

Select fill placed within and adjacent to leaching system areas shall be a clean material comprised of sand, or sand and gravel, free from organic matter and foreign substances. The select fill shall meet the following requirements unless otherwise approved by the design P.E. Select fill exceeding 6 percent passing the #200 sieve based upon a wet sieve analysis cannot be approved by the design P.E.

- The select fill shall not contain any material larger than the three (3) inch sieve.
- Up to 45% of the dry weight of the representative sample may be retained (gravel portion) on the #4 sieve.
- The material that passes the #4 sieve is then reweighed and the sieve analysis started.
- The remaining sample shall meet the following gradation criteria:

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50*	10-75
#100	0-20	0-5
#200	0-5	0-2.5

* Percent passing the #40 sieve can be increased to no greater than 75 if the percent passing the #100 sieve does not exceed 10 and the #200 sieve does not exceed 5.

GROUND WATER MONITORING

DATE	AT T.P. #1	AT T.P. #2
March 17, 2015	23"	18"
March 24, 2015	25"	20"
April 1, 2015	17"	12"
April 8, 2015	23"	15"
April 14, 2015	24"	17"
April 21, 2015	32"	26"
February 11, 2020	52"	49"
February 18, 2020	55"	46"
February 28, 2020	52"	46"

OWNER: Estate of Jane Palmer
Frank Palmer, Executor
7189 Cedarwood Circle
Boulder, CO 80301

SYSTEM LOCATION: 142 Turnpike Road
Somers, CT 06071

BASIS OF DESIGN: Number of Bedrooms: 3
Garbage Grinder: No

SOIL TESTS: Performed By: Michael Mocko, R.S. (7-25-2019) & (10-6-2014)
Observed By: Steve Jacobs, R.S. - Town of Somers Health Agent

PERC DESIGN RATE: 17 min/in

TEST PIT #1 - (10-6-2014)
0 - 9" FSL 10YR/2
9" - 16" Stoney FSL 7.5YR5/6
16" - 27" Very Stoney Firm Sandy loam 7.5YR6/2
27" - 68" Very Stoney Firm Sandy Loam 7.5YR4/3
Estimated Seasonal High Groundwater @ 16" No Ledge Roots @ 18"

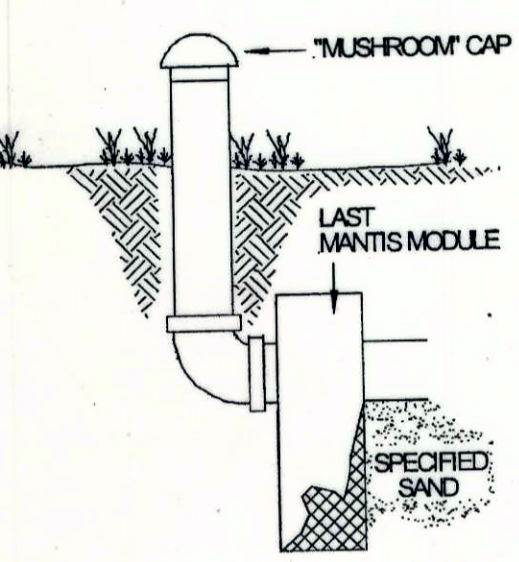
TEST PIT #2 - (10-6-2014)
0 - 8" FSL 10YR/2
8" - 26" Stoney FSL 7.5Y6/2
26" - 52" Very Stoney Firm Sandy loam 7.5YR4/3
Estimated Seasonal High Groundwater @ 8" No Ledge Roots @ 13"

TEST PIT #201 - (7-25-2019)
0 - 7" Ap Topsoil
7" - 16" Bw 10YR5/3 Somewhat Friable, Very Stoney, Fine
16" - 23" Bg 10YR6/2 Gleyed, Somewhat Friable, Sandy Loam
23" - 48" Cd 10YR4/4 Very Firm, Very Stoney, Sandy Loam Till
Estimated Seasonal High Groundwater @ 10" No Ledge Roots @ 20"

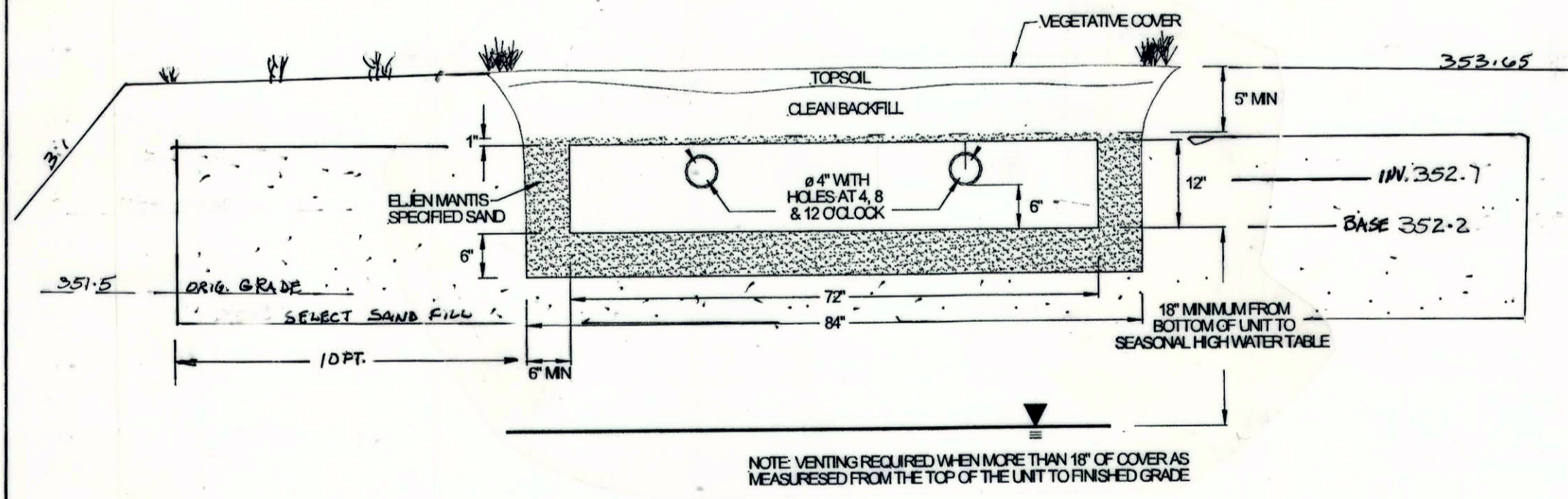
TEST PIT #202 (7-25-2019)
0 - 10" Ap Topsoil
10" - 16" Bw 10YR5/3 Somewhat Friable, Very Stoney, Fine
16" - 32" Bg 10YR6/2 Gleyed, Somewhat Friable, Sandy Loam
32" - 52" Cd 10YR4/4 Very Firm, Very Stoney, Sandy Loam Till
Estimated Seasonal High Groundwater @ 13" No Ledge Roots @ 21"

CODE REQUIREMENTS:
Septic Tank: 1250 gal. Required. Provide 1500 gal. two compartment septic tank with outlet filter
Leaching Area: 675 sq. ft. Required.
Provided Leaching Area: 96 lin. ft. Mantis in Select Sand Fill - 96 Ft. Mantis Double-Wide 58 - Rated 11.6 SF/LF
1 Trench at 96 ft.
96 lin. ft. of Mantis Double Wide 58 x 11.6 SF per ft. = 1113.6 sq. ft. Provided. See Plan.
Minimum Spread Calculation with Sand Fill (use 24" to R): MLSS = HF x FF x PF (17 min/in perc)
66 x 1.5 x 1.5 = 148.5 MLSS Required.
Use Radial Calculation: 106 + 106 + 6 + 6 = 224 ft. Provided.

MANTIS 536-8 SERIES VENTING DIAGRAM



MANTIS 58 CROSS SECTION



NOTE: VENTING REQUIRED WHEN MORE THAN 18\"/>

EROSION CONTROL:

- PRIOR TO EARTH MOVING, ESTABLISH SILT BARRIER.
- DRIVEWAY ENTRANCE TO BE PROVIDED WITH A STONE TRACKING MAT FOR A MINIMUM LENGTH OF 30 FEET FROM ROAD EDGE.
- DRIVEWAY TO BE CONSTRUCTED WITH A MINIMUM 12 inch DEPTH BASE OF BANK RUN GRAVEL PRIOR TO POURING FOUNDATION.
- PERMANENT SEEDING OF DISTURBED SOIL SHALL FOLLOW WITHIN 2 WEEKS OF COMPLETED CONSTRUCTION. FOLLOW RECOMMENDATIONS IN CONNECTICUT EROSION CONTROL HANDBOOK.

IF PERMANENT SEEDING CAN NOT BE COMPLETED DUE TO SEASON, PROVIDE MULCHING OR TEMPORARY SEEDING. SEE CONNECTICUT EROSION CONTROL HANDBOOK.

PERMANENT SEEDING

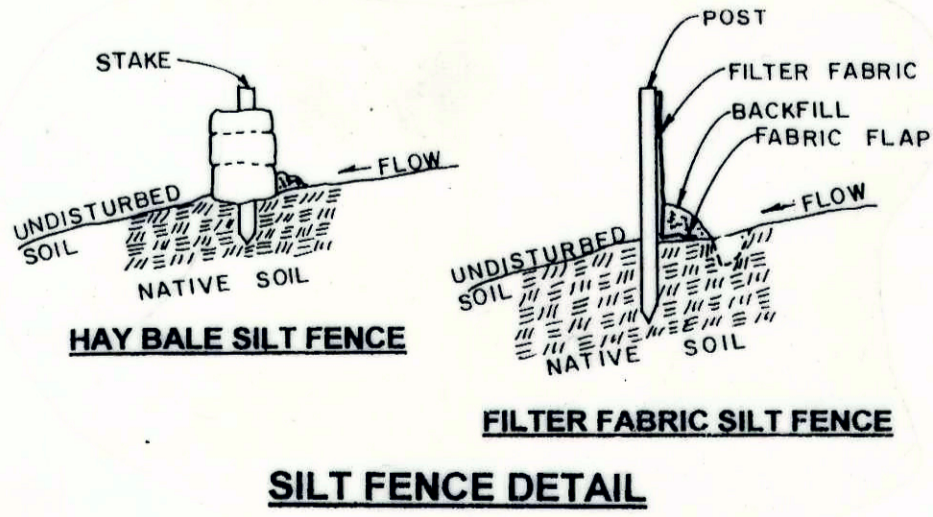
Dates: April 15 - June 15 or Aug. 15 - Sept. 15

No.	Seed Mixture	Lbs./Acre	Lbs./1000 sq. Ft.	Notes
1.	Kentucky Bluegrass	20	.45	Lawn Areas
	Creeping Red Fescue	20	.45	Regular mowing required
	Perennial ryegrass	5	.10	
	Total	45	1.00	
2.	Creeping Red Fescue	20	.45	Naturalized area Offers Wildlife food and cover
	Redtop	2	.05	
	Tall Fescue or Smooth bromegrass	20	.45	
	Total	42	.95	
3.	Creeping Red Fescue	20	.45	Mowing recommended Once a year after July
	Bird's-foot trefoil with inoculant	8	.20	
	Tall Fescue or Smooth bromegrass	20	.45	
	Total	48	1.10	
4.	Bird's-foot trefoil with inoculant	8	.20	Naturalized area - steep banks
	Crownvetch with inoculant	15	.35	
	Creeping Red Fescue, Tall Fescue or Smooth bromegrass	20	.45	
	Total	43	1.00	

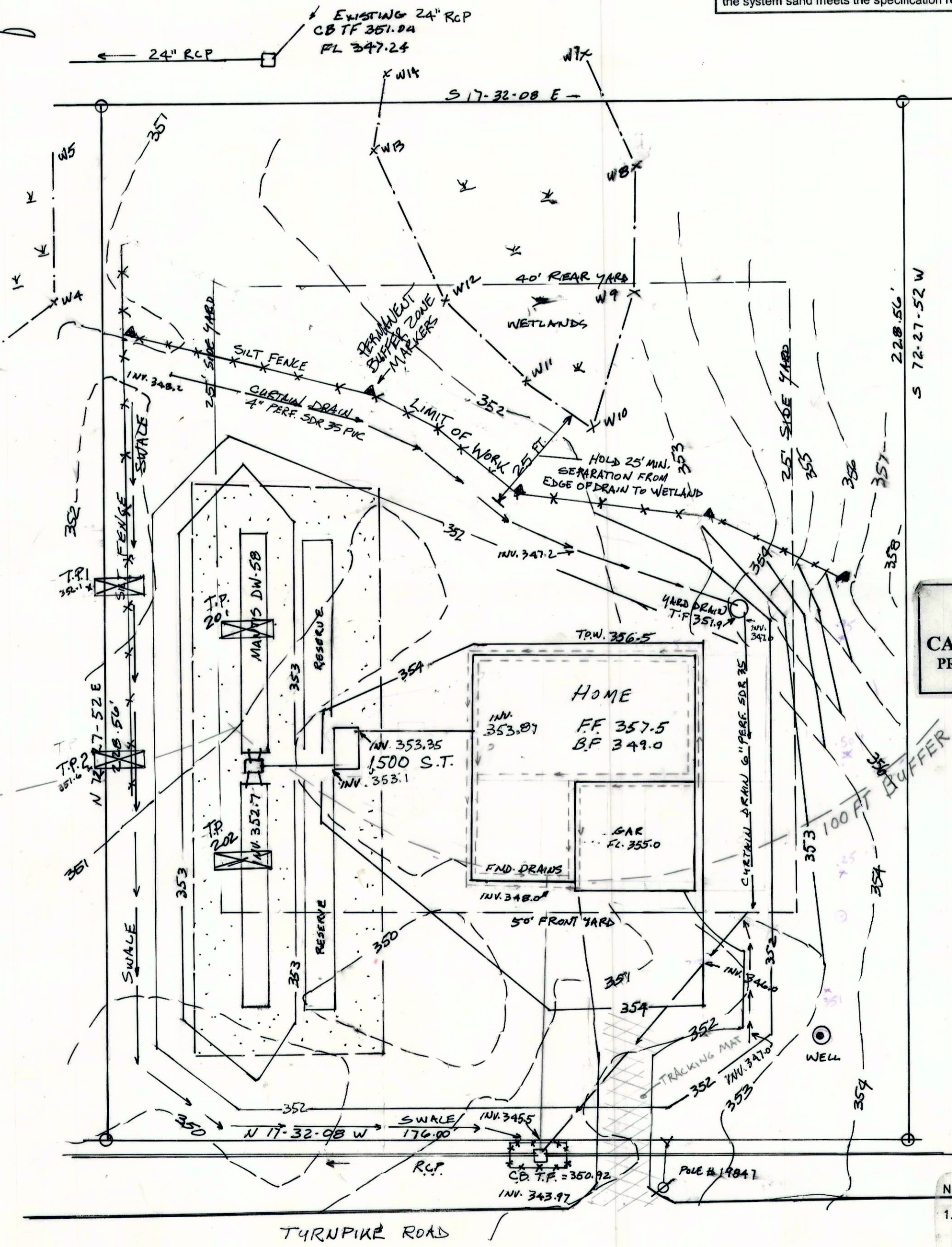
FERTILIZER: 10-10-10 300 lbs/acre or 7.5 lbs/1000 sq. ft.
LIME: Lime 3 tons/acre or 135 lbs/1000 sq. ft.

TEMPORARY SEEDING RATES AND DATES

SPECIES	SEEDING RATES (pounds)		OPTIMUM SEEDING DATE		DEPTH
	per acre	per 1000 sq. ft.	DATE	DEPTH	
Annual ryegrass	40	1.0	8/1-6/15	0.5	
Winter rye	120	3.0	4/15-6/15	1.0	



SILT FENCE DETAIL



NOTIFY CONNECTICUT CALL BEFORE YOU DIG PRIOR TO ANY EXCAVATION 1-800-(922-4455)

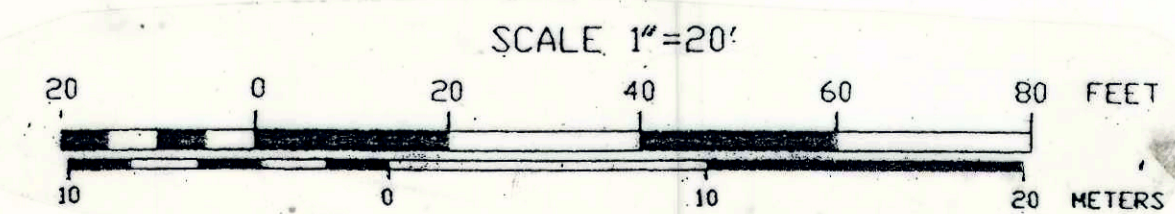
The wetland soils on this site were identified in the field by using the criteria required by Ct. P.A. 72-155 as amended by P.A. 73-571, P.A. 87-338 and P.A. 87-533. The boundaries of these soils and identified watercourses are accurately represented on this plan.

John P. Jani
John Jani
Certified Soil Scientist

NOTES:

- THIS SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT. IT IS AN IMPROVEMENT LOCATION SURVEY BASED UPON A RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON



RACHEL L. DEARBORN, LICENSED LAND SURVEYOR

L.S. 70295 LICENSE NO.

SEPTIC SYSTEM CONSTRUCTION NOTES:

- FILL FOR SEPTIC AREA. STRIP EXISTING SOIL UNDER PROPOSED LEACHING AREA TO A DEPTH OF AT LEAST 6\"/>

ATTACHMENT TO INLAND WETLANDS & WATERCOURSES PERMIT APPLICATION

SITE PLAN & SEPTIC SYSTEM DESIGN

142 TURNPIKE ROAD
SOMERS, CT

PREPARED FOR:

ESTATE OF JANE PALMER
FRANK PALMER, EXECUTOR

7189 CEDARWOOD CIRCLE, BOULDER, CO 80301

PREPARED BY:

MICHAEL MOCKO ENVIRONMENTAL CONSULTANT
36 HAMPDEN ROAD, STAFFORD SPRINGS, CT 06076

TELEPHONE: (860) 684-7205

ENGINEER: JOSEPH E. WARD, P.E.

1200 CONVERSE STREET, LONGMEADOW, MA 01106

TELEPHONE: (413) 567-6560

SCALE: 1\"/>

REV. Feb 29, 2020 PER TOWN COMMENTS.
REV. 10-1-2020 HOLD 25\"/>

