

ADDITIONAL SUBMITTALS

#20-1242

Ann-Marie Aubrey

From: David Held <dheld@prorovinc.com>
Sent: Friday, June 12, 2020 11:13 AM
To: Ann-Marie Aubrey
Cc: kbrignole@spauldingagents.com
Subject: Snake Meadow Club gravel application
Attachments: 203011 plans rev 6-12-20.pdf; AERIAL MAP.pdf; setback waiver.pdf; volume 1305-647.pdf

SNAKE MEADOW
CLUB, INC.
GRAVEL OPERATIONS

Hi Ann-Marie,

Per our conversation this morning, the attached plan revisions and documents address the comments from the last P&Z meeting. As discussed, we will be asking to continue the public hearing following the presentation of the revised materials because the wetlands commission has not yet met to act on our request to extend the existing wetlands permit. I believe that with the 90 day timeline extension per the executive order there won't be any need for an extension letter to continue the hearing but if you find you need one, I can provide it.

The attached materials address the following:

1. 6" of planting medium is now specified for site restoration on sheet 8.
2. The 50' setback line has been shown on sheets 3-5. Because of proposed work within 50' of the common boundary between two parcels owned by the applicant, we have provided the attached declaration regarding setback waivers, an executed copy of which will be filed on the land records upon approval of the project. By way of this correspondence, we are formally requesting a waiver of the setback requirement as it relates to any common boundaries of properties owned by the applicant.
3. The attached deed shows the parcel merger per the 2015 approval on this site.
4. Sediment removal requirements (6" depth) have been added to the maintenance notes on sheets 3-5 as well as the containment berm detail on sheet 8.
5. A maximum open area of 3 acres and 2 phases has been specified in the notes on sheet 8. This would take effect after the completion and restoration of the initial phases since approximately 8 acres are currently open.
6. The aerial map shows existing conditions around the perimeter of the project as well as any buildings, etc. in the vicinity. The aerial photo is from 2016 but I don't believe there are any changes around the property perimeter.
7. The applicant would like to get the existing \$10,000 cash bond returned and provide passbook to the town for \$15,000.00 to cover the bonding requirements.

Please let me know if you need anything else.

Thanks.

David J. Held, P.E., L.S.
Provost & Rovero, Inc.
57 East Main Street
P.O. Box 191
Plainfield, CT 06374
Phone (860) 230-0856
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After recording ret. to:
Garon Camassar
181 Broad Street
New London, CT 06320

Receipt # 70855 Instr # 2016-01719
VOL 1305 PG 647
08/02/2016 02:54:09 PM
4 Pages
QUIT CLAIM
TOWN OF KILLINGLY
Elizabeth M. Wilson, Town Clerk
Local Tax \$0.00
State Tax \$0.00

QUIT CLAIM DEED - STATUTORY FORM

KNOW ALL YE MEN BY THESE PRESENTS THAT,

SNAKE MEADOW CLUB INCORPORATED, a Connecticut Non-stock Corporation having a principal place of business at 561 Snake Meadow Road, Plainfield, Connecticut, for One (\$1.00) Dollar and other good and valuable considerations received to its full satisfaction **SNAKE MEADOW CLUB INCORPORATED** of Plainfield, Connecticut, do remise, release and forever QUIT CLAIM unto the said **SNAKE MEADOW CLUB INCORPORATED**, as Grantee, with QUIT-CLAIM COVENANTS upon the Statutory Condition, the following property,

That certain piece or parcel of land, known and designated as 567 Hubbard Road, Danielson (Town of Killingly), Connecticut, which premises are more particularly bounded and described in Schedule A, attached hereto and incorporated herein by reference thereto.

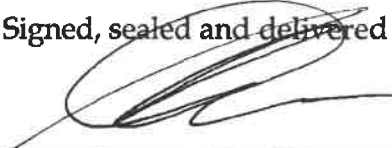
The purpose and intent of this Instrument is to merge the within described premises with other property of the Grantee located in the Town of Plainfield, and being more particularly described in Volume 44 at Page 239, and in Volume 75 at Page 546 of the Plainfield Land Records, to which reference may be had, such that the within described premises shall not be hereafter separately conveyed.

This Instrument is executed in duplicate to facilitate recording.

The circumstances surrounding the execution and delivery of this instrument are such that no conveyance tax is required.

Signed this 9th day of May, 2016.

Signed, sealed and delivered in the presence of:


Garon Camassar - Witness


Becky L. Fuller- Witness



**SNAKE MEADOW CLUB
INCORPORATED**
By: Kevin Brignole
Duly Authorized

DUBICKI & CAMASSAR, LLP
Attorneys At Law
181 Broad Street, New London, CT 06320
(860) 443-1864 (860) 443-7023 Fax

STATE OF CONNECTICUT)
) ss: New London
COUNTY OF NEW LONDON)

May 9, 2016

On this, the 9th day of May, 2016, before me, the undersigned officer, personally appeared Kevin Brignole of SNAKE MEADOW CLUB INCORPORATED, a Connecticut Non-stock Corporation, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, who acknowledged that he executed the same for the purposes therein contained as his free act and deed, as Past President and Director, aforesaid and as the free act and deed of said Corporation.


Garon Camassar
Commissioner of the Superior Court

DUBICKI & CAMASSAR, LLP
Attorneys At Law
181 Broad Street, New London, CT 06320
(860) 443-1864 (860) 443-7023 Fax

SCHEDULE A

377 Snake Meadow Road, Plainfield, Connecticut

located at Danileson, in said Town of Killingly, do give, grant, bargain, sell and confirm unto the said Snake Meadow Club, Incorporated, Six certain tracts or parcels of land situated in the Towns of Plainfield and Killingly in said Windham County, and bounded and described as follows, to wit:-

FIRST TRACT: A certain tract or parcel of land with all the buildings thereon standing, situated in said Town of Plainfield and bounded and described as follows, to wit: Beginning at the south side of Mill Bridge, in the center of Snake Meadow Brook, thence running northerly by the center of said brook 23 rods 6 ft; thence westerly about 17 rods to a stake and stones; thence southerly about 28 rods to a heap of stones on the top of a rock; thence southerly about 9 rods 6 ft to the corner of a wall adjoining land now or formerly of heirs of Harry W. Hill; thence easterly about 27 rods to the first mentioned bound, together with such flowage privileges as now are in existence in connection with the water privilege upon this tract, which original flowage privileges were reserved in a deed from Arnold H. Harrington to Sarah J. Eldridge dated December 24, 1870, and recorded in Plainfield Land Records in Vol. 23 at page 214; being the same premises described in a warranty deed from Harriet L. Penery and James W. Brown to Charles Danvers, dated October 8, 1909 and recorded in Plainfield Land Records, Vol. 31, at page 310.

SECOND TRACT: Being a part of the farm formerly known as the Chas. A. Sanderson farm, situated in the northerly part of said Town of Plainfield on the Pond Hill Road, so-called, and bounded and described as follows, to wit: Situated on the easterly side of said highway known as the Pond Hill Road and bounded westerly by said highway, northerly by highway leading from the first mentioned highway to the dwelling house now or formerly of Henry L. Spaulding; easterly by land now or formerly of said Spaulding, an old road and land now or formerly of Russell Hill, and southerly by land formerly of said Hill.

THIRD TRACT: Being a part of said Charles A. Sanderson farm so-called, situated westerly of said Pond Hill Road, bounded easterly by said highway and land now or formerly of Russell Hill, northerly by land formerly of said Hill; westerly by Snake Meadow Brook and southerly by the highway leading westerly from said Pond Hill Road to the Squar Rock Farm, so-called;

FOURTH TRACT: Being a part of said Charles A. Sanderson farm, so-called, situated westerly of said Pond Hill Road, bounded easterly by said highway; northerly by said highway running from said Pond Hill Road to the Squar Rock Farm; westerly by Snake Meadow Brook and southerly by land formerly of Charles A. Sanderson (hereinafter described as the Fifth Tract) and said Pond Hill Road.

FIFTH TRACT: A small tract of land situated on the westerly side of said Pond Hill Road and is bounded and described as follows: Beginning at the northerly end of the bridge over Snake Meadow Brook on the westerly side of said highway to the Fourth Tract just above described; thence westerly to the easterly bank of said brook; thence on said brook to the first mentioned bound. The above mentioned Second, Third, Fourth and Fifth Tracts or the same described in a warranty deed from Carrie Bell Karijohm to Charles Danvers, dated July 28, 1915 and recorded in Plainfield Land Records, Vol. 36, at page 110.

SIXTH TRACT: A certain tract of land situated in the Towns of Killingly and Plainfield and bounded and described as follows, to wit:- Beginning at the northwest corner of said tract at a heap of stones at a large White Oak tree now or formerly standing; thence running easterly 984 feet bounding northerly on land formerly of Albert Weston to a white oak tree marked now or formerly standing; thence easterly 550 feet bounding northerly on land now or formerly of Joshua Reed to a pile of stones; thence southeasterly 764 feet bounded on land now or formerly of Metay Jilcox to a pond in the wall; thence southwesterly 100 feet on said land

377 Snake Meadow Road, Plainfield, Connecticut (cont)

now or formerly of said Betsey Wilcox to a corner of wall; thence southerly on land now or formerly of Peter Hagan to a pile of stones; thence southerly 876 feet on land formerly of Russell Hill to a pile of stones; thence westerly 196 feet on land formerly of Ruth Hill to a pile of stones; thence westerly 324 feet on said land now or formerly of said Hill to the middle of Snake Meadow Brook; thence south westerly 730 feet along the middle of said Brook thence westerly 342 feet on land formerly of Charles Sanderson to a pile of stones; thence Southwesterly 487 feet on said land formerly of said Sanderson and crossing Mill Road to a pile of stones; thence westerly on said land formerly of said Sanderson to a corner of wall; thence bounded westerly on land formerly of Edward Rivers and land formerly of Jeremiah Hill to point of beginning; being the same premises described in a warranty deed from Hernidas Couture to Charles Dandereau dated May 14, 1923 and recorded in Plainfield Land Records in Vol. 41, at page 339.

Being the same premises described in a warranty deed from Charles L. Torrey to John B. Bussett dated September 21st, 1925 and recorded in Plainfield Land Records Book 43 at pages 142, 143 and 144, and recorded in Killingly Land Records Book 79 at page 85.

567 Hubbard Road, Danielson (Town of Killingly), Connecticut

"Commencing at a point on the easterly bank of Snake Meadow Brook in the southeasterly line of Hubbard Hill Road at the northwesterly corner of land now or formerly of Onnie A. Johnson and Helvi Johnson; thence south-southwesterly along the easterly bank of said Brook 520 feet, more or less, to a point; thence easterly 27 feet, more or less, to a stone wall intersection; thence S. 79 degrees 43' E. 260 feet, more or less, along stone wall to a point; thence N. 88 degrees 15' E. 22.76 feet along stone wall; thence N. 80 degrees 58' E. 46.91 feet along stone wall; thence N. 50 degrees 06' E. 82.86 feet along stone wall; thence N. 40 degrees 13' E. 84.0 feet along stone wall to a wall corner; thence S. 51 degrees 20' E. 29.74 feet along stone wall; thence S. 59 degrees 30' E. 87.87 feet along stone wall; thence S. 70 degrees 30' E. 42.56 feet to a corner of stone wall and land now or formerly of David B. and Agnes J.

Starkweather; the last ten (10) courses being along said Johnson land; thence S. 18 degrees 25' W. 262.17 feet along stone wall; thence S. 17 degrees 58' W. 750.34 feet along stone wall to a wall corner and land of Snake Meadow Club, Inc.; the last two courses being along said Starkweather land; thence N. 52 degrees 20' W. 85.34 feet along stone wall; thence N. 29 degrees 39' W. 47.13 feet along stone wall; thence N. 39 degrees 06' W. 378.41 feet along stone wall to end of stone wall; thence N. 37 degrees 40' W. 128.94 feet to an iron pin on the easterly bank of Snake Meadow Brook; thence N. 19 degrees 38' E. 143.75 feet along the east side of said Brook to a pile of stones between two rocks; thence N. 5 degrees 43' W. 344.35 feet crossing said Brook to an ancient bound; thence N. 37 degrees 14' E. 157.75 feet to a pile of stones; thence N. 36 degrees 01' E. 239.72 feet to an iron pin in a ditch; thence N. 40 degrees 43' E. 203.7 feet along said ditch to an iron pin in the southwesterly line of Hubbard Hill Road; thence in a southeasterly direction by a curve to the left along said Hubbard Hill Road 66 feet, more or less to the point and place of beginning. Containing 11.5 acres, more or less.

DECLARATION OF SETBACK WAIVER

This Declaration of Setback Waiver ("Declaration") made this ____ day of June, 2020 by Snake Meadow Club, Incorporated ("SMC"),

Whereas SMC is the owner of the following properties in the town of Killigly ("SMC Properties"):

- 1. 377 Snake Meadow Road (Map 267, Lot 1)
- 2. 561 Hubbard Road (Map 255, Lot 9)
- 3. 567 Hubbard Road (Map 255, Lot 10)
- 4. 571 Hubbard Road (Map 255, Lot 11)

Whereas SMC may apply for permits that authorize it to excavate and remove sand gravel and other earth products from the SMC Properties.

Now therefore, SMC declares the following:

- 1. SMC shall allow excavation and removal of earth products up to and over any common boundary of the SMC Properties.
- 2. The final grade along any common boundary of the SMC Properties shall be that grade determined by SMC to be in its best interest and as authorized in any permits for excavation.
- 3. This Declaration and all rights, obligations and privileges herein granted, including all benefits and burdens, shall run with the land and shall inure to the benefit of and shall be binding upon the successors and assigns of SMC for any of the SMC Properties.
- 4. This Declaration may be amended or modified only upon the written consent of SMC and the successors and assigns for any of the SMC Properties.
- 5. In the event any provision of this Declaration shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.
- 6. This Declaration shall be governed in all respects by the laws of the State of Connecticut without regard to the principles of conflict of laws.
- 7. If any action at law or equity is necessary to enforce or interpret terms of this Declaration, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.
- 8. All claims or controversies arising out of or related to this Declaration shall be submitted to and resolved by binding arbitration. The American Arbitration Association shall conduct the arbitration unless the parties mutually agree to use an alternative arbitration service and the costs of the arbitration shall be borne equally by the parties.

IN WITNESS WHEREOF, the party hereto has executed this Declaration as of the date set forth in the first paragraph hereof.

Snake Meadow Club, Incorporated

Subscribed and sworn to me on the ____ day of June, 2020

By: _____
Name: Kevin Brignole
Its: Treasurer

Notary

PROPOSED GRAVEL EXCAVATION

SNAKE MEADOW ROAD & HUBBARD ROAD
KILLINGLY, CONNECTICUT

PROPERTY OWNER:

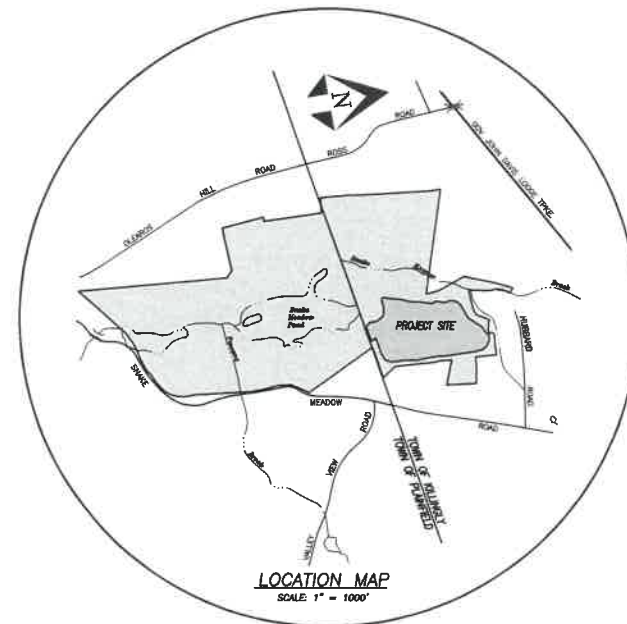
SNAKE MEADOW CLUB, INCORPORATED

APPLICANT:

SNAKE MEADOW CLUB, INCORPORATED

LEGEND

○	IRON PIN OR PIPE FOUND
●	DRILL HOLE FOUND
●	DRILL HOLE SET
●	STONE PILE
*	WIRE FENCE REMAINS
#	WETLAND FLAG
⊠	TEST PIT
~~~~~	EXISTING TREELINE
-----	STONE WALL
-----	STONE WALL REMAINS
-----	EXISTING INDEX CONTOUR
-----	EXISTING CONTOUR
-----	PROPOSED CONTOUR
-----	PHASE LINE
~~~~~	PROPOSED CLEARING LIMITS
-----	PROPOSED SILT FENCE
-----	PROPOSED STAKED HAYBALES
-----	LIMIT OF FLOOD ZONE "A"



INDEX TO DRAWINGS

TITLE	SHEET No.
COVER SHEET	1 OF 8
PROPERTY SURVEY	2 OF 8
OVERALL EXCAVATION & PHASING PLAN	3 OF 8
SITE PLAN No. 1	4 OF 4
SITE PLAN No. 2	5 OF 8
EXCAVATION CROSS SECTION A-A	6 OF 8
EXCAVATION CROSS SECTION B-B	7 OF 8
DETAIL SHEET	8 OF 8

PREPARED BY:

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning
Structural • Mechanical • Architectural Engineering

57 East Main Street, P.O. Box 191
Plainfield, Connecticut 06374
(860) 230-0856 - FAX: (860) 230-0860
info@prorovinc.com
www.prorovinc.com

REVISIONS	
DATE	DESCRIPTION
6/12/2020	P&Z COMMENTS

MARCH 20, 2020

APPROVED BY THE TOWN OF
KILLINGLY PLANNING AND ZONING COMMISSION

Special Permit No.: _____
Applicant: _____
Date Approved: _____
Chairman: _____
Date: _____

APPROVED BY THE TOWN OF
KILLINGLY INLAND WETLANDS COMMISSION

CHAIRMAN _____ DATE _____

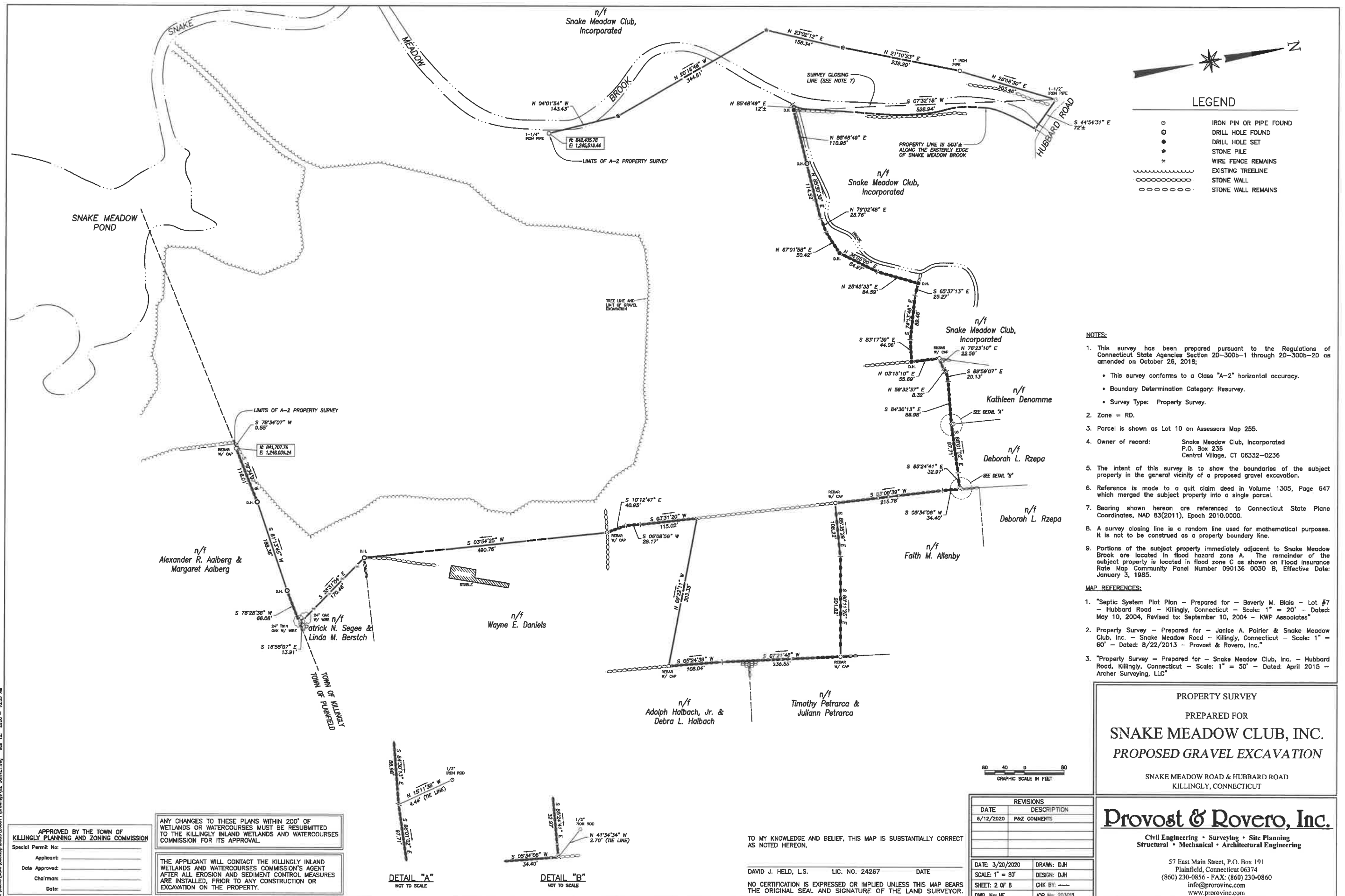
ANY CHANGES TO THESE PLANS WITHIN 200' OF
WETLANDS OR WATERCOURSES MUST BE RESUBMITTED
TO THE KILLINGLY INLAND WETLANDS AND WATERCOURSES
COMMISSION FOR ITS APPROVAL.

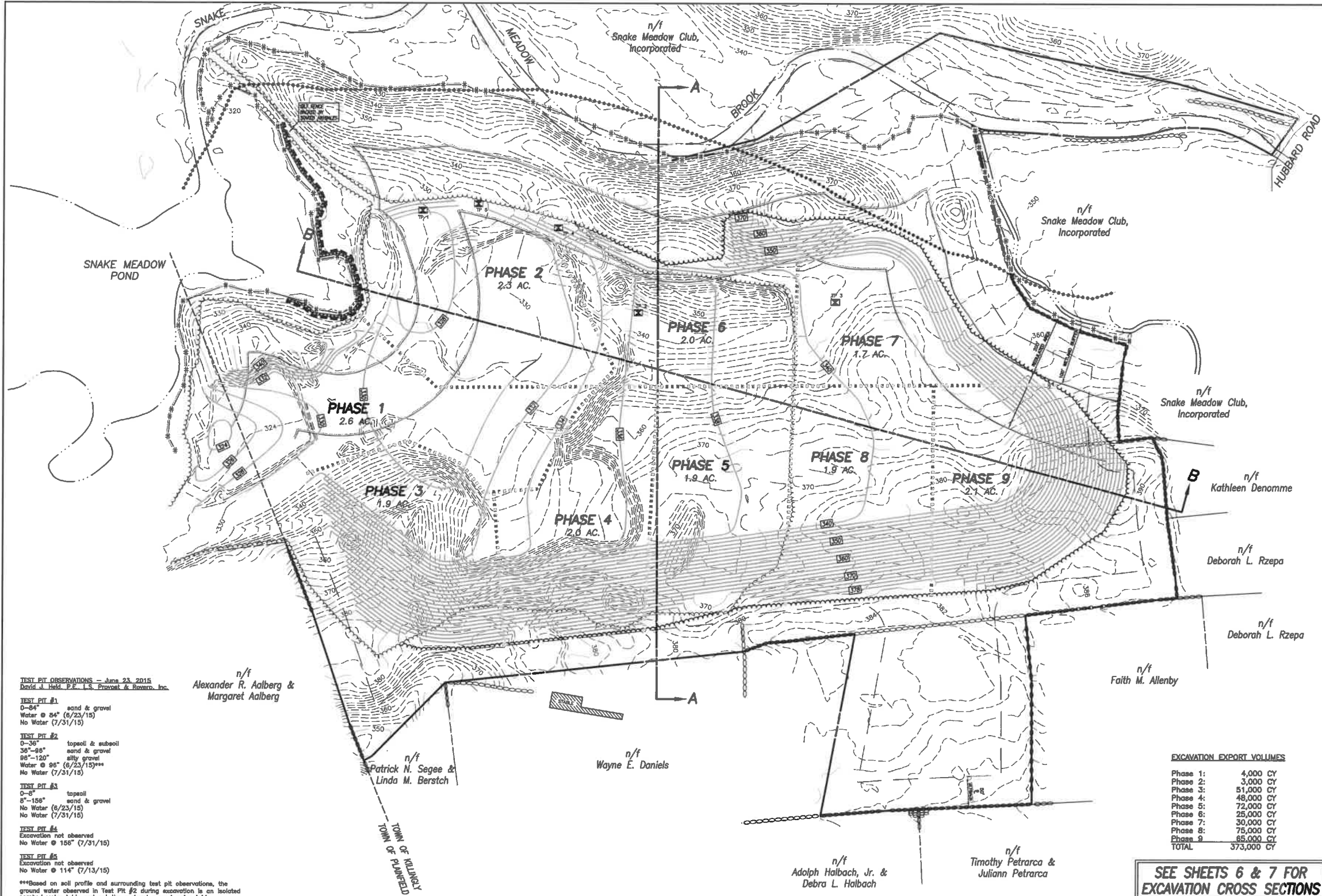
THE APPLICANT WILL CONTACT THE KILLINGLY INLAND
WETLANDS AND WATERCOURSES COMMISSION'S AGENT
AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES
ARE INSTALLED, PRIOR TO ANY CONSTRUCTION OR
EXCAVATION ON THE PROPERTY.

ENGINEER _____ DATE _____

SHEET 1 OF 8
JOB NO. 203011
DWG NO. 18'

#20-1242 ADDITIONAL SUBMITTAL





TEST PIT OBSERVATIONS - June 23, 2015
David J. Held, P.E., L.S. Provost & Rovero, Inc.

TEST PIT #1
0-8" sand & gravel
Water @ 54" (6/23/15)
No Water (7/31/15)

TEST PIT #2
0-36" topsoil & subsoil
36"-98" sand & gravel
98"-120" silty gravel
Water @ 98" (6/23/15)***
No Water (7/31/15)

TEST PIT #3
0-8" topsoil
8"-156" sand & gravel
No Water (6/23/15)
No Water (7/31/15)

TEST PIT #4
Excavation not observed
No Water @ 156" (7/31/15)

TEST PIT #5
Excavation not observed
No Water @ 114" (7/13/15)

***Based on soil profile and surrounding test pit observations, the ground water observed in Test Pit #2 during excavation is an isolated perched water table and not the regional ground water table.

APPROVED BY THE TOWN OF
KILLINGLY PLANNING AND ZONING COMMISSION

Special Permit No:

Applicant:

Date Approved:

Chairman:

Date:

ANY CHANGES TO THESE PLANS WITHIN 200' OF
WETLANDS OR WATERCOURSES MUST BE RESUBMITTED
TO THE KILLINGLY INLAND WETLANDS AND WATERCOURSES
COMMISSION FOR ITS APPROVAL.

THE APPLICANT WILL CONTACT THE KILLINGLY INLAND
WETLANDS AND WATERCOURSES COMMISSION'S AGENT
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EXCAVATION ON THE PROPERTY.

EXCAVATION EXPORT VOLUMES

Phase 1:	4,000 CY
Phase 2:	3,000 CY
Phase 3:	51,000 CY
Phase 4:	48,000 CY
Phase 5:	72,000 CY
Phase 6:	25,000 CY
Phase 7:	30,000 CY
Phase 8:	75,000 CY
Phase 9:	85,000 CY
TOTAL	373,000 CY

SEE SHEETS 6 & 7 FOR
EXCAVATION CROSS SECTIONS

80 40 0 80
GRAPHIC SCALE IN FEET

REVISIONS	
DATE	DESCRIPTION
6/12/2020	P&Z COMMENTS

DATE: 3/20/2020	DRAWN: DJH
SCALE: 1" = 80'	DESIGN: DJH
SHEET: 3 OF 8	CHK BY: ---
DWG. No: HF	JOB No: 203011

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT
AS NOTED HEREON.

DAVID J. HELD, L.S. LIC. NO. 24267 DATE

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS
THE ORIGINAL SEAL AND SIGNATURE OF THE LAND SURVEYOR.

OVERALL SITE & PHASING PLAN

PREPARED FOR
SNAKE MEADOW CLUB, INC.
PROPOSED GRAVEL EXCAVATION

SNAKE MEADOW ROAD & HUBBARD ROAD
KILLINGLY, CONNECTICUT

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning
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Plainfield, Connecticut 06374
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info@prorovinc.com
www.prorovinc.com



- ### EXCAVATION EXPORT VOLUMES

STORMWATER INSPECTION & MAINTENANCE NOTES:

- SITE PLAN No. 2**

PREPARED FOR

SNAKE MEADOW CLUB, INC.
PROPOSED GRAVEL EXCAVATION

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 KILLINGLY, CONNECTICUT

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www.prorovinc.com

REVISIONS	
DATE	DESCRIPTION
6/12/2020	P&Z COMMENTS

DATE: 3/20/2020	DRAWN: DJH
SCALE: 1" = 40'	DESIGN: DJH
SHEET: 5 OF 8	CHK BY: ---
DWG. No: HF	JOB No: 203011

I HAVE REVIEWED THE FLAGGED INLAND WETLANDS LOCATION SHOWN ON THIS PLAN AND THEY APPEAR TO BE SUBSTANTIALLY CORRECT.

Certified Soil Scientist
Date

MATCH LINE - SEE SITE PLAN No. 1

**APPROVED BY THE TOWN OF
KILLINGLY PLANNING AND ZONING COMMISSION**

Special Permit No:

Applicant:

Data Approved:

Chairman:

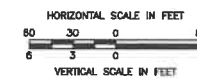
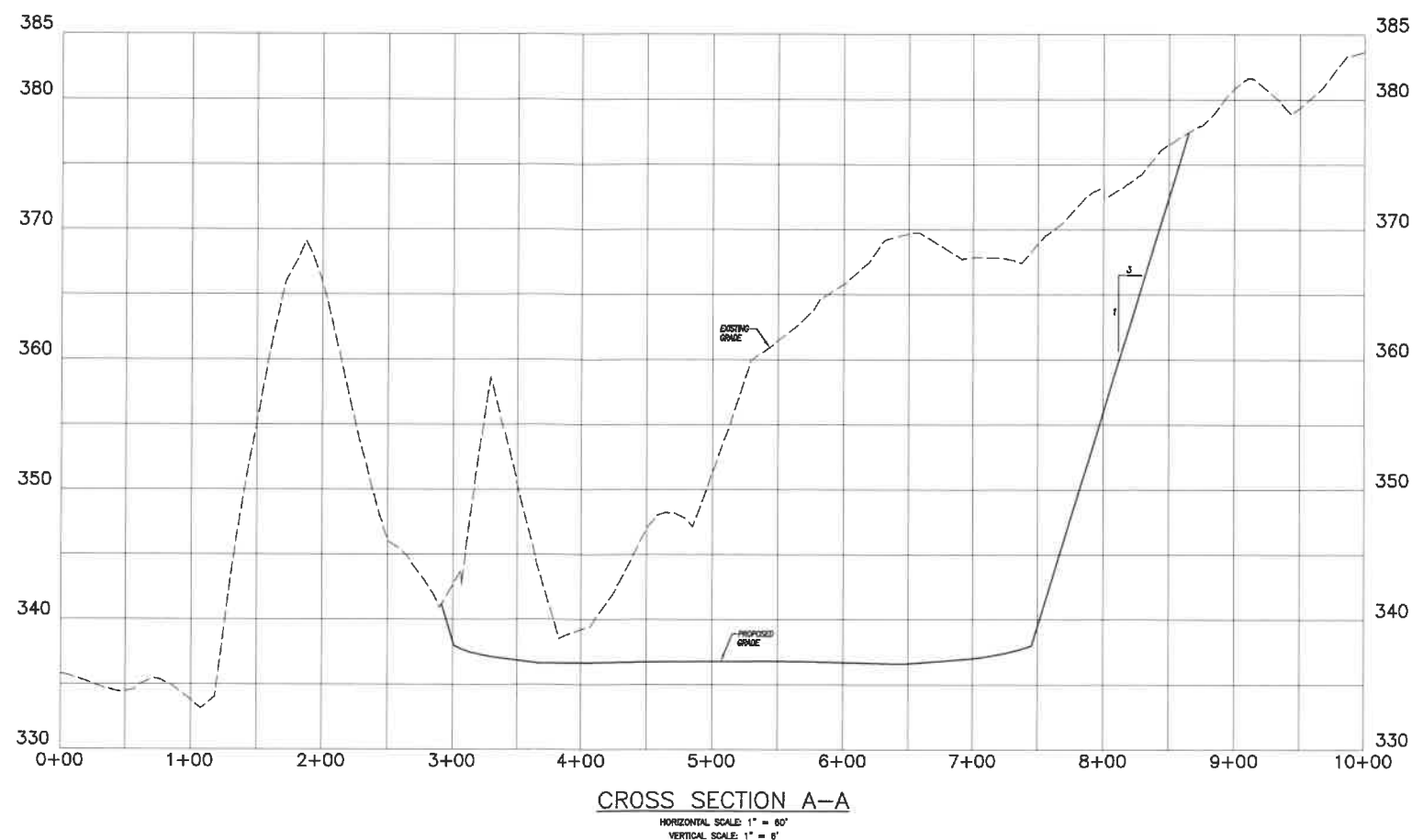
Date: _____

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TO THE KILLINGLY INLAND WETLANDS AND WATERCOURSES
COMMISSION FOR ITS APPROVAL.

THE APPLICANT WILL CONTACT THE KILLINGLY INLAND WETLANDS AND WATERCOURSES COMMISSION'S AGENT AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED, PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON THE PROPERTY.

ENGINEER

DATE _____



EXCAVATION CROSS SECTION A-A

PREPARED FOR

SNAKE MEADOW CLUB, INC.
PROPOSED GRAVEL EXCAVATION

SNAKE MEADOW ROAD & HUBBARD ROAD
KILLINGLY, CONNECTICUT

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REVISONS	
DATE	DESCRIPTION
6/12/2020	P&Z COMMENTS

DATE: 3/20/2020	DRAWN: DJH
SCALE: AS SHOWN	DESIGN: DJH
SHEET: 6 OF 8	CHK BY: ---
DWG. No: HF	JOB No: 203011

APPROVED BY THE TOWN OF
KILLINGLY PLANNING AND ZONING COMMISSION

Special Permit No: _____

Applicant: _____

Date Approved: _____

Chairman: _____

Date: _____

ANY CHANGES TO THESE PLANS WITHIN 200' OF WETLANDS OR WATERCOURSES MUST BE RESUBMITTED TO THE KILLINGLY INLAND WETLANDS AND WATERCOURSES COMMISSION FOR ITS APPROVAL

THE APPLICANT WILL CONTACT THE KILLINGLY INLAND WETLANDS AND WATERCOURSES COMMISSION'S AGENT AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED, PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON THE PROPERTY.

ENGINEER _____ DATE _____

EROSION AND SEDIMENT CONTROL PLAN:

REFERENCE IS MADE TO:

1. Connecticut Guidelines for Soil Erosion and Sediment Control 2002 (2002 Guidelines).
2. Soil Survey of Connecticut, N.R.C.S.

SILT FENCE INSTALLATION AND MAINTENANCE:

1. Dig a 6" deep trench on the uphill side of the barrier location.
2. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.
3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
4. Inspect and repair barrier after heavy rainfall.
5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
6. Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands commission.
7. Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because:
 - the fence has been overtopped, undercut or bypassed by runoff water,
 - the fence has been moved out of position (knocked over), or
 - the geotextile has decomposed or been damaged.

HAY BALE INSTALLATION AND MAINTENANCE:

1. Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other.
2. Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be wedged with straw to prevent water from passing between the bales.
3. Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
4. Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the inland wetlands commission.
5. Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because:
 - the barrier has been overtopped, undercut or bypassed by runoff water,
 - the barrier has been moved out of position, or
 - the hay bales have deteriorated or been damaged.

TEMPORARY VEGETATIVE COVER:

SEED SELECTION

Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure TS-2 in the 2002 Guidelines.

TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.

SITE PREPARATION

Install needed erosion control measures such as diversions, grade stabilization structures, sediment basins and grassed waterways.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application, and mulch anchoring.

SEEDBED PREPARATION

Loosen the soil to a depth of 3-4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing, harrowing, raking or dragging with a section of chain link fence. Avoid excessive compaction of the surface by equipment traveling back and forth over the surface. If the slope is tracked, the cleat marks shall be perpendicular to the anticipated direction of the flow of surface water.

If soil testing is not practical or feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10-10-10 or equivalent. Additionally, lime may be applied using rates given in Figure TS-1 in the 2002 Guidelines.

SEEDING

Apply seed uniformly by hand cyclone seeder, drill, cultipacker type seeder or hydroseeder at a minimum rate for the selected species. Increase seeding rates by 10% when hydroseeding.

MULCHING

Temporary seedlings made during optimum seeding dates shall be mulched according to the recommendations in the 2002 Guidelines. When seeding outside of the recommended dates, increase the application of mulch to provide 95%-100% coverage.

MAINTENANCE

Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Repair eroded areas and install additional controls if required to prevent recurrence of erosion.

Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative cover).

PERMANENT VEGETATIVE COVER:

Refer to Permanent Seeding Measure in the 2002 Guidelines for specific applications and details related to the installation and maintenance of a permanent vegetative cover. In general, the following sequence of operations shall apply:

1. Subsoil and topsoil (growing medium) will be replaced once the excavation and grading has been completed. The growing medium will be spread at a minimum compacted depth of 6".
2. Once the growing medium has been spread, all stones 2" or larger in any dimension will be removed (unless desired for landscape aesthetics) as well as debris which would hinder the establishment and maintenance of permanent vegetation.
3. Apply agricultural ground limestone at a rate of 2 tons per acre or 100 lbs. per 1000 s.f. Apply 10-10-10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per 1000 s.f. or as otherwise determined by laboratory soil tests. Work time and fertilizer into the soil to a depth of 4".
4. Inspect seedbed before seeding. If traffic has compacted the soil, refill compacted areas.
5. Apply the chosen grass seed mix. The recommended seeding dates are: April 1 to June 15 & August 15 - October 1.
6. Following seeding, firm seedbed with a roller. Mulch immediately following seeding. If a permanent vegetative stand cannot be established by September 30, apply a temporary cover on the topsoil such as netting, mat or organic mulch.

EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erosion and sediment controls is to absorb erosional energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequate erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

- Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.
- Route traffic patterns within the site to avoid existing or newly planted vegetation.
- Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Sequence the construction of storm drainage systems so that they are operational as soon as possible during construction. Ensure all outlets are stable before outletting storm drainage flow into them.
- Schedule construction so that final grading and stabilization is completed as soon as possible.

SLOW THE FLOW

Detachment and transport of eroded soil must be kept to a minimum by absorbing and reducing the erosive energy of water. The erosive energy of water increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases during development as a result of reduced infiltration rates caused by the removal of existing vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

- Use diversions, stone dikes, silt fences and similar measures to break flow lines and dissipate storm water energy.
- Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion.

KEEP CLEAN RUNOFF SEPARATED

Clean runoff should be kept separated from sediment laden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off-site generated runoff with sediment laden runoff generated on-site until after adequate filtration of on-site waters has occurred.

- Segregate construction waters from clean water.
- Divert site runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the development until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

While it may seem less complicated to collect all waters to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub-drainage basins within the site. By reducing sediment loading from within the site, the chance of perimeter control failure and the potential off-site damage that it can cause is reduced. It is generally more expensive to correct off-site damage than it is to install proper internal controls.

- Control erosion and sedimentation in the smallest drainage area possible. It is easier to control erosion than to contend with sediment after it has been carried downstream and deposited in unwanted areas.
- Direct runoff from small disturbed areas to adjoining undisturbed vegetated areas to reduce the potential for concentrated flows and increase settlement and filtering of sediments.
- Concentrated runoff from development should be safely conveyed to stable outlets using rip rapped channels, waterways, diversions, storm drains or similar measures.
- Determine the need for sediment basins. Sediment basins are required on larger developments where major grading is planned and where it is impossible or impractical to control erosion at the source. Sediment basins are needed on large and small sites when sensitive areas such as wetlands, watercourses, and streams would be impacted by off-site sediment deposition. Do not locate sediment basins in wetlands or permanent or intermittent watercourses. Sediment basins should be located to intercept runoff prior to its entry into the wetland or watercourse.
- Grade and landscape around buildings and septic systems to divert water away from them.

EXCAVATION NOTES:

1. Excavation shall be completed in accordance with the phasing plan contained herein. Prior to the start of sand and gravel removal, any topsoil and subsoil shall be stripped and stockpiled within or adjacent to the respective phase for use in restoration. Topsoil and subsoil stockpiles shall be protected with a temporary or permanent vegetative cover. The selection of an appropriate vegetative cover will depend on the anticipated duration of the phase.
2. Following the completion of phases 1-3, a maximum of 3 acres shall be in an open or unrestored condition. The 3 acre maximum open area shall not encompass more than two phases.
3. Proposed finish grade elevations shown hereon are based on test pits with standpipes installed at the locations shown. It is assumed that the regional groundwater elevation is located at the bottom of each test pit where water was not encountered. The applicant may excavate additional test pits or borings as the proposed finish grades are approached to determine if additional material may be removed while maintaining 6" of separation between finish grades and the regional groundwater table. All such test pits and/or borings shall be witnessed by a professional engineer and/or the Killingly Engineering Department and each test pit or boring shall be equipped with a standpipe or monitoring well to allow long term monitoring of the groundwater levels. The applicant shall notify the Killingly Planning Department if excavation below the proposed grades shown hereon is desired and shall not proceed with such excavation without the approval of the Planning Department.
4. No topsoil or subsoil stripped from the excavation area shall be sold or removed from the property.
5. No stumps shall be buried on the site. All stumps shall be stockpiled on the ground surface, chipped or removed from the site and properly disposed of.
6. Excavation of each phase shall be completed in a manner which ensures containment of sediment laden stormwater within the active excavation area. In general, this can be accomplished by progressing with a "downcutting" excavation method and maintaining an active excavation face at a lower elevation than the surrounding grades. If any perimeter erosion and sedimentation controls are required to prevent transport of sediment laden stormwater from the active area, they shall be installed prior to excavation and maintained until no longer required.
7. No blasting is anticipated for completion of the work shown. If blasting is required, the owner is responsible for obtaining all necessary permits.
8. The owner and/or site operator shall provide adequate dust control to prevent any off-site nuisance. Dust control on haul roads shall be accomplished with the application of water.

9. In general, excavation work will be completed by a site operator/contractor and not the property owner. Excavated material will not be sold to the general public directly at the subject property. Excavated material will be removed from the site for further processing, sale or use.
10. The hours of operation shall be: 7:00 am - 8:00 pm, Monday - Friday
7:00 am - 12:00 pm, Saturday
No operations shall take place on Sundays or national holidays. Operations outside of the normal hours will be allowed only with the permission of the Killingly Planning & Zoning Commission.
11. The owner/operator shall install any necessary barricades or barriers to provide protection around the perimeter of open excavation faces and steep slopes.
12. Excavation operations shall be completed in accordance with all appropriate Mine Safety & Health Administration (MSHA) rules and regulations.
13. On-site processing of material shall be limited to dry screening. No processing equipment shall be placed or used within 200' of any property boundary or within 500' of any residence.

RESTORATION NOTES:

The intended use for the permitted area following completion of excavation is managed upland game bird and other wildlife habitat.

1. Restoration of each phase shall take place immediately following the completion of excavation of the phase. It is the intention that Phases 1, and 2 be restored to the extent possible prior to continuing excavation of the active face in Phase 3. The site operator shall maintain haul roads and a sufficient work area to continue excavation into future phases.
2. Areas shown to be filled to provide the required final grade shall be filled with silt, silty sand and/or fine sand. In general, this material may be either on-site overburden or material unsuitable for other uses or washing fines from off-site processing. The purpose of this material is to provide water holding capability for the restored area and allow for establishment of the desired vegetative cover.
3. Final restoration shall be accomplished by spreading stockpiled topsoil, subsoil and/or other growing medium to a minimum thickness of 6" and seeding for a permanent vegetative cover. The permanent vegetative cover may be a suitable wildlife or game bird habitat mix or the following mixture which is suitable for use in all locations:

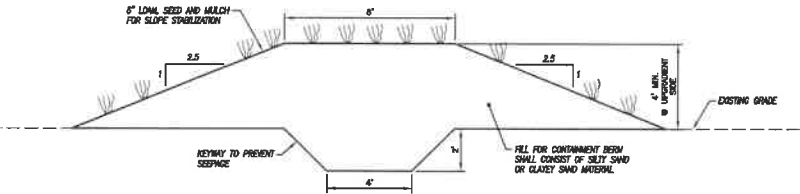
Variety	Lbs./Acre
Switchgrass (Blackwell, Shelter, Cave-In-rock)	4.0
Big Bluestem (Nagay, Kow)	4.0
Little Bluestem (Blaze, Aldous, Camper)	2.0
Sand Lovegrass (NE-27, Bend)	1.5
Birds-foot Trefol (Empire, Viking)	2.0
TOTAL	13.5

4. Hay or straw mulch shall be utilized on 3:1 excavation side slopes to provide temporary stabilization during establishment of permanent vegetative cover.
5. Fertilizer and lime shall be provided as required to establish a permanent vegetative cover based on laboratory soil testing results.
6. Selective fruit trees, brambles and other wildlife food plants may be planted at the owner's discretion to support the desired habitat creation.

EXCAVATION EQUIPMENT

The following equipment is the anticipated maximum for use on site during the duration of excavation and restoration operations:

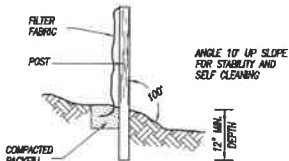
- 2 wheel loaders (Cat 980 or similar)
- 1 large excavator (Cat 345 or similar)
- 1 large dozer (Cat D8 or similar)
- 1 medium dozer (Cat D6 or similar)
- Misc. equipment for restoration of excavated areas



CONTAINMENT BERM SHALL BE INSPECTED FOLLOWING ANY MINOR EVENT GREATER THAN 1\"/>

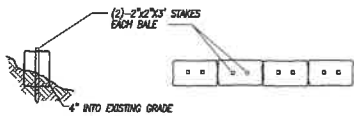
CONTAINMENT BERM CROSS SECTION

NOT TO SCALE



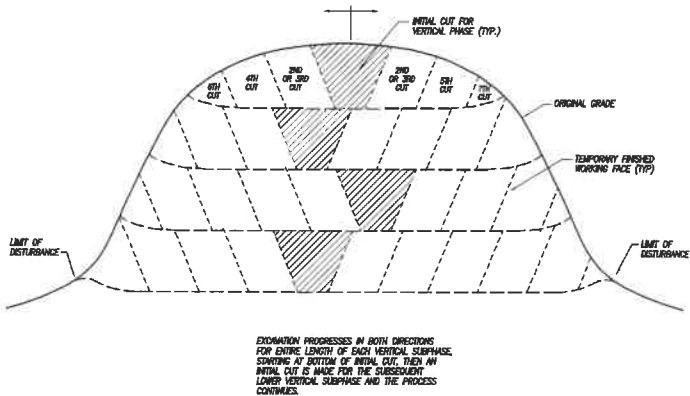
SILT FENCE

NOT TO SCALE



HAYBALE BARRIER

NOT TO SCALE



DETAIL SHOWING "DOWNCUTTING" EXCAVATION METHOD

NOT TO SCALE

DETAIL SHEET
PREPARED FOR
SNAKE MEADOW CLUB, INC.
PROPOSED GRAVEL EXCAVATION

SNAKE MEADOW ROAD & HUBBARD ROAD
KILLINGLY, CONNECTICUT

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning
Structural • Mechanical • Architectural Engineering

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REVISIONS	
DATE	DESCRIPTION
6/12/2020	P&Z COMMENTS
DATE: 3/20/2020	DRAWN: DJH
SCALE: AS SHOWN	DESIGN: DJH
SHEET: B OF B	CHK BY: ---
DWG. No: HF	JOB No: 203011

APPROVED BY THE TOWN OF
KILLINGLY PLANNING AND ZONING COMMISSION

Special Permit No: _____

Applicant: _____

Date Approved: _____

Chairman: _____

Date: _____

ANY CHANGES TO THESE PLANS WITHIN 200' OF
WETLANDS OR WATERCOURSES MUST BE RESUBMITTED
TO THE KILLINGLY INLAND WETLANDS AND WATERCOURSES
COMMISSION FOR ITS APPROVAL.

THE APPLICANT WILL CONTACT THE KILLINGLY INLAND
WETLANDS AND WATERCOURSES COMMISSION'S AGENT
AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES
ARE INSTALLED, PRIOR TO ANY CONSTRUCTION OR
EXCAVATION ON THE PROPERTY.

ENGINEER

DATE

