

MAIN OFFICE:  
49 Herring Pond Road  
Buzzards Bay, MA 02532  
TEL: (508) 833-0070  
FAX: (508) 833-2282



NANTUCKET OFFICE:  
19 Old South Road  
Nantucket, MA 02554  
TEL: (508) 325-0044  
[www.brackeneng.com](http://www.brackeneng.com)

June 15, 2023

**Hand Delivery & Email** [tguarino@townofbourne.com]

Bourne Board of Health  
Terri Guarino, RS, CHO  
24 Perry Avenue  
Bourne, MA 02532

**RECEIVED**

*By Bourne Health Department at 1:39 pm, Jun 20, 2023*

**RE: Bourne Board of Health Variance Request – Proposed Septic Upgrade  
435 Circuit Avenue (Map 43.3 Parcel 168)**

Dear Members of the Board:

On behalf of the owners/applicants, Paul H. Stenberg & Madeline K. Stenberg, please accept this letter as a request for the following variances to 310 CMR 15.00 (Title 5) & the Town of Bourne Health Regulations for a proposed septic installation at the above referenced property. We request the following variances:

- **310 CMR 15.405(1)(a) – A 5'± divergence from full compliance is requested for a 5'± setback from a property line (Pequot Avenue) to a soil absorption system.**
- **310 CMR 15.405(1)(a) – A 5'± divergence from full compliance is requested for a 5'± setback from a property line (#425 Circuit Avenue) to a soil absorption system.**
- **310 CMR 15.405(1)(a) – A 4'± divergence from full compliance is requested for a 6'± setback from a property line (#425 Circuit Avenue) to a septic tank.**
- **310 CMR 15.405(1)(b) – A 4'± divergence from full compliance is requested for a 16'± setback from an abutting foundation (#425 Circuit Avenue) to a soil absorption system.**
- **A 76'± variance is requested from the Bourne Board of Health Regulations for a 74'± setback from a proposed soil absorption system to the top of a Coastal Bank.**

The proposed project includes the raze and rebuild of an existing single family dwelling and Title V septic upgrade. No records of the existing septic system are on file at the Bourne Health Office. The site contractor is to locate and abandon the existing system in accordance with 310 CMR 15.532. If the system is found to be in conflict with the proposed work, it shall be removed. The proposed septic system is an Innovative/Alternative (I/A) septic system, consisting of a MicroFAST 0.5 Unit, and a Cur-Tech “Good-Flow soil absorption system. The total number of bedrooms on the property is being reduced from 5 to 4. The bedroom reduction, employment of I/A technology results in a benefit to the environment by reducing the nitrogen loading from 19.8 ppm to 10.93 ppm or 44%.

Bracken Engineering, Inc. is requesting that the Bourne Board of Health diverge from the goal of full compliance by allowing the variance requested above. The above variances are being made because of the relatively small lot and its proximity to adjacent resource areas. Due to the proximity of the abutting dwelling to the proposed system, relief is being sought for a setback reduction the foundation. An impervious liner will be installed along the property line. The design provides the best treatment within the borders of the lot and confines of the existing resource areas.



Thank you for your time and consideration on this matter. We look forward to reviewing this project with the Board of Health at the July 12th Public Hearing. Should you have any questions regarding this project or require any further information please contact the undersigned at either 508-833-0070 or [zac@brackeneng.com](mailto:zac@brackeneng.com)

Sincerely,

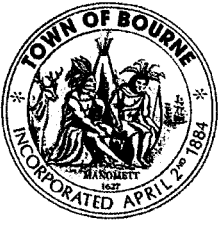
**BRACKEN ENGINEERING, INC.**

A handwritten signature in blue ink, appearing to read 'Z. Basinski', is written over a horizontal line.

Zachary L. Basinski, P.E., CFM  
Senior Project Manager

A handwritten signature in black ink, appearing to read 'Jason P. Heyer', is written over a horizontal line.

Jason P. Heyer, CFM  
Project Designer



# Bourne Board of Health Application for Septic Variance or Waiver Requests



In accordance with the established procedures of the Bourne Board of Health, this application is for septic variances and waivers which have not been approved administratively and require approval at a public meeting. Please use the following application form for guidance on how to apply for variances and waivers which serve new construction, changes in use, increases in flow, or repairs and upgrades to on-site sewage disposal systems with design flows of less than 10,000 gallons/ day.

### 1. Facility Name and Address:

**Owner's Name**

The Seven Stens Trust c/o Paul H. Stenberg Jr., Trustee & Madeline K. Stenberg, Trustee

**Facility's Street Address**

435 Circuit Avenue (Map 43.3, Parcel 168)

**Owner's Telephone Number**

781-492-5835

**Owner's E-mail Address**

paul.h.stenberg@huntington.com or careysten@gmail.com

**Owner's Mailing Address**

32 Damon Road, Needham Heights, MA 02494

### 2. Applicant or Preparer's Name and Address (if different from above):

**Preparer's Name**

Zachary L. Basinski, PE, CFM

**Company**

Bracken Engineering, Inc.

**Telephone Number**

508-833-0070 Ext 303

**E-mail Address**

zac@brackeneng.com

**Mailing Address**

49 Herring Pond Road, Buzzards Bay, MA 02532

### 3. Type of Facility (check all that apply):

- Residential    Commercial    Institutional    School    Industrial    Mixed Use

### 4. Describe Facility (i.e. single-family dwelling, 45 seat restaurant): \_\_\_\_\_

Single-family dwelling, 4 bedrooms

### 5. Type of System Proposed (check all that apply):   Conventional Title 5   I/A System

- Pumped System    Gravity System    Pressure Dosed    Tight Tank    Other

6. Describe the existing and proposed septic system components: PROPOSED:  
1,500 gallon MicroFast 0.5 septic tank, blower unit and d-box  
SAS consisting of eight (8) Goodflow CTL-18 chambers in a 13.67' Wide x 34' Long bed

7. Design Flow per 310 CMR 15.203 (in gallons/ day):

110 GPD	EXISTING	PROPOSED
Design flow of system:	550	440
Total design flow of facility: <i>(if more than one system on subject property)</i>	550	500

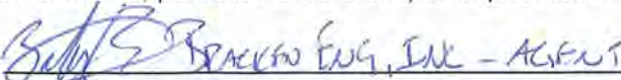
8. Enclose a **letter of request for variances/waivers** which makes reference to the specific provisions of Title 5 and/ or the Board Bourne of Health Regulations for which a variance is sought. Please use this opportunity to demonstrate compliance with 310 CMR 15.410, and to justify the relevant facts and circumstances of the individual case. Note that with regard to variances for new construction, enforcement of the provision from which a variance is sought must be shown to deprive the applicant of substantially all beneficial use of the subject property in order to be manifestly unjust. Be sure to explain why full compliance with the applicable regulations is not feasible, and how a level of environmental protection that is at least equivalent to that provided under Title 5 and the Board of Health Regulations can be achieved without strict application of said regulations.

9. In order for this Application to be deemed complete, it must be accompanied by the following:

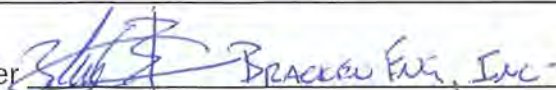
- \$125 filing fee + any other applicable permit application fees paid to the Town of Bourne.
- Application for a Disposal System Construction Permit (may be filled out by installer).
- Six copies of Letter of Request describing nature of variances.
- Six sets of complete engineered plans and specifications, one with original stamp of design engineer; plus, one electronic copy. All variances/ waivers must also be listed on the plans per 310 CMR 15.220(4).
- Six sets of floor plans, existing and proposed.
- Six copies of [Nitrogen Loading Calculation Worksheet](#) \*required for all applications.
- If abutter notification is required, one of each of the following must be submitted:
  - A copy of the certified list of abutters from the Assessor's Department.
  - Sample letter for abutter notification postmarked 10 days prior to meeting date.
  - Proof of certified mailing (receipts) meeting requirements of 310 CMR 15.405(2).
- Proposals for installation of Innovative/Alternative septic systems must be accompanied by:
  - A copy of the Certification for Use including technology specific conditions.
  - Draft [disclosure notice for the I/A technology](#) to be recorded in the deed.
- Hydrogeologic data may be required for new leaching facilities proposed within 100ft of a wetland/watercourse.
- Percentage of Increase Worksheet may be required for waivers or increases in flow.

10. Certification:

"I certify under penalty of law that this document and all attachments, to the best of my knowledge and belief, are true, accurate, and complete. I am aware that there may be significant consequences for submitting false information, including, but not limited to, penalties or fine and/or imprisonment for deliberate violations."

Facility Owner's Signature  BRACKEN ENG, INC - AGENT Date 6/15/23

Print Name Zachary L. Basinski, PE, CFM | Bracken Engineering, Inc. - as AGENT

Signature of Preparer  BRACKEN ENG, INC - Date 6/15/23

Print Name Zachary L. Basinski, PE, CFM | Bracken Engineering, Inc.

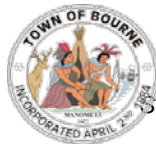


# Town of Bourne - Water Resources Nitrogen Loading and Mitigation Worksheet

See Cape Cod Commission Technical Bulletin 91-001 for further details: [https://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website\\_Resources/regulatory/NitrogenLoadTechbulletin.pdf](https://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website_Resources/regulatory/NitrogenLoadTechbulletin.pdf)

Facility Address: 435 Circuit Avenue  
Preparer's Name: Bracken Engineering, Inc.  
Date: 5/24/2023  
Watershed: Red Brook Harbor

Project Nitrogen Load	Proposed Wastewater	New Construction/ Raze & Rebuild, Increases in Flow, or Repairs/ Upgrades	Existing Conditions
1.	Project Title-5 wastewater flows: <input type="text" value="440.0"/> gpd (a) Actual wastewater flows: <input type="text" value="175.0"/> * (b) Average wastewater flows: <input type="text" value="307.5"/> gpd (a)+(b) ÷2= (A) * Title-5 flows prescribed by TB91-001 for commercial uses		Calculate (A') through (P') as w/ (A) through (P): Title-5 wastewater flows: <input type="text" value="550.0"/> gpd Actual wastewater flows: <input type="text" value="175.0"/> * Avg. wastewater flows: <input type="text" value="362.5"/> gpd (A')
	Place <input checked="" type="checkbox"/> in applicable box: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Will the project be connected to sewer ?  <input type="checkbox"/> <input checked="" type="checkbox"/> Is project Title-5 wastewater flow 10,000 gpd or greater ?		Place <input checked="" type="checkbox"/> in applicable box: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is existing development on sewer ? (If 'Yes', then go to line 2.)
	Place <input checked="" type="checkbox"/> in applicable box and multiply unsewered wastewater flow by applicable conversion factor: <input type="checkbox"/> Standard Title-5 System (35-ppm-N) x 0.048359 <input type="checkbox"/> DEP-approved I/A System (25-ppm-N) x 0.034542 <input checked="" type="checkbox"/> DEP-approved I/A System (19-ppm-N) x 0.026252 } Type of system: <input type="text" value="MicroFast &amp; Good Flow SAS"/> <input type="checkbox"/> DEP-approved Enhanced I/A (12-ppm-N) x 0.016580		<input checked="" type="checkbox"/> Standard Title-5 System <input type="checkbox"/> DEP-approved I/A System (commercial) <input type="checkbox"/> DEP-approved I/A System (residential) <input type="checkbox"/> DEP-approved enhanced I/A
	Wastewater nitrogen load (Title-5 flows) = <input type="text" value="11.55"/> kg-N/yr (B)  Wastewater nitrogen load (Actual flows) = <input type="text" value="4.59"/> kg-N/yr (C)		<input type="text" value="26.60"/> kg-N/yr (B')  <input type="text" value="8.46"/> kg-N/yr (C') wastewater offsets
<b>Stormwater Runoff</b>			
	Town of Bourne Recharge rate for Bourne (inches; for natural areas from Technical Bulletin 91-001): <input type="text" value="21"/> (RECH)		
	Project site area: <input type="text" value="0.129"/> acres (D)		Project site area: <input type="text" value="0.129"/> acres (D)
	Project site wetland area: <input type="text" value="0.000"/> acres (E)		Project site wetland area: <input type="text" value="0.000"/> acres (E)
	Project site upland area: <input type="text" value="0.129"/> acres (F)		Project site upland area: <input type="text" value="0.129"/> acres (F)
	Pervious unpaved upland: <input type="text" value="0.070"/> acres (G)		Pervious unpaved upland: <input type="text" value="0.073"/> acres (G')
	<input type="text" value="0"/> % using LID Paved area: <input type="text" value="384"/> s.f. (H) Factor may be adjusted for employment of LID → x 1.4158E-04 LID = low impact development = <input type="text" value="0.05436826"/> kg-N/yr (I)		Paved area: <input type="text" value="587"/> s.f. (H') Paving runoff offset: <input type="text" value="0.0831"/> kg-N/yr (I')
	Roof area: <input type="text" value="2,219"/> s.f. (J) x 7.0792E-05 = <input type="text" value="0.1571"/> kg-N/yr (K)		Roof area: <input type="text" value="1,894"/> s.f. (J') Roof runoff offset: <input type="text" value="0.1341"/> kg-N/yr (K')
	<b>Fertilizer</b> Previous unpaved upland - roof area = Managed turf/ lawn area <input type="text" value="3,000"/> s.f. x 3.4019E-04 = <input type="text" value="1.021"/> kg-N/yr (L)		Managed Turf/ lawn area: <input type="text" value="3,100"/> s.f. Fertilizer offset: <input type="text" value="1.055"/> kg-N/yr (L')
<b>Total Nitrogen Load</b>			



# Town of Bourne - Water Resources Nitrogen Loading and Mitigation Worksheet

See Cape Cod Commission Technical Bulletin 91-001 for further details: [https://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website\\_Resources/regulatory/NitrogenLoadTechbulletin.pdf](https://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website_Resources/regulatory/NitrogenLoadTechbulletin.pdf)

Facility Address: 435 Circuit Avenue  
Preparer's Name: Bracken Engineering, Inc.  
Date: 5/24/2023  
Watershed: Red Brook Harbor

Total project nitrogen load (Title-5 flows):	<input type="text" value="12.78"/>	kg-N/yr	(M)=	(B)+(I)+(K)+(L)	Existing nitrogen load (Title-5 flows):	<input type="text" value="27.87"/>	kg-N/yr	(M')
Total project nitrogen load (Actual flows):	<input type="text" value="5.83"/>	kg-N/yr	(N)=	(C)+(I)+(K)+(L)	Existing nitrogen load (Actual flows):	<input type="text" value="9.73"/>	kg-N/yr	(N')
Nitrogen load per acre (Average):	<input type="text" value="71.85"/>	kg-N/yr/acre	(O)=	(M)+(N) ÷ 2 ÷ (F)	Nitrogen offset per acre:	<input type="text" value="145.20"/>	kg-N/yr/acre	(O')

Proposed Nitrogen Loading Concentration				Existing nitrogen loading concentrations:				
Project nitrogen loading concentration (Title-5 flows):	<input type="text" value="12.73"/>	ppm-N	(P)=	$(a)+723.76 + (G)\frac{(M)}{(RECH)+9.7286 + (H)+10,594 + (K)+0.75}$	Title-5 flows	<input type="text" value="24.22"/>	ppm-N	(P')
Project nitrogen loading concentration (Actual flows):	<input type="text" value="9.13"/>	ppm-N	(Q)=	$(b)+723.76 + (G)\frac{(N)}{(RECH)+9.7286 + (H)+10,594 + (K)+0.75}$	Actual flows	<input type="text" value="15.39"/>	ppm-N	(Q')
Project nitrogen loading concentration (Average):	<input type="text" value="10.93"/>	ppm-N	(R)=	(P)+(Q) ÷ 2	Average	<input type="text" value="19.80"/>	ppm-N	(R')

## Resource/ Impact Based Criteria

### Marine Water Recharge Areas / Coastal Embayments

2.  Yes  No Is the project located in any of the following watersheds: **Buttermilk Bay Basins, Phinneys Harbor / Back River / Eel Pond, Pocasset River Basin, Pocasset Harbor / Hen Cove / Red Brook Harbor, Megansett / Squeteague Harbors\*\* ?**  
(If 'No', then go to line 3.)

Name of Watershed  
(from Regional Policy Plan Data Viewer): RED BROOK HARBOR

Critical Nitrogen-loading limit\*\* :  kg-N/year/acre (S)

Yes  No Does project's nitrogen load (O) exceed the existing load (O') AND the critical nitrogen load (S) ?  
(If 'No', then go to line 3.)

Excess project nitrogen load to be mitigated:  kg-N/yr (T)= LESSER OF (O)-(S) x(F) AND (O)-(O') x(F)

\*\* When a nitrogen-loading limit has been determined through either a Total Maximum Daily Load (TMDL), a Massachusetts Estuaries Project-accepted technical report, or specified by a Commission-approved comprehensive wastewater management plan pursuant to Objective WR3, or if impaired water quality has been documented for the receiving coastal waters, the nitrogen loading limit shall be 0 kg-N/yr per acre pursuant to Objective WR3.

### Groundwater Quality

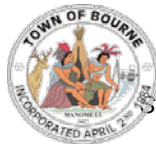
3.  Yes  No Does the project's nitrogen loading concentration in groundwater (R) exceed the greater of 5 ppm or the existing concentration (R') ?  
(If 'Yes', the project will need to provide an alternative strategy for meeting these thresholds by using another worksheet)

### Potential Public Water Supply Areas

4.  Yes  No Is project in a Potential Public Water Supply Area (PPWSA) ?  
(If 'No', then go to line 5.)

Yes  No Does the project's nitrogen loading concentration (R) exceed the greater of 1 ppm or the existing concentration (R') ?  
(If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)

Yes  No Does the project use, treat, generate, store or dispose of hazardous materials in excess of the greater of a) household quantities or b) existing quantities ?  
(If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)



# Town of Bourne - Water Resources Nitrogen Loading and Mitigation Worksheet

See Cape Cod Commission Technical Bulletin 91-001 for further details: [https://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website\\_Resources/regulatory/NitrogenLoadTechbulletin.pdf](https://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website_Resources/regulatory/NitrogenLoadTechbulletin.pdf)

Facility Address: 435 Circuit Avenue  
Preparer's Name: Bracken Engineering, Inc.  
Date: 5/24/2023  
Watershed: Red Brook Harbor

## Wellhead Protection Areas

5. 

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>

 Is project in a Wellhead Protection Area (WHPA) ?
- |                                     |                          |
|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|-------------------------------------|--------------------------|

 Does the project's nitrogen loading concentration (**R**) exceed the greater of **5 ppm** or the existing concentration (**R'**) ?  
*(If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)*
- |                          |                                     |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|-------------------------------------|

 Does the project use, treat, generate, store or dispose of hazardous materials in excess of the greater of a) household quantities or b) existing quantities ?  
*(If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)*

## Fresh Water Recharge Areas

6. 

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>

 Is project wastewater disposed of within 300 feet of a stream or fresh surface water body?  
*(If 'No', then go to line 7.)*
- |                          |                                     |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|-------------------------------------|

 Is the project located in a freshwater recharge area (FWRA) hydraulically upgradient of a stream or fresh surface water body?  
*(If 'Yes', the project must provide an alternative strategy for meeting Objective WR2)*

## Other Potential Impacts

7. 

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>

 Will the project withdraw more than 20,000 gallons of water per day ?  
*(If 'Yes', then the project must provide documentation demonstrating that there will not be significant impacts to water levels, surface waters and wetlands)*
8. **The project must demonstrate compliance with Objective WR4, including use of Low Impact Development to mitigate impacts of stormwater runoff and O & M plans for maintaining stormwater infrastructure and landscaping.**



Michael Leitzel, Chairperson  
Ellen Doyle Sullivan, Clerk  
Donna Barakauskas, Member

## **TOWN OF BOURNE**

**Board of Assessors**  
24 Perry Avenue  
Buzzards Bay, MA 02532  
(508) 759-0600 Ext. 1510



Rui Pereira, MAA  
Director of Assessing

June 12, 2023

Paul & Madeline Stenberg  
c/o Bracken Engineering, Inc.  
49 Herring Pond Rd.  
Buzzards Bay, MA 02532

Re: Abutters List for Map 43.3 Parcel 168  
Property address: 435 Circuit Avenue

As required by the Bourne Board of Health, pursuant with section 310 CMR 15.411(1), this is to certify that the attached list of names and addresses constitutes all of the parties in interest as shown on the most recent tax list of the Town of Bourne.

Abutting properties are: Map 42.4 Parcel 38; Map 43.3 Parcels 168.01, 171 & 190; Map 47.1 Parcels 1 & 124.

Your filing fee of \$10.00 has been received by the Bourne Assessor's Office.

**Please be advised that this abutters list is only good for 30 days from the date on this letter. Expired abutters list can be recertified for an additional filing fee.**

See enclosed for abutters mailing addresses.

Board of Assessors

*Ellen Doyle Sullivan -  
Donna Barakauskas  
Michael Leitzel*



Extract: ABUTTERS LIST  
 Database: LIVE  
 Filter: Key IN 8935,9452,9454,9468,10147,10266  
 Sort:

Report #24: Owner Listing Report  
 Fiscal Year 2024

Bourne MA

Key	Parcel ID	Owner	Location	LC/CI	Bk-Pg(Cert) /Dt	Mailing Street	Mailing City	ST	Zip Cd/County
8935	42.4-38-0	CAMPBELL JOYCE M & DAVID C TR CAMPBELL FAMILY TRUST	425 CIRCUIT AVE	N	31120/170 1010 3/6/2018	10 ALDEN ROAD	MILTON	MA	02186
9452	43.3-168-1	STENBERG PAUL H & MADELINE K STENBERG	435 CIRCUIT AVE	N	7943/177 1320 3/30/1992	12 WALNUT ST	NEEDHAM	MA	02492
9454	43.3-171-0	HART RUSSELL D & KAREN J HART	52 PEQUOT AVE	N	02742/0279 1010	P O BOX 805	POCASSET	MA	02559-0805
9468	43.3-190-0	HOBICA DAVID E & JANET D	50 PEQUOT AVE	N	31767/218 1010 1/7/2019	12 PATRIOTS WAY	MANSFIELD	MA	02048
10147	47.1-1-0	CERULLE JEANNE & ROBERT C CERULLE JR TRS JEANNE CERULLE	441 CIRCUIT AVE	Y	176646 1010 5/9/2005	68 FAIRBANKS AVE	WELLESLEY	MA	02461-5255
10266	47.1-124-0	AVERY GERALDINE K TRUSTEE OF THE AVERY FAMILY REALTY TRUST	0 CIRCUIT AVE	N	20607/55 1320 12/27/2005	11300 QUAIL CREEK RD APT 3	OKLAHOMA CITY	OK	73120

Total Records 6

MAIN OFFICE:  
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Nantucket, MA 02554  
TEL: (508) 325-0044  
[www.brackeneng.com](http://www.brackeneng.com)

June 26, 2023

**CERTIFIED MAIL**

RE : Notice of Public Hearing

Dear Abutter:

In accordance with the State Environmental Code, Title 5: 310 CMR 15.00, you are hereby notified that **Paul and Carey Stenberg** have requested a hearing before the Bourne Board of Health for relief from MA Title 5: and the Bourne Board of Health Regulations for the installation of an upgraded septic system utilizing Innovative/Alternative technologies. The location of the property for which approval is sought is **435 Circuit Avenue (Map 43.3, Parcel 168), Pocasset** where you are listed as an abutter. At said hearing the Board will discuss and possibly vote on:

- **310 CMR 15.405(1)(a) – A 5'± divergence from full compliance is requested for a 5'± setback from a property line (Pequot Avenue) to a soil absorption system.**
- **310 CMR 15.405(1)(a) – A 5'± divergence from full compliance is requested for a 5'± setback from a property line (#425 Circuit Avenue) to a soil absorption system.**
- **310 CMR 15.405(1)(a) – A 4'± divergence from full compliance is requested for a 6'± setback from a property line (#425 Circuit Avenue) to a septic tank.**
- **310 CMR 15.405(1)(b) – A 4'± divergence from full compliance is requested for a 16'± setback from an abutting foundation (#425 Circuit Avenue) to a soil absorption system.**
- **A 76'± variance is requested from the Bourne Board of Health Regulations for a 74'± setback from a proposed soil absorption system to the top of a Coastal Bank.**

This hearing is **tentatively** scheduled for Wednesday, July 12th at **5:30 p.m.** in Conference Room #2 at the Bourne Veteran's Memorial Community Building, 239 Main Street, Buzzards Bay. Information regarding the hearing may be available for your review one week prior to the meeting by contacting the Bourne Health Department at 508-790-0600, Ext. 1513, Monday through Friday from 8:30 a.m. until 4:30 p.m.

Meeting agendas are posted on the Town of Bourne website, [www.townofbourne.com/health](http://www.townofbourne.com/health) no less than 48 hours in advance of the hearing. *Please confirm the date, time, and location of the meeting with the Town, in case of any changes.* Should you have any questions or concerns, please do not hesitate to contact the undersigned at [zac@brackeneng.com](mailto:zac@brackeneng.com) or the Bourne Health Department at 508-790-0600, Ext. 1513.

Sincerely,

**BRACKEN ENGINEERING INC.**

A handwritten signature in black ink, appearing to read 'Zachary L. Basinski', written over a horizontal line.

Zachary L. Basinski, PE, CFM  
Senior Project Manager  
Agent for the Applicant

**NOTICE OF ALTERNATIVE SEWAGE DISPOSAL SYSTEM**  
M.G.L. c. 21A, § 13 and 310 CMR 15.287(10)

**ADDRESS OF PROPERTY SERVED BY ALTERNATIVE SYSTEM:**

**435 Circuit Avenue, Bourne, MA**

**TITLE REFERENCE FOR PROPERTY SERVED BY ALTERNATIVE SYSTEM**

Deed recorded with the **Barnstable** Registry of Deeds in **Book 35689, Page 73**

**NAME(S) OF OWNER OF PROPERTY SERVED BY ALTERNATIVE SYSTEM:**

**The Seven Stens Trust**  
**Paul H. Stenberg, Jr, and Madeline K. Stenberg, Trustees**

**OWNER(S) MAILING ADDRESS: 32 Damon Road, Needham Heights, MA 02494**

WHEREAS, Section 15.280 of Title 5 of the State Environmental Code (“Approval of Alternative Systems”), provides for the Massachusetts Department of Environmental Protection (the “Department”) to approve or certify, as appropriate, all proposals to construct, upgrade or replace on-site sewage disposal systems using alternative systems;

WHEREAS, owners and/or operators of approved or certified alternative systems are subject to general conditions, as specified in Section 15.287 of Title 5 of the State Environmental Code, 310 CMR 15.287, and may be subject to special conditions, as specified in the Department’s approvals or certifications; such general and special conditions potentially including, without limitation, requirements relating to the use of trained operators, periodic inspections, maintenance, sampling, reporting and/or recordkeeping;

WHEREAS, the owners and/or operators this alternative system acknowledges and agrees to comply with the provisions of all of the **BOURNE** Board of Health Alternative Septic System Regulations and any other conditions for the existence of the system;

WHEREAS, Section 15.287(10) of Title 5 of the State Environmental Code, 310 CMR 15.287(10), requires that “prior to obtaining a Certificate of Compliance for installation of a new or upgraded system, the system owner shall record in the chain of title for the property served by the alternative system in the Registry of Deeds and/or Land Registration Office, as applicable, a Notice disclosing both the existence of the alternative on-site system and the Department’s approval of the system. The system owner shall also provide evidence of such recording to the **BOURNE** Board of Health; and

WHEREAS, the Property is served by an alternative sewage disposal system.

NOW, THEREFORE, Notice of an alternative sewage disposal system is hereby given for the above- referenced Property, as follows:

**1. Existence System #1.** An alternative system has been installed as a new or upgraded alternative sewage disposal system, on or adjacent to the Property, and serves the Property. The trade name and model number(s) of the alternative system are as follows:

<b>Trade name of technology:</b>	<i>MicroFAST®</i>
<b>Manufacturer Name:</b>	Bio-Microbics, Inc.
<b>Model number(s):</b>	MicroFAST 0.5 Unit

**2. Approval/Certification.** On 12/29/2010, revised 3/20/2015, the Department, pursuant to its authority under the section of Title 5 as specified below, approved or certified the technology used in the above referenced alternative system, under MassDEP Transmittal Number X232831.

- Certified for GENERAL use under 310 CMR 15.288

**3. Existence System #2.** An alternative system has been installed as a new or upgraded alternative sewage disposal system, on or adjacent to the Property, and serves the Property. The trade name and model number(s) of the alternative system are as follows:

**Trade name of technology:** Cur-Tech Systems

**Manufacturer Name:** Cur-Tech, LLC

**4. Approval/Certification.** Issued January 5, 2017, and revised March 31, 2017, the Department, pursuant to its authority under the section of Title 5 as specified below, approved or certified the technology used in the above referenced alternative system, under MassDEP Transmittal Number X268062.

- Approved for GENERAL use under 310 CMR 15.288

A copy of the Department of Environmental Protection's Approval/Certification is available online at the Department's website: <https://www.mass.gov/guides/approved-title-5-innovativealternative-technologies>

*\*\*This Notice of Alternative Sewage Disposal System must be submitted to the **BOURNE** Board of Health\*\**

WITNESS the execution hereof under seal this \_\_\_\_ day of \_\_\_\_\_, 2023, made by the above-named Alternative System Owner.

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**Paul H. Stenberg, Jr, Trustee | The Seven Stens Trust**

COMMONWEALTH OF MASSACHUSETTS

\_\_\_\_\_, ss

On this \_\_\_\_ day of \_\_\_\_\_, 2023, before me, the undersigned notary public, personally appeared \_\_\_\_\_, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

---

(official signature and seal of notary)

WITNESS the execution hereof under seal this \_\_\_\_ day of \_\_\_\_\_, 2023, made by the above-named Alternative System Owner.

---

**Madeline K. Stenberg, Trustee | The Seven Stens Trust**

COMMONWEALTH OF MASSACHUSETTS

\_\_\_\_\_, SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 2023, before me, the undersigned notary public, personally appeared \_\_\_\_\_, proved to me through satisfactory evidence of identification, which were \_\_\_\_\_, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

---

(official signature and seal of notary)

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Approved and Accepted By:

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Agent of the Board of Health  
Health Department  
Town of Bourne



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Matthew A. Beaton  
Secretary

Martin Suuberg  
Commissioner

### **CERTIFICATION FOR GENERAL USE**

Pursuant to Title 5, 310 CMR 15.000

#### **Name and Address of Applicant:**

Bio-Microbics, Inc.  
8450 Cole Parkway  
Shawnee, KS 66227

#### **Trade name of technology and models:**

FAST Treatment Systems with Nitrogen Reduction including models *MicroFAST® 0.5, 0.75, 0.9, 1.5, 3.0, 4.5, 9.0*, *HighStrengthFAST® 1.0, 1.5, 3.0, 4.5, 9.0* and *NitriFAST® 0.5, 0.75, 1.0, 1.5, 3.0, 4.5, 9.0* (all hereinafter the "System") for facilities with design flows less than 2,000 gallons per day (GPD). Schematic drawings illustrating the models and an Inspection Checklist are part of this Certification.

Transmittal Number: X232831

Date of Issuance: December 29, 2010, revised March 20, 2015

#### **Authority for Issuance:**

Pursuant to Title 5 of the State Environmental Code, 310 CMR 15.000, the Department of Environmental Protection (hereinafter "the Department") hereby issues this General Use Approval to: Bio-Microbics, Inc., 8450 Cole Parkway, Shawnee, KS 66227 (hereinafter "the Company"), approving the above referenced FAST technology (hereinafter "the Technology" or "System") for use in the Commonwealth of Massachusetts subject to the conditions herein. Sale and use of the Technology are subject to compliance by the Company, the Designer, the System Installer, the Operator, and the System Owner with the terms and conditions herein. Any noncompliance with the terms or conditions of this Certification constitutes a violation of 310 CMR 15.000.

\_\_\_\_\_  
David Ferris, Director  
Wastewater Management Program  
Bureau of Water Resources

March 20, 2015

Date

#### **I. Purpose**

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TTY# MassRelay Service 1-800-439-2370  
MassDEP Website: [www.mass.gov/dep](http://www.mass.gov/dep)

Printed on Recycled Paper

1. Subject to the conditions of this Approval and any other local requirements, the purpose of this Approval is to allow the use of the System in Massachusetts on a General Use basis. With the necessary permits and approvals required by 310 CMR 15.000, this Certification authorizes the installation and use of the System in Massachusetts.
2. The System may be installed for residential facilities with design flow less than 2,000 GPD where a system in compliance with 310 CMR 15.000 exists on-site or could be built and for which a site evaluation in compliance with 310 CMR 15.000 has been approved by the local approving authority; or by the Department if Department approval is required by 310 CMR 15.000. This Approval allows for the use of the System as an equivalent alternative technology in accordance with 310 CMR 15.202 on facilities for nitrogen reduction in a Department designated nitrogen sensitive or limited area as defined in 310 CMR 15.214 and 15.215.

Non-residential facilities are not allowed under this approval. Non-residential facilities include properties with businesses and/or commercial establishments.

3. The technology shall meet or exceed the following effluent discharge requirements:
  - Effluent Total Nitrogen (TN) concentration of 19 mg/L (for 660 gallons per day per acre -gpda- loading) or 25 mg/L (for 550 gpda loading).
  - Effluent pH range shall be 6.0 to 9.0.
  - The System is approved for use at facilities with a maximum design flow less than 2,000 GPD.
4. The System Owner or the designated System Operator (or 'Operator') has responsibility for oversight and sampling of the System if the property served was allowed to increase the discharge rate per acre above 440 gpda in an area subject to Nitrogen Loading Limitations.

The System Owner will be required to repair, replace, modify or take any other action as required by the Department or the local approving authority, if the Department or the local approving authority determines that the System is not capable of meeting the required reduction in nitrogen in the effluent.

The Company is responsible for the approved technology as described below.

## **II. General Description of the Technology and Design Standards**

1. The tank containing the FAST® insert is installed between the building sewer and the soil absorption system (SAS). The SAS shall be designed and constructed in accordance with 310 CMR 15.100 - 15.279 and subject to the provisions of this Certification.
2. Technology Description - The FAST® system is an aerobic wastewater treatment system that utilizes a completely submerged fixed film process to treat organics and nitrify, and a passive recycle system for denitrification. Each model contains submerged media specific to the application. Microorganisms grow on the media and remove soluble contaminants from the wastewater, utilizing them as a source of energy for growth and production of new microorganisms. The FAST® system insert consists of a liner around the media and an airlift to provide aeration and mixing within the confines of the liner. The area outside the liner in the septic tank remains anoxic for denitrification and a passive recirculation system

moves the aerated wastewater to the outside of the liner to obtain denitrification. The aeration and circulation inside the liner are provided by a blower that pumps air into a draft tube that extends down the center of the media. Treated effluent passes out of the aerobic zone of the treatment plant through a pipe connected directly to a baffled quiescent area in the liner. Final effluent is discharged to a soil absorption system. Specific model considerations are as follows:

- The MicroFAST® 0.5, 0.75 and 0.9, HighStrengthFAST® 1.0 and NitriFAST® 0.5, 0.75 and 0.9 are installed in the second compartment of a two-compartment tank with a total liquid capacity of at least 1,500 gallons constructed in accordance with 310 CMR 15.226.
  - The MicroFAST®, HighStrengthFAST® and NitriFAST® 1.5 are installed in the second compartment of a two compartment 3000-gallon tank constructed in accordance with 310 CMR 15.226.
  - The MicroFAST®, HighStrengthFAST® and NitriFAST® 3.0 is installed in a separate tank constructed in accordance with 310 CMR 15.226 and located between a standard Title 5 septic tank, designed in accordance with 310 CMR 15.223 and 15.224, and the soil adsorption system (SAS). In this larger system, an additional recycle pump may be needed to send nitrified effluent back to the septic tank for added denitrification. Consult the Company for proper layout.
  - The NitriFAST® models can also be used for additional nitrification in series after the MicroFAST® models or HighStrengthFAST® models. In this configuration the tanks used for the NitriFAST® shall be constructed in accordance with 310 CMR 15.226 and meet the minimum dimensions and volumes required by the Company.
  - Flow equalization may also be employed prior to the FAST® system depending on the type of facility. Consult Company for proper layout.
3. All access ports and manhole covers shall be readily removable, of durable material and installed and maintained at grade to allow for maintenance of the System. No structures shall be located directly upon or above the access locations which could interfere with performance, access, inspection, pumping, or repair. Sufficient access for infrequent maintenance of the System treatment media and all other treatment works shall be evaluated, and addressed in the System design if necessary, by the designer. System control panel(s) including alarms shall be mounted in a location accessible to the operator of the System.

4. Wastewater Loading and Effluent Concentration Design Standards

For new residential construction in an area subject to the Nitrogen Loading Limitations of 310 CMR 15.214, and the facility does not meet with the Nitrogen Loading Limitations pursuant to the aggregation provisions of 310 CMR 15.216, an increase in calculated nitrogen loading per acre is allowed for facilities with design flow less than 2000 gpd with limitations as follows:

- The design flow shall not exceed 660 gallons per day per acre (gpda) and the total nitrogen (TN) concentration in the effluent shall not exceed 19 milligrams per liter (mg/L); or



- The design flow shall not exceed 550 gallons per day per acre (gpda) and the total nitrogen (TN) concentration in the effluent shall not exceed 25 milligrams per liter (mg/L).
- TN is measured as the total of TKN (Total Kjeldhal Nitrogen), NO<sub>3</sub>-N (Nitrate nitrogen) and NO<sub>2</sub>-N (Nitrite nitrogen).

### **III. General Conditions**

1. The provisions of 310 CMR 15.000 is applicable to the use and operation of this System, the System owner and the Company, except those that specifically have been varied by the terms of this Certification.
2. Any required operation and maintenance, monitoring and testing shall be performed in accordance with a Department approved plan. Any required sample analysis shall be conducted by an independent U.S. EPA or DEP approved testing laboratory, or a DEP approved independent university laboratory, unless otherwise provided in the Department's written approval. It shall be a violation of this Certification to falsify any data collected pursuant to an approved testing plan, to omit any required data or to fail to submit any report required by such plan.
3. The facility served by the System and the System itself, shall be open to inspection and sampling by the Department and the local approving authority at all reasonable times.
4. In accordance with applicable law, the Department and the local approving authority may require the System owner to cease operation of the system and/or to take any other action as it deems necessary to protect public health, safety, welfare or the environment.
5. The Department has not determined that the performance of the System will provide a level of protection to public health and safety and the environment that is at least equivalent to that of a sanitary sewer system. Accordingly, no System shall be upgraded or expanded, if it is feasible to connect the facility to a sanitary sewer, unless as allowed by 310 CMR 15.004.
6. Design, installation, and use of the System shall be in strict conformance with the Company's DEP approved plans and specifications and 310 CMR 15.000, subject to this Certification.

### **IV. Conditions Applicable to the System Owner**

1. The System owner shall at all times have the System properly operated and maintained by a Company approved Operator in accordance with this Certification, the designer's operation and maintenance requirements and the Company's approved procedures.
2. The System is certified only in connection with the discharge of sanitary wastewater from facilities with a design flow of less than 2000 gpd. Any non-sanitary wastewater generated and/or used at the facility served by the System shall not be introduced into the System and shall be lawfully disposed of.

3. The System Owner shall provide access to the site for the System Operator to perform inspections, maintenance, repairs, responding to alarm events, field testing, and sampling as may be required by the Approval.

Operation and Monitoring Requirements

4. System effluent total nitrogen (TN) concentrations shall not exceed 19 or 25 mg/L and effluent pH shall not be less than 6.0 or more than 9.0. Field test observations of dissolved oxygen (DO) shall equal or exceed 2 mg/L and for Turbidity shall be equal or less than 40 NTU.
5. All samples shall be taken at a flowing discharge point, i.e. distribution box, pipe entering a pump chamber or other Department approved location from the treatment unit.
6. Inspection, operation and maintenance (O&M), sampling, and field testing of the System required by the Approval shall be performed by a Company approved Operator who has been certified at a minimum of Grade Level 4 (four) by the Board of Registration of Operators of Wastewater Treatment Facilities, in accordance with Massachusetts regulations 257 CMR 2.00, and is an approved Title 5 System Inspector in accordance with 310 CMR 15.340.
7. Prior to commencement of construction of the System, the System Owner shall provide to the local approving authority a copy of a signed O&M Agreement that meets the requirements of paragraph IV (8).
8. The System Owner shall maintain, at all times, an O&M Agreement with a qualified System Operator approved by the Company. The Agreement shall be at least for one year and include the following provisions:
  - a) The name of a System Operator who is an approved System Inspector in accordance with 310 CMR 15.340 and who meets any additional qualification requirements specified in the Approval;
  - b) The System Operator must inspect the Alternative System as required by paragraph IV (9) and (12);
  - c) The System Operator shall be responsible for submitting the monitoring results to the System Owner in accordance with paragraph IV (13) and to the local approving authority in accordance with paragraph IV (14); and
  - d) In the case of a System failure, an equipment failure, alarm event, components not functioning as designed, or violations of the Approval, procedures and responsibilities of the System Operator and System Owner shall be clearly defined for corrective measures to be taken immediately. The System Operator shall agree to provide written notification within five days, describing corrective measures taken, to the System Owner and the local board of health.
9. The System Owner shall comply with the following monitoring requirements if the System is subject to a TN concentration limit in accordance with paragraph II (4):

- a) Year-round installations shall be inspected and have effluent sampled for at least the TN parameter quarterly for the first year, then a minimum of twice/year thereafter, at least 5 months apart and with at least one sample taken between December 1 and March 1 of each year. Field testing shall be completed per paragraph IV (11) below, and as determined necessary by the System Operator. See DEP Field Testing Protocol at <http://www.mass.gov/dep/water/laws/policies.htm#t5pols>. Wastewater flow shall be recorded at each inspection, see 'Flow Metering' paragraph IV (10).
- b) Seasonal installations shall be inspected and have effluent sampled for at least the TN parameter a minimum of twice/year. At least one sample must be taken 30 to 60 days after each seasonal occupancy begins. A second sample must be taken no less than 2 months after the first sample. Field testing shall be completed per paragraph IV (11) below, and as determined necessary by the System Operator. Wastewater flow shall be recorded at each inspection, see 'Flow Metering' paragraph IV (10).
- c) Systems in operation prior to issuance of this Approval, which have received approval of sampling reduction from the Department may continue with that System monitoring frequency.

Properties occupied at least 6 months per year are considered year-round properties. Properties occupied less than 6 months per year are considered seasonal properties.

TN is measured as the total of TKN (Total Kjeldhal Nitrogen), NO<sub>3</sub>-N (Nitrate nitrogen) and NO<sub>2</sub>-N (Nitrite nitrogen).

10. Flow Metering: Reporting of residential System water use is not required, however it is recommended the Operator record water meter readings if available at all inspections, or otherwise estimate System flow, to assist in addressing possible operational problems or issues. Flow measurement when recorded shall be based on:
  - a) actual metering data of wastewater flow to the System or actual water meter data of flow to fixtures that discharge to the wastewater system; or
  - b) actual water meter data for the total facility with either actual meter data or estimated flows for non-wastewater usage subtracted from the total facility water usage. If estimating the wastewater portion of metered water usage, the System Operator shall provide a best estimate of wastewater discharged to the System with the method of estimating, such as pump run times, occupancy rates, adjustment due to seasonal outdoor watering use, etc.; or
  - c) for Systems installed under a prior Approval that did not include a wastewater flow data reporting requirement, if no flow meters are available, the System Operator shall provide a best estimate of wastewater discharged to the System with the method of estimating, such as pump run times, occupancy rate, etc.
11. Field Testing: Temperature, turbidity, pH and DO shall be measured and recorded in the field whenever the effluent is sampled for TN. See applicable sections of the Department's Field Testing Protocol at <http://www.mass.gov/dep/water/laws/policies.htm#t5pols>.

12. At a minimum, the System Operator shall inspect the System:
  - a) quarterly for the first year then two times per year thereafter;
  - b) in accordance with the approved O&M manual, the Designer's operation and maintenance requirements, and the requirements of the local approving authority; and
  - c) any time there is an alarm event, equipment failure, or system failure.

Recordkeeping and Reporting

13. Within 60 days of any site visit, the System Operator shall submit an O&M report and inspection checklist to the System Owner and the Company. It is recommended the System Owner and Company maintain copies of these items for possible Department audit. The O&M report shall include, at a minimum:
  - a) for a System failing, any corrective actions taken;
  - b) wastewater analyses, wastewater flow data, field testing results and inspection checklists;
  - c) any violations of the Approval;
  - d) any determinations that the System or its components are not functioning as designed or in accordance with the Company specifications; and
  - e) any other corrective actions taken or recommended.
14. By February 15th of each year the System Owner or the System Operator if designated by the owner, shall submit to the local approving authority all monitoring results with all O&M reports and inspection checklists completed by the System Operator during the previous 12 months.
15. Upon determining that the System has failed, as defined in 310 CMR 15.303, the System Operator shall notify the System Owner immediately.
16. Upon determining that the System has failed, as defined in 310 CMR 15.303, the System Owner and the System Operator shall be responsible for the notification of the local approving authority within 24 hours of such determination.
17. The System Owner shall notify the Approving Authority and the Company in writing within seven days of any cancellation, expiration or any other change in the terms and/or conditions of the O&M Agreement required by Paragraph IV (8).
18. Violations of the TN concentration in the System effluent shall not constitute a failure of the System for the purposes of 24-hour notification or 5-day written reporting as required in Paragraphs IV (16) and (8).
19. The System owner shall provide a copy of this Approval, prior to the signing of a purchase and sale agreement for the facility served by the System or any portion thereof, to the proposed new owner.

20. The System owner shall furnish the Department any information that the Department requests regarding the System, within 21 days of the date of receipt of that request.
21. Prior to issuance of a Certificate of Compliance of the System, and after recording and/or registering the Notice required by 310 CMR15.287(10), the System Owner shall provide to the Local Approving Authority a copy of: (i) a certified Registry copy of the Notice bearing the book and page/or document number; and (ii) if the property is unregistered land, a Registry copy of the System Owner's deed to the property, bearing a marginal reference on the System Owner's deed to the property. The Notice to be recorded shall be in the form of the Notice provided by the Department.
22. Prior to signing any agreement to transfer any or all interest in the property served by the System, or any portion of the property, including any possessory interest, the System Owner shall provide written notice of all conditions contained in the Approval to the transferee(s). Any and all instruments of transfer and any leases or rental agreements shall include as an exhibit attached thereto and made a part of thereof a copy of the Approval for the System. The System Owner shall send a copy of such written notification(s) to the Local Approving Authority within 10 days of giving such notice to the transferee(s).

**V. Conditions Applicable to the Company**

1. The Company shall notify the Director of the Wastewater Management Program at least 30 days in advance of the proposed transfer of ownership of the technology for which this Certification is issued. Said notification shall include the name and address of the proposed new owner and a written agreement between the existing and proposed new owner containing a specific date for transfer of ownership, responsibility, coverage and liability between them. All provisions of this Certification applicable to the Company shall be applicable to successors and assigns of the Company, unless the Department determines otherwise.
2. The Company shall develop maintain and update as necessary the following: minimum installation requirements; an operating manual, including information on substances that should not be discharged to the System; a maintenance checklist; and a recommended schedule for maintenance of the System consistent with the Department's requirements essential to consistent successful performance of the installed Systems.
3. The Company shall institute and maintain a program of operator training and continuing education. The Company shall maintain and annually update, and make available the list of qualified operators by February 15th and make the list known to local approving authorities, the Department and to users of the technology.
4. The Company shall furnish the Department any information that the Department requests regarding the System, within 21 days of the date of receipt of that request.
5. The Company shall include copies of this Certification and the procedures described in Section V (3) with each System that is sold. In any contract executed by the Company for distribution or re-sale of the System, the Company shall require the distributor or re-seller to provide each purchaser of the System with copies of this Certification and the procedures described in Section V (3).

6. A copy of the wastewater analyses, wastewater flow data, field testing results, and System Operator O&M reports and inspection checklists from each installed System shall be maintained by the Company or its designee for possible Department audit.
7. If the Company wishes to continue this Certification after its expiration date, the Company shall apply for and obtain a renewal of this Certification. The Company shall submit a renewal application at least 180 days before the expiration date of this Certification, unless written permission for a later date has been granted in writing by the Department. This Certification shall continue in force until the Department has acted on the renewal application.

## **VI. Conditions Applicable to the System Designer**

1. Upon submission of an application for a DSCP, the Designer shall provide to the local approving authority:
  - a) a certification, signed by the owner of record for the property to be served by the System, stating that the property owner:
    - i) has been provided a copy of the Approval, the Owner's Manual, and the Operation and Maintenance Manual, if applicable, and the Owner agrees to comply with all terms and conditions;
    - ii) has been informed of all the owner's costs associated with the operation including, when applicable: power consumption, maintenance, sampling, recordkeeping, reporting, and equipment replacement;
    - iii) understands the requirement for a service contract;
    - iv) agrees to fulfill his responsibilities to provide a Deed Notice as required by 310 CMR 15.287(10) and the Approval;
    - v) agrees to fulfill his responsibilities to provide written notification of the Approval to any new owner, as required by 310 CMR 15.287(5);
    - vi) if the design does not provide for the use of garbage grinders, the restriction is understood and accepted;
    - vii) if the design is for an upgrade of failed or nonconforming system, the System Owner has been provided a copy of the evaluation of the existing system;
    - viii) whether or not covered by a warranty, the System Owner understands the requirement to repair, replace, modify or take any other action as required by the Department or the local approving authority, if the Department or the local approving authority determines that the Alternative System is not capable of meeting the performance standards; and
  - b) a certification, signed by the Designer that the design conforms to the Approval with Conditions and 310 CMR 15.000.

## **VII. Reporting**

1. All notices and documents required to be submitted to the Department by this Certification shall be submitted to:

Director  
Wastewater Management Program  
Department of Environmental Protection,  
One Winter Street - 5th floor  
Boston, Massachusetts 02108

**VIII. Rights of the Department**

1. The Department may suspend, modify or revoke this Certification for cause, including, but not limited to, non-compliance with the terms of this Certification, non-payment of the annual compliance assurance fee, for obtaining the Certification by misrepresentation or failure to disclose fully all relevant facts or any change in or discovery of conditions that would constitute grounds for discontinuance of the Certification, or as necessary for the protection of public health, safety, welfare or the environment, and as authorized by applicable law. The Department reserves its rights to take any enforcement action authorized by law with respect to this Certification and/or the System against the owner or operator of the System and/or the Company.

Transmittal: X232831 (formerly W101238)



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Matthew A. Beaton  
Secretary

Martin Suuberg  
Commissioner

### **APPROVAL FOR GENERAL USE**

Pursuant to Title 5, 310 CMR 15.000

Name and Address of Applicant:

Cur-Tech, LLC.  
23 Ryan Street  
Stamford, CT 06907

Trade name of technology and model: Cur-Tech CTL Systems (hereinafter the "System"). Schematic drawings of the System and a design and installation manual are a part of this Certification. This approval allows the installation of the above identified chambers without aggregate.

Transmittal Number: **X268062**  
Date of Issuance: January 5, 2017  
Date of Revision: March 31, 2017

### **Authority for Issuance**

Pursuant to Title 5 of the State Environmental Code, 310 CMR 15.000, the Department of Environmental Protection hereby issues this Certification to: Cur-Tech, LLC., 23 Ryan Street, Stamford, CT 06907 (hereinafter "the Company"), for General Use of the System described herein. The sale, design, installation, and use of the System are conditioned on compliance by the Company, the Designer, the Installer and the System Owner with the terms and conditions set forth below. Any noncompliance with the terms or conditions of this Approval constitutes a violation of 310 CMR 15.000.

Marybeth Chubb, Acting Section Chief  
Groundwater/Title 5/Reuse  
Bureau of Water Resources

March 31, 2017  
Date

*Enclosure: Standard Conditions for Alternative Soil Absorption Systems with General Use Certification and/or Approved for Remedial Use.*



**I. Design Standards**

1. The models listed in Table 1 are covered under this Certification.

**Table 1: Chamber Dimensions**

Model	Dimensions W x L Feet	Invert Height Inches
CTL-12	4 x 8	8
CTL-18	4 x 8	14

- a. Includes an ABS plastic injection molded fin structure that is snapped together along each side.
- b. This approval allows the use of the high capacity H-20 reinforced concrete chambers but makes no determination as to the chambers meeting the H-20 loading requirements.
2. The System is an open-bottom leaching unit molded from H-20 reinforced concrete chamber with an ABS plastic injection molded fin structure that is snapped together along each side as an integral part of the system. The design of the structure and way it snaps together gives the assembled structure strength and stability. Each assembly can be an endless chain. The plastic fin structure is covered with a filter fabric to prevent soil from entering. The fabric approved to cover the plastic part is Contech c-46nw or approved equal. The concrete chambers can have an optional 3 inch pipe imbedded in the top of the chamber. If the System is installed with stone aggregate then the “Effective Leaching Area” in Tables 2 and 3 is not applicable, and must be designed in accordance with the provisions of 310 CMR 15.000.
3. The total effective leaching area for any Chamber Model shall be calculated by multiplying the Effective Leaching Area per square foot of chamber times the total length of chamber from end cap to end cap including end caps.
4. For new construction or upgrades, the applicant can size the System in a trench configuration, using the effective leaching areas presented in Table 2.

**Table 2:      \* Effective Leaching Area in Trench Configuration for New Construction and Remedial Sites**

Model	Effective Leaching Area SF/LF
CTL-12	7.24
CTL-18	8.91

- a. \* See Section II, #7.

5. Systems installed on remedial sites shall be allowed to utilize the effective leaching areas presented in Tables 2 or 3, or additional reductions in soil absorption system may be allowed. In no instance shall the reduction in the soil absorption system required in 310 CMR 15.242 exceed the maximum reduction allowed for alternative systems approved in accordance with 310 CMR 15.284.
6. For new construction or an upgrade, the applicant can size the System in bed or field configuration, using the effective leaching areas presented in Table 3.

**Table 3: Effective Leaching Area for Bed or Field Configuration New Construction and Remedial Sites**

<b>Model</b>	<b>Effective Leaching Area SF/LF</b>
CTL-12	10.57
CTL-18	10.57

- a. Leaching area is equal to 1.67 times bottom width only. Width of the Chamber for Bed or Field configuration includes the fins width of 1.165ft on each side of the concrete chamber.
7. When the System is used with a secondary treatment unit approved in accordance with 310 CMR 15.284 or 15.288, additional reductions in soil absorption system may be allowed. In these situations the reduction in the SAS cannot exceed the maximum allowed under the secondary treatment units' approval. In no instance shall the reduction in the soil absorption system area required in 310 CMR 15.242 exceed the maximum reduction allowed for alternative systems approved in accordance with 310 CMR 15.284.

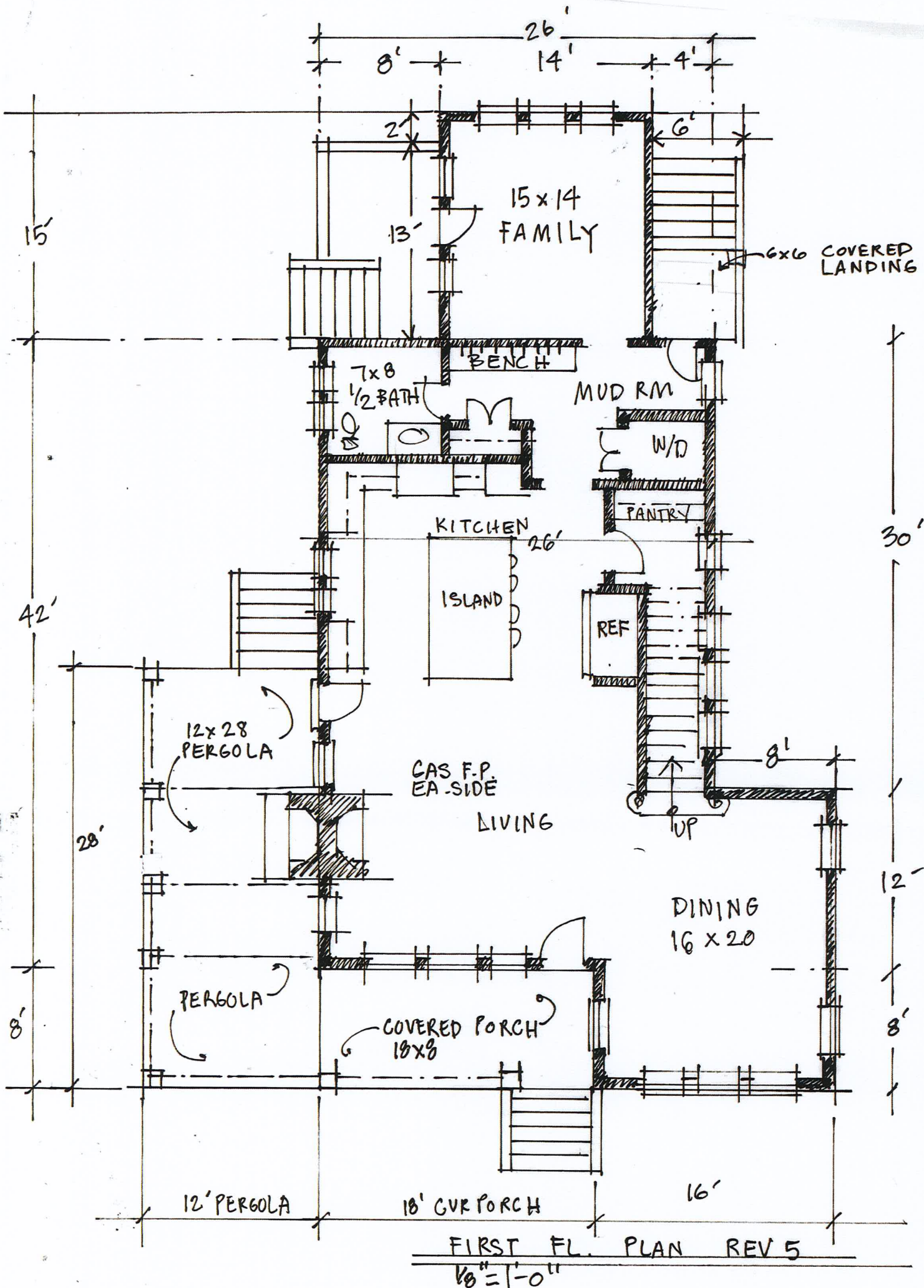
## **II. Special Conditions**

1. The System is an approved Alternative Chamber for use as an Alternative Soil Absorption System. In addition to the Special Conditions contained in this Approval, the System shall comply with the "*Standard Conditions for Alternative SAS with General Use Certification and/or Approved for Remedial Use*" (the '*Standard Conditions*'), except where stated otherwise in these Special Conditions.
2. New Construction This Certification is for the installation of a System to serve new construction or an existing facility with a proposed increase in flow, for which a site evaluation in compliance with 310 CMR 15.000 has been approved by the Approving Authority and the site meets the siting requirements for new construction, as provided in Paragraph 6 in section II (Design and Installation Requirements of the) *Standard Conditions*.
3. Remedial Site This General Use Certification also applies to the installation of a System for the upgrade or replacement of an existing failed or nonconforming system, provided that the facility meets the siting requirements for upgrades, as provided in Paragraph 7 in section II (Design and Installation Requirements of the) *Standard Conditions*.

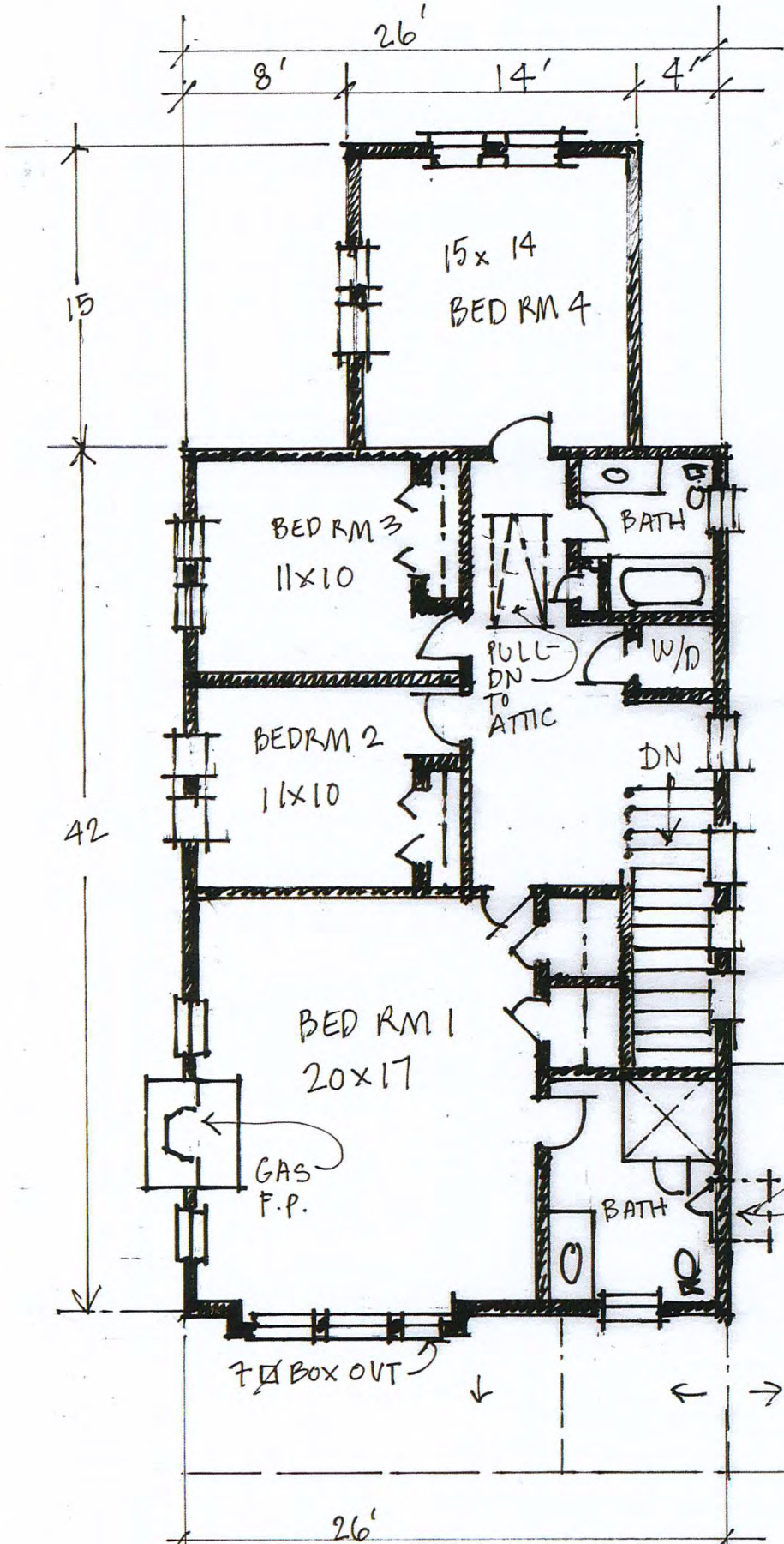
4. The System shall be exempt from the minimum inlet spacing requirements of 310 CMR15.253.
5. The System shall have a minimum of one inspection port through the top of one of the chambers. The inspection port shall be capped with a screw type cap and accessible to within three inches of finish grade.
6. When the System is installed in trench configuration, then the system shall comply with these requirements:
  - a) Length (each trench) 100 feet maximum (310 CMR 15.251(1)(a));
  - b) The minimum separation distance between any two trenches shall be two times the effective width or depth of each trench, whichever is greater, or where the area between trenches is designated as reserve area, three times the effective width or depth of each trench, whichever is greater (310 CMR 15.251(1)(d));
  - c) The effective leaching area shall be calculated using the bottom area and a maximum of two feet (per side) of side wall area for each trench (310 CMR 15.251(1)(e));
  - d) Trenches shall be situated, where possible, with their long dimension perpendicular to the slope of the natural soil. Where possible they shall follow the contour lines (310 CMR 15.251(2));
  - e) Trenches constructed at different elevations shall be designed to prevent effluent from the higher trench(es) flowing into the lower trench(es) (310 CMR 15.251(3));
  - f) The area between trenches may be designated as system reserve area only where the separation distance between the excavation sidewalls of the primary trenches is at least three times the effective width or depth of each trench, whichever is greater (310 CMR 15.251(4)) - Cur-Tech, shall be separated by three times the actual width and are subject to other Special Conditions and limitations; and
  - g) Effluent distribution lines exceeding 50 feet in length shall be connected and venting provided in accordance with 310 CMR 15.241 (310 CMR 15.251(11)).
7. When installed in trench configuration, approved Alternative Chambers greater than 3 feet wide such as Cur-Tech:
  - a) shall be installed with a minimum separation distance between any two trenches of two times the actual width of the chamber, or where the area between trenches is designated as reserve area, three times the actual width of the chamber; and
  - b) shall only be entitled to a maximum effective width of 3 feet for the purposes of calculating total effective leaching area.
8. When installed in a bed or field configuration, the System may be installed without distribution piping, but must comply with the following requirements in 310 CMR 15.252:
  - a) the use of leaching beds or fields is restricted to systems with a calculated design flow of less than 5,000 gpd per leaching bed or field (310 CMR 15.252(1));
  - b) the maximum length of chambers in series shall be 100 feet (310 CMR 15.252(2)(b));
  - c) separation distance between adjacent beds/fields shall be ten feet (310 CMR 15.252(2)(f)); and

- d) the effective leaching area shall include only the bottom area, not the sidewalls (310 CMR 15.252(2)(i)).
- 9. For Systems constructed in fill and installed, the System shall be installed as specified in 310 CMR 15.255 Construction in Fill, except the minimum 15 foot horizontal separation distance to be provided between the soil absorption area and the adjacent side slope shall be measured horizontally from the top of the chamber.
- 10. The System is exempt from 310 CMR 15.287, specifically items: (5) requiring written notification of alternative system prior to property transfer, (6) need for a certified operator, (9) need for an operation and maintenance contract with an operator and (10) deed notice requirement.

X268062



435 CIRCUIT AVE  
 BOURNE, MA 02532



$26 \times 42 = 1092$   
 $14 \times 15 = 210$   
 $14 \times .5 = 7$  (Box-out)  

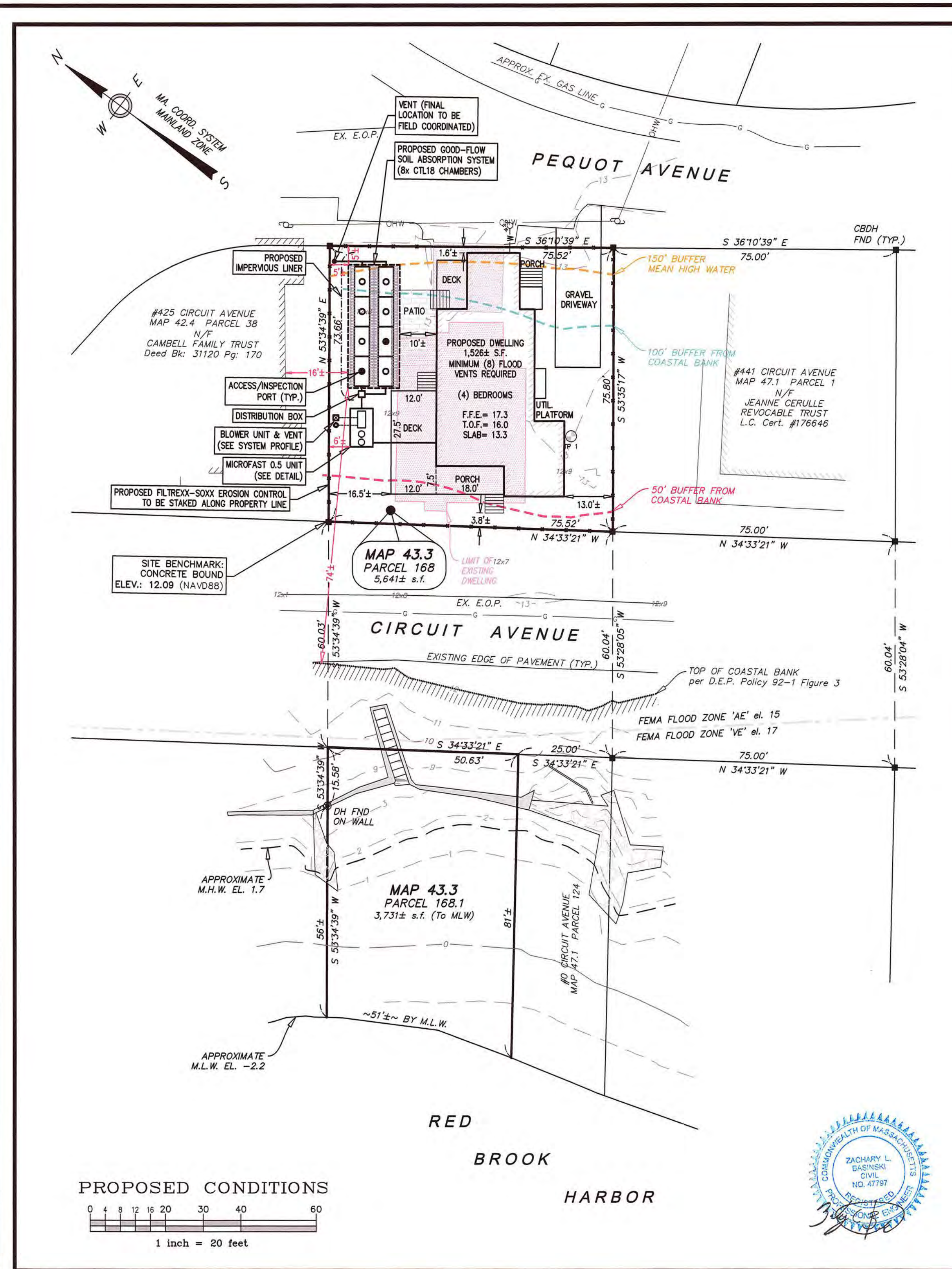
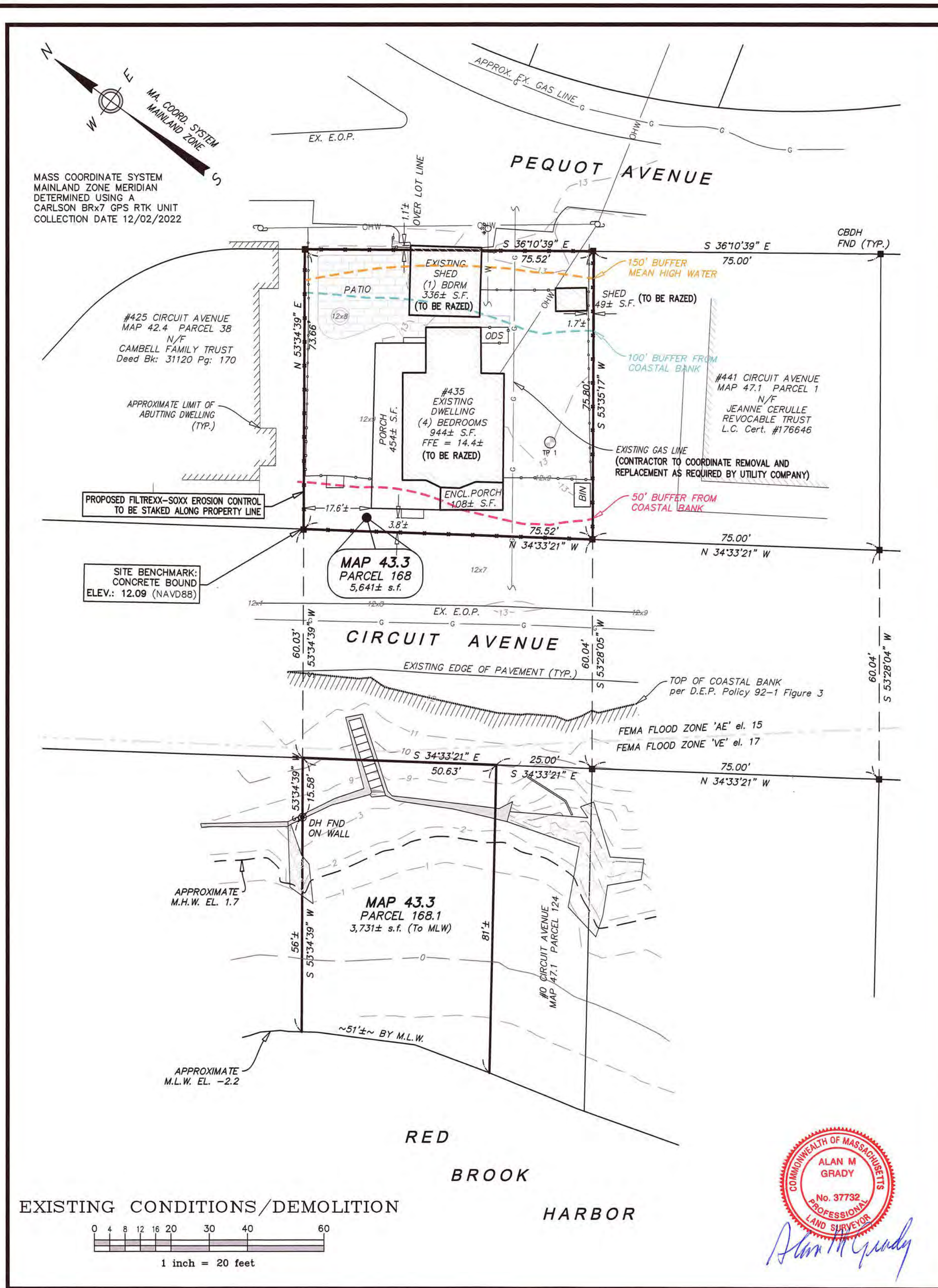

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 1309 #

SECOND FL. PLAN REV. 5

$\frac{1}{8}'' = 1'-0''$

435 CIRCUIT AVE  
BOURNE, MA 02532



**LOCAL UPGRADE APPROVALS & VARIANCE REQUESTS**

IN ACCORDANCE WITH MA 310 15.00 (TITLE 5) AND LOCAL BOURNE BOARD OF HEALTH REGULATIONS, THE FOLLOWING VARIANCES ARE REQUESTED:

A 76± VARIANCE IS REQUESTED FROM THE BOURNE BOARD OF HEALTH REGULATIONS FOR A 74± SETBACK FROM A PROPOSED SOIL ABSORPTION SYSTEM TO THE TOP OF A COASTAL BANK.

15.405(1)(a) - A 5± DIVERGENCE FROM FULL COMPLIANCE IS REQUESTED FOR A 5± SETBACK FROM A PROPERTY LINE (PEQUOT AVENUE) TO A SOIL ABSORPTION SYSTEM.

15.405(1)(c) - A 5± DIVERGENCE FROM FULL COMPLIANCE IS REQUESTED FOR A 5± SETBACK FROM A PROPERTY LINE (#425 CIRCUIT AVENUE) TO A SOIL ABSORPTION SYSTEM.

15.405(1)(c) - A 4± DIVERGENCE FROM FULL COMPLIANCE IS REQUESTED FOR A 6± SETBACK FROM A PROPERTY LINE (#425 CIRCUIT AVENUE) TO SEPTIC TANK.

15.405(1)(b) - A 4± DIVERGENCE FROM FULL COMPLIANCE IS REQUESTED FOR A 16± SETBACK FROM AN ABUTTING FOUNDATION TO A SOIL ABSORPTION SYSTEM (#425 CIRCUIT AVENUE)

**ZONING REQUIREMENTS**

**ZONE: R-40**  
PRE-EXISTING NON-CONFORMING

SEE TABLE 2456 FOR NON-CONFORMING LOTS IN BOURNE ZONING BY LAWS.

ZONE: R-40	REQUIRED	EXISTING	PROPOSED
LOT AREA:	40,000 s.f.	9,372± s.f. (a)	9,372± s.f. (a)
FRONTAGE:	125'	SEE PLAN	SEE PLAN
FRONT YARD:	20'	SEE PLAN	SEE PLAN
SIDE YARD:	12'	1.7'± (b)(2)	13.0'±
REAR YARD:	12'	SEE PLAN	SEE PLAN
LOT COVERAGE:	25%	22.9%	22.9%
	(2,141 ±)	(1,918 ±)	(2,155 ±)
GROSS FLOOR AREA:	23%	30.2%	30.1%
	(2,159 ±)	(2,698 ±)	(2,026 ±)
BUILDING HEIGHT:	29' (b)	25.8±	<34±

Notes:  
(a) LOT AREA INCLUDES PARCELS 168 & 168.1  
(b) INCREASE ALLOWABLE HEIGHT BY 5' FOR ROOF ELEMENTS HAVING A SLOPE OF 4° OR MORE PER FOOT (SEE SECTION 2500 FOOTNOTES (c))

**SOIL LOGS**

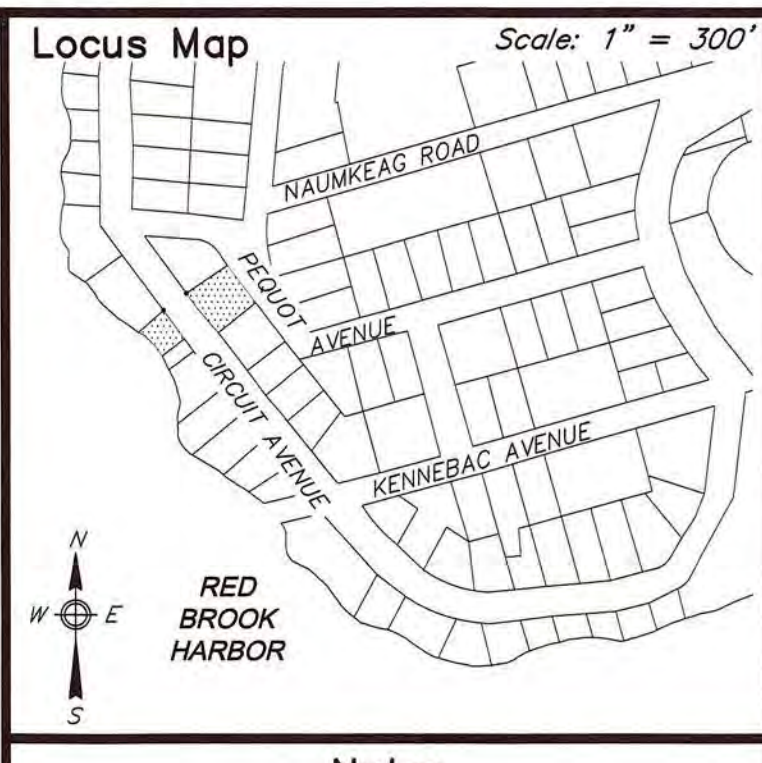
TP NO.	1
GRD. EL.	13.0
GW. EL.	NONE TO 2.7
0'	13.0
A <sub>p</sub> SANDY LOAM 10YR 3/2	
12'	12.0
B <sub>w</sub> LOAMY SAND 10YR 5/6	
48'	9.0
C MEDIUM SAND 2.5Y 6/4	
124'	2.7
NO MOTTLING NO WATER	

DATE PERFORMED: DECEMBER 15, 2022  
SOIL EVALUATOR: ROBERT E. DEWAAR, E.I.T. SE#14230  
WITNESSED BY: KAITLY SHEA - B.O.H. INSPECTOR  
PERC. RATE: <2 MINUTES/INCH  
SOIL CLASS: CLASS I  
MAX. GROUND WATER ELEV.: 2.7  
METHOD OF DETERMINATION: NO MOTTLING NO WATER

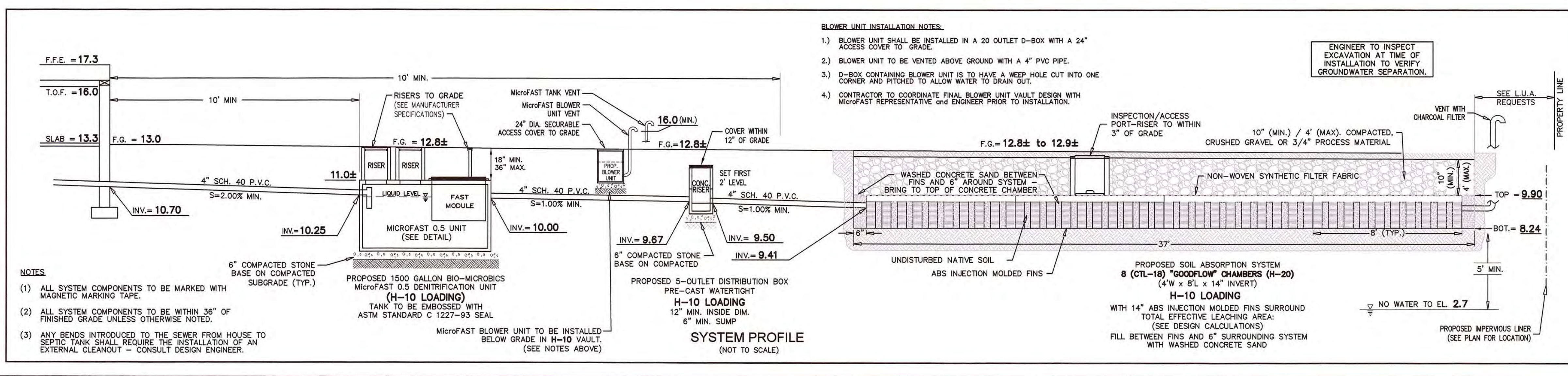
(SEE SOIL REPORT FOR MORE DETAILED DESCRIPTION)

**EXCAVATION NOTE**

THIS SYSTEM REQUIRES THE EXCAVATION OF ALL UNSUITABLE SOIL WITHIN 5' OF THE SOIL ABSORPTION SYSTEM. SOIL SHALL BE EXCAVATED TO THE EXISTING C MEDIUM SAND LAYER, APPROXIMATELY 48". ENGINEER TO CONFIRM SOIL DEPTH PRIOR TO INSTALLATION. THE EXCAVATION SHALL BE INSPECTED BY THE DESIGN ENGINEER PRIOR TO BACKFILLING. SOIL IS TO BE REPLACED WITH SAND CONFORMING TO 310 CMR SECTION 15.255. CONSTRUCTION IN FILL. CONTRACTOR IS RESPONSIBLE TO PROVIDE ENGINEER WITH SAND SAMPLE FOR SIEVE ANALYSIS.



- Notes**
- BENCHMARK: ELEVATION = 12.09 (NAVD88) CONCRETE BOUND
  - ALL CONSTRUCTION METHODS AND MATERIALS TO CONFORM TO TITLE 5 AND THE TOWN OF BOURNE BOARD OF HEALTH REGULATIONS.
  - ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
  - NO FIELD MODIFICATION TO THE SYSTEM SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE DESIGN ENGINEER AND BOARD OF HEALTH.
  - ALL JOINTS AND COVERS TO BE WATERTIGHT.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES.
  - A CERTIFICATE OF COMPLIANCE MUST BE OBTAINED PRIOR TO BACKFILLING SYSTEM.
  - OWNER: PAUL H. STENBERG, Jr. Trustee  
MADELINE K. STENBERG, Trustee  
THE SEVEN STENS TRUST  
435 CIRCUIT AVENUE  
BOURNE, MA 02559
  - DEED REFERENCE: Deed Bk: 35689 Pg: 73
  - PLAN REFERENCE: Plan Bk: 28 Pg: 1  
Plan Bk: 40 Pg: 113  
L.C. Plan #42838-A
  - THE DESIGN IS INTENDED TO MEET TITLE 5 AND OTHER APPLICABLE REQUIREMENTS. THIS PLAN DOES NOT GUARANTEE THAT THE SYSTEM WILL BE INSTALLED AS DESIGNED, NOR DOES THIS PLAN GUARANTEE THE OPERATION OF THE SYSTEM.
  - THIS SYSTEM IS NOT DESIGNED NOR INTENDED FOR USE WITH A GARBAGE GRINDER.
  - THE SYSTEM OWNER SHALL BE RESPONSIBLE TO PUMP THE SEPTIC TANK AT LEAST ONCE EVERY THREE YEARS.
  - LOCUS DOES NOT FALL WITHIN A ZONE II WELLDRE PROTECTION AREA OR BOURNE WATER RESOURCE DISTRICT.
  - LOCUS DOES NOT FALL WITHIN AN NHESP ESTIMATED HABITAT OF RARE WILDLIFE AND PRIORITY HABITAT OF RARE SPECIES.
  - LOCUS DOES FALL WITHIN A SPECIAL FLOOD HAZARD ZONE "AE" (EL. 15) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25001C-0492-J, dated 7/16/2014.
  - CONTRACTOR TO REFER TO ALL MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS FOR INSTALLATION OF THE MICROFAST UNIT AND GOOD-FLOW SOIL ABSORPTION SYSTEM.
  - RECORD PROPERTY OWNER IS TO FILE A NOTICE OF DEED RESTRICTION AT THE BARNSTABLE COUNTY REGISTRY OF DEEDS PRIOR TO THE INSTALLATION OF THE SYSTEM, INDICATING THE USE OF AN INNOVATIVE/ALTERNATIVE SEPTIC SYSTEM ON THE PROPERTY.
  - HOMEOWNER IS TO ESTABLISH AN OPERATION & MAINTENANCE PLAN WITH A COMPANY CERTIFIED SYSTEM OPERATOR FOR THE MICROFAST UNIT. ALL SYSTEM TESTING, MONITORING & REPORTING IS TO BE CONDUCTED IN ACCORDANCE TO THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) REMEDIAL USE PERMITS.
  - CONTRACTOR TO COORDINATE PLACEMENT OF ALL ALARM/CONTROL PANELS WITH THE HOMEOWNER & SYSTEM MANUFACTURERS PRIOR TO INSTALLATION.
  - CONTRACTOR TO COORDINATE FINAL LOCATION OF MicroFAST BLOWER UNIT AND VENT WITH OWNER. VENTS SHALL BE ELEVATED ABOVE DESIGN FLOOD ELEVATION.
  - SOIL CONDITIONS ENCOUNTERED DURING THE INSTALLATION OF THE PROPOSED SEPTIC SYSTEM MAY VARY FROM PREVIOUSLY OBSERVED CONDITIONS AT TEST PIT LOCATION. DESIGN ENGINEER SHALL BE CONTACTED IF DISCREPANCIES ARE FOUND.



**DESIGN CALCULATIONS**

SOIL TEXTURAL CLASS:	CLASS I
PERC. RATE:	<2 MINUTES/INCH
NO. OF BEDROOMS:	4
DESIGN FLOW REQUIRED:	440 GPD
SEPTIC TANK REQUIRED:	1500 GALLONS
SEPTIC TANK PROVIDED:	1500 GALLON

**LEACHING SYSTEM:**  
USE GOODFLOW CTL-18 CHAMBERS \*GENERAL USE APPROVAL  
(8) CTL-18 CONCRETE LEACHING CHAMBERS IN A (13.67') WIDE x (34') LONG BED

**EFFECTIVE LEACHING:** (BASED ON GENERAL USE APPROVAL)  
(8 UNITS)(8 L.F./UNIT) = 64 L.F.

(10.57 S.F./L.F.)(64 L.F.) = 676 S.F. EFFECTIVE  
LOADING RATE = 0.74 GPD/SF  
FLOW PROVIDED: 500 GPD > 440 GPD REQUIRED

Prepared By:

**BRACKEN ENGINEERING, INC.**

49 HERRING POND ROAD  
BUZZARDS BAY, MA 02532  
(tel) 608.833.0070  
(fax) 608.833.2282

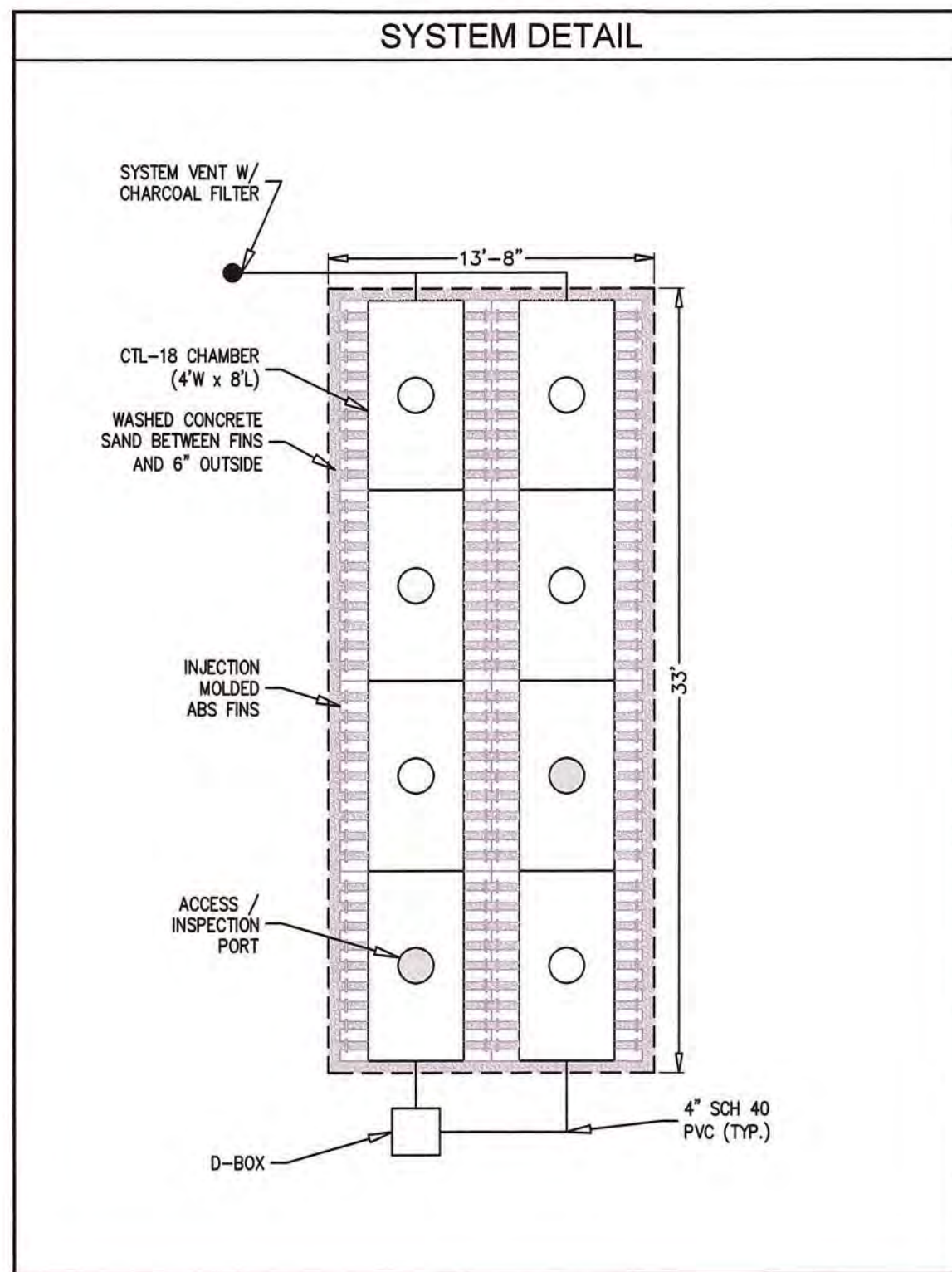
19 OLD SOUTH ROAD  
NAUTUCKET, MA 02554  
(tel) 608.328.0044  
www.brackeneng.com

**PROPOSED SITE PLAN**  
IN BOURNE, MASSACHUSETTS

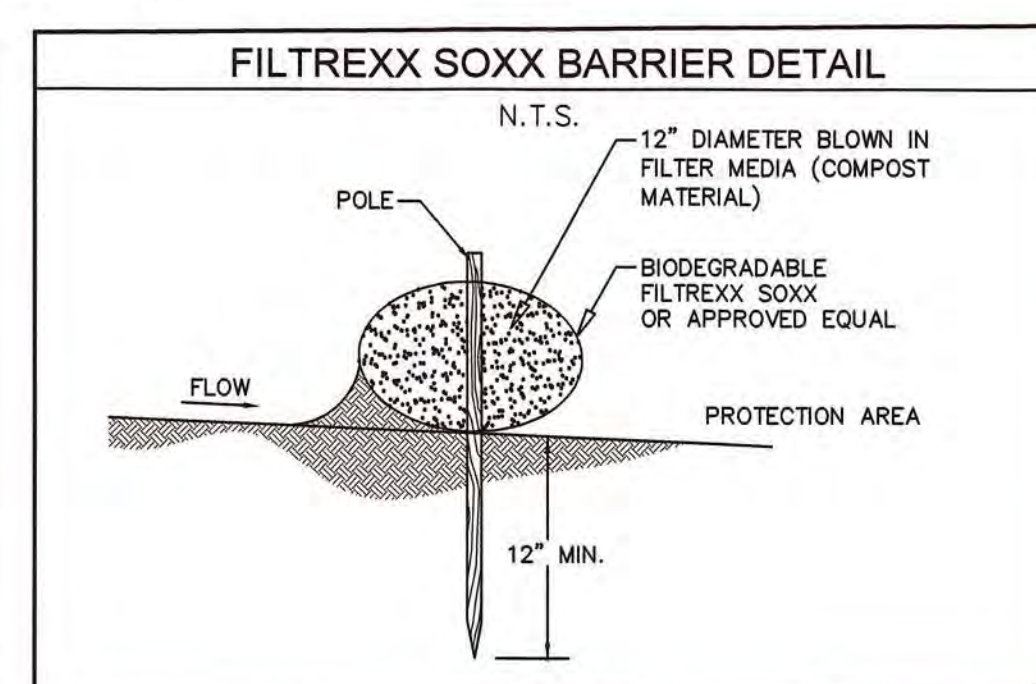
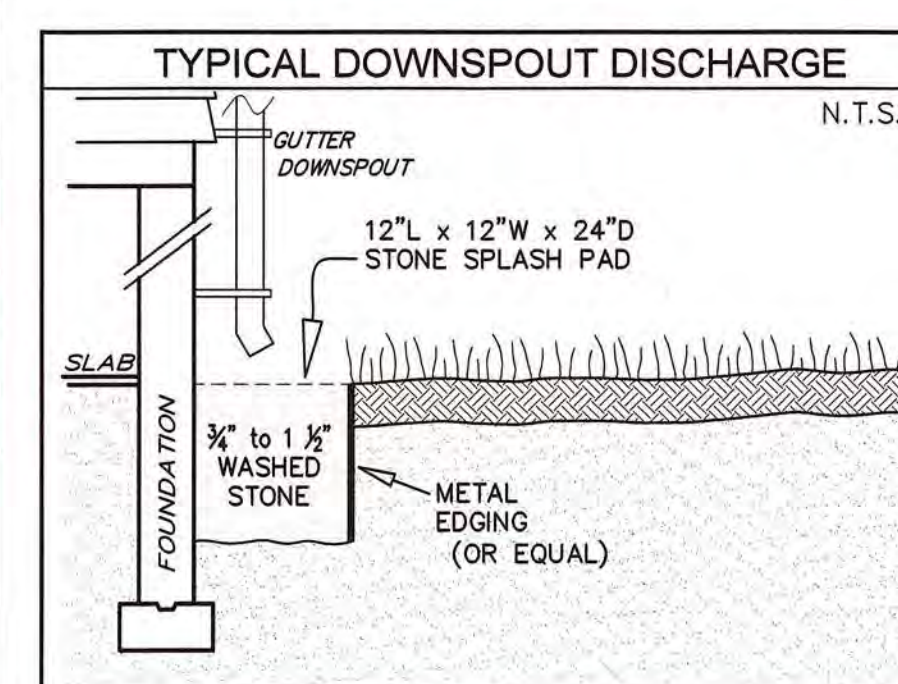
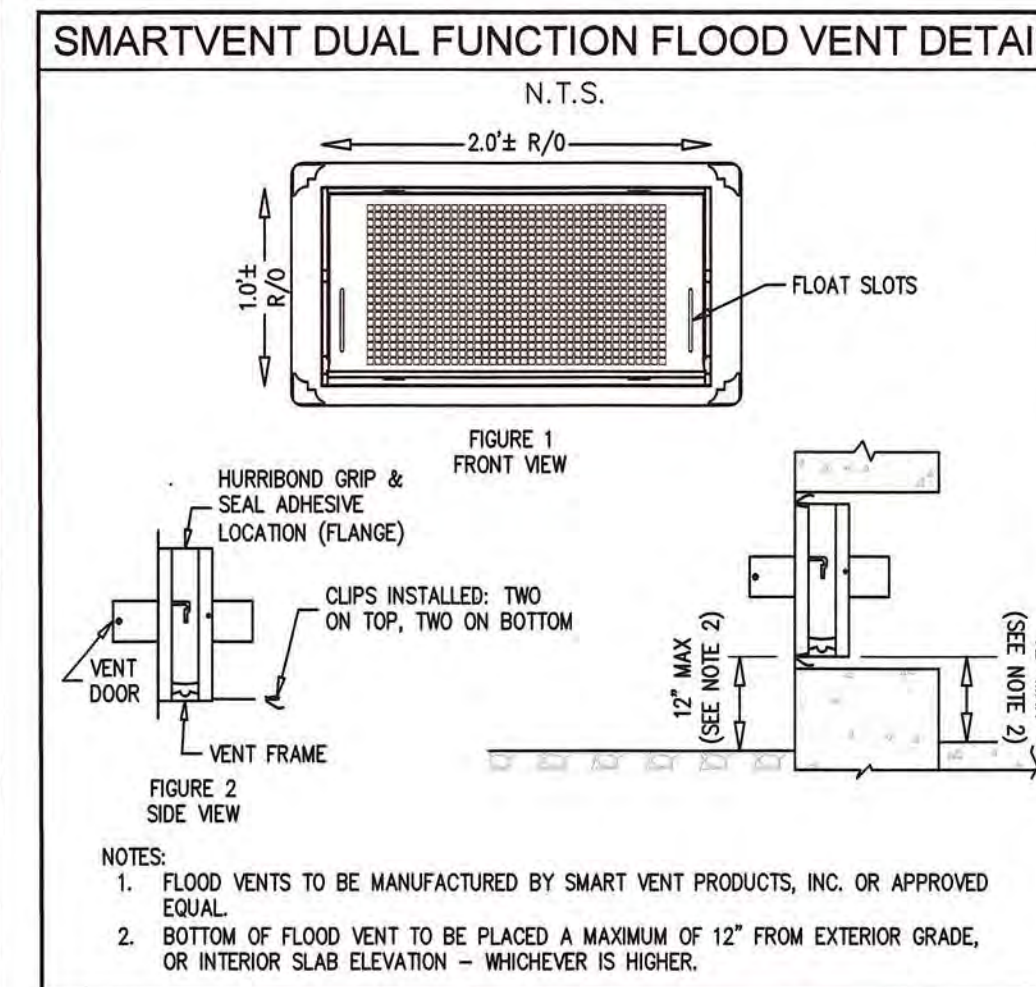
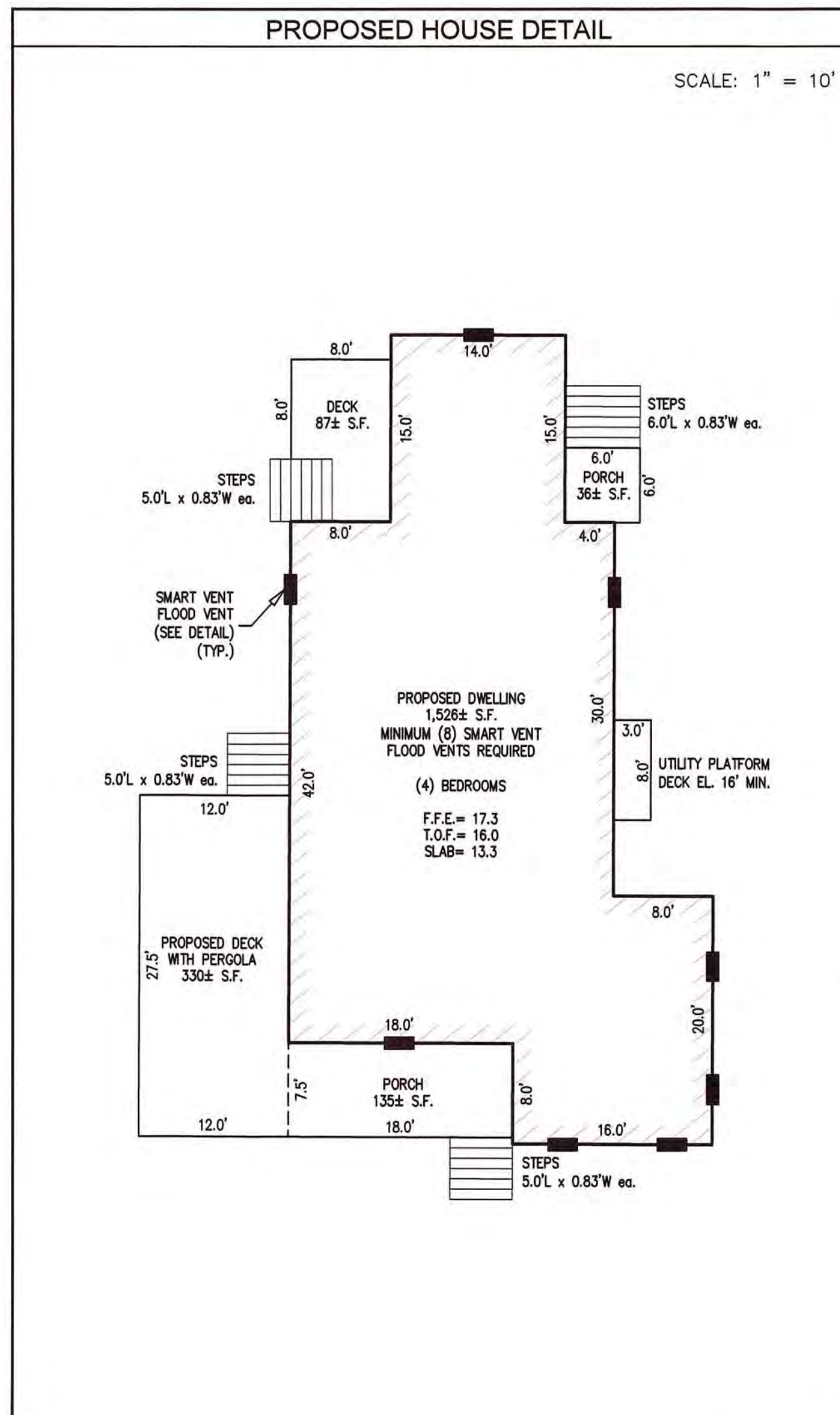
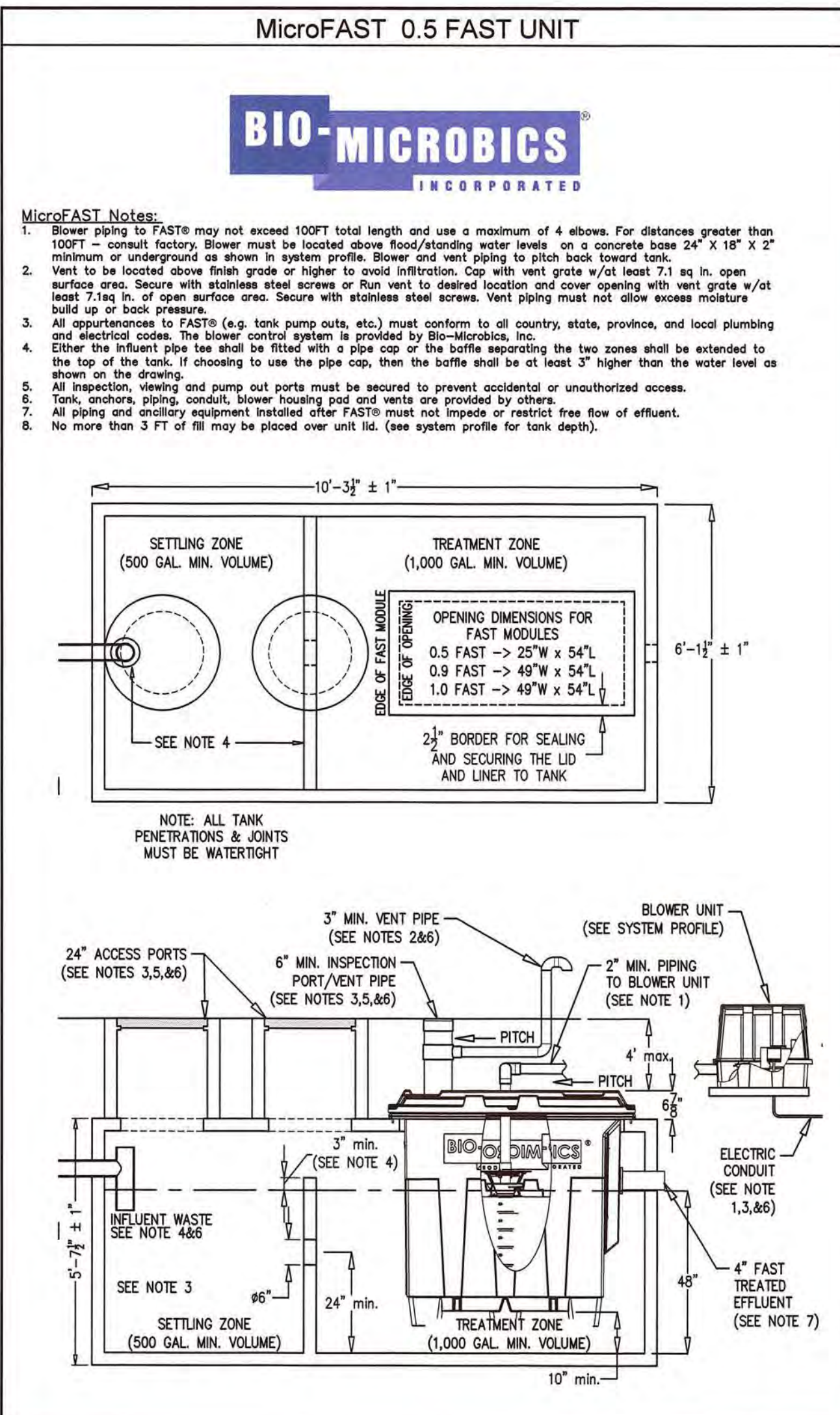
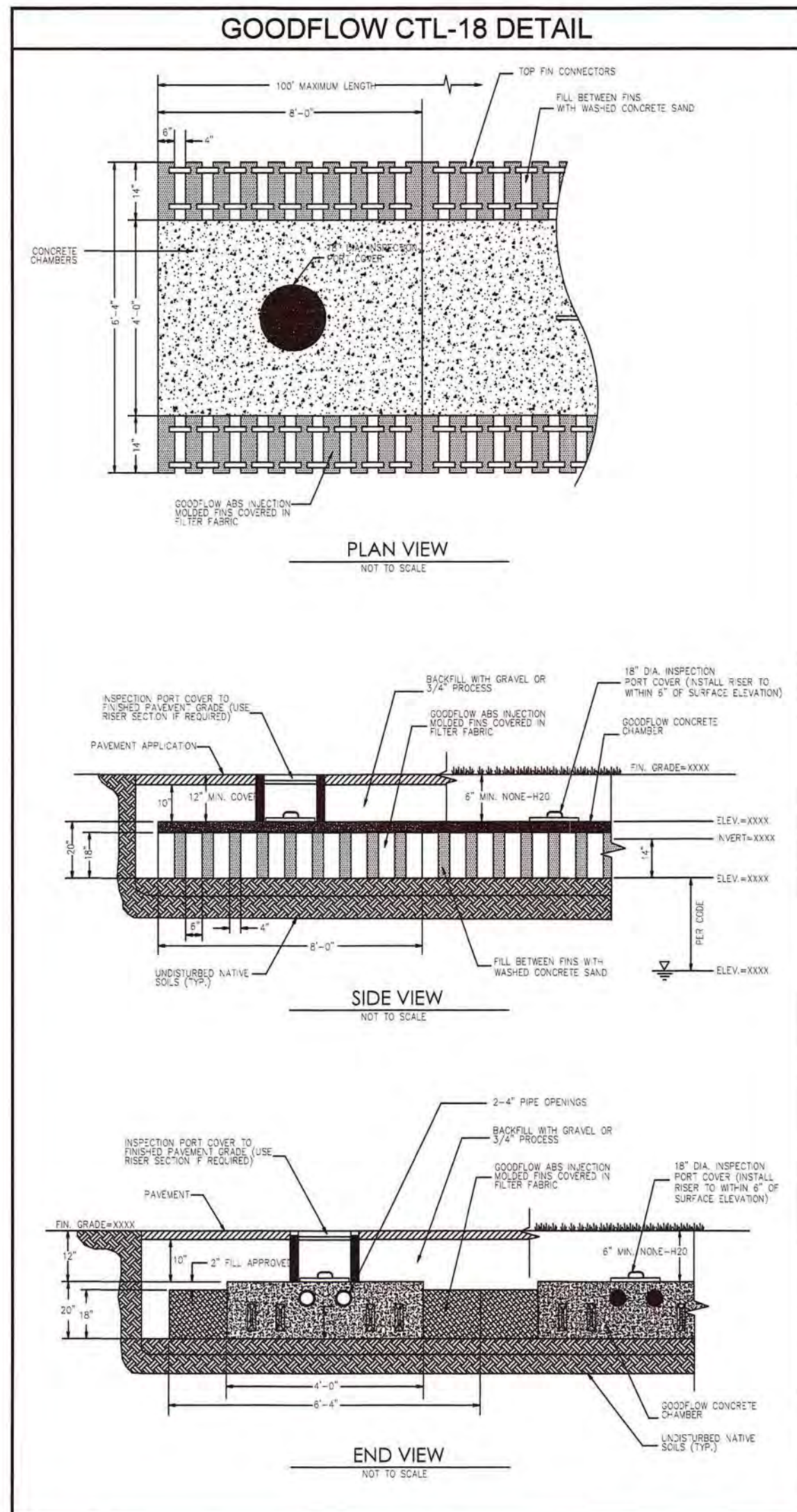
Prepared For:  
**THE SEVEN STENS TRUST**  
#435 CIRCUIT AVENUE  
MAP 43.3 PARCEL 168

No.	Date	Revision Description	By
1	6/6/23	REVISE FOR ZBA & BOH SUBMISSIONS	JPH

Date: MAY 31, 2023 Drawn: JPH/BE Checked: ZLB/AMG Sheet: 1 of 2



- ### GOODFLOW INSTALLATION NOTES
1. FINS COME PREPARED WITH FILTER FABRIC ON ALL SIDES EXCEPT BOTTOM - THIS IS SEPARATE FROM THE FILTER FABRIC ON TOP OF THE SYSTEM PROVIDED BY THE INSTALLER.
  2. MINIMUM OF 2" TITLE 5 SAND FROM THE TOP OF THE FINS TO THE TOP OF THE CHAMBER - CREATING A FLUSH SURFACE.
  3. FILTER FABRIC IS PLACED ACROSS THE CONCRETE CHAMBER AND ON TOP OF THE 2" OF TITLE 5 SAND ATOP THE FINS. THE NON-WOVEN SYNTHETIC FILTER FABRIC SHALL HAVE ADEQUATE TENSILE STRENGTH TO PREVENT RIPPING DURING INSTALLATION AND BACKFILLING, ADEQUATE AIR PERMEABILITY TO ALLOW FREE PASSAGE OF GASES, AND ADEQUATE PARTICLE RETENTION TO PREVENT DOWNWARD MIGRATION OF SOIL PARTICLES.
  4. MINIMUM OF 10" / MAXIMUM 4' BACKFILL WITH COMPACTED GRAVEL OR 3" PROCESS MATERIAL WITH 2" OF FINISH SURFACE (PAVED) OR 4" OF LOAM & SEED.
  5. FOR ORDERING, CONTACT GOODFLOW SOLUTIONS AT 203-869-2969.



Prepared By:  
**BRACKEN ENGINEERING, INC.**  
 49 HERRING POND ROAD BUZZARDS BAY, MA 02532  
 19 OLD SOUTH ROAD NANTUCKET, MA 02554  
 (tel) 508.833.0070 (fax) 508.833.2282  
 (tel) 508.325.0044 (www.brackeneng.com)

### PROPOSED SITE PLAN IN BOURNE, MASSACHUSETTS

Prepared For:  
**THE SEVEN STENS TRUST**  
 #435 CIRCUIT AVENUE  
 MAP 43.3 PARCEL 168

No.	Date	Revision Description	By
1	6/6/23	NO CHANGES	JPH

Date: MAY 31, 2023 Drawn: JPH/BEI Checked: ZLB/AMG Sheet: 2 of 2

5: \Users\jph\Drawings\Bourne\Drawn\44333-001.dwg Plot: 44333-001.dwg