

Plan of Land

SCALE: 1"=20'
 MAP NO.: 22
 PARCEL NO.: 17
 AREA: 70,597± SF.

Legend

- 100 — EXISTING CONTOUR
- 100+0 EXISTING SPOT ELEVATION
- 100 — PROPOSED CONTOUR
- ⊗ THI PERCOLATION TEST
- X SEWAGE LINE
- W — SUSPECTED WATER LINE
- G — APPROXIMATE GAS LINE
- — APPROXIMATE PROPERTY LINE
- O.W. — U.E. — OVERHEAD WIRE OR UNDERGROUND ELECTRIC

Notes

- GENERAL NOTES:**
- THIS PLAN IS TO BE USED ONLY FOR THE PERMITTING AND INSTALLATION OF A SEWAGE DISPOSAL SYSTEM. IT IS NOT TO BE USED FOR ANY OTHER PURPOSE.
 - NO CHANGES TO THIS PLAN ARE PERMITTED WITHOUT THE PRIOR WRITTEN APPROVAL OF SOURATI ENGINEERING GROUP, LLC.
 - INSTALLATION SHALL BE IN STRICT CONFORMITY WITH TITLE 5 OF THE MASSACHUSETTS STATE SANITARY CODE AND THE RULES & REGULATIONS OF THE TOWN OF WEST TISBURY BOARD OF HEALTH.
 - MACHINERY THAT MAY DISTURB PIPE ALIGNMENT IN THE DISPOSAL SYSTEM SHALL NOT BE USED ON THE DISPOSAL AREA.
 - NO EXISTING WELLS WERE FOUND WITHIN 150' FROM THE PROPOSED SOIL ADSORPTION SYSTEM, OR WITHIN 50' FROM THE SEPTIC TANK.
 - FINISHED SURFACE OF LEACHING AREA SHALL BE GRADED TO INSURE RUNOFF (2% MINIMUM SLOPE).
 - THE SEPTIC TANK AND THE DISTRIBUTION BOX SHALL BE EITHER:
 - A WATER TIGHT ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND WARRANTY, OR
 - MADE WATER TIGHT BY THE MANUFACTURER, EQUIPMENT SUPPLIER OR INSTALLER, USING ASPHALT OR SYNTHETIC POLYMER SEALER SPECIFIED BY THE CONCRETE OR SYNTHETIC MATERIAL MANUFACTURER.
 - SEPTIC TANKS AND DISTRIBUTION BOXES SHALL BE LEVEL AND TRUE TO GRADE ON A LEVEL STABLE BASE THAT HAS BEEN MECHANICALLY COMPACTED AND ONTO WHICH 6 INCHES OF CRUSHED STONE HAVE BEEN PLACED TO MINIMIZE UNEVEN SETTLING.
 - ALL SYSTEM COMPONENTS SHALL BE CONSTRUCTED OF CORROSION RESISTANT MATERIALS.
 - ALL PIPING SHALL BE A MINIMUM OF SCHEDULE 40 PVC UNLESS OTHERWISE NOTED.
 - DISTRIBUTION BOX OUTLET LINES SHALL BE LEVEL FOR A MINIMUM OF THE FIRST TWO FEET OF THEIR LENGTH.

CONSTRUCTION IN FILL:

FILL MATERIAL FOR SYSTEMS CONSTRUCTED IN FILL SHALL CONSIST OF SELECT ON-SITE OR IMPORTED SOIL MATERIAL. THE FILL BE COMPOSED OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES, MIXTURES AND LAYERS OF DIFFERENT CLASSES OF SOIL. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN TWO INCHES. A SIEVE ANALYSIS USING A #4 SIEVE SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL UP TO 25% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED ON THE #4 SIEVE. SIEVE ANALYSIS SHALL BE PERFORMED ON THE FRACTION OF THE FILL SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSES MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
#4	4.75 MM	100 ±
#50	0.30 MM	10 ± - 100%
#100	0.15 MM	0 ± - 20%
#200	0.075 MM	0 ± - 5%

HIGH CAPACITY INFILTRATOR CHAMBER SOIL ADSORPTION SYSTEM:

- THE INFILTRATORS SHALL BE INSTALLED IN STRICT CONFORMITY WITH THE MANUFACTURER SPECIFICATIONS.

Design Computations:

HYDRAULIC LOADING:

6 + 1 + 7 BEDROOMS AT 110 GPD = 770 GPD
 A GARBAGE DISPOSAL IS NOT ALLOWED IN THIS DESIGN.

SEPTIC TANK SIZE:

INCREASE FLOW TO 200% (TITLE VI) = 1540 GALLONS USE 2,000 GALLON SEPTIC TANK.

LEACHING CAPACITY:

DESIGN PERCOLATION RATE IS 5 MIN/INCH SOIL TYPE: CLASS 1
 EFFLUENT LOADING RATE 0.74 G/S.F./D.
 USE 1 LEACHING FIELD WITH 36 CHAMBERS.

TOTAL AREA OF FIELD = 36 CHAMBERS X 6.25 L.F./CHAMBER X 4.73 S.F./L.F. = 1,064 S.F.
 TOTAL LEACHING CAPACITY PROVIDED = 1,064 S.F. X 0.74 G/S.F./D = 787 G/D.
 TOTAL LEACHING CAPACITY PROVIDED = 787 G/D.
 TOTAL HYDRAULIC LOADING REQUIRED = 770 G/D.

SOILS LOG

TEST HOLE #1	DATE: 2/24/2020	ELEV.: 58.0
DEPTH	HORIZON	TEXTURE
00-08"	A	LOAMY SAND
08-36"	B	LOAMY SAND
36-120"	C	SAND

WORKSHEET REFERENCE: 102266W5

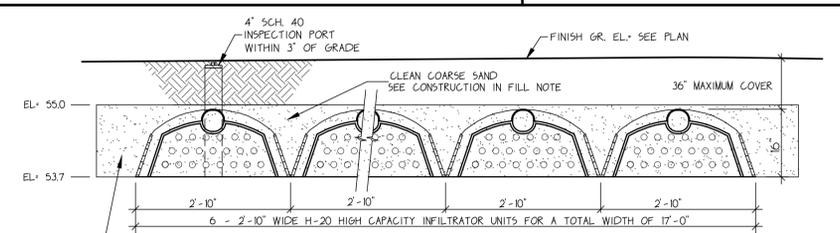
DATUM: ALL ELEVATIONS ARE RELATIVE TO AN ASSUMED DATUM OF 60.00 SET ON TOP OF NAIL IN TREE. SEE PLAN FOR LOCATION.

ALL SOILS EXTENDING OUT 5'-0" AROUND THE LEACHING FIELD TO BE EXCAVATED BETWEEN ELEVATIONS 55.0 AND 53.7 AND REPLACED WITH CLEAN, COARSE, COMPACT SAND WITH A PERCOLATION RATE OF 2 MPI BEFORE AND AFTER PLACEMENT. SEE CONSTRUCTION IN FILL NOTE.

EXISTING CESSPOOLS TO BE PUMPED DRY, CRUSHED AND BACKFILLED WITH CLEAN, COARSE, COMPACT SAND. SEE CONSTRUCTION IN FILL NOTE.

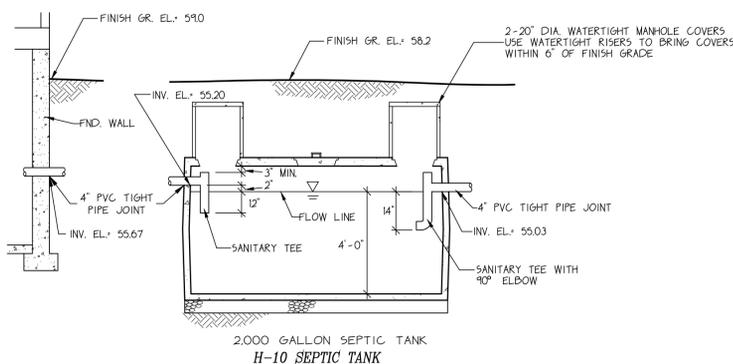
NOTES:

- THE OWNER SHALL SUBMIT THE EXISTING HOUSE FLOOR PLANS TO THE WEST TISBURY BOARD OF HEALTH FOR THEIR APPROVAL.
- ALL UNDERGROUND UTILITIES, INCLUDING WATER, PHONE, AND ELECTRICAL LINES, MUST BE LOCATED BY THE CONTRACTOR AND DIG SAFE SYSTEM, INC. MUST BE CONTACTED AT 1-888-344-7233 PRIOR TO ANY EXCAVATION.
- ENGINEER SHALL INSPECT BOTTOM OF EXCAVATION IN THE LEACHING FIELD PRIOR TO PLACEMENT OF ANY FILL.

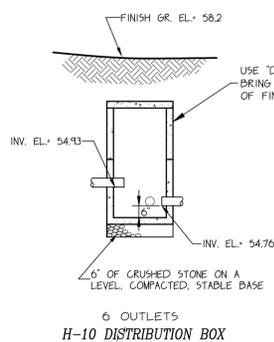


ALL SOILS EXTENDING OUT 5'-0" AROUND THE LEACHING FIELD TO BE EXCAVATED BETWEEN ELEVATIONS 55.0 AND 53.7 AND REPLACED WITH CLEAN, COARSE, COMPACT SAND WITH A PERCOLATION RATE OF 2 MPI BEFORE AND AFTER PLACEMENT. SEE CONSTRUCTION IN FILL NOTE.

Cross Section of H-20 High Capacity Infiltrator Chamber Field
 Not To Scale

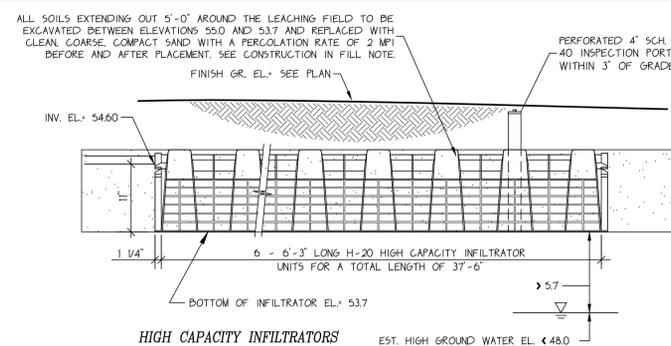


2,000 GALLON SEPTIC TANK
 H-10 SEPTIC TANK



6 OUTLETS
 H-10 DISTRIBUTION BOX

Profile of System
 Not To Scale



HIGH CAPACITY INFILTRATORS

EST. HIGH GROUND WATER EL. < 48.0

New Sewage Disposal System
 In The Town Of
 West Tisbury

Site:
 Existing Six Bedroom House Plus
 Proposed One Bedroom Addition
 for a Total of Seven Bedrooms
 Map 22, Parcel 17
 49 Old Courthouse Road

Owner:
 Rosalie H. Powell, Trustee of
 The Rosalie H. Powell Trust
 32 Wentworth Road
 Canton, MA 02021

Scale: As Shown Date: March 11, 2020
 Job No.: 102266 Drawing No.: 102266SP
 Sheet 1 of 1



P.O. Box 4458
 107 Beach Road, Suite 202
 Vineyard Haven, MA 02568
 Phone: (508) 693-9933
 Fax: (508) 693-4933

- Revisions:**
- △
 - △
 - △
 - △
 - △