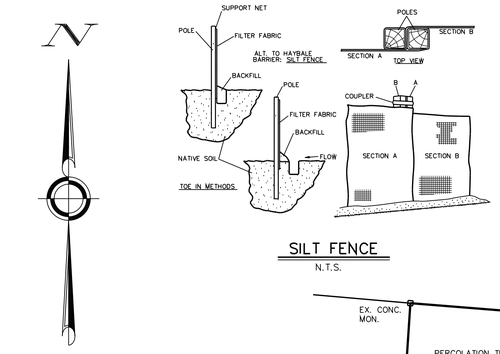


SILT FENCE

N.T.S.

DEEP TEST PIT RESULTS (12/2/21 BY MEYERS ASSOCIATES, PC W/T.A.H.D.)

TP 'A'
0 – 4" TOPSOIL
4" – 84" GREY COMPACT SILTY FINE SAND
WATER @ 32"
MOTTLING @ 4"
NO LEDGE

TP 'B'
0 – 7" TOPSOIL
7" – 72" GREY COMPACT SILTY FINE SAND
WATER @ 40"
MOTTLING @ 7"
NO LEDGE

DEEP TEST PIT RESULTS (12/14/21 BY MEYERS ASSOCIATES, PC W/T.A.H.D.)

TP 'C'
0 – 9" TOPSOIL
9" – 21" YELLOW BROWN COMPACT SILTY SAND
21" – 72" GREY COMPACT MOTTLED SILTY SAND
UPHILL SIDE OF HOLE HAS FILL

ROOTS TO 21"
WATER @ 70"
MOTTLING @ 21"
NO LEDGE

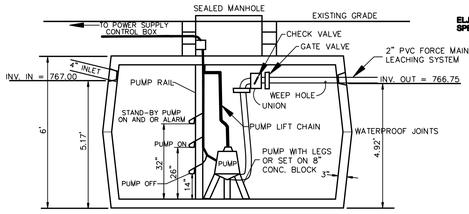
TP 'D'
0 – 32" FILL
32" – 40" ORIGINAL TOPSOIL
40" – 56" ORANGE BROWN FINE SILTY LOAM
56" – 70" GREY COMPACT MOTTLED SILTY SAND

ROOTS TO 36"
WATER @ 70"
MOTTLING @ 24" FROM ORIGINAL
NO LEDGE

TP 'E'
0 – 12" TOPSOIL
12" – 20" YELLOW BROWN FINE SILTY SAND
20" – 72" GREY COMPACT MOTTLED SILTY SAND

ROOTS TO 18"
WATER @ 20"
MOTTLING @ 18"
NO LEDGE

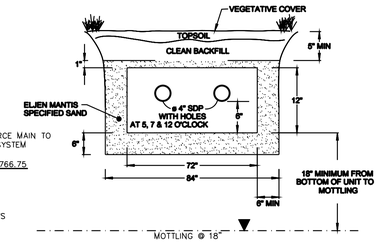
1000 GALLON PRECAST CONCRETE PUMP CHAMBER:
- PROVIDE MANHOLE RISER TO GRADE
- PUMP AND SPEC. TO BE SUPPLIED BY OTHERS



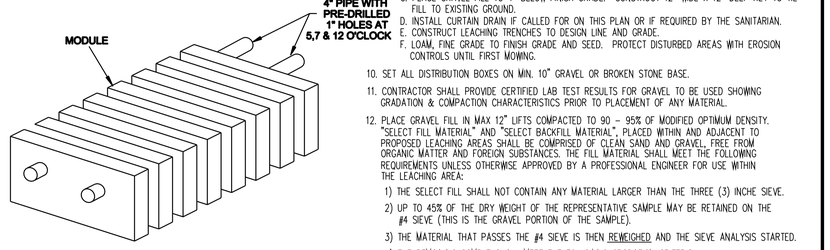
*MODEL #PC 1000 BY UNITED CONCRETE PRODUCTS, INC. OR APPROVED EQUAL.

PUMP CHAMBER

N.T.S.



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



MANTIS DW-58 SECTION

N.T.S.

ELJEN MANTIS
SPECIFIED SAND REQUIREMENTS

SIEVE SIZE	SIEVE SQUARE OPENING SIZE (mm)	SPECIFICATION PERCENT PASSING (Wet Sieve)
0.375"	9.5 mm	100.0
#4	4.75 mm	95.0 – 100.0
#8	2.36 mm	80.0 – 100.0
#16	1.18 mm	50.0 – 85.0
#30	600 mm	25.0 – 60.0
#50	300 mm	5.0 – 30.0
#100	150 mm	< 10.0
#200	75 mm	< 5.0

Request a sieve analysis from your material supplier to ensure that the system sand meets the specification requirements listed above.

MANTIS ELEVATIONS:

TRENCH #1
Top = 769.50
Invert = 769.00
Bottom = 768.50

MLSS REQUIRED = 90 L.F.; MLSS PROVIDED = 90 L.F.

NOTES:

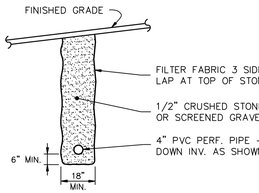
1. ELEVATIONS REFER TO AN ASSUMED DATUM.
2. PERC & TEST PIT DATA BY MEYERS ASSOCIATES, PC W/T.A.H.D.
3. TOPOGRAPHIC DATA BY MEYERS ASSOCIATES, PC – FIELD SURVEY.
4. ALL CONSTRUCTION TO CONFORM TO STANDARDS OF THE CONNECTICUT PUBLIC HEALTH CODE AND TO THE SATISFACTION OF THE TORRINGTON AREA HEALTH DISTRICT.
5. PERCOLATION RATE FOR DESIGN = 30.1 – 45 MIN./INCH.
6. REQUIRED EFFECTIVE LEACHING AREA FOR 3 BEDROOMS = 900 S.F.
7. 90 L.F. – MANTIS DOUBLE–WIDE 58 @ 11.6 S.F./L.F. = 1,044 S.F. PROVIDED.
8. MINIMUM LEACHING SYSTEM SPREAD (MLSS):
   - Hydraulic Factor (HF) = 30 (based on 18" depth to restrictive layer and 10% gradient).
   - Flow Factor (FF) = 1.5 (3 Bedrooms x 150/300 = 1.5).
   - Percolation Factor (PF) = 2.0 (40 min./in.)
   - MLSS = HF x FF x PF = 90 L.F. LEACHING SYSTEM SPREAD REQUIRED.
9. CONSTRUCTION PROCEDURE:
   A. CLEAN BRUSH & DEBRIS FROM AREA TO RECEIVE FILL.
   B. REMOVE TOPSOIL IN THE PRIMARY LEACHING AREA, AND RESERVE IF TO BE PREPARED, MUST BE REMOVED PRIOR TO PLACEMENT OF SELECT FILL UNLESS OTHERWISE SPECIFIED BY DESIGN ENGINEER.
   C. PLACE GRAVEL FILL TO 4" BELOW FINISH GRADE. CONSTRUCT 12" WIDE X 12" DEEP KEY TO TIE FILL TO EXISTING GROUND.
   D. INSTALL CURTAIN DRAIN IF CALLED FOR ON THIS PLAN OR IF REQUIRED BY THE SANITARIAN.
   E. CONSTRUCT LEACHING TRENCHES TO DESIGN LINE AND GRADE.
   F. LOAM, FINE GRADE TO FINISH GRADE AND SEED. PROTECT DISTURBED AREAS WITH EROSION CONTROLS UNTIL FIRST MOWING.
10. SET ALL DISTRIBUTION BOXES ON MIN. 10" GRAVEL OR BROKEN STONE BASE.
11. CONTRACTOR SHALL PROVIDE CERTIFIED LAB TEST RESULTS FOR GRAVEL TO BE USED SHOWING GRADATION & COMPACTION CHARACTERISTICS PRIOR TO PLACEMENT OF ANY MATERIAL.
12. PLACE GRAVEL FILL IN MAX 12" LIFTS COMPACTED TO 90 – 95% OF MODIFIED OPTIMUM DENSITY. "SELECT FILL MATERIAL" AND "SELECT BACKFILL MATERIAL", PLACED WITHIN AND ADJACENT TO PROPOSED LEACHING AREAS SHALL BE COMPRISED OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:
    1) THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCHE SIEVE.
    2) 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).
    3) THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
    4) 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%.

THE RESPONSIBILITY FOR THE PREPARATION OF A LEACHING AREA UTILIZING "SELECT MATERIAL" IS THAT OF THE LICENSED INSTALLER. THE TOPSOIL IN THE LEACHING SYSTEM AREA MUST BE REMOVED AND THE SUBSOIL SCARIFIED PRIOR TO SELECT FILL PLACEMENT UNLESS OTHERWISE DIRECTED BY THE DESIGN ENGINEER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVERCOMPACTION AND SILTATION ONCE EXPOSED.

13. FILL PLACED IN RESERVE AREA MUST BE SELECT FILL TO FACILITATE FUTURE USE.
14. THE LEACHING SYSTEM SHALL BE PROPERLY COVERED BY THE LICENSED SYSTEM INSTALLER WITHIN TWO (2) WORKING DAYS FOLLOWING THE LOCAL HEALTH DEPARTMENT'S FINAL INSPECTION AND APPROVAL.
15. THE DESIGN SHOWN HEREON CONFORMS TO ALL APPLICABLE STATE AND LOCAL CODE REQUIREMENTS AND TO GOOD ENGINEERING PRACTICE. WE CANNOT GUARANTEE AGAINST FAILURE DUE TO IMPROPER INSTALLATION, IMPROPER MAINTENANCE, OR TO NATURAL PHENOMENA BEYOND THE SCOPE OF NORMAL FIELD INVESTIGATION.
16. IN A PROPERLY FUNCTIONING SUBSURFACE SEWAGE DISPOSAL SYSTEM, SEWAGE EFFLUENT SHOULD NOT BACKFLOW INTO THE SEPTIC TANK AT THE TIME OF TANK PUMPING. SUCH CONDITIONS INDICATE LEACHING SYSTEM IS SURCHARGED.
17. LEACHING SYSTEMS SHOULD BE INSTALLED AS SHALLOW AS POSSIBLE AND IN NO CASE SHALL THE BOTTOM OF ANY SYSTEM BE INSTALLED MORE THAN 8 FEET BELOW FINISHED GRADE.
18. NO WELLS EXIST WITHIN 75 FEET OF PROPOSED SEPTIC SYSTEM. NO SEPTIC SYSTEMS EXIST WITHIN 75 FEET OF PROPOSED WELL.
19. THIS SYSTEM IS NOT DESIGNED TO HANDLE GARBAGE DISPOSAL OR JACUZZI TUB OVER 100 GALLONS.



CURTAIN DRAIN DETAIL

N.T.S.

PERCOLATION TEST RESULTS (12/14/21 BY MEYERS ASSOCIATES, PC)

PERC 'I' – 40 min./in. Depth = 18"		PERC 'J' – 40 min./in. Depth = 18"	
0 min.	– 3 1/2"	0 min.	– 5 3/4"
5 min.	– 3 5/8"	5 min.	– 6"
10 min.	– 3 3/4"	10 min.	– 6 1/4"
15 min.	– 3 7/8"	15 min.	– 6 1/2"
20 min.	– 4"	20 min.	– 6 3/4"
25 min.	– 4 1/8"	25 min.	– 6 7/8"
30 min.	– 4 1/4"	30 min.	– 6 7/8"
35 min.	– 4 3/8"	35 min.	– 7"
40 min.	– 4 1/2"	40 min.	– 7 1/8"
45 min.	– 4 5/8"	45 min.	– 7 1/4"

STORAGE REQUIREMENTS:

3 BEDROOMS @ 2 PERSONS/BEDROOM x 75 GAL./CAPITA = 450 GAL'S./DAY MINIMUM.

PUMP CHAMBER REQUIREMENTS:

CHAMBER TO HAVE 1.61' MIN. OF STORAGE CAPACITY (450 GALLONS) (1 DAY) – 280 GAL./FT. OF DEPTH (PER MANUFACTURER)

CHAMBER PROPOSED HAS 2.67' OF DEPTH WHICH IS 1.6 TIMES REQUIRED STORAGE, OR 747 GALLONS.

PLACE FLOAT SWITCHES AT THE FOLLOWING LEVELS:
- OFF @ TOP OF PUMP OR 14" ABOVE BOTTOM OF TANK.
- ON @ 12" ABOVE 'OFF' OR 26" ABOVE BOTTOM OF TANK.
- HIGHWATER @ 6" ABOVE 'ON' OR 32" ABOVE BOTTOM OF TANK.

VOLUME OF EFFLUENT PUMPED PER CYCLE SHOULD BE PER MANTIS SPECS THESE TYPE OF UNITS

MAP REFERENCES:

1) "SUBDIVISION PLAN OF RIDGEVIEW ACRES – SECTION FOUR PROPERTY OF CONTINENTAL INVESTMENT CO. WATERTOWN, CONN. NOV. 20, 1971 SCALE 1"=100'", BY THE OFFICE OF HARRY E. COLE, ON FILE AS MAP NO. 1639 IN THE WATERTOWN TOWN CLERK'S OFFICE.

2) "PROPERTY SURVEY SHOWING RECORDED RESUBDIVISION PROPERTY OF SALVATOR V. & MARGARET M. DELUCA PARCEL 2, "DELUCA SUBDIVISION" HINMAN ROAD A.K.A. TOWN LINE HIGHWAY WATERTOWN, CONNECTICUT SCALE 1"=80' MAR. 5, 2008", BY GARY GIORDANO PROFESSIONAL ENGINEER & LAND SURVEYOR, LLC, ON FILE AS MAP NO. 3428 IN THE WATERTOWN TOWN CLERK'S OFFICE.

NOTES:

1) TOTAL AREA OF PROPERTY IS 60,160 SQUARE FEET OR 1.38 ACRES.
2) PRESENT ZONE IS R–70.
3) (xxx) DENOTES LOT NUMBER PER MAP REFERENCES ABOVE.
4) (xxx) DENOTES LOT NUMBER PER TAX ASSESSOR'S MAP.
5) ALL UTILITIES SHOWN ARE APPROXIMATE AND BASED UPON ACTUAL FIELD LOCATIONS WHERE VISIBLE. CALL BEFORE YOU DIG TO VERIFY.
6) ELEVATIONS REFER TO AN ASSUMED DATUM.
7) PROPERTY IS SUBJECT TO ANY EASEMENTS OF RECORD WHICH MAY APPEAR.

NOTIFY "CALL BEFORE YOU DIG" AT 1–800–922–4455 72 HOURS PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITY INFORMATION.

LEGEND

- ⊡ = Monument
- ○ = I.P. To Be Set
- ◔ = Deep Test Pit
- ◔ = Percolation Test Hole
- ▣ = Existing Catch Basin
- ◎ = Existing Storm Manhole
- ● = Proposed Well
- ⊛ = Existing Well
- 000 = Existing Contour
- 000 = Proposed Contour
- x000.0 = Existing Spot Elevation
- [000.0] = Proposed Spot Elevation
- = Stone Wall
- = Inland Wetlands Limit Line
- = Curtain Drain
- = Silt Fence

NO ACTIVITY IN SEPTIC AREA EXCEPT AS DESCRIBED IN THE NOTES HEREON

SURVEY NOTES:

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20–300b–1 THRU 20–300b–20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES – "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.

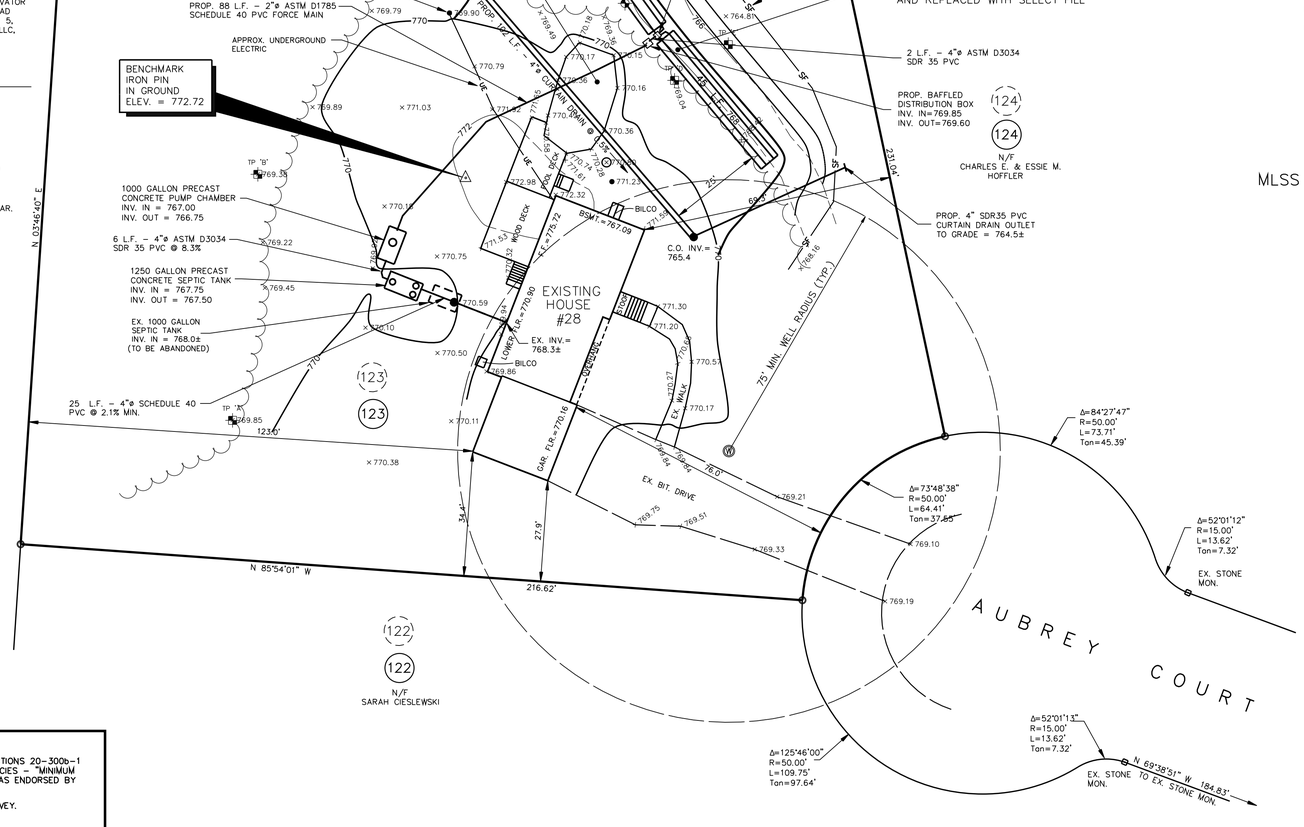
THE TYPE OF SURVEY PERFORMED IS A(N) IMPROVEMENT LOCATION SURVEY.

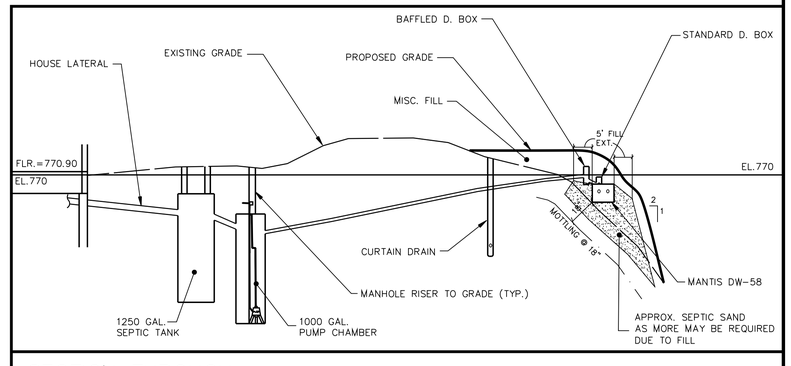
BOUNDARY DETERMINATION IS BASED ON A(N) RESURVEY.

THIS SURVEY CONFORMS TO A CLASS A–2.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

SCOTT A. MEYERS, L.S. — 12–20–21 DATE — 70093 REGISTRATION NO.





SECTION THROUGH PROPOSED SEPTIC SYSTEM

SCALE – H 1" = 20' V 1" = 4'

SCALE 0' 10' 20' 40' 60'

DATE	REVISION

SCALE : 1"=20' | DATE: 12–20–21
SHEET # 1 OF 1 | DRAWN BY: S.A.M.

NOT VALID UNLESS EMBOSSED SEAL AFFIXED HEREON

SEPTIC REPAIR PLAN
OWNED BY
PAM TESTA
28 AUBREY COURT
WATERTOWN, CONNECTICUT

MEYERS ASSOCIATES P.C.
ENGINEERS – SURVEYORS – PLANNERS
60 LINDEN STREET WATERBURY, CONNECTICUT 06702 – (203) 575–0350