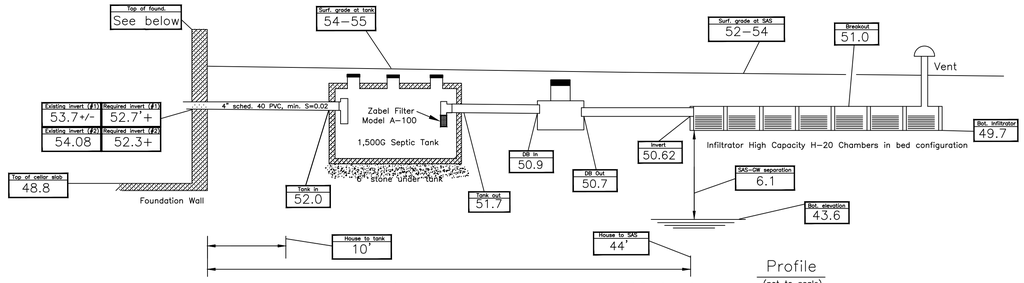


Profile
(not to scale)

NOTE: All elevations referenced to 56.00' BENCH at top of foundation at corner "A" (NAVD)

Soil Logs

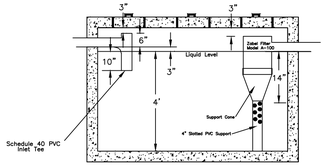
Elevation (Feet)	Observation Hole #1				
	Perk Rate = <2 min/in (@ 18")				
53.6	Depth (inches)	Soil Horizon	Soil Texture	Soil Color	Soil Mottling
52.8	0–10	A	Loamy Sand	10 YR 3/3	None
52.1	10–18	B	Loamy Sand	10 YR 4/6	None
43.6	18–120	C	V. Grav. Sand	2.5 Y 5/3	None

Elevation (Feet)	Observation Hole #2				
	Perk Rate =				
52.7	Depth (inches)	Soil Horizon	Soil Texture	Soil Color	Soil Mottling
51.9	0–10	A	Loamy Sand	10 YR 3/3	None
50.7	10–24	B	Loamy Sand	10 YR 4/6	None
42.7	24–120	C	V. Grav. Sand	2.5 Y 5/3	None

Elevation (Feet)	Observation Hole #3				
	Foundation test hole – no perc test				
55.7	Depth (inches)	Soil Horizon	Soil Texture	Soil Color	Soil Mottling
54.7	0–12	A	Loamy Sand	10 YR 3/3	None
43.0	12–153	C	V. Grav. Sand	2.5 Y 5/3	None

"Groundwater" for foundation hole = 43.0'
18" vertical clearance = 44.5' minimum
elevation at bottom of new cellar slab
4" cellar slab, top new slab elevation = 44.83' (minimum)
Existing cellar floor elevation = 48.83'
Therefore, new cellar floor can be lowered up to 4.0' below existing cellar floor

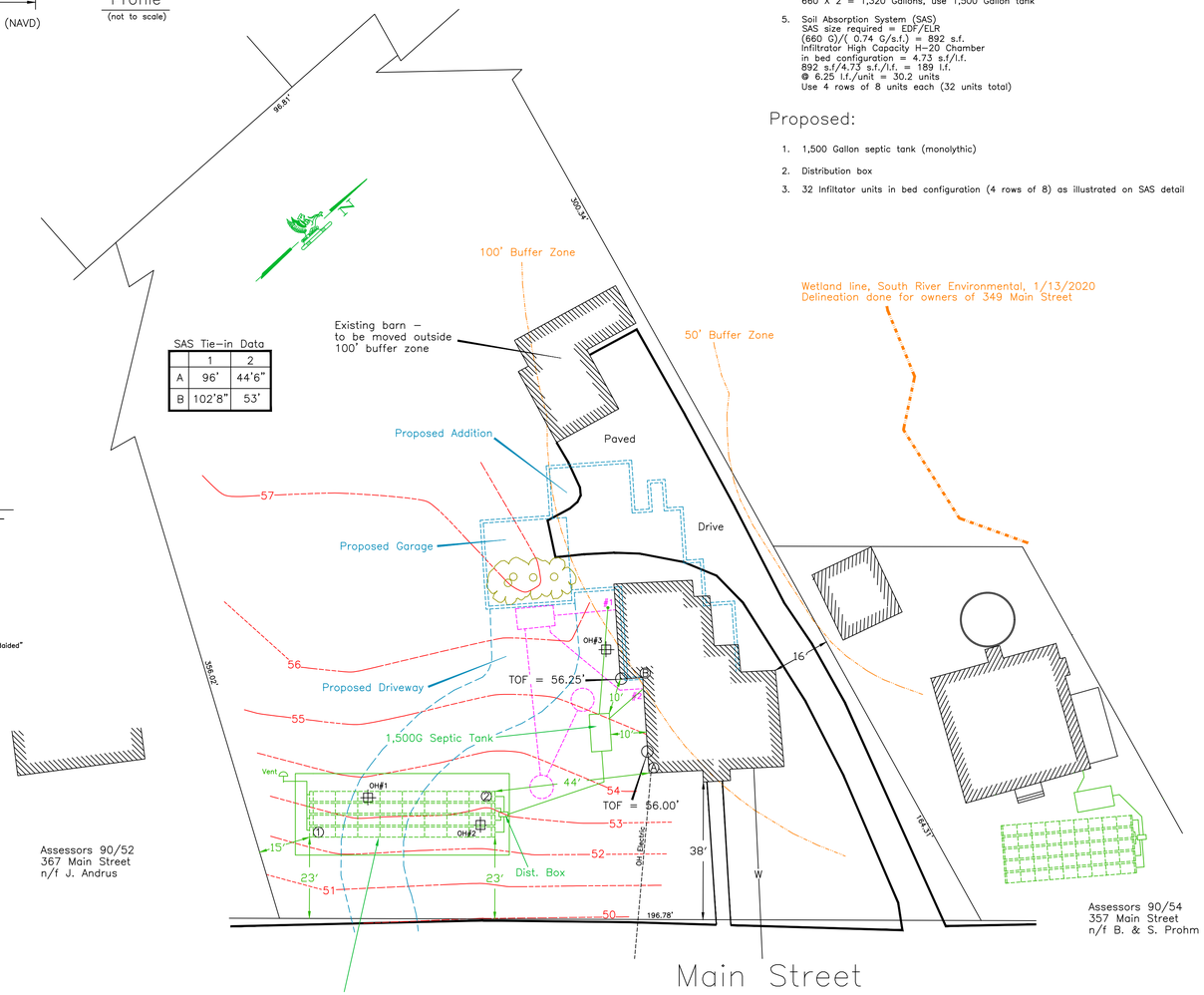
Tank Detail
Not to scale



NOTE: Tanks in groundwater must be waterproofed and "bandaided"

Notes:

1. On March 5, 2020 soil tests were made, as shown here, by Terence McSweeney, a Massachusetts Department of Environmental Protection (DEP) approved Soils Evaluator, with B. Nee observing for the Board of Health. The logs of these tests are as follows, with location as #1 and #2 on this plan.
2. 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.
3. The existing SAS is to be abandoned and disposed of to the satisfaction of the health authority.
4. 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.
5. No part of the proposed system shall be buried greater than 3' below the surface of the ground.
6. The Zabel filter is to be covered with a 20" diameter (minimum) metal cover, containing in indelible marking (paint or otherwise) the following notice: "There is a filter under this cover".
7. 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.
8. House plumbing to be set to the grades specified on this plan, as necessary, with a pipe slope minimum of 0.01.
9. All unsuitable material below breakout elevation of 51.0' is to be removed and replaced with material suitable to the health authority, for 5' around SAS. Fill specifications are as follows ("overdig"):
   1. No material is larger than 2".
   2. Not more than 45% is retained on #4 sieve.
   3. For the material which passes the #4 sieve, the following limits apply:
      #50 sieve 10 – 100% passing
      #100 sieve 0 – 20% passing
      #200 sieve 0 – 5% passing
   4. Results of sieve analysis submitted to Board of Health for approval prior to instalation.



SAS Tie–in Data		
	1	2
A	96'	44'6"
B	102'8"	53'

Wetland line, South River Environmental, 1/13/2020
Delineation done for owners of 349 Main Street

Limits of Overdig. All unsuitable material between breakout elevation (51.0') and bottom of B horizon (50.7', Hole #2) must be removed for instalation. Note: Elevations and volumes are estimated from site data obtained at the time of percolation testing and may vary depending upon conditions encountered at the time of system instalation.

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

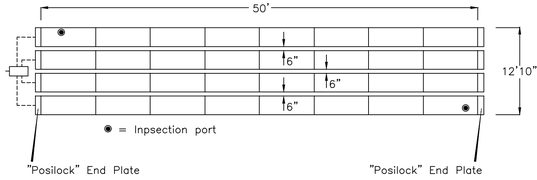
VARIANCES/DIVERGENCES REQUESTED: None

Calculations:

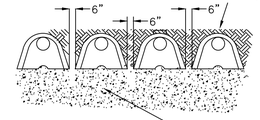
1. 6 bedrooms (by permit), no disposal
2. Est. Day Flow (EDF) = # B.R. x 110 G/Day
   EDF = 660 Gallons per day
3. Perk rate = <2 min/inch, Class I soil (see soil logs)
   Effluent Loading (ELR) = 0.74 G/s.f.
4. Septic Tank – 2 X EDF with 1,500 G minimum
   660 X 2 = 1,320 Gallons, use 1,500 Gallon tank
5. Soil Absorption System (SAS)
   SAS size required = EDF/ELR
   (660 G)/(0.74 G/s.f.) = 892 s.f.
   Infiltrator High Capacity H–20 Chamber
   in bed configuration = 4.73 s.f./l.f.
   892 s.f./4.73 s.f./l.f. = 189 l.f.
   @ 6.25 l.f./unit = 30.2 units
   Use 4 rows of 8 units each (32 units total)

Proposed:

1. 1,500 Gallon septic tank (monolythic)
2. Distribution box
3. 32 Infiltator units in bed configuration (4 rows of 8) as illustrated on SAS detail

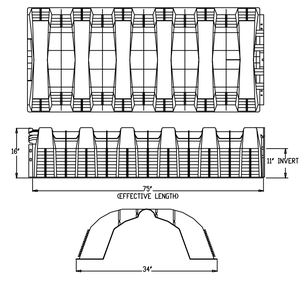


Backfill with native C horizon soils or "Title V" Spec. sand



"Title V" Spec. sand (see note #9), from bottom of overdig to base of Infiltrator chamber

Infiltrator High Capacity H–20 Chamber



SAS Detail
(not to scale)

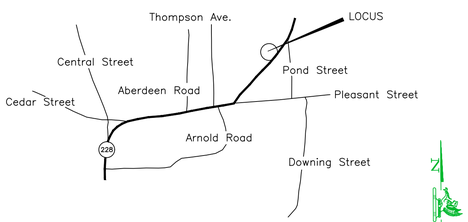
I certify that in the fall of 1997 I was approved by the Mass. Department of Environmental Protection as a Soils Evaluator and that the soils analysis contained herein was preformed by me consistent with the training, expertise, and experience described in 310 CMR 15.018(2).

Terence McSweeney — Date

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 suppy wells in the area, location and distance from locus, are shown herein.

Terence McSweeney, R.S.

Locus Map



Lot Data:
Deed: LCC# 113418 – 6/19/2009
Hingham Assessors Map 90/53 – 1.28 Acres
Reference Plan:
Cavanaro Consulting, 12/12/2018

Revisions:

McSweeney Associates, Inc.
McS
Environmental Engineering

Proposed Septic System
361 Main Street
Hingham, Massachusetts

745 Winter Street, Hanson, MA 02341

Thomas F. McSweeney 1894–1977
Brian McSweeney 1923–2015
Terence K. McSweeney 781–826–4571
Colin T. McSweeney 781–570–9381

Job Reference:	KirkM
Scale:	As Noted
Date:	4/25/2020
Drawn By:	T McS
Checked By:	C McS