

**ENVIRONMENTAL IMPACT STATEMENT and  
PLANNING JUSTIFICATION REPORT REVIEW**

Langmaid's Island  
Township of Lake of Bays  
Town of Huntsville  
District of Muskoka

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Ages Consultants Limited

May 2018

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### In summary

- 1. My review of the inventories of the features and values of Langmaid's Island found that there is not sufficient information to determine environmental impacts.**
- 2. The policies (PPS, District OP, Township) require an assessment impact on the values for which the Island was determined to be important and protected – including regionally significant woodland, diversity and undisturbed environments. These values are not properly addressed in the EIS or Planning Justification Report.**
- 3. The documents do not provide a description of the development sufficient to analyze impacts. More detail is necessary on a lot by lot basis. As a result, the proposal does not conform to the Township of Lake of Bays documents or the District Official Plan nor is it consistent with the Provincial Policy Statement (2014).**
- 4. The proposed implementing by-law and mechanisms (limited zoning, conservation easements) are unlikely to be effective in protecting natural values. I include an example of a development concept that does meet the planning policies and will be effective in protecting the environment.**

**In conclusion, I recommend that the proposal be refused and returned for refinement as indicated.**

## 1.0 Introduction

This Review is prepared to assist the Lake of Bays Association and Lake of Bays Heritage Foundation in their review of a series of applications related to a development proposal by the Langmaid's Island Corporation for Langmaid's Island located in Township of Lake of Bays, Muskoka District and two shoreline parcels in the Town of Huntsville.

The proposal for the Island includes the Island itself and the two mainland properties from which boat access will be obtained. These are described as:

*The subject lands consist of one (1) Island property in the Township of Lake of Bays (Langmaids Island) along with two (2) Blocks located in the Town of Huntsville. The subject lands are legally described as Island A (Langmaids Island), in the Geographic Township of McLean, Township of Lake of Bays, District Municipality of Muskoka. The lands contain a dwelling, a boathouse and associated buildings.*

*Block 'A' is described as Part of Lot 24, Concession 1 and Part of the OSRA in front of Lot 24, Concession 1, in the Geographic Township of Brunel, in the Town of Huntsville, District Municipality of Muskoka and is currently vacant.*

*Block 'B' is located at 4215 South Portage Road and is legally described as Part of Lot 21, Concession 1 in the Geographic Township of Brunel, in the Town of Huntsville, District Municipality of Muskoka being Lot 7, Plan M-247. This property contains an existing tourist establishment known as Beauview Resort.*

*The Island is approximately 59.5 hectares (147.0 acres) in area. Blocks A and B are 0.1 hectares (0.25 acres) and 1.17 hectares (2.89 acres) respectively.*

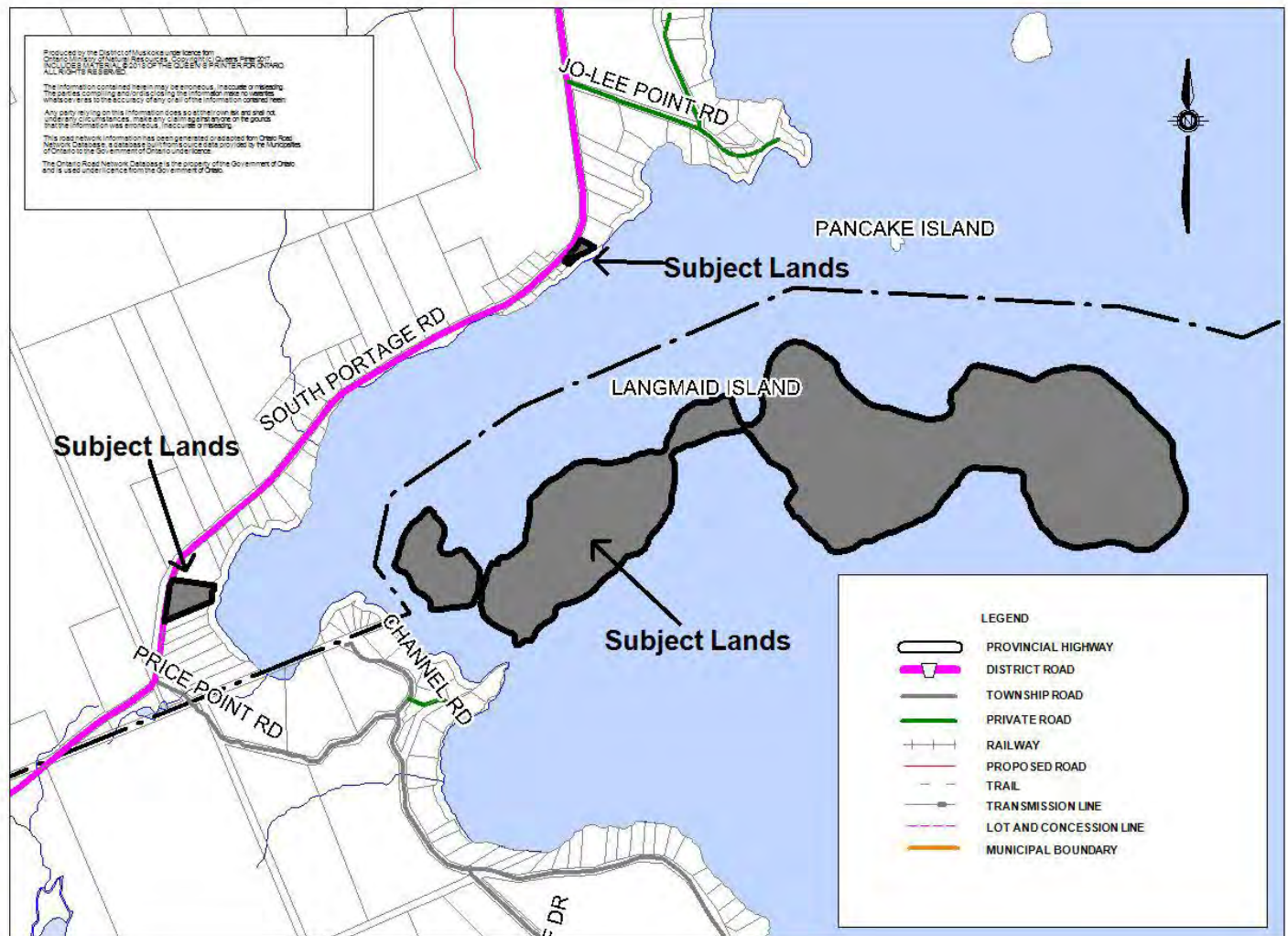
*The proposal consists of 36 Lots intended for single family residential development and two (2) Blocks which are intended to be used as mainland parking and access for the island.*

*Frontages for the proposed lots range from 90.2 metres (295.9 feet) to a maximum of 316.8 metres (1,039.3 feet). The development is proposed to be serviced via private individual on-site water and waste disposal systems.*

The location and context for the proposals is shown on the figure on the next page.

The proposal will be implemented through a Plan of Subdivision and amendments to the District and local planning documents (Township of Lake of Bays and Town of Huntsville).

I note that the Island is referred to as either Langmaid's or Langmaid – I will use the first spelling.



The applications are supported by a series of reports that I have reviewed – specifically:

- Planning Justification Reports (3 in total), MHBC Planning Consultants Limited, January 2018.
- Environmental Impact Assessments (3 in total), RiverStone Environmental Solutions Inc, January 2018.
- Functional Servicing Report, Langmaid's Island, C.C. Tatham & Associates Ltd., January 2018.
- Boating Impact Assessment, Langmaid's Island, Michalski- Nielsen Associates Limited, January 2018.

There are other reports (Heritage, Archaeology, etc.) that I have not reviewed as they are outside my areas of expertise (ecology, environmental planning) where I will focus my review and comments.

I note that I have not visited the sites as of this date, but rely on the reports, planning documents and letters filed by local residents who are most knowledgeable of the environment. I am particularly informed by a letter from Mr. Ed Pollen on behalf of his family dated March 19, 2018 and sent to the

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District planner. This is an outstanding letter and I choose to attach it to this review to emphasize its knowledgeable and thoughtful approach.

My review will consist of four sections that follow:

- Description of policies and applications
- Site background information
- Review of Proposal
- Conclusions

## 2.0 Policy and Applications Submitted

The applicable policies in the planning documents are extensively reviewed in the MHBC Planning Justification Reports for the Island and the two shore parcels. I will not repeat these descriptions in detail at this point to provide a policy context rather than analysis. I will summarize the most relevant OP sections and conclusions reached by MHBC on process so that I can deal with them in this report.

### Provincial Policy Statement (2014)

The PPS defines areas of Provincial interest that municipalities must be consistent with. This includes certain environmental features in section 2.1.5, 2.1.6 and 2.1.7 which must be identified and protected as they occur and if development is proposed that is adjacent. This includes:

- significant wildlife habitat
- significant areas of natural and scientific interest
- fish habitat
- habitat of endangered and threatened species

A lower level of government can provide more restrictive environmental protections (Section 4.9) so long as the Provincial interest is not conflicted.

### District of Muskoka Official Plan (2014 Consolidation):

- The District OP provides a balance between protecting the environment and policies permitting development;
- Generally, protection of the natural environment and the character of shoreline areas are to take priority over development per se;
- Development of waterfront areas can occur, provided that the quality of the landscape and the natural environment are protected and that the development is compatible with adjacent land uses;
- Langmaid's Island is designated as *Waterfront*, permitting cottages and associated facilities;
- The District OP has policies on Natural Heritage Areas (NHAs), but Langmaid's Island is not identified as an NHA on the Schedules, but is recognized as it is identified in the local planning documents;
- MHBC concluded that a District Official Plan Amendment is not required but the application needs to satisfy the environmental protection and land use compatibility provisions of the District OP. I agree.

- MHBC also conclude that the policies and approvals at the Township will provide the details on how these District policies will be satisfied. I agree.
- For reference purposes I note the following sections of the District OP of most relevance to a reader F6, F7, F85, F96 and F98. These policies provide protection to the environment particularly through the local documents so that if the Lake of Bays requirements are not met, then, the District policies are not satisfied.

Township of Lake of Bays Official Plan (2016):

- The Township OP must comply with and amendments to it conform to the District policies;
- The OP is also protective of ecological and shoreline resources;
- The designation is *Waterfront Residential*, permitting seasonal recreational dwellings and associated uses;
- The Island is also shown in an overlay as a *Muskoka Heritage Area* due to its ecological and scenic characteristics;
- There are specific policies in the OP related to protection of the Island features and limiting development on it, most importantly:
  - “conservation of the natural environment will take precedence over development when the two are in conflict and mitigation measures are unable to protect environmentally significant natural features and functions”;
- Any development proposal would need to demonstrate that it would “ensure the preservation of these values”;
- There are policies (D.98, D.99, D.100) specific to the Island:

*Section D.98      Creation of new lots on Langmaid's Island or substantial development will be discouraged in order to retain this as a natural and undisturbed area and retain its important values. Any further development or site alteration on the island should be focused in the area, which has already been disturbed by development.*

*Section D.99      Where further development of the island is proposed beyond the existing development site, an impact assessment will be undertaken in order to better identify, locate and evaluate the values of the area, and to ensure that development can occur in a location and manner which will ensure the preservation of these values.*

*D.100 Where it is not feasible to preserve the whole island in its natural state, protection of important areas and features of the island that have been identified through impact assessment will be accomplished by:*

- a) dedication or purchase of the land in favour of the Township, or other appropriate organization; or*
- b) establishment of a conservation easement; or*
- c) private land stewardship; and*
- d) zoning, together with site plan or other agreements or the Development Permit System.*

- MHBC concluded that the development proposal required an amendment to the LoB Official Plan to remove possible conflicts in the wordings related to protection and development and modify the *Muskoka Heritage Area* description.

#### Township of Lake of Bays Development Permit By-law (04-180)

- This By-law serves as the zoning by-law for the Township and identifies Langmaid's Island as a *Waterfront Residential* permit area and shows a *Heritage Site* overlaying it.
- Lots in the *Muskoka Heritage Area* are currently limited to the existing single lot;
- Development proposals in this situation are resolved by preparing a Plan of Subdivision and creating an exception to the By-law.
- The exception proposed by MHBC would allow a recreational dwelling on any lot (36 in total proposed) along with three *sleep cabins* per lot provided total sum of ground floors is less than 564 m<sup>2</sup> (6071 ft<sup>2</sup>), and two dwellings on two of the larger lots. Dwellings could be up to 8.5 metres (27.9 ft) in height on the footprint.
- The Draft Amendments to the DP By-law would change the Schedule for Langmaid's Island for the WR designation in certain locations to *Waterfront Environmental Protection* or to *Waterfront Open Space* and these areas would have a conservation easement placed on them
- Some type of association of property owners would administer the conservation easement to protect the environment. These are not specified in any of the filed reports supporting the applications.

The general directions that I take from this review of the policies and applications are that:

- Langmaid's Island is identified for various reasons as a significant natural area with identified values;
- The various documents (District, Township) recognize that significant character and contain policies that limit any development on the Island. Conservation is to be given priority over development.



- Development beyond the current use (single cottage and associated structures) requires, first, (D100) a demonstration that the whole Island cannot be preserved in a natural state. If it cannot be protected, then, studies need to show that the Island “values” are “preserved” (D98 and D99).

### 3.0 Background Review

In this section, I will review the information on the Island that is provided by the applicant, particularly the RiverStone EIS, as well as public sources.

As is acknowledged by the applicant, Langmaid's Island was identified in 1991 as a Regionally Significant Forest and in 1993 by the Ministry of Natural Resources as a "Candidate" Area of Natural and Scientific Interest (ANSI), including the adjacent "Seagull Island". I have appended the summary description of the Island prepared at that time. This MNR ANSI program was designed to identify significant resources within each MNR district so that the management of the resources was coordinated within the Ministry and when dealing with external agencies. Langmaid's is identified as a significant resource.

It occurred that as the District and Lake of Bays Official Plans were prepared/updated the Island was included as a significant Muskoka Heritage Area as mentioned previously. The description of the feature is as follows in Section D96 of the LoB OP:

- a) Langmaid's Island supports a diversity of habitats including various forest types, rocky shorelines, sandy beach, marshland, steep rocky ridges, exposed cliff faces and semi-open treed barrens;*
- b) The landscape, shoreline and biotic communities on Langmaid's Island show little recent disturbance;*
- c) Langmaid's Island was evaluated as a regionally significant forest and recommended as a candidate ANSI;*
- d) Langmaid's Island supports a deer wintering area as well as a potential Lake Trout spawning location;*
- e) Seagull Island is a nesting area for Canada Geese and functions as a Herring Gull loafing area; and*
- f) Seagull Island has high scenic value and the hills on Langmaid's Island offer a commanding and scenic vista of Lake of Bays.*

These are the values that any development proposal should be tested against utilizing the policies D98 to D100 included in the previous section that require "preservation of these values" (D99).

At this point, I note that the Provincial Policy Statement (2014) only identifies a Provincial interest and provides protection to *significant woodlands* in two site regions in Ontario and these regions do not include Muskoka. However, Section 4.9 of the PPS permits a municipality to provide stronger/more extensive protection to the environment so long as it does not conflict with the Provincial interests. In the Lake of Bays/Langmaid's Island policies the protection of the Regionally Significant Woodlands conforms to the PPS. Various of the features/values that are noted (deer wintering habitat, diversity of habitats, etc.) require demonstration that they will not be impacted in order to be consistent with the PPS.

As noted above, the Island was identified as a "candidate" ANSI during the MNR program science sites. Life science ANSIs (like Langmaid's Island) were selected using the following criteria: representation, diversity, condition, ecological consideration, and special features.

Once a site is identified as a candidate site, it is evaluated and confirmed and a decision made as to whether it is of Provincial or local significance. This confirmation process appears not to have occurred for Langmaid's, so it does not receive direct protection under the Provincial Policy Statement. The ANSI information, however, was used to identify it as a Muskoka Heritage Area in the local documents, implementing the ANSI inventory.

I used the MNRF Land Information Ontario site and MNRF Lake Fact Sheet to look at the general context for Langmaid's in the Lake of Bays (includes Lake of Bays Township as well as a portion of the Town of Huntsville). The information below and the figure on the following page shows some of the results.

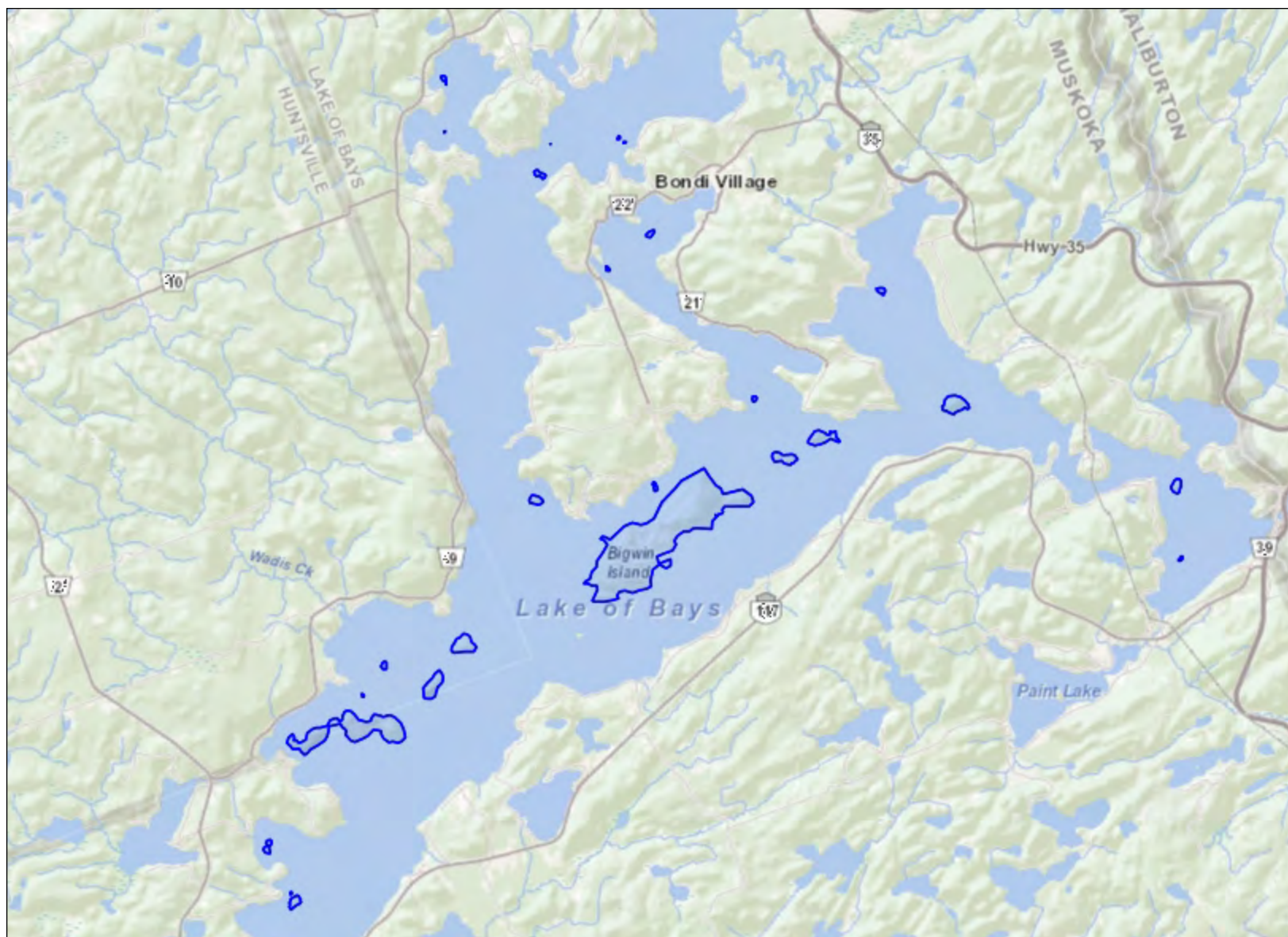
#### Lake of Bays

- Surface area - 6780 ha.
- Perimeter – 167 ha.
- Shoreline development – high
- Crown land – 0%
- Provincial Parks – none
- Islands in the lake – 25, including three rocky islets



## Lake of Bays - Islands

Notes:



### Legend

- Building as Symbol
- Building to Scale
- Airport
- Helipoint \ Hospital Helipoint
- Seaplane Base
- Ferry Route
- Trail Head \ Trail
- Railway \ Train Station
- Railway with Bridge
- Railway with Tunnel
- Road (Major \ Minor)
- Winter Road
- Road with Bridge
- Road with Tunnel
- Primary, Kings or 400 Series Highway
- Secondary Highway
- Tertiary Highway
- District, County, Regional or Municipal Road
- Toll Highway
- One Way Road
- Road with Permanent Blocked Passage
- Road with Address Ranges
- Hydro Line, Communication Line or Unknown Transmission Line
- Natural Gas Pipeline, Water Pipeline or Unknown Pipeline
- Spot Height
- Index Contour
- Contour
- Wooded Area
- Wetland
- Waterbody
- Waterbody Elevation
- Watercourse
- Falls
- Rapids
- Rapids \ Falls
- Rapids
- Rocks
- Lock Gate
- Dam \ Hydro Wall
- Dam \ Hydro Wall
- Provincial \ State Boundary
- International Boundary
- Upper Tier \ District
- Municipal Boundary
- Lower Tier \ Single Tier
- Municipal Boundary
- Lot Line
- Indian Reserve
- Provincial Park
- National Park
- Conservation Reserve
- Military Lands

0 5.2 km

Projection: Web Mercator



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Only two of the islands in the Lake are of any size (Bigwin ~ 210 ha and Langmaid's ~ 55 ha). All islands appear occupied on aerial photos and developed except for the very small Roothog Island and several uninhabitable rocky islets. Langmaid's shows the largest undisturbed area on the Lake.

Bigwin Island is larger and has 112 lots, apartments in the former Bigwin Inn and a restaurant/tea house. It is organized as a condominium corporation. Facilities include an 18-hole golf course and ferry service to the island.

Thus, Langmaid's Island is unusual in terms of its size, natural conditions and the lack of current development. The 6100 metres of undisturbed shoreline appears to be the last such extent of shoreline on the Lake of Bays on either an island or the mainland.

The identification/recognition of Langmaid's Island as a significant Muskoka Heritage Area is warranted given the descriptions available and the scarcity of undisturbed shoreline and resources in the Township. As indicated in the brief policy review (Section 2), any development would need to be balanced against retaining the natural features of the Island.

An EIS of the proposal has been prepared by RiverStone Environmental Services, including various site-specific inventories that were intended to provide direction to the proposal on meeting the policies in the planning documents as noted above.

The inventories and descriptions include:

- Terrain, Drainage and Soils
- Ecological Communities
- Wildlife
  - Breeding Birds
  - Turtles
- Fish and Fish Habitat
- Habitat of Endangered and Threatened Species
- Significant Wildlife Habitat
  - Seasonal Concentration Areas of Animals
  - Rare Vegetation Communities
  - Habitat for Species of Conservation Concern
- Muskoka Heritage Area

The results of the inventories and analysis are summarized on Figure 3 in the RiverStone EIS that is included on the next page of this Review.

There are two issues I mention. First, the EIS mentions that a Terms of Reference was agreed to with District staff. This ToR is not included so I cannot assess whether the report meets the criteria established.

Secondly, the EIS approach is focused on protecting limited PPS features rather than assessing overall values and interrelationships. This is a shortcoming. Comments on the specific sections of the report follow.





Legend

Planning Boundaries

Subject Property

Man-made Features Existing at Time of Site Visit (Approximate)

Accessory Building

Cottage

Biophysical Features and Functions Identified By RiverStone

Localized Seepage Areas

Ecological Communities (Shaded Communities - Condinate Significant Wildlife Habitat)

G100Tt/TI - Fresh, Silty to Fine Loamy Hemlock-Cedar Conifer

G011Tt/TI - Very Shallow, Dry to Fresh: White Pine Conifer

G013Tt/TI - Very Shallow, Dry to Fresh: Hemlock-Cedar Conifer

G015Tt/TI - Very Shallow, Dry to Fresh: White Pine Mixedwood

G017Tt/TI - Very Shallow, Dry to Fresh: Oak Hardwood

G018Tt/TI - Very Shallow, Dry to Fresh: Maple Hardwood

G155N - Active Limnetic Mineral

G158Tt - Acidic Treed Cliff

G164TI - Rock Barren

G005X - Active Mineral Shoreline

Fish Habitat

Type 1 (Critical)

Aquatic Vegetation

Complex Features

Lake Trout Spawning (Potential)

Type 2 (Important)

General Shoreline Habitat

Endangered and Threatened Species Habitat

Barn Swallow Structure

Orthorectified aerial photo - spring 2008

Scale	RS Project No.	Date Last Updated	By
1:6,500	2017-088	Oct 20, 2017	AS

075150 Metres

RIVERSTONE

**Figure 3. Biophysical Features and Functions. Langmaid's Island, Geographic Township of McLean, Township of Lake of Bays. Part Lot 24, Concession 1, and Seagull Island, Geographic Township of Brunel, Town of Huntsville.**

**Prepared for: Langmaid's Island Corp.**

**Disclaimers:**

- the scale text on this figure (e.g., 1:1000) is based on a 11x17" print. If this figure has been printed on a different page size, then only the scale bar is accurate.
- figure should not be used in place of a professional survey



## Comments on EIS Inventories

### 1. Terrain, Drainage and Soils

The EIS includes only a general description of drainage and soils based on walking the Island and concludes that the soil depths are minimal to zero. There are no wetlands interior to the shoreline of the Island. Terrain and topography are described as very steeply sloping (almost vertical) in places. A vertical terrain model (slope %) is presented in Figure 2 of the EIS. The slope intervals selected to display could have been more informative. The lowest slope class shown is <20%, so one cannot determine if there are any lower gradients (i.e. <10%) or flat areas on the Island that would be most suitable for development. Figure 2 shows only that the shoreline areas are less than 20%. In my experience, slopes in the order of 20% are limiting. A revision to this figure to show areas less than 10% would be useful in identifying if there are better areas within the <20% category where development might be focused.

The reports in support of the proposal assume that slopes up to 30% (MHBC, p.6) are developable. This conclusion causes concerns with construction feasibility (septic and mantle) and access after occupancy (i.e. climbing up a 15-metre elevation/30% slope to get to the dwelling from the shore for every trip/bag over a lifetime). Some detail is provided for several lots, but not all and there is no overall picture of the proposal and analysis of its implications.

It is clear from the EIS and the Tatham Functional Servicing Report that slope and soil depths are important limiting factors on the Island and that they are a major input in assessing feasibility and impacts. In neither report is a suitable detailed soil topography inventory/assessment available to determine feasibility and impacts at a lot level, only generalizations are presented.

### 2. Ecological Communities

The ecological communities (see Figure 3 on a previous page) on the Island were described using the acceptable ELC manual for the region and are shown in large part as "Very Shallow" "Rock Barren" or "Treed Cliff" save for three areas of somewhat deeper loam soils and a small shallow water limnetic community. The deeper soils are limited to the immediate shoreline areas.

The general description of the communities is acceptable. However, there is no full botanical list limiting interpretation of the data and quality of the communities (i.e. % native/non-native) so that any analysis of the values is constrained. It would be desirable to have that information, preferably by major community types. This would assist in identifying the preferred communities for development or preservation. If the preservation objectives are to be met, I would like to know that the appropriate communities are reserved.

### 3. Wildlife

#### a. Breeding Birds

The breeding bird surveys on the Island used a method (Ontario Breeding Bird Atlas) that is unusual for this situation as it is based on point counts at fixed locations. The EIS report does not contain the

necessary information on locations to assess its validity. I certainly prefer a traverse of all habitats with records maintained by habitat type. The data on these OBBA stations, particularly locations, is not presented nor is the species list for the Island.

It is general for such EIS reports to include species lists for occurrences so that a complete picture can be obtained, and impacts assessed (i.e. do any species require minimum areas or forest interior habitat/will the proposal remove/alter critical habitat for any of the species), rather than only including the summary comments such as in this EIS.

This is particularly limiting for breeding birds where only 28 species were recorded, but all the 28 are not identified. Breeding birds are a useful indicator of habitat quality. In this case with the size and diversity of habitats, 28 total species seems a low number indicating a possible issue with the inventory. I would expect that the total number of breeding birds would be 50-60 species for a property of this size and diversity. Without more detail, I cannot assess the value of this inventory and the implications for impacts.

#### **b. Turtles and Other Flora and Fauna**

No turtles were observed during field visits and this result appears questionable to me.

In the EIS, there is no inventory/comment on snakes and amphibians. I would have expected some activity on the Island for these groups.

The ANSI report also identifies mammals (other than deer), butterflies, dragonflies and mushrooms as being present and contributing to the diversity of the Island. There is no inventory or comment on these groups.

#### **4. Fish and Fish Habitat**

I have reviewed the aquatics sections of the EIS – an area in which I am a generalist and not a specialist. My client had Hutchinson Environmental Sciences review the EIS. They concluded that it was generally satisfactory in terms of process but did not visit the site.

Letters such as the Pollen letter (previously identified) question the accuracy of the aquatic inventory.

#### **5. Habitat of Endangered and Threatened Species**

The EIS uses field observations and a desktop screening to identify species and habitat suitable for SAR species with three identified – Barn Swallow (observed), Little Brown Bat (potential), Northern Long-eared Bat (potential).

Registration and habitat replacement is recommended for the Barn Swallow and this is acceptable. A limitation on site clearing during a critical period is recommended for the bats. This would not meet requirements if they are present. It would be helpful to have at least a preliminary field assessment (acoustic survey) of the presence of the bats to determine the degree of limitation they pose.



The two species of bats would be protected by Section 2.1.7 and 2.1.8 of the PPS as well as the Endangered Species Act. The studies are not sufficient to demonstrate that the standards can be met.

## **6. Significant Wildlife Habitat**

### **a. Seasonal Concentration Areas of Animals**

The EIS concludes that the Island is not a “deer wintering area”. MNRF should be asked to confirm this conclusion as deer are reported on the Island. I understand that a further submission is being prepared by RiverStone so this issue is not settled.

Studies of bat maternal colonies for non-listed species is proposed, treatment would be similar to the Endangered Species. Also, similarly, it would be desirable to have more site-specific assessment information. There is not sufficient information to conclude that the proposal is consistent with the PPS Section 2.1.5 d).

### **b. Rare Vegetation Communities**

Cliff and Talus and Rock Barren ELC communities are identified and proposed for protective designations.

### **c. Habitat for Species of Conservation Concern**

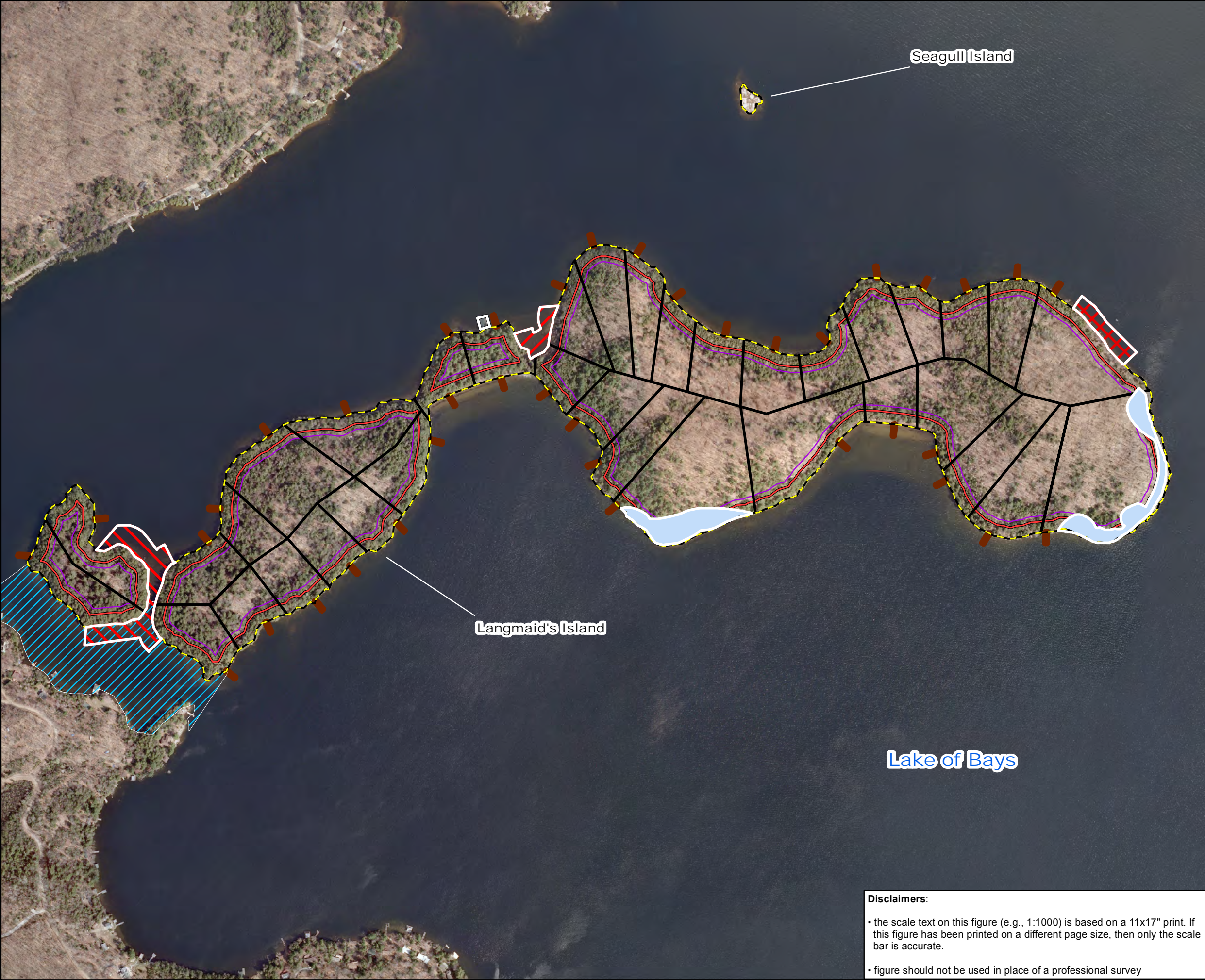
White-fringed Sedge (Special Concern) is identified in a Rock Barren Community that is to be protected.

## **7. Muskoka Heritage Area**

The EIS recognizes the Muskoka Heritage Area designations but does not appear to inventory or address several of the values noted above in the OP description of Langmaid's Island, particularly “Significant Forest” and “diversity of habitats”. These flow from the MNR ANSI inventory program that identified the Island as a Candidate ANSI. Neither the EIS or the Planning Justification Report seem to recognize the ANSI status and the criteria used in its identification – diversity and condition particularly.

The EIS concludes the inventory section with a Figure 4, included on the following page, showing the constrained areas and proposed lots. In my opinion this does not represent the extent of values for which the Island was identified for preservation.





### Legend

**Planning Boundaries**

Subject Property

**Features with Recognized High Natural Heritage Value - Identified by RiverStone**

**Endangered or Threatened Species at Risk Habitat**

Barn Swallow Habitat (boathouse)

**Candidate Significant Wildlife Habitat**

Rock Barren and Cliff Ecosites

**Type 1 Fish Habitat**

Aquatic Vegetation

Complex Features

Lake Trout Spawning (Potential)

**Development Setbacks Required by Relevant Approval Authorities**

20m Development Setback

30m Septic Setback

Narrow Waterbody Policy Area

**Proposed Development and Site Alteration**

Proposed Lots

Docks

**Measures Recommended by RiverStone to Prevent and/or Reduce Impacts**

Area to Exclude from Development

Orthorectified aerial photo - spring 2008

Scale	RS Project No.	Date Last Updated	By
1:6,500	2017-088	Dec 7, 2017	AS

0 50 100 150 Metres

**Figure 4. Proposed Development and Environmental Constraints.**  
 Langmaid's Island, Geographic Township of McLean, Township of Lake of Bays.  
 Part Lot 24, Concession 1, and Seagull Island, Geographic Township of Brunel, Town of Huntsville.

**Prepared for: Langmaid's Island Corp.**

**Disclaimers:**

- the scale text on this figure (e.g., 1:1000) is based on a 11x17" print. If this figure has been printed on a different page size, then only the scale bar is accurate.
- figure should not be used in place of a professional survey



It is my first major conclusion that the RiverStone EIS Figure 4 shown on the previous page does not contain a complete analysis of the environmental constraints necessary to satisfy the policies of the planning documents, specifically D.99, as it does not fully reflect the “values” to be protected, including:

- regionally significant forest: there is no identification/consideration of the Island forest (regional or local) in the EIS;
- diversity/quality of features: there is no analysis/criteria identifying communities to be protected as undisturbed to maintain diversity and the functioning and quality of the overall Island ecology. Various groups of biota noted in the ANSI description are not inventoried or assessed.
- high undisturbed natural value: there is no analysis of the scenic values and (ultimately) only limited protection provided to steep slopes and some shoreline without consideration of viewsheds and visibility including the alterations to vegetation that will occur because of the development proposal.

For these reasons, I conclude that the EIS (January 2018) is deficient as it does not address the issues as required by policy.

I note that the MHBC Planning Justification Report relies on the RiverStone EIS and is similarly prejudiced.

## 4.0 Review and Analysis of Proposals

Despite the deficiencies, I will still review the proposal and the policies to comment further on the development. The basics of the proposal have been described earlier – 36 lots (38 dwellings) and two shore access points in Huntsville.

I have reviewed the two shoreline access parcels from an environmental planning perspective and the analysis seems generally acceptable. The proposed uses should be tested against compatibility with the adjoining lots. The complications of this overall proposal with two access points and a shuttle service illustrates problems in providing access to service the scale of the proposal.

To start the review of the Island proposal, I note that the Planning Justification Report (MHBC) depends upon the EIS and its conclusions on environmental impact:

As noted above, RiverStone completed a detailed EIS of the Island. Based on the EIS, certain values identified in the original "Muskoka Heritage Areas" Report (1993) do not exist on the Island, specifically:

- Langmaid's Island is not a regionally significant forest;
- Langmaid's Island does not support a deer wintering area;
- Langmaid's Island does support potential Lake Trout spawning locations in certain areas which can be protected from shoreline development without the need to prohibit all shoreline areas of the Island from development.

I can find no mention of "Regionally Significant Forest" in the EIS nor can I find an analysis of "diversity of habitats" or of "undisturbed visual resources" in the EIS.

The EIS and Planning Justification Report proceed into the applicant's proposal without addressing the required justification:

*D.100 Where it is not feasible to preserve the whole island in its natural state, protection of important areas and features of the island that have been identified through impact assessment will be accomplished by:*

- a) dedication or purchase of the land in favour of the Township, or other appropriate organization; or*
- b) establishment of a conservation easement; or*
- c) private land stewardship; and*
- d) zoning, together with site plan or other agreements or the Development Permit System.*

There is no documentation that preservation of the whole Island is not feasible. The four items above are intended to suggest means for protecting areas should some development be contemplated, but

do not imply that the “whole Island” is available. Sections D98 and D99 provide direction on that consideration.

There are four points that I wish to comment on in the proposal and analysis of it from an environmental planning perspective.

#### 4.1 *Extent of the Proposal and Environmental Damage*

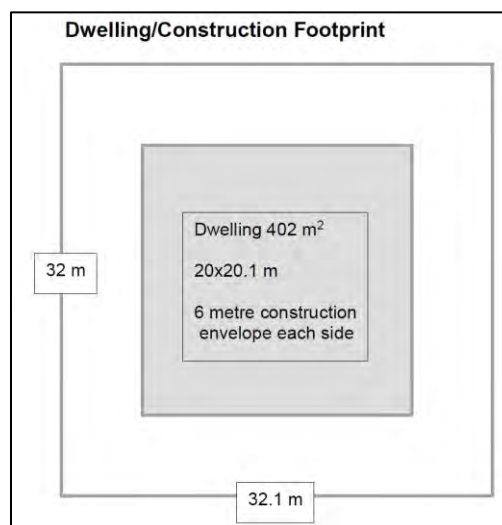
In reviewing the documents, I found an evaluation only of the lot sizes in the documents. There is no presentation of the extent of the proposal in determining the impact on the environment. The Tatham Functional Servicing Report did examine some of the lots to demonstrate how the dwellings and waste disposal would fit; however, these illustrations are incomplete and don't include all the site disturbances permitted in the By-law:

- The building footprint used is only 371 m<sup>2</sup> whereas the By-law permits 582 m<sup>2</sup>
- The Amended By-law permits 3 sleep cabins per lot – none are shown on the illustrations
- On two of the lots 2 dwellings are permitted – only one is shown

The EIS Figure 4 Proposed Development and Environmental Constraints is also incomplete as it only shows lot lines and dock placements. This clearly does not show or analyze what will go within the lots and the disturbances that will occur.

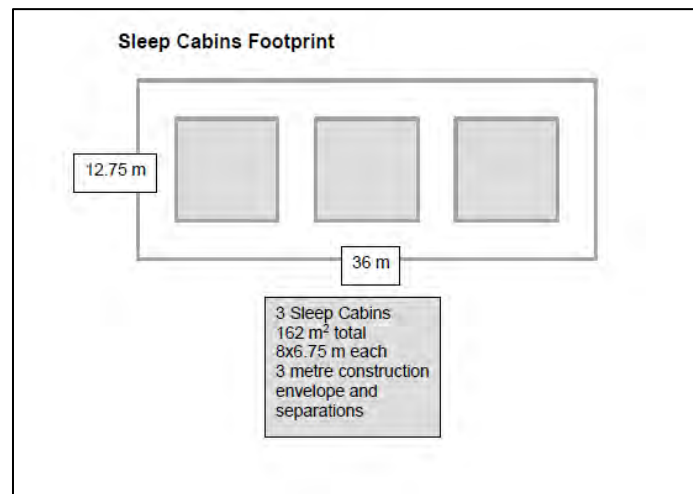
At the information meeting on May 26, 2018, an additional plan was shown that seems to show placements on all the lots, but it does not appear in the EIS and Planning Justification Reports. I will comment on what it does show later.

The criteria in the Development Permit By-law, as proposed to be amended in the MHBC PJR, are the only controls at this lot level. There are four development elements that can occur on each lot. The standards in the amended by-law allow the following, as illustrated below:



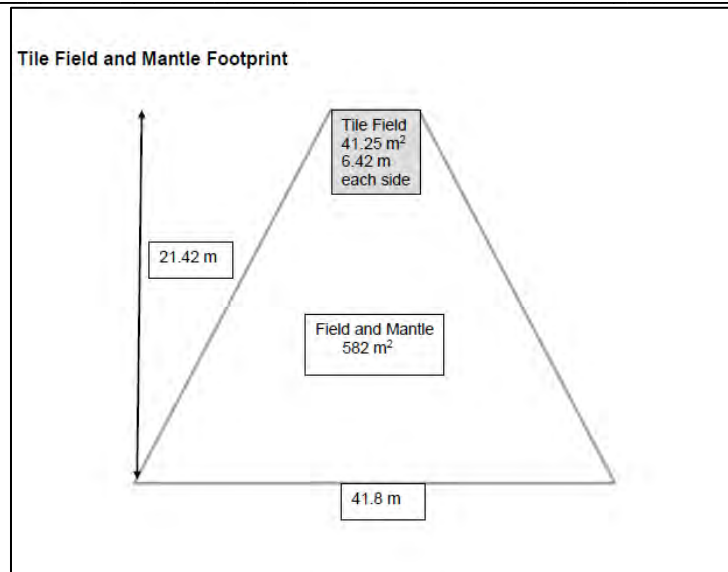
The By-law allows for a 564 m<sup>2</sup> footprint for the dwelling and sleep cabins. The Sleep cabins can total 162 m<sup>2</sup>. For the impact analysis, this creates a 402 m<sup>2</sup> dwelling footprint as illustrated. The Tatham Report assumes (and I accept) a 6-metre construction disturbance zone on all sides of the dwelling. This creates a minimum 32 x 32.1 m disturbance. To give you a scale of the dwelling, the 402 m<sup>2</sup> footprint converts to 4327 ft<sup>2</sup>. The height allowed is 8.5 m, permitting 2 above-ground floors, or a dwelling of 8654 ft<sup>2</sup> – without the sleep cabins this could be increased to a total 12,142 ft<sup>2</sup>. On two of the lots (# 18 and # 24), two dwellings would be permitted giving a possible 24,284 ft<sup>2</sup> of cottages on the lots.

The Amended By-law seeks to permit 3 sleep cabins per lot with a total of 162 m<sup>2</sup>. This equates to 54 m<sup>2</sup> (581 ft<sup>2</sup>) per cabin. For impact purposes, I assume (conservatively) that these cabins are closely clustered and require only a 3 m construction/separation zone as illustrated below:



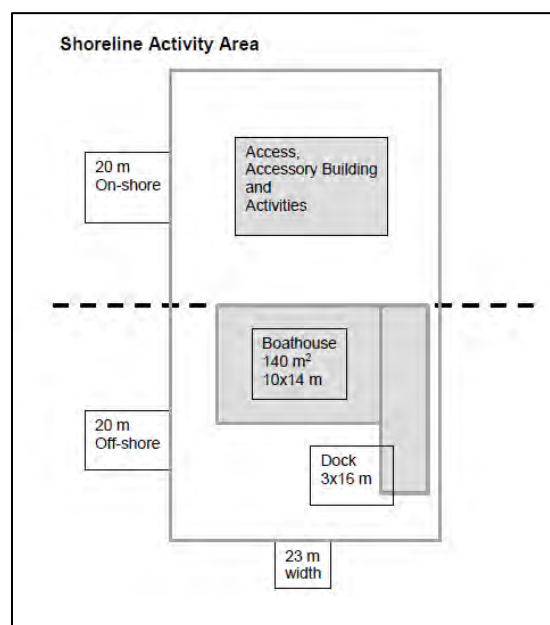
This creates a 12.75 x 30 m disturbance. It will likely be larger as bunkies typically are not so closely grouped.

The Functional Servicing Report sizes the required tile field and mantle at 582 m<sup>2</sup>. The configuration suggested in the Tatham FSR for this arrangement is shown below:



The resulting disturbance has a maximum width at the base of 41.8 m and a height of 21.42 m. This does not take into account topographic extremes. This assumes the Tatham report is accurate for each lot – an issue that should be tested in detail for each lot due to topographic differences as it will have a large influence on the footprint of development and the impacts. This does not allow for space for a secondary (back-up bed) as is frequently required. Thus, again, the disturbance will likely be much greater than either the FSR or I have shown. Also, the impacts from blasting which may be required are not considered.

The By-law protects the shoreline by permitting an activity/disturbance area of maximum width of 23 metres (25% of frontage) with shore zone and water zone depths of 20 metres either side of the shoreline.



---

A boathouse and or accessory building is permitted with no limits on docks within the Activity Area. Lot access is to occur in this Activity Area. The By-law permits a dock of 20 metres length and a boathouse of 15 metres depth – both larger in size than I have shown.

To appreciate/analyze the impact of these proposed uses, I have prepared a series of three figures that follow.

The first figure is the current undisturbed situation with one lot and these four permitted disturbances (dwelling, boathouse, sleep cabin, tile bed/mantle) shown at the current site of the historic use of the Island. This is the base case (current permitted) against which to assess impacts.

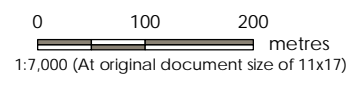
The Island is an undisturbed environment.



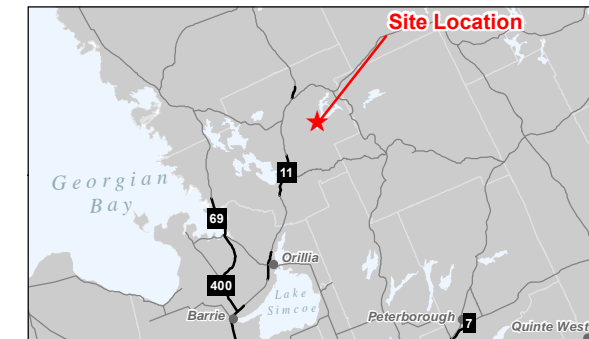


Legend

- Ground Topography (metres above mean sea level)
- Road
- Waterbody
- Existing Permission Buildings
  - Footpath/Access
  - Boathouse
  - Dock
  - Dwelling
  - Sleep Cabin
  - Tile Field



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
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Project Location  
Township of  
Lake of Bays

160961008-Langmaid's Island. REVA  
Prepared by PW on 2018-05-29

Client/Project  
LANGMAID'S ISLAND

Figure No.  
1

Title  
Site Location - Existing Permission

The second figure that follows shows the proposed 36-lot subdivision with 38 dwellings (two on Lots 18 and 24) waste disposal facilities and 36 sleep cabin and shoreline activity areas. I generally located these to illustrate the extent of disturbance and are not optimized on the lots. The extreme topography will limit the flexibility and may result in greater disturbance and fragmentation of environmental features than is shown.

Also shown are the 6 metre access paths and an overhead hydro service to the island (Tatham, p.21). I understand there may be a commitment to underwater cables, but this is not in the submissions I have reviewed nor is there any consideration of the impacts (physical/visual, etc.) of either approach to hydro service.

Generally, it was difficult to locate the dwellings outside of 20 metres but within 60 metres from the shoreline (Development Permit By-law Section 5.1.1 i) on many of the lots given the topography – so I have ignored the topography so as to portray the extent of disturbance that is permitted by the applications. Dealing with the topography issues on each lot will likely produce a greater disturbance.

There were difficulties locating the two dwellings on the Lots 18 and 24 and staying outside the very steep slope constrained areas. I note that the Tatham FSR shows an example for these lots, but only located one dwelling – an inconsistency with the amended Development Permit By-law allowing two.

Additionally, for Lots 7, 8, 10, 16, 17, 19, 25, 26, 27, 28, 32, 33, 34, and 35 I could not locate all the facilities in an unconstrained area.

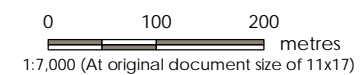
Thus, based on this preliminary layout, 16 of the lots will have difficulty supporting the development permitted on the lots outside the constraints. I conclude that a lot by lot plan needs to be prepared to properly analyze the impacts.

There are some steps that could be taken to improve the proposal like providing underwater hydro service, but this does not improve the impact of the number of lots and extent of footprints.

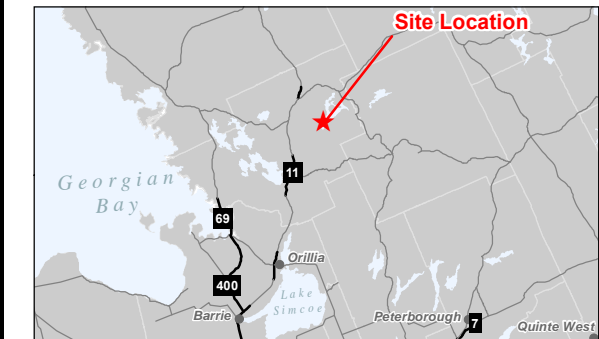




- Legend
- Proposed Lot
  - Ground Topography (metres above mean sea level)
  - Road
  - Waterbody
  - Shoreline - 20 metre Setback
- Proposed Buildings
- Footpath/Access
  - Proposed Utility Line
  - Boathouse
  - Dock
  - Dwelling
  - Sleep Cabin
  - Tile Field



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
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Township of  
Lake of Bays

160961008-Langmaid's Island. REVA  
Prepared by PW on 2018-05-29

Client/Project  
LANGMAID'S ISLAND

Figure No.  
2.0

Title  
Development Proposal

The extent of the disturbance proposed is evident. This case clearly shows the fragmentation of the Island resources.

At the information meeting on May 26, 2018 an additional plan was shown to show the “Protected Areas”.



This Plan also shows the extent of impacts that will occur even though it is based on the incomplete assumptions about lot disturbance noted earlier. Implementing such a pattern of protected areas within lots in this difficult terrain poses a significant problem in identifying limits and enforcing compliance.

I point out in the MNRF Natural Heritage Reference Manual (2010) and other MNRF guidance documents (Eco-zones of Ontario, 2012) there is an explanation of factors to use in determining significance and impacts of development on woodlands and this provides guidance to the missing analyses in the EIS. The standards suggested in the NHRM are that openings greater than 20 metres across and woodland fragments less than 40 metres in width constitute disturbance and fragmentation. An opening greater than 20 metres fragments and a treed area less than 40 metres wide is no longer a woodland. Additionally, the Island in its current condition supports areas of “forest interior habitat” (interior >100 m. from an edge) where more sensitive species are likely to be found and the quality of the woodlands higher, considered “old growth forest”. The proposal will substantially negatively alter the woodland areas by creating extensive openings, reducing woodlands to less than 40 metres and eliminating all forest interior habitat and the old growth forest.

The Protection Plan above shows impact not protection.

My conclusion is that the proposal does not meet Policies D.98 and D.99:

*Section D.98      Creation of new lots on Langmaid's Island or substantial development will be discouraged in order to retain this as a natural and undisturbed area and retain its important values. Any further development or site alteration on the island should be focused in the area, which has already been disturbed by development.*

*Section D.99      Where further development of the island is proposed beyond the existing development site, an impact assessment will be undertaken in order to better identify, locate and evaluate the values of the area, and to ensure that development can occur in a location and manner which will ensure the preservation of these values.*

Development is not “focused” on the already disturbed area and does not “ensure the preservation” of the Island’s values – forest, diversity, undisturbed environments.

As it does not meet these policies, it follows that it does not conform to the District Plan nor is it consistent with the PPS.

I have also prepared a third figure on the following page, as an example, that I feel does meet policies D.98 and D.99 by allowing development of some lots, focusing development on the disturbed area and retaining the Island’s values – particularly its forest and undisturbed ecological values.

The lots should be clustered (“focused” not scattered) in a location(s) where there would be the least impact. There was enough space available around the existing disturbance site for 6 lots. This would meet the policy on “focused” development with a minimal footprint and impact while retaining the values.

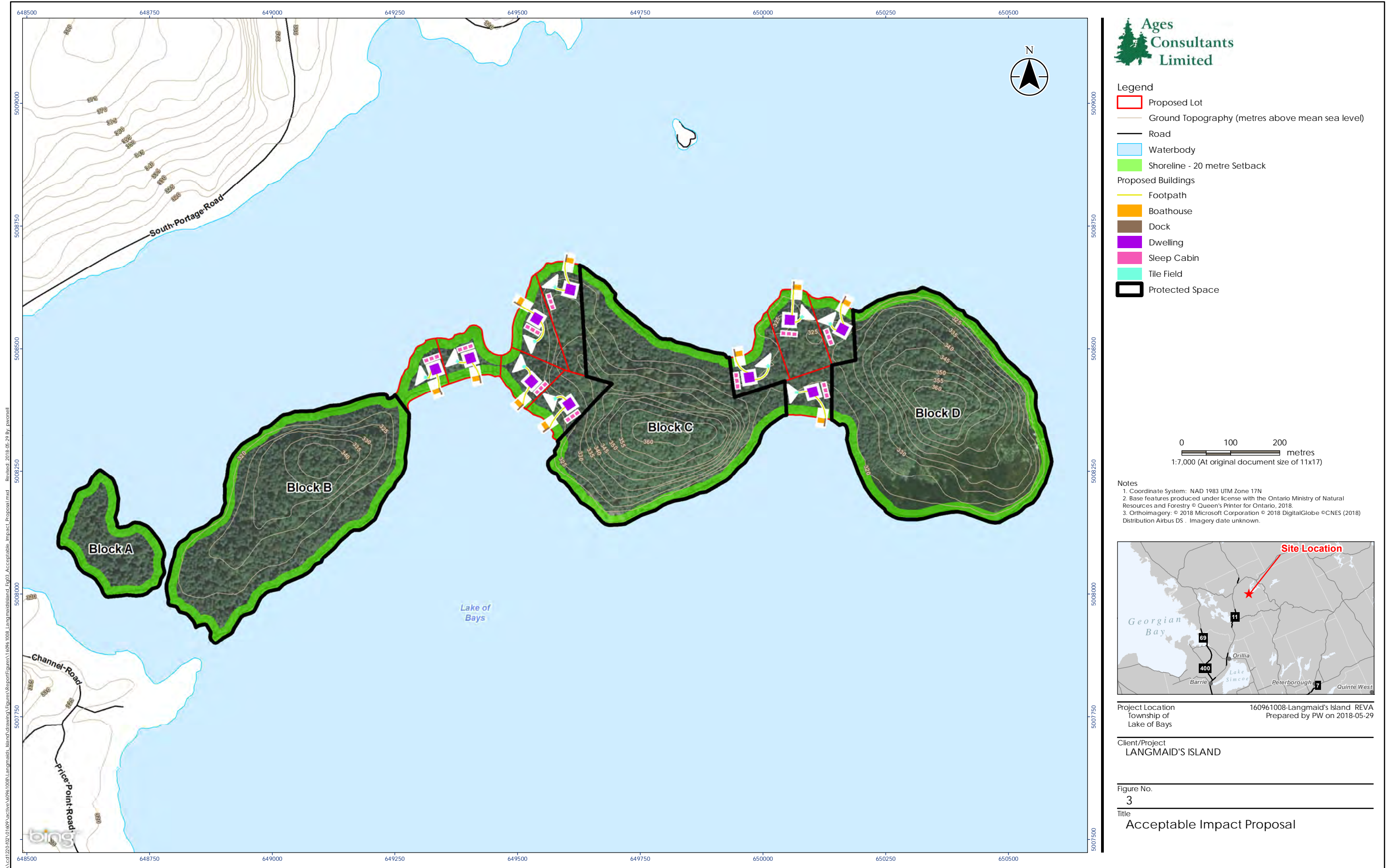
Up to a 10-lot development does not need to be supported by the extra parking and shuttle service and would need substantially less importation of materials. I identify a location where there is another low saddle where 4 lots could be added if one contemplated more development than the strict 6-lot focused existing disturbance location. This could have greater potential impacts.

Thus, up to 10 lots can be located where the topography is the lowest to the water and away from the large forested blocks where it is important to maintain interior conditions and values.

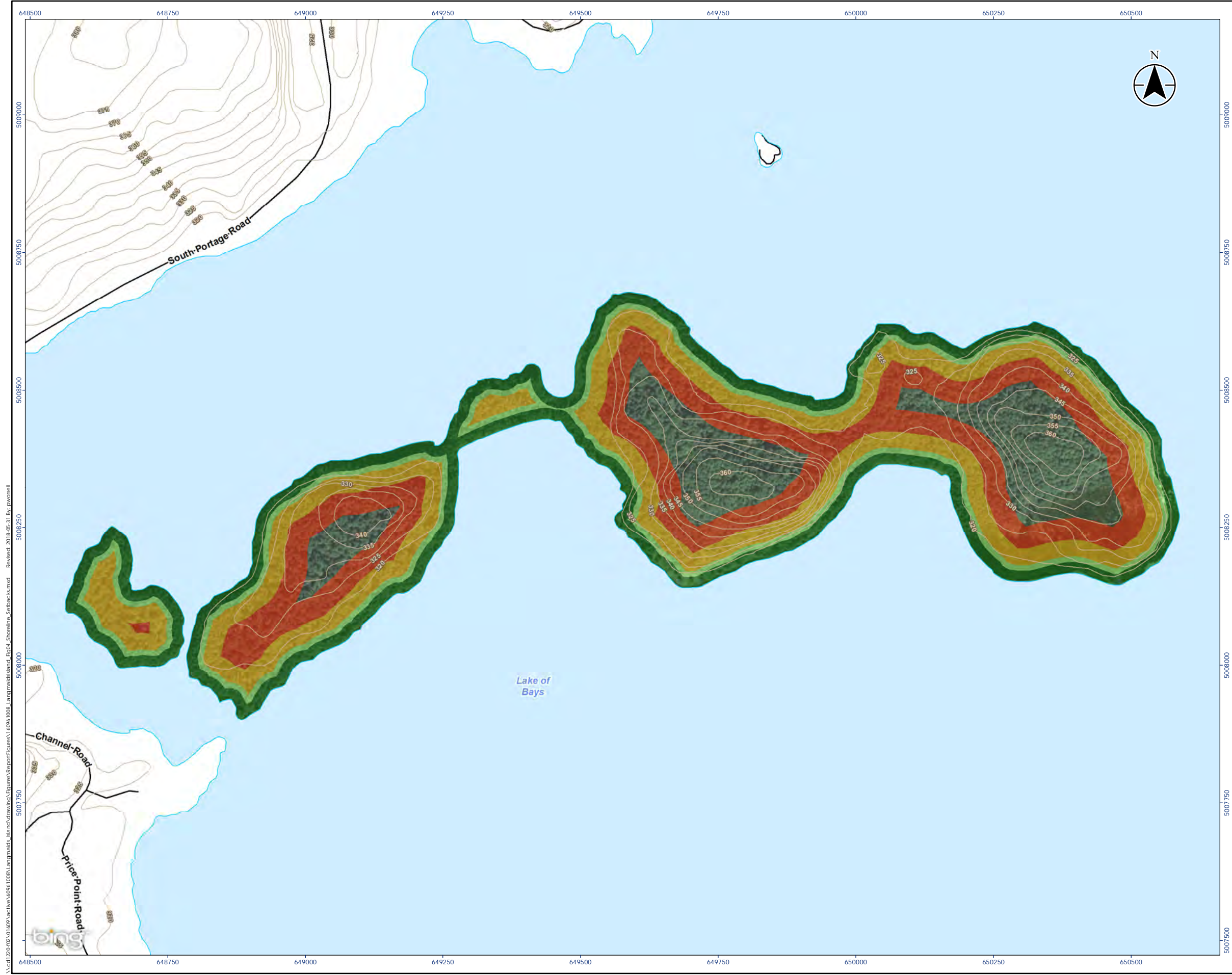
This leaves four larger undisturbed blocks with forest interior habitat while still allowing a measured development on the Island. You can also appreciate how this fits the topography rather than fighting it and that administration and protection of the separate blocks is simplified and clear.

A final figure on the second following page shows the various setbacks from the shoreline on the Island. This includes the 20, 30 and 60 metre construction setbacks and the 100 m definition of forest interior/old growth forest. There are, at present, 3 large areas of forest interior (where the trees on the aerial show through). These areas of forest interior are the undisturbed forest value of the Island. They will be lost with the development proposal, but largely retained with the acceptable plan (Figure 3).

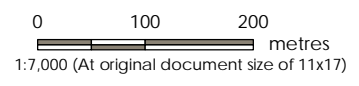




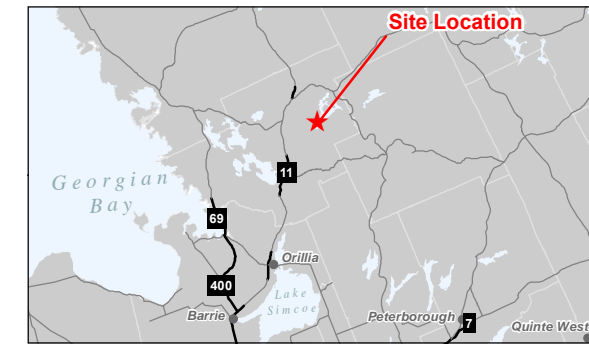




- Legend
- Ground Topography (metres above mean sea level)
  - Road
  - Waterbody
  - Shoreline Setbacks (in metres)
    - 20
    - 30
    - 60
    - 100



- Notes
- Coordinate System: NAD 1983 UTM Zone 17N
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Project Location  
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Lake of Bays

160961008-Langmaid's Island. REVA  
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Client/Project  
LANGMAID'S ISLAND

Figure No.  
4

Title  
Shoreline Setbacks

\\cd1220102\01609\active\1008\Langmaid's Island\drawing\Figures\Report\Figures\160961008\_Langmaid's Island\_Settback.kmxd Revised: 2018-05-31 By: pwcorsell

## 4.2 Inconsistent Shoreline Protection Zone and Setbacks

The Development Permit By-law reserves a 15 metre Shoreline Protection Zone that is to be left vegetated, with any dwelling located between 20 and 60 metres from the shore and a tile field and leaching bed setback 30 metres. (Section 5.1.1.i)

The EIS recommends the following to protect the environment:

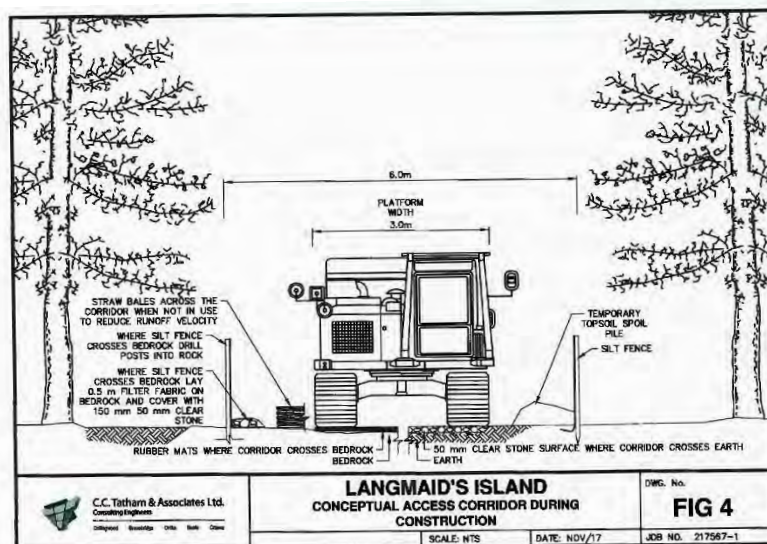
- *Vegetation within 20 m of the shoreline should be maintained in its natural state, with the exception of a pathway to the shoreline for each proposed lot. The path will have a maximum width of 2 m, meander, and be constructed of permeable substances (e.g. clean gravel, mulch), or drain away from the shoreline, where required. Trees will not be cut within the setback unless they are a safety hazard, and debris from clearing or materials to be used in construction will not be placed within the setback. (p. iii)*

In order to support the conclusions in the EIS, the Development Permit By-law should be amended to require this greater setback.

## 4.3 Inconsistent Access Corridors

There is variable treatment of the access through the Shoreline Protection Zone in the various documents.

The Functional Servicing Report shows a 6 metre corridor that will be rehabilitated to 3 metres:



Due to the shallow soils on the Island, substantial quantities of material will need to be imported and placed to provide for the access and tile field/mantle. No estimate of quantities is provided, but with



38 possible facilities it could rapidly add up to several thousand tandem truck loads. This is a concern in terms of disturbance on the Lake and on the Island. Again, an individual lot analysis should be required.

As shown in the EIS quotation above, the assumption is a 2-metre winding pathway – a slight difference.

However, the Planning Justification Report and planning applications do not seem to address the access question. The Development Permit By-law establishes only a 23-metre wide Shoreline Activity Area with no apparent limit on access and requirement for rehabilitation of disturbed areas. Site specific analyses of each lot should be prepared to define the acceptable access corridor locations and widths.

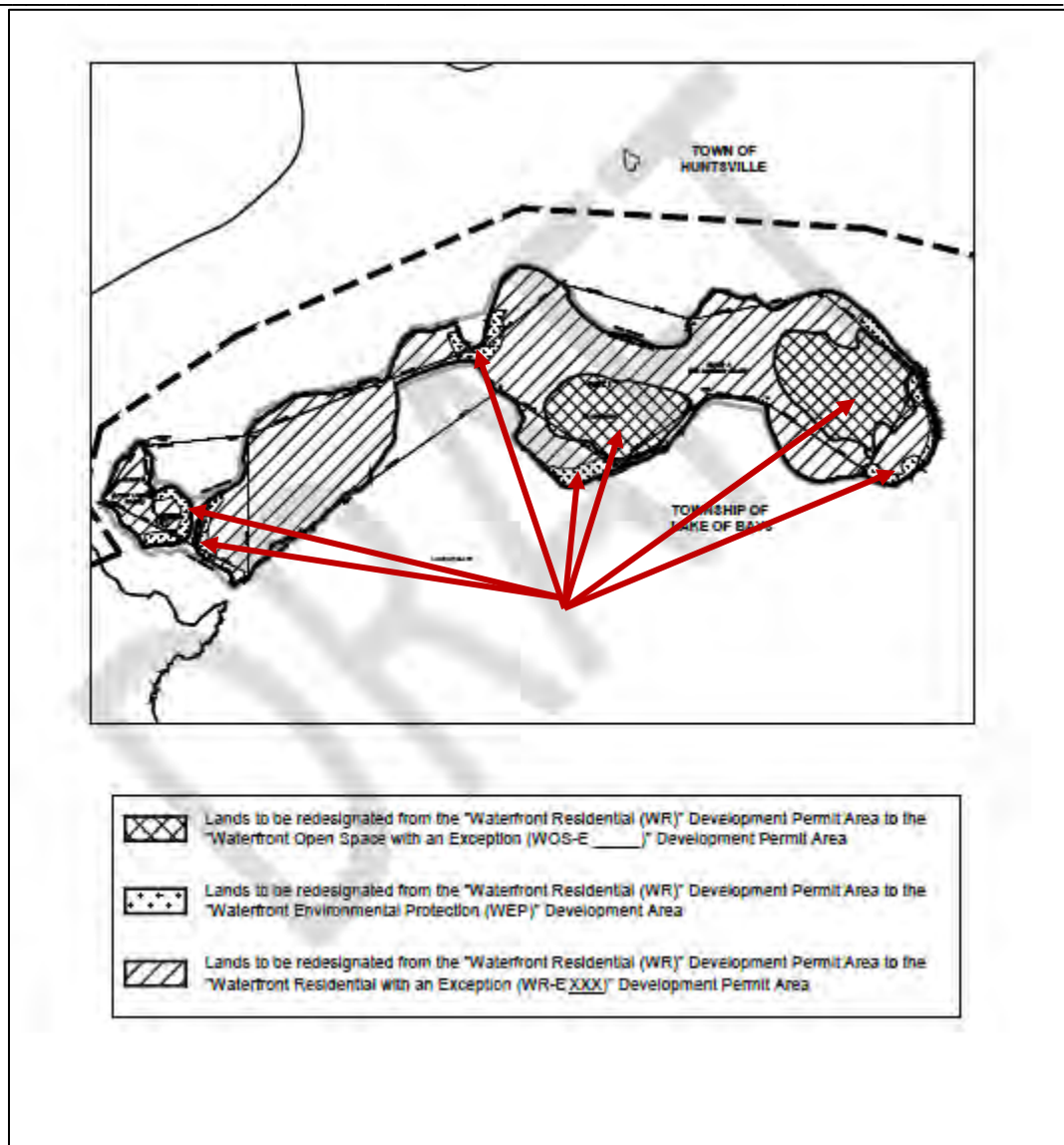
#### ***4.4 Weak Implementation***

A final concern is the proposed controls on how to implement the proposal.

The Planning Justification Report includes the following:

The subdivision would include conservation easements over the lands identified as Environmental Protection and Open Space in the draft DP By-law Amendment. The conservation easements would restrict the use of the lands to conservation and passive (un-motorized) recreation. The easements would be in favour of the Association comprised of all of the property owners. The current property owners would establish a trust account for the Association to draw upon to monitor the conservation of the lands, and in the event that action was required to enforce the conservation easement. The requirements for the Association would be included in a subdivision agreement between the Township and the Owners.

and the Schedule attached is shown on the next page.



The areas indicated by the arrows are those fragments that would have conservation easements placed on them. There are several problems with this approach to implementing protection of the Islands values.

- The areas protected by the Development Permit Areas are limited to perhaps 15-20 % of the Island in comparison to the resources of the Island. The remainder of the lands save for the Shoreline Protection Area (15 m.) are either destroyed or subject to landowner discretion and, thus, at risk.
- The protected areas will be difficult to identify on the ground and to maintain undisturbed.
- The protected areas are mixed within the lots with active uses. It is not clear that a part lot conservation easement is possible.

- 
- The proposal relies on an association of landowners to enforce protection. This is obviously weak due to potentially vested/conflicting interests.
  - There is no easy route for enforcement as the adjoining interests (i.e. Lake of Bays Heritage Foundation) are not a party or able to visit.

I am not aware of any examples of the use of conservation easements in development control in this way.

Over the past 20 years (particularly GTA/Oak Ridges Moraine), protection of environmental features within development areas has been refined to be best achieved by:

- Creating separate blocks including the features and protective buffers and dedicating the blocks to a public authority who have the resources/mandate to protect and enforce;
- Defining the limits of any lots and blocks on the ground and providing a barrier (i.e. fence) between them - otherwise trespass is common and difficult to detect.

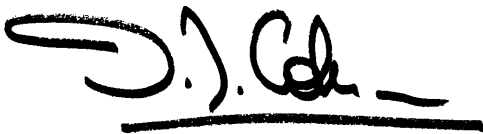
The alternative "Acceptable Proposal" I showed on my Figure 3 could meet these principles. It would protect about 80 – 85 % of the Island while allowing development that meets the policies, including "old growth forest". The four blocks could be transferred to a body with an interest in conservation and assuming that it is a registered land trust and charity a tax receipt would be available. This would be the best approach to preserving the natural values in perpetuity.

## 5. Review Conclusions

In summary then:

1. My review of the inventories of the features and values of Langmaid's Island found that there is not sufficient information to determine environmental impacts.
2. The policies (PPS, District OP, Township) require an assessment impact on the values for which the Island was determined to be important and protected – including regionally significant woodland, diversity and undisturbed environments. These values are not properly addressed in the EIS or Planning Justification Report.
3. The documents do not provide a description of the development sufficient to analyze impacts. More detail is necessary on a lot by lot basis. As a result, the proposal does not conform to the Township of Lake of Bays documents or District Official Plan nor is it consistent with the Provincial Policy Statement (2014).
4. The proposed implementing by-law and mechanisms (limited zoning, conservation easements) are unlikely to be effective in protecting natural values. I include an example of a development concept that does meet the planning policies and will be effective in protecting the environment.

In conclusion, I recommend that the proposal be refused and returned for refinement as indicated.

A handwritten signature in black ink, appearing to read 'D.J. Coleman', with a horizontal line underneath.

Derek J. Coleman, PhD., MCIP, RPP

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## Appendices

Langmaid's Island, Candidate ANSI Description.  
Pollen Letter

## LANGMAID'S ISLAND

UTM Ref. 17TPA498082

McLean Township, Lake of Bays  
Status: Recommend Heritage Area

Area: 55 ha

### *Site Characteristics*

This island is situated just off the mainland north of Baysville in Lake of Bays. The narrow island is formed by three large hills which rise up to 50 metres above the elevation of the water (315m ASL). The geology is mainly bedrock-drift complex, with deeper soils on the slopes and lowlands supporting early successional White Birch-Trembling Aspen deciduous forests and late successional Sugar Maple-Yellow Birch-Eastern Hemlock mixed forests. The two highest peaks are of exposed bedrock outcrops with very thin soils supporting semi-open Red Oak-White Pine-White Ash treed woodland barrens. Exposed cliffs on the south side of the island are sparsely vegetated with an open graninoid and low shrub assemblage consisting of some uncommon plant species.

The undeveloped rocky shoreline is mainly coniferous fringe forest dominated by Eastern Hemlock and Eastern White Cedar with some areas of White Spruce, and White Pine on the more exposed slopes. Two long sandy beaches are present in isolated bays along the southern shoreline, while one small marshland occupies a tiny, protected bay along the northern shore at the narrowest point of the island.

Between Langmaid's Island and Joli Point of the mainland is a small rocky island, Seagull Island, which was included as part of this site because of the presence of nesting Canada Geese (considered regionally uncommon) and its function as a Herring Gull loafing area.

### *Flora and Fauna*

Total numbers of species recorded were:

Vascular Plants	134 native; 3 introduced
Birds	28 observed during the breeding season
Mammals	3
Herpetofauna	4
Butterflies	1
Dragonflies	4
Mushrooms	14

### *Significant Natural Values and Selection Criteria Met*

1. **Diversity - (B2)** For an island of its size, Langmaid's Island supports a diversity of habitats, including coniferous fringe forest, early successional deciduous forests, late successional mixed forests, rocky shorelines, sandy beach, marshland, steep rocky ridge exposed cliff faces and semi-open treed barrens.

2. **Quality and Disturbance - (B3)** The island contains biotic communities showing little recent disturbance. In particular, it supports long stretches of undeveloped shoreline and natural beaches on a lake otherwise heavily developed for recreational property.

The successional sequence following a natural disturbance (70-80 years ago) by fire on the eastern section of the island is of interest to compare with the late successional (120-140 year old) forests on the western section of the island.

The use of this island by Fisher (reported by Towle, 1989) would attest to its quality of forested communities and lack of disturbance. The island was evaluated by Brunton (1991 b) as a regionally significant forest and recommended as a candidate ANSI.

**3. Fish and Wildlife Concentrations** - (B5) Langmaid's Island supports a deer wintering area as well as potential Lake Trout spawning school. The proximity of the island to the mainland allows for a wildlife migration opportunity for many species.

**4. Scenic Landscapes** - (C7) Seagull Island was identified as having high scenic value. In addition, the view from the summit of the hills on Longmaid's Island provide a commanding and highly scenic vista of the Lake of Bays.

#### *Ownership and Disturbance*

The island is privately owned by one individual who wishes to maintain the island in a natural state. Development of the island is restricted to a cluster of buildings on the small peninsula separating the western and eastern island sections and a limited network of paths. The sandy beaches are frequented by boaters who stop to picnic and swim. While some disturbance to the adjoining forests is occurring, the beaches remain relatively clean.

Natural disturbances to the island show evidence of a fire on the eastern section in the past. There were old burned stumps in the understory of the early successional forest dominated by White Birch with Trembling Aspen and Eastern White Cedar.

#### *Sensitivity*

The sensitivity of this site is related to natural quality of this forested island as wildlife habitat and undisturbed shoreline. Private land stewardship with the landowner should go far to ensure its continued protection. Posting of the island as private conservation area may help to limit unregulated uses.

#### *Major Sources of Information*

Bergsma, et al., 1993; Brunton, 1991b; District Municipality of Muskoka, 1985 Sensitive Areas Schedules; OMNR, 1989 Deer Mapping; Reid, & Berney, 1993; Towle, 1989.

Melissa Halford  
The District Municipality of Muskoka  
70 Pine Street, Bracebridge, ON, P1L 1N3

March 19, 2018

Ms Halford:

Re: Langmaid's Island Development Proposal  
Application File Number Subdivision File No. S2018-1 (Langmaids Island Corp.)

This response is being submitted on behalf of Carol Pollen (owner) and her family at 1016 Channel Road on Lake of Bays. The cottage is located in the middle of what is referred to in the various planning assessment and proposal documents as "the Narrows". It is a multi-generational family cottage, which has provided years of experiencing "living in the Narrows" as well as around Langmaid's Island.

The focus of our concerns center on the scale of the proposal and the cumulative impact on the water quality, environment and overall character of the island and the role it plays in the surrounding area and more broadly within the lake and the Township. These concerns are outlined below.

### **1. Significant Heritage Area**

The Township of Lake of Bays Official Plans identifies the entire island as a Significant Heritage Area on Schedule C and includes a number of policies that apply to it.

Policy D.96 specifically recognizes the Island (together with Seagull Island) as being identified as a heritage area of **regional significance** (emphasis added) because it "supports a diversity of habitats including various forest types, rocky shorelines, sandy beach, marshland, steep rock ridges, exposed cliff faces and semi open treed barrens."

Indeed, it is one of only 3 Significant Heritage Areas in the entire Township and the only one comprised of an island. The Plan recognizes that the landscape, shoreline and biotic communities show little recent disturbance and this is clearly why it was recognized to be of such importance that it was designated a Significant Heritage Area.

Clearly, anyone familiar with travelling to the western end of the lake can testify to the unspoiled beauty of the island and the value it therefore plays in displaying the stunning vistas and character of the majestic Lake of Bays – one of central Ontario's most pre-eminent and storied lakes.



In recognition of the above, Policy D.98 therefore specifically states that the creation of new lots on Langmaid's Island or substantial development will be discouraged in order to retain this as a natural and undisturbed area and retain its important values. Any further development or site alteration should therefore be focused in the area which has already been disturbed by development.

So, while the Plan goes on to state that where "further development is ***proposed***", an impact assessment will be undertaken in order to better identify, locate and evaluate the values of the area, and to ***ensure that development*** can occur in a location and manner ***which will ensure the preservation of these values***" (emphases added).

As such, it is all the individual as well as the totality of values described in Policy D.96 which are to be preserved as these are the values that gave rise to the Significant Heritage Area designation to begin with. Further, given the increasing impacts of ongoing development on the lake, this crown jewel needs to be considered in that context. The Plan does not provide a right to develop – it recognizes that it could be proposed. Accordingly, while we are not seeking to restrict any development on the island, the above is clearly the fundamental starting point for assessment of this proposal.

To that end, we reiterate our overarching concern that the scale and cumulative impact of the proposed development will not ensure retention of the values which gave rise to Langmaid's Island being recognized as such a unique landscape within the Lake of Bays Official Plan.

Further, we do not feel that the proponent has provided a sufficiently comprehensive recognition and protection of those values as will be discussed below along with other more detailed concerns.

## **2. Fish Habitat:**

As identified in the Environmental Impact Study (EIS) by RiverStone Environmental Solutions Inc, there are 3 shoreline areas which have been classified as Type 1 Fish Habitat (Fig 3 & 4) and, as such, are "highly sensitive to development or have a critical role in sustaining fisheries" (p. II).

With respect to the identification of these 3 areas, the Study states that it was based on "restricted fish habitat field documentation". It is not clear why the field documentation was completed "on a restricted documentation basis" or why this restricted documentation would be accepted. Further, the 3 areas are clearly "squared off" which reflects an artificial and arbitrary approach since nature does not function that way. Moreover, it appears as if this "squaring off" was specifically intended to facilitate accesses for Lots 1, 2, 14, 36 and 25. It also appears that Schedule C of the Town's Official Plan shows there is an additional area of Type 1 Fish Habitat adjacent to Lots 4, 5, 6 and 7 and yet it does not show up in the RiverStone EIS report.

In addition, we are concerned with the density of the proposed lots in these areas, namely Lots 1, 2, 3 and 12 which surround the area involving Little Langmaid's Island and the Narrows as well as Lots 14, 15 & 36. Having paddled around the island extensively, we are very familiar with these habitat areas and know the extent of the tree deadheads/debris and boulders in the water off the shorelines of these areas. The concern with Lots 14, 15 & 36 is they sandwich the protected area with dock access in a bay where the extent of the submerged wood debris extends well past where the report "squares or cuts off" the Type 1 fish habitat area. The vast majority of the shoreline of Lot 25 has been identified as a Type 1 fish habitat area, yet the artificial rectangular shape conveniently allows dock access.

Finally, Lots 1, 2, 3 and 12 surround the largest Type 1 Fish Habitat area, encompassing an area larger than the combined space of the 2 other Type 1 habitats. Also knowing this area extremely well, the area of submerged tree deadhead/wood debris and boulders is extensive and covers the majority of the shoreline of Langmaid's and Little Langmaid's Islands throughout the entire length of the Narrows. As such, we have significant questions about how the extent of all three Type 1 Fish Habitat areas was determined and delineated.

Last, beyond the Type 1 habitats, the Township's Official Plan identifies virtually the entire shoreline of Lake of Bays as Type 2 Fish Habitat – with the notable exception of Langmaid's Island and a small stretch of shoreline to the southwest of it. This seems inexplicable. Moreover, the Official Plan identifies Fish Habitat as being both Types 1 and 2 and Policy D.116 states "fish habitat **will be** protected in order to **ensure** long-range health of fisheries resources (**emphases added**). It does not say only Type 1. The report does not identify any Type 2 Fish Habitat or speak to it in any fashion. This is a clear omission and needs to be rectified.

Based on all the above, and given the scale of the project, potential impacts on the values of Langmaid's Island and the policies of both official plans, we are of the view the Township and District (whose official plan also contains fish habitat protection policies) need to request a peer review of the report along with obtaining an assessment and comments from the Ministry of Natural Resources and Forestry on this report. We would like to see those assessments to see what if any issues are identified and what if any further work should be undertaken as an addendum to the report – including further field documentation of the Types 1 and 2 habitats.

Last, we have further concern regarding the proposed division of Little Langmaid's Island into 2 lots. Having a large percentage of the shoreline designated as a Type 1 fish habitat area and with it being very low in elevation (Fig 2), we are concerned with the impact of septic effluent runoff and would strongly propose that the island be limited to the development of only 1 lot.

### **3. Slopes, Tree Cutting and Visual Impact**

It is clear that significant portions of the island have exposed cliffs, steep rock ridges and steep treed slopes. These can be easily seen as one passes by the island and particularly in around the 3 "peaks" of the 3 main domes of the eastern, middle and western parts of the island.

While the applications propose to maintain the eastern and western “peaks/domes” as Open Space, it appears these actually should be designated and zoned as Environmental Protection. Further, while the applications also propose to keep buildings and structures off slopes greater than 30%, it is apparent from various site drawings of certain lots in the Functional Servicing Report that in some cases structures seem to encroach into slopes above 30% and that accesses to both cottages and septic areas will have to traverse slopes greater than 30% (eg. see Lots 7, 8, 9, 10, 17, 18, 24, 25 and 26).

In addition, much of the island is comprised of slopes greater than 20% and many of the cottages and septic areas are proposed on such slopes. The overall steepness of most of the island creates significant challenges for development if the values of Langmaid’s Island are to be protected (eg. see lots listed above as well as some others).

Developing footprints for cottages, accesses, boat houses and septic fields will entail significant tree cutting – which is one of the Langmaid’s Island values the Township Official Plan identifies. The proponent suggests there are no “regionally significant forests” and as such essentially ignores them – despite the Significant Heritage Area policies. It is our view that the density of cottages and the resultant required tree clearing to allow for development would greatly impact the visual characteristics of the island.

Further, a slope of greater than 20% is a significant gradient such that the structures will undoubtedly reach a height taller than the trees in various and likely many instances which runs contrary to the policies of the Township Official Plan. The multitude of cottages thus rising above the canopy will again negatively impact the visual amenity of the vistas of the island which in part gave rise to it being identified a Significant Heritage Area.

To this end, it appears as though there are no restrictions or limitations on the amount of overall disturbed area – which could greatly exceed the cottage, septic and access footprints – and which would entail further tree cutting.

There also does not seem to be any restriction or limitation on tree cutting – which some may be inclined to do to enhance views and to create more “useable” area – given many of the cottages are set back further than 30m from the lake and in virtually all cases comprised of locations in which trees are located between the cottages and the lake.

There is no analysis of tree cutting. There should be further visual analysis required and undertaken in relation to the height impacts of development on the proposed building sites in relation to the topography and existing tree cover. This is a common type of analysis in this day and age of three dimensional GIS and computer simulations and the firms involved are sophisticated enough to produce it. This should inform the development of limitations/restrictions on the total amount of disturbed area and on the total area and location of tree cutting.

#### **4. Septic Systems**

While the Functional Servicing Report states that the type of septic systems proposed can be built on slopes equal or less than 4:1, this means a slope less than 25%. On most of the lots cited above, and likely others, the septic systems are on slopes greater than 20%. It appears, based on the lot specific drawings, some portions of the septic beds and fields are above a 25% slope. In many other cases it seems they are certainly located between 20-25% slopes thus pushing the envelope of the parameters for the siting and thus functioning of these septic systems.

Further, such slopes will entail importing significant amounts of fill to create and level the leaching beds and septic fields – which will be prone to erosion and/or require retaining structures/walls of some sort thus furthering the development footprint.

Lastly, the Report relies on only 4 soil samples in making its conclusions on the ability of the soils on the site to retain phosphorus from the septic systems – and it is noted that these all appeared to be taken from lower lying portions of the island.

At the same time, the Report identifies an average soil depth of .5 meters (about 19 inches) and reflected a range of a maximum of 1 meter and a minimum of 0 meters.

Similarly, it identifies a phosphorus retention range of 290 to 3330 ug/g for an average of 1708.

It does not appear to speak at all to the implications of the steep slopes characterizing many of the lots and the location of the septic systems on these slopes. This is important because slope can impact the speed at which effluent is detained in the soil and thus how quickly it reaches the lake. It is also directly related to the range of soil depths as steeper slopes typically have much shallower or no soils (see the 0 minimum referred to above).

Based on the variation in phosphorus retention characteristics of the soil, depth of soil and steep slopes, reliance on 4 soil samples is simply nowhere near sufficient. As well, reliance on averages is meaningless and therefore risky. It would appear appropriate and prudent to require a detailed analysis, including slope, soil depth and soil characteristics for phosphorus retention to be undertaken for each individual lot. This will inform whether those lots can sustain a septic system while meeting provincial water quality standards.

While the Report suggests this will occur at the Development Permit Stage, our view is this is far too late as the lot fabric via the plan of subdivision will have been approved by that point – which impacts the overall development proposal. This servicing is fundamental to the principle as well as the detailed design of the development sought by the proposal and needs to be proven up front.

The Township and District should require a peer review of the Functional Servicing Report by a qualified hydrogeologist and/or the Ministry of the Environment and Climate Change.

## **5. Set Backs from the Lake**

The Township's Official Plan and Development Permit By-law require a **minimum** 15 meter shoreline vegetation protection zone and a 20 meter setback for buildings and structures (excluding docks/boat houses).

It is noted that these are minimums and the proposal does not suggest that anything more is needed in any instance – despite the lack of detail and reliance on averages in the Functional Servicing Report. It appears as though the proponent has not demonstrated that the minimum is sufficient. It is noted that precedent has already been set with the development of Bigwin Island where properties have a setback of 30m (rather than 20 m). We would strongly request consideration be given to requiring the same setback for the proposed lots on Langmaid's Island and a larger (20-25 meter) vegetation zone. This additional set back and larger buffer zone would provide additional protection of the shoreline, help protect lake water quality from septic effluent and storm water run-off which will be exacerbated by the steep slopes, and offer greater protection to the vistas of the island.

## **6. Narrow Water Bodies**

Both the Township and District Official Plans have policies regarding Narrow Water Bodies, which the applicant agrees exists between the western end of the island and the mainland. More specifically, the Township Official Plan says that new lots within Narrow Water Bodies in a Significant Heritage Area should reflect exiting conditions. In this case, that would mean no new lots.

Having substantial personal experience in the Narrows, we are intimately familiar with the boat traffic in both high and low boating usage times. The Boating Impact Assessment (BIA) by Michalski Nielsen Associates Ltd stated that the proposed plan did not "trigger" a requirement for a BIA but the owners requested one to be completed (p. 5). Since a BIA was not required, the Nielsen group extrapolated their data from other assessments completed on Lake of Bays, specifically citing the Port Cunningham Marina, Bigwin Island North Landing and the Haystack Bay Marine developments as well as referencing past projects involving Bigwin Island development which included the Norway Point shuttle service.

The report states the Narrows has a boating area of only 2.5 ha and that it "experiences periods of overcapacity at present, and will be susceptible to an increased frequency of such occurrences" (p. 13). We are in agreement with this conclusion but differ from their further comments which state use of the Narrows would experience "a small amount of traffic from boats travelling around the southwest end of Langmaids Island" and by "some fishers". They further state that most boats would tend to drive "slowly and with caution" and go on to conclude that "even this very small and restricted areas of boating is unlikely to be frequently in an overcapacity situation; however, it is certainly susceptible to an increased frequency of such occurrences with additional traffic" ( p 13).

In addition, the Planning Justification Reports states that any potential hazard impact is mitigated by the proposed setbacks of the cottages and that no lots have amenity areas within a Narrow Water Body. Building setbacks have no bearing on hazards in the channel. It is people swimming, fishing and/or boating/skiing from the amenity that are subject to hazard. The report is silent on the potential hazard posed by and to the amenity areas/accesses to Lots 1 and 3, which are located almost immediately around the corner of each end of the Narrows. The location of these amenity areas pose significant risks as they are “blind” – and is virtually the same as putting a driveway just over the crest of a hill – a practice that is not allowed. Our concern is the Nielson report does not accurately reflect a clear understanding of the boat traffic in the Narrows. It may well capture the September to June picture but the July and August months are very different. It will also change overall with the number of new cottages and their visitors – as it is apparent that all lots on the south side will undoubtedly use the Narrows as the most efficient route. These two lots simply do not appear to be free from hazard and actually pose hazards. Limiting development to one lot on Little Langmaid’s Island would allow the dock access to be located on the north east side (dock proposal site for Lot 2) which provides safety for cottagers and boaters. Revisiting dock access locations for Lots 3-8 would allow consideration for safety with regards to the dock access for Lot 3, which currently can only be considered a “blind corner” location.

Many boaters do drive slowly and with caution but many don’t and there are ski boats and water tubes being towed through the channel regularly. It is quite obvious to local residents that the Narrows is a destination point for many people who are touring the lake. This is supported by the fact that the Lake of Bays boat tour passes through the channel as part of its tour route. The extrapolated BIA data does not reflect this unique narrow water accurately.

The Langmaid’s Island proposal with the attached mainland boat slip/shuttle service at the Beauview Cottage location will without doubt create an “overcapacity” situation through the Narrows for the summer months. Add to that concern, the largest of the three Type 1 Fish Habitat protected areas is also in the Narrows area. It is noted that the BIA has recommended that the shuttle will be limited to a 10 mph speed while travelling through the Narrows and that appropriate signs will be posted at the two mainland parking areas for Langmaid’s residents. These accommodations fall short in addressing the main and most significant concerns we have about boat overcapacity which endangers swimmers, non-motorized watercraft, while also creating shoreline erosion and potential risk to the fish habitat area due to boat wake.

We support the speed limits and signs but would like to strongly propose that the shuttle not be allowed to use the Narrows as the travel route to the lots on south east side of the island and that the appropriate Ministry erect signs at both ends identifying the Narrows to be a “no wake” zone rather than a 10 mph speed zone.

The construction traffic and barges associated with this development are also of concern in this often “over capacity” narrow body of water which has a large Type 1 Fish Habitat. We would strongly request all related construction traffic be required to use alternate routes.

## **Other Matters**

There appears to be no discussion about the proposed/draft Area of Natural and Scientific Interest (ANSI) designation by the Ministry of Natural Resources and Forestry. The Ministry needs to be consulted and provide comments on that (and other matters eg. fisheries) identified in this letter.

There is a statement in the proposed amendment to the Township Official Plan about protecting a contiguous open space system along the length of the island – “to the greatest extent possible”. The first part of the statement is sound – however the caveat is unacceptable. It needs to be absolute and steps taken to ensure that through appropriate zoning, development permit restrictions/conditions - including the requirement for conservation easements.

The proposed amendment also speaks to re-designating lands to “Open Space – With Exceptions”. It is unclear what “With Exception” is intended to mean/allow. It appears it should be removed and the re-designation to be Environmental Protection as stated earlier.

In relation to the open space system and Open Space designation – it is noted there is no Open Space designation proposed on the westerly part of the island (Lot 10). This needs to be rectified in order to achieve a system.

Similarly, the proposed amendment speaks to a re-designation to “Environmental Protection – Development Area”. This seems like a misnomer, as this designation is not to permit any development. This should be renamed solely as Environmental Protection.

## **Conclusion**

As set out above, we have identified and hold a number of significant concerns with the proposed applications as submitted. We feel there are a number of serious and various deficiencies in the supporting studies that necessitate careful review and analysis. This includes obtaining peer reviews by qualified experts (at the expense of the proponent – in keeping with the official plans of both the District and Township). Further, there is a need for review and input by various agencies including the Ministries of Natural Resources and Forestry and Environment and Climate Change.

Langmaid’s Island is unique and an irreplaceable gem in Lake of Bays. The Significant Heritage Area designation is reflective of that and the views of citizens who supported it and elected representatives who put the designation and policies in place in the first instance.

While development is inevitable given the decisions/inability of the Lake of Bays Heritage Foundation and the Township to secure it as a public resource, any proposal, in keeping with the Township’s Official Plan, needs to ensure its values are protected. This includes the overall value for the sum of the parts is greater than the whole and the proposal attempts to take an



incremental approach to ticking off the boxes – many incompletely (eg. fisheries, boat traffic) while ignoring others (vistas, trees). There is no discussion about cumulative impacts on the values and character of Langmaid's Island.

It is our view that a number of the lots are not suitable for development and that there has not been sufficient analysis and justification for those and others. We have asked for pragmatic steps to have other qualified experts – including Township and District staff – to assess the issues we have raised.

In closing, we feel that these further analyses (staff review, peer review, comments from agencies) need to be addressed in a subsequent staff report which is shared with the public prior to the applications moving forward in either Council. The results could inform further addendums to the studies by the proponents, reconsideration/redesign of the proposal and/or further conditions, requirements or restrictions by the municipalities. We feel it is important to share these results with the public as a next step so that we may make informed final submissions to both The District of Muskoka and the Township of Lake of Bays.

As mentioned earlier, our intent is not to try to prevent development on Langmaid's Island but rather to express our thoughts and concerns regarding the size and scope of the development and hope the planning decisions uphold the vision and values of the Significant Heritage Area designation. Examining and questioning the development proposal in its entirety at this stage in the process will be key to safeguarding these values.

On behalf of the Pollen family, I submit this response to the Langmaid's Island Development Proposal.

Sincerely,

Ed Pollen

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