

**Philipstown Planning Board Meeting
Butterfield Library
10 Morris Avenue
Cold Spring, New York
November 20, 2014 @ 7:30 p.m.**

11/19/2014 11:01:11 AM

Agenda

Pledge of Allegiance
Roll Call
Approval of Minutes – September 18, 2014

Old Business

Scanga Realty, LLC – Amended site plan (Lot 4) – Lady Blue Devils Lane, Cold Spring:
Request for 6-month extension

Public Hearing

ESP (continued) – Subdivision/site plan application - 3330 Route 9, Cold Spring: Revised plans/
discussion

Burstein – Minor site plan application – 52 Lane Gate Road, Cold Spring: Revised plans/
discussion

Regular Meeting

Horton Road, LLC (Hudson Highlands Reserve) - Conservation subdivision - East Mountain
Road North, Horton Road and Route 9, Cold Spring: Part 2 EAF

201 Old Stone Road – Site plan application – 201 Old Stone Road, Garrison: Part 3 EAF

Local Law to amend Chapter 175 – Wind Energy: Referral from Tina Merando, Town Clerk

Adjourn

Anthony Merante, Chairman

Note: All items may not be called. Items may not always be called in order.

Philipstown Planning Board
Public Hearing – November 20, 2014

The Philipstown Planning Board for the Town of Philipstown, New York will hold a public hearing on Thursday, November 20, 2014 at 7:30 p.m. at the Butterfield Library, 10 Morris Avenue in Cold Spring, New York to consider the following applications:

ESP (continued) - Application dated June 5, 2014 for approval of site plan to continue the use of the Kehr property as a building supply yard and sales establishment. The intention is to eliminate non-conformities that have accumulated since the site was originally approved. Also, application dated July 3, 2014 for approval of a merger of three lots and a two-lot subdivision. Total acreage is 11.239 acres. The front two parcels lie within the HC zoning district and the rear (7.6 acre) parcel is currently vacant and lies within the RR zoning district. The subdivision would create two lots: lot one (on which the commercial activity would continue) would comprise of 7.217 acres after the lots are merged; lot two would comprise of 4.022 acres and would obtain access from Stephanie Lane (a private road). Property location is 3330 Route 9 in the Town of Philipstown (t.m.# 16.20-18, 20 & 21).

Burstein – Application dated September 4, 2014 for approval of a minor site plan to construct an addition in excess of 1,000 square feet to an existing single-family dwelling in excess of 2,000 square feet for a total cumulative footprint greater than 3,000 square feet. The dwelling is served by an existing septic system and private well. The proposed addition shall be connected to same without modification. The property is located at 52 Lane Gate Road, Cold Spring in an RC (rural conservation) district (t.m.# 38.-3-49.1).

At said hearing(s) all persons will have the right to be heard. Copies of the application, plat map, and related material may be seen in the Office of the Planning Board at the Town Hall.

Dated at Philipstown, New York this 4th day of November 2014.

Anthony Merante, Chairman



Handwritten note: 11-6-14

P.O. Box 226
20 Nazareth Way
Garrison, NY 10524

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info@hhlt.org
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November 5, 2014

Town of Philipstown Planning Board
238 Main Street
P.O. Box 155
Cold Spring, NY 10516

Re: Application by Horton Road, LLC (the "Applicant") for a conservation subdivision on certain property with frontage on East Mountain Road North, Horton Road and Route 9 (the "Property")

Dear Chairman Merante and Members of the Planning Board:

At the Planning Board meeting on October 16, 2014, the Applicant presented a preliminary plan for the development of the Property as a conservation subdivision, and it is in connection with the proposal as reflected in that plan that I am writing.

As stated in § 175-19A & B of the Philipstown Zoning Law (the "Law"), conservation subdivisions are one of the options provided by the Law to enable developers to avoid the uniform pattern of conventional subdivisions sometimes referred to as "suburban sprawl." The "Town encourages conservation subdivisions," because they cluster units "on those portions of a property most suitable for development while leaving substantial portions as undeveloped open space." They result in "the preservation of contiguous open space and important environmental conservation, while allowing compact development, more walkable neighborhoods, and more flexibility than conventional subdivisions." To provide an incentive to developers, conservation subdivisions will typically allow, through clustering, more dwelling units to be constructed on a property than would be allowed in a conventional subdivision, but those additional units should not come at the expense of open space protection.

Conservation subdivisions are new to the town. In fact, if this proposal were to proceed, it would be Philipstown's first conservation subdivision, and the board would have to make decisions without the experience of many years to rely on as would be the case were the proposal for a conventional subdivision. In addition, the fact that this would be the town's first conservation subdivision calls for extra care lest decisions made here have unintended consequences for the future and inadvertently undercut the purposes that the conservation subdivisions provisions of the Law are intended to serve. A further regulatory complexity is that the Property, which is in the Rural Residential District (RR), is also in the Open Space Conservation Overlay District (OSO) (see § 175-18), which overrides some of the provisions of the regulations affecting the RR District.

The Hudson Highlands Land Trust is an organization recommended in § 175-20 A of the Law for applicants to consult when preparing a conservation analysis. We have not been so consulted by the Applicant in this case, but would be pleased to assist the board in any way we can as you consider the issues this application raises. A word about the conservation analysis: As provided in § 175-20 A of the Law, the

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preparation and submission of a conservation analysis of the Property is the first step mentioned in the Law that an applicant must take in proceeding with a conservation subdivision. The reason for this is that unlike conventional subdivisions, conservation subdivisions must give priority to preserving a property's features having conservation value and must relegate the sites for dwelling units to those portions of the property having no or the least conservation value. We have not seen a conservation analysis of the Property or know whether one has been submitted. If not, we believe that the Applicant's next step should be to prepare one for delivery to the board.

While we have no conservation analysis as yet to guide us, we are familiar with the Property and the preliminary plan presented at the October 16 meeting, and would like to share with you some initial observations:

1. **Open Space.** (a) As noted above, conservation subdivisions are intended to preserve contiguous open space, and they usually accomplish this by clustering. To facilitate clustering, the Law sets no single arbitrary minimum on lot sizes for conservation subdivisions such as it does for conventional subdivisions. The minimum lot sizes range between 40,000 square feet (less than an acre) and 4,000 square feet, depending on the degree of availability of common or municipal water supply and sewage disposal services (see § 175-11 D). Rather than clustering the dwelling units on small lots to maximize the amount of open space protected, however, this plan spreads the dwelling units across the Property on lots approximating 5 acres, with extensive roadways to connect them all, thereby reducing the amount of open space and fragmenting what remains. In our view, the plan resembles a conventional suburban subdivision more than it does a conservation subdivision.
(b) What's more, (under § 175-20 H (1)) conservation subdivisions in OSO districts are required to preserve at least 80% of the land as open space, and (under § 175-21 A) to set such open space land permanently aside in a conservation easement. It's true that a portion of the land so set aside may be on "one or more large parcels" provided that "the Planning Board approves such configuration of the open space," but we do not think that the 28 similarly sized dwelling lots shown on the preliminary plan constitute the sort of large lots with open space that may be used to satisfy the 80% requirement as contemplated by the section. Truly large lots having substantial open space in its natural state that is contiguous with and undifferentiated from other similar areas of open space might qualify, but suburban-style lawns should not. On its face, the plan appears to fall short of satisfying the 80% requirement, and for the foregoing reasons fails to provide the open space protections required by the Law for conservation subdivisions.
2. **Number of Units.** In conservation subdivisions, "maximum density" refers to the number of acres to be divided into a stated percentage of "unconstrained land" on a property to determine the maximum number of dwelling units that may be built. (It does not refer to the actual size of the lots.) Under § 175-20 B (1), to calculate the maximum number of dwelling units that would be allowed on the Property, one needs to (i) subtract from the Property's total acreage 75% of its constrained land (wetlands, watercourses, flood plains, cemeteries, and slopes of 20% or more), then (ii) multiply the difference remaining by a development loss factor of .85, and then (iii) divide the result of step (ii) by 5 acres (the "maximum density" allowed in the OSO District). The number resulting from step (iii) would be the maximum number of units allowed. Our preliminary findings based on GIS analysis indicate that 36.78 acres are constrained land. If the total area of the Property is 155 acres, our calculations (which have not as of yet been field

checked) indicate that the total maximum number of units allowed is 22, rather than the 28 units indicated on the plan. Ultimately, if the "density method" is to be used to calculate the number of permitted lots, the applicant will need to provide the full calculations based on the requirements of § 175-20 B (1) for approval by the Planning Board.

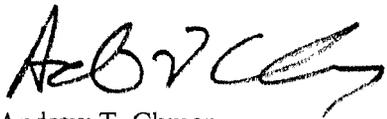
3. **Siting of Units.** As noted above, we believe that spreading the unit sites across so large a portion of the Property is inconsistent with the statutory purposes of conservation subdivisions. But of particular concern is the plan to encircle most of the pond with residential lots, providing direct unbuffered access to the pond. The pond should not be exposed to nitrates or other runoff from cleared sites and lawns. We suggest that consideration be given to leaving the area surrounding the pond largely in its natural state, perhaps as common area with trails accessible to all residents. We also expect that the required conservation analysis of the Property will identify the pond and associated wetlands as having high conservation value, thus a feature "that should be protected from development by conservation easement." (§ 175-20 A (4))

As what was presented to the Planning Board and public at the October 16th meeting is a conceptual schematic, with few details beyond the proposed layout of the subdivision, the observations above are only meant to raise the immediate issues we see in relation to the town's zoning code for conservation subdivisions. Undoubtedly, there are many other matters required by the code that the Planning Board will need to address when the full plan emerges. HHLT looks forward to providing further comments concerning the proposed conservation subdivision once the required conservation analysis is completed, and the application with a full site plan is presented to the Planning Board and public.

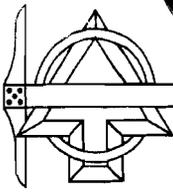
Please let us know if you have any questions on our comments or if there is anything we may do to assist you.

Thank you for your consideration.

Very truly yours,



Andrew T. Chmar,
Executive Director



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Glennon J. Watson, L.S.
John P. Delano, P.E.
Peter Meisler, L.S.
Stephen R. Miller, L.S.
Jennifer W. Reap, L.S.
Robert S. Miglin, Jr., L.S.
Mary Rice, R.L.A., Consultant
George A. Badey, L.S., (1973-2011)

November 6, 2014

Anthony Merante, Chairman
Philipstown Planning Board
238 Main Street
Cold Spring, NY 10516

RE: Bruce & Donna Kehr (ESP) - Submission of Subdivision Plat

Dear Mr. Merante and Honorable Board Members:

We are submitting herewith 13 copies of the Subdivision Plat, last revised November 4, 2014, for the captioned property. In addition, we are also submitting various deeds as requested by Ms. Connor.

We look forward to continued review at the Public Hearing scheduled for November 20, 2014.

As always, thank you for your consideration of this matter.

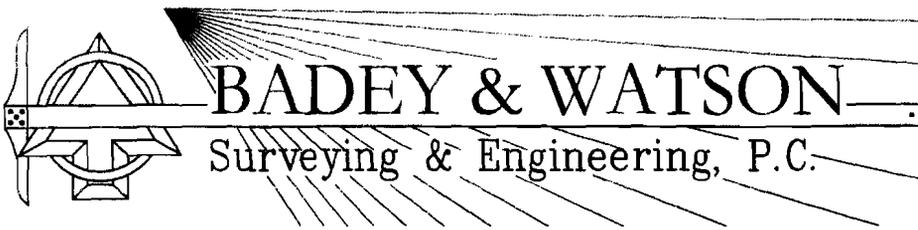
Yours truly,
BADEY & WATSON,
Surveying & Engineering, P.C.

by
Glennon J. Watson, L.S.

GJW/bms
Enclosures
cc: File 89-159B\AM06NV14BP_SubmitRevPlan.doc
Donna & Bruce Kehr

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November 4, 2014

Anthony Merante, Chairman
Town of Philipstown Planning Board
238 Main Street
Cold Spring, NY 10516

Re: Burstein – Minor Site Plan
52 Lane Gate Road,
Philipstown TM# 38.-3-49.1

Dear Chairman Merante and Board Members:

Enclosed please find revised drawings, for the subject application, for use at the scheduled Public Hearing on this matter to take place on November 20, 2014. These documents have been revised in address of comments provided by your engineer in a memorandum dated September 16, 2014. More specifically, those revisions are as follows:

The presence of steep slopes on the property has been revisited. After further scrutinizing the topography, we represent that the subject site does not contain any steep slopes as would be determined under your Code Section 175-36.B.(6).

Both the “Existing Conditions” and “Site Plan” drawings now reflect the location of the SPO district boundary.

Notation concerning wells and SSDS’s within 200 feet of the proposed structure is now provided on the plans.

The subject parcel is pre-existing non-conforming with respect to lot area and front yard setback, neither of which will be made any more non-conforming by the application. Indication as to any requirement for action by the ZBA has been absent to date, and presumably therefore not required.

The extent of site disturbances is indicated in two separate locations on the Erosion & Sedimentation Control Plan. The extent of new impervious area to be created is indicated in the Proposed Runoff Volume calculation on the Erosion & Sedimentation Control Plan. The Intended

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Sequence of Construction Activities is provided on both the Site Plan and the Erosion & Sedimentation Control Plan.

Discussion at the site inspection on October 5, 2014 precluded the need for any new plantings. Additionally, a note has been placed on both the Site Plan and the Landscape, Planting & Grading Plan stating that no trees or shrubs are proposed to be removed.

A note has been added to the Site Plan requiring all new site lighting to be building mounted, low lumen and dark-sky compliant.

During the course of the site inspection, the applicant committed to have the new construction match the existing construction with respect to materials. Color samples were painted directly on the existing structure, and viewed by those present. A copy of the chosen color sample is provided herewith.

Additional silt fence is now proposed downhill of the proposed building foundation as requested. This was also requested by the Conservation Board.

As previously related, the Conservation Board approved a Wetlands Permit at their meeting of September 9, 2014. The Freshwater Wetlands Permit drawing has been revised to address the Conservation Board's comments, and resubmitted with a request for the permit to be issued.

At your meeting of September 18, 2014, you declared the proposed application to be a "minor" site plan, declared your intention to perform an uncoordinated SEQRA review, scheduled a site inspection for October 5th, and expressed your probable intention to hold a public hearing on the application as well.

Whereas no additional concerns were raised at the site inspection, we request that you consider adopting a negative declaration under SEQRA, closing the public hearing at your meeting on the 20th of this month (providing no substantive objections are raised), and have your consultant(s) provide the appropriate resolution(s) for approval of the subject application.

Thank you in advance for your time and consideration.

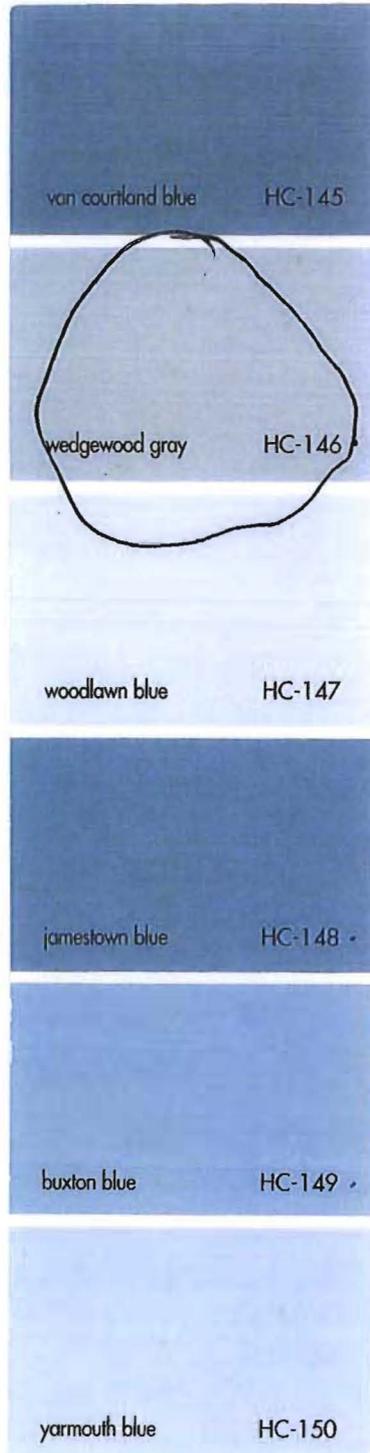
Yours truly,
BADEY & WATSON,
Surveying & Engineering, P.C.



by,
John P. Delano, P.E.

JPD/jpd
Encl.
cc: File
Jeffrey & Ellyn Burstein
Ronald Gainer

FILE NO 78-100
"BURSTEIN"
MINOR SITE PLAN



PROPOSED COLOR
FOR HOUSE AND
ADDITION



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November 6, 2014

Anthony Merante, Chairman
 Philipstown Planning Board
 238 Main Street
 Cold Spring, NY 10516

RE: Hudson Highlands Reserve
 Submission of Applicant's Suggested Part 2 of EAF

Dear Mr. Merante and Honorable Board Members:

We submit herewith a suggested Part 2 of the Full Environmental Assessment Form for consideration by the Planning Board.

Please place this matter on the agenda for the November 20, 2014, meeting of the Planning Board at which time we are hopeful that the Board adopt Part 2 and direct the applicant to have Part 3 prepared and the Full EAF submitted.

As always, we appreciate the Planning Board's efforts on behalf of the Town. Thank you.

Yours truly,
BADEY & WATSON,
Surveying & Engineering, P.C.

by 
 Glennon J. Watson, L.S.

GJW/bms
 cc: File U:\86-228\B\WO_21792\TownCorrespond\AM06NV14BP_Submit_Suggested_Part2.docx
 Anthony Sunga
 Ulises Liseaga

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Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency and the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "Yes" to a numbered question, please complete all the questions that follow in that section.
- If you answer "No" to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land			
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
<i>If "Yes", answer questions a - j. If "No", move on to Section 2.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

NO YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

NO YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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4. Impact on groundwater The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) <i>If "Yes", answer questions a - h. If "No", move on to Section 5.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

5. Impact on Flooding The proposed action may result in development on lands subject to flooding. <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. E.2) <i>If "Yes", answer questions a - g. If "No", move on to Section 6.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____	<input type="checkbox"/>	<input type="checkbox"/>
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6. Impacts on Air			
The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2,h, D.2.g) If "Yes", answer questions a - f. If "No", move on to Section 7.		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO ₂) ii. More than 3.5 tons/year of nitrous oxide (N ₂ O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF ₆) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane	D2g D2g D2g D2g D2g D2h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

7. Impact on Plants and Animals			
The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) If "Yes", answer questions a - j. If "No", move on to Section 8.		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input checked="" type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

8. Impact on Agricultural Resources
 The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) NO YES
 If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

9. Impact on Aesthetic Resources
 The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) NO YES
 If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur

a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.)

NO

YES

If "Yes", answer questions a - e. If "No", go to Section 11.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input type="checkbox"/>	<input type="checkbox"/>
d. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3: i. The proposed action may result in the destruction or alteration of all or part of the site or property. ii. The proposed action may result in the alteration of the property's setting or	E3e, E3g, E3f E3e, E3f, E3g, E1a,	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

integrity.	E1b E3e, E3f, E3g, E3h, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.			

11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.

NO YES

(See Part 1. C.2.c, E.1.c., E.2.q.)

If "Yes", answer questions a - e. If "No", go to Section 12.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)

NO YES

If "Yes", answer questions a - c. If "No", go to Section 13.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems.

NO YES

(See Part 1. D.2.j)

If "Yes", answer questions a - g. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input type="checkbox"/>	<input type="checkbox"/>

b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy. NO YES
(See Part 1. D.2.k)

If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____			

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting. NO YES
(See Part 1. D.2.m., n., and o.)

If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

16. Impact on Human Health

The proposed action may have an impact on human health from exposure

NO YES

to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)

If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____			

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans.
(See Part 1. C.1, C.2. and C.3.)

NO

YES

If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not	C3, D1c,	<input type="checkbox"/>	<input type="checkbox"/>

supported by existing infrastructure or is distant from existing infrastructure.	D1d, D1f, D1d, E1b		
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character			
The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3)		■ NO □ YES	
<i>If "Yes", answer questions a - g. If "No", proceed to Part 3.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>



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 George A. Badey, L.S., (1973-2011)

November 6, 2014

Anthony Merante, Chairman
 Philipstown Planning Board
 238 Main Street
 Cold Spring, NY 10516

RE: 201 Old Stone Road, LLC –
 Request for Approval of a Special Use Permit
 Submission of Full EAF

Dear Mr. Merante and Honorable Board Members:

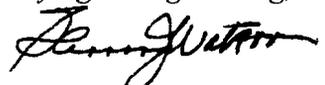
Please consider this letter as our formal request, on behalf of our client 201 Old Stone Road, LLC, for approval of a Special Use Permit to allow construction on slopes that exceed 20% as provided for in Section 175-36(B) of the Town Code. We make this following Mr. Gaba's opinion on the matter and for the reasons discussed by the Planning Board during its October 2014 meeting.

We submit herewith a Full Environmental Assessment Form, Parts 1, 2, and 3, including two appendices.

Please place this matter on the agenda for the November 20, 2014 Planning Board at which time we are hopeful that the Board will review the EAF and direct its engineer to prepare a Negative Declaration and a resolution granting approval to both the Site Plan and Special Use Permit.

As always, we appreciate the Planning Board's efforts on behalf of the Town. Thank you.

Yours truly,
BADEY & WATSON,
Surveying & Engineering, P.C.


 by
 Glennon J. Watson, L.S.

GJW/bms
 cc: File u:\75-169\WO_21504\AM06NV14BP_SUP_Request
 Christopher Buck
 Tim Mohr, AIA

Owners of the records of:

- ◆ Joseph S. Agnoli ◆ Barger & Hustis ◆ Burgess & Behr ◆ Roy Burgess ◆ Vincent Burruano ◆ Hudson Valley Engineering Company ◆ G. Radcliff Hustis ◆
- ◆ Peter R. Hustis ◆ J. Wilbur Irish ◆ James W. Irish, Jr. ◆ Douglas A. Merritt ◆ E.B. Moebus ◆ Reynolds & Chase ◆ General Jacob Schofield ◆
- ◆ Sidney Schofield ◆ Steven J. Shaver ◆ Allan Smith ◆ Taconic Surveying and Engineering ◆ D. Walcutt ◆

FULL ENVIRONMENTAL ASSESSMENT FORM

PARTS 1, 2 & 3

For the Application
of

201 OLD STONE ROAD, LLC

For Approval
of

SITE PLAN

For a

PARCEL CONTAINING 4.453 ACRES

Located at the Southerly Terminus
of

OLD STONE ROAD

in the

TOWN OF PHILIPSTOWN

PUTNAM COUNTY

NEW YORK

November 6, 2014

Prepared & compiled for and at the request of the

PHILIPSTOWN PLANNING BOARD

Town Hall, 238 Main Street

Cold Spring, New York 10516

by

BADEY & WATSON

Surveying & Engineering, P.C.

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Introduction & Background

Property Identified

201 Old Stone Road, LLC (The Applicant) applied to the Philipstown Planning Board for approval of a site plan to renovate/demolish and construct an addition to an existing residential building located at 201 Old Stone Road, in Garrison, an area within the Town of Philipstown. The property is designated as Lot 29 of Block 1 on Sheet 71 (71.-1-29) on the Putnam County Tax Map for the Town of Philipstown.

Review and Referrals

The Planning Board was introduced to the project at its May 15, 2014, meeting, during which it determined that the project was a major project requiring Site Plan Approval. It also determined that the project was a Type I action due to its proximity to Castle Rock Unique Area. The Planning Board declared its intention to assume the role of Lead Agency and instructed its clerk to circulate notice of its intention to all Involved and Interested agencies. The project was also referred to the New York State Office of Parks Recreation and Historic Places, The Philipstown Conservation Board and the Putnam County Planning Department for review and comment and, in the case of the Putnam County Planning Department, as required under Section 239 of the Town Law.

In addition to its May 15, 2014, meeting, the Planning Board conducted a site visit on June 1, 2014, and discussed the project during its June 19, 2014, meeting, July 22, 2014, Public Hearing, and October 16, 2014, meeting.

Observations

The property is located in a Rural Conservation District (RC) of the Zoning Law of the Town of Philipstown. The RC District requires a minimum lot size of 10 acres. However, the 4.453 acre parcel pre-exists the current zoning requirement and is therefore legally non-conforming.

The property contains steep terrain, and in addition to the properties RC zoning, it is located in an area designated on the "Resource Protection Zoning Map Scenic Ridgelines" of the Philipstown Zoning Law. It is therefore subject to the additional requirements of Section 175-36 of the code.

If approved, the project will result in an increased footprint area of approximately 6,000 square feet. Because other buildings are being removed the net increase in building coverage will be approximately 4,870 square feet. A portion of the original building will be reconstructed. Other portions will be removed, as will a large detached garage with accessory living quarters constructed in its 2nd story. The final footprint will cover approximately 7,500 square feet.

Because a portion of the proposed construction is located on land with slopes that are steeper than 20%, the Planning Board was concerned that a variance from Section 175-36 would be

required and directed the matter to its attorney Stephen Gaba for an opinion. Mr. Gaba's opinion explained that the Board might determine that a variance was required, but he also outlined the circumstances where a Special Use Permit, as provided for in Section 175-36B(7), would be appropriate. After discussion of the matter during its October 16, 2014, meeting, the Planning Board concluded that the issuance of a Special Use Permit would be appropriate, and a variance need not be obtained.

SEQRA Processing

Part 1 of the EAF was submitted with the original application. It is dated May 1, 2014 and was signed by D. Ben Benoit, Manager of 201 Old Stone Road, LLC. It has been incorporated into this document.

As discussed above, classification and claim of Lead Agency status was completed on May 15, 2014. Under cover letter dated May 21, 2014 notifications of the Planning Board's intention to serve as Lead Agency were mailed to:

- Michael J. Budzinski, PE, Putnam County Department of Health;
- Eric Lind, Philipstown Conservation Advisory Board;
- Kevin Donohue, Philipstown Code Enforcement Officer; and
- David J. Klotzle, Philipstown Wetlands Inspector & Stormwater Management Officer.

No competing claims were received.

A suggested Part 2 of the EAF was also submitted with the original application. It was reviewed by Ronald J. Gainer, P.E., the Town's Planning and Engineering Consultant. In his review memoranda dated May 13 and June 2, 2014, Mr. Gainer made several observations suggesting that Part 2, as originally submitted, was inadequate. On October 1, 2014, the applicant's consultants submitted a revised Part 2 responding to Mr. Gainer's comments. The consultants requested the revised document be considered at the October 16, 2014, meeting of the Planning Board.

During the October 16, 2014, meeting of the Planning Board Mr. Gainer suggested that that a single minor correction be made to the new Part 2. This correction was accepted by the Planning Board and acknowledged by the applicant's consultant as appropriate. Whereupon, the Planning Board adopted Part 2, which has been incorporated into this document and directed the applicant's consultants to prepare Part 3.

PART 1

X

**Full Environmental Assessment Form
Part 1 - Project and Setting**

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: 201 Old Stone Road Addition -Site Plan Approval		
Project Location (describe, and attach a general location map): 201 Old Stone Road, Garrison, NY 10524		
Brief Description of Proposed Action (include purpose or need): Renovation, demolition and addition to residence at 201 Old Stone Rd, Garrison, NY		
Name of Applicant/Sponsor: 201 Old Stone Road, LLC		Telephone: 860-572-1242 E-Mail: benb@pcwmanagement.com
Address: 7 Mason's Island Road, Suite #1		
City/PO: Mystic	State: Connecticut	Zip Code: 06355
Project Contact (if not same as sponsor; give name and title/role): D. Ben Benoit (Manager)		Telephone: 860-572-1242 E-Mail: benb@pcwmanagement.com
Address: 7 Mason's Island Rd., Suite #1		
City/PO: Mystic	State: Connecticut	Zip Code: 06355
Property Owner (if not same as sponsor): 201 Old Stone Road, LLC		Telephone: 860-572-1242 E-Mail: benb@pcwmanagement.com
Address: 7 Mason's Island Rd., Suite #1		
City/PO: Mystic	State: Connecticut	Zip Code: 06355

B. Government Approvals

B. Government Approvals Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Site plan approval	MAY 1, 2014
c. City Council, Town or Village Zoning Board of Appeals <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Variance from Section 175-36b: construction on slopes > 20%	MAY 1, 2014
d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Conservation Advisory Board-steep slope approval	T.B.D.
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Health Dept. approval	T.B.D.
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	County Planning 239 approval	
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	General stormwater permit	
h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes,		
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? Yes No

- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally-adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? Yes No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? Yes No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other)? Yes No

If Yes, identify the plan(s):

Ridgeline Protection Area
175-38 Phillipestown Code

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? Yes No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
 If Yes, what is the zoning classification(s) including any applicable overlay district?
Rural Conservation (RC)

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No
 If Yes,
 i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Garrison UFSD

b. What police or other public protection forces serve the project site?
Putnam County Sheriff's Dept. & NY State Police

c. Which fire protection and emergency medical services serve the project site?
Garrison Fire District and Garrison Ambulance Corps

d. What parks serve the project site?
Hudson Highlands State Park, Phillipstown Town Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?
Approval of construction of single family residence

b. a. Total acreage of the site of the proposed action? 4.45 acres
 b. Total acreage to be physically disturbed? 1.49 acres
 c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 4.45 acres

c. Is the proposed action an expansion of an existing project or use? Yes No
 i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 156 Units: 5,427 sqft (existing 3,483)

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
 If Yes,
 i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) _____
 ii. Is a cluster/conservation layout proposed? Yes No
 iii. Number of lots proposed? _____
 iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? Yes No
 i. If No, anticipated period of construction: 24 months
 ii. If Yes:
 • Total number of phases anticipated _____
 • Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
 • Anticipated completion date of final phase _____ month _____ year
 • Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? If Yes, show numbers of units proposed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
One Family Two Family Three Family Multiple Family (four or more)	
Initial Phase _____ At completion _____ of all phases _____	
g. Does the proposed action include new non-residential construction (including expansions)? If Yes,	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
i. Total number of structures _____ ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length iii. Approximate extent of building space to be heated or cooled: _____ square feet	
h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? If Yes,	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
i. Purpose of the impoundment: _____ ii. If a water impoundment, the principal source of the water: _____ <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify: _____ iii. If other than water, identify the type of impounded/contained liquids and their source. _____ iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____	
D.2. Project Operations	
a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) If Yes:	<input type="checkbox"/> Yes <input type="checkbox"/> No
i. What is the purpose of the excavation or dredging? _____ ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site? • Volume (specify tons or cubic yards): _____ • Over what duration of time? _____ iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____	
iv. Will there be onsite dewatering or processing of excavated materials? If yes, describe. _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
v. What is the total area to be dredged or excavated? _____ acres vi. What is the maximum area to be worked at any one time? _____ acres vii. What would be the maximum depth of excavation or dredging? _____ feet viii. Will the excavation require blasting? _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
ix. Summarize site reclamation goals and plan: _____	
b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? If Yes:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____	

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will proposed action cause or result in disturbance to bottom sediments? Yes No
 If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No
 If Yes:

- [area] acres of aquatic vegetation proposed to be removed _____
- expected acreage of aquatic vegetation remaining after project completion _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No
 If Yes:

i. Total anticipated water usage/demand per day: 800 _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No
 If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No
 If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No
 If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No
 If Yes:

i. Total anticipated liquid waste generation per day: 900 (existing 600) _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): 50% increase in existing use: sanitary wastewater _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No
 If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

• Do existing sewer lines serve the project site? Yes No

• Will line extension within an existing district be necessary to serve the project? Yes No

If Yes:

• Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No

If Yes:

• Applicant/sponsor for new district: _____

• Date application submitted or anticipated: _____

• What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):
 new individual subsurface treatment system _____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: none

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or .24 acres (impervious surface)
 _____ Square feet or 4.46 acres (parcel size)

ii. Describe types of new point sources: Roof Drains

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?
On site infiltration system(s)

• If to surface waters, identify receiving water bodies or wetlands: _____

• Will stormwater runoff flow to adjacent properties? Yes No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____ Tons/year ([metric] short tons) of Carbon Dioxide (CO₂)
- _____ Tons/year ([metric] short tons) of Nitrous Oxide (N₂O)
- _____ Tons/year ([metric] short tons) of Perfluorocarbons (PFCs)
- _____ Tons/year ([metric] short tons) of Sulfur Hexafluoride (SF₆)
- _____ Tons/year ([metric] short tons) of Carbon Dioxide equivalent of [Hydrofluorocarbons] Hydrofluorocarbons ([HCFS] HFCs)
- _____ Tons/year (metric) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No
 If Yes:
 i. Estimate methane generation in tons/year (metric): _____
 ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No
 If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No
 If Yes:
 i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____
 ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____
 iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____ Yes No
 iv. Does the proposed action include any shared use parking? Yes No
 v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within 1/4 mile of the proposed site? Yes No
 vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No
 viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No
 If Yes:
 i. Estimate annual electricity demand during operation of the proposed action: _____
 ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____
 iii. Will the proposed action require a new, or an upgrade to, an existing substation? Yes No

l. Hours of operation. Answer all items which apply.
 i. During Construction:
 • Monday - Friday: 7 a.m. to 5 p.m.
 • Saturday: 8 a.m. to 3 p.m.
 • Sunday: none
 • Holidays: none
 ii. During Operations:
 • Monday - Friday: single family residence
 • Saturday: "
 • Sunday: "
 • Holidays: "

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No
 If yes:
 i. Provide details including sources, time of day and duration:
 Initial excavation may require blasting- this could go on for a few weeks. Construction equipment and traffic, particularly related to excavation/ earthwork will also generate some noise on an occasional basis through construction period

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: _____

n. Will the proposed action have outdoor lighting? Yes No
 If yes:
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:
 all lighting will be residential in character - full cut off no glare (dark sky compliant)- minimum exterior lighting necessary for safety

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products (over 550 gallons) 185 gallons in above ground storage or any amount in underground storage? Yes No
 If Yes:
 i. Product(s) to be stored: _____
 ii. Volume(s) _____ per unit time _____ (e.g., month, year)
 iii. Generally describe proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No
 If Yes:
 i. Describe proposed treatment(s): _____

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No
 If Yes:
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:
 • Construction: _____ tons per _____ (unit of time)
 • Operation: _____ tons per _____ (unit of time)
 ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
 • Construction: _____
 • Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:
 • Construction: _____
 • Operation: _____

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DBC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 0 > 3 feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? 10 %

c. Predominant soil type(s) present on project site:

C&C B	CHARLTON-CHATFIELD complex, rolling, very rocky	Well drained	11	%
C&C B	CHATFIELD-HOLLIS ROCK complex, rolling, very rocky	Well drained	13	%
C&C B&WB	CHATFIELD-HOLLIS ROCK outcrop complex rolling	Well drained	12	%
C&C B&WB	CHATFIELD-HOLLIS ROCK outcrop complex rolling	Well drained	61	%

d. What is the average depth to the water table on the project site? Average: > 7 feet

e. Drainage status of project site soils: Well Drained: 100 % of [S]ite
 Moderately Well Drained: _____ % of site
 Poorly Drained: _____ % of [S]ite

f. Approximate proportion of proposed action site with slopes:

<input checked="" type="checkbox"/> 0-10%:	<u>9.6</u> % of site
<input type="checkbox"/> 10-15%:	<u>7.0</u> % of site
<input type="checkbox"/> 15% or greater:	<u>83.4</u> % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either i or ii, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information[.]:

• Streams:	Name _____	Classification _____
• Lakes or Ponds:	Name _____	Classification _____
• Wetlands:	Name _____	Approximate Size _____
• Wetland No. (if regulated by DBC)	_____	

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100 year Floodplain? Yes No

k. Is the project site in the 500 year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____
 ii. Source of information: _____

c. Is the project site presently used by members of the community for public recreation? Yes No
 i. If Yes, explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
 If Yes,
 i. Identify Facilities: _____

e. Does the project site contain an existing dam? Yes No
 If Yes:
 i. Dimensions of the dam and impoundment:
 • Dam height: _____ feet
 • Dam length: _____ feet
 • Surface area: _____ acres
 • Volume impounded: _____ gallons OR acre-feet
 ii. Dam's existing hazard classification: _____
 iii. Provide date and summarize results of last inspection: _____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
 If Yes:
 i. Has the facility been formally closed? Yes No
 • If yes, cite sources/documentation: _____
 ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____
 iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
 If Yes:
 i. Describe waste(s) handled and waste management activities, including approximate times when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
 If Yes:
 i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes - Spills Incidents database Provide DEC ID number(s): _____
 Yes - Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
 ii. If site has been subject of RCRA corrective activities, describe control measures: _____
 iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
 If yes, provide DEC ID number(s): _____
 iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? 0 > 3 feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? 10 %

c. Predominant soil type(s) present on project site:

CdC #	CHARLTON-CHATFIELD complex, silty, very rocky	Well drained	11	%
CdC #	CHATFIELD-HOLLIS complex, silty, very rocky	Well drained	12	%
CdC #	CHATFIELD-HOLLIS-ROCK outcrop complex silty	Well drained	13	%
CdC #	CHATFIELD-HOLLIS-ROCK outcrop complex silty	Well drained	63	%

d. What is the average depth to the water table on the project site? Average: > 7 feet

e. Drainage status of project site soils: Well Drained: 100 % of [S]site
 Moderately Well Drained: _____ % of site
 Poorly Drained: _____ % of [S]site

f. Approximate proportion of proposed action site with slopes: 0-10%: 9.6 % of site
 10-15%: 7.0 % of site
 15% or greater: 83.4 % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either i or ii, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information[.]:

Streams:	Name	Classification
• Lakes or Ponds:	Name	Classification
• Wetlands:	Name	Approximate Size
• Wetland No. (if regulated by DEC)	_____	

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100 year Floodplain? Yes No

k. Is the project site in the 500 year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____
 ii. Source of information: _____

m. Identify the predominant wildlife species that occupy or use the project site:
White Tail Deer DEC map attached

n. Does the project site contain a designated significant natural community? Yes No
 If Yes:
 i. Describe the habitat/community (composition, function, and basis for designation): DEC map attached
 ii. Source(s) of description or evaluation: _____
 iii. Extent of community/habitat:
 • Currently: _____ acres
 • Following completion of project as proposed: _____ acres
 • Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? Yes No
 If Yes:
 i. Species and listing (endangered or threatened): DEC map attached
 ii. Nature of use of site by the species (e.g., resident, seasonal, transient): _____

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? Yes No
 If Yes:
 i. Species and listing: DEC map attached
 ii. Nature of use of site by the species (e.g., resident, seasonal, transient): _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? Yes No
 If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? Yes No
 If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? Yes No
 i. If Yes: acreage(s) on project site? _____
 ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? Yes No
 If Yes:
 i. Nature of the natural landmark: Biological Community Geological Feature
 ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? Yes No
 If Yes:
 i. CEA name: _____
 ii. Basis for designation: _____
 iii. Designating agency and date: _____

X

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? Yes No

If Yes:

i. Nature of historic/archaeological resource: Archaeological Site Historic Building or District

ii. Name: Castle Rock

iii. Brief description of attributes on which listing is based: Woodsome Lodge is located on property that was part of the original Castle Rock estate

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? Yes No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? Yes No

If Yes:

i. Describe possible resource(s): more information to follow for items f. & g

ii. Basis for identification: _____

h. (Would) is the project site (be visible from) within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? Yes No

If Yes:

i. Identify resource: Hudson Highlands State Park, Rte. 9D, and the Hudson River

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): State Park, Scenic Road (9D), American Heritage River

iii. Distance between project and resource: 0.3 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? Yes No

If Yes:

i. Identify the name of the river and its designation: Hudson River

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? Yes No

F. Additional Information

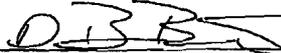
Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name 201 Old Stone Road, LLC Date May 1, 2014

Signature  Title Manager
 D. Ben Benoit

PART 2

PART 2

1. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>
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4. Impact on groundwater
 The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. NO YES
 (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
 If "Yes", answer questions a - h. If "No", move on to Section 5.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

5. Impact on Flooding
 The proposed action may result in development on lands subject to flooding. NO YES
 (See Part 1. E.2)
 If "Yes", answer questions a - g. If "No", move on to Section 6.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contributes to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>
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6. Impacts on Air			
The proposed action may include a state regulated air emission source. (See Part 1. D.2.f, D.2.h, D.2.g)		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. More than 1000 tons/year of carbon dioxide (CO ₂)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
ii. More than 3.5 tons/year of nitrous oxide (N ₂ O)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
iv. More than .045 tons/year of sulfur hexafluoride (SF ₆)	D2g	<input type="checkbox"/>	<input type="checkbox"/>
v. More than 1000 tons/year of carbon dioxide equivalent of hydrochlorofluorocarbons (HFCs) emissions	D2g	<input type="checkbox"/>	<input type="checkbox"/>
vi. 43 tons/year or more of methane	D2h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

7. Impact on Plants and Animals			
The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.)		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	<input type="checkbox"/>	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

8. Impact on Agricultural Resources
 The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) NO YES
 If "Yes", answer questions a - h. If "No", move on to Section 9.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

9. Impact on Aesthetic Resources
 The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) NO YES
 If "Yes", answer questions a - g. If "No", go to Section 10.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur

a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year-round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2g, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/4-3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

10. Impact on Historic and Archeological Resources			
The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3 e, f, and g.)		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
<i>If "Yes", answer questions a - e. If "No", go to Section 11.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Other impacts: _____		<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3a, E3g, E3f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property's setting or	E3e, E3f, E3g, E1a,	<input checked="" type="checkbox"/>	<input type="checkbox"/>

integrity.	E1b E3e, E3f, E3g, E3h, C2, C3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.			

11. Impact on Open Space and Recreation			
The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If "Yes", answer questions a - e. If "No", go to Section 12.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resources in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

12. Impact on Critical Environmental Areas			
The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If "Yes", answer questions a - c. If "No", go to Section 13.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

13. Impact on Transportation			
The proposed action may result in a change to existing transportation systems. (See Part 1. D.2.j) <i>If "Yes", answer questions a - g. If "No", go to Section 14.</i>		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>

b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: Identify "Adequacy of access road during construction"		<input type="checkbox"/>	<input checked="" type="checkbox"/>

14. Impact on Energy
 The proposed action may cause an increase in the use of any form of energy. NO YES
 (See Part I. D.2.k)
 If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1g, D2k	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts:			

15. Impact on Noise, Odor, and Light
 The proposed action may result in an increase in noise, odors, or outdoor lighting. NO YES
 (See Part I. D.2.m., n., and o.)
 If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts:		<input type="checkbox"/>	<input type="checkbox"/>

16. Impact on Human Health
 The proposed action may have an impact on human health from exposure NO YES

to new or existing sources of contaminants. (See Part 1.D.2.q, E.1. d. f. g. and h.)
 If "Yes", answer questions a - m. If "No", go to Section 17.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2a	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____			

17. Consistency with Community Plans
 The proposed action is not consistent with adopted land use plans. NO YES
 (See Part 1. C.1, C.2. and C.3.)
 If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not	C3, D1c,	<input type="checkbox"/>	<input type="checkbox"/>

X

supported by existing infrastructure or is distant from existing infrastructure.	D1d, D1f, D1d, E1b		
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d, D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character The proposed project is inconsistent with the existing community character. <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. C.2, C.3, D.2, E.3) If "Yes", answer questions a - g. If "No", proceed to Part 3.			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f, D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3, E1a, E1b, E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

X

supported by existing infrastructure or is distant from existing infrastructure.	D1d, D1f, D1d, E1b		
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character			
The proposed project is inconsistent with the existing community character. <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
(See Part 1. C.2, C.3, D.2, E.3)			
If "Yes", answer questions a - g. If "No", proceed to Part 3.			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

X

supported by existing infrastructure or is distant from existing infrastructure.	D1d, D1f, D1d, E1b		
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character The proposed project is inconsistent with the existing community character. <input type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. C.2, C.3, D.2, E.3) If "Yes", answer questions a - g. If "No", proceed to Part 3.			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

MAPS

In addition to the 8 vantage points, the surveyors revisited the North Redoubt and were able to obtain photographs of the building site. A sampling of the new photographs are attached to this report.

Evaluation

Each of the photo sets were evaluated. As a result, and as the attached photosets clearly indicate, we concluded that the most visible publicly accessible location from which the building site could be viewed is the mid-point of Nelson Lane (See Photo Set 6 and Profile 1). At each of the other points the existing house, even with the exposed white sheet showing, is less visible, either because of the distance involved or the existing screening or both. So we will leave the other sites out of this discussion.

Profile 1 clearly shows that an unobstructed line of site in a "bare earth" condition exists between Nelson Lane and the building site. Photo set 6 includes a 35 mm view with the sheet exposed toward the vantage point, but the sheet is barely visible. However, when the optical zoom is set to 420mm, the sheet is clearly visible. In the following photo, the sheet has been removed using earth tones and the building all but disappears. In the other photographs, the pattern is either repeated or the sheet is hardly visible due to the distance and natural screening.

Nelson Lane continues to present the most visible view and it is obvious that the straight lines interjected into the view by the ridgelines of the roof are in contrast to the natural shapes presented by the tree canopy and the ground. However, the distant views, which is closest to the view actually observed, continue to show very little of the buildings that presently exist.

The "leaf-off" view from North Redoubt continues to be obscured by trees and other vegetation on the North Redoubt property.

When the maps were complete, surveyors knowledgeable of the area reviewed the maps and identified places where open views of the site might be obtained. The applicant's sole member Christopher Buck and the applicant's architect Tim Mohr, who had both surveyed the area in search of views, were also consulted. The study and consultation resulted in 8 sites that might contain direct views of the building site.

Surveyors were then sent into the field to find the selected points, refine them and photograph the building site from them. The field surveyors were instructed to maximize the view of the building site and then photograph it. Two (2) photos were to be taken. Both were to be taken with a large white sheet displayed toward the camera position. One (1) was to be taken with the camera stop a 35mm and the other with the stop at 420mm.

The surveyors visited each of the sites and visually assessed whether the building site was visible. Once it was determined the building site could be seen from the vantage point, the position (latitude and longitude) was determined and photographed. Photographs were then taken at 8 sites as follows.

Vantage/Photo Point	Location	Expected Viewers
1	Route 9D near Lisburne Lane	Mostly Motorists
2	Route 9D near Normandy Grange	Mostly Motorists
3	Route 9D near Grassi Lane	Mostly Motorists
4	Route 9d near Spruce Lane	Mostly Motorists
5	East end of Nelson Lane	Motorists and Local Residents
6	Mid-point of Nelson Lane	Motorists and Local Residents
7	Winter Hill east of Nazareth Lane	Recreational Visitors
8	South End of Avery Road	Motorists, Occasional Pedestrians

Profiles were developed using the GIS and Clearinghouse data. These profiles were drawn between the building site and publicly accessible locations where views were thought to be important. Each end point was visited and assessed. Those listed above were photographed. Others did not have a "leaf-on" view of the site and were not. The following table lists the profiles.

Profile	End Point	Visible ("leaf-on")	Photo
1	Nelson Lane	Yes	6
2	Winter Hill	Yes	7
3	North Redoubt	No	No
4	Appalachian Trail	No	No
5	Hudson Highlands Park (Osborn Preserve)	No	No
6	Hudson Highlands Park (Osborn Preserve)	No	No
7	Hudson River, Lisburne Lane	Yes	1
8	St. Philips Church	No	No

The vantage points were revisited in early November and re-photographed. As might be expected, the visibility increased. However, the backdrop of trees continues to camouflage the existing buildings.

Introduction

The Philipstown Planning Board has received an application from 201 Old Stone Road, LLC for approval of a site plan to partially remove an existing structure and related outbuildings, and construct an addition to the remaining portion of the existing residential structure that will result in a single building with a footprint area of approximately 7,500 square feet. The proposed building is located within a Protected Ridgeline that is identified and regulated under Section 175-36 of the Philipstown Zoning Law.

The property located at 201 Old Stone Road, in Garrison, an area within the Town of Philipstown. The property is designated as Lot 29 of Block 1 on Sheet 71 (71.-1-29) on the Putnam County Tax Map for the Town of Philipstown.

This Visual Analysis was prepared to assist the Philipstown Planning Board in assessing any visual impacts that might occur to those publicly accessible places within the Town of Philipstown that are within 2 miles of the building site.

Summary of Findings

There are few publicly accessible places within the Town of Philipstown that can view the proposed house. Of those identified all are relatively distant views. Some of the vantage points studied are along highways where pedestrian traffic is minimal and most passersby are traveling in vehicles moving at speeds between 25 and 40 miles per hour. All of those sites that actually have a view are seasonally screened by existing trees. The distances between the proposed house and the several vantage points identified, the existing screening, and the design elements discussed in the Full EAF have led to the conclusion that any impacts associated with the approval of the 201 Old Stone Road, LLC Site Plan have been mitigated to the greatest practical extents. This analysis supports that conclusion.

Methodology

Global Mapper, a Geographic Information System (GIS) program was utilized to identify the area and develop a series of maps that show the “Bare Earth” view shed and the view shed with an assumed tree cover of 40 feet that exist for the project site. The study area was limited to a radius of 2 miles from the proposed building site. Topographic information compatible with the GIS was obtained from the NYS GIS Clearinghouse (Clearinghouse) and used to develop the view sheds which are shown on the view shed maps attached to this report.

In similar fashion information concerning publicly accessible land was obtained from the Clearinghouse. Other maps attached to this report showing the publicly accessible land were prepared.

The mapping was then combined to show those areas within 2 miles of the site that were both publicly accessible and within the view shed. These maps show both the “bare earth” and 40 foot tree cover conditions.

Visual Analysis
Prepared for
201 Old Stone Road, LLC
At the request of the
Philipstown Planning Board

Prepared by
BADEY & WATSON,
Surveying & Engineering, PC
3063 Route 9
Cold Spring, NY 10516
(845) 265-9217 v
(845) 265-4428 f
(877) 3.141593
www.Badey-Watson.com

Visual Analysis
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2

APPENDIX

LEGEND FOR SOIL DESCRIPTION**COARSE GRAINED SOIL:** (Coarser than No. 200 sieve)**DESCRIPTIVE TERM & GRAIN SIZE**

<u>TERM</u>	<u>SAND</u>	<u>GRAVEL</u>
coarse - c	No. 4 Sieve to No. 10 Sieve	3" to 3/4"
medium - m	No. 10 Sieve to No. 40 Sieve	
fine - f	No. 40 Sieve to No. 200 Sieve	3/4" to 3/16"

<u>COBBLES</u>	3" to 10"	<u>BOULDERS</u>	10" +
-----------------------	-----------	------------------------	-------

GRADATION DESIGNATIONS

fine, f
medium to fine, m-f
medium, m
coarse to medium, c-m
coarse, c
coarse to fine, c-f

PROPORTIONS OF COMPONENT

Less than 10% coarse to medium
Less than 10% coarse
Less than 10% coarse and fine
less than 10% fine
Less than 10% medium and fine
All greater than 10%

FINE GRAINED SOIL: (Finer than No. 200 Sieve)

<u>DESCRIPTION</u>	<u>PLASTICITY INDEX</u>	<u>PLASTICITY</u>
Silt	0 - 1	none
Clayey Silt	2 - 5	slight
Silt & Clay	6 - 10	low
Clay & Silt	11 - 20	medium
Silty Clay	21 - 40	high
Clay	greater than 40	very high

PROPORTION:

<u>DESCRIPTIVE TERM</u>	<u>PERCENT OF SAMPLE WEIGHT</u>
trace	1 - 10
little	10 - 20
some	20 - 35
and	35 - 50

The primary component is fully capitalized

COLOR:

Blue - blue	Gy - gray	Wh - white
Blk - black	Or - orange	Yl - yellow
Bwn - brown	Rd - red	Lgt - light
Gn - green	Tn - tan	Dk - dark

SAMPLE NOTATION:

S - Split Spoon Soil Sample	WOC - Weight of Casing
U - Undisturbed Tube Sample	WOR - Weight of Rods
C - Core Sample	WOH - Weight of Hammer
B - Bulk Soil Sample	PPR - Compressive Strength based on Pocket Penetrometer
NR - No Recovery of Sample	TV - Shear Strength (tsf) based on Torvane

ADDITIONAL CLASSIFICATIONS:

New York City Building Code soil classifications are given in parentheses at the end of each description of material, if applicable. See Sections 1804.2 of the 2008 Building Code for further details.

CLIENT: 201 Old Stone Road, LLC			GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Chris Ferri																					
CONTRACTOR: General Borings, Inc.							DRILLER: John Wyant																					
METHOD OF ADVANCING BORING	DIA.	DEPTH				SURFACE ELEVATION: 658.0																						
POWER AUGER:	3 7/8"	0 TO 2.5'	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			DATUM: See Remarks																						
ROT. DRILL:		TO	SCREEN DEPTH: - TO -			DATE START: 7/29/14																						
CASING:		TO	WEATHER: Clear TEMP: 70° F			DATE FINISH: 7/29/14																						
DIAMOND CORE:		TO	DEPTH TO ROCK: 2.5'			UNCONFINED COMPRESS. STRENGTH (TONS/FT)																						
ATV Mounted Drill Rig with Safety Hammer			*CHANGES IN STRATA ARE INFERRED			<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td> </tr> <tr> <td>PLASTIC LIMIT %</td><td colspan="2">WATER CONTENT %</td><td colspan="2">LIQUID LIMIT %</td> </tr> <tr> <td>X</td><td colspan="2">●</td><td colspan="2">▲</td> </tr> <tr> <td>10</td><td>20</td><td>30</td><td>40</td><td>50</td> </tr> </table>			1	2	3	4	5	PLASTIC LIMIT %	WATER CONTENT %		LIQUID LIMIT %		X	●		▲		10	20	30	40	50
1	2	3	4	5																								
PLASTIC LIMIT %	WATER CONTENT %		LIQUID LIMIT %																									
X	●		▲																									
10	20	30	40	50																								

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BLU/IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)					ELEVATION (FT.)		
			SAMPLE NUMBER	RECOV.					MOISTURE	STANDARD PENETRATION (BLOWS/FT.)						
LENGTH (IN.)	ROD (%)															
1							No Sampling Auger Probe to 2.5' Auger refusal @ 2.5'									
2																
3								End of Boring at 2.5'								
4																
5																
6															653.0	
7																
8																
9																
10																
11																
12																
13																
14																
15															648.0	
16																
17																
18																
19																
20																
21															643.0	
22																
23																
24																
25															638.0	
															633.0	

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

TECTONIC ENGINEERING & SURVEYING CONSULTANTS P.C.		PROJECT No. 7292.01			BORING No. P-4											
		PROJECT: 201 Old Stone Road														
		LOCATION: Garrison, NY			SHEET No. 1 of 1											
CLIENT: 201 Old Stone Road, LLC				GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Chris Ferri								
CONTRACTOR: General Borings, Inc.								DRILLER: John Wyant								
METHOD OF ADVANCING BORING		DIA.	DEPTH					SURFACE ELEVATION: 655.0								
POWER AUGER:		3 7/8"	0	TO 4.5'	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM: See Remarks									
ROT. DRILL:			TO		SCREEN DEPTH: - TO -		DATE START: 7/29/14									
CASING:			TO		WEATHER: Clear TEMP: 70° F		DATE FINISH: 7/29/14									
DIAMOND CORE:			TO		DEPTH TO ROCK: 4.5'		UNCONFINED COMPRESS. STRENGTH (TONS/FT) ● 1 2 3 4 5 PLASTIC LIMIT % WATER CONTENT % LIQUID LIMIT % X --- ○ --- △ 10 20 30 40 50 STANDARD PENETRATION (BLOWS/FT.) ● 10 20 30 40 50									
ATV Mounted Drill Rig with Safety Hammer				*CHANGES IN STRATA ARE INFERRED												
DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BLU6 IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	ELEVATION (FT.)							
			SAMPLE NUMBER	RECOV. LENGTH (IN.)	RQD (%)				MOISTURE							
1							No Sampling Auger Probe to 4.5' Auger refusal @ 4.5'									
2																
3																
4																
5							End of Boring at 4.5'									650.0
6																
7																
8																
9																
10																645.0
11																
12																
13																
14																
15																640.0
16																
17																
18																
19																
20																635.0
21																
22																
23																
24																
25																630.0

BORING LOG 7292-01.GPJ TECTONIC ENG.GDT 9/3/14

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

CLIENT: 201 Old Stone Road, LLC		GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Chris Ferri
CONTRACTOR: General Borings, Inc.						DRILLER: John Wyant
METHOD OF ADVANCING BORING	DIA.	DEPTH			SURFACE ELEVATION: 654.0	
POWER AUGER:	3 7/8"	0 TO 3.5'	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM: See Remarks	
ROT. DRILL:		TO	SCREEN DEPTH: — TO —		DATE START: 7/29/14	
CASING:		TO	WEATHER: Clear TEMP: 70° F		DATE FINISH: 7/29/14	
DIAMOND CORE:		TO	DEPTH TO ROCK: 3.5'		UNCONFINED COMPRESS. STRENGTH (TONS/FT)	
ATV Mounted Drill Rig with Safety Hammer		*CHANGES IN STRATA ARE INFERRED				

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES			UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)			ELEVATION (FT.)		
			SAMPLE NUMBER	RECOV. LENGTH (IN.)	ROD (%)				MOISTURE	1	2		3	4
1							No sampling. Auger Probe to 3.5' Auger refusal @ 3.5'							
2														
3														
4							End of Boring at 3.5'							
5														
6														649.0
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														639.0
17														
18														
19														
20														
21														634.0
22														
23														
24														
25													629.0	

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

BORING LOG 7292-01.OPJ TECTONIC.ENG.GDT 9/3/14

CLIENT: **201 Old Stone Road, LLC**

CONTRACTOR: **General Borings, Inc.**

METHOD OF ADVANCING BORING DIA. DEPTH

POWER AUGER: 3 7/8" 0 TO 3.5'

ROT. DRILL: TO

CASING: TO

DIAMOND CORE: TO

GROUND WATER

DATE

TIME

DEPTH

INSPECTOR: **Chris Ferri**

DRILLER: **John Wyant**

SURFACE ELEVATION: **655.0**

DATUM: **See Remarks**

DATE START: **7/29/14**

DATE FINISH: **7/29/14**

MON. WELL YES NO

SCREEN DEPTH: -- TO --

WEATHER: **Clear** TEMP: **70° F**

DEPTH TO ROCK: **3.5'**

UNCONFINED COMPRESS. STRENGTH (TONS/FT)

1 2 3 4 5

PLASTIC LIMIT % WATER CONTENT % LIQUID LIMIT %

10 20 30 40 50

STANDARD PENETRATION (BLOWS/FT.)

10 20 30 40 50

*CHANGES IN STRATA ARE INFERRED

ATV Mounted Drill Rig with Safety Hammer

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)					ELEVATION (FT.)	
			SAMPLE NUMBER	RECOV.		MOISTURE				STANDARD PENETRATION (BLOWS/FT.)						
LENGTH (IN.)	RQD (%)			10 20 30 40 50												
1							No sampling. Auger Probe to 3.5' Auger refusal @ 3.5'									
2																
3																
4							End of Boring at 3.5'									
5																
6																650.0
7																
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16																640.0
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19																
20																
21																
22																
23																
24																
25															630.0	

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

CLIENT: 201 Old Stone Road, LLC			GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Chris Ferri	
CONTRACTOR: General Borings, Inc.							DRILLER: John Wyant	
METHOD OF ADVANCING BORING	DIA.	DEPTH					SURFACE ELEVATION: 655.0	
POWER AUGER:	3 7/8"	0 TO 0.5'		MON. WELL	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	DATUM: See Remarks	
ROT. DRILL:		TO	SCREEN DEPTH:	—	TO	—	DATE START: 7/29/14	
CASING:		TO	WEATHER: Clear	TEMP: 70° F			DATE FINISH: 7/29/14	
DIAMOND CORE:		TO	DEPTH TO ROCK: 0.5'				UNCONFINED COMPRESS. STRENGTH (TONS/FT)	
ATV Mounted Drill Rig with Safety Hammer			*CHANGES IN STRATA ARE INFERRED					

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/8 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)			ELEVATION (FT.)		
			SAMPLE NUMBER	RECOV.		MOISTURE				1	2	3		4	5
				LENGTH (IN.)	RQD (%)										
1							No sampling. Auger Probe to 0.5' Auger Refusal @ 0.5' End of Boring at 0.5'								
2															
3															
4															
5														650.0	
6															
7															
8															
9															
10														645.0	
11															
12															
13															
14															
15														640.0	
16															
17															
18															
19															
20														635.0	
21															
22															
23															
24															
25														630.0	

REMARKS: Surface elevations were obtained from a site plan drawing provided by Baley & Watson Surveying & Engineering, P.C. and should be considered approximate.

BORING LOG 7292-01.GPJ TECTONIC ENG.GDT 8/3/14

CLIENT: **201 Old Stone Road, LLC**

CONTRACTOR: **General Borings, Inc.**

METHOD OF ADVANCING BORING

DIA.

DEPTH

GROUND WATER

DATE

TIME

DEPTH

INSPECTOR: **Chris Ferri**

DRILLER: **John Wyant**

SURFACE ELEVATION: **666.0**

POWER AUGER:

TO

MON. WELL YES NO

DATUM: **See Remarks**

ROT. DRILL:

TO

SCREEN DEPTH: - TO -

DATE START: **7/29/14**

CASING:

TO

WEATHER: **Clear** TEMP: **75° F**

DATE FINISH: **7/29/14**

DIAMOND CORE:

2"

0

TO 10'

DEPTH TO ROCK: **0'**

UNCONFINED COMPRESS. STRENGTH (TONS/FT)

ATV Mounted Drill Rig with Safety Hammer

*CHANGES IN STRATA ARE INFERRED

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)			ELEVATION (FT.)		
			SAMPLE NUMBER	RECOV.		MOISTURE				1	2	3		4	5
				LENGTH (IN.)	ROD (%)										
1	2						2" Topsoil								
2	2						Blk-wh, fresh, slightly weathered, med-fine grained, slightly fractured, medium hard, GNEISS								
3	2		C-6	53/60	70										
4	2														
5	2														
6	2													661.0	
7	2						Blk, Same								
8	3		C-7	54/60	82										
9	3														
10	3													656.0	
11							End of Boring at 10'								
12															
13															
14															
15													651.0		
16															
17															
18															
19															
20													646.0		
21															
22															
23															
24															
25													641.0		

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

CLIENT: **201 Old Stone Road, LLC**

CONTRACTOR: **General Borings, Inc.**

METHOD OF ADVANCING BORING DIA. DEPTH

POWER AUGER: 3 7/8" 0 TO 0.5'

ROT. DRILL: TO

CASING: TO

DIAMOND CORE: 2" 0.5 TO 10.5'

GROUND WATER DATE TIME DEPTH

MON. WELL YES NO

SCREEN DEPTH: - TO -

WEATHER: **Overcast** TEMP: **70° F**

DEPTH TO ROCK: **0.5'**

INSPECTOR: **Chris Ferri**

DRILLER: **John Wyant**

SURFACE ELEVATION: **652.0**

DATUM: **See Remarks**

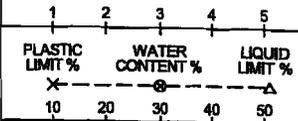
DATE START: **7/28/14**

DATE FINISH: **7/28/14**

ATV Mounted Drill Rig with Safety Hammer

*CHANGES IN STRATA ARE INFERRED

UNCONFINED COMPRESS. STRENGTH (TONS/FT)



STANDARD PENETRATION (BLOWS/FT.)



DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)					ELEVATION (FT.)	
			SAMPLE NUMBER	RECOV.		MOISTURE				1	2	3	4	5		
				LENGTH (IN.)	RQD (%)											
1	4						4" Topsoil									
2	4						Blk-wh, fresh to slightly weathered, slightly fractured, fine to medium grained, hard, GNEISS									
3	4		C-1	60/60	87											
4	4															
5	4															
6	4															647.0
7	4						Same									
8	4		C-2	72/72	74											
9	4															
10	5															
11																642.0
12							End of Boring at 10.5'									
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25														627.0		

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

CLIENT: 201 Old Stone Road, LLC		GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Chris Ferri
CONTRACTOR: General Borings, Inc.						DRILLER: John Wyatt
METHOD OF ADVANCING BORING	DIA.	DEPTH	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		SURFACE ELEVATION: 659.0	
POWER AUGER:	3 7/8"	0 TO 3'			DATUM: See Remarks	
ROT. DRILL:		TO	SCREEN DEPTH: - TO -		DATE START: 7/29/14	
CASING:		TO	WEATHER: Clear TEMP: 70° F		DATE FINISH: 7/29/14	
DIAMOND CORE:	2"	3 TO 8'	DEPTH TO ROCK: 3'			

ATV Mounted Drill Rig with Safety Hammer *CHANGES IN STRATA ARE INFERRED

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)			ELEVATION (FT.)		
			SAMPLE NUMBER	RECOV.		MOISTURE				1	2	3		4	5
				LENGTH (IN.)	ROD (%)										
1	41	3 8 33 55	S-1	10		M	SP								
2															
3							Auger refusal @ 3'								
4	1														
5	2														
6	2		C-5	46/60	7		Blk-or, highly weathered, m-f grained, highly stained, moderately fractured, medium hard, GNEISS						654.0		
7	2														
8	2														
9							End of Boring at 3'								
10													649.0		
11															
12															
13															
14															
15													644.0		
16															
17															
18															
19															
20													639.0		
21															
22															
23															
24															
25													634.0		

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

BORING LOG 7292-01.GPJ TECTONIC ENG.GDT 8/3/14

CLIENT: 201 Old Stone Road, LLC			GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Chris Ferri	
CONTRACTOR: General Borings, Inc.							DRILLER: John Wyant	
METHOD OF ADVANCING BORING	DIA.	DEPTH					SURFACE ELEVATION: 650.0	
POWER AUGER:	3 7/8"	0 TO 3.5'	MON. WELL	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	DATUM: See Remarks		
ROT. DRILL:		TO	SCREEN DEPTH:	—	TO	—	DATE START: 7/29/14	
CASING:		TO	WEATHER: Clear	TEMP: 62° F	DATE FINISH: 7/29/14			
DIAMOND CORE:	2"	3.5 TO 9'	DEPTH TO ROCK: 3.5'					
ATV Mounted Drill Rig with Safety Hammer			*CHANGES IN STRATA ARE INFERRED					

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BLU/6 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)			ELEVATION (FT.)		
			SAMPLE NUMBER	RECOV.		MOISTURE				1	2	3		4	5
				LENGTH (IN.)	RQD (%)										
1	10	2 3 7	S-1	5		M	SP								
2		15													
3	80+	13 30 50/3	S-2	4		M	SP								
4															
5	2														
6	1												645.0		
7	2		C-4	65/66	70										
8	2														
9	2														
10													640.0		
11															
12															
13															
14															
15													635.0		
16															
17															
18															
19															
20													630.0		
21															
22															
23															
24															
25													625.0		

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

BORING LOG 7292-01.GPJ TECTONIC ENG.GDT 8/3/14

CLIENT: 201 Old Stone Road, LLC		GROUND WATER	DATE	TIME	DEPTH	INSPECTOR: Chris Ferri	
CONTRACTOR: General Borings, Inc.						DRILLER: John Wyant	
METHOD OF ADVANCING BORING	DIA.	DEPTH			SURFACE ELEVATION: 658.0		
POWER AUGER:	3 7/8"	0 TO 2'	MON. WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		DATUM: See Remarks		
ROT. DRILL:		TO	SCREEN DEPTH: - TO -		DATE START: 7/28/14		
CASING:		TO	WEATHER: Clear TEMP: 75° F		DATE FINISH: 7/28/14		
DIAMOND CORE:	2"	2 TO 7'	DEPTH TO ROCK: 2'		UNCONFINED COMPRESS. STRENGTH (TONS/FT)		
ATV Mounted Drill Rig with Safety Hammer		*CHANGES IN STRATA ARE INFERRED				1 2 3 4 5 PLASTIC LIMIT % WATER CONTENT % LIQUID LIMIT % X ○ △ 10 20 30 40 50 STANDARD PENETRATION (BLOWS/FT.) ● 10 20 30 40 50	

DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BLU6 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)					ELEVATION (FT.)
			SAMPLE NUMBER	RECOV.		MOISTURE				1	2	3	4	5	
				LENGTH (IN.)	RQD (%)										
1	53+	2 3 50/5	S-1	3		M	SP	4" Topsoil Bwn c-f SAND, trace c-f Gravel, trace Silt, grass, roots, moss Auger refusal @ 2'							
2															
3	3														
4	3														
5	3		C-3	60/60	78			Blk-gy, fresh to slightly weathered, slightly - moderately fractured, fine-medium grained, hard GNEISS							653.0
6	2														
7	4														
8								End of Boring at 7'							
9															
10															648.0
11															
12															
13															
14															
15															643.0
16															
17															
18															
19															
20															638.0
21															
22															
23															
24															
25															633.0

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.

CLIENT: **201 Old Stone Road, LLC**

CONTRACTOR: **General Borings, Inc.**

GROUND
WATER

DATE

TIME

DEPTH

INSPECTOR: **Chris Ferri**

DRILLER: **John Wyant**

METHOD OF ADVANCING BORING

DIA.

DEPTH

SURFACE ELEVATION: **655.0**

POWER AUGER:

3 7/8"

0 TO 3'

MON. WELL YES NO

DATUM: **See Remarks**

ROT. DRILL:

TO

SCREEN DEPTH: - TO -

DATE START: **7/28/14**

CASING:

TO

WEATHER: **Clear** TEMP: **70° F**

DATE FINISH: **7/28/14**

DIAMOND CORE:

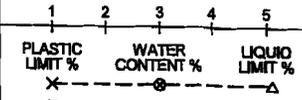
TO

DEPTH TO ROCK: **3'**

UNCONFINED COMPRESS. STRENGTH
(TONS/FT)

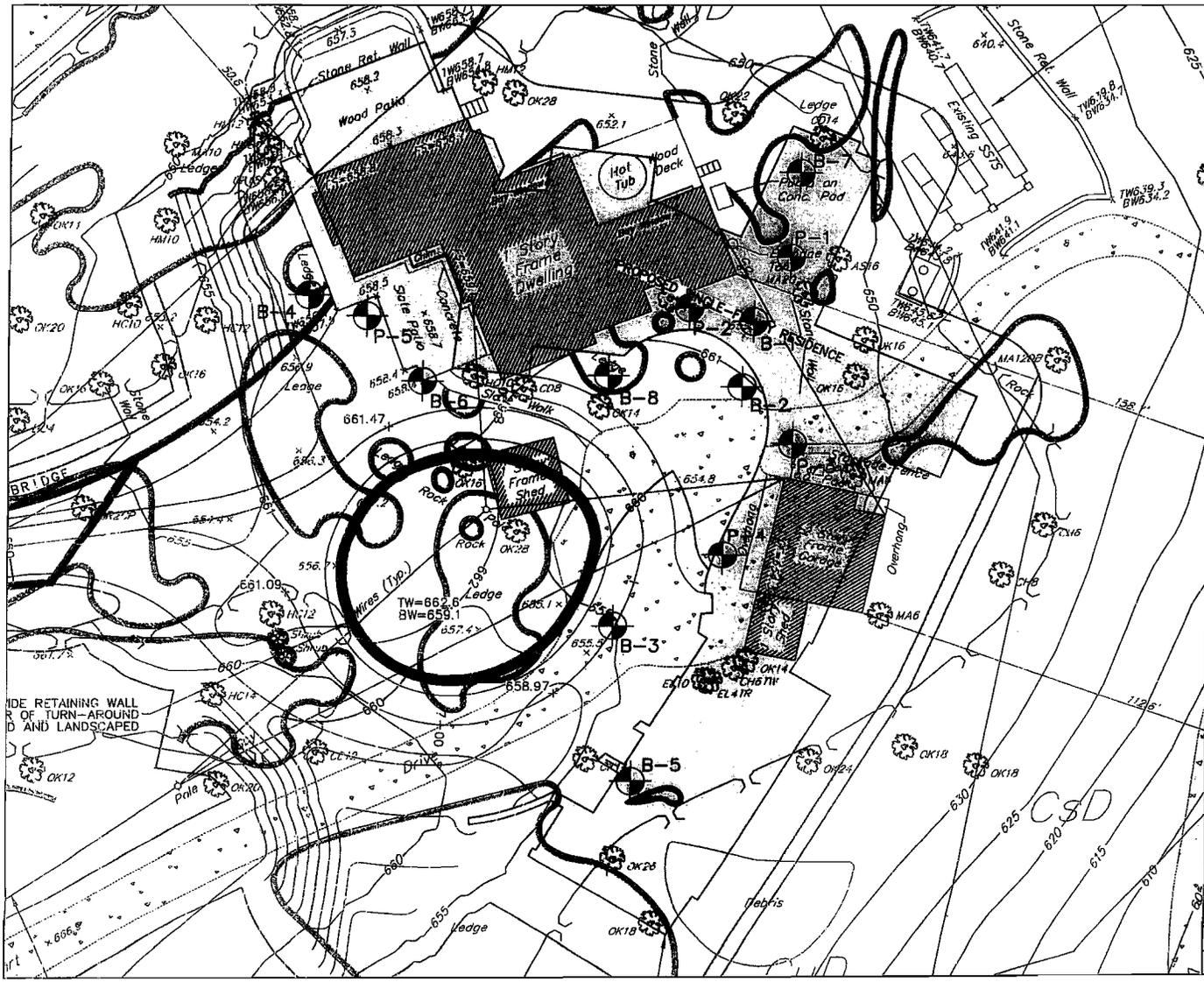
ATV Mounted Drill Rig with Safety Hammer

*CHANGES IN STRATA ARE INFERRED



DEPTH (FT.)	N OR MIN./FT.	PENETRATION RESISTANCE (BL/6 IN.)	SAMPLES				UNIFIED SOIL CLASS.	DESCRIPTION OF MATERIAL	LITHOLOGY*	UNCONFINED COMPRESS. STRENGTH (TONS/FT)					ELEVATION (FT.)		
			SAMPLE NUMBER	RECOV.		MOISTURE				1	2	3	4	5			
				LENGTH (IN.)	ROD (%)											PLASTIC LIMIT %	WATER CONTENT %
1	47	6 17 30	S-1	12		M	SP										
2		7															
3	50+	8 50/3	S-2	1		M	SP										
4																	
5																	
6																	650.0
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	

REMARKS: Surface elevations were obtained from a site plan drawing provided by Badey & Watson Surveying & Engineering, P.C. and should be considered approximate.



LEGEND

- APPROXIMATE BORING LOCATION
- APPROXIMATE ROCK PROBE LOCATION
- APPROXIMATE ROCK CORE LOCATION

NOTES

1. PLAN BASED ON DRAWING ENTITLED "SP21504_R01", BY BADEY & WATSON.
2. BORINGS WERE FIELD LOCATED BY TECTONIC AND SHOULD BE CONSIDERED APPROXIMATE.
3. PLAN BASED ON IMAGE TAKEN FROM NYS DIGITAL ORTHOMAGERY. SITE LOCATION SHOULD BE CONSIDERED APPROXIMATE.

ORIGINAL SIZE IN INCHES

TECTONIC

- PLANNING
- ENGINEERING
- SURVEYING
- CONSTRUCTION MANAGEMENT

TECTONIC Engineering & Surveying Consultants P.C. Phone: (845) 567-6856
 1278 Route 309, 2nd Floor Fax: (845) 567-6246
 Newburgh, NY 12550 www.tectonicengineering.com

BORING LOCATION PLAN			
201 OLD STONE ROAD GARRISON, NEW YORK PUTNAM COUNTY			
Date 08/22/14	Work Order 7292.01	Drawing No. FIGURE 1	Rev 0

FIGURE 1

11.0 LIMITATIONS

Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable geotechnical engineers and geologists practicing in this or similar situations. The interpretation of the field data is based on good judgment and experience. However, no matter how qualified the geotechnical engineer or detailed the investigation, subsurface conditions cannot always be predicted beyond the points of actual sampling and testing. No other warranty, expressed or implied, is made as to the professional advice included in this report.

The recommendations contained in this report are intended for design purposes only. Contractors and others involved in the construction of this project are advised to make an independent assessment of the soil and groundwater conditions for the purpose of establishing quantities, schedules and construction techniques.

This report has been prepared for the exclusive use of 201 Old Stone Road, LLC. for the specific application to the proposed two-story, residential building, to be located in Garrison, New York. We recommend that prior to construction, Tectonic review the project plans and specifications. It should be noted that upon review of those documents, some recommendations presented herein might be revised or modified. In the event that any changes in the design or location of the proposed structures are planned, Tectonic shall not consider the conclusions and recommendations contained in this report valid unless reviewed and verified in writing. It is further recommended that Tectonic be retained to provide construction monitoring and inspection services to ensure proper implementation of the recommendations contained herein, which would otherwise limit our professional liability.

G:\Newburgh\Geotechnical\7200\7292.01 Old Stone Road Garrison\Report\7292.01_Old Stone_Geotech Report.docx

greater than 4 feet in height should be sloped back for safety unless sheeting or a bracing system is used. Design of all shoring and bracing should be performed by a licensed Professional Engineer.

9.6 Protection of Subgrades/Construction Dewatering

In general, excavations for building construction should not encroach into static groundwater. Zones of perched water may be encountered during foundation excavation. Where water is encountered, dewatering should be performed in a manner to prevent loosening or migration of the subgrade soils. Dewatering should be performed to maintain a water level at least 2 feet below any soil subgrade. Sumping directly in footing excavations should not be performed. Surface runoff should be diverted away from open excavations by the use of diversion ditches.

10.0 CONSTRUCTION MONITORING

A geotechnical engineer familiar with the existing subsurface conditions and having the appropriate laboratory and field testing support should be engaged by the Owner to observe that all earthwork is performed in accordance with the specifications and the design criteria outlined in this report.

The following work should be performed under the supervision of a geotechnical engineer:

- Rock Subgrade preparation
- Fill placement and compaction, if necessary
- Dewatering, if necessary
- Preconstruction condition surveys of adjacent structures
- Vibration and deformation monitoring of adjacent buildings and structures.

All materials proposed for use as soil fill should be tested and approved prior to delivery to the site. Additionally, all fill materials should be tested as they are being placed to verify that the required compaction is achieved. We further recommend that the project plans and specifications be reviewed by the geotechnical consultant prior to final completion of the bid documents. It should be noted that upon review of those documents, some recommendations presented herein may be revised or modified.

Non-conforming native soils may be suitable for use as general fill outside the building areas or in landscaped areas, provided they are free of trash, debris, roots, vegetation, peat or other deleterious materials and have a moisture content suitable for compacting.

All general fill and structural fill should be compacted to at least 95 percent of the maximum dry density, at near optimum moisture contents, as determined by the modified Proctor test (ASTM Standard D1557). The degree of compaction should be tested and documented by a geotechnical engineer for each lift of fill. The lift thickness for the structural fill soils will vary depending on the type of compaction equipment used. Structural fill should generally be placed in uniform horizontal lifts not exceeding 8 inches in loose thickness when using a 10-ton roller. In confined areas, the loose lift thickness should be 4 inches or less and each lift should be compacted with sufficient passes of hand operated vibratory or impact compaction equipment. Backfill in landscape areas should be compacted to at least 85 percent of the maximum dry density, at near optimum moisture contents, as determined by the modified proctor test (ASTM Standard D1557). A geotechnical engineer with appropriate field and laboratory support should inspect all subgrades, approve materials for use as fill, and test backfill materials for compliance with the recommended compaction.

Free draining crushed aggregate below slabs and as drainage materials behind foundation walls should be as follows:

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
1 inch	100
½ inch	30 – 100
¼ inch	0 – 30
No. 4	0 – 10

9.5 Excavations

Excavations into the native soil should be feasible utilizing standard construction equipment (i.e. hydraulic excavator). All excavations should conform to the latest OSHA requirements regarding worker safety. We recommend that the native soil be assumed to have the OSHA designation of Class C soils. All vertical cuts in soil

conducted in a manner that will minimize ground vibrations at adjacent structures and also limit the amount of air overblast pressure.

Due to the relatively close proximity and high local historical significance of Osborne Castle, pre-construction and post-construction building condition surveys should be performed to document existing conditions which may be aggravated by the proposed rock removal and other construction operations, and to aid in the defense of spurious damage claims. Pending the results of the aforementioned pre-construction building condition survey, a monitoring program could be implemented through limitations on peak particle velocity and air overblast pressure (sound level) at adjacent structures.

9.3 Rock Subgrade Preparation

Rock subgrades should be prepared approximately level and they should be cleaned of all soil materials. If lean concrete is used to provide a level subgrade, the geotechnical engineer should evaluate the degree and direction of the slope of the rock surface and their variation over the area of the leveling pad to determine the stability of the leveling pad relative to sliding failure along the concrete-bedrock interface. If it is determined that the leveling pad is unstable due to shear forces resulting from a sloping rock surface, the bedrock surface should be stepped or dowels should be installed to resist the sliding forces.

9.4 Fill and Backfill Materials

If required, structural fill should consist of sand, gravel, crushed stone, or a mixture of these, and should contain no organic matter or deleterious material. The fill materials should contain no particles exceeding 4 inches in largest dimension and conform to the following gradation:

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
4 inch	100
1/4 inch	30-70
No. 40	5-40
No. 200	0-10
No. 8	0-5

collection pipe, as a minimum, should be installed along any building wall where the outside grade is higher than the slab elevation. The gradation specification for the drainage material is provided in Section 9.5 as "free draining crushed stone." The stone or gravel should be completely separated from the soil backfill by a permeable geotextile having an equivalent opening size of 70 to 100. Grading of the surface of the backfill and the surrounding topography and pavements should provide positive drainage away from the walls. Roof drains should be positively drained to areas away from the building.

9.0 EARTHWORK CONSTRUCTION CRITERIA

The following sections outline our recommendations regarding earthwork and subgrade preparations for the proposed project site.

9.1 General Site Preparation

Initially, the site should be cleared of all existing structures, vegetation, pavements, roots, debris, and subsurface obstructions. Debris and vegetation from the clearing operations should be removed from the site and disposed of at a legal dump site. Any loose or unsuitable native materials and subsurface obstructions should be removed from the building footprint.

The portion of the existing building, which is to be demolished, should be removed in its entirety from the proposed building footprint. Existing floor slabs, foundation walls, and column footings should be excavated and completely removed.

9.2 Rock Excavations

Our investigation shows that bedrock is present at relatively shallow depths across the entire project site. Where feasible, rock excavation should be performed by ripping techniques. Other methods, such as controlled blasting, hydraulic hoe-ramming, rock trenching, or expansive chemical grout, should be considered as potential means for the rock excavation. The feasibility and methodology for rock removal should be developed by an experienced qualified contractor or a specialist and it should be performed in a manner that will minimize damage to underlying bedrock that will serve as foundation subgrades. Rock removal should also be

Soil Parameter	Structural Fill
Angle of internal friction	34°
Active earth pressure coefficient (K_a) for horizontal backfill surface ⁽¹⁾	0.28
At rest earth pressure coefficient (K_o) for horizontal backfill surface ⁽²⁾	0.44
Passive earth pressure coefficient (K_p) ⁽³⁾	3.54
Coefficient of base friction ⁽⁴⁾	0.6
Total unit weight of soil (pounds per cubic foot)	130

- 1) Use for walls where movement of up to 0.0025 X height of wall is both possible and tolerable. Otherwise, use at-rest coefficient.
- 2) Passive resistance should be neglected within the zone of frost penetration (4 feet).
- 3) Use for walls restrained against outward lateral movement including basements walls.
- 4) Coefficient of base friction applies to mass concrete placed directly against the approved competent rock subgrades.

Note that the at-rest earth pressure coefficient should be used to evaluate the earth pressure against the non-yielding basement walls. Also, additional loading due to temporary and permanent surcharges should be added to the lateral loading exerted by the backfill.

Walls should be backfilled in accordance with Section 9.5 of this report. Placement and compaction of backfill should be observed and tested by a geotechnical engineer to monitor that proper compaction is being achieved.

Damproofing should be provided for all foundation walls where the outside grade is higher than the slab elevation. All foundation walls should be provided with a 12-inch wide drainage layer of crushed stone or gravel behind the wall with a collector pipe at the footing elevation draining to a positive outlet. The drainage layer and

degrees of weathering observed and allows for minor disturbance due to the blasting process (if any). The recommended net allowable bearing pressure should be verified during construction by the Geotechnical Engineer.

Isolated spread footings should have a minimum width of 2 feet when bearing on bedrock. Continuous wall footings should have a minimum width of 12 inches when bearing on bedrock. Foundations bearing on rock should have a minimum depth of embedment of 2 feet. Subgrade preparation recommendations are provided in Section 9 of this report.

8.2 Slab-On-Grade Floors

If slab-on-grade floors are proposed, they should be supported on a minimum 6-inch thick layer of free draining $\frac{1}{2}$ to $\frac{3}{4}$ inch crushed stone placed directly over bedrock. Subgrade preparation and structural fill material and placement recommendations are provided in Section 9.2 of this report.

A vapor barrier consisting of a polyethylene membrane at least 6 mils thick should be placed beneath all moisture sensitive floor slabs. A coefficient of friction of 0.3 should be used between the slab and the vapor barrier. If concrete is cast directly against clean, sound, bedrock, a coefficient of friction of 0.70 can be used.

For design of slab-on-grade floors with a 6 inch crushed stone base, a modulus of subgrade reaction of 250 pounds per cubic inch (pci) is recommended. The modulus of subgrade reaction is suitable for estimating distributions of bearing pressure beneath the slab and for estimating bending moments and shears within the slab. It is not intended for the purpose of calculating total or differential settlements.

8.3 Foundation Walls

The proposed below-grade foundation walls should be designed in accordance with the following criteria:

Other conclusions that can be drawn from the results of the performed investigation are as follows:

- The on-site soils are recommended for re-use as fill within landscape areas or as backfill behind retaining or foundation walls as long as no large cobbles or boulders are present.
- Excavations to rock should be feasible with conventional heavy-duty construction equipment; however, construction debris, cobbles and boulders may be encountered. Removal of the rock will require hydraulic hoe-rams and/or controlled blasting.
- Groundwater was not encountered within any of the preliminary borings. However, it should be noted that groundwater levels fluctuate with changing seasons and weather conditions and groundwater may be present in a perched condition on top of bedrock.
- The site soils are not likely subject to liquefaction during the design earthquake event.

8.0 FOUNDATION RECOMMENDATIONS

The following sections include our geotechnical recommendations for design and construction of the proposed building foundation. The recommendations are based on our understanding of the proposed construction, the results of our subsurface investigation, and our experience on similar projects in the general vicinity of the project site.

8.1 Building Foundations

Shallow spread footings and continuous wall footings are recommended for support of the proposed addition. Based on our analysis of the subsurface conditions, it is anticipated that construction of the new structure will require cutting and possibly filling to obtain the proposed finished floor grades across the length of the building. In order to minimize differential settlement, we recommend that the entire building be supported on competent bedrock. It is anticipated that bedrock will be encountered along the majority of the footing subgrade elevations; however, depending on the actual proposed finish floor elevations, some footings may have to be deepened to bear on the competent bedrock. Although it is anticipated that much of the bedrock that will be encountered at the subgrade elevation will have a bearing capacity on the order of 20 tons per square foot (tsf), we recommend that the foundations be designed for a net allowable bearing capacity of 8 tsf. This is due to the variable

(Sm1) equal to 0.060g. The design spectral response accelerations (SDS and SD1) should be determined based on these maximum values and the procedures outlined in the Code.

Liquefaction of soils can be caused by a strong vibratory motion due to earthquakes. Both research and historical data indicate that loose, granular soils saturated by a shallow groundwater table are most susceptible to liquefaction. Liquefaction occurs when an earthquake and associated ground shaking of sufficient duration results in the loss of grain-to-grain contact due to a rapid increase in pore water pressure, causing the soil to behave as a fluid for short periods. Based on the results of the borings and SPT sampling, the subsurface conditions at the site should be considered as having a very low potential for liquefaction. This is due to the dense soil conditions, shallow bedrock and absence of any groundwater.

7.0 DISCUSSION AND CONCLUSIONS

Construction of the proposed building is feasible from a geotechnical standpoint provided that the recommendations contained in the following sections are incorporated into the design and construction. The building, based on our investigation, can be supported on continuous wall footings or conventional shallow footings bearing directly on the bedrock. The main geotechnical constraint associated with the proposed construction will be the rock removal required to achieve proposed site grades and establish uniform bearing within foundation subgrades.

As summarized in Section 5, the top of the bedrock surface was encountered at depths ranging from 0 to 4.5 feet in the borings and probes. Based on the site grading information provided by the design team, as much as 11-feet of rock removal will be required to construct the floor slabs and building foundations to planned elevations. Due to the relative hardness and RQD values of the retrieved rock cores, it is anticipated that rock excavation will be very difficult and will likely require the use of controlled blasting, drilling and splitting, or hydraulic hoe-rams to remove rock in a timely, cost efficient manner. Blasting of the rock will likely be the most efficient method of rock removal.

5.0 SUBSURFACE CONDITIONS

The subsurface conditions encountered in the borings generally consist of native soils, underlain by bedrock. A generalized description of the materials encountered at the boring locations is provided below. More detailed descriptions of the subsurface conditions are provided in the boring logs included in Appendix I.

5.1 Native Soils

Native sand soils were encountered at approximate depths ranging from 0 and 4.5 feet below existing grade. Standard Penetration Test (SPT) N-values within the sands ranged from 10 to 90+ blows per foot (bpf) indicating medium dense to very dense conditions.

5.2 Bedrock

Bedrock was encountered either at the surface or beneath the native soils in all borings at depths varying between 0 and 4.5 feet. The rock consists of a white, light grey-black, fresh to slightly weathered, slightly to moderately fractured, medium to fine grained, hard gneiss. The bedrock was variable with rock quality designations (RQD) between 7 and 87 percent and recovery of between 76 and 100 percent encountered indicating the rock was in a soft to hard state.

5.3 Groundwater

Groundwater was not encountered in any of the borings. It should be noted that groundwater levels will fluctuate with variations in rainfall and with season and groundwater can be, at different times, encountered at varying depths. Perched groundwater may be encountered overlying the bedrock surface following periods of wet weather.

6.0 SEISMIC SITE COEFFICIENTS AND LIQUEFACTION POTENTIAL

As part of our investigation, we have evaluated an appropriate site coefficient for use in seismic design. Based on the results of our subsurface investigation and the criteria outlined in the current edition of the New York State Building Code, the subsurface soils underlying the proposed building should be considered Site Class B with maximum spectral response acceleration at short periods (SmS) equal to 0.246g and at 1-second periods

A one-story residence with a detached, two-story, garage currently occupies the site. Based on conversations with the client, and review of a surveyed site plan drawing by Badey & Watson, titled "SP21504_R01" and dated May 1, 2014, it is our understanding that the proposed project will include partial demolition of the existing main residence building and complete demolition of the existing two-story detached garage and construction of a new two-story, residential, building having an approximate footprint of 7,500 square feet, with a one-story, below grade cellar, having an approximate bearing elevation of 647.7-feet AMSL. No structural loading information was provided at the time of this report.

4.0 SUBSURFACE INVESTIGATION

The subsurface investigation consisted of drilling eight (8) test borings and five (5) auger probes. The borings were designated as B-1 through B-8 and the auger probes were designated as P-1 through P-5.

The subsurface investigation was performed by General Borings, Inc. on July 28 and 29, 2014 using an ATV-mounted drill rig with safety hammer. All borings and auger probes were advanced using 3-7/8 inch diameter hollow stem augers to depths varying from 0 to 10.5 feet below existing grade. Standard Penetration Testing (SPT) was performed, using a standard 2-inch diameter split-spoon sampler continuously. SPT sampling was performed in accordance with the requirements of ASTM Standard D1586 "*Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils*". SPT N-values were recorded for each sample taken. Samples of the soils obtained by the split-spoon sampler were collected and retained in glass jars. All boreholes were backfilled with the drilling spoils to match the existing grade. Rock cores were taken at select boring locations using a 2-inch diameter, double tube, NX-size, diamond core barrel.

The subsurface investigation was performed under the full-time observation of a geotechnical engineer representing Tectonic. The engineer classified soil and rock samples as they were recovered, collected representative samples of the soil and rock for analysis and prepared logs of the soil, rock, and groundwater conditions encountered. The locations of the borings and probes are shown on the attached Boring and Rock Probe Location Plan, Figure 1. Logs of the borings and rock probes are included in Appendix I.

1.0 INTRODUCTION

Tectonic Engineering & Surveying Consultants, P.C. has completed a geotechnical engineering evaluation for the proposed single-family residence building located at an existing one-story residence site on 201 Old Stone Road in Hamlet of Garrison, Town of Philipstown, Putnam County, New York. The purpose of this investigation was to evaluate the subsurface conditions and develop geotechnical recommendations for the design and construction of the foundation for the proposed building. This report presents our findings and recommendations.

2.0 SCOPE OF SERVICES

A geotechnical engineering evaluation was performed for 201 Old Stone Road, LLC., herein referred to as the Client, coordinated through Badey & Watson Surveying & Engineering, P.C., herein referred to as the Client's Agent. The scope of our geotechnical evaluation consisted of the following:

- Drilling, sampling, and logging of eight (8) test borings and five (5) auger probes at the site to depths ranging from approximately 0 to 10.5 feet below the existing ground surface.
- Field inspection and supervision by a geotechnical engineer to locate the borings and probes, log the subsurface conditions, and modify the subsurface investigation program as conditions warrant.
- Geotechnical engineering analysis of the subsurface conditions as they relate to the design and construction of the proposed building foundations.
- Preparation of this report presenting the results of the subsurface investigation, engineering analyses, as well as our geotechnical recommendations for the design and construction of the foundations for the proposed building.

3.0 SITE AND PROJECT DESCRIPTION

The project site is located on 201 Old Stone Road, in the Hamlet of Garrison, Town of Philipstown, Putnam County, New York. The property is located at the top of a hill, with an approximate elevation of 659-feet above mean sea level (AMSL), and is generally bound by undeveloped woodlands and unpaved roadways/driveways.

GEOTECHNICAL EVALUATION
PROPOSED SINGLE-FAMILY RESIDENCE
201 OLD STONE ROAD
GARRISON, PUTNAM COUNTY, NEW YORK

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FIGURE 1 BORING AND ROCK PROBE LOCATION PLAN

APPENDIX I BORING AND ROCK PROBE LOGS

**GEOTECHNICAL EVALUATION
PROPOSED SINGLE-FAMILY RESIDENCE
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FIGURE 1 BORING AND ROCK PROBE LOCATION PLAN

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**GEOTECHNICAL EVALUATION
PROPOSED SINGLE-FAMILY RESIDENCE
201 OLD STONE ROAD
GARRISON, PUTNAM COUNTY, NEW YORK**

PREPARED FOR:

**201 OLD STONE ROAD LLC
C/O BADEY & WATSON SURVEYING & ENGINEERING P.C.
3063 ROUTE 9
COLD SPRING, NY 10516**

PREPARED BY:

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1279 ROUTE 300
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NOVEMBER 4, 2014



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I

APPENDIX

The applicant prepared and submitted Part 1 of this EAF and a suggested Part 2. After an initial review of and report concerning the project by the Town's Engineer/Planning Consultant, the applicant submitted a second suggested Part 2, which, with one minor correction suggested by the Town Engineer/Planning Consultant was adopted during the October 2014 meeting of the Planning Board. The Planning Board instructed the applicant to prepare Part 3 and submit the Full EAF for its consideration.

The Planning Board considered Part 3 of the EAF along with its appendices during its November 2014 meeting. Based on its review and recommendation of its consultants the Planning Board may determine that Full EAF provides suitable responses to the questions it raised and that it may adopt a Negative Declaration under SEQRA for the 201 Old Stone Road Site Plan Approval.

This project is not expected to require any more materials, equipment or personnel than other residential construction projects in the area. Except for the final approach to the site, all deliveries are expected to arrive via State Highways capable of handling the delivery trucks. However, the final approach to the site is over a long private road that cannot be negotiated by larger delivery trucks. Moreover, the roadway is over 100 years old and has exhibited some deterioration.

The Planning Board and its consultant have expressed concern that deliveries to or removals from the project area will be difficult or impossible, may require realignment of the private road or consist of loads too heavy for the roadway.

The applicant does not own the road. It enjoys an easement over a specific 50 foot wide alignment centered on the existing road. Consequently, there is little, if any, opportunity to realign the traveled-way. This is especially true in those areas where the alignment contains switchbacks necessitated by the grade that must be overcome.

The applicant has engaged the services of an engineer to assess the condition of the road with particular attention to the dry laid stone retaining walls that support part of it. The engineer has reported that the road is serviceable and regularly handles deliveries of fuel etc. to the three buildings that rely on the upper part of the road for access.

Still the applicant recognizes that deliveries to the site over the road is cause for concern. In that regard, the applicant will agree to a condition that the road be periodically inspected during the construction of the building and other site plan elements. Should the engineer identify a dangerous condition, deliveries to the site will be halted until necessary repairs have been completed.

The private road is approximately 6,500 feet long. It services a total of 6 homes. Three (3) of the 6 homes are located within the first 1,500 feet of the road and before the road conditions becomes problematic. Christopher Buck, sole member of 201 Old Stone Road, LLC is also a member of 8 Old Stone Road, LLC and 16 Old Stone Road, LLC, each of which is improved with a single family home, neither of which is occupied. Either of these homes are available to serve as a staging area. No. 8 is closer to Route 403 and has been assessed by the intended contractor as more convenient than No. 16. By utilizing these properties as a staging area, the project can receive deliveries from larger trucks and use smaller trucks to ferry smaller loads up the hill to the construction site.

Removals from the site will be by smaller trucks that are capable of negotiating the road. Removal loads might be unloaded into a roll off container at one of the lower sites or it may be directed to deliver the material directly to its final destination. The decision about which would occur would depend on the material being removed.

By regularly inspecting the road, halting deliveries until any necessary repairs to the road are made, using smaller lighter delivery vehicles and ferrying lighter more manageable loads along the last leg of the route to the site, potential impacts will be minimized to the greatest practical extent.

Conclusion

The construction activity proposed by the applicant is located within the area protected by Section 175-36 Steep Terrain and Ridgeline Protection Regulations of the Philipstown Zoning Law. This law is intended to reduce the impact of building on ridgelines. Among the purposes of protecting the ridgelines is to preserve their appearance from publicly accessible places.

The applicant's property is clearly on a ridgeline as shown on the "Resource Protection Zoning Map – Scenic Ridgelines" that is part of the Philipstown Zoning Law. It is therefore subject to Section 175-36. A study of the applicant's plans reveals that it has located the proposed house away from the highest part of the property and has chosen a design that respects the reduced maximum building height of 30 feet instead of the 40 feet that is allowed in the underlying Rural Conservation zoning district. As presented to the Planning Board, the height of the proposed building is 23.5 feet, well below the reduced maximum.

The building designed for the applicant is articulated and has sloping roof lines. The articulation allows the building to more closely conform to the shape of the ground and will have the effect of appearing smaller than it actually is because it "wraps" around the hillside rather than interrupting it with a large box that is in clear contrast to the shape of the ground. The roof lines were designed with the same idea in mind. They slope or dive in a manner that will mimic the slope of the ground. The clear intention of the design is to make the ridgelines appear as more natural further reducing the contrast normally associated with conventional construction.

The applicant has represented that it will use natural materials and muted colors to the greatest practical extent. The architectural details, such as the use of wider eaves and thick shingles are also intended to reduce the view and thus the impact the building may have. The deep shingles will further roughen the roof line creating shadows, thus reducing the impression of a large man-made plane that is typical of a conventional roof. The wide eaves are intended to create more shadows and reduce the effect of the sunlight reflecting from the windows towards people viewing the ridgeline.

There are also physical features of the property and the building that contribute to the protection of the ridgeline and thus mitigate the impact associated with the proposed construction. First, most of the building will be screened by trees that stand downslope of the building. These trees will remain and thus continue to interrupt views of the building in the same way they have interrupted the view of the existing building for over 100 years. The highest part of the property is located approximately 140 feet south of the site of the proposed house. Shortly beyond the high point, the land drops quickly to the south. This condition makes views from the south virtually impossible. Finally, as mentioned before the curving contour of the ground at the actual building site has afforded the designer the opportunity to provide the articulation discussed above.

Appendix 2 to this EAF is a study to determine what might be seen from the publicly accessible places in Philipstown. The study was limited to a two mile radius within the Town of Philipstown. In all, eight (8) sites were chosen to assess the potential impacts. As discussed in the study, there are few publicly accessible areas where the building will actually be visible and in those few areas the combination of the distant view, building design and the naturally mitigating design factors discussed above show that the impact on views of the ridgeline have been mitigated to the greatest practical extent.

Other Impacts: Identify "Adequacy of access road during construction."

Removing material from the site generates additional traffic, which is a concern that will be discussed in more detail below. Removing material also raises the question: “Where will the material go?”

There is little that can be done to reduce the amount of discarded building material that will be removed. However little is not “nothing”. Portions of the original building will be saved. The fireplace, the flooring and the interior siding will be saved and reused in the reconstruction process, thus reducing the amount of construction debris. Portions of the foundation will also be saved and reused, further reducing the necessity to remove the building remains. The construction debris will be removed from the site and delivered to a recycling/disposal center equipped to handle such material.

Allowing for excavation of 5 feet beyond the foundation perimeter, the foundation hole will yield approximately 3300 tons or 1900 cubic yards of rock. This rock might be removed from the site. However, the applicant intends to use virtually all of the material for fill and other improvements that it will construct on the site. This includes the bridge abutments, and retaining walls shown on the plan, the relocated driveway, back fill around the foundation and landscaping. Rather than remove the fill, the applicant will bring a small crusher that will be used to convert the spoil to usable construction material.

Crushers make noise. Large crushers make a lot of noise and, for this reason, will not be used. Small crushers make much less noise. The applicant will use crusher small enough to be exempt from the NYS DEC requirement to obtain an Air Quality Permit. To minimize the impact of the noise that is generated the applicant will be required to insure that all sound attenuation equipment is kept in good and working order at all times during the proposed construction and that the hours of operation be limited to those during which blasting may occur, namely 8:30 AM until 3:30 PM weekdays. Neither blasting nor crushing will be permitted on weekends or during legal holidays

By reclaiming, restoring and reusing some of the materials in the existing building and by utilizing as much of the spoil from the foundation excavation on site as possible, removal of material will be reduced to the greatest practical extent. The material that must be removed will be removed in smaller trucks, as discussed later in this EAF. As stated above construction debris will be delivered to a recycling/disposal center equipped to handle such material. Any remaining spoil will be brought directly to another construction site that has a need for it or it will be brought to a contractor’s yard where, if necessary, it can be further processed into usable construction materials.

By using as much construction and excavated material on site as possible, limiting the size of the crusher that it may operate and properly disposing of any materials that must be removed from the site, the applicant will have reduced this impact to the greatest practical extent.

The Proposed Action May Be Visible from Publicly Accessible Vantage Points:

Seasonally (e.g., Screened by summer foliage, but visible during other seasons)

Year round

The Situation or activity in which viewers are engaged while viewing the proposed action is:

Routine Travel by residents, including travel to and from work

Recreational or Tourism-based Activities

hammering will only be conducted during weekdays between the hours of 8:30 AM and 3:30 PM when most people are at work, thereby minimizing the annoyance from the noise associated with hammering.

Still, blasting is likely to be required at some point in the process. While it is more efficient, it is also inherently more dangerous. There is immediate danger to persons or objects in the immediate vicinity of the blast, which, if not properly controlled can launch the blasted rock damaging nearby objects and injuring nearby persons. Blasting also sends shockwaves through the earth, which, if not properly controlled could reach and damage sensitive objects. Blasting is also loud, noisy and generally an annoyance to those within earshot.

One obvious mitigation to this potential impact is to eliminate blasting or reduce it. This mitigation could be accomplished by raising the building, but, as discussed below, the long-term impact would be to increase any impact proposed construction might have on the view shed that is so important in the Hudson Highlands.

Other mitigations are suggested in the Tectonic report that are easily accomplished by incorporating good management practices into the construction process. Chief among them are the use of duly licensed and qualified personnel to plan and carry out the blasting program. Such a plan generally includes limiting the size of the charges and following other safety procedures such as the use of blasting mats to contain the shot rock. Tectonic also recommends that a survey be made of the nearby Castle Rock building to assess its condition prior to any blasting in that it be routinely monitored during the blasting process to be certain that damage to the building is avoided. To avoid the less serious but nonetheless important annoyances caused by blasting, it should be scheduled to those times of the day and days of the week when it will cause the least annoyance to nearby property owners.

The Tectonic report recommends that a plan be prepared by a licensed and experienced contractor and that the plan be reviewed by a qualified professional. It also recommends that regular monitoring and inspection of the site be incorporated into any such plan.

The sponsor is willing to commission and abide by the requirements of such a plan. The Planning Board has the authority to condition any approval on the preparation of such a plan and its positive review by the Town Engineer. Furthermore, it has the authority to require that the sponsor abide by the plan. A properly prepared and implemented plan will minimize the dangers and annoyances threatened by the blasting that may be necessary to remove rock from the foundation site. Therefore, by imposing such a requirement on the sponsor as a condition of site plan approval the Planning Board can be assured that the impacts associated with construction on the land where bedrock is within 5 feet of the ground surface will be mitigated to the greatest practical extent.

The proposed action May involve the excavation and removal of more than 1000 tons of natural material.

The removal of 1000 tons of material from the site raises concerns regarding transportation and traffic that is associated with the removal. Most of the building materials from the removal of the existing buildings must be removed from the site. It is also possible that some of the rock will have to be removed as well.

stormwater that actually falls directly onto its property. Simply put, because water does not flow onto the site, there is less water to contend with.

The site is surrounded by a road. While it is certain that uncontrolled runoff from the site would eventually flow across the road, when water reaches the road the grade will change from the steep slope of the property to the virtually level surface of the road. This will cause the water to slow and drop some, if not all of the material it has eroded.

Still, there is potential from erosion that must be addressed. During construction, part of the land will be cleared and excavation is necessary to install the foundation for the proposed house and other infrastructure. To minimize the chance for erosion, the Planning Board will require the applicant to produce an erosion control plan that plans for and provides protection from the negative effects of erosion. The plan will be required to provide such safe guards as the use of erosion control fencing or hay bales around any excavation or other soil disturbance, minimizing the size of disturbed areas to the smallest practical size and restoring area with permanent erosion control measures as soon in the construction process as possible. The plan will be required to follow established guidelines such as those found in the *New York State Standards and Specifications for Erosion and Sediment Control* published by the New York State Department of Environmental Conservation. The site will be regularly inspected by the applicant's consultants and the Town to ensure that the plan is being followed.

Because the applicant will be required to provide and implement an erosion control plan throughout the construction process, and because it will be regularly inspected and face consequences should it not adhere to the approved plan, the Planning Board is assured that the threat from potential erosion is mitigated to the greatest practical extent.

The Proposed Action May Involve Construction on Land Where Bedrock Is Exposed or Generally within 5 Feet of Existing Ground Surface.

Construction where bedrock is exposed or where it is within 5 feet of the existing ground surface raises the likelihood that the envisioned construction will require its removal, a certainty for the 201 Old Stone Road project and one about which the project sponsor is concerned.

All construction presents problems that must be solved if it is to be successful. Removal of rock in order to build a dwelling presents one of the more serious problems encountered during single family residential construction. The sheer amount of effort necessary to remove rock increases costs and the time to complete the work, but more important are the inherent dangers associated with rock removal. To assist the sponsor in evaluating the problems that might be encountered, it engaged Tectonic Engineering and Surveying Consultants, P. C. to test the ground surrounding the proposed dwelling and prepare a report and recommendations concerning the proposed construction and how it might be affected by the rock so near the surface of the ground. Report is dated November 4, 2014, and is attached hereto as Appendix 1.

There are several methods to removing rock. It can be excavated or ripped or hammered or blasted. Each method has its limitations and its own difficulties. Excavating or ripping rock cannot be accomplished if the rock is too hard or too solid. Hammering is the preferred method of the contractor and will be the method employed to the extent practical.

Hammering creates noise that can be annoying to neighbors. Fortunately the nearest occupied building is several hundred feet away, thus reducing the potential annoyance. Nevertheless,

EAF - Part 3 (Narrative)

Introduction

As previously stated Part 1 of this EAF was prepared and submitted by the applicant. Part 2 was prepared and submitted by the applicant's consultants and adopted by the Planning Board on October 16, 2013. This part, Part 3 has been prepared in response to those impacts identified by the Planning Board as having a potentially large impact.

Part 2 identified the following potentially large impacts:

❖ **Impacts on Land**

- The Proposed Action May Involve Construction on Slopes of 15% or Greater.
- The Proposed Action May Involve Construction on Land Where Bedrock Is Exposed or Generally within 5 Feet of Existing Ground Surface.
- The proposed action May involve the excavation and removal of more than 1000 tons of natural material.
- The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).

❖ **Impacts on Aesthetic Resources**

- The Proposed Action May Be Visible from Publicly Accessible Vantage Points:
 - Seasonally (e.g., Screened by summer foliage, but visible during other seasons)
 - Year round
- The Situation or activity in which viewers are engaged while viewing the proposed action is:
 - Routine Travel by residents, including travel to and from work
 - Recreational or Tourism-based Activities

❖ **Impact on Transportation**

- Other Impacts: Identify "Adequacy of access road during construction."

Each of the identified potential impacts is addressed in the discussion that follows

Discussion

The Proposed Action May Involve Construction on Slopes of 15% or Greater.

The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).

It is generally recognized that construction on land where the slopes are steeper than 15% should be avoided. Such construction increases the potential for erosion, which can result in downstream sedimentation. In the instant situation, the applicant proposes construction on such slopes and, for this reason, the threat of erosion must be carefully examined.

There are site characteristics that partially mitigate the threat. First, the site is at the high point of a small mountain. Thus, there is no surface water flowing onto the site that might exacerbate any condition where erosion might occur. Accordingly, the applicant need only consider

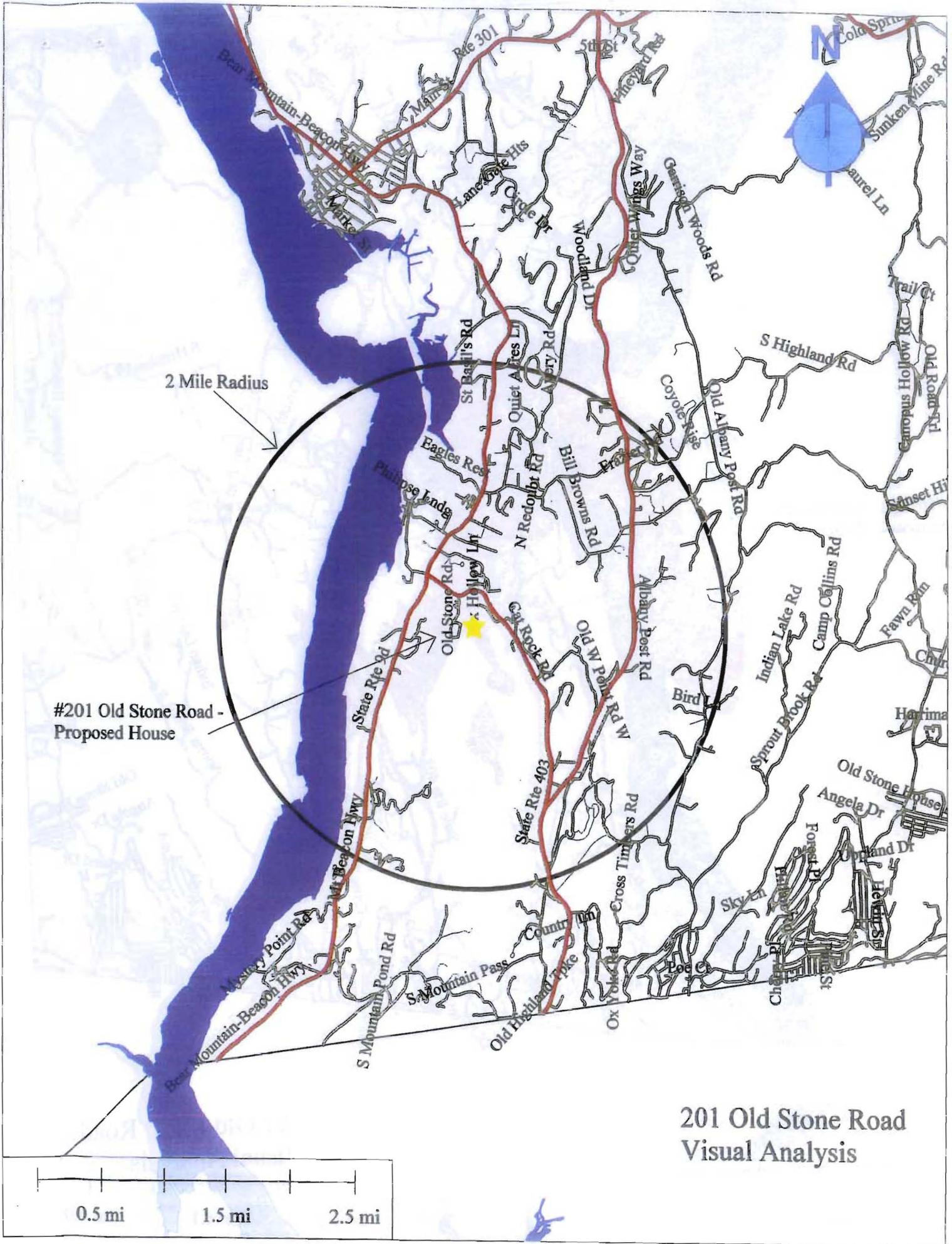
PART 3

X

supported by existing infrastructure or is distant from existing infrastructure.	D1d, D1f, D1d, E1b		
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character			
The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3)		<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	
<i>If "Yes", answer questions a - g. If "No", proceed to Part 3.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

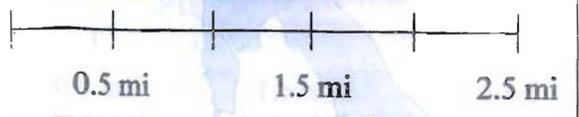
STUDY AREA

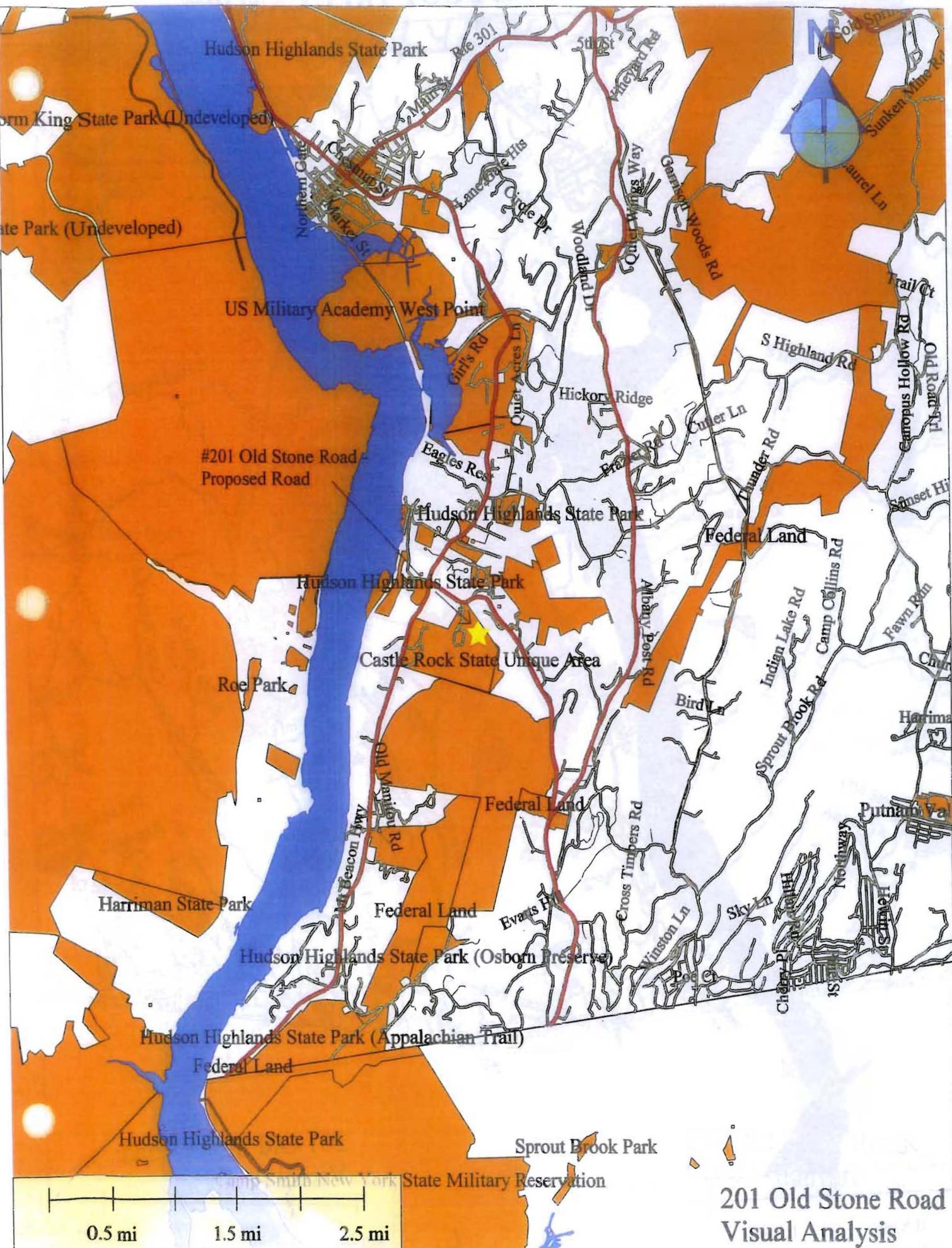


2 Mile Radius

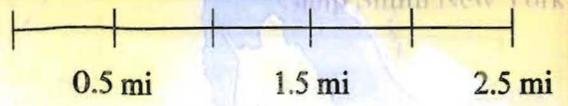
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201 Old Stone Road Visual Analysis

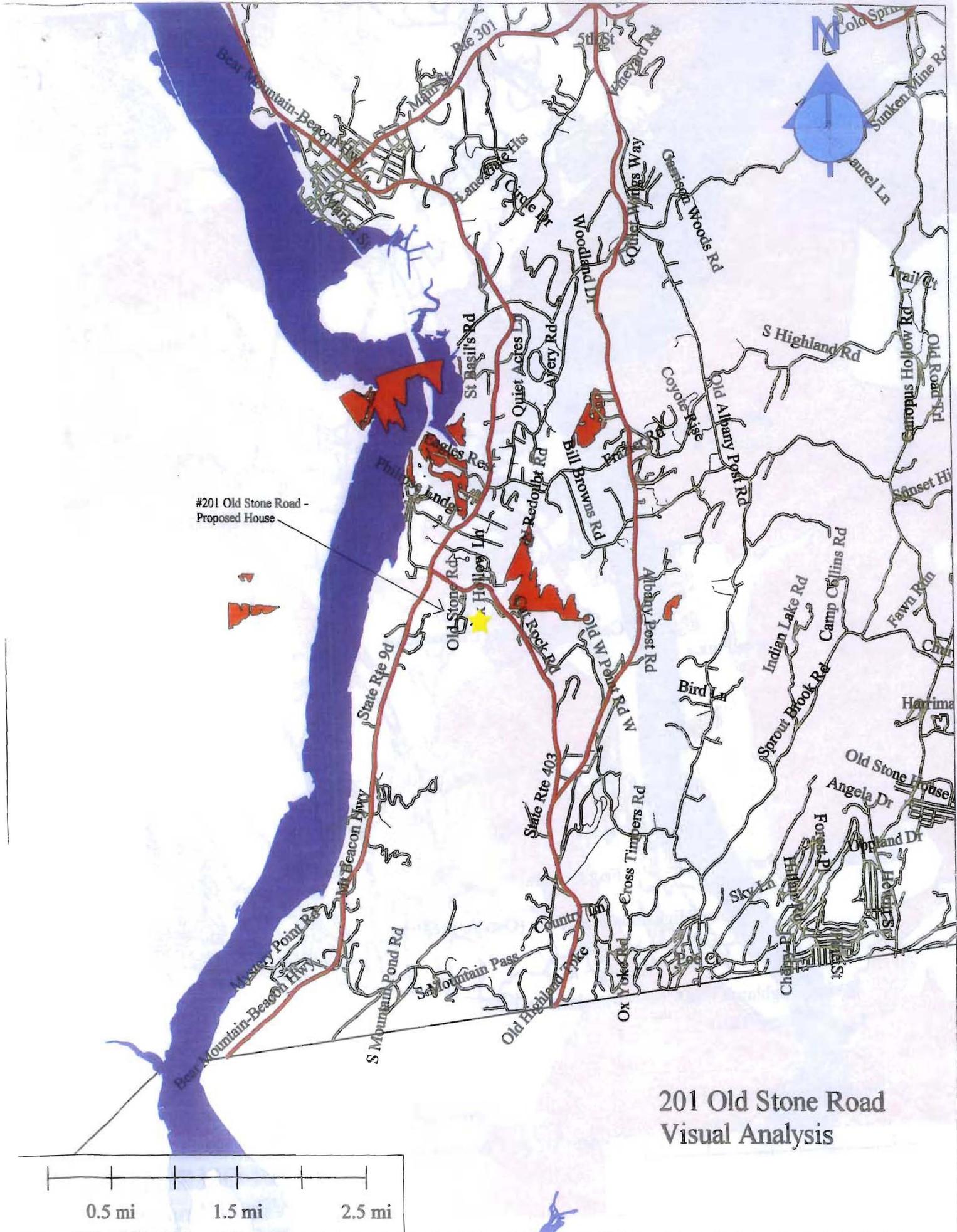




201 Old Stone Road Visual Analysis



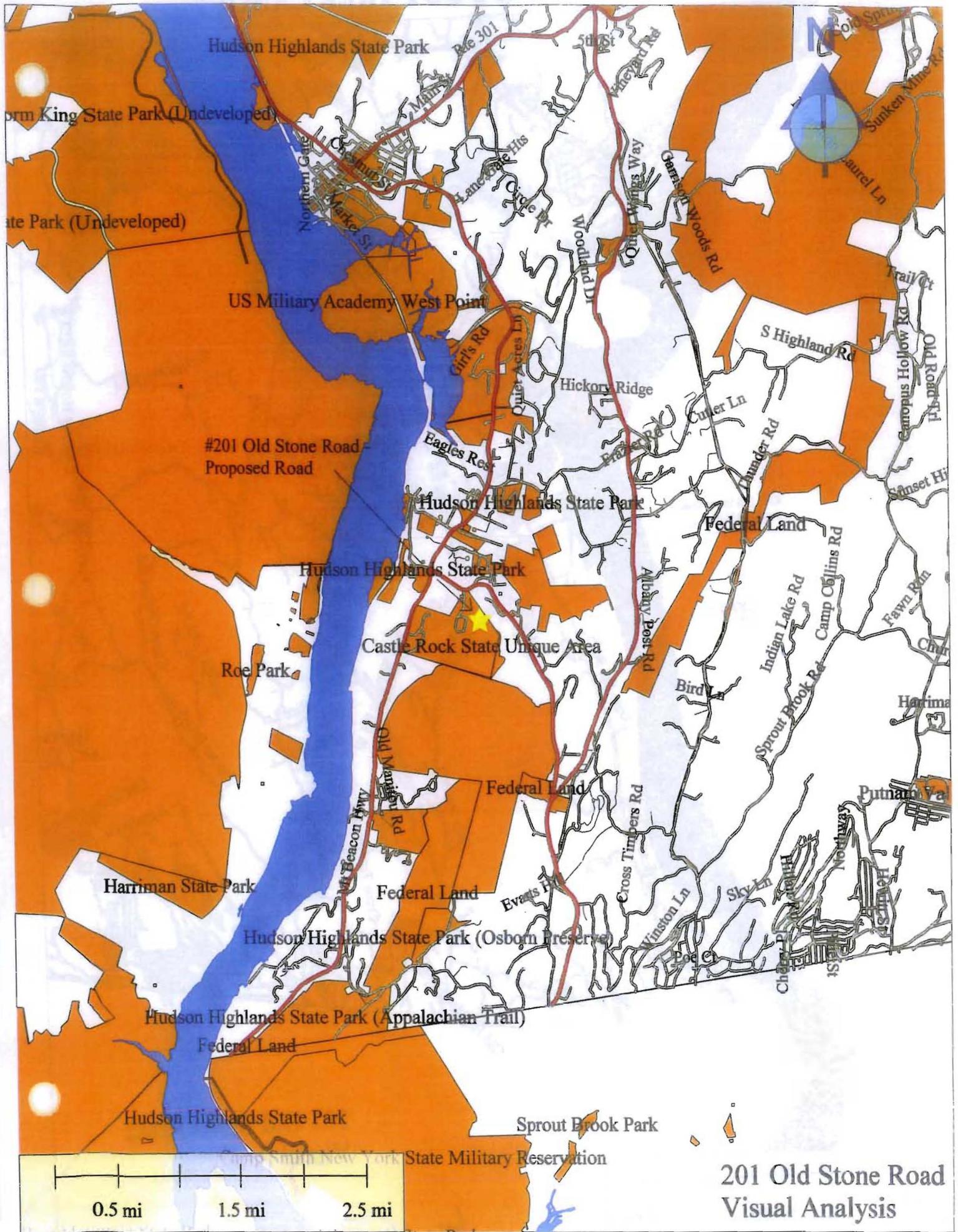
VIEW SEED WITH 40 FOOT TREE CANOPY



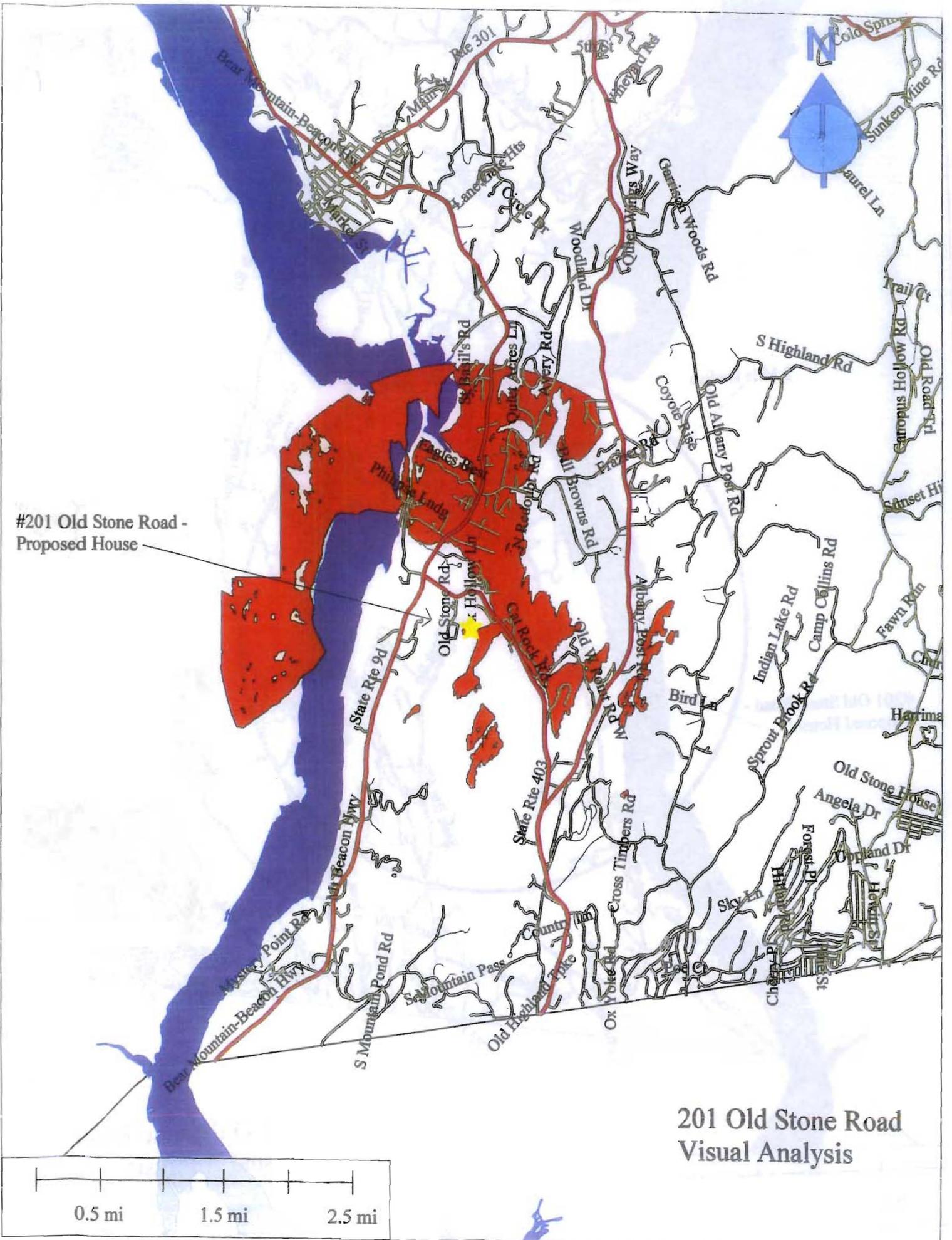
#201 Old Stone Road - Proposed House

201 Old Stone Road
Visual Analysis

0.5 mi 1.5 mi 2.5 mi

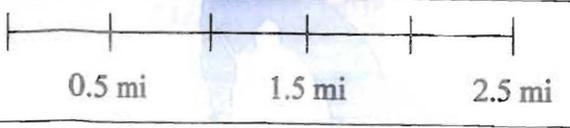


201 Old Stone Road
Visual Analysis

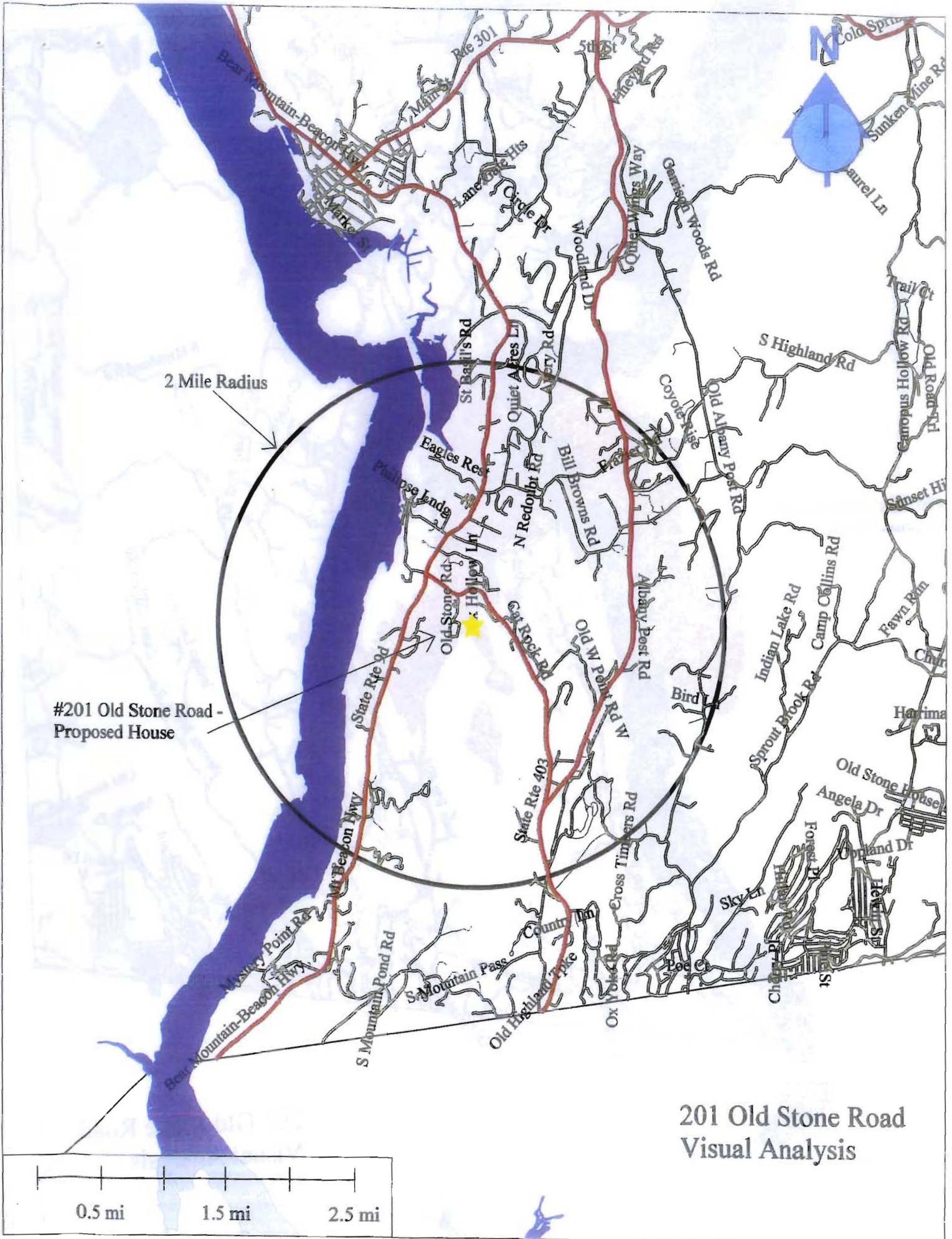


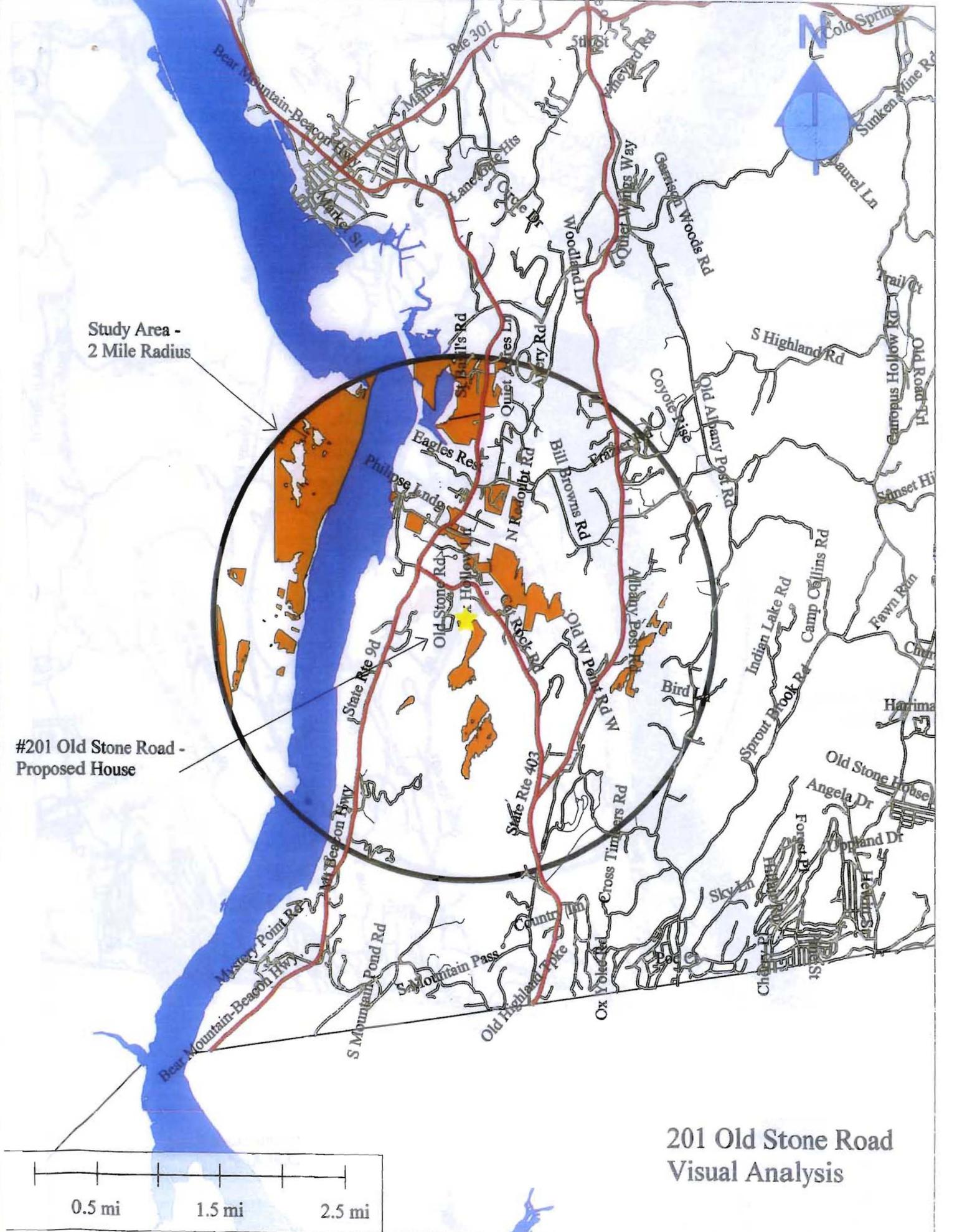
#201 Old Stone Road - Proposed House

201 Old Stone Road Visual Analysis



STUDY AREA

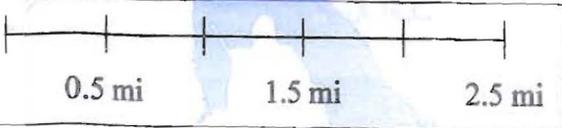


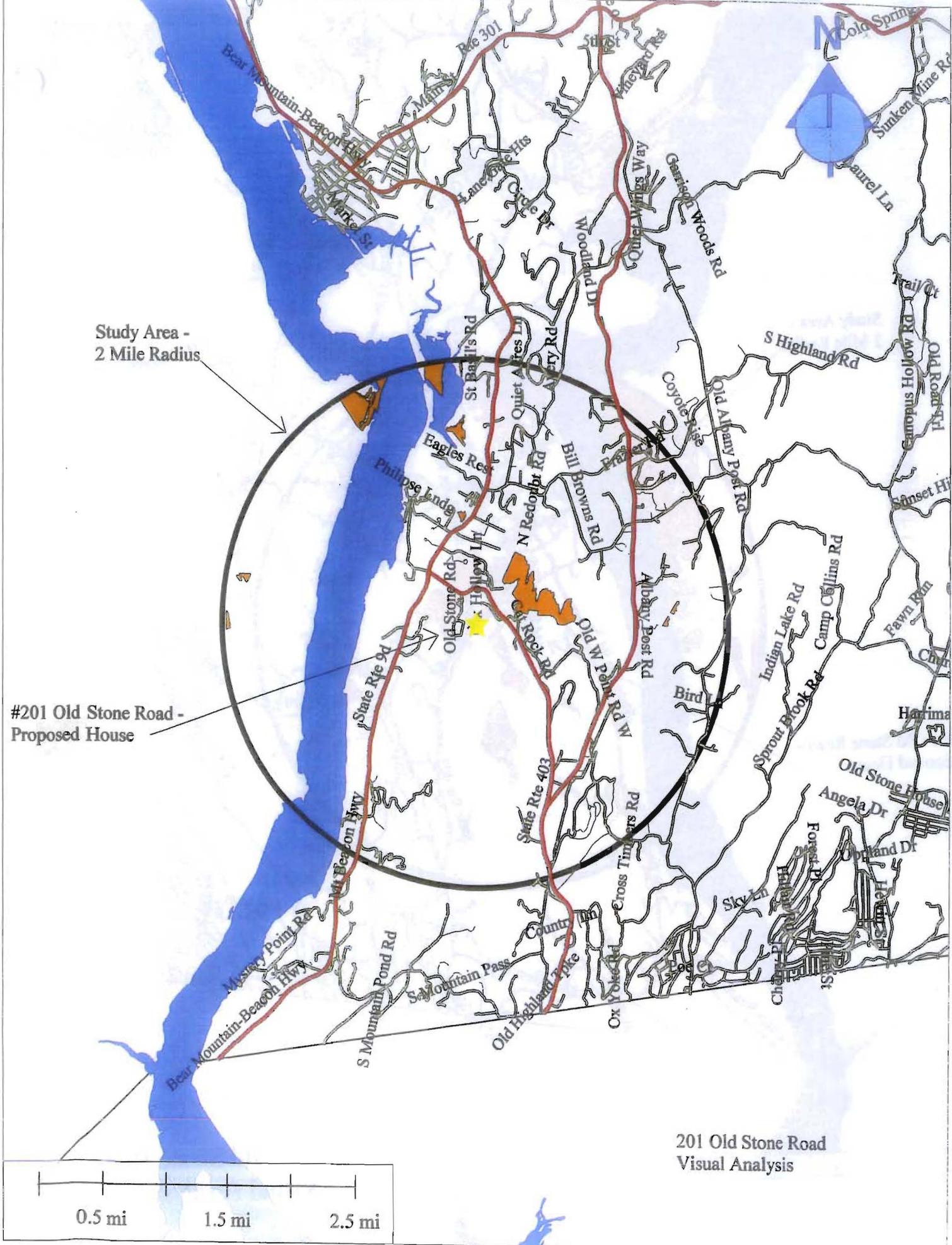


Study Area -
2 Mile Radius

#201 Old Stone Road -
Proposed House

201 Old Stone Road
Visual Analysis





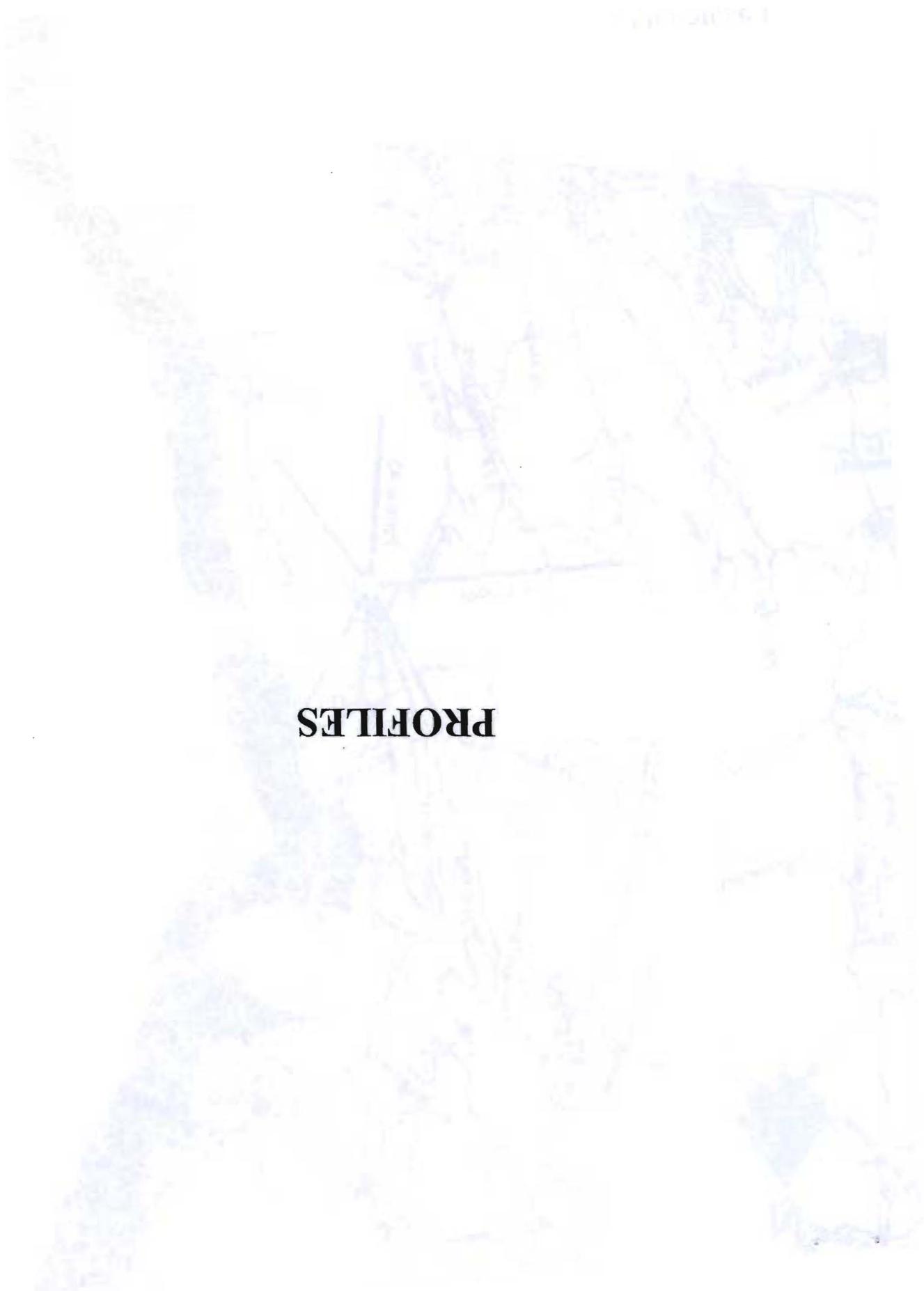
Study Area - 2 Mile Radius

#201 Old Stone Road - Proposed House

201 Old Stone Road Visual Analysis

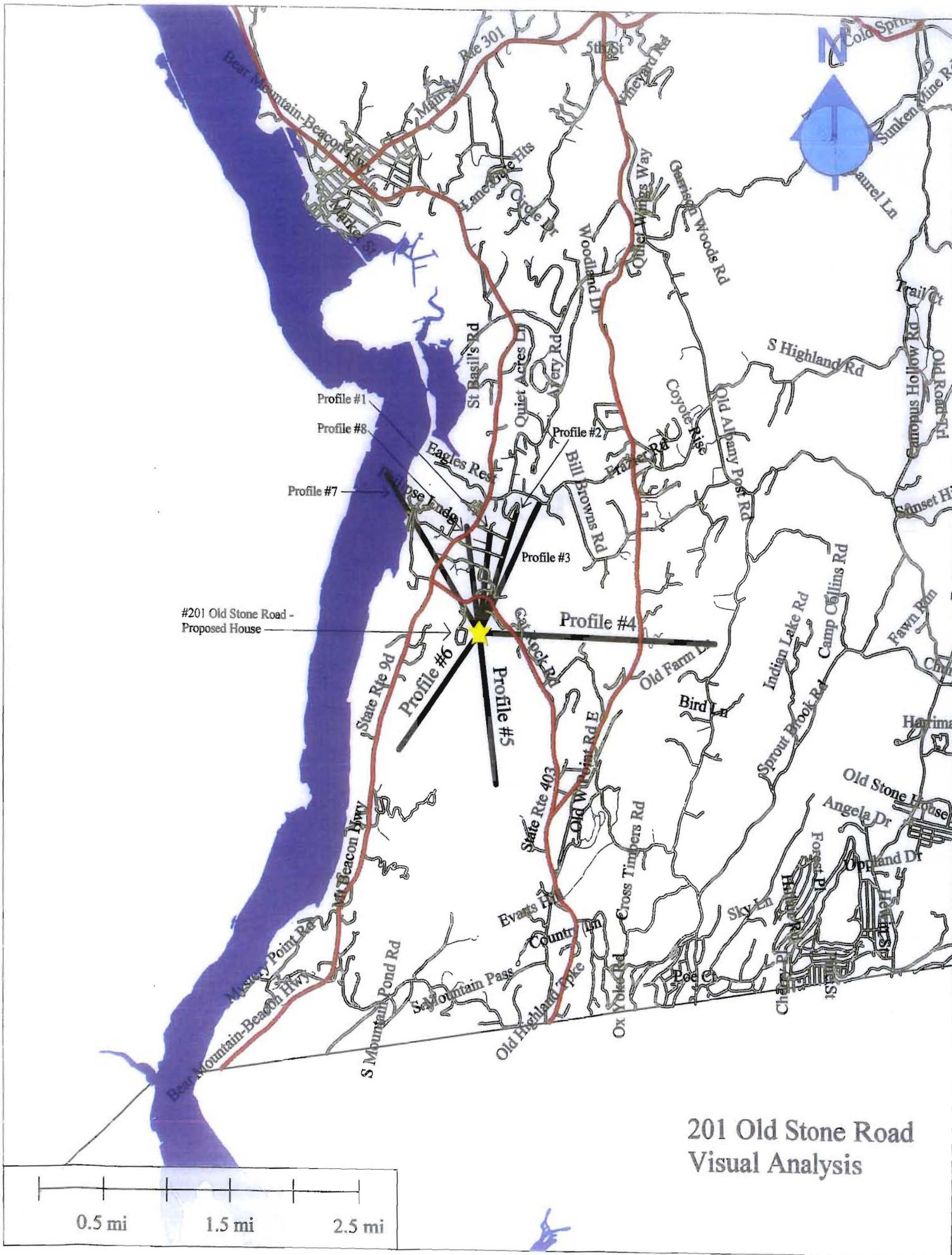
0.5 mi 1.5 mi 2.5 mi

1. SECTION OF
2. PLAN OF

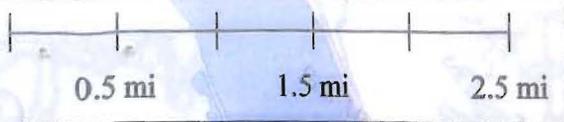


PROFILES

PROFILE PLAN



Profile #1



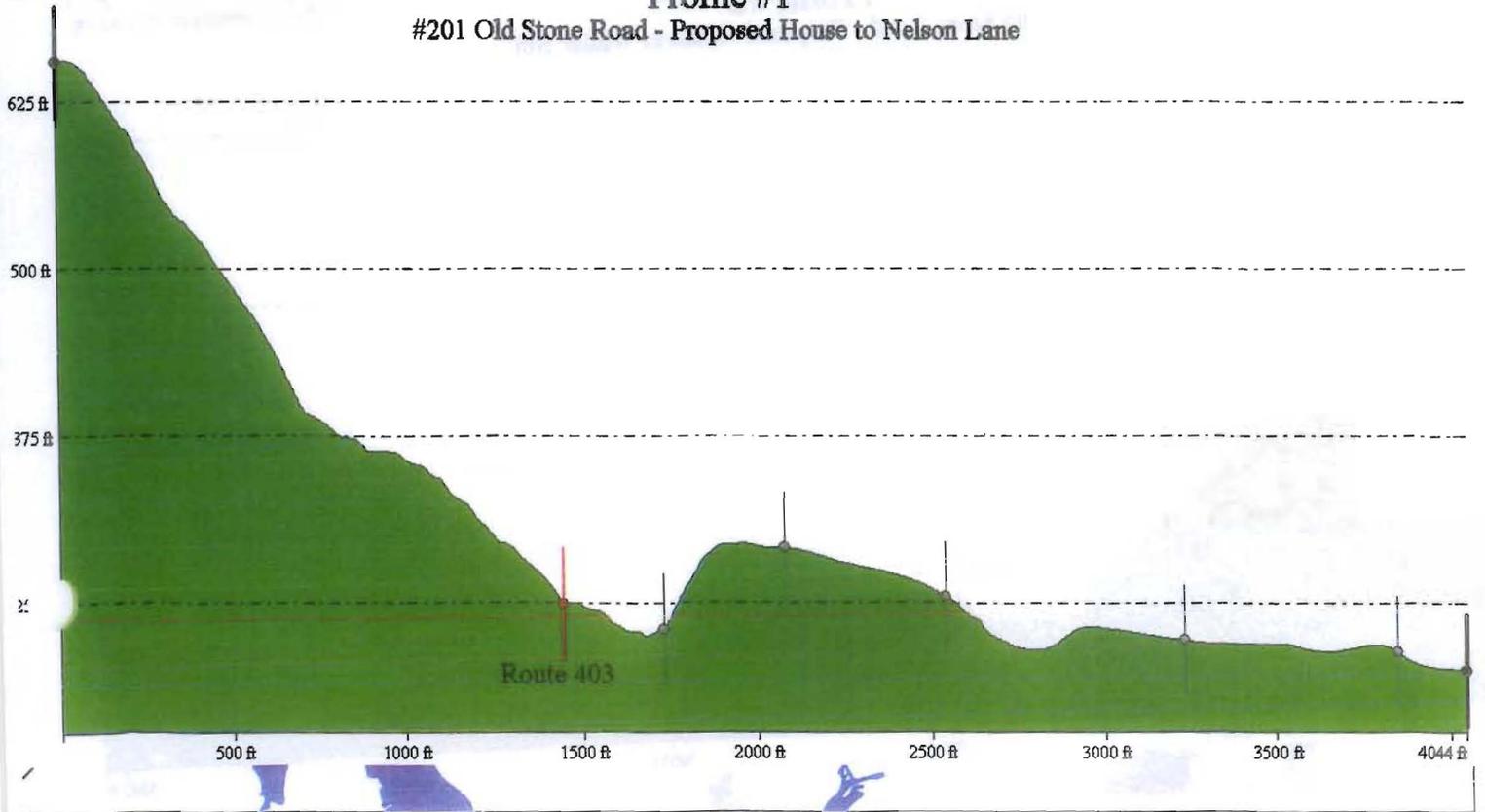
#201 Old Stone Road - Proposed House

Profile #1

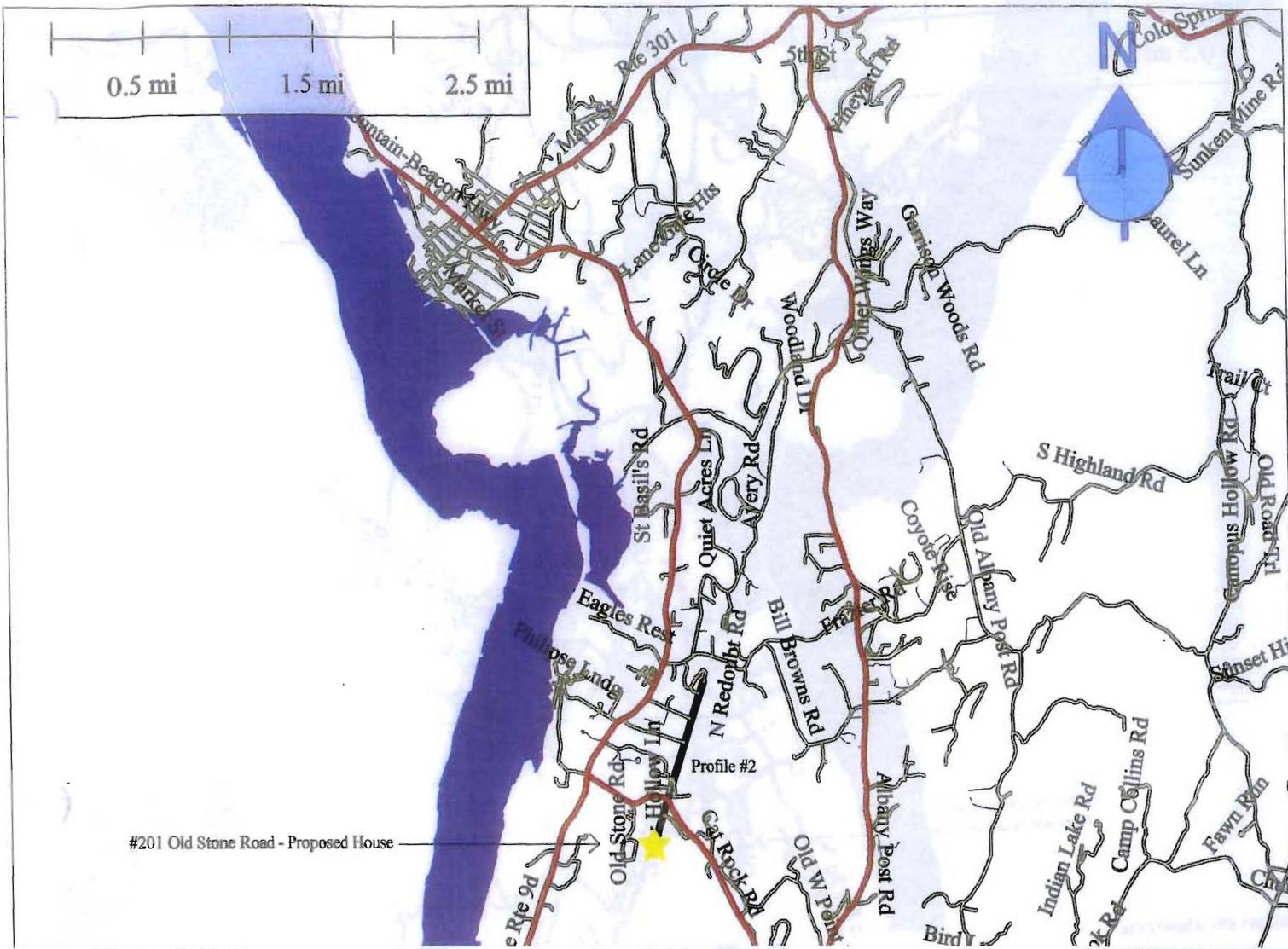
#201 Old Stone Road - Proposed House to Nelson Lane

From Pos: 588921.686, 4580417.616

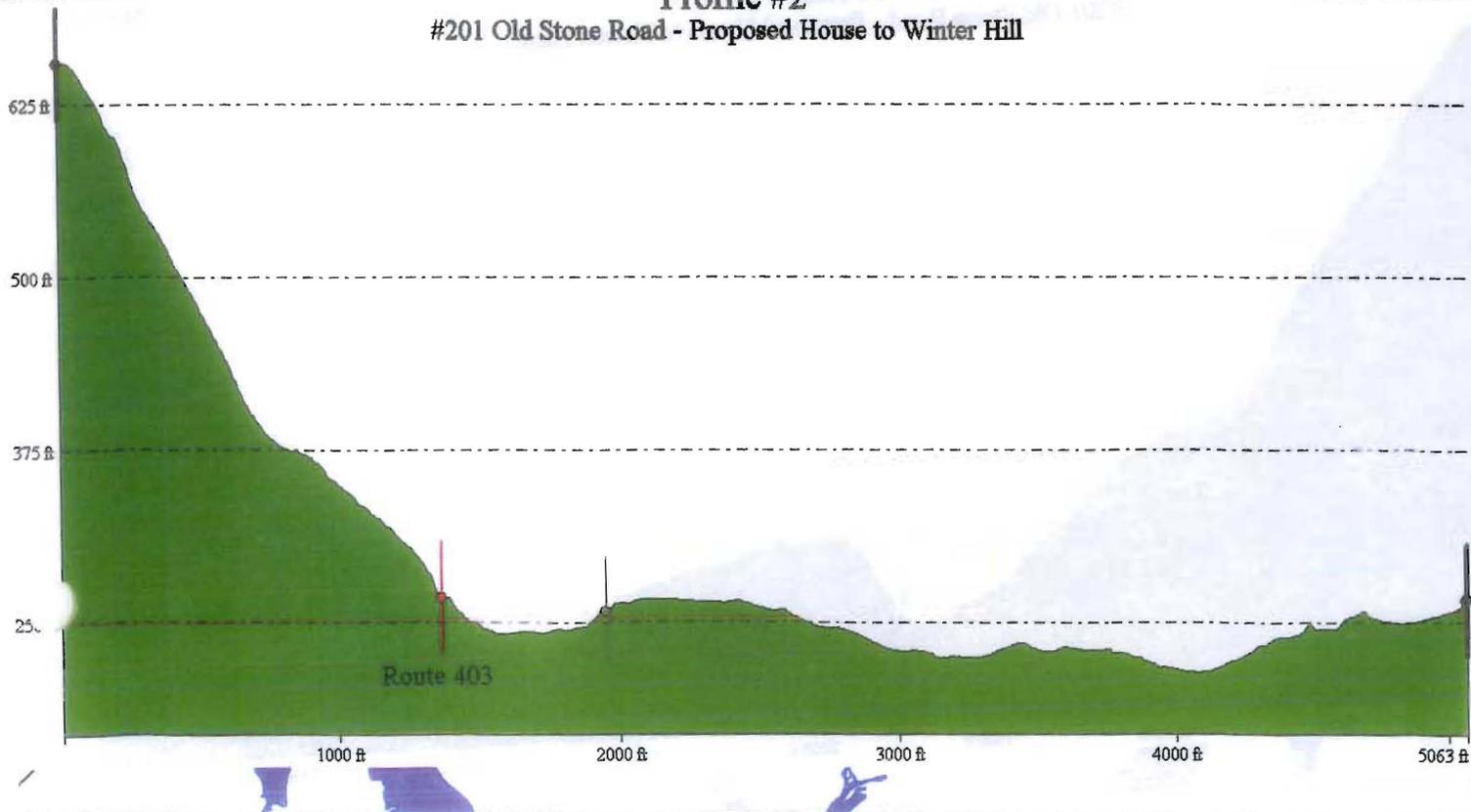
To Pos: 589063.811, 4581641.547



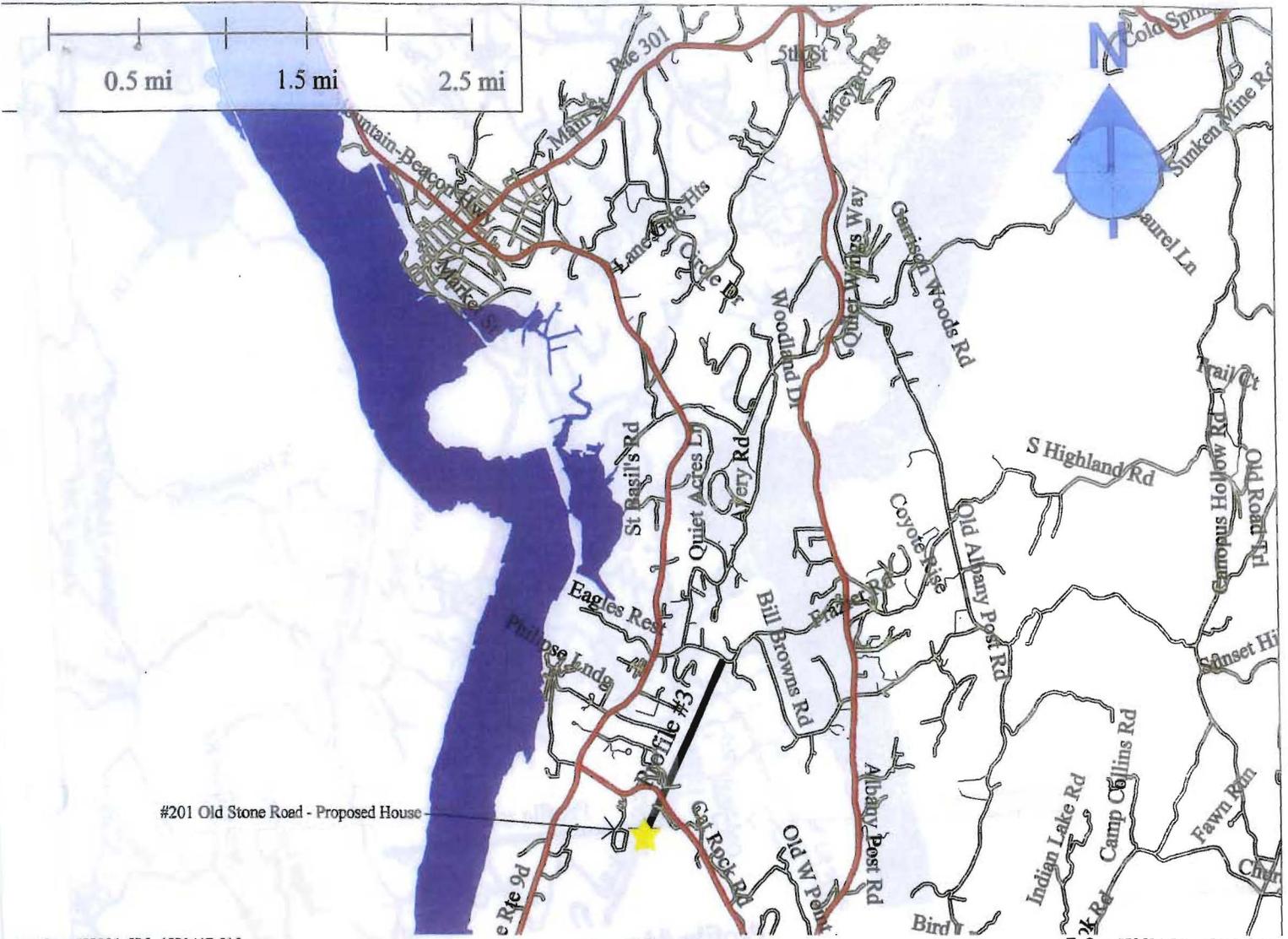
Profile #2



Profile #2
#201 Old Stone Road - Proposed House to Winter Hill



Profile #3



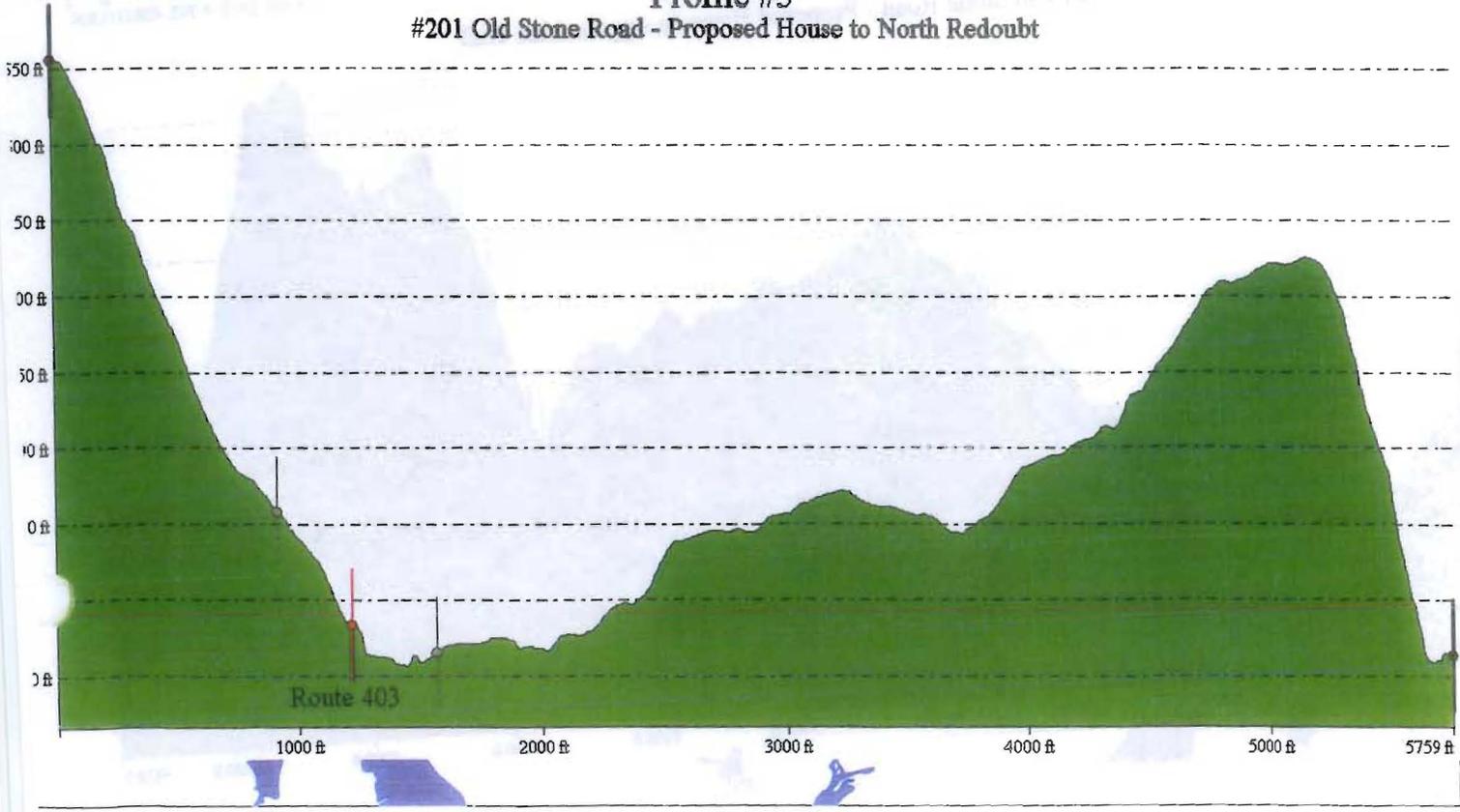
#201 Old Stone Road - Proposed House

From Pos: 588921.686, 4580417.616

To Pos: 589694.563, 4581993.183

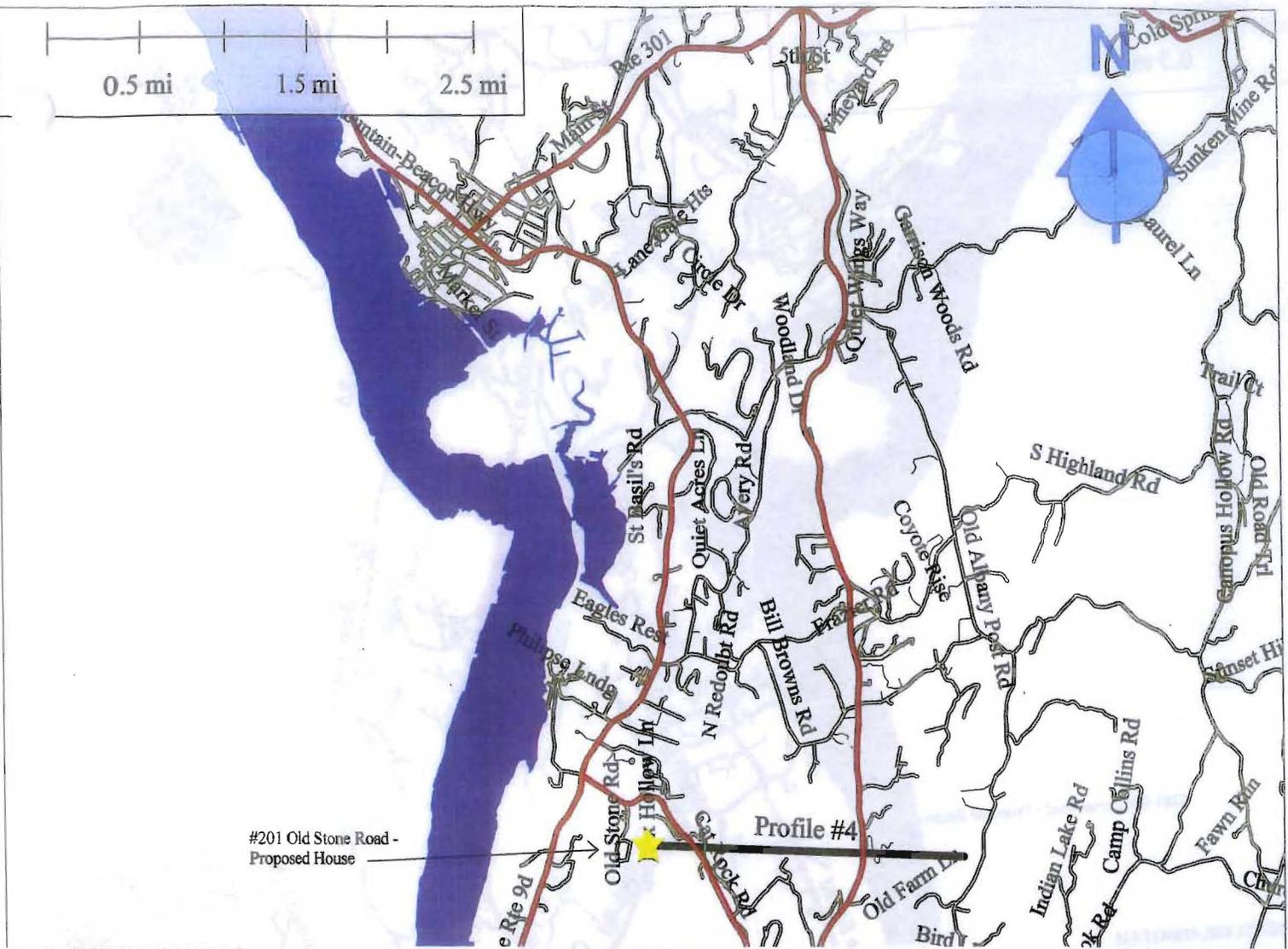
Profile #3

#201 Old Stone Road - Proposed House to North Redoubt



Route 403

Profile #4

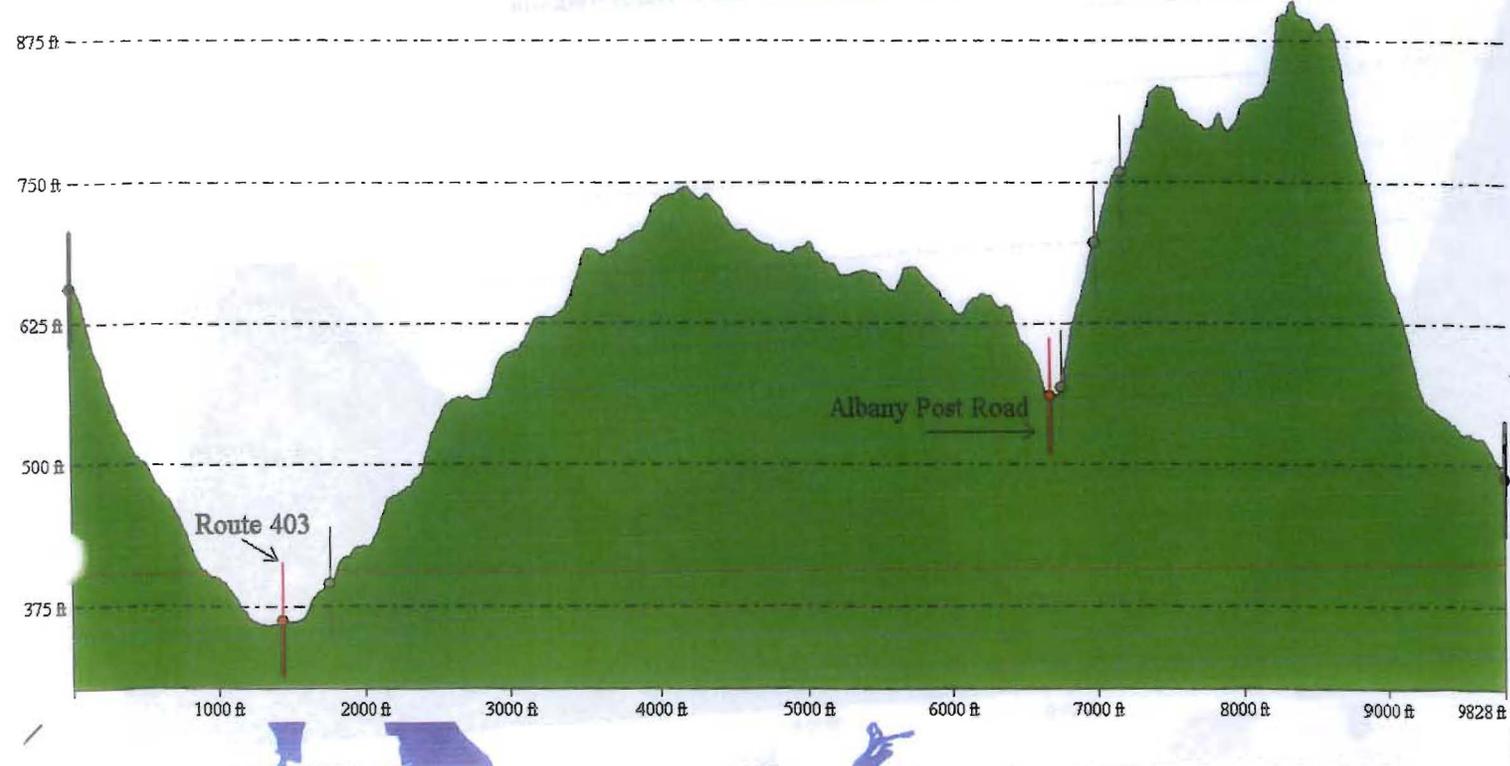


From Pos: 588921.686, 4580417.616

To Pos: 591914.765, 4580315.954

Profile #4

#201 Old Stone Road - Proposed House to Appalachian Trail



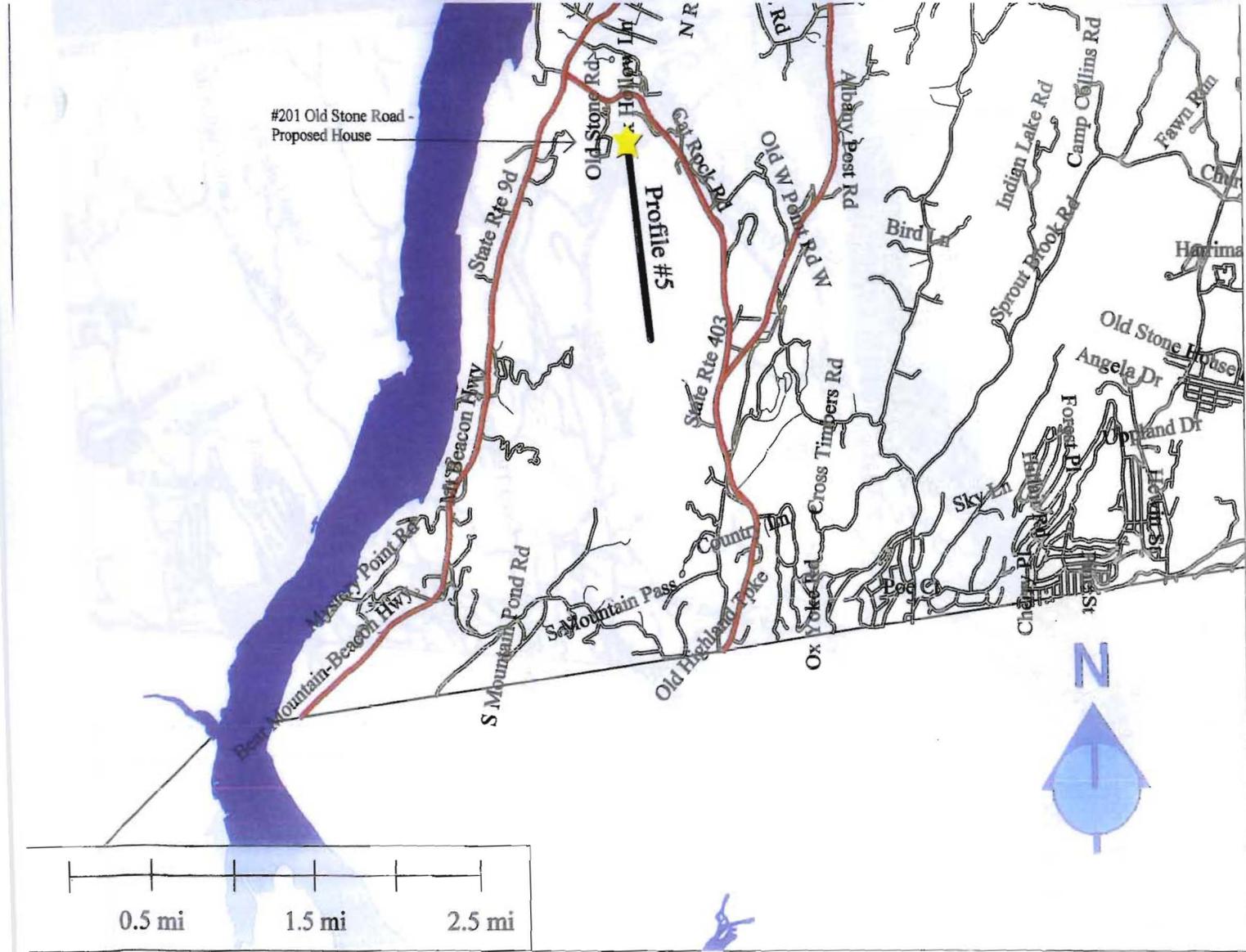
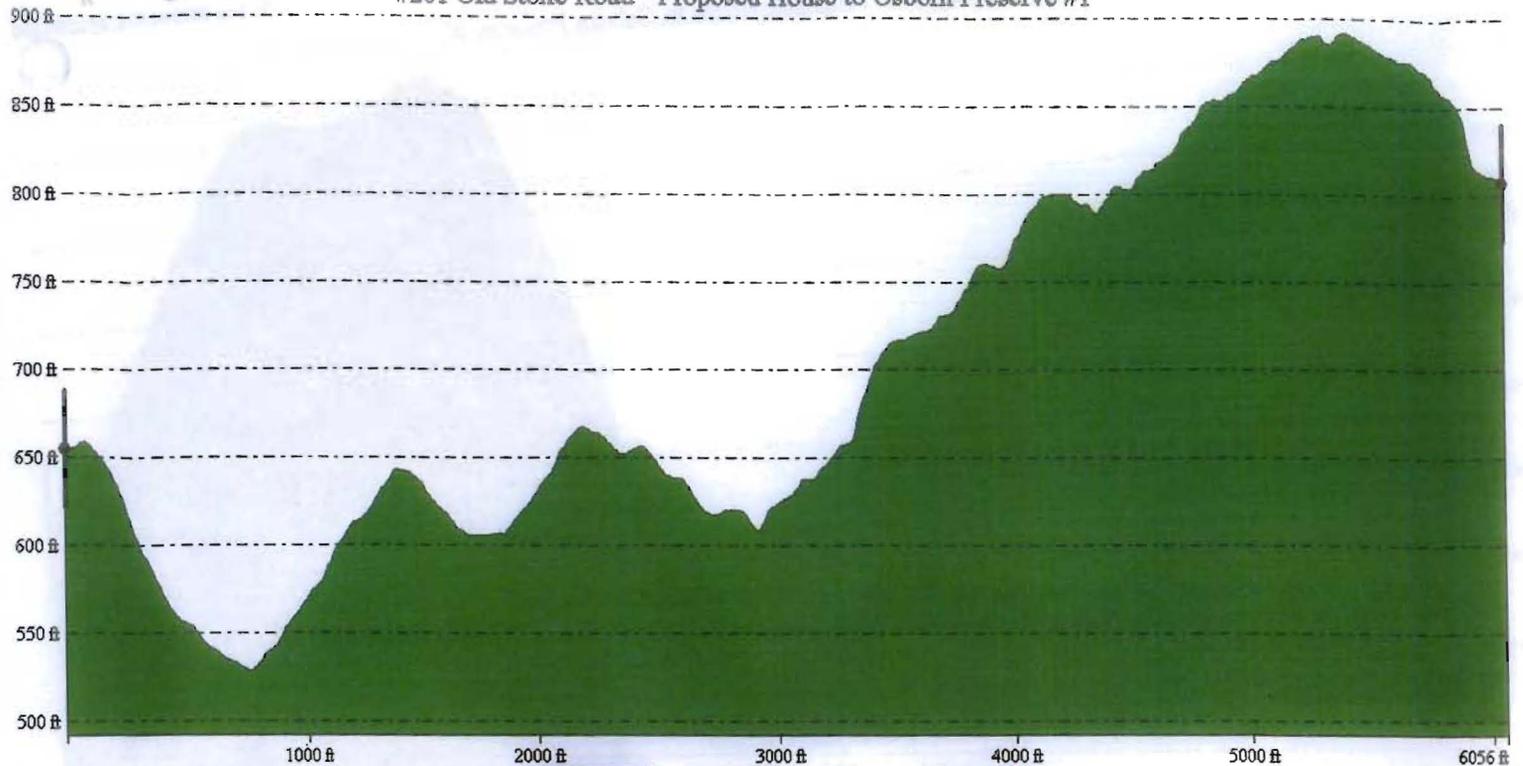
Profile #5

Profile #5

#201 Old Stone Road - Proposed House to Osborn Preserve #1

To Pos: 589126.954, 4578583.619

From Pos: 588921.686, 4580417.616



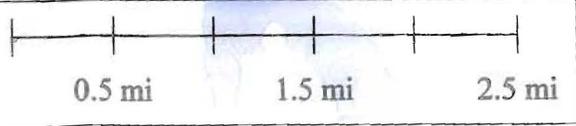
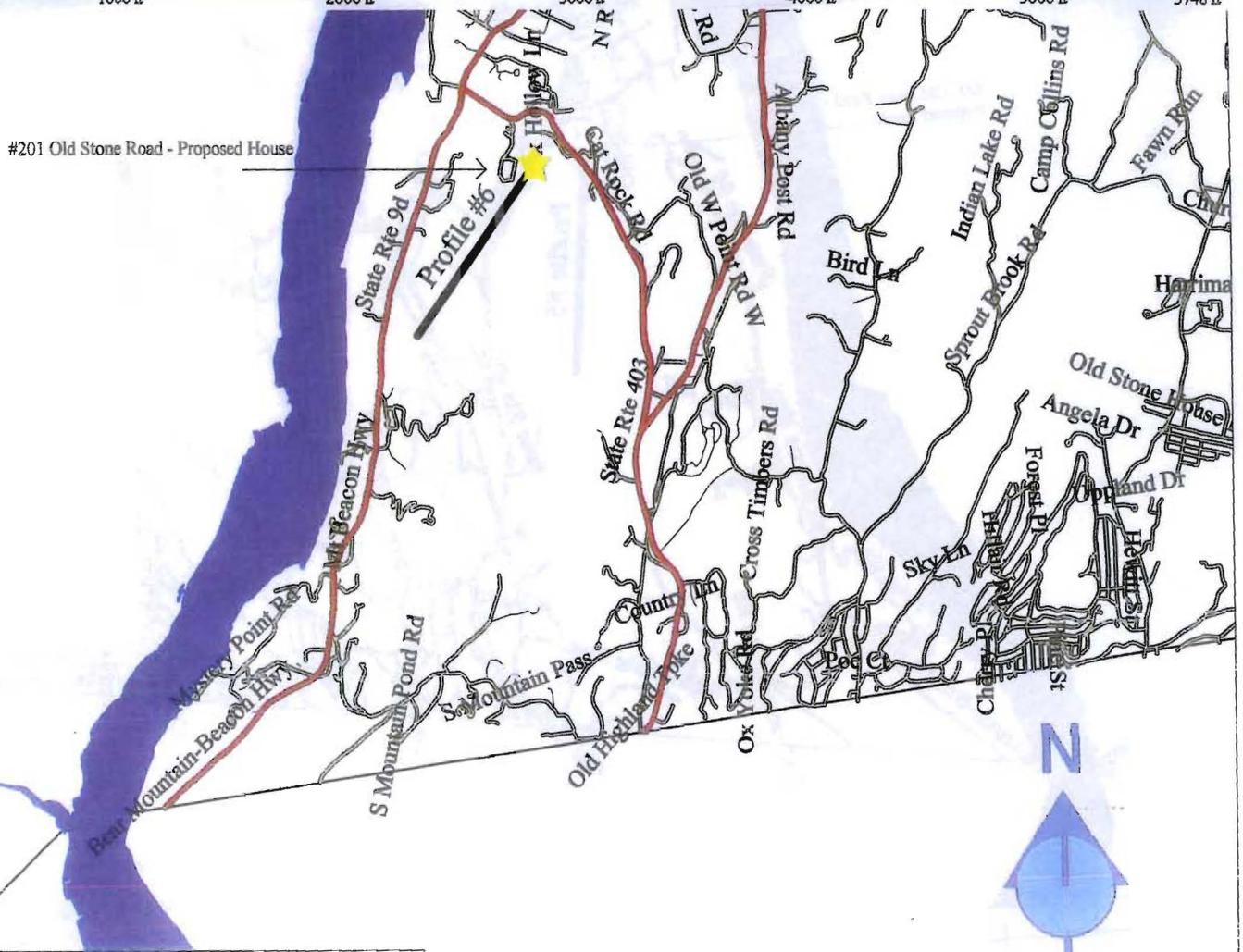
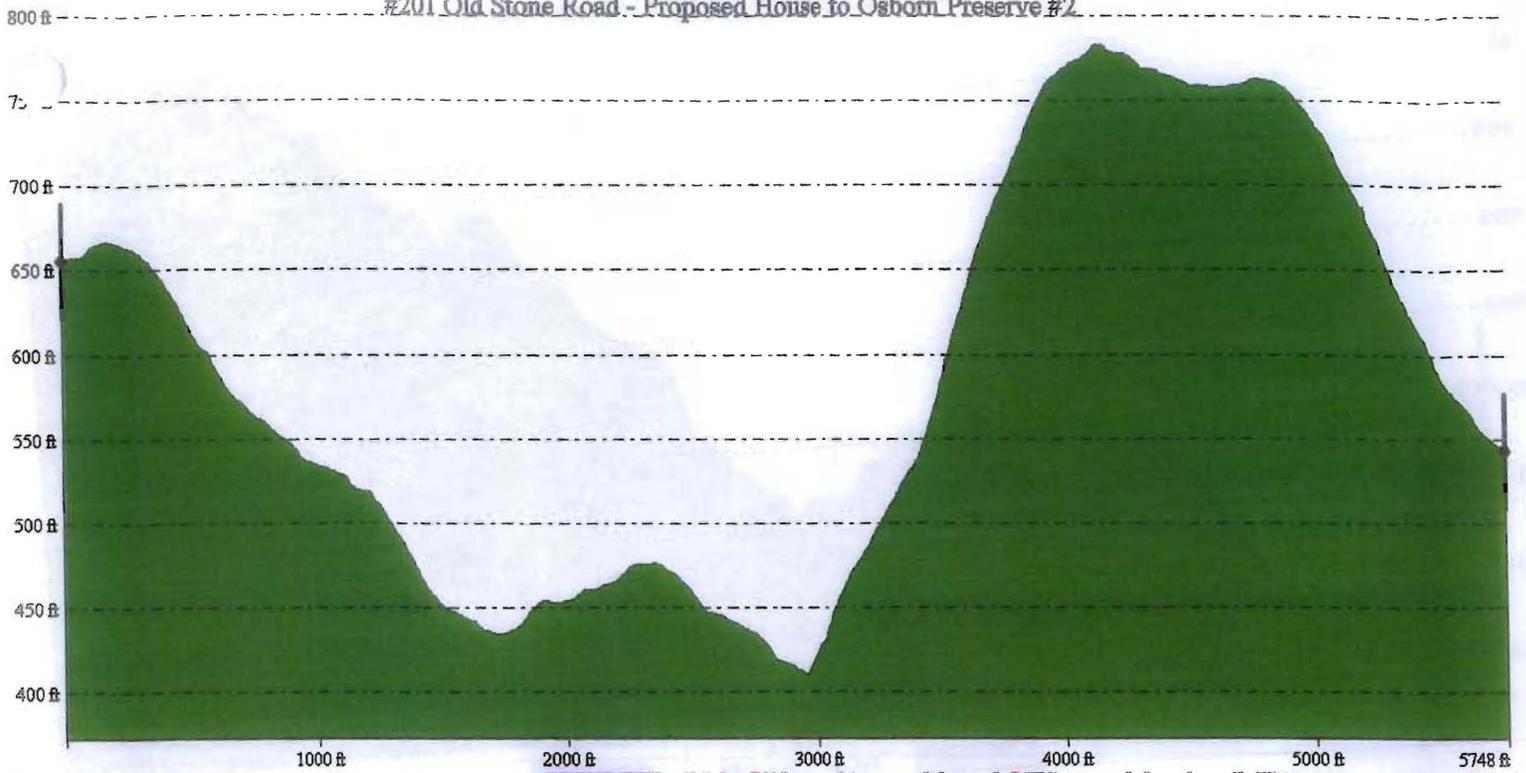
Profile #6

Profile #6

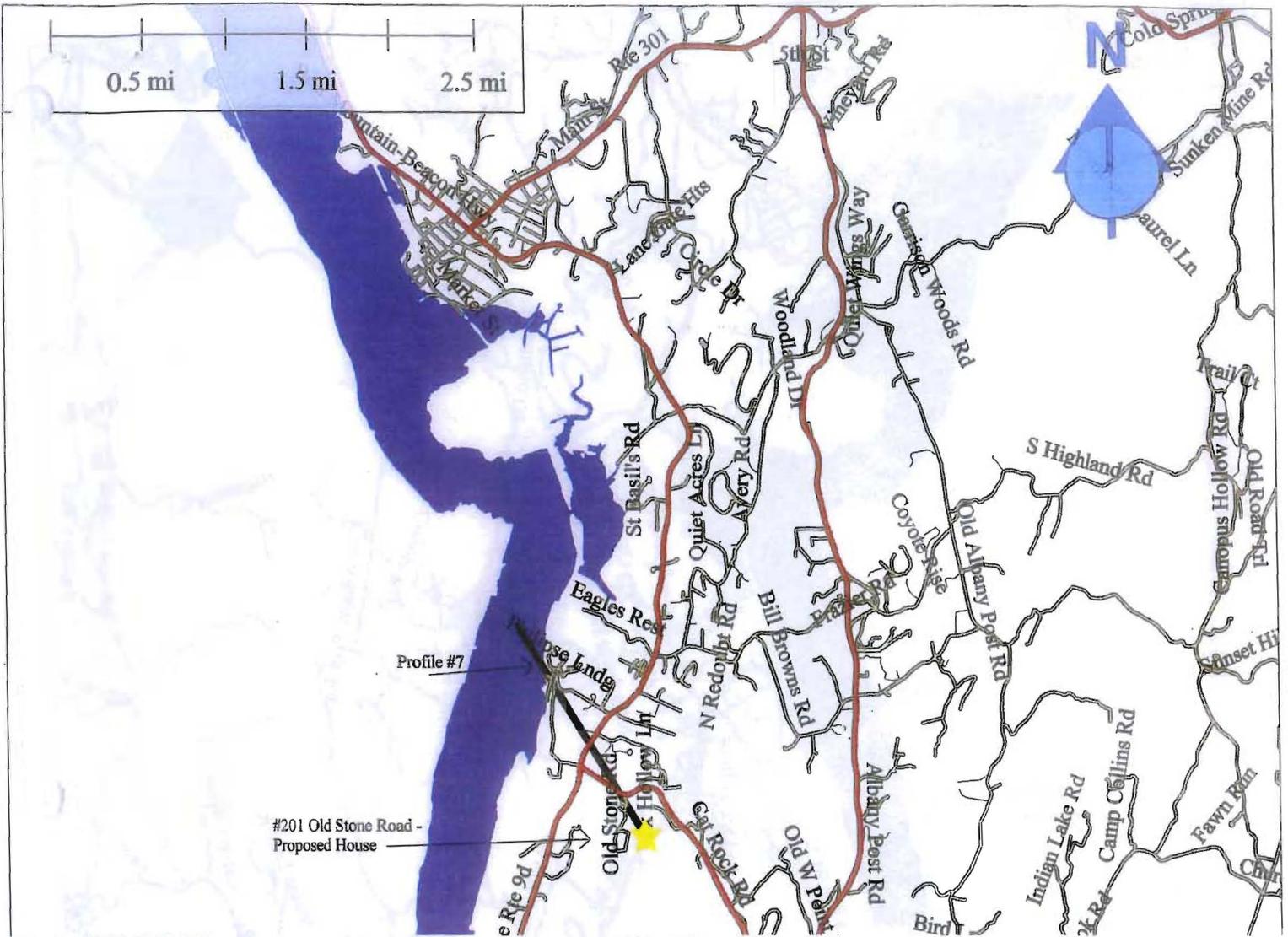
To Pos: 587904.378, 4578991.850

From Pos: 588921.626, 4580417.616

#201 Old Stone Road - Proposed House to Osborn Preserve #2

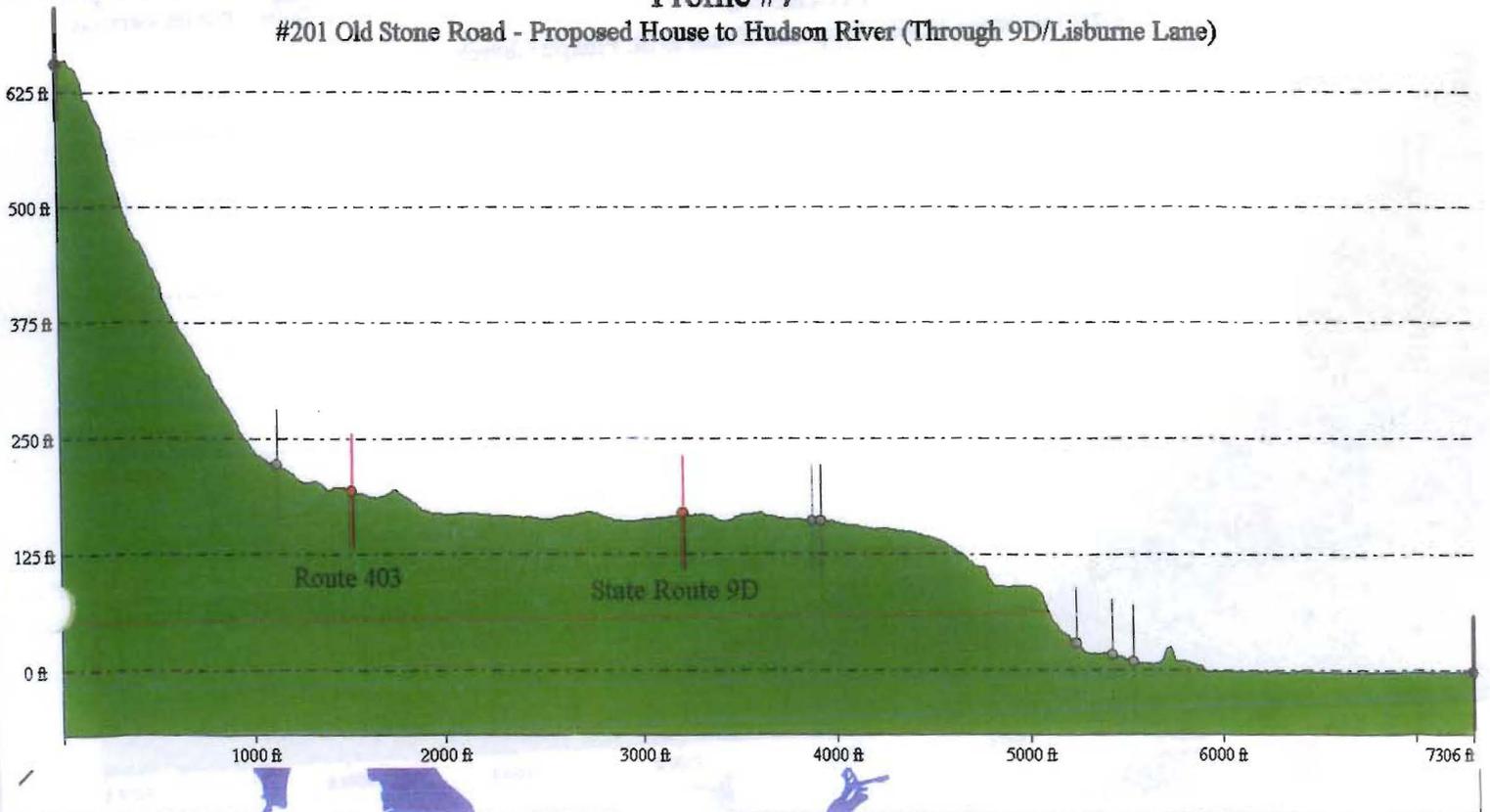


Profile #1

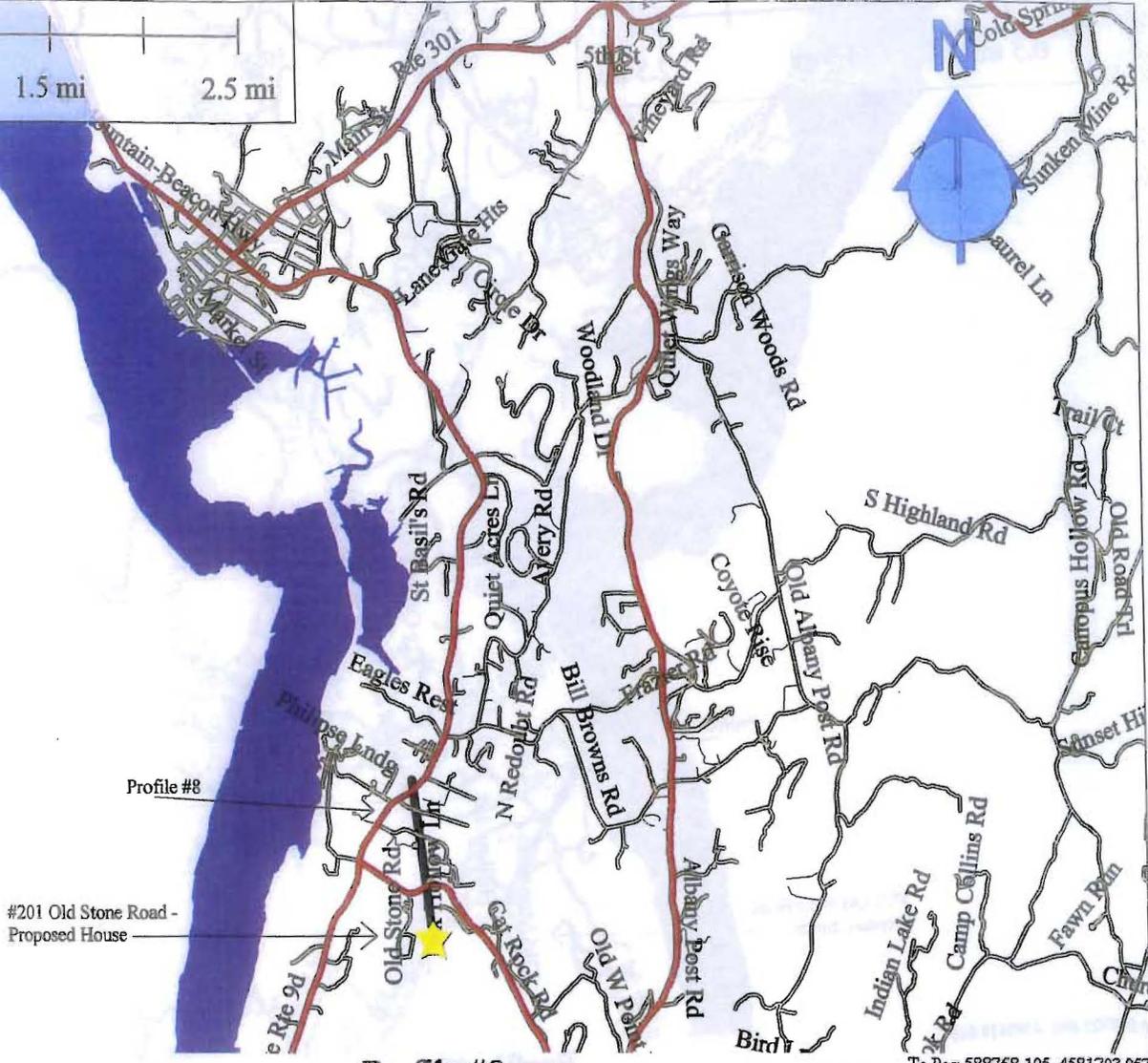
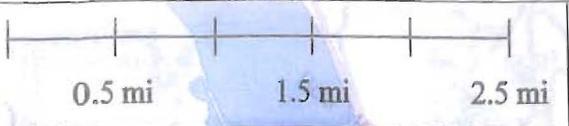


Profile #7

#201 Old Stone Road - Proposed House to Hudson River (Through 9D/Lisburne Lane)



Profile #8



Profile #8

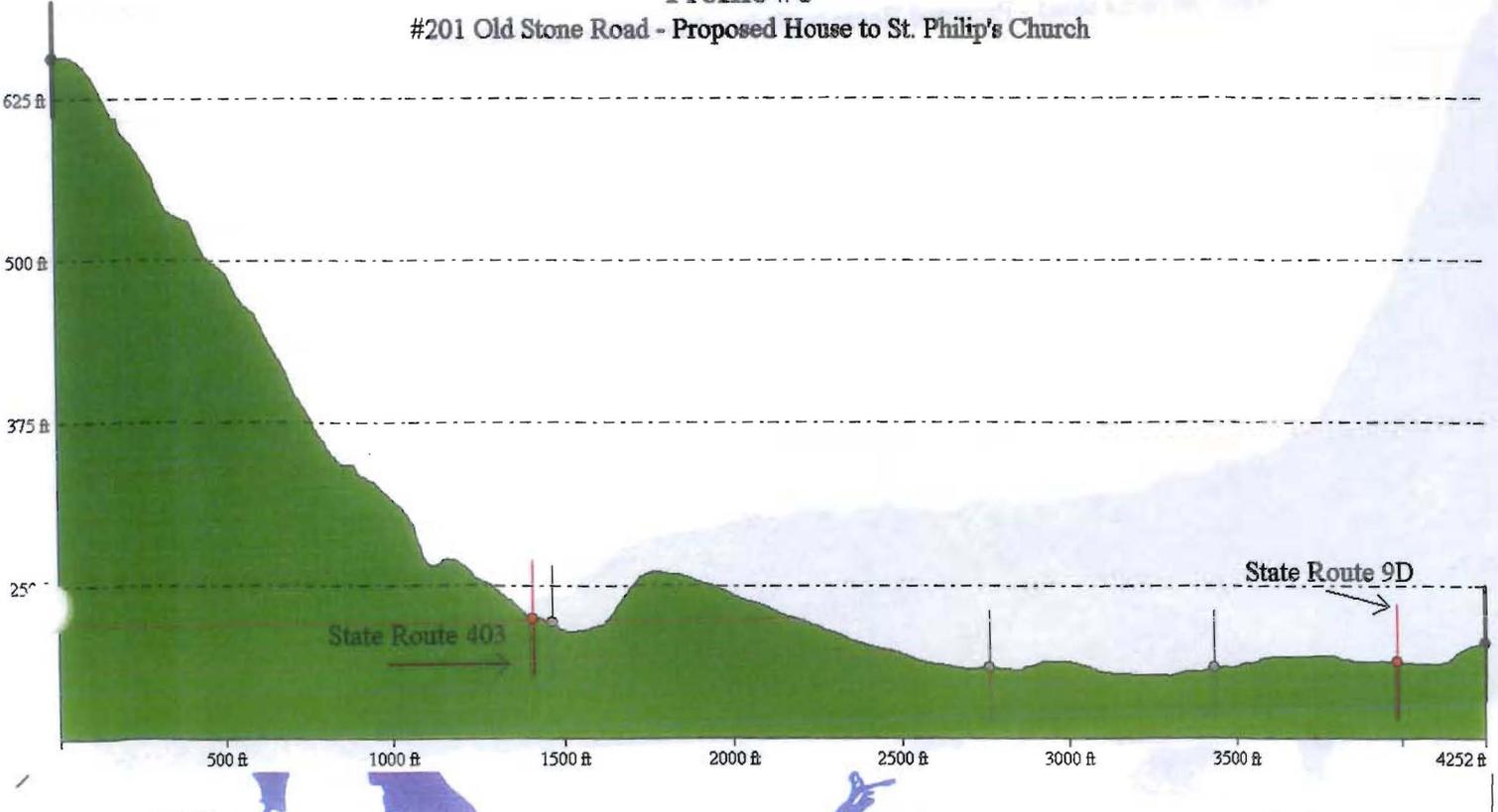
#201 Old Stone Road - Proposed House

Profile #8

#201 Old Stone Road - Proposed House to St. Philip's Church

From Pos: 588921.686, 4580417.616

To Pos: 588768.105, 4581703.957



LEAF ON PHOTOS

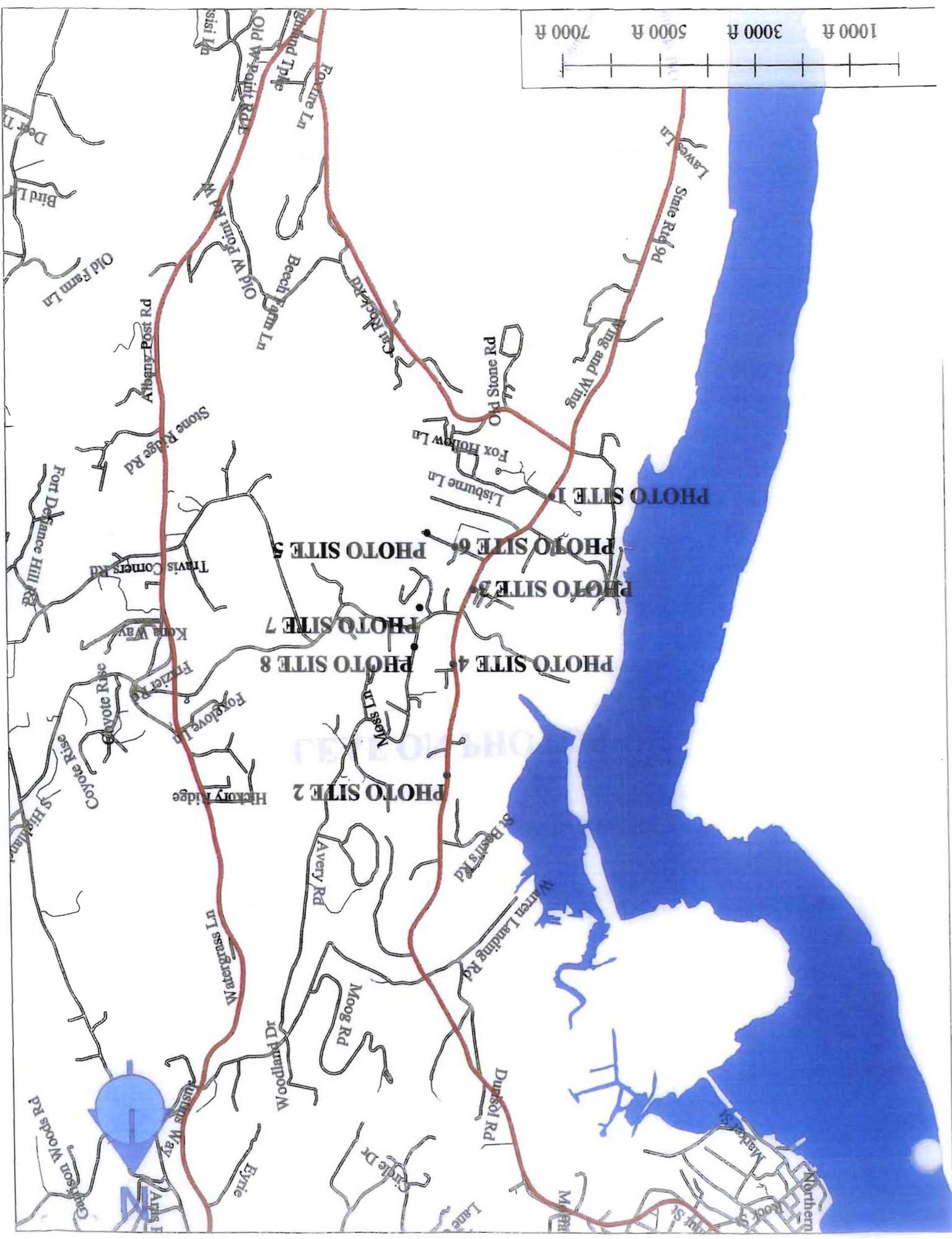
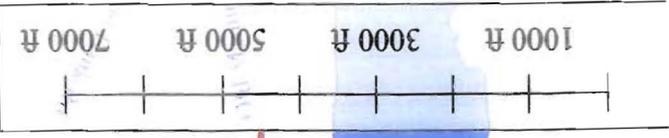
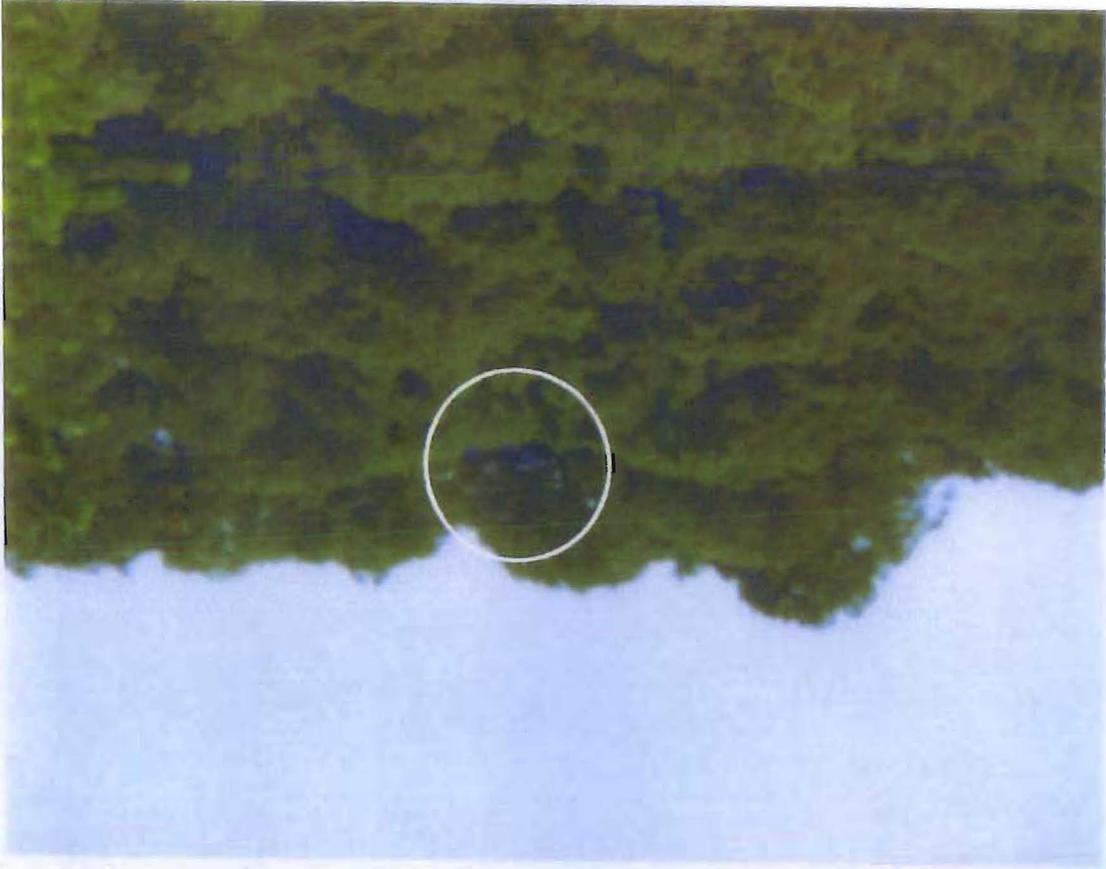


PHOTO SITE LOCATIONS

Photo Site #1
(Route 9D near Lisburne Lane)
Photo Date: 18 July 2014

420mm / 12X Optical Zoom



35mm / 1X Optical Zoom





**Enlarged 420 mm / 12X Optical Zoom
UNEDITED Photo Site**

**Photo Site #1
(Route 9D near Lisburne Lane)
Photo Date: 18 July 2014**



Enlarged 420 mm / 12X Optical Zoom modified with Earth tones

**Photo Site #2
(Route 9D north of Normandy George)
Photo Date: 18 July 2014**



Enlarged 420 mm / 12X Optical Zoom

**Photo Site #2
(Route 9D north of Normandy George)
Photo Date: 18 July 2014**



35mm / 1X Optical Zoom



420mm / 12X Optical Zoom

**Photo Site #2
(Route 9D north of Normandy George)
Photo Date: 18 July 2014**



35mm / 1X Optical Zoom



420mm / 12X Optical Zoom

**Photo Site #3
(Intersection of Route 9D and Grassi Lane)
Photo Date: 18 July 2014**



**Enlarged 420 mm / 12X Optical Zoom
UNEDITED Photo Site**

**Photo Site #3
(Intersection of Route 9D and Grassi Lane)
Photo Date: 18 July 2014**

Photo Site #4
(Route 9D south of Spruce Lane)
Photo Date: 18 July 2014

420mm / 12X Optical Zoom



35mm / 1X Optical Zoom





Enlarged 420 mm / 12X Optical Zoom

**Photo Site #4
(Route 9D south of Spruce Lane)
Photo Date: 18 July 2014**



Enlarged 420 mm / 12X Optical Zoom modified with Earth tones

**Photo Site #4
(Route 9D south of Spruce Lane)
Photo Date: 18 July 2014**



35mm / 1X Optical Zoom



420mm / 12X Optical Zoom

**Photo Site #5
(East end of Nelson Lane)
Photo Date: 18 July 2014**



Enlarged 420 mm / 12X Optical Zoom

**Photo Site #5
(East end of Nelson Lane)
Photo Date: 18 July 2014**



Enlarged 420 mm / 12X Optical Zoom modified with Earth tones

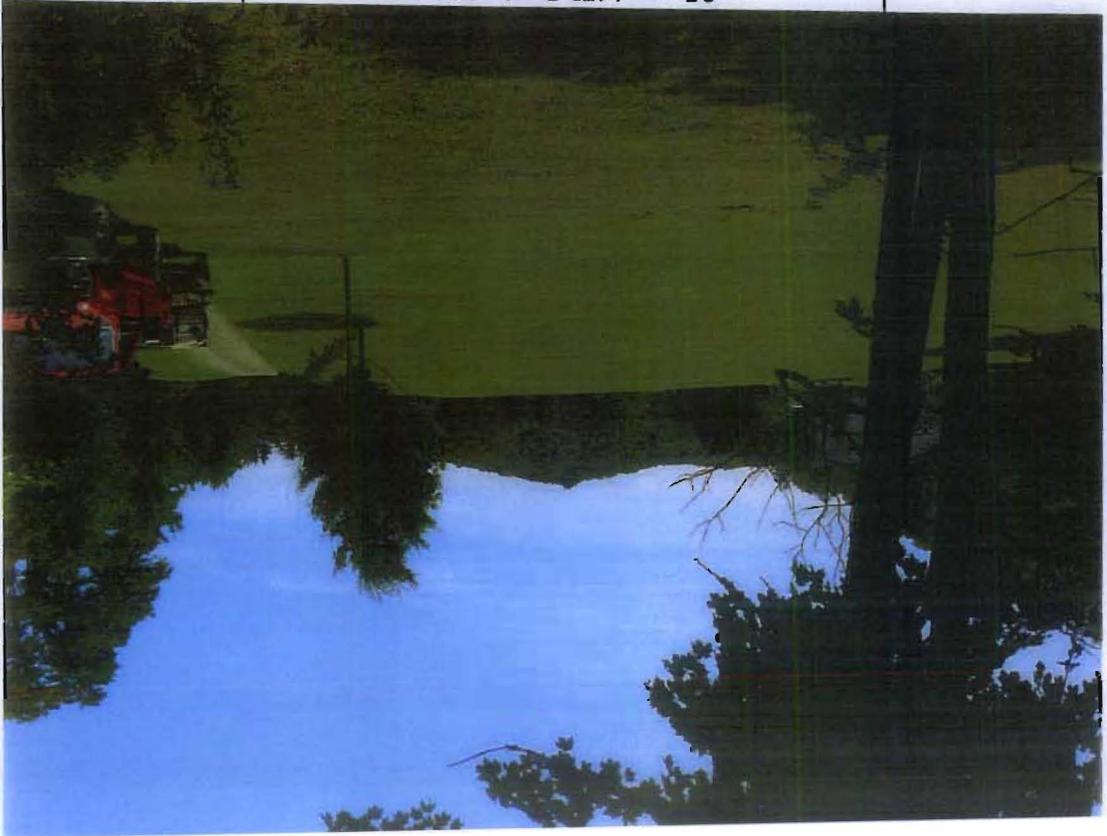
**Photo Site #5
(East end of Nelson Lane)
Photo Date: 18 July 2014**

Photo Site #6
(Middle of Nelson Lane)
Photo Date: 18 July 2014

420mm / 12X Optical Zoom



35mm / 1X Optical Zoom





Enlarged 420 mm / 12X Optical Zoom

Photo Site #6
(Middle of Nelson Lane)
Photo Date: 18 July 2014



Enlarged 420 mm / 12X Optical Zoom modified with Earth tones

**Photo Site #6
(Middle of Nelson Lane)
Photo Date: 18 July 2014**

Photo Site #7
(Just east of Nazareth Way)
Photo Date: 18 July 2014

420mm / 12X Optical Zoom



35mm / 1X Optical Zoom





**Enlarged 420 mm / 12X Optical Zoom
UNEDITED Photo Site**

**Photo Site #7
(Just east of Nazareth Way)
Photo Date: 18 July 2014**



35mm / 1X Optical Zoom



420mm / 12X Optical Zoom

**Photo Site #8
(Southern end of Avery Road)
Photo Date: 18 July 2014**



Enlarged 420 mm / 12X Optical Zoom

**Photo Site #8
(Southern end of Avery Road)
Photo Date: 18 July 2014**



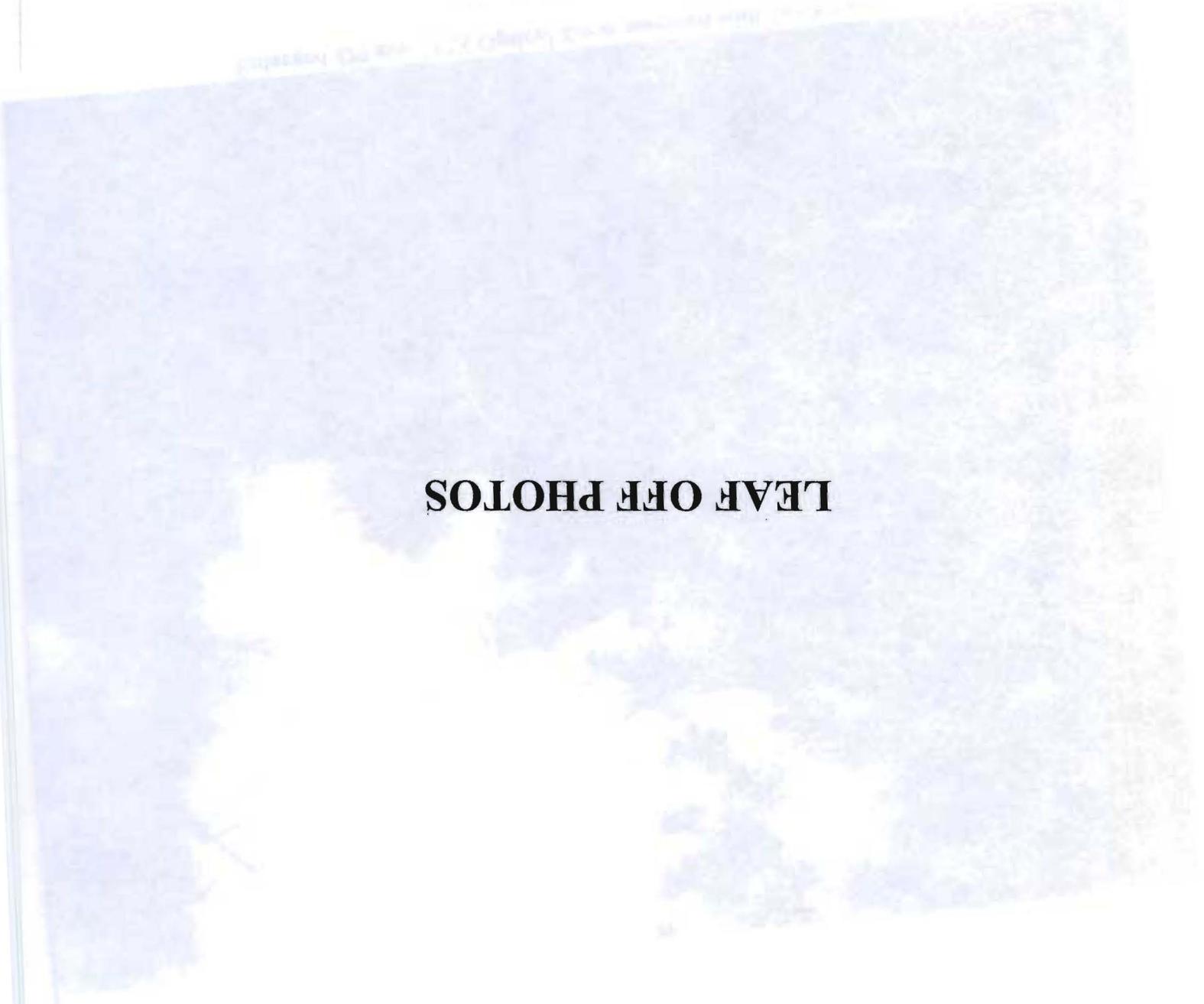
Enlarged 420 mm / 12X Optical Zoom modified with Earth tones

**Photo Site #8
(Southern end of Avery Road)
Photo Date: 18 July 2014**

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LEAF OFF PHOTOS







View of Woodsome Lodge from North Redoubt
November 2014 - 420mm



View of Woodsome Lodge from Nelson Lane -
November 2014 — 420mm



FOTOPT06_035mm1.JPG (2560x1920x16M jpeg)



FOTOP106_035mm1.JPG (2560x1920x16M jpeg)

