

PENNYROYAL HILL, LAND SURVEYING & FORESTRY LLC

CLAYTON E. PLATT, LICENSED SURVEYOR AND LICENSED FORESTER
414 PINE HILL ROAD, CROYDON NH 03773 Tel. and Fax (603) 863-0981 claytonplatt@pennyroyalhill.com

LETTER OF TRANSMITTAL

Date: January 9, 2017

To: Lucy St John
Planning Office
New London, NH

RECEIVED
JAN 09 2017

Re: Stevens Subdivision
217 Owls Nest Road

Items Enclosed: 4 sets- Final subdivision and Road Plans (Revised 1/6/17)
1 set 11" x 17' plans
Cover letter- Moser Engineering
State subdivision Approval Letter

For Review and Comment

For Your Information

For Bids Due

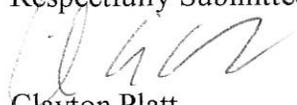
COMMENTS

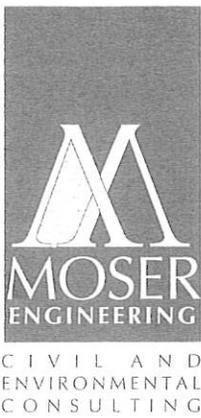
Dear Lucy,

Here are the revised plans for the Stevens subdivision. The boundary plans by my office are essentially the same – bounds set are shown and minor changes to the bearings were revised to correspond to the new bounds. The changes to the road plans are summarized in Mark Moser's attached letter. I have also attached a copy of the NHDES approval letter for both lots.

I will also drop off a check for the New London Health officer fee of \$20.00 which I believe has not been taken care of yet. Please let me know if you have any questions. I assume we will be up early on the agenda on January 24th under "old business".

Respectfully Submitted,


Clayton Platt



January 4, 2017

RECEIVED
JAN 09 2017

Lucy St. John
Planning and Zoning Administrator
Town of New London
375 Main St.
New London, NH 03257

RE: Owls Nest Road upgrade

Dear Lucy,

This letter is a follow-up to the meeting of 12-8-2016 with Jason Lyon and Richard Lee.

As a result of this meeting, the following changes have been made to the construction (engineering) drawings, sheets 4-6:

SHEET 4:

1. One additional cross culvert has been added at station 4+28,
2. Plan Note #4 added. "Geotextile fabric is to be installed as directed on Sheet 5, Typical X-Section, from Sta. 3+40 to Sta. 6+40."
3. Note with leader added near end of road, "Increase shoulder width from 2' wide to 4' wide from Sta. 6+35 right to Sta. 6+70 right," in order to facilitate the turning of emergency vehicles.

SHEET 5:

1. Typical X-Section. Road fabric specified from Sta. 3+40 to Sta. 6+40, Mirafi 500x.
2. Road Construction Note # 7 added, "If groundwater is encountered during construction, or if deemed necessary by the Public Works Director, 6" underdrain is to be installed under the ditch line in accordance with the detail on this sheet."
3. Underdrain Pipe Trench Detail added.

Don't hesitate to contact me, if you have any questions.

Sincerely,

Mark R. Moser, PE



The State of New Hampshire
Department of Environmental Services



Clark B. Freise, Acting Commissioner

APPROVAL FOR SUBDIVISION OF LAND

AS AUTHORIZED BY THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES, WATER DIVISION PURSUANT TO RSA 485-A, WATER POLLUTION AND WASTE DISPOSAL AND ENV-WQ 1000, SUBDIVISION AND INDIVIDUAL SEWAGE DISPOSAL SYSTEM DESIGN

SUBDIVISION APPROVAL DATE: 1/4/2017

APPROVAL NUMBER: eSA2017010404

I. PROJECT LOCATION

Subdivision Name: HIGH PINES
Address: 217 OWLS NEST ROAD
NEW LONDON NH 03257
Tax Map: 135
Parent Lot No.: 01
No. of Lots: 2
Lot Nos.: 1-0 AND 1-1

II. OWNER INFORMATION

Name: SAMUEL STEVENS
Address: 7 REEVES ROAD
BEFORD MA 01730

III. APPLICANT INFORMATION

Name: JONATHAN A SISSON III
Address: 21 HALE HILL RD
SWANZEY NH 03446

IV. DESIGNER INFORMATION

Name: JONATHAN A SISSON III
Address: 21 HALE HILL RD
SWANZEY NH 03446
Permit No.: 01702

V. SURVEYOR INFORMATION

Name: CLAYTON E PLATT
Address: 414 PINE HILL RD
CROYDON NH 03773
Permit No.: 00833

IV. SPECIFIC TERMS AND CONDITIONS: Applicable to this Approval for Subdivision of Land

A. OTHER CONDITIONS AND WAIVERS:

1. Approved for lot 1-0 & 1-1.
2. All activity shall be in accordance with RSA 483-B, the Shoreland Water Quality Protection Act.
3. Dredge or fill in a jurisdictional wetland or stream requires DES Wetland Bureau approval per RSA 482-A.

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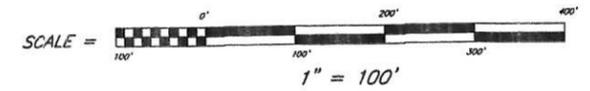
Darren K. King
Subsurface Systems Bureau

"HIGH PINES"
 PLAN OF MINOR SUBDIVISION
 PROJECT OVERVIEW
 TAX MAP 135 LOT 1 - 217 OWLS NEST ROAD

PROPERTY OF
**SAMUEL STEVENS, AMELIA STEVENS,
 and WILLIAM STEVENS**

7 REEVES ROAD BEDFORD MA 01730

LOCATED IN
 NEW LONDON, N.H.



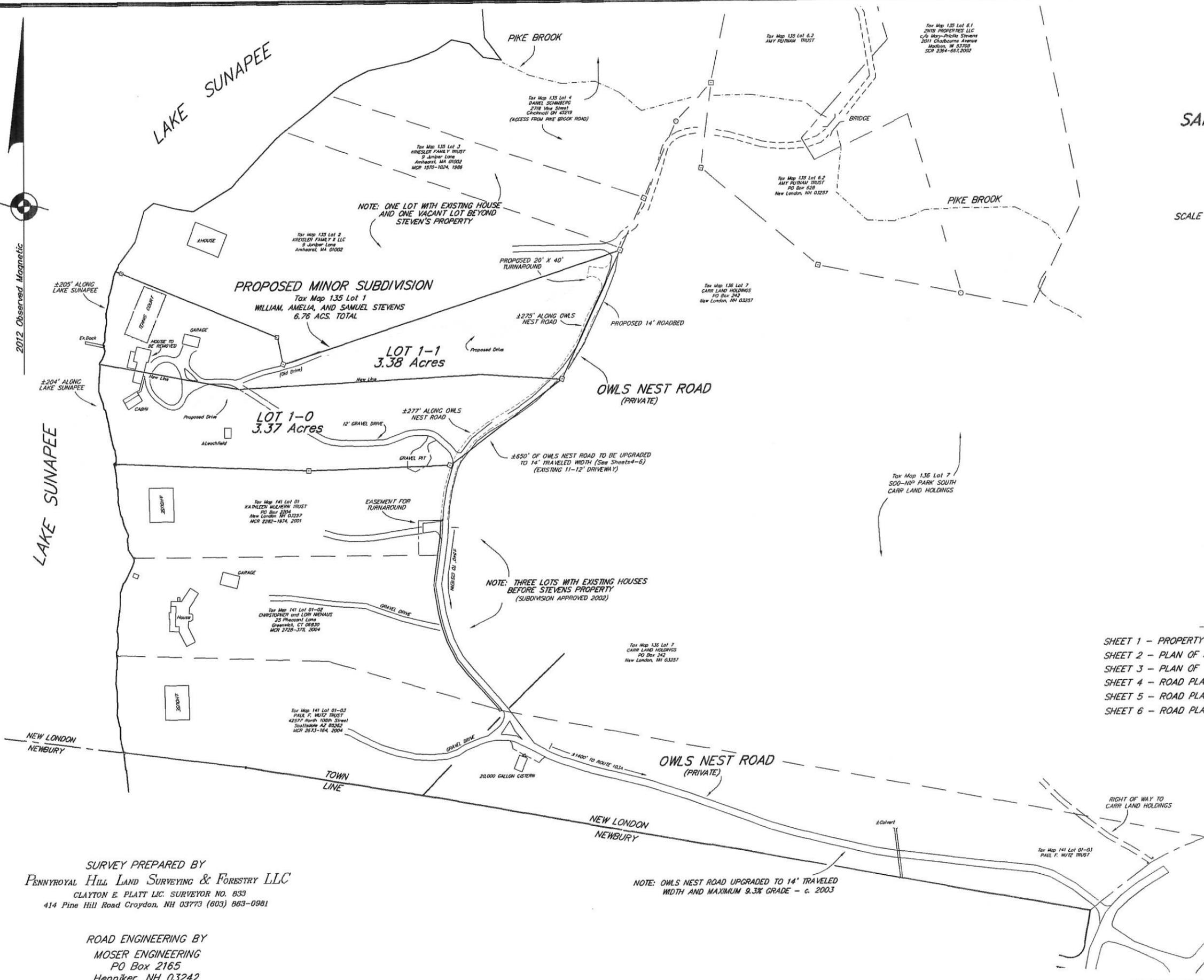
NOVEMBER 21, 2016
 REVISED JANUARY 6, 2017



SHEET INDEX

- SHEET 1 - PROPERTY OVERVIEW
- SHEET 2 - PLAN OF STANDARD PROPERTY SURVEY-MINOR SUBDIVISION
- SHEET 3 - PLAN OF TOPOGRAPHY AND SOILS
- SHEET 4 - ROAD PLAN - GRADING, SEDIMENT & EROSION CONTROL PLAN AND PROFILE
- SHEET 5 - ROAD PLAN - CONSTRUCTION DETAILS
- SHEET 6 - ROAD PLAN - SEDIMENT & EROSION CONTROL DETAILS

RECEIVED
 JAN 09 2017



SURVEY PREPARED BY
PENNYROYAL HILL LAND SURVEYING & FORESTRY LLC
 CLAYTON E. PLATT LIC. SURVEYOR NO. 833
 414 Pine Hill Road Croydon, NH 03773 (603) 863-0981

ROAD ENGINEERING BY
MOSER ENGINEERING
 PO Box 2165
 Henniker, NH 03242

NOTE: OWLS NEST ROAD UPGRADED TO 14' TRAVELED WIDTH AND MAXIMUM 9.3% GRADE - c. 2003

NOTE: THREE LOTS WITH EXISTING HOUSES BEFORE STEVENS PROPERTY (SUBDIVISION APPROVED 2002)

NOTE: ONE LOT WITH EXISTING HOUSE AND ONE VACANT LOT BEYOND STEVENS PROPERTY

PROPOSED MINOR SUBDIVISION
 Tax Map 135 Lot 1
 WILLIAM, AMELIA, AND SAMUEL STEVENS
 6.76 ACS. TOTAL

LOT 1-1
 3.38 Acres

LOT 1-0
 3.37 Acres

2012 Observed Magnetic

LAKE SUNAPEE

NEW LONDON
 NEWBURY

TOWN
 LINE

NEW LONDON
 NEWBURY

NH ROUTE 103A

FOR REGISTRY USE ONLY

REFERENCE PLANS

1. MCR Plan No.15019 - "Annexation Plan For Mary F. Charles Heirs...", by Bristol Sweet & Associates, INC., dated January, 2000.
2. MCR Plan No.2111 - "Property Survey and Schematic, Soo-Nipi Lodge Inc...", by R.Bristol and W.Breckenridge, dated June, 1986.
3. MCR Plan No.6972 - "Boundary Survey for Alan Porter et als...", by Bristol Sweet & Associates, INC., dated July, 1979.
4. MCR Plan No.11800 - "Proposed Subdivision, Estate of Mary F. Charles...", by Allen Wilson, dated October, 1989.
5. MCR Plan No.15831 - "Plan of Subdivision, Property of the George E. Williams Inter Vitros Trust...", by this office, April 1, 2002.
6. MCR Plan No.18529 - "Survey for Jay H. Anderson...", by Bristol Sweet & Associates, INC., dated October 18, 2002.
7. MCR Plan No.18984 - "Soo-Nipi Park South, 215 Soo Nipi Park Road, Plan of Minor Subdivision...", by this office, revised August 23, 2008

KEY

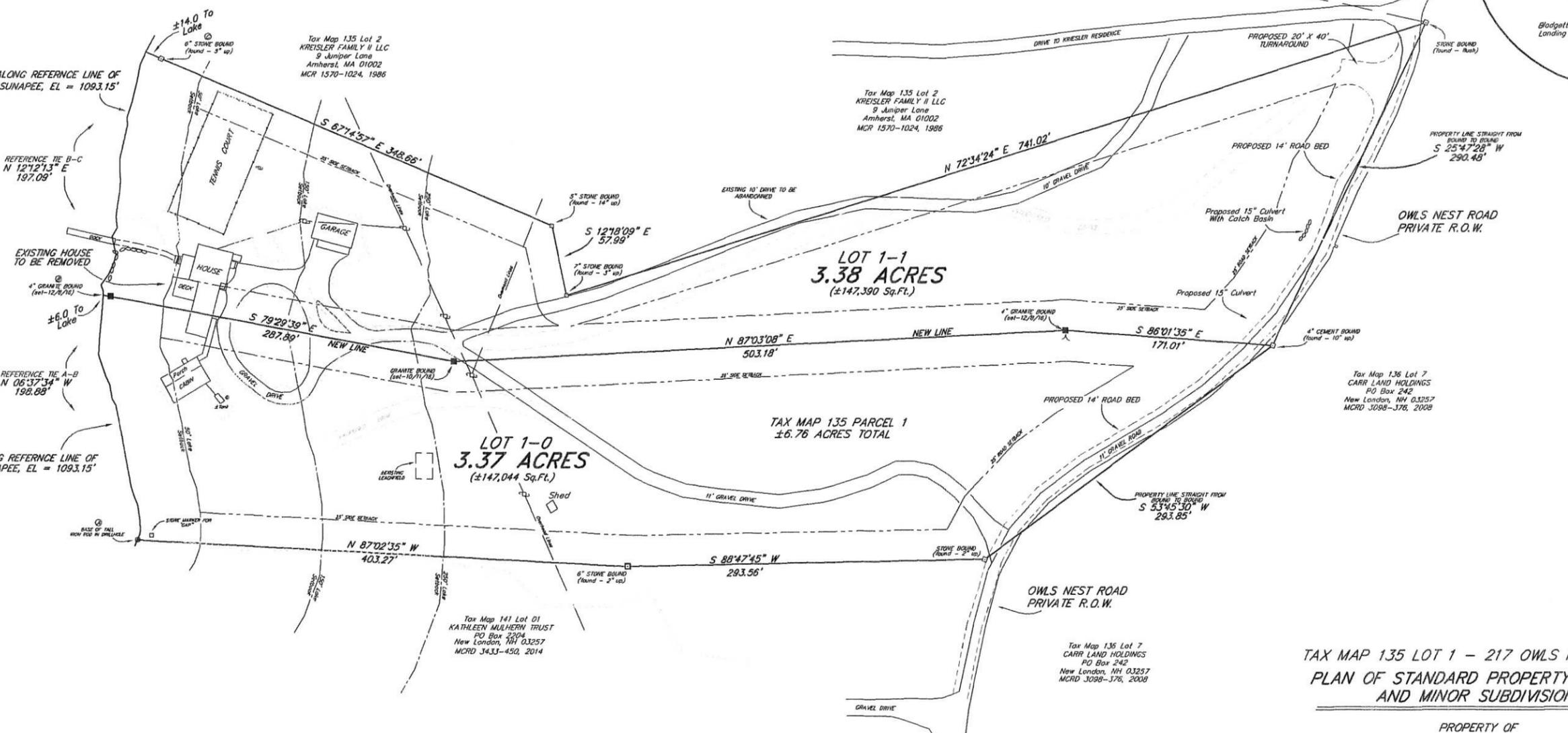
- Setback Per Zoning
- Property Line
- 1" Iron Pipe (found) - or as noted
- Stone Bound (found) or as noted
- 4" Stone Bound (set-2016) or as noted
- Edge Existing Road/ Drive
- - - Edge Proposed Roadbed
- Culvert
- Utility Pole w/ Overhead Lines
- Trealine



LOCUS

2012 OBSERVED MAG.

LAKE SUNAPEE



205' ALONG REFERENCE LINE OF LAKE SUNAPEE, EL = 1093.15'

Tax Map 135 Lot 2 KREISLER FAMILY II LLC 9 Juniper Lane Amherst, MA 01002 MCR 1570-1024, 1986

Tax Map 135 Lot 2 KREISLER FAMILY II LLC 9 Juniper Lane Amherst, MA 01002 MCR 1570-1024, 1986

Tax Map 135 Lot 3 KREISLER FAMILY TRUST 9 Juniper Lane Amherst, MA 01002 MCR 1570-1024, 1986

Tax Map 136 Lot 7 CARR LAND HOLDINGS PO Box 242 New London, NH 03257 MCRD 3098-376, 2008

LOT 1-0 3.37 ACRES (±147,044 Sq.Ft.)

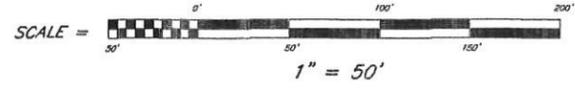
LOT 1-1 3.38 ACRES (±147,390 Sq.Ft.)

TAX MAP 135 PARCEL 1 ±6.76 ACRES TOTAL

TAX MAP 135 LOT 1 - 217 OWLS NEST ROAD PLAN OF STANDARD PROPERTY SURVEY AND MINOR SUBDIVISION

PROPERTY OF SAMUEL STEVENS, AMELIA STEVENS, and WILLIAM STEVENS 7 REEVES ROAD BEDFORD MA 01730

LOCATED IN NEW LONDON, N.H.



NOVEMBER 22, 2016 REVISED JANUARY 6, 2017

PENNYROYAL HILL LAND SURVEYING & FORESTRY LLC CLAYTON E. PLATT LIC. SURVEYOR NO. 833 414 Pine Hill Road Croydon, NH 03773 (603) 863-0981

NOTES

1. Dead references:
 - A. MCRD Book 3035 Page 758, Robert Stevens Trust to Samuel, William, and Amelia Stevens, November 24, 2007.
 - B. MCRD Book 562 Page 345, Sunapee Corporation to Dorothy Porter, September 17, 1938.
 - C. MCRD Book 561 Page 42, Soo-Nipi Park Inc. to Dorothy Porter, March 31, 1938.
 - D. MCRD Book 509 Page 573, Soo-Nipi Park Inc. to Dorothy Porter, October 3, 1930.
2. This plan is the result of Nikon total station survey by this office, 2012-2016 having a closed traverse relative error of closure greater than 1:10,000. All elevations are referenced to the 10.5' mark at the Sunapee Harbor gauge (1093.15').
3. The purpose of this plan is to show the boundary information for the minor subdivision of the Stevens property. See a Soils and Topography plan by this office for additional information. No wetlands were found on the property.
4. Easements of Record:
 - A. Right of way over existing and future roads granted by Sunapee Corporation, MCRD 562-345, 1938.
 - B. Right of way to Public Highway granted in MCRD 509-573, 1930.
 - C. Utility rights granted to NTT by Soo Nipi Park Inc., MCRD 440-349, 1919. (and cited in later deeds)
5. Soils mapping and test pit logs were completed by Jon Sisson, Beaver Tracks LLC, October 17, 2016. See test pit logs attached for additional information on soils conditions.

The Subdivision Regulations of the Town of New London are a part of this plot and approval of this plot is contingent on the completion of all requirements of said Subdivision Regulations excepting only any variances or modifications made in writing by the Board and attached hereto.

APPROVED BY THE NEW LONDON, N.H. PLANNING BOARD

Date _____

FORWARD _____

REVISIONS 1/6/17 - Add bounds set, bearings, new culvert

RECEIVED JAN 09 2017

2012 OBSERVED MAG.

- KEY**
- Setback Per Zoning
 - Property Line
 - 1" Iron Pipe (found) - or as noted
 - Stone Bound (found) or as noted
 - 4" Stone Bound (set-2016) or as noted
 - Edge Existing Road/ Drive
 - Edge Proposed Roadbed
 - Culvert
 - Utility Pole w/ Overhead Lines
 - Two Foot Contour
 - Ten Foot Contour
 - HISS Soil Boundary
 - Treeline
 - Hardwood/Softwood Tree

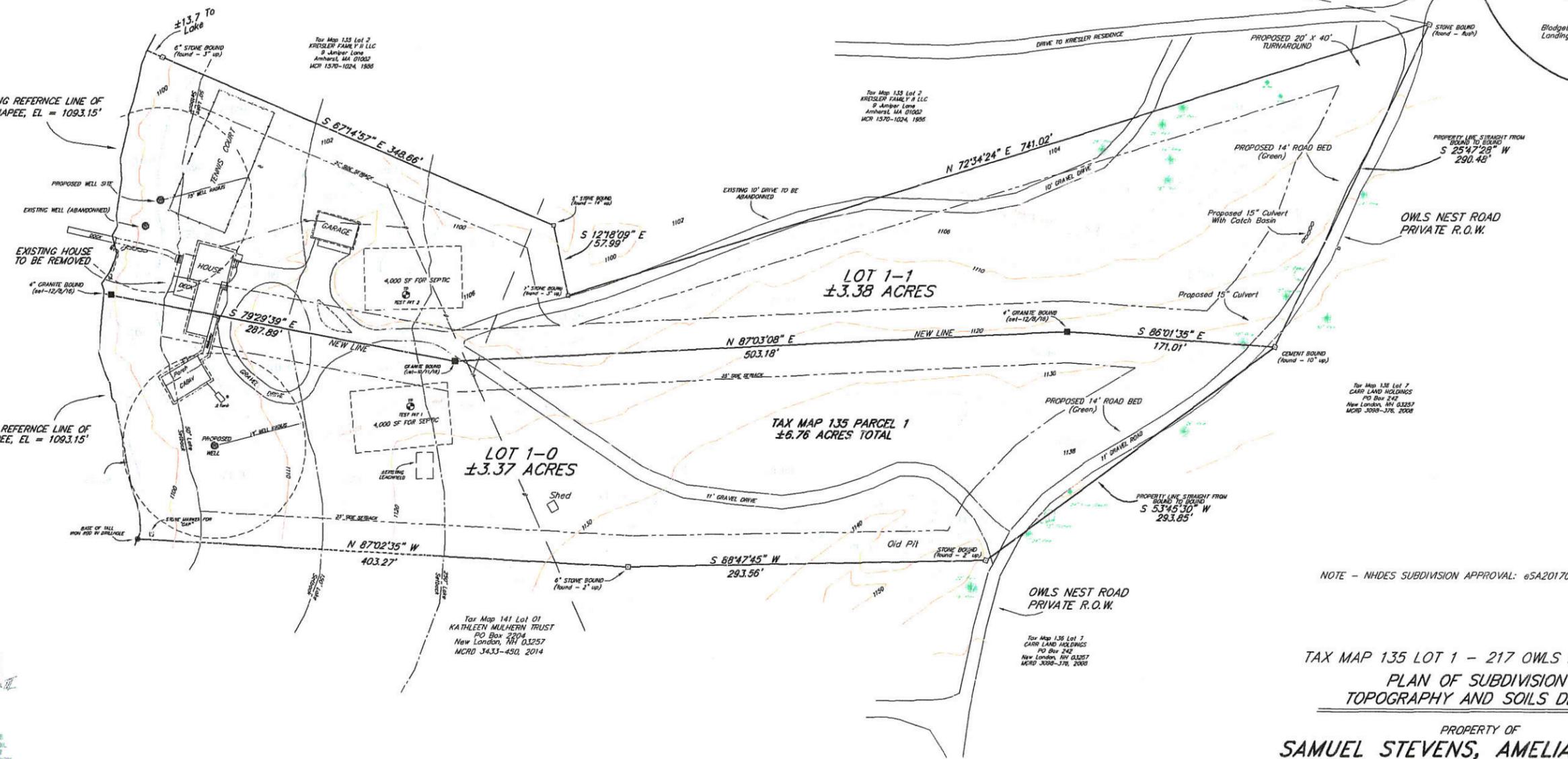
H.I.S.S. SOILS KEY

B1M1 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, B-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M2 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M3 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M4 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M5 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M6 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M7 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M8 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M9 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS
 B1M10 8-1/2" BROWN SHALLOWSOIL, H-14-CLAY, PLACED/PLUVIAL, PARENT MATERIAL, L-40 RESTRICTIVE FEATURES, C-4 0-2% SLOPE, H-10M MEETS HIGH INTENSITY STANDARDS

NOTE: MINIMUM AREA REQUIRED FOR 21EH SOILS IS 68,000 SQ.FT. OR 1.6 ACRES
 BOTH LOTS EXCEED MINIMUM H.I.S.S. REQUIREMENTS BY OVER 1 ACRE



LAKE SUNAPEE

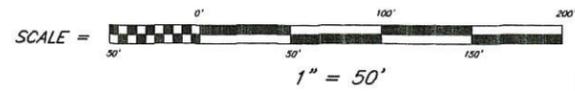


NOTE - NHDES SUBDIVISION APPROVAL: @SA2017010404, JAN. 4, 2017

TAX MAP 135 LOT 1 - 217 OWLS NEST ROAD
 PLAN OF SUBDIVISION
 TOPOGRAPHY AND SOILS DETAIL

PROPERTY OF
**SAMUEL STEVENS, AMELIA STEVENS,
 and WILLIAM STEVENS**
 7 REEVES ROAD BEDFORD MA 01730

LOCATED IN
 NEW LONDON, N.H.

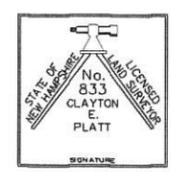


NOVEMBER 22, 2016
 REVISED JANUARY 6, 2017

PENNYROYAL HILL LAND SURVEYING & FORESTRY LLC
 CLAYTON E. PLATT LIC. SURVEYOR NO. 833
 414 Pine Hill Road Craydon, NH 03773 (603) 863-0981

NOTES

- Deed references:
 A. MCRD Book 3025 Page 758, Robert Stevens Trust to Samuel, William, and Amelia Stevens, November 24, 2007.
 B. MCRD Book 562 Page 345, Sunapee Corporation to Dorothy Porter, September 17, 1938.
 C. MCRD Book 509 Page 573, Soo-Nipi Park Inc. to Dorothy Porter, October 3, 1930.
- This plan is the result of Nikon total station survey by this office, 2012-2016 having a closed traverse relative error of closure greater than 1":10,000. All elevations are referenced to the 10.5' mark of the Sunapee Harbor gauge (1093.15')
- The purpose of this plan is to show the topography and soils conditions on the Stevens property; see a Plan of Standard Property Survey-Minor Subdivision for details of all boundaries.
- No wetlands and no exposed ledge was found on the subject tract.
- Soils mapping and test pit logs were completed by Jon Sisson, Beaver Tracks LLC, October 17, 2016. See test pit logs attached for additional information on soils conditions.



REVISIONS
 1/6/17 - Add bounds set, DES approval

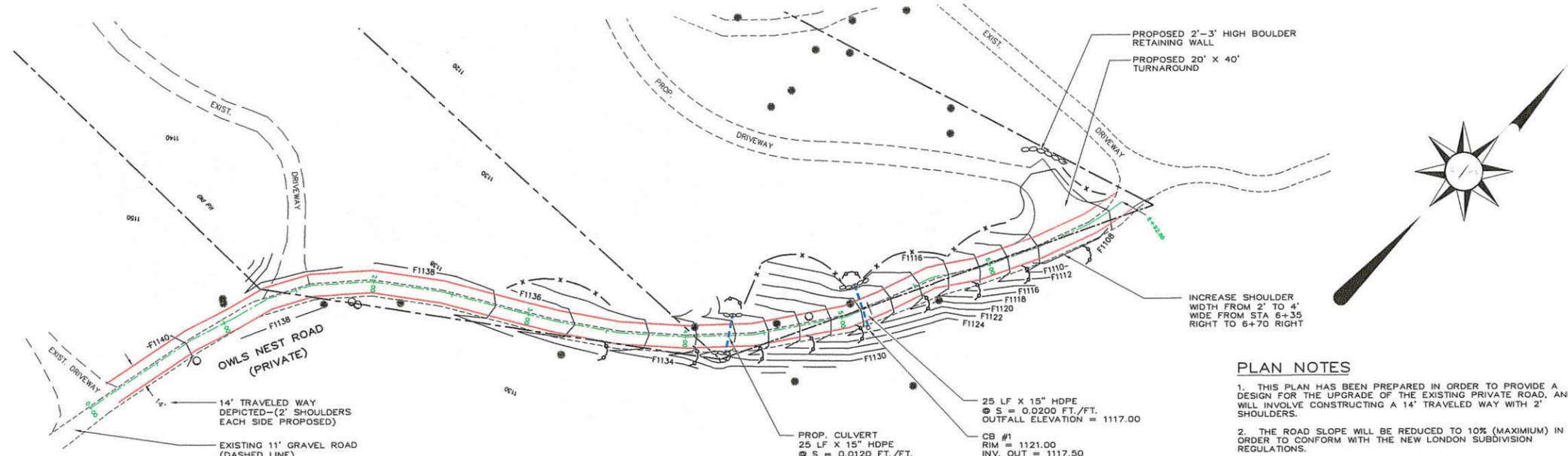
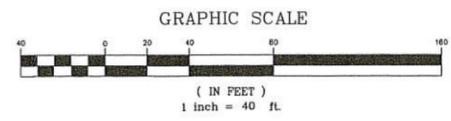
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 JAN 09 2017



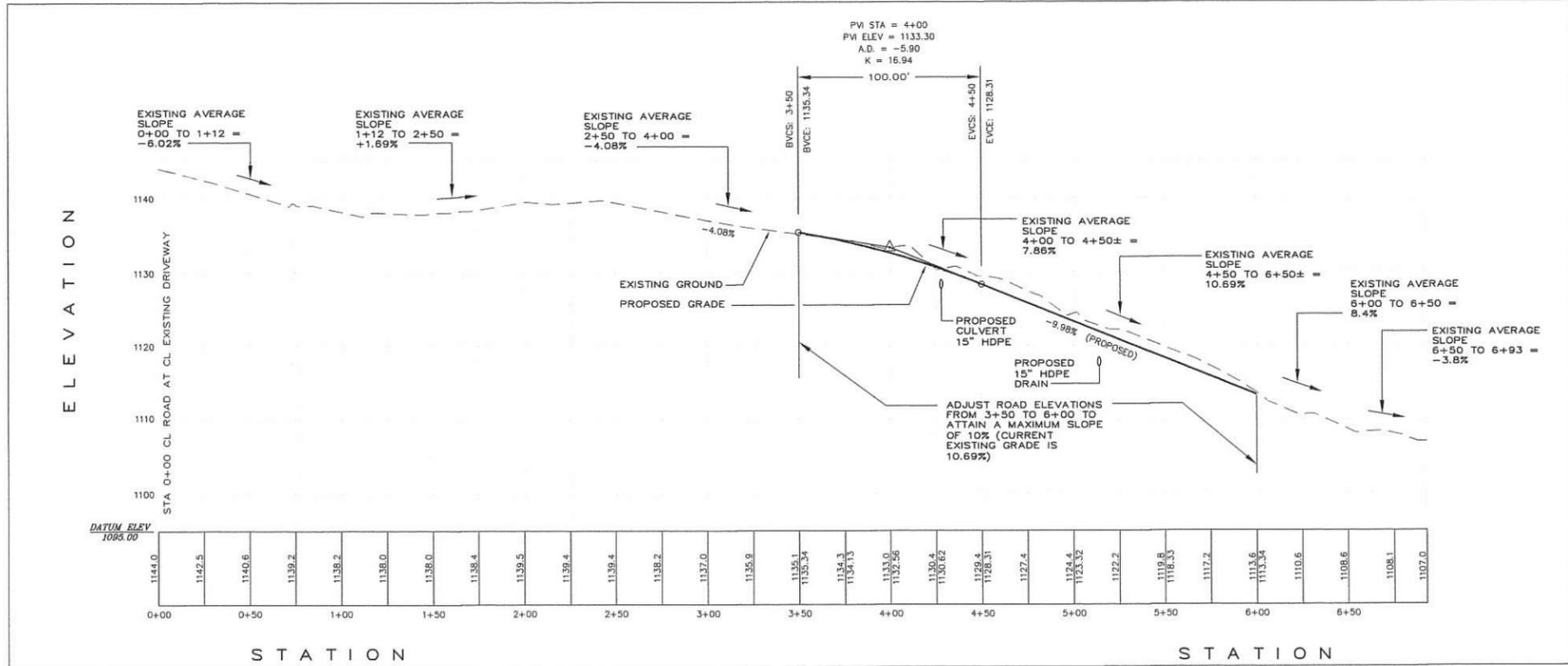
SOIL MAP WAS PRODUCED
 ACCORDING TO THE GUIDELINES
 PROVIDED IN "SITE-SPECIFIC SOIL
 MAPPING STANDARDS FOR NEW
 HAMPSHIRE AND VERMONT", VERSION
 3.0, DECEMBER 2014, RESOLVE
 SPECIAL PUBLICATION NO. 3

Beaver Tracks, LLC
 21 Hale Hill Road
 Swanzey, NH 03446
 Phone: 603 313-4925
 Fax: 603 357-1881
 email: beavertracksllc@yahoo.com





- PLAN NOTES**
1. THIS PLAN HAS BEEN PREPARED IN ORDER TO PROVIDE A DESIGN FOR THE UPGRADE OF THE EXISTING PRIVATE ROAD, AND WILL INVOLVE CONSTRUCTING A 14' TRAVELED WAY WITH 2' SHOULDERS.
 2. THE ROAD SLOPE WILL BE REDUCED TO 10% (MAXIMUM) IN ORDER TO CONFORM WITH THE NEW LONDON SUBDIVISION REGULATIONS.
 3. TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN WAS OBTAINED FROM A WORKSHEET PREPARED BY CLAYTON PLATT, LLS, PENNYROYAL HILL LAND SURVEYING.
 4. GEOTEXTILE FABRIC IS TO BE INSTALLED AS DIRECTED ON SHEET 5, TYPICAL CROSS SECTION, FROM STA 3+40 TO 6+40.



LEGEND

	EXIST. DRAIN PIPE
	PROP. DRAIN PIPE W/ FIELD STONE HEADWALLS
	EXIST. CONTOUR
	PROP. CONTOUR
	SILT FENCE
	STONE CHECK DAM

REVISIONS

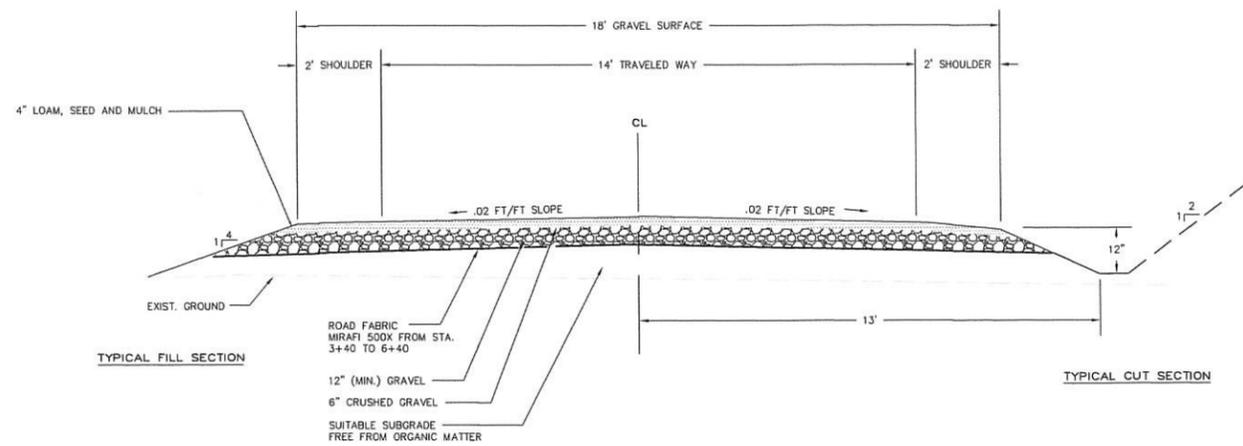
NO.	DATE	DESCRIPTION	MRM	BY
1	12-19-16	MISC.	MRM	

ENGINEERING
MOSER
PLANNING/CONSULTING
ENVELOPE CONSULTING, INC. 02824
603-683-7024

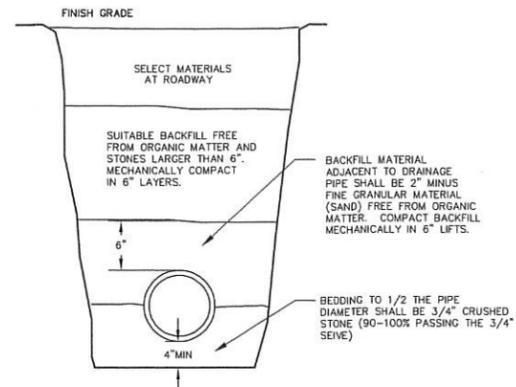
NEW HAMPSHIRE - PROFESSIONAL ENGINEER
MARK MOSER
NO. 741

Plan and Profile
PROPOSED IMPROVEMENTS FOR
OWLS NEST ROAD
prepared for
WILLIAM STEVENS
NOVEMBER 2016

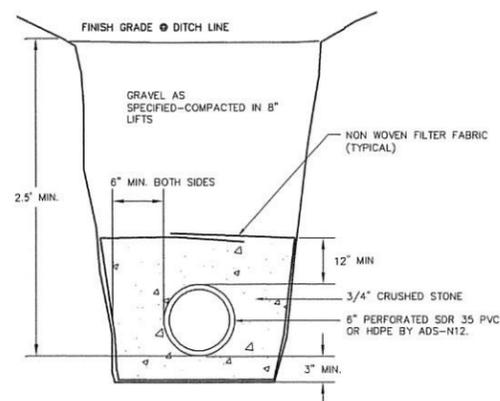
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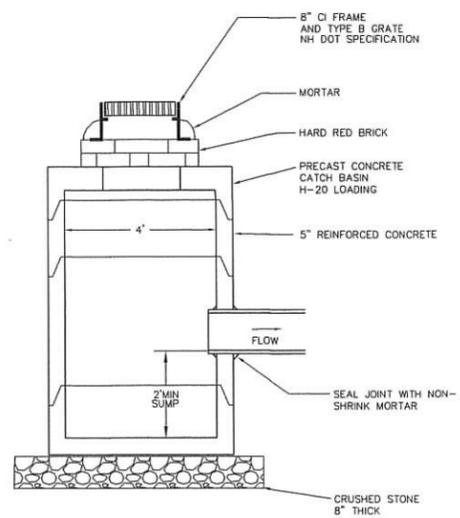
TYPICAL X-SECTION
OWLS NEST ROAD
(NOT TO SCALE)



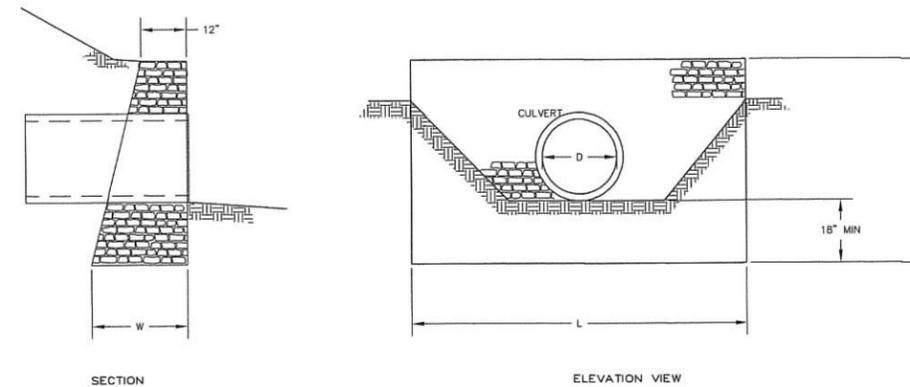
DETAIL
DRAINAGE PIPE TRENCH
(NOT TO SCALE)



DETAIL
UNDERDRAIN PIPE TRENCH
(NOT TO SCALE)



DETAIL
CATCH BASIN
(NOT TO SCALE)



CULVERT DIAMETER "D"	"L"	"H"	"W"
15"	4'-6"	3'-9"	1'-11.25"

DETAIL
MORTAR-RUBBLE-MASONRY HEADWALL
(NOT TO SCALE)

ROAD CONSTRUCTION NOTES

1. ALL ORGANIC MATTER, INCLUDING STUMPS, ROOTS AND MUCK, IS TO BE REMOVED PRIOR TO PLACEMENT OF SUBGRADE AND EMBANKMENT FILL.
2. ALL BOULDERS AND LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW THE GRAVEL COURSE.
3. SUBGRADE FILL SHALL BE FREE FROM DEBRIS, BOULDERS AND ORGANIC MATTER, AND IS TO BE COMPACTED IN LIFTS NOT TO EXCEED 12". COMPACTING SHALL BE PERFORMED WITH A VIBRATORY ROLLER AND ADEQUATE WATER TO OBTAIN 95% OF THE MAXIMUM DENSITY USING AASHTO T99 (PROCTOR DENSITY).
4. GRAVEL SHALL BE A CLEAN, WELL GRADED MATERIAL WITH NO STONES LARGER THAN 6", 25-70% PASSING THE #4 SIEVE, AND 0-12% OF THE SAND PORTION PASSING THE #200 SIEVE. GRAVEL IS TO BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DENSITY.
5. CRUSHED GRAVEL SHALL BE FRACTURED STONE WITH 100% PASSING THE 3" SIEVE, 95-100% PASSING THE 2" SIEVE, 55-85% PASSING THE 1" SIEVE, 27-52% PASSING THE #4 SIEVE AND 0-12% OF THE SAND PORTION PASSING THE #200 SIEVE.
6. ROAD CONSTRUCTION, PROCEDURES AND MATERIALS SHALL CONFORM TO THE TOWN OF NEW LONDON, NH, SUBDIVISION REGULATIONS.
7. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, OR IF DEEMED NECESSARY BY THE PUBLIC WORKS DIRECTOR, 8" UNDERDRAIN IS TO BE INSTALLED UNDER THE DITCH LINE IN ACCORDANCE WITH THE DETAIL ON THIS SHEET.

GENERAL CONSTRUCTION NOTES

1. THE EXCAVATING CONTRACTOR SHALL CONTACT THE NEW LONDON PUBLIC WORKS DIRECTOR PRIOR TO THE START OF SITE WORK.
2. THE PROPOSED ROADWAY SHALL BE BUILT AS DEPICTED ON THE PLANS IN A WORKMANLIKE MANNER.
3. THE CONTRACTOR SHALL CONTACT DIG SAFE PRIOR TO THE START OF SITE WORK, 1-888-DIG-SAFE (344-7233).

DRAINAGE NOTES

1. DRAINAGE PIPE SHALL BE CONSTRUCTED OF POLYETHYLENE WITH A SMOOTH INTERIOR (HDPE). PROVIDE ADS N-12 PIPE MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. (A.D.S.) OR AN EQUIVALENT PIPE. GASKETED, WATERTIGHT JOINTS SHALL BE PROVIDED.
2. SEDIMENT AND EROSION CONTROL MEASURES CALLED FOR SHALL BE EMPLOYED THROUGHOUT CONSTRUCTION.
3. HEADWALLS ARE TO BE PROVIDED WHERE SPECIFIED FOR ON THE PLANS.
4. ALL PIPE IS TO BE LAID AT THE PROPER SLOPE PRIOR TO PLACEMENT OF SELECT ROAD MATERIAL.
5. PIPE BEDDING AND BACKFILL MATERIAL SHALL CONFORM TO THE STANDARD TRENCH DETAIL.

NOTE: ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO NHDOT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

DWG NAME: MMBASE-40
DRAWN BY: MRM

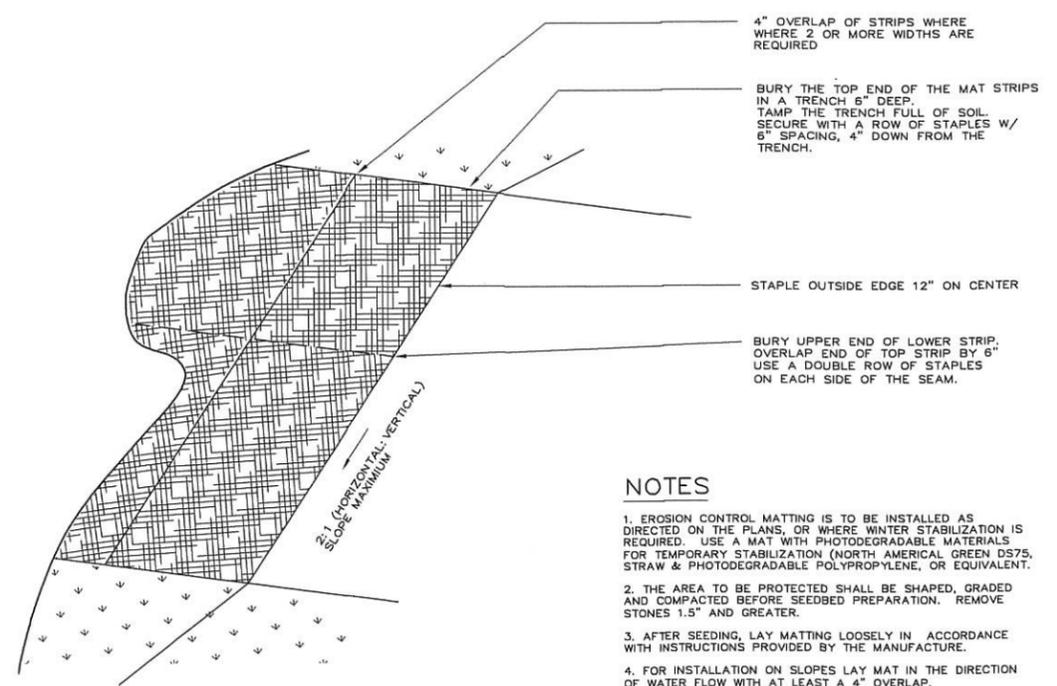
REVISIONS

NO.	DATE	DESCRIPTION
1	12-19-16	ROAD FABRIC & DET.



Construction Details
PROPOSED IMPROVEMENTS FOR
OWLS NEST ROAD
prepared for
WILLIAM STEVENS
NOVEMBER 2016

RECEIVED
JAN 09 2017



NOTES

1. EROSION CONTROL MATTING IS TO BE INSTALLED AS DIRECTED ON THE PLANS, OR WHERE WINTER STABILIZATION IS REQUIRED. USE A MAT WITH PHOTODEGRADABLE MATERIALS FOR TEMPORARY STABILIZATION (NORTH AMERICAN GREEN DS75, STRAW & PHOTODEGRADABLE POLYPROPYLENE, OR EQUIVALENT).
2. THE AREA TO BE PROTECTED SHALL BE SHAPED, GRADED AND COMPACTED BEFORE SEEDBED PREPARATION. REMOVE STONES 1.5" AND GREATER.
3. AFTER SEEDING, LAY MATTING LOOSELY IN ACCORDANCE WITH INSTRUCTIONS PROVIDED BY THE MANUFACTURE.
4. FOR INSTALLATION ON SLOPES LAY MAT IN THE DIRECTION OF WATER FLOW WITH AT LEAST A 4" OVERLAP.

**DETAIL
EROSION CONTROL MATTING**
(NOT TO SCALE)

SEEDING SPECIFICATIONS

SEEDING FOR LONG TERM COVER

FOLLOWING PLACEMENT OF 4" OF TOPSOIL, REMOVE ALL STONES 4" AND LARGER, AND TRASH FROM THE SURFACE, WHERE POSSIBLE, TILL THE SOIL TO A DEPTH OF 4". LIMESTONE SHOULD BE APPLIED AT A RATE OF 2 TONS/ACRE. APPLY 10-20-20 FERTILIZER AT A RATE OF 500 LBS/ACRE. SPREAD SEED UNIFORMLY ACCORDING TO THE REQUIRED RATES. IMMEDIATELY COVER SEEDS WITH MULCH HAY AT A RATE OF 2 TONS/ACRE. THE FOLLOWING SEED MIX SHALL APPLY TO DRAINAGE SWALES, CUTS AND ALL DISTURBED AREAS:

SEED	LB/AC	LB/1000 SF
TALL FESCUE	20	.45
CREeping RED FESCUE	20	.45
BIRDSFOOT TREFLOIL	8	.2
TOTAL:	48	1.10

ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED BETWEEN EARLY SPRING AND THE FIRST WEEK OF OCTOBER.

TEMPORARY SEEDING

TEMPORARY SEEDING SHALL BE PERFORMED TO STABILIZE DISTURBED AREAS FOR A LIMITED TIME PERIOD, USUALLY LESS THAN A YEAR. SEED BY SEPT. 15 FOR BEST RESULTS. WHEN POSSIBLE, TILL TO A DEPTH OF 3", ACROSS THE SLOPE. ALL AREAS SHALL BE MULCHED. SEED ACCORDING TO THE FOLLOWING SPECIFICATIONS:

- A. SPRING SEEDING PRIOR TO MAY 15: OATS RATE: 80 LBS/ACRE TO A DEPTH OF 1".
- B. SEED BETWEEN APRIL 1 & JUNE 1 OR BETWEEN AUGUST 15 & SEPT 15: PERENNIAL RYEGRASS. RATE: 30 LBS/ACRE TO A DEPTH OF 1/2".
- C. SEED BETWEEN AUGUST 15 & OCTOBER 1: WINTER RYE. RATE: 112 LBS/ACRE TO DEPTH OF 1".
- D. AFTER OCTOBER 1 SEED WITH WINTER RYE (112 LBS/AC), MULCH WITH 3 TONS/ACRE AND INSTALL NETTING TO SECURE MULCH.

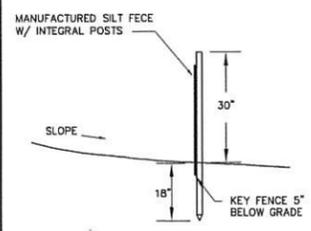
ALL AREAS WILL NEED PERMANENT SEEDING THE FOLLOWING SEASON.

CONSTRUCTION SEQUENCE

1. SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLANS PRIOR TO THE START OF EARTHWORK.
2. STRIP AND STOCKPILE HUMUS AT SUITABLE LOCATIONS AWAY FROM DRAINAGE COURSES FOR USE AFTER FINAL GRADING.
3. CONSTRUCT DOWNSTREAM SWALES FIRST, THEN THE ASSOCIATED CULVERT. LOAM, SEED AND MULCH SWALES IMMEDIATELY UPON COMPLETION TO PERMIT ESTABLISHMENT OF VEGETATION.
4. UPON FINAL GRADING, APPLY A MINIMUM OF 4" OF LOAM. SEED AND MULCH AS SPECIFIED.
5. INSPECT AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES AT LEAST WEEKLY AND AFTER EVERY RAINFALL GREATER THAN .5".
6. AFTER ALL DISTURBED AREAS HAVE STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

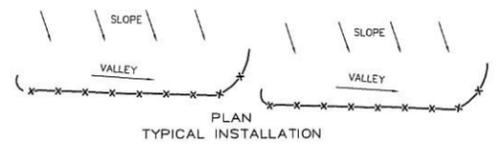
EROSION CONTROL NOTES

1. SILT FENCE AND STONE CHECK DAMS ARE TO BE INSTALLED AS DEPICTED ON THE PLANS.
2. ALL SWALES ARE TO BE LOAMED, SEEDED AND MULCHED IMMEDIATELY UPON COMPLETION.
3. FILL MATERIAL IS TO BE FREE OF STUMPS AND ORGANIC MATTER.
4. ROAD AND DRAINAGE SIDE SLOPES SHALL NOT EXCEED 2:1 (HORIZONTAL TO VERTICAL), AND SHALL BE MULCHED WITH HAY AT A RATE OF 2 TONS/ACRE, OR OTHERWISE STABILIZED.
5. ALL DISTURBED AREA SHALL BE LOAMED (4" MIN), SEEDED AND MULCHED.
6. SEEDING SHALL CONFORM TO THE SPECIFICATIONS ON THIS SHEET.
7. DITCHES AND SWALES ARE TO BE STABILIZED PRIOR TO RECEIVING RUNOFF.
8. STABILIZATION SHALL BE DEFINED AS FOLLOWS:
 - A. WHEN 85% OF VEGETATED GROWTH IS ESTABLISHED.
 - B. WHEN AT LEAST 3" OF STONE RIP RAP HAS BEEN PLACED.
 - C. WHEN AREAS TO BE PAVED HAVE BEEN COVERED W/ 3" OF GRAVEL.
 - D. WHEN EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
9. ALL PROPOSED VEGETATED AREAS WHICH ARE NOT STABLE BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER THIS DATE SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES STEEPER THAN 3:1, AND SEEDING AND PLACING 3-4 TONS PER ACRE OF MULCH SECURED WITH ANCHORED NETTING ELSEWHERE. BLANKETS, MULCH OR NETTING SHALL NOT BE INSTALLED OVER SNOW OR FROZEN GROUND.
10. ALL DITCHES AND SWALES WHICH ARE NOT STABLE BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER THIS DATE, SHALL BE STABILIZED WITH ROCK RIP RAP OR EROSION CONTROL BLANKETS.
11. AFTER NOVEMBER 15TH ALL UNFINISHED PAVED SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3" NON-EROSIVE MATERIAL.
12. THE SMALLEST PRACTICAL AREA SHALL BE EXPOSED AT ANY TIME.

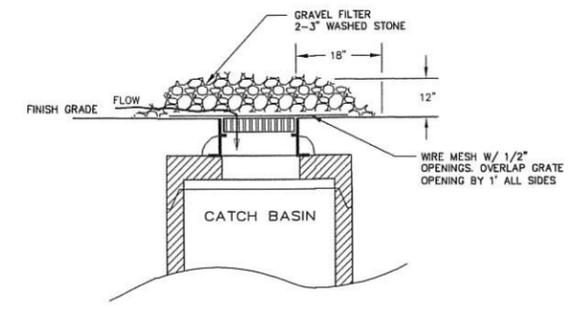


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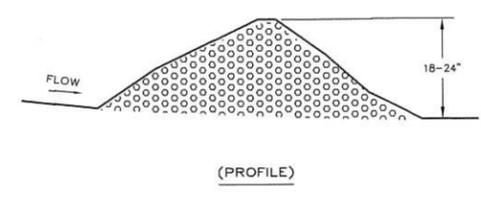
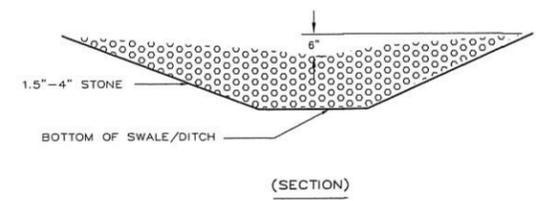
1. SILT FENCE SHALL BE INSTALLED WHERE DEPICTED ON THE PLANS. PLACE FENCE AT APPROX. 6' FROM THE TOE OF SLOPE TO FACILITATE MAINTENANCE.
2. THE ENDS OF THE SILT FENCE SHALL BE TURNED UPHILL. INSTALL WITH A CURVED SHAPE TO PROVIDE EFFICIENT PONDING OF STORMWATER.
2. WHERE 2 SECTIONS OF FABRIC ARE TO BE MEET, OVERLAP BY 6", AND FOLD THE FABRIC.
3. SUPPORTS SHALL BE AT A MAXIMUM SPACING OF 6'.
4. INSTALL HAY BALES BEHIND THE FENCE AT LOCATIONS WHERE ADDITIONAL SUPPORT IS REQUIRED.



**DETAIL
SILT FENCE**
(NOT TO SCALE)



**X-SECTION
TEMPORARY CB INLET PROTECTION**
(NOT TO SCALE)



**DETAIL
STONE CHECK DAM**
(NOT TO SCALE)

NOTES

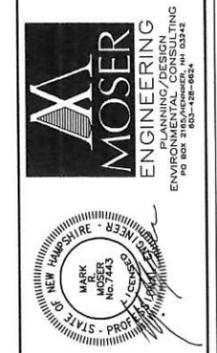
1. STONE SHALL BE 2-3" WASHED, CRUSHED ROCK.
2. THE MAX. HEIGHT OF THE STRUCTURE SHALL BE 2'. THE CENTER OF THE STRUCTURE SHALL BE 6" LOWER THAN THE OUTER EDGES.
3. THE STRUCTURES SHALL BE INSPECTED AFTER EVERY RAINFALL. SEDIMENT SHALL BE REMOVED FROM BEHIND THE DAM WHEN IT HAS REACHED 1/2 THE ORIGINAL HEIGHT OF THE STRUCTURE.

DWG NAME: IMBUSE_40

REVISIONS

NO.	DATE	DESCRIPTION	BY

DRAWN BY: MRM



Construction Details
PROPOSED IMPROVEMENTS FOR
OWLS NEST ROAD
prepared for
WILLIAM STEVENS
NOVEMBER 2016