

OCEAN COUNTY HEALTH DEPARTMENT

P.O. BOX 2191

TOMS RIVER, N.J. 08754-2191

(908) 341-9700

No. 011198

5/2/96
Date

BOARD OF HEALTH OF JACKSON

CERTIFICATE OF COMPLIANCE

Issued to Horizon 2000
(Owner or Contractor)

THIS IS TO CERTIFY That the

INDIVIDUAL SEWAGE SYSTEM Approved 5/2/96 R.B.

INDIVIDUAL WATER SYSTEM Approved 4/17/96 J.G.

Installed at Block No. 98.01

Lot No. 16.24 is in compliance with the

Application for Permit to Locate and Construct or

Alter Such Systems.

No. 011198 dated 10/26/95

The issuance of this certification shall not be construed as a guarantee that the system will function satisfactorily nor shall it in any way restrict the powers or responsibilities of the Board of Health in the enforcement of any law or ordinance relating to public health.

Final
approved
[Signature]

Ruby T. Brown

DWR-133
(6/95)

SERIAL # 91451

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Permit No. 2830922

Mail to
NJDEP
Bureau of Water Allocation
CN 426
Trenton, NJ 08625-0426

PERMIT TO DRILL WELL

WILD ONLY AFTER APPROVAL BY THE D.E.P.

Drawn by

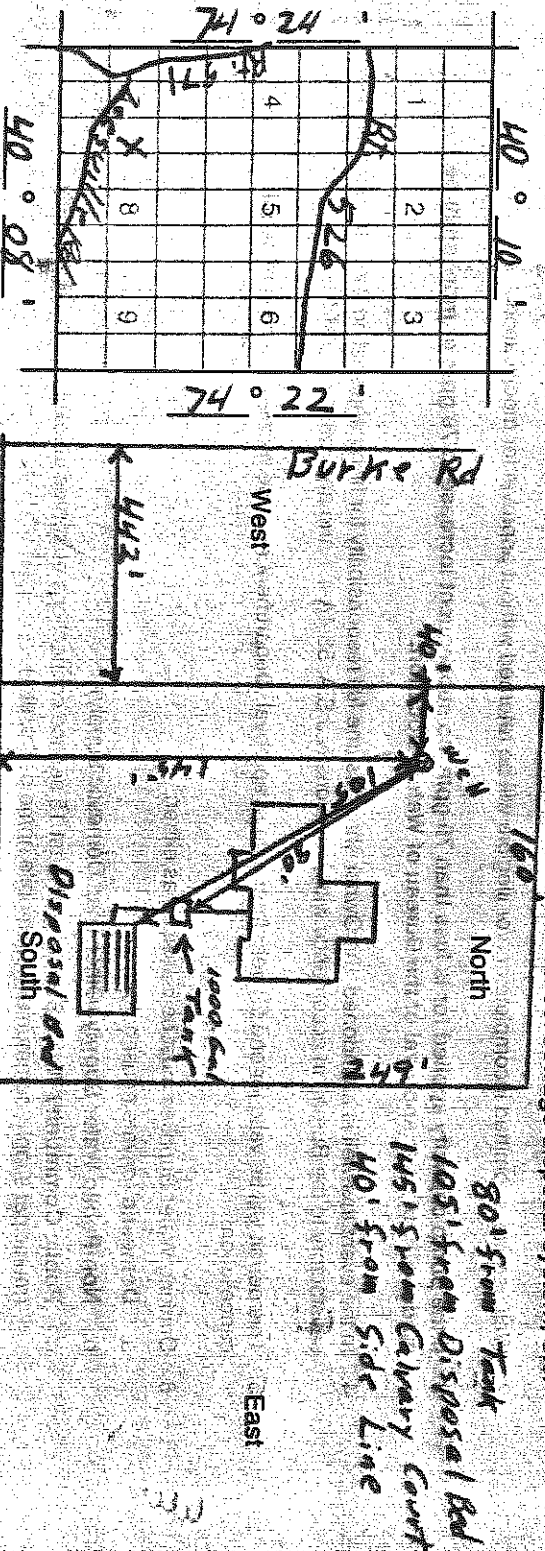
Site

COORD # 26.74.376

Owner	HORIZON 2000 DEVELOPMENT CORP.	Driller	KRIS ENDRESON
Address	35 BEAVERSON BLVD. BRICK, N.J. 08723	Address	P.O. BOX 338 BAYVILLE, N.J. 08721
Name of Facility	HOME	Diameter of Well	4 inches
Address	CALVARY COURT JACKSON, N.J. 08527	Proposed Capacity of Pump	15 GPM
		Use of Well (See Reverse)	DOMESTIC
		Drinking Water Supply?	XXXXXX
		Proposed Depth of Well	100 Feet
		Method of Drilling (Cable-tool, Rotary, etc.)	ROTARY
		Drinking Water Supply?	yes (see # 6 on reverse)

LOCATION OF WELL

Draw sketch showing distance and location of well site to nearest public roads, streets, components of the nearest sewage disposal system, etc.



SEE REVERSE SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT. APPROVAL OF THIS PERMIT IS MADE SUBJECT TO ACCEPTANCE OF AND COMPLIANCE WITH THE FOLLOWING ADDITIONAL CONDITIONS.

- ☒ DOMESTIC/PUBLIC NON-COMMUNITY/NON-PUBLIC Water Supply Wells shall comply with N.J.A.C. 7:10-12.1 et seq.
- ☐ PUBLIC COMMUNITY Water Supply Wells shall obtain construction and operation permits from the Bureau of Safe Drinking Water in accordance with N.J.A.C. 7:10-11.1 et seq.
- ☐ CLOSED LOOP GEOTHERMAL - see attached conditions.
- ☐ OPEN LOOP GEOTHERMAL HEAT PUMP WELLS - Wells must be a minimum of 50 feet apart and the water must be returned to the aquifer as the production well.
- ☐ INDUSTRIAL SUPPLY - A physical connection control permit shall be obtained pursuant to the provisions of N.J.A.C. 7:10-10.1 et seq.
- ☐ IRRIGATION SUPPLY - A physical connection control permit may be required pursuant to the provisions of N.J.A.C. 7:10-10.1 et seq.
- ☐ REPLACEMENT WELL - Existing well must be sealed by a certified New Jersey licensed well driller upon abandonment.
- ☐ IRRIGATION PURPOSES ONLY
- ☐ PINELANDS - Well must be drilled and cased to a minimum depth of 100 feet below the base of the aquifer and must comply with the provisions of N.J.A.C. 7:50-5.4 (e) 4. v. are met.
- ☐ MINIMUM distance requirements as per N.J.A.C. 7:10-12.13 have not been met - see attached additional conditions.
- ☐ The well shall be equipped with a totalizing flow meter per N.J.A.C. 7:10-2 et seq.

02 OCT 18 6N 3:53

In compliance with N.J.S.A. 58:4A-14, application is made for a permit to drill a well as described above.

Date 10/18/95

DECLINED

Signature of Driller

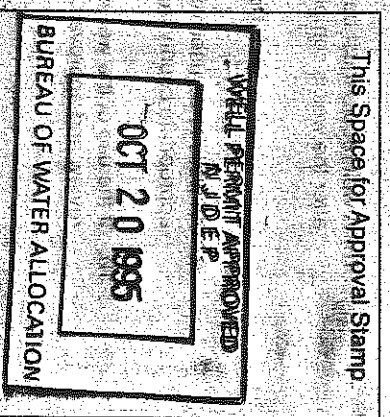
Registration No. 1015

COPIES: Water Allocation — White

Health Dept. — Yellow

Owner — Blue

Driller — White



OCEAN COUNTY HEALTH DEPARTMENT
PO Box 2191, Sunset Avenue
Toms River, NJ 08754-2191

APPLICATION FOR PERMIT TO INSTALL A SEPTIC SYSTEM
AND/OR A WATER SUPPLY SYSTEM

DATE
Official Use Only

Fee Paid

JACKSON MUNICIPALITY	☒ (A) To construct both a septic & water supply system ☐ (B) To construct a water supply system ☐ (C) To replace or alter a water supply system ☐ (D) To construct or alter septic system ☐ (E) To replace or repair a septic system	Type of Water System ☒ (A) Potable Non-Public ☐ (B) Potable Public Non-Community ☐ (C) Non-Potable ☐ (D) Public Community System
Comm. Code 15 Official Use Only		
Block 98.01		
Lot(s) 16.24		

(Current address of applicant required. All information must be completed.

NAME OF APPLICANT HORIZON 2000 DEVELOPMENT CORP. PHONE NO. 920-2444
ADDRESS 35 BEAVERSON BLVD. CITY BRICK, STATE N.J. ZIP 08723
DIRECTIONS TO LOCATION LEESVILLE RD. TO BURKE RD. TO CALVARY CT.

WELL APPLICATION

TYPE OF CASTING: Material P.V.C. Diameter 4 IN. Grade #40 Thickness 1/4 IN.
TYPE AND METHODS OF SEALING JOINTS: Type COUPLING Method GLUE
METHOD OF INSTALLATION ROTARY If Rotary or Auger, size of hole 8 IN.
GROUTING MATERIAL BENTONITE Depth & Method of grouting: Depth
Method PRESSURE NJAC7:10-12:20(B)1

STORAGE TANK CAPACITY 42 GAL. Model No. WX-202
WELL DRILLER KRIS JENDRESON Lic. # 1015 Driller Phone # 269-3344
DRILLER (Signature) State Well Permit # 28-36922

NOTE: Copy of NUDEP "Permit to Drill Well" must be attached. Hose bibs are prohibited on non-potable well, unless such well is sampled. NUDEP's "Well Record" must be immediately submitted to the Health Department upon installation of well.

SEPTIC APPLICATION

TYPE OF BUILDING TO BE SERVED Dwelling Unit: No. of Bedrooms
EXPANSION ATTIC, DEN OR REC. ROOM: Yes No If yes, calculate as additional bedroom
PERCOLATION TEST PERFORMED BY Date Phone
WEATHER CONDITIONS AT TIME OF TEST
ENGINEER'S SIGNATURE AND SEAL

NOTE: All engineering data relating to soils, percolation & system design must be on engineer's drawing. Engineer's drawings must be signed & sealed by the engineer.

STATEMENT: Submit four (4) complete legible copies of applications, including engineer's & well driller's submissions. Final approval will only be granted after all inspections are completed, "as-built" drawings are submitted (where required) and satisfactory water analysis received, and all fees are paid. Permit is valid for one (1) year from date of issuance.

OCEAN COUNTY HEALTH DEPARTMENT
PO Box 2191, Sunset Avenue
Toms River, NJ 08754-2191

APPLICATION FOR PERMIT TO INSTALL A SEPTIC SYSTEM
AND/OR A WATER SUPPLY SYSTEM

01/11/98

OCEAN COUNTY
PLANNING DEPARTMENT
STANDARD PLAN APPROVAL
PLAN APPROVAL
DATE 1/11/98

Official Use Only

Fee Paid

JACKSON MUNICIPALITY		☒ (A) To construct both a septic & water supply system		Type of Water System	
Comm. Code 15 Official Use Only		☐ (B) To construct a water supply system		☒ (A) Potable Non-Public	
Block 98.01		☐ (C) To replace or alter a water supply system		☒ (B) Potable Public Non-Community	
Lot(s) 16.24		☐ (D) To construct or alter septic system		☐ (C) Non-Potable	
		☐ (E) To replace or repair a septic system		☐ (D) Public Community System	

(Current address of applicant required. All information must be completed.)

NAME OF APPLICANT HORIZON 2000 Dev Corp PHONE NO. 920-2444
ADDRESS 35 Beaverson Blvd. Suite 68 CITY BRICK STATE NJ ZIP 08723
DIRECTIONS TO LOCATION Leesville Rd to Burke Rd to Calvary Ct.

WELL APPLICATION

TYPE OF CASTING: Material	Diameter	Grade	Thickness
TYPE AND METHODS OF SEALING JOINTS: Type	Method	If Rotary or Auger, size of hole	
METHOD OF INSTALLATION	Depth & Method of grouting: Depth		
GROUTING MATERIAL	Method		
STORAGE TANK CAPACITY	Model No.		
WELL DRILLER	(Print)	Lic. #	Driller Phone #
DRILLER	(Signature)	State Well Permit #	

NOTE: Copy of NUDEP "Permit to Drill Well" must be attached. Hose bibs are prohibited on non-potable well, unless such well is sampled. NUDEP's "Well Record" must be immediately submitted to the Health Department upon installation of well.

SEPTIC APPLICATION

TYPE OF BUILDING TO BE SERVED	RESIDENTIAL	Dwelling Unit: No. of Bedrooms	4
EXPANSION ATTIC, DEN OR REC. ROOM: Yes No	X	If yes, calculate as additional bedroom	
PERCOLATION TEST PERFORMED BY	ENVIRONMENTAL DISK ASSES	Date	9/28/95
WEATHER CONDITIONS AT TIME OF TEST	W - HOUSE	Phone	905-2112
ENGINEER'S SIGNATURE AND SEAL			

NOTE: All engineering data relating to soils, percolation & system design must be on engineer's drawing. Engineer's drawings must be signed & sealed by the engineer.

STATEMENT: Submit four (4) complete legible copies of applications, including engineer's & well driller's submissions. Final approval will only be granted after all inspections are completed, "as-built" drawings are submitted (where required) and satisfactory water analysis received, and all fees are paid. Permit is valid for one (1) year from date of issuance.

329

WELL RECORD

OWNER

Zip Code

Owner's Well No.

Block No.

DATE WELL STARTED

DATE WELL COMPLETED

Total Depth Drilled _____ ft.

Finished Well Depth _____ ft.

Top _____ in.
Bottom _____ in.

ft. above grade or
ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs./each no.)
Single/Inner Casing					
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used)					
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack					
Grout				Neat Cement Bentonite	lbs _____ lbs _____

Test Date _____

Static Water Level _____ ft. below land surface

Water Level Measured Using

Well Was Pumped Using _____

Well Yield _____ gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ **hours**

Installed by _____ Reg. No. _____

Pump Type

Depth of Pump below land surface _____ ft.

Capacity _____ gpm Horsepower _____

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company

Well Driller (Print)

Driller's Signature _____

Registration No. _____ Date _____ / _____ / _____

COPIES: White - DEP Canary - Driller

Pink - Owner

Goldenrod - Health Dept.

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations.

[illegible]

DWR-133
(6/95)

SERIAL # 91451

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

Permit No. 2836922

Mail to
NJDEP
Bureau of Water Allocation
CN 426
Trenton, NJ 08625-0426

PERMIT TO DRILL WELL

VALID ONLY AFTER APPROVAL BY THE D.E.P.

COORD #:

28 • 34 • 376

Owner HORIZON 2000 DEVELOPMENT CORP.

Driller KRIS ENDRESON

Address 35 BEAVERSON BLVD.

Address P.O. BOX 338

BRICK, N.J. 08723

DAYVILLE, N.J. 08721

Name of Facility HOME

Address CALVARY COURT

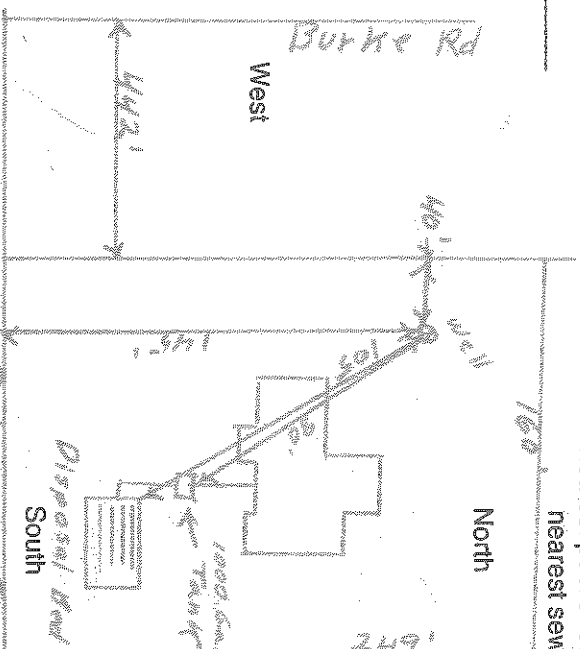
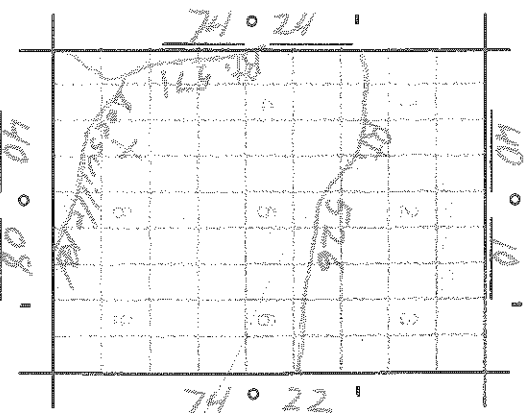
JACKSON, N.J. 08527

LOCATION OF WELL

Diameter of Well	4	Inches	Proposed Depth of Well	100	Feet
Proposed Capacity of Pump	15	GPM	Method of Drilling (cable-tool, Rotary, etc.)	ROTARY	
Use of Well (See Reverse)	DOMESTIC				
Drinking Water Supply?	XXXXXXXX	yes (see # 6 on reverse)	no		

Lot #	Block #	Municipality	County
16.24	98.01	JACKSON	OCEAN

State Atlas Map No. 2B

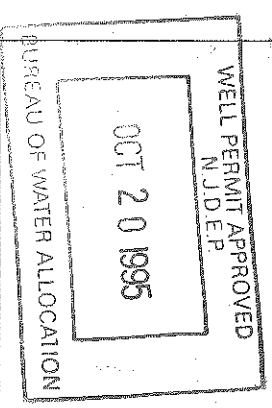


Draw sketch showing distance and location of well site to nearest public roads, streets, components of the nearest sewage disposal system, etc.

SEE REVERSE SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT. APPROVAL OF THIS PERMIT IS MADE SUBJECT TO ACCEPTANCE OF AND COMPLIANCE WITH THE FOLLOWING ADDITIONAL CONDITIONS

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- ☐ CLOSED LOOP GEOTHERMAL - see attached conditions.
- ☐ OPEN LOOP GEOTHERMAL HEAT PUMP WELLS - Wells must be a minimum of 50 feet apart and the water must be returned to the same aquifer as the production well.
- ☐ IRRIGATION SUPPLY - A physical connection control permit shall be obtained pursuant to the provisions of N.J.A.C. 7:10-10.1 et seq.
- ☐ IRRIGATION SUPPLY - A physical connection control permit may be required pursuant to the provisions of N.J.A.C. 7:10-10.1 et seq.
- ☐ REPLACEMENT WELL - Existing well must be sealed by a certified New Jersey licensed well driller upon abandonment.
- ☐ IRRIGATION PURPOSES ONLY ☐ TEST PURPOSES ONLY
- ☐ PINELANDS - Well must be drilled and cased to a minimum depth of 100' unless the provisions of N.J.A.C. 7:50-6.84 (a)(4) are met.
- ☐ MINIMUM distance requirements as per N.J.A.C. 7:10-12.13 have not been met - see attached additional conditions(s).
- ☐ The well shall be equipped with a totalizing flow meter per N.J.A.C. 7:19-2 et seq.

This Space for Approval Stamp



In compliance with N.J.S.A. 58:4A-14, application is made for a permit to drill a well as described above.

Date

10/18/95

Signature of Driller

Registration No. 1015

Signature of Owner

COPIES:

Water Allocation — White

Health Dept. — Yellow

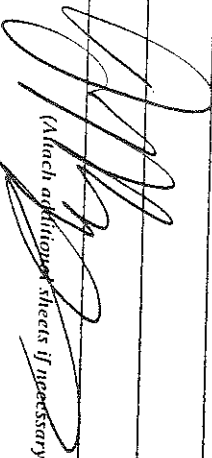
Owner — Blue

Driller — White

OCEAN COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH SERVICES

DETAILED DATA SHEET

CONTINUATION SHEET

Signature of Inspecting Official		Municipality		Date 10/6/95
FRED MAGGIE				Time - (2400 Hours) Begin
REG. NO.	REMARKS (Please specify area)			
	Septic-Well Permit Review	#	01498	
	(From 10/6/95)	Block	9801	Lot 16.24
		Municipality	Jackson	
	Approved with Stipulation:			
	Engineer must certify by signature and seal using Appendix B			
	Parts A and B, that system has been located, constructed and			
	installed as per approved plan. An inspection by this department			
	is required prior to backfilling the system.			
	A satisfactory Ocean County Health Department Ordinance 94-1 water			
	analysis and well head and tank inspection are required for approval.			
	This department shall be notified 24 hours prior to well installation			
	for witnessing purposes.			
	Other: Any change to this and submission / approved plan will require			
	PE submission and review period.			
	SUBMIT CORRECTIONS OR REAPPROVAL BY WITHIN 15 DAYS, OTHERWISE,			
	COMPLETERS, (NOT REVIS N/A IF NOT APPLICABLE TO APPLICANT)			
Reviewer's Signature: 				

(Attach additional sheets if necessary)

COUNTY/MUNICIPALITY: Ocean/Manchester

**APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM**

Form 2a - General Site Evaluation Data

Block: 98.01 Lot: 16.24

1. Name of Site Evaluator: Robert Berg
Environmental Risk Assessment Service, Inc.
2. Business Address of Site Evaluator: 31 Driftwood Drive
Howell, New Jersey 07731
3. Business Phone Number of Site Evaluator: (908) 905-2112
4. Special Site Limitations Identified (Check appropriate Categories): N.A.

☐ Flood Plains	☐ Bedrock Outcrops	☐ Wetlands
☐ Excessively Stony	☐ Disturbed Ground	☐ Sink Holes
☐ Sand Dunes	☐ Steep Slopes	
☐ Other--Specify _____		
5. Soil Logs--Enter on Form 2b ATTACHED
6. Considerations Relating to Disturbed Ground N.A.
 - a) Type of Disturbance (Check appropriate categories):

☐ Filled Area	☐ Excavated Area	☐ Regraded Area
☐ Subsurface Drains	☐ Other--Specify _____	
 - b) Pre-existing Natural Ground Surface:
Elevation Relative to Existing Ground Surface:
Method of Identification:
 - c) Suitability of Disturbed Ground

☐ Unsuitable: Objects Subject to Disintegration or Change in Volume
☐ Excessively Coarse
☐ Proctor Test performed--% Standard Proctor Density = _____
7. Hydraulic Head Test: N.A.
 - a) Hydraulically Restrictive Horizon: Depth Top to Bottom _____
 - b) Piezometer A: Depth to Bottom _____ Depth to Water Level (24 hrs) _____
 - c) Piezometer B: Depth to Bottom _____ Depth of Water Level (24 hrs) _____
 - d) Witnessed by _____ Signature _____ Date _____
8. Attachments (Check items included):

<u>XXXX</u>	Site Plan
☒	Key Map Showing Location of Site of U.S.G.S. Quadrangle or Other Accurate Map
☒	Key Map Showing Location of Site on U.S.D.A. Soil Survey Map
☒	Other--Specify <u>DETAILS</u>

9. I hereby certify that the information furnished on Form 2a of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator _____

Date 9/28/05

Signature of Professional Engineer _____

License # 34337

APPENDIX B

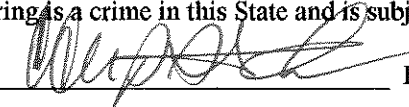
STANDARD FORMS FOR SUBMISSION OF SOILS / ENGINEERING DATA

COUNTY / MUNICIPALITY Ocean / Jackson

APPLICATION FOR PERMIT TO CONSTRUCT / ALTER / REPAIR AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 1 - General Information

1. Type of Permit Needed (Check applicable categories)
☒ New Construction ☐ Alteration / No Expansion or Change of Use
☐ Alteration / Expansion or Change of Use
☐ Alteration / Malfunctioning Sysytem
☐ Deviation from Standard ☐ Repair to Existing System
2. Location of Project:
Municipality Jackson Township Block No. 98.01 Lot No. 16.24
Street Address Calvary Court / Burke Road
Jackson, New Jersey Zip 08527
3. Name of Applicant (print): Horizon 2000 Development Corp
4. Applicant's Present Address: 35 Beaverson Blvd., Suite 6B
Brick, New Jersey Zip 08723
5. Applicant's Phone Number: 920-2444
6. Type of Facility:
☒ Residential
☐ Commercial / Institutional
Specify Type of Establishment: _____
7. Type of Wastes to be Discharged:
☒ Sanitary Sewage
☐ Industrial Wastes
☐ Other - Specify Type _____
8. Other Approvals / Certification / Waivers / Exemptions (Attach to Application): N/A
☐ Pinelands Commission
☐ U.S. Army Corps of Engineers
☐ NJDEP - Bureau of Flood Plain Management
☐ Other - Specify: _____
9. I hereby certify that the information furnished on Form 1 of this application is true. I am aware that false swearing is a crime in this State and is subject to prosecution.

Signature of Applicant  Date 10/26/98

COUNTY/MUNICIPALITY: Ocean/Jackson

**APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM**

Form 2b - Soil Log and Interpretations

Block: 98.01 Lot: 16.24

1. Log Number: 1 Method: (Check One): XXXX Profile Pit Boring
2. Soil Log

Depth (Inches)	Comments
0 - 2	Dark gray (10 YR 4/1) loamy sand; single grain; friable; 5% gravel to 1/4".
2 - 6	Dark brown (10 YR 4/3) loamy sand; single grain; friable; 5% gravel to 1/4".
6 - 16	Yellowish brown (10 YR 5/4) loamy sand; weak subangular blocky; friable; 5% gravel to 1/4".
16 - 22	Yellowish brown (10 YR 5/6) gravel to 1/2"; single grain; friable; 50% sand, single grain, friable.
22 - 30	Yellowish red (5 YR 4/6 dry) sand; single grain; hard; few scattered 1" x 1 1/2" x 1/4" ironstone fragments; 25% gravel to 1/2".
30 - 36	Strong brown (7.5 YR 5/6 dry) sand; single grain; hard; 10% gravel to 1/4".
36 - 46	Strong brown (7.5 YR 5/6 dry) sand; single grain; hard; 25% gravel to 1/4".
46 - 52	Light yellowish brown (10 YR 6/4) sand; single grain; hard; few scattered 1" x 1" x 3" ironstone fragments.
52 - 63	Pink (7.5 YR 7/4 dry) sand; single grain; friable; 1/16" bands of strong brown (7.5 YR 5/6 dry) coarse sand, single grain, friable.
63 - 72	Very pale brown (10 YR 8/4) sand; single grain; friable; 1/16" bands of strong brown (7.5 YR 5/6).
72 - 96	Very pale brown (10 YR 7/4) coarse sand; single grain; friable; 2% gravel to 3/8".
96 - 108	Light yellowish brown (10 YR 6/4) coarse sand; single grain; friable.
108 - 122	Very pale brown (10 YR 7/4) coarse sand; single grain; friable; pockets of brownish yellow (10 YR 6/6) loamy sand, subangular blocky, friable.

- Notes: 1. Soil pit described on September 20, 1995 by Robert Berg
2. All soil colors are described as moist unless otherwise noted.
3. Soil pit located in an area mapped as Downer.

3. Ground Water Observations: None
- Seepage -- Indicate Depth:
- Pit/Boring Flooded -- Depth after hours
4. Soil Limiting Zones (Check Appropriate Categories)
- Fractured Rock -- Depth to Top:
- Massive Rock Substratum -- Depth to Top:
- XXXX Excessively Coarse Horizon -- Depth Top to Bottom: 21 - 122"
- Excessively Coarse Substratum -- Depth to Top:
- Hydraulically Restrictive Horizon -- Depth Top to Bottom:
- Hydraulically Restrictive Substratum -- Depth to Top:
- Perched Zone of Saturation -- Depth Top to Bottom:
- Regional Zone of Saturation -- Depth to Top: >132"
5. Soil Suitability Classification: IIHc

Block 98.01, Lot 16.24
Pit 1

6. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator

Date

1/28/95

Signature of Professional Engineer

License #

34337

COUNTY/MUNICIPALITY: Ocean/Jackson

**APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM**

Form 2b - Soil Log and Interpretations

Block: 98.01 Lot: 16.24

1. Log Number: 2 Method: (Check One): XXXX Profile Pit Boring

2. Soil Log

Depth (Inches)	Comments
0 - 2	Very dark gray (10 YR 3/1) loamy sand; single grain; friable.
2 - 8	Dark brown (10 YR 4/3) loamy sand; weak subangular blocky; friable; 2% gravel to 1/2".
8 - 17	Yellowish brown (10 YR 5/4) loamy sand; subangular blocky; friable; 2% gravel to 1/2".
17 - 21	Light yellowish brown (10 YR 6/4 dry) sand; single grain; friable; 20% gravel to 1/2".
21 - 30	Dark red (2.5 YR 3/6 dry) coarse sand; single grain; friable; 50% gravel to 1/2".
30 - 58	Very pale brown (10 YR 7/4 dry) coarse sand; single grain; friable; 1/16" bands of reddish yellow (7.5 YR 6/8 dry) sand, single grain, friable; isolated pockets containing up to 25% gravel to 1/2".
58 - 78	Red (2.5 YR 4/8 dry) sand; single grain; very hard; pockets of very pale brown (10 YR 7/4 dry) sand, single grain, friable and brownish yellow (10 YR 6/6 dry) coarse sand; single grain, friable.
78 - 90	Brownish yellow (10 YR 6/8 dry) fine sand; weak subangular blocky; very hard.
90 - 108	Yellow (10 YR 7/8 dry) sand; single grain; friable.
108 - 120	Yellow (10 YR 7/6 dry) sand; single grain; friable.

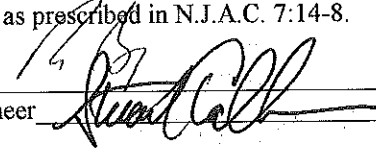
- Notes: 1. Soil pit described on September 20, 1995 by Robert Berg
2. All soil colors are described as moist unless otherwise noted.
3. Soil pit located in an area mapped as Downer.

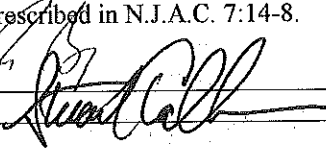
3. Ground Water Observations: None
 Seepage -- Indicate Depth:
 Pit/Boring Flooded -- Depth after hours

4. Soil Limiting Zones (Check Appropriate Categories)
 Fractured Rock -- Depth to Top:
 Massive Rock Substratum -- Depth to Top:
XXXX Excessively Coarse Horizon -- Depth Top to Bottom: 17 - 120"
 Excessively Coarse Substratum -- Depth to Top:
 Hydraulically Restrictive Horizon -- Depth Top to Bottom:
 Hydraulically Restrictive Substratum -- Depth to Top:
 Perched Zone of Saturation -- Depth Top to Bottom:
 Regional Zone of Saturation -- Depth to Top: >120"

5. Soil Suitability Classification: IIHc

6. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator 

Signature of Professional Engineer 

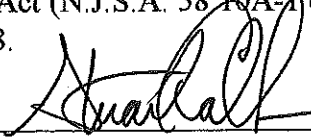
Date 7/28/95

License # 34337

Edwin J. Hale & Associates, Inc.
35 Beaverson Boulevard, Suite 6B
Brick, New Jersey 08723-7859

FORM 4 GENERAL DESIGN DATA

1. Volume of Sanitary Sewage, gal. 650
x Residential: No. of Dwelling Units 1 Total No. of Bedrooms 4
Commercial/Institutional- indicate type of establishment and show method of calculation. If estimate is based on water meter data, indicate source of data, frequency of readings, average daily flow, and maximum recorded daily reading _____
2. Alterations or Repairs
 - a. Reason for alteration or Repair (Check appropriate categories):
_____ Expansion or Change of Use _____ Upgrade Existing Facilities
_____ Correct Malfunctioning System _____ Other (Specify) _____
3. System Components:
 - a. Grease Trap Capacity, gals _____
Show Calculation Used: _____
 - b. Septic Tank Capacities, gals 1,000 First (Single) Compartment
gals _____ Second Compartment, gals _____ Third Compartment
 - c. Effluent Distribution Method: x Gravity Flow _____ Gravity Dosing
_____ Pressure Dosing
 - d. Dosing Tank Capacities, gals: Total Capacity _____ Dose Volume _____
Reserve Capacity _____ gals.
 - e. Laterals: Number 7 Total Length 48' Pipe Size 4" Spacing 3'
 - f. Connecting Pipe: Size 4" Type PVC Length 45'
 - g. Manifold: Size _____ Length _____
 - h. Disposal Field: Type of Installation Soil Replacement, Filled Enclosed
Design Permeability (Percolation Rate) 6 - 20 in/hr
Trenches: Width _____ Total Length _____ Bed: Area 1050 S.F.
 - i. Seepage Pits: Design Percolation Rate _____
4. Attachments (Check items included):
x General Plan of System Showing Location of All System Components
x X-Sections of Each System Component Including Grease Trap, Septic Tank,
Dosing Tank, Disposal Field, Seepage Pits and Interceptor Drains
_____ Pump Performance Curve
x Other-Specify _____ Details _____
5. I hereby certify that the information furnished on Form 4 of this application (and attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Professional Engineer  Lic.# 34337

Members

Gary Casperson, Chairman
Walter F. Rehak, Vice Chairman
Robert Singer, Secretary-Treasurer
Leon Dwulet, M.D.
Barbara Hiering
Robert S. Laureigh
John J. Mallon
Patricia Seeber
Warren Wolf
James F. Lacey, Freeholder Liaison
Seymour J. Kagan, Counsel



OCEAN COUNTY HEALTH DEPARTMENT

P.O. Box 2191
Toms River, N.J. 08754-2191
908-341-9700

Herbert W. Roeschke
Public Health Coordinator

DATE:

10/26/95

PLAN #:

011198

TO: Public Water Purveyor
FROM: Ocean County Health Department

Please be advised that the Ocean County Health Department has received an application for a permit to install the below listed water supply:

- ☒ Potable Non-Public
☐ Potable Public Non-Community
☐ Non-Potable

faxed 10/26/95
3:50 PM
B. Davis

This system will be installed at the property known as:

ADDRESS

Calvary Ct

TWP

Jackson

BLOCK

98.01

LOT

16.24

Ocean County Board of Health Ordinance 94-1 requires that no permit for a POTABLE water well can be approved if public water is presently available to serve the property. The National Standard Plumbing Code which was adopted by the State Department of Community Affairs defines availability as being at the discretion of the Plumbing Sub-Code Official.

If you have a public water service line available to this property, YOU MUST ADVISE THIS DEPARTMENT BY THE NEXT WORKING DAY AFTER RECEIPT OF THE FAX COPY, since the permit is scheduled to be returned to the applicant. It would be appreciated if you would complete and return this notice.

- ☐ Water Service Available
☐ Water Service Not Available
☐ Name of Water Company: _____

Representative's Signature: _____

Date: _____

If you should have any questions on this matter, please feel free to contact this office at (908)341-9700 ext. 7416.

ADOPTIONS

8. Indicate Problems Identified During Inspection:

- ☐ Septic Tank Not Accessible ☐ Solids in D-Box
☐ Inlet Baffle Needs Repair ☐ D-Box Not Level
☐ Outlet Baffle Needs Repair ☐ Hydraulic Failure of Disposal
☐ Effluent Backs-Up into Septic Tank ☐ Field or Seepage Pit
☐ Septic Tank Leaks ☐ Settlement or Improper Grading
☐ Dosing Tank Not Accessible ☐ Encroachments in Disposal Area
☐ Dosing Tank Leaks ☐ Improperly Directed Drainage
☐ Solids in Dosing Tank ☐ Physical Condition of Seepage Pit
☐ Operation/Condition of Pump, ☐ Other—Specify _____
 Switches, Alarm, Siphon, etc.

9. Observed Malfunctions:

- ☐ Back-up into Plumbing ☐ Seepage of Sewage/Effluent into Bldg.
☐ Surface Break-out or Ponding ☐ Contamination of Well Water
☐ Odors
☐ Other—Specify _____

10. I hereby certify that the information furnished on Form 1 of this application (and attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Septic System Inspector _____ Date _____

FOR AGENCY USE ONLY

- ☐ Renewal of License Denied—Reason for Denial _____
☐ Approval Pending Completion of Repairs—Description of
 Repairs Required: _____
☐ License Renewed—Expiration Date of New License _____

STANDARD FORMS FOR
CERTIFICATE OF COMPLIANCE

County/Municipality of DEAN / JACKSON

INSTRUCTIONS: Part A is to be completely filled in for all Certifications. Only Part B or Part C will be completed. Part B will be completed if the administrative authority relies upon the certification signed and sealed by a New Jersey licensed professional engineer that the system has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 7:9A-1 and the Application to Construct/Alter/Repair and Individual Subsurface Sewage Disposal System which was approved by the administrative authority. Part C will be completed if the administrative authority performs the certification.

Part A—General Information

1. Permitted Activities (Check applicable categories):

- Permit Number _____
☒ New Construction
☐ Alteration/No Expansion or Change of Use
☐ Alteration/Expansion or Change in Use
☐ Alteration/Malfunctioning System
☐ Deviation from Standards
☐ Repairs to Existing System

2. Location of Project:

Municipality JACKSON Lot 16.24 Block 98.01
 Street Address CALVARY COURT

ENVIRONMENTAL PROTECTION

3. Name and Present Address of Applicant:

HORIZON 2000 DEV. CORP.
(908) 920-2444

Applicant's Phone Number _____

Part B—Professional Engineers Certification

I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 7:9A-1 and the Application to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System which was approved by the administrative authority. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

STUART CHALLONER
(Signature)

SEAL

STUART CHALLONER
Name (Type or Print), License # 34337

Date: _____

Part C—Certification by Administrative Authority

I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 7:9A-1 and the Application to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System which was approved by the administrative authority. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Authorized Signature _____

Type of License Held _____

Name (Typed or Printed) _____

License Number _____

Date: _____

For Agency Use Only

Date Received: _____
 Form Determined To Be: ☐ Complete ☐ Incomplete
 Date Returned: _____
 Date Received: _____

Date Certification Approved: _____

Authorized Signature: _____

APPENDIX C
UNIFORM PLACEMENT OF
PERCOLATION TESTS

Uniform Placement of Percolation Tests

N.J.A.C. 7:9A-6.1(c) of these standards requires that percolation tests be spaced uniformly within the area of the disposal field. Acceptable patterns or arrangements for percolation test placement depend upon the size and shape of the disposal field as outlined below. Patterns other than those provided below may be approved provided that it is determined by the Administrative Authority that the test results submitted are representative of the soil conditions throughout the entire area of the disposal field.

Definitions

The following words and terms shall have the following meanings when used within Appendix B of this chapter:

"Center" means the intersection of the two disposal field diagonals.

"Diagonal" means a line connecting opposite corners of the disposal field.

"Elongated disposal field" means a disposal field with a length/width ratio of 3.0-5.0.

"End" means one of the two shorter sides in a disposal field which has a length/width ratio not equal to 1.0.

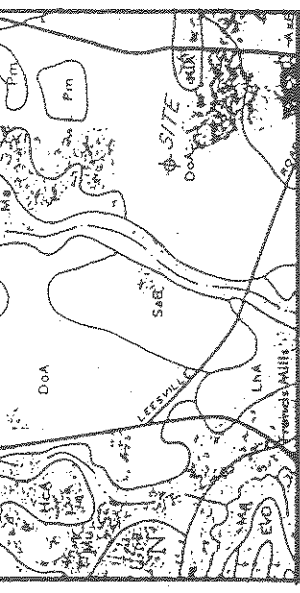
"Length" means the longest dimension of the disposal field, or the distance between the ends of the disposal field.

11198

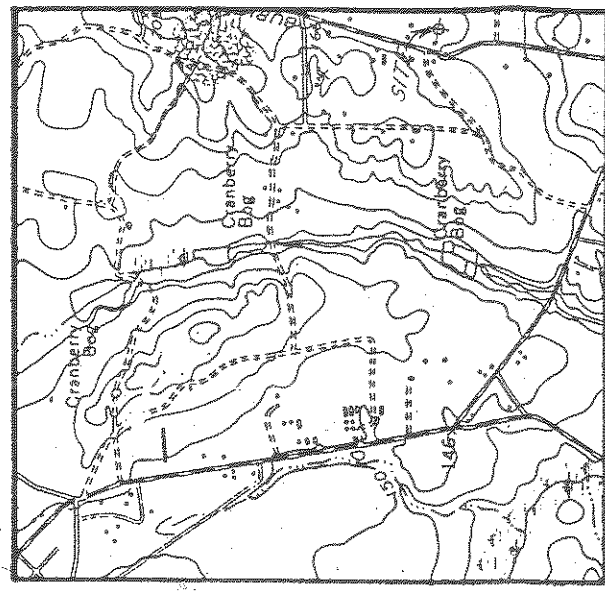
10. Requirements for soil replacement within the zone of treatment:
Select fill shall meet the requirements of N.J.A.C. 7:9A-10.1(f)4. Specifically, the fill material shall have a coarse fragment content less than 15 percent by volume or less than 25 percent by weight; and by textural analysis: from 85 to 95 percent sand, 5 to 15 percent silt plus clay (minimum of 2 percent clay); and have a permeability rate between 6 and 20 inches per hour.

Compactions of the select fill material shall meet the requirements of N.J.A.C. 7:9A-10.4(F)1. All compactions of fill shall be carried out as directed by the design engineer and as follows. Compaction may be accomplished manually or mechanically, by tamping or rolling or by driving over the filled area in a controlled pattern using tracked or rubber-tired vehicles. During compaction by vehicles, a minimum of one foot of fill material shall be maintained below the vehicle tracks of wheels at all times.

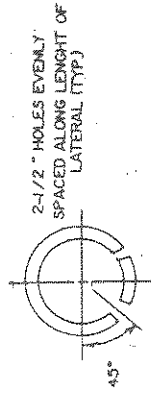
Testing of the select fill shall be performed by the engineer after compaction by means of tube permeameter test. Based on the results of these tests and inspections of the system construction, the engineer shall certify the adequacy of the compaction of the fill in accordance with N.J.A.C. 7:9A-10.4(F)3ii.



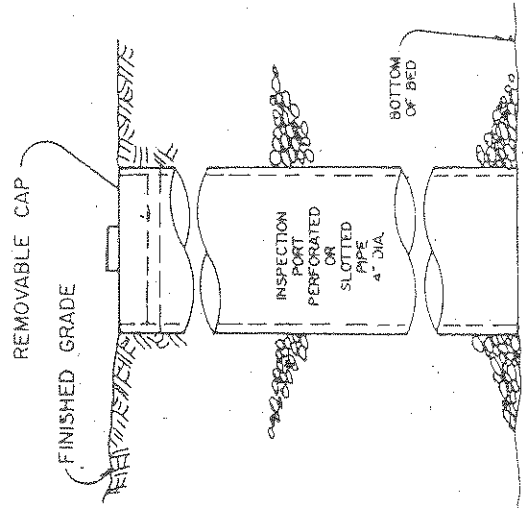
USDA SOIL SURVEY MAP
OCEAN COUNTY



KEY MAP
USGS MAP SCALE 1" = 2000'

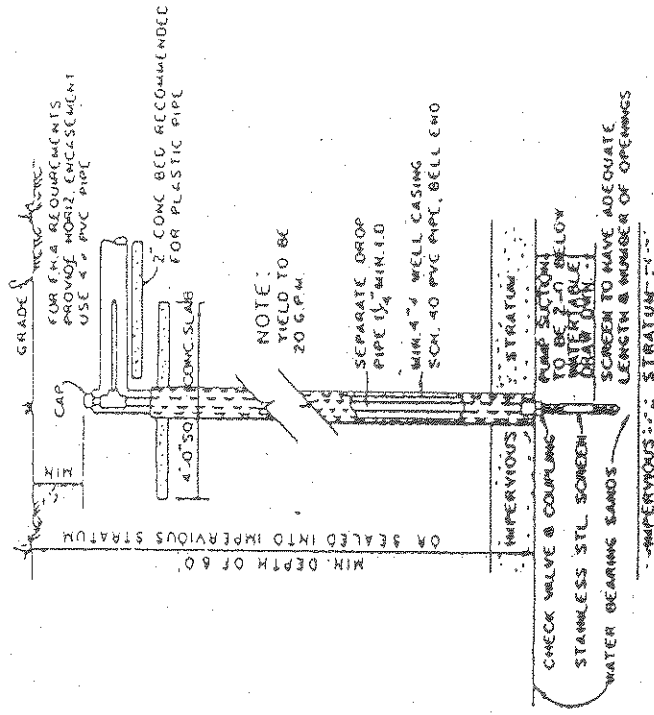


LATERAL
CROSS SECTION



INSPECTION PORT
DETAIL

NOTE:
(1) HOLE SIZE = 8"
(2) HOLE SEAL TO BE BEN SEAL
(3) WELL PIPE TO BE DISINFECTED
WITH CHLORINE
(4) SEAL TO BE A FITLESS ADAPTOR

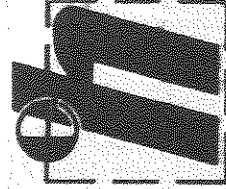


WELL SECTION

PLAN DATE 10/16/95 APPROVED BY STUART C. CHALLONER, P.E. LIC. # 34337

EDWIN J. HALE, PROFESSIONAL LAND SURVEYOR, N.J. LIC. # 35842

STUART C. CHALLONER, P.E. LIC. # 34337



edwin j. hale & associates, inc.
35 beverton boulevard, suite 6b
brick township, new jersey 08723-7850
phone 908-920-2444
fax 908-920-2450

professional land surveyors, civil engineers
& environmental scientists

PLOT PLAN &
SEPTIC DESIGN FOR
LOT 16.24 BLOCK 98.01
SITUATED IN

TOWNSHIP OF JACKSON
OCEAN COUNTY, NEW JERSEY

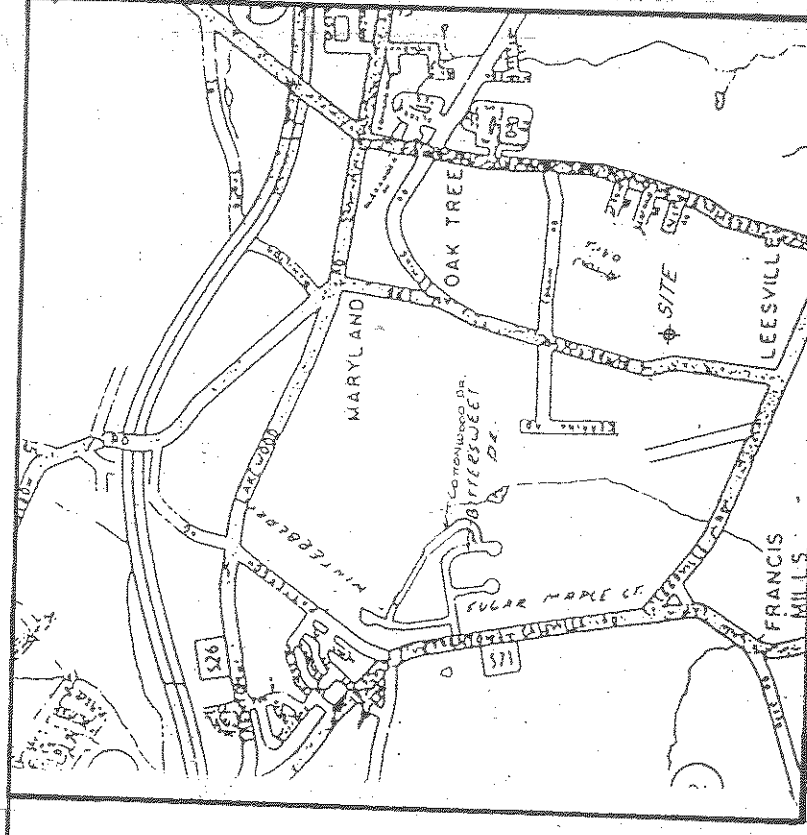
DATE 10/16/95	SCALE 1" = 50'	FILE NO. 95004A	DRAWN BY S.C.	CKD BY S.C.	FIELD BOOK	DRAWING
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CONSTRUCTION PROCEDURES

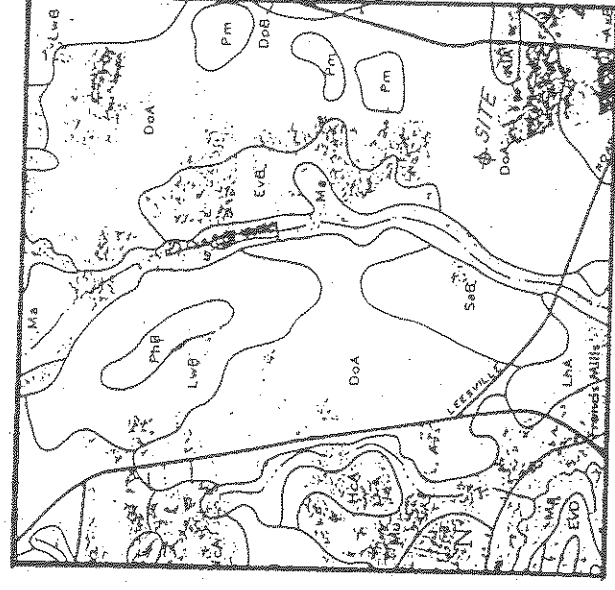
1. Disposal field excavation may proceed only when the moisture content is below the plastic limit of the soil. If a sample of soil taken at the depth of the proposed bottom of the system forms a "wire" instead of crumbling when attempting to roll it between the hands, the soil is too wet. Work should only be scheduled when the infiltrative surfaces can be covered in one day, because wind-blown silt or raindrop impact can clog the soil.
2. The disposal field shall be constructed to the specified depth shown on the plan. Extreme care must be used to construct the field bottom at the same elevation (level throughout its entire length). The distribution lines shall be laid at a maximum slope of 2" per 100'.
3. Upon completion of the field excavation, the bottom and side walls shall be thoroughly scarified by hand to remove any smeared soil surfaces. After scarification, no one shall be permitted on this area until the filter materials have been placed.
4. Crushed stone or washed gravel filter shall be placed by backhoe (not dumped by truck) below the distribution lines to the minimum depth shown on the plans. The filter materials shall conform to NJDOT Soil Aggregate Size Number 6, 3, 4, or 24. (Crushed limestone is unsuitable). The filter material shall be free of all fines, prior to its installation.
5. The distribution laterals shall be carefully laid approximately level, but in no case shall the slope be greater than 2" per 100'.
6. The filter material shall extend a minimum distance of 2" above the pipes, under one layer of synthetic filter fabric (as manufactured by Mirafi, Dupont or equal). An inspection must be requested by the contractor from the County Health Department prior to backfill over the field. The design engineer must also be notified at this time so that any necessary asbuilt measurements can be made.
7. After obtaining approval from the County Health Department a minimum of 9" and no more than 18" of backfill, including 4" of topsoil, shall be placed over the top of the disposal field filter material. This area shall be stabilized within 10 days after the installation by either seeding, sodding or mulching, to prevent soil erosion.
8. The area over the disposal field shall be graded to prohibit ponding of surface water. No grading machinery or heavy equipment shall be permitted to pass over the disposal field for final grading operations. Stormwater runoff from roofs, patios, driveways or other impervious surfaces shall be directed away from the disposal field area.
9. An inspection port shall be installed at each corner of the disposal field.
10. Requirements for soil replacement within the zone of treatment: Select fill shall meet the requirements of N.J.A.C. 7:9A-10.1(f)4. Specifically, the fill material shall have a coarse fragment content less than 15 percent by volume or less than 25 percent by weight; and by textural analysis: from 85 to 95 percent sand, 5 to 15 percent silt plus clay (minimum of 2 percent clay); and have a permeability rate between 6 and 20 inches per hour.

Compactions of the select fill material shall meet the requirements of N.J.A.C. 7:9A-10.4(F)1. All compactions of fill shall be carried out as directed by the design engineer and as follows. Compaction may be accomplished manually or mechanically, by tampering or rolling or by driving over the filled area in a controlled pattern using tracked or rubber-tired vehicles. During compaction by vehicles, a minimum of one foot of fill material shall be maintained below the vehicle tracks of wheels at all times.

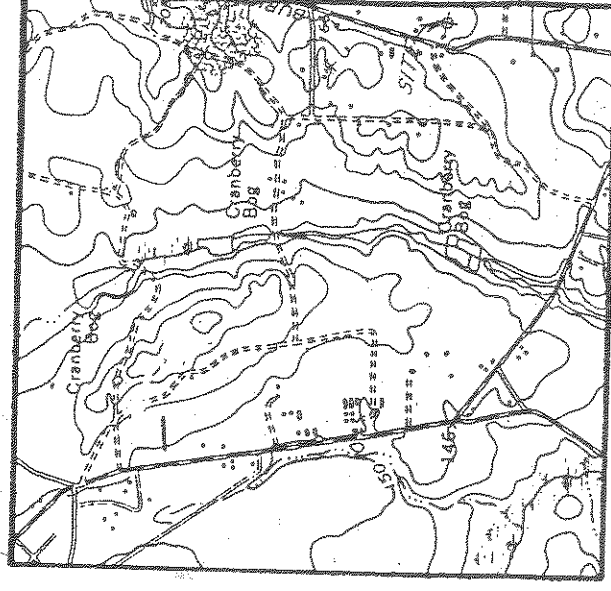
Testing of the select fill shall be performed by the engineer after compaction by means of tube permeameter test. Based on the results of these tests and inspections of the system construction, the engineer shall certify the adequacy of the compaction of the fill in accordance with N.J.A.C. 7:9A-10.4(F)3ii.



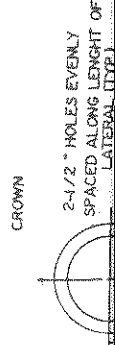
KEY MAP
STREET MAP SCALE 1" = 3000'



USDA SOIL SURVEY MAP
OCEAN COUNTY



KEY MAP



conform to the New Jersey Administrative Code's the Construction of Individual Subsurface Sewage Systems" (N.J.A.C. 7:9A) and to all state, county or ordinances or requirements applicable thereto.

occur in the characteristics of the design (i.e., septic system location or orientation, etc.) this id and a revised plan reflecting the revisions ed to the DEAN COUNTY Health their approval, prior to installation.

responsibility of the contractor to immediately gn engineer, in writing, of any discrepancies he drawings and the specifications and site ny ambiguities or inconsistencies in the drawings ns. (All work done by the contractor prior to the ny discrepancies found, shall be done solely at s risk).

responsibility of the contractor to notify the , in writing, of any unusual site or soil unerred or any deviations from the plan during and to work the limits of disposal field for

poses. The contractor shall notify the design st 48 hours prior to construction and also after the field, but prior to back-filling, so that the rform as-built measurements, if necessary. If the notified, the contractor shall (at his own engineer's request, expose or otherwise make bservation those components of the sewage disposal est be as-built or inspected.

by the contractor in varying from the plans and or substitution of alternate procedures or ility for the written approval of the design engineer for the substitutions or alternatives.

responsibility of the contractor to locate any ities prior to any construction.

ed shall be of first quality and not damaged. erial and backfill material shall be clean and is.

c over the disposal field is prohibited at all disposal field is located in close proximity to a ll be separated from said driveway and protected r encroachment by means of a barrier consisting bollards, railroad ties or other approved excess pedestrian traffic in the disposal field completed. Winter pedestrian traffic should be ed to minimize frost penetration.

inking in the vicinity of the disposal field o an absolute minimum to prevent the infiltrating from being over-burdened.

ing or conditioning equipment shall not be septic system.

er between the dwelling, septic tank and dosing ain a minimum slope of 1/4 inch per foot. , where required, shall not be sharper than 45 side angle between adjacent sections of pipe than 135 degrees.

er from the dwelling to the septic tank shall be iron pipe (extra heavy), ductile iron or P.V.C. edule 40, SDR-21 and SDR-26.

ration distances shall meet the requirements of ards for Individual Subsurface Disposal Systems".

SEPTIC TANKS

CONSTRUCTION PROCEDURE:

1. Tanks shall be precast reinforced concrete tanks as manufactured by R & E Mershon Concrete Products, Inc., Bordentown, New Jersey or approved equal by the design engineer.
2. All joints below the liquid level of the tank or below the seasonally high water table shall be provided with a permanent water-tight seal.
3. Covers shall be designed and constructed so as not to be damaged by any load which is likely to be placed on them. Pre-cast slabs used as covers shall be water-tight, a minimum of three inches in thickness and adequately reinforced.
4. All inside concrete surfaces shall be sealed with two coatings of an appropriate inert coating to minimize corrosion. Coating of pre-cast tanks shall be applied by the manufacturer prior to delivery to the job site.
5. Tanks shall be placed upon a firm and stable foundation so that the potential for uneven settlement or shifting is minimized. Tanks shall be installed directly on undisturbed natural soil. If the excavation is dug too deep, it shall be backfilled to the proper elevation with sand.
6. Each tank shall be provided with at least one access opening which shall be a manhole a minimum of 24 inches square or 24 inches in diameter. All manholes shall be extended flush with finished grade by means of a riser fitted with a removable water-tight cover. Covers shall be bolted or locked to prevent access by children. Covers shall be of cast-iron when a concrete riser is used.
7. An inspection port extending to finished grade shall be provided over each tank or compartment inlet and outlet which is not directly below a manhole except for those outlets where a septic solids retainer is used. Inspection ports shall extend to finished grade, shall be constructed of four inch cast iron or polyvinyl chloride (PVC), and have a locked or bolted cap.
8. Backfill around tank shall be free of large stones, roots or foreign objects, shall be placed in thin layers, not to exceed eight inches, and shall be thoroughly tamped in a manner that will not produce undue strain on the tank.
9. Inlets and outlets of septic tanks shall be arranged so that all flow is directed along the longest horizontal dimension of the tank.
10. Inlet and outlet connections of the septic tank shall be fastened with and constructed of, or coated with, materials which are resistant to corrosion by sulfuric acid. Where pipe tees are used, the tees shall be sanitary tees and shall be installed in a manner that will provide a lasting water-tight seal between the tee and the wall of the tank. For this purpose, a manufactured water-proof pipe coupling which is incorporated into the wall of the tank may be used, or an expanding grout which will adhere to both the tee and to the body of the tank where the tee is installed.
11. Outlet connections of the septic tank or each compartment thereof shall be provided with a septic solids retainer provided that this device bears the seal of the National Sanitation Foundation (NSF) certifying that the device has been approved by NSF for the specific use proposed and provided that the installation conforms to the manufacturer's recommendations.

1. Disposal field ex content is below soil taken at the a "wire" instead when the filtra wind-blown silt o
2. The disposal fiell shown on the plan field bottom at ti length). The dis of 2" per 100'.
3. Upon completion o shall be thorough surfaces. After area until the fi
4. Crushed stone or (not dumped by tr depth shown on th NJDOT Soil Aggreg limestone is unsu all fines, prior
5. The distribution level, but in no
6. The filter materi the pipes, under requested by the prior to backfill be notified at th measurements can
7. After obtaining a minimum of 9" and topsoil, shall be material. This a installation by e soil erosion.
8. The area over the ponding of surfac shall be permitte grading operation driveways or othe the disposal fiell
9. An inspection por disposal field.
10. Requirements for Select fill shall 7:9A-10.1(f)4. S coarse fragment c than 25 percent b 95 percent sand, percent clay); an inches per hour.

Compactions of th requirements of N shall be carried follows. Compactl by tampering or controlled pattern compaction by veh shall be maintain times.

Testing of the se after compaction results of these the engineer shall fill in accordance

6' WIDE SHADE TREE &
UTILITIES EASEMENT

7C 155.15
8C 154.65

TC 153.15
BC 154.65

Lot 16.18
VACANT

CATION FOR PERMIT TO CONSTRUCT AL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Lot	Block	Lot	Block
16.24	98.01	16.24	98.01

Method: (Check One): ~~XXXX~~ Profile Pit BoringComments EEV. 162.50

(10 YR 3/1) loamy sand, single grain; friable.
(10 YR 4/3) loamy sand, weak subangular blocky, friable, 2% gravel to 1/2".
(10 YR 5/4) loamy sand, weak subangular blocky, friable, 2% gravel to 1/2".
brown (10 YR 6/4 dry) sand, single grain; friable; 20% gravel to 1/2".
(R 3/6 dry) coarse sand, single grain; friable; 50% gravel to 1/2".
(10 YR 7/4 dry) coarse sand, single grain; friable; 1/16" bands of reddish
6/8 dry) sand, single grain, friable, isolated pockets containing up to 23%
6/8 dry)

8 dry) sand; single grain, very hard; pockets of very pale brown (10 YR 8/6 dry) sand; single grain, friable and brownish yellow (10 YR 6/6 dry) coarse sand; friable.

10 YR 6/8 dry) fine sand; weak subangular blocky, very hard
7/8 dry) sand; single grain; friable.
7/6 dry) sand; single grain; friable.

described on September 20, 1995 by Robert Berg
colors are described as moist unless otherwise not
located in an area mapped as Downer.

ons: None
ate Depth:
ded - Depth after _____ hours

Black Appropriate Categories)

-- Depth to Top:

Substratum -- Depth to Top:

Coarse Horizon -- Depth Top to Bottom: 17 - 120

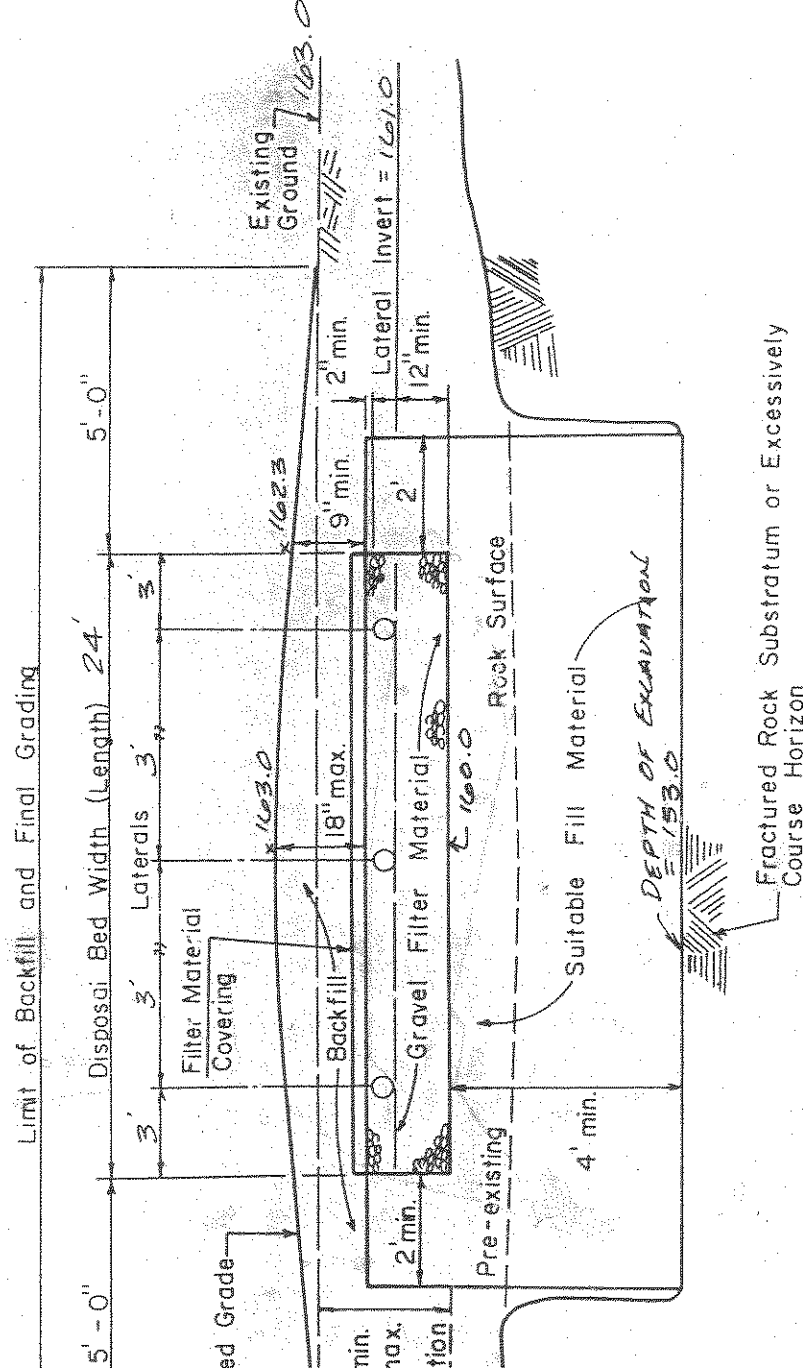
Coarse Substratum -- Depth to Top:

Restrictive Substratum Depth to Top of Bolson:

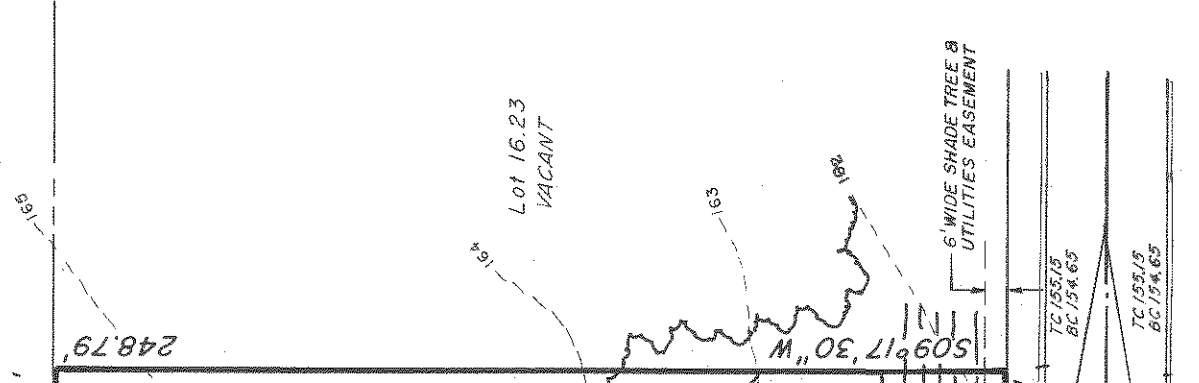
Eff Saturation -- Depth Ton to Bottom:

of Saturation -- Depth to Top: >120"

tion: IHC

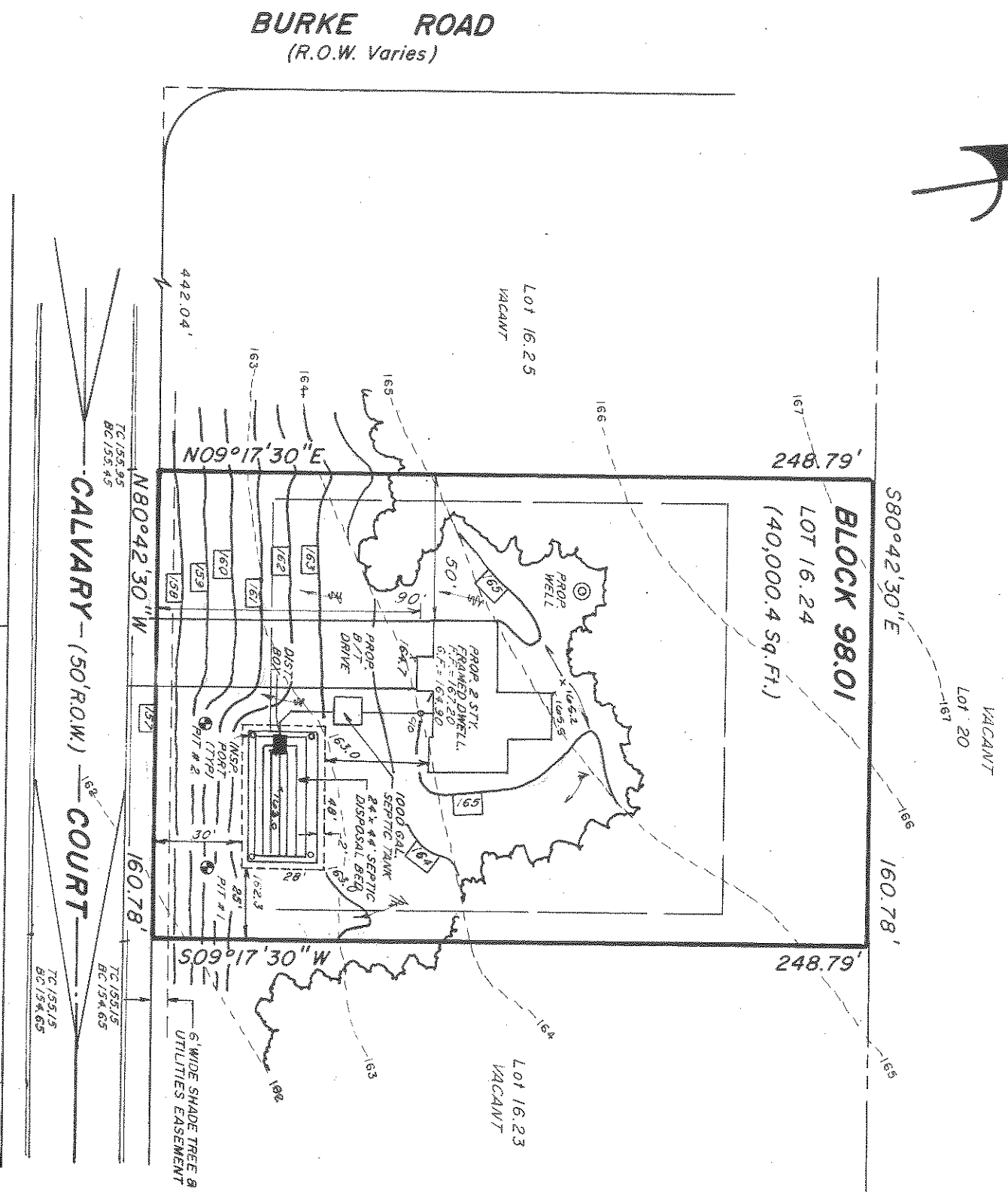
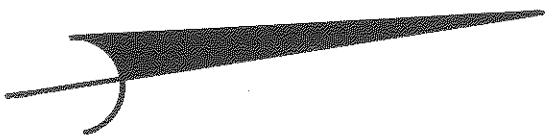


Replacement, Fill - Enclosed Disposal Field Installation



GENERAL REQUIREMENTS

1. All work shall conform to the New Jersey "Standards for the Construction of Industrial Disposal Systems" (N.J.) A.C. 7:9A) and municipal ordinances or requirements applicable to the project.
2. If any changes occur in the character of building use, septic system location or plan will be void and a revised plan must be submitted to the DEAN CO. Department for their approval, prior to construction.
3. It shall be the responsibility of the design engineer, in writing, to notify the design engineer, in writing, of any changes found between the drawings and the specifications or any ambiguities or inconsistencies. (All work done by the contractor's risk).
4. It shall be the responsibility of the design engineer, in writing, of any conditions encountered or any deviations from the drawings and the specifications, and to work the limits of as-built plan purposes. The contractor engineer at least 48 hours prior to construction of the field, but prior to installation of the field, the contractor engineer may perform as-built measurements. (All work done by the contractor's risk).
5. Any changes made by the contractor in specifications or substitution of materials without the written approval of the design engineer, the contractor assumes no liability for the substitution of materials.
6. It shall be the responsibility of the contractor to provide for the protection of underground utilities prior to any construction.
7. All materials used shall be of first quality and shall be free of all debris.
8. Vehicular traffic over the disposal field is prohibited. If any disposal field is located on a driveway, it shall be separated from the disposal field by a minimum of 10 feet. Vehicular encroachment by means of landscaping, bollards, railroad tie methods. Avoid excess pedestrian traffic. Avoid excess pedestrian traffic area after it is completed. Winter pe completely avoided to minimize frost damage.
9. Overall lawn sprinkling in the vicinity of the disposal field shall be kept to an absolute minimum capacity of soil from being over-burdened.
10. Any water softening or conditioning equipment shall be connected to the septic system.
11. The building sewer between the dwelling and the septic tank shall maintain a minimum slope of 1/4" per foot. Horizontal bends, where required, shall be 45 degrees. The inside angle between adjacent bends shall be no less than 135 degrees.
12. The building sewer from the dwelling to the septic tank shall be 4" diameter cast iron pipe (extra heavy) (ASTM A-216) schedule 40, SDR-21 and shall be installed in accordance with the requirements of the International Plumbing Code (IPC) Chapter 9A "Standards for Individual Sewage Disposal Systems".
13. All minimum separation distances shall be in accordance with the requirements of the International Plumbing Code (IPC) Chapter 9A "Standards for Individual Sewage Disposal Systems".



APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b - Soil Log and Interpretations Block: 98.01 Lot: 16.24

1. Log Number: 1 Method: (Check One) XXXX Profile Pit Boring
2. Soil Log

Depth (Inches)	Comments
0-2	Dark gray (10 YR 4/1) loamy sand, single grain, friable, 5% gravel to 1/4"
2-6	Dark brown (10 YR 4/3) loamy sand, single grain, friable, 5% gravel to 1/4"
6-16	Yellowish brown (10 YR 5/4) loamy sand, weak subangular blocky, friable, 5% gravel to 1/4"
16-22	Yellowish brown (10 YR 5/6) gravel to 1/2", single grain, friable, 50% sand, single grain, friable
22-30	Yellowish red (5 YR 4/6 dry) sand, single grain, hard, few scattered 1" x 1 1/2" x 1 1/4"
30-36	Ironstone fragments, 25% gravel to 1/2"
36-46	Strong brown (7.5 YR 5/6 dry) sand, single grain, hard, 25% gravel to 1/4"
46-52	Light yellowish brown (10 YR 6/4) sand, single grain, hard, few scattered 1" x 1" x 3" ironstone fragments
52-63	Pink (7.5 YR 7/4 dry) sand, single grain, friable, 1/16" bands of strong brown (7.5 YR 5/6 dry) coarse sand, single grain, friable
63-72	Very pale brown (10 YR 8/4) sand, single grain, friable, 1/16" bands of strong brown (7.5 YR 5/6)
72-96	Very pale brown (10 YR 7/4) coarse sand, single grain, friable, 2% gravel to 3/8"
96-108	Light yellowish brown (10 YR 6/4) coarse sand, single grain, friable
108-122	Very pale brown (10 YR 7/4) coarse sand, single grain, friable, pockets of brownish yellow (10 YR 6/6) loamy sand, subangular blocky, friable

Notes: 1. Soil pit described on September 20, 1995 by Robert Berg
2. All soil colors are described as moist unless otherwise noted
3. Soil pit located in an area mapped as Downer

APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b - Soil Log and Interpretations Block: 98.01 Lot: 16.24

1. Log Number: 2 Method: (Check One) XXXX Profile Pit Boring
2. Soil Log

Depth (Inches)	Comments
0-2	Very dark gray (10 YR 3/1) loamy sand, single grain, friable
2-8	Dark brown (10 YR 4/3) loamy sand, weak subangular blocky, friable, 2% gravel to 1/2"
8-17	Yellowish brown (10 YR 5/4) loamy sand, subangular blocky, friable, 2% gravel to 1/2"
17-21	Light yellowish brown (10 YR 6/4 dry) sand, single grain, friable, 20% gravel to 1/2"
21-30	Dark red (2.5 YR 3/6 dry) coarse sand, single grain, friable, 50% gravel to 1/2"
30-58	Very pale brown (10 YR 7/4 dry) coarse sand, single grain, friable, 1/16" bands of reddish yellow (7.5 YR 6/8 dry) sand, single grain, friable, isolated pockets containing up to 25% gravel to 1/2"
58-78	Red (2.5 YR 4/8 dry) sand, single grain, very hard, pockets of very pale brown (10 YR 7/4 dry) sand, single grain, friable and brownish yellow (10 YR 6/6 dry) coarse sand, single grain, friable
78-90	Brownish yellow (10 YR 6/8 dry) fine sand, weak subangular blocky, very hard
90-108	Yellow (10 YR 7/8 dry) sand, single grain, friable
108-120	Yellow (10 YR 7/6 dry) sand, single grain, friable

Notes: 1. Soil pit described on September 20, 1995 by Robert Berg
2. All soil colors are described as moist unless otherwise noted
3. Soil pit located in an area mapped as Downer

Ground Water Observations: None
Seepage - Indicate Depth: _____
Pit/Boring Flooded - Depth after _____ hours
Soil Limiting Zones (Check Appropriate Categories)
Fractured Rock - Depth to Top: _____
Massive Rock Substratum - Depth to Top: _____

APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b - Soil Log and Interpretations

Block: 98.01 Lot: 16.24

1. Log Number: 1 Method: (Check One) XXXX Profile Pit Boring
2. Soil Log

Depth (Inches)	Comments
0 - 2	Dark gray (10 YR 4/1) loamy sand, single grain, friable; 3% gravel to 1/4"
2 - 6	Dark brown (10 YR 4/3) loamy sand, single grain, friable; 5% gravel to 1/4"
6 - 16	Yellowish brown (10 YR 5/4) loamy sand, weak subangular blocky, friable; 5% gravel to 1/4"
16 - 22	Yellowish brown (10 YR 5/6) gravel to 1/2"; single grain, friable; 50% sand, single grain, friable.
22 - 30	Yellowish red (5 YR 4/6 dry) sand, single grain, hard; few scattered 1" x 1 1/2" x 1/4" ironstone fragments; 25% gravel to 1/2"
30 - 36	Strong brown (7.5 YR 5/6 dry) sand, single grain, hard; 10% gravel to 1/4"
36 - 46	Strong brown (7.5 YR 5/6 dry) sand, single grain, hard; 25% gravel to 1/4"
46 - 52	Light yellowish brown (10 YR 6/4) sand, single grain, hard; few scattered 1" x 1" x 3" ironstone fragments.
52 - 63	Pink (7.5 YR 7/4 dry) sand, single grain, friable; 1/16" bands of strong brown (7.5 YR 5/6 dry) coarse sand, single grain, friable.
63 - 72	Very pale brown (10 YR 8/4) sand, single grain, friable; 1/16" bands of strong brown (7.5 YR 5/6)
72 - 96	Very pale brown (10 YR 7/4) coarse sand, single grain, friable; 2% gravel to 3/8"
96 - 108	Light yellowish brown (10 YR 6/4) coarse sand, single grain, friable
108 - 122	Very pale brown (10 YR 7/4) coarse sand, single grain, friable; pockets of brownish yellow (10 YR 6/6) loamy sand, subangular blocky, friable.

- Notes:
1. Soil pit described on September 20, 1995 by Robert Berg
 2. All soil colors are described as moist unless otherwise noted.
 3. Soil pit located in an area mapped as Downer.

3. Ground Water Observations: None
Seepage -- Indicate Depth: _____
Pit/Boring Flooded -- Depth after _____ hours

4. Soil Limiting Zones (Check Appropriate Categories)

____ Fractured Rock -- Depth to Top: _____
____ Massive Rock Substratum -- Depth to Top: _____
XXXX Excessively Coarse Substratum -- Depth to Bottom: 21 - 122"
____ Excessively Coarse Substratum -- Depth to Top: _____
____ Hydraulically Restrictive Horizon -- Depth Top to Bottom: _____
____ Hydraulically Restrictive Substratum -- Depth to Top: _____
____ Perched Zone of Saturation -- Depth Top to Bottom: _____
____ Regional Zone of Saturation -- Depth to Top: >132"

5. Soil Suitability Classification: IIHc

APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b - Soil Log and Interpretations

Block: 98.01 Lot: 16.24

1. Log Number: 2 Method: (Check One) XXXX Profile Pit Boring
2. Soil Log

Depth (Inches)	Comments
0 - 2	Very dark gray (10 YR 3/1) loamy sand, single grain, friable.
2 - 8	Dark brown (10 YR 4/3) loamy sand, weak subangular blocky, friable; 2% gravel to 1/2"
8 - 17	Yellowish brown (10 YR 5/4) loamy sand, subangular blocky, friable; 2% gravel to 1/2"
17 - 21	Light yellowish brown (10 YR 6/4 dry) sand, single grain, friable; 20% gravel to 1/2"
21 - 30	Dark red (2.5 YR 3/6 dry) coarse sand, single grain, friable; 50% gravel to 1/2"
30 - 58	Very pale brown (10 YR 7/4 dry) coarse sand, single grain, friable; 1/16" bands of reddish yellow (7.5 YR 6/8 dry) sand, single grain, friable; isolated pockets containing up to 25% gravel to 1/2"
58 - 78	Red (2.5 YR 4/8 dry) sand, single grain, very hard; pockets of very pale brown (10 YR 7/4 dry) sand, single grain, friable and brownish yellow (10 YR 6/6 dry) coarse sand, single grain, friable.
78 - 90	Brownish yellow (10 YR 6/8 dry) fine sand, weak subangular blocky, very hard.
90 - 108	Yellow (10 YR 7/8 dry) sand, single grain, friable.
108 - 120	Yellow (10 YR 7/6 dry) sand, single grain, friable.

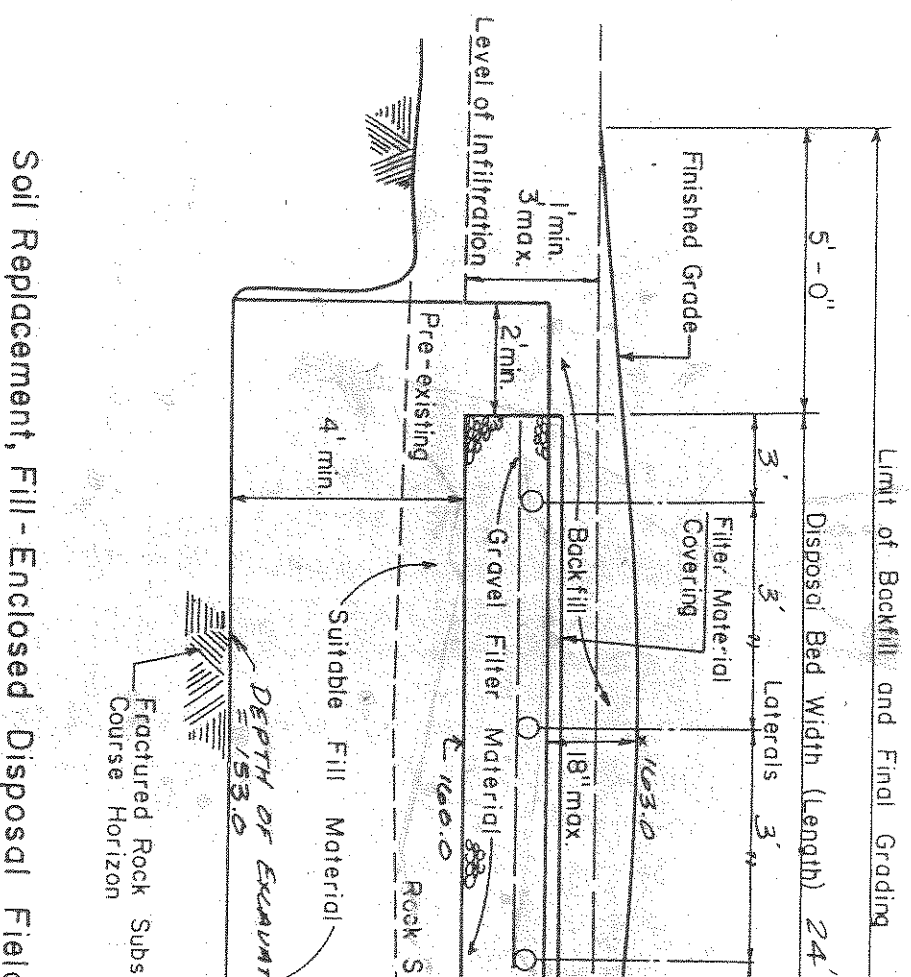
- Notes:
1. Soil pit described on September 20, 1995 by Robert Berg
 2. All soil colors are described as moist unless otherwise noted.
 3. Soil pit located in an area mapped as Downer.

3. Ground Water Observations: None
Seepage -- Indicate Depth: _____
Pit/Boring Flooded -- Depth after _____ hours

4. Soil Limiting Zones (Check Appropriate Categories)

____ Fractured Rock -- Depth to Top: _____
____ Massive Rock Substratum -- Depth to Top: _____
XXXX Excessively Coarse Substratum -- Depth to Bottom: 17 - 120"
____ Excessively Coarse Substratum -- Depth to Top: _____
____ Hydraulically Restrictive Horizon -- Depth Top to Bottom: _____
____ Hydraulically Restrictive Substratum -- Depth to Top: _____
____ Perched Zone of Saturation -- Depth Top to Bottom: _____
____ Regional Zone of Saturation -- Depth to Top: >120"

5. Soil Suitability Classification: IIHc



Form 2b - Soil Log and Interpretations

Block: 98.01 Lot: 16.24

APPLICATION FOR PERMIT TO CONSTRUCT AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b - Soil Log and Interpretations

Block: 98.01 Lot: 16.24

Log Number: 2

Method: (Check One) XXXX Profile Pit

Boring

Depth (inches)	Comments
0 - 2	Dark gray (10 YR 4/1) loamy sand; single grain, friable; 5% gravel to 1/4"
2 - 6	Dark brown (10 YR 4/3) loamy sand; single grain, friable; 5% gravel to 1/4"
6 + 16	Yellowish brown (10 YR 5/4) loamy sand; weak subangular blocky, friable; 5% gravel to 1/4"
16 - 22	Yellowish brown (10 YR 5/6) gravel to 1/2", single grain, friable; 50% sand; single grain, friable.
22 - 30	Yellowish red (5 YR 4/6 dry) sand; single grain, hard; few scattered 1" x 1/2" x 1/4" ironstone fragments; 25% gravel to 1/2"
30 - 36	Strong brown (7.5 YR 5/6 dry) sand; single grain, hard; 10% gravel to 1/4"
36 - 46	Strong brown (7.5 YR 5/6 dry) sand; single grain, hard; 25% gravel to 1/4"
46 - 52	Light yellowish brown (10 YR 6/4) sand; single grain, hard; few scattered 1" x 1" x 3" ironstone fragments.
52 - 63	Pink (7.5 YR 7/4 dry) sand; single grain, friable; 1/16" bands of strong brown (7.5 YR 5/6 dry) coarse sand; single grain, friable.
63 - 72	Very pale brown (10 YR 8/4) sand; single grain, friable; 1/16" bands of strong brown (7.5 YR 5/6).
72 - 96	Very pale brown (10 YR 7/4) coarse sand; single grain, friable; 2% gravel to 3/8"
96 - 108	Light yellowish brown (10 YR 6/4) coarse sand; single grain, friable.
108 - 122	Very pale brown (10 YR 7/4) coarse sand; single grain, friable; pockets of brownish yellow (10 YR 6/6) loamy sand; subangular blocky, friable.

Notes: 1. Soil pit described on September 29, 1995 by Robert Berg
2. All soil colors are described as moist unless otherwise noted
3. Soil pit located in an area mapped as Dwyer.

3. Ground Water Observations: None
 Seepage -- Indicate Depth: _____
 Pit/Boring Flooded -- Depth after _____ hours

Soil Limiting Zones (Check Appropriate Categories)

Soil Limiting Zones (Check Appropriate Categories)

Fractured Rock -- Depth to Top:

Massive Rock Substratum -- Depth to Top:

Excessively Coarse Horizon -- Depth Top to Bottom: 21 - 122"

X
X
X
X
X

Excessively Coarse Substratum -- Depth to Top:

Hydraulically Restrictive Horizon -- Depth Top to Bottom:

Hydraulically Restrictive Substratum -- Depth to Top:

Perched Zone of Saturation -- Depth Top to Bottom:

Regional Zone of Saturation -- Depth to Top: >132'

5. Soil Suitability Classification: IHC

Notes:

1. Soil pit described on September 20, 1995 by Robert Berg
2. All soil colors are described as moist unless otherwise noted.
3. Soil pit located in an area mapped as Downer.

3 Ground Water Observations: None
Seepage -- Indicate Depth: _____
Pit/Boring Flooded -- Depth after _____ hours

4 Soil Limiting Zones (Check Appropriate Categories)
Fractured Rock -- Depth to Top: _____
Massive Rock Substratum -- Depth to Top: _____
XXXX Excessively Coarse Horizon -- Depth to Bottom: 17 - 120"
Excessively Coarse Substratum -- Depth to Top: _____
Hydraulically Restrictive Horizon -- Depth Top to Bottom: _____
Hydraulically Restrictive Substratum -- Depth to Top: _____
Perched Zone of Saturation -- Depth Top to Bottom: _____
Regional Zone of Saturation -- Depth to Top: > 120"

5. Soil Suitability Classification: IIIc

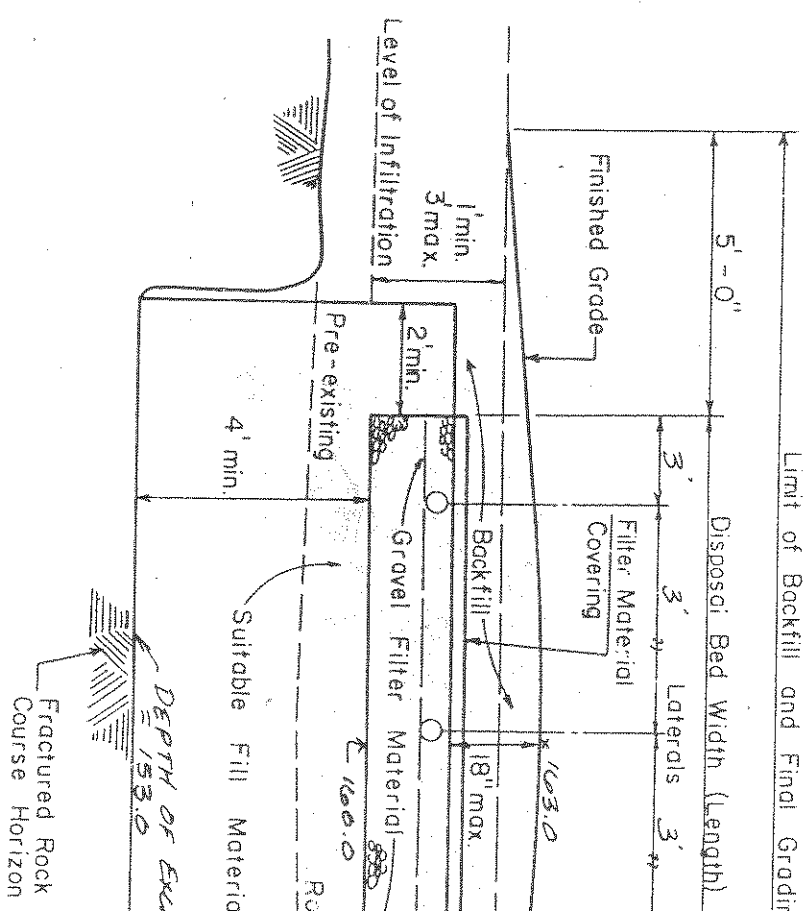
Notes	
1.	Soil pit described on September 20, 1995 by Robert Berg
2.	All soil colors are described as moist unless otherwise noted
3.	Soil pit located in an area mapped as Downer.

3 Ground Water Observations: None
Seepage -- Indicate Depth: _____
Pit/Boring Flooded -- Depth after _____ hours

4. Soil Limiting Zones (Check Appropriate Categories)

not containing zones (check appropriate categories)
 Fractured Rock -- Depth to Top
 Massive Rock Substratum -- Depth to Top.
 Excessively Coarse Horizon -- Depth to Bottom: 17 - 120"
 Excessively Coarse Substratum -- Depth to Top:
 Hydricaly Restrictive Horizon -- Depth Top to Bottom:
 Hydricaly Restrictive Substratum -- Depth to Top:
 Perched Zone of Saturation -- Depth Top to Bottom:
 Regional Zone of Saturation -- Depth to Top: >120"

5. Soil Suitability Classification: MHC



Soil Replacement, Fill- Enclosed Disposal

GENERAL REQUIREMENTS

1. All work shall conform to the New Jersey Administrative Code "Standards for the Construction of Individual Subsurface Disposal Systems" (N.J. A.C. 7:9A) and to all state, county and municipal ordinances or requirements applicable thereto.
2. If any changes occur in the characteristics of the design building use, septic system location or orientation, etc., plan will be void and a revised plan reflecting the revisions must be submitted to the DELAN COUNTY Health Department for their approval, prior to installation.
3. It shall be the responsibility of the contractor to immediately notify the design engineer, in writing, of any discrepancies found between the drawings and the specifications and site conditions or any ambiguities or inconsistencies in the drawings or specifications. (All work done by the contractor prior to resolution of any discrepancies found, shall be done solely at the contractor's risk).
4. It shall be the responsibility of the contractor to notify the design engineer, in writing, of any unusual site or soil conditions encountered or any deviations from the plan during construction, and to work the limits of disposal field to the design engineer at least 48 hours prior to construction and also install a minimum of 1/4 inch per foot. (All work done by the contractor prior to installation of the field, but prior to back-filling, so the design engineer may perform as-built measurements, if necessary, the design engineer is not notified, the contractor shall at his own expense) at the engineer's request, expose or otherwise make available for observation those components of the sewage disposal system which must be as-built or inspected.
5. Any changes made by the contractor in varying from the plan specifications or substitution of alternate procedures or materials without the written approval of the design engineer shall assume no liability for the substitutions or alterations.
6. It shall be the responsibility of the contractor to locate and mark all underground utilities prior to any construction.
7. All materials used shall be of first quality and not damaged. Stone filter material and backfill material shall be clear and free of all debris.
8. Vehicular traffic over the disposal field is prohibited at all times. If any disposal field is located in close proximity to a driveway, it shall be separated from said driveway and protected against vehicular encroachment by means of a barrier consisting of landscaping, bollards, railroad ties or other approved methods. Avoid excess pedestrian traffic in the disposal area after it is completed. Winter pedestrian traffic shall be completely avoided to minimize frost penetration.
9. Overall lawn sprinkling in the vicinity of the disposal field should be kept to an absolute minimum to prevent the infiltration capacity of soil from being over-burdened.
10. Any water softening or conditioning equipment shall not be connected to the septic system.
11. The building sewer between the dwelling, septic tank and disposal tank shall maintain a minimum slope of 1/4 inch per foot. Horizontal bends, where required, shall not be sharper than 45 degrees. The inside angle between adjacent sections of pipe shall be no less than 135 degrees.
12. The building sewer from the dwelling to the septic tank shall be 4" diameter cast iron pipe (extra heavy), ductile iron or (ASTM A-265) schedule 40, SDR-21 and SDR-26.
13. All minimum separation distances shall meet the requirements of Chapter 9A "Standards for Individual Subsurface Disposal Systems".

4 16.18
24CAN/T

FRUCT
SAL SYSTEM

oct: 98.01 Lot: 16.24

File Pit Boring

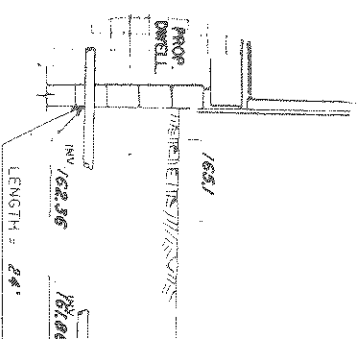
EV. 162.50

ble
ocky, friable; 2% gravel to 1/2"
ocky, friable; 2% gravel to 1/2"
; friable, 20% gravel to 1/2"
le; 50% gravel to 1/2"
n; friable, 1/16" bands of reddish
d pockets containing up to 25%

is of very pale brown (10 YR
0 YR 6/6 dry) coarse sande

ular blocky, very hard.

ert Berg
wise noted



STRUCTURAL SYSTEM
Deck: 98.01 Lot: 16.24
Boring

Week: 98.01	Lot: 16.24
Office Pii	Boring
EU: 1602.50	

EV. 162.50

fine, blocky, friable, 2% gravel to 1/2" size; friable, 2% gravel to 1/2" size; friable, 20% gravel to 1/2" size, 50% gravel to 1/2" size; friable; 1/16" bands of reddish and pockets containing up to 25% of very pale brown (10 YR 6/6 dry) coarse sand

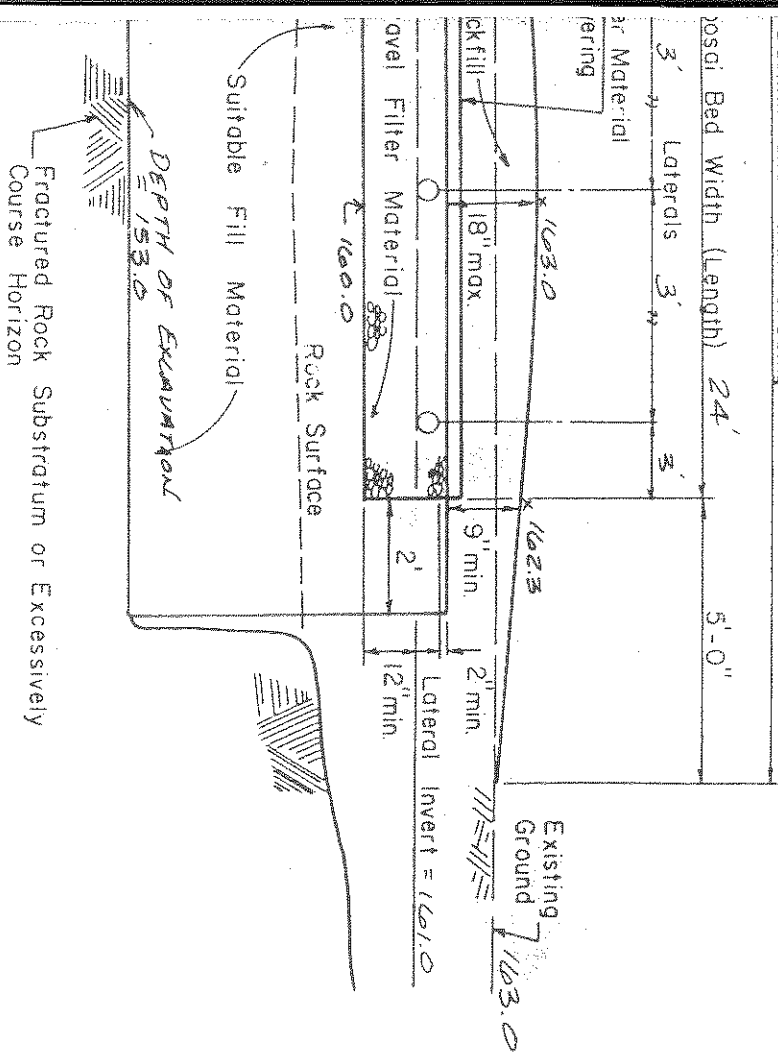
is of very pale brown (10 YR 0 YR 6/6 dry) coarse sand; clastic blocky; very hard.

War blocky; very hard

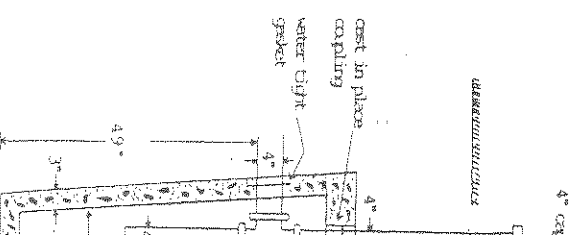
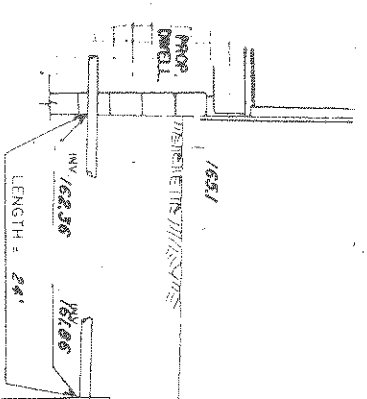
Let Herg
wise noted

misc noted

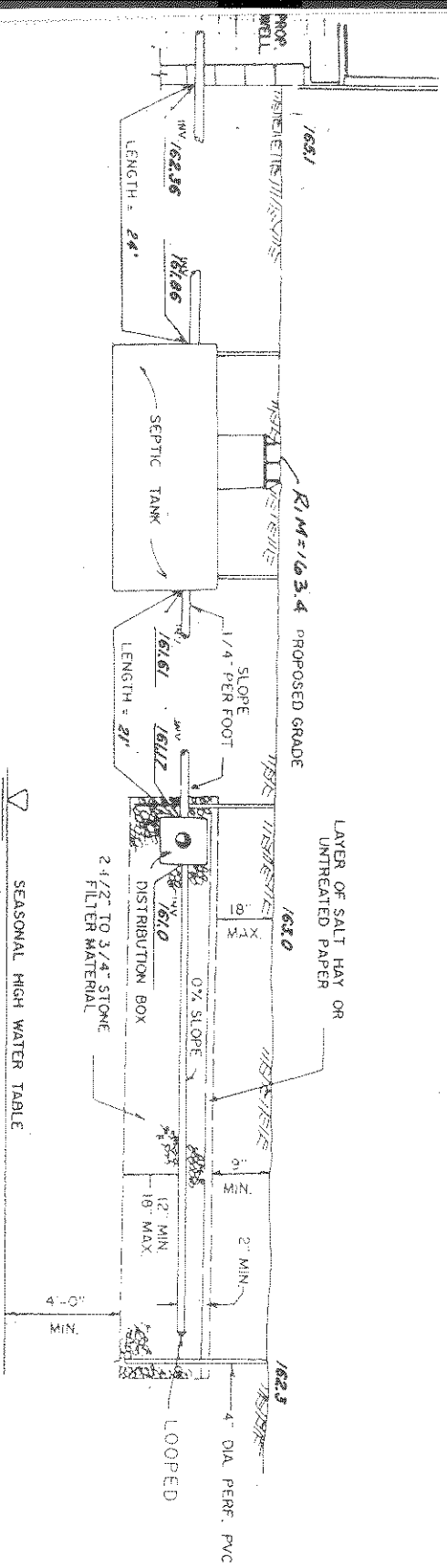
Backfill and Final Grading



Enclosed Disposal Field Installation



Think papers top to
hierarchical in a



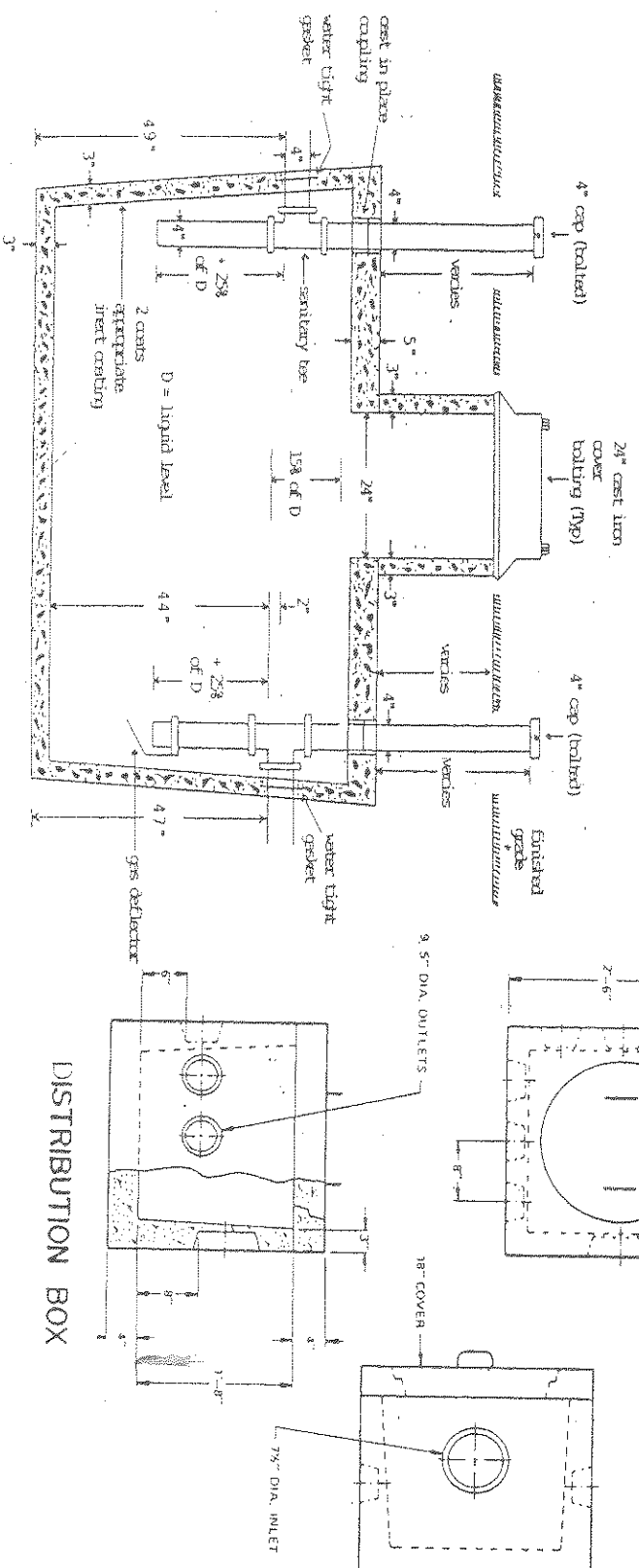
R & E MERSHON CONCRETE

RT 130 - P.O. BOX 254 BORDENTOWN, NEW JERSEY 08505

1000 GALLON TANK - ONE PIECE

Length 8'-6"
width 5'-2"

W.D.



* Concrete Minimum Strength – 4,000 P.S.I. @ 28 Days
* Steel Reinforcement – ASTM A-615-75 Grade 60 1"

* Steel Reinforcement – ASTM A-615-75, Grade 60, 1" Min. Cover

© 1977 ROTONDO & SONS, INC.

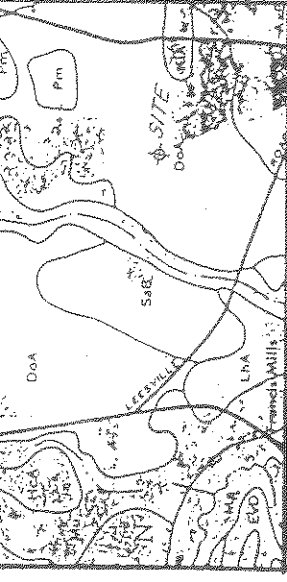
Tank tapers top to bottom and is perpendicular in cross section.

Tpk is 4000 psi concrete- steel reinforced
 Circle conforms to XI 318-16-4.5.1
 and 318-16-4.5.2

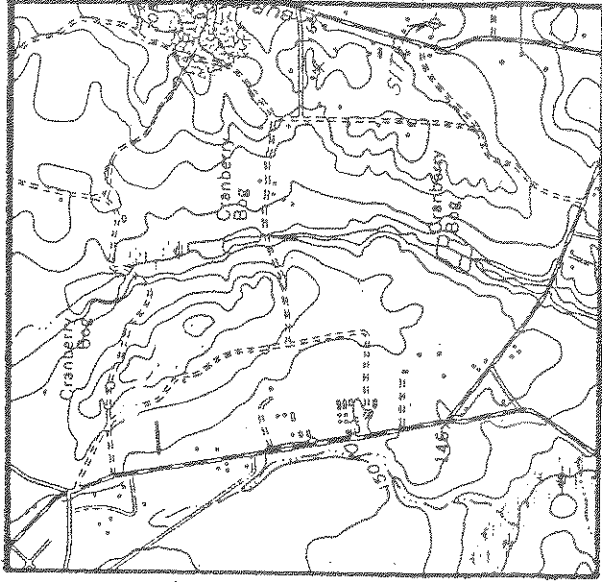
10. Requirements for soil replacement within the zone of treatment:
Select fill shall meet the requirements of N.J.A.C. 7:9A-10.11(f)4. Specifically, the fill material shall have a coarse fragment content less than 15 percent by volume or less than 25 percent by weight; and by textural analysis: from 85 to 95 percent sand, 5 to 15 percent silt plus clay (minimum of 2 percent clay); and have a permeability rate between 6 and 20 inches per hour.

Compactions of the select fill material shall meet the requirements of N.J.A.C. 7:9A-10.4(F)1. All compactions of fill shall be carried out as directed by the design engineer and as follows. Compaction may be accomplished manually or mechanically, by tampering or rolling or by driving over the filled area in a controlled pattern using tracked or rubber-tired vehicles. During compaction by vehicles, a minimum of one foot of fill material shall be maintained below the vehicle tracks of wheels at all times.

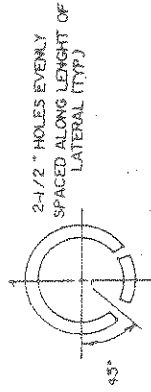
Testing of the select fill shall be performed by the engineer after compaction by means of tube permeameter test. Based on the results of these tests and inspections of the system construction, the engineer shall certify the adequacy of the compaction of the fill in accordance with N.J.A.C. 7:9A-10.4(F)3i.



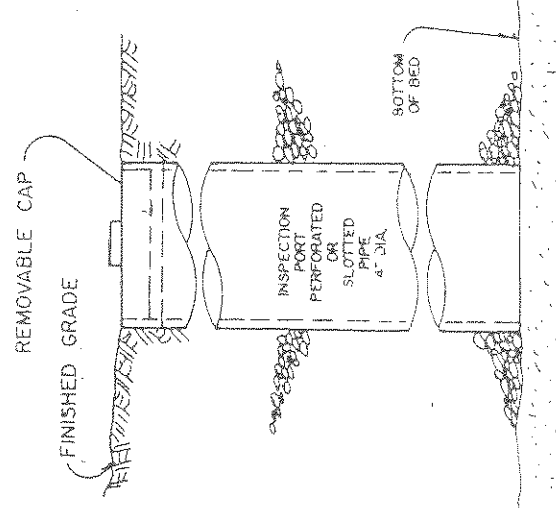
USDA SOIL SURVEY MAP
OCEAN COUNTY



KEY MAP
USGS MAP SCALE 1" = 2000'

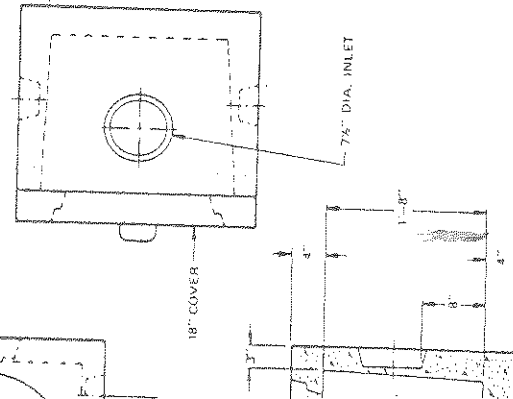


LATERAL
CROSS SECTION



© 5/977 ROTONDO & SONS, INC.

length - 4,000 P.S.I. @ 28 Days
ASTM A-615-75, Grade 60, 1" Min. Cover



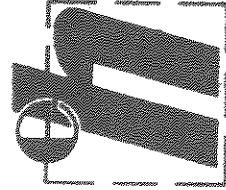
SEPTIC BOX

4/22/96 SEPTIC AS-BUILT

Septic As-built 5/2/96 Approved

EDWIN J. HALE, PROFESSIONAL LAND SURVEYOR, N.J. LIC. # 35842

STUART C. CHALLONER, P.E. LIC. # 34337



edwin j hale & associates, inc.
35 beaverson boulevard, suite 6b
brick township, new jersey 08723-7859
phone 908-920-2444
fax 908-920-2450

professional land surveyors, civil engineers
& environmental scientists

PLOT PLAN &
SEPTIC DESIGN FOR

LOT 16.24 BLOCK 98.01

SITUATED IN

TOWNSHIP OF JACKSON
OCEAN COUNTY, NEW JERSEY

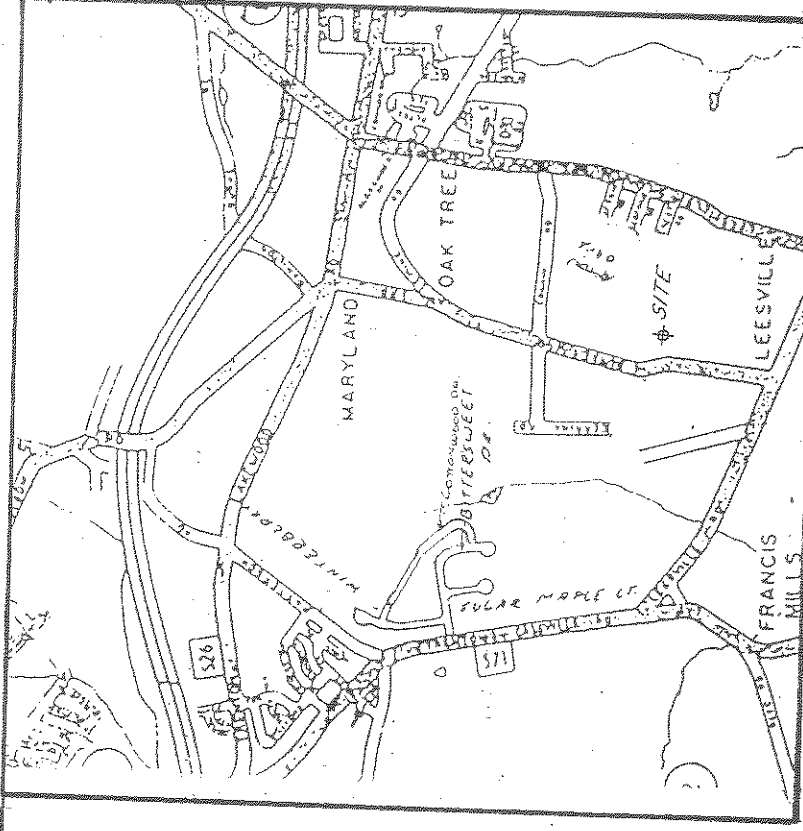
DATE 10/16/95	SCALE = 50	FILE NO 95004A	DRAWN BY S.C.	CKD BY S.C.	FIELD BOOK	DRAW NO
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CONSTRUCTION PROCEDURES

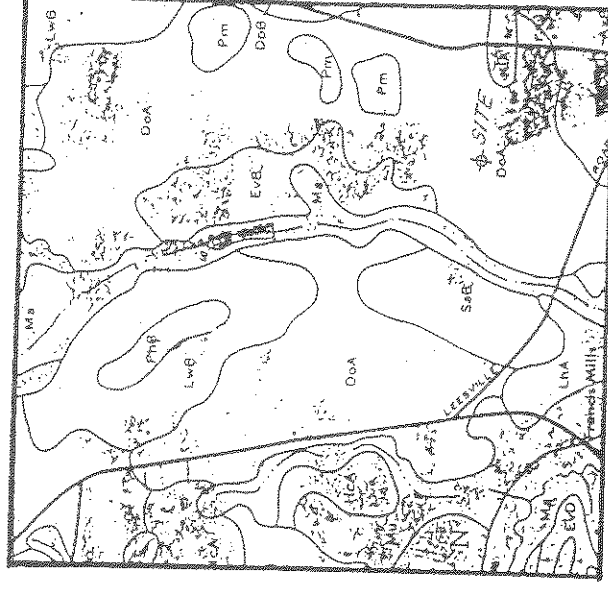
1. Disposal field excavation may proceed only when the moisture content is below the plastic limit of the soil. If a sample of soil taken at the depth of the proposed bottom of the system forms a "wire" instead of crumbling when attempting to roll it between the hands, the soil is too wet. Work should only be scheduled when the infiltrative surfaces can be covered in one day, because wind-blown silt or raindrop impact can clog the soil.
2. The disposal field shall be constructed to the specified depth shown on the plan. Extreme care must be used to construct the field bottom at the same elevation (level throughout its entire length). The distribution lines shall be laid at a maximum slope of 2" per 100'.
3. Upon completion of the field excavation, the bottom and side walls shall be thoroughly scarified by hand to remove any smeared soil surfaces. After scarification, no one shall be permitted on this area until the filter materials have been placed.
4. Crushed stone or washed gravel filter shall be placed by backhoe (not dumped by truck) below the distribution lines to the minimum depth shown on the plans. The filter materials shall conform to NDOT Soil Aggregate Size Number 6, 3, 4, or 24. (Crushed limestone is unsuitable). The filter material shall be free of all fines, prior to its installation.
5. The distribution laterals shall be carefully laid approximately level, but in no case shall the slope be greater than 2" per 100'.
6. The filter material shall extend a minimum distance of 2" above the pipes, under one layer of synthetic filter fabric (as manufactured by Mirafi, Dupont or equal). An inspection must be requested by the contractor from the County Health Department prior to backfill over the field. The design engineer must also be notified at this time so that any necessary asbuilt measurements can be made.
7. After obtaining approval from the County Health Department a minimum of 9" and no more than 18" of backfill, including 4" of topsoil, shall be placed over the top of the disposal field filter material. This area shall be stabilized within 10 days after the installation by either seeding, sodding or mulching, to prevent soil erosion.
8. The area over the disposal field shall be graded to prohibit ponding of surface water. No grading machinery or heavy equipment shall be permitted to pass over the disposal field for final grading operations. Stormwater runoff from roofs, patios, driveways or other impervious surfaces shall be directed away from the disposal field area.
9. An inspection port shall be installed at each corner of the disposal field.
10. Requirements for soil replacement within the zone of treatment: Select fill shall meet the requirements of N.J.A.C. 7:9A-10.1(f)4. Specifically, the fill material shall have a coarse fragment content less than 15 percent by volume or less than 25 percent by weight; and by textural analysis: from 85 to 95 percent sand, 5 to 15 percent silt plus clay (minimum of 2 percent clay); and have a permeability rate between 6 and 20 inches per hour.

Compactions of the select fill material shall meet the requirements of N.J.A.C. 7:9A-10.4(P1). All compactions of fill shall be carried out as directed by the design engineer and as follows. Compaction may be accomplished manually or mechanically, by tamping or rolling or by driving over the filled area in a controlled pattern using tracked or rubber-tired vehicles. During compaction by vehicles, a minimum of one foot of fill material shall be maintained below the vehicle tracks of wheels at all times.

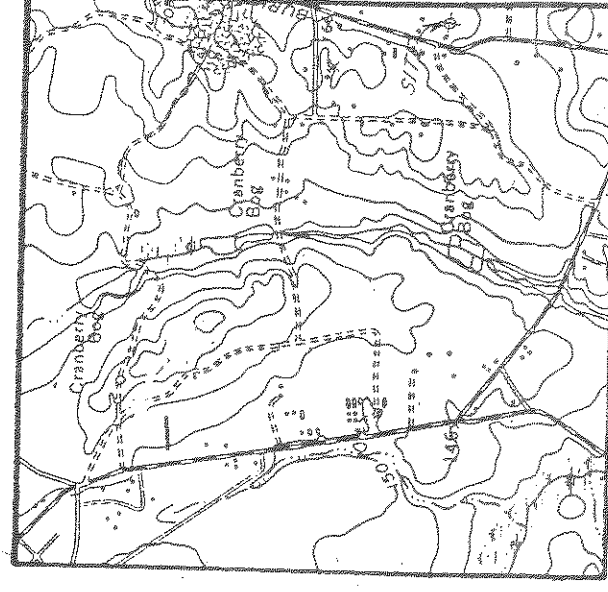
Testing of the select fill shall be performed by the engineer after compaction by means of tube permeameter test. Based on the results of these tests and inspections of the system construction, the engineer shall certify the adequacy of the compaction of the fill in accordance with N.J.A.C. 7:9A-10.4(P)3ii.



KEY MAP
STREET MAP SCALE 1" = 3000'



USDA SOIL SURVEY MAP
OCEAN COUNTY



KEY MAP
USGS MAP SCALE 1" = 2000'

