DEEP TEST PIT DATA

NOT FOR DESIGN - REFERENCE ONLY)
OPSOIL AND LOAM (DISTURBED)
¾" STONE LEACHING BED AROUND ENTIRE PERIMETER OF TEST HOLE
IGHT BROWN MEDIUM SAND WITH GRAVEL
OTTLED GREY SILTY SAND MODERATELY COMPACT
: 40" GW: NONE - LEDGE: NO - ROOTS: 39"

DDED TOPSOIL / FILL
ORIGINAL TOPSOIL
ELLOW BROWN MEDIUM SANDY LOAM
REY MOTTLED MEDIUM SAND WITH GRAVEL, MODERATELY COMPACT
OTTEN ROCK
: 50" GW: NONE - LEDGE: NO REFUSAL - ROOTS: 50" -

ELLOW BROWN, BROWN FINE SILTY LOAM
OTTEN ROCK ON UPGRADIENT SIDE (COMPACT @40")
OTTLED GREY MODERATELY COMPACT SAND WITH ROCKS,
OME ROTTEN ROCK
: 31" GW: NONE - LEDGE: NO - ROOTS: 50"

L MATERIAL
OPSOIL
IGHT YELLOW BROWN FINE SILTY LOAM
REY MODERATELY COMPACT TO COMPACT SILTY SAND
ITH ROCKS, HARDPAN
: 37" GW: NONE - LEDGE: NONE - ROOTS: HEAVY TO 50"

BASIS OF SANITARY DESIGN

2 BEDROOM HOUSE - 5.33 Min/In PERC RATE
375 SQ. FT. OF LEACHING AREA REQUIRED
E 1 TRENCHES 62" WIDE @ 13' CTRS @ LENGTHS SHOWN
378 SQ. FT. OF LEACHING AREA PROVIDED
USE MINIMUM 1,000 GALLON SEPTIC TANK.
HF 26 x FF 1.0 x PF 1.0 = MLSS 26'

HYDRAULIC FACTORS (HF)

Receiving Soil Depth (Inches)	Hydraulic Gradient (% Slope) 0-0.5	0.6-1.0	1.1-2.0	2.1-3.0	3.1-4.0	4.1-6.0	6.1-8.0	8.1-10.0	10.1-12.0	12.1-15.0
	See Comments in Section VIII A									
18.0-23.0	72	62	51	48	42	34	30	28	26	
23.1-30.0	66	56	48	42	34	30	28	26	24	
30.1-36.0	56	49	42	34	30	28	26	24	20	
36.1-46.0	48	42	34	30	28	26	24	20	18	
46.1-62.0	42	36	30	28	26	24	20	18	16	

GEOMATRIX GST "LEACHING SYSTEM
B-B' CROSS SECTION
Finished Grade shall be pitched to sheet flow stormwater away from system
Cover material depth shall be >5" and shall be uniform over system
ASTM C-33 Sand (or approved equivalent) | Filter Fabric | Distribution Pipe* CT DOT No. 6 stone | *P

62"

H= 6" (GST6206) 12" (GST6212) 18" (GST6218) 24" (GST6224) 30" (GST6230) 36" (GST6236)
*Pe 2" - 5.5"
*3" min. I.D., ASTM D-3034, SDR 35 pipe for gravity applications
0.75" min. I.D., ASTM D-2666, SCH 40 PVC pipe for pressure applications

MP: GRINDER EFFLUENT
AD CALCS:

	HEAD
IP ELEVATION = 307.75	
EIVING ELEVATION = 314.09	6.34 FT
C. ELEVATION CHANGES = (ESTIMATED)	0.66 FT
AL STATIC HEAD	7 FT

L.F. 3" PE PIPE

CHECK VALVES = 17 FT LENGTH

	@ 10 GPM	@ 30 GPM	@ 50 GPM	@ 70 GPM
76 LF TOTAL				
DYNAMIC HEAD / 100':	.02	1.55	3.99	____
X 76 LF TOTAL / 100':	0.15	1.18	3.03	____
PUMP CURVE TDH:	7	8	10	____

MP PER PLAN: 37 GPM @ 8.5 ' HEAD

R APPROVED EQUAL

REFERENCE NOTE

Y AND MAP HAVE BEEN PREPARED PURSUANT TO THE
S OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1
-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS
E OF CONNECTICUT" ADOPTED FOR USE BY THE CONNECTICUT
N OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

' SURVEY IS "ZONING LOCATION SURVEY".

ANY DETERMINATION CATEGORY IS "DEPENDENT RESURVEY".

ONTAL ACCURACY CONFORMS TO "C" STANDARDS.

PERCOLATION TEST DATA

PT1
DATE: 8/15/22
DEPTH: 18"
PRESOAK: 10:00 8/15/22
REF. NAIL: 3"

TIME:	READING:
12:52	3.00"
12:56	6.50"
13:00	8.25"
13:04	9.75"
13:08	11.00"

PERCOLATION RATE: 5.33 MIN./IN.

PERCOLATION TEST CONDUCTED BY DUTCH & ASSOCIATES

ASTM C-33 SIEVE SPECS
(PER DAVE POTTS OF GEOMATRIX SYSTEMS, LLC (860) 510-0730)

SIEVE SIZE	% PASSING (DRY)
#50	10 - 30
#100	2 - 10
#200	0 - 3

Connecticut Precast Corp.
Manufacturers of Concrete Products
555 Fan Hill Road, Monroe, CT 06468
Telephone (203) 268-6888 Fax (203) 452-1007 www.ctprecast.com

Septic Tanks

PRECAST CONCRETE
1000 Gallon Capacity
Residential

MODEL NO.	LIQUID CAPACITY	LENGTH IN.	WIDTH IN.	DEPTH IN.	WEIGHT LBS.	WEIGHT TONS
1000	1000	8'-0"	4'-0"	4'-0"	8,000	4.00

NOTES:
1. 1000 GAL = 4,000 IMP. GAL = 4,800 U.S. GAL
2. ALL TANKS TO BEAR ON UNDISTURBED OR COMPACTED SOIL
3. NO TANKS OVER 4' DEEP WITHOUT SPECIAL DESIGN
4. TANKS WITH BAFFLES WEIGH 100 LBS. MORE
5. TANKS WITH BAFFLES HAVE 2 MANHOLES
6. TANKS WITH AERIAL MANHOLES TO BE SPECIFIED

Connecticut Precast Corp.

PLAN NOTES:

NORTH SHOWN PER REFERENCE MAP.

ELEVATION DATUM IS ASSUMED.

THE PURPOSE OF THIS PLAN IS TO SHOW A CODE COMPLYING SEPTIC AREA FOR AN EXISTING 2 BEDROOM RESIDENCE. IT IS INTENDED FOR THIS PLAN TO DEMONSTRATE THIS SITE'S SUITABILITY FOR YEAR-ROUND STATUS.

BOUNDARY SHOWN PER REFERENCE MAPS AND DOES NOT REPRESENT A BOUNDARY DETERMINATION BY THIS SURVEYOR.

SEPTIC NOTES:

THE PROPOSED CODE COMPLYING AREA ENCOMPASSES A PORTION OF THE EXISTING LEACHING AREA. ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE AREA SHOWN AS "AREA OF SELECT FILL AND REPLACED WITH SELECT FILL PRIOR TO INSTALLATION OF THE REPAIR SEPTIC SYSTEM.

EXISTING SYSTEM TO BE PROPERLY ABANDONED (PUMPED CRUSHED & FILLED). AREAS WITHIN 5' OF THE PROPOSED SEPTIC SHALL BE FILLED WITH SELECT FILL, ALL OTHER AREAS SHALL BE CLEAN COMMON FILL.

UNSUITABLE MATERIAL SHALL BE DISPOSED OF ON SITE IN THE AREA INDICATED.

REMOVE ALL PIPEING WITHIN 25' OF THE PROPOSED LEACHING FIELD PRIOR TO INSTALLATION

SEPTIC PUMP AND ALARM SHALL BE INSTALLED ON SEPARATE CIRCUITS

STANDARD SEPTIC NOTES:

AN AS-BUILT SHALL BE SUBMITTED (A-2 WITH TIES FOR ENGINEERED PLAN AND TIED PLAN FOR NON-ENGINEERED) TO THE HEALTH DEPARTMENT WITH DISTANCES TO FLOW LINE AT HOUSE, INLET AND OUTLET COVER OF TANK, D-BOX(S), CLEANOUTS AND ENDS OF LEACHING ROWS, WELL, FOOTING/CURTAIN DRAINS AND BETWEEN TIE POINTS. IN ADDITION, PROVIDE THE NAME OF THE INSTALLER, DATE, HOUSE LOCATION AND STREET/DIRECTIONAL ARROW.

ALL TANKS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 59 LBS. AND/OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO TANK. ALL BELOW GRADE TANK OR RISER COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE

REQUIRED A.) SYSTEM STAND/BENCHMARK INSPECTION/ WELL SITE STAKE VERIFICATION B.) SEPTIC LEACHING STRIP INSPECTION. C.) SEPTIC FINAL INSPECTION (WHICH MAY ALSO REQUIRE OTHER INSPECTIONS INCLUDING, BUT NOT LIMITED TO FILL INSPECTIONS/ PERCING OF FILL, PUMP/PUMP CHAMBER, GREASE TRAP, CURTAIN DRAIN, FOOTING DRAIN DISCHARGE, COVER INSPECTIONS, BUILDING WALKTHROUGH, WATER TREATMENT WASTEWATER DISPOSAL SYSTEM LOCATION VERIFICATION, WELL CASTING AND CAP VERIFICATIONS)

THOUGH NOT REQUIRED, ALL PROPOSED WELL ARCS SHOULD BE KEPT ON THE PROPERTY THEY SERVE (TO ALLOW NEIGHBORS FULL USE OF THEIR PROPERTIES) AND ALL WELL CASTINGS SHOULD BE LOCATED AT LEAST 10' FROM DRIVING SURFACES AND/OR STRUCTURES TO PREVENT FUTURE

GASES AND PREVENT INDIVIDUALS FROM FALLING INTO TANKS.

THE DESIGNER SHOULD TAKE INTO CONSIDERATION THE LOCATION OF POTENTIAL FUTURE WATER TREATMENT DISCHARGE SYSTEMS, RAIN GARDENS AND FOOTING/CURTAIN DRAIN DISCHARGE LOCATIONS.

"THE CONNECTICUT PUBLIC HEALTH CODE - ON-SITE SEWAGE DISPOSAL REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS" ARE PART OF THIS PLAN. ALL WORK SHALL BE SUBJECT TO THESE REGULATIONS.

GENERAL NOTES

PRIMARY AND RESERVE SEPTIC AREAS ARE TO BE PROTECTED FROM COMPACTION AND DAMAGE BY MACHINERY AND EQUIPMENT DURING CONSTRUCTION.

ADDITIONAL TEST PITS MAY BE REQUIRED TO CONFIRM SOIL CONDITIONS IN THE AREA OF THE PRIMARY AND RESERVE LEACHING FIELDS. PITS ARE TO BE DUG PRIOR TO THE START OF CONSTRUCTION OF THE SEPTIC SYSTEM AND ARE TO BE STAKED IN THE FIELD BY ENGINEER TO ENSURE PROPER LOCATION.

DISTRIBUTION BOXES TO BE INSTALLED TO CREATE A HIGH LEVEL OVERFLOW (5" MIN)

SEPTIC SYSTEM SHALL CONFORM TO THE CURRENT STATE OF CONNECTICUT PUBLIC HEALTH CODE

IF FIELD CONDITIONS (MOTTLING LEDGE-GROUNDWATER) ARE ENCOUNTERED AT SHALLOWER DEPTH THAN THOSE SHOWN IN THE DEEP TEST HOLE RESULTS, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY AND CONSTRUCTION HALTED UNTIL FURTHER DIRECTED.

SDR 35 TIGHT PIPE FROM TANK TO D. BOX AND BETWEEN D. BOXES

CONTOURS TAKEN FROM AN ON SITE FIELD TOPOGRAPHY AND ARE TO 1-2 STANDARDS

SOILS HAVE A MINIMUM PERCOLATION RATE SLOWER THAN THIRTY (30) MINUTES PER INCH.

SELECT FILL MATERIAL AND SELECT BACKFILL MATERIAL PLACED WITHIN AND ADJACENT TO PROPOSED LEACHING AREAS SHALL BE COMPOSED OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN DEBRIS/TRASH. THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:

1. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THREE (3) INCHES.
2. UP TO 48% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
3. 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	PERCENT PASSING
#4	100%	100%
#10	70% - 100%	70%-100%
#40	10% - 80%	10%-75%
#100	0% - 40%	0%-35%

SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURING SOILS FROM OVERCOMPACTION AND SILTATION ONCE EXPOSED.

NOTE: WATER TREATMENT DEVICES NOT TO DISCHARGE INTO SEPTIC SYSTEM

EROSION CONTROL NOTES

GENERAL REQUIREMENTS FOR EROSION CONTROL:

A SCHEDULE OF OPERATIONS TO INCLUDE STARTING AND COMPLETION DATES FOR MAJOR DEVELOPMENT PHASES, SUCH AS LAND CLEARING AND GRADING, STREET, SIDEWALK, AND STORM SEWAGE INSTALLATION, ETC.

SEEDING, SODDING, OR REVEGETATION PLANS AND SPECIFICATIONS FOR ALL UNPROTECTED OR UNVEGETATED AREAS SHALL BE IMPLEMENTED AS SOON AS POSSIBLE.

EXCAVATIONS , FILLS AND GRADING :

CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 3:1 UNLESS STABILIZED BY A RETAINING WALL OR CRIBBING, EXCEPT AS APPROVED BY THE COMMISSION UNDER SPECIAL CONDITIONS.

FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.

GRADING SHALL NOT BE DONE IN SUCH A WAY SO AS TO DIVERT WATER ONTO THE PROPERTY OF ANOTHER LANDOWNER WITHOUT THE EXPRESSED CONSENT OF THAT LANDOWNER AND THE COMMISSION.

FILLS SHALL NOT ENCROACH ON THE NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS.
DURING GRADING OPERATIONS, NECESSARY MEASURES FOR DUST CONTROL SHALL BE EXERCIZED.

GRADING EQUIPMENT WILL NOT BE ALLOWED TO CROSS LIVE STREAMS EXCEPT BY MEANS OF BRIDGES AND CULVERTS OR OTHER METHODS AS APPROVED BY THE COMMISSION.

ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.

WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.

WHERE NECESSARY, TEMPORARY VEGETATION AND/OR MULCHING SHOULD BE USED TO PROTECT AREAS EXPOSED DURING DEVELOPMENT.

THE PERMANENT FINAL VEGETATION AND STRUCTURES SHOULD BE INSTALLED AS SOON AS PRACTICAL IN THE DEVELOPMENT.

CONSTRUCTION NOTES

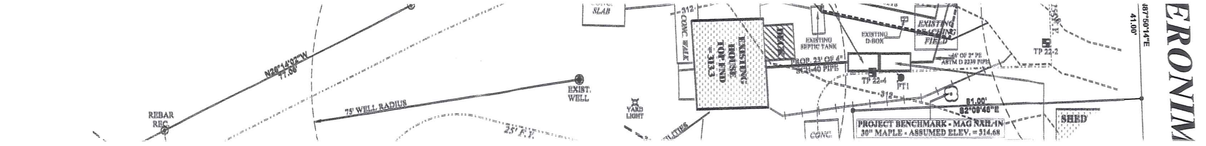
MATERIAL, SEPTIC TANK, PRIMARY LEACH SYSTEM. SIMILAR STAKING REQUIRED FOR ALL CURTAIN AND FOUNDATION DRAINS AND WELL.

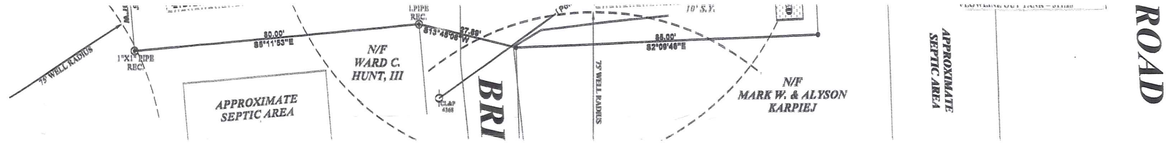
NO SOIL, STRIPPING OR EXCAVATION SHALL BEGIN WITHIN THE AREA OF THE SUB-SURFACE SEWAGE DISPOSAL SYSTEM WITHOUT A VALID CONSTRUCTION PERMIT.

A LICENSED SEWAGE DISPOSAL SYSTEM INSTALLER SHALL OBTAIN A CONSTRUCTION PERMIT AND ARRANGE FOR THE SITE INSPECTION PRIOR TO CONSTRUCTION. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THIS PLAN AND ALL APPLICABLE STATE, AND LOCAL RULES, REGULATIONS AND CODES.

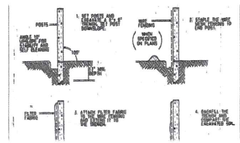
TOPSOIL TO BE STRIPPED AND STOCKPILED PRIOR TO ANY FILLING. SCARIFY AREA BEFORE FILLING. AVOID STRIPPED AREA WITH HEAVY VEHICLES ON WHEELS TO MINIMIZE COMPACTION. PLACE FILL AT EDGE OF PREPARED AREA AND SPREAD WITH BULLDOZER IN 6" LIFTS AND COMPACT TO 95% MAXIMUM DENSITY.

SANITARIAN TO INSPECT ANY FILL OVER 24" DEEP PRIOR TO CONSTRUCTION.



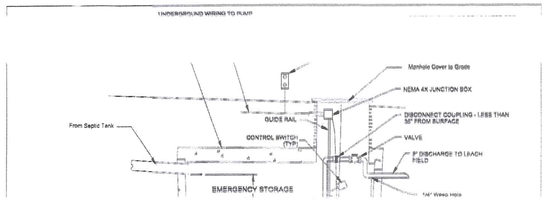


- UTILITY POLE
- PROPERTY CORNER
- IP RECOVERED AS NOTED
- YARD LIGHT
- WELL
- PERCOLATION TEST
- DEEP TEST PIT



OUTSIDE BOTTOM PUMP CHAMBER ELEV. = 307.00
INSIDE BOTTOM PUMP CHAMBER ELEV. = 307.25
BOTTOM OF PUMP ELEV. = 307.75

PUMP FLOAT ELEVATIONS:
PUMP ALARM = 308.56
PUMP ON = 308.45
PUMP OFF = 308.21
DOSE = 60 GALLONS (186.84 GAL. MAX.)
EMERGENCY STORAGE = 672 GAL. (MIN. 300 REQ.)





TRENCHES TO BE INSTALLED NO DEEPER THAN 19" INTO ORIGINAL GROUND

TRENCH SECTION B-B
NO SCALE

SILT FENCE DETAIL

B100A SEPTIC PLAN

1 BRITAIN ROAD - EAST HADDAM, CONNECTICUT
SCALE 1" = 20' - AUGUST 18, 2022

0 20' 40'

MAP REFERENCES:

SITE PLAN PROPERTY OF & PREPARED FOR MARY P. HUNT & WARD C. HUNT JR. • 3 WARD ROAD • EAST HADDAM, CONNECTICUT • SCALE: 1" = 20' • DECEMBER 31, 2004 • REVISED THRU MARCH 2, 2004 • BY DUTCH & ASSOCIATES.

AS BUILT PLAN PREPARED FOR DAVE MOLESKY - GERONIMO ROAD - EAST HADDAM, CONNECTICUT • SCALE: 1" = 20' - MARCH 26, 2002 • BY FRANCIS E. HAMM & ASSOCIATES

SITE MAP FOR SANDRA J. STANLEY - TOWN OF EAST HADDAM, CONNECTICUT - SCALE: 1" = 20' - DATE: MAY 4, 1987 • REVISED THRU SEPT. 12, 1988 - BY RICHARD J. ZIOBRON, L.S.

STATE OF CONNECTICUT JOHN K. MANTUCHAS 18484 LICENSED PROFESSIONAL ENGINEER

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

CHARLES R. DUTCH, L.S. 15776 LICENSE NUMBER

STATE OF CONNECTICUT CHARLES R. DUTCH 15776 LICENSED LAND SURVEYOR

DUTCH & ASSOCIATES
LAND SURVEYORS
392 SOUTH MAIN STREET, COLCHESTER, CONN.
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JOB NO. 22-145