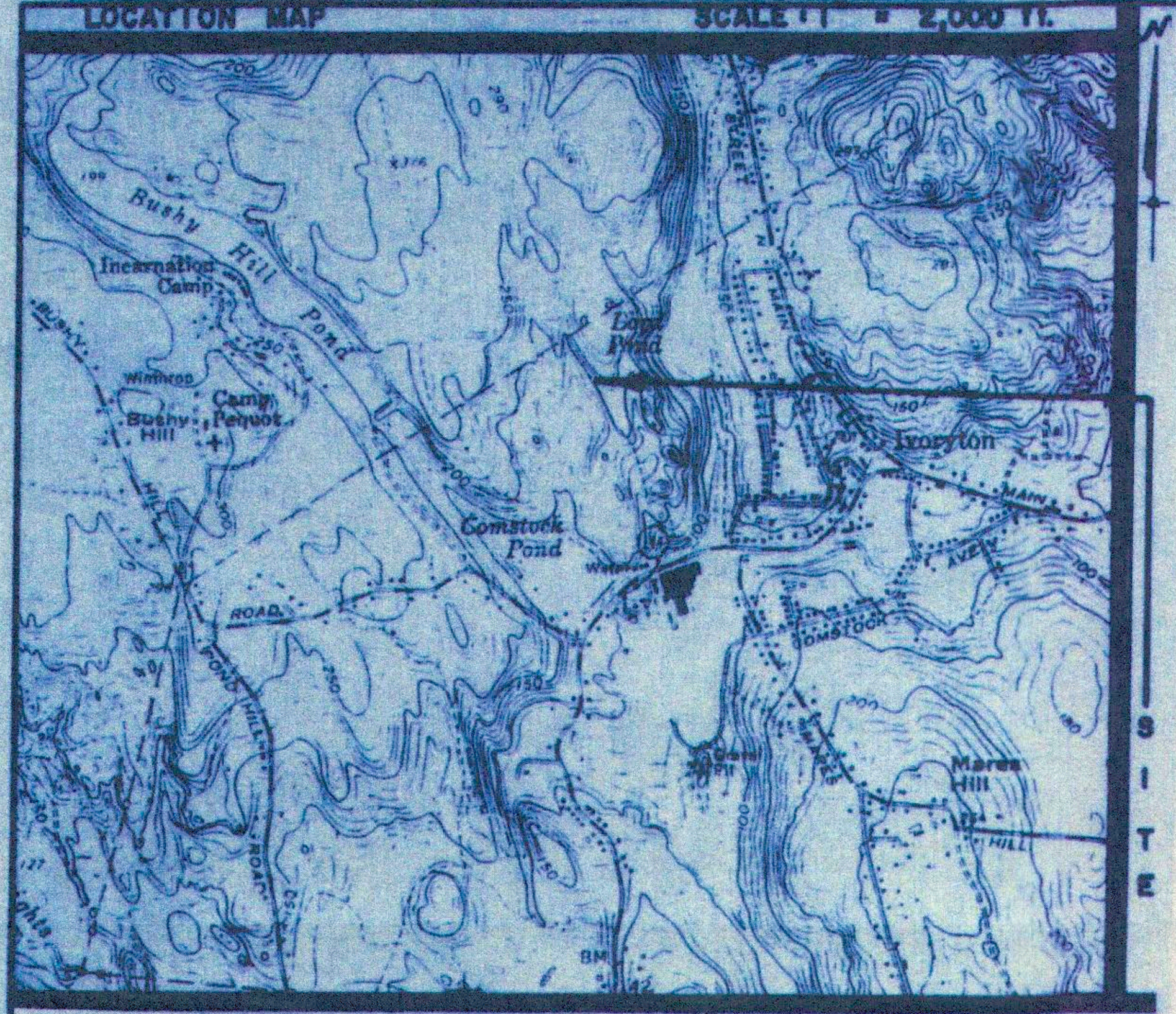
LOCATION MAP SCALE: 1" = 2,000 ft.



Test Hole Data
Performed by Doane-Collins Eng.
10/18/95

TH 13-1

0 - 5" Topsoil
5 - 32" Sandy, loam subsoil
32 - 68" Coarse sand & gravel, moist with cobbles
68 - 84" Fine to medium, gray sand with little silt, moist
No ledge observed
No groundwater observed
Mottling observed at 68"

TH 13-2

Ledge observed at 36"

TH 13-3

0 - 4" Topsoil
4 - 32" Sandy loam subsoil
32 - 66" Coarse sand & gravel, damp
66 - 84" Very fine, gray, silty sand
No ledge observed
Groundwater observed at 78"
Mottling observed at 23"

TH 13-4

0 - 7" Topsoil
7 - 26" Sandy loam subsoil
26 - 55" Coarse sand & gravel
55 - 80" Fine to medium, brown sand with little silt
No ledge observed
Groundwater observed at 76"
Mottling observed at 21"

TH 13-5

0 - 6" Topsoil
6 - 22" Silty loam subsoil
22 - 80" Fine, gray, silt & silty sand mix
No ledge observed
Groundwater observed at 70"
Mottling observed at 13"

Percolation Test
Performed by Doane-Collins Eng.
4-11-00

Percolation rate = 6.7 min/in

Primary

SANITARY SYSTEM DESIGN CRITERIA:

Proposed 3 bedroom house
Percolation rate = 6.7 min/in
Required effective leaching area = 495 sf
Provide 12 inch galleries
Provide 1 line 40 lf
1 line 48 lf
88 lf x 5.9 sf/lf = 519.2 sf required
Provide 1,000 gallon septic tank
Provide 100 % reserve area

Minimum Leaching System Spread
(MLSS)

d = 23. s = .05 ft/ft

HF = 34
PF = 1.2
FF = 1.5

MLSS required = 34 x 1.2 x 1.5 = 61.2 lf
MLSS proposed = 88 lf

Reserve

Provide 2 lines 64 lf each of 12 inch shallow galleries
2 x 64 lf x 5.9 sf/lf = 755.2 sf provided

Minimum Leaching System Spread
(MLSS)

d = 21. (TH 13-4) s = 176-172/62 = .064 ft/ft

HF = 34
PF = 1.2
FF = 1.5

MLSS required = 34 x 1.2 x 1.5 = 61.2 lf
MLSS proposed = 64 lf

NOTE:

A pump will be required should the reserve area be utilized.

DATE	REVISION	CK.
04/11/00	GENERAL REVISIONS	

NOTES:

1. No large capacity tubs (> 100 gallon capacity) are planned and will not be permitted in the proposed residence.
2. No garbage grinder installation is planned for the proposed residence. Should a garbage grinder be installed the proposed septic tank shall be increased to the next larger size.
3. No wells currently exist within 75 ft of proposed sanitary system.
4. No sanitary systems exist within 75 ft of proposed well
5. All solid piping after the septic tank to be 4 PVC ASTM D 3034, SDR 35.
6. Filter fabric shall be selected from the following table:

APPROVED FILTER FABRICS FOR PLACEMENT OVER LEACHING SYSTEMS

MANUFACTURER	ITEM NUMBER
AMERICAN ENGINEERED FABRICS	AEF-480
CARTHAGE MILLS	M35
CULTEC	410
ENGINEERING SYNTHETIC PRODUCTS	TNS R020
MIRAFI	65304 (4' WIDE) 65303 (3' WIDE)
BRADLEY INDUSTRIAL TEXTILE	PHOENIX
TERRA TEX	S01.5 P01.5
TYPAR	3151 3201

7. No deviation from this plan will be allowed without the approval of the Engineer and Sanitarian.
8. The well location shown hereon has been selected to demonstrate compliance with the requirements set forth in the Connecticut Public Health Code and does not imply that this location will produce the appropriate quantity or quality of water.
9. Septic tank construction joints shall be sealed with asphalt cement. All pipe connections to the septic tank and distribution boxes shall be sealed with a polyethylene gasket (poly-lok or approved equal)
10. Septic tank baffles shall conform to Section VA-1 TECHNICAL STANDARDS of the State Health Code.
11. Septic tank shall be two compartment tank with heavy duty steel handles for manhole access covers and gas baffles installed on outlet piping.

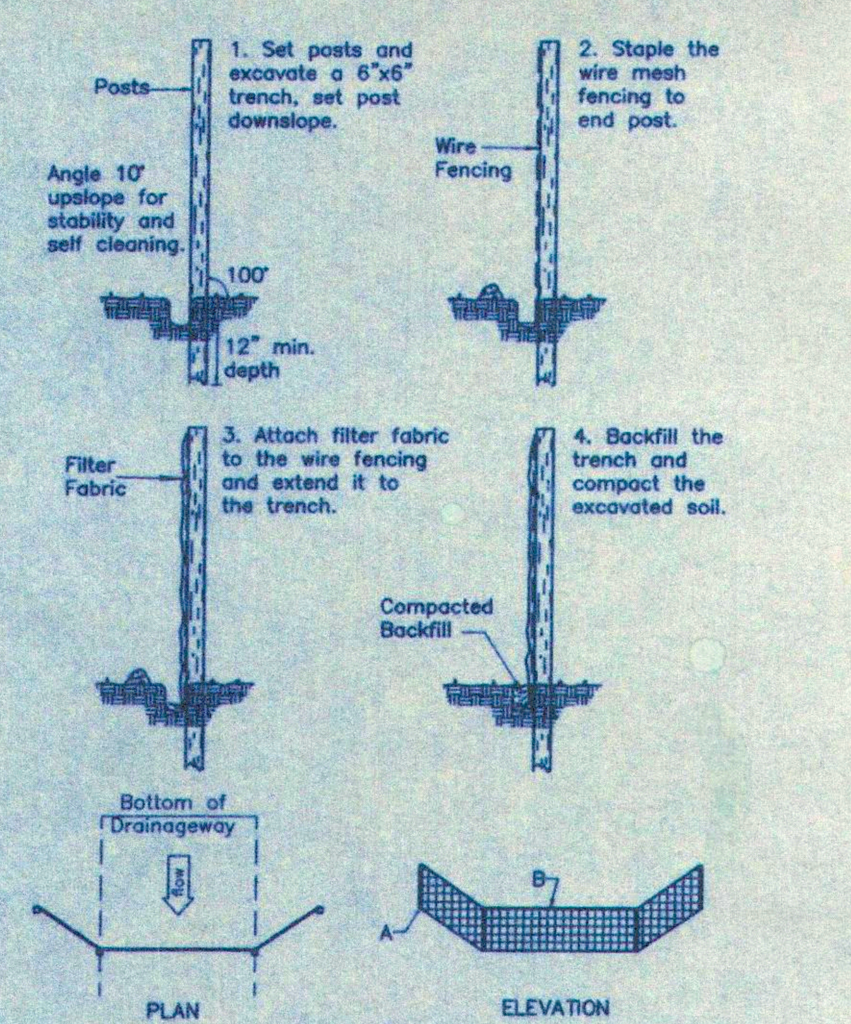
CONSTRUCTION SEQUENCE
(SANITARY SYSTEM)

1. Notify Town Health Department and the Engineer 24 - 48 hours prior to the beginning of construction for inspection.
2. Place synthetic barrier as shown on the drawing and in the detail.
3. Remove all trees, stumps and deleterious material from system area. Stockpile topsoil for reuse. Do not stockpile topsoil in sanitary system area.
4. Engineer to field stake well and septic system prior to construction.
5. Strip area for system to the gravel layer beneath the subsoil. (approx. 26 - 32 inches)
6. Prepared area to be inspected by the Sanitarian or Engineer before placing fill.
7. Place fill to the horizontal and vertical limits shown.
8. Select fill material shall meet criteria set forth below and in the Connecticut Public Health Code: Select Fill 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:
   a. The fill shall not contain any material larger than three (3) inches.
   b. Up to 45 percent 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 Size	Percent Passing
#4	100 percent
#10	70% - 100 percent
#40	10% - 50 percent (see Note below)
#100	0% - 20 percent
#200	0% - 5 percent

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

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 over compaction and siltation once exposed.
   e. Fill placement must be inspected by the Engineer and the Sanitarian.
   f. Testing may be required to ensure fill quality.
9. Install septic system as shown.
   a. If soil conditions other than those shown in the soil logs are encountered during the installation of the sanitary system, the design Engineer or the Sanitarian shall be notified and the work will be halted pending review of those conditions. If necessary the sanitary system shall be revised.
   b. A minimum of 4 feet must be maintained between the bottom of the system and ledge. A minimum of 1.5 feet must be maintained between the bottom of the system and seasonal high groundwater.
   c. The sanitary system shown hereon must be constructed to the horizontal and vertical alignment shown, unless expressly directed by the Engineer in writing and with the approval of the Town Sanitarian.
10. Do not backfill any portion of the sanitary system until inspected by the Engineer and the Sanitarian and until the Engineer has completed a RECORD survey.
11. Replace topsoil, grade, seed and mulch all disturbed areas.
12. Maintain synthetic filter barrier until all disturbed areas are stabilized.



SILT FENCE
NOT TO SCALE

Scource: U.S. Department of Agriculture, Soil Conservation Service, Storrs, Connecticut.

Test Hole Data
Performed by Angus McDonald/Gary Sharpe & Assoc.
7-7-87

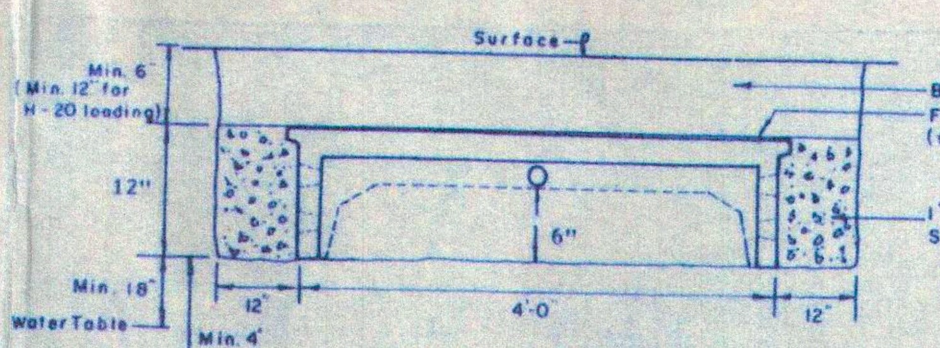
TH 204

0 - 6. Topsoil
6 - 26. Silty loam
26 - 55. Red/brown, silty sand & gravel
Ledge observed at 55.
Mottling observed at 25.
Groundwater observed at 45.

TH 205

0 - 10. Topsoil
10 - 39. Fine, sandy, loam with silt
39 - 48. Brown, sand & gravel
Ledge observed at 48.
No groundwater observed
No mottling observed

——— ———	EDGE OF WATER/STREAM
— — 100 — —	EXISTING CONTOURS
——[100]——	PROPOSED CONTOURS
—o— — —o—	FLAGGED WETLANDS LINE
——SF——	SILT FENCE
——— - ———	BUILDING SETBACK LINE
T.H.	TEST HOLE



SHALLOW GALLERY
N.T.S.

Notice to Lot Owner:

Activity within 60 ft of the wetlands or within 100 ft of the water course other than that which is shown hereon is limited to maintenance of existing vegetation and does not include removal or deposition of substantial amounts of material. Refer to Town of Essex, Inland Wetlands and Water Courses Commission Regulations.

REFERENCE MAP:
"Site Development Plan and Sedimentation & Erosion Control Plan, Woodwind, prepared for Pratt-Read Corporation, Main Street (Ivoryton) Essex, Connecticut". Scale 1"=40', Date 5/9/89. Prepared by Angus McDonald/Gary Sharpe & Associates, Inc., Old Saybrook, Ct.

FILE COPY

Map 39
Lot 1-13

ROBERT L. DOANE JR.
CONN P.E & L.S. LIC. NO 11463

APPROVED
NOV 28 2001

STATE OF CONNECTICUT ROBERT L. DOANE, JR. No. 11463 REGISTERED PROFESSIONAL ENGINEER

STATE OF CONNECTICUT ROBERT L. DOANE JR No. 11463 LICENSED LAND SURVEYOR

FILE: WOODWIND.DWG | UCS: WORLD | SNAP: PLAN | MS: P-13 | PS: P-13

DOANE-COLLINS ENGINEERING ASSOCIATES
CIVIL ENGINEERING & LAND SURVEYING
P.O. BOX 113 CENTERBROOK, CT. 06409 (860)767-0138

SITE PLAN
LOT # 13
WOODWIND SUBDIVISION
ESSEX,CT.

SCALE:	DATE:	SHEET NO.:	IDENT. NO.:
1"=40'	03/14/00	1 OF 1	E-787-46