N/F
ENFIELD PROPERTIES, LLC
63 DENISON ROAD

N/F
SALVATORE J. ALBANO
79 DENISON ROAD

N/F
SOMERS SPORTSMEN'S ASSOCIATION
85 DENISON ROAD

N/F
THERESA L. BOTELLIO
68 DENISON ROAD

N/F
CHRISTIAN BUJDUD, MARUEEN BUJDUD,
& DENNIS BUJDUD
241 GULF ROAD

LAND OF
JOHN L. & SANDRA KEARNS
307,081 Sq.Ft.
7.05 Acres

DENISON ROAD

BENT REBAR FOUND

I.PIPE FOUND

EVERSOURCE 11090

I.PIPE FOUND 817.14' ALONG RIGHT OF WAY

I.PIPE FOUND 1002.20' ALONG RIGHT OF WAY

I. PIPE FOUND

S23°53'00"E
282.97' (CORRECTED)

ANTI-TRACKING PAD

SOMERS SPORTSMEN'S ASSOCIATION CLAIMS TO THE CENTERLINE OF THE OLD LANEWAY PER MAP REFERENCE 3.B. RIGHTS OF OTHERS MAY EXIST

L=125.38' R=1900.00' (CORRECTED) Δ=3°46'20"

PROPOSED UTILITIES CONTRACTOR TO COORDINATE WITH APPROPRIATE UTILITY COMPANY

100' REGULATED AREA

PROPOSED WELL

50' F.Y.

PAVED DRIVEWAY

DRIVEWAY SLOPE DOES NOT EXCEED 10% SLOPE

PROPOSED 4BR HOUSE
FF=517.0
TW=516.5
BSMT=508.0

GF=515.5

GF=507.7

PORCH

DECK

STEPS

PATIO

VINYL FENCE ENCROACHMENT

WIRE FENCE ENCROACHMENT

SHED

SHED ENCROACHMENT

LIMIT OF TREE CLEARING

PROPOSED FOOTING DRAIN

4" PVC

SOIL STOCKPILE AREA

RESERVE AREA
ROWS OF STONE TRENCH
(PUMP REQUIRED)

CLEANOUT

WATER TREATMENT WASTEWATER (WTW)
(2) QUICK 4 INFILTRATORS
BOTTOM INFILTRATOR SET 12" ABOVE MAX. GROUNDWATER AND 24" ABOVE LEDGE.
(SEE DESIGN NOTES)

SILT FENCE BARRIER (TYP)

BENCHMARK:
15" BLACK BIRCH
TOP NAIL=500.00

CONTRACTOR TO COORDINATE CONFIRMATORY TEST PIT WITH HEALTH DISTRICT PRIOR TO SEPTIC INSTALLATION

PATH "LANEWAY"

LIMIT OF TREE CLEARING

S21°03'30"W
484.93' (CORRECTED)

N21°34'29"E
515.33'

25' S.Y.

40' R.Y.

566.50'

N 39°40'31" W

N 10°19'18" W
255.00'

GRAPHIC SCALE 1"=30'
30 15 0 30 60 90

NOTES:

1. THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT". THIS IS AN IMPROVEMENT LOCATION SURVEY AND A DEPENDANT RESURVEY WITH CORRECTIONS CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY CLASS T-2.
2. BEARINGS DEPICTED ON THIS PLAN ARE BASED THE PLAN REFERENCED IN NOTE 3A. ELEVATIONS DEPICTED ARE ON AN ASSUMED DATUM.
3. REFERENCE IS MADE TO THE FOLLOWING MAPS:
   A. "PLAN OF LOTS SECTION I FOR MARY CARPENTER BRENNAN SOMERS, CONNECTICUT" BY FRANK A. MEUNIER & ASSOCIATES, INC. DATE: JANUARY 7, 1975. REVISED: JANUARY 22, 1975.
   B. "LAND EXCHANGE PLAN PREPARED FOR STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SOMERS SPORTSMEN'S ASSOCIATION, INC. 79 DENISON ROAD AND GULF ROAD SOMERS, CONNECTICUT STAFFORD, CONNECTICUT" BY MESSIER & ASSOCIATES, INC. DATE: 02/07. REVISED: 04-24-08.
4. PARCEL IS LOCATED IN THE RESIDENCE A-1 ZONE.
5. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND OTHER DATA SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES AND/OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES, LLC. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.

LEGEND

- PROPERTY BOUNDARY
- IRON PIN/PIPE FOUND
- ZONING SETBACK
- 268 EXISTING ELEVATION CONTOUR
- x260.7 EX. ELEVATION
- OHW UTILITY POLE/OVERHEAD WIRE
- 326 PROPOSED CONTOUR
- x319.0 PROPOSED ELEVATION
- F PROPOSED FOUNDATION DRAIN
- PROPOSED SILT FENCE BARRIER
- S BUILDING SEWER
- SOLID PIPE
- OVERFLOW PIPE
- LEACHING CHAMBERS
- SEPTIC TANK
- DISTRIBUTION BOX
- OVERFLOW BOX
- PT PERCOLATION TEST
- LIMIT OF INLAND WETLANDS

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN.

GEORGE T. LOGAN, MS, PWS
Registered Soil Scientist

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ERIC R. PETERSON — L.S. 23430 REGISTRATION NO.

STATE OF CONNECTICUT
ERIC R. PETERSON
No. 23430
LICENSED
LAND SURVEYOR

STATE OF CONNECTICUT
ERIC R. PETERSON
No. 23430
LICENSED
PROFESSIONAL ENGINEER

REVISIONS

IMPROVEMENT LOCATION SURVEY
PERMIT PLAN AND
SUBSURFACE DISPOSAL SYSTEM DESIGN
PREPARED FOR PATSUN CONSTRUCTION
80 DENISON ROAD
SOMERS, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
E.R.P.	1"=30'	01-15-2021	1 OF 2	10937A

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10937\Dwg\10937A.dwg

MINIMUM LEACHING SYSTEM SPREAD (MLSS)

HYDRAULIC FACTOR (HF) X FLOW FACTOR (FF) X PERCOLATION FACTOR (PF)

MLSS = HF X FF X PF 30 X 1.75 X 1.5 = 79

HYDRAULIC FACTOR (HF)

AVERAGE DEPTH TO RESTRICTIVE LAYER

	HYDRAULIC GRADIENT (% OF SLOPE)								
	<1	1.1–2	2.1–3	3.1–4	4.1–6	6.1–8	8.1–10	10.1–15	>15
<17.9	SEE	NOTE	#1						
18–22	72	62	54	48	42	34	30	28	26
22.1–26	66	56	48	42	34	30	28	26	24
26.1–30	56	49	42	34	30	28	26	24	20
30.1–36	48	42	34	30	28	26	24	20	18
36.1–42	42	36	30	28	26	24	20	18	16
42.1–48	36	32	28	26	24	20	18	16	14
48.1–60	30	28	24	22	20	18	16	14	10
>60	MLSS NEED NOT BE CONSIDERED								

#1–CANNOT BE APPROVED UNLESS HYDRAULIC ANALYSIS DEMONSTRATES SUITABILITY

FLOW FACTOR (FF) = DESIGN FLOW / 300 SO:

2 BEDROOMS = 300/300 = 1.0

3 BEDROOMS = 450/300 = 1.5

4 BEDROOMS = 525/300 = .75

COMMERCIAL = DESIGN FLOW / 300 = (FF)

PERCOLATION FACTOR:

Up to 10.0 Minutes/Inch	= 1.0
10.1 – 20 Minutes/Inch	= 1.25
20.1 – 30 Minutes/Inch	= 1.5
30.1 – 45 Minutes/Inch	= 3.0 or 2.0*
45.1 – 60 Minutes/Inch	= 5.0 or 3.0*

NOTES – SEPTIC SYSTEM DESIGN

1. Soil testing observed by the Steve Jacobs, R.S. & Gardner & Peterson Associates, LLC.

2. Design based on a 4 bedroom house and a percolation rate in the range of 20.1–30.0 min./inch (875 sf required).

3. Provide a 1250 gallon 2–compartment septic tank and 2 rows of Quick 4 Infiltrators (3.6 sf/lf) each 122 feet long including end caps, 12 inches deep by 36 inches wide for a total of 244 l.f. or 878 sq. feet of leaching area. Provide a footing drain as shown. Drain is to outlet to the ground surface as shown. Outlet to be screened against rodents.

4. House sewer to be 4" I.D. centrifugally cast iron pipe hubless ASTM A 74 with 3" wide heavy duty stainless steel coupling and rubber gasket, or Extra Strength PVC pressure water pipe AWWA C–900 75–100 psi with rubber compression gaskets, or an approved equal. Minimum slope to be 1/4" per foot.

5. Serial distribution – inverts of overflow pipes in upper trenches to be set 3" above inverts of distribution pipes in those trenches. Overflow boxes are D–boxes using high hole for overflow.

6. Bottoms of trenches to be set not more than 3" below the grade existing prior to stripping and excavation. Bottom of each trench to be constructed level and distribution pipe in each trench to be set level.

7. Topsoil to be stripped off prior to filling. The fill material (natural or manufactured) between and beyond trenches to be pervious, good quality and clean medium sand (select fill) placed and compacted in 6" lifts. Select fill shall meet the following minimum requirements:
   A. The fill should not contain any material larger than 3 inches.
   B. Up to 45% of the dry weight of the representative sample may be retained on the #4 sieve (This is the gravel portion of the sample).
   C. The material that passes the #4 sieve is then reweighed and the sieve analysis started.
   D. The remaining sample shall meet the following gradation criteria:

Sieve	Percent Passing
No. 4	100
No. 10	70–100
No. 40	10–50
No. 100	0–20
No. 200	0–5

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%.

The responsibility for the preparation of a leaching area utilizing "select material" is that of the licensed installer. The installer shall take the necessary steps to protect the underlying naturally occurring soils from overcompaction and siltation once exposed.

Fill material to be placed prior to trench excavation. No traffic other than track–driven equipment is to cross, dump, unload or otherwise compact the fill area after topsoil removal until 18" of fill material has been placed. Initial 18" of fill material to be dumped at the edge of the stripped area and spread and compacted with track–driven vehicles. Stockpiling is to take place upgradient of the leaching area. The area down gradient of the leaching area is not to be disturbed. The contractor shall contact the Town of Somers for a percolation test when fill is in place.

8. Disturbed areas to be loamed and seeded. Final grade to shed surface water.

9. Elevations shown are based on an assumed datum. A benchmark will be established at the time of house staking.

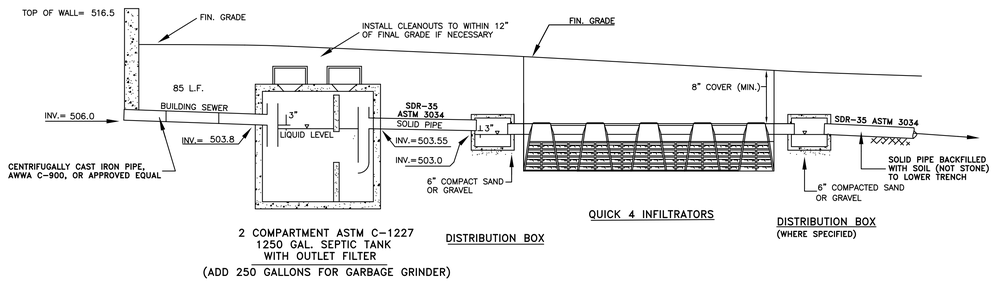
10. No in–ground fuel tank, bury hole, or other source of pollution is to be within 75' of a well.

11. It is recommended that the Town of Somers Sanitarian be contacted before any site work is performed contacted before any site work is performed.

12. It is the responsibility of the contractor to contact the property owners, appropriate utility companies, or "Call Before You Dig" to verify the location of underground utilities prior to construction. Any utility locations shown on this plan are approximate only, and must be verified by the contractor prior to construction.

13. It is the responsibility of the owner or his contractor the obtain all local, state, or federal, or other permits which are required to implement the activities shown on this plan, and to perform the activities in accordance with the regulations recommendations of the appropriate agencies.

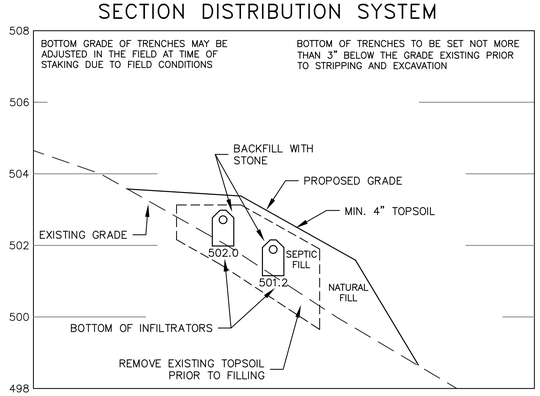
14. As required by the Town of Somers, the design engineer shall supervise the staking of the septic system and assure conformance to the plan and all of the septic system and assure conformance to the plan and all requirements of the Public Health Code of Connecticut.



SUBSURFACE DISPOSAL DISTRIBUTION

NOT TO SCALE

SECTION DISTRIBUTION SYSTEM



SCALE: 1"=10' HORIZONTAL 1"=2' VERTICAL

Deep Test Pit Results
Date Tested: 3/31/1986
By: S. Jacobs, R.S.

(SEE SKETCH IN HEALTH DEPARTMENT FILES FOR TEST PIT LOCATIONS)

TP A:
0–7" TOPSOIL
7–28" FINE SANDY LOAM
28–80" COMPACT SAND TILL
GROUNDWATER @ 21"
MOTTLING @ 21"
NO LEDGE

TP B:
0–8" TOPSOIL
8–29" FINE SANDY LOAM
29–76" COMPACT SAND TILL
GROUNDWATER @ 23"
MOTTLING @ 23"
NO LEDGE

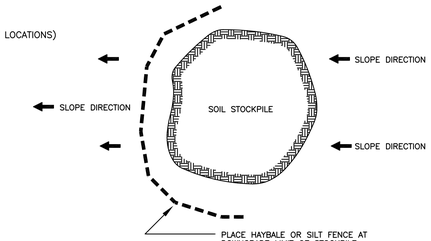
TP C:
0–9" TOPSOIL
9–28" FINE SANDY LOAM
28–84" COMPACT SAND TILL
GROUNDWATER @ 25"
MOTTLING @ 25"
NO LEDGE

Percolation Test Pit Results
Date Tested: 01/20/2021
By: Gardner & Peterson Associates, LLC

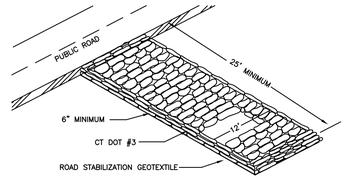
PT
DEPTH: 20"
PRESOAK @ 9:15
MARK 8" BELOW GRADE

TIME	DEPTH
12:28	0"
12:43	1½"
12:58	2½"
1:13	3"
1:28	3½"
1:43	4"
1:58	4½"
2:13	5"
2:28	5½"
3:43	6"

RATE: 30 MIN/IN

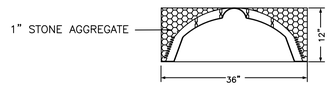


STOCKPILE EROSION PROTECTION DETAIL



CONSTRUCTION ENTRANCE

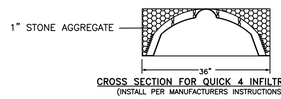
NOT TO SCALE



INSTALL PER MANUFACTURERS INSTRUCTIONS

CROSS SECTION FOR QUICK 4 INFILTRATORS

NOT TO SCALE



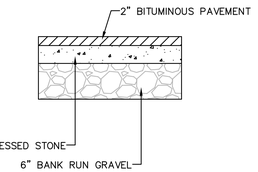
CROSS SECTION FOR QUICK 4 INFILTRATORS
(INSTALL PER MANUFACTURERS INSTRUCTIONS)

WATER TREATMENT WASTEWATER (WTW)
ANY WASTEWATER FROM A DEVICE USED FOR THE TREATMENT OF WELL WATER THAT ENHANCES THE QUALITY OF WATER AND/OR PROVIDES FOR THE REMOVAL OF IRON, MANGANESE, RADIONUCLIDES OR OTHER SUBSTANCES SHALL DISCHARGE TO A WTW SYSTEM.

WTW BASED ON A MAXIMUM DISCHARGE OF 50 GPD.
STORAGE VOLUME REQUIRED: 50 GPD x 1.5 = 75gallons
STORAGE VOLUME PROVIDED: QUICK 4 STANDARD INFILTRATOR 2 units x 43gallons/unit = 86gallons

WATER TREATMENT WASTEWATER SYSTEM

NOT TO SCALE



DRIVEWAY DETAIL

NOT TO SCALE

CONSTRUCTION SCHEDULE & EROSION & SEDIMENT CONTROL CHECKLIST

PROJECT NAME: SINGLE FAMILY RESIDENCE

LOCATION: 80 DENISON ROAD, SOMERS, CT

PROJECT DESCRIPTION: CONSTRUCTION OF SINGLE FAMILY HOME

PARCEL AREA: 7 ACRES

RESPONSIBLE PERSONNEL: JIM PATSON (860) 573–5570

WORK DESCRIPTION	EROSION & SEDIMENT CONTROL MEASURES	DATE INSTALLED	INITIALS
ESTABLISH CONSTRUCTION ENTRANCE	INSTALL ANTI–TRACKING PAD		
CUT TREES AND BRUSH			
	INSTALL SILT FENCE		
REMOVE STUMPS			
ROUGH GRADING			
CONSTRUCT HOUSE AND UTILITIES			
FINAL GRADE SITE			
FINAL GRADE/PAVE DRIVEWAY			
	LOAM AND SEED DISTURBED ALL DISTURBED AREAS		
	REMOVE SILT FENCE WHEN SITE IS STABILIZED		

PROJECT DATES:
DATE OF CONSTRUCTION START APRIL 1, 2021
DATE OF CONSTRUCTION COMPLETION 1 YEAR AFTER START

EROSION AND SEDIMENT CONTROL PROCEDURES SHALL ESSENTIALLY BE IN ACCORDANCE WITH THESE PLANS, AS REQUIRED BY TOWN REGULATIONS, AND THE MANUAL, "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" FOR CONNECTICUT, BY THE COUNCIL ON SOIL AND WATER CONSERVATION, 1985, REVISED TO 2002.

TEMPORARY SEEDING SCHEDULE:

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
ANNUAL RYEGRASS	40	0.9	3/1–6/15, 8/1–10/1
WINTER RYE	40	0.9	4/15–6/15, 8/15–10/1
SUDANGRASS	11	0.25	5/15–8/15

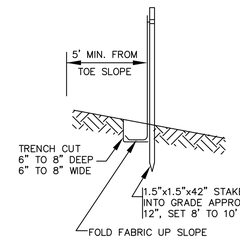
TEMPORARY SEEDING IS NOT LIMITED TO THE SPECIES SHOWN. OTHER SPECIES RECOMMENDED BY THE SCS OR AS LIMITED BY SITE CONDITIONS MAY BE USED.

STRAW MULCH IS TO BE APPLIED TO SEEDED AREA AT THE RATE OF 1–1/2 TO 2 TONS PER ACRE, 70 TO 90 LBS. PER 1000 SQ. FT.

FINAL SEEDING SCHEDULE:

PROVIDE 4 INCHES OF TOPSOIL MINIMUM, FREE OF ROOTS, LARGE STONES, AND OTHER OBJECTS.

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
KENTUCKY BLUEGRASS	40	0.90	4/15–6/15, 8/15–9/15
CREEPING RED FESCUE	120	2.75	
PERENNIAL RYEGRASS	40	0.90	



NOTES:
1. SEDIMENT CONTROL FABRIC TO BE A GEOTEXTILE MATERIAL TREATED TO RESIST DEGRADATION FROM EXPOSURE TO SUNLIGHT.
2. USE ONLY GEOTEXTILES WHICH ARE ALREADY ON THE CONNECTICUT DEPARTMENT OF TRANSPORTATION'S GEOTEXTILE APPROVED LIST OF GEOTEXTILES.
3. AFTER FOLDING FABRIC EDGE, BACKFILL TRENCH WITH TAMPED ORIGINAL SOIL OR AGGREGATE.
4. INSTALL PER 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.

SILT FENCE INSTALLATION

NOT TO SCALE

STATE OF CONNECTICUT ERICA L. PETERSON No. 23430 LICENSED PROFESSIONAL ENGINEER

REVISIONS

IMPROVEMENT LOCATION SURVEY
PERMIT PLAN AND
SUBSURFACE DISPOSAL SYSTEM DESIGN
PREPARED FOR PATSUN CONSTRUCTION
80 DENISON ROAD
SOMERS, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
E.R.P.	AS SHOWN	01–15–2021	2 OF 2	10937A

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