

REQUEST FOR DETERMINATION OF APPLICABILITY APPLICATION

For the Upgrade of a Septic System Within the Buffer Zone To a Bordering Vegetated Wetland

At

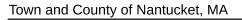
325 Polpis Road Nantucket, MA

September 2018

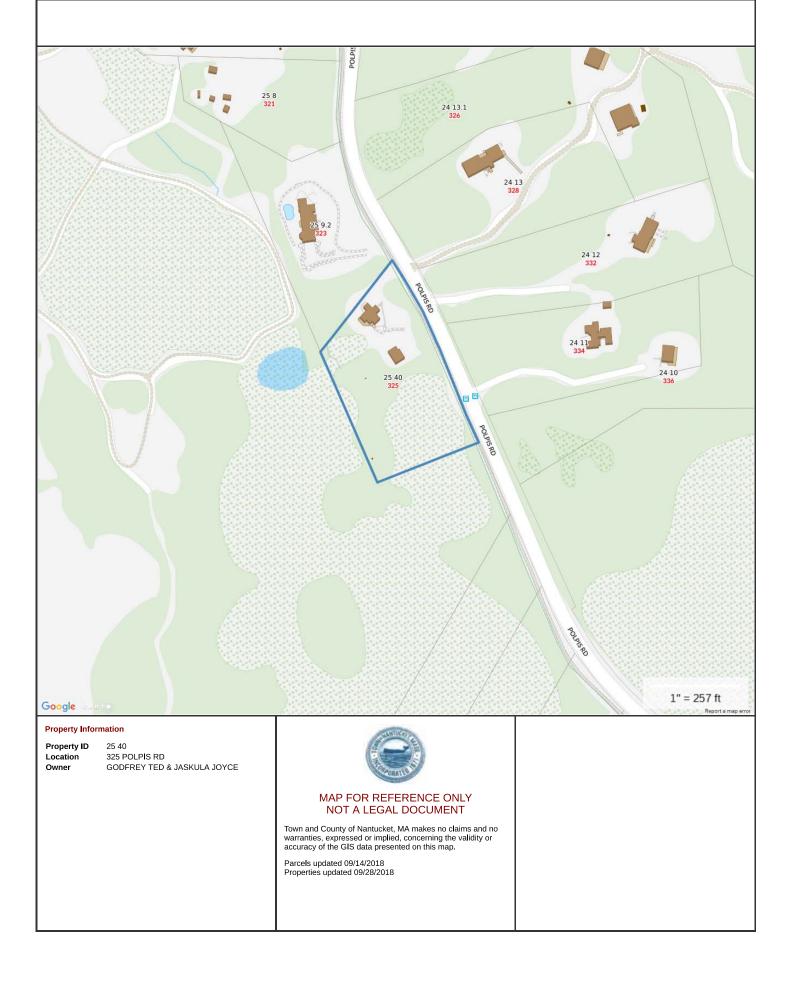
Prepared For

Ted Godfrey & Joyce Jaskula

20 Mary Ann Drive • Nantucket, MA 02554 508-825-5053 • www.NantucketEngineer.com



September 28, 2018





Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

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Applicant:				
Ted Godfrey & Joyce Jaskula				
Name	E-Mail Address	S		
325 Polpis Road				
Mailing Address				
Nantucket	MA	02554		
City/Town	State	Zip Code		
Phone Number	Fax Number (if	f applicable)		
Representative (if any):				
Nantucket Engineering & Survey, P.C.				
Firm				
Arthur D. Gasbarro, PE, PLS	art@Nantuc	cketEngineer.com		
Contact Name	E-Mail Address	S		
20 Mary Ann Drive				
Mailing Address				
Nantucket	MA	02554		
City/Town	State	Zip Code		
508-825-5053				
Phone Number	Fax Number (if	Fax Number (if applicable)		

B. Determinations

- 1. I request the <u>Nantucket</u> make the following determination(s). Check any that apply: Conservation Commission
 - a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
 - b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
 - c. whether the work depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
 - d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Nantucket	
Name of Municipality	

e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



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C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

325 Polpis Road	Nantucket
Street Address	City/Town
25	40
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

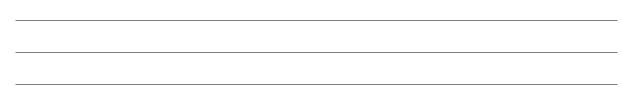
The subject property is located in the Poplis area of Nantucket. The area is developed residentially, with properties served by on-site wells & septic systems. The Bordering Vegetated Wetland resource area boundary is along the southern side of the property as shown on the site plan.

c. Plan and/or Map Reference(s):

Site Plan of Land For an Upgrade of an Onsite Septic System	8/2/18
Title	Date
Title	Date
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

The Applicant proposes to upgrade an onsite septic system partially within the buffer zone to the vegetated wetland. A new septic tank and pump chamber will be installed outside of the 50-foot buffer zone, and a new leach field outside of the 100-foot buffer zone. The existing septic tank will continue to be used as part of the system.





Nantucket City/Town

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C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

All work is located greater than 25-feet from the resource area. No waivers are required from applicable regulations.

- 3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.
 - Single family house on a lot recorded on or before 8/1/96
 - Single family house on a lot recorded after 8/1/96
 - Expansion of an existing structure on a lot recorded after 8/1/96
 - Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
 - New agriculture or aguaculture project
 - Public project where funds were appropriated prior to 8/7/96
 - Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
 - Residential subdivision; institutional, industrial, or commercial project
 - Municipal project
 - District, county, state, or federal government project
 - Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



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D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Ted Godfrey & Joyce Jaskula	
Name	
325 Polpis Road	
Mailing Address	
Nantucket	
City/Town	
MA	02554
State	Zip Code

Signatures:

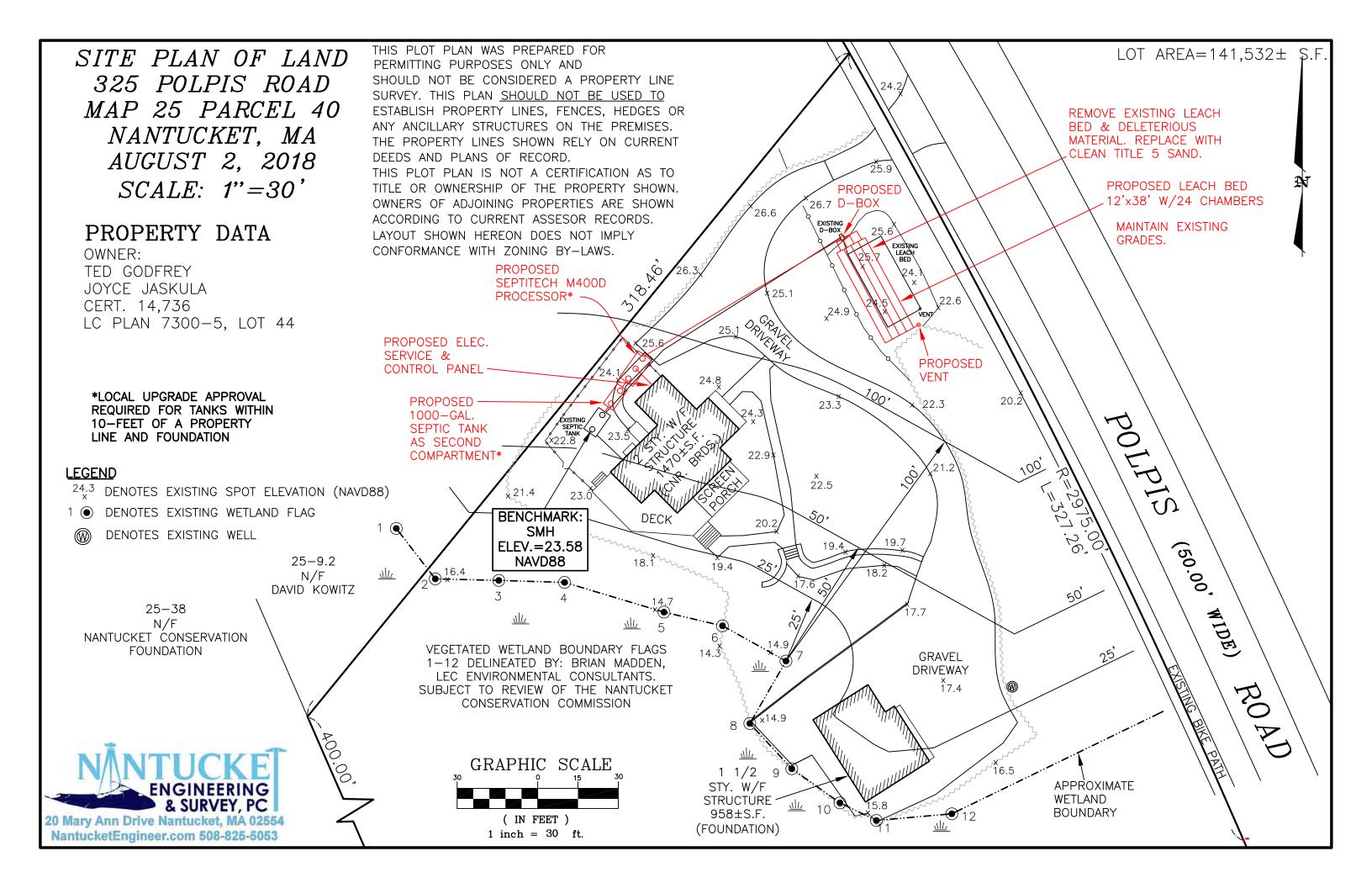
I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

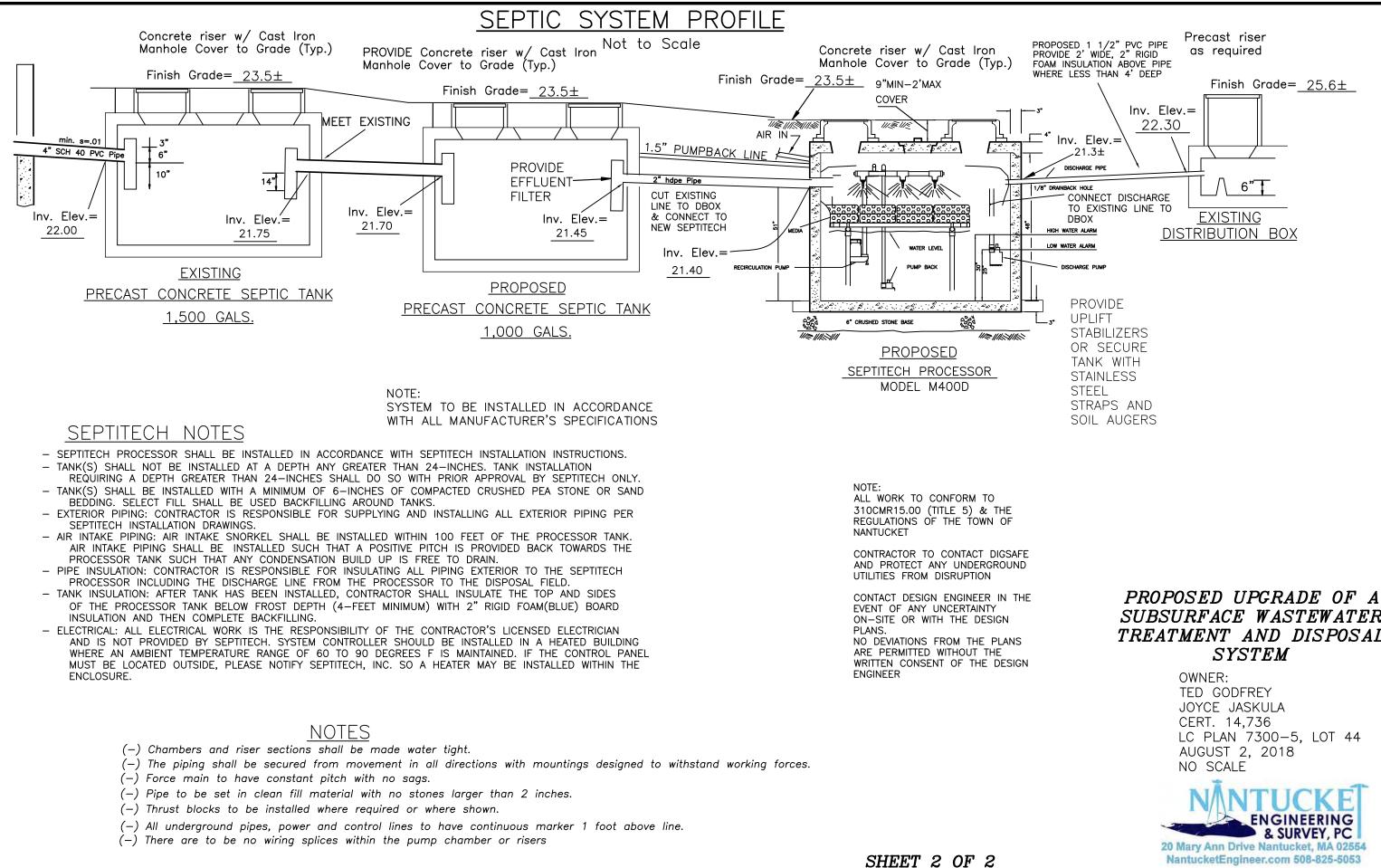
atting Salmo Agent	9/28/18	
	Date	

attin D. Salaro

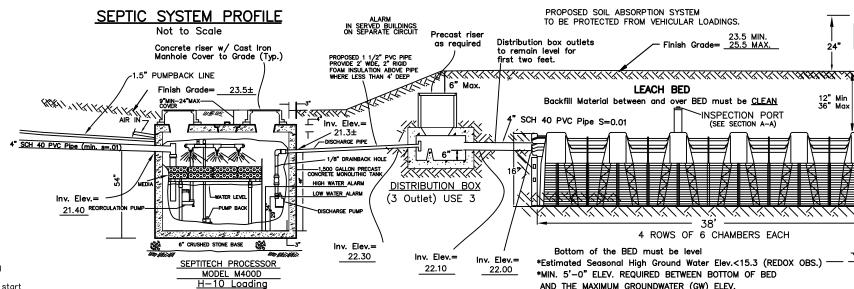
Signature of Representative (if any)

9/28/18 Date





SUBSURFACE WASTEWATER TREATMENT AND DISPOSAL



GENERAL CONSTRUCTION NOTES

- 1.) All construction to conform to 310 CMR 15.00, TITLE 5 and Regulations of the
- Nantucket Board of Health. 2.) Any deviation or alteration in the construction from the approved plan without the expressed permission of the Design Engineer may invalidate the design and
- endanger the issuance of a certificate of compliance.
 3.) Nantucket Engineering & Survey shall be contacted three (3) days prior to the start of construction by the Installer. (508) 825-5053
 4.) This plan does not warrant or imply any subsurface conditions other than those
- observed at the immediate testpit locations. In the event impervious or unsuitable material is encountered during construction, said impervious or unsuitable
- material is encountered using construction, said impervious of anisotratic and the second seco in proximity to delivery and/or distribution lines is to be free from tailings, clay or similar materials
- 6.) A cleanout is to be provided in proximity to the building wall to enable a Pumper to clear the house to tank line. 7.) Distribution lines are to be PVC Schedule 40 NSF or PVC Schedule 35 may be
- used for systems designed for less than 2000 gpd and where no vehicular traffic is anticipated. PVC end caps are to be provided on Distribution Line ends that do not require venting. All Distribution Lines over fifty (50') feet in length are to be vented.
- 8.) Any fill required in proximity to delivery piping shall be clean and free of stones larger than 2" dia and be hand tamped to reduce settlement and assure alignment. 9.) The septic tank shall be pre-cast reinforced concrete in compliance w/Title 5,
- 15.223 & 15.226 with an H-10 loading. A Schedule 40 Tee is to be installed in both the inlet and outlet baffles of the Precast Concrete Septic Tank. A gas baffle is to be installed over OUTLET BAFFLE. 10.) The tank shall have three 20 inch minimum diameter manholes with readily
- removable impermeable covers within 6 inches of finish grade.
- 11.) The base of the Distribution Box shall be set on a compacted, suitable, stable base.
- The Distribution Box shall be fitted with an inlet tee (cut-off 1 inch above the outlet invert). Distribution Boxes shall be a minimum 3 Outlets.
- The first length (minimum 2 feet) of each pipe outlet pipe from the Distribution Box shall be laid level. All outlet pipes should draw equally, A WATER TEST WILL BE REQUIRED.
- Topsoil, peat or other impervious (or unsuitable) material shall be removed from below and for a distance of 5 feet in all directions around the disposal works footprint and replaced with clean, suitable material as described in TITLE 5, 15.255: (3) Construction in Fill.
- Trench bottoms excavated in natural material must be scarified to off-set any machine compaction of the bottom surface.
- 16.) All fill used in conjunction of the system construction must conform to Title 5 15.255: (3) Construction in Fill.
- 17.) All stone used in disposal trench construction must conform to Title 5, 15.247 Aggregate for size and quality. 18.) Any impermeable material used for the construction of an impervious barrier
- must be impermeable. (Will not pass water, swells upon contact with water, fine sand is not impervious).
- 19.) Areas disturbed by construction shall loamed, seeded, mulched or otherwise stabilized to minimize erosion. The general system area shall be graded with a minimum 2% grade to provide positive surface drainage. Compliance with any Order of Conditions issued by the local Conservation Commission or DEP shall be considered requirements of this design.
- 20.) The property lines depicted here—on are GRAPHIC, it is strongly recommended that the actual property lines be field established prior to construction. Conformance to local by-laws shall be determined by the Owner (Client) prior to construction. This disposal works design is not a property line, bank mortgage or title survey.
- 21.) In the event that evidence or article of human remains is found during the excavation or construction of this proposed works, all activity on-site is to Immediately contact the State Police (508) 228-0706, Nantucket Police 228–1212 (or 911) and DESIGN ENGINEER
- 22.) To prevent the carry over of solids and particulates from the septic tank to soil surfaces in the disposal trenches that are prone to clogging, the septic tank should be inspected periodically to determine the depth of sludge and floatables (grease) accumulation. The tank should be pumped, by a Licensed Pumper, when the sludge volume fills one quarter (1/4) of the tank clear space (or approx every 2 years).
 The Design Engineer will refuse to issue a positive ASBUILT COMPLIANCE certificate if any portion of the construction is covered prior to
- adequate inspection by DESIGN ENGINEER and the local Heath Agent. The Disposal Works
- and to be covered until it is authorized by DESIGN ENGINEER
 Asbuilt and inspection time has not been included in the billing for this design. Multiple inspections and analysis to correct deviations from the approved design will be billed as add in charges. Call (508) 825-5053 when you are ready for your inspection.

DESIGN CRITERIA

1. TYPE OF ESTABLISHMENT: 4 BEDROOMS

SYSTEM TO BE INSTALLED IN ACCORDANCE WITH ALL MANUFACTURER'S SPECIFICATIONS

- 2. DESIGN FLOW: 4 BEDROOMS AT 110 GALS./BEDROOM/DAY = 440 GPD
- 3. SEPTIC TANK SIZE: 1,500 GALLONS: 440 x 200%=880 GAL MIN. USE EXISTING PROPOSED 2nd, 1000 GAL. SEPTIC TANK: 440x100%=440 MIN.

PROPOSED SEPTITECH PROCESSOR: M400D NO ADDITIONAL CAPACITY HAS BEEN PROVIDED FOR GARBAGE DISPOSAL.

- 4. DESIGN PERCOLATION RATE: <5 MINUTES/INCH SOIL CLASS I (C2 SOIL HORIZON) FROM TITLE 5 SECTION 15.242: LTAR-EFFLUENT LOADING RATES:
- 5. SOIL ABSORPTION SYSTEM (SAS): 440 GPD / 0.74 GPD/SF= 595 SF REQ'D PROVIDE: 12'x38' LEACH BED: 4 ROWS OF 6 CHAMBERS 24 CHAMBERS x 28.5 SF/CHAMBER = 684 S.F.
- 6. LEACHING CAPACITY PROVIDED (BY TITLE 5): 506 GPD= 684 SF x 0.74 GPD/SF
- 7. MAXIMUM ALLOWABLE LOADING (BY TITLE 5)= 506 GALLONS/DAY ACTUAL HYDRAULIC LOADING (DESIGN FLOW) = 440 GALLONS/DAY

NOTES

NOTE:

SEPTITECH I/A SYSTEM M400D PER MASSDEP PROVISIONAL USE APPROVAL TO SATISFY TON HEALTH REG. 64.00 - NANTUCKET HARBOR WATERSHED

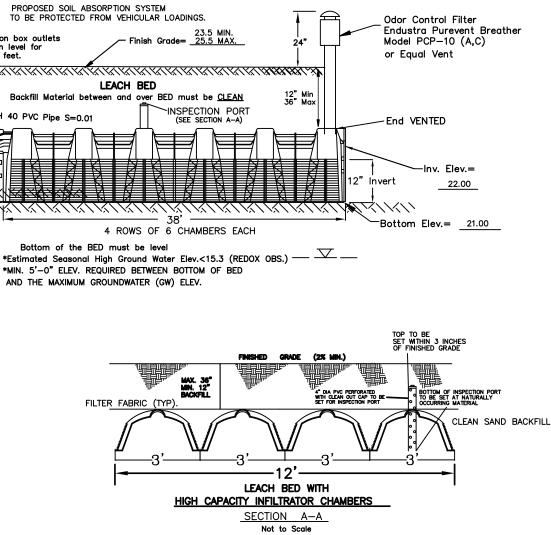
SOIL LOGS

SOIL EVALUATION BY: FRANK HOLGATE DATE OF TESTING: 6/3/10, WITNESSED BY: RICHARD RAY, NAN. HEALTH DEPT REMOVE TO ELEVATION 20.3, C1 LAYER, OR UNTIL ALL UNSUITABLE MATERIAL IS REMOVED AND REPLACE TO ELEVATION 21.3 WITH TITLE V SAND 5-FEET ALL AROUND SYSTEM.

DEEP	OBS.	HOLE	#	1	EL.=24.3±

-	DEPTH	НС	RIZON	<u>TEXT</u>	JRE COLOF	2
	15"	A	MEDIUM	LOAMY SAND	10YR4/2	23.1
	31"	В	MEDIUM	LOAMY SAND	10YR5/8	21.7
12'	120"	C1		MEDIUM SAND	10YR7/4	14.3
	144"	C2	MED	. LOAMY SAND	10YR5/6	12.3

MOTTLES @ 108" EL.=15.3 OBS. SEASONAL HIGH GW ELEV. = 12.3



PROPOSED UPGRADE OF A SUBSURFACE WASTEWATER TREATMENT AND DISPOSAL SYSTEM

OWNER: TED GODFREY JOYCE JASKULA CERT. 14,736 LC PLAN 7300-5. LOT 44 AUGUST 2, 2018 NO SCALE

