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REPORT FOR: CROWE VALLEY CONSERVATION AUTHORITY WATERSHED ADVISORY BOARD

ONTARIO REGULATION 159/06, PERMIT APPLICATION NO. 080/23 BEING: **REGARDING:**

A DWELLING, DECK AND SEPTIC SYSTEM LOCATED WITHIN THE CROWE LAKE

FLOOD HAZARD.

DATE: MARCH 07, 2024

HEARING DATE	March 21, 2024				
DATE APPLICATION RECEIVED	May 05, 2023				
DATE HEARING REQUESTED	September 13, 2023				
APPLICANT					
	Brian Facey				
LOCATION	#30 Mackenzie Road (Crowe Lake)				
	Part Lot 12; Concession 3				
	Municipality of Marmora and Lake				
	ARN: 1241-141-015-12600				
PROPOSAL	To construct a dwelling, deck and septic system within the flood hazard.				
OVERVIEW	The proposed development does not conform to the CVCA's Watershed				
	Planning and Regulations policies because:				
	New development within the Regulatory floodplain is not				
	permitted.				
	a. The proposed reconstruction of the dwelling is within the				
	flood hazard and exceeds the allowable habitable floor				
	area increase (50% of original up to a maximum of 500				
	ft ²).				
	b. The dwelling is therefore considered new development.				
	c. The proposed reconstruction of the deck (accessory				
	structure) is within the flood hazard and exceeds the				
	allowable ground floor footprint increase (up to a				
	maximum of 500 ft ²).				
	d. The deck is therefore considered new development.				
	2) The development would require fill to create a building envelope				
	within the Regulatory floodplain.				
	3) The development would require changes to grade within the				
	Regulatory floodplain for the purpose of permitting				
	development.				

Executive Summary

An application for development has been submitted by Mr. Brian Facey with regard to Ontario Regulation 159/06: Crowe Valley Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. The application is requesting permission to reconstruct a dwelling and deck and septic system. The dwelling, deck and septic tank are all within the floodplain of Crowe Lake.

The proposal does not conform to CVCA Watershed Planning and Regulations Policies (hereafter simply referred to as "CVCA policies") on account of the proposed dwelling and deck exceeding the maximum allowable size increase within the floodplain and proposed fill and grading within the floodplain. CVCA staff believe there are other options available to the applicant that would avoid the flood hazard and/or represent a least impact alternative. These options were not explored by the Applicant nor were any revisions made to the original application despite suggestions from CVCA staff. Therefore, it is CVCA staff's recommendation that the application be **denied**.

Provincial directive is clear that prevention is the preferred approach for development in flood hazard areas, with effective management of the flood hazard directing development out of the hazard. Mismanagement of the flood hazard will result in long term loss of floodplain control that would result in irreversible changes and ultimately cause an increase in costs, social disruption, as well as potential damage of property and loss of life.

The CVCA's Policies are designed to minimize risk to life and property caused by flooding hazards. When making decisions on development proposals, the CVCA must have a wider perspective than one specific development scenario. The CVCA must use a preventative approach and consider cumulative impacts over a long period of time (i.e. all development over a 100-year horizon).

It is the CVCA's responsibility to ensure new development avoids the hazard upfront and early in the planning process, as prevention is more effective than to deal with the long term impacts of developing within hazardous lands.

The proposed development does not conform to the CVCA's Watershed Planning and Regulations policies for the following reasons:

- 1. In general, CVCA policies do not permit development within the regulatory floodplain.
- 2. New residential development is not permitted in the floodplain.
- 3. The proposed dwelling does not conform to CVCA's Policy for replacement/reconstruction of existing dwelling within the floodplain.
 - Replacement of an existing dwelling is permitted where it is considered to be a minor increase, not to exceed 50% of the original habitable floor area up to a maximum of 500 ft².
 - If the allowable size increase is exceeded, replacement/reconstruction of a dwelling is considered new development.
- 4. The proposed deck does not conform to CVCA's Policy for replacement/reconstruction of existing accessory structures within the floodplain.
 - Replacement of an existing accessory structure is permitted where it is considered to be a minor increase, not to exceed maximum of 500 ft².
 - If the allowable size increase is exceeded, replacement/reconstruction of a deck is considered new development.
- 5. Fill placement to create a building envelope within the Regulatory floodplain is not permitted.
- 6. Grade modifications, for the purpose of permitting development, is not permitted.

Subject Lands

The subject property is located along the north shore of Crowe Lake. The property consists of approximately 0.14 hectares (0.34 acres), with approximately 32m of frontage on Crowe Lake. The subject property and adjacent properties are



Page **2** of **15**

developed. Mackenzie Road traverses the subject property east-west. A majority of the south portion of the property is considered floodplain, with about 1/3 being outside of the floodplain. The north portion of the lot is completely outside of the floodplain.

Background/Timeline

The following outlines key events related to the application:

- 1. On May 05, 2023, The applicant submitted a permit application (#080/23) (Appendix A) with elevation survey (Appendix C).
- 2. On May 08th, 2023, CVCA staff completed the triage (initial) review of the application and requested confirmation of the status of the previous pending permit application. The Applicant had submitted an identical permit application in 2022 that they decided to withdraw. CVCA staff communicated policy requirements (including flood hazard policies) to the applicant as the proposed development did not meet policy.
- 3. On August 4th, 2023 CVCA received the Jewel Engineering Opinion Letter Floodline Assessment (dated August 4, 2023) (Appendix D).
- 4. On September 13th, 2023, CVCA staff (Kelsey Davidson) communicated the outstanding policy requirements (including flood hazard policies) to the applicant again as the proposed development still did not meet policy. CVCA staff also requested a revised elevation survey to show the 6m setback from the flood hazard. The revised elevation survey was submitted promptly on September 13th, 2023.
- 5. On September 13th, 2023, the applicant/Agent requested that the application go to a hearing, stating that the CVCA recommendations were not viable options due to:
 - a. Hydro Easement
 - b. Municipal setback requirements
 - c. Flood Plain
 - d. Costs to "rejuvenate" existing structures
- 6. On September 13th, 2023, CVCA informed the Applicant of the hearing process when the applicant stated they were unwilling to consider alternative options.
- 7. On November 24th, 2023, the next available Hearing date was communicated to the Applicant.
- 8. On December 13th, 2023 the Applicant/Agent communicated that they would prefer the January 18th, 2024 Hearing date.
- 9. On December 15th, 2023, CVCA staff communicated that additional information be required for the applicant to be considered complete and before proceeding with the hearing.
- 10. On January 16th, 2024 CVCA staff communicated that additional information requirements:
 - a. Engineered designs demonstrating that the septic tank (located within the floodplain) is anchored to prevent the tank from becoming unsecured in a potential flood event.
 - b. Floodproofing details demonstrating the proposed structure is floodproofed to an elevation of 0.3 metre above the regulatory flood elevation as per floodproofing standards outlined in Appendix C Floodproofing Guidelines.
 - c. Peer review of the Opinion Letter Floodline Assessment (August 4th, 2023) provided with the application.



- 11. On January 22nd, 2024, a zoom meeting was scheduled with the Applicant and Agent. In addition to the scheduled attendees, the Applicant's Lawyer, and Consultant were also in attendance. The following was discussed:
 - a. Hearing process and timelines
 - b. Policy clarification
 - c. Floodproofing requirements
- 12. On January 25th, 2024, CVCA requested peer review from EXP Services Inc.
- 13. On January 26th, 2024 EXP Services Inc. confirmed they could conduct the peer review.
- 14. On March 07, 2024, CVCA also received revised septic system details from the Applicant.
- 15. PENDING the peer review to be completed by EXP Services Inc. (Appendix E). The peer review report will be sent to all parties.

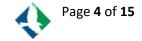
Timeline

05 May 2023	Applicants apply for CVCA permit (#080/23)		
08 May 2023	CVCA completes triage and notifies Applicant of Policy requirements		
04 August 2023	CVCA receives Jewel Engineering Opinion Letter – Floodline Assessment		
13 September 2023	CVCA requests revised elevation survey		
	CVCA receives revised survey		
	Applicant requests hearing		
September 2023 -	CVCA staff working with applicant to complete technical information required		
present	prior to requesting hearing with CVCA Watershed Advisory Board		
24 November 2023	CVCA communicates the next available Hearing date to the Applicant.		
13 December 2023	The Applicant/Agent communicated that they would prefer the January hearing		
	date.		
15 December 2024	CVCA communicates that application is not considered complete and requires		
	additional information		
16 January 2024	CVCA communicates additional requirements prior to proceeding with hearing		
	 Septic system information is still outstanding. 		
25 January 2024	CVCA Requests peer review from EXP Services Inc.		
26 January 2024	EXP Services Inc. confirms they can conduct the peer review.		
07 March 2024	CVCA received updated septic system details.		
PENDING	Peer Review to be received and communicated to all parties.		
21 March 2024	Hearing with CVCA Watershed Advisory Board		

Proposal Description

Existing Development (see Appendix A and B)

- Single storey dwelling with deck and crawlspace
- The dwelling is 625.5ft² with irregular footprint of 27 feet by 8 feet and 10 feet by 11 feet
- The deck is 286ft² located on the south side of the dwelling
- Entire dwelling is within the floodplain



Proposed Development (see Appendix A and B)

- Single-storey residential dwelling with crawlspace
- Build area of 64 feet 8 inches by 36 feet 1 inch
- 2,272 square feet of gross floor area (slight irregular shape)
- Entirely within the floodplain and 6m setback
- Will be 4.8m from shoreline of Crowe Lake

Fill (see Appendix A and B):

- 123.4 cubic metres (4,358 cubic feet) net fill placed in the existing floodplain required for construction and to achieve floodproofing requirements
- Flood Apron exceeding 1 metre in width surrounding the dwelling and graded further towards the lake than what would be recommended by CVCA staff.

Septic System (see Appendix A and B):

We acknowledge receipt of the revised changes to the septic system as per documents received March 07, 2024.

- Septic bed and tank are located outside of the floodplain
- Septic pump is located inside the floodplain
- Consists of septic tank and filter bed
 - o Tank will be 3,600L
 - o Filter bed will be 37.21m²
- Septic system floodproofing will include:
 - Septic bed will be floodproofed by ensuring that the bottom of the filter bed runs will be at or above the regulatory flood elevation of 183.88m (CGVD28).
 - o Septic tank will be securely anchored.

CVCA Regulated Features:

- Regulatory floodplain of Crowe Lake.
 - o Requisite minimum development setback is 6 metres.
 - If floodplain cannot be avoided, the proposed should represent the area of least amount of encroachment / impact.
- Wetland greater than 2 hectares.
 - o Requisite minimum development setback is 30 metres.
 - The Hearing scheduled for March 21, 2024, does not require the Board to consider impacts to the wetland as the proposed development is greater than 30m from the wetland boundary.

<u>Applicability of the Conservation Authorities Act, Ontario Regulation 159/06 and the Crowe Valley Conservation Authority's Watershed Planning and Regulations Policy Manual</u>

Ontario Regulation 159/06, was made pursuant to section 28 of the Conservation Authorities Act, R.S.O. 1990. Ontario Regulation 159/06. The Conservation Authorities Act and Ontario Regulation 159/06 are attached as **Appendix D.**

The proposed development is within an area regulated by the CVCA due to the regulatory flood hazard of Crowe Lake.

Section 2 (1) (a) (iii) (A) of the Regulation states:

Development prohibited

- 2. (1) Subject to section 3, no person shall undertake development or permit another person to undertake development in or on the areas within the jurisdiction of the Authority that are,
 - (a) river or stream valleys that have depressional features associated with a river or stream, whether or not they contain a watercourse, the limits of which are determined in accordance with the following rules:
 - (i) where the river or stream valley is apparent and has stable slopes, the valley extends from the stable top of bank, plus 15 metres, to a similar point on the opposite side,
 - (ii) where the river or stream valley is apparent and has unstable slopes, the valley extends from the predicted long term stable slope projected from the existing stable slope, or if the toe of the slope is unstable, from the predicted location of the toe of the slope as a result of stream erosion over a projected 100-year period, plus 15 metres, to a similar point on the opposite side.
 - (iii) where the river or stream valley is not apparent, the valley extends the greater of,
 - (A) the distance from a point outside the edge of the maximum extent of the flood plain under the applicable flood event standard, plus 15 metres, to a similar point on the opposite side, and
 - (B) the distance from the predicted meander belt of a watercourse, expanded as required to convey the flood flows under the applicable flood event standard, plus 15 metres, to a similar point on the opposite side;
 - (b) hazardous lands;
 - (c) wetlands; or
 - (d) other areas where development could interfere with the hydrologic function of a wetland, including areas within 120 metres of all provincially significant wetlands and wetlands greater than 2 hectares in size, and areas within 30 metres of wetlands less than 2 hectares in size.

Permission to develop

3. (1) The Authority may grant permission for development in or on the areas described in subsection 2 (1) if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development.

Section 3, above, refers to "tests" of the Regulation. Any application for development within an area regulated by the Conservation Authority is reviewed through the lens of these tests. The CVCA's Watershed Planning and Regulations Manual was developed to govern how these tests are applied to a multitude of possible development scenarios, as well as to provide guidance to CVCA staff in order to implement a consistent and practical approach for granting or refusing permission for development.

Hearing Process and Role of the CVCA's Watershed Advisory Board

When an application for development does not conform to the CVCA policies, CVCA staff must recommend the application for denial. The applicant then has the ability to request a Hearing with the CVCA's Watershed Advisory Board. The Watershed Advisory Board is tasked with reviewing the application for development, considering the applicable CVCA policies that have not been satisfied, and ultimately making a decision as to whether the application is consistent with the tests of the Regulation.

Tests of the Regulation

The development will not affect the control of:

- flooding,
- erosion,
- dynamic beaches (not applicable in CVCA watershed),
- pollution or
- the conservation of land

The CVCA Watershed Advisory Board may grant or refuse permission. Permission may be granted with or without conditions. The applicant will receive written notice of the decision. The notice of decision must state the reasons for which the application was either approved or refused. The applicant has the right to appeal the decision within 30 days of receipt of the notice of decision. Appeals are to the Ontario Land Tribunal. The applicant can appeal a refusal or the conditions of an approval.

CVCA Staff Recommendation

Based on the information submitted, CVCA staff recommend that the application be **denied** for the following reasons:

- 1. The proposed development would be located within hazardous lands, being the Crowe Lake regulatory flood hazard. Therefore, the proposed development has the potential to negatively impact the control of flooding.
- 2. The proposed development does not conform to the CVCA's Watershed Planning and Regulations Policies, specifically:
 - a. The proposed development exceeds the maximum allowable increase in habitable space for reconstruction of a dwelling within the flood hazard, being 50% of the existing dwelling, up to a maximum of 500 ft².
 - b. The proposed development exceeds the maximum allowable increase in ground floor footprint for reconstruction of an accessory structure within the flood hazard, being up to a maximum of 500 ft².
 - c. That placement of fill to create a building envelope for he proposed development within the Regulatory floodplain shall not be permitted.
 - d. That fill placement for the purpose of changing the grade on a property within the flood hazard for the purpose of permitting development will not be permitted.

The applicable policies from the CVCA Watershed Planning and Regulations Policy Manual are listed and detailed in the following section of this report. Policy sections that are not relevant to this application have been omitted.

The CVCA Board approved Watershed Panning and Regulations Policy Manual provides a framework for the CVCA and its staff to consistently administer its powers under Ontario Regulation 159/06. When reviewing development applications, the Authority must have regard for its objectives of preventing loss of life and minimizing property damage as a result of natural hazards. Section 3(1) of Ontario Regulation 159/06.

Administrative Policies

The following sections speak to over-arching policies that every application must be tested against. Areas subject to the regulation include several different items with hazardous lands being a critical component. Hazardous lands include all lands that are or could be flooded.

3.8 General Regulation Policies

- **3.8.1** That development, interference or alteration will not be permitted within a regulated area, except in accordance with the policies contained within this document. In the event of a conflict between the policies applicable to the development, interference or alteration, the most restrictive policy shall apply.
- **3.8.2** That notwithstanding Policy 3.8.1, the CVCA's Board of Directors may grant permission for development, interference and/or alteration where the application provided evidence acceptable to the Board of Directors that documents the development and/or activity will have no adverse effect on the control of flooding, erosion, pollution or the conservation of land with respect to river or stream valleys, hazardous land, wetland and areas of interference, or result in unacceptable interference with a watercourse or wetland).
- **3.8.3** That development, interference or alteration within a regulated area may be permitted where it can be demonstrated to the satisfaction of CVCA, through appropriate technical reports, assessments, site plans and/ or other documents as required by CVCA, that:
 - there is no feasible alternative location for development outside the hazard;
 - the risk to public safety is not increased;
 - susceptibility to natural hazards is not increased and no new hazards are created (e.g. there will be no impacts on adjacent properties with respect to natural hazards);
 - there are no adverse hydraulic or fluvial impacts on rivers, creeks, streams, or watercourses;
 - negative or adverse hydrological or ecological impacts on natural features and functions, including wetlands, are avoided and mitigated as demonstrated by a qualified professional;
 - intrusions on natural features, areas and systems contributing to the conservation of land, including areas providing ecological functions and hydrologic functions, are avoided or mitigated as demonstrated by qualified professional;
 - access for emergency works and maintenance of flood or erosion control works is available;
 - pollution, sedimentation and erosion during construction and post-construction is minimized using best management practices including site, landscape, infrastructure and/or facility design (whichever is applicable based on the scale and scope of the project), construction controls, and appropriate remedial measures;
 - the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected during and post development, interference or alteration;
 - proposed development is constructed, repaired and/or maintained in accordance with accepted engineering principles and approved engineering standards to the satisfaction of CVCA, whichever is applicable based on the structural scale and scope, and the purpose of the project.
- **3.8.7** That notwithstanding supplementary policies or stand-alone policies as specified in Sections 4.0 through to and including 7.0, development within a regulated area shall be set back from the greater of the following:
 - a) Valley and Stream Corridors: 15 metres from the long term stable top of slope, stable toe of slope, meander belt and any contiguous natural features and areas that contribute to the conservation of land; b) Natural Hazards: 6 metres from the extent of a hazard;
 - c) Wetlands: 30 metres from provincially significant wetlands and wetlands greater than 2 ha and 15 metres for all other wetlands; and

d) Setbacks based upon the results of a comprehensive environmental study or technical report completed to the satisfaction of the CVCA.

Conformity

The proposed development does not conform as it is not set back 6 metres from the extend of a natural hazard (*flooding*, erosion, unstable soil or bedrock).

Hazardous Lands Policies

This component of the Regulation applies to development within hazardous lands which is defined under Section 28 of the CA Act as land that could be unsafe for development due to naturally occurring processes associated with flooding, erosion, dynamic beaches, or unstable soil or bedrock.

The following policies are specific to development in the flood hazard. Any development within a flooding hazard requires permission from the CVCA. In general development within the Regulatory floodplain shall not be permitted.

Policy 4.2.6

Development will be permitted within 15 metres of the greater of the floodplain or predicted meander belt width (erosion hazard) of the river or stream provided that:

- it can be demonstrated through appropriate technical reports (e.g., topographic survey, geomorphologic assessment, floodplain mapping) that all development will be located a minimum of 6 metres beyond the greater of the floodplain OR the predicted meander belt width (erosion hazard);
- safe access (ingress/egress) is present;
- inert fill material will be used. The proponent may be required to provide proof of the origin and quality of the fill material and conduct other studies and/or monitoring as may be required to ensure the control of pollution and the conservation of land is not impacted;
- development does not change drainage or vegetation patterns that would exacerbate flooding hazards and/or erosion hazards;
- the potential for erosion has been addressed through proper drainage, erosion and sediment control and site stabilization/restoration plans;
- the finished floor/lowest opening of proposed habitable structures is to be located at least 0.3 metres above the regulatory flood elevation; and,
- all electrical circuits, outlets and permanently installed electrical equipment are to be located at least 0.3 metres above the regulatory flood elevation.

A site plan prepared by a qualified professional illustrating the elevations of existing and proposed grades and lowest openings of existing and proposed buildings/structures, where applicable must be submitted.

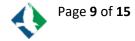
Conformity

The proposed development does not conform as it is not located a minimum of 6 metres beyond the greater of the floodplain OR the predicted meander belt width (erosion hazard) and will change drainage on the site and exacerbate flood hazard.

5.2.1 Development within the Regulatory floodplain shall not be permitted.

Conformity

The proposed dwelling, deck, septic tank and fill placement /grading is located within the regulatory floodplain.



5.2.2 Placement of fill to create a building envelope for future / proposed development within the Regulatory floodplain shall not be permitted.

Conformity

To achieve floodproofing requirements, the proposed development would require 123.4 m³ of fill to be placed in the floodplain. The proposed fill amount exceeds the recommended amount for a fill apron.

5.3 Specific Policies for Flooding Hazards

5.3.1.2 New single residential development on an existing lot will not be permitted within a flooding hazard regardless of previous approvals provided under the Planning Act or other regulatory process (e.g., Building Code Act).

Conformity

The proposed development is considered 'new single residential development' under the CVCA's policies because it exceeds the allowable size increase for minor additions (policy 5.3.1.3)

5.3.1.3 Additions (including ground floor, second storey or an attached garage) to existing residential dwellings located, even partially, within a flooding hazard will be permitted provided it can be demonstrated that:

- the addition is 50% or less of the original habitable floor space* to a maximum footprint of 46.5 square metres (~500 square feet), whichever is less, or in the case of multiple additions, all additions combined are equal to or less than 50% of the original habitable floor space to a maximum footprint of 46.5 square metres (~500 square feet), whichever is less;
- the number of dwelling units is the same or fewer;
- the addition will not be subject to flows that could cause structural damage;
- where feasible, an improvement in the existing dwelling will occur with respect to floodproofing of the structure;
- safe access (ingress/egress) is present;
- the addition will be floodproofed to an elevation of 0.3 metre above the regulatory flood elevation as per floodproofing standards outlined in Appendix C Floodproofing Guidelines;
- the structure is properly anchored to prevent flotation, is not subject to damage by flooding or other hazards and flood flows and flood water storage are not impeded;
- no basement is proposed and any crawl space is designed to facilitate service only;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the CVCA.

These policies apply to any addition to a dwelling that is located entirely or partially in the flood hazard regardless of whether or not the addition, or part thereof, is located in the flood hazard.

A site plan prepared by qualified professional illustrating the elevations of existing and proposed grades and lowest openings of existing and proposed buildings/structures must be submitted. In

addition, detailed technical analysis completed by a qualified professional engineer may be required to be submitted to demonstrate the acceptability of the proposal.

Conformity

The proposed development $(2,272 \text{ ft}^2)$ is greater than 50% of the existing habitable floor space, up to a maximum of 500 ft². The existing dwelling was 625.5 ft². The allowable proposed dwelling would be capped at 938.25 ft² (50% of 625.5 ft² = 312.75 ft²). The proposed represents an increase of 363% or 1,646.5 ft².

5.3.1.4 Additions to existing residential dwellings greater than the size provision identified in 5.3.1.3 above would be considered Single Residential Development and therefore subject to Policy 5.3.1.2.

Conformity

This policy renders development proposals that exceed the allowable size increase for additions to be considered 'new development,' and subject to Policy 5.3.1.2 (above): new development not permitted within a flooding hazard.

Policy 5.3.1.5

Reconstruction of residential dwellings located within a flood hazard will be permitted provided it can be demonstrated that:

- the dwelling to be replaced is relocated outside the flooding hazard where feasible;
- there is no increase in the number of dwelling units;
- the new dwelling is the same size or smaller than the previous dwelling;
- the use of the new dwelling is the same as the previous dwelling;
- the dwelling will be floodproofed to an elevation of 0.3 metre above the regulatory flood elevation, as per floodproofing standards identified in Appendix C Floodproofing Guidelines;
- safe access (ingress/egress) is present;
- no basement is proposed, and any crawl space is designed to facilitate service only;
- there is no risk of structural failure due to potential hydrostatic/dynamic pressures;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedure and recognized methodologies to the satisfaction of the CVCA.

A site plan prepared by a qualified professional illustrating the elevations of existing and proposed grades and lowest openings of existing and proposed buildings/structures must be submitted.

Conformity

The proposed development does not conform because it is not located outside the hazard, and the new dwelling is not the same size or smaller than the previous dwelling. In such case, Policy 5.3.1.6 applies.

5.3.1.6 Replacement of residential dwellings within a flooding hazard that would result in an increase in dwelling size will be permitted provided it can be demonstrated that the conditions for Minor Residential Additions (Policies 5.3.1.3, 5.3.1.4) can be satisfied, and safe access is present.

Conformity

If reconstruction or replacement of a dwelling is proposed where there is an increase in size, CVCA's dwelling addition policies apply, which, if the allowable size increase is exceeded, ultimately point to policy 5.3.1.2 (above): new development not permitted within a flooding hazard.

Policy 5.3.4.1 – Accessory Structures (Deck)

Accessory buildings or structures associated with an existing residential, agricultural, commercial, industrial or institutional use such as detached garages, decks, sheds, silos, gazebos and other similar structures (but not including on-shore boathouses: see Policy 5.3.5), will be permitted within a flooding hazard provided it can be demonstrated that:

- there is no feasible alternative site outside of the flooding hazard;
- there is no habitable floor space associated with the building or structure and no opportunity for conversion into habitable floor space in the future;
- the site is not subject to frequent flooding;
- the building or structure does not exceed a ground floor footprint of 46.5 square metres for settlement areas or shoreline development areas and for rural areas, the building or structure does not exceed a ground floor footprint of 100 square metres;
- the risk of property damage and pollution is minimized through site and facility design to ensure that the development will not result in a pollution hazard (e.g., release of a biohazard substance, nutrients, pesticides or other chemicals during a flood event);
- the building or structure is securely anchored to either a concrete pad or footings;
- no basement is proposed, and any crawl space is designed to facilitate service only;
- where dry floodproofing cannot be achieved, wet floodproofing is undertaken in accordance with floodproofing standards identified in Appendix C Floodproofing Guidelines;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the CVCA.

A site plan prepared by a qualified professional illustrating the elevations of existing and proposed grades and lowest openings of proposed buildings/structures must be submitted.

Conformity

The proposed development does not conform to policy because the proposed accessory structure (deck) exceeds the prescribed size limitation of 46.5 square metres (500ft²). In such case, Policies 5.3.4.1 and 5.3.4.2 apply. The proposed deck is 780ft² which is 56% or 280ft² beyond the allowable limit.

Policy 5.3.4.2

Additions to existing accessory buildings or structures located within a flooding hazard will be permitted provided it can be demonstrated that:

- the total size of the building or structure that would result from the addition does not exceed the maximum size identified in Policy 5.3.4.1;
- there is no habitable floor space associated with the addition and no opportunity for conversion into habitable floor space in the future;
- no basement is proposed, and any crawl space is designed to facilitate service only;



- an improvement in the existing building or structure will occur with respect to floodproofing;
- the risk of property damage and pollution is minimized through site and facility design to ensure that the development will not result in a pollution hazard (e.g. release of a biohazard substance, nutrients, pesticides or other chemicals during a flood event);
- where dry floodproofing cannot be achieved, wet floodproofing is undertaken in accordance with floodproofing standards identified in Appendix C Floodproofing Guidelines;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the CVCA.

A site plan prepared by a qualified professional illustrating the elevations of existing and proposed grades and lowest openings of existing and proposed buildings/structures must be submitted.

Conformity

The proposed development does not conform to policy as the total size of the building or structure exceeds the maximum size identified in Policy 5.3.4.1.

Policy 5.3.4.3

Replacement or reconstruction of existing accessory buildings or structures that have been damaged or destroyed by causes other than flooding will be permitted provided it can be demonstrated that:

- there is no feasible alternative site outside the flooding hazard;
- the building or structure to be replaced is relocated to an area within the existing lot where the risk of flooding and property damage is reduced to the greatest extent, wherever possible;
- the new building or structure is the same size or smaller than the previous building or structure (Note: replacements to accessory buildings or structures located within a flooding hazard that would result in an increase in building or structure size are subject to the provisions of Policy 5.3.4.2;
- there is no habitable floor space associated with the building or structure and no opportunity for conversion to habitable floor space in the future;
- no basement is proposed, and any crawl space is designed to facilitate service only;
- where dry floodproofing cannot be achieved, wet floodproofing is undertaken in accordance with floodproofing standards identified in Appendix C Floodproofing Guidelines; and
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the CVCA.

A site plan prepared by a qualified professional illustrating the elevations of existing and proposed grades and lowest openings of existing and proposed buildings/structures must be submitted.

Conformity

The proposed development does not conform to policy because the proposed accessory structure exceeds the maximum allowable size of 500 ft². In such case, Policies 5.3.4.1 and 5.3.4.2 apply.

5.3.13 Fill Placement, Excavation and/or Grade Modifications

5.3.13.1 Fill placement and or excavation for the purpose of changing the grade on a property within the flood hazard for the purpose of permitting development will not be permitted.

Conformity

The proposed development would require placement of 123.4m³ fill and grade changes within the flood hazard to achieve minimum floodproofing requirements. With the proposed dwelling surpassing the allowable size increase to be considered reconstruction of existing development, more fill is required to meet the minimum floodproofing requirements than what is recommended for a fill apron.

Summary

Hazard land management was delegated to Conservation Authorities by the Province of Ontario through the establishment of the Conservation Authorities Act and Ontario Regulation 159/06. The CVCA's Watershed Planning and Regulations Policies have been developed to guide CVCA staff with the administration of the Regulation. CVCA staff review development proposals in an effort to protect people and their property in areas susceptible to natural hazards and other areas where development could interfere with the hydrologic function of wetlands.

The proposed development does not conform with the CVCA's Policies, which state:

- 1) That development within the Regulatory floodplain shall not be permitted;
- 2) That new single residential development on an existing lot will not be permitted within a flooding hazard regardless of previous approvals provided under the Planning Act or other regulatory process (e.g., Building Code Act).
 - a) The proposed dwelling exceeds the size increase allowance (50% of original up to 500 ft²) to be considered reconstruction of existing development, and is therefore considered new development under CVCA policies.
 - i) The proposed development (2,272 $\rm ft^2$) is greater than 50% of the existing habitable floor space, up to a maximum of 500 $\rm ft^2$. The existing dwelling was 625.5 $\rm ft^2$. The allowable proposed dwelling would be capped at 938.25 $\rm ft^2$ (50% of 625.5 $\rm ft^2$ = 312.75 $\rm ft^2$). The proposed represents an increase of 363% or 1,646.5 $\rm ft^2$.
 - b) The proposed deck exceeds the size increase allowance (up to 500 ft²) to be considered reconstruction of existing development, and is therefore considered new development under CVCA policies.
 - i) The proposed deck is 780ft² which is 56% or 280ft² beyond the allowable limit.
- 3) That placement of fill to create a building envelope for future / proposed development within the Regulatory floodplain shall not be permitted.
 - i) The proposed development includes 123.4m³ of fill.
- 4) That fill placement and or excavation for the purpose of changing the grade on a property within the flood hazard for the purpose of permitting development will not be permitted.

CVCA Staff Recommendation:

Understanding that there are other CVCA approvable options (i.e. dwelling within the allowable 500ft² size limitation and deck size within the allowable 500ft² size limitation), the landowner could choose other acceptable options that would conform to CVCA Policy. These are reasonable solutions that the CVCA has presented to the landowner which could realistically be carried out.

The CVCA Watershed Advisory Board must carefully consider the potential implications of granting exceptions to CVCA policy at any hearing, including the ability to set precedent. If this application is allowed to proceed as is, it will set precedent with implications and undermining the authority of CVCA across the watershed.

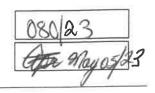
CVCA staff therefore recommend that the application be **denied**.

Appendix A

Permit Application #080/23



Date Received



PERMIT APPLICATION FORM

FOR A DEVELOPMENT, INTERFERENCE WITH WETLANDS AND ALTERATIONS TO SHORELINES AND WATERCOURSES PERMIT (CONSERVATION AUTHORITIES ACT – ONTARIO REG. 159/06)

Please provide the completed Permit Application Form to info@crowevalley.com

Trease provide the company
Contact Information (please print clearly and legibly)
Property Owner's Name(s): BRIAN FACEY
Mailing Address (Street, P.O. Box) City City TORONO ON Postal Code MSC A9
Telephone: Home 4262 Work Mobile 416 735 9761
brianfacey 2 amail. com
Agent's Name(s): *property owner's letter of authorization or signature to be attached
Mailing Address (Street, P.O. Box) City Postal Code KOUSEO
Telephone: Home Work / Mobile
Email Scottestewart a sympatico, ca.
Is the Owner aware of this application? Yes If No Please explain: Have you contacted the municipality/township to determine if a Planning Act Application is required? Yes No No No Sea Planning Act Application (minor variance or zoning by-law amendment) required for the proposed development? Yes
descriptions are attached)
Location of Proposed Works (please ensure a map and driving directions are attached) Lot So (2) Concession (3) Municipality MAKMOKA & LAKE
Civic Address (i.e. 70 Hughes Lane) ROAN PLAN: \$21R-15920
Assessment Roll Number (can be found on your tax bill) Watercourse/Waterbody (i.e. Belmont Lake, Crowe River, creek) CROWE LAKE:
Existing Land Use (vacant, residential, etc.) Proposed Land Use
RESIDENTIAL NO CHANGE.

The processing fee will be determined by the Conservation Authority. The site plan and application MUST include the following:

- 1. General location of property in relation to roads, shoreline, natural features, etc.
- 2. Location and dimensions of all existing structure(s) on property and a site plan with lot dimensions.
- 3. Location of any waterway, open water, wetland, steep slope on or near the property and any drainage features (ditches/culverts).
- 4. Intended location and dimensions of fill, construction, or waterway alteration proposed.
- 5. Cross-section of proposal showing existing and final grade with elevations from the current water level of any nearby waterway, and elevations of the lowest structure(s) opening if applicable.
- 6. Current photographs of the property (shoreline, area of proposed development, etc.) with no snow on the ground.

,	
Proposed Works (please complete all sections that apply)	
Section A, please refer to page 7:	Section C, please refer to page 12:
Construction of a new structure	Watercourse Crossing (culvert)
Add to an existing structure(s)	Section D, please refer to page 13:
Renovations resulting in a change in use of an existing	Shoreline Protection
structure(s) Alter an existing structure(s)	
New dock	Section E:
Replace existing dock	If proposing a bridge, please contact the CVCA office to
	determine permit application requirements
Castian D. places refer to many 11.	Pond Construction, clean out or repair.
Section B, please refer to page 11: Install Sewage System	Other: If you do not see your proposed active here, please
Place or Remove Fill Material	contact the office for direction and information or see ou
Trace of Nemove till Material	website.
Please provide a detailed description of the proposed works (If	there is not sufficient space below, please provide the required
information on a separate piece of paper and/or in the body of	
Example 1: Tear down existing one storey dwelling that is 10 r	
dwelling with covered deck and detached garage all being at least	
Example 2: Replace existing septic bed in same location as existing	
Example: Complete 15 metres of shoreline protection using gabi	ion stone.)
I/We the undersigned herby certify to the best of my/our knowledge	
documentation and information is correct and true. I/we further sole	
of this application and specifically the terms and conditions on the follo	
By signing this application, consent is given to the Crowe Valley Corepresentatives to access the property for the purposes of obtaining	
to Section 28(20) of the Conservation Authorities Act.	ig information and monitoring any approved works pursuant
I, (please print name) SCOTT STEWAR de	eclare that the above information is correct to the best of my
knowledge and I agree to abide by Ontario Regulation 159/06.	
	\sim \sim \sim \sim
Signature: Date:	1/M 6065
NOTE. Signature or Written Authorization of Landowner is Man	ndatory. Landowner authorization form follows this page.
am the: Owner Agent Contractor	Other:
The information on this form is being collected, and will be used, for the	purposes of administering a Regulation made pursuant to
Section 28 of the Conservation Authorities Act, R.S.O. 1990 C27.	·

NOTE: Further information and studies may be required by the Crowe Valley Conservation Authority (CVCA) in order to process this file, the cost of which will be borne by the applicant or their agent. This information may include details related to wetlands, floodplains, hydraulics, slope stability or stream systems. Once completed, all studies become the joint property of the CVCA and the landowner and the information may be used by the CVCA, its member municipalities and partners. In order for members of the public to view any studies, plans and reports related to your permit, a formal request under the **Municipal Freedom of Information Protection and Privacy Act**, RSO 1990, c.M.56, is required. Access is subject to statutory exemptions. The same is true should you wish to access any studies, plans and reports pertaining to other's permits. Insufficient information may delay the processing of your application. This application does not relieve the applicant of the obligation to secure any other necessary approvals. Fees are subject to change without notice.

Landowner Authorization

If this Application of Permit is to be submitted by a solicitor/ contractor/ agent on behalf of the owner(s), this Landowner Authorization must be completed and signed by the owner(s). If the owner is a corporation acting without agent or solicitor, the application must be signed by an officer of the corporation and the corporation's seal (if any) must be affixed.

NOTE TO OWNER(S)

Please note that the Crowe Valley Conservation Authority staff reserve the right to discuss any or all aspects of the permitting process with the property owner.

If the Application of Permit is to be prepared by a solicitor/ contractor/ agent, authorization should not be given until the Application of Permit and its attachments have been examined and approved by you the owner(s). All submissions are the responsibility of the owner(s). 1

Brian A. Facey I/ We Print full name of owner Hereby Authorize SCOTT E. STEWART Print full name of Solicitor/ Contractor/ Agent)

To submit the enclosed Application of Permit to the Crowe Valley Conservation Authority and to provide any further information or material required by Authority Staff relevant to the Application of Permit for the purpose of obtaining a Permit to fill, construct or alter a watercourse in accordance with the requirements of the Ontario Regulations.

Signature of Owner(s)

Date_March 6, 2023

Signature of Solicitor/ Contractor/ Agent

TERMS AND CONDITIONS

The Applicant, by acceptance and in consideration of the issuance of this Application of Permit, agrees to the following conditions:

- 1. The Owner and Applicant agrees:
 - a. to indemnify and save harmless, the CVCA and its officers, employees, or agents, from and against all damage, loss, costs, claims, demands, actions and proceedings, arising out of or resulting from any act or omissions of the Owner and Applicant or any of his/her agents, employees or contractors relating to any of the particulars, terms or conditions of this Application of Permit;
 - b. that this Application of Permit shall not release the Owner and Applicant from any legal liability or obligation and remains in force subject to all limitations, requirements and liabilities imposed by law;
 - that at all complaints arising from the proposed works authorized under this Application of Permit shall be reported immediately by the Owner and Applicant to the CVCA. The Owner and Applicant shall indicate any action which has taken place or is planned to be take, with regard to each complaint.
- 2. This Application of Permit shall not be assigned or assumed by any subsequent purchaser, transferee or grantee.
- 3. This Application of Permit does not absolve the Applicant of the responsibility of obtaining necessary permission from applicable federal, provincial or local agencies.
- 4. Should default be made by the Owner and Applicant in compliance with, or satisfaction of, the enumerated conditions and or submitted application, the CVCA may enter upon the property with respect to which conditional approval is granted and cause said conditions to be satisfied if necessary, the expense of which will be the sole responsibility of the Owner and Applicant.
- 5. The work shall be carried out as per the approved plans and specifications submitted in support of the application and as amended by the approval of this permit.
- The Owner and Applicant agree to maintain all existing drainage patterns, and not to obstruct external drainage from other adjacent private or municipal lands.
- The permit granted under this regulation is valid for TWO years from the date of issue and it is the responsibility of the Owner and Applicant to ensure that a valid permit is in effect at the time of works occurring.
- The Owner and Applicant may appeal any or all of the stated conditions of the permit to the Board of the Conservation Authority.

PLEASE NOTE THAT ONLY THE FIRST THREE (3) PAGES OF THIS PACKAGE NEED TO BE RETUREND ALONG WITH SUPPORTING DOCUMENTATION. PLEASE DO NOT RETURN THE FOLLOWING PAGES WITH YOUR APPLICATION.

provide the required information on a separate piece of paper and/or in the body of your email. If a portion is not applicable, please fill in as N/A. If it is determined that the proposed works are within the floodplain or erosion hazard additional information will be required, please see page 14. Existing Dwelling (if applicable): Size of main/ground level of existing dwelling. We will require both the square footage and footprint dimensions. (i.e. square footage = 720 square feet, footprint =36 foot by 20 foot): 27×18'+0'×11' Number of storey(s) of existing dwelling including second storey, basement (finished or unfinished), lofts, and crawlspace: STOREY 4 Chaucspace Size of additional storey(s)/loft of existing dwelling. We will require both the square footage and footprint dimensions Size of basement (finished or unfinished) or crawlspace of existing dwelling. We will require both the square footage and footprint dimensions. CRAWLSPACE 675.2 77x18'+10'x Distance from high water mark or natural feature(s), roadway, property lines, other structure(s) to existing dwelling: SHORELINE - 26-10" 1:100 - 14-ZZ Existing Deck/Porch/Veranda (if applicable): Size of existing deck. We will require both the square footage and footprint dimensions. (i.e. square footage = 144 square feet, footprint = 12 foot by 12 foot)_ 16:6 x 12'0 Is the existing deck/porch/veranda covered or Uncovered Distance from high water mark, natural feature(s), roadway, property lines, other structure(s) to existing deck/ porch/veranda: 5hore/inc. - 15-9" 1:00 - 52'-2"

In addition to the general requirements the following is required. If there is not sufficient space below, please

Section A: Structure(s) (New or Altered).

Existing	Garage	(if app	licable)
C:£		الثني ع/4/ عا	

Size of existing garage We will require both the square footage and footprint dimensions.
(i.e. square footage = 240 square feet potprint = 20 foot by 12 foot)
Is the existing garage attached Detached Detached
Is the existing garage habitable? Yes No
Number of storey(s) of existing garage (if applicable):
Distance from high water mark, natural feature(s), roadway, property lines, other structure(s) to existing garage:
Proposed Dwelling (if applicable): Size of proposed dwelling. We will require both the square footage and footprint dimensions. (i.e. square footage = 1,200, footprint = 40 foot by 30 foot) 2777 ft - 64-8 x 36-1
Number of storey(s) of proposed dwelling including second storey, basement, lofts, and crawlspace: 1 Storey + CRAWSPACE
Size of additional storey(s)/loft of proposed dwelling. We will require both the square footage and footprint dimensions:
Size of basement or crawlspace of proposed dwelling. We will require both the square footage and footprint dimensions. 277 ft7 - 64-8* y 36'-/*
Distance from high water mark or natural feature(s), roadway, property lines, other structure(s) to proposed dwelling:

Proposed Deck/Porch/Veranda (if applicable):

Size of proposed deck. We will require both the square footage and footprint dimensions.
(i.e. square footage = 300 square feet, footprint = 15 foot by 20 foot).
780ft - 65'x 12'
Is the proposed deck/porch/veranda covered or Uncovered
Distance from high water mark, natural feature(s), roadway, property lines, other structure(s) to proposed deck/porch/veranda:
REFOR TO SITE PLAN
Proposed Garage (if applicable):
Size of proposed garage We will require both the square footage and footprint dimensions.
(i.e. square footage = 400 square feet, footprint = 20 foot by 20 foot)
A//A
Is the proposed garage Attached or Detached
Is the proposed garage Attached or Detached
Will the proposed garage be habitable? Yes No
Number of storey(s) of proposed garage, if more than one storey please provide details (i.e. loft, full second storey):
Distance from shoreline or natural feature(s), roadway, property lines, other structure(s) to proposed garage:

Section A(i): Accessory and Detached Structure(s) (i.e. boathouse(s), dock(s), shed(s), bunkie(s), etc.). In addition to the general requirements the following is required. If there is not sufficient space below, please provide the required information on a separate piece of paper and/or in the body of your email. If a portion is not applicable, please fill in as N/A.

Existing Development (if applicable)

Size of existing development/structure(s). We will require both the square footage and footprint dimensions. (i.e. square footage = 300 square feet, footprint = 20 foot by 15 foot)
Number of storey(s) of existing structure(s) (if applicable):
Distance from high water mark, natural feature(s), roadway, property lines, other structure(s):
Proposed Development (if applicable):
Size of proposed development/structure(s) We will require both the square footage and footprint dimensions. (i.e. square footage = 500 square feet, footprint = 25 foot by 20 foot)
Distance from high water mark, natural feature(s), roadway, property lines, other structure(s):

Section B: Fill Placement, Grading or Sewage Systems (In addition to the general requirements the following is required)

Dimensions of the proposed fill area and the depth of fill required: 212 + Varies Max 2-0'
Description of proposed fill (e.g. crushed stone, sand, and/or mix):
CHEAN SAND, GRAVEL, TOPSOIL.
Volume of fill (in cubic metres): 123, 4 m ³
New Sewage System or Replacement of Existing If replacing an existing septic system is this an emergency replacement? Yes No
Size of septic tank (if applicable):
If the sewage system is a replacement system is it the same size as the existing system? Yes No
If no, please explain the reason for the change in size: EXISTIM NOT Sutable
Is the sewage system in a new location? Yes No I I I I I I I I OBE REQUIR MITS If yes, please explain:
Size (footprint dimensions) of septic bed: 37, 71 m ²
If the sewage system is replacing a failed sewage system please explain (if known) why the existing sewage system
failed: AGE,
Distance from high water mark, natural feature(s), edge of roadway, property lines, other structure(s) of the proposed
sewage system: REFER TO SITE PLAN

Section C: Culverts and Water Crossings. In addition to the general requirements the following is required, please check off once you have confirmed you have included the below. If the proposed works is a bridge, please contact the CVCA office for permit application requirements

	Statement and purpose of proposed works.
	Drawing showing in plain view and cross-sectional detail the existing and proposed watercourse or watercourse crossing including dimensions.
T	Location, length, diameter, type and pipe invert for any proposed culvert(s).
Ť	Details of staging construction (commencement, order of works, completion, etc.) if required.
Ŧ	Drawing showing plan view and cross-sectional detail of existing and proposed shoreline including dimensions.
Ť	Site restoration plan including planting details.
	Details of erosion and sediment control measures to be implemented prior to commencement of work and throughout construction period.
rawi etail it re	provide the following information: g showing in plain view and cross-sectional detail the existing and proposed watercourse or watercourse crossing including dimensions. blacing an existing culvert? Yes No
the	proposed culvert in the same location as the existing culvert? Yes No No Proposed culvert is in different location, please provide details:
the ngth	oroposed culvert in the same location as the existing culvert? Yes No oroposed culvert is in different location, please provide details: of existing culvert: Diameter of existing culvert: of proposed culvert: Diameter of proposed culvert: d pipe invert for any proposed culvert(s):
f the ength ength ope ar	of proposed culvert: Diameter of existing culvert:
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ength ength ength epe ar	of existing culvert: Diameter of existing culvert: Diameter of proposed culvert: Diameter of proposed culvert: Diameter of proposed culvert: Diameter of proposed culvert: dipipe invert for any proposed culvert(s): umber of Culvert(s)? Yes No No No Diameter of proposed culvert:
f the ength ength /pe ar	port of existing culvert: Diameter of existing culvert: Diameter of proposed culvert:

Section D: Shoreline Works. In addition to the general requirements the following is required.

Photographs of the shoreline are required (no snow), demonstrating that active erosion is taking place Have you considered a natural shoreline (i.e. planting of native plants, targeted placement of rocks, bioengineering)? , if no please explain why: _____ Please explain, in detail, the erosion concern(s) you or your client are experiencing and why hardening of the shoreline is proposed: Total length of shoreline: _____ Total length of shoreline with active erosion: ___ Total length of proposed shoreline works: ____ Height of existing shoreline embankment: _____ Height of proposed shoreline embankment: _____ Type of material (i.e. gabion stone, boulders): _____ Volume of material (cubic metres): _____ Is the material going on non-woven geotextile material? Yes Will the proposed works maintain the existing contours and height of the shoreline embankment? Yes If no, please explain: ___ Please indicate the proposed slope (check all that apply). Below we are requesting information on the proposed slope measured as run over rise, i.e. 3 Horizontal feet for every 1 foot of Vertical rise. Existing Retaining Wall Replacement 1H:1V 2H:1V 3H:1V or gentler Replacement of existing retaining walls exceeding two tiers (greater than one metre in height) will require engineered drawings. New retaining walls are not permitted. Please note: Bioengineering combines structural engineering principles with the use of vegetation for shoreline stabilization and erosion

control. Hard material such as rocks, boulders, and armour stone do NOT qualify as bioengineering

Requirements for Development within the Floodplain and Erosion Hazard

New development will not be permitted within hazardous lands unless the proposed development is replacing an existing development or development that by its nature is within hazardous lands (i.e. docks by their nature are within the flood and erosion hazard). Development within hazardous lands that cannot be moved outside of the hazard will be subject to current CVCA Board Approved Polices (i.e. size limitations, floodproofing, additional engineering requirements, etc.).

If it has been determined that your proposed development is within the floodplain additional information and requirements will be requested as part of your permit application. Size restrictions will also be applied. As part of a complete application for development within a floodplain the CVCA will require the following:

- The applicant will have to demonstrate that there is no feasible alternative outside of the flood hazard. If there is room to move outside of the floodplain the existing footprint will not be honoured regardless of other approvals such as the Planning Act.
- An elevation survey, completed by an Ontario Land Surveyor, showing the following:
 - Plot the 1:100-year floodplain in CGDV28 (please contact the CVCA office for the regulatory flood elevations)
 - Spot elevations (in 2m by 2m grid pattern.)
 - Plot the 6 metre setback from the floodplain
 - Elevations of the proposed build footprint taken in an "X" pattern (four corners and center)
 - Elevations of the finished floor elevation of the main level, finished floor elevation of the crawlspace or basement and lowest opening into the proposed structure(s). Please see table below for floodproofing requirements.
 - Elevations of the lowest level opening and finished floor elevation of existing structures (if applicable)

The minimum standards for floodproofing are based on the Regulatory Flood elevation. The following table depicts the minimum elevations for various features and structure(s):

Regulatory flood elevation +0.3m		
Regulatory flood elevation -1.0m		
Regulatory flood elevation		
Regulatory flood elevation +0.3m		
Regulatory flood elevation +0.3m		
Regulatory flood elevation -0.3m		
Regulatory flood elevation -0.8m		

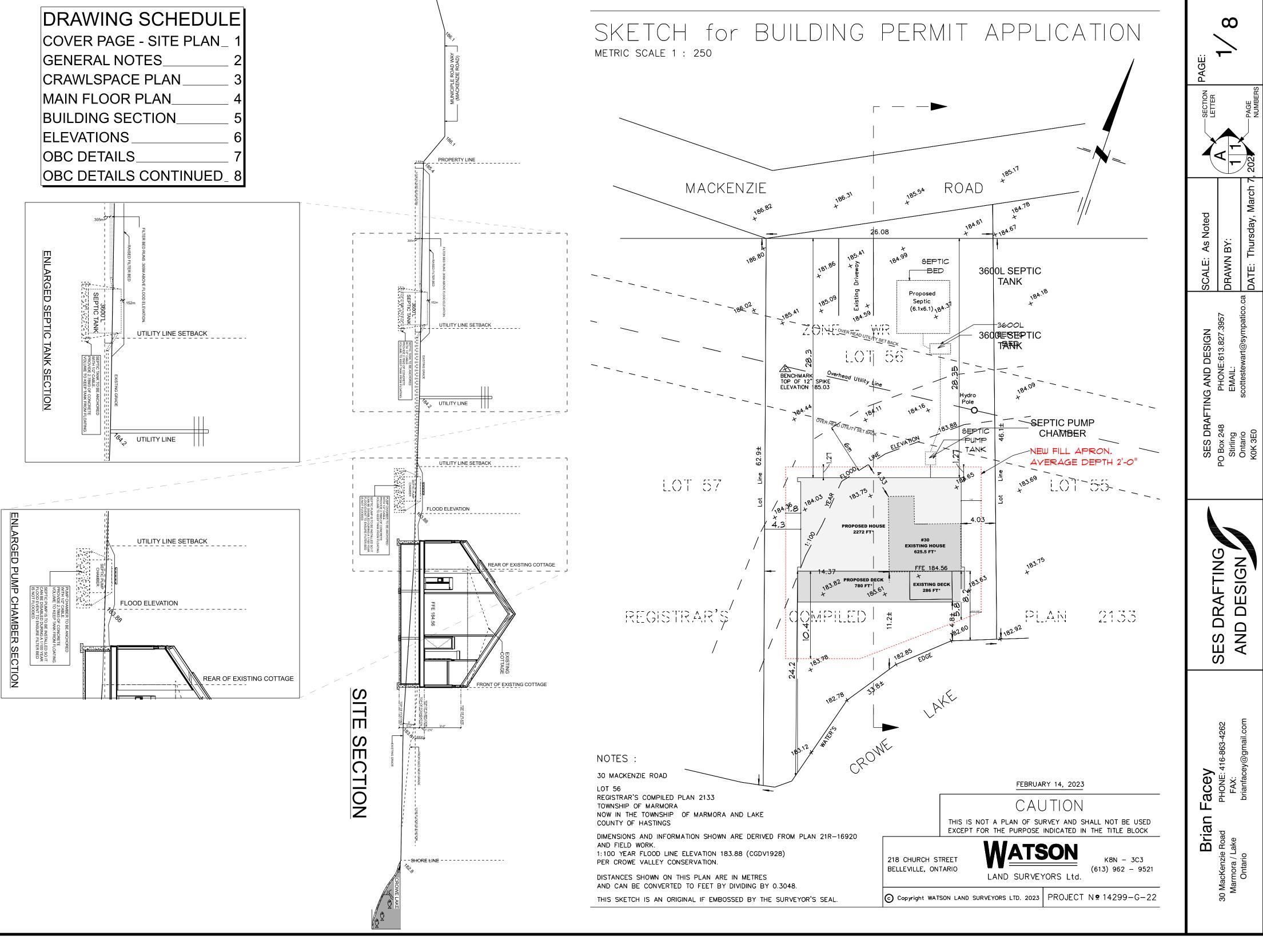
Erosion Hazard

If it has been determined that your proposed development is within the erosion hazard additional information and requirements will be requested as part of your permit application. Size restrictions will also be applied. As part of a complete permit application for development within the erosion hazard the CVCA will require the following:

- The applicant will have to demonstrate that there is no feasible alternative outside of the erosion hazard (if there is room to move outside of the erosion hazard the existing footprint will not be honoured regardless of other approvals such i.e. the Planning Act).
- If there is no alternative outside of the erosion hazard, a geotechnical assessment, completed by a qualified professional, may be required to include the following:
 - Toe erosion allowance
 - Stable slope allowance
 - o Erosion access allowance. A minimum erosion access allowance of 6 metres is used from the top of stable slope (after accounting
 - o A cross section showing the top of slope (after accounting for toe erosion)
 - Completion of a slope inspection record and a slope stability rating chart (Tables 4.1 and 4.2 from the MNR Technical Guide River & Stream Systems: Erosion Hazard Limit (2002). The results of these findings will determine the level of investigation required.
 - Potential impacts of the proposed development on neighbouring properties
 - Design bearing values
 - o Caisson/pile/foundation designs
 - Potential for settlement
 - Potential causes of instability
 - o Safe slopes of banks and excavation walls
 - Soil stabilization methods and comparison of benefits
 - Relation of hazards to proposed development 0
 - Long-term stable slope crest position and inclination
 - Factor of safety
 - o Failure surfaces
 - Methods for soil erosion/sedimentation control
 - Methods for minimizing impacts on vegetation and root systems

Appendix B

Site Plan and Detailed Drawings



I HAYE REVIEWED QUALIFIED DESIGN

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AND

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CONSTRUCTION NOTES

ALL CONSTRUCTION PRACTICES TO COMPLY WITH (2012) ONTARIO BUILDING CODE

THESE PLANS AND SPECIFICATIONS ARE TO BE USED IN THE CONSTRUCTION OF A NEW OBC PART 9 SINGLE FAMILY DWELLING

DESIGN LOADS STRUCTURAL LOADS ARE AS PER SUPPLEMENTARY STANDARDS "SB-1" FOR THE 2012 ONTARIO BUILDING CODE (OBC)

<u>DESIGN AREA :</u> NORWOOD, ONTARIO.

1. GROUND SNOW LOADS 1/50: 2.1 kPa (44 psf) 2. RAIN LOADS 1/50: 0.4 kPa (8.4 psf) 3. WIND LOADS 1/50: .41 kPa (8.56 psf)

CONTRACTOR REQUIREMENTS

1. VERIFY ALL DIMENSIONS AND REPORT ANY INCONSISTENCIES BEFORE PROCEEDING

2. ENSURE ALL WORK ADHERES TO ALL OBC 2012 BUILDING CODES.

STANDARD DETAILS

NOT ALL DETAILS IN THIS DRAWING SET, MAY BE ILLUSTRATIVE OF THIS EXACT PROJECT. STANDARD DETAILS ARE PROVIDED FOR A GUIDE TO THE BUILDER TO RELATE THE DESIGNERS INTENTIONS AND TO SHOW CERTAIN ASSEMBLY

NOTIFICATIONS

THE BUILDER / CONTRACTOR IS ADVISED TO NOTIFY THE MUNICIPAL BUILDING AND PLANNING DEPARTMENT, AS WELL AS ANY OTHER INVOLVED AUTHORITY i.e. FIRE INSPECTOR / CHIEF, ONTARIO MINISTRY OF HEALTH, ANY CONSERVATION AUTHORITY, ESSA, ECT. AT THE REQUIRED STAGES OF CONSTRUCTION AS SET OUT BY THE AUTHORITY HAVING JURISDICTION.

SHOP DRAWINGS

ANY AND ALL SHOP DRAWINGS INCLUDED IN PART OR AS A WHOLE, WITH THIS DRAWING SET ARE INCLUDED BY THE SHOP DRAWING DESIGNERS i.e. TRUSS DESIGNS, HEAT AND COOLING DRAWINGS, SEPTIC DRAWINGS, ENGINEERED FLOOR SYSTEM LAYOUTS AND

SES DRAFTING AND DESIGN HOLDS NO LIABILITY FOR ANY SHOP DRAWINGS AND MUST BE SUBMITTED TO THE BUILDING DEPARTMENT AS WELL AS SES DRAFTING AND DESIGN FOR REVIEW PRIOR TO INSTALLATION OR COMMENCEMENT OF WORK

EXCAVATION AND BACKFILL NOTES:

I. FOOTINGS SHALL BEAR ON UNDISTURBED SOILS OR SOLID ROCK AND SHALL BE MINIMUM 4'-0" BELOW FINISHED GROUND LEVEL. (ANY FILL UNDER FOOTINGS TO BE SPECIFIED BY QUALIFIED GEO-TECHNICAL ENGINEER)

2. DRAWINGS HAVE BEEN MADE FOR SOIL CONDITION OF NO LESS THAN 1555 PSF. SHOULD LINUSUALLY SOFT SOILS BE ENCOUNTERED AT THE TIME OF EXCAVATION SES DRAFTING AND DESIGN SHALL BE CONTACTED IMMEDIATLY.

3. FOOTING ARE TO BE KEPT FREE OF STANDING WATER AT TIME OF EXCAVATION

4. BACKFILL IS TO FREE DRAINING CLEAN GRANULAR FILL. PROVIDE SLOPE AWAY

5. SHOULD UNUSUALLY SOFT SOILS BE ENCOUNTERED DURING EXCAVATION, THE EXCAVATOR / BUILDER/ OWNER IS TO NOTIFY THE STAMPING ENGINEER AND SES DRAFTING AND DESIGN BEFORE PROCEEDING WITH CONSTRUCTION OF FOOTINGS. THE CONTRACTOR / OWNER MUST NOTIFY THE ENGINEER AND SES DRAFTING AND DESIGN OF ANY CONCERNS WITH REGARDS TO BUT NOT LIMITED TO BEARING CAPACITY OF SOILS, SLOPE, STABILITY, GROUND WATER

CONCRETE

FROM BUILDING.

1. MINIMUM CONCRETE STRENGTH

LOCATION	STRENGTH	W/C RATIO	AIR ENTRAINMENT
FOOTINGS	20 MPa	0.55	5% TO 8%
FOUNDATION WALLS / PIERS	25 MPa	0.50	5% TO 8%
CONCRETE FLOORS	32 MPa	0.45	0%
EXTERIOR FLAT WORK	32 MPa	0.45	0%

2. CONCRETE CODES: CONFORM TO CSA 23.1.2.3 MANUAL OF STANDARD

PRACTICE BY R.S.I.O. REBAR 400 MPa 4" SLUMP. +/- 1%

4. CONCRETE TESTING: BY CERTIFIED CONCRETE TESTING LAB.

5. SLABS: SAW-CUT TO 1/4 OF SLAB DEPTH SPACING @ 30 TIMES SLAB DEPTH

CUT WITH IN 24 HRS OF SLAB PLACEMENT 6. AGGREGATE: 3/4" INCH MAX. SIZE 7. ADMIXTURES: TO CAN3-A266.1

CONSTRUCTION LUMBER

1. ALL CONSTRUCTION LUMBER IS TO BE SPRUCE/PINE/FIR(SPF) AND HAVE A MOISTURE CONTENT NOT GREATER THAN 19% AT THE TIME OF INSTALLATION. ALL LUMBER IS TO BE IDENTIFIED BY A GRADE STAMP OF AN AGENT CERTIFIED BY CLISAR 2. FRAMING AND BOARD LUMBER IS TO BE IN ACCORDANCE WITH TABLE

9.3.2.1 OF THE OBC UNLESS OTHER WISE SPECIFIED ON THE DRAWINGS.

AFORE MENTIONED LUMBER.

INSTALL ALL MEMBERS TRUE TO LINE, LEVELS AND ELEVATIONS. CONSTRUCT CONTINUOUS MEMBERS FROM PIECES OF THE LONGEST

INSTALL SPANNING MEMBERS WITH THE CROWN EDGE UP, STAGGER SPLICE JOINT LOCATIONS. WHEN USING PRESSURE TREATED LUMBER (PT) ENSURE THAT

FASTENERS ARE GALVANIZED OR APPROVED FOR CONNECTION OF

ALL STAIRS- EXTERIOR / INTERIOR

= 200 (7.7/8")MIN. RUN = 210 (8 1/4") MIN TREAD = 235 (9 1/4") MIN. NOSING = 25 (1") MIN. HEADROOM = 1950 (6'-5") = 860 (2' 10") FOR CURVED STAIRS. MIN. RUN = 150 (5 7/8") MIN. AVERAGE RUN = 200 (7 7/8")

GUARDRAIL/HANDRAIL

RAIL @ INT LANDING	=	900	(2'	11")
RAIL @ INT STAIR	=	800	(2'	7")
RAIL @ EXT LANDING (0 THAN 1800 ABOVE FIN (1	070	(3' 6	3")
RAIL @ EXT LANDING	=	900	(2'	11")
RAIL @ EXT STAIR	=	900	(2'	11")

WOOD PICKETS MAX 100mm (4") BETWEEN

<u>ATTIC ACCESS</u>

AS PER OBC 9.19.2.1.

ATTIC ACCESS HATCH 546x 864mm(21 1/2 " x 23") min WITH WEATHER STRIPPING.

SMOKE AND CO DETECTORS.

INTERCONNECTED AND FOUIPPED WITH A VISUAL SIGNALING COMPONENT IN COMPLIANCE WITH NFPA-72.

HAND AND GUARD RAILS. ALL HAND AND GUARD RAILS FOR THIS PROJECT ARE SPECIFIED FROM THE ONTARIO BUILDING CODE SB-7 PRESCRIPTIVE. IF A RAILING IS TO BE USED OTHER THAN WHAT HAS

BEEN PRESCRIBED (i.e. ENGINEERED RAILING IN ALUMINUM OR VINYL CLAD) THE BUILDER / OWNER WILL MAKE THE MANUFACTURES

SPECIFICATIONS AND COMPLIANCE LETTER / DESIGNS FOR SUCH RAILING ALONG WITH ANY REQUIRED CONNECTION DETAILS, AVAILABLE TO THE MUNICIPALITY UPON THEIR REQUEST.

SQUASH BLOCKING

SQUASH BLOCKING MUST BE PROVIDED UNDER ALL WOOD POSTS AS FOLLOWS

BUILT-UP POST	SQUASH BLOCK BETW
3-38X89 (2X4) 4-38X89 (2X4) 5-38X89 (2X4) 6-38X89 (2X4) 7-38X89 (2X4) 2-38X140 (2X6) 3-38X140 (2X6)	1- 38X89 (2X4) 1- 38X89 (2X4) 2- 38X89 (2X4) 2- 38X89 (2X4) 3- 38X89 (2X4) 1-38X89 (2X4) 2-38X89 (2X6)

INTERIOR STUD PARTITIONS <u>(AS REQUIRED).</u>

38 x 89 (2 x 4) @ 400 (16") O.C. NONBEARING, 12.7mm (1/2") INT DRYWALL BOTH SIDES, 2 TOP PLATES & 1 BOTTOM PLATE TO MATCH STUD WIDTH.

<u>INTERIOR LOAD BEARING</u> PARTITIONS (AS REQUIRED).

38 x 140 (2 x 6) @ 400 (16") O.C. 12.7mm (1/2") INT DRYWALL BOTH SIDES, 2 TOP PLATES & 1 BOTTOM PLATE TO MATCH STUD WIDTH.

CLOSET RODS PROVIDE HANGING ROD AND SHELF IN ALL BEDROOM CLOSETS

BEDROOM WINDOWS

ON FLOORS WITH NO DIRECT GRADE ACCESS BY DOOR, AT LEAST ONE WINDOW PER FLOOR SHALL HAVE AN UNOBSTRUCTED OPEN PORTION HAVING A MIN. AREA OF 0.35m (3.8 sq. ft.) WITH NO DIMENSION LESS THAN 380mm (15") AND A MAX SILL HEIGHT OF 1000mm (3'-3") ABOVE FLOOR.

ALL HVAC DESIGNS TO BE DESIGNED BY A QUALIFIED HVAC DESIGNER. OF THE FOLLOWING: SES DRAFTING AND DESIGN HAS NOT PROVIDED AN HVAC DESIGN WITH THIS PROJECT. CLIENT

OR CONTRACTOR IS RESPONSIBLE TO PROVIDE ONTARIO BUILDING CODE HVAC DESIGNS. THESE GENERAL NOTES ARE A GUIDELINE ONLY, AND BY NO MEANS

1. PROVIDE DUCT WORK IN ACCORDANCE WITH S.M.A.C.N.A., LATEST ADDITION. TOTAL ALLOWABLE LEAKAGE TO NOT EXCEED 1.5% OF TOTAL SYSTEM DESIGN.

2. ALL DUCTWORK TO BE GALVANIZED.

CONSTITUTE AN HVAC DESIGN

3. ROUND DUCT WORK TO BE SPIRAL LOCK SEAM

4. FLEXIBLE DUCT WORK TO BE ALUMINUM SPIRAL WOUND WITH 1' INSULATION SLEEVE 5. PROVIDE VOLUME DAMPERS AT ALL DUCT

6. NEW SYSTEM TO BE BALANCED BY CONTRACTOR.

BRANCHES AND TAKE-OFFS.

PLUMBING

ALL PLUMBING AND ON SITE SEWAGE DESIGNS TO BE DESIGNED BY A QUALIFIED DESIGNER. SES DRAFTING AND DESIGN HAS NOT PROVIDED A PLUMBING OR ON SITE SEWAGE DESIGN WITH THIS PROJECT. THE CLIENT OR CONTRACTOR IS RESPONSIBLE TO PROVIDE A PLUMBING AND ON SITE SEWAGE DESIGN FOR THIS PROJECT.

THESE GENERAL NOTES ARE A GUIDELINE ONLY, AND BY NO MEANS CONSTITUTE A PLUMBING

1. ALL FIXTURES, PIPING, EQUIPMENT, LABOR AND SERVICES TO BE SUPPLIED BY CONTRACTOR UNLESS OTHER WISE SPECIFIED BY OWNER TO COMPLETE A WORKING PLUMBING

2. ALL PIPING TO TO BE INSTALLED IN ACCORDANCE WITH THE PLUMBING CODE. ONTARIO BUILDING CODE, AND AS REQUIRED BY THE LOCAL INSPECTION AUTHORITY.

3. DOMESTIC WATER SUPPLY PIPING & FITTINGS TO CONFORM AS FALLOW -COPPER TUBE TYPE "L" -BRASS AND BRONZE TO ANSI B16.15 -SOLDER: TI, ANTIMONY: 95:5 TO ASTM B2 -SOLDER AND FLUXS AT POTABLE WATER LOCATIONS TO BE LEAD FREE. 4. ALL WATER CLOSETS TO BE MAXIMUM 4.8L PER FLUSH

PROVIDE TEMPERATURE CONTROL DEVICES TO LIMIT THE HOT WATER TEMPERATURE TO 49°C TO ALL FIXTURES EXCLUDING DISHWASHERS AND CLOTHES WASHERS IN ACCORDANCE WITH

ELECTRICAL

PROJECT.

THE ONTARIO BUILDING CODE.

ALL ELECTRICAL DESIGNS TO BE DESIGNED BY A QUALIFIED DESIGNER. SES DRAFTING AND DESIGN HAS NOT PROVIDED AN ELECTRICAL DESIGN WITH THIS PROJECT. THE CLIENT OR CONTRACTOR IS RESPONSIBLE TO PROVIDE AN ELECTRICAL DESIGN FOR THIS

THESE GENERAL NOTES ARE A GUIDELINE ONLY. AND BY NO MEANS CONSTITUTE AN ELECTRICAL

1. PROVIDE ALL LABOR, EQUIPMENT, MATERIAL AND SERVICES, FOR COMPLETE AND OPERATING ELECTRICAL SYSTEM.

2. PROVIDE ELECTRICAL WORK IN ACCORDANCE OF ALL APPLICABLE GOVERNMENT CODES, LOCAL BYLAWS, UNDERWRITERS REGULATIONS, CSA STANDARDS AND ALL AUTHORITIES HAVING JURISDICTION.

GENERAL

- 1. DESIGN & CONSTRUCTION OF ALL WORK ON THIS PROJECT SHALL CONFORM TO THE LATEST EDITION
 - NATIONAL BUILDING CODE

 - LOCAL REGULATIONS OHSA REGULATIONS
- 2. THE PROJECT DRAWINGS ARE BY REVIEW BY SES DRAFTING AND DESIGN (SES) AND COMPLY WITH THE BUILDING CODE (OBC) PART 9 PROVISIONS.
- 3. THE SEALED DRAWINGS ARE ONLY FOR USE BY THE PARTY WITH WHOM SES HAS ENTERED INTO A CONTRACT (THE CLIENT), AND ARE NOT TO BE USED BY OTHERS.
- 4. SES'S REVIEW IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AT THE TIME OF OUR REVIEW. SES IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS FROM THIS INFORMATION. IT IS THE CLIENT'S RESPONSIBILITY TO INFORM US OF ANY CHANGES, ADDITIONS OR CORRECTIONS REQUIRED ON OUR DRAWINGS
- 5. THIS SPECIFICATION SHEET IS TO ACCOMPANY THE STAMPED DRAWINGS AND OBC PART 9 REQUIREMENTS. PLEASE CONTACT THE LOCAL BUILDING DEPARTMENT OR SES, IF FURTHER CLARIFICATION IS REQUIRED
- 6. SES ASSUMES THAT ALL REQUIRED INSPECTIONS WILL BE DONE BY THE LOCAL BUILDING DEPARTMENT. IF SES IS REQUIRED TO PERFORM AN INSPECTION, CALL 613.8278.3957. ALLOW 24 HOURS NOTICE FOR ALL INSPECTIONS.
- 7. NO CHANGES SHALL BE MADE TO THE STAMPED DRAWINGS WITHOUT NOTIFYING SES PRIOR TO MAKING THOSE CHANGES.
- 8. THE CLIENT SHALL CHECK AND VERIFY ALL SITE CONDITIONS AND MEASUREMENTS, AND REPORT ANY

WOOD-FRAME CONSTRUCTION

- 1. ALL WOOD-FRAME CONSTRUCTION SHALL CONFORM TO OBC 9.23 U.N.O. ON THE STAMPED
- 2. ALL STRUCTURAL COMPOSITE LUMBER (SCL) SHALL BE 2.0E WITH Fb=2950 OR BETTER. FASTEN MULTI-PLY SCL BEAMS AS PER MANUFACTURES SPECIFICATIONS. PROVIDE 3" MIN. BEARING LENGTH AT ENDS, U.N.O
- 3. ALL PRE-ENGINEERED SYSTEMS (I.E. ROOF TRUSSES, FLOOR JOISTS, ETC.) ARE TO BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OF ONTARIO. PROVIDE LAYOUTS AND STAMPED DRAWINGS TO SES AND THE LOCAL BUILDING DIVISION.
- FOR THE BUILDING. 5. PROVIDE SUFFICIENT LATERAL SUPPORT FOR THE TOP OF ALL DROPPED BEAMS AND LINTELS TO PREVENT LATERAL TORSIONAL BUCKLING.

4. ENSURE THE EXTERIOR WALLS ARE BRACED AS PER OBC 9.23.10.2 TO PROVIDE LATERAL SUPPORT

- 5.1. AN EXAMPLE OF SUFFICIENT LATERAL SUPPORT IS (2) 3 1/4" NAILS PER JOIST FOR LEDGER STRIP TO WOOD BEAM CONNECTION (AS PER OBC TABLE 9.23.3.4).
- 6. ALL WOOD COLUMNS SHALL CONFORM TO OBC 9.17. U.N.O. PROVIDE A BUILT-UP WOOD STUD COLUMN EQUAL TO THE WIDTH OF BEAM/GIRDER TRUSS UNDER ALL BEAM/GIRDER TRUSSES MIN. U.N.O. CONTINUE ALL COLUMNS DOWN TO FOUNDATION OR FULL BEARING ON BEAMS, BLOCK SOLID IN JOIST SPACES, TYPICAL (TYP.).
- 7. ALL LINTELS TO HAVE 1 JACK STUD, 1 KING STUD AT ENDS U.N.O.
- 8. ALL WOOD SHALL BE NO. 2 SPRUCE OR BETTER.
- 9. ALL GUARDS SHALL CONFORM TO OBC 9.8.8 AND SUPPLEMENTARY STANDARD SB-7 U.N.O.

ROOF AND CEILING FRAMING

- 1. ALL ROOF AND CEILING FRAMING SHALL CONFORM TO OBC 9.23.13 U.N.O. ON THE STAMPED
- $2. \ \, \text{ALL ROOF RAFTERS/JOISTS AND CEILING JOISTS SHALL CONFORM TO THE SPANS SHOWN IN OBC} \\$ PART 9 TABLES A-3 TO A-7.

3. WHERE REQUIRED, PROVIDE INTERMEDIATE SUPPORT FOR ROOF RAFTERS/JOISTS AS PER OBC

- 3.1. SES ASSUMES THAT COLLAR TIES WILL BE USED TO PROVIDE INTERMEDIATE SUPPORT INSTEAD OF STRUTS OR DWARF WALLS U.N.O. (I.E. ALL ROOF RAFTERS/JOISTS BEAR ON EXTERIOR WALLS
- ONLY AND INTERIOR WALLS SUPPORT CEILING JOISTS ONLY U.N.O.). 4. WHERE THE RIDGE IS UNSUPPORTED, ROOF RAFTERS/JOISTS ARE TO BE TIED TO THE CEILING JOISTS (OR SOLID BLOCKING AT 3'-11" o.c. MAX.) AT THEIR BASE AND NAILED AS PER OBC TABLE 9.23.13.8 TO PREVENT OUTWARD MOVEMENT.
- 5. OVER-FRAMED AREAS ARE TO BE SUPPORTED ON LOWER ROOF RAFTERS/JOISTS BY 2x4 STRUTS @ 24" EACH WAY MIN., U.N.O..
- 6. WOOD ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH OBC 9.23.13.11, OR PART 4 IF THEIR SPAN EXCEEDS 40'-0" (AS PER OBC 9.23.1.1).
- 6.1. IF THE TRUSSES ARE DESIGNED IN ACCORDANCE WITH OBC PART 4, THE DESIGN OF UPLIFT ANCHORS SHALL BE PROVIDED BY THE TRUSS SUPPLIER ALONG WITH LAYOUTS AND STAMPED

MATERIALS

CONCRETE

1. MATERIALS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS U.N.O. ON THE STAMPED

OBC 9.3.1

REINFORCING STEEL	- CSA G30
LUMBER & WOOD PRODUCTS	- OBC 9.23
STEEL BEAMS	- OBC 9.23.4.3
STEEL COLUMNS	- OBC 9.17
ANCHOR BOLTS, STEEL PLATES & ROLLED SECTIONS	- CAN/CSA-G40.21
STEEL HSS & W-BEAMS	- CAN/CSA-G40.21M-350V
ALL OTHER STEEL	- CAN/CSA-G40.21M-300V
STRUCTURAL BOLTS	- ASTM A325

FOOTINGS AND FOUNDATIONS

- 1. ALL FOOTINGS AND FOUNDATIONS SHALL CONFORM TO OBC 9.15 UNLESS NOTED OTHERWISE (U.N.O.) ON THE STAMPED DRAWINGS
- 2. FOOTINGS TO BEAR ON SOUND SUB-GRADE SUITABLE FOR 75 kPa (1555 psf) ALLOWABLE SOIL BEARING CAPACITY. THE CLIENT IS TO INFORM SES IF THE REQUIRED BEARING CAPACITY CANNOT BE
- 3. FOUNDATION WALLS SUPPORTING DRAINED EARTH HAVE BEEN DESIGNED FOR THE LOADS PROVIDED IN 9.4.4.6.(1)(a). ENSURE PROVISIONS ARE MADE FOR APPROPRIATE DRAINAGE OF GROUNDWATER. 4. ENSURE ALL FOUNDATION WALLS ARE LATERALLY SUPPORTED PRIOR TO BACKFILLING.
- 5. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF CAN/CSA-G30. REINFORCING BARS SHALL BE DEFORMED HI-BOND HARD GRADE WITH MINIMUM YIELD STRENGTH OF Fy = 400MPa.

STRUCTURAL STEEL

- 1. ALL WELDING SHALL BE PERFORMED BY A CANADIAN WELDING BUREAU CERTIFIED WELDER AND CONFORM TO CSA STANDARD W59.
- 2. PROVIDE SUFFICIENT LATERAL SUPPORT FOR STEEL BEAMS TO PREVENT LATERAL TORSIONAL BUCKLING. SUFFICIENT LATERAL SUPPORT EXAMPLES:
- c/w NUTS & WASHERS OR HILTI X-U FASTENERS @ 24" o.c., STAGGERED INTO THE TOP FLANGE & (2) 3 1/4" NAILS FROM EACH JOIST INTO THE TOP PLATE. 2.2. FLUSH STEEL BEAM - SOLID BLOCKING (2x LUMBER AND PLYWOOD) BOLTED TO THE BEAM WEB

2.1. DROPPED STEEL BEAM - AS PROVIDED IN OBC 9.23.4.3.(3). OR A 2x6 TOP PLATE w/ 3/8" THRU BOLTS

MOUNT HANGERS FOR THE JOIST TO BLOCKING CONNECTION. 3. WHERE A STEEL PLATE SUPPORTING MASONRY VENEER IS SPECIFIED, WELD TO THE TOP OR BOTTOM FLANGE OF THE BEAM WITH (2) ROWS OF 2" LONG FILLET WELDS @ 12" o.c. MIN., STAGGERED.

WITH 1/2" DIA. THRU BOLTS AT 16" o.c., STAGGERED TOP AND BOTTOM AND APPROVED FACE

- 4. ALL STEEL COLUMNS ARE TO BE LATERALLY SUPPORTED TOP & BOTTOM (I.E. BY CONCRETE SLAB ON GRADE, (2) 3/8" DIA. BOLTS OR 2" OF 1/4" FILLET WELD MIN.). CONTINUE ALL COLUMNS DOWN TO FOUNDATION OR FULL BEARING ON BEAMS, BLOCK SOLID IN JOIST SPACES, TYPICAL (TYP.).
- ALL STRUCTURAL STEEL TO BE FINISHED AS APPROVED BY GENERAL CONTRACTOR.

<u>LOADING</u>

1. ROOF LOADING:

2. CEILING LOADING

1.1. SNOW LOAD = $Cb \times Ss + 0.4 \text{ kPa}$; NOT LESS

THAN 1 kPa (20.9 psf), AS PER 0BC 9 .4.2.2 Cb = 0.55 kPa FOR ROOF WIDTH > 4.3m Cb = 0.45 kPa FOR ROOF WIDTH <= 4.3m

Ss = 1-IN-50 GROUND SNOW LOAD in kPa

TOTAL SPECIFIED LOAD = 0.35 kPa (7.3 psf)

1.2. DEAD LOAD = 0.29 kPa (6 psf) (ROOF RAFTERS/ JOISTS OR TRUSS TOP CHORDS)

2.1. ATTIC OR ROOF SPACE WITH LIMITED ACCESSIBILITY (CEILING JOISTS/TRUSS BOTTOM CHORDS), AS PER OBC 9.4.2.4.(1)

2.2. ACCESSIBLE ATTIC = SEE FLOOR LOADING FLOOR LOADING: 3.1. LIVE LOAD = 1.92 kPa (40 psf),

OBC 9.4.2.3:

BEDROOMS = 1.44 kPa (30 psf) 3.2. DEAD LOAD = 0.57 kPa (12 psf) 4. ACCESSIBLE EXTERIOR PLATFORMS, AS PER

5. GUARD LOADS: AS PER OBC 2012 4.1.5.14 (1)

4.1. LIVE LOAD = GREATER OF 1.92 kPa (40 psf)

OR SNOW LOA

SES

I HAYE REYIEWED QUALIFIED DESIGN

 ∞

SES

Brian |
30 MacKenzie Road
Marmora / Lake
Ontario

vent to exterior

minimum 0.10 mm

polyethylene

ground cover

other acceptable ground covers in

· 100 mm 15 MPa Portland cement,

concrete or Type S Roll Roofing

unheated crawl space are:

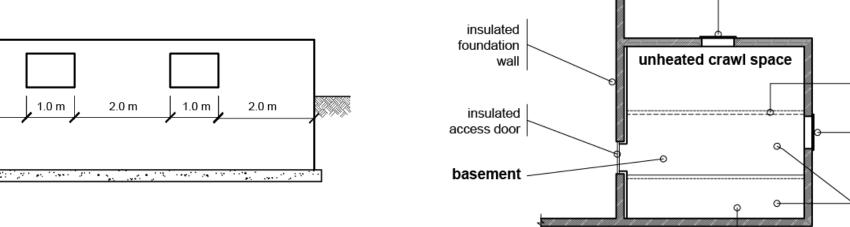
50 mm asphalt

9.18.6.1. Ground Cover in Unheated Crawl Spaces

Ground cover in unheated crawl space will limit the likelihood

of ingress of moisture from the ground.

joints lapped, weighted down and lapped 100 mm min.



Plan

Follow these steps to determine if a foundation wall is considered laterally supported at the top when the wall incorporates openings.

62'-0"

WALL: DW/2X6/DW -HEIGHT: 4' - 0" FOOTING WIDTH: 1' - 4" FOOTING DEPTH: 0' - 6"

WALL: DW/2X6/DW -HEIGHT: 4' - 0" FOOTING WIDTH: 1' - 4" FOOTING DEPTH: 0' - 6"

1) Check - single openings are not more than 1.2 m.

Elevation

2) Check - for combined width of openings not considered as a single opening single opening = average width of openings > width of solid wall between openings

average width = 1.0 m + 1.0 m (width of openings) = 1.0 m

width of solid wall between openings = 2.0 m the average width of openings is less than the width of solid wall between openings, therefore the combined openings are <u>not</u> considered a single opening more

3) Check - total width of openings shall be not more than 25% of the length of the wall

- total width of openings is 1.0 m + 1.0 m = 2.0 m

- total length of wall = 8.0 m x 25% = 2.0 m

- total width of openings is 2.0 m which is ≤ 2.0 m being

25% of the total length of the wall, therefore the total width of openings not more than 25% of the length of the wall

9.15.4.3. Foundation Walls Considered to be Laterally Supported at the Top

Foundation wall beneath an opening considered laterally supported.

Foundation Wall Thickness and Required Lateral Support 9.15.4.2.

CRAWLSPACE PLAN

SCALE: 3/16" = 1'-0"

floor joist

laterally supported

For Example: Column 4

for 200 mm solid concrete

the maximum height of

finished grade above the

basement floor is 2.3 m

of Table 9.15.4.2. A

20 MPa strength

concrete

floor slab

foundation wall

at the top

Foundation walls shall be sufficiently thick to support lateral earth loads.

finished ground

loads

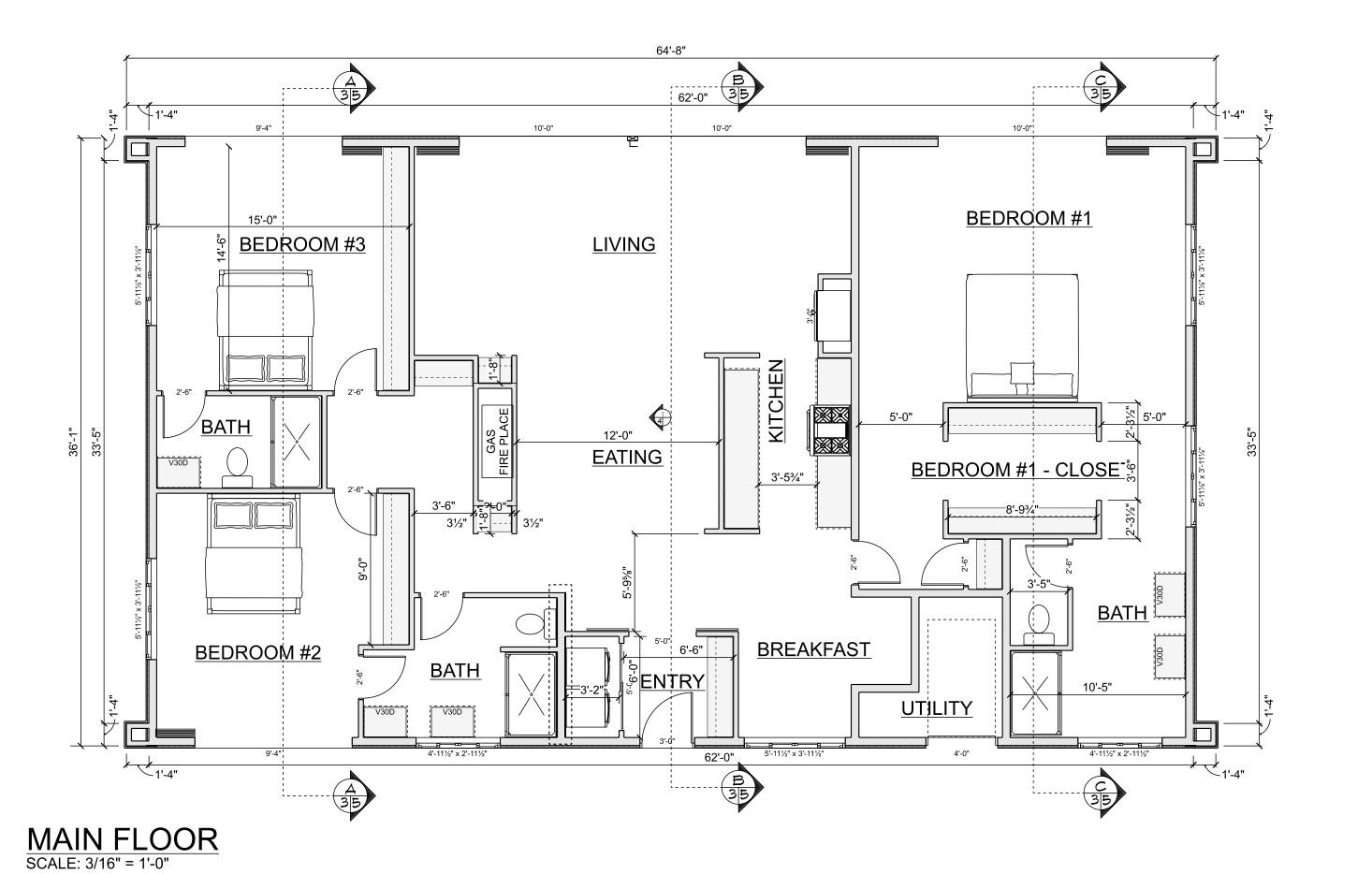
Section

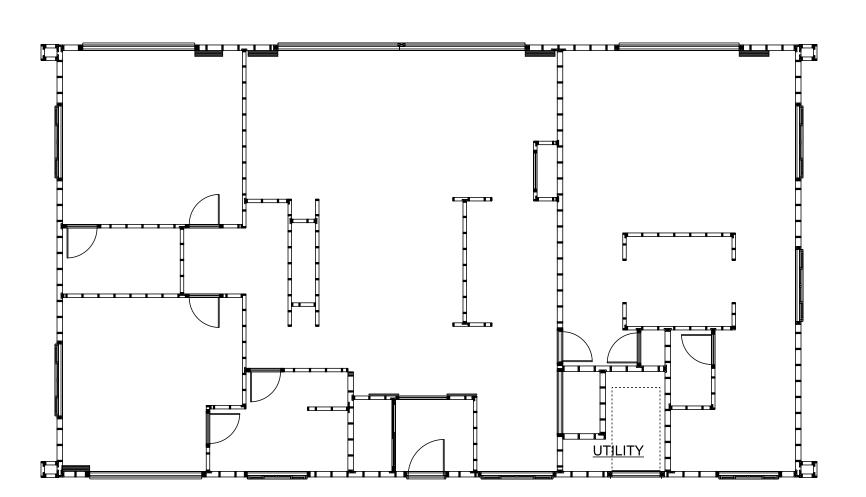
The thickness of foundation walls made of reinforced concrete block or solid concrete and subject to lateral earth pressure should conform to Table 9.15.4.2.A. for walls not exceeding 3.0 m in unsupported height.

As Noted

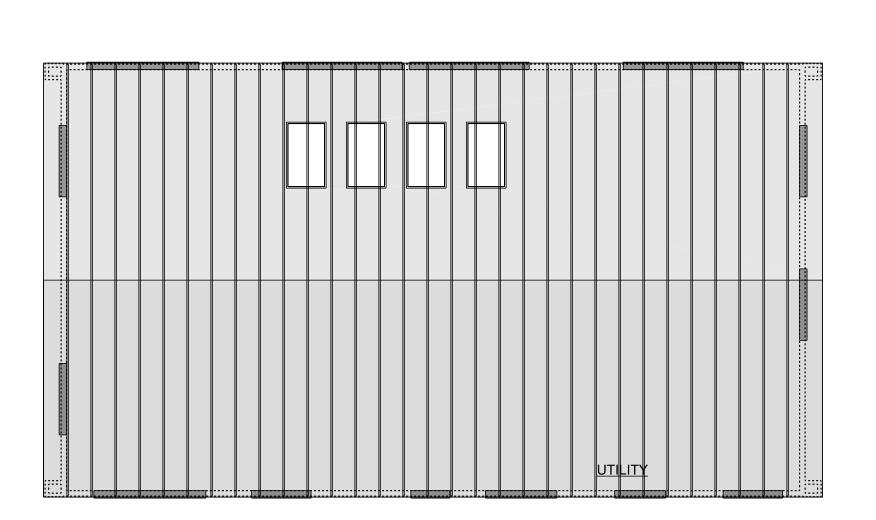
DRAWN BY:

SES DRAFTING AND DESIGN
PO Box 248 PHONE:613.827.3957
Stirling EMAIL:
Ontario scottestewart@sympatico.0





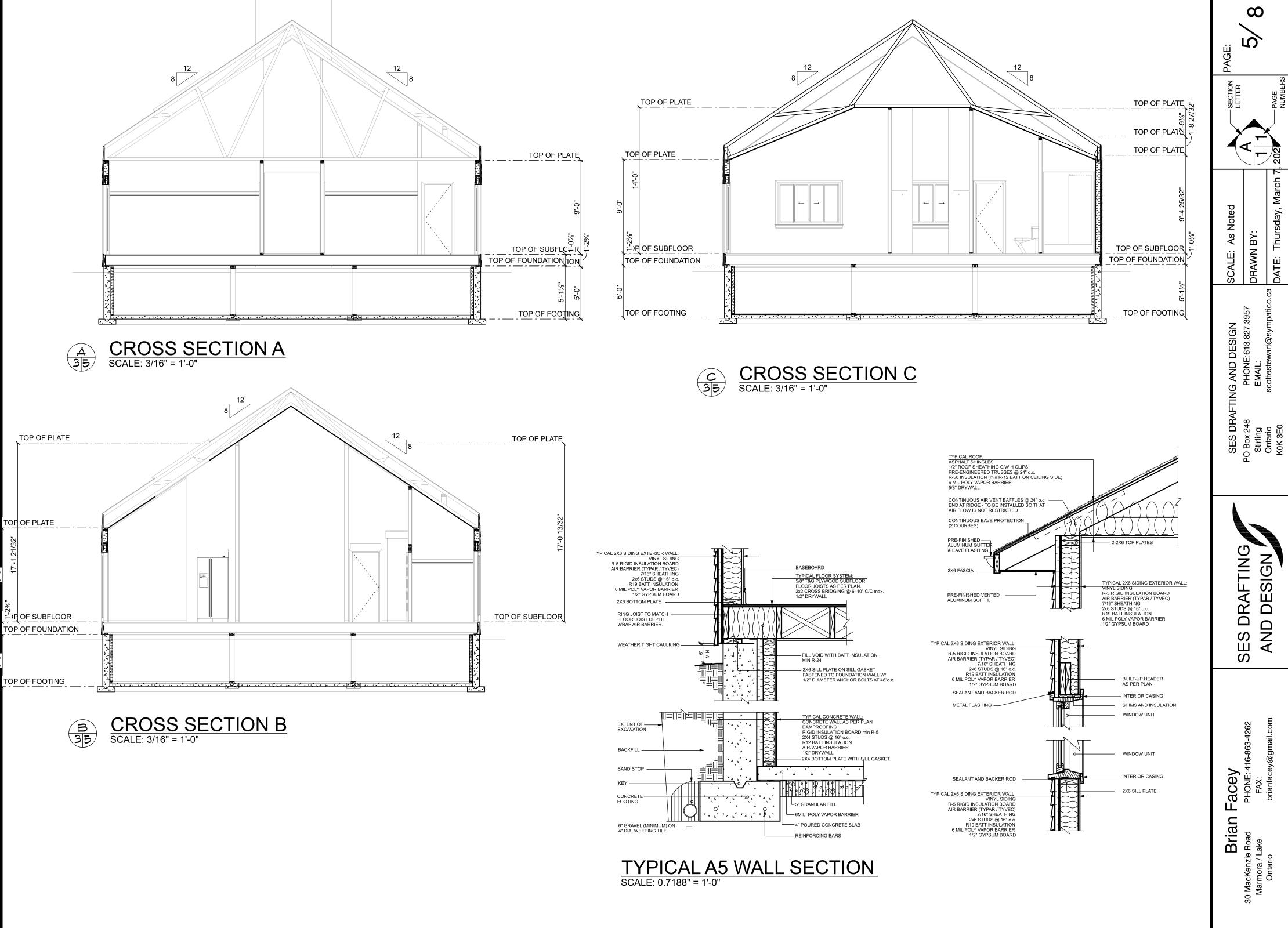
MAIN FLOOR - FRAMING
SCALE: 1/8" = 1'-0"



MAIN FLOOR - ROOF SCALE: 1/8" = 1'-0"

SES DRAFTING AND DESIGN

Brian Facey
30 MacKenzie Road PHONE: 41
Marmora / Lake FAX:
Ontario



I HAVE REVIEWED AND TAKE QUALIFIED DESIGNER SCOTT B

THESE DESIGNS UNDER 98 FIRM #36714 E. STEWART BCIN

416-863-4262 Facey

DRAFTING

SES

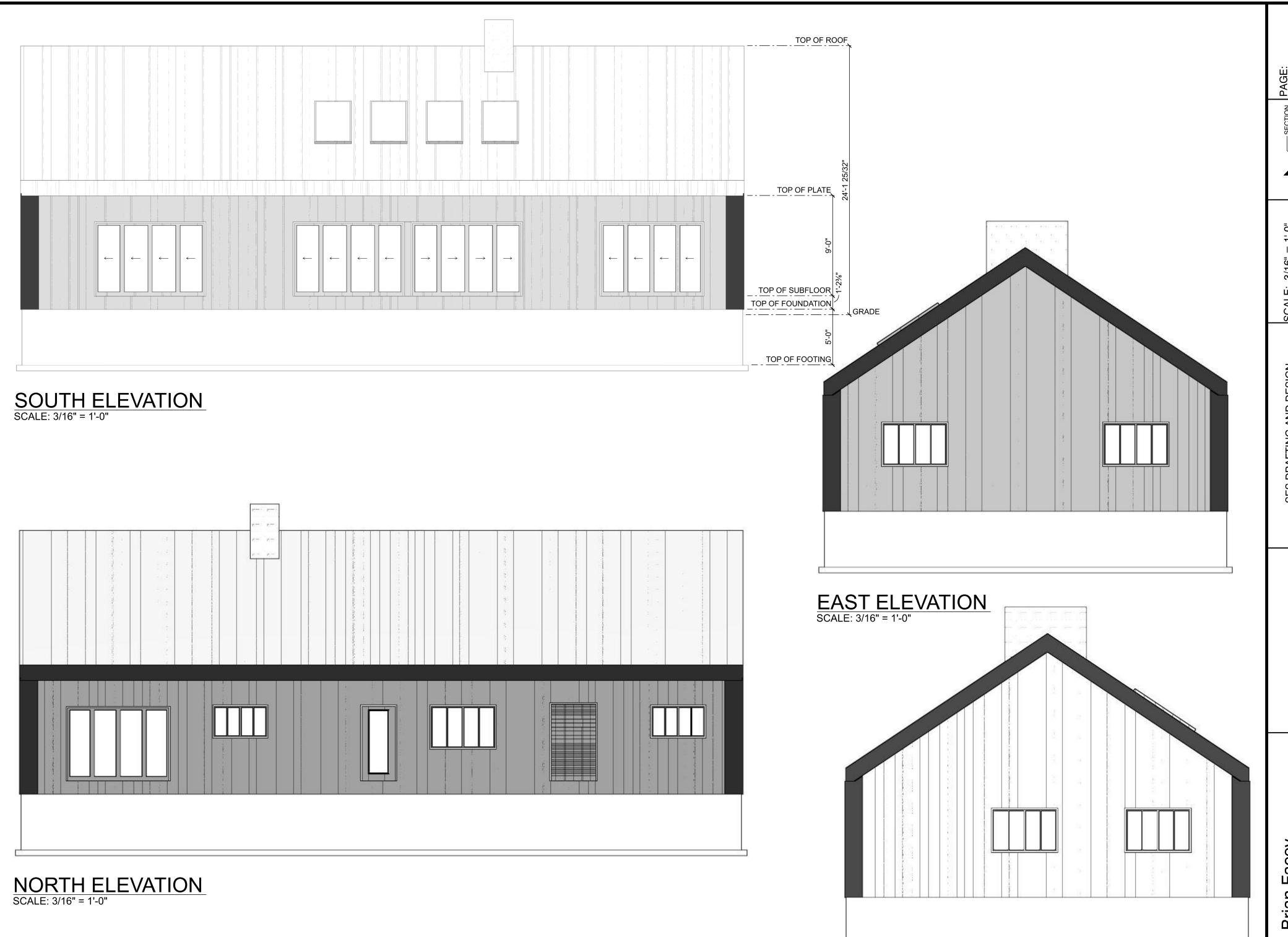
DESIGN

AND

 ∞

DRAWN BY:

Brian F
30 MacKenzie Road
Marmora / Lake
Ontario



WEST ELEVATION
SCALE: 3/16" = 1'-0"

SES DRAFTING AND DESIGN
PO Box 248 PHONE:613.827.3957
Stirling EMAIL:
Ontario scottestewart@sympatic
KOK 3E0

OR THESE DESIGNS UNDER THE REQUIREMENTS OF THE O.B.C. I HAVE REVIEWED AND TAKE RESPONSIBILITY FC QUALIFIED DESIGNER SCOTT E, STEWART BCIN #3

 ∞

DRAWN BY:

Brian Facey
30 MacKenzie Road PHONE: 416-863-4262
Marmora / Lake FAX:
Ontario brianfacey@gmail.com

March

0.1562"

DESIGN

AND

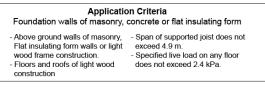
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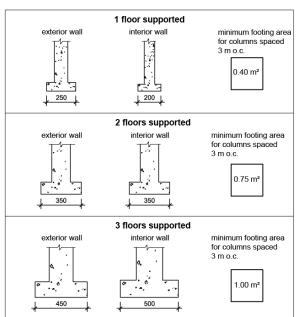
DRAWN

PHONE:613.827.3957 EMAIL: scottestewart@sympaticc

SES DRAFTING A
PO Box 248 PH
Stirling EN

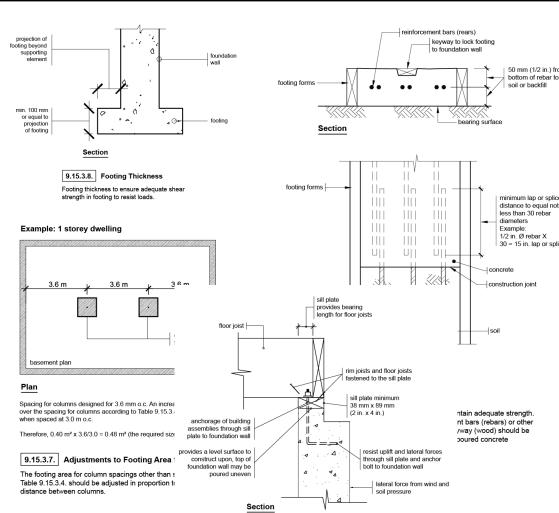
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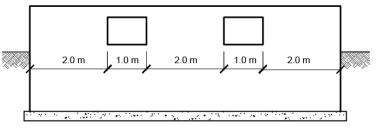
9.15.3.4. Basic Footing Widths and Areas

There must be sufficient bearing area for a strip footing and footing area for a column to support the anticipated loads.



9.23.7.1. Size of Sill Plates

Perform various functions when providing bearing for the floor system



Elevation

Follow these steps to determine if a foundation wall is considered laterally supported at the top when the wall incorporates openings.

1) Check - single openings are not more than 1.2 m.

2) Check $\,$ - for combined width of openings \underline{not} considered as a single opening

single opening = average width of openings > width of solid wall between openings

average width = 1.0 m + 1.0 m (width of openings) = 1.0 m 2 (openings)

width of solid wall between openings = 2.0 m

the average width of openings is less than the width of solid wall between openings, therefore the combined openings are <u>not</u> considered a single opening more

3) Check - total width of openings shall be not more than 25% of the length of the wall - total width of openings is 1.0 m + 1.0 m = 2.0 m

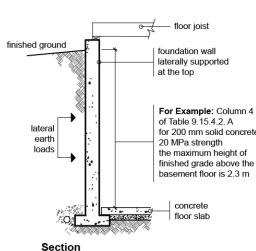
total length of wall = 8.0 m x 25% = 2.0 m

- total width of openings is 2.0 m which is ≤ 2.0 m being 25% of the total length of the wall, therefore the

total width of openings not more than 25% of the length of the wall

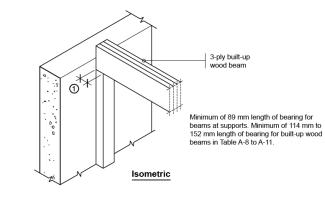
9.15.4.3. Foundation Walls Considered to be Laterally Supported at the Top

Foundation wall beneath an opening considered laterally supported.



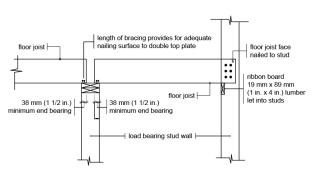
9.15.4.2. Foundation Wall Thickness and Required Lateral Support Foundation walls shall be sufficiently thick to support lateral earth loads.

The thickness of foundation walls made of reinforced concrete block or solid concrete and subject to lateral earth pressure should conform to Table 9.15.4.2.A. for walls not exceeding 3.0 m in unsupported height.

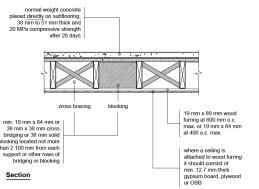


9.23.8.1. Bearing for Beams

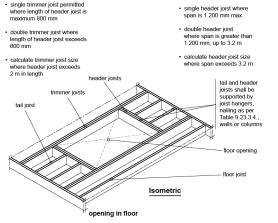
Beams shall be designed to have a minimum length of bearing at end supports.



9.23.9.1. End Bearing for Joists Adequate bearing area to ensure transfer of loads.



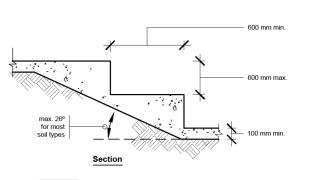
9.23.9.4. Strapping and Bridging in Tables A-1 and A-2 In Table A-2 the installation of bridging and designed concrete topping, or the joists with ceilings attached to wood furring provides for the distribution of loads from one joist to another.



9.23.9.5. Header Joists 9.23.9.6. Trimmer Joists

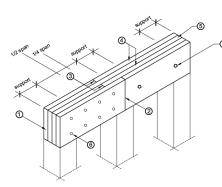
9.23.9.7. Support of Tail and Header Joists

Openings in floors require header, trimmer and tail joists to support dead and live gravity loads. Loading is transferred from tail joist to header joist and header joist to trimmer joist.



9.15.3.8. Footing Thickness 9.15.3.9. Step Footings

Stepped footings shall be designed so that there is a max. 600 mm vertical rise between horizontal portions and a min. 600 mm horizontal distance between vertical risers.



1 Individual members minimum of 38 mm thick installed on edge

2 Individual members butted together to form a joint shall occur over a support

⑤ Joints in individual members of a beam located at or near end quarter joints shall not occur in adjacent members at the same quarter points and not reduce the effective beam width by more than half.

6 Individual members fas members tastened usgenier wini,

double row of nails

nails not less than 89 mm in length

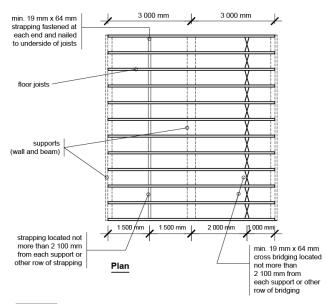
nails spaced 450 mm apart in each row

nails located 100 mm to 150 mm from the end of each piece

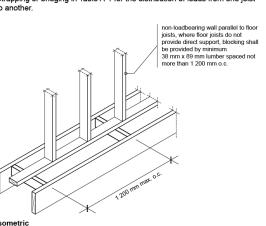
Where individual members are not fastened together with nails, they shall be fastened together with;
 bolts with not less than 12.7 mm diameter bolts
 bolts equipped with washers
 bolts squaed not more than 1 200 mm o.c.
 bolts located not more than 600 mm from the ends of members

9.23.8.3. Built-up Wood Beams

Proper construction of a built-up wood beam should resist the expected gravity loads through adequate joint support, bending strength at butt joints and load distribution and shear strength between members.

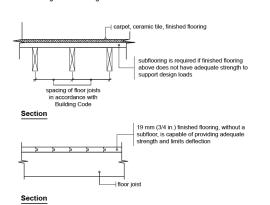


9.23.9.4. Strapping and Bridging in Tables A-1 and A-2 Strapping or bridging in Table A-1 for the distribution of loads from one joist

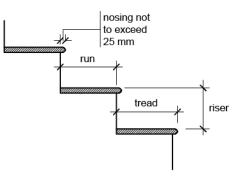


9.23.9.8. Support of Walls

Non-loadbearing walls parallel to floor joists must be provided with support to carry dead loads from the walls and prevent deflection of the floor assemblies, including the subflooring.

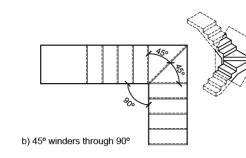


9.23.14.1. Subflooring Required Subflooring is required if the finished flooring does not have adequate strength to support the design loads.



9.8.4.6. Leading Edges of Treads

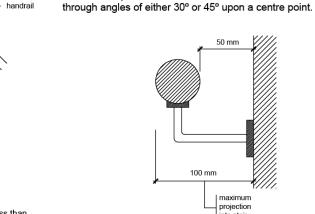
Riser, run, tread, and nosing. Nosing on stairs cannot exceed 25 mm in length.



9.8.4.5. Winders

a) 30° winders through 90°

Winders are permitted to consist of treads that turn



The height of a handrail serving a stair should be not less than 865 mm and not more than 965 mm above a straight line drawn tangent to the tread nosings of the stair served by the handrail

Section 9.8.7.5. Ergonomic Design 9.8.7.6. Projections into Stairs and Ramps

fastened to studs with no fewer than 2 wood screws penetrating 32 mm

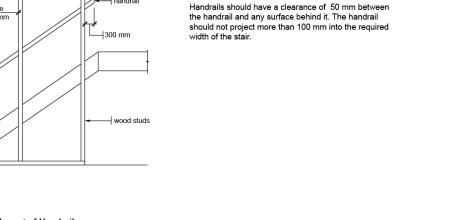
Section

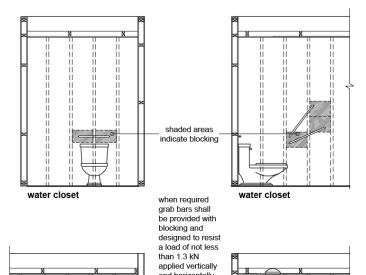
9.8.7.4. Height of Handrails

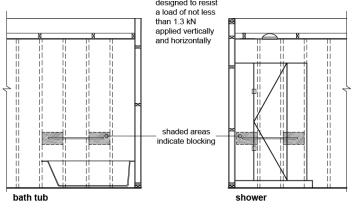
to the top of the handrail.

9.8.7.7. Design and Attachment of Handrails

Handrails should be attached to wood studs or blocking spaced not more than 1.2 m apart with the attachments at top and bottom not more than 300 mm from the ends of the handrail. Handrails should be attached to wood studs or blocking with no fewer than 2 wood screws penetrating 32 mm into the solid wood.







horizontal and vertical loads.

Elevations

9.31.2.3. Grab Bars

The design for the anchorage of grab bars shall be adequate for the anticipated

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416-863-4262

acey

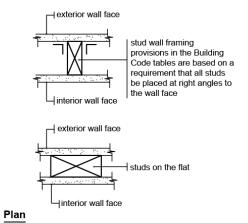
an

- 1 studs clad with minimum 9.5 mm plywood, waferboard or OSB on the exterior and minimum of 12.5 mm gypsum board on the interior
- 2 solid bridging at a minimum of 1 200 mm o.c.
- 3 studs fastened to top and bottom plates with minimum 3 mm x 87 mm toe-nails
- 4 double top plates fastened together
- (5) roof framing members spaced maximum of 600 mm o.c. and fastened to top plate
- 6 bottom plate fastened to floor joists, blocking or rim joists with not less than 82 mm nails spaced more than 200 mm o.c.
- 7 stud members are singular or double, refer to Tables A-30 to A-33

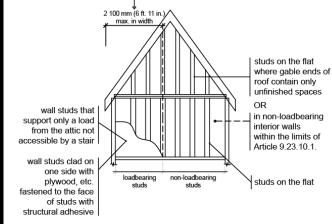
Elevation

9.23.10.1. Stud Size and spacing

Two storey height walls are permitted to support roof loads. The size and spacing of studs should conform to Table 9.23.10.1.



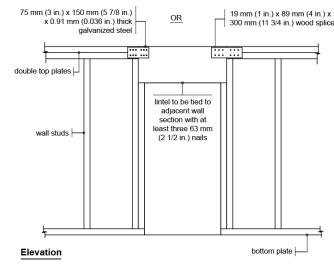
Exemptions loads from attic onto studs



Elevation

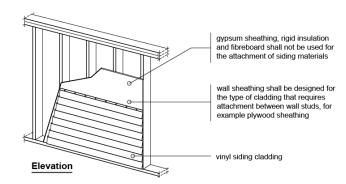
9.23.10.3. Orientation of Studs

Designed for installation at right angles to the wall face and on



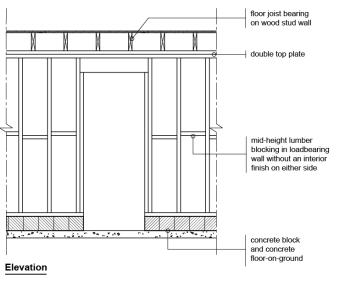
9.23.11.3. Top Plates

Lintels to be designed with splices to serve the role of the top plates



9.23.16.1. Required Sheathing

The requirement for wall sheathing depends on the exterior wall design and its components. Sheathing can be used as a base for the attachment of siding. Certain sheathing are not acceptable for the attachment of cladding and shall not be designed for that purpose.



9.23.10.2. Bracing and Lateral Support

Loadbearing interior walls require a finish in accordance with Section 9.29. to prevent the wall from buckling. Where an interior finish is not applied, blocking or strapping should be designed.

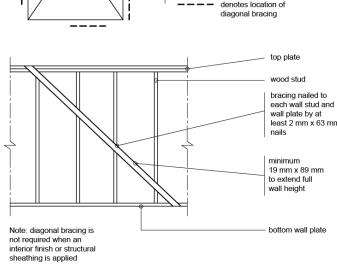
9.23.10.4. Continuity of Studs

Wall studs are required to be continuous for the full storey height.

no loads block

opening

required to have fire resistance rating



provide at least one diagonal wall brace per elevation for each floor

wall studs to be

the full storey

rim board

not permitted

9.23.10.2. Bracing and Lateral Support

backing for interio

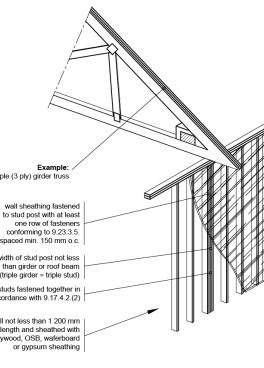
Plan

9.23.10.5. Support for Cladding Materials

support and nailing surfaces for cladding materials.

Corners in wall stud framing should be designed to provide adequate

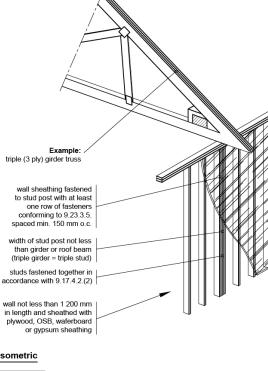
Exterior walls shall be designed to provide resistance to gravity and lateral loads.

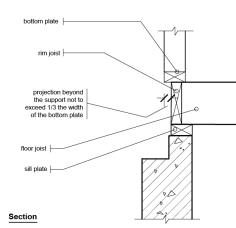


equivalent of 2 studs

9.23.10.7. Stud Posts Built into Walls

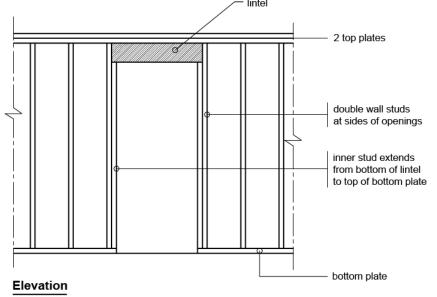
Stud posts built into walls supporting a girder truss or roof beam to conform with Tables A-34 to A-37 and to the requirements in the above figure.





9.23.11.2. Bottom Wall Plates

Bottom wall plates are used to fasten the stud wall to the building floor system. Adequate bearing and fastening between the bottom plate and the support



joints in upper

wood stud

joints are staggered not less than one stud spacing

Stagger Joints

wood studs below top plates

Lapped Top Plates

Joints in top plates reduce the stiffness and strength of the

structure to resist forces due to gravity and lateral

upper top plates

this upper top plate to overlap lower (2) top plate

joint in single wall plate reinforced

stud extends from top wall

Single wall studs are permitted on either side of an opening in a

9.23.10.6. Studs as Sides of Openings

Elevation

ioints in lower

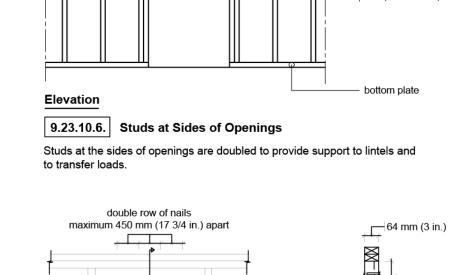
top plate

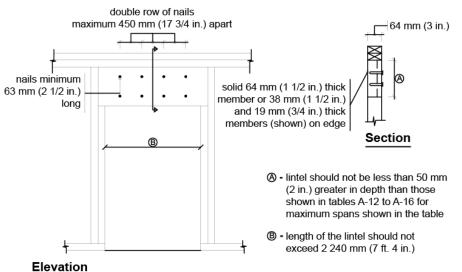
Elevation

Elevation

loads, such as wind.

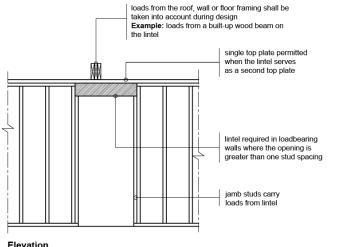
9.23.11.4. Joints in Top Plates





9.23.12.3. Lintel Spans and Sizes

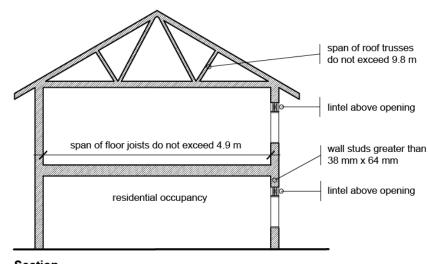
Loadbearing exterior and interior walls with 38 mm x 64 mm (2 in. x 3 in.) framing members, lintels must be sufficiently thick, deep and fastened in order to distribute the anticipated lateral and gravity loads.



9.23.11.3. Top Plates

9.23.12.2. Openings in Loadbearing Walls

A single top plate may be designed when a lintel serves as a second top plate and the top plate forms a tie across the lintel. Openings in loadbearing walls greater than the required stud spacing shall contain a lintel



Section

9.23.12.3. Lintel Spans and Sizes

The spans and sizes of wood lintels shall conform to the spans shown in Tables A-12 to A-16 in accordance with the criteria in Figure 9.23-28. Where any of the criteria cannot be met, the design shall conform to Part 4 of the Building Code. Walls of 38 mm x 64 mm in size shall conform to 9.23.12.3. (2) and (3).

compression web members exceeding 1 830 mm (6 ft.) roof truss design capable of supporting two and two thirds times the specified live roof load for 24 hours continuous bracing bracing consists of not less than 19 mm x 89 mm top chord ⊢ (1 in. x 4 in.) lumber nailed at with Subsection 4.3.1. right angles to web C = compression member at least two 63 mm = tension member roof truss design capable of supporting a total ceiling load (dead load plus live load) of deflection not to exceed those shown in | (1) Refer to CAN/CSA-086 "Engineering Table 9.23.13.11, when loaded with the Design in Wood" standard eiling load plus one and one third times the specified roof snow load for 1 hour Elevation 9.23.13.11. Wood Roof Trusses

Wood roof trusses designed in conformance with Part 9 should comply with above

requirements.

0.1200" BY. DRAWN March

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 ∞

DESIGN PHONE:613.827.3 EMAIL: cottestewart@sym AND

SES DRAFTING A
PO Box 248 PH
Stirling EN

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416-863-4262 acey an

DESIGNS 1 #36114__ THESE D RESF E. STE I HAVE REVIEWED QUALIFIED DESIGN



Calculation for concrete needed to keep a 3600L septic tank from floating at 30 Mackenzie Road.

Assumptions:

3600 L septic tank is a concrete from A & B Precast Safety factor is 1.5 Tank is buried 0.15m below grade

$$V_c = \underbrace{(SF F_B F_T F_S)}_{Y_c}$$

Where

V_C = volume of concrete

F_B = the buoyant force of the groundwater pushing up (kN)

 F_T = the weight of the tank (kN)

 F_S = the weight of the soil (kN)

SF = factor of safety 1.5 - 2.0

 Y_c = submerged specific weight of concrete (14kN/m³ typically)

 F_B = volume of tank submerged (m³) x specific weight of water (kN/m³)

= 2.286 * 1.524 * 1.651 *9.81

= 56.42kN

 F_T = mass of tank (kg) * gravity (m/s²) / 1000

= 3640 * 9.81 / 1000

= 35.7kN

 F_s = volume of soil above tank (m³) * specific weight of soil (kN/m³)

= (2.286*1.524*0.15) *19

= 9.9 kN

 $V_C = (SF * F_B - F_T - F_S) / Specific weight of concrete$

= (1.5 * 56.42 - 35.7 - 9.9) / 14

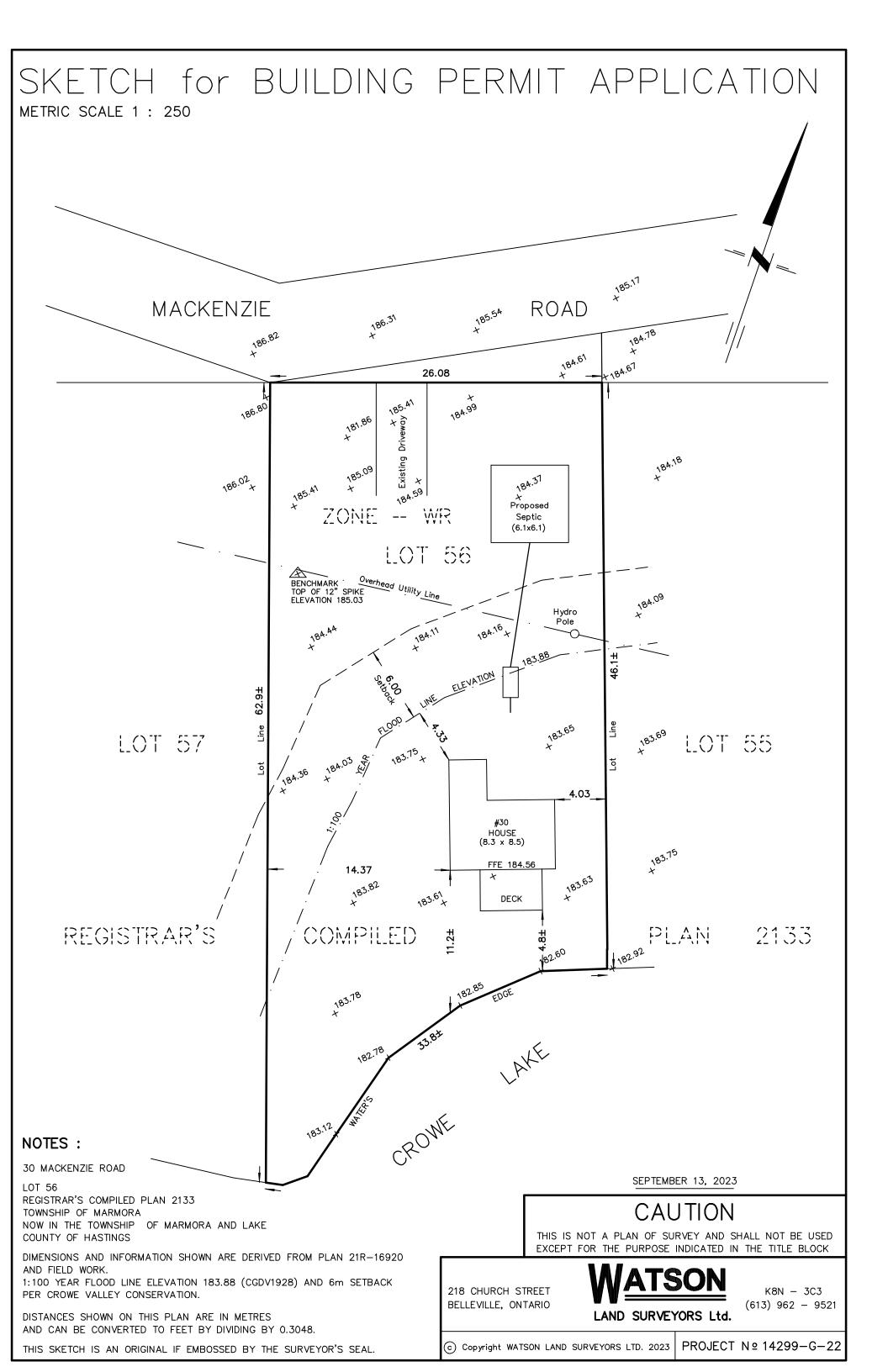
= (39.03) / 14

 $= 2.78 \text{m}^3$

Formula taken from Ontario Rural Wastewater Centre: Advanced Design of On-site Wastewater **Treatment Systems**

Appendix C

Elevation Survey



Appendix D

Opinion Letter



August 4, 2023

Attention: Scott Stewart

RE: 30 Mackenzie Road, Marmora ON

Opinion Letter - Floodline Assessment

Jewell File No. 230-5387

Mr. Stewart,

Jewell Engineering Inc. (Jewell) was retained to complete a floodline assessment at 30 Mackenzie Road in Marmora near the northeast corner of Crowe Lake (see Figure 1). Jewell completed the following tasks as part of this assessment.

- Review of topographic survey prepared by Watson Land Surveyors Ltd.
- Correspondence with Crowe Valley Conservation (CVC) staff to confirm the scope of work requested.
- A site visit on August 3, 2023 to observe individual characteristics of the subject property as it relates to floodplain.
- This engineering opinion letter regarding potential impacts on the Crowe Lake system in the regulatory flood event.



Figure 1: Site Location – 30 Mackenzie Road, Marmora



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KINGSTON 208-4 Cataraqui St. Kingston ON K7K 1Z7 Tel: 613-389-7250 kingston@jewelleng.ca

MISSISSAUGA 200A—2155 Leanne Blvd. Mississauga ON L5K 2K8 Tel: 905-855-1592 mississauga@jewelleng.ca

www.jewelleng.ca





Existing Conditions

The client is proposing to construct a 2,272 ft² house with a 760 ft² deck to upgrade their existing house on the lot. The final floor elevation for the building upgrade is 184.56m (CGVD28) per the Waterson Land Surveyors plan of survey. The existing and proposed structures are surrounded by existing buildings on both sides. CVC provided a regulatory 100-yr floodplain elevation of 183.88m for the property as indicated on the survey plan.

In a comparison of the regulatory water level to the existing grades (both elevations in CGVD28), the regulatory water level is an average of 0.4m above the existing ground within the vicinity of the proposed fill to accommodate the building improvements. A schematic of the proposed plan is attached. Note that the average fill on the plan is 2 ft, or 0.6m. This is greater than the 0.4m referenced above since the 0.6m represents the average *total* fill (i.e. including above the 100-yr water level).

Assessment of Potential Impacts to Storage and Conveyance

Based on experience and an understanding of hydraulic principles, the proposed building addition would have no negative impacts to adjacent properties at Crowe Lake. The reasoning is described below.

When completing an assessment to determine whether a building addition will negatively impact the control of flooding, two parameters need to be investigated.

- 1) Conveyance
- 2) Storage

Conveyance:

River and drainage systems rely on effective flow areas to convey runoff from upstream to downstream. The *effective flow areas* are defined as areas that contribute to the river's ability to move the water in its desired flow path. *Ineffective flow areas* on other hand, represent areas that are within the floodplain, but do not contribute to the conveyance of flows. Examples of *ineffective flow areas* would be runoff that is blocked by a bridge approach, or an infill development where there are existing structures on either side of the proposed development location.

For the subject lot, it is obvious that it is within an ineffective flow area since there are existing houses on either side. It is also located on the shore of a lake, within the perimeter of the drainage system. In drainage systems, lakes function as a reservoir, and are not relied on for conveyance in the same manner as a river. The proposed addition is within an ineffective flow area and on the perimeter of Crowe Lake; therefore, the proposed fill to accommodate the



building improvements on the lot will not contribute to Crowe Lake's ability to convey runoff from upstream to downstream. Subsequently, there will be no increase in water levels and no negative impacts to adjacent properties.

Note: Even if the proposed addition was within an effective flow are (which it is not), the cross-sectional area of Crowe Lake perpendicular to the direction of flow is exceptionally larger than the cross-sectional area associated with the shallow fill proposed for the building addition. Cross-sectional area is the driving factor in calculating the conveyance and subsequent water level in a drainage system (more so for rivers since lakes have little conveyance and are primarily dead storage).

Based on the above discussion, Jewell Engineering acknowledges the proposed building improvements would present no negative impacts to the control of flooding as it relates to conveyance.

Storage:

The proposed building and deck improvements have a total footprint area of 335m² within the existing floodplain limits. With an average elevation difference of 0.4m between the regulatory 100-yr water level and the existing ground within the fill area of the existing floodplain, the proposed building improvements will occupy approximately 134 m³ of storage within the existing floodplain as shown below.

Equation 1: Volume Below Floodline

$$335m^2 * (183.88m - 183.48m) = 134m^3$$

For lakes, majority of their volume is dead storage – meaning it does not flow downstream unless above the elevation of the outlet of the lake. Active storage is the depths near the top of the lake that vary based on the outlet elevation. When assessing storage implications, the active storage is of interest.

For Crowe Lake, it has a surface area of approximately 12.2 million square meters. For the purpose of our calculation, we will conservatively assume that the active storage depth for Crowe Lake is limited by the depth from the 100-yr water level (183.88m) to lowest elevation of the subject lot within the proposed fill area (182.60m).

From this information, Jewell calculated the active storage volume of Crowe Lake that would theoretically be adjusted with the proposed fill to accommodate the proposed building improvements.



$$Volume = 12,200,000m2 * (183.88m - 182.60m) = 15,600,000m^3$$

With 134 m³ of fill being occupied relative to the 15,600,000 m³, we can determine the percentage of storage lost to the fill placement as shown below.

Equation 3: Occupied vs Total Volume

$$\frac{134m^3}{15,600,000m^3} = 0.0009\% (9 \ parts \ per \ million)$$

It is atypical to quantify storage volumes in hydrology calculations in parts per million (ppm). However, the loss in storage volume is so minimal that it becomes the unit of measurement for this investigation.

With negligible loss in storage volume, there will be no increase in water surface elevation in Crowe Lake with the proposed additions at the subject lot.

Conclusion:

In summary, the proposed fill associated with the building improvements will have no impact on the conveyance or storage of the Crowe River system, and it will not increase water levels within Crowe Lake. Therefore, Jewell Engineering concludes the proposed building improvements will present no negative impacts to the control of flooding.

We also note that the survey plan shows the final floor elevation is 184.56m. Since this is more than 0.6m above the 100-yr water level of 183.88m, we have no concerns regarding the proposed final floor elevation.

Please note that floodproofing measures for the subject lot were outside the scope of this investigation as CVC's requested information was to address potential impacts to water levels and adjacent properties at Crowe Lake.

For the Owner's information, we note that there are dry and/or wet floodproofing measures available that can be detailed by the Owner or hired professionals.

Examples of these types of floodproofing measures include:

- Dry floodproofing:
 - Construct structure with waterproof membrane
 - Use sealants
 - Reinforce walls to withstand water pressure



- Wet floodproofing
 - o Keep all electrical outlets and wires a minimum of 1 foot above the floodline
 - Store valuables and potential contaminants (oils, solvents, etc.) at least 1 foot above the floodline
 - o Construct drains to allow water to drain from structure after floodwaters recede.

If you have any questions or concerns, please feel free to contact the undersigned.

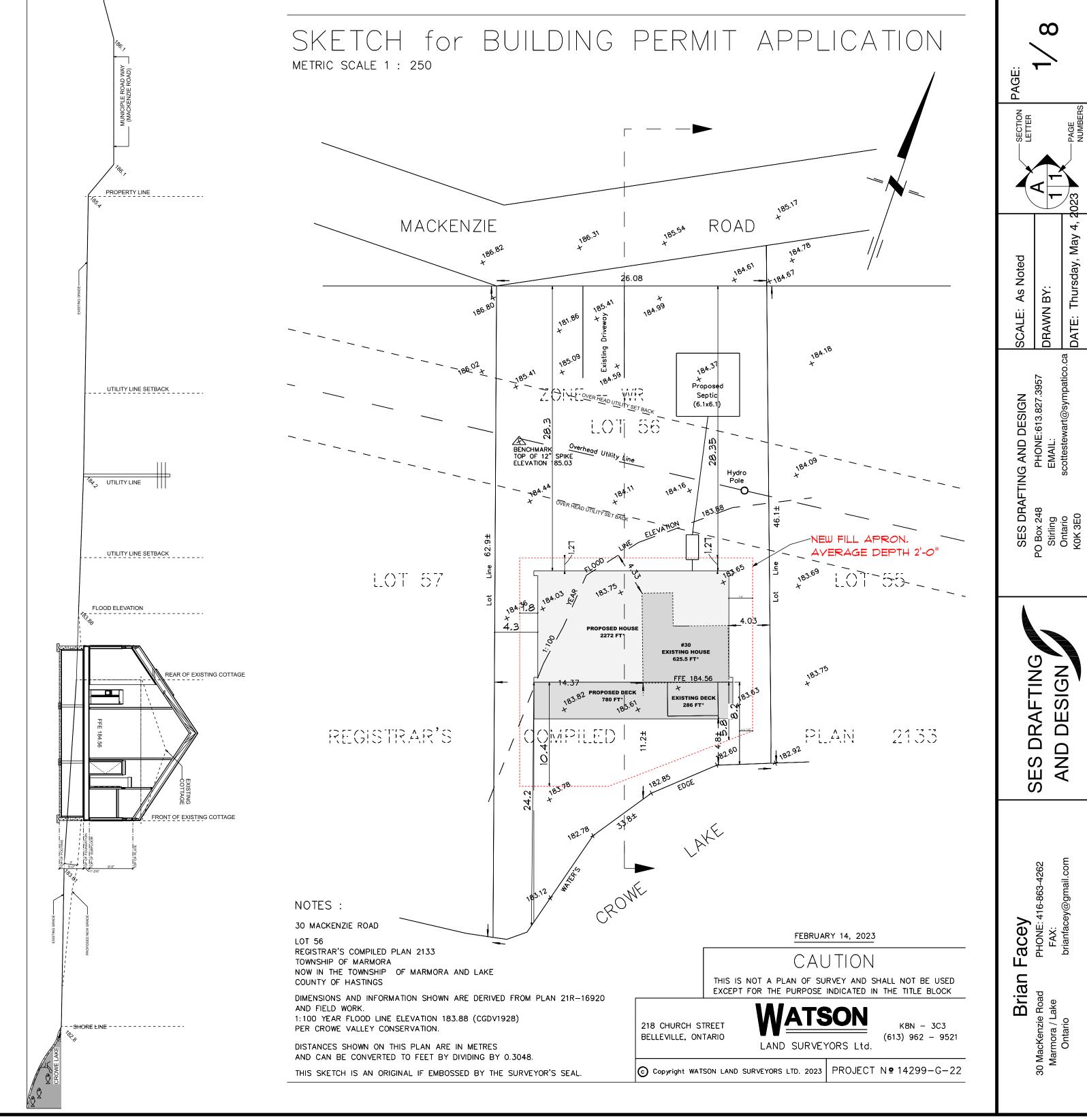
Sincerely,

Elliott Fledderus, P. Eng.

Jewell Engineering Inc.



	RAWING SCHEDUL	Ε
C	OVER PAGE - SITE PLAN_	1
G	ENERAL NOTES	2
C	RAWLSPACE PLAN	3
M	IAIN FLOOR PLAN	4
В	UILDING SECTION	5
E	LEVATIONS	6
0	BC DETAILS	7
0	BC DETAILS CONTINUED_	8



THESE DESIGNS UNDER 98 FIRM #36114

I HAVE REVIEWED AND TAKE QUALIFIED DESIGNER SCOTT 1

AND DESIGN

 ∞

DRAWN BY:

Brian F
30 MacKenzie Road
Marmora / Lake
Ontario

SITE SECTION SCALE: NOT TO SCALE

Appendix E

Peer Review

Appendix F

Site Visit Photos



Figure 1: Looking northeast along the shoreline (November 18, 2022).



Figure 2: Looking west along the shoreline (November 18, 2022).



Figure 3: Looking northeast along the shoreline (November 18, 2022).



Figure 4: Looking northeast towards the existing dwelling and deck (November 18, 2022).

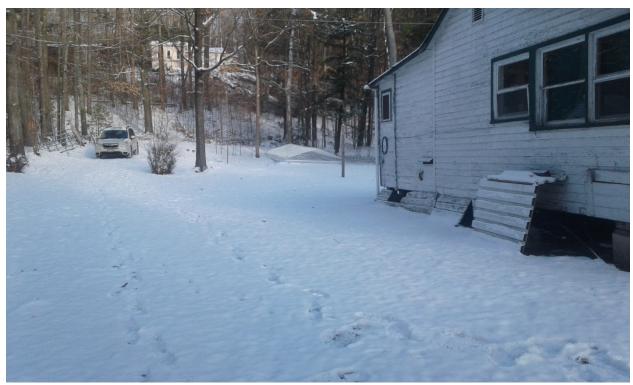


Figure 5: Looking north towards MacKenzie Road (November 18, 2022).



Figure 6: Looking west towards the west property line (November 18, 2022).



Figure 7: Looking towards Crowe Lake shoreline (November 18, 2022).



Figure 8: Looking east towards the north portion of the existing dwelling (November 18, 2022).

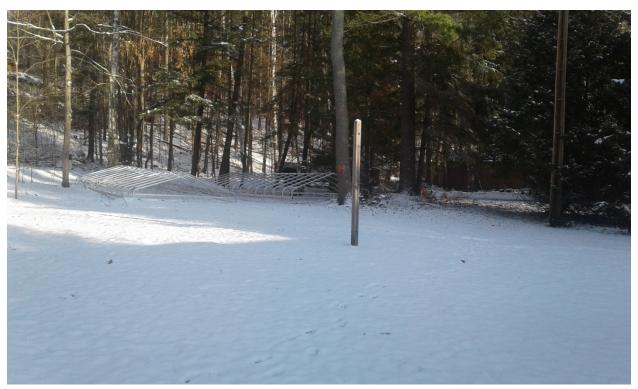


Figure 9: Looking north towards the proposed septic system location (November 18, 2022).



Figure 10: Looking southwest towards Crowe Lake shoreline. The pink flag demonstrates the approximate flood plain (November 18, 2022).



Figure 11 Looking south towards the dwelling and Crowe Lake shoreline. The pink flags demonstrate the approximate flood plain (November 18, 2022).



Figure 12: Looking east towards the north side of the dwelling. Pink flags demonstrate the approximate flood plain (November 18, 2022).



Figure 13: Looking south towards the north side of the dwelling. Pink flags demonstrate the approximate flood plain (November 18, 2022).



Figure 14: Looking south towards the north eastside of the dwelling. Pink flags demonstrate the approximate flood plain (November 18, 2022).



Figure 15: Looking southwest towards the north side of the dwelling. Pink flags demonstrate the approximate flood plain (November 18, 2022).

Appendix G

Correspondence

Kelsey Davidson

From: Facey, Brian <bri> brian.facey@blakes.com>

Sent: January 23, 2024 12:19 PM

To: Kelsey Davidson; scottestewart@sympatico.ca

Cc: Mark Pedersen

Subject: Urgent - Application 080/23 - 30 MacKenzie Road

Thanks Kelsey.

It will be the same folks as yesterdays call, all copied here other than Elliot (Scott can give you his coordinates).

I am free today and rest of week.

From: Kelsey Davidson < kelsey.davidson@crowevalley.com >

Sent: Tuesday, January 23, 2024 11:47 AM

To: Facey, Brian <bri> scottestewart@sympatico.ca

Subject: RE: Thank you.

• External Email | Courrier électronique externe •

Good morning Brian, Scott,

As discussed, I am in the process of scheduling our next call. Can you please confirm who all will be attending the next call?



Thanks,

Kelsey Davidson Regulations Officer

Crowe Valley Conservation 70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

Any maps/screen shots provided in emails are produced by Crowe Valley Conservation Authority with data supplied under licence by the Ontario Geospatial Data Exchange and local County data. These maps/screen shots have been created for demonstrative purposes only and are not to be used as an official source of data.

Disclaimer: This is intended for the addressee indicated above. It may contain information that is privileged, confidential, or otherwise protected from disclosure under the Municipal Freedom of Information and Privacy Protection Act. If you have received this in error, please notify us immediately.

From: Facey, Brian [mailto:brian.facey@blakes.com]

Sent: January 22, 2024 4:46 PM

To: kelsey.davidson@crowevalley.com

Subject: Thank you.

Brian A. Facey

Chair, Strategic Business Intiatives Partner

brian.facey@blakes.com

T. +1-416-863-4262 C. +1-416-735-9761

Blake, Cassels & Graydon LLP 199 Bay Street, Suite 4000, Toronto ON M5L 1A9 (Map)

blakes.com | LinkedIn



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Kelsey Davidson

From: Kelsey Davidson < kelsey.davidson@crowevalley.com>

Sent: January 22, 2024 3:47 PM

To: 'Facey, Brian'; 'Scott E Stewart <sesdraftingdesign@gmail.com>'; 'Scott E Stewart

<scottestewart@sympatico.ca>'

Subject: RE: Permit Application 080/23 - 30 MacKenzie Road

Good afternoon Brian, Scott,

I unfortunately can not access Teams at this time. I have included a Google Meets Link below to host our call at 4pm.

Call - 30 MacKenzie Permit 080/23

Monday, January 22

Time zone: America/Toronto Google Meet joining info

Video call link: https://meet.google.com/pkw-agya-gch

Or dial: (CA) +1 778-728-8800 PIN: 219 109 544#

More phone numbers: https://tel.meet/pkw-agya-gch?pin=7518464830574

Please let me know if you have any questions.

Thanks,

Kelsey DavidsonRegulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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----Original Appointment----

From: Facey, Brian [mailto:brian.facey@blakes.com]

Sent: January 19, 2024 12:45 PM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>; Scott E Stewart <sesdraftingdesign@gmail.com>; Scott E

Stewart <scottestewart@sympatico.ca>; Cory Golden <cory@lakefrontconstruction.com>; Crowe Valley

<info@crowevally.com>; Mark Pedersen <mpedersen@owtlaw.com>; Soloway, Julie

Subject: Permit Application 080/23 - 30 MacKenzie Road

When: January 22, 2024 4:00 PM-5:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Microsoft Teams Meeting

From: Facey, Brian

Sent: Friday, January 19, 2024 8:25 AM

To: Kelsey Davidson kelsey.davidson@crowevalley.com; Lall, Teevanie teevanie.lall@blakes.com

Cc: Scott E Stewart sesdraftingdesign@gmail.com; Brian Facey brianfacey@gmail.com; Scott E Stewart

scottestewart@sympatico.ca; Soloway, Julie julie.soloway@blakes.com; Mark Pedersen mpedersen@owtlaw.com; Cory

Golden cory@lakefrontconstruction.com; Crowe Valley info@crowevally.com

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

I am available at that time.

Tee. Please send a teams Link.

Brian A. Facey
Chair, Strategic Business Intiatives
Partner
brian.facey@blakes.com
T. +1-416-863-4262
C. +1-416-735-9761

On Jan 19, 2024, at 8:11 AM, Kelsey Davidson < kelsey.davidson@crowevalley.com > wrote:

• External Email | Courrier électronique externe •

Good morning Brian, Scott,

Are you available Monday around 4:00pm to set up a call?

<image005.png> Thanks,

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation 70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0 Tel: 613-472-3137 Fax: 613-472-5516

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From: Facey, Brian [mailto:brian.facey@blakes.com]

Sent: January 18, 2024 4:32 PM

To: Scott E Stewart < sesdraftingdesign@gmail.com >

Cc: Brian Facey < brianfacey@gmail.com >; Scott E Stewart < scottestewart@sympatico.ca >; Kelsey Davidson < kelsey.davidson@crowevalley.com >; Soloway, Julie < julie.soloway@blakes.com >; Mark Pedersen

<mpedersen@owtlaw.com>; Cory Golden <cory@lakefrontconstruction.com>; Crowe Valley <info@crowevally.com>

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

Kelsey please advise. You earlier said this would happen this week.

Brian A. Facey

Chair, Strategic Business Intiatives Partner brian.facey@blakes.com T. +1-416-863-4262 C. +1-416-735-9761

The special party

Blake, Cassels & Graydon LLP 199 Bay Street, Suite 4000, Toronto ON M5L 1A9 (Map)

blakes.com | LinkedIn

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On Jan 18, 2024, at 4:16 PM, Scott E Stewart < sesdraftingdesign@gmail.com > wrote:

Brian,

Not at this point, today.

Talk soon.

On Thu., Jan. 18, 2024, 3:48 p.m. Brian Facey, < <u>brianfacey@gmail.com</u>> wrote: Did a meeting get set up for this week as Kelsey indicated?

Brian A. Facey

Chair, Strategic Business Intiatives Partner brian.facey@blakes.com T. +1-416-863-4262

C. +1-416-735-9761

On Jan 18, 2024, at 8:20 AM, Scott E Stewart <scottestewart@sympatico.ca> wrote:

• External Email | Courrier électronique externe •

I have spoke with Brian.

Can you please confirm that we will have a hearing on Feb 22 2024.

I would also appreciate a opportunity to speak with you this week to clarify the few requirements left outstanding. Are we able to do so over an online platform, perhaps Teams or Zoom?

Look forward to hearing from you.

Talk Soon. Scott

On Jan. 18, 2024 8:11 a.m., Kelsey Davidson kelsey.davidson@crowevalley.com wrote:

Good morning Scott,

Can you please confirm that you spoke with Brian and informed him that his hearing is postponed to a later date?

Thanks,

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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From: Scott E Stewart [mailto:scottestewart@sympatico.ca]

Sent: January 17, 2024 1:48 PM

To: Kelsey Davidson < kelsey.davidson@crowevalley.com >
Cc: julie.soloway@blakes.com; Mark Pedersen mpedersen@owtlaw.com ;

www.CroweValley.com

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From: Brian Facey [mailto:brianfacey@gmail.com]

Sent: January 17, 2024 8:22 AM

To: Kelsey Davidson < kelsey.davidson@crowevalley.com >

Cc: scottestewart scottestewart <scottestewart@sympatico.ca>; Info <info@crowevalley.com>;

julie.soloway@blakes.com; Mark Pedersen <mpedersen@owtlaw.com>

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

Hi Kelsey.

Looking forward to tomorrow.

Still awaiting the details for the hearing location and the time and location etc.

Thanks and happy new year.

Brian A. Facey

Chair, Strategic Business Intiatives Partner brian.facey@blakes.com

T. +1-416-863-4262 C. +1-416-735-9761

On Nov 24, 2023, at 5:40 PM, Brian Facey brianfacey@gmail.com wrote:

Thank you. Yes. We will proceed on that date.

Kelsey Davidson

From: Kelsey Davidson < kelsey.davidson@crowevalley.com>

Sent: January 16, 2024 11:13 AM
To: 'scottestewart scottestewart'

Subject: RE: Fwd: RE: RE: RE: Permit Application 080/23 - 30 MacKenzie Road

Good morning Scott,

Thank you for your patience on this matter.

The CVCA will require some additional information prior to confirming the hearing date. I have listed the items below:

- Engineered designs demonstrating that the septic tank (located within the floodplain) is anchored to prevent the tank from becoming unsecured in a potential flood event.
- Provide floodproofing details demonstrating the proposed structure is floodproofed to an elevation of 0.3 metre above the regulatory flood elevation as per floodproofing standards outlined in Appendix C Floodproofing Guidelines.
- We will require a peer review of the Opinion Letter Floodline Assessment (August 4th, 2023) provided with the application. As noted in the CVCA Board-approved Policy, the costs incurred to conduct the peer review will be the responsibility of the proponent. I will follow up with you on this matter to provide additional information.

If you are available for a call sometime this week, I would be happy to schedule a call to discuss details with you.

Thanks,

Kelsey Davidson Regulations Officer

Crowe Valley Conservation 70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0 Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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From: Scott E Stewart [mailto:scottestewart@sympatico.ca]

Sent: January 9, 2024 8:18 AM

To: kelsey.davidson@crowevalley.com

Subject: Re: Fwd: Re: RE: RE: Permit Application 080/23 - 30 MacKenzie Road

Hello Kelsey.

I am still waiting on your response to this email.

Please kindly respond.

Thank you.

Talk Soon, Scott

On Jan. 2, 2024 11:55 a.m., Scott E Stewart <scottestewart@sympatico.ca> wrote:

Hello Kelsey.

Could you please reply to the attached email?

Thank you.

Talk Soon. Scott

----- Forwarded message -----

From: scottestewart scottestewart <scottestewart@sympatico.ca>

Date: Dec. 19, 2023 10:13 a.m.

Subject: Re: RE: Permit Application 080/23 - 30 MacKenzie Road

To: Kelsey Davidson kelsey.davidson@crowevalley.com

Cc:

Hello Kelsey, Thank you for your email.

On November 24, 2023, you presented us with a date of January 18, 2024, for the next board hearing. (with no required date regarding our required response time)

After speaking with our team, we determined that this date (January 18, 2024) would work for us and responded on December 13, 2023, that we would be ready for the Board Hearing on January 18, 2024.

Your email of December 15, 2023, leaves me with some confusion. In your most recent email (December 15, 2023) you restate what was sent on September 13, 2023, regarding the permit application, dates and next steps. In your most recent email (December 15, 2023) you also indicate that the date of January 18, 2024 "does seem feasible." Are we to assume that the Date of January 18, 2024, is feasible? If so, why are we given other dates for board hearings?

We feel that we have submitted the required applications, drawings and reports to date, that have been required by your office. We have paid all requested fees and after your email of November 24, 2023, we are in the position to attend and present our application to the board.

Please advise further.

Thank you.

----- Original Message -----

From: kelsey.davidson@crowevalley.com

To: scottestewart@sympatico.ca Cc: elliott@jewelleng.ca

Sent: Friday, December 15th 2023, 15:30

Subject: RE: RE: Permit Application 080/23 - 30 MacKenzie Road

Kelsey Davidson

From: Kelsey Davidson < kelsey.davidson@crowevalley.com >

Sent: December 15, 2023 3:31 PM To: 'scottestewart scottestewart' Cc: 'elliott@jewelleng.ca'

Subject: RE: RE: Permit Application 080/23 - 30 MacKenzie Road

Good afternoon Brian, Scott,

In regards to your permit application, CVCA staff have communicated to you that the proposed development does not conform to CVCA policy. You have communicated that you are not going to make any adjustments to your application, and wish to proceed with a hearing in from of the CVCA Watershed Advisory Board.

Before a specific hearing date can be requested, your application must be considered complete by CVCA staff. These requirements will be outlined to you in a separate email. Once submitted, CVCA staff will need a reasonable amount of time to review (i.e. 2 weeks). In consideration of the current date, and with winter holidays, the potential hearing date of January 18th, 2024 does seem feasible. The next possible hearing dates are:

February 22, 2024 April 18, 2024 June 20, 2024

You can expect an email from me within the next couple business days which will outline the additional items/information required for your application to be considered complete prior to setting a hearing date.

Please let me know if you have any questions.



Kelsey Davidson Regulations Officer

Crowe Valley Conservation 70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0 Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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From: scottestewart scottestewart [mailto:scottestewart@sympatico.ca]

Sent: December 13, 2023 5:20 PM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>

Cc: 'scottestewart scottestewart' <scottestewart@sympatico.ca>; elliott@jewelleng.ca Subject: Re: RE: Permit Application 080/23 - 30 MacKenzie Road</scottestewart@sympatico.ca>			
Hello Kelsey,			
We will be ready to proceed with the Water Advisory Board Hearing on January 18, 2024.			
Original Message From: kelsey.davidson@crowevalley.com To: brianfacey@gmail.com Cc: scottestewart@sympatico.ca; info@crowevalley.com; julie.soloway@blakes.com; mpedersen@owtlaw.com Sent: Friday, November 24th 2023, 10:02 Subject: RE: Permit Application 080/23 - 30 MacKenzie Road			
Good morning Brian,			
My apologies for delay in response.			
The next available Water Advisory Board Hearing date is January 18, 2024.			
Please confirm that you would like to proceed with your hearing on this date.			
Thanks,			
Kelsey Davidson			
Regulations Officer			
Crowe Valley Conservation			

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Kelsey Davidson

From: Kelsey Davidson < kelsey.davidson@crowevalley.com>

Sent: November 24, 2023 10:03 AM

To: 'Brian Facey'

Cc: 'scottestewart scottestewart'; 'Info'; 'julie.soloway@blakes.com'; 'Mark Pedersen'

Subject: RE: Permit Application 080/23 - 30 MacKenzie Road

Good morning Brian,

My apologies for delay in response.

The next available Water Advisory Board Hearing date is January 18, 2024.

Please confirm that you would like to proceed with your hearing on this date.

Thanks,

Kelsey Davidson Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

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From: Brian Facey [mailto:brianfacey@gmail.com]

Sent: November 23, 2023 4:01 PM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>

Cc: scottestewart scottestewart <scottestewart@sympatico.ca>; Info <info@crowevalley.com>;

julie.soloway@blakes.com; Mark Pedersen <mpedersen@owtlaw.com>

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

Dear Kelsey.

The most recent response from you indicated you would reply last Thursday about next steps in the process.

I wrote to you last Friday to follow up when I did not hear from you.

With another week having passed, I write again to ask if I may have the courtesy of a reply to my numerous emails below and an update.

These delays are causing us to be unable to add to the housing stock in a timely fashion.

Thank you. I await your reply.

Brian A. Facey

Partner, Competition, Antitrust & Foreign Investment Group

Direct: <u>416-863-4262</u> Cell: <u>416-735-9761</u>

On Nov 17, 2023, at 6:54 AM, Brian Facey < brianfacey@gmail.com > wrote:

Hi Kelsey, just following up on this. You mentioned below that the board was meeting yesterday. Can you please let me know the outcome. Thank you.

Brian A. Facey

Partner, Competition, Antitrust & Foreign Investment Group

Direct: <u>416-863-4262</u> Cell: <u>416-735-9761</u>

On Nov 14, 2023, at 8:31 AM, Kelsey Davidson kelsey.davidson@crowevalley.com wrote:

Good morning Brian,

Apologies in delay in response.

The CVCA Water Advisory Board is having their meeting this Thursday and will determine the next hearing date. Once the date has been confirmed by the Board I will relay that date to you.

<image004.png>

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

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From: Brian Facey [mailto:brianfacey@gmail.com]

Sent: November 13, 2023 2:56 PM

To: scottestewart scottestewart < scottestewart@sympatico.ca>

Cc: Kelsey Davidson <kelsey.davidson@crowevalley.com>; Info <info@crowevalley.com>; julie.soloway@blakes.com

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

Following up again.

Brian A. Facey

Partner, Competition, Antitrust & Foreign Investment Group

Direct: <u>416-863-4262</u> Cell: <u>416-735-9761</u>

On Nov 9, 2023, at 9:43 AM, Brian Facey < brianfacey@gmail.com > wrote:

Hi there,

I am following up to see if there are any developments here.

Could you please advise at your earliest convenience.

Thank you.

Brian A. Facey

Partner

Direct: <u>416-863-4262</u> Cell: <u>416-735-9761</u>

On Oct 31, 2023, at 2:22 PM, scottestewart scottestewart <scottestewart@sympatico.ca> wrote:

Hi Kelsy,

Just wondering if you could give me an idea where we are in the process for this appeal?

Thanks.

----- Original Message -----

From: kelsey.davidson@crowevalley.com

To: scottestewart@sympatico.ca; brianfacey@gmail.com Cc: info@crowevalley.com

Sent: Wednesday, September 13, 2023 1:41 PM

Subject: RE: Permit Application 080/23 - 30 MacKenzie Road

Good afternoon Scott, Brian,

Thank you Scott for contacting me today regarding the proposed dwelling and flood plain limitations. Please consider the following as official notification of the Crowe Valley Conservation Authority's decision regarding application 080/23.

At this time, the CVCA is not able to grant permission to support the proposed development as submitted in application 080/23. As you are aware, the proposed addition is within the flood plain of Crowe Lake and does not currently meet the requirements of Ontario Regulation 159/06 and the Crowe Valley Conservation Watershed Planning and Regulations (O. Reg. 159/06) Policy, as approved by the CVCA Board.

If you do not agree with this decision, you have the option to request a hearing with the Crowe Valley Conservation Authority Watershed Advisory Board. Please see the following information for the hearing process, should you choose to pursue this avenue:

CVCA Hearing Request Process

1) The applicant must submit an application deemed to be complete by the CVCA (including applicable fee payment and any technical requirements).

Outstanding: Revised elevation survey from Ontario Land Surveyor including the 6m setback

Fee: Fee payment was received by CVCA on 04 August 2023 for the permit #080/23 application.

The hearing fee is \$600. This fee is required to confirm us booking the hearing.

2) The applicant is to confirm in writing (email is acceptable) that they are requesting a hearing.

Outstanding: N/A - Confirmation received 13 September 2023.

3) The CVCA will provide the applicant with a list of possible dates for a hearing.

We will advise you of the next available hearing date as soon as that information becomes available to us.

4) Once a date is selected, CVCA issues a Notice of Hearing. The Notice of Hearing will include:

a. Reference to the applicable legislation to which the hearing is to be held (Conservation Authorities Act).

b. Time, place and purpose of the hearing. (Until further notice, all hearings are being held electronically.)

c. Particulars which identify the applicant and reasons for the proposed refusal.

d. Hearing conduct and procedural information.

5) The CVCA will then provide the applicant with a report detailing the reasons for refusal.

6) The applicant must be given a minimum of 2 weeks to prepare a report once the above reasons have been received.

7) The applicant's report must be received 2 weeks prior to the hearing date in order for all documents to be properly indexed and received and to allow for sufficient time for staff to review and provide professional opinion to the Hearing Board.

Please note: all information to be presented at the hearing is to be submitted a minimum of 14 days prior to the meeting date. The information that CVCA staff will present will be made available to you at least 14 days in advance. After this, no new information can be presented at the hearing.

Please let me know if you have any questions.

<image005.jpg> Thanks,

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

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From: scottestewart scottestewart [mailto:scottestewart@sympatico.ca]

Sent: September 13, 2023 1:29 PM

To: Kelsey Davidson < kelsey.davidson@crowevalley.com >; brianfacey@gmail.com

Cc: Info < info@crowevalley.com >

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

Hello Kelsey,

Thank you for the email and the direction as per the CVCA policies.

Due to the nature of the property (hydro easement and municipal set back requirements and flood plain) there is no feasible way to develop the proposed structure outside of the flood plan, as well, to incur the cost to rejuvenate the existing cottage and incur the cost to add an addition and flood proof the existing structure and new addition structure would, at the end of the day, would only leave the Mr. Facey with a renovated property that is still in the flood plan.

We would like to file an appeal and continue to work with you and your office to get this project developed and better this property as proposed along with your direction and input.

The request to have the 6m flood elevation set back added to the elevation survey has been made and i will forward that to you once it is received from Watson Land Surveyors.

Please advise as to next steps and of any further required information you may need to keep this project moving forward.

----- Original Message -----

From: kelsey.davidson@crowevalley.com

To: brianfacey@gmail.com; scottestewart@sympatico.ca Cc:

info@crowevalley.com

Sent: Wednesday, September 13, 2023 10:58 AM

Subject: Permit Application 080/23 - 30 MacKenzie Road

Good morning Brian, Scott,

Thank you for your permit application 080/23 at 30 MacKenzie Road for the proposed dwelling and septic replacement.

Based on the provided elevation survey, approximately the southern half of the property, including the entire existing dwelling and proposed dwelling, are located within the flood plain of Crowe Lake.

It is my understanding that the existing dwelling is 625.5 ft² and deck is 286 ft² and the proposed dwelling is 2,272 ft² and the proposed deck is 780ft². This results in an increase of habitable space by approximately 1,646.5 ft², which does currently exceed the size limitations for dwelling additions within the flood hazard (noted below) and does not meet CVCA Board-approved policy. As per Policy, the maximum increase for the dwelling would be up to 938.25 ft² (original square footage (625.5 ft²) plus 50% = 312.75ft² of additional habitable space). I have included the CVCA policy sections below outlining the CVCA policy requirements for residential dwelling re-construction within the flood hazard. Please note that the increasing the size of the dwelling from the original size is considered an addition (hence why the addition section is included).

Minor Residential Additions

- 5.3.1.3 Additions (including ground floor, second storey or an attached garage) to existing residential dwellings located, even partially, within a flooding hazard will be permitted provided it can be demonstrated that:
- the addition is 50% or less of the original habitable floor space* to a maximum footprint of 46.5 square metres (~500 square feet), whichever is less, or in the case of multiple additions, all additions combined are equal to or less than 50% of the original habitable floor space to a maximum footprint of 46.5 square metres (~500 square feet), whichever is less;
- the number of dwelling units is the same or fewer;
- the addition will not be subject to flows that could cause structural damage;

- where feasible, an improvement in the existing dwelling will occur with respect to floodproofing of the structure;
- safe access (ingress/egress) is present;
- the addition will be floodproofed to an elevation of 0.3 metre above the regulatory flood elevation as per floodproofing standards outlined in Appendix C Floodproofing Guidelines;
- the structure is properly anchored to prevent flotation, is not subject to damage by flooding or other hazards and flood flows and flood water storage are not impeded;
- no basement is proposed and any crawl space is designed to facilitate service only;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the CVCA.

These policies apply to any addition to a dwelling that is located entirely or partially in the flood hazard regardless of whether or not the addition, or part thereof, is located in the flood hazard.

5.3.1.4 Additions to existing residential dwellings greater than the size provision identified in 5.3.1.3 above would be considered Single Residential Development and therefore subject to Policy 5.3.1.2.

*Original habitable floor space means the floor space that was part of the original structure when it was first constructed. Subsequent requests for additions which will result in the cumulative exceedance of 50% of the original floor space or 46.5 square metres (~500 square feet) will not be considered.

Residential Replacement/Reconstruction

- 5.3.1.5 Reconstruction of residential dwellings located within a flood hazard will be permitted provided it can be demonstrated that:
- the dwelling to be replaced is relocated outside the flooding hazard where feasible;
- there is no increase in the number of dwelling units;
- the new dwelling is the same size or smaller than the previous dwelling;
- the use of the new dwelling is the same as the previous dwelling;
- the dwelling will be floodproofed to an elevation of 0.3 metre above the regulatory flood elevation, as per floodproofing standards identified in Appendix C Floodproofing Guidelines;
- safe access (ingress/egress) is present;
- no basement is proposed, and any crawl space is designed to facilitate service only;
- there is no risk of structural failure due to potential hydrostatic/dynamic pressures;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedure and recognized methodologies to the satisfaction of the CVCA.
- A site plan prepared by a qualified professional illustrating the elevations of existing and proposed grades and lowest openings of existing and proposed buildings/structures must be submitted.
- 5.3.1.6 Replacement of residential dwellings within a flooding hazard that would result in an increase in dwelling size will be permitted provided it can be

demonstrated that the conditions for Minor Residential Additions (Policies 5.3.1.3, 5.3.1.4) can be satisfied, and safe access is present.

Ideally, the CVCA's goal is to get all proposed development outside of a natural hazard or feature, including all associated setback(s). Currently, the proposed dwelling is within the flood hazard of Crowe Lake. The CVCA would want to see that the proposed dwelling is relocated outside the flooding hazard where feasible. Alternatively, if relocation is not an option, the proposed development would need to meet size limitation and floodproofing requirements (noted above). Please confirm if either of these options are something you will consider in order to meet CVCA Policy.

Additionally, after reviewing the provided elevation survey, the 6m setback has not been plotted on the survey. Please request that the surveyor plot the 6m setback from the flood elevation and provide me with a revised copy. This will be required to be considered a complete permit application.

If you have any questions, please let me know.

<image005.jpg> Thanks,

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

www.CroweValley.com

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Talk Soon.

Scott E. Stewart Arch. Dip. Techn. SES Drafting & Design 613.827.3957

Kelsey Davidson

From: Kelsey Davidson < kelsey.davidson@crowevalley.com>

Sent: November 14, 2023 8:32 AM

To: 'Brian Facey'; 'scottestewart scottestewart'

Cc: 'Info'; 'julie.soloway@blakes.com'

Subject: RE: Permit Application 080/23 - 30 MacKenzie Road

Good morning Brian,

Apologies in delay in response.

The CVCA Water Advisory Board is having their meeting this Thursday and will determine the next hearing date. Once the date has been confirmed by the Board I will relay that date to you.



Thanks,

Kelsey DavidsonRegulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

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From: Brian Facey [mailto:brianfacey@gmail.com]

Sent: November 13, 2023 2:56 PM

To: scottestewart scottestewart <scottestewart@sympatico.ca>

Cc: Kelsey Davidson <kelsey.davidson@crowevalley.com>; Info <info@crowevalley.com>; julie.soloway@blakes.com

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

Following up again.

Brian A. Facey

Partner, Competition, Antitrust & Foreign Investment Group

Direct: <u>416-863-4262</u> Cell: <u>416-735-9761</u>

On Nov 9, 2023, at 9:43 AM, Brian Facey

Sprianfacey@gmail.com> wrote:

Hi there,

I am following up to see if there are any developments here.

Could you please advise at your earliest convenience.

Thank you.

Brian A. Facey

Partner

Direct: <u>416-863-4262</u> Cell: <u>416-735-9761</u>

On Oct 31, 2023, at 2:22 PM, scottestewart scottestewart <scottestewart@sympatico.ca> wrote:

Hi Kelsy,

Just wondering if you could give me an idea where we are in the process for this appeal?

Thanks.

----- Original Message -----

From: kelsey.davidson@crowevalley.com

To: scottestewart@sympatico.ca; brianfacey@gmail.com Cc: info@crowevalley.com

Sent: Wednesday, September 13, 2023 1:41 PM

Subject: RE: Permit Application 080/23 - 30 MacKenzie Road

Good afternoon Scott, Brian,

Thank you Scott for contacting me today regarding the proposed dwelling and flood plain limitations. Please consider the following as official notification of the Crowe Valley Conservation Authority's decision regarding application 080/23.

At this time, the CVCA is not able to grant permission to support the proposed development as submitted in application 080/23. As you are aware, the proposed addition is within the flood plain of Crowe Lake and does not currently meet the requirements of Ontario Regulation 159/06 and the Crowe Valley Conservation Watershed Planning and Regulations (O. Reg. 159/06) Policy, as approved by the CVCA Board.

If you do not agree with this decision, you have the option to request a hearing with the Crowe Valley Conservation Authority Watershed Advisory Board. Please see the following information for the hearing process, should you choose to pursue this avenue:

CVCA Hearing Request Process

1) The applicant must submit an application deemed to be complete by the CVCA (including applicable fee payment and any technical requirements).

Outstanding: Revised elevation survey from Ontario Land Surveyor including the 6m setback

Fee: Fee payment was received by CVCA on 04 August 2023 for the permit #080/23 application.

The hearing fee is \$600. This fee is required to confirm us booking the hearing.

2) The applicant is to confirm in writing (email is acceptable) that they are requesting a hearing.

Outstanding: N/A - Confirmation received 13 September 2023.

3) The CVCA will provide the applicant with a list of possible dates for a hearing.

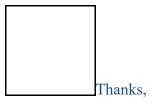
We will advise you of the next available hearing date as soon as that information becomes available to us.

- 4) Once a date is selected, CVCA issues a Notice of Hearing. The Notice of Hearing will include:
- a. Reference to the applicable legislation to which the hearing is to be held (Conservation Authorities Act).
- b. Time, place and purpose of the hearing. (Until further notice, all hearings are being held electronically.)
 - c. Particulars which identify the applicant and reasons for the proposed refusal.
 - d. Hearing conduct and procedural information.
- 5) The CVCA will then provide the applicant with a report detailing the reasons for refusal.

- 6) The applicant must be given a minimum of 2 weeks to prepare a report once the above reasons have been received.
- 7) The applicant's report must be received 2 weeks prior to the hearing date in order for all documents to be properly indexed and received and to allow for sufficient time for staff to review and provide professional opinion to the Hearing Board.

Please note: all information to be presented at the hearing is to be submitted a minimum of 14 days prior to the meeting date. The information that CVCA staff will present will be made available to you at least 14 days in advance. After this, no new information can be presented at the hearing.

Please let me know if you have any questions.



Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

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From: scottestewart scottestewart [mailto:scottestewart@sympatico.ca]

Sent: September 13, 2023 1:29 PM

To: Kelsey Davidson <kelsey.davidson@crowevalley.com>; brianfacey@gmail.com

Cc: Info <info@crowevalley.com>

Subject: Re: Permit Application 080/23 - 30 MacKenzie Road

Hello Kelsey,

Thank you for the email and the direction as per the CVCA policies.

Due to the nature of the property (hydro easement and municipal set back requirements and flood plain) there is no feasible way to develop the proposed structure outside of the flood plan, as well, to incur the cost to rejuvenate the existing cottage and incur the cost to add an addition and flood proof the existing structure and new addition structure would, at the end of the day, would only leave the Mr. Facey with a renovated property that is still in the flood plan.

We would like to file an appeal and continue to work with you and your office to get this project developed and better this property as proposed along with your direction and input.

The request to have the 6m flood elevation set back added to the elevation survey has been made and i will forward that to you once it is received from Watson Land Surveyors.

Please advise as to next steps and of any further required information you may need to keep this **project** moving forward.

----- Original Message -----

From: kelsey.davidson@crowevalley.com

To: brianfacey@gmail.com; scottestewart@sympatico.ca Cc:

info@crowevalley.com

Sent: Wednesday, September 13, 2023 10:58 AM

Subject: Permit Application 080/23 - 30 MacKenzie Road

Good morning Brian, Scott,

Thank you for your permit application 080/23 at 30 MacKenzie Road for the proposed dwelling and septic replacement.

Based on the provided elevation survey, approximately the southern half of the property, including the entire existing dwelling and proposed dwelling, are located within the flood plain of Crowe Lake.

It is my understanding that the existing dwelling is 625.5 ft² and deck is 286 ft² and the proposed dwelling is 2,272 ft² and the proposed deck is 780ft². This results in an increase of habitable space by approximately 1,646.5 ft², which does currently exceed the size limitations for dwelling additions within the flood hazard (noted below) and does not meet CVCA Board-approved policy. As per Policy, the maximum increase for the dwelling would be up to 938.25 ft² (original square footage (625.5 ft²) plus 50% = 312.75ft² of additional habitable space). I have included the CVCA policy sections below outlining the CVCA policy requirements for residential dwelling re-construction within the flood hazard. Please note that the increasing the size of the dwelling from the original size is considered an addition (hence why the addition section is included).

Minor Residential Additions

- 5.3.1.3 Additions (including ground floor, second storey or an attached garage) to existing residential dwellings located, even partially, within a flooding hazard will be permitted provided it can be demonstrated that:
- the addition is 50% or less of the original habitable floor space* to a maximum footprint of 46.5 square metres (~500 square feet), whichever is less, or in the case of multiple additions, all additions combined are equal to or less than 50% of the original habitable floor space to a maximum footprint of 46.5 square metres (~500 square feet), whichever is less;
- the number of dwelling units is the same or fewer;
- the addition will not be subject to flows that could cause structural damage;
- where feasible, an improvement in the existing dwelling will occur with respect to floodproofing of the structure;
- safe access (ingress/egress) is present;
- the addition will be floodproofed to an elevation of 0.3 metre above the regulatory flood elevation as per floodproofing standards outlined in Appendix C Floodproofing Guidelines;
- the structure is properly anchored to prevent flotation, is not subject to damage by flooding or other hazards and flood flows and flood water storage are not impeded;

- no basement is proposed and any crawl space is designed to facilitate service only;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
- the potential for surficial erosion has been addressed through the submission of proper drainage, erosion and sediment control and site stabilization/restoration plans;
- natural features and/or ecological functions associated with conservation of land are protected, pollution is prevented, and erosion hazards have been adequately addressed; and,
- the plan has been carried out by a qualified professional with recognized expertise in the appropriate discipline and must be prepared using established procedures and recognized methodologies to the satisfaction of the CVCA.

These policies apply to any addition to a dwelling that is located entirely or partially in the flood hazard regardless of whether or not the addition, or part thereof, is located in the flood hazard.

5.3.1.4 Additions to existing residential dwellings greater than the size provision identified in 5.3.1.3 above would be considered Single Residential Development and therefore subject to Policy 5.3.1.2.

*Original habitable floor space means the floor space that was part of the original structure when it was first constructed. Subsequent requests for additions which will result in the cumulative exceedance of 50% of the original floor space or 46.5 square metres (~500 square feet) will not be considered.

Residential Replacement/Reconstruction

- 5.3.1.5 Reconstruction of residential dwellings located within a flood hazard will be permitted provided it can be demonstrated that:
- the dwelling to be replaced is relocated outside the flooding hazard where feasible;
- there is no increase in the number of dwelling units;
- the new dwelling is the same size or smaller than the previous dwelling;
- the use of the new dwelling is the same as the previous dwelling;

- the dwelling will be floodproofed to an elevation of 0.3 metre above the regulatory flood elevation, as per floodproofing standards identified in Appendix C Floodproofing Guidelines;
- safe access (ingress/egress) is present;
- no basement is proposed, and any crawl space is designed to facilitate service only;
- there is no risk of structural failure due to potential hydrostatic/dynamic pressures;
- the proposed development will not prevent access for emergency works, maintenance, and evacuation;
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5.3.1.6 Replacement of residential dwellings within a flooding hazard that would result in an increase in dwelling size will be permitted provided it can be demonstrated that the conditions for Minor Residential Additions (Policies 5.3.1.3, 5.3.1.4) can be satisfied, and safe access is present.

Ideally, the CVCA's goal is to get all proposed development outside of a natural hazard or feature, including all associated setback(s). Currently, the proposed dwelling is within the flood hazard of Crowe Lake. The CVCA would want to see that the proposed dwelling is relocated outside the flooding hazard where feasible. Alternatively, if relocation is not an option, the proposed development would need to meet size limitation and floodproofing requirements (noted above). Please confirm if either of these options are something you will consider in order to meet CVCA Policy.

Additionally, after reviewing the provided elevation survey, the 6m setback has not been plotted on the survey. Please request that the surveyor plot the 6m setback from the flood elevation and provide me with a revised copy. This will be required to be considered a complete permit application.

If you have any questions, please let me know.

Kelsey Davidson

Regulations Officer

Crowe Valley Conservation

Thanks,

70 Hughes Lane P.O. Box 416 Marmora, ON K0K 2M0

Tel: 613-472-3137 Fax: 613-472-5516

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Talk Soon.

Scott E. Stewart Arch. Dip. Techn. SES Drafting & Design 613.827.3957

Kelsey Davidson

From: Kelsey Davidson < kelsey.davidson@crowevalley.com>

Sent: September 13, 2023 11:59 AM

To: 'brianfacey@gmail.com'; 'scottestewart@sympatico.ca'

Cc: Info

Subject: Permit Application 080/23 - 30 MacKenzie Road

Good morning Brian, Scott,

Thank you for your permit application 080/23 at 30 MacKenzie Road for the proposed dwelling and septic replacement.

Based on the provided elevation survey, approximately the southern half of the property, including the entire existing dwelling and proposed dwelling, are located within the flood plain of Crowe Lake.

It is my understanding that the existing dwelling is 625.5 ft² and deck is 286 ft² and the proposed dwelling is 2,272 ft² and the proposed deck is 780ft². This results in an increase of habitable space by approximately 1,646.5 ft², which does currently exceed the size limitations for dwelling additions within the flood hazard (noted below) and does not meet CVCA Board-approved policy. As per Policy, the maximum increase for the dwelling would be up to **938.25 ft²** (original square footage (625.5 ft²) plus 50% = 312.75ft² of additional habitable space). I have included the CVCA policy sections below outlining the CVCA policy requirements for residential dwelling re-construction within the flood hazard. Please note that the increasing the size of the dwelling from the original size is considered an addition (hence why the addition section is included).

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- the number of dwelling units is the same or fewer;
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- where feasible, an improvement in the existing dwelling will occur with respect to floodproofing of the structure;
- safe access (ingress/egress) is present;
- the addition will be floodproofed to an elevation of 0.3 metre above the regulatory flood elevation as per floodproofing standards outlined in Appendix C Floodproofing Guidelines;
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Additionally, after reviewing the provided elevation survey, the 6m setback has not been plotted on the survey. Please request that the surveyor plot the 6m setback from the flood elevation and provide me with a revised copy. This will be required to be considered a complete permit application.

If you have any questions, please let me know.



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Kelsey Davidson

Subject: FW: RE: 30 Marmora - Letter Update/ Site Visit

From: Liam Bailey-McDade < liam.baileymcdade@crowevalley.com >

Sent: August 4, 2023 10:48 AM

To: 'scottestewart scottestewart' < scottestewart@sympatico.ca>

Subject: RE: RE: 30 Marmora - Letter Update/ Site Visit

Hello again Scott,

The fee for the permit (Permit 080/23) is \$1,495.00.

As far as next steps, we will process the fee and then the permit will go into the queue. A Regulations Officer will take the permit once it has reached the top of the queue. The Regulations Officer will get in touch with you regarding next steps. As I have mentioned, they likely can't approve the permit as proposed. In the event that this is true, the permit will be denied and you will then have the opportunity to appeal the decision at a hearing.

I would anticipate around 4 weeks for the permit to be processed, a Regulations Officer will get in touch with you at that point.

Thank you, All the best, Liam

Liam Bailey-McDade (He/Him)

Water Resource & Regulations Technician



liam.baileymcdade@crowevalley.com

613-472-3137

www.crowevalley.com

From: scottestewart scottestewart < scottestewart@sympatico.ca>

Sent: August 4, 2023 10:17 AM

To: Liam Bailey McDade < liam.baileymcdade@crowevalley.com>

Subject: Fwd: RE: 30 Marmora - Letter Update/ Site Visit

H Liam,

Attached is the report from Elliot Fledderus, P.Eng from Jewell Engineering.

Please reach out to me with any questions.

Could you also advise as to next steps and any possible important dates that will be forth coming (ie hearings meeting ect) .

Thanks for your help with this!

Original Message From: elliott@jewelleng.ca To: scottestewart@sympatico.ca Sent: Friday, August 4, 2023 8:52 AM Subject: RE: 30 Marmora - Letter Update/ Site Visit
Hi Scott,
Please see attached opinion letter for the floodline assessment at 30 Mackenzie Rd.
Hopefully you can submit before you go. Enjoy your holidays!
Thanks,
Elliott Fledderus, P. Eng.
Jewell Engineering Inc.
1-71 Millennium Parkway
Belleville ON K8N 4Z5
O 613.969.1111 ex 242

From: Scott E Stewart < scottestewart@sympatico.ca>

Sent: Friday, August 04, 2023 8:48 AM

To: Elliott Fledderus < elliott@jewelleng.ca>

Subject: RE: 30 Marmora - Letter Update/ Site Visit

Thanks Elliott!

Talk Soon. Scott

On Aug. 4, 2023 7:44 a.m., Elliott Fledderus < <u>elliott@jewelleng.ca</u>> wrote:

Thanks Scott. Just an update - I'm just about finished the letter. It will be sent to you by 9:30am this morning.

Elliott Fledderus, P. Eng.
Jewell Engineering Inc.
1-71 Millennium Parkway
Belleville ON K8N 4Z5
O 613.969.1111 ex 242
From: Scott E Stewart < scottestewart@sympatico.ca> Sent: Thursday, August 03, 2023 9:15 AM To: Elliott Fledderus < elliott@jewelleng.ca> Subject: Re: 30 Marmora - Letter Update/ Site Visit No one is on the property today. Your welcome to visit at your convenience. Talk Soon. Scott
On Aug. 3, 2023 9:02 a.m., Scott E Stewart < scottestewart@sympatico.ca > wrote: Thank you Elliott. I will inform the owner of your intentions. Talk Soon. Scott
On Aug. 3, 2023 8:44 a.m., Elliott Fledderus < <u>elliott@jewelleng.ca</u> > wrote: Hi Scott,

I'm hoping to finish up the letter tonight by tonight so you can submit before you go on vacation.

FYI, I plan to stop by the lot this afternoon to complete the site visit in case you want to let the owner know that I'll be on their property.

Thanks,
Elliott Fledderus, P. Eng.
Jewell Engineering Inc.
1-71 Millennium Parkway
Belleville ON K8N 4Z5
O 613.969.1111 ex 242

Talk Soon.

Scott E. Stewart Arch. Dip. Techn. SES Drafting & Design 613.827.3957

Kelsey Davidson

To: Kelsey Davidson

Subject: FW: 30 Mackenzie Road Permit Application

From: Liam Bailey-McDade < liam.baileymcdade@crowevalley.com >

Sent: May 8, 2023 2:41 PM

To: 'scottestewart@sympatico.ca' < scottestewart@sympatico.ca>

Subject: 30 Mackenzie Road Permit Application

Good afternoon Scott,

We have completed the initial review on the Permit Application for the demo and rebuild of the cottage at 30 Mackenzie Road. Since the proposed rebuild is within the floodplain of Crowe Lake, there are size restrictions that apply. These restrictions are a maximum increase of 50% of the existing footprint of the structure, meaning that the proposed house would be capped at a maximum increase of 312.75 square feet for a total of 938.25 square feet. The same size restriction of a maximum increase of 50% of the existing footprint will apply to the deck. If the structure can be moved outside of the floodplain then these size restrictions would no longer apply.

Don't hesitate to contact us if you would like to discuss your options in more detail or have any questions regarding the size restrictions.

I am also wondering if you could help with clarification regarding a different permit on the property. We have a record of a Permit Application by the same property owner for a similar project on the property but with a different agent that was submitted last year. No fee has been paid and it is marked as waiting on information from the applicant. I assume they have just switched agents. Could you please confirm with the property owners that this is the case and we can close the other file.

Please give us a call if you have any questions, Thank you, Best regards, Liam

Liam Bailey-McDade (He/Him)

Water Resource & Regulations Technician



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