SITE DATA TABLE - ZONE R-40		
ITEM	REQUIRED	PROVIDED
LOT AREA	40,000 S.F.	31,608 SF +/- (EXIST.)
LOT FRONTAGE	100 FT.	25.90 FT. (EXIST.)
LOT WIDTH	125 FT.	130.3' (EXIST.)
FRONT YARD	50 FT.	51.5'
REAR YARD	50 FT.	60.5' (DECK)
SIDE YARD (NORTH)	25 FT.	47.0' (PORCH)
SIDE YARD (SOUTH)	25 FT.	27.0' (DECK)
BUILDING HEIGHT	35 FT.	28 FT.
LOT COVERAGE	25% ALLOWED	8%

MLSS & DESIGN DATA

3 BEDROOM HOUSE
SLOPE - 9%
AVG. RESTRICTIVE LAYER - 32"
PERC RATE - 8.0 MIN. PER INCH
(HF)24 x (FF)1.50 x (PF)1.0 = 36.0'
MLSS REQUIRED - 36.0'
MLSS PROVIDED - 45'

3 BEDROOM HOUSE REQUIRES 495 S.F.
OF EFFECTIVE LEACHING AREA
USE 45LF- OF ELJEN - MANTIS 536-8 UNITS
(45 x 11.0 = 495 S.F. OF ELA)
USE 1,000 GAL. 2 COMPARTMENT SEPTIC TANK
W/ OUTLET FILTER DEVICE

SOIL TEST DATA

WITNESSED BY KIMBERLY HAMLEY, R.S.
LLHD - 10/12/23 & 10/24/23

TH-#1 0-6" TOPSOIL
6"-38" ORANGE/BROWN FINE SANDY LOAM
SMEARING PRESENT
NO WATER, NO MOTTLES, LEDGE 38"

TH-#2 0-10" TOPSOIL
10"-33" ORANGE/BROWN FINE SANDY LOAM
SMEARING PRESENT
33"-82" COMPACT WET GREY FINE LOAM,
SMEARING PRESENT
WATER @60", MOTTLES@33", LEDGE 71"
ROOTS@35"

TH-#3 0-6" TOPSOIL
6"-34" ORANGE/BROWN FINE SANDY LOAM
SMEARING PRESENT
34"-96" COMPACT WET GREY FINE LOAM,
SMEARING PRESENT
WATER @70", MOTTLES@34", NO LEDGE
ROOTS@20"

TH-#4 0-10" TOPSOIL
10"-39" ORANGE/BROWN FINE SANDY LOAM
39"-77" COMPACT WET GREY FINE LOAM,
SMEARING PRESENT
WATER @71", MOTTLES@38", LEDGE@77"
ROOTS@25"

TH-#5 0-6" TOPSOIL
6"-24" ORANGE/BROWN FINE SANDY LOAM
24"-60" COMPACT, MOIST, GREY FINE SANDY LOAM,
SMEARING PRESENT @50"
60"-84" FULL OF WATER, SOIL NOT OBSERVABLE
WATER @60", MOTTLES@24", LEDGE@84"
ROOTS@24"

PERC. TEST DATA

PERFORMED BY ADVANCED SURVEYS, LLC
10/26/23

PERC #1
DEPTH - 28"
PRESOAK - 1:30

2:15 - 8"
2:20 - 12"
2:25 - 16"
2:30 - 18 1/2"
2:35 - 20 1/4"
2:40 - 22"
2:45 - 23 1/4"
2:50 - 24 1/2"
2:55 - 25"
3:00 - 25 3/4"
3:05 - 26 1/2" (DRY)

PERC RATE - 7.0 MINUTES PER INCH

PERC "A"
DEPTH - 24"
PRESOAK - 1:40

2:17 - 6"
2:22 - 11"
2:27 - 13 1/4"
2:32 - 17 3/4"
2:37 - 19 1/4"
2:42 - 20 1/4"
2:47 - 21"
2:52 - 21 3/4" (DRY)

PERC RATE - 6 MINUTES PER INCH

EROSION AND SEDIMENT CONTROL PLAN:

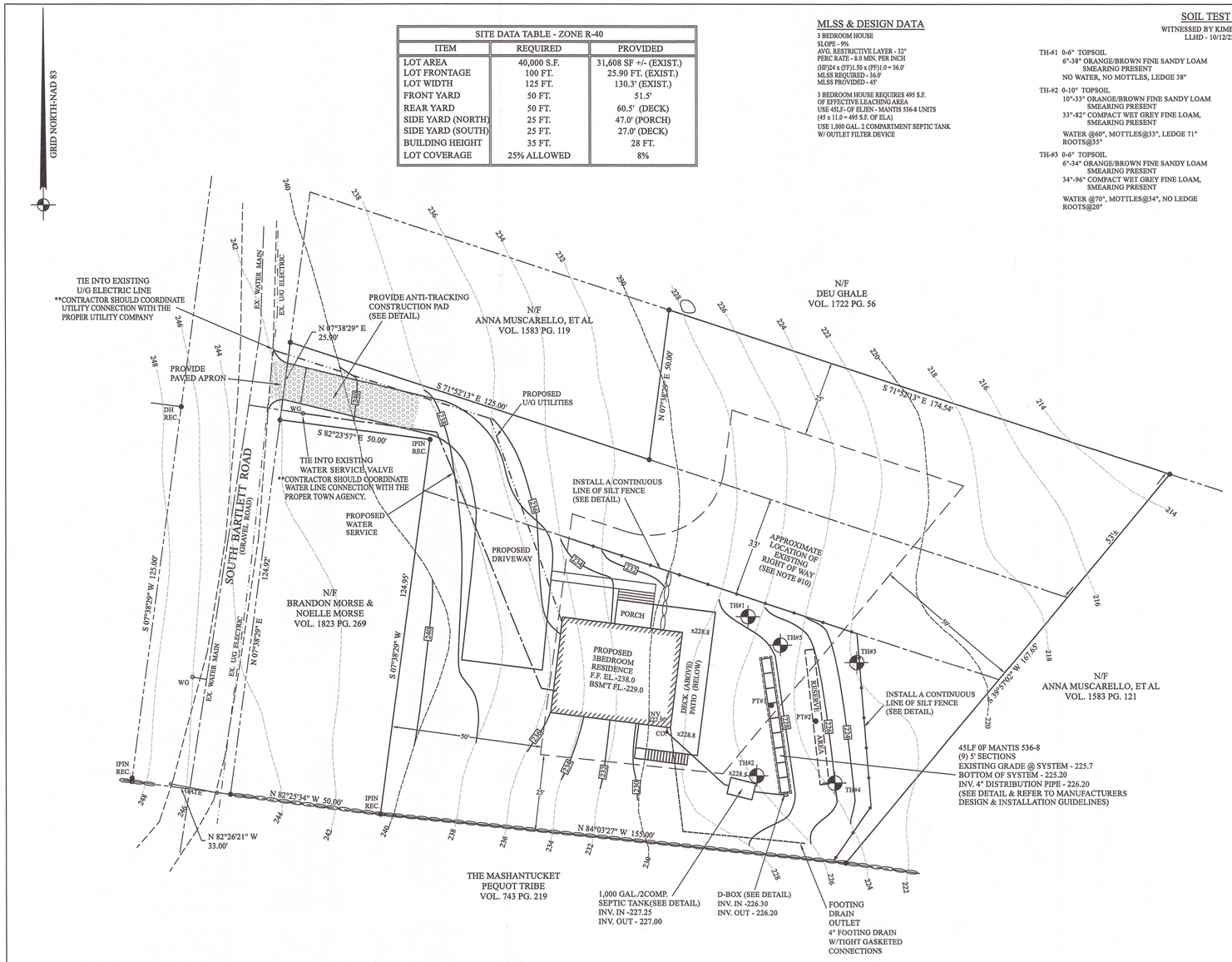
1. CLEARING, GRUBBING, AND GRADING OF THE PROPOSED SITE TO BE LIMITED TO AREAS ADJACENT TO THE PROPOSED HOUSE SEPTIC SYSTEM AND DRIVEWAY.
2. DISTURBED AREAS TO BE LOAMED, SEEDED, AND MULCHED.
3. ALL TOPSOIL TO BE STOCKPILED ON SITE AND PROTECTED WITH HAYBALES OR SILT FENCE.
4. ALL CUT AND FILL SLOPES ARE NOT TO EXCEED 3:1 SLOPES.
5. PRIOR TO SITE DISTURBANCE, THE REPRESENTATIVE OF THE TOWN OF WATERFORD SHALL BE NOTIFIED WHEN SEDIMENT CONTROL MEASURES ARE IN PLACE SO THAT THE INSPECTION CAN OCCUR.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL REQUIRED SEDIMENT CONTROL MEASURES THROUGHOUT CONSTRUCTION.
7. DUST CONTROL WILL BE ACCOMPLISHED BY SPRAYING WITH WATER, AND IF NECESSARY THE APPLICATION OF CALCIUM CHLORIDE.

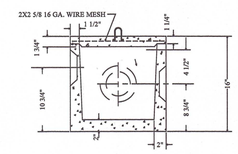
TEMPORARY VEGETATIVE COVER:

MULCHES	APPLICATION RATE PER 1000 S.F.	NOTES
STRAW/HAY	70-90 lbs.	FREE FROM WEEDS AND COARSE MATTER
WOOD CHIPS	185-275 lbs.	FREE OF COARSE MATTER AIR DRIED, TREAT WITH 12lbs NITROGEN / TON

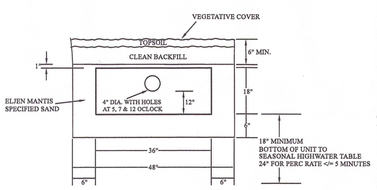
PLANTING SCHEDULE:

SEEDING DATES:
APRIL 1 ------- JUNE 15
AUGUST 1 ------ SEPTEMBER 15
SEED MIXTURE:
45% RED FESCUE
45% KENTUCKY BLUE GRASS
10% PERENNIAL RYE





STANDARD D-BOX
NOT TO SCALE



NOTE: VENTING REQUIRED WHEN MORE THAN 18" COVER AS MEASURED FROM TOP OF THE UNIT TO FINISHED GRADE

MANTIS 536-8
SAND FILL CROSS SECTION

C. PLACE MANTIS UNITS IN TRENCH. REFER TO MANUFACTURERS DESIGN AND INSTALLATION GUIDELINES FOR INSTALLATION.

DESIGN NOTES:

1. ALL CONSTRUCTION TO CONFORM TO STANDARDS OF THE CONNECTICUT PUBLIC HEALTH CODE AND TO THE SATISFACTION OF THE TOWN SANATARIAN.
2. THIS SYSTEM HAS NOT BEEN DESIGNED FOR THE USE OF LARGE CAPACITY (+100 GALLONS), DISCHARGE TYPE BATHTUBS. RESIDENTIAL GARBAGE DISPOSALS ARE NOT ANTICIPATED FOR THIS DESIGN. IN THE EVENT THAT SUCH AN INSTALLATION IS CONTEMPLATED FOR THE PROPOSED HOUSE, A LARGER SEPTIC TANK AND INCREASED LEACHING FIELD CAPACITY WILL BE REQUIRED.

LEACHING SYSTEM CONSTRUCTION NOTES:

1. TOPSOIL TO BE STRIPPED OFF PRIOR TO FILLING. FILL MATERIAL 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 SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 3 INCHES.
   B. THE FILL SHALL NOT CONTAIN MORE THAN 45 PERCENT GRAVEL (GRAVEL IS BETWEEN NO. 4 & 3" SIEVES) NO MORE THAN 45 PERCENT OF THE MATERIAL CAN BE RETAINED ON THE NO. 4 SIEVE.
   C. THE FILL LESS THE GRAVEL SHALL MEET THE FOLLOWING GRADATION CRITERIA:

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

   ** 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%.
2. DOCUMENTATION OF TEST RESULTS ARE TO BE PROVIDED TO THE HEALTH DISTRICT.
3. 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. 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.

SEPTIC SYSTEM CONSTRUCTION NOTES:

1. CONSTRUCTION SEQUENCE:
   A. STRIP & STOCKPILE TOPSOIL FROM LEACHING AREA.
   B. EXCAVATE 48" WIDE TRENCHES AND PREPARE SURFACE.
   C. PLACE MANTIS UNITS IN TRENCH. REFER TO MANUFACTURERS DESIGN AND INSTALLATION GUIDELINES FOR INSTALLATION.
   D. LOAM, FINE GRADE TO FINISHED GRADE AND SEED. PROTECT DISTURBED AREAS WITH EROSION CONTROLS UNTIL FIRST MOWING.
2. THE PIPE BETWEEN THE HOUSE AND SEPTIC TANK SHALL BE 4 IN. EXTRA HEAVY CAST IRON, DUCTILE IRON OR EXTRA STRENGTH PVC ASTM D1785 SCHD 40 OR APPROVED EQUAL.
3. ALL DISTRIBUTION PIPE IS TO BE ASTM D3034 SDR 35 (4"PVC) OR APPROVED EQUAL UNLESS NOTED.
4. SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF 6" OF PROCESSED GRAVEL OR BROKEN STONE ON COMPACTED SUBGRADE.
5. THERE ARE NO APPARENT WELLS OR SEPTIC FIELDS WITHIN 75' OF THE PROPOSED WELL AND SEPTIC SYSTEM AS SHOWN ON THIS PLAN.
6. THE LOCATION AND ELEVATION OF THE PROPOSED SEPTIC SYSTEM SHALL BE STAKED IN THE FIELD BY A LICENSED LAND SURVEYOR.

NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. IT IS A IMPROVEMENT LOCATION SURVEY BASED ON A RESURVEY AND CONFORMS TO HORIZONTAL ACCURACY CLASS A-2.
2. TOPOGRAPHIC INFORMATION ON THIS PLAN COMPLIES WITH T-2 MAPPING STANDARDS.
3. PROPOSED HOUSE AND SEPTIC SYSTEM TO BE STAKED IN THE FIELD BY A LAND SURVEYOR LICENSED IN THE STATE OF CONNECTICUT.
4. BASE FOR LEVELS: N.A.V.D. 1988.
5. PROPERTY IS LOCATED IN THE TOWN OF WATERFORD ZONING DISTRICT R-40.
6. THERE ARE NO WELLS LOCATED WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM LOCATED ON ABUTTING PROPERTIES.
7. THE LOT IS TO BE SERVICED BY MUNICIPAL WATER AND ON SITE SEPTIC SYSTEM.
8. A BENCHMARK IS TO BE PLACED WITHIN 50' OF THE PROPOSED HOUSE & SEPTIC SYSTEM AT THE TIME OF CONSTRUCTION.
9. THERE ARE NO INLAND WETLANDS LOCATED ON OR WITHIN 100' OF THE PROPERTY.
10. THE PROPERTY IS POSSIBLY SUBJECT TO A RIGHT OF WAY AS RECORDED IN VOLUME 1583 PG. 121 OF THE TOWN OF WATERFORD LAND RECORDS.

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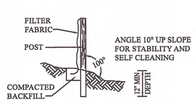
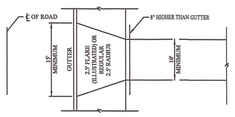
Planning & Development
Town of Waterford, CT

REFERENCE MAP:

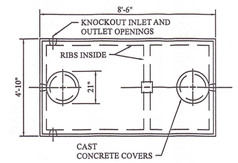
PLAN OF PROPERTY BELONGING TO THERESE S. & JOHN J. MCGUIRK, 32 & 33 SOUTH BARTLETT ROAD, WATERFORD, CONNECTICUT, SCALE: 1"=20', AREA PARCEL A 12,4821 S.F., AREA PARCEL B-6,214 S.F., MARCH 27, 1987, PREPARED BY WILLIMA KENT.



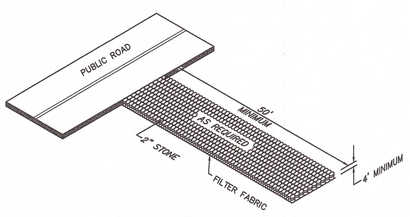
SILT FENCE
NOT TO SCALE



PLAN



PLAN



CONSTRUCTION ENTRANCE
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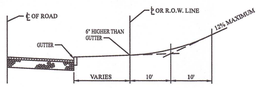
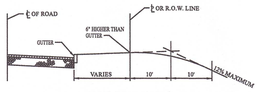
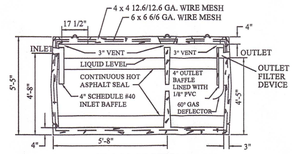


SAG CURVE IN DRIVE



CREST CURVE IN DRIVE

RESIDENTIAL DRIVEWAY DETAILS
NOT TO SCALE



CROSS SECTION

1000 GALLON
2 COMPARTMENT
SEPTIC TANK
NOT TO SCALE

LEGEND:

F.F.	FIRST FLOOR
EL.	ELEVATION
S.F.	SQUARE FEET
IPIN	IRON PIN
D.H	DRILL HOLE
REC.	RECOVERED
x230.5	EXISTING SPOT ELEVATION
x230.8	PROPOSED SPOT ELEVATION
230	EXISTING CONTOURS
230	PROPOSED CONTOURS
B L	BUILDING SETBACK LINE
	TEST HOLE
	IRON PIN OR DRILL HOLE TO BE SET

STATE OF CONNECTICUT RICHARD A. DESCHAMPS No. 70019 LICENSED LAND SURVEYOR

STATE OF CONNECTICUT DAVID J. HEWITT No. 24287 LICENSED PROFESSIONAL ENGINEER

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON. THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND THE EMBOSSED SEAL OF THE SURVEYOR HEREON.

RICHARD A. DESCHAMPS L.S. #70019 — 3/6/24 DATE

PROJECT NO.	23-106
DRAWN BY:	R.A.D.
DATE:	10/28/23
SCALE:	1"=20'
SHEET	1 OF 1
REVISIONS	
3/24	NOTE ADDED

20 10 0 20
GRAPHIC SCALE IN FEET

SEPTIC SYSTEM DESIGN PLAN
PREPARED FOR

GREGORY J. GANNOTTI
&
MARY LOU GANNOTTI

#30 SOUTH BARTLETT ROAD
WATERFORD, CONNECTICUT

ADVANCED SURVEYS, LLC.
43 Flyers Drive, Norwich, CT 06360
Phone (860) 639-8928

N W E S