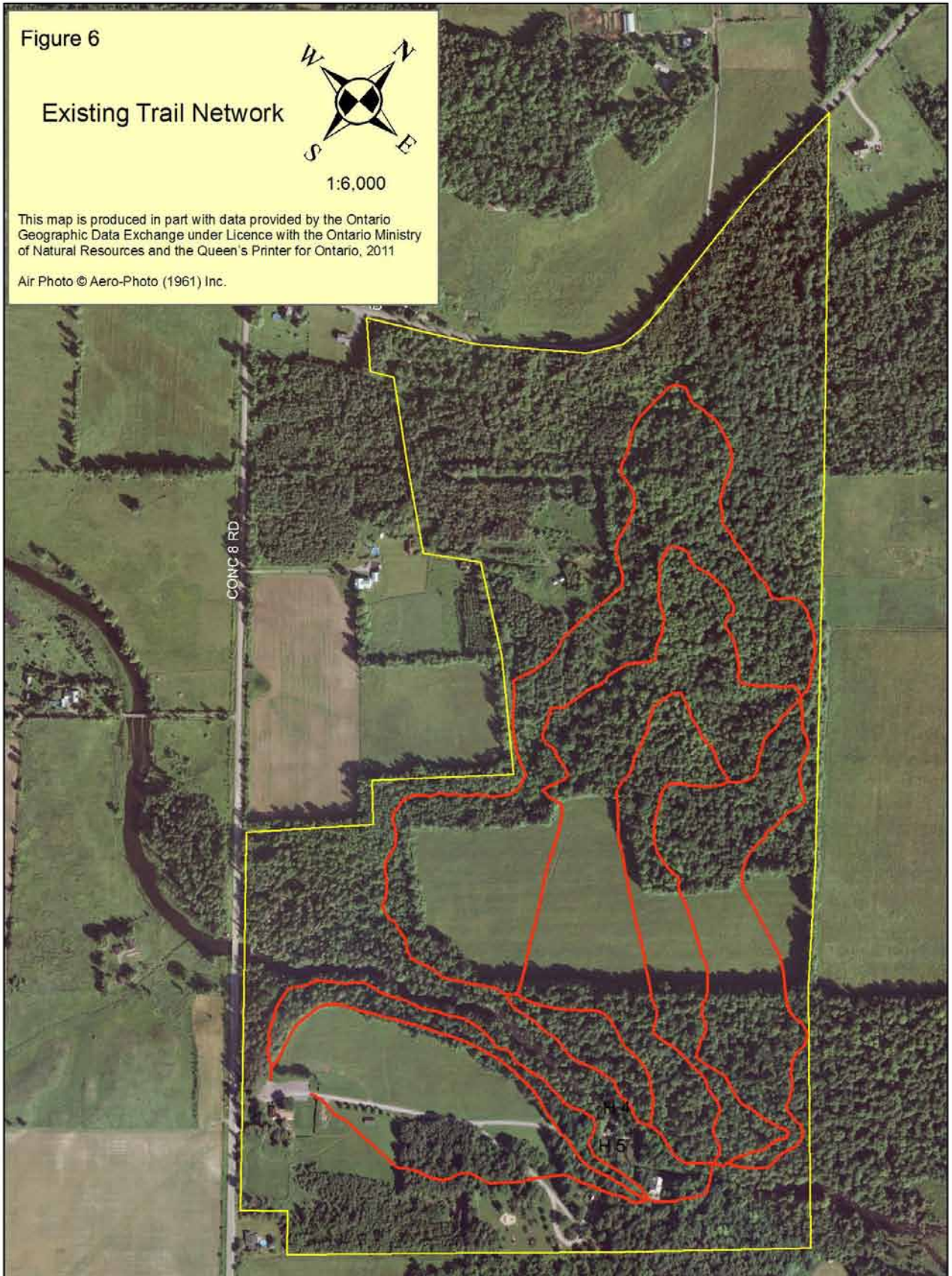


Figure 7

Conceptual Trail Design



1:6,000

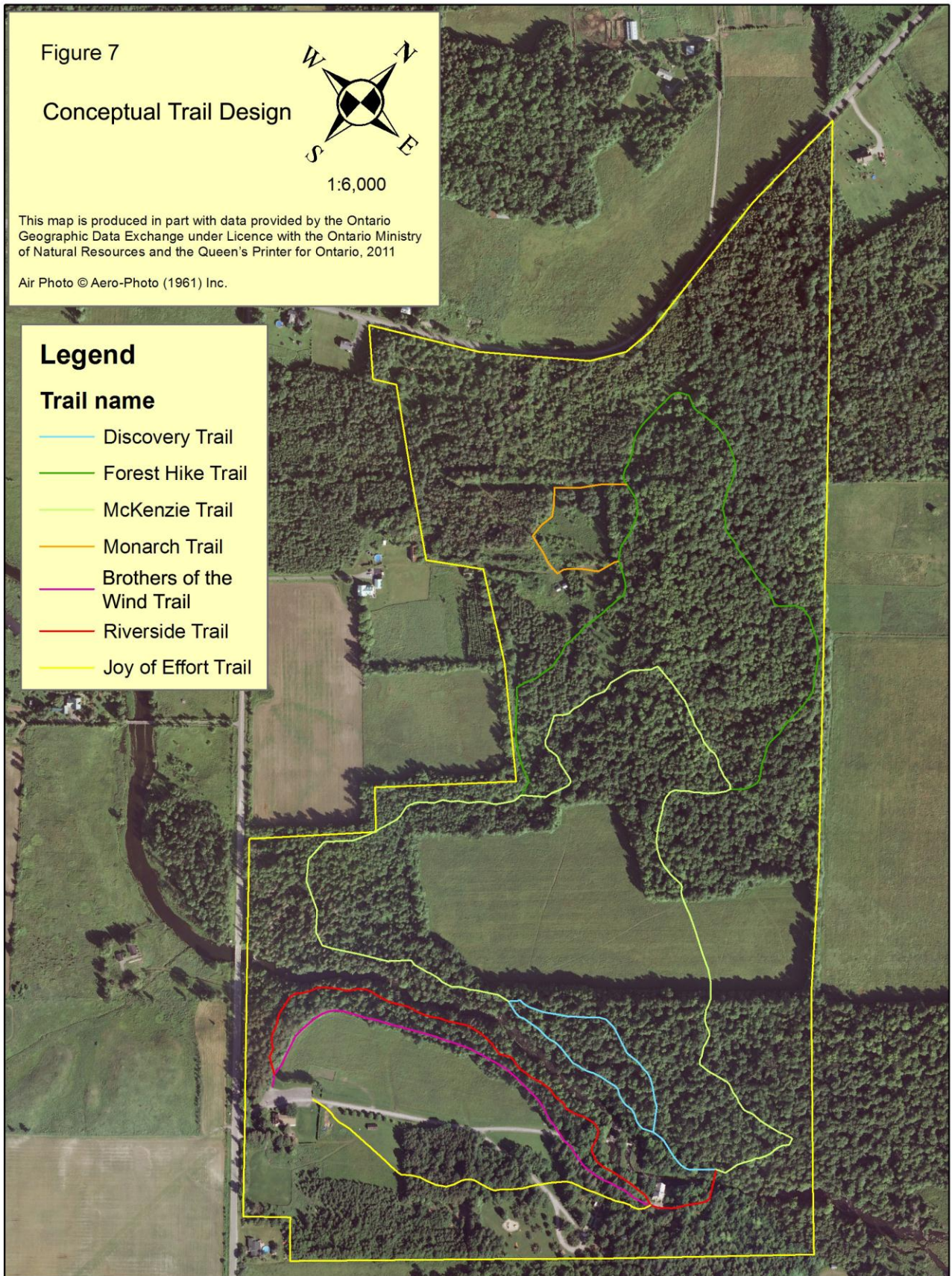
This map is produced in part with data provided by the Ontario Geographic Data Exchange under Licence with the Ontario Ministry of Natural Resources and the Queen's Printer for Ontario, 2011

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Legend

Trail name

-  Discovery Trail
-  Forest Hike Trail
-  McKenzie Trail
-  Monarch Trail
-  Brothers of the Wind Trail
-  Riverside Trail
-  Joy of Effort Trail



Access for large maintenance or emergency response vehicles to the trail network is offered from two points. One leads from Ramsay Concession Road 8, while the other is from Bennies Corners Road.

Multi-Use

With the closure of some trails, the network may require to be widened in some areas in order to accommodate multiple uses, especially during the winter season. The overall width will allow hiking, snowshoeing and skiing to occur on the same trail. Signage to inform visitors about trail sharing will be increased in an attempt to alleviate potential user conflict. The trail will not be widened to the extent where it will disrupt forest canopy connectivity or have a detrimental impact on natural heritage values.

Trail Signage

Primary signage for trails consists of a route map board located at the Indian River bridge crossing. Also, individual trails are identified using coloured trail markers placed at various intervals throughout the network. Once the trail configuration is simplified, a new signage board will be required to clearly identify the new stacked-loop configuration. The intent of a stacked-loop system, however, is to help minimize the overall required number of markers and route signage.

Accessible Trails

Currently, accessible trail offerings on-site are limited. While most trails are fairly level and not extremely technical in difficulty, rocks and roots make navigating wheelchairs and strollers a challenge. Fully accessible trails will be made a priority for the network. An abandoned section of roadbed that is gradually being reclaimed by vegetative growth travels parallel to the river. Designating this roadbed as part of an accessible trail loop is a preferred option. Trail branches leading from this trail to the river would provide scenic viewing opportunities to all visitors. The McKenzie Loop Trail on the north side of the property will be upgraded to allow full accessibility. The Joy of Effort Trail includes several stations designed to challenge visitor's abilities. These stations need to be expanded to include activities that are accessible to people of all physical abilities. Once this is completed, the Joy of Effort Trail can be incorporated into the accessible trail network.



Former roadbed that can be converted into an accessible trail

Trail Conditions

Overall, trail conditions are generally good with acceptable levels of erosion and compaction. There are some exceptions however. The Winter Trail travels through a wet area that is sensitive to heavy use. This trail will be closed as part of the overall network reconfiguration. Winter programs will be allowed to continue on all other trails throughout the site. For other trail sections that are seasonally wet, increased armoring or elevated crossings will be constructed to help prevent accelerated erosion.

Some key areas that exhibit problems and have become of concern include the section of Riverside Trail leading from the Boy Scout Cabin location to the Museum. This trail is experiencing erosion and it is located in close proximity to the river bank, and is especially treacherous during the winter. This section of trail should either be closed and re-routed, or reconstructed.

Also of concern is the secondary stream study area situated on the north side of the Indian River. This area is experiencing heavy erosion due to foot traffic combined with overland water runoff. As a result of these influences, the steep shoreline bank is now lacking vegetative cover, which is leading to accelerated erosion. This study area will be closed and rehabilitated, and the trail will be re-routed around this area in order to mitigate further damage to the river banks.



Heavily eroded riverbank

Trail Maintenance

Natural trail surfaces are preferred in order to maintain the natural look and feel of an outdoor trail system. However, where deemed necessary, surfaces such as crushed rock screenings or woodchips may be added to trails, scenic viewing areas, resting points, and educational areas (stream study) to reduce compaction of soil, damage to exposed roots and lessen potential trip hazards. In more problematic areas armouring techniques or elevated boardwalks will be used for erosion prevention.



Example of trail surfaced with stone chips

Trail Decommissioning

Trails that are being decommissioned will be allowed to regenerate naturally. This process may be accelerated by planting areas with native species indigenous to the Mill. Plant types may include a mix of trees, shrubs and herbaceous plants.

Signage at the closed trail section may be required to identify the new trail closure and/or configuration. Fencing or barriers may be needed to prevent continued use of the closed trail section. Natural barriers, such as planted sections, are a preferred option.

8.5.5 Scenic Viewing Areas and Rest Stops

Part of the attraction of the Mill and one of the most scenic landscapes - not coincidentally also one of the most heavily visited areas - is the Indian River corridor. An emphasis will be placed on adding scenic viewing areas and rest stops along the river to increase the appreciation of this picturesque river. Clearing of viewing areas and rest stops within the river corridor will be minimal, and benches may be added to allow visitors to pause and enjoy quiet moments of reflection along the river corridor.

Additional rest stops may be added throughout the trail network in order to entice all visitors to explore the entire site, and to provide opportunities of nature appreciation.

While the intent of the rest stops is to be situated at key points of interest, and may coincide with interpretive stops or signage, the rest stops will not be located in areas that could be negatively impact natural or cultural features of the Mill.

8.5.6 Road Network and Parking

The road network is satisfactory at this point in time. No new roads or road upgrades are being proposed as part of this Master Plan.

A retaining wall along the road adjacent to the Museum is beginning to fail and is in need of replacement. An engineered or terraced design may be required.

The main parking lot for the site is located at the front entrance for the Mill of Kintail. This lot adequately services the Visitor Centre and the Riverside Trail; however, it is far removed from the remainder of the property facilities. There is also an aesthetic problem with the main entrance. Visitors often do not associate the entrance area as being the main parking facility, and continue to drive further into the site where suitable parking does not exist. This often creates vehicular congestion at the Museum or Education Centre. The current main parking lot location poses some logistical challenges for pedestrian movement as it is a far walk to the Museum, Cloister, summer Education Centre, and the main trailhead. To resolve this, a centralized parking area closer to the bulk of the facilities is needed. This new parking area will minimize the need for people to walk the main road in order to access other areas of the property, which has also been a

safety concern. The centralized parking facility should be sized appropriately to accommodate the turn-around of large vehicles, particularly buses.

8.5.7 Accessory Buildings

A Boy Scout Cabin is situated along the Riverside Trail towards the Museum. While neither the building nor its location is historically significant, the building does have a direct link to Dr. McKenzie's involvement with the Boy Scouts. The cabin is falling into a state of disrepair, and should be refurbished. Its current location does offer a scenic point of interest along the trail, but the building is not being fully utilized in this location. The cabin might be better located at the main entrance to be used as an information kiosk, or elsewhere on site where it can be incorporated into interpretative, educational, or fitness programming.



Boy Scout Cabin



Carriage Shed

A small structure, known as the Pioneer Cabin, is located near the summer Education Centre and Cloister. This building has no known direct link to the history of the Mill of Kintail, and is believed to be a relocated building. The cabin is currently being used for storage. The aesthetics of the building blends well with the overall site, and it would serve as a valuable addition to the education program to house summer interpretive staff, or for other educational or display purposes.

A former Carriage Shed is situated to the rear of the Visitor Centre, adjacent to the main road. This structure is currently used for general storage of machinery and various materials. No issues have been identified with the structural integrity or use of this building.

A building previously used as a detached garage is situated directly adjacent to the Mill's main entrance. The building consists of a single bay garage with an additional storage room and loft. It is currently used for the Artist in Residence program. As it is situated in close proximity to Ramsay Concession Road 8, it suffers from the same logistical and identity issues as the Visitor Centre. Offering this building for rent to support cultural and artistic uses complementary to the Mill seems to be a suitable use for the building. Other similar uses may also be encouraged.



Detached Garage

A second detached garage is located adjacent to the Museum and is currently used as a maintenance workshop. While this is considered to be a suitable use for the garage, it is not in an ideal location as maintenance vehicles driving to the building often encounter groups of visitors on the road. An alternative location will be selected as part of the site plan creation process for the Development Zone.

A new covered pavilion will complement the outdoor education and fitness programs, in addition to special events hosted on site. This structure can be constructed anywhere in the Development Zone where it does not interfere with natural or cultural values. To help recover costs, this structure could be rented to organized groups to help host special events, or to day visitor groups as it would enhance day use activities such as picnics and large gatherings.

A common theme throughout the site is a lack of storage space for equipment, machinery, lumber, group event supplies, outdoor fitness equipment, etc. The storage and work area needs of the operations, museum and education programs will be reviewed and storage buildings will be constructed or modified as the need arises and as funding permits. As noted in the zoning Section 6.4.1 the Development Zone is the most suitable area for supporting new accessory buildings. Any new buildings or modified buildings shall be constructed in a manner that maintains the overall historical character of the site, and does not interfere with cultural landscapes or views of historical buildings.

8.5.8 Playground Structure

A children's play structure is located in the central part of the site, near the Cloister and Education Centre. It is a popular attraction with school groups and summer camp kids, and adds variety to the fitness activities that the Mill has to offer.

Dr. R. Tait McKenzie was directly affiliated with the Playground Association of America. Maintaining a playground structure at the Mill is therefore a fitting reminder of his professional involvement with this organization, and his dedication to providing opportunities for physical activity.

The current play structure at the Mill is dated, and as such, may not meet current design standards. It is recommended that the structure either be upgraded to meet current standards, or be completely replaced. There is ample room to accommodate a new larger structure, and priority should be given towards adding features that are accessible to children of all physical abilities.

Options for other play structures/activity centres may also be pursued.



Playground Structure

8.5.9 Vehicle Traffic

Motorized vehicles will be permitted only on established and maintained roads within the site. Exceptions will be made for emergency response and site maintenance reasons. Bicycles will be permitted on the same primary roads as motorized vehicles.

8.5.10 Washrooms

The primary washroom facility that is heated, fully accessible, and functions on a year-round basis is located inside of the Gatehouse. The concern with this facility is that the Gatehouse is normally under lock and key and primarily accessible only to staff, or is open for limited periods of time, such as during special event functions. Availability of this facility will increase once the Gatehouse is converted into the envisioned Visitor

Centre. With this conversion and increased staff presence, the washrooms will become more accessible to the general public.

The remainder of washroom facilities is situated throughout the southern part of the property. One toilet facility, located adjacent to the Museum, has been converted to an accessible washroom. Another washroom is located within the Museum and is intended for staff use only. An outhouse-style toilet is situated at the Mill's main entrance.

The Mill is lacking an all-season comfort station-type facility that is located centrally to the Museum, Education Centre, and Cloister. As funding permits, an all-season fully accessible comfort station will be constructed. This centrally-located comfort station will benefit group day-use activities, special events, education programs, and museum activities. A centralized comfort station could also allow for a reduction in the number of vault privies. The integration of small-sized toilets/sinks/counters would benefit young school-aged visitors who are important users of the site and education programs.

8.5.11 Site and Building Accessibility

Recognizing the history of discrimination against persons with disabilities in Ontario, the province introduced the Accessibility for Ontarians with Disabilities Act in 2005. The purpose of this Act is to benefit all Ontarians by:

- (a) developing, implementing and enforcing accessibility standards in order to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises on or before January 1, 2025; and
- (b) Providing for the involvement of persons with disabilities, of the Government of Ontario and of representatives of industries and of various sectors of the economy in the development of the accessibility standards. (R.S.O., 2005).

MVC is committed to be compliant with this Act.

Existing accessible facilities include: the main level of the Visitor Centre including washrooms, the main level of the Museum, and some trails. The Cloister is an open structure and is therefore considered accessible. A vault privy toilet adjacent to the Museum is in the process of being converted for accessibility. Opportunities will be pursued to offer improved access to all existing site facilities. Any new facilities constructed within the conservation area must be designed in accordance with current accessibility standards.

An accessible recreational trail configuration can be easily designed based on the existing Riverside, Brothers of the Wind, and Joy of Effort Trails. Expansion of the fitness stations and the play structure to offer accessible activities is recommended.

The pathway joining the Education Centre and Cloister to the Museum is not user-friendly for visitors of all physical abilities. This pathway needs to be re-routed, or incorporate a ramp system into a redesign.

9.0 LAND ACQUISITION and LINKAGES

The Mill property has undergone various boundary changes over the years. These changes have benefitted both natural heritage and cultural features related to the site. The overall growth has added both recreation potential as well as outdoor appreciation opportunities. MVC will consider the acquisition of adjacent lands as additions to the Mill of Kintail if the property enhances any of the following components: cultural, environmental, resource management, education, recreation, or operation. Acquisition or securement will be subject to the availability of funding and the willingness of the owners to sell or lease their properties. Areas of priority for acquisition include lands adjacent to the stream study area, connecting river corridors, or adjacent woodlots. Property donations will be reviewed and considered on a case-by-case basis.

MVC will also strive to achieve natural and recreational corridor linkages to other similar local areas. A key wildlife corridor example worth noting includes the portion of Indian River that links the Mill of Kintail Conservation Area to the Mississippi River. This river corridor is an ideal linkage as it is in a natural condition with vegetated banks along its length.

Connecting with other local trail networks could enhance community-wide recreational opportunities. Any new recreational linkages, however, must be compatible with the overall goals and objectives of the Mill, and not negatively impact the natural or cultural values of the site.

10.0 MARKETING AND COMMUNICATIONS

A marketing plan will be developed to market the use of the site, and particularly group activities and special events. Both cultural and natural/outdoor resources will be promoted. Promotional material will specifically encourage increased site use during the shoulder and winter seasons. The promotion of site facility rental is also encouraged.

Rental facilities include:

- Visitor Centre multi-purpose room
- Cloister-on-the-Hill
- Coverall Tents
- Covered Pavilion (proposed)

Communication messages will be conveyed through such mediums as signs, self-use brochures, an annual tabloid, the local media, and interpretive staff.

10.1 Partnerships

Formal partnerships are valuable arrangements for two or more entities to share their own interests. The Mill provides a diverse natural area and cultural setting for groups to explore, recreate in, and conduct research. Staff will strive to establish new partnerships

with parties that blend well with MVC's mandate and interests at the Mill. Examples of potential future partnerships could include: opportunities to relay conservation-related messaging; opportunities to utilize green energy sources for site operation; conduct research, monitor, and interpret natural features and cultural resources; and, provide fitness-based group activities. Some examples of needed research include continued wildlife inventories particularly involving Species at Risk, interpretation of geological features, and an archeological evaluation of the property.

Establishing partnerships may also prove beneficial for the expansion of the Museum collection, producing interpretive and educational materials, maintaining historically-accurate gardens and landscaping, employing seasonal staff, and establishing and hosting special events.

Partnerships may also help increase the use site facilities on a year round basis. For example, while the Mill of Kintail trails are not groomed or track-set for cross-country skiing, this use may be considered should a local ski club be willing to enter into a formal ski trail maintenance agreement.

10.2 Optics/Signage

All interpretive and site information signage will display corporate identity logos. Trail route markers will consist of standardized signage that is user friendly to all visitors. The main trailhead sign will be updated to reflect reconfigured trial routes. Main entrance signage will be updated to reflect changes to the Visitor Centre operation, and will better assist with overall site orientation.

11.0 Mill of Kintail Overall Strengths and Challenges

The intent of the Master Plan is to determine and prioritize measures to help MVC capitalize on the strengths of the site by addressing existing challenges. The following is a summary of those strengths and challenges.

Strengths

- ◆ Quiet and attractive natural setting offering a unique combination of educational, cultural and recreational activities developed around the legacy of an important and interesting Canadian historical figure.
- ◆ Close proximity to local communities (Almonte, Carleton Place) and reasonable proximity to a large population centre (Ottawa).
- ◆ Due to the natural/cultural blend of the Mill, it provides an interesting alternative to other local park destinations such as Pinhey Point Park in Dunrobin, McKenzie King Estate in Gatineau Park, the NCC's Greenbelt, and Fitzroy Harbour Provincial Park.
- ◆ Well maintained grounds and facilities
- ◆ Very low operational costs
- ◆ Both educational and cultural activities and programming

Challenges

- ◆ The Mill is still realizing its full visitation potential as peak visitation occurs primarily between May and October.
- ◆ The ability of MVC to expand or develop new programs is limited by the capacity of the existing facilities (hydro service, winterized building, washrooms, multipurpose space) and existing financial resources
- ◆ Certain facilities, such as the Gatehouse, are currently underutilized.
- ◆ Site orientation is awkward considering the disconnect between the front entrance parking lot and the site's centralized attractions.
- ◆ Lack of financial resources committed to needed lifecycle and capital projects

During a stakeholder consultation in December of 2007 options for addressing the overall challenges of the site were presented. There was clear agreement that the key direction to rectify challenges involves developing the Gatehouse as a Visitor Centre. Based on existing and potential financial and human resources, this option provides a viable basis around which many of the overall challenges of the site can be addressed, and builds on the existing strengths of the site and its program and activities.

12.0 Implementation Strategy

Based on the identified strength and challenges for the site, and proposed direction for the management of the Mill of Kintail, the following offers a recommended course of action for project implementation. High priority items are to be completed within a 1 to 2 year time frame. Project with a medium priority are intended to be implemented within 3 to 5 years. Low priority project may require greater than 5 years for implementation.

<i>Projects</i>	<i>Priority</i>	<i>Action</i>
Convert the Gatehouse to a Visitor Centre, and improve site orientation	High	The rear multi-purpose room remains essentially unchanged. The front residential rental unit will serve as the primary welcoming area. The second story will be converted into office space.
Create a universal pathway that is accessible to visitors of all abilities	Medium	Add accessible stations to the Joy of Effort Trail and the play structure. Upgrade the Brothers of the Wind Trail to meet accessible standards Construction techniques must respect natural heritage and cultural values of the Mill.

<p>Improve self-guided interpretation opportunities</p>	<p>Medium</p>	<p>Add interpretive signage along the Riverside Trail conveying MVC messaging.</p> <p>Make available, brochures, booklets and other self-use information.</p> <p>Partner with geological groups to reopen the geological garden.</p>
<p>Roads and Parking</p>	<p>High</p>	<p>Construct centralized parking Facility.</p> <p>Reconstruct/redesign retaining wall along access road adjacent to museum.</p>
<p>Rectify visual identity issues</p>	<p>High</p>	<p>Improve navigational signage throughout the property.</p> <p>Revamp landscaping at main entrance increasing visibility of the Visitor Centre from the entrance way.</p>
<p>Address concerns related to trail configuration</p>	<p>Medium</p>	<p>Reconfigure trail network into a closed loop system using the existing trails as a base. The included figures illustrate a concept configuration.</p> <p>Trailhead sign will be updated to reflect reconfigured trial routes.</p> <p>Scenic rest stops will be added in strategic locations along the trail network.</p>
<p>Encourage shoulder and winter season visitation and increase level of service</p>	<p>High</p>	<p>Develop a marketing strategy to encourage year-round visitation and target new visitor groups, such as fitness groups and physical education classes.</p> <p>Encourage winter programming. Look at options for staffing assistance, such as student coop placements.</p>

		<p>Complete an up-to-date all season visitor survey to establish demographics of current visitors, to determine groups to market, and to determine off-season interest in the site.</p> <p>Consider acquisition and rental of outdoor equipment such as snowshoes.</p> <p>An education strategy will be developed to identify new programming opportunities and target groups.</p>
Broaden sources of revenue	High	<p>Continue to market site for conferences, festivals, special group events, organized groups.</p> <p>Expand Museum gift shop. Add souvenirs, MVC merchandise, assess viability of vending machines.</p> <p>Continue to market the rental of facilities, multi-purpose room with kitchen, tents, Cloister. Construct an open air covered shelter that is serviced by electricity to support programming and special events. Offer the structure for rent to groups.</p> <p>Consider the rental of outdoor equipment, such as snowshoes to the general public and groups.</p>
Continue inventory work to better understand Mill natural resources	Medium	Partner with qualified groups to complete biological, geological and archeological inventories.
Recreate historical landscaping and gardens around historical buildings	Low	Partner with local horticultural groups.

Expand play structure	High	Look for sources of revenue and grants to add to the Joy of Effort Trail activities and expand the play structure. Emphasis will be placed on activities and structures that benefit visitors of all physical abilities.
Partnerships	Medium	Look for opportunities to add benefit to the Mill for accommodating the Observatory.
Address seasonal functionality of Education facilities	High	Operate education program during peak operating period from the Education Centre and from the Visitor Centre during the shoulder season. Expand the summer Education Centre. Alternatives could include utilizing the Pioneer Cabin to house interpreters.
Species at Risk	High	Continue monitoring the site for Species at Risk. Implement buffer area around Butternut. Should any field nesting species be identified within the hay field areas, recommend best management practices as to avoid negative impacts.
Monarch Habitat Area	Low	Permanently decommission abandoned group camp. Implement Monarch Butterfly habitat interpretation area by extending trail loop and adding interpretive signage. Develop vegetation management strategy to allow favorable conditions for milkweed and goldenrod. Monitor area for success.

Operations	High	<p>Develop an operating plan to address budget, staffing, maintenance, enforcement, and emergency services.</p> <p>Evaluate the need for storage and work areas to support site operations program. Construct or modify buildings as required and as funding permits to support on-going activities.</p>
Accessibility	High	<p>Meet accessibility targets identified by the Ontarians with Disabilities Act.</p> <p>Create accessible pathways and routes that lead to all site facilities.</p>
Trail Maintenance	High	<p>Implement erosion control measures.</p> <p>Hazardous trails will be permanently closed and rerouted, or redesigned to address the hazard.</p>
Stream Study area	Low	<p>Monitor soil compaction and bank erosion. Stabilize highly impacted areas.</p>
Washroom facilities	Medium	<p>Construct centralized all—season comfort station. Decommission any redundant vault privy toilets.</p>
Vegetation Management	Low	<p>A vegetation management strategy is recommended to evaluate the health of the pine plantations on site. This study will determine if thinning or other management is required, or if the stands should remain in their current state.</p> <p>The vegetation management strategy will also determine the extent of maintenance that may occur around the Observatory without impacting natural heritage values.</p>

Landscape / Site Plan	High	A landscape / site plan will be created to direct the overall development of the site, and to identify preferred locations of future buildings, structures and landscape changes.
Museum Collection	Medium	A museum collection strategy will be developed to prioritize the acquisition and expansion of the McKenzie and Naismith exhibits.

13.0 SITE INVENTORIES

Focus of Inventory	Status
Overall Life Science Inventory	Completed 2009
Fish Inventory of the Indian River	Completed 2009
Reconnaissance Nesting Bird Inventory	Completed 2009
Benthic Macro Invertebrate Samples	Completed 2009
Detailed Bird Inventory	Required
Detailed Mammal Inventory	Required
Detailed Insect Inventory	Required
Detailed Amphibian and Reptile Inventory	Required
Species at Risk Monitoring	On-Going – including monitoring for Bobolink specifically within the hayfields, Butternut throughout the site, and Blanding’s Turtle along the Indian River corridor.
Detailed Archaeological Evaluation	Required

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