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Staff Report

Planning and Development Services

Report To:	Committee of the Whole
Meeting Date:	September 8, 2020
Report Number:	PDS.20.53
Subject:	Follow-Up Report: Ellis Drive Water Access
Prepared by:	Nathan Westendorp, Director of Planning & Development Services
	Ryan Gibbons, Director of Community Services

A. Recommendations

THAT Council receive Staff Report PDS.20.53, entitled "Follow-Up Report: Ellis Drive Water Access";

AND THAT Council directs staff to proceed with the actions required to pursue Option ____;

AND THAT any design solutions recommended for the Ellis Drive water access be considered through the Leisure Activities Plan as a potential model for other water access points.

B. Overview

In 2018, the Town of The Blue Mountains finalized the Delphi Waterfront Management Plan. Residents have expressed interest in the Town's management of the waterfront lands, most specifically access to and on to the Town-owned waterfront block north of Ellis Drive. In consideration of the issues raised by local residents, Council directed staff to undertake a peer review of the Delphi Waterfront Management Plan. This report provides an update on that peer review process, confirms background related to the waterfront block, and offers potential options for next steps to move forward with resolution of the issues.

C. Background

Development in Delphi Point area is generally captured within 3 linked, but separate subdivisions. These are commonly referred to as the Neighbourhoods of Delphi, Peaks Bay West, and Peaks Bay East. In 2005, the Ontario Municipal Board (OMB) approved these subdivisions and the associated zoning that was required (OMB Decision 0727; OMB File#PL020894). As most of the local resident interest has been associated with the Townowned waterfront lands north of Ellis Drive obtained through the approvals of the Peaks Bay East subdivision ("Peaks Bay East"), this report will focus on the background of the Peaks Bay East development specifically.

Town staff have reviewed the primary background documents related to the planning approvals process for the Peaks Bay East subdivision and offer the following overview of the relevant

considerations related to the original intended management of the waterfront block generally located north of Ellis Drive:

Environmental Impact Statement

The applicant for the development, along with the applicants for the Neighbourhoods at Delphi and Peaks Bay West submitted an Environmental Impact Statement (EIS) in support of the required Planning Act applications. Please refer to Attachment 1. The EIS assessed the natural heritage characteristics of the site and associated recommendations. The report includes a description of the Delphi Point Earth Science Area of Natural & Scientific Interest (ANSI) and recommendations to ensure implementation of proposed development would confirm with applicable policies and regulations. Specifically, Section 4.3 (page 21) states:

It is recommended and supported by MNR (OMNR Pers. Comm., 2002a) that development and recreational use of the Delphi Point Earth Science ANSI be avoided and where possible, the site be protected from further damage from users and fossil collectors through appropriate land use designation and/or restricted access.

Figure 4 of the EIS shows a Composite Plan of the draft plans of subdivision proposed in the area at that time, including Peaks Bay East. The lands between the Peaks Bay East residential lots and Georgian Bay are shown in green, are labelled as Non-developable (Open Space) lands and encompass the working wave uprush line. They also appear to act as a buffer between the developable lands and the Delphi Point Earth Science ANSI mapped on Figure 4.

Figure 6 (Potential Forest Preservation Areas) of the EIS indicates areas hatched in green. These areas appear to include the Non-Developable lands shown on Figure 4, as well as varying portions of Lots 1, 2, 3, 5, and 6 and the stormwater management block located between Lot 5 and Lot 6. It should be noted that the legend of Figure 6 labels these areas as Potential Forest & Swamp Wetland Cover to be Retained (to be determined at detailed design stage).

References within the EIS suggest that the open space blocks within the three subdivisions were intended to remain forested. It also notes that most of the proposed lots in the Peaks Bay East subdivisions are extra deep, intentionally to retain as many trees as possible. A tree preservation plan was recommended to be prepared at detailed design to address issues such as grading, drainage, clearing and future management requirements.

Section 6.2.6 Human Use and Activities stated the following of relevant interest,

Many of the lots to be developed will be within the wooded area on the property. While a tree preservation plan has been recommended to identify where forest cover can be maintained on individual lots, human activities can soon limit the success of the best plans. It is recommended that the tree preservation plan set out a construction envelope for those properties that are wooded...A management plan for the shoreline as a component of the Town's planning for the shoreline park [is recommended]. The management plan should address trail location, managing and preserving the ANSI, and the protection of wetlands, vegetation features and quality habitats, specifically the coastal meadow marsh and sand dune vegetation units. The Delphi Point Earth Science ANSI is found along the shoreline across the Delphi Point properties.

It was suggested by MNR (OMNR Pers. Comm., 2002a) that recreational use of the Delphi Point Earth Science ANSI be avoided and where possible, protected from further damage from users and fossil collectors through appropriate land use designation and/or restricted access. Both of these have been accomplished through public ownership of the shoreline [shown on the proposed plans], limited access from the Delphi Point properties to the shore and designation as hazard land. However, additional people may now be able to access the shoreline through the park dedication as hazard land. However, additional people may now be able to access the shoreline through the park dedication, and there should be some method/education of park users as to the significance of the ANSI and remind users to leave the rocks for others to enjoy.

The EIS includes several recommendations, including the need for the preparation of a Tree Preservation Plan, resulting in the identification of a building envelope on each lot. It also recommends that a management plan be prepared by the Town of The Blue Mountains for the lands to become publicly owned open space. This management plan was to address access, tree clearing for views, protection of rare vegetation, protection of the fossils in the ANSI, and trail locations. A Tree Preservation Plan was prepared as part of the package of drawings approved and attached to the original subdivision/development agreement. Through the building permit process, plans were submitted to the Town identifying the building envelope relative to the Tree Preservation Area.

Ontario Municipal Board & Draft Plan of Subdivision

As part of the OMB process, Peaks Bay East received draft plan approval and the required amendments to the applicable zoning bylaw. The draft plan was approved with conditions on May 11, 2007). Please refer to Attachment 2 and 3 for the Draft Approved Plan of Subdivision and Conditions of Approval, respectively.

- This plan indicates one Open Space block between Lots 1-6 and Georgian Bay (Block 27), another Open Space block between Lots 6-9 and the municipal park to the east (Block 28), and a SWM/bio-filter block between Lot 5 and Lot 6 (Block 29).
- Condition 6 stated that "Blocks 25 to 28 were to be conveyed to the Town of The Blue Mountains for Open Space, Trail, and Buffer purposes. Block 29 was to be conveyed to the Town for Stormwater Management purposes.
- Condition 9 required the preparation of a recreational trail routing and design plan, and to implement same through appropriate language in the subdivision agreement.
- Condition 10 required, among several items, the preparation of a Tree Preservation and Landscape Plan for property to be approved by the Niagara Escarpment Commission and the to the satisfaction of the municipality in consultation with the Grey Sauble Conservation Authority. These plans were to be implemented through the subdivision agreement.
- Each lot was required to have a detailed topographic, grading and drainage plan prepared as part of a Site Plan Approval to show the locations of building and tree preservation envelopes and proposed lot grading and drainage management.

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The zoning approved by the OMB required that the Delphi Point ANSI lands be dedicated to the Town, and they were to be re-zoned to Public Open Space OS-1h. The By-Law requires that the holding symbol "h", not be removed until:

- a) A Parks Management Plans has been completed and implemented through a Zoning By-Law Amendment in accordance with the Official Plan
- b) Notwithstanding the provisions of Section 25.1 permitted uses, no uses shall be permitted prior to the removal of the "h" symbol in accordance with this Section.

Registered Plan & Detailed Plan Implementation

Once the County of Grey was satisfied that all conditions of approval had been met, the County granted final approval to the plan on December 12, 2008. The plan of subdivision was registered as Plan 16M-23 (please refer to Attachment 4). Registration of this plan at the Land Registry Office creates that individual lots and blocks shown on the block. Upon review of the registered plan by current staff, it appears that Block 27, 28, and 29 originally shown on the draft approved plan were all registered as one single block (Block 29). While Planning staff have not been able to ascertain precisely why this occurred, it is likely that despite the different purposes intended for the blocks shown on the draft plan (Open Space vs. SWM/Bio-filter), the lands were registered as once block since all were to be deeded to the Town. Upon consideration of Staff Report PDS.18.05 (please refer to Attachment 5), Town Council enacted a bylaw to assume Block 29 and the works within it in 2018.

As per normal practice, the Town and the developer originally entered into a subdivision/development agreement in 2008 to administer the detailed implementation of the approved subdivision. Included in this agreement, are the detailed plans and drawings used in the construction of the development. Within the Subdivision/Development Agreement Schedule G, Part 1, Section 3.1 states that trails were to be installed by the Developer on Block 28 shown on the Draft Approved Plan. The exact location, details, and specifications of these trails shall be approved by the Town prior to final approval of Phase 2 of the development. Section 3.2 also required the placement of limestone block monuments at specified locations to clearly delineate boundaries between private and public properties. Upon review of Town file information, it does not appear that these limestone block monuments have been installed as required by the agreement. It is Town staff's understanding that the placement of these monuments prior to assumption of the subdivision was impeded as it would require machinery to either cross through the tree preservation area or cross through the landscaped yards of the applicable lots to places the monuments.

The agreement also included several provisions related to the Tree Preservation Plan originally recommended by the EIS, and required by the Conditions of Draft Plan Approval, and submitted as part of the agreement package. Specifically, it was intended that each lot prepare lot-specific plans for approval by the Town to ensure the overall Tree Preservation Plan was

implemented while provided a buildable envelope for residential construction. Associated warnings and restrictive covenants were also included in the agreement. Town staff have confirmed with legal counsel that these restrictive covenants were placed on the required properties. Furthermore, lot-specific plans were submitted to the Town Building department for approval during each lot's building permit process. While these site plans were approved by Town staff and the process appears to meet the intention for coordinated approvals, to be clear the site plan approvals were not granted under Section 41 (Site Plan Control) of the *Planning Act.*

With regard to the detailed plans and drawings associated with the file, staff note the following:

- Tree Preservation Plan (please refer to Attachment 6). This plan shows tree preservation areas on the waterside portion of registered Block 29 ("the waterfront block") and extending onto the adjacent residential lots. Notes on the plan state that selective thinning may occur within the tree preservation area to provide views to the water.
- General Servicing Plan (please refer to Attachment 7). This plan shows a trail along the north side of Ellis Drive. However, it does not appear that a formal trail is labelled along the ditch between Lot 5 and Lot 6. No trail is shown on the waterfront block (Draft Approved Block 27). It is assumed that details of this waterfront block were deferred subject to future management planning exercises required by the Ontario Municipal Board. There does not appear to be a culvert within draft approved Block 29 (SWM block) to facilitate pedestrian crossing of the adjacent ditch westwards to the Town waterfront block and shoreline ANSI area. Furthermore, the detailed design drawings of the subdivision did not include a north/south trail on draft approved Block 28. It is likely that this trail was deemed redundant by decision-makers at the time since Delphi Park and associated access road had been constructed.
- Overall Lot Grading Plan (please refer to Attachment 8)– Drawing LG3 includes a crosssection detailing how draft approved Block 29 (SWM block) was to be constructed.

Community Services Staff brought forward Staff Report CSPW.16.049(please refer to Attachment 9) that provided options to provide access through the existing drainage ditch. At the time, staff recommended the placement of a culvert at the Northern portion of the drainage ditch. The Report at the time identified the need to complete a Parks Management Plan as required through the OMB decision before any development of the property.

Delphi Waterfront Parks Management Plan 2018

In 2017, the Town retained the services of Skelton Brumwell & Associates to prepare the Delphi Waterfront Management Plan. Planning staff have reviewed the final plan provided to the Town in 2018 (please refer to Linked Attachment 10). Staff note that the consultant undertook considerable engagement with relevant agencies and the public in the preparation of the plan. It also includes a comprehensive review of the applicable policies and provides recommendations to the Town to assist with managing public desire to access the waterfront, while recognizing the natural heritage features (including ANSI) that need to addressed.

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Planning staff have no objection to recommendations outlined in the Delphi Parks Management Plan and find the recommendations appropriate.

In consideration of Staff Report CSOPS.19.084, Council expressed a desire to have the 2018 Delphi Waterfront Management Plan reviewed by a third party. Community Services staff contacted representatives of the Niagara Escarpment Parks & Open Space System (NEPOSS) regarding a review of the management plan. This path was chosen as a cost-effective approach of obtaining the review desired by Council. While NEPOSS representatives initially indicated that they would be able to conduct a review, Community Services staff have recently been advised that the review is beyond the capacity of existing NEPOSS volunteers to complete the review the Town requires.

In the Fall of 2019 the NEPOSS Council committed to performing a peer review of the 2018 Delphi Waterfront Parks Management Plan including consideration for the following Council resolution:

THAT Council direct staff to prepare a report which addresses the questions raised by correspondence received regarding waterfront access at Peaks Bay Subdivision, and which includes and independent peer review of the Parks Management Plan, and any comments by the Ministry of Natural Resources and Forestry and Grey Sauble Conservation Authority, and proposes:

- 1. a solution that ensures equal public access to the Area of Natural and Scientific Interest ("ANSI") for all residents; and
- 2. the appropriate level of protection for the ANSI and the adjacent Tree Preservation Zone; and
- 3. proposed solutions and budgets to implement any such solutions, CARRIED.

In the Spring of 2020 the NEPOSS Council advised that they will not be providing recommendations on the Delphi Waterfront Parks Management Plan or the resolution of Council but they would provide feedback on the process followed including review of the RFP (Request For Proposal), if the proposal met the scope of work of the RFP and if the final approved document met the commitments of the proposal.

At this time, the NEPOSS Council have advised that they will not be performing the peer review, addressing the items identified in the resolution or the process review. They have indicated that upon further review of the request that the ANSI is not formally a part of a NEPOSS park and will not be performing the reviews. Staff feel this is unfortunate with the significance of the ANSI and its proximity to Delphi Point Park which is a designated NEPOSS property.

D. Analysis

When this matter was previously considered by Council, Council directed staff to pursue two primary objectives as noted below.

1. a solution that ensures equal public access to the Area of Natural and Scientific Interest ("ANSI") for all residents; and

Equality is the apparent goal in this objective. Staff have suggested options for Council to consider. However, the granting of access to the ANSI should continue to respect the need to preserve the tree preservation area and protection of the ANSI.

2. the appropriate level of protection for the ANSI and the adjacent Tree Preservation Zone.

The current Delphi Waterfront Management Plan contains appropriate recommendations to achieve protection for the ANSI and the adjacent Tree Preservation Area. However, should Council wish to pursue enhanced level of equal access, any engineered solutions to achieve this enhanced access should be reviewed by a qualified environmental professional to ensure that the solutions have no negative impact on the trees/natural heritage features and the ANSI.

The recommendation provided in this report provides Council with the option to consider the initiation of engineering design and project costing to address current damage to town infrastructure to stormwater infrastructure in the Peaks Bay East Development caused by high water levels. Through this process staff is suggesting that if Council wishes to pursue an enhanced level of access that considers options to modify the previous Councils approved Limited access design. Staff suggest that the Delphi Waterfront Management Plan provides the guidance of protecting the ANSI and the levels of protection of the ANSI.

Staff acknowledges that concerns have been identified by adjacent landowners of the existing drainage ditch, stormwater infrastructure and associated accessway between Lot 5 and Lot 6. These concerns include erosion damage that has been caused by the highwater levels, pedestrian use during the closure of parks. In addition, reviews of the development agreement and have identified that the Block noted above was intended and constructed as a stormwater management block. The designs for this block included a parallel accessway to facilitate Maintenance/Service of the infrastructure within the block. While this accessway has also allowed for pedestrian use, as is common in development design in Ontario, it does not appear that its primary function was only for trail purposes. However, limestone screenings were used as the material during construction resulting in a pathway that looks similar to common recreational trails. that encourages and promotes a trail surface resulting in use as a trail access. To be clear, this accessway could still function to also allow pedestrian use towards the waterfront, ultimately leading local area residents to the municipal park area located east of the subdivision.

Provided the tree preservation area remains intact, the engineering process would incorporate options that provide enhancements for public safety and detailed infrastructure design and project options costing that also incorporate potential water access to the entire Lower Whitby Formation ANSI that could also be incorporated to the Peaks Bay West Development that utilizes similar stormwater drainage design and infrastructure. Staff recommend this work can be completed while ensuring the protection of the ASNSI is achieved as outlined in the approved Delphi Waterfront Management Plan.

Based on the background review summary, it appears that the planning and development decisions/documents that have implemented the Peaks Bay East subdivision intended to follow-through with the recommendations of the original Environmental Impact Statement. Specifically, that was to retain an area of trees straddling both public lands and private lots between developed areas of the subdivision and the ANSI. Tree preservation with permissions for selective thinning to provide for water views from adjacent lots is noted on the detailed drawings submitted and approved to guide the implementation of the development. Therefore, based on the above and the current status of the third-party review of the Delphi Waterfront Management Plan, staff offer the following Options as potential next steps for Council's consideration:

OPTIONS

Option 1 – Continue implementation recommendations of Delphi Waterfront Management Plan and maintain the current limited access. This approach balances what appears to be the original professional recommendations to provide protection of the trees and the ANSI, while focusing regular recreational use at the waterfront park. In times where water levels permit, public access to the shale areas to the west of the park would be enabled. This Option still requires staff to move forward with repairs to existing infrastructure caused by the highwater levels.

Option 2- That Council direct staff to modify the current surface treatment from crushed limestone to a more naturalized type surface capable of equipment loading for required maintenance of the drainage area and stormwater management infrastructure located within the Block between Lots 5 and 6.

Option 3 – In the absence of a Peer Review or commentary from other public bodies, Council could engage the services of the Grey Sauble Conservation Authority or commence an updated Environmental Impact Statement (EIS) to identify whether it is supportable to permit a publicly accessible walkway on the northern edge of the originally identified tree preservation area. This EIS should include consultation with the relevant agencies/authorities to assess whether such a solution could be supported by both science and policy. It may also require Council to make amendments to other documents/agreements to ensure changes are reflected. If recommendations from an updated EIS indicate that access can be provided (as described above) with no negative natural heritage impacts and in accordance with applicable policies, the Delphi Waterfront Management Plan would need to be amended to outline how implementation could occur. This would include engineering assessment/design of the structures within the stormwater management block leading to Georgian Bay. This is particularly necessary to identify how structures can be protected from wave action. Should Council select this option, Staff will need to obtain quotes from qualified environmental and engineering/coastal professionals given the specific nature of the scope of work.

Option 4 - That Council direct staff to initiate engineering design and project costing to address current damage to town infrastructure to stormwater infrastructure in the Peaks Bay East

Development caused by high water levels and through this process incorporate options that provide enhancements for public safety, private / public property limit identification & encroachment, municipally owned and operated video surveillance, and detailed infrastructure design and project options costing that also incorporate potential water access (outside of the Tree Preservation Area) to the entire Lower Whitby Formation ANSI that could also be incorporated to the Peaks Bay West Development that utilizes similar stormwater drainage design and infrastructure. Both maintenance access areas referenced above will also be considered through the Leisure Activities Plan as directed by Council July 13, 2020, including the following information:

- i) Current uses, both authorized and unauthorized;
- ii) Existing conditions, including fencing, or other physical barriers;
- iii) Any limitations on the use of the waterfront access points;
- iv) Highlight any existing formal agreements and encumbrances.

To be clear, the design solution that would be pursued through Option 4 would include the following:

- Repair current damage to existing stormwater management outlet. This may require a redesign to avoid the build-up of shale.
- Provide safer pedestrian access to water via the Block 29 SWM Accessway, specifically exploring the usage of rock platform steps in a northerly direction. While not limiting the public's ability to access other areas of the Town-owned waterfront, it would direct most convenient access toward the water allowing people to explore the ANSI.
- Confirm appropriate delineation of public areas/private property through signage.
- Install signage identifying the Tree Preservation Area
- Install signage noting that Water Access May be Limited Due to High Water or seasonal Conditions
- Identify the appropriate access control to deter unacceptable recreational usage of the stormwater management ditch/outlet while maintaining convenient access for maintenance and access to the waterfront area
- Install video surveillance equipment to monitor use of municipally owned lands and areas to be protected.

Option 5 – The same scope of Option 4, however Council direct staff to utilize existing reserves to pursue completion of the necessary works in 2020 or as soon as possible.

Options 1 and 2 essentially reflect the findings and approval of the previous Council that provided limited access. If Council wishes, selection of Option 3,Option 4, or Option 5 provides staff clear direction that Council's intent is to ensure an appropriate level of public access via the existing Maintenance/Service Access and work could be included in the required repairs to the existing drainage infrastructure.

E. The Blue Mountains Strategic Plan

Goal #3:	Support Healthy Lifestyles
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Objective #1 Promote the Town as a Healthy Community

Objective #3 Manage Growth and Promote Smart Growth

Objective #4 Commit to Sustainability

Goal #4:Promote a Culture of Organizational & Operational ExcellenceObjective #4To Be a Financially Responsible Organization

F. Environmental Impacts

Should Council pursue an option that departs from the professional recommendations contained within the Environmental Impact Statement, unknown environmental impacts may occur.

G. Financial Impact

Option 2, Option 3, Option 4, and Option 5 will require additional funds to secure qualified professional services. The funds required should be confirmed through a formal Request For Quotations process.

H. In consultation with

Brian Worsley, Manager of Development Engineering

Will Thomson, Director of Legal Services

Shawn Everitt, Chief Administrative Officer

I. Public Engagement

The topic of this Staff Report has not been subject to a Public Meeting and/or a Public Information Centre as neither a Public Meeting nor a Public Information Centre are required.

Comments regarding the planning components of report should be submitted to Nathan Westendorp, <u>directorplanningdevelopment@thebluemountains.ca</u>

Comments regarding the management of the Town-owned lands and facilities component of this report should be submitted to Ryan Gibbons, <u>directorcs@thebluemountains.ca</u>

J. Attached

- 1. Attachment 1 Environmental Impact Statement
- 2. Attachment 2 Draft Approved Plan of Subdivision

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- 3. Attachment 3 Conditions of Draft Approval
- 4. Attachment 4 Registered Plan 16M-23
- 5. Attachment 5 Staff Report PDS.18.05
- 6. Attachment 6 Tree Preservation Plan
- 7. Attachment 7—General Servicing Plan
- 8. Attachment 8 Landscape Plan
- 9. Attachment 9 Staff Report CSPW.16.049
- 10. <u>Attachment 10 (Hyperlink) Delphi Waterfront Management Plan</u>

Respectfully submitted,

Ryan Gibbons Director of Community Services

Nathan Westendorp, RPP, MCIP Director of Planning and Development Services

For more information, please contact: Nathan Westendorp <u>directorplanningdevelopment@thebluemountains.ca</u> 519-599-3131 extension 246

Ryan Gibbons <u>directorcs@thebluemountains.ca</u> 519-599-3131 extension 281

prepared for:

Delphi Point Holding Inc. Phoebus Investments Peaks Bay Holdings Inc.

prepared by: Gartner Lee Limited

reference:

GLL 22-579.3

October, 2003

date:

distribution:

- 1 Delphi Point Holding Inc.
- 1 Landex Group
- 1 Peaks Bay Holdings Inc.
- 1 Grey County
- 1 Niagara Escarpment Commission
- **1** Grey Sauble Conservation Authority
- 1 Town of the Blue Mountains
- 1 R.J. Burnside & Associates
- 2 Malone Given Parsons
- 2 Gartner Lee Limited

Gartner Lee Limited

October 20, 2003

Mr. John Genest Malone Given Parsons 140 Renfrew Drive, Suite 201 Markham, ON L3R 6B3

Dear John:

Re: GLL 22-579.3 – Environmental Impact Statement, Delphi Point Properties, The Town of the Blue Mountains

We are pleased to provide you with our final report – Environmental Impact Statement for the Delphi Point landowners.

We have identified several constraints to development on the Delphi Lands including wetland pockets, forest cover, flood hazard lands and shoreline wetlands. The Delphi Point Earth Science Area of Natural and Scientific Interest is located lakeward of the floodline and does not pose a constraint to development. The impact statement notes the need for a few additional studies at the detailed design stage, including the preparation of a management plan to ensure that the shoreline open space is protected while at the same time allowing recreational use of the property, as well as a tree preservation plan to develop building envelopes to maintain maximum tree cover.

Thank you for the opportunity to have been involved with this project.

Yours very truly, GARTNER LEE LIMITED

Deborah K. Martin-Downs, M.Sc. Senior Ecologist, Principal

DMD:tmc Attach.

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1. Introduction

A group of six landowners referred to collectively as the Camperdown Landowners Group (CLG) hold lands on four sites within the Camperdown area in The Town of the Blue Mountains. The Camperdown Landowners Group is in the process of planning for recreational housing development for their respective properties. Generally, the Camperdown lands occur along both sides of Highway 26 in The Town of The Blue Mountains, County of Grey (Figure 1). Each of the sites has unique characteristics, for which reason four separate reports have been prepared. This report addresses issues related to the natural features of Delphi Point properties held by the following owners: Delphi Point Holdings Inc., Phoebus Investments Inc., and Peaks Bay Holdings Inc. (West) and (East).

Malone Given Parsons Ltd. was retained by the CLG to prepare Official Plan (OP) and Zoning By-law Amendments (ZBLA) and Draft Plans for the four sites. Gartner Lee Limited was retained by the CLG in mid October 2002 to undertake the natural science and geological components of this assignment. The scope of Gartner Lee's involvement has been to:

- a) prepare a baseline Environmental Conditions Report (ECR) describing and assessing site conditions (submitted in March 2003);
- b) respond to agency comments, planning issues, and complete additional field inventory at the appropriate season; and
- c) prepare an Environmental Impact Statement (EIS) considering the impact of the development plan proposed for the property on significant or sensitive site features and functions.

This EIS supercedes the ECR and has guided revisions to the proposed draft plan. It is submitted in support of draft plan and zoning by-law approvals.

2. Methodology

Existing conditions on the property were determined through the review of secondary source information as well as field inventory. Recent (May 2002) stereo pair air photos of the site were obtained and examined along with the secondary source material from the Ministry of Natural Resources (MNR) and the Grey Sauble Conservation Authority. Several sources of existing information were consulted in order to assess the property. These sources included:



- a) 1:12,000 (May 2002) aerial photographs;
- b) topographic mapping of the property;
- c) Natural Heritage Information Centre (NHIC), Ontario Ministry of Natural Resources for species risk information and vegetation communities rankings;
- d) the Craigleith/Camperdown Area Subwatershed Study (G&S 1993).
- e) Ontario Ministry of Natural Resources wetlands, ANSI's, fisheries and aquatic habitat information.

Gartner Lee Limited ecologists visited the Delphi Point Properties on two occasions in the fall of 2002 and four more occasions in the spring and early summer of 2003 to assess the site for terrestrial and aquatic conditions. One of the spring visits (April 14th, 2003) was in the company of staff and consultants from the Pown of the Blue Mountains (TOBM), the Niagara Escarpment Commission (NEC) and the Grey Sauple Conservation Authority (GSCA). Comments from those individuals guided the subsequent field work and analysis.

Investigations included a recommaissance assessment of the terrain on the subject property, a qualitative assessment of fish habitat, an inventory of vegetation communities and the compilation of floral and fauna species lists. Locations of wetlands were flagged in the field and incorporated in the property survey using GPS technology.

2.1 Vegetation and Terrestrial Wildlife

An initial field visit was made on October 16, 2002 in order to characterize the vegetation communities present on the entire Delphi Point property. The Ecological Land Classification method was used (Lee *et al.* 1998) to record vegetation units. This method is the standard in Ontario to consistently classify natural habitats. Occasional soil samples were taken using a soil auger, to determine moisture regime, depth of organics in wetlands and to better understand the relationship of soil type to vegetation All encountered species of vascular plants were documented. As the initial visit was made very late in the growing season, an assessment of plant species was repeated in May and June of 2003 during visits to assess wetlands and wildlife habitat use. Wetland boundaries were flagged on May 14, 2003 and subsequently GPS surveyed by R.J. Burnside.

Nocturnal surveys were conducted to document calling amphibian activity on April 14, May 13, June 2, and June 25, 2003. This consisted of walking around the property on suitably warm nights to determine if amphibians were calling from wetland areas, then recording the species and numbers present.

3

Date	Temp	Sky
April 14	14°C	 Partly cloudy
May 13	10°C	Overcast
June 2	11°C	Clear
June 25	22°C	Clear

Table 1. Weather Conditions during Nocturnal Amphibian Surveys

All bird species observed during the site visits were documented. Breeding bird surveys were conducted on the mornings of June 3 and June 26, 2003. The site was walked to record the number and locations of territorial singing males, as well as other birds showing breeding behaviour or presence in suitable nesting habitat during the breeding season. Following protocols of the Ontario Breeding Bird Atlas (2001), a species is considered a 'possible breeder' if it is present in suitable habitat during the breeding season and a 'probable breeder' if it is present on its territory for at least seven days (i.e., if recorded on both survey dates). Birds recorded on other visits were mainly migrants or visitors. Incidental observations of other wildlife were recorded including mammals and reptiles.

2.2 Aquatic Environment

An aquatic habitat assessment was conducted of the Delphi Point lands, on November 19, 2002. The existing conditions of the surface water features were visually assessed and photographed to document existing habitat conditions during the field survey. Information collected included a description of the substrate composition, channel dimensions, aquatic habitat features, and riparian vegetation.

Existing in-house fish community information, previously obtained from the Ministry of Natural Resources - Midhurst District, as well as from other projects in the area was collected and reviewed. Due to the lack of flow or low flow depths found within the channels and the availability of representative fish community data within the Collingwood area of Georgian Bay, active fish sampling during the field surveys was not conducted or considered necessary as alterations to the channels were not anticipated.

The flood limit zone or Shoreline Hazard Zone along the Georgian Bay shoreline, was derived using the GSCA mapped 178 mASL contour elevation to represent the limit of the 100 year return storm (177.96 mASL) (GSCA pers. comm. 2002_a). Beyond this contour elevation, a wave up-rush zone setback extends 15 m inland, as also defined by the Conservation Authority.

3. Existing Conditions

3.1 Background Review

There are no wetlands evaluated by the Ontario Ministry of Natural Resources, known habitats of species at risk (endangered, threatened or vulnerable species), or Environmentally Significant/Sensitive Areas (ESAs) on the property (OMNR Pers. Comm., 2002_{b&c}; GSCA pers. comm. 2002_b). The Delphi Point Earth Science Area of Natural and Scientific Interest (ANSI) of provincial significance occurs on the Delphi Point lands (Figure 2).

Other natural heritage features found in the vicinity of the Delphi Point properties include Craigleith Provincial Park located approximately 1.5 km to the east, and the provincially significant Blue Mountain Slopes Life Science Area of Natural and Scientific Interest (ANSI), located on the southern portion of the Barton Group Property along the Niagara Escarpment face (Figure 1).

Drainage areas within and adjacent to the study area are relatively small in size and for this reason were referred to collectively as the Craigleith Camperdown Subwatersheds in a 1993 subwatershed study of the area undertaken on behalf of the Grey Sauble Conservation Authority (Gore & Storrie 1993). Based on this study it appears that four separate subwatersheds occur within the Camperdown Lands, each originating from the Niagara Escarpment and flowing northward to Nottawasga Bay. One of these previously identified watercourses drains through the Delphi Point property. Its local name is unknown.

3.2 Vegetation Communities

3.2.1 Vegetation Community Descriptions

The property is situated in the Nottawasaga Basin section of the Simcoe Lowlands (Chapman and Putnam 1984). The physical conditions of the site are to a large degree influenced by old shorelines. The property has a gradually decreasing slope from Highway 26 to the Georgian Bay shoreline. The slope is not continuous, but undulates as it crosses old beach ridges. Thus the vegetation communities are arranged in a more or less east-west orientation reflecting the underlying and undulating pattern of the land, which alternate between relatively wet and relatively dry communities. Most of the soils are composed of sands, which are a result of ancient beach dune deposition from Georgian Bay. A wide expanse of open exposed shale bedrock occurs along the shoreline at current low water levels. The majority of the property is treed, dominated by a mixture of coniferous and deciduous forest with some deciduous swamp units intermixed. Much of this forest cover is relatively young suggesting that the site was cleared of vegetation in the last 100 years. Other vegetation types include old field communities and an apple orchard positioned in the southern central portion of the property.





The vegetation communities were described using Ecological Land Classification (ELC) methods. Each of the vegetation communities is briefly described below and their position indicated on Figure 2. Association boundaries have been revised in some instances from the earlier report based on additional field inventory work.

Coniferous Forest

(1) Dry-fresh White Cedar (FOD2-2)

Coniferous forest dominated by White Cedar (*Thuja occidentalis*) occurs in several units. White Cedar dominates the canopy but White Spruce (*Picea glauca*) and Balsam Fir (*Abies balsamea*) may be present as well as occasional deciduous trees, especially Paper Birch (*Betula papyrifera*). The ground layer is usually sparse because of the dense canopy. The most frequent ground cover is the sedge *Carex eburnea*.

Mixed Forest

(2) Dry-fresh White Cedar - Poplar (FOM4-2)

The irregular broken canopy of this community is comprised of White Cedar and Trembling Aspen (*Populus tremuloides*), with Paper Birch and Green Ash (*Fraxinus pennsylvanica*). The tall shrub layer is dense and dominated by Round-leaved Dogwood (*Cornus rugosa*) with some White Cedar and Choke Cherry (*Prunus virginiana*). The ground cover is nearly complete, comprised by a mix of Canada Goldenrod (*Solidago canadensis*), Starry False Solomon's-seal (*Maianthemum stellatum*) and Poison Ivy (*Rhus radicans*).

Deciduous Forest

(3a) Dry-fresh Poplar – Birch (FOD3-1/2)

This is a relatively young deciduous forest that occurs on well drained sites. The canopy is dominated by Trembling Aspen and/or Paper Birch. Green Ash is also usually common. Round-leaved Dogwood and Green Ash saplings comprise the shrub layer. Most common ground layer species include Calico Aster (Aster lateriflorus), Starry False Solomon's-seal and Poison Ivy.

(3b) Fresh-moist Green Ash (FOD7-2)

Green Ash dominates the canopy but Trembling Aspen and Paper Birch are frequent. The tall shrub layer is dominated by a mix of Round-leaved Dogwood and Silky Dogwood (*Cornus amomum*). Ground layer is variable with Fringed Loosestrife (*Lysimachia ciliata*), Starry False Solomon's-seal and Poison Ivy being among the most frequent species. This community contains small pockets of deciduous swamp (see 7a) which are too small and indistinguishable to accurately map.

Cultural Woodland

(4a) Poplar Cultural Woodland (CUW1)

Cultural woodland differs from forest in that the tree canopy comprises between 25 and 60%, whereas a forest canopy is greater than 60%. The open canopy is a result of past human disturbances. There are two units of this community that appear to have been grazed by livestock in the recent past. The canopy is a mix of Trembling Aspen and a hybrid poplar (*Populus* sp.). Trembling Aspen saplings comprise the understorey while the dense ground cover consists mainly of grasses such as Kentucky Bluegrass (*Poa pratensis*) and Smooth Brome (*Bromus inermis*).

(4b) Poplar – Ash Cultural Woodland (CUW1)

This unit was also likely grazed by livestock. Trembling Aspen and Green Ash dominate the canopy along with some Paper Birch and Crack Willow (*Salix X rubens*). The shrub layer is a fairly dense mix of Choke Cherry, Common Buckthorn (*Rhamnus catharticus*) and Red-osier Dogwood (*Cornus stolonifera*). Poison Ivy and Virgin's Bower (*Clematis virginiana*) dominate the ground cover.

(4c) Mixed Cultural Woodland (CUW1)

Two units of mixed woodland occur, with the one on the west part of the property being more mature. The overall composition and canopy density is quite variable. Generally White Cedar, Paper Birch, Trembling Aspen are the predominant species. White Spruce and Sugar Maple (*Acer saccharum*) are also common in the west unit. Round-leaved Dogwood, Choke Cherry, Common Buckthorn and Ninebark (*Physocarpus opulifolius*) comprise the shrub layer while ground cover is typically a mix of grasses, Bracken Fern (*Pteridium aquilinum*), asters and Starry False Solomon's-seal.

Coniferous Plantation

(5) Red Pine (CUP3-1)

There are three units of medium aged plantations of Red Pine (*Pinus resinosa*). Ninebark dominates the shrub layer and some deciduous regeneration is occurring. The ground layer is often sparse but Starry False Solomon's-seal and Poison Ivy are common.

Cultural Meadow

(6) Old Field (CUM1-1)

Two units of field/meadow occur. These are areas of early succession that have been disturbed in the past few years. The western unit was likely a horse pasture. There is a foundation of a barn and several other buildings that burned down in the past few years. Many weedy invasive plant species are present which is indicative of recent disturbance. Some woody regeneration is occurring such as Manitoba Maple (*Acer negundo*) near the buildings, with ash, poplar and dogwood elsewhere. Asters (*Aster spp.*), goldenrods (*Solidago spp.*) and grasses dominate the less disturbed parts of the meadow. The eastern unit is less disturbed with a greater component of woody regeneration.

Deciduous Swamp

(7a) Green Ash Mineral Swamp (SWD2-2)

Several units of seasonally flooded swamp occur in the swales between subtle beach ridges. There was abundant standing water during spring 2003, but many areas were no longer wet by late June. All swamps were dry on the October 2002 field visit. The canopy is dominated by Green Ash, with some Swamp Maple (*Acer X freemannii*) and American Elm. The shrub layer is usually dominated by Silky Dogwood and ash saplings but is sometimes sparse. Ground cover is also variable with Sensitive Fern (*Onoclea sensibilis*), Marsh Fern (*Thelypteris palustris*) and sedges (*Carex* spp.) often present.

(7b) Green Ash – Crack Willow Mineral Swamp (SWD2-2)

Mature Green Ash and non-native Crack Willow comprise the canopy. There is a partial shrub layer of Silky Dogwood and a ground cover largely of Canada Goldenrod, Red Raspberry (*Rubus idaeus*) and non-native Reed Canary Grass (*Phalarus arundinacea*).

Thicket Swamp

(8a) Silky Dogwood Mineral Swamp (SWT2-8)

Silky Dogwood dominates the community with a few scattered Green Ash rising above the main thicket. Canada Bluejoint (*Calamagrostis canadensis*) and some Hybrid Cattail (*Typha X glauca*) comprise the ground layer. Silky dogwood, while common in this area is reaching the northern extent of its range.

(8b) Ash – Dogwood Mineral Swamp (SWT2-8)

There are two units of ash – dogwood swamp behind a shingle beach ridge that is 50 cm high and up to 10 m wide. The seasonally flooded wetland is comprised of a rather dense tall shrub canopy of Green Ash saplings and Silky Dogwood. The ground layer is mainly Canada Bluejoint, Wooly Sedge (*Carex lanuginosa*) and invasive Purple Loosestrife (*Lythrum salicaria*).

(8c) Winterberry Mineral Swamp (SWT2-8)

A rather dense thicket of Winterberry (*llex verticillata*) with some Silky Dogwood, under a partial canopy of Green Ash occurs in one unit. Canada Bluejoint and Sensitive Fern comprise the ground layer. The presence of winterberry suggests a relatively low disturbance site.

Meadow Marsh

These coastal meadow marshes, which contain a distinctive mixture of plant species and are often found associated with shallow sloping calcareous beaches, are found only along parts of the Great Lakes coastline. These units are considered rare according to the NHIC (2002). The inventory work did not identify any provincially or regionally significant plant species associated with this unit on this site.

(9a) Reed Canary Grass Mineral Meadow Marsh (MAM2-2)

A single small unit of seasonally flooded meadow marsh is dominated by Reed Canary Grass.

(9b) Graminoid Coastal Meadow Marsh – (MAM4-1)

Coastal meadow marsh is a type of community that is restricted to sandy shoreline areas of the Great Lakes. Three-square Bulrush (*Scirpus americana*) was the most abundant species. Baltic Rush (*Juncus balticus*), Purple Loosestrife, native form of Common Reed (*Phragmites communis*) and Variegated Horsetail (*Equisetum variegatum*) are common here. This community occurs in a subtle moist depression on the backside of a low dune and is a better representative of Graminoid Coastal Meadow Marsh than 9c.

(9c) Forb Coastal Meadow Marsh - (MAM4-1)

This area occurs immediately on the shoreline of Georgian Bay. It occurs on the sheltered area behind the point but is still subject to the effects of wind, ice scour and occasional wave action. Non-native White Sweet Clover (*Melilotus alba*) and Purple Loosestrife are abundant which suggests considerable disturbance. Other abundant species include rushes (*Juncus* spp.), Grass-leaved Goldenrod (*Euthamia graminifolia*), Panicled Aster (*Aster lanceolatus*) and Small-flowered Agalinus (*Agalinus paupercula*). Although somewhat disturbed, this is an unusual and diverse community.

Open Dune

(10) Switch Grass Open Dune (SDO1-1)

This is an open area of low stabilized sand dune that is dominated by Switch Grass (*Panicum virgatum*) with a lower layer of Bent Grass (*Agrostis stolonifera*). Occasional forbs occur here including Calico Aster, Smooth Aster (*Aster laevis*), Hairy Goldenrod (*Solidago hispida*) and Baltic Rush. Xeric sands characterize this area, therefore only deep rooted species that are adapted to very dry conditions can survive here. Part of the dune is surrounded by stunted cedar forest which results from the dry soils and windswept condition of the shoreline. This type of unit is considered rare in the province by NHIC (2002).

Shrub Beach

(11) Ash – Dogwood Shingle Shrub Beach (BBS1)

A raised shingle beach occurs between the rock shoreline and the forested parts of the subject lands. Green Ash saplings and Silky Dogwood predominate, but other shrubs are common including Heartleaf Willow (*Salix eriocephala*), Buffaloberry (*Shepherdia canadensis*) and Ninebark.

(12) Rock Shoreline

The entire length of the Georgian Bay shoreline consists of an extensive flat outcrop of shale that is affected by wave wash and ice scour. There are abundant fractures and fissures where soil has collected supports annual or perennial plants. Most abundant species include Purple Loosestrife, Grass-leaved Goldenrod, Small-flowered Agalinus, New England Aster (*Aster nova-angliae*), rushes and Hairy Panic Grass (*Panicum acuminatum*). It supports a plant community similar to the forb coastal meadow marsh.

Anthropogenic

Areas on Figure 2 that are designated as 'anthropogenic' ("A") encompass all lands that are currently, or have been, continually managed by human activity to prevent the development of natural vegetation. Orchards, mowed areas, ornamental plantings, buildings and driveways are included in this category.

3.2.2 Flora

Approximately 190 species of vascular plants were recorded during field investigations in 2002 and 2003 (listed in Appendix B). Of these, 52 species (27%) are non-native. No provincially or regionally significant plant species were encountered. (Riley 1989; NHIC website) The overall plant diversity is relatively low given the size of the property and range of vegetation types. In addition, the vegetation is mostly in a relatively early stage of succession. These two characteristics indicate that the site was probably virtually cleared of forest cover within the past 100 years.

3.2.3 Aquatic Habitat

Nottawasaga Bay occurs within the larger Georgian Bay on Lake Huron. The fish community within Georgian Bay is very dynamic, as a result of diverse habitat types across the shorelines of this large waterbody. This habitat variability permits open migration and a persistence of a variety of warm, cool, and coldwater fish species.

Previous shoreline fish surveys undertaken in the Collingwood area revealed a species composition dominated by warm water forage fish species. In addition, several game fish species, including smallmouth bass, northern pike and rainbow trout, were also observed. A list of species common to Georgian Bay is provided on Table 1 (Appendix A). This list depicts the overall community composition found at two areas of the Georgian Bay shoreline near Collingwood. Although the surveys are not recent, there is no reason to suspect that the community is not similar today. All 23 species encountered are commonly found throughout Georgian Bay and do not represent species at risk (COSEWIC 2000).

Available fisheries information indicates that the species expected to inhabit the near-shore area are typically dominated by minnow species at all life stages, namely bluntnose minnow, spottail shiner, and mimic shiner, as well as alewife. Of the remaining species found, most were represented by young fish indicating that species, such as smallmouth bass, yellow perch, white sucker, brown bullhead, and lake chub typically utilize this area for spawning and nursery purposes.

These species typically spawn in lakes where water depths range up to 5.0 m in depth (Lane *et al.* 1996). All species found are relatively tolerant of variations in habitat type (Scott and Crossman 1973), which would allow for free lateral migration from near-shore to deepwater habitats throughout the year. As such, nearshore areas including the shoreline adjacent to the coastal wetland communities and the Earth Science ANSI would be potentially suitable for some of these fish species and those habitats that are continually wetted provide more consistent quality habitat for local species.

The flood limit zone or Shoreline Hazard Zone along the Georgian Bay shoreline occurs at the 177.96 mASL contour elevation and is shown as mapped by the GSCA. This elevation represents the limit of the 100 year return storm and therefore the existing limit to development (GSCA pers. comm. 2002_{a}). In addition, a 15 m wave up rush zone is usually applied on the landward side of this line. The mean annual high water level that occurs further lakeward than the floodline is considered the wetted area that could be utilized by fishes.

3.2.4 On-Site Aquatic Habitat Potential

Watercourse #1

Watercourse #1 is located near the eastern boundary of the Delphi Point Properties (Figure 2). The watercourse begins south of Highway 26 and flows through a concrete box culvert before continuing to flow north through a man-made trapezoidal ditch adjacent to the Hydro Station access toward Georgian Bay. At the time of the field survey in November, relatively slow flowing water was observed in this channel. This straight channel was dug approximately 2.0 m below ground level and has been heavily reinforced with rip-rap. The average water depth was 3 cm in November. The bottom of the ditch was approximately 1.5 m wide throughout the length of the channel. The low flow channel's wetted width varied considerably. In some sections it was as wide as 1.5 m and at other sections it disappeared completely, as a result of flow passing under the large rip-rap substrate. The defined channel ended in the vicinity of the tree line at the shale beach on Dephi Point. From here the water continued to flow as a veneer layer over the shale, for approximately 50 m until entering Georgian Bay at current water levels.

Based on these observations the channel is expected to flow seasonally in response to runoff events. When visited in September of 2003, this channel contained standing water but no flow, confirming this expectation. Its potential to support fish is limited by the temporary flow conditions, homogeneous riprap substrate and lack of connectivity with Georgian Bay. As a result, the channel is not predicted to support fish. A recent Comprehensive Environmental Assessment Study (CEAS) for proposed water and wastewater servicing performed on behalf of The Town of The Blue Mountains similarly concluded that this "system does not support year round fish habitat" (LGL in MacViro 2002).

Watercourse #2

Watercourse #2 is located in the central section of the Delphi Point properties. It flows from south of Highway 26, and crosses under the highway in a concrete culvert adjacent to a private cottage's driveway. The defined channel runs north, beside the access road and ends at the shale beach of Delphi Point. From here the water sheet flows over shale with no channel, for approximately 75 m toward the waters of Georgian Bay. Neither the Town's CEAS or the Gore & Storrie Subwatershed Study (1993) evaluated or identified this watercourse.

When surveyed by GLL on November 26, 2002, water was flowing steadily through this watercourse at a relatively moderate velocity. Stream morphology consisted of pool and riffle sequences and water depths ranged between 3 cm and 25 cm. The existing channel had steep banks, especially in areas closest to the southern property line near Highway 26. Here banks were cut approximately 4.0 m below grade and the channel's bottom was approximately 3.5 m wide. It has been ditched over the years. As the channel continued toward Nottawasaga Bay, the gradient flattened and the stream became less steeply incised. At the most downstream section the channel near Delphi Point's shale beach, the banks were incised only 0.5 m below grade. Here the channel bottom and wetted width was approximately 1.5 m wide.

The channel has been viewed on other field dates including April and June. On both occasions water was present but flow was virtually non-existent. Based on these observations the channel is considered to be warm water ephemeral, although it may support resident populations of baitfish in standing pools. Under high water levels some connection with Georgian Bay may occur, but it is not continuous.

Watercourse #3

Watercourse #3 is located near the western boundary of the Delphi Point Property boundary. North of Highway 26 the creek emerges beside the Blue Mountain Private Beach driveway from a large box culvert. It meanders in its natural form eastward and then flows north toward Georgian Bay. Similar to the other channels on this site, the defined channel ends at Delphi Point's shale beach. From here the water flows over shale as a veneer layer, for approximately 150 m to Georgian Bay, at current water levels. Secondary source material for this watercourse was not available as it appears it was not identified or evaluated in either the Town's CEAS or the Gore &Storrie Subwatershed Study (1993).

When surveyed on November 26, 2002, the southern end of the channel was dry while the northern end contained standing pools of water. The banks of this creek are generally incised 1.5 - 2.5 m below ground level. The channel width was approximately 1.5 m wide, but widened to 4.0 m at a large pool (15 cm deep) near a small footbridge. During the survey a single minnow sized fish was observed in this pool.

Based on our observations the watercourse is considered to be ephemeral. The observation of fish suggests that the stream is capable of supporting resident populations of warm water baitfish in standing pools during low flow periods.

3.3 Terrestrial Wildlife

All of the wildlife species recorded on the Delphi Point lands in the course of field investigations are listed in Appendix C.

A total of 40 species of birds were recorded between the two breeding bird surveys in June. Most are common and adaptable forest and edge species which are typical of this kind of habitat. A Merlin (Falco columbarius) was seen flying along the shoreline. This species typically nests in coniferous trees and might be nesting on site although no nests were located. As a foraging bird it can hunt and fly considerable distances from the nesting site, and was only seen flying along the shoreline. Four of the species designated as possible or probably breeding are recognized as area sensitive forest interior species by Freemark and Collins (1992): Hairy Woodpecker (Dendrocopos villosa), Magnolia Warbler (Dendroica magnolia) (possibly a migrant), Black-and-white Warbler (Mniotilta varia) (possibly a migrant) and American Redstart (Setophaga ruticilla). There were four singing male American Redstarts indicating that it is good habitat for them. These territories were randomly distributed in successional forest across the property and not tied into a particular site.

The overall density of breeding birds on site was low, especially considering there is a mosaic of successional forest and wetland. The lowest density of birds occurs in the coniferous forest and coniferous plantations. The forest in the study area comprises about 17 ha of forest habitat and is contiguous with a smaller area of more mature forest to the east.

The bay on the west of Delphi Point is shallow and sheltered from the main wave action of Georgian Bay (depending on where wind comes from) and it is sometimes a congregating spot for waterbirds. A number of waterfowl were taking shelter here during a swell on the bay on October 16, 2002 including Mallards (*Anas playrhynchos*), Black Ducks (*Anas rubripes*), Common Mergansers (*Mergus merganser*) and Canada Geese (*Branta canadensis*). This is also a feeding area for other birds. Belted Kingfisher (*Ceryle alcyon*), Great Blue Herons (*Ardea herodius*) and even a Great Egret (*Casmerodius albus*) were feeding in the bay on June 2, 2003. Eleven species of migrant land bird species were observed in the interior of the subject lands on October 16, 2002. A number of other migrants including nine species of warblers were observed on May 13, 2003. Delphi Point's position immediately along the shoreline of Georgian Bay may make it a concentration area for migrant songbirds.

Four species of calling amphibians were recorded during the nocturnal surveys. Three of the four interior wetlands with amphibians found only Western Chorus Frogs (*Pseudacris triseriata*), as shown on Figure 2. Chorus frogs were calling from the ash-dogwood thicket swamp near the Delphi Point on April 14, May 13 and June 3. Spring Peepers (*Pseudacris crucifer*) and Green Frogs (*Rana clamitans*) as well as Western Chorus Frogs were breeding in the Winterberry thicket swamp (8c on Figure 2). This was the only site with three species, and therefore the most important amphibian breeding location. Spring peepers require some adjacent forest cover for summer habitat. The presence of Green Frogs indicates that water is present almost permanently since the tadpoles take a whole year to develop. Green Frogs and American Toads (*Bufo americanus*) were also calling from the Georgian Bay shoreline on the west side of Delphi Point. There were no amphibians recorded in the wetlands on the southern or eastern portion of the property.

Eight common species of mammals were noted including White-tailed Deer, Eastern Cottontail, Gray Squirrel, Red Squirrel, Eastern Chipmunk, Meadow Vole, Woodchuck and Little Brown Bat. Eastern Garter Snake is the only reptile observed.

Presently there is habitat connectivity for wildlife movement to the east and southeast, and to a lesser extent to the west. Despite the presence of Highway 26 and developed areas, landscape level connections to wooded areas south of the property are currently present and may have some limited use by wildlife.

3.4 Delphi Point Earth Science ANSI

Delphi Point is a provincially significant earth science Area of Natural and Scientific Interest (ANSI). It is accessible from Highway 26 by a gravel road along the Ontario Hydro right-of-way (ROW), and several gravel roads leading to private residences and cottages located south of a treeline opposite the ANSI. The ANSI boundary lies approximately 30 to 35 m northward from the treeline and is beyond the 100 year flood limit. A representative from the Ministry of Natural Resources (MNR) visited the site in 1999 and provided the UTM co-ordinates for the ANSI boundary as depicted on Figure 2. The following description of the ANSI was compiled based on various pieces of correspondence and file notes provided by the MNR representative (OMNR pers. comm., 2002a).

The ANSI comprises a succession of remnant pebble beaches, sporadic occurrence of shrubs, large igneous boulders and exposed bedrock. It is this bedrock unit of the Late Ordovician Period that provides the provincial significance of the earth science ANSI. The exposed bedrock consists of the Collingwood Member of the Lindsay Formation, formerly called the Lower Member of the Whitby Formation. In the Collingwood-Craigleith area the Collingwood Member is about 2 m thick. The rocks in this interval are commonly termed as black calcareous shales. However, lithologically, the more appropriate name for this unit is impure limestones or lime marlstones. The dark colour of the Collingwood Member unit is due to a high organic content. This unit contains abundant, well-preserved fossils including trilobites, brachiopods, bivalves, graptolites, conulariids and nautiloids. The fossil content in the Collingwood Member unit increases westward in size and abundance. A shallow sea covering the area about 445 million years ago is favoured as the depositional setting for the macrofaunal record in the Collingwood Member. The macrofauna in this unit can be correlated with existing strata in Manitoulin Island, the Ottawa Valley and Michigan State. The Delphi Point is the best exposure of this record in Ontario, which makes it important for preservation. However, easy access from Highway 26 for collectors and distributors of fossil materials endangers this ANSI. Observations made during Gartner Lee's site visit in November 2002 established that slabs of shale, likely containing fossils, had been cut out of the surface of the bedrock.

4. Significance and Sensitivity

For the purpose of this report, the significance of a feature is based on either: a) it being identified as significant by a regulatory agency or ministry; or b) it being identified through field investigations and subsequent evaluation, as having the potential to be a significant feature or play a significant role in the ecology of the site or its adjacent lands by GLL ecologists with reference to published sources. The main sources of information consulted for the presence of significant features on the Delphi Point site were MNR, GSCA and the Natural Heritage Information Centre (NHIC). Further direction on the

identification and interpretation of significant features was derived using the Provincial Policy Statement (Government of Ontario 1997) and its supporting documents (OMINR 1999; OMINR 2000) as well as species designations (NHIC 2002). GLL also assigned *relative* levels of significance to the vegetation units based on local representation, age, and likely habitat potential.

Sensitivity of an ecological system or feature is measured by its resistance to change when exposed to a disturbance. The degree to which an ecological feature can withstand or recuperate from a disturbance is termed its "resilience". The lower the resilience of a feature to a disturbance the higher its sensitivity. By identifying the sensitivity of ecological features and functions one is better able to predict the potential loss of a significant feature or function given the proposed land use and if identified to be retained, to ensure that adequate protection / mitigation for its maintenance is prescribed. Figure 3 has evaluated the features on the properties for significance of feature or function. For the purposes of this study, the potential disturbances or stressors are related to the proposed intended land use, primarily the development and use of recreational housing, and all statements related to sensitivity refer to the relative ability of a feature or function to withstand such disturbance.

4.1 Vegetation and Wildlife

There are no known terrestrial wildlife values of significance based on published information or found through the field investigations of 2003. The bay on the southwest side of the point provides shelter from Georgian Bay wave action (depending on where wind comes from) and may be an important staging area for waterfowl along the relatively exposed shoreline.

None of the plant species recorded on-site are considered provincially or regionally rare. In addition, most of the vegetation communities identified on the property and classified using the Ecological Land Classification (ELC) process, are common. There are no old forest communities, in fact most are in a relatively early successional stage, as indicated by the abundance of cedar, ash, poplar and birch.

Much of the site is covered by the common communities of White Cedar-Poplar Mixed Forest or Cultural Thicket. Vegetation communities of relatively low significance include the anthropogenic areas (e.g. orchard, manicured areas), cultural woodlands (Community 4), the three units of medium aged plantations of Red Pine (Community 5) and the field/meadow (Community 6).

It is difficult to assign a significance level where interior breeding birds were found associated with the cedar-poplar forest as the they rely on a certain size of forest block that is not related to one unit type. Habitat for interior species is usually found where forest cover is more than 100 m from an edge (Sandilands and Hounsell 1994). In this case, the birds were located in areas that were less than 100 m from the edge, and notably less than 100 m from Highway 26, where a noise disturbance factor may be expected. There was no specific area that could be delineated as being interior habitat on the properties. The remainder of this forest type lacked an association of significant plant species or interior forest breeding birds but provides forest area needed for interior conditions to develop.



Legend

r Flood Limit

- CA 15m Wave Uprush

Proposed Wave Uprush

Proposed Flood Limit

ANSI Boundary

Creek

6

Forest Interior Breeding Birds

Vegetation Communities

Areas of High Significance/Sensitivty

Areas of Low Significance/Sensivity

Higher Functioning Wetlands -Amphibian Breeding Sites

VEGETATION COMMUNITIES

1. Coniferous Forest: Dry-fresh White Cedar (FOD2-2)

2. Mixed Forest: Dry-fresh White Cedar - Poplar (FOM4-2)

Deciduous Forest 3a. Dry-fresh Poplar - Birch (FOD3-1/2) 3b. Fresh-moist Green Ash (FOD7-2)

Cultural Woodland 4a. Poplar Cultural Woodland (CUW1) 4b. Poplar - Ash Cultural Woodland (CUW1) 4c. Mixed Cultural Woodland (CUW1)

5. Coniferous Plantation: Red Pine (CUP3-1)

6. Cultural Meadow: Old Field (CUM1-1)

Deciduous Swamp 7a. Green Ash Mineral Swamp (SWD2-2) 7b. Green Ash - Crack Willow Mineral Swamp (SWD2-2)

Thicket Swamp

8a. Silky Dogwood Mineral Swamp (SWT2-8) 8b. Ash - Dogwood Mineral Swamp (SWT2-8) 8c. Winterberry Mineral Swamp (SWT2-8)

Meadow Marsh 9a. Reed Canary Grass Mineral Meadow Marsh (MAM2-2) 9b. Graminoid Coastal Meadow Marsh - (MAM4-1) 9c. Forb Coastal Meadow Marsh - (MAM4-1)

10. Open Dune: Switch Grass Open Dune (SDO1-1)

11. Shrub Beach: Ash - Dogwood Shingle Shrub Beach (BBS1)

12. Rock Shoreline

A. Anthropogenic (A)

Existing Conditions & Siginifcant Features

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Figure 3

Delphi Point

Project 22579, October 2003

-Gartner Lee Limited 50 100 Orthophotography: April 2002

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Higher significance and / or sensitivity to development occurs in the wetland and some of the shoreline communities as described below.

Switch Grass Open Dune

Community 10 is an open grassland dune community. Sand dune communities are generally a rare feature, restricted to certain areas of Great Lake shorelines. Based on our site evaluation the community type is consistent with a Little Bluestem – Switch Grass - Beach Grass Open Dune that is ranked as S2 by the Natural Heritage Information Centre (2002). An S2 rank means that the community is rare with between 5 and 20 known occurrences in the province. For this reason it is recommended that the community be protected. Furthermore, the fragile nature of open grassland dune communities results in this feature also having a high sensitivity to development. For these reasons, any encroachment into community 10 should be strictly controlled to reduce the potential for impacts from human use (Figure 3).

Wetland Communities

Although no evaluated wetlands occur on the Delphi Point Property a number of relatively small wetland communities were found as a result of Gartner Lee's field survey. The on-site wetlands are represented by the following two wetland types: Great Lakes coastal meadow marsh positioned along the property's western shoreline and small pockets of swamp communities located in the interior of the property. All individual interior wetland units were less than 2 ha in size, the largest being 1.4 ha, but the majority were between 0.17 and 0.39 ha in area.

Interior Wetland Communities

Portions of the site (communities 7, 8 and 9a on Figure 2) are classified as a wetland swamp communities using ELC methods. These have not been evaluated by the Ontario Ministry of Natural Resources, likely due to their relatively small size. Generally, the wetlands occur in the troughs between successive beach ridges where they intersect the water table. None of these wetlands are connected to the watercourses and none play a significant role in flood attenuation or water quality filtration, functions often associated with wetlands.

In total, the interior wetlands on site comprise approximately 4.5 ha. The wetland community boundaries as they appear on Figures 2 and 3 are have been staked and their position determined with a GPS unit. In general, wetlands are considered to have high sensitivity to development based on their requirement for wet soil conditions. Of these, some have been shown to provide one additional habitat function for breeding amphibians. The sites where amphibians were found breeding are areas with a higher level of function since they retain water for a longer period of time and therefore also support more wetland plant species. In particular the single unit of Winterberry thicket swamp (8c) supports the greatest diversity of breeding amphibians and is a less common vegetation community on site.

functions are deemed to be higher functioning and more sensitive to development than those that had only wetland plant communities and limited duration of standing water. Figure 3 depicts those wetlands that were designated as having higher function. Of the remaining wetlands, the thicket swamp vegetation units (8) are slightly more unusual than the deciduous swamp units (7), which are more common. However, as the other units do not have breeding amphibian functions, they are considered to be low functioning.

Great Lakes Coastal Meadow Marsh

Our site investigation identified communities 9b and 9c which are consistent with a Great Lakes coastal meadow marsh vegetation type. Community 9c is co-dominated by White Sweet Clover, which indicates degraded conditions. Although these marsh communities are not evaluated or classified by MNR (OMNR, pers. comm., $2002_{b\&c}$), a Graminoid Coastal Meadow Marsh is ranked as S2 by Natural Heritage Information Centre (2002). An S2 rank means that the community is rare, for which reason communities 9b and 9c are ranked as having high significance and sensitivity to development. Both are inside the 100 year flood limit.

4.2 Aquatic Habitat and Fishery Potential

4.2.1 Nearshore Habitat

Available fisheries information indicates that the species expected to inhabit the near-shore area are typically dominated by minnow species at all life stages, namely bluntnose minnow, spottail shiner, and mimic shiner, as well as alewife. Of the remaining species found, most were represented by young fish indicating that species, such as smallmouth bass, yellow perch, white sucker, brown bullhead, and lake chub typically utilize this area for spawning and nursery purposes.

The nearshore areas including the shoreline adjacent to the coastal wetland communities and the Earth Science ANSI are considered fish habitat and conditions observed suggest the potential to support bass and perch spawning and nursery uses.

4.2.2 On-Site Surface Water Features

As stated above, none of the nearshore species, including the minnows appear to have continuous access to the on-site surface water features due to the lack of connectivity between the defined channel and the lake. This may change when lake levels are high. Based on the field observations, all watercourses were found to be ephemeral, but have the potential to provide warm water baitfish habitat in refuge pools. Maintenance of the form and function of these three watercourses will likely be required although channel relocation would likely be permitted.

4.3 Delphi Point Earth Science ANSI

The Delphi Point Earth Science ANSI is of provincial significance. According to the Provincial Policy Statement (PPS) (Government of Ontario 1997), development or site alteration may be permitted to such features provided that there will be no negative impacts on the feature. The PPS recommends that an impact assessment be undertaken for development within 50 m of a provincially significant ANSI in order to conserve the defining features for which it was identified. The ANSI limits as defined by MNR are wholly contained within the 100 year flood limit and therefore, outside the developable area of the properties.

It is recommended and supported by MNR (OMNR Pers. Comm., 2002a) that development and recreational use of the Delphi Point Earth Science ANSI be avoided and where possible, the site be protected from further damage from users and fossil collectors through appropriate land use designation and/or restricted access.

5. Planning Proposal

Revised draft plans of subdivision have been prepared for the Delphi Point landowners by Malone Given Parsons Ltd. (September 2003). The plans provide for 52 single family residential units as well as 4 medium density blocks (1, 2, 15 and 16) with 149 units, for a total of 201 units, as shown on Figure 4. It is envisioned that this subdivision will cater to seasonal and full time residents taking advantage of nearby recreational opportunities in The Town of the Blue Mountains and Collingwood.

The Delphi Landowners holdings consist of 4 parcels, each with its own Draft Plan file number as follows and shown on Figure 4; Delphi Point Holdings Inc. (42T-88003), Phoebus Investments (42T-95007), Peaks Bay Holdings Inc. (West) (42T-95006) and Peaks Bay Holdings Inc. (East) (42T-87016). The Delphi Point and Peaks Bay East parcels date from 1988 and 1987, respectively, and therefore, are subject to policy provisions of that time.

Several landowners are not participating in the development plan and land use designations have been suggested, where eventual participation is anticipated.

The draft plans have been prepared after consultation with The Town of The Blue Mountains, County of Grey, Niagara Escarpment Commission and Grey Sauble Conservation Authority, and modified further through discussions between Gartner Lee, R.J. Burnside Engineering, Shoreplan Engineering and Malone Given Parsons Ltd. An evaluation of the overall plan and its impacts on the environmental features on the property follows in Section 6.



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Delphi Point Holdings Inc. Subject of Draft Plan 42T-8	Lands, 8003	
Total Lots (Min. 30.5m, 100ft frontage) Total Medium Density Total Units Designated Yield = 62 units + 18	14 <u>66</u> 80 units = 80 u	inits
Resiential Density Non Developable (Open Space) Developable Area 30.5m Singles - 14 Lots Medium Density Roads (Private @10m)	19.9 uph 3.19 ha 4.03 ha 2.32 ha 1.16 ha 0.55 ha	8.0 upa (7.88 ac) (9.96 ac) (5.73 ac) (2.87 ac) (1.36 ac)
Total Area	7.22 ha	(17.82 ac)

Phoebus Investments Inc. Lands, Subject of Draft Plan 42T-95007

Total Medium Density Units 83 Designated Yield = 66 units + 17 units = 83 units

18.3 uph	7.4 upa
1.14 ha	(2.81 ac)
4.53 ha	(11.23 ac)
3.90 ha	(9.67 ac)
0.63 ha	(1.56 ac)
5.67 ha	(14.04 ac)
	18.3 uph 1.14 ha 4.53 ha 3.90 ha 0.63 ha 5.67 ha

Peaks Bay Holdings (West Subject of Draft Plan 42T-9) Lands, 5006	
Total Lots (Min. 30.5m, 100ft frontage)	14	
Residential Density	3.2 uph	1.3 upa
Non Developable (Open Space)	0.57 ha	(1.40 ac)
Developable Area	4.33 ha	(10.70 ac)
Net Residential	3.33 ha	(8.22 ac)
Roads	1.00 ha	(2.48 ac)
Total Area	4.90 ha	(12.10 ac)

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			_
Peaks Bay Holdings (East) Subject of Draft Plan 42T-8	Lands, 87016		
Total Lots (Min. 30.5m, 100ft frontage)	24		
Residential Density Non Developable (Open Space)	4.8 uph 0.93 ha	1.9 upa (2.29 ac)	
Net Residential	5.02 ha 4.05 ha	(12.40 ac) (10.00 ac)	
Roads	0.97 ha	(2.40 ac)	
Total Area	5.95 ha	(14.69 ac)	
Total Yield	201 units		
Overall Density	11.2 uph	4.5 upa	

80m	160m	Delphi Point Landowners	
ale 1:4000		PROPOSED DRA	FT PLAN
Drown By: -		1	FIGURE
Approved By: -			A
Project No.: 22-57	9-3	Gartner Lee	4
6. Environmental Effects and Mitigation

The proposed development plan has been overlaid on the environmental conditions defined on the Delphi Point Properties (Figure 5). The following section evaluates the potential effects, proposed mitigation measures of the proposed plan.

6.1 Summary of Features, Functions and Linkages

The Delphi Point environmental features reflect the shoreline history of beach bars and troughs which parallel the shoreline throughout the property. In the troughs, wetlands have formed that typically do not hold water for very long and for the most part, are too small to have other attributes associated with them. Most of the wetlands were green ash swamps with smaller pockets of thicket swamp.

Two watercourses (1, 3) with associated vegetation runs parallel to the eastern and western property limits, with the third watercourse (2) bisecting the lands. The two watercourses contained wholly within the property limits have been ditched historically for the purposes of conveying drainage from the ski slope area.

Approximately two thirds of the site is covered with deciduous and mixed forest, dominated by cedar, poplar, white ash and birch and interspersed with green ash swamp and swamp thickets. A small area of pine plantation occurs adjacent to Highway 26. The remainder of the vegetation on the site was dominated by cultural meadow and woodland, and orchard, in addition to manicured areas, which pose a low constraint to development.

The natural forest cover provides habitat for a few area sensitive forest breeding birds, but they were well dispersed across the properties and were represented by only 4 species, none of which are rare. Several of the wetlands provide habitat for breeding amphibians, indicating that water is retained long enough for development of the young, when compared with other wetland units on the site. Spring peepers rely on nearby wooded habitats to complete their life cycle.

The watercourses provide a conveyance function for runoff and two of these are expected to have direct fish habitat potential, although linkages with Georgian Bay are currently limited due to low water levels. The shoreline is subject to periodic flooding. A 100 year flood limit was established on the site along with a 15 m wave uprush zone. Several of the wetland units are contained within this hazard designation.

Soils are reported to be sandy with bedrock close to surface resulting in a high water table over much of the property (R.J. Burnside 2003).



Legend



- CA 15m Wave Uprush
- Proposed Wave Uprush
- Proposed Flood Limit
- **Development Plan**
- ANSI Boundary

Creek

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Forest Interior Breeding Birds

Vegetation Communities

Areas of High Significance/Sensitivty

Areas of Low Significance/Sensivity

Higher Functioning Wetlands-Amphibian Breeding Sites

VEGETATION COMMUNITIES

1. Coniferous Forest: Dry-fresh White Cedar (FOD2-2)

2. Mixed Forest: Dry-fresh White Cedar - Poplar (FOM4-2)

Deciduous Forest 3a. Dry-fresh Poplar - Birch (FOD3-1/2) 3b. Fresh-moist Green Ash (FOD7-2)

Cultural Woodland 4a. Poplar Cultural Woodland (CUW1) 4b. Poplar - Ash Cultural Woodland (CUW1)

4c. Mixed Cultural Woodland (CUW1)

5. Coniferous Plantation: Red Pine (CUP3-1)

6. Cultural Meadow: Old Field (CUM1-1)

- Deciduous Swamp 7a. Green Ash Mineral Swamp (SWD2-2) 7b. Green Ash Crack Willow Mineral Swamp (SWD2-2)

- Thicket Swamp 8a. Silky Dogwood Mineral Swamp (SWT2-8) 8b. Ash Dogwood Mineral Swamp (SWT2-8) 8c. Winterberry Mineral Swamp (SWT2-8)

Meadow Marsh 9a. Reed Canary Grass Mineral Meadow Marsh (MAM2-2) 9b. Graminoid Coastal Meadow Marsh - (MAM4-1) 9c. Forb Coastal Meadow Marsh - (MAM4-1)

- 10. Open Dune: Switch Grass Open Dune (SDO1-1)

11. Shrub Beach: Ash - Dogwood Shingle Shrub Beach (BBS1)

12. Rock Shoreline

A. Anthropoganic (A)

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Significant Features & **Draft Plan**

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Figure 5

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Delphi Point

Project 22579, October 2003

Gartner Lee Limited

Orthophotography: April 2002

Natural linkages within the property are currently good with continuous forest cover. This forest cover is connected to areas of forest to the south of Highway 26 and to the east of the property. The linkages to the west are interrupted as the depth of properties between the lake and the Highway are less and development has retained less forest cover, but good forest cover remains to the south of the highway.

6.2 Post Development Plan

6.2.1 Drainage and Shoreline

All watercourses are retained in their existing location on this plan, are designated open space and incorporate a 15 m setback, as shown on Figure 4. It should be noted that the setback from Watercourse 2 is applied on the west side, but a driveway runs along the east side, and these lands are not participating in the development plan.

The shoreline of Georgian Bay will not be altered through this development. All hazard lands (including the 100 year floodline plus wave uprush zone), with the exception of two areas under consideration by GSCA for hazard line modification, have been placed in an open space category. These two areas are described further in Shoreplan 2003. The western modification encroaches on one of the lower functioning wetland units (no amphibians) and cedar forest. The eastern one also includes cedar forest. In both areas, however, the depth of the lot and expected tree preservation potential (as shown on Figure 6) would allow for protection of both of these areas.

Many wetland areas were identified on the properties. Each of these was mapped and assessed. The vegetation and wildlife habitat characteristics are dealt with in Section 6.2.2. Of the wetlands outside the 100 year flood limit, all were found to be less than 2 ha in size, which is considered by the GSCA to be a minimum size to be mapped for the purposes of identifying hazard lands (GSCA 1992). Further, none of the wetlands outside the hazard limit were considered important for flood control as none were associated with streams or the active flood hazard area.

6.2.2 Vegetation and Wildlife Habitat Features

The site is largely forested and there will be losses in this vegetation type and associated wildlife habitat. A number of unevaluated interior and shoreline wetlands were identified on the properties. Only a few of the wetlands on the site were found to have breeding amphibians. Blocks 18, 4, and 15 have been set aside as open space, which incorporate three of the four wetland units with breeding amphibian habitat, as shown on Figures 4 and 5. The most easterly unit, 7a, with amphibian breeding potential, is not shown as preserved in this plan. The proposed road layout will bisect it and alter the drainage pattern such that even if a portion is retained, it is expected to have much reduced function. There are limited options to alter the road pattern on this parcel as the landowner between Peaks Bay West and Peaks Bay East is not participating at this time.



Other wetland units are also preserved in the open space blocks and on lands that are currently not participating in development for the time being. Approximately 1.5 ha (or 33%) of the predevelopment interior wetlands are retained in the plan. As well, portions of the significant Coastal Meadow Marsh on the Georgian Bay shoreline, where they occur between the property limit and the flood line, have been included in Block 18. The remainder of the coastal wetlands are preserved as they are inside the floodline. The wetlands to be retained have been linked together in open space blocks to provide for better protection and movement of plants and animals between them. The linkage between Block 4 and 15 however, is interrupted by a non-participating landowners driveway, which in its current state, is not a significant impediment to movement of the wildlife between units. In the event this property develops, the linkage should be maintained.

Block 17 is also set into an open space designation and includes all of the rare Switch Grass Open Dune community and forest cover between them. The lots backing onto this unit are between 34 and 50 m deep, which provides some opportunity to preserve some of the forest edge against the dune vegetation. This open space block is intended to be privately held and managed to provide access to the lake through strictly controlled points, while protecting the integrity of the vegetation. A management plan should be prepared for the privately held lands to determine where access points are best placed to avoid more sensitive plants, and if some thinning of the forest cover can be tolerated to allow views to the lake. It would be important to carry out any thinning in a controlled fashion rather than based on landowner desires to limit impacts to the trees within this block.

These open space blocks, including the stream buffers represent approximately 24.5% of the property (not including non-participating landowners). The width of the open space blocks varies between 15 m to 100 m, and will remain forested where it is currently. Most of the proposed lots are extra deep, intentionally to retain as many trees as possible. As the forest is relatively young, it is expected that the trees remaining will be more resilient to adjacent clearing. With the exception of the 5 lots backing onto Highway 26, the remaining lots (19) on Peaks Bay East range between 49 m (161 ft) and 66 m (216 ft) deep, with the majority being 53 m (174 feet) deep or greater. Lots on Peaks Bay West are even larger ranging between 50 and 115 m deep. The majority of lots are (10 of 14) greater than 65 m in depth. The positioning of the lots allows for potentially 20 m of the lot to remain treed, as shown on Figure 6. This cannot be confirmed without grading plans, but preliminary servicing plans for the site (R.J. Burnside 2003) have indicated that the Peaks Bay portions will not need much fill, if any, to create a gravity drained storm sewer system. Local grading around individual houses has not been determined yet. Therefore, a tree preservation plan will be required to determine building envelopes and further assess the impact of grading on the forest. It is possible that in the back lots of Peaks Bay lands both upland (e.g., lots 16-24 and 3-10, 11-12) and swamp units (e.g., lots 3, 4, 11, 16 and 24) will be retained. There are additional wetland units that may be retained on the non-participating landowner lands for the time being.

Lot depths on the Delphi lands have already taken into account some tree saving along the shoreline, and were intentionally shortened to create open space Block 17. Additional tree saving is anticipated to be minimal as the site needs to be filled to allow for the installation of the storm and sanitary sewers in this area. R.J. Burnside (2003) has developed a cross-section showing up to 2 m of fill across this section of the property. The storm sewers are a requirement of the Town of the Blue Mountains. Fill required to meet the drainage and sewer grades will be determined further at detailed design and with a more accurate topographic survey of the lands. Nevertheless, there is some filling anticipated across the Phoebus and Delphi portions of the site which results in the removal of forest cover and wetland units not already captured in the open space designations. In total, we estimate about 39% of the forest cover can be maintained on all the properties combined, as shown on Figure 6.

A calculation of pre and post drainage area to the wetland units to be retained was attempted but the resolution of the topographic survey was not sufficient to provide meaningful results. To ensure that the water continues to be delivered to the wetlands to be retained, the natural drainage path will be retained from the rear half of the lots. Roof leaders will spill onto the yards, which will maintain current infiltration characteristics. Given the larger lots and natural forest cover on the site, typical grading for lot drainage should not be undertaken. Subsurface pipes may require trench breaks to ensure that the pattern of groundwater movement is not impacted.

A few bird species representative of interior forest conditions were found on the properties. Their habitat is expected to be lost with the fragmentation of the forest cover. It will be important to maintain larger areas of forest rather than isolated patches, which may allow for some interior species to be retained. Some were found surprisingly close to Highway 26, suggesting that they may be more tolerant of edge and noise conditions. Large forest tracts are found outside the site offering opportunities for relocation.

A tree preservation plan will be prepared at detail design to address grading, drainage, clearing and future management requirements.

The remainder of the development is located over vegetation that was considered to have low constraint to development.

6.2.3 Road Crossings

None of the roads cross any of the Watercourses, as shown on Figure 5. Clearing for the roads will remove forest cover.

6.2.4 Stormwater Plans

Stormwater from the site will be conveyed in a storm sewer to oil/grit separators and then through a bioswale to the lakeshore or stream channels. This treatment train will provide for level 1 treatment of the storm runoff. Further details are found in R.J. Burnside 2003. Lot drainage will be conveyed by overland flow and directed to the watercourse, forest or wetland unit to be retained using natural flow paths, without lot grading except around the house. Roof leaders will be disconnected allowing clean roof water to infiltrate into the ground on the lot and thus maintain water contributions to the wetlands to be maintained. High water tables have been identified in areas of the Delphi properties, which are important in maintaining the wetlands to be retained. During geotechnical work for detailed design, the groundwater conditions should be verified and appropriate mitigation measures applied to ensure that the groundwater directions and quantity are maintained. As much of the lot drainage as possible should be directed to permeable surfaces to maintain the infiltration on the site and pattern of recharge.

6.2.5 Servicing

The Delphi Point properties are to be serviced with municipal water and sewage. Infrastructure will be associated with the road right-of-way. The servicing does not need to cross any of the watercourses. The servicing standards need to also take into consideration the forested nature of the properties and the desire to retain tree cover. Slight modifications to inverts of storm outlets, for example, may result in less filling to accommodate the cover over the pipes and protect more trees. Opportunities to modify design standards, while maintaining the function of the system, should be explored at detailed design.

During detailed geotechnical investigations, the presence of groundwater discharge should be established and measures incorporated into the design (such as trench breaks) to ensure that the direction and quantity of any discharges is maintained.

6.2.6 Human Use and Activities

Many of the lots to be developed will be within the wooded area on the property. While a tree preservation plan has been recommended to identify where forest cover can be maintained on individual lots, human activities can soon limit the success of the best of plans. It is recommended that the tree preservation plan set out a construction envelope for those properties that are wooded, and that prospective buyers are provided with a forest care package upon purchase of these properties. This package should outline appropriate plantings adjacent to the woodlands, clearing guidelines, and how to keep the forest healthy.

A management plan for the shoreline as a component of the Town's planning for the shoreline park. The management plan should address trail location, managing and preserving the ANSI, and the protection of wetlands, vegetation features and quality habitats, specifically the coastal meadow marsh and sand dune vegetation units.

The Delphi Point Earth Science ANSI is found along the shoreline across the Delphi Point properties. It was suggested by MNR (OMNR Pers. Comm., 2002a) that recreational use of the Delphi Point Earth Science ANSI be avoided and where possible, protected from further damage from users and fossil collectors through appropriate land use designation and /or restricted access. Both of these have been accomplished through public ownership of the shoreline, limited access from the Delphi Point properties to the shore and designation as hazard land. However, additional people may now be able to access the shoreline through the park dedication, and there should be some method/education of park users as to the significance of the ANSI and remind users to leave the rocks for others to enjoy.

6.2.7 Enhancement Potential

Vegetation species selected for planting around the homes and amenity areas should be native and tolerant of the site-specific conditions. The Tree Preservation Plan should address opportunities to enhance stability, connectivity and function of the site's natural features. Species complimentary to the woodlands being retained should be used where planting is proposed proximate to the forest edges.

6.2.8 Policy Framework

Province

There is one feature of Provincial interest located on the site, the Delphi Point Earth Science ANSI, an area recognized for the exposure of fossil bearing shale along the Georgian Bay shoreline. According to the Provincial Policy Statement (PPS) (1997), development or site alteration may be permitted to such features provided that there will be no negative impacts on the feature. The PPS recommends that an impact assessment be undertaken for development within 50 m of a provincially significant ANSI in order to conserve the defining features for which it was identified. The ANSI limits as defined by MNR are wholly contained within the 100 year flood limit established by GSCA and is therefore, outside the developable area of the properties. There are no proposals to alter the shoreline or impact on the ANSI. This report provides the EIS to satisfy the requirements of the PPS.

Niagara Escarpment Commission

The property is contained within the Niagara Escarpment Recreation Area and is therefore subject to the policies of the Niagara Escarpment Plan. The draft plan application dates of each of the parcels within the Delphi Point lands varies from 1987 to 1995. The Delphi Point Holdings and Peaks Bay East parcels date from 1988 and 1987, respectively, and therefore, are subject to policy provisions of the NEC 1985. The remaining parcels are subject to the policy provisions in the revised Plan dated 1994 (NEC 1994). Each of the parcels has been reviewed based on the policies of the relevant Niagara Escarpment Plan.

The Delphi Point Holdings and Peaks Bay East parcels meet the policy directions of the NEC plan dated 1985 as shown on Table 2. Development impacts on significant features and higher functioning wetlands has been limited, while some of the lower functioning units will be lost. Tree cover will be preserved through a tree preservation plan and the identification of building envelopes.

The proposed draft plans for Phoebus and Peaks Bay West have respected policies of the NEC Plan (1994) for natural features, with the exception of the protection of all wetlands in their entirety, as shown in Table 3. The wetlands were not previously defined by the County, MNR or Conservation Authority. The mapping criteria of the GSCA (1992) notes that wetlands of greater than 2 ha are typically mapped for incorporation in planning documents. Both parcels contain areas of swamp that are not retained with the development proposals because of the size of the units (less than 2 ha), the distribution of the wetlands on the site significantly limits development potential, and the fact that they fulfill a low level of function, without other significant plant species or wildlife habitat attributes. Further, maintaining drainage to these features when contained in small pockets will be difficult. This plan has preserved the majority of wetlands where wildlife function was identified and provides for open space linkages between them. Tree preservation has been incorporated to also address the policies of the NEC.

Table 2. Policy Excerpts from the Niagara Escarpment Plan (1985)

Niagara Escarpment Plan Policies	Response of the Draft Plan
New Development Affecting Steep Slopes and Ravines	(2.5)
Not applicable	 The main slope of the Niagara Escarpment does not occur on the property.
New Development Affecting Water Resources (2.6) Wa	ter Quality
 Changes to natural drainage should be avoided. Setback to be established from each side of a stream, river bed, lakeshore or wetland for the purposes of maintaining water quality in consultation with MOE, CA, MNR. No alteration of grade or drainage shall occur within setback where there is a potential to adversely affect water resources. 	 Watercourses will not be altered. 15 m setback is provided to watercourses. Hazard lands include 100 year flood level plus 15 m wave uprush allowance. No grading in hazard or buffer anticipated.
Floodplain	
 No development permitted in identified floodplain. Where possible, such projects should be designed and located to minimize impact on wetlands, wildlife habitat, source areas, streams, steep slopes and other areas of visual and environmental significance. 	 Development located away from watercourses and hazard lands. Development retains all wetland units where they occur inside the 100 year flood limit on the shoreline. Wetlands outside the floodplains are not specifically addressed by the policies of this plan
Ponds	
Not applicable.	

Table 2. Policy Excerpts from the Niagara Escarpment Plan (1985)

Niagara Escarpment Plan Policies	Response of the Draft Plan
New Development in Wooded Areas (2.7)	
 Disturbance of treed areas should be minimized and proposed developments in heavily treed areas shall have site plan agreements containing specific management details regarding the protection of existing trees. Preserve as much as possible of wooded areas by minimizing disturbance to treed areas and maintaining tree cover on slopes in excess of 25% (1 in 4 slope). 	 Forest cover on the site will be removed; estimated that we can maintain around 39% of the properties as wooded areas with open space designations, larger lots and Tree Preservation Plans. Propose to identify building envelopes. No steep slopes present.
Areas of Natural and Scientific Interest (2.13)	
 Any development within ANSI should substantially maintain scenic, scientific, educational and interpretive value. A setback for development should be establishedfor ANSIs. 	 No life science ANSIs on the properties. Development is outside the Earth Science ANSI. Setback is provided with the 15 m wave uprush.

Table 3.Policy Excerpts from the Niagara Escarpment Plan (1994,
Office Consolidation 2002)

Niagara Escarpment Plan Policies	Response of the Draft Plan
New Development Affecting Steep Slopes and Ravines	(2.5)
Not applicable	 The main slope of the Niagara Escarpment does not occur on the property.
New Development Affecting Water Resources (2.6) Wa	ter Quality
 Setback to be established from each side of a stream, river bed, lakeshore or wetland for the purposes of maintaining water quality in consultation with MOE, CA, MNR. No alteration of grade or drainage shall occur within setback where there is a potential to adversely affect water resources. 	 15 m setback is provided to the watercourses. Hazard lands include 100 year flood level plus 15 m wave uprush allowance. No grading in hazard or buffer anticipated.
Water Quantity	
 Water taking and diversions should not adversely affect water quality, quantity or Escarpment environment. 	 Municipal water supply to be provided.
Wetlands	and the second
 Development shall locate outside of wetlands. Limits of the wetlands shall be determined by implementing authority in consultation with MNR and CA. 	 Wetland units were defined and limits staked and surveyed using GPS. No wetlands have been identified by County, MNR or CA on the properties; Higher functioning units have been retained and linked.

Table 3. Policy Excerpts from the Niagara Escarpment Plan (1994, Office Consolidation 2002)

Niagara Escarpment Plan Policies	Response of the Draft Plan
Fisheries	
 Development adjacent to significant fishery resources to ensure net gain / no net loss of fish habitat. Maintain baseflow. Maintain existing watercourses. Maintain buffers. 	 All watercourses are protected in the plan. Direction is provided to maintain infiltration and discharge pattern and direction of groundwater. Setbacks provided to maintain riparian buffer.
Floodplain	
• No development permitted in identified floodplain.	 Development located away from watercourses and hazard lands.
Ponds	
Not applicable.	
New Development in Wooded Areas (2.7)	
 Preserve as much as possible of wooded areas by minimizing disturbance to treed areas and maintaining tree cover on slopes in excess of 25% (1 in 4 slope). 	 No steep slopes. Forest cover on the site will be removed; estimated that we can maintain around 39% of the properties as wooded areas with open space designations, larger lots and Tree Preservation Plans.
Areas of Natural and Scientific Interest (2.14)	and the second second second
 Development to be directed outside of provincially significant and regionally significant life science ANSIs. 	 No life science ANSIs on the properties. Development is outside the Earth Science ANSI.
 Development will be considered in provincially significant earth science ANSIs where development does not significantly alter topography or geological features of the ANSI. 	
Wildlife Habitat (2.8)	
 Development to minimize impact to wildlife habitat for rare, vulnerable, threatened plant or animal species. Maintain wildlife corridors. Enhance wildlife habitat 	 No species at risk have been-identified on this property. Wildlife corridor is maintained along shoreline and through centre of the site.

Grey Sauble Conservation Authority

Development has not been proposed within a floodplain or other flood prone lands. The GSCA requires a setback of 15 m from a watercourse and top of bank (GSCA 1994). This has been accommodated in Watercourses 1, 2 and 3, within the lands to be developed as part of the Delphi Point properties. Wetlands were identified and mapped. All interior wetlands were less than 2 ha in size, considered by GSCA (1992) to be a minimum size for mapping. Most of the higher functioning wetlands have been retained while wetlands that were observed to have no breeding amphibians or birds, and which were found to retain water for a shorter period of time will not be preserved. Wetlands within the shoreline hazard area have been retained. Policies of the GSCA (1994) are summarized in Table 4 below.

Table 4. Policy Excerpts from the Grey Sauble Conservation Authority 1994

	GSCA Policies		Response of the Draft Plan
3.1	Riverine Floodplain Policies		
i)	The limits of the riverine floodplain shall be defined by the Riverine Regulatory Flood Standard, which is the greater of the 100 year flood or the regional flood.		n/a
3.2	New Development		
i)	With the exception of the structures and uses listed under 2.1 (i) and (ii) new development in the floodplain will be prohibited.	•	The hazard lands have been defined and development is not proposed within a floodplain.
4.0	Other Flood Prone Lands		
Con i) ii) iii) iv) v) v) v) vi)	siderations Flood reduction Erosion potential Groundwater recharge/discharge Water quality improvements (settling, infiltration) Impact on neighbouring properties Precedence General	•	n/a
i)	 The boundaries of the hazard lands associated with inland lakes, wetlands and other flood prone lands that are not already covered in this document shall be defined according to Hazard Land Mapping Guidelines June 1992. Hazard Mapping Guidelines 1992 Great Lakes shorelines are mapped according to the Regulatory Flood Standardwhich is the 100 year plus and allowance for wave uprush The hazard areas associated with wetlands and other poorly drained areas are mapped as the greatest extent of observed or potential flooding and instability based on but not limited to limit of wetland type vegetation, poorly drained/organic soils, local topography, depth to water table. Generally, only wetlands in excess of 2ha in area are mapped for identification 		The boundaries of the wetlands on the property were flagged and surveyed using GPS; the wetlands are not associated with a watercourse or other surface drainage feature. A couple of shoreline wetland units are contained within the 100 year floodline. None of the interior units are associated with hazard lands and all are less than 2 ha. Therefore, this policy does not apply.
4.2. i)	With the exception of the uses listed under 2.1 (i) and (ii) new development within the boundaries of those areas falling under 4.1 (i) will be prohibited.	•	Development will take place in the area of some of the wetlands, which were shown to have lower function. With the exception of the wetlands inside the floodline, the other wetland units are not hazard lands and are all less than 2 ha, the minimum mapping size (see 4.1)

Table 4. Policy Excerpts from the Grey Sauble Conservation Authority 1994

	GSCA Policies		Response of the Draft Plan
5.0 5.1	River Bank and Steep Slope Polices General		
i)	As defined by Section 1.3.2 (i) of the GSCA Hazard Land Mapping Guidelines 1992 the hazard limit of banks associated with watercourses shall be based on two components: a stable slope limit and a development setback to allow for erosion. (Development setback is measured horizontally from the stable slope setback and is equal to a distance of 15 m GSCA 1992).	•	Two of the watercourses have been straightened previously and as a result will not have erosion associated with meander bends. A 15 m setback has been applied to the watercourse. The watercourses and their setbacks have been set aside as open space.
6.0 6.2	Great Lakes Shoreland Policies .1 General		
i) ii)	Limits of the Great Lakes shoreline floodplain shall be defined based on the Shore Regulatory Flood Standard which includes the 100 year lake flood limit and an allowance for wave uprush and other water related hazards. Development shall be directed to areas outside the Shore Regulatory Flood Standard.	• •	The 100 year flood limit was defined according to the GSCA mapping. The development is outside of the regulatory floodline, except in two locations where modifications to the limits are being requested of the CA.
7.2 7.2	Plans of Subdivision .1 General Policies		
i) ii)	Residential lot boundaries will be discouraged from extending into hazard lands. Hazard lands must be maintained as a single block and must be appropriately zoned to preclude development from occurring within the limits of the hazard lands.	•	All lots are outside the hazard limits and stream setbacks, except the two instances noted above. The hazard lands have been incorporated into an open space block
8.0 8.2	Access Flood Prone Lands		
i)	Access in floodplain shall be subject to the following flood-proofing requirements.	•	No road access will be placed over the watercourses or through the shoreline hazard lands.

County of Grey

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The Provincially significant Delphi Point Earth Science ANSI, hazard lands and the Niagara Escarpment Recreation area are features of regional significance shown on Schedule A and Appendix A - Map 2 of the Grey County Official Plan (Grey County 2000) and for which specific environmental policies are identified (see Table 5).

Setbacks of 15 m have been applied to the watercourse on the site, which is consistent with direction of the County Plan for designated warmwater streams. No development is proposed within the ANSI or hazard lands. Table 4 summarizes the environmental policies from the County Plan (2000).

Table 5. Excerpts from the Grey County Official Plan (2000)

	Grey County Policies		Response of the Draft Plan
2.8	.5 Natural Function		
1.	In the absence of more specific mapping showing significant natural areas and functions, the Hazard lands and Wetlands designations shall be used in conjunction with Appendix A. Development and site alteration may be permitted within significant areas of fish habitat, woodlands, valleylands, wildlife habitat and their adjacent lands, provided an acceptable Environmental Impact Study is completed in accordance with 2.8.5 (4) of this plan.		Hazard land mapping of the GSCA has been used to define limits to development. No wetlands were defined in the County Plan; site specific studies have identified additional features. This report provides an EIS for development within natural areas, although none were specifically identified in the County plan.
2.	No development or site alteration shall be permitted within areas of significant, threatened or endangered specie.	•	There were no significant or species at risk identified on the Property, either through secondary sources or field investigations.
3.	Development and site alteration may be permitted within Areas of Natural and Scientific Interest.	•	An earth science ANSI is located on the Property but is wholly contained within the hazard lands based on mapping provided by the MNR.
4.	Where it is allowed by this plan, development and site alteration may be permitted, provided it is demonstrated by an acceptable Environmental Impact Study, prepared by a qualified individual, that there will be no negative impacts on the natural features or on the ecological function for which the area has been identified.	•	This report provides an EIS for the natural features and functions of the properties. Only hazard lands and the Earth Science ANSI were features specifically identified in the County Plan (or by any other).
5.	No development shall be permitted within 30 m of cold water streams or 15 m of a warm water stream as shown on Appendix A.	1	None of the watercourses are identified on the property; all are considered warm water and a 15 m setback has been applied.

Town of the Blue Mountains

Table 6 summarizes environmental policy excerpts from the Craigleith – Camperdown Secondary Plan, Beaver Valley OPA 133 (Town of Blue Mountains 2003) along with a description of how the plan has addressed them. The features of interest to the Town are associated with the hazard land designation along the shoreline of Georgian Bay, wetlands and the watercourses. The shoreline hazard lands are protected in this plan, although modified based upon site specific mapping. A 15 m setback is applied to the watercourses. The development plan has generally respected the Secondary Plan with the exception that several of the wetland units that have been designated as hazard have been protected while others have not. They were not related to a watercourse or the shoreline, and were not found to have a high level of function.

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Table 6.	Environmental Policy Excerpts from the Craigleith -
	Camperdown Secondary Plan OPA 133

1.	Craigleith - Camperdown Secondary Plan	Response of the Draft Plan
1.3	General Development Policies	the second se
1.	Special attention shall be given to the protection of the natural and visual characteristics of the Niagara Escarpment, Nipissing Ridge and other environmental features.	 The most significant natural features have been substantially protected in this plan. The ANSI and hazard lands are protected from development. Considerable effort has been expended to develop a plan that allows for maintaining tree cover, as well as the higher functioning wetlands.
2.	Residential and other building shall be setback sufficiently from the crest of any slope or watercourse embankment in order to ensure adequate structural stability, minimize disruption to existing topography and natural environment. Building envelopes may also be identified under the applicable development agreement. Development within any environmental constraint area may be subject to site plan control.	 A setback of 15 m has been applied to the watercourse No additional buffers have been applied given the tree preservation plan proposed and that the age of the forest is relatively young, and therefore less sensitive to disturbance. The use of building envelopes has been suggested to limit the removal of tree cover on some of the lots including: Delphi Point Holdings 1 - 11 Peaks Bay Holdings West 1 - 14 Peaks Bay Holdings East 1 - 24 and are to be further specified in a T.P.P.
3.	No development or site alteration shall be permitted within 15 m of any warm water stream, or within 30 m of any cold water streamchanges to be considered in consultation with NEC and GSCA. Any development or site alteration within fill regulation areas, including alteration to waterways shall require a permit from GSCA.	 A 15 m setback has been applied to the watercourses. The watercourses are not fill regulated; but no site alteration is expected.
2.4	Hazard lands	mi i ii ii i i a a a a a a a a a a a a a
4.	razard tand designation is shown on Schedule A- 133 identifies those lands which may be provincially significant environmental features and other lands on which development may be restricted because of environmental sensitivity or potential hazards such as wetlands, poor drainage, organic soils, flood and erosion susceptibility, steep slopes or other physical limitations.	 The nazard land designation on Schedule A-133 has been refined based on site specific surveying of the wetland limits. None of the wetlands to be lost to development were found to have significant species or high function. The Hazard land designation on the shoreline has been based on the GSCA limits with a 15 m wave uprush allowance.
5.	Permitted uses include conservation, forestry, wildlife, fisheries management, public parks, trails and similar passive outdoor recreational uses.	 The shoreline hazard lands are designated open space and are intended for conservation and passive recreation. The wetlands to be preserved and watercourse are similarly designated open space lands.

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Table 6.Environmental Policy Excerpts from the Craigleith –
Camperdown Secondary Plan OPA 133

	Craigleith – Camperdown Secondary Plan	12	Response of the Draft Plan
6.	Boundaries of the hazard lands to be more precisely defined through the subdivision and zoning process based on site specific information which will identify significant environmental features to be protected.	•	The hazard land designation on Schedule A-133 is a guide that allows the precise locations of environmental features to be preserved to be settled through the draft plan approval. This report provides the basis for defining the limits of higher functioning environmental features that are important to preserve and can be sustained after development. The Hazard land designation on the shoreline has been based on the GSCA limits with a 15 m wave uprush allowance. Significant vegetation units were identified on the Delphi property that have also been incorporated into an open space designation.
6.4	Development Reports	-	
7.	Developer shall prepare development reports and supporting studies which shall address engineering, environmental and visual aspects.	•	This report provides supporting documentation on the environmental conditions on the site and proposed mitigation measures.

7. Summary, Conclusions and Recommendations

The information gathered on the site has been assessed to provide guidance to the planning for residential development and servicing. The following summarizes the conditions on the property with recommendations for additional work that should be completed to contribute to detailed design of the development and servicing proposals:

7.1 Summary and Conclusions

- A large portion of the property is dominated by forest, with the remainder comprised of wetland units and cultural vegetation.
- b) The Delphi Point Earth Science ANSI is the only designated provincially significant feature on the property. No other previously recognized Environmentally Significant Areas, classified wetlands, or significant natural heritage features exist on the site. No significant vegetation or wildlife species have been identified previously or through field investigations.

- c) Habitat connectivity across the site for wildlife movement is maintained through retention of the forest areas associated with the open space blocks along the shoreline and the expected tree cover to be retained in the back of the lots.
- d) The conveyance of flow through the three watercourses to downstream reaches will be maintained without alteration and a 15 m setback applied from each.
- e) Three of the four wetland units with amphibian habitat have been protected in this plan and linked together. These wetlands were the best representation of habitat and unusual species on the properties. The remainder of the wetland units are formed in the troughs of old beach ridges which will be difficult to maintain as they are reliant on the shallow water table and local drainage. Further, to retain the wetlands only would be at the expense of upland forest cover, which was found to support breeding birds. Portions of the wetlands cannot be retained with the servicing required, particularly for the eastern portion of the site where fill will be required over the storm sewers.
- f) Roughly 39% of the site's forest (i.e., excluding the meadow and other cultural vegetation units) cover will be retained with the proposed development concept. Additional forest cover protection may be achieved with a Tree Preservation Plan and the use of building envelopes. Removal of the remainder of forest is an outcome anticipated by the site's designation for development.
- g) The draft plan prepared by Malone Given Parsons Ltd. dated September 10, 2003 has balanced development with preservation of the site's more highly valued features and functions and accords with the development and natural heritage protection policies of the NEC, Grey County Official Plan, Town of Blue Mountains Official Plan Amendment 133, and policies of the GSCA

7.2 Recommendations

The draft plan is recommended for approval, subject to the incorporation of the following recommendations.

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- A Tree Preservation Plan should be developed for those areas of the property where forest cover, including wetland, is to be retained. This plan should result in the identification of a building envelope for each lot. The Tree Preservation Plan should include an assessment of grading and drainage contributions to the wetland unit to be retained to ensure that the trees will survive. A
- b) A landscape plan should be prepared at detailed design of the subdivision to enhance connectivity and function of these natural features. Species selected for enhancement should be native and tolerant of the site-specific conditions.

forest care package should be prepared for landowners to guide the protection of the trees to be

retained.

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- c) Issues with respect to West Nile Virus cannot be ignored, and monitoring for mosquito production may be required in the wetlands to be retained.
- d) During detailed geotechnical investigations, the presence and elevation of groundwater should be established and measures incorporated into the design of the servicing trenches (such as trench breaks), to ensure that the direction and quantity of any discharges is maintained.
- e) The servicing standards need to also take into consideration the forested nature of the properties and the desire to retain tree cover. Slight modifications to inverts of storm outlets, for example, may result in less filling to accommodate the cover over the pipes and protect more trees. Opportunities to modify design standards, while maintaining the function of the system, should be explored at detailed design.
- f) Management plans to be prepared by the developers for the blocks containing the dune association, and by the Town of the Blue Mountains for the lands to become publicly owner open space, will need to address access, tree clearing for views, protection of rare vegetation, protection of the fossils in the ANSI, and trail locations.

Report Prepared By:

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Appendices



Appendix A

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Fish Species Common to Georgian Bay – Table 1

Appendix A

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Fish Species Common Georgian Bay

Table 1.

Fish Species Composition and Total Species Abundance Captured During Seine Netting at Two Stations Along Georgian Bay Shorelines from July to September, 1981 (MNR)

Common Name	Species Name	Abundance	Young-of-Year Captured				
Longnose Gar	Lepisosteus osseus	Visual					
Northern Pike	Esox lucius	visual	-				
Rainbow Trout	Oncorhynchus mykiss	visual					
Rock Bass	Ambloplites rupestris	3	- 3				
Smallmouth Bass	Micropterus dolomieu	16	16				
Bluegill	Lepomis macrochirus	N/A	N/A				
Yellow Perch	Perca flavescens	69	59				
Carp	Cyprinus carpio	6	3				
Bluntnose Minnow	Pimephales notatus	1917	1440				
Fathead Minnow	Pimephales promelas	3	0				
Common Shiner	Luxilus cornutus	4	0				
Spottail Shiner	Notropis hudsonius	425	290				
Mimic Shiner	Notropis volucellus	405#	0				
Spotfin Shiner	Cyprinella spiloptera	2	0				
Emerald Shiner	Notropis atherinoides	155#	0				
Lake Chub	Couesius plumbeus	18	18				
Logperch	Percina caprodes	2	0				
Johnny Darter	Etheostoma nigrum	21	5				
Rainbow Smelt	Osmerus mordax	1	1				
Alewife	Alosa pseudoharengus	403	66				
Shorthead Redhorse	Moxostoma macrolepidotum	4	4				
White Sucker	Catostomus commersoni	78	66				
Brown Bullhead	Ameiurus nebulosus	37	37				

Note: # - Approximate number of individuals

Appendix B

Plant Species List – Delphi Point Properties

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Appendix B - Plant Species Recorded on Delphi Point Properties

Family / Species			Location						
	Common Name	ST	1	2	3	4	5	6	
PTERIDOPHYTA	FERNS AND ALLIES		199						
ASPLENIACEAE	SPLEENWORT FAMILY				1				
Cystopteris bulbifera (L.) Bern.	Bublet Fern			x	x		18		
Onoclea sensibilis L.	Sensitive Fern		10		x				
DENNSTAEDTIACEAE	BRACKEN FAMILY	- 11							
Pteridium aquilinum (L.) Kuhn	Eastern Bracken			x					
EQUISETACEAE	HORSETAIL FAMILY								
Equisetum arvense L.	Field Horsetail			x	1.3				
Equisetum fluviatile L.	Water Horsetail			24		-	x		
Equisetum variegatum Schleich.	Variegated Scouring-rush	 A 		x					
THELYPTERIDACEAE	BEECH FERN FAMILY			E		10			
Thelypteris noveboracensis (L.)	New York Fern				x	12			
GYMNOSPERMAE	CONIFERS		10						
CUPRESSACEAE	CYPRESS FAMILY								
Juniperus communis L.	Common Juniper			x			x		
Juniperus virginiana L.	Red Cedar	1.00		x					
Thuja occidentalis L.	White Cedar	1.1	1.8	x		x	x		
PINACEAE	PINE FAMILY	1.1					1		
Abies balsamea (L.)Mill.	Balsam Fir	1.011				x	x		
Larix decidua Mill.	European larch	+				x		Ľ	
Picea abies (L.) Karst.	Norway Spruce	+						>	
Picea glauca (Moench) Voss	White Spruce					x	11		
Pinus resinosa Ait.	Red Pine					x	1.5		
Pinus sylvestris L.	Scots Pine	+		x		16	x	×	
ILIOPSIDA	MONOCOTS	111				5.1		1	
ARACEAE	ARUM FAMILY								
Arisaema triphyllum (L.) Schott	Jack-in-the-pulpit			x					
CYPERACEAE	SEDGE FAMILY								
Carex bebbii (Bailey) Fern.	Bebb's Sedge				54			>	
Carex eburnea Boott	Bristle leaved Sedge					x	x	1	
Carex gracillima Schw.	Graceful Sedge			x					
Carex intumescens Rudge	Bladder Sedge			x	1.8				
Carex lanuginosa Michx.	Wooly Sedge				x	1.00			
Carex retrorsa Schw.	Bristle-stalked Sedge		19.		x				
Carex stipata Muhl. ex Willd.	Awl-Fruited Sedge		10		x				
Carex viridula Michx.	Green Sedge		x	10	1.00			L	
Scirpus americanus Pers.	American Bulrush				x			0	
Scirpus atrovirens Willd.	Black Bulrush				x				
IRIDACEAE	IRIS FAMILY								
Iris versicolor L.	Wild Blue Flag				x				
JUNCACEAE	RUSH FAMILY								
Juncus articulatus L.	Rush		x						
Juncus balticus Willd.	Baltic Rush						x		
Juncus effusus L.	Rush		x						
Juncus tenuis Willd.	Path Rush		x					l x	

Appendix B - Plant Species Recorded on Delphi Point Properties

			LO			cation		
Family / Species	Common Name	ST	1	2	3	4	5	
LILIACEAE	LILY FAMILY		2	-			121	Г
Convallaria majalis L.	Garden Lily-of-the-valley	+	1.0	x				
Hemerocallis fulva (L.)L	Orange Day Lily	+		e.				L
Maianthemum canadense Desf.	Canada MayFlower			x		x	x	Ľ
Trillium grandiflorum (Michx.) Salisb.	White Trillium	1.13	12	x				L
ORCHIDACEAE	ORCHID FAMILY		1.1					
Cypripedium calceolus L.	Yellow Lady-slipper			x		x	x	
POACEAE	GRASS FAMILY			101		1		Ľ
Agropyron repens (L.)	Quack Grass	+						L
Agrostis scabra Willd.	Ticklegrass	1.1	x					L
Agrostis stolonifera L.	Creeping Bent Grass		x				x	L
Bromus inermis Leyss.	Smooth Brome Grass	+						Ŀ
Dactylis glomerata L.	Orchard Grass	+	0			10		Ľ
Danthonia spicata (L.) R. & S.	Poverty Oat Grass	1				10	x	L
Echinochloa crusgalli (L.) Beauv.	Barnvard Grass	+	x			10		Ľ
Festuca arundinacea Schreb.	Tall Fescue	+	Ű.			18		L
Glyceria striata (Lam.) A.S. Hitchc.	Fowl Manna Grass				x			L
Panicum capillare L.	Witch Grass							L
Panicum virgatum L.	Switchgrass	1.1	x	6			x	
Phalaris arundinacea L	Beed Capary Grass		,				î	ľ
Phleum pratense L.	Timothy	4	n.					l
Poa compressa L	Canada Blue Grass		×					l
Poa pratensis L	Kentucky Blue Grass		l^					l
MAGNOLIOPSIDA	DICOTS							l
ACERACEAE	MAPLE FAMILY							L
Acer negundo L.	Manitoba Maple							L
Acer saccharum Marsh.	Sugar Maple			x				L
Acer freemani	Hybrid Maple			1	x	1.15		l
ANACARDIACEAE	CASHEW FAMILY							L
Rhus radicans L.	Poison-ivv			x		x	x	L
Rhus typhina L.	Staghorn Sumac							L
APIACEAE	CARROT FAMILY			$\left \right\rangle$				L
Cicuta maculata L.	Spotted Water-bemlock		1.1			12		l
Daucus carota I	Wild Carrot Queen Anne's Lace	1			Î.		~	L
Sanicula canadensis I	Black Spakeroot		î.			~	î.	I
APOCYNACEAE	DOGBANE FAMILY					^		
Vince minor						ЪŬ		L
				^		16		
ller vorticillate //) Grav	llex verticillata (L.) Grav Winterberry					1.1		L
APALIACEAE			Γ.		×			L
	GINSENG FAMILY						1.97	l
				×		x		
ASGLEPIADACEAE	MILKWEED FAMILY							
ASCIEDIAS SYNACA L.	Common Milkweed							ľ
ASTERACEAE	ASTER FAMILY						1.0	
Achillea millefolium L.	Yarrow	+					1.13	Ľ

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Appendix B - Plant Species Recorded on Delphi Point Properties

Family / Species		111		L	002	atio	n	-
	Common Name	ST	1	2	3	4	5	
Artemisia campestris L. ssp. caudata (Michx.)	Sage Wormwood						x	T
Aster cordifolius L.	Heart-leaved Aster			x				ł
Aster eriocoides L.	Heath Aster		x	Gel				İ
Aster lanceolatus Willd.	Tall White Aster		0.	x				ļ
Aster lateriflorus (L.) Britt.	One-sided Aster		x	x				
Aster macrophyllus L.	Large-leaved Aster		10	x		x		
Aster novae-angliae L.	New England Aster		x					
Cirsium arvense (L.) Scop.	Canada Thistle	+	1.					
Cirsium vulgare (Savi) Tenore	Bull Thistle	+						
Conyza canadensis (L.) Cronq.	Horse-Weed							
Erigeron philadelphicus L.	Philadelphia Fleabane	1.1						
Eupatorium maculatum L.	Spotted Joe-Pye Weed				x			
Eupatorium perfoliatum L.	Boneset		х		x			
Euthamia graminifolia (L.) Nutt.	Narrow-leaf Goldenrod		x		x			
Hieracium caespitosum Dumort.	Yellow Hawkweed	+					×	l
Inula helenium L.	Elecampane	+	1.0	x	x		17	
Prenanthes alba L.	Rattlesnakeroot				10	x		
Prenanthes altissima L.	Tall White Lettuce					x		
Solidago canadensis L.	Canada Goldenrod							
Solidago flexicaulis L.	caulis L. Zig-zag Goldenrod					x		
Solidago gigantea Ait.	Late Goldenrod	1.1	x		x			
Solidago hispida Muhl.	Hairy Goldenrod						x	
Solidago rugosa Ait.	Rough Goldenrod						x	
Sonchus arvensis L.	Field Sow-thistle	+					151	
Taraxacum officinale Weber	Dandelion	+	x					
Tussilago farfara L.	Sweet Coltsfoot	+	x					
BETULACEAE	BIRCH FAMILY		0					
Betula papyrifera Marsh.	Paper Birch	1.1		x		×		
BORAGINACEAE	BORAGE FAMILY							
Echium vulgare L.	Viper's-bugloss	+						
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY							
Diervilla Ionicera Mill.	Bush-honeysuckle			x				
Lonicera tatarica L.	tatarica L. Tartarian Honeysuckle			x				
CARYOPHYLLACEAE	PINK FAMILY	1110						
Arenaria serpyllifolia L.	aria serpyllifolia L. Thyme-leaved Sandwort							
CELASTRACEAE	ACEAE STAFF-TREE FAMILY						11	
Celastrus scandens L.	scandens L. Climbing Bittersweet			x		x		
CORNACEAE DOGWOOD FAMILY								
Comus alternifolia L.f. Alternate-leaved Dogwood				x				
Comus amomum Mill.	Silky Dogwood			x	x			
Comus rugosa Lam.	Comus rugosa Lam. Round-leaved Dogwood			x		x	x	
Comus stolonifera Michx. Red-osier Dogwood						101		
DIPSACACEAE	TEASEL FAMILY							
Dipsacus fullonum L.	Teasel	+						
ELAEAGNACEAE	OLEASTER FAMILY							
Shepherdia canadensis (L.) Nutt.	Soapberry, Buffaloberry			x		10.0	x	

Appendix B - Plant Species Recorded on Delphi Point Properties

			_	L	002	atio	n	_
Family / Species	Common Name	ST	1	2	3	4	5	
ERICACEAE	HEATH FAMILY	1	100					Г
Arctostaphlos uva-ursi (L.) Sprengel	Bearberry						x	L
FAGACECAE	BEECH FAMILY					11	19	L
Quercus rubra L.	Red Oak			x	178	1.1		l
FABACEAE	PEA FAMILY			2				l
Amphicarpaea bracteata (L.) Fern.	Hog-peanut			x		218		1
Lathyrus latifolius L.	Everlasting Pea	+				16		l
Melilotus alba Medic.	White Sweet-clover	+	x					I
GERANIACEAE	GERANIUM FAMILY					118		I
Geranium robertianum L.	Herb Robert	+			x		10	۱
GROSSULARIACEAE	GOOSEBERRY FAMILY						10	۱
Ribes americanum Mill.	Wild Black Currant				x			I
Ribes cynosbati L.	Prickly Gooseberry			x	13			
Ribes rubrum L.	Red Currant	+		x	2.	112		
HYPERICACEAE	ST. JOHN'S-WORT FAMILY					80		
Hypericum kalmianum L.	Kalm's St. John's-wort		x					
Hypericum perforatum L.	Common St. John's-wort	+				11		
LAMIACEAE	MINT FAMILY	1.1						
Leonurus cardiaca L.	Motherwort	+						
Lycopus americanus Muhl.	American Water-horehound	10			x			
Lycopus uniflorus Michx.	Northern Water-horehound		x	11		x	18	
Mentha arvensis L.	Field or Common Mint				x			
Mentha X piperita L.	Peppermint	+	10			x		
Monarda fistulosa L.	Wild Bergamot					11	x	
Prunella vulgaris L.	Heal-all	+				x	10	
Satureja vulgaris (L.) Fritsch	Wild Basil			x		191		
Scutellaria galericulata L.	Common Skullcap				x		5	
LOBELIACEAE	LOBELIA FAMILY							
Lobelia kalmii L.	Kalm's Lobelia		x					
LYTHRACEAE	LOOSESTRIFE FAMILY		18					
Lythrum salicaria L.	Purple Loosestrife	+	x					
MORACEAE	MULBERRY FAMILY							
Morus alba L.	White Mulberry	+						
OLEACEAE	OLIVE FAMILY							
Fraxinus americana L.	White Ash			x		1		
raxinus excelsior L. European Ash		+	11					
Fraxinus nigra Marsh.	nus nigra Marsh. Black Ash.			x	x			
kinus pennsylvanica Marsh. Red Ash				x	x	x		
inga vulgaris L. Common Lilac		+						
VAGRACEAE EVENING-PRIMROSE FAMILY		- E					10.1	
Epilobium hirsutum L.	hirsutum L. Hairy Willowherb		12				0	
Epilobium parvillorum Schreb.	Small-flowered Willowherb							
Oenothera biennis L.	Hairy Yellow Evening-primrose		×					
OXALIDACEAE	WOOD-SORREL FAMILY		l °					
Oxalis stricta I	Common Yellow Wood-sorrel					×		

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Appendix B - Plant Species Recorded on Delphi Point Properties

Examples (Described	0		-		008	100	u	F
Family / Species	Common Name	ST	1	2	3	4	5	
PLANTAGINACEAE	PLANTAIN FAMILY		1	66			17	Г
Plantago lanceolata L.	English Plantain	+	1.13					
Plantago major L.	Broad-leaved Plantain	+	01	21				ŝ
Plantago rugelii Dcne.	Rugel's Plantain						11	ŀ
POLYGALACEAE	MILKWORT FAMILY							L
Polygala paucifolia Willd.	Fringed Polygala					x	65	L
POLYGONACEAE	BUCKWHEAT FAMILY							
Polygonum pensylvanicum L.	Pinkweed		x					l
Rumex crispus L.	Curly Dock	+	10				113	I
Rumex obtusifolius L.	Bitter Dock	+			x			1
PRIMULACEAE	PRIMROSE FAMILY				1			l
Lysimachia ciliata L.	Fringed Loosestrife			x				I
Lysimachia thyrsiflora L.	Tufted Loosestrife				x			I
RANUNCULACEAE	BUTTERCUP FAMILY				10		51	
Actaea rubra (Ait.) Willd.	Red Baneberry	- C.				x		l
Anemone canadensis L.	Canada Anemone				x	1		I
Anemone cylindrica Gray	Long-fruited Anemone							I
Anemone virginiana L.	Thimbleweed			x		x		I
Aquilegia canadensis L.	Wild Columbine			x			84	I
Caltha palustris L.	Marsh-marigold		110		x			
Clematis virginiana L.	Virgin's-bower		13	x	x			Į
Ranunculus acris L.	Tall Buttercup	+	12	x		1		
Thalictrum pubescens Pursh	Tall Meadow Rue		113	178	x			I
RHAMNACEAE	BUCKTHORN FAMILY				191	12		I
Rhamnus alnifolia L'Herr	Alder-leaved Buckthorn				x		1.0	l
Rhamnus cathartica L.	Common Buckthom	+		x		x		I
ROSACEAE	ROSE FAMILY						P.S	I
Agrimonia gryposepala Wallr.	Agrimony	1013		x			b b	
Amelanchier arborea (Michx. f.) Fern.	Serviceberry			x				
Geum aleppicum Jacq.	Yellow Avens				x			l
Geum canadense Jacq.	White Avens			x				
Physocarpus opulifolius (L.) Maxim.	Ninebark			x		x		
Potentilla anserina L.	Silverweed		x	11			1	
Prunus serotina Ehrh.	Black Cherry			x		x	15	
Rosa acicularis Lindl.	Prickly Rose				x	(i)		
Rosa blanda Ait.	Smooth Rose / Wild Rose			x				
Rosa multiflora Thumb.	Multiflora Rose	+		x				I
Rosa palustris Marsh.	alustris Marsh. Swamp Rose				x			I
Rubus idaeus L.	Wild Red Baspberry			x	1			I
Rubus occidentalis L.	Black Baspberry			x				
Sanguisorba minor Scop	Garden Burnet	+						
SALICACEAE	WILLOW FAMILY				13			
Populus balsamifera I	Balsam Poplar				~			
Populus tremuloides Michy	Trembling Aspen				Û			
Saliy bebbiana Sarn	Bebb's Willow			1		^		
Salix discolor Mubl	Puppi Willow		11		~			

Appendix B - Plant Species Recorded on Delphi Point Properties

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Family / Species	Common Name	ST	1	2	3	4	5	-
Salix eriocephala Michx.	Heart-leaved Willow	1	x	x		1		Г
Salix purpurea L.	Basket Willow	+		x				
Salix x rubens Schrank.	Hybrid Crack Willow	+		x				
SCROPHULARIACEAE	FIGWORT FAMILY							
Agalinus paupercula (Gray) Britt.	Purple Gerardia		x		1.1		x	Ŀ
Pedicularis canadensis L.	Wood-betony		1	1.0		10.5	x	Ľ
Verbascum thapsus L.	Common Mullein	+			10			
SOLANACEAE	NIGHTSHADE FAMILY							
Solanum dulcamara L.	Bittersweet Nightshade	+				x		
TILIACEAE	LINDEN FAMILY				1.0	1		
Tilia americana L.	Basswood			x				Ľ
ULMACEAE	ELM FAMILY							
Ulmus americana L.	American Elm			10	x			
URTICACEAE	NETTLE FAMILY				11		10	
Boehmeria cylindrica (L.) Sw.	False Nettle	1.5			x		8	
Urtica dioica L. subsp. gracilis (Ait.)	American Stinging Nettle							
VIOLACEAE	VIOLET FAMILY							
Viola conspersa Reich.	Dog Violet				x			L
Viola sororia Willd.	Common Blue Violet			x				
VITACEAE	GRAPE FAMILY							L
Vitis riparia Michx.	Riverbank Grape			x				
ST - Status	1 - Shoreline Rock and Meadow Marsh	4-0	onif	erou	s Fo	rest		
+ - Non-native species	2 - Deciduous Forest	5-0	pen	Dur	e			

3 - Swamp and Marsh

PR - Provincially Rare species

RR - Regionally Rare species

6 - Cultural Meadow

Appendix C

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Breeding Bird Species List – Delphi Point Properties

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Appendix C - Wildlife Species Recorded on Delphi Point

	Breeding Bird Surv		veys		
Common Name	Scientific Name	Status	3-Jun	26-Jun	Other
BIRDS					
Common Loon	Gavia immer	E			x
Double-crested Cormorant	Phalacrocorax auritus	181			x
Great Blue Heron	Ardea herodias	L î L			x
Great Egret	Casmerodius albus	1			x
Canada Goose	Branta canadensis	The second secon			x
American Black Duck	Anas rubrines	1.7			x
Mallard	Anas platyrhynchos		- 1		×
Common Merganser	Mercus mercanser	171			Ŷ
Turkey Vulture	Cathartes aura	M			x
Merlin	Falco columbarius	M			v
Buffed Grouse	Bonese umbellus	Pr			Ŷ
Killdeer	Charadrius vociferus	D.	2		Ŷ
Spotted Sandhiner		Po	2		^
Common Snipe	Gallinado gallinado	M			v
Ring-billed Gull	Lague delevarencie	IVI I		-	Ŷ
Herring Gull					Ŷ
Great Black-Backed Gull		L.			×
Caspian Tam	Stoma caspia	1Vi			×
Common Tem	Stema birundo	1 7 1			×
Mourping Dovo	Zonaida macroura		0	1.1	~
Great Homed Oud	Puba virginianus	D.	2		v
Buby throated Humminghird	Archilochus colubic	P			^
Rolted Kingfisher	Conde aleven	FS M		12 1	v.
Dewry Woodpockor	Piecides pubesses	D-	0		~
Hein Woodpecker	Picoides publiceus		2		×
Northorn Elicker	Colonton ourotus	Pr	2	1.4	X
Fastom Wood Powee	Colaptes autatus	Pr	4		~
Willow Electober	Empidency traili	P		1	
Faster Bhacks	Emploinax trainin	PS M	1		v
Creat Created Elvestables	Sayomis proebe	M			X
Sector Kingbird	Turoppus turoppus	Pr I	3		X
Tase Swallow	Tyrannus tyrannus	Pr	1	1	
Nother Bruch winged Suclim	rachycineta bicolor	M			X
Ronthern Hough-winged Swallow	Biographic financia	M			X
Bam Swallow	Hipana Ilpana	IVI I			~
Blue low	Alirundo rustica	M			X
American Conv	Cyanocita cristata	Pr	2	3	X
American Crow	Corvus bracnyrnynchos	Pr		1	X
	Parus atricapillus	Pr	3	4	X
	Troglodytes aedon	Pr	1	3	X
winter Wren	l rogiodytes troglodytes	м			х
Golden-crowned Kinglet	Regulus satrapa	M			X
Huby-crowned Kinglet	Regulus calendula	м			X
Veery	Catharus fuscescens	Ps		1	
American Hobin	l'urdus migratorius	Pr	8	8	Х

Appendix C - Wildlife Species Recorded on Delphi Point

		TI	Bree	Breeding Bird Su		
Common Name	Scientific Name	Status	3-Jun	26-Jun	Other	
Gray Catbird	Dumetella carolinensis	M			X	
Bohemian Waxwing	Bombycilla garrulus	Pr	1	1		
European Starling	Sturnus vulgaris	Ps	1			
Warbling Vireo	Vireo gilvus	Pr	1	1		
Red-eyed Vireo	Vireo olivaceus	Pr	3	6	x	
Northern Parula Warbler	Parula americana	м			x	
Yellow Warbler	Dendroica petechia	Pr	2	1		
Chestnut-sided Warbler	Dendroica pensylvanica	М			x	
Black-throated Blue Warbler	Dendroica caerulescens	M		1 B 2	x	
Magnolia Warbler	Dendroica magnolia	Ps	1		x	
Yellow-rumped Warbler	Dendroica coronata	M			x	
Black-throated Green Warbler	Dendroica virens	M			x	
Palm Warbler	Dendroica palmarum	M			x	
Black-and-white Warbler	Mniotilta varia	Ps	1		x	
American Redstart	Setophaga ruticilla	Pr	4	1	x	
Ovenbird	Seiurus aurocapillus	M			x	
Common Yellowthroat	Geothlyphis trichas	Pr	6	5		
Northern Cardinal	Cardinalis cardinalis	Pr	4	4	x	
Rose-breasted Grosbeak	Pheucticus Iudovicianus	Ps		- 1		
Chipping Sparrow	Spizella passerina	Pr	1	1		
Song Sparrow	Melospiza melodia	Pr	4	8	x	
Swamp Sparrow	Melospiza georgiana	M			x	
White-throated Sparrow	Zonotrichia albicollis	Pr	1		x	
White-crowned Sparrow	Zonotrichia leucophrys	M			x	
Dark-eyed Junco	Junco hyemalis	Pr	1		x	
Red-winged Blackbird	Agelaius phoeniceus	Pr	5	5	x	
Common Grackle	Quiscalus quiscula	Pr	2	2	x	
Brown-headed Cowbird	Molothrus ater	Pr	3		x	
Baltimore Oriole	Icterus galbula	Pr	1	4	x	
American Goldfinch	Cardeulis tristis	Pr	2	2	х	
Total Species			34	28	1	
Total Territories		1.00	75	70	1-1-1	
MAMMALS				1	1.5	
Little Brown Bat	Myotis lucifuga				x	
Eastern Cottontail	Sylvilagus floridanus	1 1			x	
Eastern Chipmunk	Tamias striatus	1 1			x	
Woodchuck	Marmota monax	1 1			x	
Eastern Grey Squirrel	Sciurus carolinensis			1. J	x	
American Red Squirrel	Tamiasciurus hudsonicus	1 1			x	
Meadow Vole	Microtus pennsylvanicus	1 1			x	
White-tailed Deer	Odocoileus virginianus				x	
Total Species					8	
AMPHIBIANS						
Redback Salamander	Plethodon cinereus				X	
American Toad	Bufo americanus				X	

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Appendix C - Wildlife Species Recorded on Delphi Point

			Bree	ding Bird Su	veys
Common Name	Scientific Name	Status	3-Jun	26-Jun	Other
Eastern Gray Treefrog	Hyla versicolor				х
Striped Chorus Frog	Pseudacris triseriata				х
Pickerel Frog	Rana palustris				x
Total Species		1 1		1	5

Pr - Probable breeding species Ps - Possible breeding species Other - Oct 16, 2002, April 11 & 14, May 13, June 2, 3, 25, 2003

M - Migrant

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L - Along Lakeshore


ATTACHMENT 4

Owner: PB Holdings Inc. (East) File No. 42T-87016 Municipality: Town of The Blue Mountains Location: Lot 26, Concession 5 May 11, 2007

Schedule E-8

Draft Plan of Subdivision Conditions

Plan of Subdivision File No. 42T- 87016 has been granted DRAFT APPROVAL.

The conditions of final plan approval for registration of this draft Plan of Subdivision are as follows:

Conditions No.

- That this approval applies to the draft plan prepared by Malone Given Parsons 1. Ltd. revised April 2, 2007, showing a total of 24 single detached residential lots and Blocks 25 to 32 and Streets A and B on Part of Lot 26, Concession 5 (formerly Twp. of Collingwood) in the Town of The Blue Mountains in the County of Grey.
- The owner shall pay cash-in-lieu of parkland dedication in accordance with the 2. provisions of the Planning Act.
- That the owner agrees to satisfy all the requirements, financial and otherwise, of 3. the Town of The Blue Mountains concerning the provision of roads, installation of services and any other financial matter consistent with Minutes of Settlement dated May 2, 2003 as amended, between the Town and the Owner and appropriate provisions be contained in the subdivision agreement.
- That prior to final approval, appropriate zoning is in effect for this proposed 4. subdivision, to the satisfaction of the Grey Sauble Conservation Authority and the ZBA 2006 Niagara Escarpment Commission.
- That the street(s) shall be named to the satisfaction of the Town of The Blue TEM 5. Mountains.
- That Blocks 25 to 28 be conveyed to the Town of The Blue Mountains for Open TBM 6. Space, Trail and Buffer purposes, and that Block 29 be conveyed to the Town for Schedule Stormwater Management purposes.
- That Blocks 30 and 31 be conveyed to the municipality for 0.3 metre reserves. 7.
- That Streets A and B included in this draft plan shall be shown and dedicated as 8. public highways.
- That, in consultation with the Town, the Owner shall prepare a recreational trail 9. routing and design plan, and implement same through appropriate language in the

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BM-27,2008

- shown on H-plan

TISM Schedule

Owner: PB Holdings Inc. (East) File No. 42T-87016 Municipality: Town of The Blue Mountains Location: Lot 26, Concession 5 May 11, 2007

subdivision agreement.

- 10.
- That prior to final approval: a) Water management plans shall be prepared by a professional engineer that NEC correspondence will address the means to control provide and instanting an will address the means to control erosion, sedimentation, ground and surface water flow within the development lands, and stormwater quality management both during and after construction, all having regard for the Supplementary Servicing Reports prepared by CF Crozier & Associates Inc., dated January 21, 2005. These plans will demonstrate how fill requirements and tree clearing are being minimized, and shall incorporate a water balance analysis and management strategy prepared by a hydro-geologist that will address the means to maintain, on a best efforts basis, the surface and ground water conditions and sustain wetland habitat functions in Blocks 25 and 26. These plans shall also incorporate design for the maintenance of movements of water, amphibians and small mammals between Blocks 26 and 28. They shall be prepared to the satisfaction of the municipality in consultation with the Grey Sauble Conservation Authority and the Niagara Escarpment Commission;
 - b) Tree Preservation and Landscape Plans for the property shall be prepared by the owner for the approval of the Niagara Escarpment Commission and the satisfaction of the municipality in consultation with the Grey Sauble Conservation Authority;
 - c) The subdivision agreement between the owner and the Town of The Blue Mountains contain provisions in wording acceptable to the Town of The Blue Mountains, in consultation with the Niagara Escarpment Commission and the Grey Sauble Conservation Authority that will ensure the implementation of the above approved plans.
- 11. That development shall be subject to suitable arrangements for the extension of municipal water and sewer services and the availability of adequate water and sewage allocations in accordance with the servicing provisions of the Beaver Valley Official Plan and Official Plan Amendment 133 and Minutes of Settlement dated May 2, 2003 as amended.
- 12. That a subdivision agreement between the owner and the Town of The Blue Mountains shall be entered into and registered against the lands to which it applies. The subdivision agreement shall include requirements that:
 - a) A clause be inserted in agreements of purchase and sale with lot buyers to the effect that each lot may be subject to imperfect drainage and temporary

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Owner: PB Holdings Inc. (East) File No. 42T-87016 Municipality: Town of The Blue Mountains Location: Lot 26, Concession 5 May 11, 2007

> ponding from run-off from their own or adjacent properties, and that this potential be explicitly acknowledged as a characteristic of lots/property in this developments; and,

- b) Each lot shall have a detailed topographic, grading and drainage plan prepared as part of a Site Plan Approval to show the locations of building and tree preservation envelopes and proposed lot grading and drainage management.
- c) A clause is inserted in all purchase and sale agreements to the effect that the interim access is via temporary easements through the Town Park which shall terminate when a new Public Road is established to connect to Highway 26 at Peaks Road. Further, that temporary access shall expire every 12 months with renewals for an additional 12 month period after expiry to a maximum of 5 years.
- TBM Pre-Servici That the Owner shall not construct internal services for the plan prior to entering 13. into a pre-servicing agreement or subdivision agreement.
- 14. That prior to final approval, the owner shall enter into an Agreement with the Town and the owner of the Neighbourhoods of Delphi development (Draft Plans 42T 88003 and 42T-95007) and any other appropriate party that shall address public road access to the lands from to the Provincial highway, interim access via easements through the Town Park noted in condition 12(c), including implementation of the intersection improvements identified under a Traffic Impact Study or Studies accepted by the Ministry of Transportation.
- That prior to final approval, access to Highway 26 shall be established in TBM 15. accordance with the agreement identified in condition 14.
- Stormwater Management Report/Plan indicating the intended treatment of the Arabel Arab 16. location of which has approved by the Ministry of Transportation.
- That the appropriate fees are paid to the Grey Sauble Conservation Authority for GSCA correspondence the review of the noted reports, as specified in the Authority's planning services Nov. 6, 200817. agreement with the Town of The Blue Mountains.
- 18. That prior to final approval the County is advised, in writing, by the Town of The TBN correspondence Nov- 27,2008

Owner: **PB Holdings Inc. (East)** File No. **42T-87016** Municipality: **Town of The Blue Mountains** Location: **Lot 26, Concession 5** May **11, 2007**

Blue Mountains how conditions 2 to 15 have been satisfied.

- 19. That prior to final approval the County is advised, in writing, by the Grey Sauble SCA cortespondence Conservation Authority how conditions 4, 10 and 17 have been satisfied.
- 20. That prior to final approval the County is advised, in writing, by the Niagara NEC correspondence Escarpment Commission how conditions 4, 10 and 12 have been satisfied.
- 21. That prior to final approval the County is advised, in writing, by the Ministry of NTO correspondence Transportation how Condition 16 has been satisfied.
- 22. That prior to final approval a copy of the fully executed subdivision agreement between the Owner and the Town of The Blue Mountains shall be provided to the County of Grey.
- 23. If final approval is not given to this plan within eight years of the draft approval date, and no extensions have been granted, draft approval shall lapse under Subsection 51(32) of the Planning Act, RSO 1990, as amended. If the owner wishes to request an extension to draft approval, a written explanation along with the applicable application fee and a resolution from the local municipality must be received by the County of Grey Director of Planning prior to the lapsing date. Please note that an updated review of the Plan and revisions to the conditions of approval may be necessary if an extension is to be granted.
- 24. That the owner provide the County of Grey with a computer disk containing a digitized copy of the Final Plan in a format acceptable to the County of Grey.

NOTES TO DRAFT APPROVAL

- 1. It is the Owners responsibility to fulfill the conditions of draft approval and to ensure that the required clearance letters are forwarded by the appropriate agencies to the County of Grey, quoting the County file number.
- 2. For purposes of identifying a potential safety risk, it should be noted that an electrical distribution line operating at or below 50,000 volts might be located within the area affected by this development or abutting this development. Section 186 Proximity of the Regulations for Construction Projects in the Occupational Health and Safety Act, requires that no object be brought closer than 3 meters (10 feet) to the energized conductor. It is the Owner's responsibility to be aware, and to make all personnel on site aware, that all equipment and personnel must come

NEC correspondence Dec 14,2007 A Nov. 14,2008 MTO correspondence Nov. 4,2008

> Agreement Nov. 25,2008





Staff Report

Planning and Development Services

Report To:	Committee of The Whole
Meeting Date:	January 8, 2018
Report Number:	PDS.18.05
Subject:	Assumption of Works - Block 29, Registered Plan 16M-23, Peaks Bay East
Prepared by:	Brian Worsley, Manager of Development Engineering

A. Recommendations

THAT Council receive Staff Report PDS.18.05, "Assumption of Works - Block 29, Registered Plan 16M-23, Peaks Bay East";

AND THAT Council enact a By-law to assume the Works constructed and installed within Block 29, Registered Plan Registered Plan 16M-23, being lands in the Peaks Bay East Plan of Subdivision.

B. Overview

The purpose of this Report is to provide information related to the status and related acceptance of the Works in Block 29, Plan 16M-23, Peaks Bay East; and, for Council to consider the assumption of these Works by the enactment of a related By-law.

C. Background

PB Holdings Limited has requested that the Town assume the Works and lands within Block 29, Plan 16M-23, Peaks Bay East Plan of Subdivision. Block 29 is comprised of a drainage channel, storm sewer, headwall and outlet, accessway and the shorefront within Peaks Bay East. Plan 16M-23, with Block 29 highlighted, is included as Attachment "1" to this report.

The Development Agreement between PB Holdings Limited and the Town was executed in 2008 and was subsequently amended earlier this year to align with the assumption provisions of the current Subdivision Agreement Template, and to allow for the issuance of a Certificate of Final Acceptance for Block 29, Plan 16M-23 subject to certain conditions being met. The Development Agreement was registered on December 16, 2008, and the Certificate of Basic Services was issued in 2009. Currently there are 11 homes occupied (Lots 1-8, 13, 21, 22), 2 homes under construction (Lots 11 & 17) and 2 further homes that will commence soon (Lots 23 & 24).

Committee of the Whole PDS.18.05

With respect to Block 29, Crozier and Associates, the Developer's Engineer, has provided the necessary documents/information to allow for the consideration of the assumption of Block 29 The Development Engineering Division of the Planning & Development Services Department reviewed the Works and determined that the Works are complete and deficiency free.

D. Analysis

The Development Agreement, as amended on July 18, 2017, provides for the issuance of a Certificate of Final Acceptance for Block 29 subject to the requirements of certain provisions in the Agreement. The Works in Block 29 were constructed in 2008 and are principally limited to storm drainage works including an overland drainage channel, storm sewer and a headwall with a storm sewer outlet comprised of a duckbill valve. All of these works are contained within the portion of the Block giving access to the shoreline from Ellis Drive. These requirements have been fulfilled by the Developer with confirmation that the works are performing as designed received from Crozier and Associates, the developer's Engineer of Record. These works have also been assessed by Development Engineering staff and have found to be acceptable for assumption.

As Council may recall, Block 29 also provides for pedestrian access to and along the shoreline. The matter of pedestrian access to and along the shoreline, amongst other open space and connectivity matters, are currently being reviewed by way of the Town's Delphi Park ANSI Parks Management Plan. Acceptance of the Works by the Town and the related enactment of an Assumption By-law will not inhibit or impede this Town initiative. A draft of the Assumption Bylaw for Block 29 is included as Attachment "2" to this report.

E. The Blue Mountains Strategic Plan

Goal 3: Support Healthy Lifestyles

Objective 3: Manage Growth and Promote Smart Growth

Goal 5: Ensure that our Infrastructure is Sustainable Objective 4. Ensure That Infrastructure Is Available to Support Development

F. Environmental Impacts

Not applicable.

G. Financial Impact

With the Town's acceptance of the Works within Block 29 the Town will become responsible for the operation, maintenance and ultimate replacement costs associated with the Works. The Town's Capital Replacement Program and future Town budgets will make allowance for these matters/costs.

H. In consultation with

David Finbow Land Development, Planning & Building Code Consulting, agent of PB Holdings Senior Management Team Development Engineering Division Staff

I. Attached

- 1. Plan 16M-23 Peaks Bay East
- 2. Draft Assumption By-law

Respectfully Submitted,

Brian Worsley, P.Eng, MICE, PMP Manager of Development Engineering

Michael Benner, MCIP RPP Director of Planning and Development Services

For more information, please contact: Brian Worsley, Manager of Development Engineering <u>planning@thebluemounatins.ca</u> 519-599-3131 extension 224



The Corporation of the Town of The Blue Mountains

By-Law Number 2018 –

Being a By-law to accept and assume works in Block 29 of the Peaks Bay East Plan of Subdivision, Registered Plan 16M-23

Whereas all of the public works in Block 29 of the Peaks Bay East Plan of Subdivision, Registered Plan 16M-23 have been constructed and installed in accordance with the subdivision agreement for this Plan;

Now Therefore Council of The Corporation of the Town of The Blue Mountains hereby enacts as follows:

1. All of the public works constructed and installed in accordance with the subdivision agreement for Block 29 of the Peaks Bay East Plan of Subdivision, Registered Plan 16M-23 are hereby accepted and assumed.

Enacted and passed this _____ day of ______, 2018

John McKean, Mayor

Corrina Giles, Clerk

I hereby certify that the foregoing is a true copy of By-law No. 2018-____ as enacted by the Council of The Corporation of the Town of The Blue Mountains on the ____ day of _____, 2018.

Dated at the Town of The Blue Mountains, this ____ day of _____, 2018.

Corrina Giles, Clerk



BASE INFORMATION PROVIDED BY MALONE GIVEN PARSONS LTD. 140 RENFREW DRIVE, MARKHAM, ON, L3R 6B3 905-513-0170

con. 5

N.T.S.

Lot 25

SIGNED

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT HAS BEEN SIGNED AND DATED BY THE LANDSCAPE ARCHITECT BELOW.

DATE

LANDSCAPE ARCHITECTS STAMP STAMP AND SIGNATURE VOID IF REPRODUCED **

2. AS PER THE TOWN OF BLUE MOUNTAINS COMMENTS

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OUR FILE REF. *

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TOWN FILE REF. *

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SEPT. 26/08

AUG. 11/08

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REVIEWED BY:

J. BELL

TP 3 of 4

DESIGNED BY:

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1	Revised Per Town Comments Dated Sept. 14, 2006	12/22/2006		S Ann low to		TOWN
2	Revised Per Town Comments Based on Dec. 22, 2006 Submission	04/24/2007				
3	Revised Per Town Comments Based on April 26, 2007 Submission	06/15/2007		\square K. A. MORRIS $=$	Drawing	a de la constante de la consta
4	Issued for Approval	07/10/2007		Non New JEHNE		
5	Revised Draft Plan, Issued for Inclusion of Subdivision Agreement	11/24/2008		POL		GEN
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	3	Revised Per Town Comments Based on April 26, 2007 Submission	06/15/2007			rawi
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	5	Revised Draft Plan, Issued for Inclusion of Subdivision Agreement	11/24/2008		POL STATE	
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PDS.20.53 Attachment 8 This document can be made available in other accessible formats as soon as practicable and upon request

Community Services STAFF REPORT: OWNO **REPORT TO: Committee of The Whole MEETING DATE:** April 4, 2016 CSPW.16.049 **REPORT NO.:** Peaks Bay Holding Block 29 SUBJECT: Waterfront PREPARED BY: Shawn Everitt, Director of **Community Services** Michael Benner, Director of Development and planning Services

A. Recommendations

THAT Council receive Staff Report CSPW.16.049 entitled "Peaks Bay Holding Block 29 Waterfront";

AND THAT Council approve the completion of the Restoration and Landscape Plan for Block 29 by the owner of Lot 5;

AND THAT Council approve Option F of the connectivity plan as outlined in this report.

B. Background

Purpose of Report

- 1. To answer concerns regarding previous works and proposed works on Town owned lands.
- 2. To ensure that the shoreline of Block 29 of Peaks Bay Holding Development Ltd (Peaks Bay Development) has pedestrian access from Delphi Point Park and Ellis Drive and that the Area of Natural and Scientific Interest (ANSI) is respected.

Background

Town Staff have had the opportunity to meet with a landowner that has identified a number of concerns relating to Block 29 of Peaks Bay Development. The concerns have resulted in a lengthy communication and review process. For ease of reference, a site map of the Peaks Bay Development including Block 29 has been included as Attachment 1.

Throughout the review process, Staff received a number of complaints and concerns regarding works both during and after the residential building construction on Lot 5. In preparation of this report, Staff met with the landowner that has presented the concerns and confirmed that the list below is in fact an inclusive list of concerns raised by a resident of the Peaks Bay Development.

Concerns Identified

- 1. Drainage works along Block 29 from Ellis Drive to Block 29 waterfront
- 2. Planting of trees by the owner of Lot 5 on Town property within Block 29
- 3. Westerly trail connectivity from Ellis Drive Trail to Block 29 waterfront
- 4. East West shoreline connectivity from Delphi Point Park to the west boundaries of Block 29 waterfront
- 5. Replanting of Tree Preservation Area (TPA) in Block 29 no requirements to restore (TPA)
- 6. Compromise of the Area of National and Scientific Interest (ANSI) Designated protection area
- 7. Allowing landscaping, planting and amenities to be placed on Block 29 including paddle boards and personal watercraft lifts
- 8. Drainage pipes from Lot 5 onto Block 29
- 9. Changes of grade and material encroachments / material push back during construction onto Block 29 from Lot 5
- 10. Plantings and landscaping encroachments from Lot 5 onto Block 29
- 11. Sense of private ownership of Block 29 from waterfront owners
- 12. Complaints of noise from Lot 5 including loud music
- 13. Complaints of landowners adjacent to Block 29 waterfront telling people to leave the private waterfront

During the review of the proposed landscape plan for Lot 5, including plantings and landscaping on Block 29, Staff referred to By Law 2015-43 being the By Law to provide for the Management, Control, Regulatory Maintenance and Usage of all Parks, including the Harbour, Trails, Open Space Properties and other Public Facilities owned and or leased by the Town of The Blue Mountains:

By Law 2015-43

Part 1 – Conduct

Section 9 - Encroachment

- 1. Unless authorized by permit or otherwise, no person shall encroach upon or take possession of any park by any means whatsoever including
 - a) The construction, installation or maintenance of any fence, storage shed, retaining wall or other structure of any kind;
 - b) keeping of any composting receptacle or pile;
 - c) placing of any string, wire, chain, rope or similar material; or
 - d) plantings of any hedge, tree, shrub or garden on park property thereon.

COMMITTEE OF THE WHOLE CSPW.16.049

The following points reflect on each concern that was identified and provides the rationale of Staff's review of the concerns:

- 1. Drainage works along Block 29 from Ellis Drive to Block 29 waterfront
 - Concerns relating to the drainage ditch have been remedied through works completed by the Developer. Block 29 is owned by the Town, however assumption of works has not taken place therefore all remaining works related to assumption are the responsibility of the Developer.
- 2. Planting of trees by owners of Lot 5 on Town property of Block 29
 - Once identified that the tree from Lot 5 was planted on Town property without permit the request was made to have the tree removed as it caused a possible obstruction for future ditch maintenance. Shortly after the request to remove the tree was made, the tree was relocated. Concerns still exist that the branches of the tree remain over the property line; however Staff do not have any issue with the tree's current location.
- 3. Westerly Trail connectivity from Ellis Drive trail to Block 29 waterfront
 - Staff has developed 6 potential options that would provide westerly connectivity to Block 29 west from the Ellis Drive Trail. These options were created in consultation with John D. Bell Associates Limited. John D. Bell Associates Limited completed the original tree preservation plan and landscape architecture work for the Peaks Bay Development. The recommended option "F" would provide a walking path from the north end of the Ellis Drive Trail connection, along the end of the drainage ditch that currently has an informal shale type base and a 1 meter path created through the existing rock groyne to connect to the mid waterfront elevation that would then provide connectivity. This trail would only need to be utilized by the residents of Peak Bay Development and general users of Delphi Point wishing to connect with the western portion of Block 29 on high water days. The other options would provide connectivity, however each have significant costs to achieve the same goals as the preferred option. Staff has confirmed with Grey Sauble Conservation Authority (GSCA) that Option F would be supported by their Staff and a permit would be possible.
- 4. East West shoreline connectivity from Delphi Point Park to the west boundaries of Block 29 waterfront
 - The above description from concern 3 provides the same rationale.
- 5. There is no need or requirement of replanting the Tree Preservation Area (TPA) in Block 29 due to tornado damage
 - The area North of Lot 5 and the waterfront of Block 29 in general has had little maintenance or formal clean up by the Town. The area has an ANSI designation and therefore development potential is extremely limited. The area would anticipate very little maintenance in regards to vegetation

control and Staff suggest that planting of native species within the preservation area is appropriate and permitted.

- 6. Compromise of the ANSI Designated protection area
 - As noted above, the works permitted do not impact the ANSI designation. Ministry of Natural Resources and Forestry (MNRF) and GSCA both provided feedback as to the acceptability of the permitted works.
- 7. Concerns of allowing landscaping, planting and amenities to be placed on Block 29 including paddle boards and Personal Watercraft Lifts
 - Staff will continue to work with landowners to determine the acceptability of amenities. The landowners adjacent to Block 29 have been very cooperative to deal with and have removed the previously reported fire pits and trampoline. The only remaining item outstanding that is noncompliant to the ANSI designation is the sodded area of Lot 2 and Staff intend to continue working with the new owner of Lot 2 on this issue. Personal watercraft lifts will be reviewed; the only use of Town land for the lifts would be for winter storage on or across Town property.
- 8. Drainage pipes from Lot 5 onto Block 29
 - In review of the drainage pipes from Lot 5, the Town's Building Department does not have any concerns that would warrant any follow up or remediation. The concerns were raised prior to final approval being granted and did not cause any concern in providing final approval.
- 9. Changes of grade and material encroachments / material push back during construction onto Block 29 from Lot 5
 - The Town's Building Department and GSCA have provided comment on the change of grade and push back of material during construction on Lot 5. No further action has been required and, in fact, it is suggested that additional flood protection of Lot 5 has been created and is supported by the re-grading.
- 10. Plantings and landscaping encroachments from Lot 5 onto Block 29
 - As previously noted, the plantings and landscaping is acceptable within the ANSI designated area and the TPA. The proposed plantings were approved by John Bell, who has been the landscape architect for Peaks Bay Development. John Bell supported the planting plan and identified that the proposed plan helped bring the area back to its natural pretornado state. GSCA also provided approval prior to the Town issuing the permit to plant on Town property.
- 11. Sense of private ownership of Block 29 from owners
 - No additional complaints have been made to Town Staff. Staff have also confirmed that no complaints have been filed with the OPP.
- 12. Complaints of noise from Lot 5 including loud music

- No additional complaints have been made to Town staff. Staff have also confirmed that no complaints have been filed with the OPP.
- 13. Complaints of waterfront owners telling people to leave the private waterfront
 - No additional complaints have been made to Town staff. Staff have also confirmed that no complaints have been filed with the OPP.

Consultation with Developer

Staff met with the representative for Developer; the main objective of the Developer in relation to the Block 29 waterfront is to ensure westerly connectivity from the Ellis Drive walkway on Block 29 for its residents and all segments of the population. The developer also requested that all residents in Peaks Bay Development have an opportunity to participate in the development of a Master Site Plan.

Consultation with existing Residents adjacent to Block 29 waterfront

Staffs met with landowners adjacent to Block 29 and have received confirmation that they do not object to Option F; however, they do not see the need to provide the connectivity option. It is their belief that the number of days that the shoreline connection is not intact is a small percentage and it that the weather conditions on those days do not generate a great number of users. However, they will not oppose the preferred option. They are not supportive of the other 5 options due to the anticipated costs of the proposed works.

Conclusion

The process used for the approval of restoration Lot 5 and Block 29 has been far more detailed than for the previous Lots 1 through 4. The review completed by Staff of what has been planted and placed on Block 29 by the owner of Lot 5 is based on the having consistency of a vegetation buffer along the higher elevation of Block 29 waterfront similar to what previously existed . Vegetation buffers on Lots 1 through 4 are mostly made up of existing shrubs and trees that survived the tornado of 2009.

The lands contained within Block 29 are Town owned, and it is at the discretion of the Town what works are completed on that land. In the opinion of the GSCA, MNRF and Town Staff, no site works, plantings, grading or landscaping contravene the ANSI designation save and except the placement of sod on Lot 2. The landscaping and plantings that have been completed within Block 29, including the proposed plantings along the drainage course, do not prohibit the westerly connection from the Ellis Drive Trail.

Next Steps

Staff is recommending that implementation of Option F be used for the East West public connectivity of Block 29. Staff notes that the preferred option for the concerned resident continues to have the connectivity to the immediate North East corner of Lot 5, and the ability to walk along the northern edge of Lot 5 on public land that the public is entitled

to use. Staff agrees that Block 29 is public access lands, however not unlike other lands that the Town owns and maintains, many Town properties are developed in a way that certain areas are not as accessible or permitted for many different reasons. In this particular case, it is Staff's opinion that due to the existing fragmented shale material, multi contoured elevations and respecting the adjacent landowner's properties, Staff has identified the middle elevation plateau as the suggested primary pedestrian pathway. Option F allows for the East West connectivity along the middle elevation plateau, provides this connectivity with ease of passage without significantly altering the design of the drainage ditch, and does not require the placement of a culvert or structure for the crossing of the drainage course.

Staff recommends the completion of the proposed restoration plan for Lot 5 and Block 29 to the west of the drainage course be completed under the direction of Town staff in the spring of 2016. The proposed plantings, however on Town owned land within Block 29, would provide for a vegetation buffer that would direct users to the formal pathway created by Option F for the public to access the Ellis Drive walkway from the waterfront instead of walking through the drainage ditch. The plantings also restore the area back to its pre-tornado state and character. All plantings have been reviewed by the GSCA, and include only native species.

It is anticipated that Lot 6 will have a single residential home being constructed in the spring of 2016. Staff suggests that landscaping and site plan review will utilize a refined review and approval process. The construction on Lot 5 has proven that a detailed review of requested works, planting and landscaping will provide clarity and a streamlined approach.

C. The Blue Mountains' Strategic Goals

- Goal #1 Create opportunities for sustainability
- Goal #2 Engage our community and partners
- Goal #3 Support healthy lifestyles
- Goal #5 Ensure our infrastructure is sustainable

D. Environmental Impacts

Appropriate use of ANSI Designated Parkland

E. Financial Impact

Due to the limited work required to achieve Option "F" the cost to complete work is minimal.

All plantings and landscaping completed by the owner of Lot 5 have been funded by the landowner of Lot 5, similar to other works on Lots 1, 2, 3 and 4 completed in the past.

The landowner of Lot 5 is responsible for the plantings to complete the Restoration Plan.

F. In Consultation With

Senior Management Team Town Solicitor

G. Attached

- 1. Block 29 Map
- 2. Block 29 Option F
- 3. Options A, B and C
- 4. Option D and E
- 5. Restoration Plan for Block 29 and Lot 5

Respectfully submitted,

Shawn Everitt, Director of Community Services

Michael Benner, Director of Planning & Development Services



BLOCK 29 – OPTION F





Willow tree

Informal walking path that has a fragmented shale surface that extends east to west
Existing limestone base trail that connects Ellis Drive to Block 29 Waterfront

Proposed west pedestrian connection



N.T.S.

ARCHITECT WAS NOT PRESENT FOR THE LAYOUT AND INSTALLATION OF THE PROTECTIVE TREE PRESERVATION FENCE.





SIGNED

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ASSOCIATES LIMITED. DRAWINGS ARE NOT TO BE MODIFIED AND/OR HOUT THE WRITTEN CONSENT OF JOHN D. BELL ASSOCIATES LIMITED. & DRAWINGS IN ANY FORM WITHOUT THE CONSENT OF JOHN D. BELL ASSOCIATES E DRAWING AT WHICH TIME JOHN D. BELL ASSOCIATES LIMITED ACCEPTS NO E DRAWING CONTENT OR WORKS RESULTING FROM SAID REPRODUCTION. Y BE REPRODUCED BY MUNICIPAL AND GOVERNMENT AGENROLIES RESPONSIBLE FOR THEIR OWN USE. JOHN D. BELL ASSOCIATES ESERVES THE RIGHT TO RAWING(S) FROM GOVERNMENT OR MUNICIPAL AGENCIES WHETHER APPROVED THAT ACCOUNTS ARE NOT SETTLED OR REMAIN OUTSTANDING.	CONSTRUCTION
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OPTION D OPTION D - ILLUSTRATES A PREFABRICATED PEDESTRIAN BRIDGE OF STEEL AND WOOD THAT SPANS THE OPEN DRAINAGE SWALE. THIS CONNECTION PROVIDES A DIRECT LINK FOR THE RESIDENTS OF PEAKS BAY VIA THE SERVICE ACCESS ROAD AS WELL AS PROVIDING A CONTINUOUS CONNECTION ALONG THE SHORELINE. NO MODIFICATIONS TO THE SHORELINE ARE REQUIRED

CONCEPTUAL OPTIONS TO PROVIDE PEDESTRIAN CONNECTIVITY ALONG THE SHORELINE

KEY PLAN	GENERAL NOTES	
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PLANNING & DEVELOPMENT SERVICES

DATE:

TOWN ENGINEER DATE:



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CSPW.16.049

