

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Chilmark, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for a Permit to Construct  Repair ( ) Upgrade ( ) Abandon ( ) -  Complete System  Individual Components

Location <u>157 North Road A, B</u>	Owner's Name <u>Vagdos Vineyard Properties LLC, do Markos Panthos &amp; Sharon, LLP</u>
Map/Parcel# <u>Map 4 Parcel 22.2</u>	Address <u>685 Third Avenue, 4th Floor, New York, NY 10017</u>
Lot#	Telephone#
Installer's Name	Designer's Name <u>George Sourah, P.E.</u>
Address	Address <u>P.O. Box 4458, Vineyard Haven, MA 02568</u>
Telephone#	Telephone# <u>508-693-9933</u>

Type of Building Proposed Single-Family Residence and Future Addition + Addition in Existing Single-Family Residence Lot Size 26.0+ <sup>acres</sup> <sub>sq. ft.</sub>  
 Dwelling - No. of Bedrooms 3 + 1 + 1 = 5 total Garbage grinder ( )  
 Other - Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ), Cafeteria ( )  
 Other Fixtures \_\_\_\_\_  
 Design Flow (min. required) 330 + 110 + 110 = 550 gpd Calculated design flow 550 Design flow provided 550 gpd  
 Plan: Date July 14, 2023 Number of sheets 1 Revision Date N/A  
 Title New Sewage Disposal System in The Town of Chilmark  
 Description of Soil(s) See soils log  
 Soil Evaluator Form No. \_\_\_\_\_ Name of Soil Evaluator George Sourah Date of Evaluation March 22, 2023

DESCRIPTION OF REPAIRS OR ALTERATIONS \_\_\_\_\_

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

Signed George Sourah (Representative) Date 7/23/2023

Inspections \_\_\_\_\_

COMMONWEALTH OF MASSACHUSETTS

Board of Health, \_\_\_\_\_, MA.

CERTIFICATE OF COMPLIANCE

Description of Work:  Individual Component(s)  Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed ( ), Repaired ( ), Upgraded ( ), Abandoned ( )

by: \_\_\_\_\_

at \_\_\_\_\_

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. \_\_\_\_\_, dated \_\_\_\_\_, Approved Design Flow \_\_\_\_\_ (gpd)

Installer: \_\_\_\_\_

Designer: \_\_\_\_\_ Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.

COMMONWEALTH OF MASSACHUSETTS

Board of Health, \_\_\_\_\_, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct ( ) Repair ( ) Upgrade ( ) Abandon ( ) an individual sewage disposal system at \_\_\_\_\_ as described in the application for

Disposal System Construction Permit No. \_\_\_\_\_, dated \_\_\_\_\_.

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.

20943

**SOURATI ENGINEERING GROUP LLC**

107 BEACH RD SUITE 202, PO BOX 4458  
VINEYARD HAVEN, MA 02568  
PH. (508) 693-9933

**MARTHA'S VINEYARD BANK**

53-7292/2113



6/17/2023

PAY TO THE ORDER OF

Town of Chatham

\$ 150.00

one hundred fifty and 00/100

DOLLARS

Security features. Details on back.

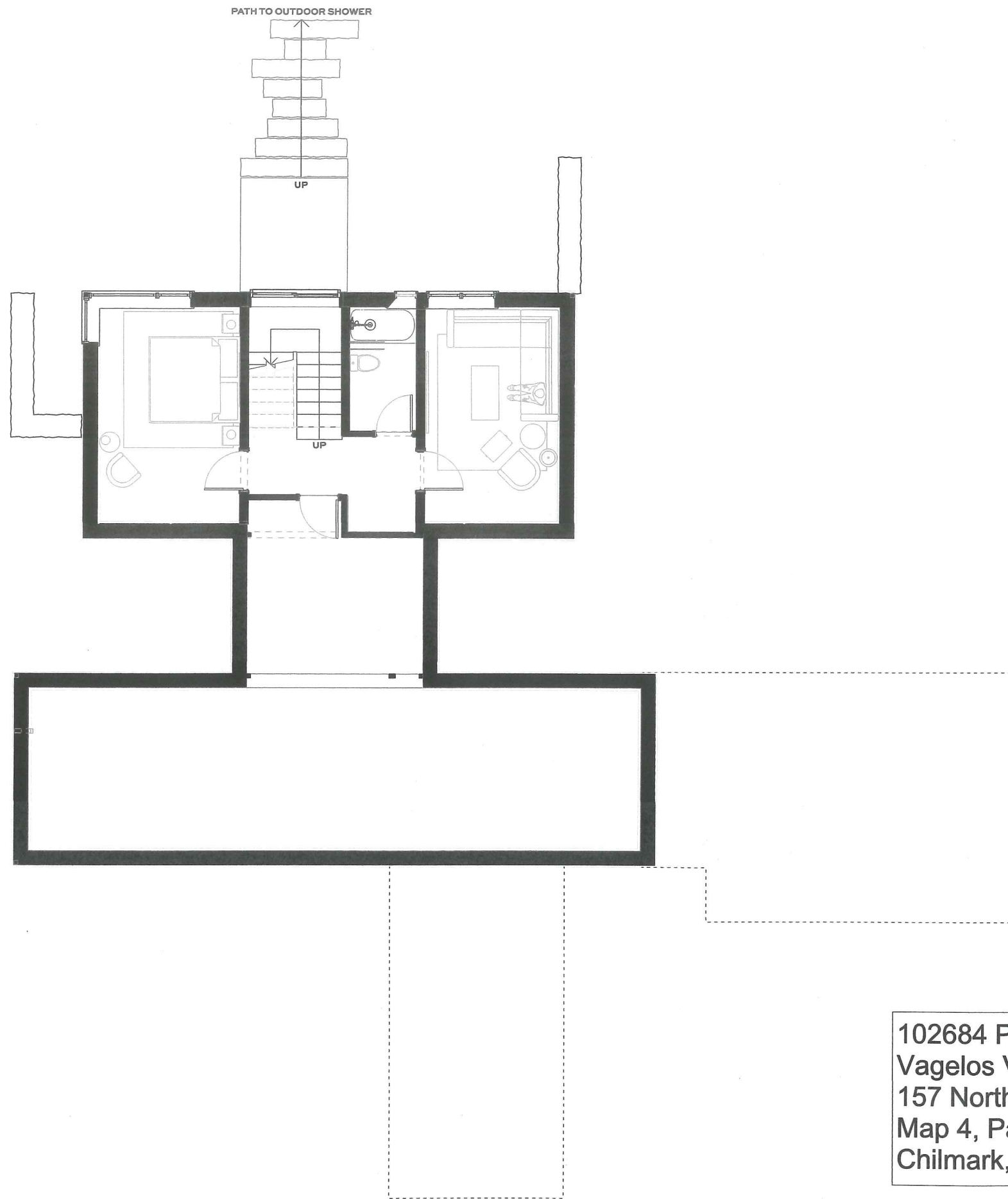


*George Sourati*

AUTHORIZED SIGNATURE

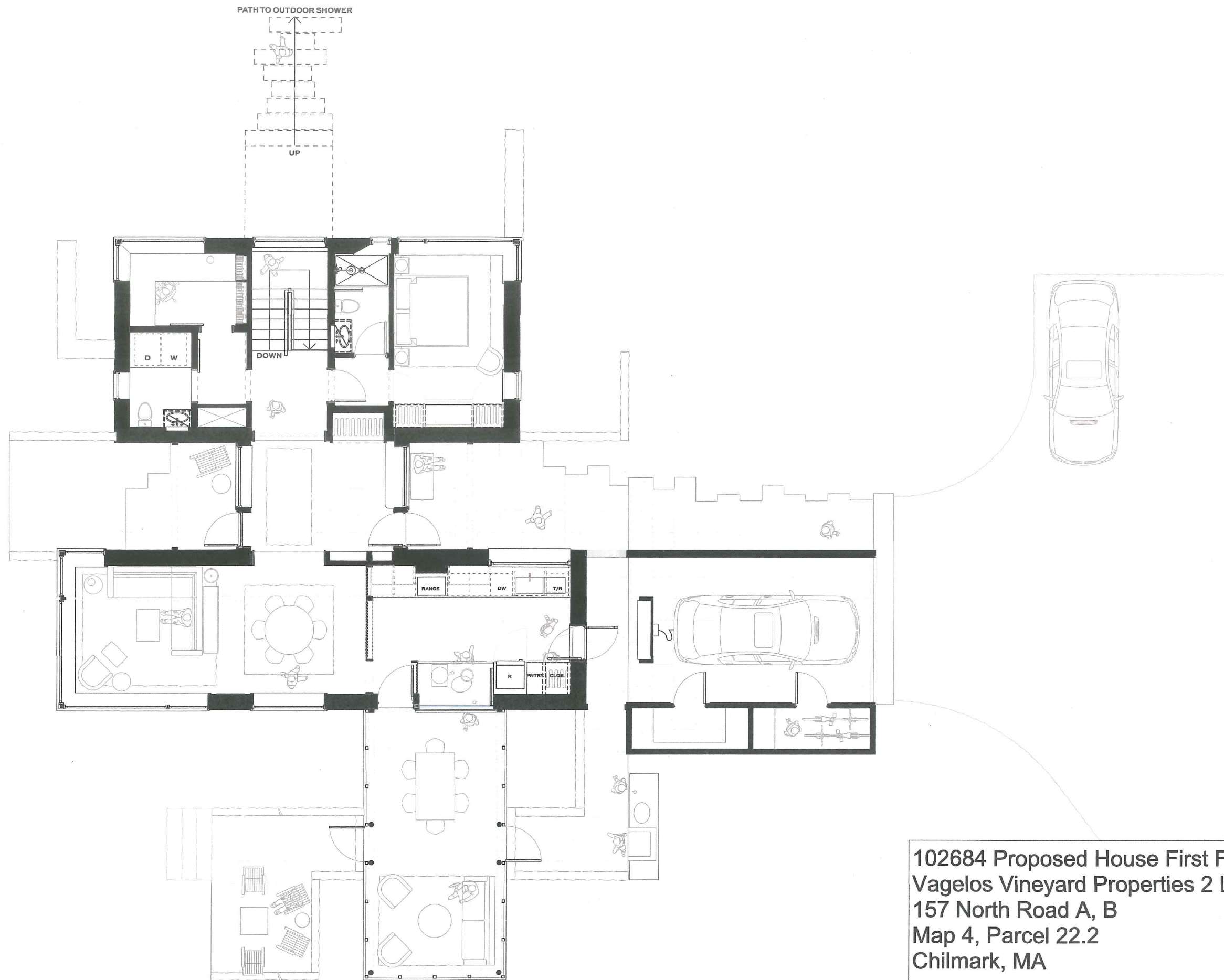
MEMO 102689 Vagelos BOH Filing Fee

⑆020943⑆ ⑆211372925⑆ 45 255593⑆



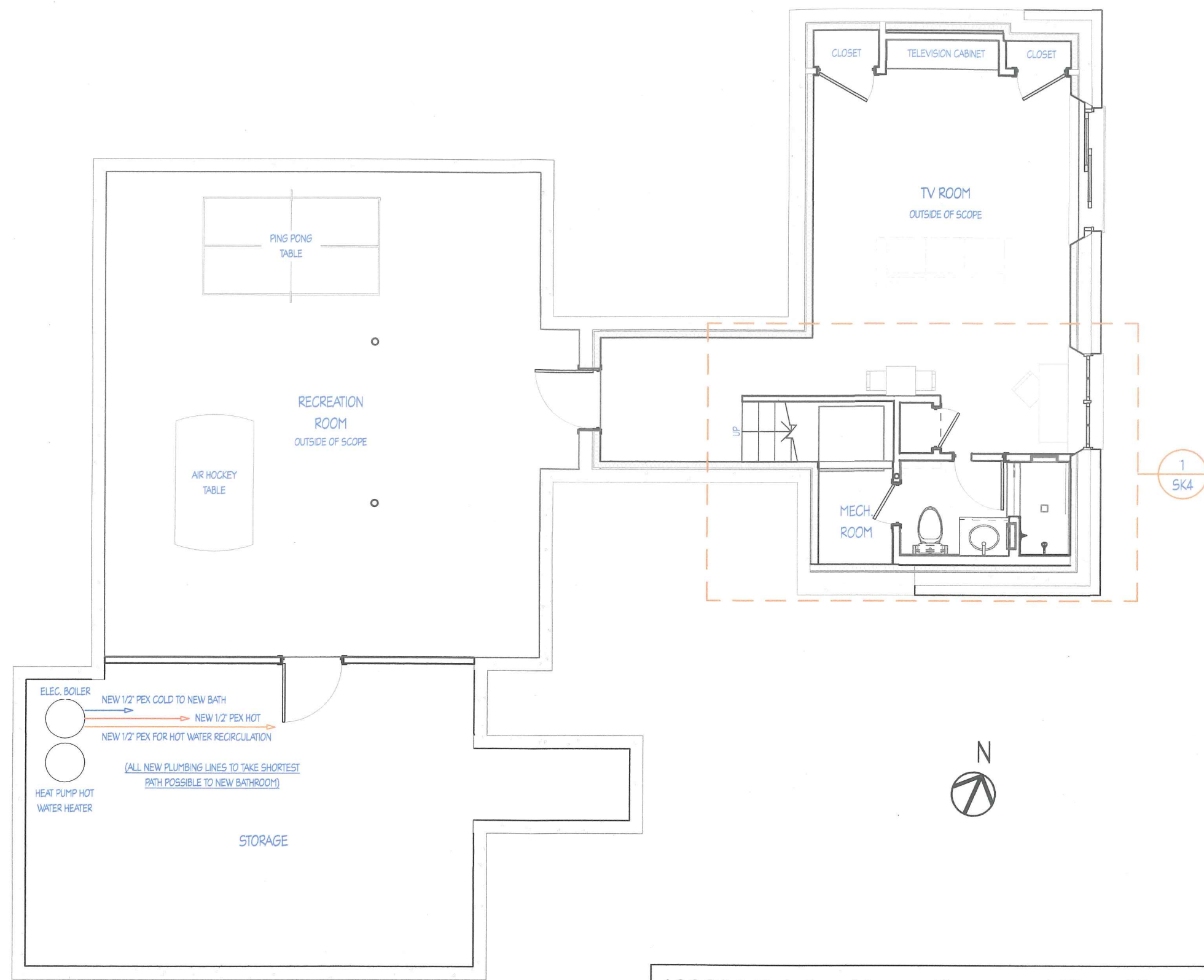
102684 Proposed House Basement Floor Plan  
Vagelos Vineyard Properties 2 LLC  
157 North Road A, B  
Map 4, Parcel 22.2  
Chilmark, MA





102684 Proposed House First Floor Plan  
Vagelos Vineyard Properties 2 LLC  
157 North Road A, B  
Map 4, Parcel 22.2  
Chilmark, MA

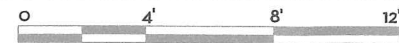
File: VAGELOS TRAILHOUSE BASEMENT BATH Print Date: 3/15/23



1

# NEW BASEMENT PLAN

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



102684 Existing House Basement Floor Plan (Proposed)  
 Vagelos Vineyard Properties 2 LLC  
 157 North Road A, B  
 Map 4, Parcel 22.2  
 Chilmark, MA

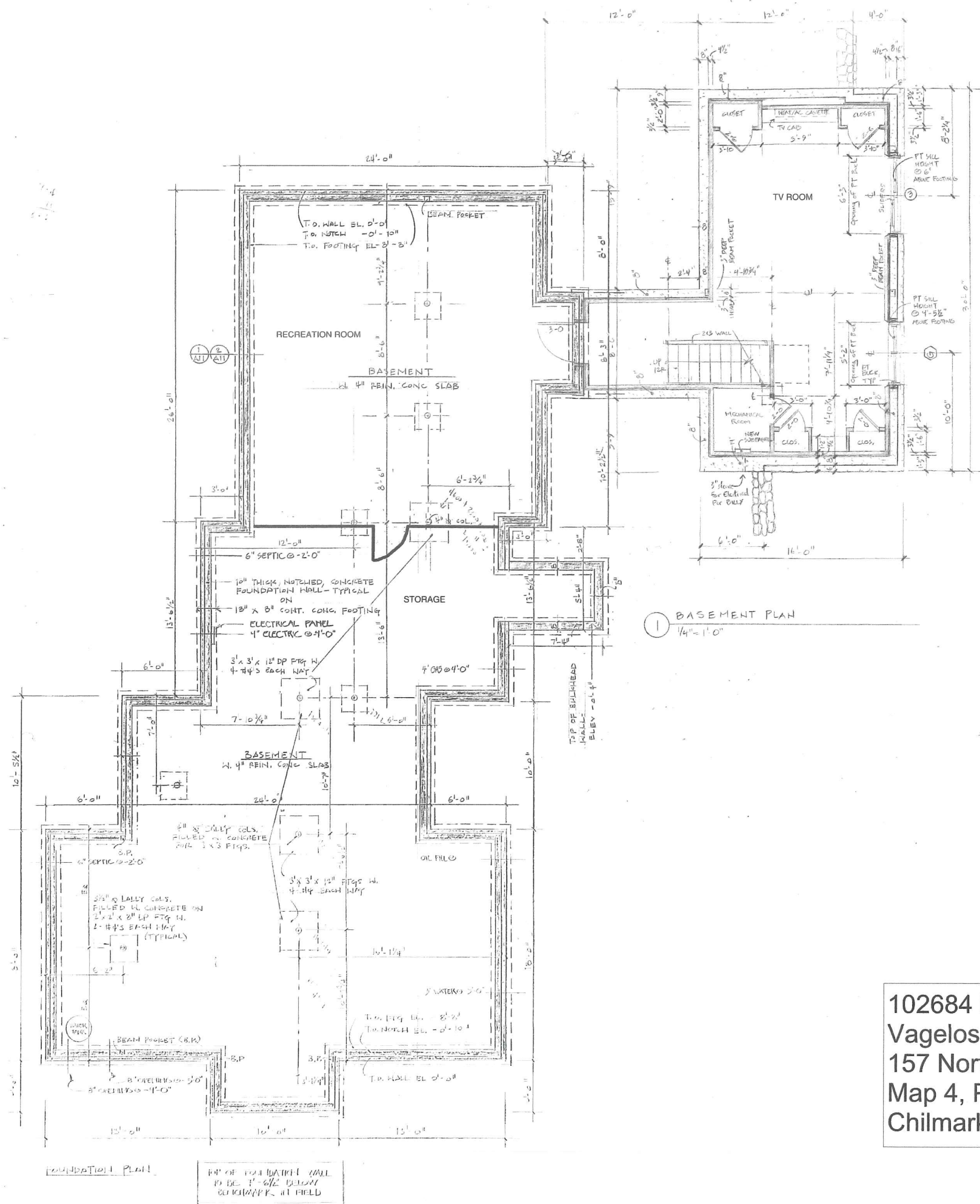
Date: 3/15/23  
 Scale: See Above  
 Revised: N/A

## SK2

**NEW BASEMENT PLAN**  
 VAGELOS TRAIL HOUSE BASEMENT BATHROOM  
 NORTH ROAD - CHILMARK, MA

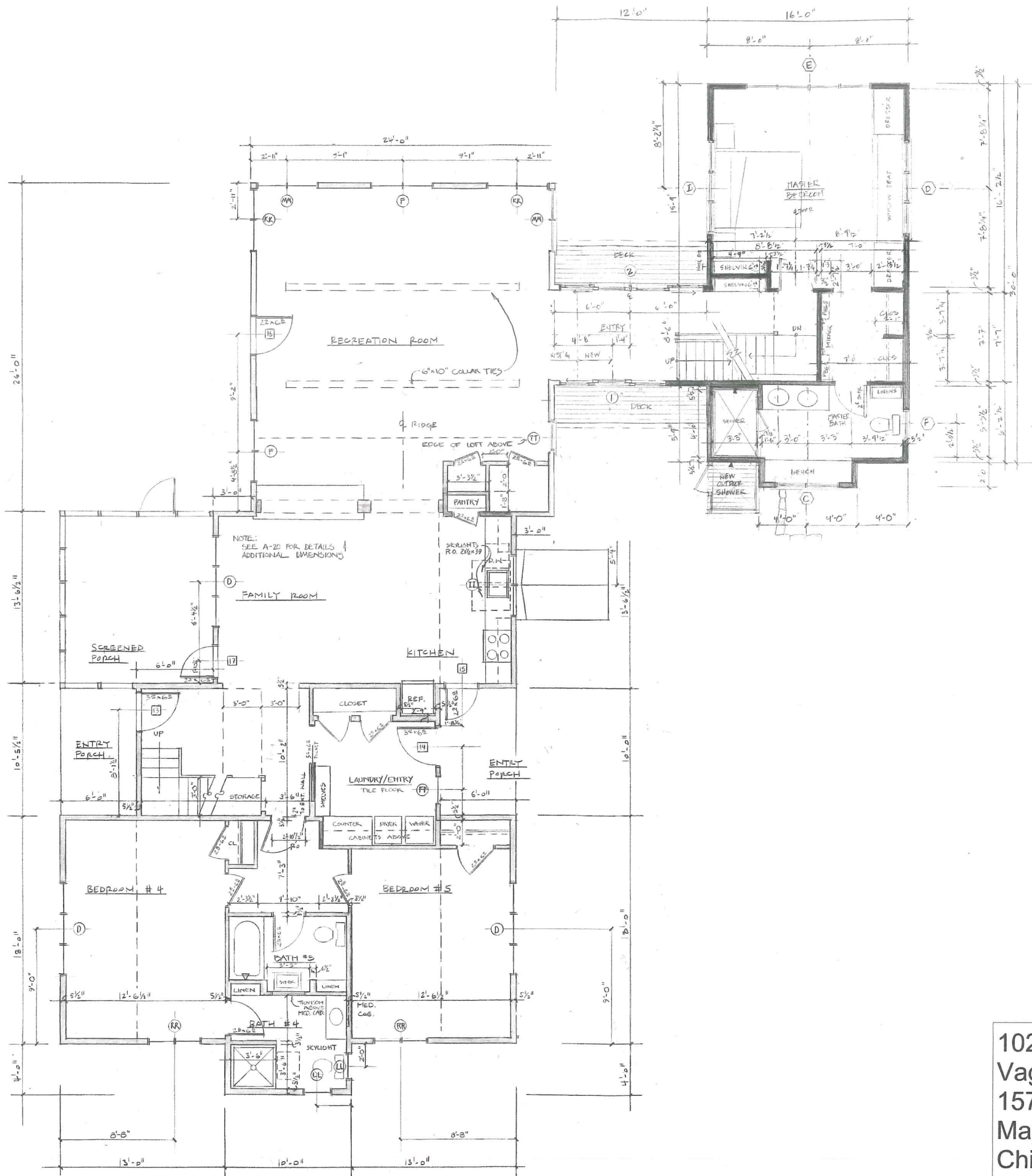
15 Red Arrow Road  
 P.O. Box 1260  
 West Tisbury, MA 02575  
 508-693-4850

south  
 mountain  
 COMPANY



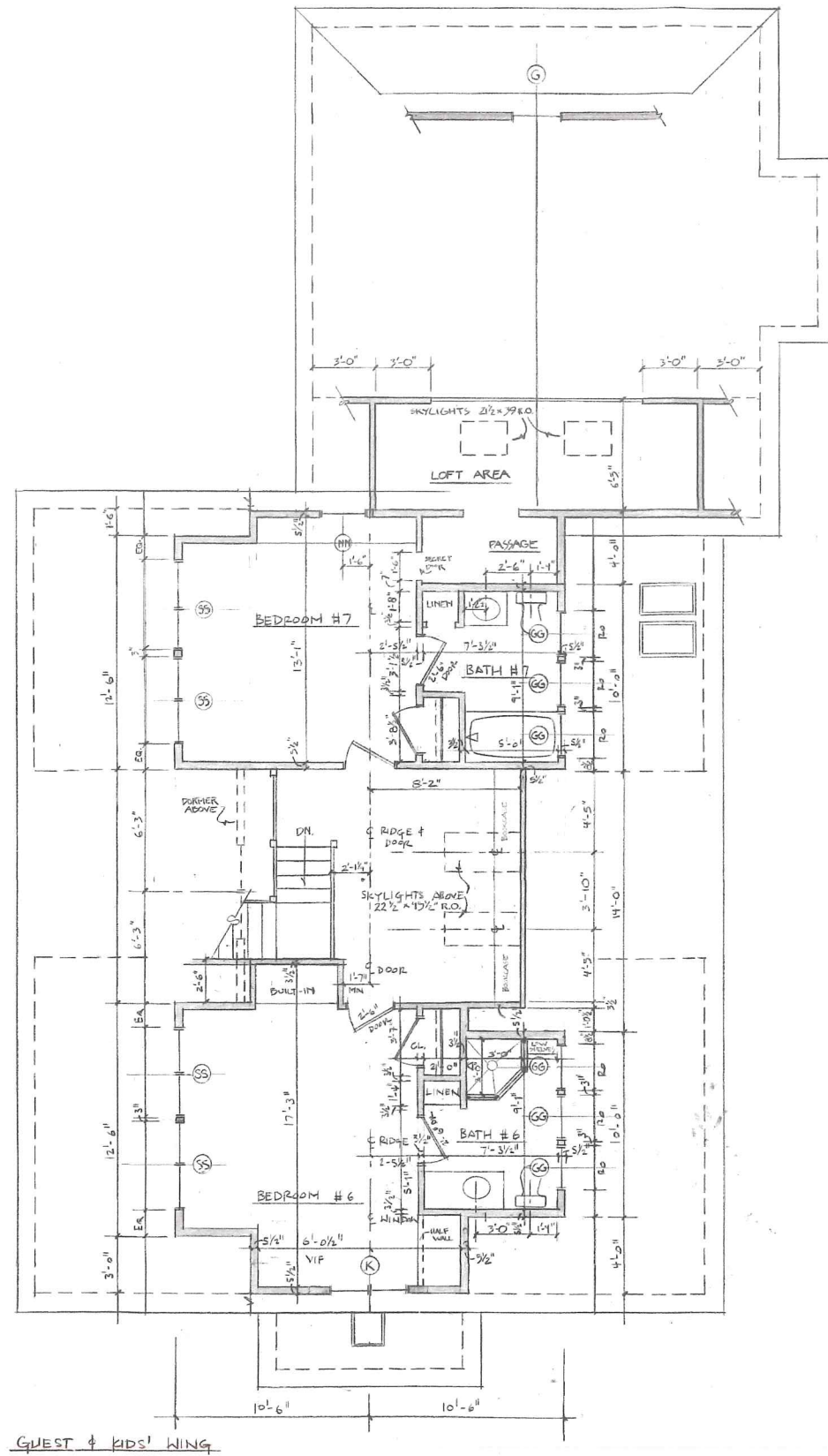
102684 Existing House Basement Floor Plan  
 Vagelos Vineyard Properties 2 LLC  
 157 North Road A, B  
 Map 4, Parcel 22.2  
 Chilmark, MA



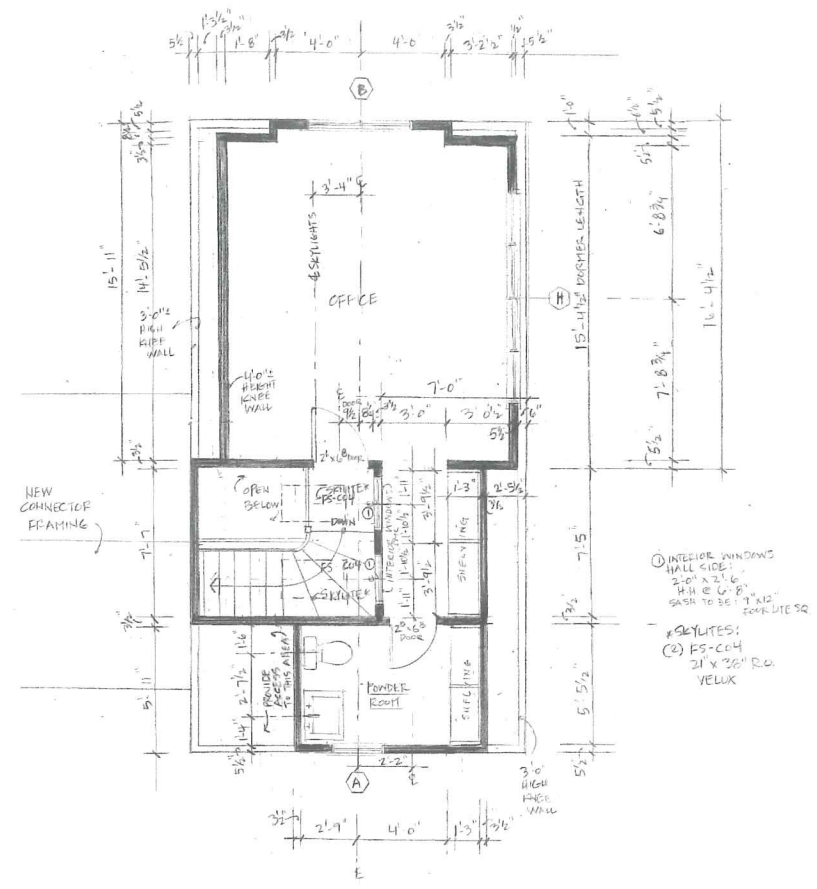


GUEST & KIDS WING

102684 Existing House First Floor Plan  
 Vagelos Vineyard Properties 2 LLC  
 157 North Road A, B  
 Map 4, Parcel 22.2  
 Chilmark, MA



GUEST & KIDS WING



1 SECOND FLOOR PLAN  
1/4" = 1'-0"

1 INTERIOR WINDOWS  
HALL SIDE  
2'-0" x 2'-6"  
4" H x 6" B  
SASH TO BE 1" x 12" SQUARE  
2 SKYLITES:  
(2) FS-C04  
21" x 29" R.O.  
VELUX

102684 Existing House Second Floor Plan  
Vagelos Vineyard Properties 2 LLC  
157 North Road A, B  
Map 4, Parcel 22.2  
Chilmark, MA





Commonwealth of Massachusetts

City/Town of Chilmark

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

Vagelos Vineyard Properties 2 LLC, c/o Marks Paneth & Sharon, LLP

Owner Name

157 North Road A,B

Street Address

Chilmark

City

MA

State

Map 4, Parcel 22.2

Map/Lot #

02535

Zip Code

B. Site Information

1. (Check one) [X] New Construction [ ] Upgrade [ ] Repair

2. Soil Survey Available? [X] Yes [ ] No

If yes: Soil Survey of Dukes County, Mass. Source

Soil Map Unit

Soil Name

Soil Limitations

3. Surficial Geological Report Available? [ ] Yes [X] No

If yes: Year Published/Source

Publication Scale

Map Unit

SAND

Geologic/Parent Material

GLACIAL OUTWASH

Landform

4. Flood Rate Insurance Map

Above the 500-year flood boundary? [ ] Yes [X] No

Within the 100-year flood boundary? [X] Yes [ ] No

Within the 500-year flood boundary? [X] Yes [ ] No

Within a velocity zone? [X] Yes [ ] No

5. Wetland Area: Wetlands Conservancy Program Map

Map Unit

Name

6. Current Water Resource Conditions (USGS): Month/Year

Range: [ ] Above Normal [X] Normal [ ] Below Normal

7. Other references reviewed: GROUNDWATER HYDROLOGY OF MASSACHUSETTS MAP



Commonwealth of Massachusetts

City/Town of Chilmark

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (minimum of two holes required at every proposed primary and reserved disposal area)

Deep Observation Hole Number: 1 Date: 3-22-2023 Time: Weather:

1. Location

Ground Elevation at Surface of Hole: 31.1 Location (identify on plan): SEE PLAN

2. Land Use: RESIDENTIAL (e.g., woodland, agricultural field, vacant lot, etc.) NONE Surface Stones - Slope (%) WOODS Vegetation GLACIAL OUTWASH Landform SEE PLAN Position on Landscape (attach sheet)

3. Distances from: Open Water Body 359± feet Drainage Way N/A feet Possible Wet Area 200+ feet Property Line 180± feet Drinking Water Well 200+ feet Other - feet

4. Parent Material: SAND Unsuitable Materials Present: [ ] Yes [X] No

If Yes: [ ] Disturbed Soil [ ] Fill Material [ ] Impervious Layer(s) [ ] Weathered/Fractured Rock [ ] Bedrock

5. Groundwater Observed: [ ] Yes [X] No If yes: Depth Weeping from Pit Depth Standing Water in Hole Estimated Depth to High Groundwater: >120 inches <21.1 elevation



Commonwealth of Massachusetts

City/Town of Chilmark

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (continued)

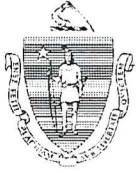
Deep Observation Hole Number: 1

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
00-03	A					LOAMY SAND					
03-08	B					LOAMY SAND					
08-18	C1					LOAMY SAND					
18-48	C2					LOAMY SAND					
48-120	C3					LOAMY SAND					

Additional Notes:

20% cobbles and boulders between 6' and 9' below grade.





Commonwealth of Massachusetts

City/Town of Chilmark

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (continued)

Deep Observation Hole Number: 2 Date: 3-22-2023 Time: Weather:

1. Location

Ground Elevation at Surface of Hole: 30.9 Location (identify on plan): SEE PLAN

2. Land Use: RESIDENTIAL (e.g., woodland, agricultural field, vacant lot, etc.) NONE Surface Stones - Slope (%) WOODS Vegetation GLACIAL OUTWASH Landform SEE PLAN Position on Landscape (attach sheet)

3. Distances from: Open Water Body 383± feet Drainage Way N/A feet Possible Wet Area 200+ feet Property Line 193± feet Drinking Water Well 200+ feet Other - feet

4. Parent Material: SAND Unsuitable Materials Present: [ ] Yes [X] No

If Yes: [ ] Disturbed Soil [ ] Fill Material [ ] Impervious Layer(s) [ ] Weathered/Fractured Rock [ ] Bedrock

5. Groundwater Observed: [ ] Yes [X] No If yes: Depth Weeping from Pit Depth Standing Water in Hole Estimated Depth to High Groundwater: >108 inches <21.9 elevation



Commonwealth of Massachusetts

City/Town of Chilmark

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (continued)

Deep Observation Hole Number: 2

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
00-06	A					LOAMY SAND					
06-13	B					LOAMY SAND					
13-46	C1					LOAMY SAND					
46-108	C2					LOAMY SAND					

Additional Notes:

Cobbles and boulders between 6' and 9' below grade.



Commonwealth of Massachusetts

City/Town of Chilmark

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used:

Depth observed standing water in observation hole

A. \_\_\_\_\_  
inches

B. \_\_\_\_\_  
inches

Depth weeping from side of observation hole

A. \_\_\_\_\_  
inches

B. \_\_\_\_\_  
inches

Depth to soil redoximorphic features (mottles)

A. N/A \*no mottles  
encountered to a depth of 120

B. \_\_\_\_\_  
inches

Groundwater adjustment (USGS methodology)

A. \_\_\_\_\_  
inches

B. \_\_\_\_\_  
inches

2.

Index Well Number \_\_\_\_\_

Reading Date \_\_\_\_\_

Index Well Level \_\_\_\_\_

Adjustment Factor \_\_\_\_\_

Adjusted Groundwater Level \_\_\_\_\_

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

Yes       No

b. If yes, at what depth was it observed?

Upper boundary: \_\_\_\_\_  
inches

Lower boundary: \_\_\_\_\_  
inches





Commonwealth of Massachusetts

City/Town of Chilmark

## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

### F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

Signature of Soil Evaluator

GEORGE SOURATI, P.E. SE #2290

Typed or Printed Name of Soil Evaluator / License #

MARINA LENT

Name of Board of Health Witness

JUNE 14, 2023

Date

OCTOBER 1997

Date of Soil Evaluator Exam

CHILMARK

Board of Health

**Note:** In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with [Percolation Test Form 12](#).



Commonwealth of Massachusetts

City/Town of Chilmark

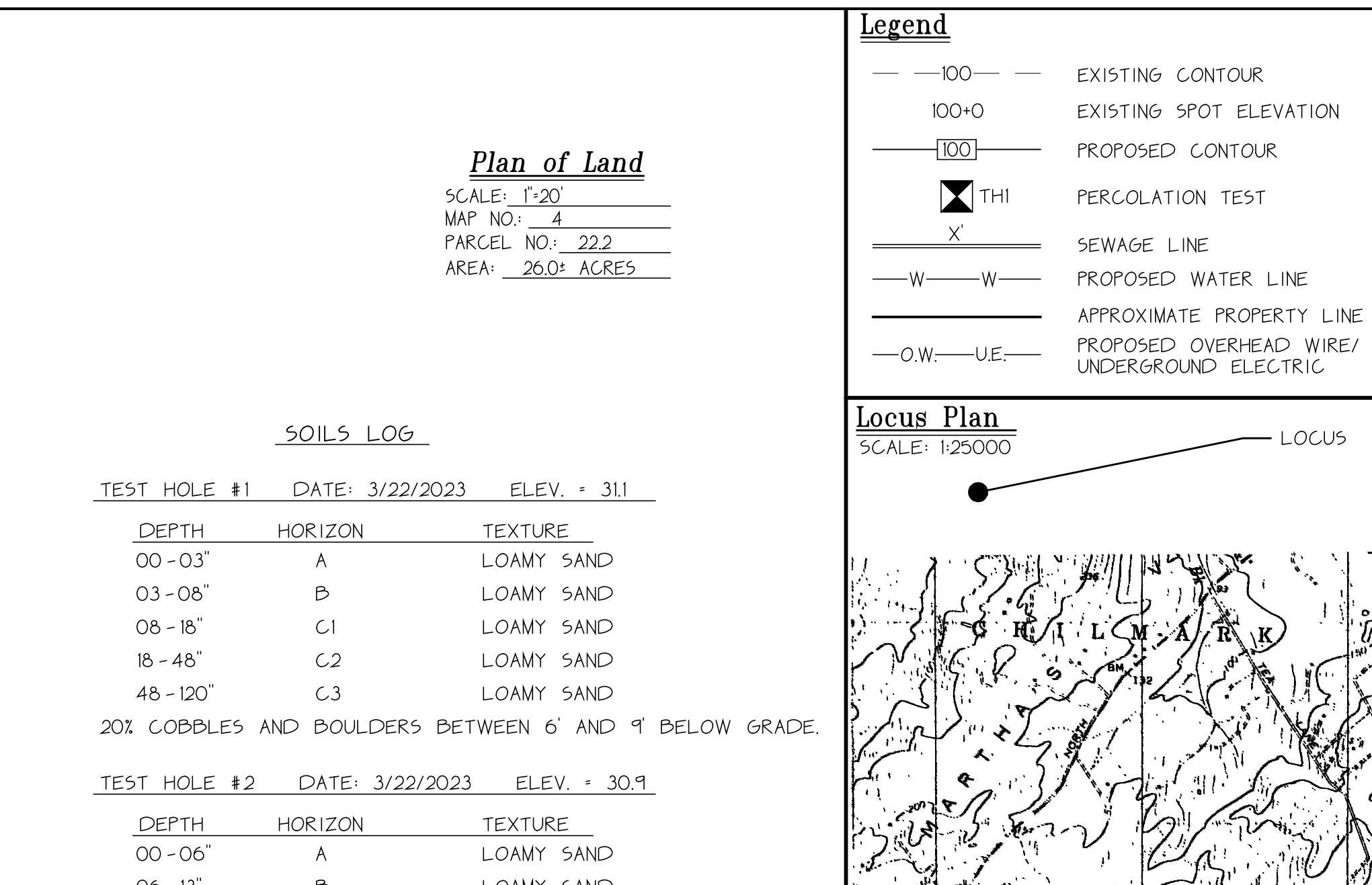
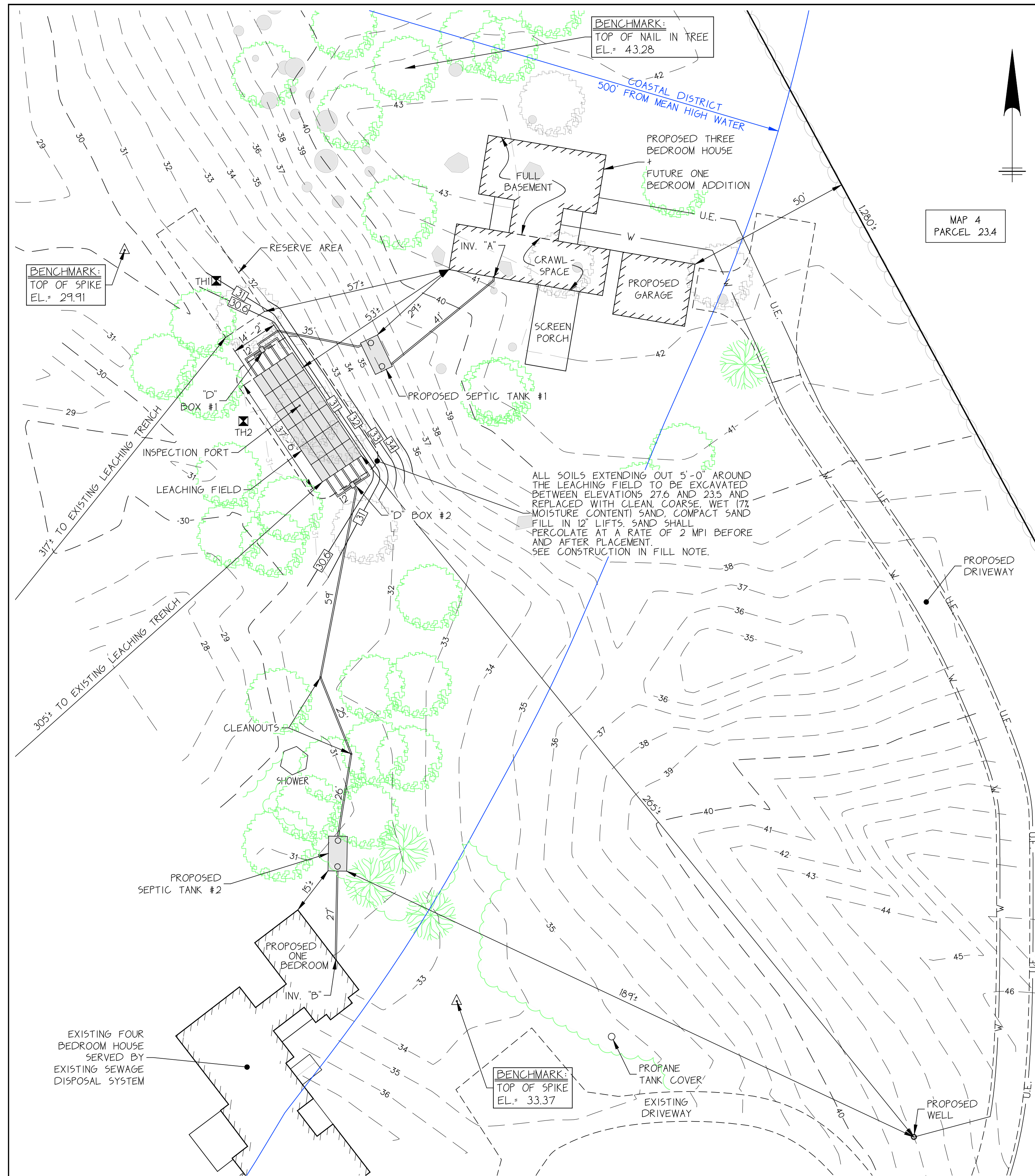
## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

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### Field Diagrams

Use this sheet for field diagrams:



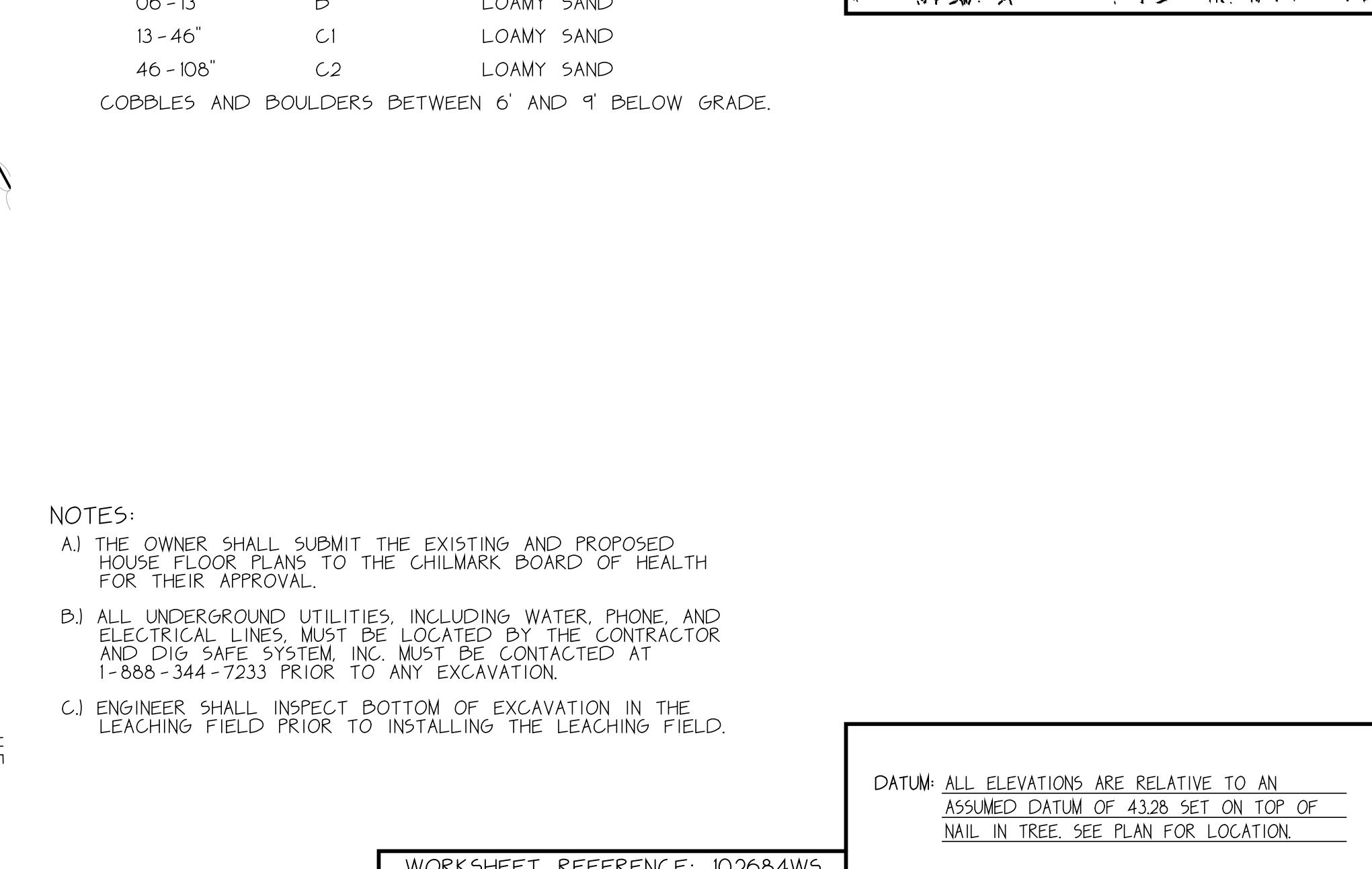
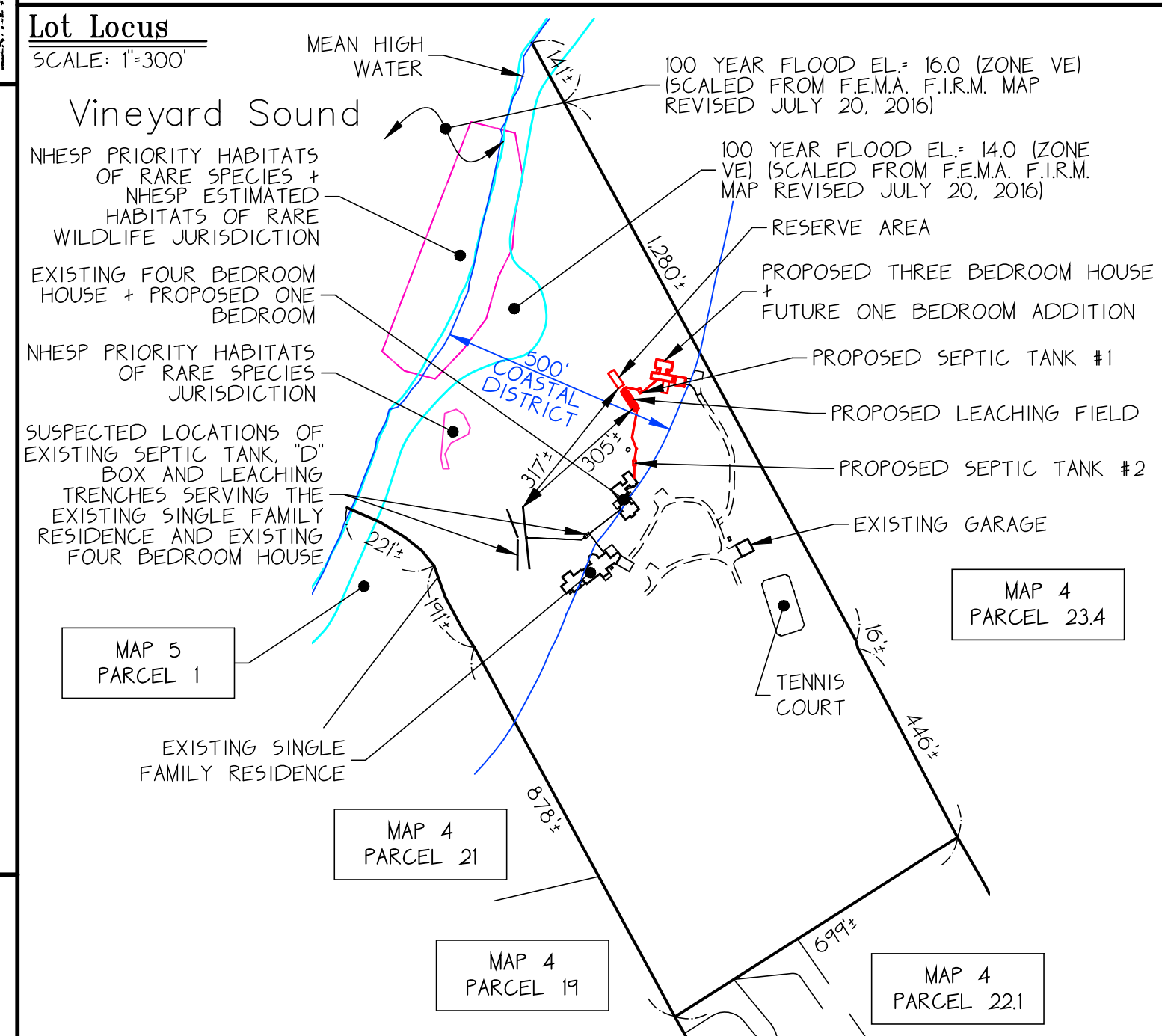


**Notes**  
 GENERAL NOTES:  
 1. THIS PLAN IS TO BE USED ONLY FOR THE PERMITTING AND INSTALLATION OF A SEWAGE DISPOSAL SYSTEM. IT IS NOT TO BE USED FOR ANY OTHER PURPOSE.  
 2. NO CHANGES TO THIS PLAN ARE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL OF SOURATI ENGINEERING GROUP, LLC.  
 3. INSTALLATION SHALL BE IN STRICT CONFORMITY WITH TITLE 5 OF THE MASSACHUSETTS STATE SANITARY CODE AND THE RULES & REGULATIONS OF THE TOWN OF CHILMARK BOARD OF HEALTH.  
 4. MACHINERY THAT MAY DISTURB PIPE ALIGNMENT IN THE DISPOSAL SYSTEM SHALL NOT BE USED ON THE DISPOSAL AREA.  
 5. NO EXISTING WELLS WERE FOUND WITHIN 50' FROM THE PROPOSED SOIL ABSORPTION SYSTEM, OR WITHIN 50' FROM THE SEPTIC TANK.  
 6. FINISHED SURFACE OF LEACHING AREA SHALL BE GRADED TO INSURE RUNOFF (2% MINIMUM SLOPE).  
 7. THE SEPTIC TANK AND THE DISTRIBUTION BOX SHALL BE EITHER:  
 A. WATER TIGHT ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND WARRANTY, OR  
 B. MADE WATER TIGHT BY THE MANUFACTURER, EQUIPMENT SUPPLIER OR INSTALLER, USING ASPHALT OR SYNTHETIC POLYMER SEALER SPECIFIED BY THE CONCRETE OR SYNTHETIC MATERIAL MANUFACTURER.  
 8. SEPTIC TANKS AND DISTRIBUTION BOXES SHALL BE LEVEL AND TRUE TO GRADE ON A LEVEL STABLE BASE THAT HAS BEEN MECHANICALLY COMPACTED AND ONTO WHICH 6 INCHES OF CRUSHED STONE HAVE BEEN PLACED TO MINIMIZE UNEVEN SETTLING.  
 9. ALL SYSTEM COMPONENTS SHALL BE CONSTRUCTED OF CORROSION RESISTANT MATERIALS.  
 10. ALL PIPING SHALL BE A MINIMUM OF SCHEDULE 40 PVC UNLESS OTHERWISE NOTED.  
 11. DISTRIBUTION BOX OUTLET LINES SHALL BE LEVEL FOR A MINIMUM OF THE FIRST TWO FEET OF THEIR LENGTH.

**CONSTRUCTION IN FILL:**  
 1. FILL MATERIAL FOR SYSTEMS CONSTRUCTED IN FILL SHALL CONSIST OF SELECT ON-SITE OR IMPORTED SOIL MATERIAL. THE FILL BE COMPOSED OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES, MIXTURES AND LAYERS OF DIFFERENT TYPES OF SOIL SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN TWO INCHES. A SIEVE ANALYSIS USING A #4 SIEVE SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL UP TO 23 BY WEIGHT OF THE FILL. THE FILL SHALL BE REPLACED WITH CLEAN COARSE WET (7% MOISTURE CONTENT) SAND. COMPACT SAND FILL IN 12" LIFTS. SAND SHALL PERCOLATE AT A RATE OF 2 MPI BEFORE AND AFTER PLACEMENT. SEE CONSTRUCTION IN FILL NOTE.

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
#4	4.75 MM	100 ±
#10	0.30 MM	10 ±
#100	0.15 MM	0 ±
#200	0.075 MM	0 ±

**HIGH CAPACITY INFILTRATOR CHAMBER (SOIL ABSORPTION SYSTEM):**  
 1. THE INFILTRATORS SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURER SPECIFICATIONS.



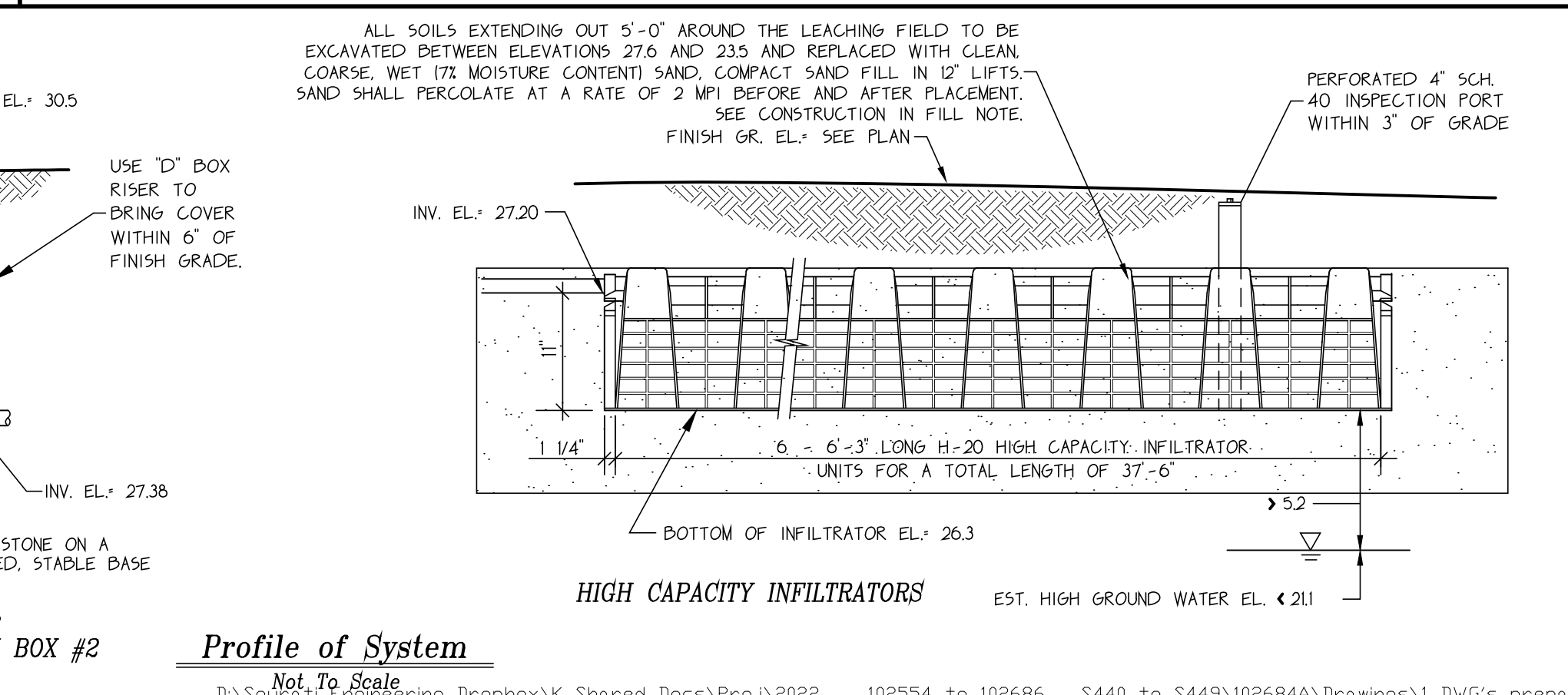
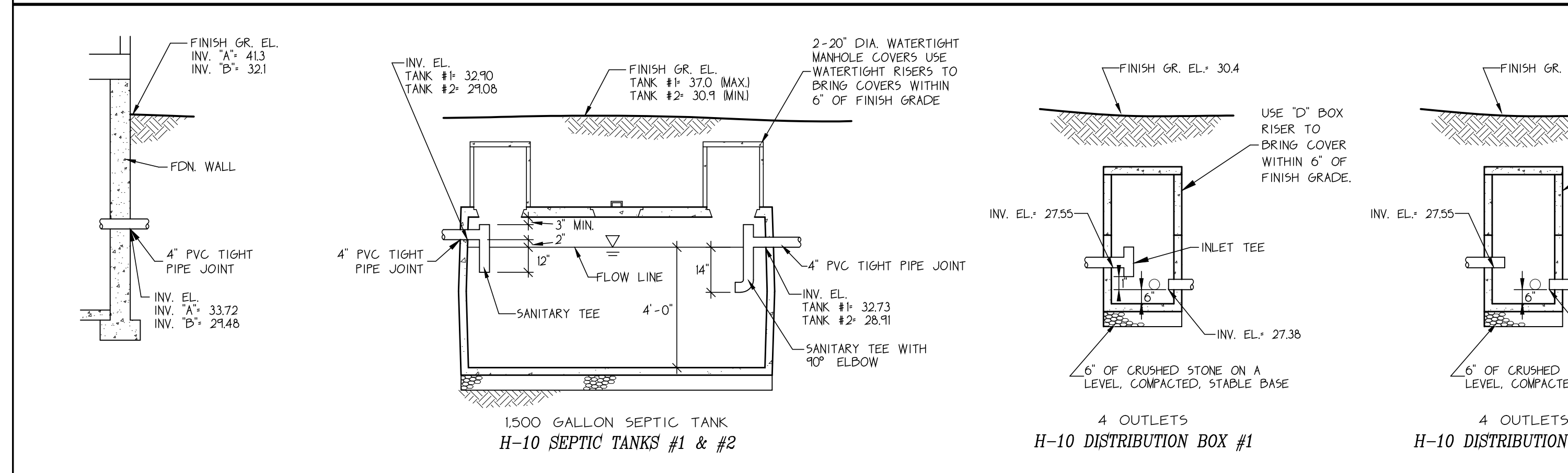
**Design Computations:**  
**HYDRAULIC LOADING**  
 3 + 1 + 1 + 5 BEDROOMS AT 110 GPD = 550 GPD  
 A GARBAGE DISPOSAL IS NOT ALLOWED IN THIS DESIGN.

**SEPTIC TANK #1 SIZE**  
 3 + 1 + 4 BEDROOMS AT 110 GPD = 440 GPD  
 INCREASE FLOW TO 200% (TITLE VI) = 880 GALLONS USE 1500 GALLON SEPTIC TANK.

**SEPTIC TANK #2 SIZE**  
 1 BEDROOM AT 110 GPD = 110 GPD  
 INCREASE FLOW TO 200% (TITLE VI) = 220 GALLONS USE 1500 GALLON SEPTIC TANK.

**LEACHING CAPACITY**  
 DESIGN PERCOLATION RATE IS 5 MIN/INCH  
 EFFLUENT LOADING RATE 0.74 G/5F/D  
 USE 1 LEACHING FIELD WITH 30 CHAMBERS.

TOTAL AREA OF FIELD = 30 CHAMBERS X 6.25 LF/CHAMBER X 4.72 5F/LF = 885 5F.  
 TOTAL LEACHING CAPACITY PROVIDED = 885 5F. X 0.74 G/5F/D = 654 G/D.  
 TOTAL LEACHING CAPACITY PROVIDED = 654 G/D.  
 TOTAL HYDRAULIC LOADING REQUIRED = 550 G/D.



**New Sewage Disposal System**  
 In The Town Of Chilmark

**Site:**  
 Proposed Three Bedroom House Plus  
 Future One Bedroom Addition Plus  
 Proposed One Bedroom in Existing House  
 for a Total of Five Bedrooms  
 Map 4, Parcel 22.2  
 157 North Road A,B

**Owner:**  
 Vagelos Vineyard Properties 2 LLC  
 c/o Marks Paneth & Sharon, LLP  
 ATTN: Robert Hughes  
 685 Third Avenue, 4th Floor  
 New York, NY 10017

**Scale:** As Shown  
**Job No.:** 102684  
**Drawing No.:** 102684SP  
**Sheet:** 1 of 1

**Date:** July 14, 2023  
**Drawn By:** H. Chen  
**Designed By:** H. Chen  
**Checked By:** G. Sourati

**Revisions:**

**Professional Land Surveyors**  
**Sourati Engineering Group LLC**  
 P.O. Box 4458  
 107 Beach Road, Suite 202  
 Vineyard Haven, MA 02568  
 Phone: (508) 693-9933  
 Fax: (508) 693-4933