



# Truro Board of Health

Tuesday April 5, 2022

Regular Meeting- 4:30 PM

## REGULAR MEETING

### Remote Meeting Access Instructions

This will be a remote meeting. Citizens in Truro can view the meeting on Channel 18 and on the homepage of the Town of Truro website on the "Truro TV Channel 18" button found under "Helpful Links". To view, click on the green "Watch" button in the upper right of the page. **To provide comment during the meeting, please call in toll free at 1-866-899-4679 and enter the following access code when prompted: 972-302-709; or access the meeting from your computer, tablet or smartphone. <https://global.gotomeeting.com/join/972302709>** There may be a slight delay (15-30 seconds) between the meeting and the live-stream and television broadcast. If you are watching the meeting and calling in, please lower the volume on your computer or television during public comment so that you may be heard clearly. We ask that you identify yourself when calling in to help us manage multiple callers effectively. Citizens may also provide public comment for this meeting by emailing the Health Agent Emily Beebe at [eebeebe@truro-ma.gov](mailto:eebeebe@truro-ma.gov) with your comments.

## I. PUBLIC COMMENT

*Please note that the Commonwealth's Open Meeting Law limits any discussion by members of the Board of an issue raised to whether that issue should be placed on a future agenda*

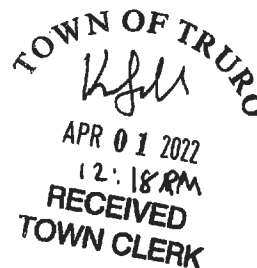
## II. AGENDA ITEMS

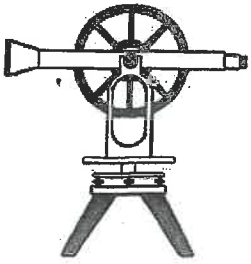
1. **Variance Request:** 45 Corn Hill Road (*continued from 3/15/2022*)
2. **Variance Requests/Local Upgrade Approval:** 127 & 133 South Pamet Road, Dennis/Whitelaw (*continued from the 3/15/2022 meeting*)
3. **Discussion on Annual Town Meeting 2022-** April 30 and outdoors
4. **Local Board of Health Regulation Review**
  - a. **Section VI – local title 5**
    - i. **ACO regulation-draft**
    - ii. **Control of placement of septic systems in relation to drinking water wells**

## III. MINUTES:

## IV. REPORTS

- o Report of the Chair-packets
- o Health Agent's Report





# J.C. ELLIS DESIGN COMPANY, INC.

SEPTIC SYSTEM DESIGN & ENGINEERING – SEPTIC INSPECTION –  
SITE PLANNING – WETLAND CONSULTATION & PERMITTING  
P.O. BOX 81, NORTH EASTHAM, MA 02651 PHONE 508-240-2220 FAX 508-240-2221  
EMAIL jcellisdesign@verizon.net

February 2, 2022

Truro Board of Health  
24 Town Hall Road  
P.O. Box 2030  
Truro, MA 02666

RECEIVED BY  
FEB 02 2022  
TOWN OF TRURO  
HEALTH DEPARTMENT

**Re: Variance Requests – Septic System Upgrade  
Rose Investment Trust  
45 Corn Hill Road, Truro, MA  
Assessor's Map 45 Parcel 116**

Dear Board,

The Rose Investment Trust is proposing an upgrade of the existing cesspool at 45 Corn Hill Road. Due to the proximity to wetland resource areas, variances are required to install the new septic system:

Specifically, the following 1 variance is sought to install the new septic system.

Truro Board of Health Regulations – Section VI, Article 9

Leach field, septic tank and pump chamber to be installed in “Wetland” as defined in Truro Board of Health Regulations. (Land Subject to Coastal Storm Flowage and Barrier Beach).

Thank you for your attention to this matter.  
Sincerely,

  
Jason C. Ellis, R.S., L.S.I.T.  
J.C. Ellis Design Co., Inc.

Cc: file

Fee: \$75.00

# V2022-03



PAID  
2/28

**APPLICATION FOR BOARD OF HEALTH VARIANCES**

Date: February 2, 2022

Property Owner's Name: Rose Investment Trust c/o Mary Rose

Mailing Address: PO Box 776 Truro MA 02666-0776

Address of Property: 45 Corn Hill Road

Map and Parcel Number: Map # 45 Parcel # 116

Design Engineer/Sanitarian: Jason C. Ellis R.S.

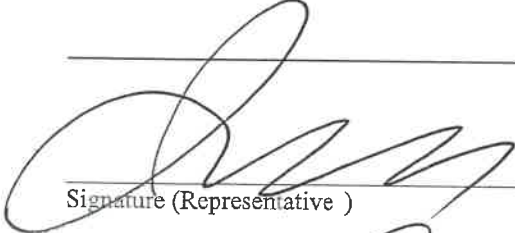
Firm/Company Name: J.C. Ellis Design Co Inc Phone #: 508-240-2220

Address: PO Box 81 North Eastham, MA 02651

Please check type of variance requested:

Title 5 Variance Request: Section \_\_\_\_\_

Board of Health Variance Request: Section/Article Section VI Article 9

  
\_\_\_\_\_  
Signature (Representative )

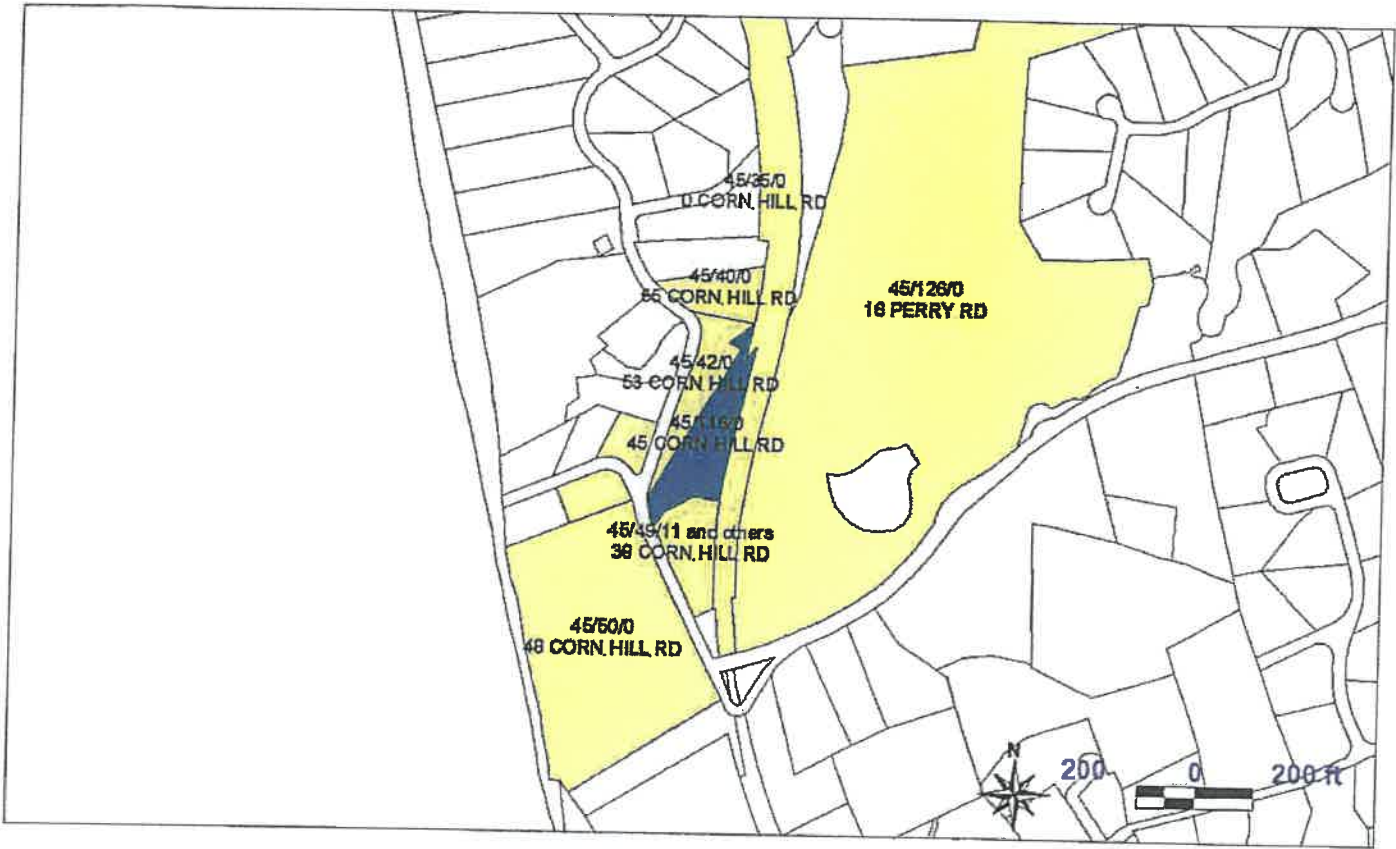
2/2/22  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Signature (Property Owner)

45 Corn Hill Road  
 Map 45 Parcel 116  
 Board of Health

TOWN OF TRURO, MA  
 BOARD OF ASSESSORS  
 P.O. BOX 2012, TRURO MA 02666

Custom Abutters List

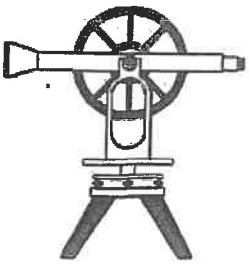


Key	Parcel ID	Owner	Location	Mailing Street	Mailing City	ST	Zip/Cd/Country
2121	45-35-0-R	ROSE INVESTMENT TRUST TRS: ROSE AUSTIN L JR & MARY L	0 CORN HILL RD	PO BOX 925	TRURO	MA	02666
2138	45-40-0-E	TRURO CONSERVATION TRUST TRS: BETSEY BROWN ET AL	55 CORN HILL RD	PO BOX 327	NO TRURO	MA	02652-0327
2140	45-42-0-R	CONDIT POLLY	53 CORN HILL RD	27 DOGWOOD LN	POMONA	NY	10970
2144	45-46-0-R	DONALD M MUSZYNSKI REVOC.TRUST TRSTEES: MUSZYNSKI DONALD M &	54 CORN HILL RD	PO BOX 374	SIMSBURY	CT	06070-0374
2146	45-48-0-R	PERRY CLAIRE A LIVING TRUST TRS: PERRY CLAIRE A	52 CORN HILL RD	PO BOX 1016	TRURO	MA	02666-1016
2147	45-49-1-R	RUMBLE JUDY M	39 CORN HILL RD	518 EAST BROADWAY	SOUTH BOSTON	MA	02127
2148	45-49-2-R	MCGIRR RICHARD H & LIDA BANDER	39 CORN HILL RD	50 CHURCH ST	CONCORD	MA	01742
2149	45-49-3-R	CORN HILL REALTY TRUST TRS: ONEIL THOMAS J III ET AL	39 CORN HILL RD	731 UNION ST	ROCKLAND BEACH	MA	02370
2150	45-49-4-R	MACIASZEK SARAH A	39 CORN HILL RD	57 BRIGHAM RD	SOUTH HADLEY	MA	01075
2151	45-49-5-R	BOOTH APRIL N REVOCABLE TRUST TRS: BOOTH APRIL N	39 CORN HILL RD	957 ROUTE 80	GUILFORD	CT	06437
2152	45-49-6-R	TENNYSON LINDA E	39 CORN HILL RD	505 MAIN ST	ACTON	MA	01720
2153	45-49-7-R	MAGUIRE MICHELLE & JOHN F	39 CORN HILL RD	5 LAUREL HILL LN	WINCHESTER	MA	01890
2154	45-49-8-R	ENTICE ENTERPRISES LLC	39 CORN HILL RD	633 ARROWHEAD DR	ORANGE	CT	06477-2306
2155	45-49-9-R	IVES DAVID & ALLISON	39 CORN HILL RD	186 MOSS HILL ROAD	JAMAICA PLAIN	MA	02130
2156	45-49-10-R	KULL DONNA M	39 CORN HILL RD	313 PARTRIDGE RUN	MOUTAINSIDE	NJ	07092

1/5/2022 LG

Key	Parcel ID	Owner	Location	Mailing Street	Mailing City	ST	ZipCd/Country
2157	45-49-11-R	CORN HILL ELEVEN LLC MGRS: RICH. CASILLI & C. AVERSA	39 CORN HILL RD	41 OCEAN ST, UNIT 2	LYNN	MA	01902
2158	45-49-12-R	MASTROBATTISTA AMY J	39 CORN HILL RD	34 CROCKER AVE	FRANKLIN	MA	02038
6959	45-49-13-E	ROSEVILLE CONDO TRUST	39 CORN HILL RD	39 CORN HILL RD	TRURO	MA	02666
2159	45-50-0-E	TOWN OF TRURO	48 CORN HILL RD	PO BOX 2030	TRURO	MA	02668-2030
5599	45-126-0-R	PERRY LTD PARTNERSHIP ET AL	16 PERRY RD	PO BOX 127	TRURO	MA	02666

1/5/2022 LG



# J.C. ELLIS DESIGN COMPANY, INC.

SEPTIC SYSTEM DESIGN & ENGINEERING – SEPTIC INSPECTION –  
SITE PLANNING – WETLAND CONSULTATION & PERMITTING  
P.O. BOX 81, NORTH EASTHAM, MA 02651 PHONE 508-240-2220 FAX 508-240-2221  
EMAIL jcellisdesign@verizon.net

February 2, 2022

**Re: Variance Requests – Septic System Upgrade  
Rose Investment Trust  
45 Corn Hill Road, Truro, MA  
Assessor's Map 45 Parcel 116**

Dear Abutter,

The Rose Investment Trust is proposing an upgrade of the existing cesspool at 45 Corn Hill Road. Due to the proximity to wetland resource areas, variances are required to install the new septic system:

Specifically, the following 1 variance is sought to install the new septic system.

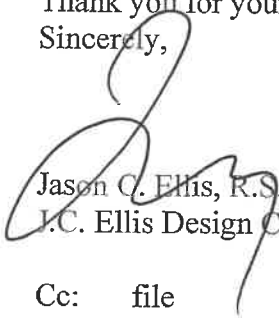
Truro Board of Health Regulations – Section VI, Article 9

Leach field, septic tank and pump chamber to be installed in “Wetland” as defined in Truro Board of Health Regulations. (Land Subject to Coastal Storm Flowage and Barrier Beach).

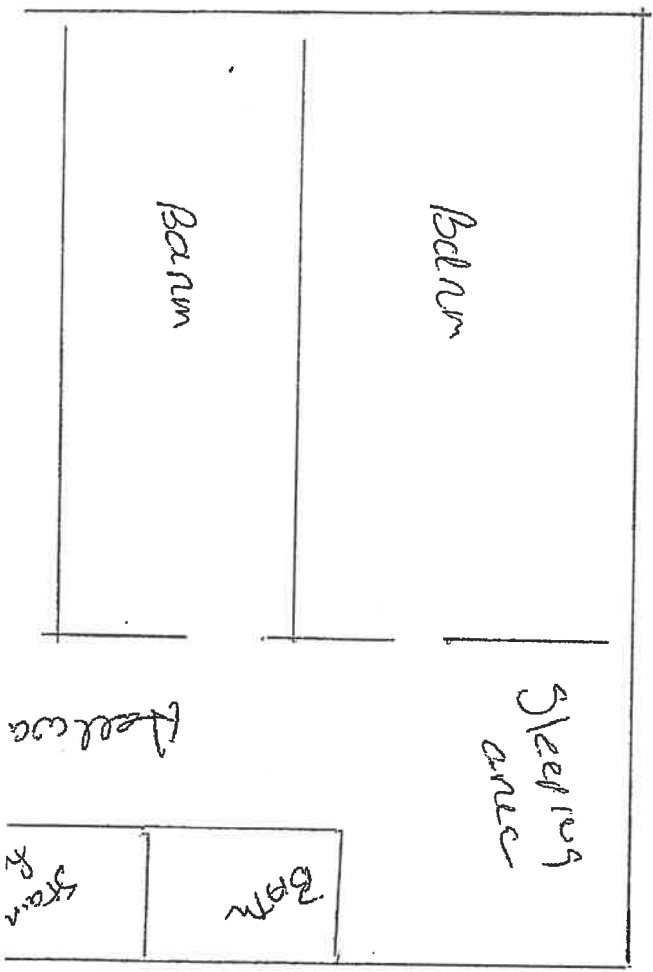
The Truro Board of Health will hold a public hearing to consider these variance requests on Tuesday, February 15, 2022, at 4:30 p.m. in the Selectmen's meeting room in Truro Town Hall, located at 24 Town Hall Road. If you are interested in attending the hearing, please confirm the hearing date, time and location with the Truro Health Department at 508-349-7004, ext. 32.

Thank you for your attention to this matter.

Sincerely,

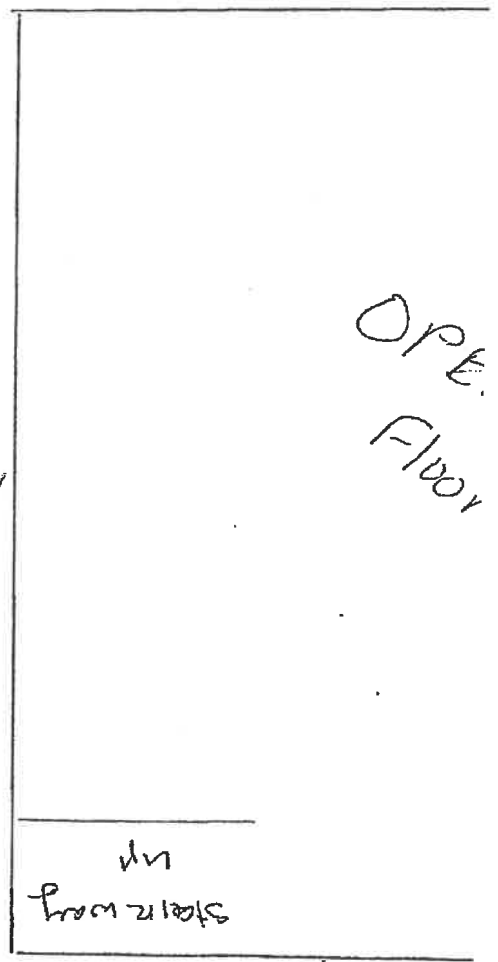
  
Jason C. Ellis, R.S., L.S.I.T.  
J.C. Ellis Design Co., Inc.

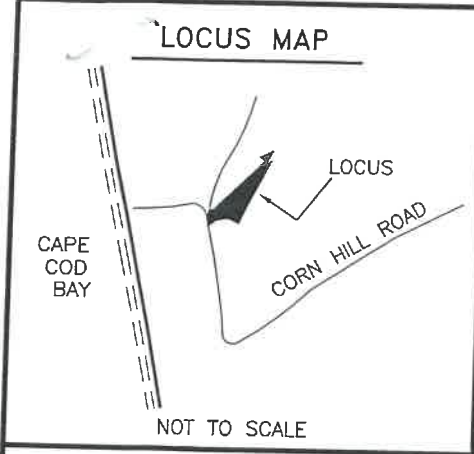
Cc: file



DECK

DOOR

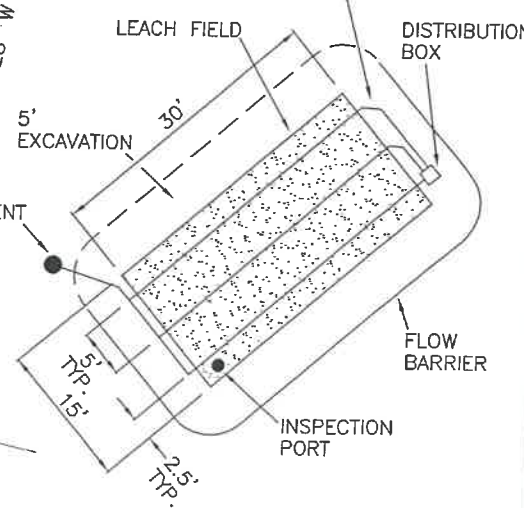




PCL. 46  
 EXISTING WELL >100'  
 FROM PROPOSED S.A.S.  
 EXISTING LEACH PIT  
 >100' FROM  
 PROPOSED WELL

**LOT 1**  
 81,203 S.F.±  
 (16,632 S.F.± UPLAND)

**S.A.S. DETAIL**



HEALTH DEPARTMENT  
 TOWN OF TRURO  
 MAR 14 2022  
 RECEIVED BY:

**SEPTIC SYSTEM UPGRADE PLAN**

SUBJECT: <b>45 CORN HILL ROAD</b> TRURO, MA	
PREPARED FOR: <b>ROSE INVESTMENT TRUST</b> C/O MARY ROSE P.O. BOX 776 TRURO, MA 02666-0776	
ASSESSOR'S MAP 45 PARCEL 116	SCALE: 1"=30'
DATE: OCTOBER 15, 2021 REV: FEBRUARY 25, 2022	SHEET 1 OF 3

THIS PLAN REQUIRES CONSERVATION COMMISSION APPROVAL.  
 WORK LIMIT TO BE STAKED SILT FENCE AND STRAW WADDLE.  
 ALL SLOPES IN EXCAVATED AREA TO BE STABILIZED WITH  
 EROSION CONTROL FABRIC.  
 ALL DISTURBED AREAS TO BE REVEGETATED WITH AMERICAN  
 BEACH GRASS.

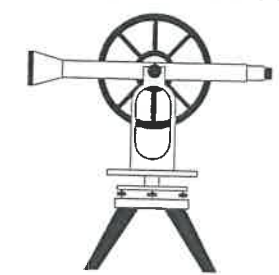
**JASON C. ELLIS, R.S.**  
 REGISTERED SANITARIAN  
 COMMONWEALTH OF MASSACHUSETTS  
 JASON CHRISTOPHER ELLIS  
 No. 1122

SURVEY PLAN REFERENCE:  
 PLAN BOOK 458 PAGE 15  
 THIS PLAN IS FOR SEPTIC SYSTEM  
 DESIGN PURPOSES ONLY.  
 THIS PLAN IS NOT FOR BOUNDARY  
 DETERMINATION.  
 PROPERTY OWNER AND  
 CONTRACTORS TO VERIFY  
 ALL WATER LINES AND GAS  
 UTILITIES ON PROPERTY.

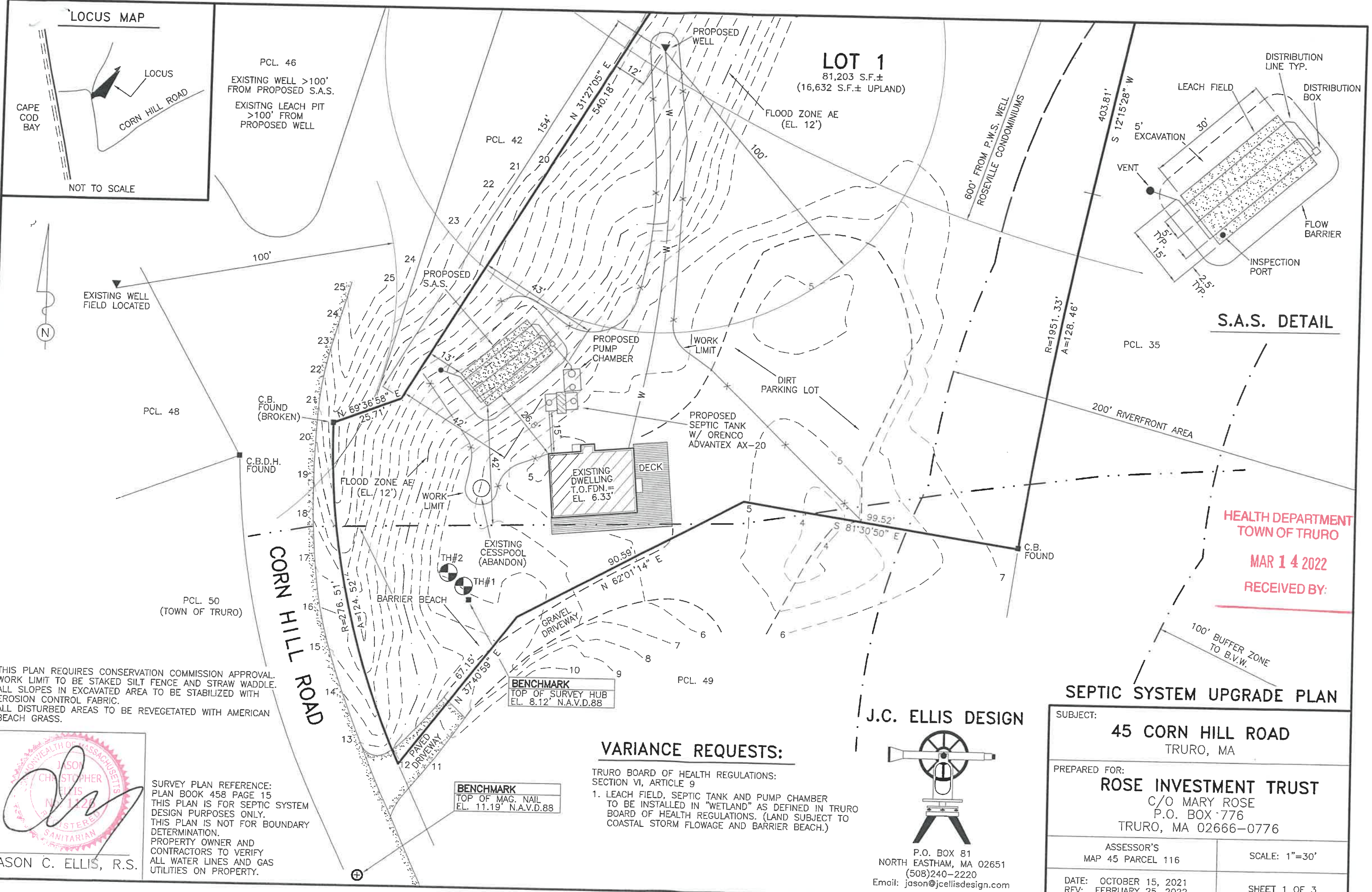
**VARIANCE REQUESTS:**

TRURO BOARD OF HEALTH REGULATIONS:  
 SECTION VI, ARTICLE 9  
 1. LEACH FIELD, SEPTIC TANK AND PUMP CHAMBER  
 TO BE INSTALLED IN "WETLAND" AS DEFINED IN TRURO  
 BOARD OF HEALTH REGULATIONS. (LAND SUBJECT TO  
 COASTAL STORM FLOWAGE AND BARRIER BEACH.)

**J.C. ELLIS DESIGN**



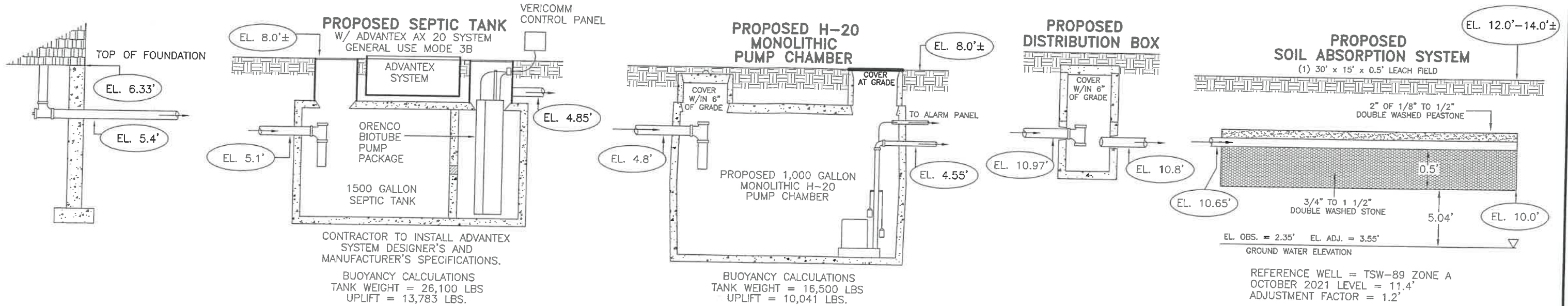
P.O. BOX 81  
 NORTH EASTHAM, MA 02651  
 (508)240-2220  
 Email: jason@jcellisdesign.com





# SECTION DETAIL - COMPONENTS

NOT TO SCALE



HEALTH DEPARTMENT  
TOWN OF TRURO

MAR 14 2022

RECEIVED BY

## DESIGN CALCULATIONS

**FLOW RATE:**  
3 BEDROOM DWELLING = 330 G/P/D REQUIRED  
(110 G/P/D PER BEDROOM x 3 BEDROOMS)  
NO GARBAGE GRINDER ALLOWED

**PROPOSED SEPTIC TANK:**  
330 G/P/D x 2 = 660 G/P/D REQUIRED  
USE 1500 GALLON SEPTIC TANK

**PROPOSED SOIL ABSORPTION SYSTEM:**  
PERC RATE = <2 MIN/IN - CLASS I SOIL  
BOTTOM: (30)(15) = 450 S.F.  
(450)(0.74) = 333 G/P/D PROVIDED  
USE: (1) 30' LONG X 15' WIDE X 0.5' DEEP  
LEACH FIELD AS SHOWN IN DETAIL.

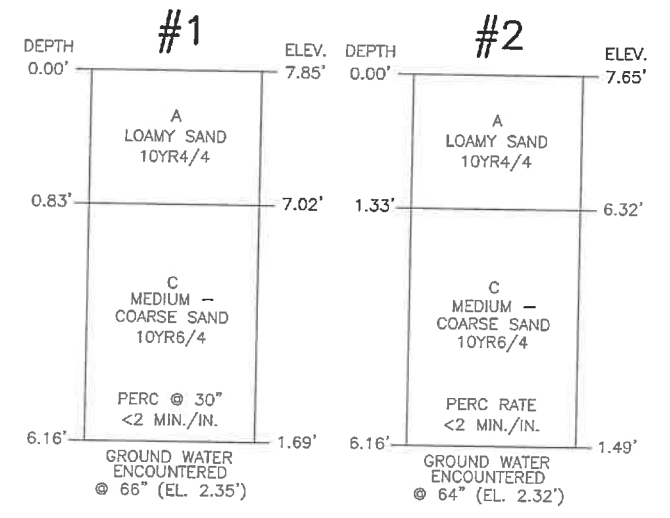
**PROPOSED PUMP CHAMBER:**  
USE (1) 1,000 GALLON PUMP CHAMBER  
USE ORENCO PUMP PF300511 OR EQUIVALENT  
FLOAT SETTINGS: PUMP ON = 14" PUMP OFF = 12"  
ALARM ON = 16"  
STORAGE CAPACITY PROVIDED = 790 GALLONS  
MINIMUM 4 CYCLES REQUIRED PER DAY  
MAXIMUM VOLUME REQUIRED PER DOSE CYCLE: 82.5 GALLONS  
VOLUME PROVIDED PER DOSE CYCLE: 41.6 GALLONS

## NOTES

1. PRECAST SEPTIC TANK AND PUMP CHAMBER TO BE H-20 RATED. ALL OTHER COMPONENTS WITH ANY ANTICIPATED VEHICULAR TRAFFIC TO BE H-20 RATED.
2. ELEVATION DATUM IS N.A.V.D. 1988
3. MUNICIPAL WATER IS NOT AVAILABLE.
4. ALL CONSTRUCTION TO CONFORM WITH 310 CMR 15.000 AND ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS.
5. INSTALLER/CONTRACTOR TO REVIEW & VERIFY ALL ELEVATIONS AND DETAILS AND REPORT ANY DISCREPANCIES TO DESIGNER PRIOR TO CONSTRUCTION OR ASSUME ALL RESPONSIBILITY.
6. INSTALLER/CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SAFE WORK AREA, VERIFYING ALL UTILITIES AND NOTIFYING DIG SAFE PRIOR TO CONSTRUCTION.
7. ANY CHANGES TO OR DEVIATIONS FROM THIS PLAN MUST BE APPROVED IN WRITING BY J.C. ELLIS DESIGN CO. AND BOARD OF HEALTH.
8. FINISH COVER OVER COMPONENTS IS NOT TO EXCEED 3' PER 310 CMR 15.000.
9. ALL ABANDONED SEPTIC SYSTEM COMPONENTS TO BE PUMPED DRY AND REMOVED AND REPLACED WITH CLEAN MEDIUM SAND.
10. ALL COMPONENTS TO BE PROVIDED WITH WATERTIGHT ACCESS PORTS WITHIN 6" OF FINISH GRADE.
11. ALL SEPTIC TANKS, DISTRIBUTION BOXES AND PIPING TO BE INSTALLED WATERTIGHT.
12. NO KNOWN WELLS EXIST WITHIN 100' OF PROPOSED LEACH AREA.
13. THIS IS NOT A CERTIFIED PLOT PLAN AND UNDER NO CIRCUMSTANCES IS THIS PLAN TO BE USED FOR BUILDING OR ZONING PURPOSES.
14. LEACH AREA TO BE PROVIDED WITH AT LEAST ONE INSPECTION PORT CONSISTING OF A PERFORATED FOUR INCH PIPE PLACED VERTICALLY DOWN INTO THE STONE TO THE NATURALLY OCCURRING SOIL OR SAND FILL BELOW THE STONE. THE PIPE SHALL BE CAPPED WITH A SCREW TYPE CAP AND ACCESSIBLE WITHIN 3" OF GRADE.
15. EXCAVATE ALL UNSUITABLE SOIL, ONLY AS NECESSARY, 5' AROUND AND UNDER S.A.S. DOWN TO C LAYER AND REPLACE WITH CLEAN MEDIUM SAND.
16. INSTALL 40 MIL POLY FLOW BARRIER AS SHOWN AROUND PROPOSED LEACH FIELD FROM EL. 11.5' DOWN TO EL. 6.0'.
17. INSTALL VENT WITH CHARCOAL FILTER ON LEACH FIELD.
18. SEPTIC TANK AND PUMP CHAMBER TO BE INSTALLED WATER TIGHT AND WATER PROOFED. SEPTIC TANK AND PUMP CHAMBER TO BE INSTALLED WITH RUBBER BOOTS AT ALL PIPE INVERTS.
19. ALL EXISTING BUILDING SEWER LINES TO BE CHANGED AS NECESSARY TO LOCATION AND ELEVATION SPECIFIED.
20. SOIL CONDITIONS TO BE VERIFIED IN AREA OF PROPOSED LEACH FIELD AT TIME OF INSTALLATION.

## DEEP HOLE DATA

PERFORMED BY: JASON C. ELLIS, R.S., S.E.  
WITNESSED BY: AROZANA DAVIS, TRURO BOH  
TEST DATE: OCTOBER 7, 2021



## SEPTIC SYSTEM UPGRADE PLAN

SUBJECT: **45 CORN HILL ROAD**  
TRURO, MA

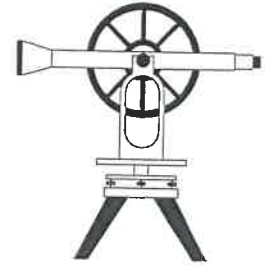
PREPARED FOR:  
**ROSE INVESTMENT TRUST**  
C/O MARY ROSE  
P.O. BOX 776  
TRURO, MA 02666-0776

ASSESSOR'S  
MAP 45 PARCEL 116

DATE: OCTOBER 15, 2021  
REV: FEBRUARY 25, 2022

SHEET 2 OF 3

J.C. ELLIS DESIGN



P.O. BOX 81  
NORTH EASTHAM, MA 02651  
(508)240-2220  
Email: jason@jcellisdesign.com



JASON C. ELLIS, R.S.

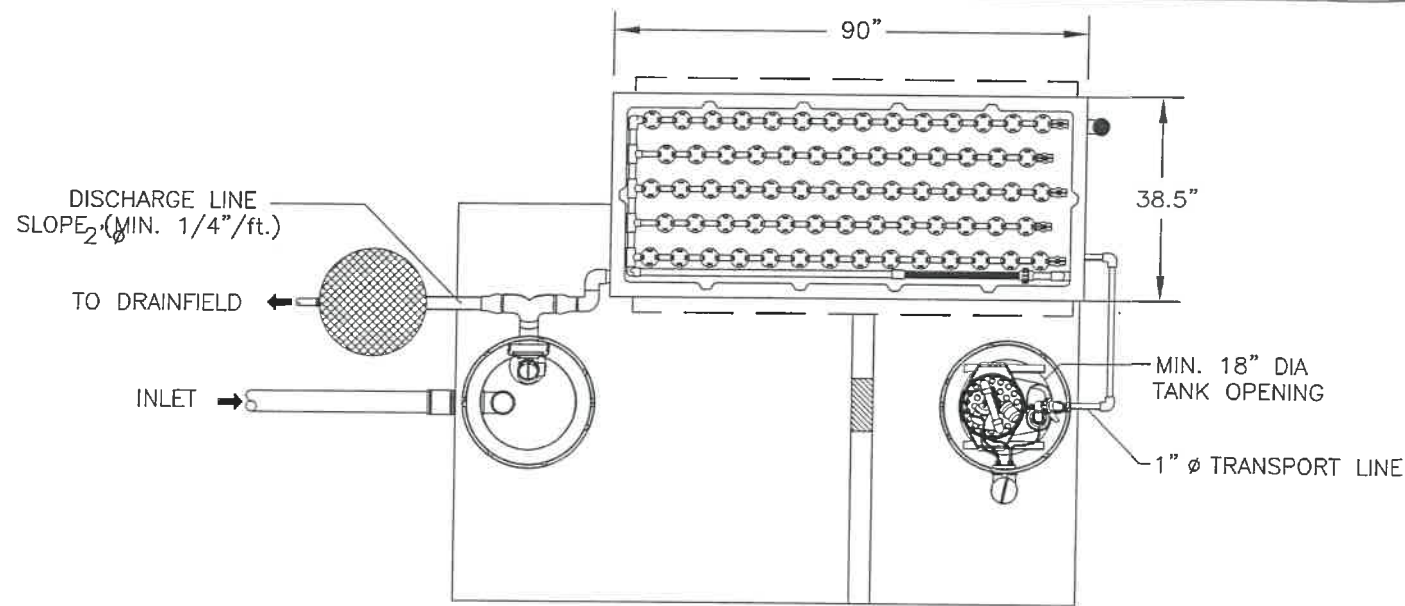
# ADVANTEX<sup>®</sup> AX20 MODE 3B

## DESIGN NOTES

FOR RESIDENTIAL STRENGTH WASTE UP TO 4-BEDROOMS

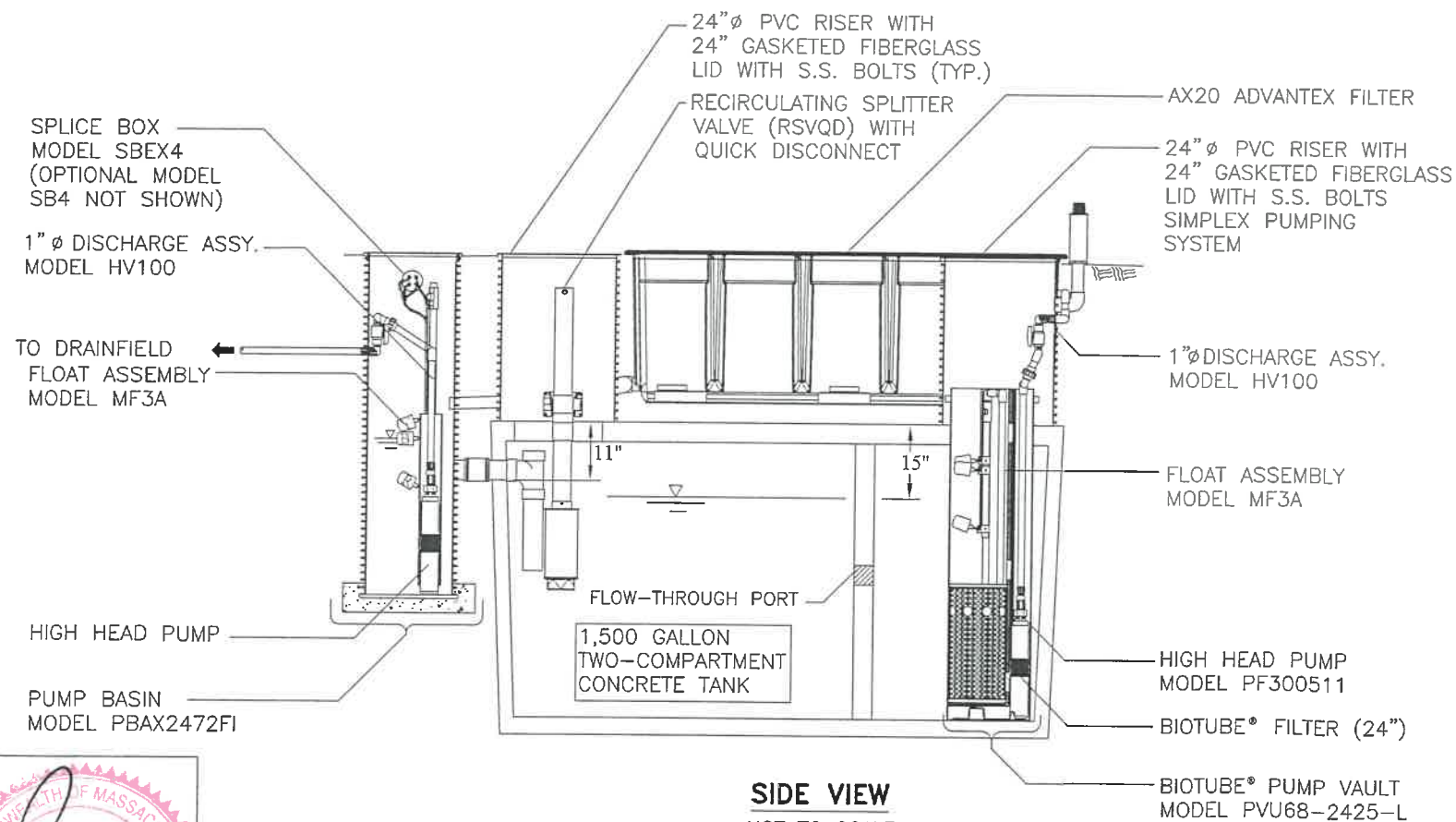
INSTALLATION TO BE PERFORMED BY AN ADVANTEX AUTHORIZED INSTALLER ONLY.

START-UP AND SERVICE TO BE PERFORMED BY AN ADVANTEX AUTHORIZED SERVICE PROVIDER ONLY.



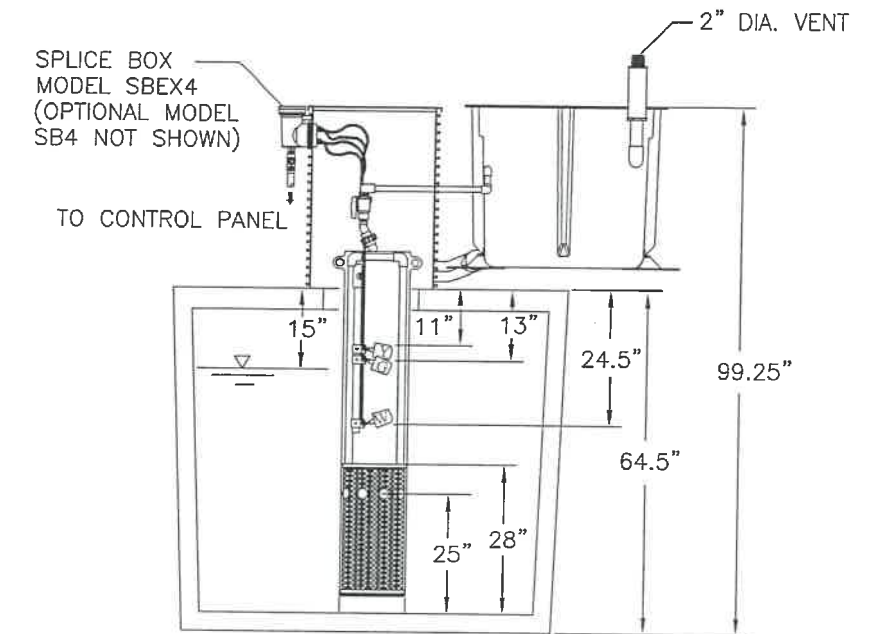
**TOP VIEW**

NOT TO SCALE



**SIDE VIEW**

NOT TO SCALE



**END VIEW**

NOT TO SCALE

FLOAT FUNCTIONS	
Y	HIGH LEVEL ALARM
G	OVERRIDE TIMER ON/OFF
W	LLA/RO
B	PUMP ON
R	PUMP OFF

## ADVANTEX AX20 1 POD MODE 3B

SUBJECT:  
**45 CORN HILL ROAD**  
 TRURO, MA

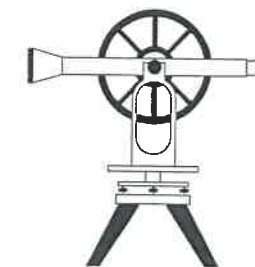
PREPARED FOR:  
**ROSE INVESTMENT TRUST**  
 C/O MARY ROSE  
 P.O. BOX 776  
 TRURO, MA 02666-0776

ASSESSOR'S  
 MAP 45 PARCEL 116

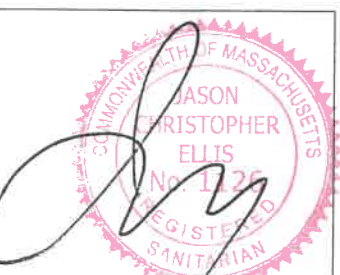
DATE: OCTOBER 15, 2021  
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SHEET 3 OF 3

J.C. ELLIS DESIGN



P.O. BOX 81  
 NORTH EASTHAM, MA 02651  
 (508)240-2220  
 jason@jcellisdesign.com





260 Cranberry Highway  
 Orleans, MA 02653  
 508.255.6511 P 508.255.6700 F  
 Orleans | Sandwich | Nantucket  
 coastalengineeringcompany.com

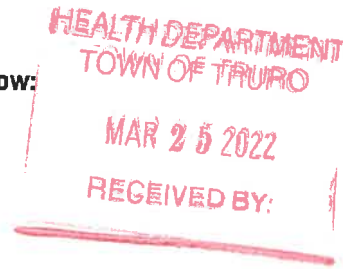
# TRANSMITTAL

**To:** Truro Board of Health  
 Attn: Emily Beebe, Agent  
 24 Town Hall Road  
 Truro, MA 02666

**Date:** 3/25/22 **Project No.** C17338.01  
**Via:**  1st Class Mail  Pick up  Delivery  Fed Ex  
**Phone:**  
**Fax:**

**Subject:** **Board of Health Variance Application Filing Package**  
 Proposed Sewage Disposal System Upgrade  
 Thomas Dennis  
 127 & 133 South Pamet Road  
 Truro, MA  
 Map 48 Parcels 12 & 8

**No. of pages to follow:**



Plans  Copy of Letter  Specifications  Other

**We are sending the following items:**

Copies	Date	No.	Description
8	Rev. 3/24/22		Coastal Engineering Co, Inc., Site Plan Showing Building Relocation & Site Improvements
8	Rev. 3/24/22		Coastal Engineering Co, Inc., Sewage Disposal System Details

**These are transmitted as checked below:**

for approval  for your use  as requested  for review & comment

**Remarks:** Enclosed please find copies of the revised plans for the referenced project.

If you have any questions, please contact our office.

**cc:** Thomas Dennis  
 John G. Schnaible, Project Manager

**By:** Sarah Cole

D:\DOC\C17300\17338.01\Permitting\BOH\Revised Plan Submission 3-24-22\Transmittal Template.doc

NOTE: If enclosures are not as noted, please contact us at (508) 255-6511



# V2021-19

# TOWN OF TRURO

## Board of Health

P.O. Box 2030, Truro, MA 02666

Tel: (508) 349-7004 x-32 Fax: (508) 349-5508

HEALTH DEPARTMENT  
TOWN OF TRURO

NOV 18 2021

RECEIVED BY:

**PAID**  
\$75.00  
Cash

### APPLICATION FOR BOARD OF HEALTH VARIANCES

Date Submitted: 11/24/21 Board of Health Hearing Date: 12/7/21

Property Owner's Name: Thomas P. Dennis, Jr. & Kathleen C. Dennis & Cape Rental LLC

Mailing Address: \*See Attached Owners List\*

Address of Property: 127 & 133 South Pamet Road

Map and Parcel Number: Map # 48 Parcel # 12 & 8

Design Engineer/Sanitarian John G. Schnaible

Firm/Company Name: Coastal Engineering Co., Inc. Phone #: 508-255-6511

Address: 260 Cranberry Highway, Orleans, MA 02653

Real Estate Broker Contact: \_\_\_\_\_

Anticipated Date of Property Transfer: \_\_\_\_\_ Length of Time Requested to

Complete Upgrade: \_\_\_\_\_

\*NOTE: The abutter's notification letter must be sent to each abutter by certified mail, return receipt requested, at the expense of the applicant. The green cards must be submitted at the hearing.

Please check type of variance requested:

- Title 5 Variance Request Section 15.211 Distances
- Board of Health Variance Request Section/Article Section VI Article 10 & Article 8
- Board of Health Variance Request from Section VI, Article 3(1)a. Required Upgrade Upon Property Transfer. Please include Buyer's Information below:

Buyer's Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone #: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Signature (Property Owner) [Signature] Signature (Buyer) \_\_\_\_\_

Date 11/18/21 Date \_\_\_\_\_

Please return this application to:  
Truro Health Agent, 24 Town Hall Road, P.O. Box 2030, Truro, MA 02666  
With a \$75.00 application fee made payable to the Town of Truro

**DEEP OBSERVATION HOLES**

DEEP OBSERVATION HOLE 1 NO SCALE

ELEVATION	SOIL HORIZON	SOIL TEXTURE	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER
16.4' - 13.4'	FILL				
13.4' - 12.4'	B	LOAMY SAND			
12.4' - 5.4'	C	MEDIUM TO FINE SAND			

NO GROUNDWATER ENCOUNTERED

DATE OF TESTS: 02-17-06  
 PERCOLATION RATE: LESS THAN 2 MINUTES PER INCH  
 WITNESSED BY: D. QUINN, RYDER & WILCOX, INC.  
 P. PAJARON, TRURO BOH

DEEP OBSERVATION HOLE 2 NO SCALE

ELEVATION	SOIL HORIZON	SOIL TEXTURE	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER
19.2' - 15.2'	FILL				
15.2' - 14.6'	A	LOAMY SAND			
14.6' - 13.2'	B	LOAMY SAND			
13.2' - 8.2'	C	MEDIUM SAND			

NO GROUNDWATER ENCOUNTERED

**DESIGN CALCULATIONS**

**DESIGN FLOW:** 7 BEDROOMS AT 110 GAL. PER DAY PER BEDROOM = 770 GPD (RELOCATED BUILDING)  
 770 GPD X 200% = 1540 GALLONS - USE 2000 GALLON NIROE WASTEWATER TREATMENT SYSTEM  
 A 63" L. x 12" W. x 2' D. LEACHING CHAMBER CAN LEACH:  
 Vt = 63 (2) x .74 + 63 (12) x .74 + 12 (2) x .74 = 781.4 GPD

**RETAIN:** EXISTING 54' x 12' SOIL ABSORPTION SYSTEM PER RYDER & WILCOX PLAN (EXPAND)  
 EXISTING DISTRIBUTION BOX PER RYDER & WILCOX PLAN (RELOCATE)

**INSTALL:** ONE (1) - 85" L x 51" W INFILTRATOR CHAMBER TO EXPAND CHAMBER TO 63" L. x 12" W. x 2' D. LEACHING CHAMBER Vt = 781.4 GPD > 770 GPD REQ'D.  
 ONE (1) - 2000 GALLON KLEAN TU NIROE SEPTIC TANK, MINIMUM ALLOWED  
 ONE (1) - KLEAN TU NIROE WASTEWATER TREATMENT SYSTEM  
 ONE (1) - 1500 GAL. PUMP CHAMBER, MINIMUM ALLOWED

**NOTES**

- GARBAGE GRINDERS ARE NOT ALLOWED WITH THIS DESIGN.
- ALL WATER FIXTURES TO BE WATER TESTED BY CONTRACTOR TO VERIFY ALL SEWER EXIT LOCATIONS PRIOR TO INSTALLATION OF ANY SYSTEM COMPONENTS.
- THE INSTALLER IS RESPONSIBLE FOR ASSURING THAT COMPONENTS OF THE SEWAGE DISPOSAL SYSTEM ARE DESIGNED WITH SUFFICIENT STRENGTH TO SUSTAIN ALL LOADS TO BE IMPOSED ON THEM. ANY COMPONENT OF THE SYSTEM SUBJECT TO VEHICULAR TRAFFIC SHALL COMPLY WITH A MINIMUM STANDARD OF A.A.S.H.T.O. H-20 WHEEL LOADS.
- PRIOR TO SETTING ANY SEWAGE DISPOSAL SYSTEM COMPONENT, INSTALLER SHALL VERIFY EXISTING CONDITIONS, INCLUDING ELEVATIONS OF EXIT INVERTS, AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER. THE INSTALLER SHALL COORDINATE WITH THE PLUMBING SUBCONTRACTOR TO VERIFY THE COMPATIBILITY OF THE PROPOSED BUILDING SEWER EXIT ELEVATION WITH THE BUILDING'S EXISTING PLUMBING PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE REPORTED TO THE DESIGN ENGINEER.
- ALL GRAVITY SEWER PIPE SHALL BE 4" DIA. SCH 40 PVC UNLESS OTHERWISE NOTED. THE MINIMUM SLOPE OF 4" DIA. SCH 40 PVC SHALL BE 0.01 FT/FT.
- NO PART OF THIS DESIGN SHALL BE ALTERED WITHOUT PRIOR APPROVAL FROM THE DESIGN ENGINEER AND THE AGENT OF THE LOCAL BOARD OF HEALTH. ALL REQUESTS FOR CHANGES SHALL BE MADE IN WRITING PRIOR TO CONSTRUCTION.
- THE USE OF ALTERNATE MANUFACTURERS FOR SYSTEM COMPONENTS SHALL NOT BE APPROVED IF THE USE OF THEIR EQUIPMENT REQUIRES CHANGES IN DESIGN.
- THE INSTALLER SHALL ASCERTAIN THE LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION, AND SHALL PROTECT UTILITIES WITHIN THE WORK AREA DURING CONSTRUCTION.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.

IF APPLICABLE:  
 10. FILL MATERIAL FOR SYSTEMS CONSTRUCTED IN FILL SHALL BE CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS. THE SAND SHALL BE GRADED SUCH THAT NOT MORE THAN 45% OF THE SAMPLE, BY WEIGHT, SHALL BE RETAINED ON THE #4 SIEVE. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES. THE MATERIAL THAT PASSES THE #4 SIEVE SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE SIZE	PERCENT PASSING
# 4	100%
# 20	10%-100%
# 100	0%-20%
# 200	0%-5%

**LOCAL UPGRADE APPROVALS AND VARIANCES**

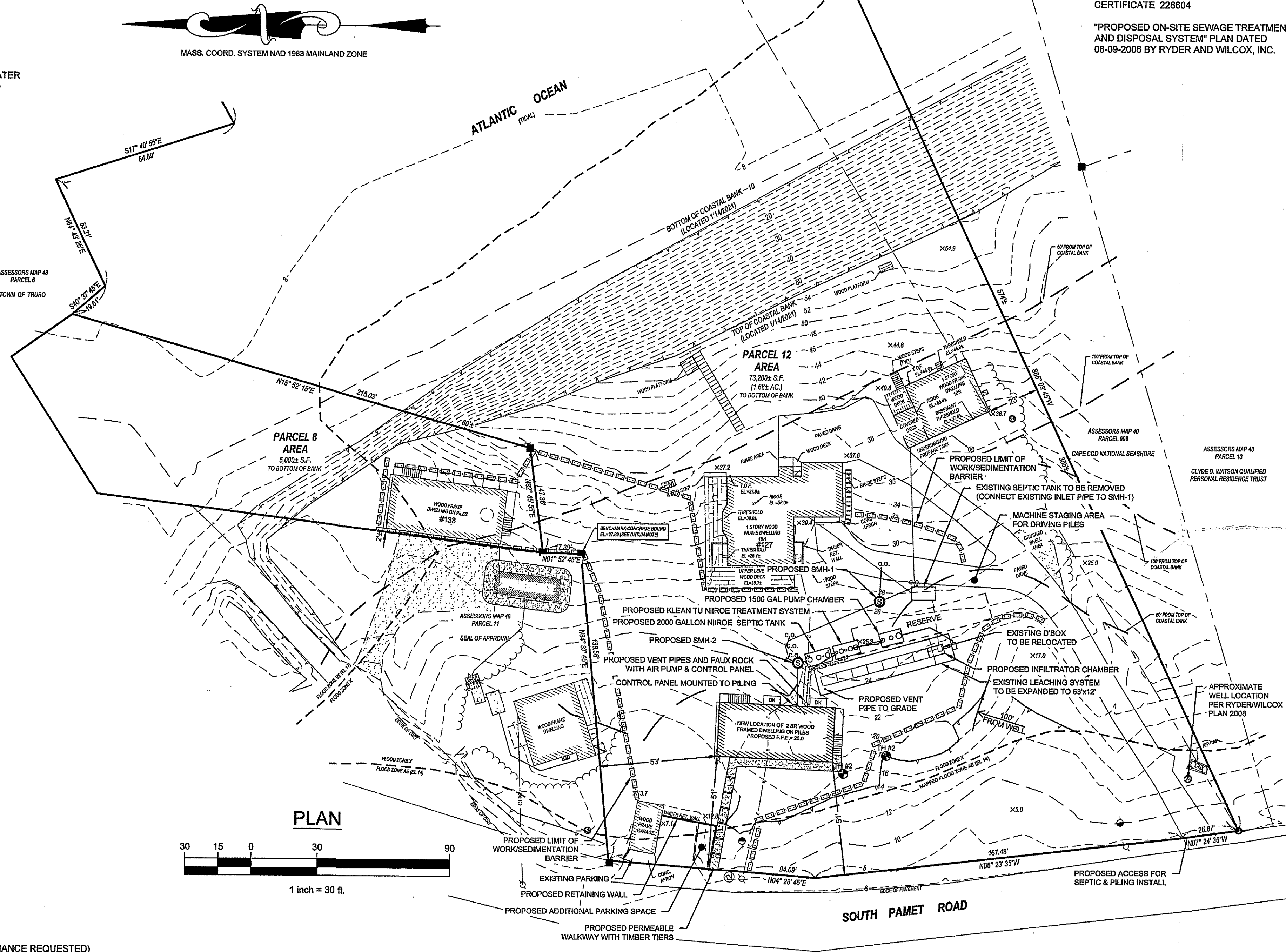
**310 CMR 16.000 (TITLE 9) LOCAL UPGRADE APPROVALS:**  
 15.211 MINIMUM SETBACK DISTANCES  
 -SAS & (RESERVE) LESS THAN 50 FEET FROM COASTAL BANK (32 FEET VARIANCE REQUESTED)

**TOWN OF TRURO BOARD OF HEALTH REGULATIONS:**  
 SECTION VI, ARTICLE 10 REQUIRED SETBACKS FOR SYSTEM COMPONENTS  
 -NIROE SEPTIC SYSTEM, PUMP, AND CHAMBER LESS THAN 100 FEET FROM WETLANDS (53 FEET VARIANCE REQUESTED)  
 -SAS & (RESERVE) LESS THAN 150 FEET FROM WETLANDS (132 FEET VARIANCE REQUESTED)

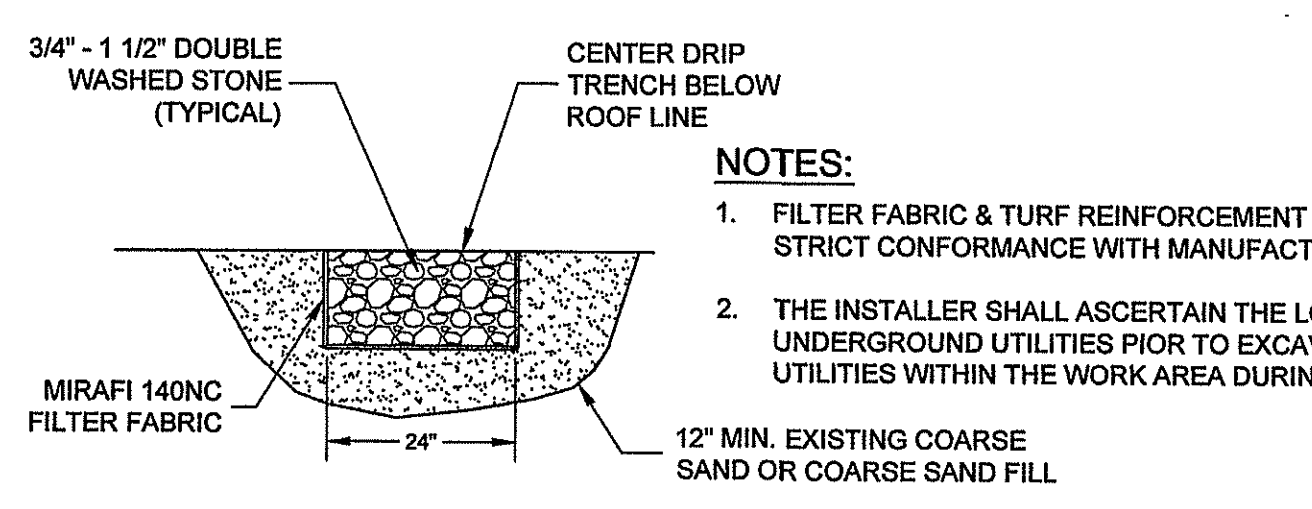
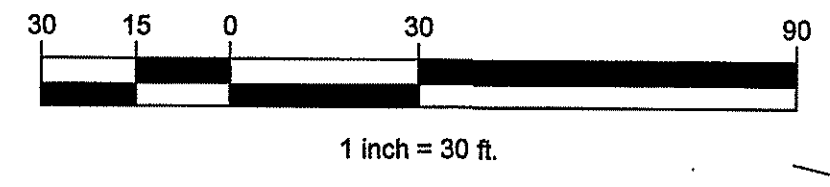
**INSPECTION NOTE**

THE STATE ENVIRONMENTAL CODE, TITLE 5, REQUIRES INSPECTION(S) OF THE SEWAGE DISPOSAL SYSTEM BY THE DESIGN ENGINEER. INSTALLATION CONTRACTOR MUST NOTIFY THE DESIGN ENGINEER PRIOR TO THE START OF INSTALLATION FOR DISCUSSION ON REQUIRED INSPECTIONS.

NOTE: THE INFORMATION HEREON HAS BEEN PREPARED ACCORDING TO THE REQUIREMENTS OF TITLE 5 OF THE STATE ENVIRONMENTAL CODE FOR SUBSURFACE DISPOSAL OF SANITARY SEWAGE AND LOCAL BOARD OF HEALTH REGULATIONS WITH NOTED REGULATIONS

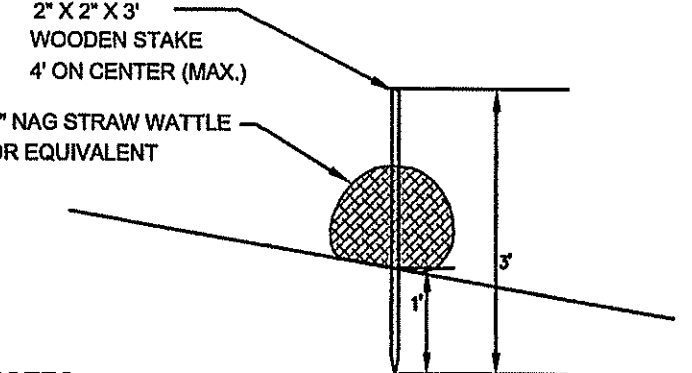


**PLAN**



**INFILTRATION TRENCHES AT ROOF DRIP LINES**

(2' W x 1' DEEP)  
 NOT TO SCALE



**SEDIMENT CONTROL BARRIER DETAIL**

NOT TO SCALE

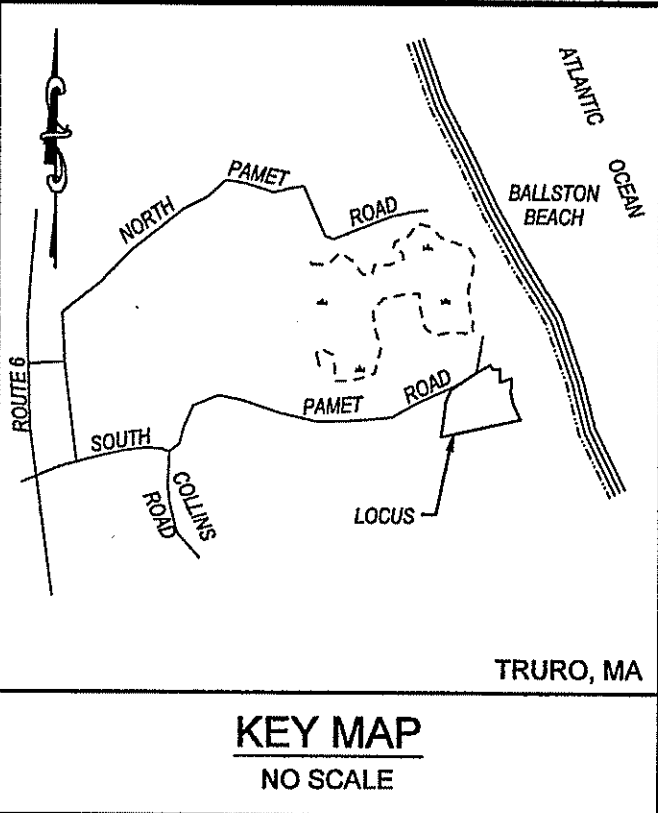
**REFERENCE:**

ASSESSORS MAP: 48, PARCEL: 8 & 12  
 LAND COURT PLAN 16182-E  
 LAND COURT PLAN 16182-F  
 LAND COURT DOC. #1287149

OWNER OF RECORD:  
 PARCEL 8  
 THOMAS P. DENNIS, JR. & KATHLEEN C. DENNIS  
 DEED BOOK 28049, PAGE 220

PARCEL 12  
 THOMAS P. DENNIS, JR. & KATHLEEN C. DENNIS  
 CERTIFICATE 228604

\*PROPOSED ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM\* PLAN DATED 08-09-2006 BY RYDER AND WILCOX, INC.



**KEY MAP**

NO SCALE

**FLOOD ZONE:**

FLOOD ZONE AE EL. 14 AND ZONE VE EL. 17 SHOWN ON THIS DRAWING ARE A DIRECT REPRESENTATION OF THE GRAPHIC FLOOD ZONE BOUNDARIES SHOWN ON FEMA FIRM PANEL #25001G0232Z EFFECTIVE JULY 16, 2014. PLEASE NOTE THAT SITE SPECIFIC FLOODPLAIN BOUNDARIES MAY VARY DUE TO DIFFERENT INTERPRETATIONS OF THESE BOUNDARIES. USERS ARE ADVISED TO VERIFY LOCATION OF THESE BOUNDARIES WITH THE DESIGNATED COMMUNITY FLOODPLAIN MANAGERS AND/OR FEMA PRIOR TO SITING ANY PROPOSED STRUCTURES.

**DATUM:**

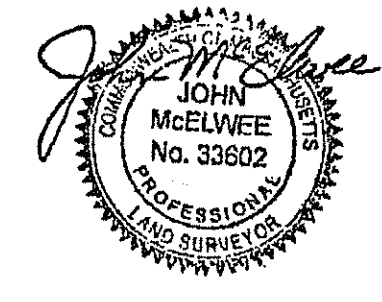
ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988)

**LEGEND**

- EXISTING**
- BOUND
  - PROPERTY LINE
  - 10- MAJOR CONTOUR
  - 2- MINOR CONTOUR
  - FENCE
  - UNDERGROUND ELECTRICAL
  - WATER SERVICE
  - SEPTIC PIPE
  - OVERHEAD WIRES
  - GUY WIRE
  - UTILITY POLE
  - ⊙ MONITORING WELL
  - ⊙ SEWER MANHOLE
  - ⊙ CESSPOOL
  - ⊙ ELECTRIC MANHOLE
  - ⊙ TELECOMMUNICATION
  - ⊙ PULL BOX
  - x10.0 SPOT ELEVATION
  - ⊙ ELECTRIC METER
  - ⊙ CABLE TV BOX
  - ⊙ DRAIN MANHOLE
  - ⊙ CATCH BASIN
  - ⊙ DEEP OBSERVATION HOLE
  - TOP OF COASTAL BANK
- PROPOSED**
- WORK LIMIT & SILT BARRIER
  - G.S.T. GALLON SEPTIC TANK
  - G.P.C. GALLON PUMP CHAMBER
  - UTILITY POLE
  - c.o. CLEANOUT
  - ⊙ TEST HOLE

I HEREBY CERTIFY THAT THE CONDITIONS SHOWN HEREON ARE LOCATED AS THEY EXISTED ON THE GROUND AS OF 01-14-2021.

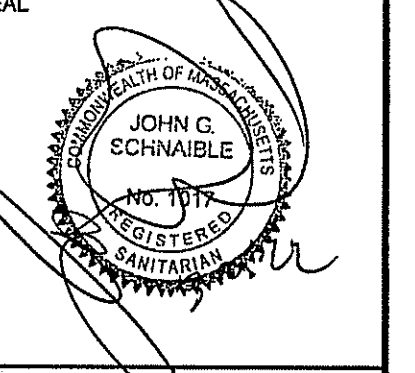
DATE 03-25-2022



HEALTH DEPARTMENT  
 TOWN OF TRURO  
 MAR 29 2022  
 RECEIVED BY:



NO.	DATE	REVISION
2	03-24-2022	SUBSTITUTION OF MICROFAST SYSTEM FOR NIROE SYSTEM
1	03-09-2022	ADJUSTMENTS TO SEWAGE DISPOSAL SYSTEM AND SITE PLAN

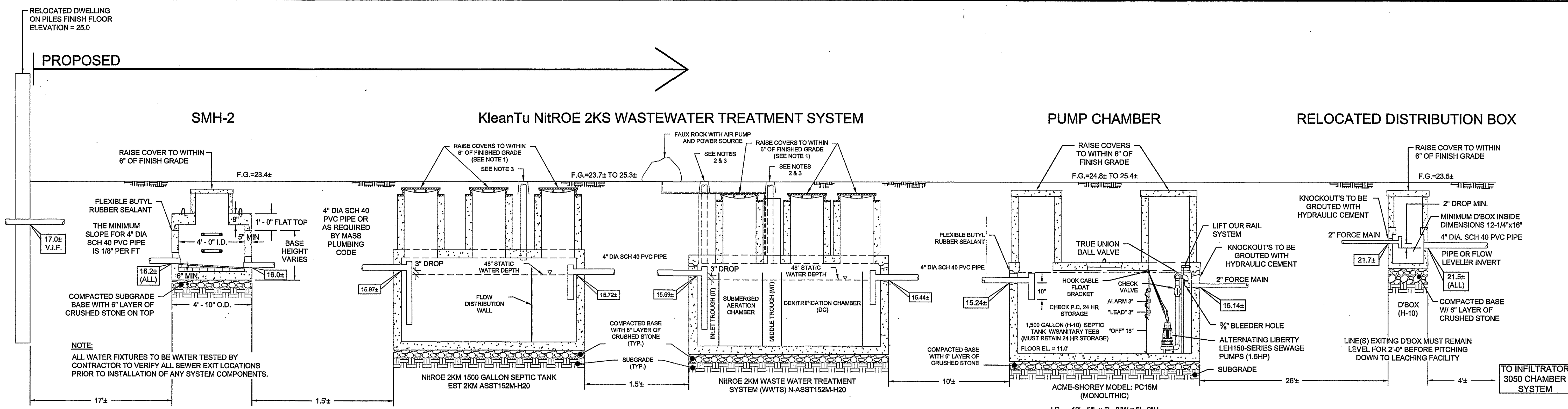


PROJECT: THOMAS DENNIS  
 127 & 133 SOUTH PAMET ROAD  
 SHEET TITLE: SITE PLAN SHOWING BUILDING RELOCATION AND SITE IMPROVEMENTS

SCALE: AS NOTED  
 DRAWING FILE: C17338-C.dwg  
 DATE: 07-14-2021  
 DRAWN BY: DAP/IJB  
 CHECKED BY: JGS

**C2.1.2**

FOR PERMITTING PURPOSES ONLY



**SCHEMATIC FLOW PROFILE**

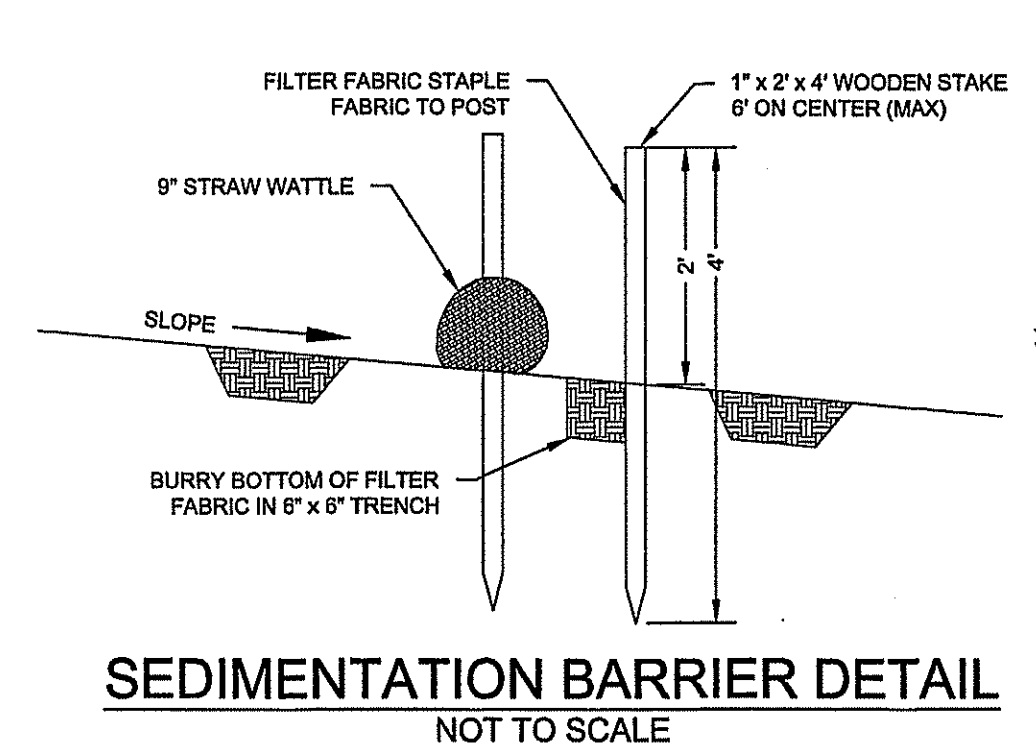
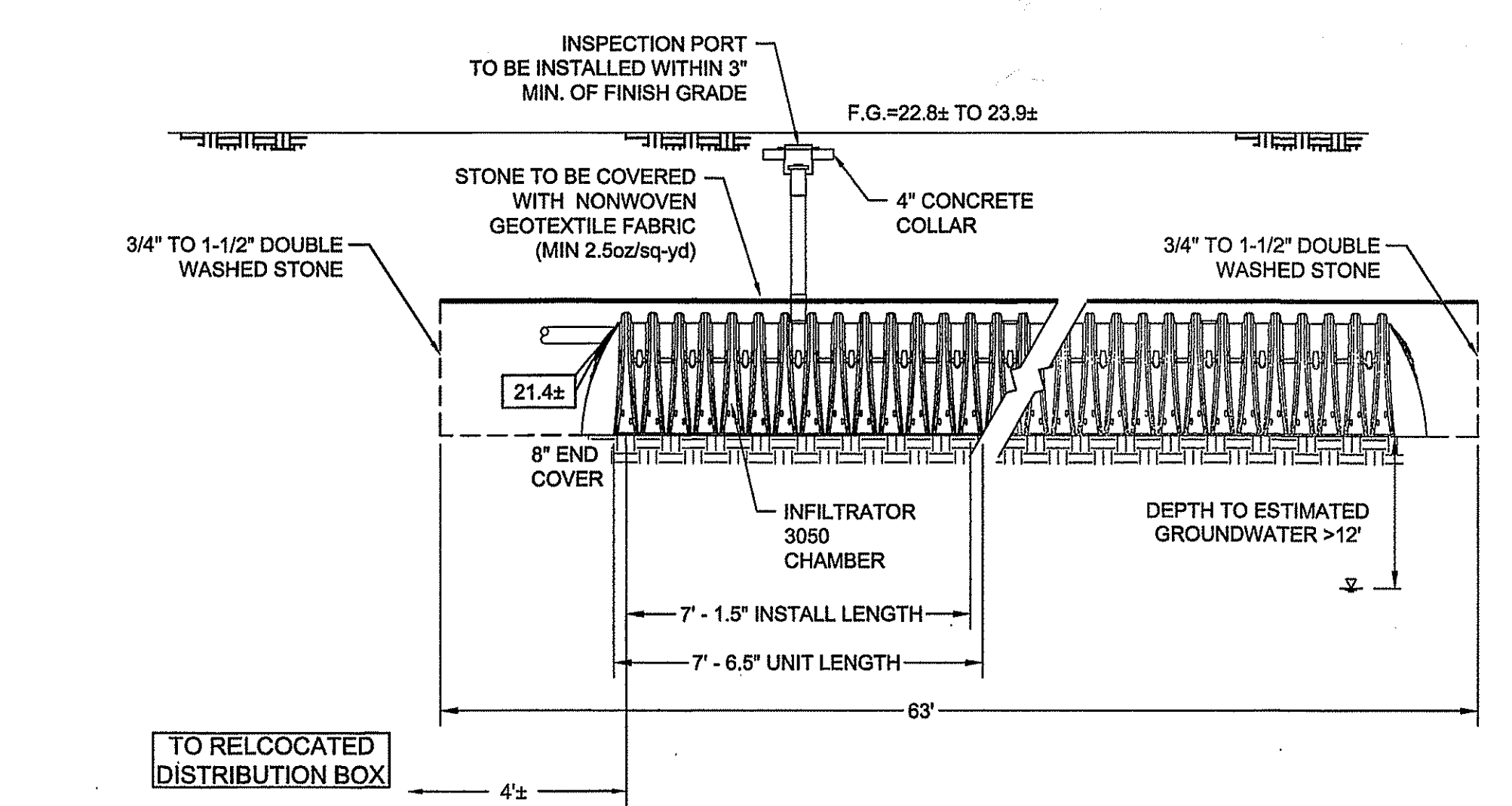
ALL INSTALLATIONS MUST CONFORM TO THE MINIMUM REQUIREMENTS OF TITLE 5

**NOTES:**

1. FOR 24" HOLES, PROVIDE 24" DIA CONCRETE RISER AND COVER (H-20) TO 6" BELOW GRADE.
2. FOR 12" HOLES USE ADS PIPE (CORRUGATED) AND POLYLOK (OR EQUIVALENT) COVERS TO 6" BELOW GRADE.
3. 4" DIA PIPE (3" BELOW GRADE) WITH FERROD RUBBER CAP AND A 6" ROUND VALVE BOX AND COVER TO BE FLUSH WITH GRADE.
4. CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING DISTRIBUTION BOX OUTLET PIPE PRIOR TO SETTING ANY TANK OR INSTALLING ANY SEWER PIPE, AND SHALL REPORT THE ELEVATION TO THE ENGINEER.

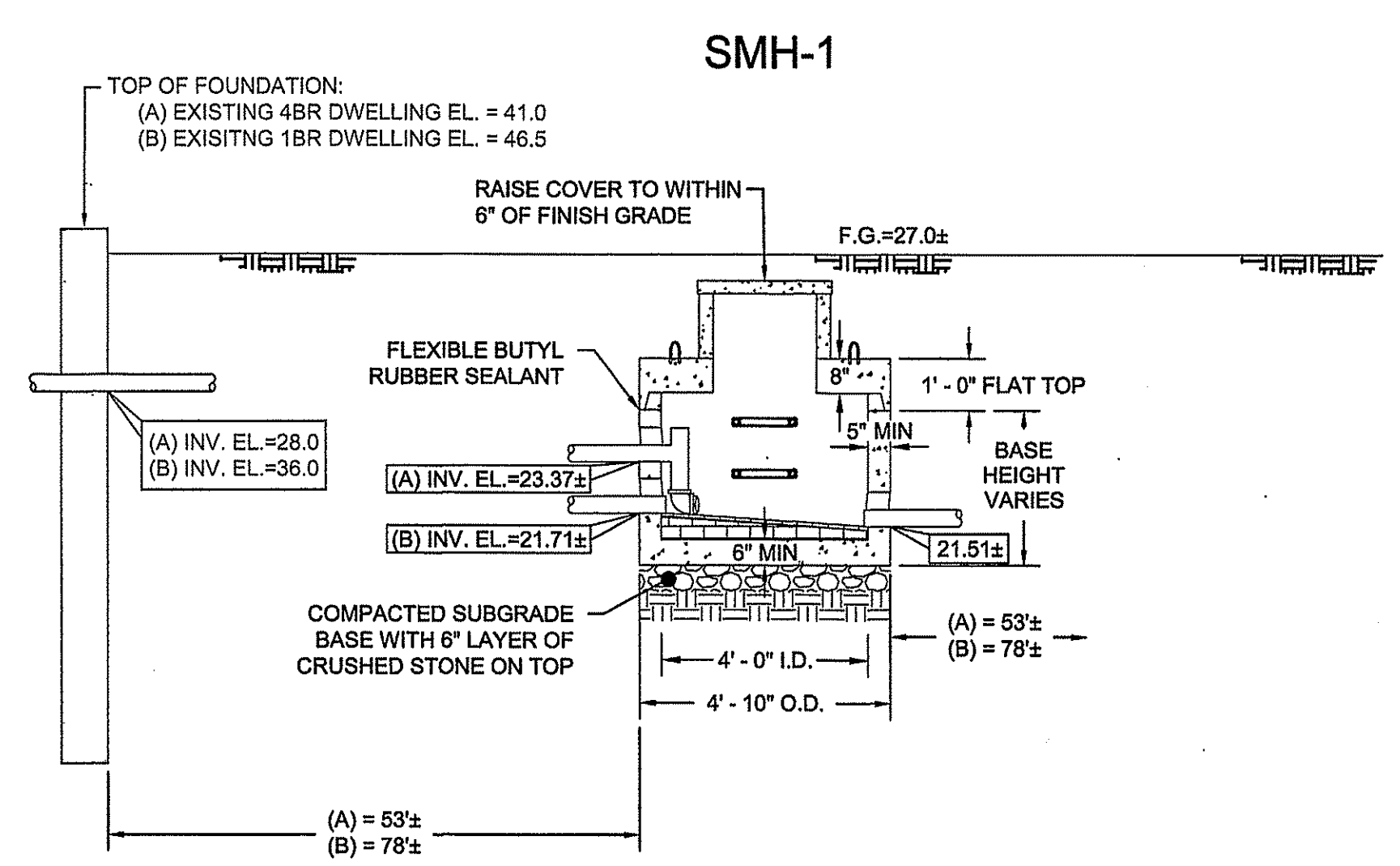
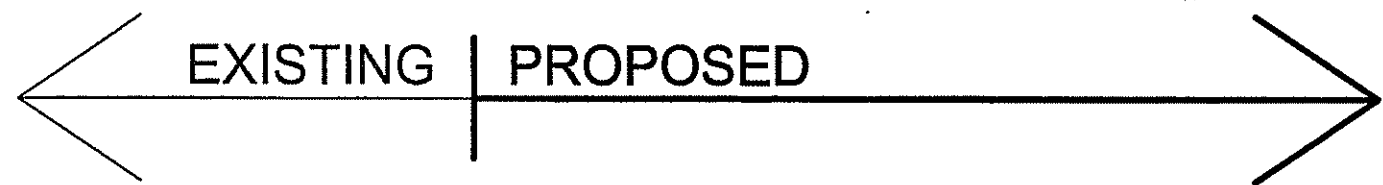


**INFILTRATOR 3050 CHAMBER SYSTEM**



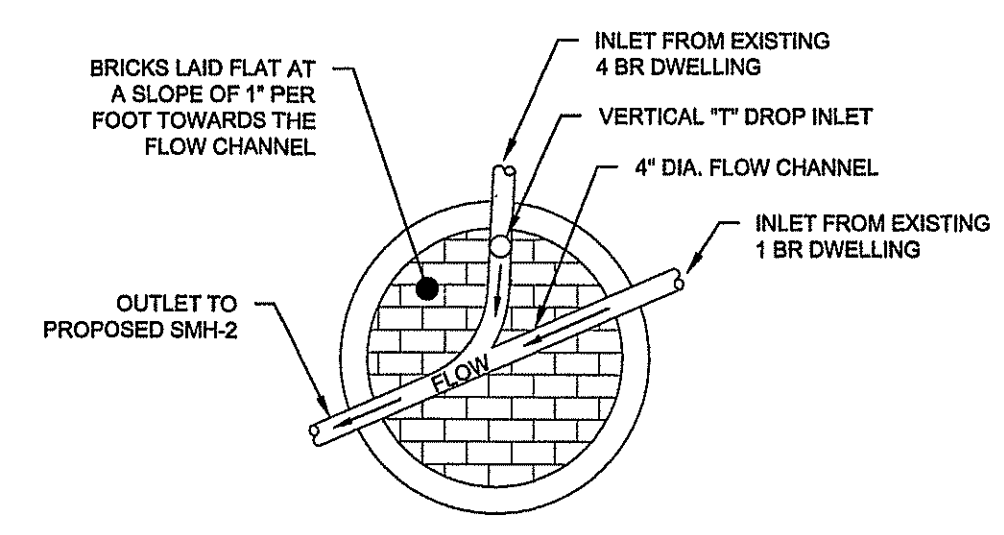
- EROSION & SEDIMENTATION CONTROL NOTES:**
1. THE SEDIMENT CONTROL BARRIER SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL STABILIZATION AND RE-VEGETATION OF DISTURBED AREAS.
  2. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL AND SHALL PROTECT THE CONSTRUCTION SITE FROM EROSION UNTIL COMPLETION OF SITE WORK AND ESTABLISHMENT OF VEGETATIVE GROUND COVER.
  3. AFTER GRADING, EXPOSED SLOPES SHALL BE COVERED WITH NORTH AMERICAN GREEN SC150 EROSION CONTROL BLANKET, OR APPROVED EQUAL. THE EROSION CONTROL BLANKET SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.
  4. THE CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING MEASURES DURING THE DAY TO DAY OPERATION AT THE SITE. THE SITE SHOULD BE POLICED DAILY TO REMOVE ANY LITER OR DEBRIS.
  5. MATERIAL STOCKPILES THAT ARE IN PLACE FOR AN EXTENDED PERIOD OF TIME SHALL BE STABILIZED WITH VEGETATION, MULCHING, EROSION CONTROL BLANKETS, AND OTHER MEASURES THAT ARE NECESSARY TO PREVENT THE DISCHARGE OF SEDIMENT FROM PROJECT SITE.

FOR PERMITTING PURPOSES ONLY



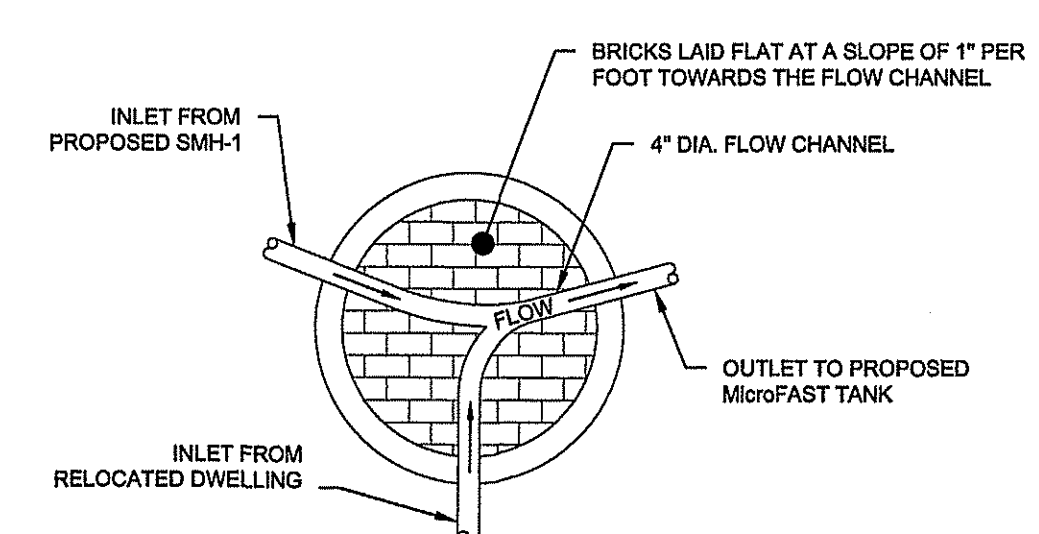
**SCHEMATIC FLOW PROFILE**

ALL INSTALLATIONS MUST CONFORM TO THE MINIMUM REQUIREMENTS OF TITLE 5



**SMH-1 PLAN VIEW**

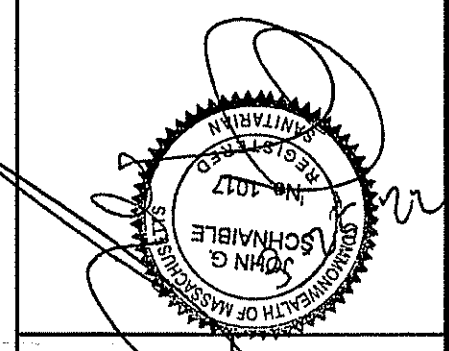
SCALE 1:3



**SMH-2 PLAN VIEW**

SCALE 1:3

NO.	DATE	REVISION	BY
2	09-24-2022	SUBSTITUTION OF MicroFAST SYSTEM FOR KLEAN TU NITROE SYSTEM	DAP
1	09-09-2022	ADJUSTMENTS TO SEWAGE DISPOSAL SYSTEM	DAP



PROJECT: THOMAS DENNIS  
 127 & 133 SOUTH PAMET ROAD  
 SHEET TITLE: SEWAGE DISPOSAL SYSTEM DETAILS

SCALE	AS NOTED
DRAWING FILE	C17338-C.dwg
DATE	09-16-2021
DRAWN BY	DAP
CHECKED BY	JGS

**C2.1.2**  
 2 OF 2 SHEETS  
 PROJECT NO. C17338.01