

to

REPORT COA2018-013

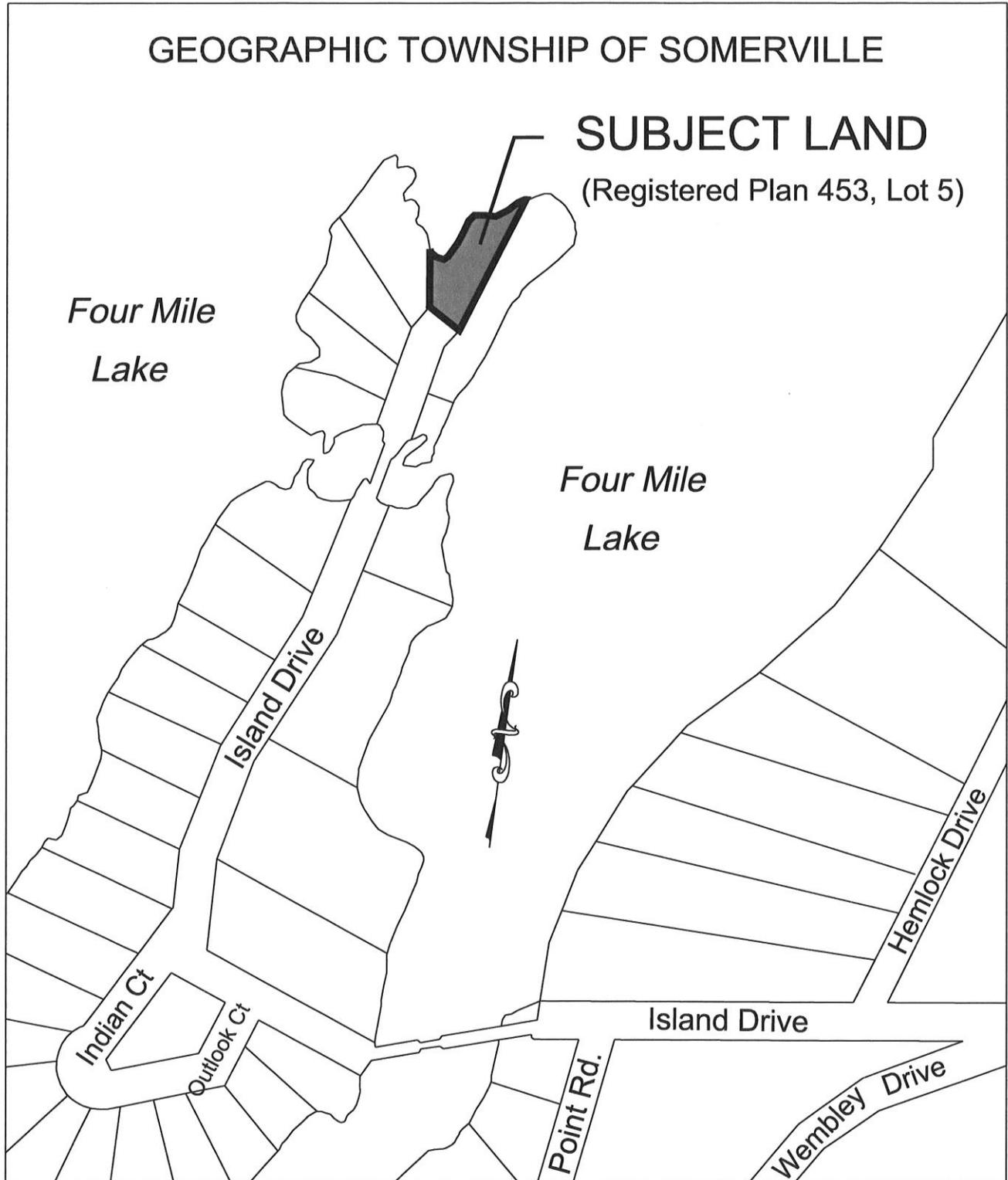
FILE NO: D20-17-049

D20-17-049

GEOGRAPHIC TOWNSHIP OF SOMERVILLE

SUBJECT LAND

(Registered Plan 453, Lot 5)



152 Island Drive, geographic Twp Somerville



0.16

Kilometers

WGS_1984_Web_Mercator_Auxiliary_Sphere
 © City Of Kawartha Lakes

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
 THIS MAP IS NOT TO BE USED FOR COMMERCIAL OR LEGAL PURPOSES



Notes

Notes

to

REPORT COA2018-013

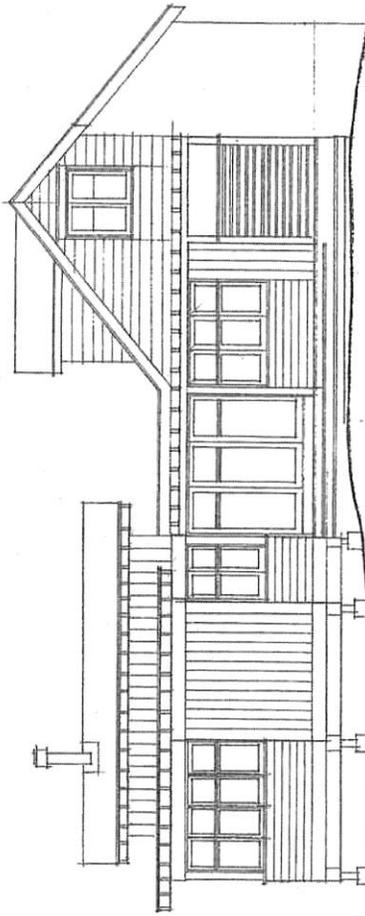
FILE NO: D20-17-049

CON 9
LOT 14

to

REPORT COA2018-013

FILE NO: D20-17-049



COOK COTTAGE ADDITION

BURNT RIVER DRIVE FOUR MILE LAKE KAWARTHA LAKES ONTARIO

CONTENTS

issued with this set

- 0.1 survey
- 0.2 site plan and information
- 1.1 foundation plan
- 1.2 first floor plan
- 1.3 second floor plan and addition roof frame
- 1.4 roof plan
- 1.5 sections
- 1.6 sections
- 1.7 construction notes
- 1.8 elevation
- 1.9 elevation
- 1.10 elevation
- 1.11 elevation
- 1.12 details
- 1.13 details
- 1.14 schedules

to

REPORT COA2018-013

FILE NO: D20-17-049

NOTES

SURVEYOR'S REAL PROPERTY REPORT
PART A

PLAN
OF

LOT 5

REGISTERED PLAN No. 453
TOWNSHIP OF SOMERVILLE
COUNTY OF VICTORIA

Scale: 1 inch = 40 Feet

0 20 40 60 80 100 Feet

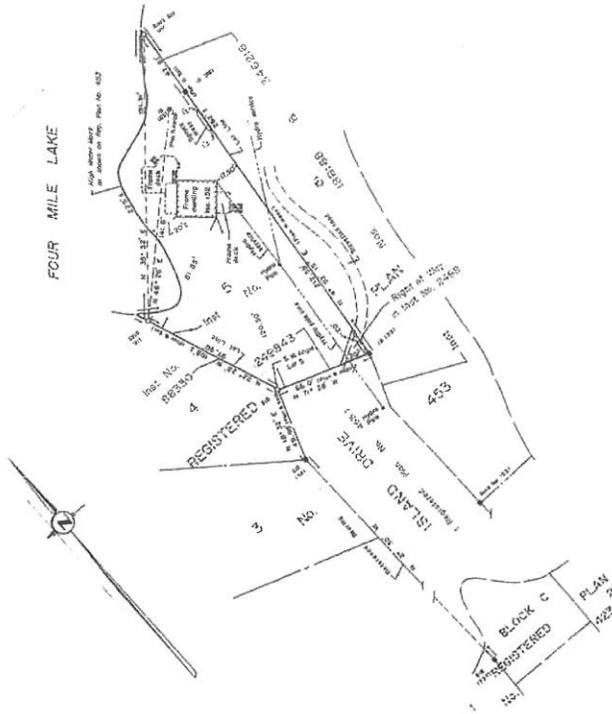
ALL DIMENSIONS SHOWN ON THIS PLAN ARE IN FEET AND CAN BE
CONVERTED TO METERS BY MULTIPLYING BY 0.3048.

THIS REPORT WAS PREPARED FOR BARBYL B. SHORT AND
JOHN R. SHORT AND THE UNDERSIGNED ACCEPTS NO
RESPONSIBILITY FOR USE BY OTHER PARTIES.

- 1 - Field Survey
- 2 - Plan Survey
- 3 - Short Survey
- 4 - Short Survey
- 5 - Short Survey
- 6 - Short Survey

Plan - Assessed Registered Plan No. 453

Surveyed by Valerie Farrell, P. Eng., on the 15th day of March, 2018, and the
said Valerie Farrell is a duly Licensed Professional Engineer, P. Eng., No. 4213.



SURVEYOR'S CERTIFICATE

I certify that:

- The survey and plan are correct and in accordance with the Survey Act and the Regulations and that the boundaries are as shown thereon.
- The survey was completed on the 15th day of March, 2018.

Valerie Farrell, P. Eng.
Professional Engineer
3000 West Beaver Creek Road
Richmond Hill, Ontario L4B 1P2
416-882-1111
vfarrell@valeriefarrell.com

E. G. GURNETT LIMITED
Ontario Land Surveyors
P. O. Box 24
1000 Highway 7
Richmond Hill, Ontario L4B 1P2
905-709-4877

THE PLAN MUST BE READ IN CONNECTION WITH SURVEY REPORT
DATED MARCH 19, 1958.

ASSOCIATION OF ONTARIO
LAND SURVEYORS
13110055



REGISTERED PROFESSIONAL ENGINEER
No. 4213

REGISTERED PROFESSIONAL ENGINEER
No. 4213

COPIES
FEM/1
revision



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Design Studio Inc
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vfarrell@valeriefarrell.com

PROJECT
COOK COTTAGE
152 ISLAND DRIVE
BURNY RIVER, ON

DRAWING
SURVEY

SCALE
AS SHOWN

DATE
April 2017

PAGE
0.1

Foundation Plan

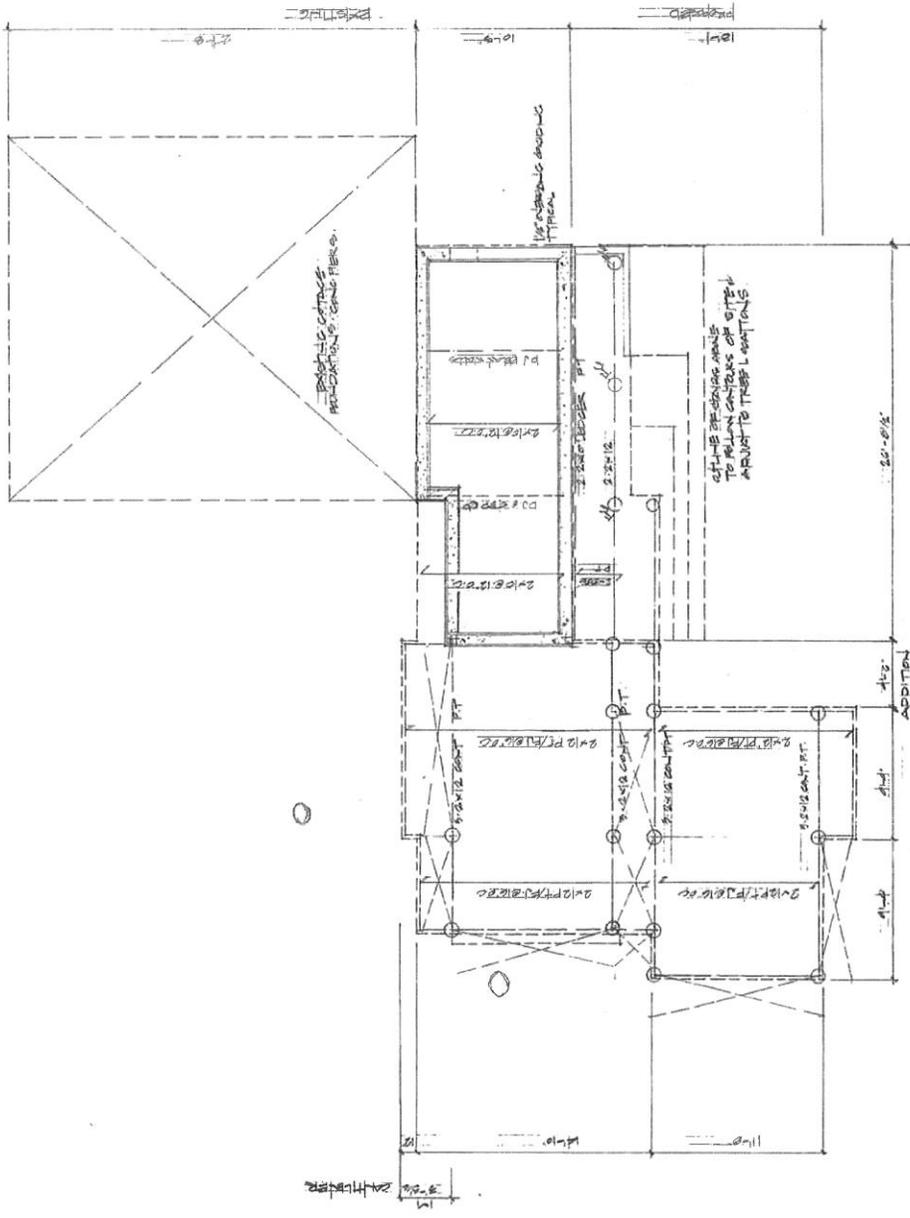
APPENDIX " D3 "

to

REPORT COA2018-013

FILE NO: D20-17-049

NOTES



REVISION	DATE	BY
1	11/17	MA/TJ



VALERIE FARRELL
 Design Studio, Inc
 276 Carlaw Ave. Studio 206
 Toronto, Ontario
 M8B 1L1
 val@valfarrell.com

PROJECT
COOK COTTAGE
 152 ISLAND DRIVE
 BURNT RIVER, ON

DRAWING
 Foundation Plan
 Prepared

SCALE
 1/4" = 1'-0"

DATE
 April 2017

PAGE
 1.1

Second Floor Plan

APPENDIX " D5 "

to

REPORT COA2018-013

FILE NO: D20-17-049

NOTES

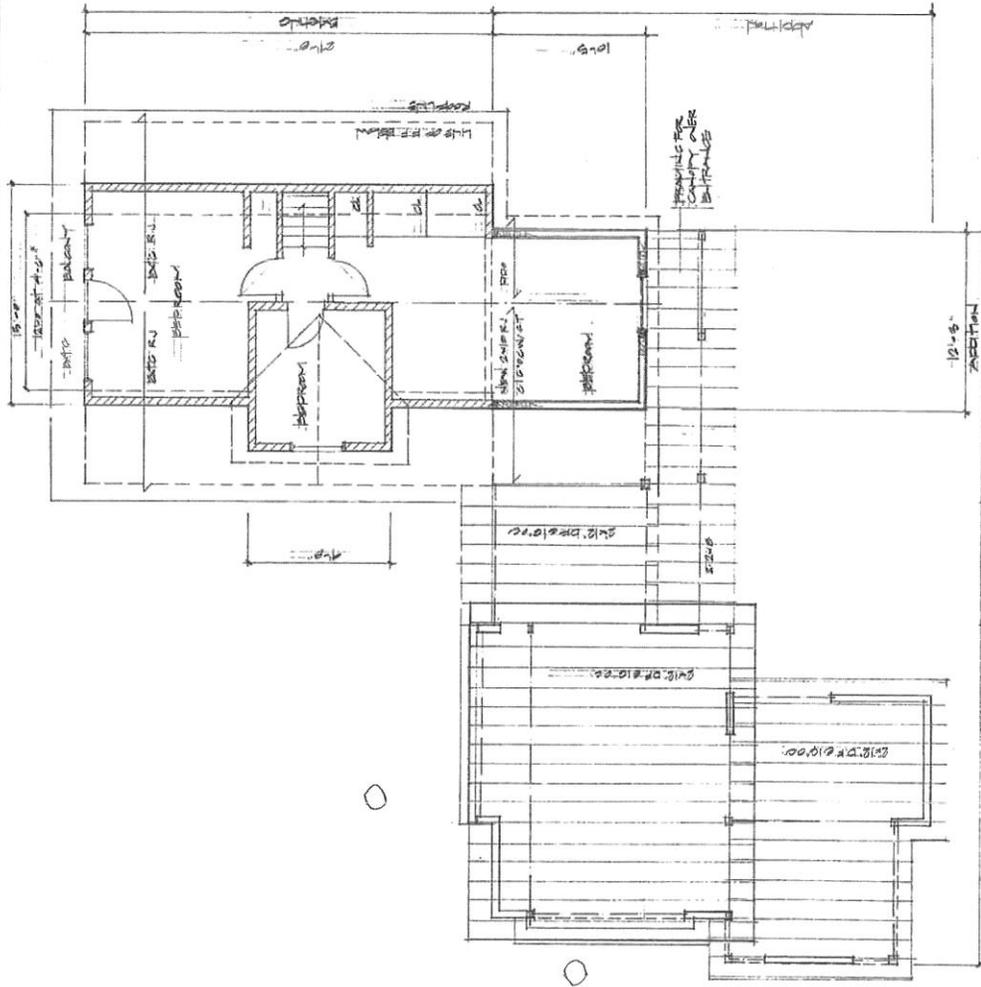
COMP: FRS/SD
 PERMIT: MAY/17
 REVISION:



VALERIE FARRELL
 Designer, Studio, Inc.
 276 Colton Ave. Studio 306
 Toronto, Ontario
 M4M 3L1
 vfarrell@gmail.com

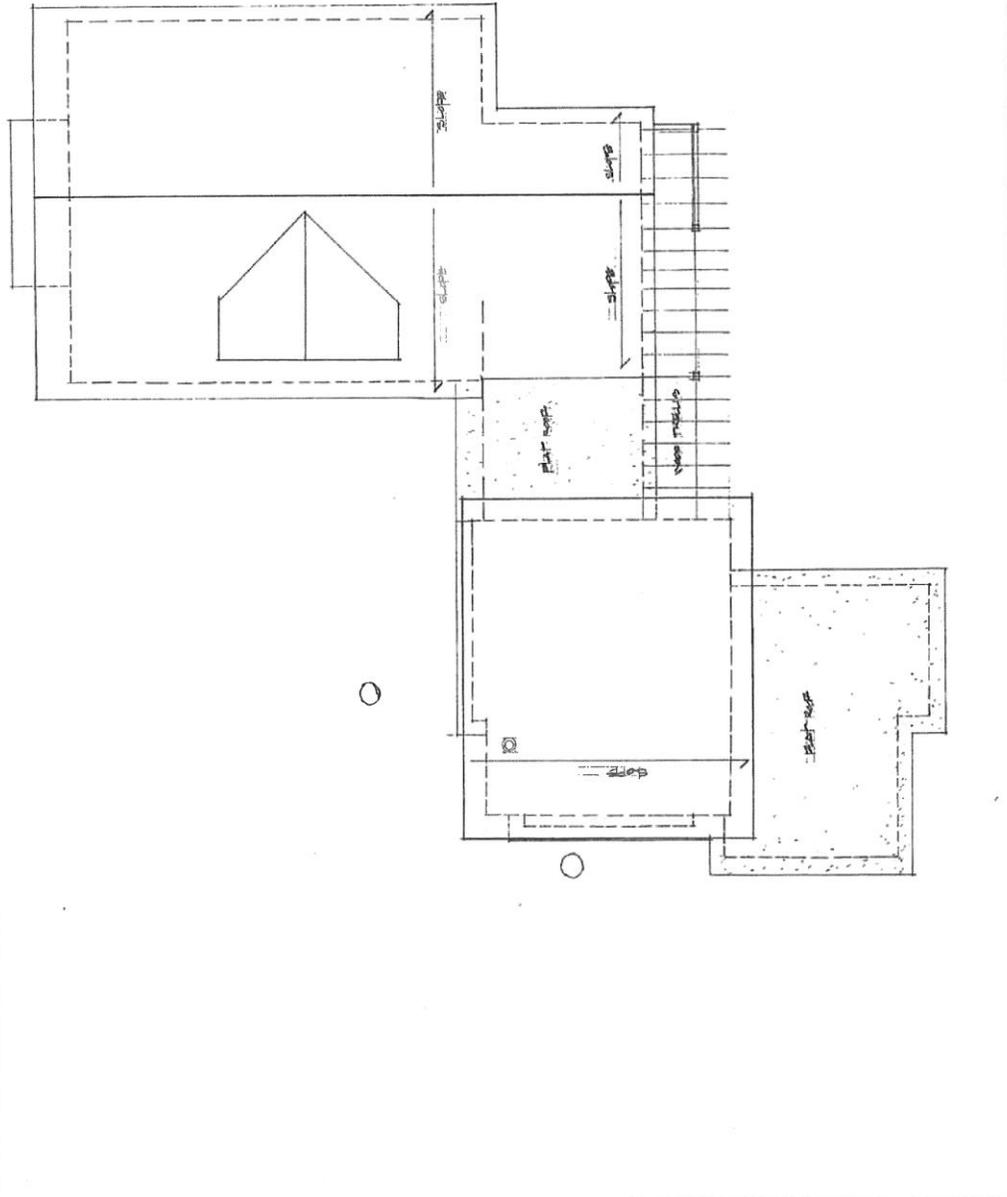
Project:
COOK COTTAGE
 152 ISLAND DRIVE
 BURNT RIVER, ON

Drawing:
 Second Floor Plan with
 Addition Roof Frame
 Scale:
 1/4" = 1'-0"



Roof Plan

NOTES



DATE: 11/24/16
PROJECT: MAY/17
revision



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val@valfarrell.com

PROJECT:
COOK COTTAGE
152 ISLAND DRIVE
BURNT RIVER, ON

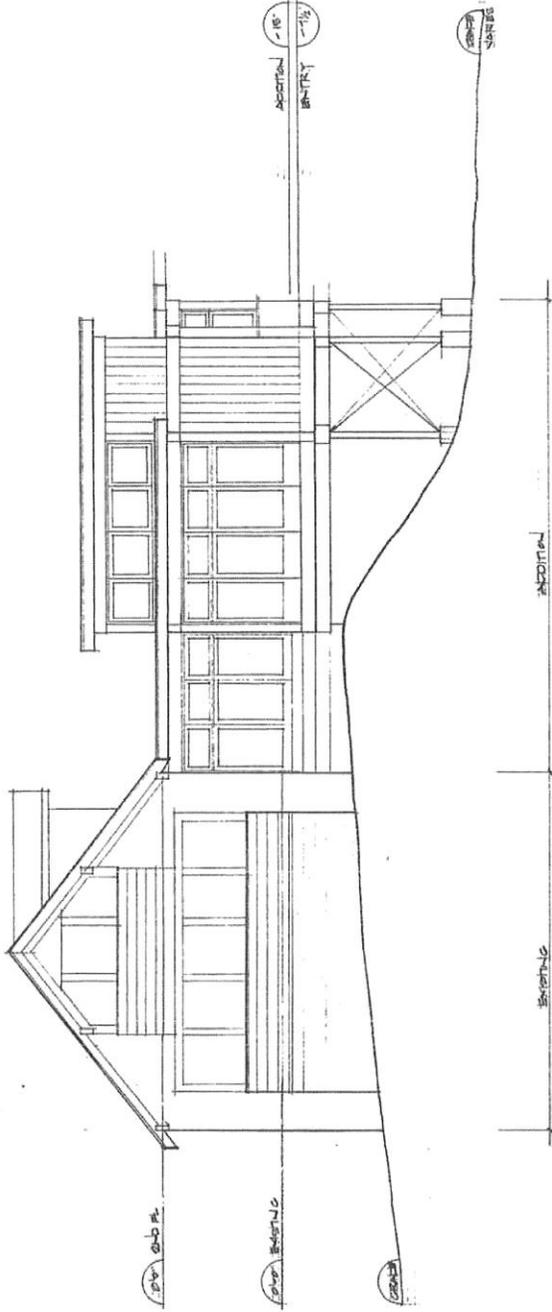
drawing:
Roof Plan
Existing & Addition
scale:
= 1/4" = 1'-0"

DATE:
1.2017
PAGE:
1.4

APPENDIX " D6 "
to
REPORT COA2018-013
FILE NO: D20-17-049

West (Water) Elevation

NOTES



DATE: FEB 15
PERMIT: MAY 17
revision



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project
COOK COTTAGE
152 ISLAND DRIVE
BURNT RIVER, ON

drawing
ELEVATION
N.B. 1/4"

scale
1/4" = 1'-0"

date
April 2017

page
1.3

APPENDIX " D7 "

to

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FILE NO: D20-17-049

South Elevation

NOTES

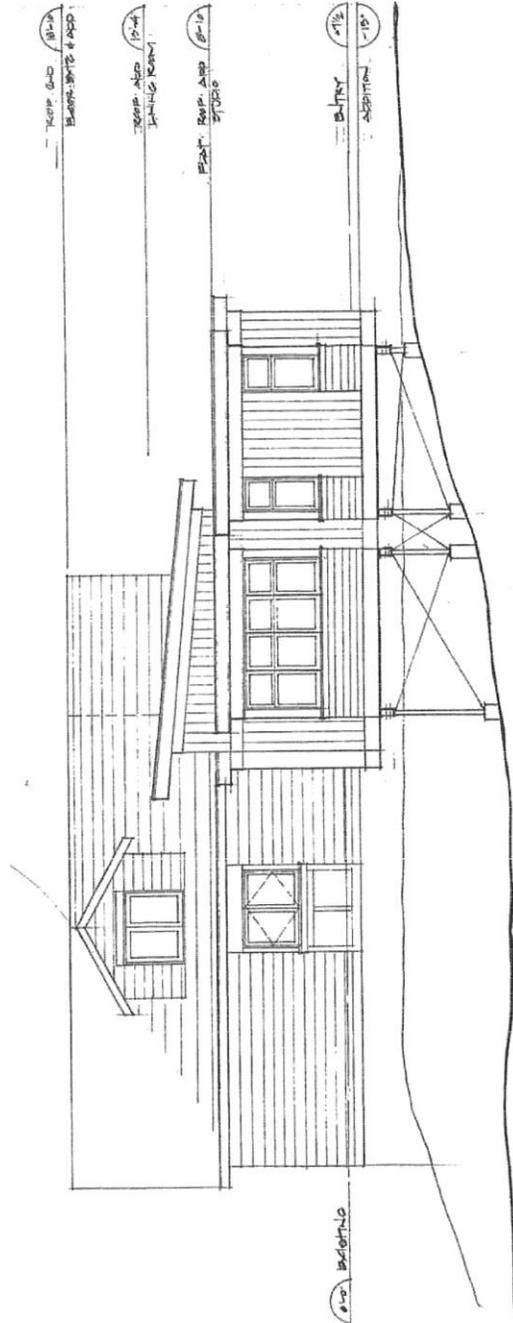
DATE FEB 04/16
PROJECT WIA-17
REVISION



VALERIE FARRELL
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valerief@valerief.com

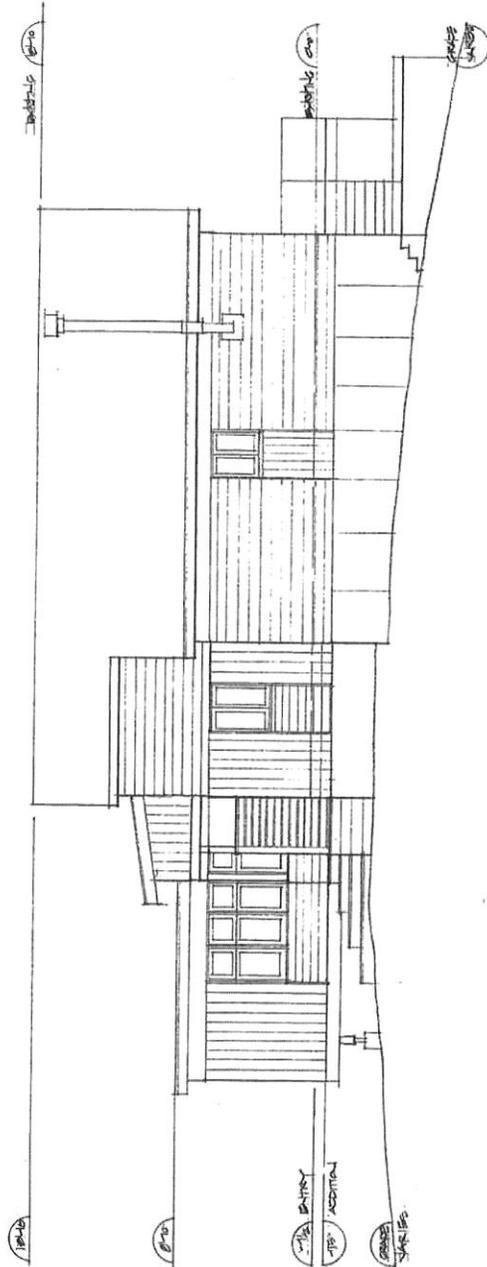
PROJECT
COOK COTTAGE
152 ISLAND DRIVE
BURNT RIVER, ON

DRAWING
ELEVATION
SOUTH



North Elevation

NOTES



COA-4 FEB 2018
PERMIT MAY 17
revision



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project
COOK COTTAGE
152 ISLAND DRIVE
BURNT RIVER, ON

drawing
ELEVATION
18-14

scale
1/4" = 1'-0"

date

APPENDIX " D10 "

to

REPORT COA2018-013

FILE NO: D20-17-049

receive
Feb 11

APPENDIX " E1 "
to

**I52 ISLAND DRIVE
Four Mile Lake
Somerville Township
City of Kawartha Lakes, Ontario**

REPORT COA2018-013
FILE NO: D20-17-049

Accompanying Notes and Photos for Variance Application

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

INTRODUCTION and REQUESTED VARIANCES

Variations Requested

1. Water Setback; to reduce the minimum required water setback from 15 M to 10 M
2. Projection into Setback; Increase maximum projection of a cantilevered floor area from .6 M to 1.0 M
3. Existing Shed in Front Yard; to permit and maintain an existing shed of 8' x 10' in the existing front yard with a setback of 2.5 M from the front property line where 7.5 is required

For this application it is important to respectfully acknowledge that waterfront setbacks are difficult requests to consider.

It is understood that the concerns are manifold and that the following must be taken into consideration,

1. The environmental impact and importance of maintaining buffer zone is met;
2. Possibility of being precedent setting;
3. Maintaining the visual and aesthetic characteristics of the area; and,
4. considering the viability of any other available options

The general intent of the by-law must be deemed to remain in effect when granting such a variance.

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

to

REPORT COA2018-013FILE NO: D20-17-049

INTENT & OBJECTIVES

It is the expressed intent of this brief to outline and illustrate the following with respect to the waterline setback request

- No other solution is reasonable or possible as the existing lot is insufficient in size and shape to permit any compliant addition to the existing cottage
- It is a very unique island site therefore cannot be viewed as precedent setting
- Location of existing services, septic, road and neighbour privacy concerns determine location
- The Environmental concerns are meet by the type of structure and foundation system proposed.
- The existing vegetation and trees on the site are maintained allowing for natural run off.
- Flooding concerns are eliminated by the type of structure proposed.
- The character and existing harmony and balance held by the existing cottages are maintained
- That in the evaluation the Four Tests are meet

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

Site description and restrictions

The site is located on Island Drive. A roadway which connects, by two bridges, the two islands located close to the shoreline of Four Mile Lake. See Map It is simultaneously a very beautiful, unique, private and challenging location to build on. Typically the existing cottages are built close to the shore line upon the rockier outcrops that jut into the lake. These outcrops create outer rock shoals and private coves. It is within one of this private coves that this site is located.

It is important to note, that it is unfortunate that some newer cottages although appearing to comply with zoning regulations have removed most of the trees and vegetation on the site. **That is not intent of this proposal.**

This particular site is the second from the end of the the two islands. It is reached by a shared dirt road created only by the passage of vehicles through the well treed centre of the island.

The site is a very narrow rectangular pie shape, with the longest edge along the shoreline. It is tugged into a shallow cove within the island.

The existing cottage is perched close to the water's edge upon the rock face, as are a number of the existing cottage of the island. This is in-part due to the narrowness of the islands and the inner sections being more challenging and to heavily treed to build upon.

The narrowness of the site and the shape of the cove makes it physically impossible to build a new addition to the cottage that is not within the water setback, conflicts with the location of existing septic and power lines or encroaches upon and disrespects the privacy of the neighbours.

See Site Photos Attached in Appendixes

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

to

REPORT COA2018-013FILE NO: D20-17-049**Proposed Solution**

The solution proposes an addition to the rear and south west side of the exiting cottage. Linking it by a enclosed entrance way to the existing cottage. The side portion of the addition would be a **one storey addition located in a small gully, tucked in amongst the trees and built on concrete and steel piers. The floor level is raised significantly above grade here to a level two steps down from the existing cottage. Thereby eliminating any concern for flooding.**

The proposal answers to the following concerns:

Environmental Buffer Zone is maintained

The major trees in the area have been located and the addition designed to be constructed around them.

The structural pier system of the foundation;

retains the naturalness of the site

prevents erosion

maintains surface runoff

retains the natural fauna

maintains the natural buffer

Retaining the trees and their root system prevents erosion of the site and allows for below subsurface water retention.

The structural pier system also allows for modifications and adjustments to be made on site to respond to conditions.

Flood plan issues are eliminated and non existent due to the raised first floor

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

Visual Buffer Zone is maintained;

Trees and natural vegetation are maintained

The natural shoreline and rock faces and outcrops are maintained

The addition is concealed by the trees

The side addition is one storey

Character of the existing cottages and shoreline is maintained:

The visual character of the design is that of a grouping of simple box shapes that is consistent with the character and language of older first generation cottages that where tucked in amongst the trees and shorelines.

The exterior material will be wood cladding in a darker tone to blend with the existing cottage.

The proposed addition is built on steel piers, a construction similar to a boat house. Which is an acceptable built form within this set back.....as per the by

See Cottage Plans Attached

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

Alternative Solutions?

A number of alternative solutions were considered and determined to be inappropriate for the following reasons.

1. Impact on the privacy of the neighbours was too great. The site lines and
2. Conflict with the Hydro Lines
3. Conflict with the existing septic tank location and assumed location of tile bed
4. Too close to the roadway, impacts on the neighbour, privacy and enjoyment of the island
5. Require the removal of too many trees and levelling of higher rock formations
t
6. Could not be linked to the existing cottage space and if so would require greater lot coverage.
7. Lack of sunlight and views
8. Inability to access shoreline with out trespassing on the neighbouring property

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

APPENDIX “ E4 ”

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FILE NO: D20-17-049

Neighbours Support

The proposal has been discussed with the two adjacent and affected neighbours and they are in support of the application.

Views of the neighbouring cottages are attached see site photos in appendixes

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

THE FOUR TESTS

APPENDIX “ E5 “

to

REPORT COA2018-013

FILE NO: D20-17-049

1. Does the proposal maintain the intent of the Official Plan

As per Section 6.7.4

- (1.) This proposal maintains the visual and environmental concerns of the required buffer zone. In that trees and vegetation on the site are maintained.
- (2.) the proposed steel pier construction and raised first floor in the buffer zone allows the natural vegetation to remain thereby continuing to maximize the control of pollutants to the water and maintain the natural habitat

Note: The pier construction is similar to that of a boat house which is an allowable built form within this buffer zone.

As per Section 6.7.5.

- (1.) The density and massing of the structures are low in profile and blend with the natural surroundings
- (3,4,5) The natural shoreline vegetation, tree cover and existing rock faces are maintained
- (5) The addition is hidden among the trees and cannot dominate the landscape.

Please refer to site photos in Appendixes

The proposal maintains the intent of the by-law for these reasons both visually and environmentally

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

2. Does the proposal maintain the general intent and Purpose of the Zoning By-law

The proposal adheres to the purpose of the applicable Zones by maintaining a vacation dwelling which is in keeping with the characteristics of the neighbouring and existing dwellings. Our intention to create a compatible form of vacation dwelling to what is already existing requires a minor variance since the form of existing building characteristic to this site and neighbouring sites does not conform to the setback provisions of the by law.

3. Is the proposal desirable for the appropriate development or use of the land

This proposal seeks to vary the zoning by law in a manner that is characteristic of the area

4. Is the proposal minor

Given that this is a very narrow and unusual site, the extent of the impact of the proposed addition on the neighbouring properties as a whole are minor and nonexistent. The mass and height of the proposed addition are situated so as to not impact on the adjoining properties or pose a condition that promotes unpleasant views, loss of light, disruption of services or overlooks. The proposed addition maintains the buffer zone trees, vegetation and drainage. As a result would be extremely difficult to see from the lake as well as the neighbours' cottages.

The proposed development is compatible with the established built form and character of the island site and has been carefully designed to quietly blend into the surroundings, respecting the environment and neighbours.

Prepared by Valerie Farrell AOCA M.Arch.

VALERIE FARRELL DESIGN STUDIO INC . TORONTO, ONTARIO

APPENDIX " E6 "

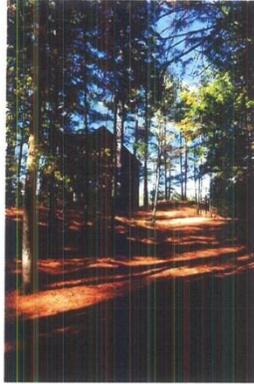
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REPORT COA2018-013

FILE NO: D20-17-049



*the travelled road in.
cottage hidden in the background.*



*front view of cottage.
septic tank bed mound visible
on the left.*

hydro pole



*septic tank
bed mound.*

*proposed addition site.
across the rear of cottage
extending to the left*

Cook's Cottage

*Neighbours
cottage visible
down the road*

*View of Existing Cottage (from the rear)
and Proposed Addition Location.
Taken from Road.*

APPENDIX " E7 "

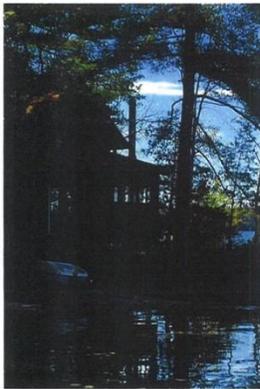
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REPORT COA2018-013

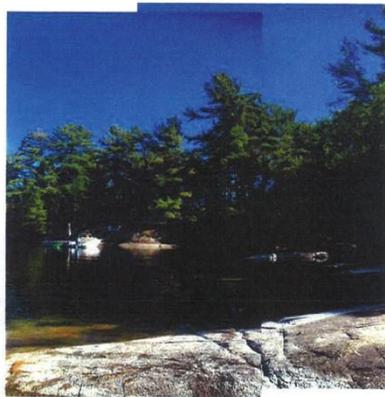
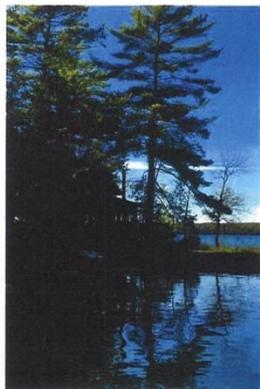
FILE NO: D20-17-049



proposed addition location.

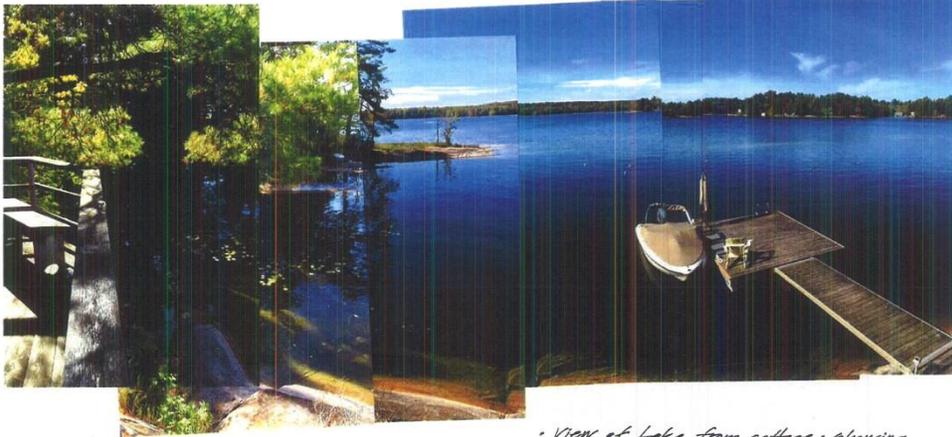


View of neighbour's cottage



*View of Cook's cottage taken from
neighbouring cottage
showing proposed location & cave.*

Lower deck railing



• View of Lake from cottage: showing outer shoal, cove and neighbour's cottage



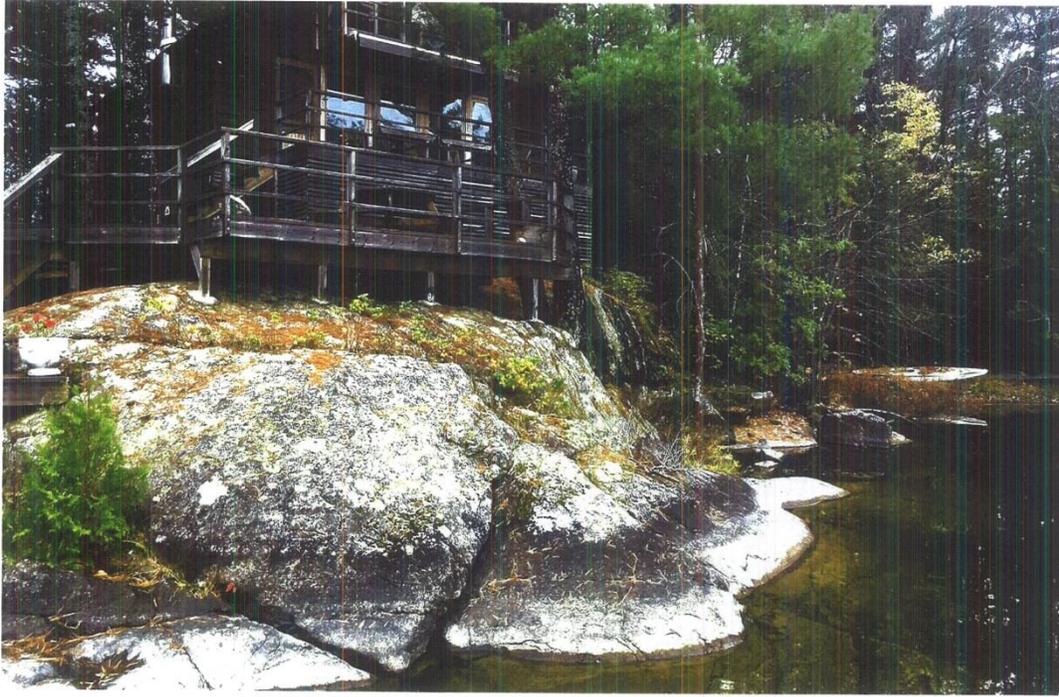
• View of cove from outer edge showing rocks, shoals, cook's cottage & neighbour's..

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to

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FILE NO: D20-17-049



APPENDIX “ E9 ”

to

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FILE NO: D20-17-049

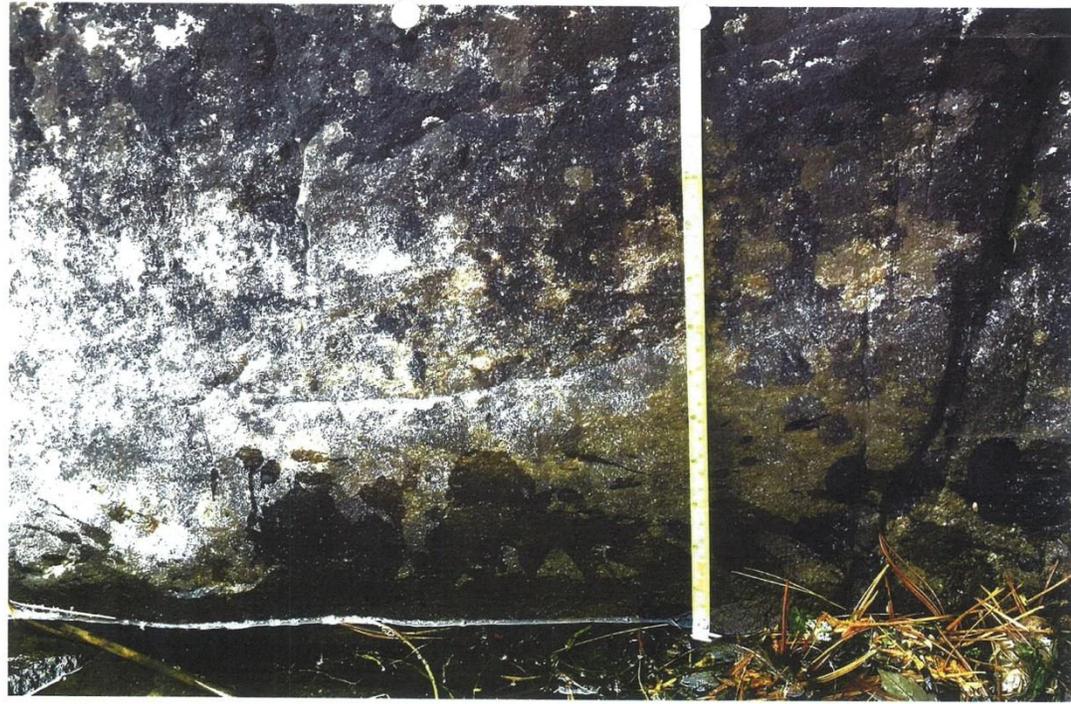


APPENDIX " E10 "

to

REPORT COA2018-013

FILE NO: D20-17-049



APPENDIX " E11 "

to

REPORT COA2018-013

FILE NO: D20-17-049



APPENDIX “ F ”

to

REPORT COA2018-013

FILE NO: D20-17-049

Subject	D20-17-049
From	Derryk Wolven
To	Charlotte Crockford-Toomey
Sent	Wednesday, February 21, 2018 3:14 PM

Please be advised building division has no concerns with the above noted application.

Derryk Wolven, CBCO

Plans Examiner

Development Services, Building Division, City of Kawartha Lakes

705-324-9411 ext. 1273 www.kawarthalakes.ca



Subject	D20-17-049
From	Derryk Wolven
To	Janet Wong
Sent	Tuesday, March 06, 2018 3:37 PM

Provide confirmation from hydro that there is no concern with the conductors over the deck.

Derryk Wolven, CBCO

Plans Examiner

Development Services, Building Division, City of Kawartha Lakes

705-324-9411 ext. 1273 www.kawarthalakes.ca





February 27, 2018
KRCA File No. 16168

APPENDIX “ F ”

to

REPORT COA2018-013

FILE NO: D20-17-049

Charlotte Crockford-Toomey
Development Services – Planning Division
City of Kawartha Lakes
180 Kent Street West
Lindsay, ON K9V 2Y6

**Regarding: Minor Variance Application D20-17-049
152 Island Drive
Island, Geographic Township of Somerville
City of Kawartha Lakes**

Dear Ms. Crockford-Toomey:

Kawartha Conservation staff have now completed our review of the above noted application to reduce the water setback from a minimum of 15m to 10m; to increase the maximum projection for a cantilevered floor from 0.6m to 1m; to permit an existing shed in the front yard where only permitted in the side or rear yard; as well as to permit a shed 2.5m from the front lot line where 7.5m is required.

The subject property fronts onto the shoreline of Four Mile Lake. There is a flooding hazard associated with this waterbody, which in the absence of detailed data, is approximately 1m above the highwater mark. Therefore, all new finished floor elevations associated with development should be a minimum elevation of 1m above the highwater mark. Staff note the property is located outside of Kawartha Conservation’s watershed, therefore it is not regulated pursuant to Ontario Regulation 182/06 and no Permit from this office is required.

The following comments are provided as recommendations under our Memorandum of Understanding (MOU) with the City of Kawartha Lakes.

City of Kawartha Lakes MOU

Wildlife Habitat

The site is not designated significant woodland under the City of Kawartha Lakes Official Plan, and therefore an Environmental Impact Study is not required. However, a Tree Preservation/Protection Plan is recommended to demonstrate that the proposal “maintains the buffer zone trees [and] vegetation” as stated in the *Accompanying Notes and Photos for Variance Application, 152 Island Drive, Four Mile Lake, Somerville Township, City of Kawartha Lakes, Ontario*, prepared by Valerie Farrell Design Studio Inc., received February 26, 2018. Should any trees be removed for the purposes of constructing the proposed addition, Kawartha Conservation has a tree removal compensation approach that can be provided to the City.

Staff note that the *Accompanying Notes* asserts the “proposed steel pier construction and raised first floor addition in the buffer zone allows the natural vegetation to remain thereby continuing to maximize the control of pollutants to the water and maintain natural habitat”. Staff do not find this statement to be entirely accurate, as the construction of development on piers, blocks out both the sun and precipitation to the landscape over which it is constructed and significantly impacts the mortality rates of existing vegetation. Staff note however that shrubs and non-native species are not considered as lost trees in the compensation plan.

KAWARTHA CONSERVATION
277 Kenrei Road, Lindsay, ON K9V 4R1
705.328.2271 Fax 705.328.2286
KawarthaConservation.com

Our Watershed Partners:

City of Kawartha Lakes • Region of Durham • Township of Scugog • Municipality of Clarington • Township of Brock • Municipality of Trent Lakes • Township of Cavan Monaghan



Fish Habitat

Four Mile Lake is considered fish habitat. Policy 2.1.8 of Provincial Policy Statement states,

“Development and site alteration shall not be permitted on adjacent lands (120m) to fish habitat unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions”.

In addition, the Ministry of Natural Resources and Forestry recommends a minimum vegetated buffer for fish habitat of 30 metres. Based on the drawings submitted, the existing cottage and proposed development does not and cannot meet the 30 metre setback. Kawartha Conservation policies would recommend a fish habitat buffer planting plan, but given the nature of the shoreline and property (i.e. bedrock, shallow soils) a planting plan is unlikely to be the preferred method to protect fish habitat. The trees along the shoreline and tableland are providing quality fish habitat, and therefore should be protected. This reinforces Kawartha Conservation’s recommendation for a Tree Preservation Plan to protect the existing vegetation, and identify areas of compensation, if necessary.

Summary

Based on our review of the above information, we can advise **staff would foresee no issue with the approval of this application based on our consideration for natural heritage, natural hazards and water quality and quantity protection policies, subject to the following condition:**

1. The proponent complete and submit a tree preservation/protection plan to the City of Kawartha Lakes and Kawartha Conservation to our satisfaction, prior to issuance of a Building Permit so as to confirm site vegetation and *fish habitat* are being protected through the development process.

I trust this meets your information requirements at this time. Should you require any additional information, please do not hesitate to contact this office.

Yours truly,



Katie Jane Harris, Resources Planner

Cc: Janet Wong, City of Kawartha Lakes, via email

Janet Wong

From: Katie Jane Harris <kjharris@kawarthaconservation.com>
Sent: Monday, March 05, 2018 2:34 PM
To: Janet Wong
Subject: RE: Cook Minor Variance Application D20-17-049

Hi Janet,

As per our discussion earlier last week, wherein it was acknowledged that a standard planting plan to address fish habitat impacts would not be appropriate for this site, given the topography, Rob has thought about the fish habitat planting plan for the Cook Minor Variance and has come up with the following recommendation.

- Once they have completed the clearing and construction phase they should over seed and, if possible plant some trees.
- First they should seed with a forest understory or forest edge mix consisting of a variety of native understory or edge plants.

Some examples of a seed mixes are included below.

- No lawn creation or mowing be permitted on this property to allow for natural succession to occur and the local seed bank to root once site disturbance is completed
- If there are locations on site with enough overburden (soil) to plant, staff recommend bare-root, White Pine seedlings.

Seed Mixes

Semi-Shade Forest Edge Seed Mix Details (St. Williams Nursery)

The Semi-Shade Forest Edge Seed Mix consists of wildflowers and grasses designed for semi shade conditions. Species will thrive in full-part sun, in average-well drained soils, and is ideal for smaller scale sites like under shade trees or in semi-shaded areas around structures. This mix is designed to add diversity to existing landscapes and once established, these species are drought tolerant.

Apply at 10-15 kg/ha

Common Name	Species	%
Bottle Brush Grass	Elymus hystrix	30
Silky Rye	Elymus villosus	30
Indian Grass	Sorghastrum nutans	10
Big Bluestem	Andropogon gerardii	10
Wild Columbine	Aquilegia canadensis	8
Giant Yellow Hyssop	Agastache nepetoides	3
Switch Grass	Panicum virgatum	3
White Vervain	Verbena urticulata	2
Brown Eyed Susan	Pycnanthemum virginianum	2
Dwarf Blazing Star	Liatris cylindracea	2

Or from the Ontario Seed Company (OSC) Limited

Woodland Seed Mix

<https://www.oscseeds.com/ecommerce/-lawns---grass---sedges-/-problem--solver--mixtures-/Woodland-Seed-Mix.htm>

This mix takes on shaded sites, diverse soil types, uses native Canadian perennials and actually grows well on its own.

Contains: Foxglove Beardtongue (*Penstemon digitalis*), Bebb's Sedge (*Carex bebbii*), Nodding/Fringed Sedge (*Carex crinata*), Fowl Bluegrass (*Poa palustris*), Showy Tick Trefoil (*Desmodium canadensis*), Fowl Mannagrass (*Glyceria striata*) Spotted Joe Pye Weed (*Eupatorium maculatum*), Canada Anemone (*Anemone canadensis*), White Avens (*Geum canadense*).

One package of 500 grams covers 200 sq. m. (2150 sq. ft.).

The above approach to mitigating impacts to fish habitat are recommendations made by KRCA to the City of Kawartha Lakes, as part of the Minor Variance application D20-17-049.

I trust the above is of assistance.

Best Regards,
Katie Jane

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From: Robert Stavinga
Sent: Monday, March 05, 2018 11:44 AM
To: Katie Jane Harris
Subject: RE: Seed spreading instead of tree planting

Hope this helps.

Rob Stavinga