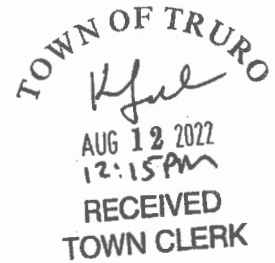




Truro Board of Health

Tuesday August 16, 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 ebeebe@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. **Change of Manager:** 471 & 482 Shore Road, (map 7, parcel 24 & map 8, parcel 25); Seaside Inn Condominiums
2. **Variance Request/Local Upgrade Approval:** 15 Longnook Road, (map 46, parcel 141); Estate of John O'Loughlin/ Waller & Hash Joint Revocable Trust
3. **Variance Request/Local Upgrade Approval:** 423 Shore Road, (map 9, parcel 1); Beach Point Trust/Jennifer Chisholm, Trustee
4. **Water Service Relocation:** 146 Shore Road, (map 22, parcel 48) Albert Silva
5. **Water Resources Discussion:** Cesspool upgrade update; Staff update on Water Resource issues

III. MINUTES:

IV. REPORTS

- Report of the Chair
- Health Agent's Report
 - public hearing schedule for updated regulations
 - Outer Cape health needs assessment report
 - MPX update

PAID 876.
2019

RECEIVED BY:

JUN 3 2022

TOWN OF TRURO
HEALTH DEPARTMENT



TOWN OF TRURO

Health Department
P.O. Box 2030, Truro, MA 02666
PH: 508-349-7004, Ext. 131 Fax: 508-349-5508
Email: ebeebe@truro-ma.gov or adavis@truro-ma.gov

APPLICATION TO NAME A MANAGER

This application is used for a Change of Manager, Add Co-Managers or to Name a Property Management Company as Manager with the Board of Health

7/24
8/25

Section 1 - Business Information

Date: 6.29.2022

Print Name of Applicant: TYLER TEAGUE [Redacted]

Business Name or DBA to be managed: SEASIDE INN CONDO'S Number of Units: 26

Street Address of Business: [Redacted] 482 SHORE RD. Business Email: info@peterspropertymg.com

Mailing Address of Business: (Check if New Address) P.O. BOX 542 / PROVINCE TOWN, MA 02655

Section 2 - Manager Information

Name of Previous Manager: LEROY PERRIN On-Site Manager Unit #: 24B

* Name of New Onsite Manager: TYLER TEAGUE On-Site Manager Unit #: 24B

Name of Property Management (10 Units or less): PETERS PROPERTY MGT.

Mailing Address of New Manager and/or Property Management Company: PETERS PROPERTY MGT

43 RACE PT. RD # D • P.O. 542 Phone (24 hours/day): 508-481-0399 Email: info@peterspropertymgt.com

Name of Co-Managers:

_____	Unit # _____	Phone (24hrs/day): _____
_____	Unit # _____	Phone (24hrs/day): _____
_____	Unit # _____	Phone (24hrs/day): _____

I have read & understand the Board of Health Manager Regulation, Section III, Article 4. Signature of New Manager, Co-Managers or Contact Person for Property Management is required.

SIGNATURE Laurie Ferrari

PRINT NAME LAURIE FERRARI

DATE 6.29.2022

* SIGNATURE [Redacted]

PRINT NAME Tyler Teague

DATE 6.29.2022

SIGNATURE _____

PRINT NAME _____

DATE _____

Section 3 - **Office Use Only**

Team Inspection
(If over 3yrs since last one)

Scheduled	Date	Fee	Paid
<input type="checkbox"/>	_____	\$45.00	<input type="checkbox"/>

Board of Health Hearing

<input checked="" type="checkbox"/>	<u>7-19-22</u>	\$75.00	<input type="checkbox"/>
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HEALTH DEPARTMENT
TOWN OF TRURO

TOWN OF TRURO

Board of Health

P.O. Box 2030, Truro, MA 02666
Tel: (508) 349-7004 x-32 Fax: (508) 349-5508

AUG 04 2022

RECEIVED BY:

APPLICATION FOR BOARD OF HEALTH VARIANCES

Date Submitted: _____ Board of Health Hearing Date: 8/16/22
 Property Owner's Name: Estate of John O'Loughlin & Walter & Hash TRR. Trust
 Mailing Address: _____
 Address of Property: 15 Longrook Road
 Map and Parcel Number: Map # 46 Parcel # 191
 Design Engineer/Sanitarian Glen E. Harrington, R.S.
 Firm/Company Name: Geo-Cape Env. Consultants Phone #: 774-238-1813
 Address: 100 Independence Drive, Hyannis MA 02601
 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 310 CMR 15, 405(1)(c)
- Board of Health Variance Request Section/Article _____
- 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 (Buyer) _____

Date _____

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



CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:
 Glen E. Harrington
 9 Leda Rose Lane
 Marstons Mills, MA 02648

Order No.: G22230541
Report Dated: 03/08/2022
Submitter: Glen E. Harrington
Description: rtn,voc

Laboratory ID#: 22230541-01

Sample #:
Collection Address: 15 Longnook Rd., Truro
Sample Location:

Matrix: Water - Drinking Water
Sampled: 03/01/2022 7:00 **By:** Customer
Received: 03/01/2022 12:05 **By:** Veronic
Turn Around: Standard

Routine

<u>ITEM</u>	<u>RESULT</u>	<u>UNITS</u>	<u>RL</u>	<u>MCL</u>	<u>METHOD #</u>	<u>ANALYST</u>	<u>TESTED</u>	<u>TIME</u>
Nitrate as Nitrogen	5.2	mg/L	0.10	10	EPA 300.0	CL	03/02/2022	
Copper	ND	mg/L	0.10	1	EPA 200.8	CL	03/03/2022	11:47
Iron	ND	mg/L	0.10	0.3	EPA 200.8	CL	03/03/2022	11:47
Manganese	0.034	mg/L	0.025	0.05	EPA 200.8	CL	03/03/2022	11:47
Sodium	16	mg/L	2.5	20	EPA 200.8	CL	03/03/2022	11:47
Total Coliform	Absent	P/A	0	0	SM 9223B	RG	03/01/2022	14:55
Conductance	160	umohs/cm	2.0		EPA 120.1	LX	03/01/2022	14:42
pH	6.0	PH AT 25C	NA		SM 4500-H-B	LX	03/01/2022	14:42

Based on the results of the parameters tested, the water is suitable for drinking.

Attached please find the laboratory certified parameter list.

Approved By:
 (Lab Manager)



CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:
 Glen E. Harrington
 9 Leda Rose Lane
 Marstons Mills, MA 02648

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Laboratory ID#: 22230541-01	Matrix: Water - Drinking Water
Sample #:	Sampled: 03/01/2022 7:00 By: Customer
Collection Addr: 15 Longnook Rd., Truro	Received: 03/01/2022 12:05 By: Veronic
Sample Location:	Turn Around: Standard
Analyst: LX Method: EPA 524.2 Dilution: 1	Date Analyzed: 03/02/2022 @

EPA 524.2 - Volatile Organics by GC/MS

Parameter	Result	MCL	MDL	Parameter	Result	MCL	MDL
	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L
Dichlorodifluoromethane	ND		0.50	Chloroethane	ND		0.50
Chloromethane	ND		0.50	Chloroform	ND	70	0.50
Vinyl chloride	ND	2.0	0.50	cis-1,2-Dichloroethene	ND	70	0.50
Bromomethane	ND		0.50	cis-1,3-Dichloropropene	ND		0.50
1,1,1,2-Tetrachloroethane	ND		0.50	Dibromochloromethane	ND		0.50
1,1,1-Trichloroethane	ND	200	0.50	Dibromomethane	ND		0.50
1,1,2,2-Tetrachloroethane	ND		0.50	Ethylbenzene	ND	700	0.50
1,1,2-Trichloroethane	ND	5.0	0.50	Hexachlorobutadiene	ND		0.50
1,1-Dichloroethane	ND		0.50	Isopropylbenzene	ND		0.50
1,1-Dichloroethene	ND	7.0	0.50	Methylene chloride	ND	5.0	0.50
1,1-Dichloropropene	ND		0.50	Methyl-tert-butyl ether	ND		0.50
1,2,3-Trichlorobenzene	ND		0.50	Naphthalene	ND		0.50
1,2,3-Trichloropropane	ND		0.50	n-Butylbenzene	ND		0.50
1,2,4-Trichlorobenzene	ND	70	0.50	n-Propylbenzene	ND		0.50
1,2,4-Trimethylbenzene	ND		0.50	p-Isopropyltoluene	ND		0.50
1,2-Dibromo-3-chloropropane	ND		0.50	sec-Butylbenzene	ND		0.50
1,2-Dibromoethane (EDB)	ND		0.50	Styrene	ND	100	0.50
1,2-Dichlorobenzene	ND	600	0.50	tert-Butylbenzene	ND		0.50
1,2-Dichloroethane	ND	5.0	0.50	Tetrachloroethene	ND	5.0	0.50
1,2-Dichloropropane	ND		0.50	Toluene	ND	1000	0.50
1,3,5-Trimethylbenzene	ND		0.50	Total xylenes	ND	10000	0.50
1,3-Dichlorobenzene	ND		0.50	trans-1,2-Dichloroethene	ND	100	0.50
1,3-Dichloropropane	ND		0.50	trans-1,3-Dichloropropene	ND		0.50
1,4-Dichlorobenzene	ND	5.0	0.50	Trichloroethene	ND	5.0	0.50
2,2-Dichloropropane	ND		0.50	Trichlorofluoromethane	ND		0.50
2-Chlorotoluene	ND		0.50				
4-Chlorotoluene	ND		0.50				
Benzene	ND	5.0	0.50				
Bromobenzene	ND		0.50				
Bromochloromethane	ND		0.50				
Bromodichloromethane	ND		0.50				
Bromoform	ND		0.50				
Carbon tetrachloride	ND	5.0	0.50				
Chlorobenzene	ND	100	0.50				

Compound	% Recovered	QC Limits (%)	
1,2-Dichlorobenzene-d4	95%	70	130
p-Bromofluorobenzene	92%	70	130

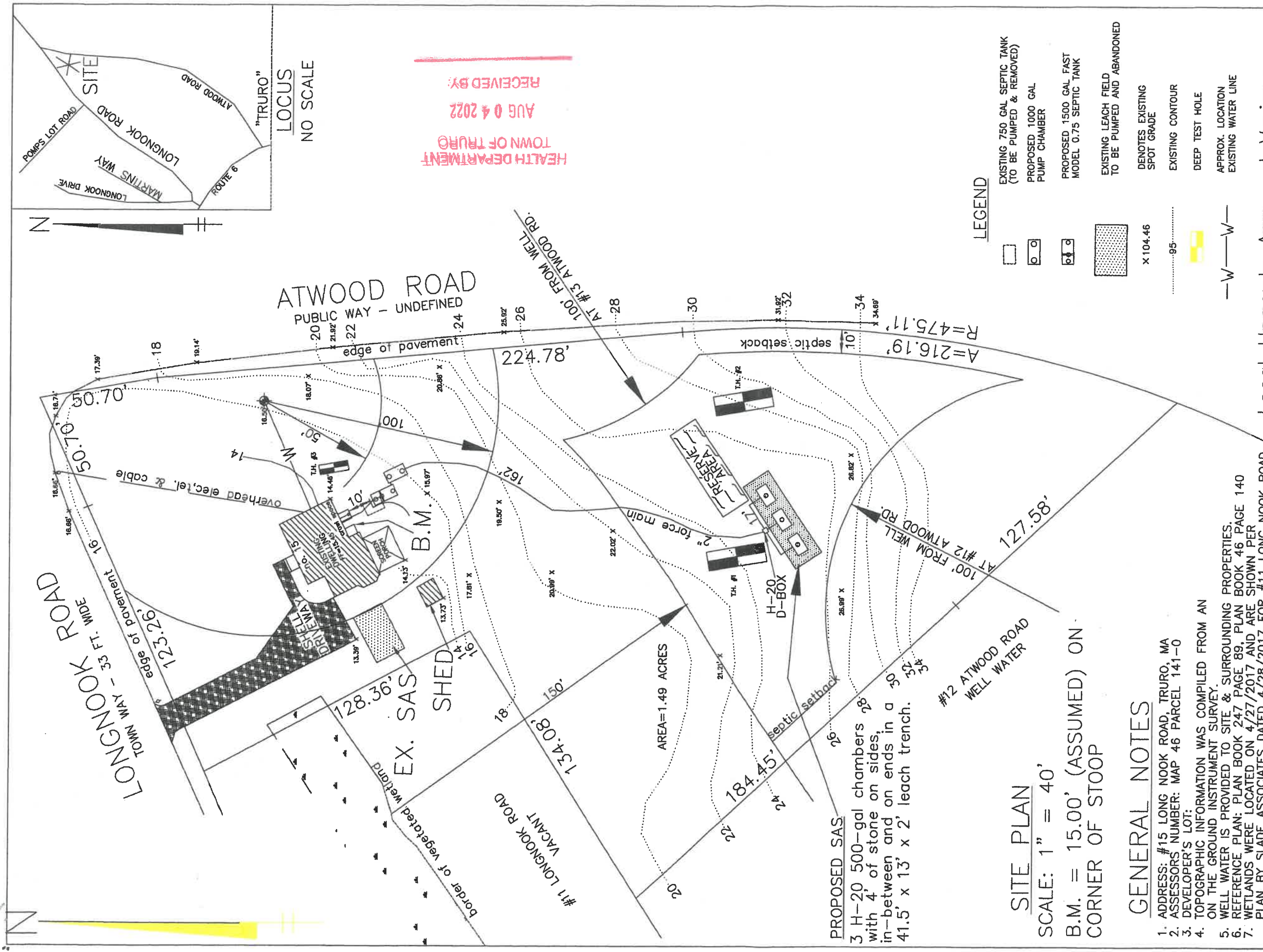
Attached please find the laboratory certified parameter list.

Approved By:
 (Lab Director)

ND = None Detected

RL = Reporting Limit

MCL = Maximum Contaminant Level



RECEIVED BY:
 AUG 04 2022
 HEALTH DEPARTMENT
 TOWN OF TRURO

"TRURO"
 LOCUS
 NO SCALE

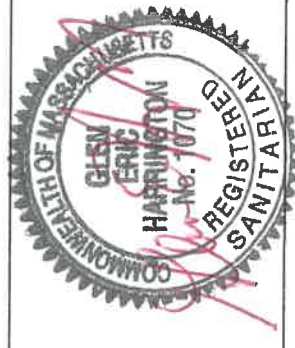
SITE PLAN
 SCALE: 1" = 40'
 B.M. = 15.00' (ASSUMED) ON
 CORNER OF STOOP

GENERAL NOTES

1. ADDRESS: #15 LONG NOOK ROAD, TRURO, MA
2. ASSESSOR'S NUMBER: MAP 46 PARCEL 141-0
3. DEVELOPER'S LOT:
4. TOPOGRAPHIC INFORMATION WAS COMPILED FROM AN ON THE GROUND INSTRUMENT SURVEY.
5. WELL WATER IS PROVIDED TO SITE & SURROUNDING PROPERTIES.
6. REFERENCE PLAN: PLAN BOOK 247 PAGE 89, PLAN BOOK 46 PAGE 140
7. WETLANDS WERE LOCATED ON 4/27/2017 AND ARE SHOWN PER PLAN BY SLADE ASSOCIATES DATED 4/28/2017 FOR #11 LONG NOOK ROAD.
8. NO POTABLE WELLS ARE LOCATED WITHIN 150 FEET OF SAS.
9. UTILITIES WERE LOCATED BY DIGSAFE #20221008506.
10. THIS DESIGN PLAN SHALL BE USED FOR SEPTIC INSTALLATION PURPOSES ONLY.

OWNER OF RECORD: ESTATE OF JOHN O'LOUGHLIN & WALLER & HASH REVOCABLE TRUST

PROPOSED SEPTIC SYSTEM REPAIR
 PREPARED FOR
 ROBERT BARKER
 AT
 #15 LONGNOOK ROAD
 TRURO, MA



PREPARED BY: A Perfect Environment LLC
 dba
 Geo-Cape Environmental Consultants
 100 Independence Drive, Suite 7-623
 Hyannis, MA 02601

Tel: 774-238-1813
 Email: gharr88@hotmail.com

SCALE: 1"=40'
 DATUM: ASSUMED
 DRAWN BY: GEH
 FILENAME: 15 Longnook
 20 JUN 2022
 SHEET 1 OF 4

LEGEND

- EXISTING 750 GAL SEPTIC TANK (TO BE PUMPED & REMOVED)
- PROPOSED 1000 GAL PUMP CHAMBER
- PROPOSED 1500 GAL FAST MODEL 0.75 SEPTIC TANK
- EXISTING LEACH FIELD TO BE PUMPED AND ABANDONED
- DENOTES EXISTING SPOT GRADE
- EXISTING CONTOUR
- DEEP TEST HOLE
- APPROX. LOCATION EXISTING WATER LINE

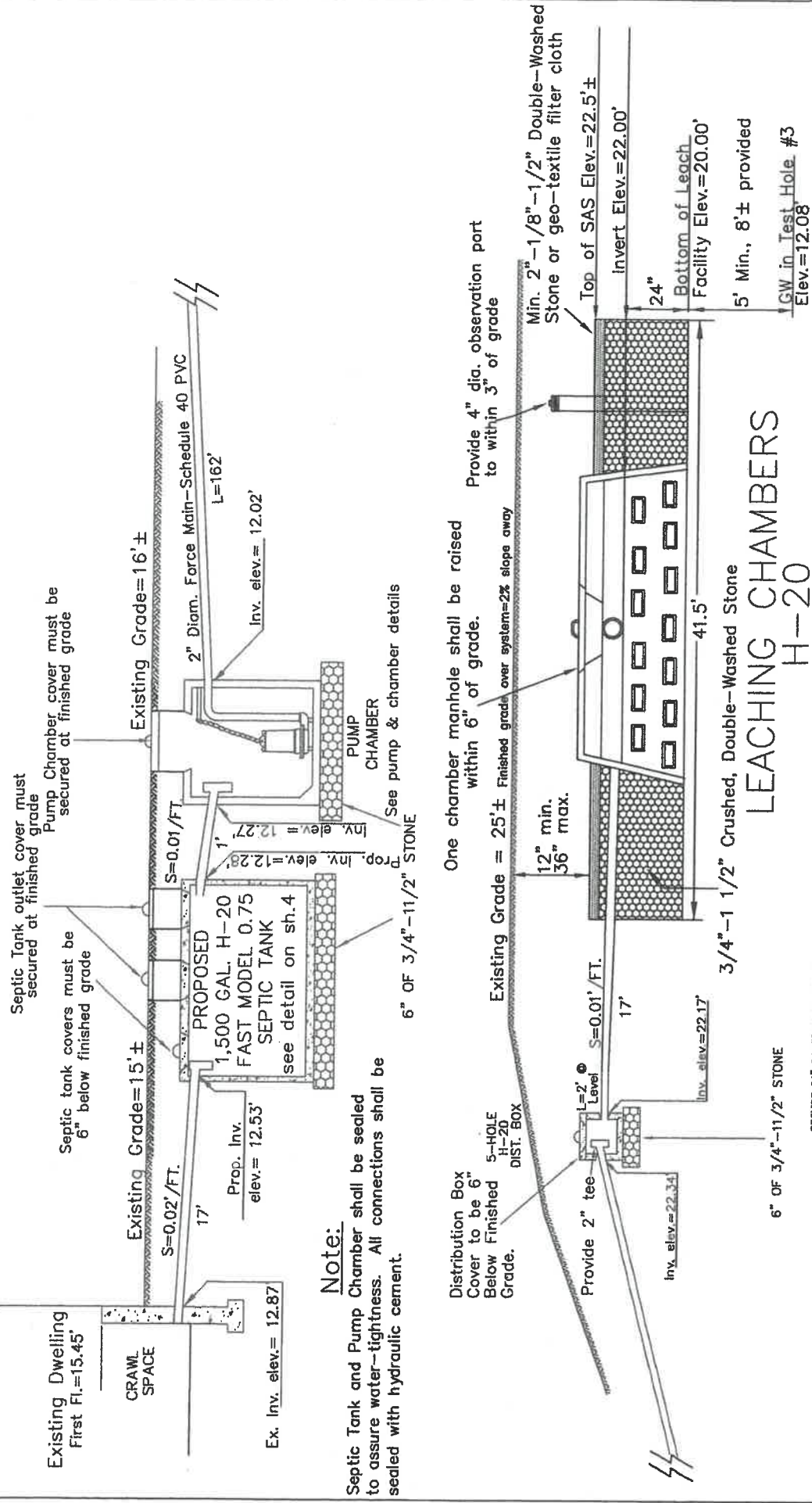
Local Upgrade Approval Variance

310 CMR 15.405(1)(g) - A variance is requested to allow the septic tank and pump chamber inverts to be less than 12" to adjusted groundwater. All connections shall have boots and be sealed with hydraulic cement, as mitigation.

SYSTEM PROFILE

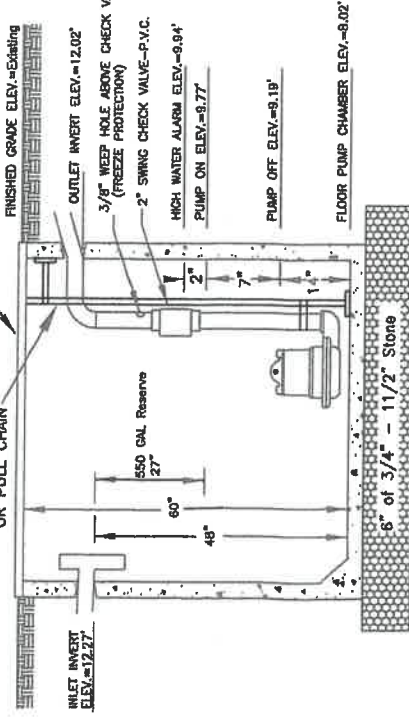
Not to Scale

*NOTE: ALL PIPES ARE TO BE 4" SCHEDULE 40 P.V.C. EXCEPT THE 2" DIAM. SCH.40 FORCE MAIN



Note:

Septic Tank and Pump Chamber shall be sealed to assure water-tightness. All connections shall be sealed with hydraulic cement.



PUMP DETAIL

Not to Scale

PUMP NOTES & SPECIFICATIONS

1. PROVIDE 1 LIBERTY MODEL LE70 3/4 H.P. SUBMERSIBLE PUMPS CAPABLE OF PASSING A MINIMUM SOLID SIZE OF 2" DIAMETER DISCHARGE, 115V, 1 PHASE OR EQUAL THE PUMP SHALL PERFORM AT A MINIMUM AT 53 GPM AT 22.5' TOTAL HEAD.
2. USE LIBERTY SX123=3 SIMPLEX ELECTRIC CONTROL PANEL OUTDOOR MOUNTED W/VISIBLE ALARM OR EQUAL
3. PUMPS SHALL BE INSTALLED IN STRICT COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS & DETAIL SHOWN.
4. ALARM SHALL CONSIST OF AUDIBLE SIGNAL & RED WARNING LIGHT TO BE INSTALLED ON BUILDING AND POWERED BY SEPARATE CIRCUIT FROM CIRCUITS TO PUMP
5. AN ELECTRICAL PERMIT SHALL BE OBTAINED PRIOR TO INSTALLING ALARM AND PUMP POWER.
6. THE FORCE MAIN SHALL BE 2" DIA. SCH 40 PVC WITH THRUST BLOCKS INSTALLED, AS NECESSARY. INSTALL STAINLESS STEEL SLIDE RAIL SYSTEM
7. AND SIMPLEX DISCHARGE PIPING OR PULL CHAIN OR EQUAL.

CONSTRUCTION NOTES

1. Contractor is responsible for Digsafe notification and protection of all underground utilities and pipes.
2. The septic tank, pump chamber and distribution box shall be set level on 6" of 3/4"-1 1/2" stone.
3. Backfill should be clean sand or gravel with no stones over 3" in size.
4. This system is subject to inspection during installation by Geo-Cape Environmental Consultants.
5. The contractor shall install this system in accordance with Title 5 of the Massachusetts Environmental Code and the Regulations of the Town of Truro.
6. Provide a Shorey Precast H-20 1,500-gal., FAST septic tank, a 1,000-gal. H-20 monolithic pump chamber, a H-20 DB-5 D-Box and 3 H-20 500-gal concrete chambers with H-10 risers or equal.
7. No vehicle or heavy machinery shall drive over the septic system unless noted as H-20 septic components.
8. Install MICROFAST Model 0.75 single-family residential treatment unit by Biomicrobics.
9. All existing inverts and site conditions shall be verified by contractor.
10. If, during installation the contractor encounters any soil conditions or site conditions that are different from those shown on the log or in the design, the installer shall halt installation immediately and notify Geo-Cape Environmental Consultants.
11. Designer not responsible for undocumented septic components.
12. The existing leaching field shall be pumped and abandoned in place.
13. The Contractor shall notify the Designer and Board of Health 24 hours prior to completion of septic repair for as-built certification purposes.
14. Magnetic marking tape shall be installed one foot below grade above all septic components.

Design Calculations

Number of Bedrooms: 5 Equivalent to 550 Gal./Day
 Garbage Disposal: Not allowed with this design
 Septic Tank Capacity Required: 550 gpd x 200% = 1,100 gpd.
 Septic Tank Capacity Provided: Proposed 1,500-gal H-20 septic Tank
 Leaching Capacity Required: 550 gpd x LTAR= 743 SF Req'd Area
 LTAR for Class 1 soil at <5 min./inch = 0.74 gal/sq. ft.
 Proposed Leaching Structure: 1-41.5'x13'x2' Leaching Trench
 Bottom Leaching Area Provided = 539.5 sq.Ft.
 Sidewall Leaching Area Provided = 218 sq. ft.
 Total Leaching Area Provided = 757.5 sq. ft. > 743 sq. ft req'd.
 Leaching Capacity Provided = 757.5 sq. ft X 0.74 gal/sq.ft.=561 gpd.

Note:

This is not an increase in flow. All bedrooms, by definition, currently exist within the dwelling.

Local Upgrade Approval Variance

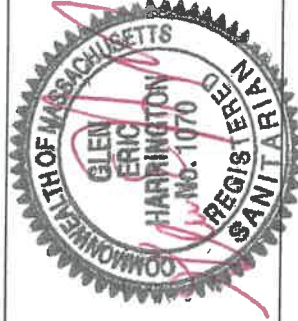
310 CMR 15.405(1)(i) - A variance is requested to allow the septic tank and pump chamber inverts to be less than 12" to adjusted groundwater. All connections shall have boots and be sealed with hydraulic cement, as mitigation.

OWNER OF RECORD: ESTATE OF JOHN O'LOUGHLIN & WALLER & HASH REVOCABLE TRUST

PROPOSED SEPTIC SYSTEM REPAIR

PREPARED FOR
 ROBERT BARKER

AT
 #15 LONGNOOK ROAD
 TRURO, MA



PREPARED BY: A Perfect Environment LLC
 dba

Geo-Cape Environmental Consultants
 100 Independence Drive, Suite 7-623
 Hyannis, MA 02601

Tel: 774-238-1813

Email: gharr88@hotmail.com

SCALE: 1"=40'
 DATUM: ASSUMED
 DRAWN BY: GEH
 FILENAME:15 Longnook
 20 JUN 2022
 SHEET 2 OF 4

PERK TEST & SOIL EVALUATION

Date of Perc. Test & Soil Eval.: March 16, 2022
 Test Performed By: Glen E. Harrington, R.S.
 WITNESSED BY: Arozana Davis, Assistant Health Agent
 EXCAVATOR: Mike Leary
 PERK RATE: LESS THAN 2 MPI in C1 at T.H. #2

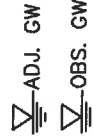
Test Hole No. 1	
DEPTH	ELEV.
0	24.0
6"	23.5
22"	22.17
75"	16.75
132"	13.0

Test Hole No. 2	
DEPTH	ELEV.
0	28.0
4"	27.67
12"	27.0
30"	25.5
75"	21.75
132"	17.0

Test Hole No. 3	
DEPTH	ELEV.
0	15.0
2"	14.83
11"	14.08
35"	12.08
58"	10.17
75"	8.75

Perk Test at T.H. #2

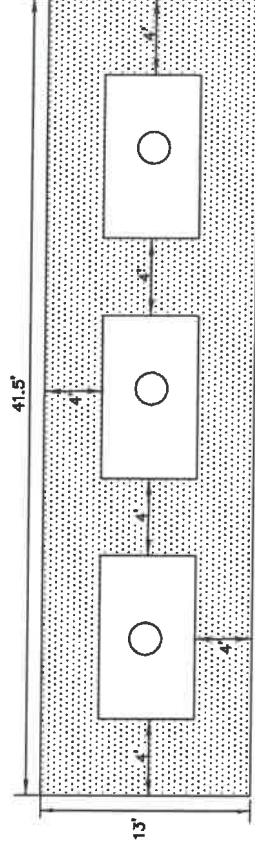
Depth: 45-63"
 Start Soak: 0:00 min:sec
 End Soak: 6:45 min:sec
 Unable to soak for 15 min.
 Use < 2 min/inch for design purposes



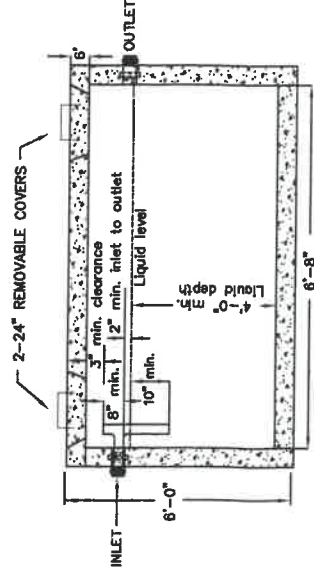
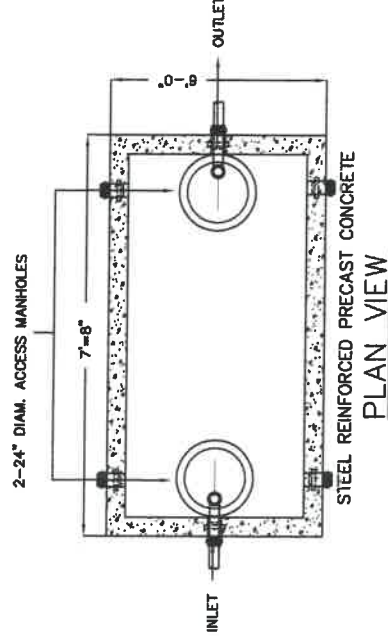
NO GROUNDWATER ENCOUNTERED

Soil Evaluation Certification
 I certify that on October, 1995, I have passed the soil evaluator examination approved by the DEP and that the analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

GLEN E. HARRINGTON, R.S.



SAS LAYOUT
 PLAN VIEW
 NOT TO SCALE

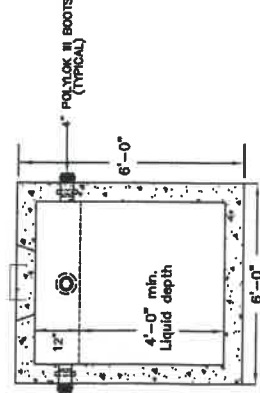


CROSS-SECTION

1000 GALLON H-20 "MONO" PUMP CHAMBER WITH BOOTS

NOT TO SCALE

THE ACCESS COVERS FOR THE SEPTIC TANK, DISTRIBUTION BOX AND LEACHING COMPONENT SHALL BE WITHIN 6" OF FINISHED GRADE.



END-SECTION

Uplift Calculations (Pump Chamber)

Fu = 6' x 7.67' x 4.56' x 62.4 lbs/cu. ft. = 13,095 lbs
 Weight of Septic Tank (empty) = 16,504 lbs
 Weight of Soil = 6' x 7.67' x 2.48' x 90 lbs/cy.ft. = 10,272 lbs
 S.T. & Soil = 26,772 lbs. > 16,500 lbs of uplift.
 No uplift anticipated.

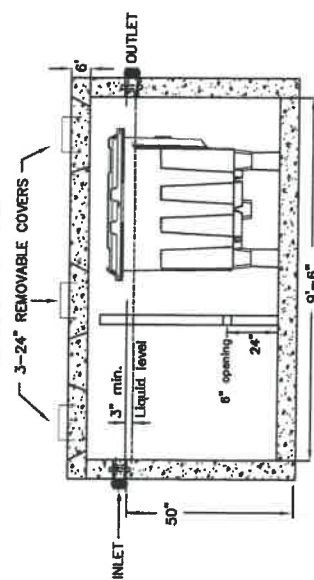
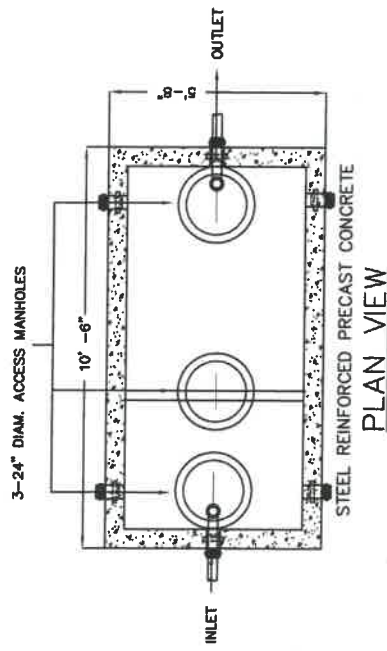
Local Upgrade Approval Variance

310 CMR 15.405(1)(j) - A variance is requested to allow the septic tank and pump chamber inverts to be less than 12" to adjusted groundwater. All connections shall have boots and be sealed with hydraulic cement, as mitigation.

Uplift Calculations (Septic Tank)

Fu = 10.5' x 5.67' x 3.72' x 62.4 lbs/cu. ft. = 13,819 lbs
 Weight of Septic Tank (empty) = 19,504 lbs
 Weight of Soil = 10.5' x 5.67' x 0.5' x 90 lbs/cy.ft. = 2,679 lbs
 S.T. & Soil = 22,183 lbs. > 13,819 lbs of uplift.
 No uplift anticipated.

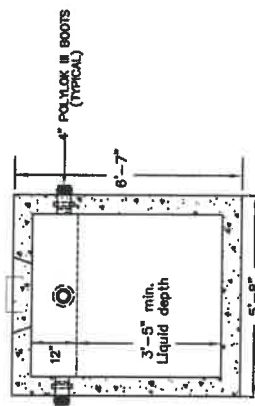
THE ACCESS COVERS FOR THE SEPTIC TANK, DISTRIBUTION BOX AND LEACHING COMPONENT SHALL BE WITHIN 6" OF FINISHED GRADE.
 INSTALL TUF-TITE GAS BAFFLE OR EQUAL ON OUTLET TEE



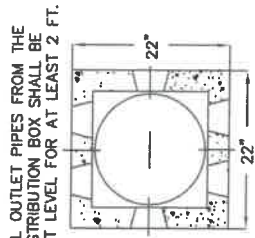
CROSS-SECTION

1500 GALLON H-20 "FAST" SEPTIC TANK

NOT TO SCALE



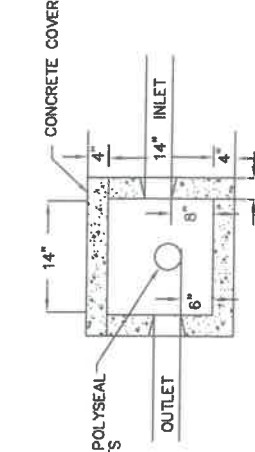
END-SECTION



PLAN-SECTION

5 HOLE H-20 DISTRIBUTION BOX

NOT TO SCALE



CROSS-SECTION

ALL OUTLET PIPES FROM THE DISTRIBUTION BOX SHALL BE SET LEVEL FOR AT LEAST 2 FT.

OWNER OF RECORD: ESTATE OF JOHN O'LOUGHLIN & WALLER & HASH REVOCABLE TRUST
 PROPOSED SEPTIC SYSTEM REPAIR

PREPARED FOR
 ROBERT BARKER
 AT
 #15 LONGNOOK ROAD
 TRURO, MA

PREPARED BY: A Perfect Environment LLC

dba
 Geo-Cape Environmental Consultants
 100 Independence Drive, Suite 7-623
 Hyannis, MA 02601

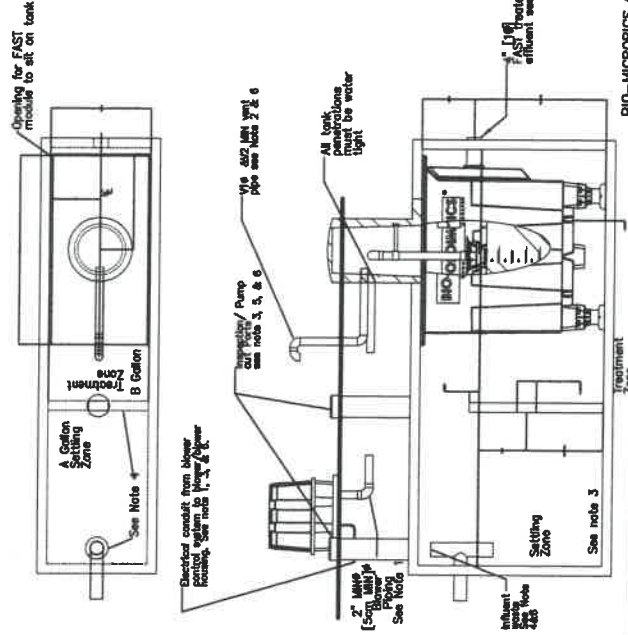


Tel: 774-238-1813
 Email: gharr88@hotmail.com

SCALE: 1"=40'	DATUM: ASSUMED	FILENAME: 15 Longnook	DRAWN BY: GEH	20 JUN 2022
SHEET 3 OF 4				

MICROFAST REQUIREMENTS

1) The MicroFAST Model 0.75 shall be installed, operated, maintained and tested according to General Use Approval Transmittal #X236074, revised 2/12/2013 and the Standard Conditions for Secondary Treatment Units under General Use, revised 3/12/2015.



- NOTES:**
- Blower piping to FAST@ may not exceed 100 FT [30.5m] total length and use 4 elbows maximum. For distances greater than 100 FT [30.5m] - consult factory. Blower must be located above flood/standing water levels on a concrete base.
 - Vent to be located above finish grade or higher to avoid infiltration. Cap with vent grate with at least 1/4" [0.6cm] surface area. Secure with stainless steel screws (see sheet 3 of 4 FAST Details).
 - Run vent to desired location and cover opening with vent grate with at least 1/4" sq in. of open surface area. Secure with stainless steel screws. Vent piping must not allow excess moisture build up or back pressure.
 - All opportunities to FAST@ (e.g. tank pump outs, etc.) must conform to all country, state, province, and local plumbing and electrical codes. The blower control system is provided by Bio-Microbics, Inc.
 - Either the influent pipe tee shall be fitted with a pipe cap or the baffle separating the two zones shall be extended to the top of the tank. If choosing to use the pipe cap, drill a 1/4" [0.6cm] vent hole in the cap and the baffle shall be at least 3" [8] higher than the water level as shown on the drawing.
 - All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
 - Tank, anchors, piping, conduit, blower housing pad and vents are provided by others.
 - All piping and ancillary equipment installed after FAST@ must not impede or restrict free flow of effluent.
 - No more than 4 FT [1.2 m] of fill may be placed over unit lid. Refer to installation manual for more details.
 - See sheet 3 of 4 for required dimensions.

BIO-MICROBICS
MA 05-1.5 FAST Units
FAST@ Details
SHEET 3 OF 4

Unit Size	A	B	V1	V2	L1	L2	L3	V1	V2	V3	H1
0.5	MIN	1000	3"	7.1 in sq	59.5"	54"	29.75"	31.25"	25"	15.125"	16.375"
0.75	MIN	1000	3"	7.1 in sq	60"	54"	31.5"	44.25"	37"	21.5"	16.375"
0.9	MIN	1000	3"	7.1 in sq	59"	54"	31.25"	54.5"	49"	26.625"	16.375"
1.0	MIN	1000	4"	9 in sq	59"	54"	31.25"	54.5"	49"	26.625"	16.375"
1.5	MIN	2000	4"	9 in sq	83.5"	75.75"	42.875"	55.75"	49"	27.625"	16.25"

FAST@ Chamber (MIN Liquid Capacity)

FAST@ Chamber (MIN Liquid Capacity)

Vent Diameter (MIN)

Vent grate open area (MIN)

FAST@ Length and MIN Tank Length

L1 Length of tank opening for hanging FAST@

L3 FAST@ Length from edge of liner to center of airflow.

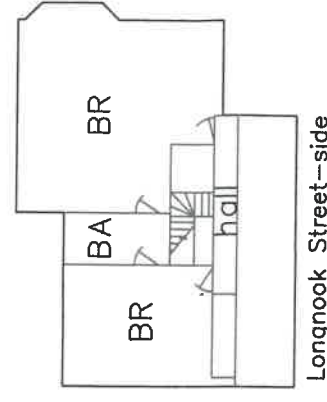
V1 MIN FAST@ MIN Tank Width.

V2 Width of tank opening for hanging FAST@.

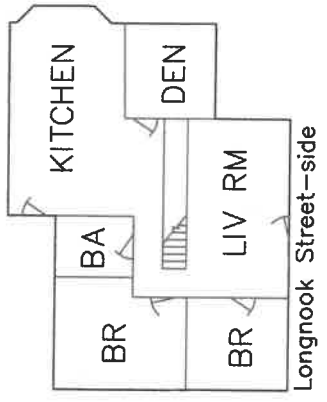
V3 FAST@ Width from edge of liner to center of airflow.

H1 MIN Clearance from center of outlet to inside top of tank (for feet install only)

BIO-MICROBICS
MA 05-1.5 FAST Units
FAST@ Details
SHEET 3 OF 4

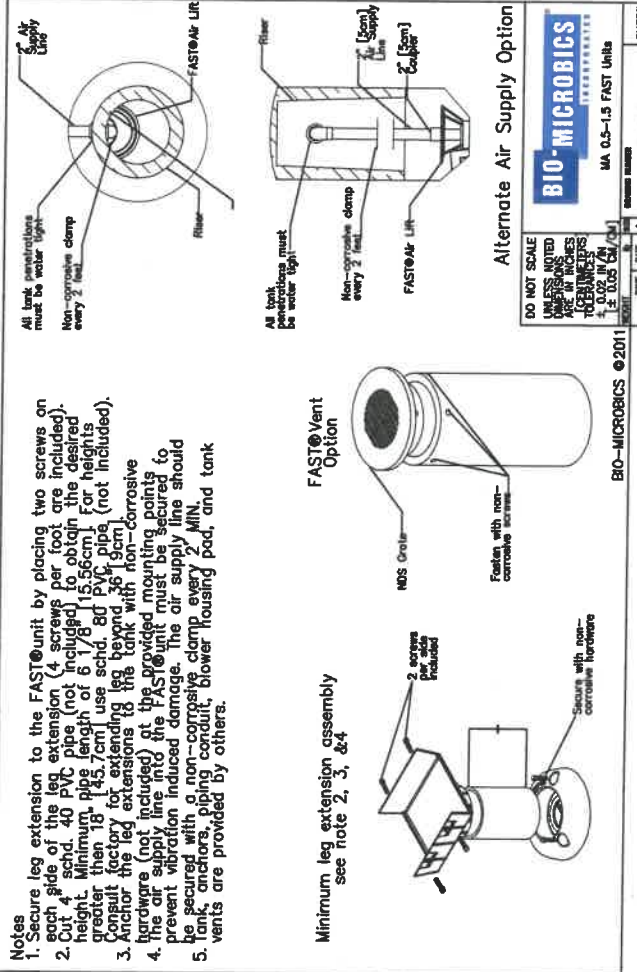


SECOND FLOOR



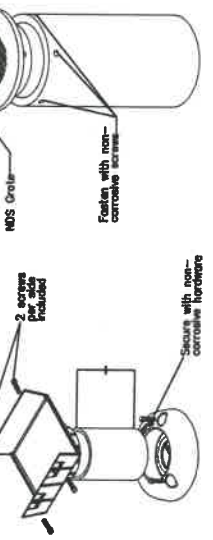
FIRST FLOOR

FLOOR PLANS
SCALE: 1"=20'



- Notes**
- Secure leg extension to the FAST@ unit by placing two screws on each side of the leg extension (4 screws per foot are included).
 - Cut 4" schd. 40 PVC pipe (not included) to obtain the desired height. Minimum pipe length of 6 1/8" [15.6cm]. For heights greater than 18" [45.7cm] use schd. 80 PVC pipe (not included).
 - Anchors that extend beyond the tank with non-corrosive hardware (not included) at the FAST@ unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' MIN.
 - Tank anchors, piping conduit, blower housing pad, and tank vents are provided by others.

Minimum leg extension assembly see note 2, 3, & 4.



BIO-MICROBICS
MA 05-1.5 FAST Units
FAST@ Details
SHEET 3 OF 4

Local Upgrade Approval Variance
310 CMR 15.405(1)(j) - A variance is requested to allow the septic tank and pump chamber inverts to be less than 12" to adjusted groundwater. All connections shall have boots and be sealed with hydraulic cement, as mitigation.

OWNER OF RECORD: ESTATE OF JOHN O'LOUGHLIN & WALLER & HASH REVOCABLE TRUST
PROPOSED SEPTIC SYSTEM REPAIR
PREPARED FOR
ROBERT BARKER
AT
#15 LONGNOOK ROAD
TRURO, MA



PREPARED BY: A Perfect Environment LLC
dba
Geo-Cape Environmental Consultants
100 Independence Drive, Suite 7-623
Hyannis, MA 02601
Tel: 774-238-1813
Email: gharr88@hotmail.com
SCALE: 1"=40'
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20 JUN 2022
SHEET 4 OF 4



HEALTH DEPARTMENT
TOWN OF TRURO

AUG 05 2022

RECEIVED Project #C13065.06

August 5, 2022

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

By Hand Delivery

PAID
[Handwritten signature]

Re: Board of Health Variance Application Filing Package
Proposed Sewage Disposal System Replacement
Jennifer Chisholm, Trustee
Beach Point Trust
423 Shore Road
Truro, MA
Map 9 Parcel 1

Dear Ms. Beebe and Board Members,

On behalf of our client, Beach Point Trust, we are submitting an original plus 6 copies of a Board of Health Variance Application Filing Package, an original check for municipal filing, and 7 copies of the plan for the above referenced project. The following items are enclosed:

- Board of Health Variance Application
- Board of Health Variance Request Letter
- Board of Health Variance Justification
- Abutter Notification Letter
- Certified Abutter List, Assessor Map 9 identifying locus
- Copy of \$75.00 check made payable to Town of Truro for filing fee
- Tom Thompson, Floor Plans, dated 6/3/2022
- Coastal Engineering Co., Inc. Plan Showing Proposed Sewage Disposal System, Sheet C2.1.1, dated 8/4/2022

Please schedule this for the **August 16, 2022** public hearing. If you have any questions or require additional information, please give our office a call. Thank you.

Sincerely,

COASTAL ENGINEERING CO., INC.

Carla A. Davis

Enclosures: As Stated

cc: Beach Point Trust
Nathaniel Stevens, Attorney
Tom Thompson, Architect
Bradford P. Malo, Project Manager

Fee: \$75.00

V#
2022-14



HEALTH DEPARTMENT
TOWN OF TRURO
TRURO HEALTH & CONSERVATION DEPARTMENT
24 Town Hall Road, Truro MA 01969

RECEIVED BY:

APPLICATION FOR BOARD OF HEALTH VARIANCES

Date: 8-5-2022

PAID
8/5/22

Property Owner's Name: Beach Point Trust/ Jennifer Chisholm, Trustee

Mailing Address: [REDACTED]

Address of Property: 423 Shore Rd., Truro, MA

Map and Parcel Number: Map # 9 Parcel # 1

Design Engineer/Sanitarian Bradford Malo

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

Address: 260 Cranberry Highway, Orleans, MA

Please check type of variance requested:

Title 5 Variance Request: Section none

Board of Health Variance Request: Section/Article Section VI, Article 9- setback from wetland

Bradford Malo
Signature (Representative)

COASTAL
ENG. CO. INC

8-3-2022

Date 8/3/22

Jennifer Chisholm
Signature (Property Owner)

Jennifer Chisholm



August 5, 2022

Project #C13065.06

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

By Hand Delivery

Re: Board of Health Variance Request
Proposed Sewage Disposal System Replacement
Jennifer Chisholm, Trustee
Beach Point Trust
423 Shore Road
Truro, MA
Map 9 Parcel 1

Dear Ms. Beebe and Board Members:

On behalf of our client, the Beach Point Trust, we are requesting variances from Truro Board of Health Regulations to install a Sewage Disposal System Upgrade to replace an existing cesspool at the above referenced 2-bedroom property. The requested variances are:

Town of Truro Board of Health Regulations Section VI Article 9

The proposed soil absorption system (SAS) and septic tank are less than the setback requirement of 150/100 feet to a wetland. (0 ft provided, full variance requested, as the entire lot lies within a FEMA AE flood zone; 130 ft is provided from the SAS to an isolated vegetated wetland, 20 ft variance requested).

Please schedule this request for your next available public hearing. If you have any questions or require additional information, please contact our office.

Very truly yours,

COASTAL ENGINEERING CO., INC.

Bradford P. Malo

BPM/cad

cc: Beach Point Trust
Nathaniel Stevens, Attorney
Tom Thompson, Architect



August 5, 2022

Project #C13065.06

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

By Hand Delivery

Re: Board of Health Variance Request Justification
Proposed Sewage Disposal System Replacement
Jennifer Chisholm, Trustee
Beach Point Trust
423 Shore Road
Truro, MA
Map 9 Parcel 1

Dear Ms. Beebe and Board Members:

Our client, Jennifer Chisholm, Trustee of Beach Point Trust, proposes to renovate an existing 2-bedroom dwelling with addition on the subject property. The property currently uses a cesspool as the means of sewage disposal. The proposed replacement sewage disposal system is designed to include a MicroFAST I/A system to provide nutrient reduction. The replacement system is designed in compliance with all requirements of 310 CMR 15 (Title 5). However, the Truro Board of Health setback requirement of 150/100 feet respectively between a wetland and soil absorption system/septic tank cannot be met. The existing daily sewage flow is classified as 2 bedrooms. There is no proposed change to the bedroom count and the proposed building changes will not change the existing design flow. The summary for the requested variances is provided below.

Town of Truro Board of Health Regulations Section VI Article 9

The proposed soil absorption system (SAS) and septic tank are less than the setback requirement of 150 feet/ 100 feet to a wetland. (A full variance is requested as the entire lot is located within the FEMA AE flood zone, which is a wetland under the local regulations.)

The property is currently served by a cesspool which is located within the flood zone, within 3.5 ft of groundwater (perT5 inspection report), and within 89 feet from the edge of an isolated wetland. The variance requested is from required setbacks under Section VI of the Truro Board of Health Regulations. The proposed soil absorption system (SAS) and septic tank are located greater than 100 feet from the isolated wetland, but they cannot meet the Truro BOH 150/100 feet setback requirements from a "wetland" which is the FEMA AE flood zone. There is no area on the lot which lies outside of the FEMA AE flood zone, so compliance with the setback is not possible. The proposed SAS provides 130 feet of separation from the isolated wetland (20 ft variance requested). Proposed improvements over the existing conditions are that the replacement system increases horizontal separation from the isolated wetland and is designed with an I/A component capable of providing nutrient reduction. The SAS will be installed below the existing ground (no grade changes) and the required 5 ft separation to groundwater will be provided. In our opinion, these features mean that the replacement system will provide better protection of public health and the environment over the existing cesspool.

Based on the summary provided above, it is our opinion that the granting of the requested variances is justified. Coastal Engineering Co. respectfully requests that the Board of Health approve the requested variances.

A representative will be at the public hearing to present the plan and address any questions you may have.

Very truly yours,

COASTAL ENGINEERING CO., INC.

A handwritten signature in black ink, appearing to read 'Bradford P. Malo', written over a horizontal line.

Bradford P. Malo

BPM/cad

cc: Beach Point Trust
Nathaniel Stevens, Attorney
Tom Thompson, Architect



August 4, 2022

Project #C13065.06

ABUTTER NOTIFICATION

Re: Board of Health Variance Request
Proposed Sewage Disposal System Replacement
Jennifer Chisholm, Trustee
Beach Point Trust
423 Shore Road
Truro, MA
Map 9 Parcel 1

Dear Abutter:

On behalf of our client, Beach Point Trust, we are requesting a variance from the Truro Board of Health Regulations, to install a Sewage Disposal System to replace an existing cesspool at the above referenced property. The requested variances are:

Town of Truro Board of Health Regulations Section VI Article 9

The proposed soil absorption system (SAS) and septic tank are less than the setback requirement of 150/100 feet to a wetland. (0 ft provided, full variance requested, as the entire lot lies within a FEMA AE flood zone; 130 ft is provided from the SAS to an isolated vegetated wetland, 20 ft variance requested).

The application and plans are available for review at the Truro Board of Health Office located at the Truro Town Hall, 24 Town Hall Road, Truro, MA. Information may also be obtained by contacting our office.

This hearing is currently scheduled **August 16, 2022** beginning approximately 4:30 p.m. at the Truro Town Hall. Please check the Town of Truro website for the agenda posting at <https://www.truro-ma.gov/board-of-health> or call the Board of Health Office directly to confirm meeting time and location.

Sincerely,

COASTAL ENGINEERING CO., INC.

Carla A. Davis

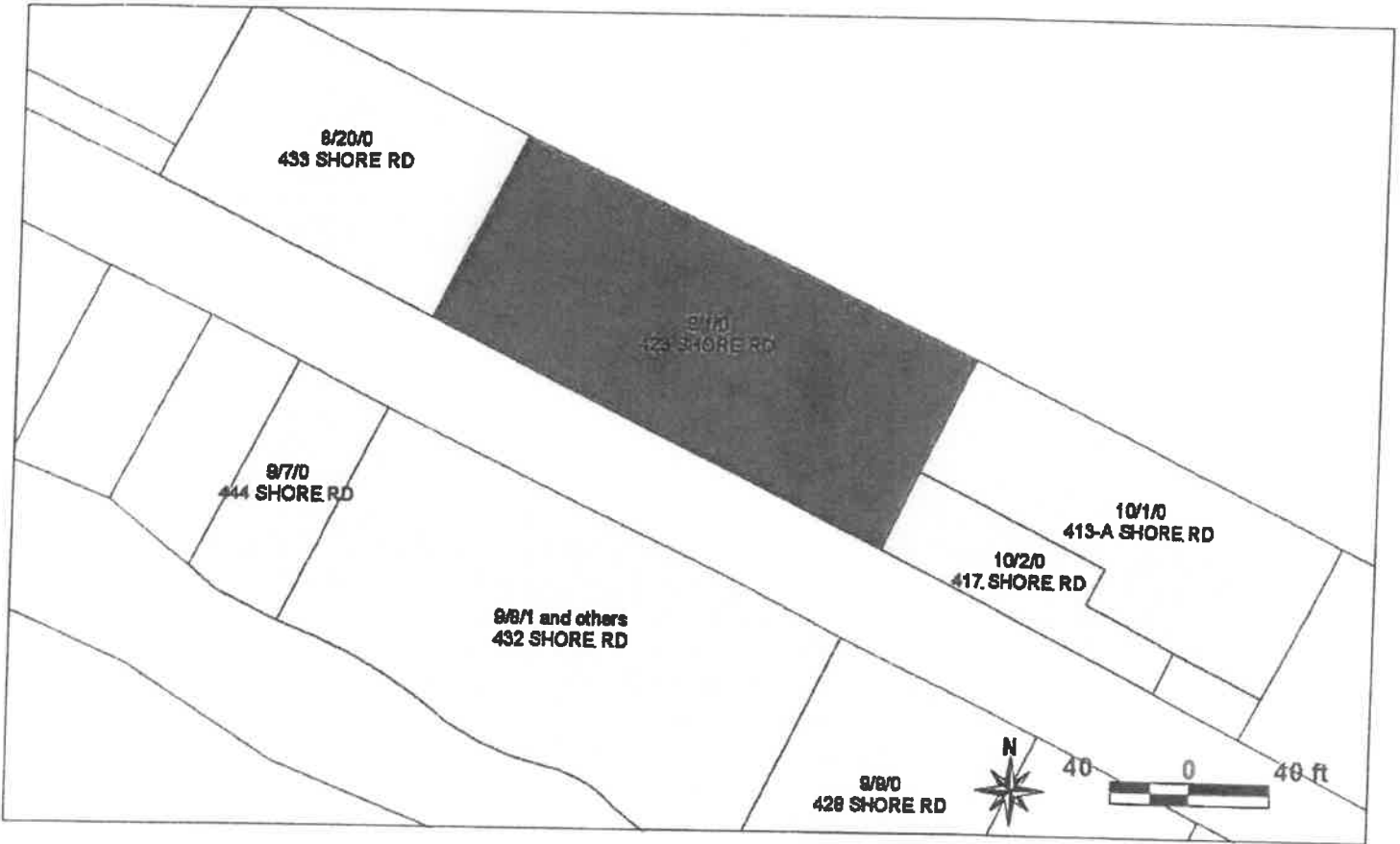
Enclosures: As Stated

cc: Town of Truro Board of Health
Beach Point Trust
Nathaniel Stevens, Attorney
Tom Thompson, Architect
Bradford P. Malo, Project Manager

423 Shore Road
 Map 9, Parcel 1
 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	ZipCd/Country
285	8-20-0-R	DOWNEY JAMES T & JOY F	433 SHORE RD	PO BOX 743	NO TRURO	MA	02652-0743
287	9-7-0-R	SHAPIRO JOSEPH & CLARK LYNN	444 SHORE RD	59 DWIGHT ST	BOSTON	MA	02118
6978	9-8-0-E	WIND & WAVE CONDO TRUST	432 SHORE RD	432 SHORE RD	NO TRURO	MA	02652
288	9-8-1-R	SHAPIRO MARTIN J REV TRUST TRS: SHAPIRO MARTIN J & BETTE J	432 SHORE RD	77 FLORENCE ST UNIT 111	CHESTNUT HILL	MA	02467
289	9-8-2-R	BEACH POINT TR TRS: SHAPIRO J R	432 SHORE RD	51 LONGFELLOW RD	WELLESLEY	MA	02481-5220
290	9-8-3-R	MORENO VITO & MARIA	432 SHORE RD	95 WINDY HILL DR	SO WINDSOR	CT	06074
291	9-8-4-R	MORENO VITO & MARIA	432 SHORE RD	95 WINDY HILL DR	SO WINDSOR	CT	06074
292	9-8-5-R	LAURIE LLC MEMBER: DAVID M LAURIE ET AL	432 SHORE RD	C/O MICHAEL LAURIE 2892 LONG HILL RD	GUILFORD	CT	06437
293	9-8-6-R	UNIT 6 WIND & WAVE CONDO TRUST TRS: CATER GLORIA J & WILLIE J	432 SHORE RD	559 CHESTNUT HILL AVE	BROOKLINE	MA	02445-4113
294	9-8-7-R	STRITTER TIMOTHY J	432 SHORE RD	167 OCEAN BLVD WEST	HOLDEN BEACH	NC	28462
295	9-8-8-R	ZUKOWSKI TRAVIS D & ANNE	432 SHORE RD	149 NELSON ROAD	PETERSHAM	MA	01366
296	9-8-0-R	CHISHOLM JOHN R & JENNIFER R	428 SHORE RD	51 LONGFELLOW RD	WELLESLEY	MA	02481-5220
297	10-1-0-R	NOONS DONALD W ESTATE OF	413-A SHORE RD	PO BOX 23	NO TRURO	MA	02652-0023
298	10-2-0-R	CHISHOLM JOHN R & JENNIFER R	417 SHORE RD	51 LONGFELLOW RD	WELLESLEY	MA	02481-5220

Handwritten signature
 6/14/2022



HEALTH DEPARTMENT
TOWN OF TRURO

AUG 10 2022

RECEIVED BY:

TOWN OF TRURO

BOARD OF HEALTH

P.O. Box 2030, Truro MA 02666
Tel: 508-349-7004 Fax: 508-349-5508

TRURO WATER SERVICE APPLICATION FOR NEW OR EXPANSION OF EXISTING WATER SERVICE

APPLICANT INFORMATION

Date: 8-10-22 Name: ALBERT SILVA
Water Service Address: 146 SHOPE RD Map/Parcel/Lot 22-48
Mailing Address: P.O. BOX 44 City/State/Zipcode N. TRURO, MA. 02652
Phone Number: [REDACTED] Email Address: [REDACTED]

EMERGENCY TELEPHONE NUMBERS

Plumber Name: CAPE QUALITY Phone Number: 508-221-0483
Property Manager: JASON SILVA Phone Number: 678-230-0377
Other Name & Phone Number: _____

TYPE OF SERVICE REQUESTED:

- New Water Service: Proposed Title 5 Design Flow: _____
- Expansion of Water Service:
Existing Title 5 Design Flow: 440 GPD Proposed Title 5 Design Flow: 440 GPD - ADDING 1 BEDROOM - STUDIO TO EXISTING SYSTEM
- Water Service for Condominium Conversion (separate meters, tap etc.) # of Units _____

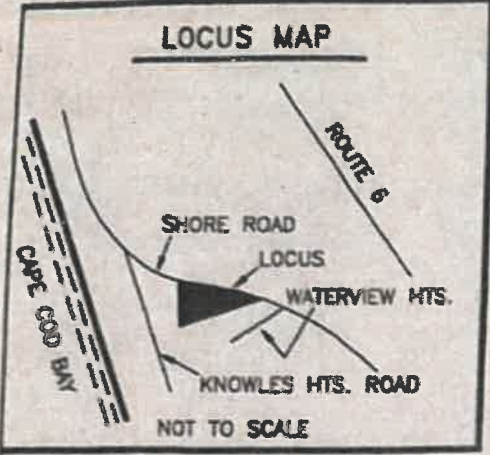
Type of Facility:

- | | | |
|--|--|--|
| <input type="checkbox"/> Single Family | <input type="checkbox"/> Condo | <input checked="" type="checkbox"/> Multifamily Dwelling |
| <input type="checkbox"/> Restaurant | <input type="checkbox"/> Motel | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Retail | <input type="checkbox"/> Office Building | <input type="checkbox"/> Industrial: _____ |

Meter installations fifty (50) feet or greater from the curb stop must be in a meter pit adjacent to the curb top. Concrete meter pits are required in roads or driveways.

I hereby agree to abide by all the rules and regulations of the Provincetown Water Department now in force or to be established by the Water and Sewer Board and declare that there is no other means of supplying potable water on-site (e.g. private well).

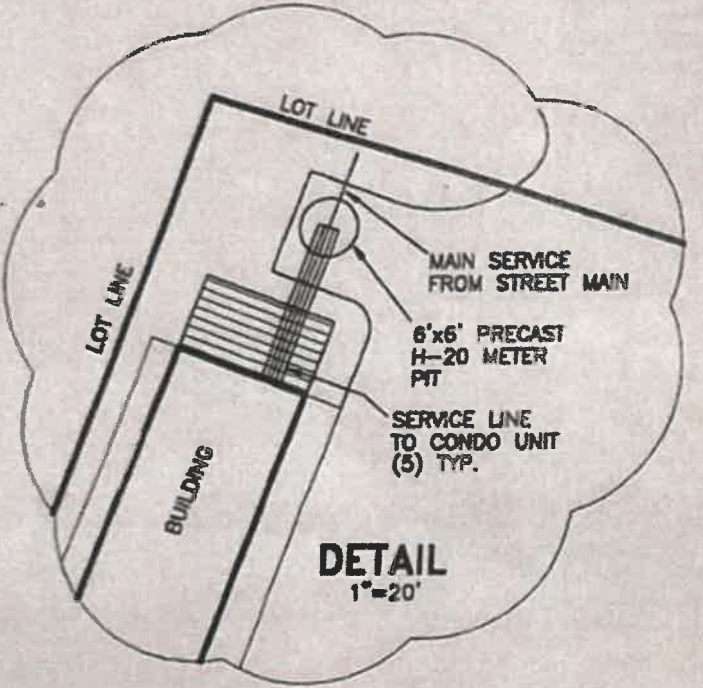
Applicant Signature: Albert Silva



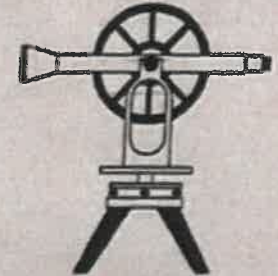
HEALTH DEPARTMENT
TOWN OF TRURO
AUG 11 2022
RECEIVED BY:

NOTES

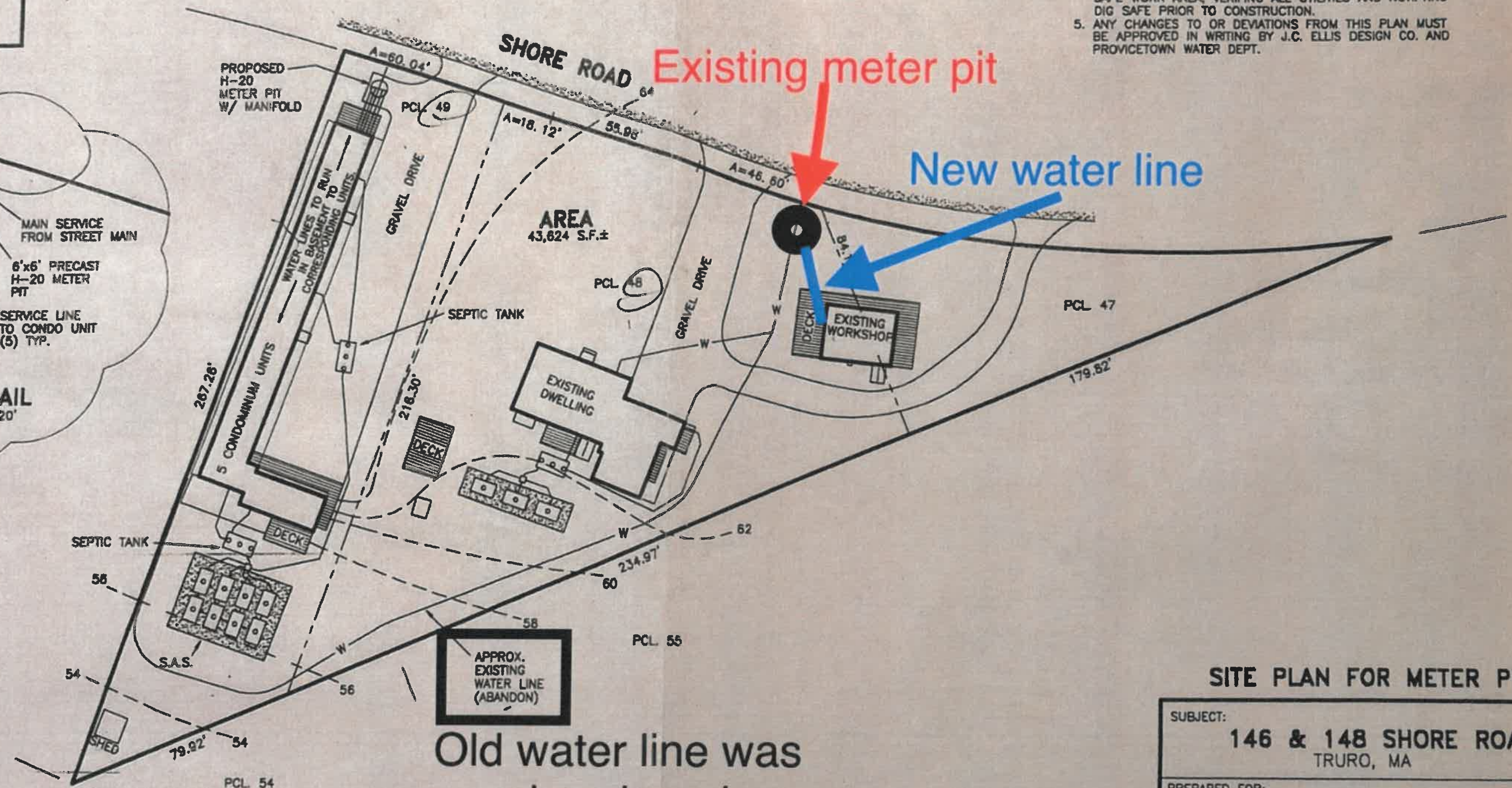
1. PRECAST WATER METER PIT IN DRIVEWAY AREAS TO BE H-20 RATED. PROVIDE H-20 STEEL COVER TO GRADE.
2. ALL CONSTRUCTION TO CONFORM WITH 310 CMR 15.000 AND ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS.
3. INSTALLER/CONTRACTOR TO REVIEW & VERIFY ALL ELEVATIONS AND DETAILS AND REPORT ANY DISCREPANCIES TO DESIGNER PRIOR TO CONSTRUCTION OR ASSUME ALL RESPONSIBILITY.
4. INSTALLER/CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SAFE WORK AREA, VERIFYING ALL UTILITIES AND NOTIFYING DIG SAFE PRIOR TO CONSTRUCTION.
5. ANY CHANGES TO OR DEVIATIONS FROM THIS PLAN MUST BE APPROVED IN WRITING BY J.C. ELLIS DESIGN CO. AND PROVICTOWN WATER DEPT.



J.C. ELLIS DESIGN



P.O. BOX 2152
BREWSTER, MA 02631
(508)385-2228
Email: jcellisdesign@verizon.net

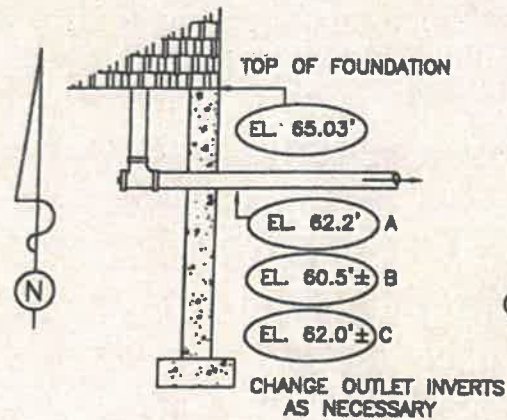
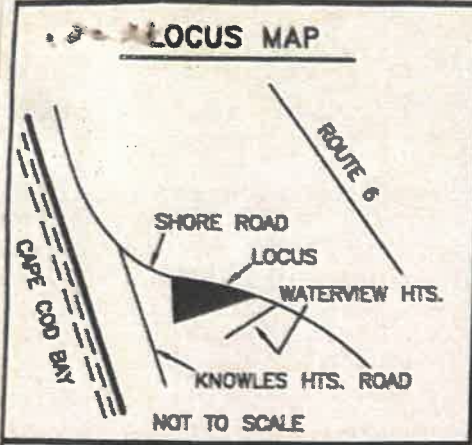


Old water line was abandoned

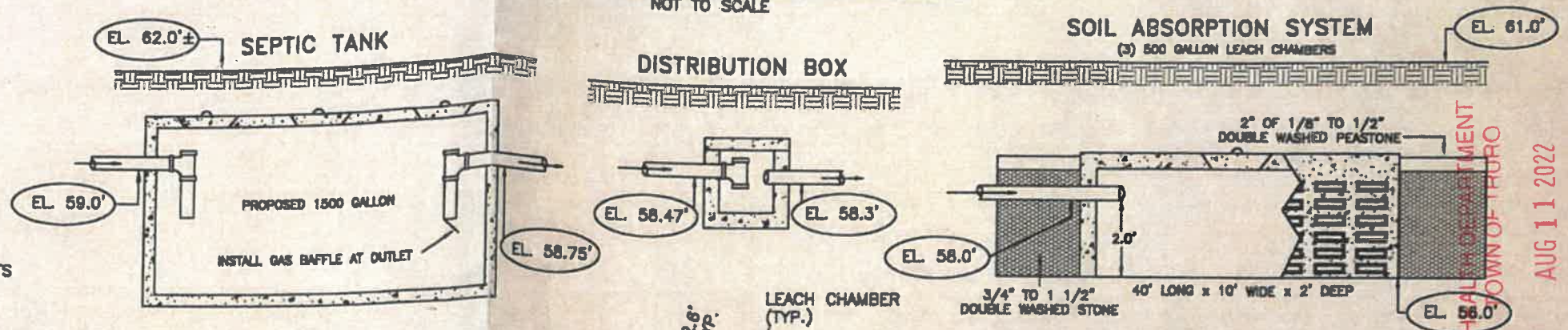
SITE PLAN FOR METER PIT

SUBJECT:		146 & 148 SHORE ROAD TRURO, MA	
PREPARED FOR:		BIG FISHERMAN APTS. DONALD PERRY P.O. BOX 185 NORTH TRURO, MA 02652	
ASSESSOR'S	MAP 22	PARCEL 47,48&49	SCALE: 1"=40'

PCL. 24-22 REFERENCE:
PLAN OF LAND IN TRURO PREPARED FOR WILLIAM & EMMA LOUISE PERRY



SECTION DETAIL - COMPONENTS



DESIGN CALCULATIONS

FLOW RATE:
 3 BEDROOM DWELLING = 330 G/P/D REQUIRED
 (110 G/P/D PER BEDROOM x 3 BEDROOMS)
 1 BEDROOM DWELLING = 110 G/P/D REQUIRED
 (110 G/P/D PER BEDROOM x 1 BEDROOM)
 TOTAL FLOW = 440 G.P.D.
 NO GARBAGE GRINDER

SEPTIC TANK:
 440 G/P/D x 2 = 880 G/P/D REQUIRED
 USE 1,500 GALLON SEPTIC TANK

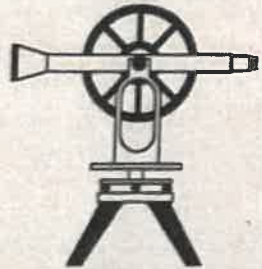
SOIL ABSORPTION SYSTEM:
 PERC RATE = <2 MIN/IN - CLASS I SOIL
 SIDEWALL = (40+10)(2)(2) = 200 S.F.
 BOTTOM: (40)(10) = 400 S.F.
 (200 + 400)(0.74) = 444 G/P/D PROVIDED

USE: (3) 500 GALLON LEACH CHAMBERS W/ STONE AS SHOWN IN DETAIL.

NOTES

1. ALL PRECAST COMPONENTS IN DRIVEWAY AREAS TO BE H-20 RATED. PROVIDE COVERS TO GRADE IN DRIVEWAY.
2. ELEVATION DATUM IS FROM USGS QUAD MAP.
3. MUNICIPAL WATER IS 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 FILLED WITH CLEAN SAND OR REMOVED AND REPLACED WITH CLEAN 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 SURVEY PLAN AND UNDER NO CIRCUMSTANCES IS THIS PLAN TO BE USED TO ESTABLISH LOT LINES.
14. EXCAVATE ALL UNSUITABLE SOIL AS NECESSARY 5' AROUND AND UNDER S.A.S. DOWN TO C LAYER AND REPLACE WITH CLEAN MEDIUM SAND.

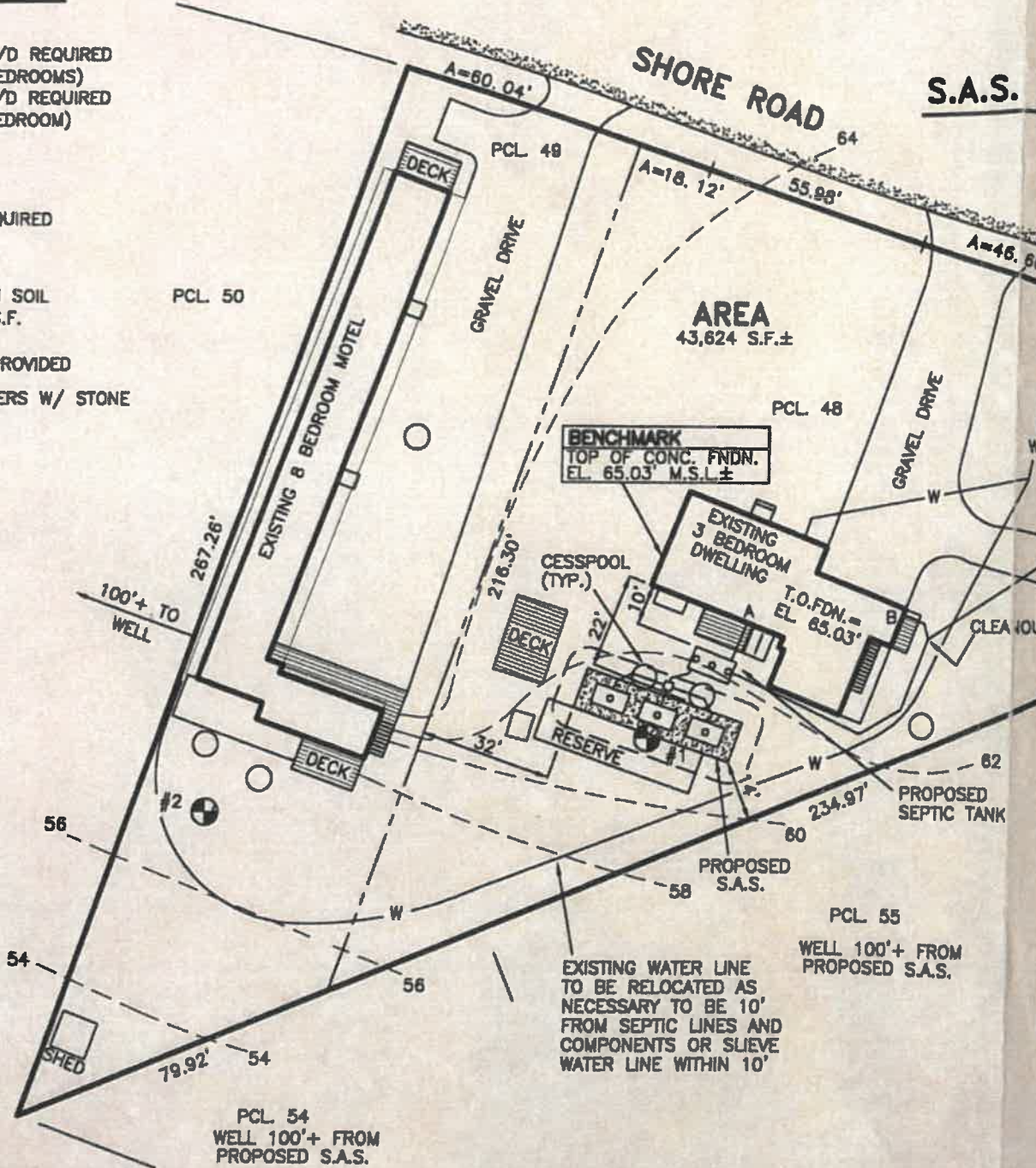
J.C. ELLIS DESIGN



551 THOUSAND OAKS DRIVE
 BREWSTER, MA 02631
 (508)896-2799
 Email: rjant@g's.net



JASON C. ELLIS, R.S.



DEEP HOLE DATA

PERFORMED BY: JASON ELLIS, S.E.
 WITNESSED BY: SUE RASK, TRURO BOH
 TEST DATE: OCTOBER 18, 2002

DEPTH	#1	ELEV.	DEPTH	#2	ELEV.
0.0'	A LOAMY SAND 10YR4/3	81.8'	0.0'	A LOAMY SAND 10YR3/2	57.3'
1.86'	B LOAMY SAND 10YR4/6	80.24'	1.0'	B LOAMY SAND 10YR4/6	58.3'
3.5'	C MEDIUM SAND 10YR6/6	58.4'	1.86'	C COARSE SAND 10YR6/6	55.64'
10.0'	PERC @ 54" <2 MIN/IN	51.9'	10.0'	PERC @ 36" <2 MIN/IN	47.3'

NO WATER ENCOUNTERED

SEPTIC SYSTEM UPGRADE PLAN

SUBJECT:
146 & 148 SHORE ROAD
 TRURO, MA

PREPARED FOR:
BIG FISHERMAN APTS.
 DONALD PERRY
 P.O. BOX 185
 NORTH TRURO, MA 02652

ASSESSOR'S
 MAP 22 PARCEL 47,48&49 SCALE: 1"=40'

DATE: NOVEMBER 12, 2002 SHEET 2 OF 2
 REVISED:

AUG 11 2022
 RECEIVED BY

**SECTION VI - LOCAL SEPTIC REGULATIONS TO SUPPLEMENT
TITLE 5, STATE ENVIRONMENTAL CODE**

Amended February 2, 2010; June 5, 2012; October 2, 2018, December 4, 2018, May 18, 2021

Commented [EB1]: Revisions for June 7, 2022

Article 1 - General Provisions

- 1) **Authority.** In accordance with Massachusetts General Laws, Chapter 111, Sections 31 and 127A, the Truro Board of Health hereby adopts the following regulations to supplement the provisions of the State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-Site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage (hereinafter, "Title 5"), and shall take effect upon passage.
- 2) **Purpose.** The purpose of this article is to ~~provide a greater degree of~~ provide protection to the environmental and public health, prevent the spread of disease, and provide greater clarification of the definitions used by the Board in applying the provisions of Title 5 and the Truro Board of Health Regulations pertaining to on-site sewage treatment and disposal systems. Of specific concern is the need to protect the groundwater, which is the sole source of drinking water for Truro, Wellfleet and Provincetown.
- 3) **Enforcement.** Enforcement of the provisions contained in this Section VI will be carried out in accordance with the provisions of Title 5 of the State Environmental Code set forth at 310 C.M.R. 15.000, et seq. and all enforcement methods outlined in Section I of these Board of Health Regulations.
- 4) **Definitions.** With the exceptions listed below, the definitions provided in the State Building and Sanitary Codes, Title 5 and the Wetland Protection regulations shall apply. All time frames referenced herein shall be counted as calendar days. The following terms used by the Board in applying the provisions of Title 5 and the Truro Board of Health Regulations pertaining to on-site sewage treatment and disposal systems, shall be defined as follows:

Accessory Dwelling Unit (ADU): A complete, separate housekeeping unit containing both a kitchen and sanitary facilities, as defined by the Truro Zoning Bylaws section 40.2.

Alter or Alteration: To make different by changing, adding and/or subtracting components, piping or location.

Bedroom

- a) Any room that meets the definition of a bedroom under Title 5 or any room or enclosed addition with at least 70 square feet of floor area and a building code conforming egress window, that provides minimum isolation necessary for use as a sleeping area. Rooms such as a finished basement with building code conforming egress may be considered a bedroom if it meets the definition. The definition does not apply to a bathroom, kitchen, hall, unfinished cellar, unfinished basement, unfinished attic, garage, unfinished area above a garage, unheated porch and open deck.

- b) Notwithstanding the foregoing, any existing dwelling with six (6) rooms shall be construed to have at least three (3) bedrooms. Any dwelling with seven (7) rooms shall be construed to have at least four (4) bedrooms. Any dwelling with eight (8) or nine (9) rooms shall be construed to have at least five (5) bedrooms. Any dwelling with ten (10) or eleven (11) rooms shall be construed to have at least six (6) bedrooms. Each additional room beyond eleven (11) shall be construed as an additional bedroom and the number of bedrooms for the purpose of sizing a subsurface sewage disposal system (proposed and existing) shall be adjusted accordingly.
- c) All lofts that do not meet the criteria above, finished basements that do not have a building code conforming egress, and rooms and with cased openings at least 60 inches wide shall be considered rooms for the purposes of this definition.
- d) Dwellings built before the 1978 Building Code will have their bedrooms determined on a case- by- case basis.

Buildable Upland: The area of contiguous upland on a lot exclusive of Wetland as defined herein.

Change of Use: With respect to properties with existing systems, a change in use will result when the use of the structure or the land is changed from one use group to another use groups as described in the Table of Uses in the Town’s Zoning Bylaws, as may be amended from time-to-time; an alteration of the structure or the land within the same use group that changes the intensity of the use, i.e. a business use changing from retail to office space or a residential use changing from single-family or multi-family; or any change or alteration to the land or structure that results in an increase in actual or design flow to the system.

Design Flow: The quantity of sanitary sewage, expressed in gallons per day (gpd), for which a system shall be designed in accordance with 310 CMR 15.203.

Failed System: Any Septic System which fails to protect the public health, safety and environment as determined by the Truro Board of Health, including but not limited to:

- a) any system which must be pumped in excess of two (2) times in a twelve-month period;
- b) any system which includes a component that the Board of Health determines is structurally unsound;
- c) any system which discharges effluent directly or indirectly to the surface of the ground through ponding, surface breakout or damp soils above the disposal area or to a wetland;
- d) any system which meets any of the failure criteria itemized on the Title 5 Official Inspection form as described in 310 CMR 15.303 or 310 CMR 15.304;
- e) any system with a leaching area with less than 4-feet (for 1978-code systems) or 5-feet (for 1995-code systems) of vertical separation to ground water; this distance shall be measured in the field (not “per plan”) by the inspector.
- f) any cesspool as defined in title 5 shall be deemed failed and shall be replaced with a title 5 compliant system no later than December 31, 2023.
- g) any systems with leaching areas/pits that are essentially at capacity, as defined herein;
- h) any systems that were not designed to accommodate the use;
- i) any system deemed as failing to protect public health, safety and the environment.

To the extent such a waiver would be consistent with the provisions of Title 5, the Board of Health may waive a finding that any of the foregoing systems have failed if the Board determines, at its sole discretion, that the system will continue to protect the public health, safety and environment.

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Innovative/Alternative (I/A) Technology: Technology that is certified for enhanced nutrient removal that is described in 310 C.M.R. 15.202 and 15.217, and which is approved by the Massachusetts Department of Environmental Protection pursuant to 310 CMR 15.280 through 15.289.

Living space: excludes screened in porches and sunrooms

Commented [EB3]: ... (needs more work)

Remedial Use: Use of I/A systems for the upgrade of a Failed or Nonconforming Septic System and there shall be no increase in the design flow served by the proposed I/A systems and no increase in habitable space or change use that, in the Board's judgement has the potential to increase sewage flow. The Board may consider a variance to this provision to allow the increase in flow from an "accessory dwelling unit" as defined herein and compliant with the Town of Truro conditions for the unit.

Nitrogen Credit is the use of I/A technology for development of a property beyond the standard of 110 gpd of wastewater flow per 10,000 sf of area. Nitrogen credit shall not be allowed for new construction, unless an ADU is being created.

Nitrogen Loading limitations: The 440 gpd per acre of land requirement for septic system design as described in title 5.

Non-conforming Septic System: Any system which, when installed did not comply with provisions of either the 1978 or 1995 iterations of Title 5, including cesspools and all similar systems in use prior to the adoption of the 1978 Code.

Title 5: Refers to Title 5 of the Massachusetts State Environmental Code, 310 CMR 15.000, et seq.

Title 5 Septic System: Includes any system installed in compliance with the 1978 or 1995 iterations of Title 5 but shall not mean cesspools or any similar system in use prior to the adoption of the 1978 Code.

TN: Means Total Nitrogen

Watersheds of Special Concern: Mapped watersheds designated by the Truro Board of Health and the Zone 1 and Zone II of public water supplies.

Wetlands: Any area that contains swamp, bog, dry bog, fresh or salt marsh, areas of exposed groundwater, embayment's, rivers, ponds, lakes, streams, inland banks, coastal banks, and coastal dunes, or any other area subject to the jurisdiction of the Conservation Commission as defined in G.L. c. 131, §40, 310 CMR 10.00, the Town of Truro Conservation Bylaw and/or regulations of the Conservation Commission, but not including buffer zones abutting such resources.

Article 2 - Variances

1. In addition to the variance criteria set forth in Section I of the Board of Health Regulations, an applicant may apply, and the Board of Health may grant a variance from this Section VI provided all of the following minimum criteria for said variance are also met:
 - a) A satisfactory inspection by a licensed system inspector of all system components if the variance sought pertains to an existing system.
 - b) The proposed or existing leaching facility has a minimum of five (5) feet of separation between the bottom of the leaching facility and the highest groundwater level as determined in 310 CMR 15.103(3); and,

- c) The proposed or existing leaching facility meets the minimum Title 5 requirements regarding setback distances for Soil Absorption Systems (SAS) as set forth in 310 C.M.R. 15.211; ~~and;~~
 - d) The existing system does not allow~~ing~~ surface breakout of the wastewater; and,
 - e) The existing system ~~does is~~ not require~~ing~~ pump-outs in excess of two (2) times in a twelve-month period; ~~and;~~
 - f) The Board of Health determines that the grant of the variance will not pose a risk to the public health, safety or the environment and, ~~further,~~ meets all the variance requirements contained in Section I of the Truro Board of Health Regulations.
2. All applications for variance must be accompanied by plans prepared by a qualified Professional Engineer or Registered Sanitarian and include all information required under 310 C.M.R. 15.220.
 3. Expiration of variances shall occur after 24 months if the approved septic design has not been installed, or, at such time as determined by the Board of Health.

Article 3 - Triggers for uPgrading Sseptic Ssystems

1. **Required Upgrades:** In order to improve the quality of water for the Town of Truro by elimination of septic systems which do not comply with Title 5 and the more protective regulations adopted by the Truro Board of Health, ~~persons who own property with non-conforming septic systems shall bring those systems into compliance by upgrading them to meet the standards of this Section VI and/or Title 5 in~~ the following situations trigger an upgrade:
 - a) Prior to any sale or transfer of title to the facility served by the system in all circumstances described in 310 CMR 15.301.
 - ~~a)b)~~ Notwithstanding any exceptions set forth in 310 CMR 15.301(2), upgrade of Nonconforming Systems shall occur prior to transfers by inheritance, between parents and their children, between full siblings, and where the grantor transfers the real property to be held in a revocable or irrevocable trust, where at least one of the designated beneficiaries is of the first degree of relationship to the grantor; and including creation of an LLC;
 - c) Prior to any change of use or increase in design flow of the facility served by a system;
 - ~~b)d)~~ Prior to the subdivision or partitioning of a parcel on which a nonconforming septic system is located;
 - ~~e)e)~~ If theAny system demonstrat~~ing~~es any of the characteristics of a failed system as defined in this Section VI;
 - f) If theAny septic system that was not constructed according to the approved plan;
 - ~~d)g)~~ Any system with aer if the soil absorption system is not designed to meet the design flow of the facility it serves; or with inadequate design capacity to serve the facility;

- e)h) ~~If a~~ Any facility served by a 1978-code system that is replaced, relocated or demolished, except when the building was destroyed by fire. A ~~nonconforming compliant~~ nonconforming compliant system serving a facility destroyed by fire does not need to be upgraded to serve a new facility if the new facility is built in the same footprint as the original ~~and~~ and provided that there is no change in use or increase in design flow of the facility and the system is not a failed system; ~~or~~
- f)i) ~~The liquid depth~~ The liquid depth in a leach pit is ~~less at least than~~ less than six inches from the inlet pipe invert or the remaining available volume within a leach pit above the liquid depth is less than ½ of one day's design flow.
- g)l) ~~All non-conforming~~ All non-conforming septic systems in the Beach Point and Pamet River Protection District or located within two hundred (200') feet of any Wetland or within the floodplain as mapped by FEMA shall be considered failing to protect public health, safety, welfare and the environment and shall be upgraded to meet the requirements of this Section VI and/or Title 5.
- h)k) ~~Cesspools~~ Cesspools in Truro are herein defined as failed systems and shall be upgraded to meet the requirements of Title 5 prior to December 31, 2023. All new systems replacing cesspools shall be installed and certified by that date.

2. Multiple Systems on One Lot.

- a) ~~———— In the event of the failure of one septic system on a lot that has On a parcel with more than one non-conforming septic system, and a total design flow on the parcel is less than 2000 gallons, the failing system shall be immediately upgraded and the remaining non-conforming septic systems shall be inspected by a Department of Environmental Protection system licensed -l) inspector pursuant to Section 15.340 of Title 5 (hereinafter, “DEP System Inspector”), except where the total cumulative flow is over 2000 gallons per day, then all systems shall be upgraded with pressure distribution in accordance with Title 5. If any of the remaining non-conforming septic systems shall fail inspection as defined in the Title 5 Official Inspection Form, and the Truro “addendum to MA title 5 inspection form” or if the inspection shall reveal that the system is a “Failed System” as defined in Article (3) set forth above, the non-conforming septic system shall be immediately that system must be upgraded to a fully conforming Title 5 septic system.~~
- a)b) If the design flow on a parcel is over 2000 gallons per day, then all systems shall be upgraded with pressure distribution in accordance with Title 5.

3. Time for Upgrades and Administrative Consent Orders

PURPOSE: To allow the Town to execute and agreement with private property owners who need to upgrade or repair their cesspools or septic systems during the Municipal wastewater planning process.

DEFINITIONS:

ADMINISTRATIVE CONSENT ORDER (ACO) is a duly executed and recorded document that

affords a property owner in Truro an opportunity to defer major repair, replacement and /or upgrade of a failed on-site wastewater treatment system until a municipal plan is available to direct the course of action for that owner or until a time frame specified and requires funds for a septic upgrade be placed in an escrow account.

SYSTEM INSPECTION REPORTS: Inspections of septic systems shall report on the functioning and condition of the system, and a description of the components. This report will be the basis to determine whether a property is eligible for an Administrative Consent Order (ACO) or will be required to upgrade immediately. If an inspection is required by Order of the Board of Health, or by the Truro Board of Health regulations, those properties with a cesspool system will not be required to submit a title 5 inspection form; however, a licensed inspector must provide the Board of Health with a letter describing the condition of the cesspool system and a description of its components.

TIME FOR UPGRADES

All onsite septic systems shall be upgraded within one hundred and eighty (180) days from completion of an inspection of the system whenever an inspection determines that the system requires upgrade due to a condition identified in Section VI, Article 3 of the Truro Board of Health Regulation or Title 5.

The Board of Health may grant a variance extending the time for completing the required upgrade, subject to the property owner entering into an Administrative Consent Order within thirty (30) days from completion of the inspection.

Commented [EB4]: What are the criteria for entering into an ACO?

ADMINISTRATIVE CONSENT ORDER

Administrative Consent Orders shall be on such terms and conditions as the Board determines are in the best interests of protecting public health and the environment until such time as the system is upgraded.

All Administrative Consent Orders shall have the following minimum terms:

Commented [EB5]: Can the Board require that a site plan be completed by the property owner while the planning process moves forward?

1. The Board of Health agrees to extend the time for upgrading the system for a specified period of time, provided that there is compliance with the terms of the ACO;
2. The Property owner agrees to deposit a predetermined sum of money into an interest-bearing escrow account in an amount sufficient to complete the required upgrade; said sum may be paid in installments;
3. The Property owner agrees to upgrade the system upon expiration of the stay;
4. The Property owner agrees to periodic inspections and pumping of the system as needed;
5. The Property owner agrees to abate any imminent health hazards arising prior to upgrade of the system, which may require earlier repairs or upgrade; and
6. The Property owner agrees to record the ACO in the chain of title to the property and that the ACO will be binding on any successors in interest.

Commented [EB6]: How would this be calculated?

Notwithstanding the terms of this Regulation or an ACO issued pursuant thereto, the Board reserves the right to issue any such order as may be deemed necessary to protect public health and the environment from an imminent hazard caused by any onsite septic system, including requiring pumping, repairs, or immediate upgrades.

All requests for an ACO shall be processed in accordance with Article I of the Truro Board of Health Regulations and Title 5 and shall be within the sole discretion of the Board.

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Article 4- Required Septic System Inspections

1. A current Inspection Report completed by a MA licensed Septic System Inspector shall be filed in the following circumstances:

- a. At or within two years prior to the time of sale or transfer of title to the facility as defined in Article 4 of this Section VI and title 5, 310 CMR 15.301;
- b. With an application for a building permit that proposes an increase in living space as determined by the Truro Health Agent, ~~if an applicant or a direct abutter is aggrieved by the determination of "increase of living space" by the Health Agent, the applicant may appeal this determination to the Truro Board of Health;~~
- ~~c.~~ With an application for a *special permit* that allows uses not otherwise permitted by the Truro Zoning Bylaw;
- ~~d.~~ With and A application for a new license or transfer of an existing license;
- ~~e.~~ or Every three years at the renewal of the annual operating permit for the operation of a motel, cottage colony, cabin, campgrounds, lodging house or restaurant. ~~(see also 2.h in this article)~~
- ~~e.~~
- ~~d.f.~~ Prior to renewal of permits for a facility served by a shared system. Inspections for all shared systems are required once every 3 years. Shared systems include condominiums, motels and camps and cabins.
- ~~e.g.~~ Prior to any change in use as defined in these regulations.
- ~~f.h.~~ At such time as a property owner/business owner is so ordered by the Board of Health.

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2. Inspection Criteria:

All system inspections shall be documented in an official Title 5 inspection form and a Town of Truro Septic "addendum to MA title 5 inspection form". An inspection shall not be considered complete unless all information required on both forms is provided. In addition to the inspection criteria set forth in Title 5, the following criteria shall be observed in conducting system inspections:

- a) An open inspection of all components of the system is required. If a component cannot be found or uncovered after a reasonable search, the inspector must provide evidence for the system's success or failure. Replacement or installation of the component is required in this instance.
- b) The septic tank shall be pumped at the time of inspection if it has not been pumped within the past 3years.

- c) Leach pits must have at least 6 inches of leaching capacity below the outlet invert in order to pass the inspection. The 6 inches of leaching capacity is determined by clean sidewall absent of staining or evidence of high water. The Inspector must clearly indicate on the inspection form the height of standing liquid in any leaching component, the level of staining in any leaching component, and the description of both sanitary tees in any inspected tank. In the case of missing sanitary tees, no passing report shall be issued unless there is proof (copy of permit) of the correction of the deficiency.
 - d) Any work for the correction of component failures, such as, but not limited to, eroded distribution-boxes, new piping, sealing a tank or installing new tees will require a valid disposal works construction permit, inspection and issuance of a certificate of compliance.
 - e) If the inspector finds that the access port covers of the septic tank inlet and outlet, distribution box and soil absorption system are not within 6 inches to grade, risers shall be provided as needed and the installation of risers shall be indicated in the septic system report.
3. **Failed systems shall include:** cesspools; non-conforming systems as defined in Article 2; systems without adequate separation to groundwater; systems with leaching areas/pits that are essentially at capacity, as defined herein; systems that were not designed to accommodate the use; any system deemed as failing to protect public health, safety and the environment.
 4. **All Inspections** shall be conducted by a MA licensed Title 5 inspector, using both the local and state inspection forms; the local form and required water test results shall be attached to the State form when filed in accordance with, and addition to, the requirements of Title 5 for septic inspection reporting.
 5. **The septic inspector** must verify that the use of the facility (ie; # of bedrooms) matches the design flow of the system (ie; a 4 bedroom dwelling should have at least 440 gpd design flow). Design flow shall be based on the records on file at the office of the Board of Health and use of the facility, including the number of bedrooms, shall be based on a visual inspection at the time of inspection.
 6. **Difficulty in Locating Components:** If a complete inspection cannot be performed, the inspector must provide adequate documentation of the specific conditions which prevented a complete inspection and should indicate on the inspection form how the inspector attempted to locate components; in this instance the report shall indicate that the system “Needs Further Evaluation from the Local Approving Authority.” The Local Approving Authority shall evaluate all “Needs Further Evaluation” entries on the inspection form and determine whether further investigation is required to adequately evaluate the system.

Commented [EB9]: Gregg Corbo suggests to shorten this and reference "as defined in article 1"

Article 5- Subdivision Plans

- 1) All new subdivision plans shall have the proposed well location and septic system on each lot. These locations shall meet all sideline and other setback and distance requirements.
- 2) The Plan shall be on file with the Building Commissioner and Health Agent.

- 3) Applications for septic and well permits shall adhere to the plan unless sufficient data ~~is~~are presented to the Board of Health to justify the change.

Article 6 - Bedroom Count

(1) Bedroom Count Determination. Notwithstanding the general provisions of Section 15.002 of Chapter 310 of the Code of Massachusetts Regulations, there shall be no presumption that single-family dwellings have at least three bedrooms in the Town of Truro. In each instance, a specific determination relative to bedroom count must be made without reliance upon any presumptions. The Health Agent shall have the authority to make the initial bedroom count determination. If the Health Agent finds the determination in a specific instance should be made by the Board of Health, the Agent may, in their sole discretion, refer the matter to the Board of Health for a final determination. The Agent may also, in their sole discretion, refer the bedroom count determination to the Board of Health upon request of the applicant.

(2) Deed Restriction. A deed restriction may be required by the Board of Health to ensure that use of the septic system as proposed will not negatively impact the public health, safety, welfare or the environment.

(3) Building Permits. No building permit, ~~foundation permit, plumbing permit, special permit or variance~~ shall be issued until a Disposal Works Construction Permit has been issued for installation of a subsurface sewage disposal system designed to accommodate the bedroom count or the Board of Health has issued a written determination that the existing system is adequate for what is proposed.

(4) Floor Plans and Inspections. For existing facilities, in order to determine compliance with any provision of the foregoing regulations, a floor plan ~~must be filed with the Truro Board of Health at the time of submission of an inspection report~~ may be requested by the Health Agent to make a determination as to bedroom count. If the Health Agent deems it necessary, they may refer the determination of the bedroom count to the Board of Health for a vote. ~~If the Board of Health, by a majority vote of its members, deems that an inspection of an existing residence is necessary to confirm the bedroom count, the Health Agent, with the applicant's permission, shall inspect the premises and report their findings to the Board.~~

~~(4)~~(5)

~~(5)~~(6) **Assessors' records, and ~~old unstamped~~ plans and the like** will not be considered ~~as~~ sufficient evidence of the size of the facility for purposes of determining design flow. In the event of a discrepancy between the results of the visual inspection and existing records, an in-person inspection by the Health Agent will be required and the Health Agent's determination of the size of the facility will be final.

Article 7 - Regulation of Separate Site Systems

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1) Septic systems shall be constructed on the same lot as the facility to be served.

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2) Variances from this Article may be granted by the Truro Board of Health for structures in existence prior to March 31, 1995, provided all of the following conditions are met:

- a. The system can be installed on a contiguous property owned by the same person and title to the lots is merged by virtue of a deed recorded at the Barnstable County Registry of Deeds;
- b. The system is not being installed for the purpose of increasing the size or use of the existing structure; and,
- c. The system will replace or repair a pre-existing, non-conforming septic system or components.

3) Any grant of variance pursuant to this Article must also be made in accordance with Article 2 of this Section VI and Section I of the Truro Board of Health Regulations.

Article 8- Innovative/Alternative Technology

Preamble: In considering the permitting and use of various alternative septic treatment technologies in the Town of Truro, the Board of Health of the Town of Truro recognizes that there may be specific local circumstances which warrant the Board to require more stringent conditions for the installation and monitoring of these alternative systems than may be required by the Massachusetts Department of Environmental Protection. As allowed under Massachusetts General Laws Chapter 111, Section 31 and as required by the revised 310 CMR Section 15.285 (2d), 15.286 (5) and 15.288 (4), the Board of Health of the Town of Truro hereby reserves the right to impose any additional conditions or monitoring requirements it views as necessary to ensure the safe performance of any alternative onsite septic system which the Board agrees to permit in the Town of Truro.

1). **Applicability:** The use of I/A technology is required in the following circumstances:

- a) for flows greater than 600 GPD;
- b) for nitrogen credit applications (these are only allowed by request in limited circumstances in Truro);
- c) for upgrade of certain non-conforming systems as determined by the Board of Health;
- d) for upgrades of previously approved systems that exceed current nitrogen loading standards of 110 gpd/10,000sf of lot area;
- e) in certain cases where a variance is required and circumstances support the use of I/A to mitigate the environmental impact of the proposed system, as determined by the Board of Health.

2). **Standards:**

- a) In all of the circumstances described above, the I/A System shall be designed to achieve/produce no greater than 19 mg/l total nitrogen (TN) concentration in the effluent by using the secondary treatment achieved with an approved innovative/alternative (I/A)

septic system. ~~At least 1 lab test showing TN shall be submitted annually to the Health department.~~

~~b) Any existing facility with a design flow greater than 600 gpd shall be designed to achieve/produce no greater than 19 mg/l total nitrogen concentration in the effluent by using secondary treatment achieved with an approved innovative/alternative (I/A) septic system that complies with the requirements of this Section VI. At least 1 lab test showing TN shall be submitted annually to the Health department.~~

~~b)~~
c) I/A Systems shall be tested and reported on a quarterly basis, unless approved for reduced testing in accordance with O&M requirements, by means of obtaining an effluent sample from the distribution box or pump chamber to determine if the system meets the post-treatment standard of less than 19 mg/l total nitrogen. The results of such evaluations shall be submitted to the Board of Health within forty-eight hours of receipt thereof.

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3) Non-Performance.

- a) Non-performance includes any I/A system that has been determined to be failing to protect public health and safety, and the environment, ~~or~~ an I/A system with equipment failure or an unresolved alarm event, or components that are not functioning as designed, or components that are not functioning in accordance with the manufacturers specifications, or a system that is in violation of the terms of its approval by the Truro Board of Health.
- b) Non-performance requires written notification by the operator to the Truro Health Department within 48 hours receipt of lab test, along with a statement describing what corrective actions will be taken.
- c) Corrective actions must be taken ~~immediately~~ (within 48 hours of a lab report or field test) to address performance that does not meet the standards as defined herein, or specific to the approval by the Truro Board of Health.
- d) Lab tests showing exceedance of TN triggers a re-test immediately following corrective actions taken to address the exceedance, until the corrective measures are shown to have improved performance to meet the standards.
- e) Failure to comply with the process as described may result in a written warning from the Truro Health Department, followed by possible fines and a hearing with the Truro Board of Health that must be attended by the property owner and the licensed inspector.

4) Applications and Hearings.

~~a) Any application for a system proposing the use of I/A technology shall be submitted to the Truro Board of Health which shall hold a public hearing to consider its approval.~~

b)a) All applications shall include a copy of the Massachusetts Department of Environmental Protection approval letter appropriate to the I/A technology being used and the level of approval (i.e., General Use, Provisional Use, Remedial Use, Piloting Use, or site-specific Pilot Approval).

e)b) All applications for Pilot Approval shall include performance data from piloting sites where the I/A technology has been similarly configured and utilized.

d)c) Notice of the public hearing of the Board of Health for the consideration of applications requiring for I/A approval shall be in accordance with the provisions of the

Open Meeting Laws in Massachusetts. A butter notification will not be required unless mandated by Title 5.

5) Monitoring and Reporting.

- a) If an I/A system is approved, the applicant will be required to submit a proposed monitoring and reporting plan to evaluate the performance of the system to the Board of Health for approval; ~~T~~his plan shall include a description of any long-term operational or maintenance requirements needed to keep the system operational, and any educational, financial assurance or other mechanism proposed to ensure effective long-term operation and maintenance.
- b) Owners and operators of all I/A systems shall report the results of all operation, maintenance, and monitoring activities required by the foregoing provision or by the Department of Environmental Protection to the Truro Board of Health and to the Barnstable County Department of Health and Environment. ~~Sueh~~Reporting must be performed in the manner specified by the Board of Health or in the form approved by the Barnstable County Department of Health and Environment and must occur within forty-eight hours after each maintenance or monitoring event.
- c) The Board of Health ~~hereby further~~ requires that when a system operator performs a system inspection and finds that a sewage treatment technology has malfunctioning components which have compromised the system's ability to treat sewage as designed, the operator shall report on the system's status and any planned corrective action, including a proposed deadline for said corrective action, to the Truro Board of Health and the Barnstable County Department of Health and Environment within 48 hours of inspection.
- d) If at any time a monitoring or maintenance report indicates that an I/A system needs corrective action, the Truro Board of Health may hold a hearing to ~~inquire as to whether~~ determine corrective action is needed. If at such hearing, the Truro Board of Health determines that such system needs corrective action, it may take enforcement action, including but not limited to, an order to cease operation of said system or any other action otherwise necessary to protect public health, safety, welfare, and the environment.
- e) I/A Systems that do not perform are required to be immediately evaluated by the licensed operator for the purpose of the inspector forming a diagnostic opinion of what corrective actions would address the non-performance.
- ~~f) Non-performance includes any I/A system that has been determined to be failing to protect public health and safety, and the environment, or an I/A system with equipment failure or an unresolved alarm event, or components that are not functioning as designed, or components that are not functioning in accordance with the manufacturers specifications, or a system that is in violation of the terms of its approval by the Truro Board of Health; or a system that is not achieving the total nitrogen standard in these regulations.~~
- ~~g) Non-performance requires written notification to the Truro Health Department within 48 hours receipt of lab test, along with a statement describing what corrective actions will be taken.~~
- ~~h) Corrective actions must be taken immediately (within 48 hours of a lab report or field test) to address performance that does not meet the standards as defined herein.~~

- ~~i) Lab tests showing exceedance of TN standard triggers a re-test immediately following corrective actions taken to address the exceedance, until the corrective measures are shown to have improved performance to meet the standards.~~
- ~~j) Failure to comply with the process as described may result in a written warning from the Truro Health Department, followed by possible fines, and a hearing with the Truro Board of Health that must be attended by the property owner and the licensed inspector.~~

6) Record Notice at Barnstable Registry of Deeds.

- a) All applicants gaining Board of Health approval for the installation of any I/A systems shall be required to record at the Barnstable County Registry of Deeds a Notice that the property is served by an I/A system, ~~together with an explanation of the Inspection, Monitoring and Reporting requirements, including the requirement of a service contract for the life of the system.~~
- b) **No Certificate of Compliance** for the installation of an I/A system will be issued until proof of recording is filed with the Health Department.

Article 9 - Required Setbacks for System Components

Notwithstanding the provisions of Title 5, 310 C.M.R. 2.11, all systems shall conform to the following minimum setback distances for septic tanks and soil absorption systems (SAS), including reserve areas, as measured in feet and set forth below:

	<u>Septic Tank or Pump Chamber</u>	<u>SAS</u>
Surface Water (except Wetlands)	50'	100'
Wetlands	100'	150'

Article 10 - Existing Systems Serving New Construction

For systems designed and approved prior to March 31, 1995, the size of the existing system shall not be considered in determining whether a change in use or new construction in the facility served by the system will result in an increase in design flow, i.e. an increase in the number of bedrooms, restaurant seats, retail space, office space etc. for facilities listed in 310 CMR 15.203(2) through (5), rather review of the existing use of the facility (i.e., existing bedroom count; existing restaurant seats; existing retail space, etc.) at the time of the change, as determined by the Truro Health Agent, will be used to make such determination.

No increase in design flow to any system shall be allowed unless the lot meets the requirements of 15.214, Nitrogen Loading Limitations, and Article 11 and Article 13 below. Should an increase in design flow be allowed, the system shall be upgraded in full compliance with Title 5 for new construction.

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Article 11 - Buildable Upland Calculations for Nitrogen Loading Limitations

When applying the nitrogen loading limitations set forth in Title 5 and this Section VI of the Truro Board of Health Regulations (see Article 14), only Buildable Uplands shall be included in the lot area calculations.

Article 12 - Deed Restrictions

- 1) Any deed restrictions required under this Section VI or under Title 5 shall be submitted to the Health Agent for review before they are finalized and executed.
- 2) Each deed restriction shall ~~adequately~~ describe the property and all restrictions placed thereon (i.e., bedroom count limitations shall include the number and location of approved bedrooms; monitoring agreements shall describe the specific monitoring and maintenance requirements, etc.).
- 3) All deed restrictions ~~may shall~~ contain a provision permitting the Truro Health Agent to inspect the premises to ensure compliance with the provisions of the deed restriction at reasonable intervals and upon reasonable prior notice.
- 4) ~~All deed restrictions~~ A deed restriction required by the Board of Health, or their Agent shall be recorded at the Barnstable County Registry of Deeds ~~and proof~~ of recording shall be submitted to the Health Department prior to the issuance of the Certificate of Compliance for the system.
- 5) A deed restriction required by the Board of Health, or its their Agent shall be recorded prior to the ~~issuance of the Disposal Works Construction permit, or approval/sign-off on~~ any building permit, as determined to be required for compliance with these local regulations and Title 5 by the Board of Health or its Agent.
- 5)6) A deed restriction is required by the Board of Health or their Agent prior to sign-off on all ADU specifying it's approval and the requirement for year-round rental in perpetuity.

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Article 13 - Nitrogen Loading Limitations

- 1) The Truro Board of Health ~~hereby~~ requires that all properties within the Town of Truro meet the loading restrictions set forth in 310 CMR 15.214 and contain at least ten thousand (10,000) square feet of Buildable Upland (as defined in Article 1 hereunder) for every 110 gallons per day of design flow ~~and that a~~ All systems designed to serve said facilities must meet the same restrictions and requirements contained in Title 5 as the "Nitrogen Sensitive Areas" defined in 310 CMR 15.215 irrespective of whether the properties are located within "Nitrogen Sensitive Areas" as so defined.
- 2) Upgrades for systems that exceed current nitrogen loading shall include the use of I/A technology ~~the use of pP~~ pressure distribution may be required when indicated and

determined by the Board, ~~to mitigate such as a need for~~ certain variances such as depth to groundwater, lateral separation to marine water bodies or private wells.

Article 14 - Septage Haulers and Septic Installers Licenses

1. A **Septic Installers license** is required in the Town of Truro for any work done to alter a septic system or its components, such as piping, tee replacement, tank and d-box replacement and tank sealing.
2. **Septage Haulers License Application:** The Board of Health will issue Septage Haulers Licenses only upon written application that includes the following information:
 - a) name and address of applicant and business name under which applicant will operate.
 - b) written description of all equipment utilized in the business, including the capacity of any tanks; and an emergency contact name and number of a person available for contact 24 hours a day in cases of emergency.
- ~~3. **Inspection:** Prior to the issuance of the Septage Haulers License and annually thereafter, all equipment of the business must be inspected by the Health Agent. All equipment must be clearly marked and identified with markings indicating the capacity of the tank. Truck tanks must be cleaned and made free of sand and sludge for every inspection. Gauges must be cleaned and calibrated so that exact volume is easily determined.~~
3. **Septage Coupons:** Septage coupons must be ~~completely and~~ properly filled out. The name, date, location and volume for each system serviced must be provided. The signature of the hauler and the customer must be executed on each coupon in order to validate the origin of the waste in the Town of Truro. Septage haulers are required to supply accurate/legible information to the Board of Health as a condition of their License.
4. **Chemicals and Acids.** Use of chemicals and acids for cleaning cesspools and septic systems is prohibited.
5. **Failing Systems.** As a condition of their License, all Licensees shall accurately report all malfunctioning systems to the Board of Health, including but not limited to, the address of the malfunctioning system, the nature of the problem and the repairs,
- ~~6.1 Septage haulers are required to supply accurate/legible information to the Board of Health as a condition of their License.~~
- ~~7.6~~ **Licenses.** Licenses go into effect January 1st of each year. The annual fee for Licenses shall be determined by the Board of Health each year.

8.7. Violations. Failure to comply with any of these regulations shall constitute a violation which may result in a show cause hearing before the Board of Health to determine whether the License should be revoked. Violations may also result in the imposition of fines and/or any necessary legal action to be undertaken by the Board.

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Article 15- Maintenance requirements

1. Leach areas with pressure distribution must be inspected annually, by a PE per Title 5;
2. Maintenance of a septic tank must be completed when ordered by the Board of Health. If a septic tank has not been pumped within 3 years of a transfer of deed, the tank must be pumped as part of the septic inspection.
3. Maintenance by pumping septic tanks is recommended every 3- 5 years for residential systems, depending on the amount of use.
4. Maintenance of Grease traps includes quarterly pumping as required by Title 5.

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Article 165- Miscellaneous Provisions

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1. **As-Built Cards.** The measured location of all components of each septic system shall be recorded on a septic "As Built" card and filed with the Health Agent prior to the issuance of a Certificate of Compliance. The installer shall verify on said "As Built" card that the components are installed in accordance with the locations shown on the approved septic plan.
2. **Severability.** If any Article, section, paragraph, sentence, clause or phrase of these regulations should be declared invalid for any reason, such declaration shall not affect the remainder of these regulations which shall remain in full force and effect.



Date: August 12, 2022

Subject: UPDATE ON CESSPOOL UPGRADE REQUIREMENT

Dear Truro Homeowner:

This update is sent as a reminder and a check-in on your process to upgrade your property to meet the Title 5 requirement by the end of 2023.

Our records indicate that you have been in touch with our office to discuss the process and we thank you for that. We want to remind you that the planning for the upgrade will require approximately four months for development of the plan, and about two months for permitting and installation. At this point it is very important that you contact an engineer or designer to start the planning process. Here is a list of some engineers/designers that serve our area:

Ryder & Wilcox: 508-255-8312

J.M. O'Reilly & Associates: 508-896-6601

Down Cape Engineering: 508-362-4541

Moran Engineering: 508-432-2878

Schofield Brothers.: 508-255-2098

Clark Engineering: 508-896-4861

East-Southeast, LLC: 508-945-3965

David Bennett, NSU Water: 508-737-7350

ECO Tech: 508-364-0894

CSN Engineering: 508-896-1783

J.C. Ellis Design: 508-240-2220

Coastal Engineering: 508-255-6511

William N. Rogers: 508-487-1565

Cape Cod Engineering: 508-896-4861

DG Digging-Douglas Grover: 508-247-9883

Glenn Harrington, RS: 774-238-1813

Dan A. Speakman Construction: 508-432-5565

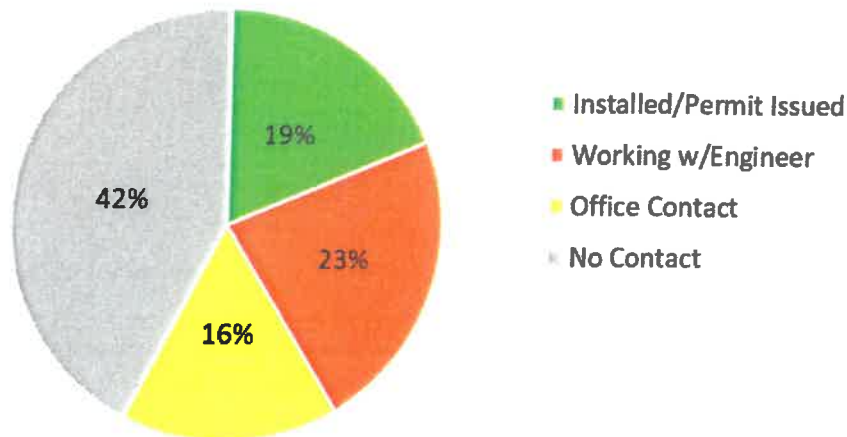
Please contact our office with any additional questions you may have or to provide us with an update on the progress you are making. We have included information about cesspools, financial support options for the upgrade, and a Q and A from a discussion with a Truro property owner.

Please call (508)-214-0919 or email at ebeebe@truro-ma.gov

Sincerely,

Emily Beebe, Health & Conservation Agent

Cesspool Upgrade Progress





Date: August 12, 2022

ORDER TO CORRECT: SEPTIC SYSTEM UPGRADE

Pursuant to Truro Board of Health Regulations, Section VI, Article 3.1.h, all cesspools in Truro are herein defined as failed systems and shall be upgraded to meet the requirements of Title 5 prior to December 31, 2023.

You are under order to correct because our records indicate that your property is still served by a cesspool. This notice is our 3rd notice to alert you to the new requirements.

Failure to comply with the requirement for installation and certification by December 31, 2023, may result in issuance of fines under the provisions of MGL Ch. 21D and the Truro Board of Health regulations. Fines may be issued daily, as each day after December 31, 2023 shall constitute a separate violation. The fine amounts escalate and would commence at \$100 on the first day; by the third day and each consecutive day thereafter there will be a \$300 fine for each day of violation.

The design of the upgrade plans for the title 5 system will require at least 4 months for an engineer or designer to complete, and the permitting and installation will take another 2 months. **Please contact an engineer/designer to start the planning process.** We recommend that you start planning immediately, as all the design companies have wait lists. A list of some of the engineers and designers that serve our area can be found at the bottom of the following page.

We have also enclosed some documents that detail the processes for financial support for the design and upgrade, as well as information about cesspools and what you can expect during the upgrade process. Please contact our office with any questions you may have so that we can assist you, and please provide us with an update on the progress you are making. We look forward to working with you to make this important project a success.

Emily Beebe, Health & Conservation Agent
ebeebe@truro-ma.gov
(508)-214-0919

Arozana Davis, Assistant Health & Conservation Agent
adavis@truro-ma.gov
(508)-214-0932

Courtney Warren, Assistant Health & Conservation Agent
cwarren@truro-ma.gov
(774)-383-3393

LOCAL DESIGNERS AND ENGINEERS

Glenn Harrington, RS: 774-238-1813
Ryder & Wilcox: 508-255-8312
J.M. O'Reilly & Associates: 508-896-6601
Down Cape Engineering: 508-362-4541
Moran Engineering: 508-432-2878
Schofield Brothers.: 508-255-2098
Dan A. Speakman Constr.: 508-432-5565
Clark Engineering: 508-896-4861

CSN Engineering: 508-896-1783
East-SouthEast, LLC: 508-945-3965
J.C. Ellis Design: 508-240-2220
Coastal Engineering: 508-255-6511
William N. Rogers: 508-487-1565
Cape Cod Engineering: 508-896-4861
ECO Tech: 508-364-0894
David Bennett, NSU Water: 508-737-7350



TOWN OF TRURO
HEALTH & CONSERVATION DEPARTMENT
24 Town Hall Road, Truro 02666

FINANCIAL SUPPORT PROGRAMS FOR SEPTIC UPGRADES

Barnstable County Community Septic Management Loan Program: The Community Septic Management Loan Program (CSMLP), aimed at upgrading failed residential septic systems to Title 5 standards, was made possible by the enactment of the Open Space Bond Bill of 1996. This law appropriated \$30 million to the Massachusetts Department of Environmental Protection (MassDEP) to assist qualified homeowners in defraying the cost of complying with Title 5 regulations. In turn, MassDEP used this appropriation to fund loans through the Massachusetts Water Pollution Abatement Trust (MWPAT).

For over a decade, the Barnstable County Department of Health and Environment administered this program on behalf of all fifteen Cape towns. As a way of streamlining the Program, Barnstable County secured special legislation in 2006 allowing CSMLP to borrow money directly from the MWPAT. In addition to relieving towns of the need to secure town meeting approval for borrowings, this meant towns no longer were required to bill and collect regular payments from homeowners or track loan repayments to the State Revolving Fund. Moreover, the passage of this legislation eliminated funding lapses that occurred when towns ran out of money prior to a town meeting vote. Presently, appropriation of funds by the Assembly of Delegates provides for the Program's uninterrupted service to the citizens in Barnstable County for replacing their septic systems.

To date, CSMLP has provided \$30 million in loans for septic system repairs. The interest rate charged to homeowners remains at 5% as does the 20-year repayment term. Further, the Program recently incorporated flexible payment plans (monthly or quarterly) after conducting a survey of borrower needs.

We anticipate that this loan program will likely amend its financing structure to include both 0% loans and sliding scale interest loans (less than 5%) based on income eligibility. Please contact us directly for more information.

(SEE ENCLOSED FAQ FOR MORE INFORMATION ON BARNSTABLE COUNTY LOANS)

Mass housing: Septic System Repair Loan

- Low- or no-interest financing to help homeowners address a failing or non-compliant septic system.
- Available to owners of 1- to 4-family homes and condominiums
- Loan amounts from \$1,000 (minimum) to \$25,000
- Loan terms vary from 3 to 20 years
- Interest rates range between 0% and 5%, depending on household income

Income Limits

- Borrowers must meet income eligibility requirements to qualify for a Septic System Repair Loan.
- 0% up to \$26k (family of 3-4)



TOWN OF TRURO
HEALTH & CONSERVATION DEPARTMENT
24 Town Hall Road, Truro 02666

FINANCIAL SUPPORT PROGRAMS FOR SEPTIC UPGRADES

- 3% up to \$52k (family of 3-4)
- 5 up to \$104k (family of 3-4)

How to Apply

Septic System Repair Loans are originated by participating lenders. For more information or to ask Questions - Contact the Mass Housing Home Ownership Team at **888-843-6432** or homeownership@masshousing.com.

Housing Rehabilitation Loan Program- Community Development Partnership (CDP)- Program Overview :

The Community Development Partnership seeks applicants for housing rehabilitation programs *including septic upgrades*. The funding is provided by the Massachusetts Department of Housing and Community Development and allows a **0% interest, deferred, forgivable loan** to make critical repairs to your home. This program is designed to improve existing housing conditions of low and moderate income resident households by eliminating code violations. Eligible repair activities will include, but not be limited to, electrical, heating and plumbing work; minor structural repairs; roof and siding repairs; insulation and window replacement; lead paint and asbestos removal; and handicap accessibility improvements and septic upgrades.

ELIGIBILITY

Preliminary eligibility is defined as an applicant meeting the initial eligibility requirements, as laid out in the pre-application, to qualify you must begin the housing rehabilitation application process. Final eligibility is determined after the fully completed loan application and all supporting documentation is received, reviewed, and accepted by the CDP Housing Rehab Program Manager.



TOWN OF TRURO
HEALTH & CONSERVATION DEPARTMENT
24 Town Hall Road, Truro 02666

FINANCIAL SUPPORT PROGRAMS FOR SEPTIC UPGRADES

Once your upgrade is completed, you are eligible for the SEPTIC UPGRADE TAX

CREDIT: Any owner ("taxpayer") of a residential property located in Massachusetts who occupies the residential property as their principal residence may claim a tax credit ("title 5 Credit") against personal income tax imposed pursuant to MGL chapter 62 s.6(i) for certain expenditures associated with the repair or replacement of a failed cesspool or septic system on such property.

To claim the credit the taxpayer must be the owner of the residential property, must occupy the property as their principal residence, and may not be the dependent of another taxpayer. The maximum aggregate amount of the Title 5 credit that may be claimed by the owner of a residential property is \$6000. The amount of the title 5 credit that may be claimed in a tax year may not exceed \$1500, but any excess credit may be applied against the taxpayer's personal income tax liability in the three tax years following the year in which the credit was originally claimed. Taxpayers claiming the title 5 credit must complete and attach Schedule SC, and a copy of the certificate of compliance to their form 1 (Massachusetts Resident income tax return) or form 1-NR/PY (Massachusetts Non-resident/Part-Year Resident tax return) at the time of filing.

Design and construction expenses for repair and replacement of a failed cesspool or septic system are qualified expenditures for the purposes of claiming the Title 5 credit when such expenses are the actual costs paid by the taxpayer for construction, upgrade or expansion of a failed system authorized pursuant to a disposal system construction permit. Expenses incurred to bring a failed system into full compliance through one or more of the following:

- an upgraded system; an alternative system; a shared system; or connection to a sewer system.
- expenses for the component of a failed system when such upgrade is deemed to meet the goal of full compliance as stated in 310 CMR 15.404.
- expenses in compliance with a local upgrade approval.
- Expenses incurred in the event a non-conforming system cannot be upgraded in accordance with 310 CMR 15.404, etc.
- Expenses incurred due to specific site or design conditions which require that additional criteria be met to achieve the purpose and intent of 310 CMR 15.000.

Main Menu

Home
About the Program
Frequently Asked Questions
Contact Information

Application

Click Here to Download and
Print a loan application.



Frequently Asked Questions

- How can I qualify for the loan?
- What residential properties are covered?
- What type of septic system upgrade is covered?
- What exactly is a failed septic system?
- My septic system has not been officially inspected so I do not have a report indicating a failed system. Therefore, what signs or symptoms of failure should I describe on the application?
- What type of work does this loan cover?
- What do I need to submit in order to be approved for a loan?
- Approximately how long does it take to get approved for a loan?
- On the application is a question relating to a deed reference. What is this?
- The application also asks for assessor's information, map and parcel. What is this?
- Once approved for a loan, how do I begin the process of hiring contractors?
- How many bids do I need to obtain?
- What happens after I have received bids from contractors?
- How does the contractor get paid?
- Can I fax an invoice to you?
- What if I have paid for some of the work because I was anxious to get the project underway? Can I get reimbursed?
- How will I be billed for the final cost of my project and to whom do I make payments?
- What are my payment options regarding the repayment of my loan?
- How long can I have to repay the loan?
- What happens if I am late with a payment?
- Can I pay my loan off early?
- Is there a tax credit available from the State of Massachusetts for my septic system repair project?
- How is my loan secured?
- When my loan is paid in full, how do I get the Notice released?
- If I sell my house, can the outstanding obligation be assumed by the buyer?
- I am planning to refinance my mortgage. The lender is requesting that my loan with Barnstable County be subordinated. Is this possible?
- How long will this program remain available?

Q: How can I qualify for the loan?

A: If the residential property has a failed septic system, you can usually be approved for a loan.

Q: What residential properties are covered?

A: Primary as well as secondary residences, condominiums and apartment buildings are some of the types of properties covered.

Q: What type of septic system upgrade is covered?

A: Conventional septic systems, alternative septic systems and sewer hook-ups are covered.

Q: What exactly is a failed septic system?

A: This is a septic system that meets either state or local definitions for failure including non-compliant systems.

Q: My septic system has not been officially inspected so I do not have a report indicating a failed system. Therefore, what signs or symptoms of failure should I describe on the application?

A: Frequent pumping, liquid at the surface, gurgling sounds or slow drainage of sinks, shower, or toilets and especially liquid flowing back into your basement are symptoms indicative of a failed septic system.

Q: What type of work does this loan cover?

A: It covers all work directly relating to the upgrade of a failed residential septic system. This includes the design of the upgrade and the installation of the new components. Also, incidental work associated with this project (e.g. loaming and seeding after work completion, repair to a driveway damaged during construction, plumbing changes required because of the upgrade, town water hook-up or well relocation required because of the septic system upgrade, etc.) are generally covered.

Q: What do I need to submit in order to be approved for a loan?

A: An original completed application, signed and dated, along with a signed and dated copy of your most recent 1040 Federal Tax Return is required at a minimum. If you do not file a Federal Tax Return, evidence of sources of income (e.g. Social Security benefits, pension benefits, etc.) should be submitted along with your application.

Q: Approximately how long does it take to get approved for a loan?

A: Once we are in receipt of all required information, you can be approved for a loan within 24 hours.

Q: On the application is a question relating to a deed reference. What is this?

A: This pertains to a reference for where your deed was recorded at the Registry of Deeds. Book and page refers to recorded land while the document number refers to land court or registered land. If you do not have this information available, we will obtain it once the application is submitted.

Q: The application also asks for assessor's information, map and parcel. What is this?

A: This is the parcel identification information obtained from your local property tax bill. If you can not find this number, we will obtain it for you once the application is submitted.

Q: Once approved for a loan, how do I begin the process of hiring contractors?

A: Depending on the exact circumstances of your situation, you should either obtain bids from a designer if no plans for your upgrade exist or an installer if plans are available.

Q: How many bids do I need to obtain?

A: This decision is up to the homeowner. We recommend 3 bids, however this is not a requirement. You should obtain as many bids as you feel are necessary in order to obtain a competitive bid. Once you receive bids, you should forward copies of them to us for review.

Q: What happens after I have received bids from contractors?

A: We will prepare a Betterment Agreement for you to sign. Once signed in the presence of a notary public, we will be able to pay contractors for septic system related work.

Q: How does the contractor get paid?

A: The homeowner should not pay for any work if they expect to be reimbursed. Instead, an original invoice indicating a balance due should be sent to us for processing.

Q: Can I fax an invoice to you?

A: All invoices must be original. An e-mailed invoice is also acceptable.

Q: What if I have paid for some of the work because I was anxious to get the project underway? Can I get reimbursed?

A: Reimbursement for costs associated with the septic system repair project up to 30 days prior to the approval of a completed application is possible, but not guaranteed.

Q: How will I be billed for the final cost of my project and to whom do I make payments?

A: You will be billed directly by Barnstable County and you will make payment on a monthly basis directly to Barnstable County

Q: What are my payment options regarding the repayment of my loan?

A: At present monthly payments are made by check or cash. The annual interest rate is 5%.

Q: How long can I have to repay the loan?

A: The maximum term is 20 years.

Q: What happens if I am late with a payment?

A: By law, the interest rate will increase from 5% to 14%. Your account will return to 5% if past due principal and interest payments become current.

Q: Can I pay my loan off early?

A: You must make the minimum payment due in order to avoid a penalty. However, you can pay more than the minimum and this amount will be credited to your outstanding principal thereby reducing your total interest payment. Also, if you pay

your loan off within one year of receipt of your first payment, we will charge you \$400.00, the minimum amount required to cover our operating costs.

Q: Is there a tax credit available from the State of Massachusetts for my septic system repair project?

A: There is a tax credit available for primary residence property owners. You should contact the state Department of Revenue with questions and to obtain Schedule SC necessary in order to obtain the credit.

Q: How is my loan secured?

A: Barnstable County records a Notice of Betterment Assessment at the Barnstable Registry of Deeds for the amount borrowed.

Q: When my loan is paid in full, how do I get the Notice released?

A: A Certificate for Dissolving Betterments will be prepared following your final payment. Please note that there will be only one original Certificate prepared. It will need to be recorded by you or your representative at the Registry of Deeds to indicate payment in full of the loan. The cost of recordation is your responsibility.

Q: If I sell my house, can the outstanding obligation be assumed by the buyer?

A: If the owner sells or transfers the property, whether voluntarily or involuntarily, the unpaid balance of principal and interest shall become due and payable to the County, unless the County has agreed in writing to permit the buyer or transferee of the property to assume the obligation to pay the unpaid balance. Generally speaking, however, the lender for the purchaser of the property will typically require that the County loan be paid in full so that an assumption of the outstanding obligation may not be an option.

Q: I am planning to refinance my mortgage. The lender is requesting that my loan with Barnstable County be subordinated. Is this possible?

A: The simple answer is no. Betterments are a tax and taxes, whether federal, state or local cannot be subordinated to existing or new mortgages.

Q: How long will this program remain available?

A: There is no anticipated shortage of funding for this program.

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Email from a Truro Homeowner:

July 15, 2021

Dear Health Department:

Your Memo about Upgrading Cesspools mentioned to contact your office.

Does this email satisfy that request? Can your office tell us how to go about this whole procedure? (ie:)

Do we (the owners) have to get an application from the Town for a new septic?

Do we (the owners) have to get our properties surveyed?

Or does the Engineer get someone?

What happens if we need Variances? Do we (the owners) apply for the Variances?

Or does the Engineer or Installer apply for them?

Can we only use Engineers that were listed on the Memo?

Do installers of the new septic systems have to be approved by the Town?

I'm just looking for some direction... I would think I'm not alone. Thank you!

Response from the Health Department:

Thanks for your email – it does satisfy our request to reach-out and is much appreciated.

- The process of upgrade begins with development of a design, which must be completed by a qualified professional. The list we sent to you includes those professionals in this area, but you certainly may use another engineer or sanitarian.
- Once the design by the engineer is completed, the plan should be submitted to 4-6 different septic installers for bids. You will need multiple copies of the plans for that purpose.
- The Town of Truro Health Department has a list of LICENSED INSTALLERS, which is attached.
- Once the plan is completed and you have selected an installer, the installer will submit the plans with a permit application to the town for approval.
- The engineer should provide you with an estimate of services, to include what is included in the price to design the system. In my opinion that should include a survey, (especially if you are anticipating variances), as well as the cost to file for variance approval, or any other permitting (conservation?) that may be required. Please be sure to carefully examine what is in the price provided. They will likely break it down to show the base design cost, and other additional costs such as permitting, and “as-built” and certification costs which are completed after the system is installed and the engineer or designer certifies that what is in the ground matches what was approved by the Town.
- If no variances or conservation permitting is required, the designer will turn the plans over to you, though you can ask for help with bidding, which some will do. This piece does take a lot of follow-up and a lot of time. Installers, like engineers/designers and general contractors are super busy right now, so it is a matter of getting in line!

Continued on reverse



- I do think it is important to acknowledge that the process to upgrade a septic system is not a small project. It involves heavy machinery, and the land around your house will be disturbed. This is a good time to assess if there are any other issues or projects that may be combined with the septic work, such as reconfiguring the driveway, addressing tree issues or other landscaping.
- The cost to upgrade may not include the cost to spread loam on the disturbed areas, so be sure to keep that in mind when you are discussing your project with the installer.
- If your intent is to replace a grassy area or create a lawn we strongly encourage you to consider using a native drought resistant grass seed to create a low maintenance "cape cod" lawn that won't need to be watered or fertilized. We strongly discourage the creation of lawns that demand water and fertilizer. Fertilizers often runoff into wetland areas, and easily impact private well water quality; their use really is improper in our coastal setting.

We hope this helps. Please let us know if you have any further questions.

Sincerely,
The Truro Health & Conservation Department



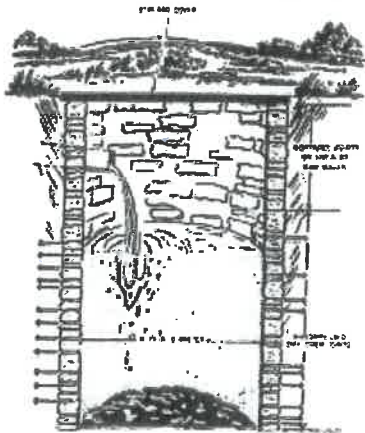
Board of Health Regulations require cesspool upgrades by December 31, 2023

What are cesspools?

They are defined as: *a pit with open-jointed linings or holes in the sides and bottom into which raw or untreated sewage flows. Solids remain in the pit and undergo some digestion, while the effluent leaches into the surrounding soil. Cesspools may be made of pre-cast concrete, individual brick or block, steel, or stones.*

What is difference between septic tank and cesspool?

A septic tank allows wastewater to flow into a leach field where it undergoes a filtration process. In contrast, a cesspool is a pit lined with cement or stone which lacks the ability to filter the waste, eventually contaminating the surrounding soil



Profile, or side view of a cesspool

Truro Board of Health Regulations, Section 6, Article 3 – Upgrading Septic Systems:
“Cesspools in Truro are herein defined as failed systems and shall be upgraded to meet the requirements of Title 5 prior to December 31, 2023. All new systems replacing cesspools shall be installed and certified by that date.”

Cesspools were constructed without the benefit of design standards, and are randomly sized, and located. Cesspools were built until about 1978, when Massachusetts adopted its Environmental Code, Title 5, as the standard for how wastewater should be disposed of. Title 5 provides requirements to keep wastewater away from points of human exposure, and design specifications to ensure the systems are adequately sized. The Truro Board of Health acknowledges that a property owner may believe that a cesspool that continues to provide adequate drainage for their plumbing without overflowing onto the ground or backing up into the facility it serves is “functioning”, however, the Board has determined that the minimal treatment of wastewater by a cesspool is no longer an adequate measure and does not provide as much to our groundwater and the environment as a title 5 system; in short the Board has determined that simply “disposing” of wastewater is no longer acceptable- more treatment is needed to protect our ground-water resources.

Why?

All wastewater on Cape Cod is disposed of in a fashion that ultimately leaches into our groundwater, which is our source of drinking water whether you own your own private well, or are connected to the Municipal Water supply.

Our groundwater needs to be protected from wastewater contamination, and that is why cesspools are no longer allowed to serve properties here in Truro.

August 2022



LIST OF LICENSED SEPTIC INSTALLERS – 2022

A&S Construction - Sean C Smith
Alden E. Silva Enterprises
Ambrose Homes
Backwood Land Services
Brundage Site Work
Cape Cod Excavating
Cape Cod Septic Inspection
Cape Cod Septic Services Inc
E-Z Doze It Excavating
F.L. Quinn Construction
GFM Enterprises, Inc.
J.W. Dubis & Sons, Inc
James J. Roderick
Jason Silva, Top Mast Resort
John F. Noons, Inc.
John Martin, Inc.
Justin Reis, Reis Excavating
Ken Rose Septic
Linda Cronin/CSN Engineering
MCE Dirtworks Inc.
Minot Reynolds
Nauset Septic Pumping Company(Nate Rose as of 2022)
NCS Construction-Nicholas Souke
Northeast Construction Septic Systems & Excavation Corp.
Robert B. Our Company, Inc.
Robert Waters Septic Service
Schmidt Site Work
Speakman Excavating
Sweeney Excavating Corporation
Terry Walker Excavation Inc.

Minutes of the Truro Board of Health, Tuesday June 21, 2022

This was a remote meeting. Board members in attendance:

Chair Tracey Rose, Vice Chair Jason Silva, Board Members: Tim Rose. Also Present: Health and Conservation Agent Emily Beebe.

The meeting was called to order at 4:33 PM by the Chair, Tracey Rose. She announced the remote meeting procedures and described the process for public participation.

PUBLIC COMMENT: None

Discussion/Presentation: Outer Cape Public Health Needs Assessment:

Patrice Barrett of the Barnstable County Health Department presented a PowerPoint presentation reviewing the Health Needs Assessment. Survey being conducted by the Health Departments of Wellfleet, Truro and Provincetown. The goal of the assessment survey is to gather data from the year-round residents of the Outer Cape to understand what factors are influencing their health and well-being. The survey is available electronically, and in hardcopy. It can be found on each Town's web site, has been featured on social media, and is in our libraries, senior and community centers. The group hopes that enough individuals will participate in the survey to provide an accurate picture of the conditions that the Outer Cape community is dealing with, so that obstacles to healthy living can be addressed. The survey will be open until mid-late July, and will be followed up with a review of results, and proposed action plan.

2022 License for Camp Lightbulb:

The director and owner of Camp Lightbulb, Puck Markham described their plans for the 2022 season which will run from July 3-23, 2022. Mr. Markham described camp Covid policies including negative Covid-19 tests three days prior to attendance, random testing during camp, and the procedures for reintroducing a camper back to camp after having been sick. Camp Lightbulb will be conducting many activities outdoors and they will be serving small meals such as continental breakfast, and will host a few cookouts throughout the camp season

Motion: Board Member Jason Silva moved to approve the temporary food service permit and renewal of the recreational camp's permit.

Second: Board Member Tracey Rose; **Vote:** 3-0-0; the vote was unanimous, and the motion was passed.

2022 License for Payomet Circus Camp:

Gabrielle Ment was on call to present the request. This is the Circus Camp's 6th season and is located at Highland Center in Truro. Ms. Ment explained that they will have a 20-student threshold for each camp session this year. They will be operating from July 11th to August 28th.

Motion: Board Member Jason Silva moved to approve the request.

Second: Board Member Tim Rose; **Vote:** 3-0-0; the vote was unanimous, and the motion passed.

Title 5 upgrade-extension request for waiver of time: 69 Old County Road:

The applicant requested a 30-day extension for the Title 5 upgrade, bringing the installation deadline to July 21, 2022. The home will remain vacant until the time of installation.

Motion: Board Member Jason Silva approved the request.

Second: Board Member Tim Rose; Vote: 3-0-0; the vote was unanimous, and the motion passed.

Variance Request/Local Upgrade Approval: 3 Knowles Heights, Topside Cottages:

There was a presentation by Matt Farrell describing the system proposed, and the variances that were requested. There was discussion by the Board of the improvement of environmental protection by the upgrade to replace cesspools and older title 5 systems. The variances were requested to site the system on the lot. The design added I/A treatment for the wastewater which would be disposed of at the outside edge of the Knowles Crossing municipal PWS zone 2. The use of perc-rite disposal was deemed an added advantage for the treatment process. The system although variances would provide more than suitable treatment as proposed.

Motion: Board Member Jason Silva approved the variance and upgrade request.

Second: Board Member Tim Rose; Vote: 3-0-0; the vote was unanimous, and the motion passed.

Variance Request/Local Upgrade Approval: 3 Fisher Path:

John O'Reilly was on call to present the project. The plan calls for an I/A system on the property, which does not meet nitrogen loading requirements, as the lot size is approximately 8500sf. The Health Agent described the variances that were being sought. The property is utilized as a seasonal residence. The extra treatment provided more environmental protection, and the variances were minimal. The degree of environmental protection was at least equivalent to an that of an unvarianced system. **Motion: Board Member Tim Rose moved to approve the upgrade as presented. Second: Board Member Jason Silva; Vote: 3-0-0; the vote was unanimous, and the motion passed.**

New Retail Food Permit: Town of Truro requesting to sell Ice at the town Pier and the Beach Office.

Motion: Board Member Jason Silva approved the new retail food permit request.

Second: Board Member Tim Rose; Vote: 3-0-0; the vote was unanimous, and the motion passed.

Well water testing: Rental registration 2022:

The Health Agent discussed the proposed implementation of the rental registration policy. Board member Jason Silva did not want to stall applications because they were waiting for water analysis results. Chair Tracey Rose stated that it was a good compromise to approve rental registration without having received the water analysis provided the test results are received by the end of the year.

Motion: Board Member Tim Rose approved the policy. Second: Board Member Jason Silva; Vote: 3-0-0; the vote was unanimous, and the motion passed.

Reorganization of the Board

The board decided to continue their reorganization discussion until the July 19th meeting because all board members were not present at the meeting.

Motion: Board Member Tim Rose moved to postpone board reorganization to the July, 19, 2022 meeting. Second: Board Member Jason Silva; Vote: 3-0-0; the vote was unanimous, and the motion passed.

MINUTES:

For the same reason as above, the board decided to move the approval of the minutes until the July 19th meeting. **Motion: Board Member Tim Rose moved to review minutes at the July 19, 2022 meeting. Second: Board Member Jason Silva; Vote: 3-0-0; the vote was unanimous, and the motion passed.**

Motion: Board Member Jason Silva moved to adjourn the meeting. Second: Board Member Tim Rose; Vote: 3-0-0; the vote was unanimous, and the meeting was adjourned at 6:01 PM.

Respectfully submitted by Nina Richey