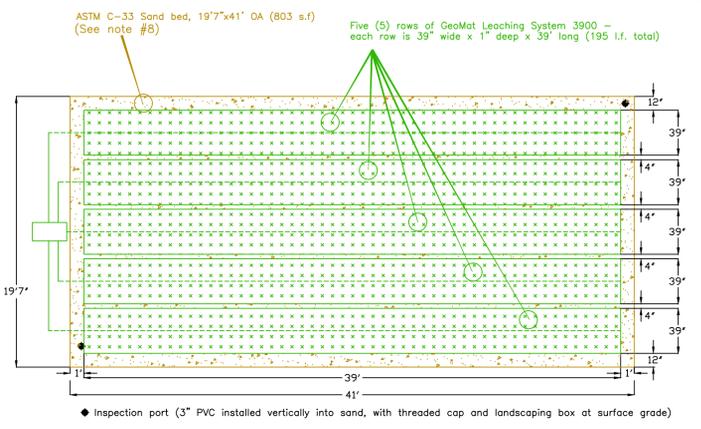


**Calculations:**

- 4 bedrooms, no disposal
- Est. Day Flow (EDF) = # B.R. x 110 G/Day  
EDF = 440 Gallons per day
- Perk rate = <30 min/inch, Class II soil (per M&DEP sieve policy)  
GeoMat loading rate with 6\"/>

**Proposed:**

- Reuse existing tanks and pump package
- Distribution box
- 803 s.f. sand bed (ASTM C-33 sand) - 19'7\"/>

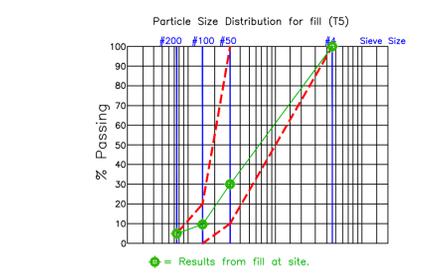


**Soil Logs**

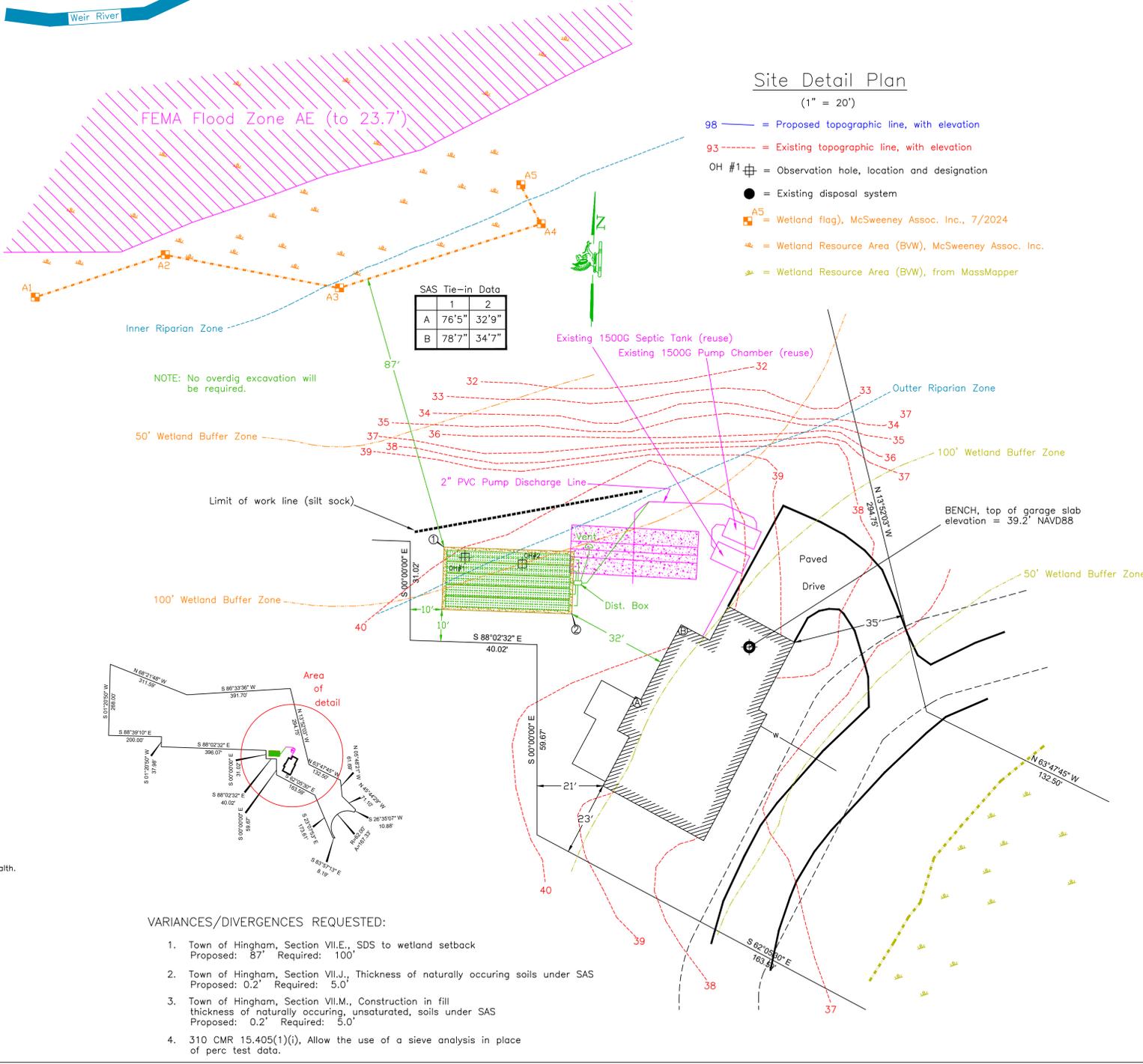
Elevation (Feet)	Observation Hole #1				
	Perk Rate (inches)	Soil Horizon	Soil Texture	Soil Color	Soil Mottling
40.2	0-72	Fill*			
34.2	72-120	C++	Sandy Loam	2.5 Y 5/2	Water weeping @ 118"

\* Passes sieve requirements for Title V fill (see below), can be reused for current installation.  
\*\* See attached sieve analysis results

Elevation (Feet)	Observation Hole #2				
	Perk Rate (inches)	Soil Horizon	Soil Texture	Soil Color	Soil Mottling
40.2	0-72	Fill			
34.2	72-120	c	Sandy Loam	2.5 Y 5/3	84"
30.2					10R 5/8

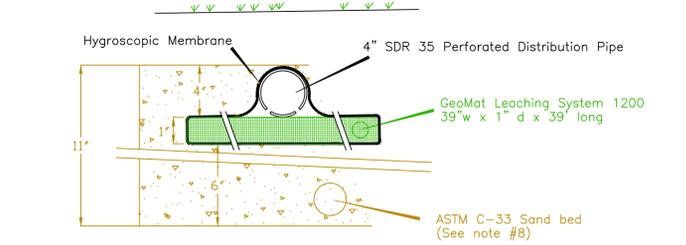


- Notes:**
- On 3/21/2024 soil tests were made, as shown here, by Terence McSweeney, a Massachusetts Department of Environmental Protection (DEP) approved Soils Evaluator, with P. Brennan observing for the Board of Health. The logs of these tests are as follows, with location as #1 and #2 on this plan.
  - All stone to be washed free of iron, fines, and dust. All "structures" to be precast concrete. All pipes to be P.V.C. Schedule 40, laid true to line and grade. All "structures" under pavement to be H-20 loading with cast iron covers and frames, set to grade, on all manholes.
  - The existing SAS is to be abandoned and disposed of to the satisfaction of the health authority.
  - It is the responsibility of the home owner to advise the site engineer of the location of all house plumbing prior to construction of the system.
  - No part of the proposed system shall be buried greater than 3' below the surface of the ground.
  - All work to conform to these plans, Title 5 of the Environmental Code (310 CMR 15.00 et. seq.) and supplementary regulations of the Hingham Board of Health.
  - House plumbing to be set to the grades specified on this plan, as necessary, with a pipe slope minimum of 0.01.
  - GeoMat Leaching System to be placed on 6" bed of ASTM C-33 sand. These materials must meet the following sieve specifications:
    - 3/8" sieve 100% passing
    - #4 sieve 95 - 100% passing
    - #8 sieve 85 - 100% passing
    - #16 sieve 50 - 85% passing
    - #30 sieve 25 - 60% passing
    - #50 sieve 10-30% passing
    - #100 sieve 2-10% passing
  - Results of sieve analysis submitted to Board of Health for approval prior to installation.
  - Property line information as depicted on this plan is to be used for Title V purposes only.



- VARIANCES/DIVERGENCES REQUESTED:**
- Town of Hingham, Section VII.E., SDS to wetland setback  
Proposed: 87" Required: 100'
  - Town of Hingham, Section VII.J., Thickness of naturally occurring soils under SAS  
Proposed: 0.2' Required: 5.0'
  - Town of Hingham, Section VII.M., Construction in fill thickness of naturally occurring, unsaturated, soils under SAS  
Proposed: 0.2' Required: 5.0'
  - 310 CMR 15.405(1)(i), Allow the use of a sieve analysis in place of perk test data.

- Site Detail Plan**  
(1" = 20')
- 98 — Proposed topographic line, with elevation
  - 93 - - - Existing topographic line, with elevation
  - OH #1 ⊕ = Observation hole, location and designation
  - = Existing disposal system
  - ⊠ A5 = Wetland flag, McSweeney Assoc. Inc., 7/2024
  - ⚡ = Wetland Resource Area (BWV), McSweeney Assoc. Inc.
  - ⚡ = Wetland Resource Area (BWV), from MassMapper

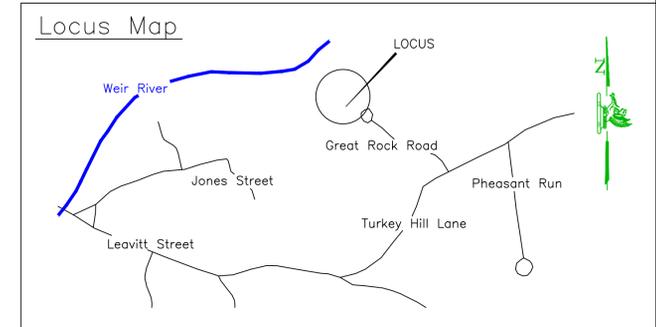


**SAS Detail**  
(not to scale)

I certify that in the fall of 1997 I was approved by the Mass. Department of Environmental Protection as a Soils Evaluator and that the soils analysis contained herein was performed by me consistent with the training, expertise, and experience described in 310 CMR 15.018(2).

I certify that there are no wells known to me, or reported to be within 500 feet of this proposed SAS, other than those shown on this plan. Public water supply wells in the area, location and distance from locus, are shown herein.

Terence McSweeney Date Brian McSweeney, P.E.



**Lot Data:**  
Deed: Cert. #107734, 8/5/2005  
Hingham Assessors Map 74/25 - 4.45 acres  
Reference Plan:  
Vanessa Hagen Brustin, Inc., 9/23/1988  
Plan #16698N, Plymouth County Land Court

The site is not located in a DEP approved Zone II, nor is it located within a Zone A as defined in 310 CMR 22.00.  
A portion of the site is located within the 100 year flood boundary

	Revisions:	Job Reference: Great Rock 10
		Proposed Septic System 10 Great Rock Road Hingham, Massachusetts
	Brian McSweeney 150 Union Street Hingham, MA (781) 749-2859	Terence McSweeney 745 Winter Street Hanson, MA (781) 826-4571
	Date: 6/1/2024	Drawn By: T McS
	Checked By: B McS	