

Shoreland Permit Applicationfor a **Shoreland Protection Permit** under
Chapter 49A of Title 10, § 1441 *et seq.*

For Shoreland Permit Program Use Only

Application Number: 2221-SPVERMONT DEPARTMENT OF
ENVIRONMENTAL CONSERVATION**WATERSHED
MANAGEMENT DIVISION**

LAKES & PONDS PROGRAM

Public Notice: At the same time this application is filed with the Shoreland Permit Program, a copy of this application must be provided to the municipal clerk for posting in the municipality in which the project is located.Submission of this application constitutes notice that the person in Section A intends to create impervious surface and/or cleared area within the Protected Shoreland Area, and certifies that the project will comply with Chapter 49A of Title 10, § 1441 *et seq.* All information required on this form must be provided, and the requisite fees (Section G) must be submitted made payable to the State of Vermont, to be deemed complete. Refer to *The Vermont Shoreland Protection Act - A Handbook for Shoreland Development* and related instructions for guidance in completing this application.**A. Parcel Information**1. Landowner's Name: Kathleen O. Upton Living Trust2a. Physical Address (911 Address): 237 West Shore Road2b. Municipality: South Hero2c. Zip: 054863. SPAN*: 603-189-111014. Phone: 802-446-2750 / 802-372-49685. Email: michael.upton@me.com6. Name of lake/pond: Lake Champlain7. Total shore frontage: 618 +/- (feet)8. Was the parcel of land created before July 1, 2014? Yes No9. Are there wetlands associated with this parcel? Yes NoContact the Wetlands Program: (802) 828-1535 or www.anr.state.vt.us/dec/waterq/wetlands.htm.10. Is there a lake encroachment permit associated with this project? Yes No Permit #: _____Contact the Lake Encroachment Program: (802) 490-6165 or www.anr.state.vt.us/dec/waterq/permits/htm/pm_encroachment.htm11. What is the surface area of your parcel within the Protected Shoreland Area (PSA): 128,410 +/- (square feet)

See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix C, Determining Lakeside Zone & PSA

12. What is the surface area of existing impervious surface on your parcel within the PSA: 8,947 +/- (square feet)

See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix F, Calculating Percent Impervious Surface

13. What is the surface area of existing cleared area on your parcel within the PSA: 50,861 +/- (square feet)

See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix E, Calculating Percent Clearing

B. Applicant Contact Information (Check box if address is the same as above in Section A:)1. Name: Michael D. Upton2a. Mailing Address: 58 Featherbed Lane2b. Municipality: South Hero2c. State: VT2d. Zip: 05486**C. Application Preparer Information** (If the individual preparing the application is not the landowner.)1. Name: Cedar Ledge Builders - Joshua Nase2a. Mailing Address: 325 US Route 22b. Municipality: South Hero2c. State: VT2d. Zip: 054863. Phone: 802. 372. 65004. Email: joshn@cedarledgebuilders.com

*SPAN: The "School Parcel Account Number" is required for your application to be deemed complete. It can be obtained from your property tax bill. If you cannot locate your property tax bill, please obtain this information from your Town Clerk. SPAN is a unique identification number for each parcel of property in the State of Vermont consisting of eleven digits. The first three digits identify the town; the next three digits identify the school district; and the last five digits represent the unique parcel or property.

D. Project Description

1. Describe the proposed project and on separate pages attach site plans, photos, calculations of impervious surface and cleared area, and any other relevant supporting documents:

Construct a new addition to an existing camp. The addition will be constructed partially on an existing footprint, partially over an existing driveway and partially on previously undisturbed soil in an existing cleared area. New driveway access is also proposed.

2. How far is existing cleared area or impervious surface from Mean Water Level 60± (feet), and how far will new cleared area or impervious surface be from MWL 60± (feet)?

See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix A – Estimating Mean Water Level

3. Can all new cleared area or impervious surface be set back at least 100 feet from MWL? Yes No
If no, explain why below (attach support information as needed):

The proposed addition is slated to use part of the existing camp's footprint and extend away from the lake. As it extends away from the lake it passes over an existing driveway and small section of currently pervious land (67± SF) that is between 86' and 93' away from the MWL. The rest of the addition and proposed driveway are 100' or more from MWL.

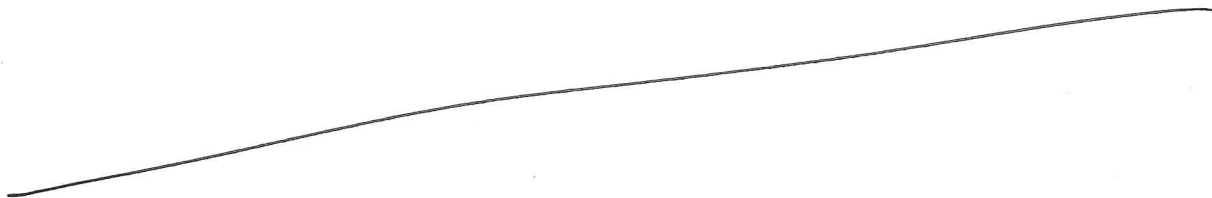
- 4a. What is the slope of the project site area: 10.3 %

See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix B, Determining Slope

- 4b. Is the slope of the project area less than 20%?

Yes No If yes, skip 4c.

- 4c. If no above (4b), describe the measures taken to ensure the slope is stable, resulting in minimal erosion and impacts to water quality (attach support information as needed):

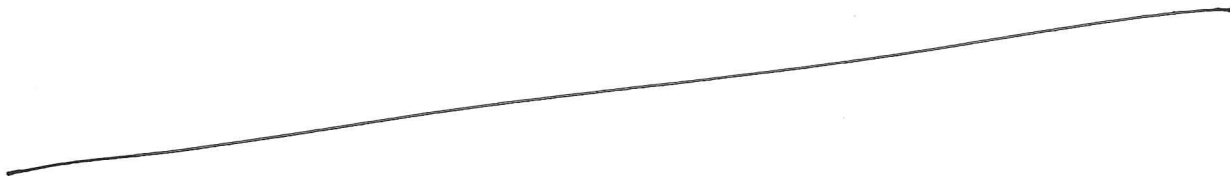


- 5a. What is the surface area of new impervious surface associated with this project: 3,466± (square feet)

See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix F Calculating Percent Impervious Surface

- 5b. What is the total resulting impervious surface after completion of the project: 12,413 ± (square feet) and is that 20% or less of the parcel area within the PSA? Yes No If yes, skip 5c.

- 5c. If no above (5b), describe the best management practices used to manage, treat and control erosion from stormwater from the portion of impervious that exceeds 20% (attach support information as needed):



6a. What is the surface area of new cleared area associated with this project: 1,388 +/- (square feet)
 See The Vermont Shoreland Protection Act – A Handbook for Shoreland Development, Appendix E, Calculating Percent Clearing

6b. What is the total resulting cleared area* after completion of the project: 52,262.75 +/- (square feet) and is that 40% or less of the parcel area within the PSA? Yes No If yes, skip 6c.
 *Total cleared area includes impervious surface area.

6c. If no above (6b), describe the best management practices used to provide erosion control, bank stability, and wildlife habitat functionally equivalent to clearing less than 40% (attach support information as needed).
 The resulting cleared area after completion of the proposed project is 40.7%. This calculation includes 23,468 +/- SF of natural existing ledge, at the lake. If this area is taken out of the calculation, then the result is 22.42%. However, even if the ledge area is not removed from the calculations, the sliding scale table from the Shoreland Handbook indicates that the resulting impervious % of 9.67% (rounded up to 10% here) qualifies the project to have up to 80% cleared area. Therefore no additional erosion control is proposed at this time.

E. Landowner Certification

As APPLICANT, I hereby certify that the statements presented on this application are true and accurate; guarantee to hold the State of Vermont harmless from all suits, claims, or causes of action that arise from the permitted activity; and recognize that by signing this application, I agree to complete all aspects of the project as authorized. I understand that failure to comply with the foregoing may result in violation of the Shoreland Protection Act, 10 V.S.A. Chapter 49A, and the Vermont Agency of Natural Resources may bring an enforcement action for violations of the Act pursuant to 10 V.S.A. chapter 201.

Applicant/Landowner Signature: Michael Duxton, I Date: 10/06/16

F. Application Preparer Certification (if applicable)

As APPLICATION PREPARER, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Application Preparer Signature: [Signature] Date: 10/6/16

G. Permit Application Fees

Administrative Fee: \$125.00		125.00
Impervious Area Fee: \$0.50 per square foot	New impervious area (5a) <u>3,466</u> X .5	<u>1,733.00</u>
Total:		\$ <u>1,858.00</u>

Submit this form and application fee to:

**Vermont Department of Environmental Conservation
 Watershed Management Division
 Shoreland Permit Program
 1 National Life Drive, Main 2
 Montpelier, VT 05620-3522**

Direct all correspondence or questions to the Shoreland Permit Program at:
 ANR.WSMDSshoreland@state.vt.us or (802) 490-6196

For additional information visit: www.watershedmanagement.vt.gov

Michael Upton Residence (Kathleen O. Upton Trust)
273 West Shore Road
South Hero, VT

Narrative of Project Details, Methods and Calculation Worksheet

The majority of the information used to generate the requested values for this permit was taken from a site plan generated by Buermann Engineering LLC. The site plan was created as part of the waste water permit for this property. Buermann Engineering LLC is not a licensed land survey company and the site plan is therefore not a legal land survey. The details contained on that site plan were found to be accurate when compared to multiple site visits by Cedar Ledge Builders and compared to other existing documentation. It is our opinion that the information contained on the site plan is appropriate for use with this permit application. The supplied site plan is a reproduction of the Buermann Engineering LLC site plan, with superfluous details removed and pertinent notes and values added by CLB.

MEAN WATER LEVEL

The MWL established for Lake Champlain is 95.5'. Buermann Engineering LLC witnessed the lake elevation at 94.13' on September 12, 2016. The site plan shows 95.5' as calculated by Buermann Engineering LLC.

SLOPE MEASUREMENT

<u>TAG</u>	<u>Contours(per 100')</u>	<u>SLOPE</u>
A	9	9%
B	7	7%
C	15	15%

Slope was measured as per the instructions of Appendix B for Site Plan or Parcel Map by use of contour lines. Contour lines are shown at 1' intervals. Runs are shown at 100' each. 3 locations were calculated and marked on site plan A0.006

TOTAL	31% / 3 = 10.3% Average Slope
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LAKESIDE ZONE AND PROTECTED SHORELAND AREA

With an average slope of 10.3%, the LZ and PSA were measured at 100' and 250' along the slope from the previously established MWL.

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PERCENT CLEARED AND PERCENT IMPERVIOUS SURFACES

All cleared and non cleared areas were measured on the site plan using area take off aspects of the AutoCAD software. Impervious areas were determined using a combination of AutoCAD software and geometry.

Area of PSA: 128,410 +/- SF total

Cleared Area- Existing: 50,861 +/- SF total

“Main Cleared Area”: 58,145 +/- SF total

Non Cleared Within “Main Cleared Area”

Near Shed: 3,612 +/- SF

South of Driveway: 664 +/- SF

North Bank: 2,074 +/- SF

South Bank: 844 +/- SF

Trees *: 90 +/- SF

$58,145 - 3,612 - 664 - 2,074 - 844 - 90 = 50,861 +/- SF$ total existing cleared

*There are a total of 75 trees in the “Main Cleared Area” with a circumference of 22” or greater. The circumference of each tree was measured to determine the Basal Area. Below is the summary of those measurements and calculated Basal Area:

Circumference between 20” – 28” (.25 SF): 11 trees	(12 * .25 = 3 SF total)
Circumference between 29” – 31” (.5 SF): 7 trees	(7 * .5 = 3.5 SF total)
Circumference between 32” – 37” (1 SF): 15 trees	(15 * 1 = 15 SF total)
Circumference between 38” – 52” (1.5 SF): 34 trees	(34 * 1.5 = 51 SF total)
Circumference between 53” – 69” (2 SF): 4 trees	(4 * 2 = 8 SF total)
Circumference between 70” – 79” (2.5 SF): 1 tree	(1 * 2.5 = 2.5 SF total)
Circumference between 80” – 85” (3.5 SF): 2 trees	(2 * 3.5 = 7 SF total)

$3 + 3.5 + 15 + 51 + 8 + 2.5 + 7 = 90 +/- SF$ total Basal Area of existing trees

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Cleared Area- Proposed: 1,388 +/- SF total

Driveway 1: 422 +/- SF

Driveway 2: 636 +/- SF

Driveway 3: 330 +/- SF

422 + 636 + 330 = 1,388 +/- SF total Cleared Area Proposed

Cleared Area Existing and Proposed: 52,262.25 +/- SF total

Existing Cleared: 50,861 +/- SF*

Proposed Cleared: 1,388 +/- SF

Trees*:

$((50,861 + 1,388 + 13.25) / 128,410) \times 100 = 40.7\%$ total cleared area **

*There are 10 trees in the "Main Cleared Area" proposed to be removed

Circumference between 20" – 28" (.25 SF): 1 trees (1 * .25 = .25 SF total)

Circumference between 32" – 37" (1 SF): 1 trees (1 * 1 = 1 SF total)

Circumference between 38" – 52" (1.5 SF): 8 trees (8 * 1.5 = 12 SF total)

.25 + 1 + 12 = 13.25 SF total Basal Area of trees proposed to be removed

** It is worth noting that 23,468 +/- SF of existing cleared area is the natural ledge from the MWL to the bank. This ledge was not man made, existed prior to any development and is unlikely to grow any vegetation dependent or independent of human involvement. If this area was taken out of the equation the % cleared is vastly reduced.

$((50,861 + 1,388 + 13.25 - 23,468) / 128,410) \times 100 = 22.42\%$ total adjusted cleared area

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Impervious Surface Areas- Existing: 8,947 +/- SF total

House, Porch, Car port, Chimney:	2,098 +/- SF
Boat House with Stairs:	282 +/- SF
Wood Shed:	150 +/- SF
Garage with concrete apron:	686 +/- SF
Driveway/Turn around:	5,560 +/- SF
Stairs to Ledge:	27 +/- SF
Concrete Ramp:	144 +/- SF
2,098 + 282 + 150 + 686 + 5,560 + 27 + 144 = 8,947 +/- SF total	

Impervious Surface Areas- Proposed: 3,466 +/- SF total

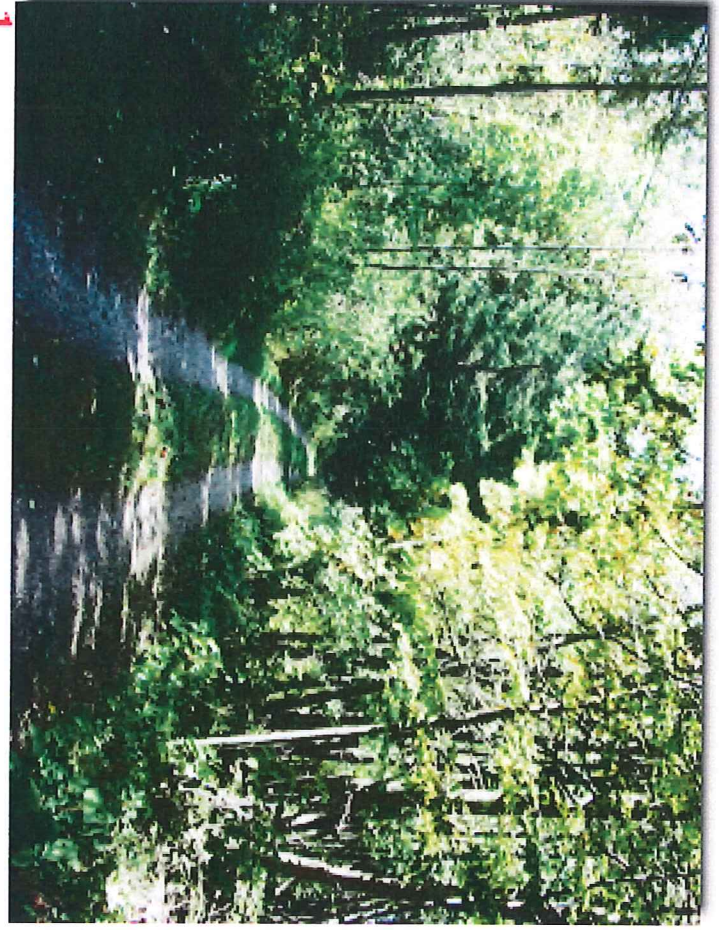
Addition within 100' Setback:	67 +/- SF
Addition beyond 100' Setback:	1,079 +/- SF
Driveway @ Addition:	526 +/- SF
Driveway to turnaround:	1,794 +/- SF
67 + 1,079 + 526 + 1,794 = 3,466 +/- SF total*	

*The proposed addition is slated to go over 382 +/- SF of the existing driveway. As that driveway is existing impervious area already, this 382 +/- SF has not been included in the proposed impervious area.

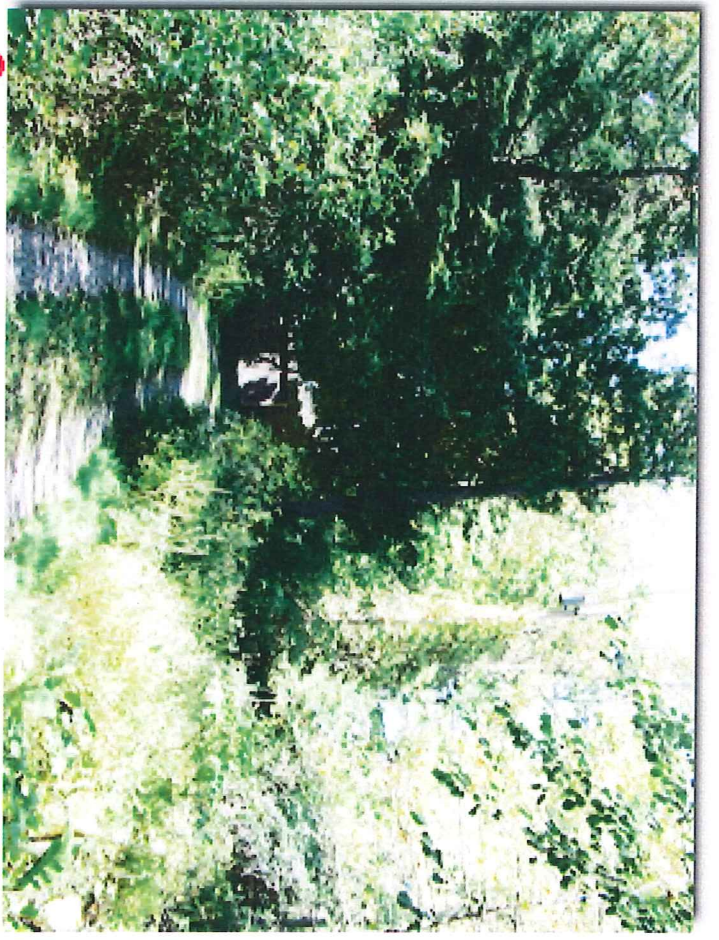
Additionally, part of the existing house will be demolished and part of the new addition will be built on the old footprint. This area is 667 +/- SF and as it is existing impervious area already this 667 +/- SF has not been included in the proposed impervious area.

Impervious Surface Areas- Existing and Proposed: 12,413 +/- SF total

Existing:	8,947 +/- SF
Proposed:	3,466 +/- SF
$((8,947 + 3,466) / 128,410) \times 100 = 9.67\%$ total impervious surfaces	



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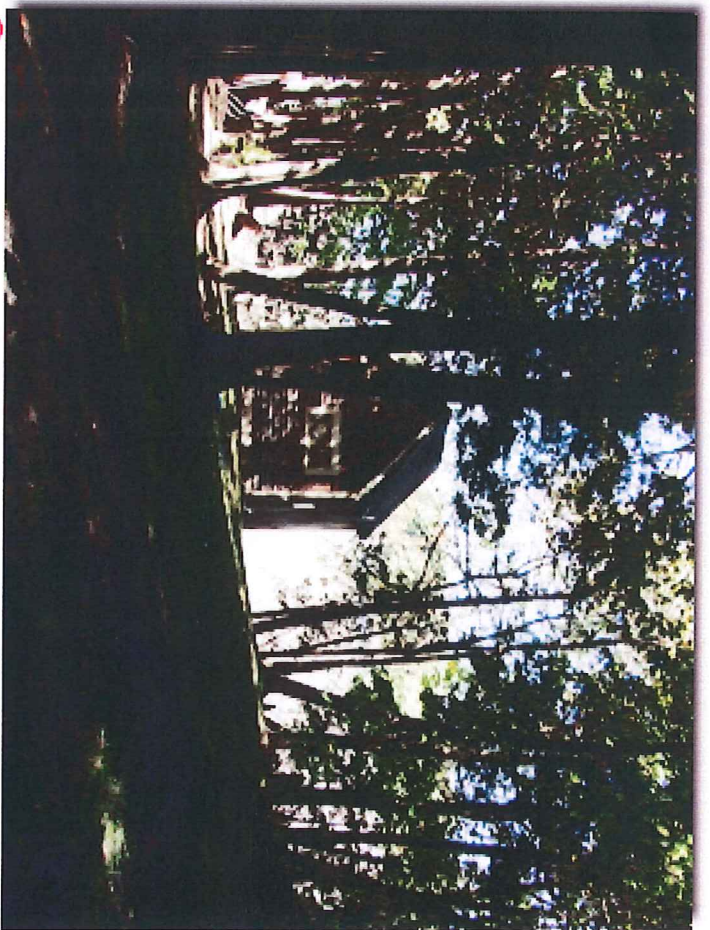
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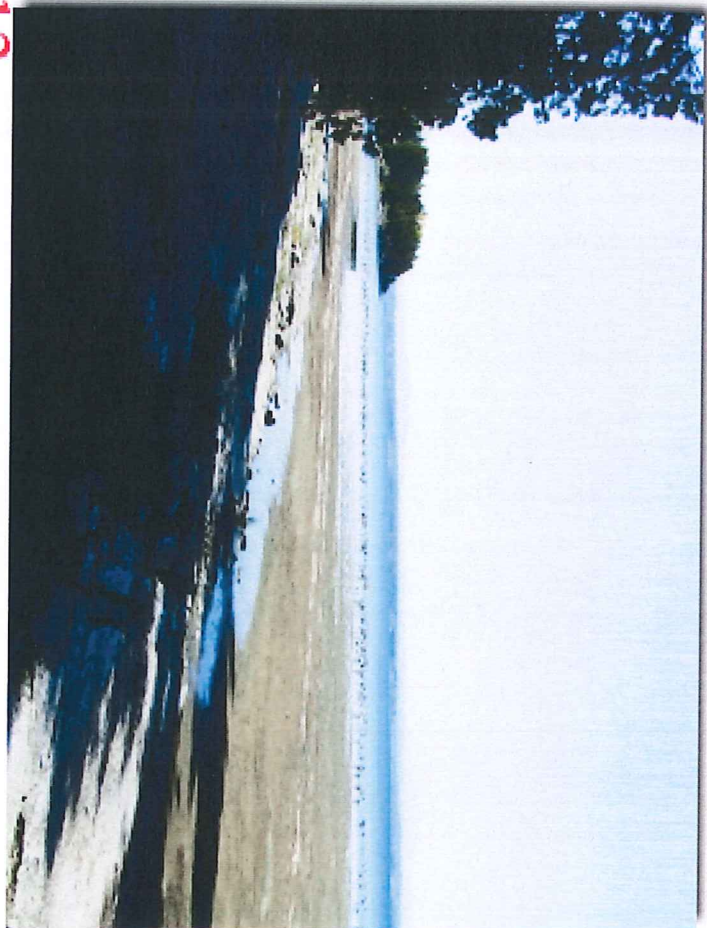
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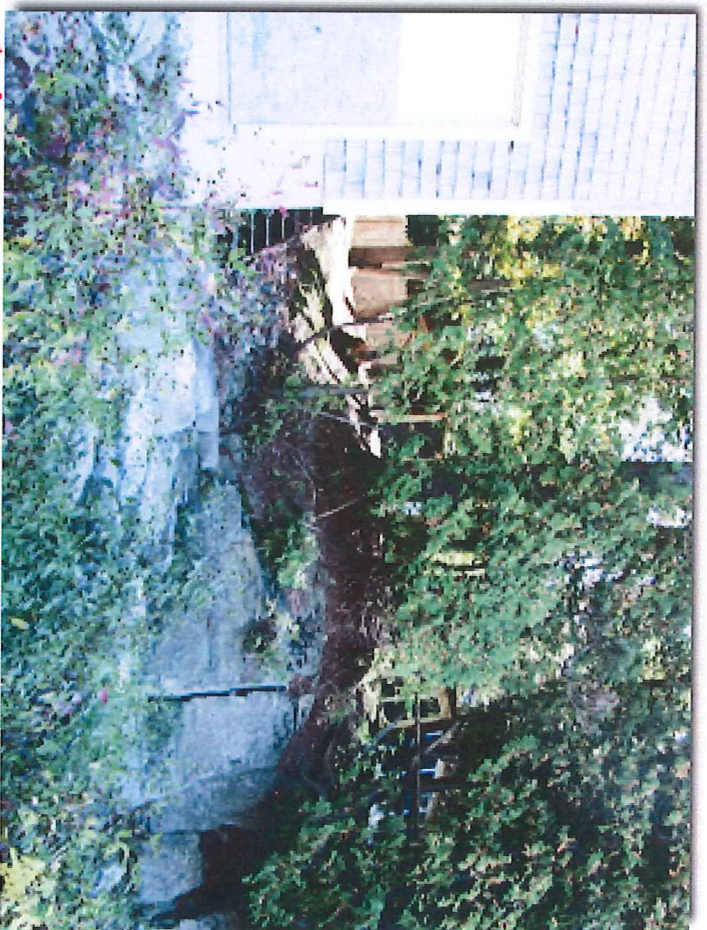
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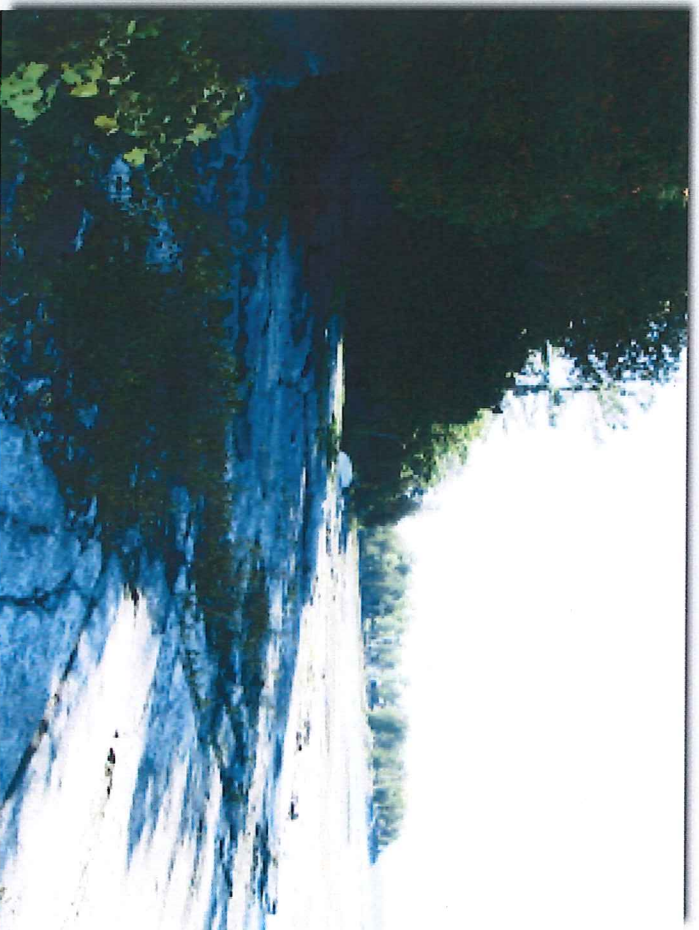
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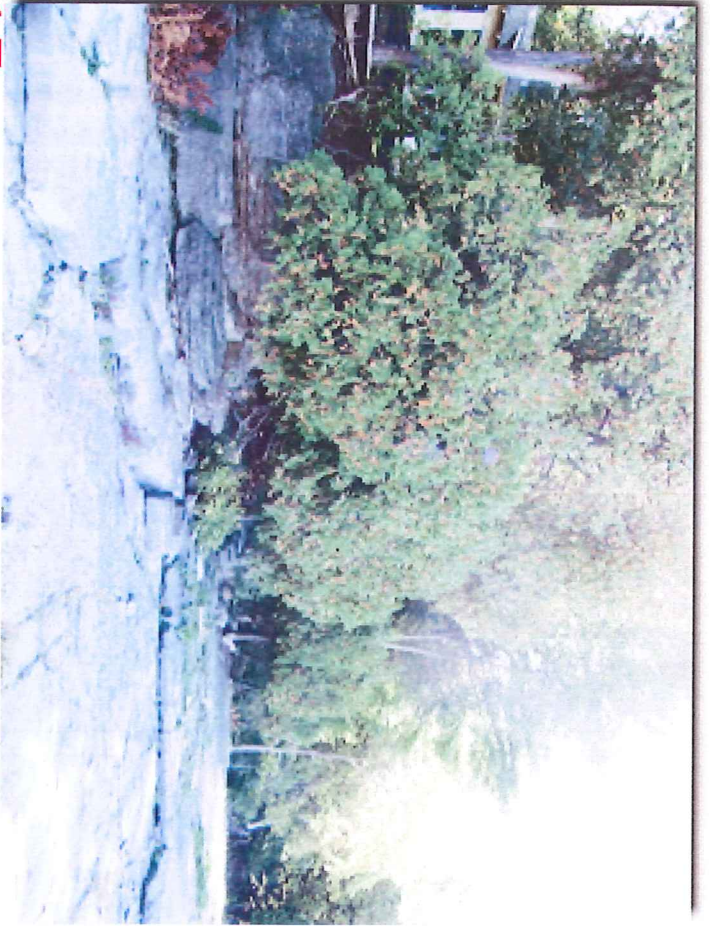
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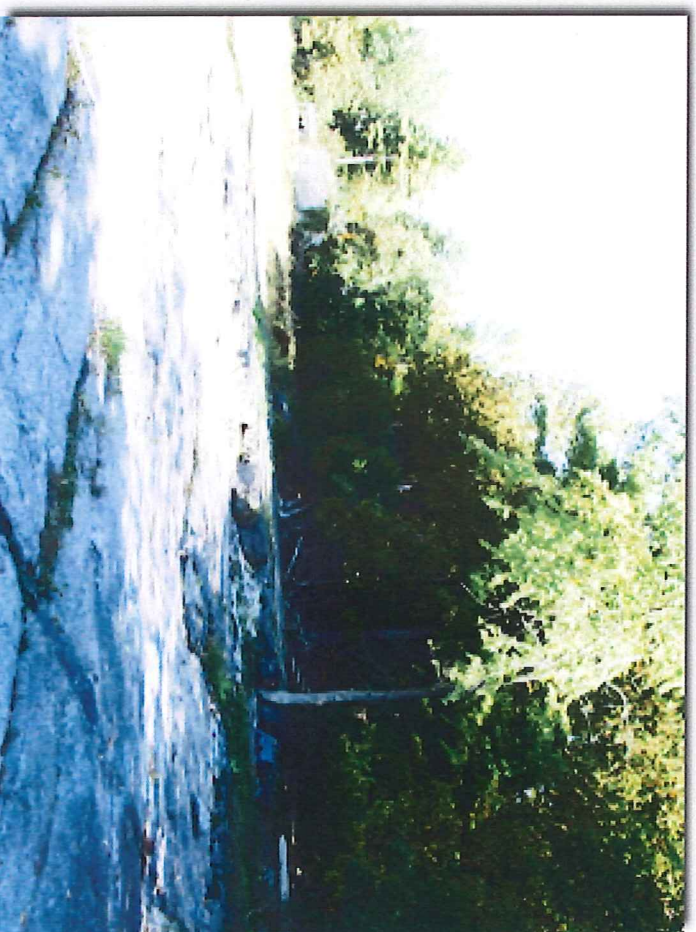
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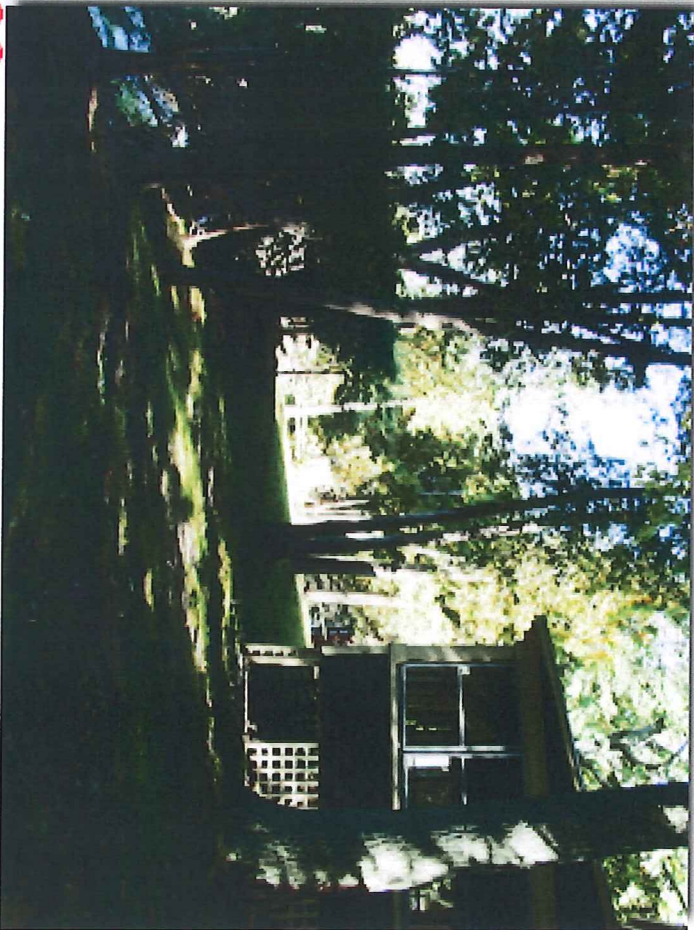
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NOT A SURVEY

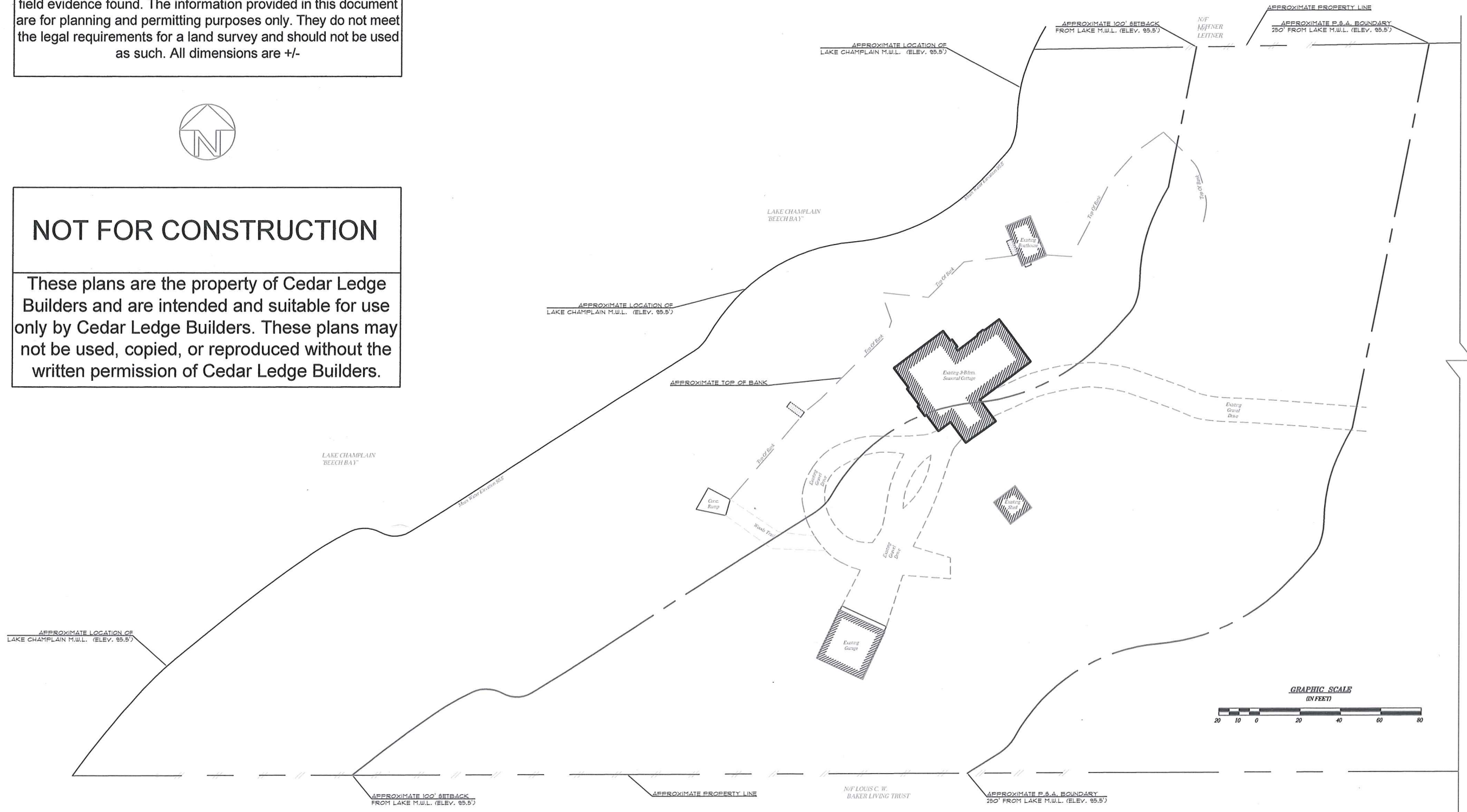
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NOT FOR CONSTRUCTION

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SITE PLAN- Existing SCALED TO FIT



REVISIONS

MM/DD/YY	REMARKS
1	
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CedarLEDGE
BUILDERS

Original Site Plan Drawn By: Buermann Engineering
Drawn By: Joshua Nase Date: 10/6/2016

UPTON RESIDENCE
237 WEST SHORE ROAD
SOUTH HERO, VT 05486

A0 003

2021-SP

NOT A SURVEY

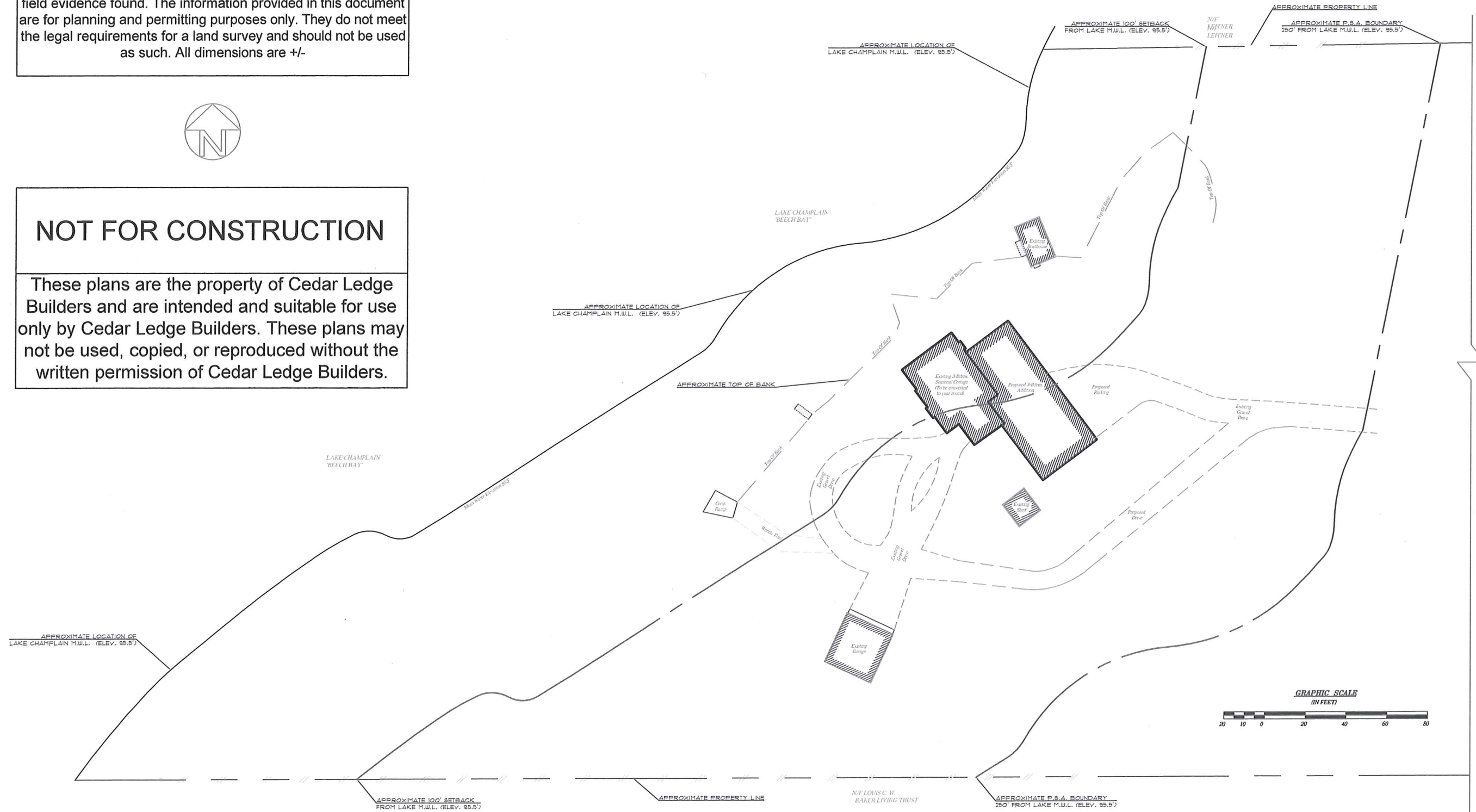
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SITE PLAN- Proposed SCALED TO FIT



REVISIONS	REMARKS
MM/DD/YY	
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CedarLEDGE BUILDERS
Original Site Plan Drawn By: Buermann Engineering
Drawn By: Joshua Nase Date: 10/6/2016

UPTON RESIDENCE
23T WEST SHORE ROAD
SOUTH HERO, VT 05486

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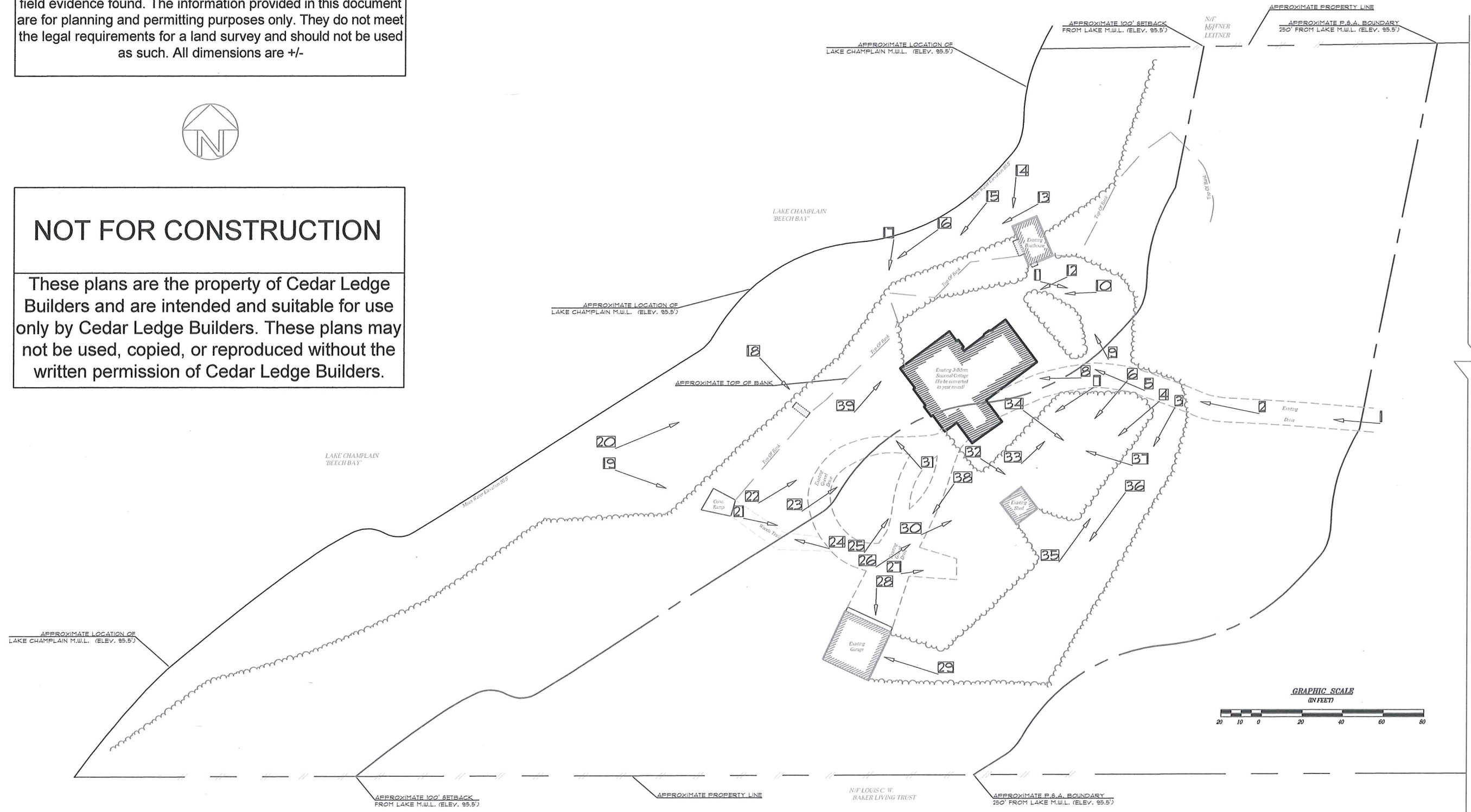
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SITE PLAN w/ Photo Locations SCALED TO FIT



REVISIONS	REMARKS
MM/DD/YY	
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Original Site Plan Drawn By: Buermann Engineering
Date: 10/6/2016
Drawn By: Joshua Nase

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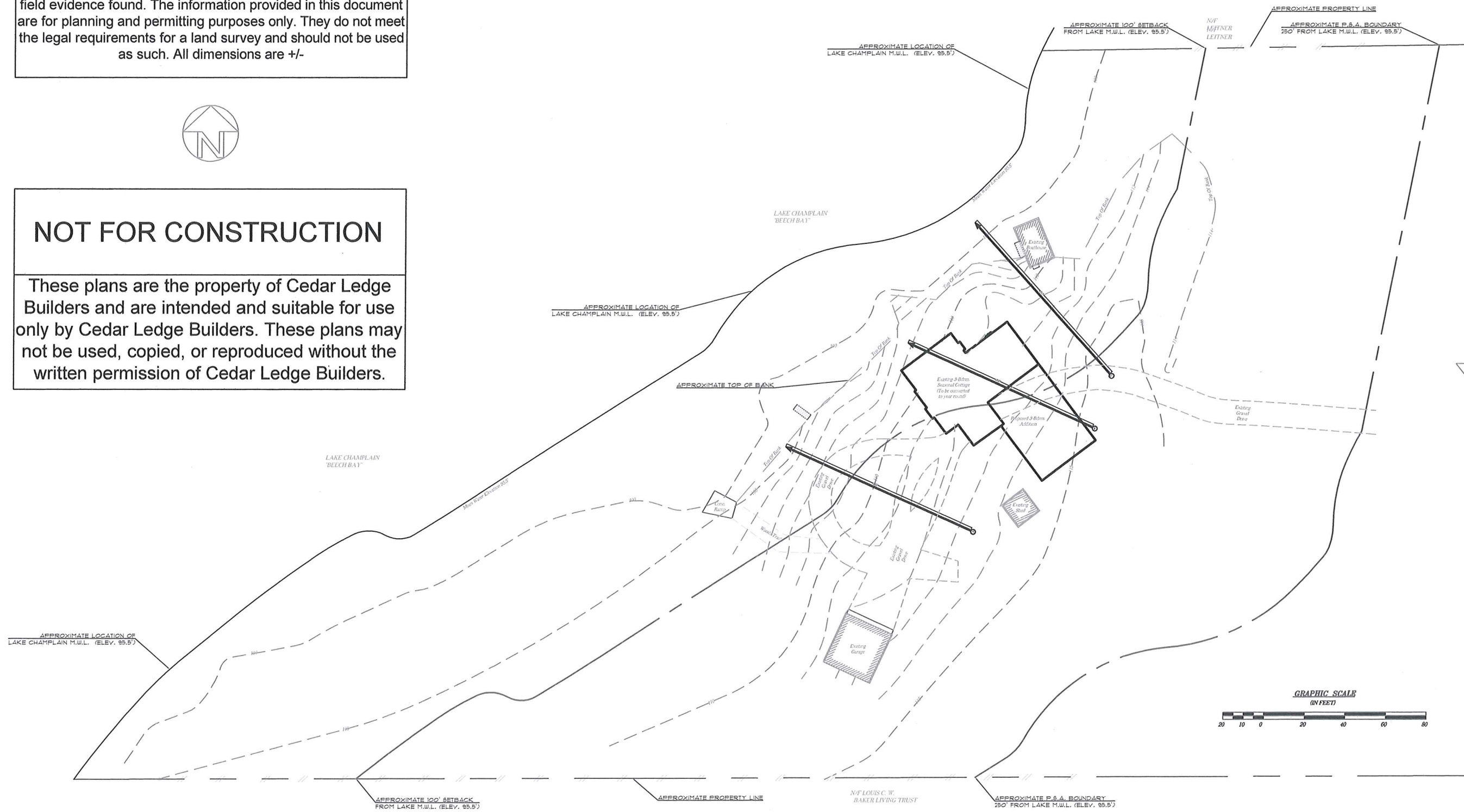


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SITE PLAN- Slope Calculations

SCALED TO FIT



REVISIONS	REMARKS
MM/DD/YY	
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CedarLEDGE BUILDERS
 Original Site Plan Drawn By: Buermann Engineering
 Drawn By: Joshua Naes Date: 10/6/2016

UPTON RESIDENCE
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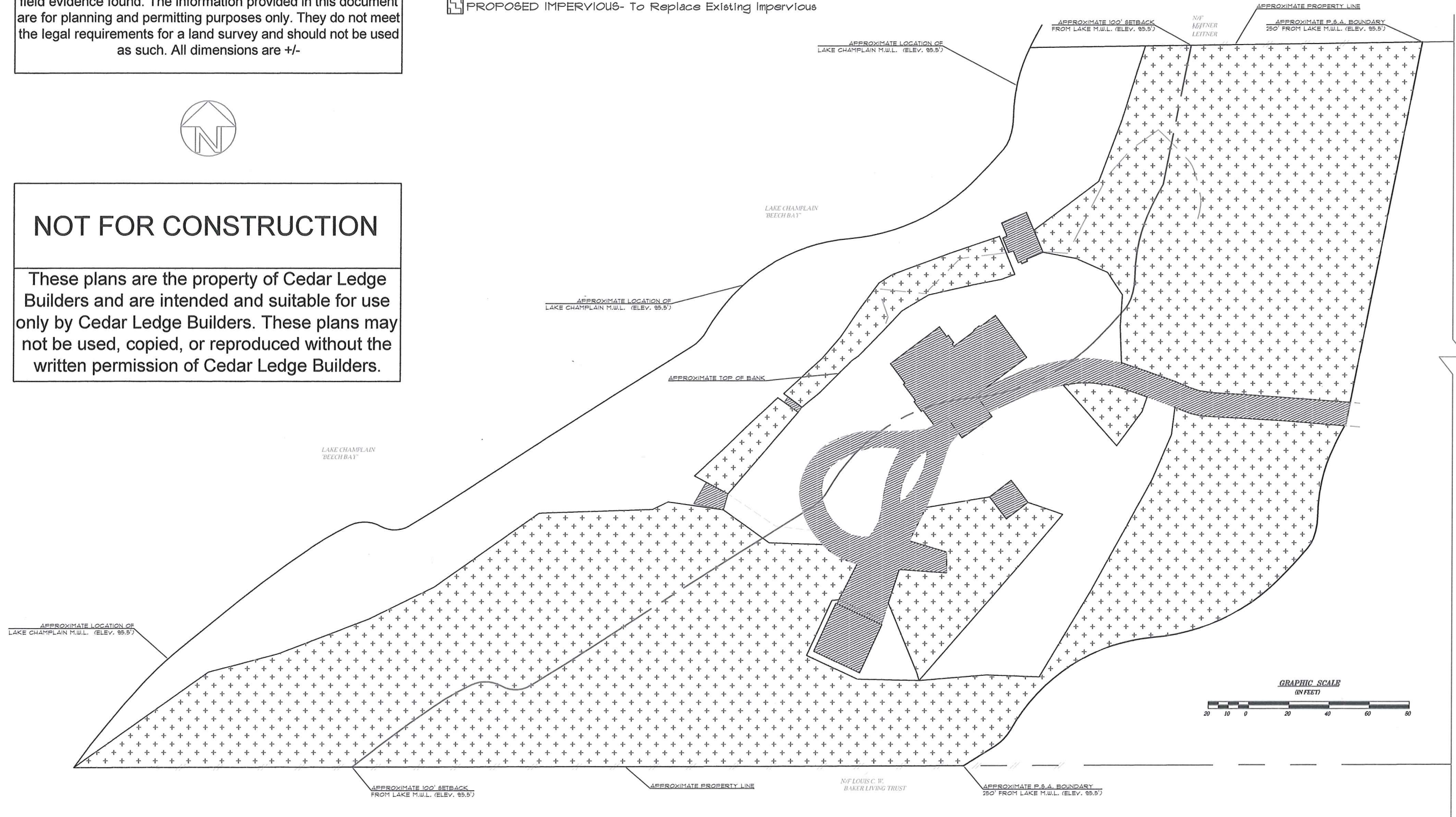


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SITE PLAN- Cleared & Impervious: Existing SCALED TO FIT

- EXISTING IMPERVIOUS
- EXISTING NON-CLEARED
- PROPOSED IMPERVIOUS- New
- PROPOSED IMPERVIOUS- To Replace Existing Impervious



REVISIONS	REMARKS
MM/DD/YY	
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CedarLEDGE
BUILDERS

Original Site Plan Drawn By: Buernann Engineering
Date: 10/6/2016
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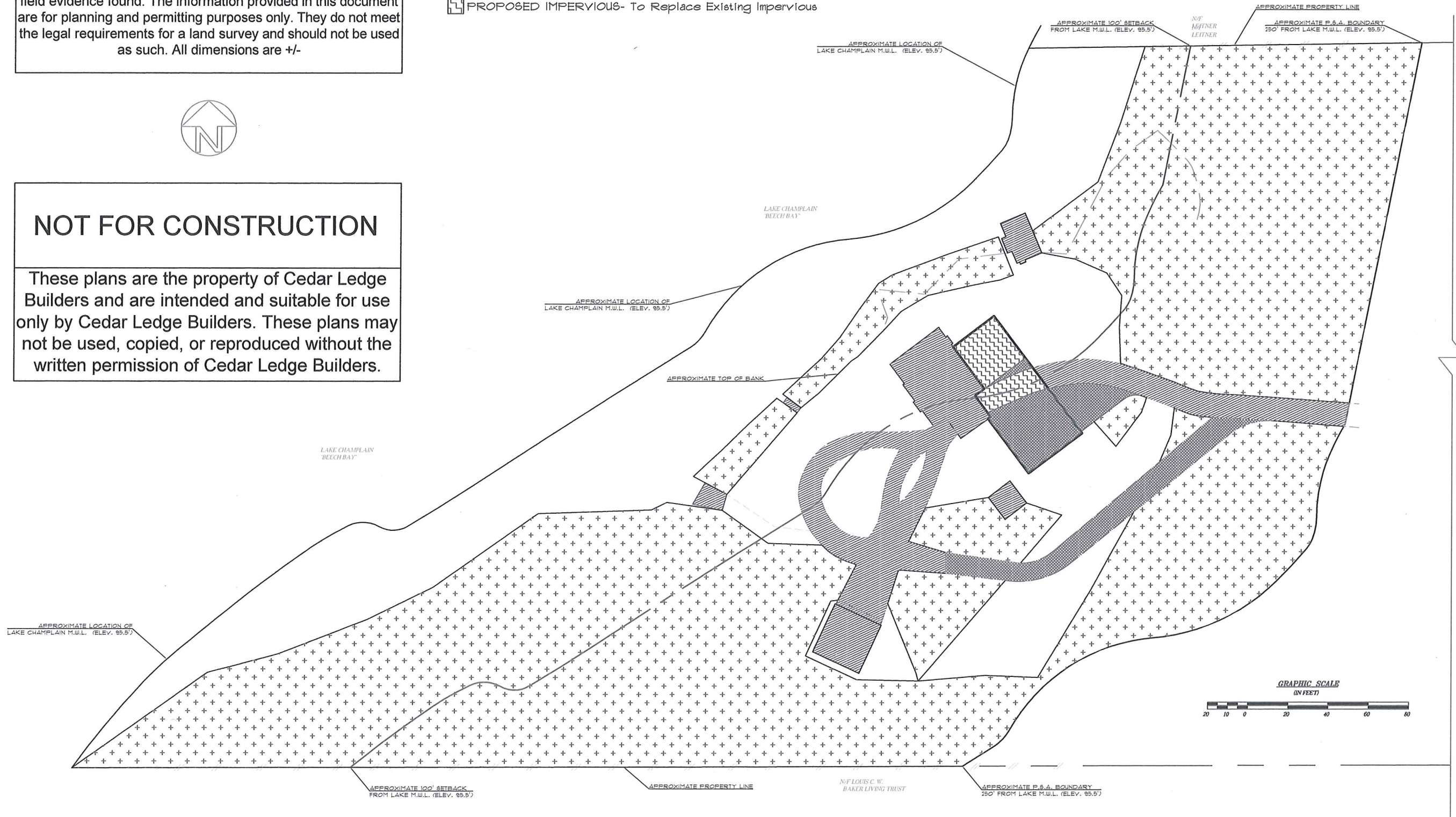


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SITE PLAN- Cleared & Impervious: Proposed SCALED TO FIT

- EXISTING IMPERVIOUS
- EXISTING NON-CLEARED
- PROPOSED IMPERVIOUS- New
- PROPOSED IMPERVIOUS- To Replace Existing Impervious



REVISIONS	REMARKS
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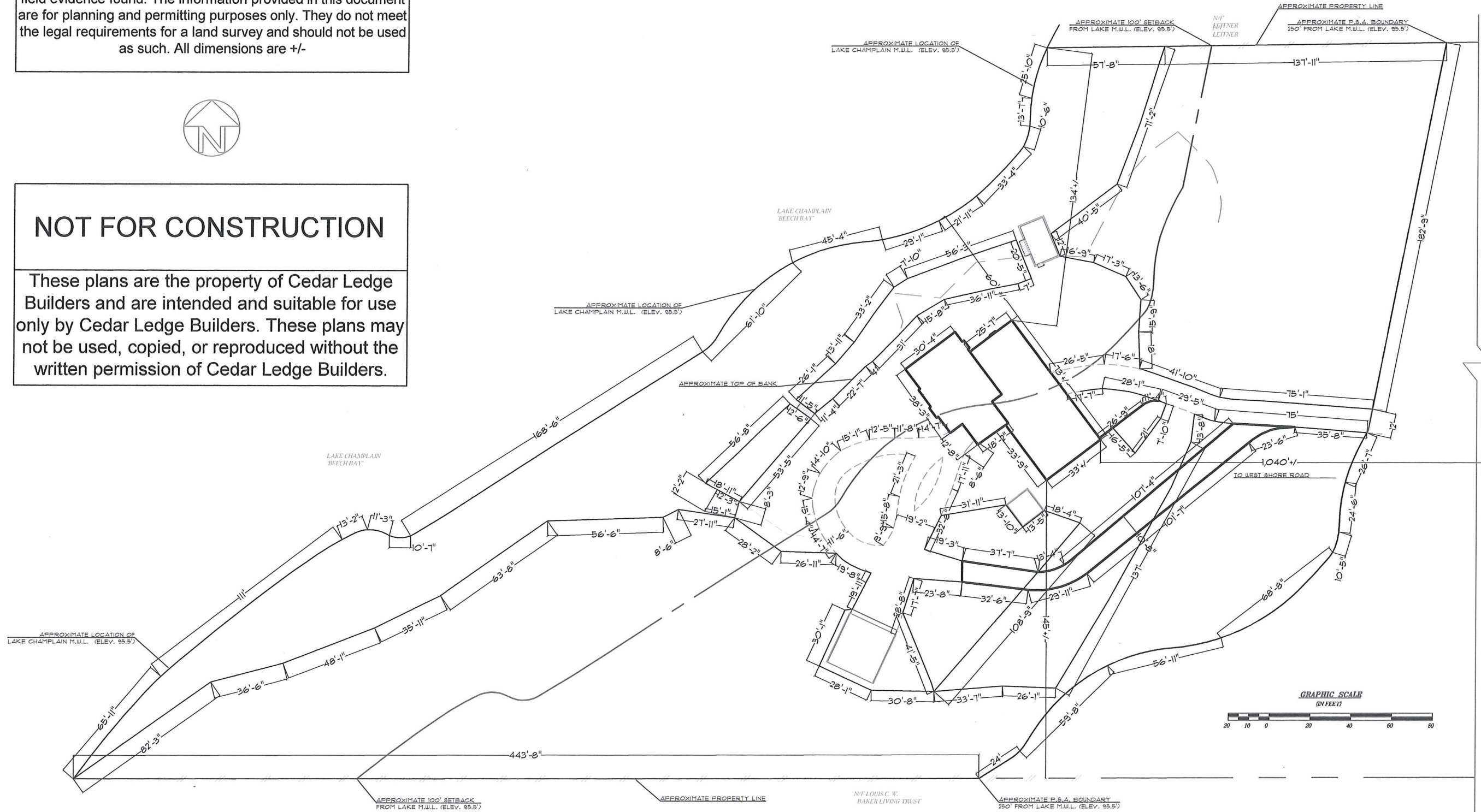
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SITE PLAN- Cleared & Impervious: Proposed SCALED TO FIT



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Drawn By: Joshua Naese Date: 10/6/2016

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SOUTH HERO, VT 05486