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No. ET2-150C
UPC 27110



Evesh

2217-96

96

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2217-96

Evesh

Board of Chosen Freeholders
Of The County of Burlington
MOUNT HOLLY, NEW JERSEY



Burlington County Health Dept.
Raphael Meadow Health Center
15 Pioneer Boulevard
P.O. Box 6000
Westampton, N.J. 08060

08060

CERTIFICATE OF COMPLIANCE

Tele: (609) 265-5548

Fax: (609) 265-5541

Part A --- General Information

Permit Number 2217-96

1 Permitted Activities (Check applicable categories):

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

2. Location of Project:

Municipality Evesham Township Block: 89.01 Lot: 11
Street Address 10 Norman Rockwell Zip

3. Name and Present Address of Applicant: Signature Home 444 Commerce La Berlin NJ 08005
Applicant's Phone Number

Part B --- Professional Engineer's Certification

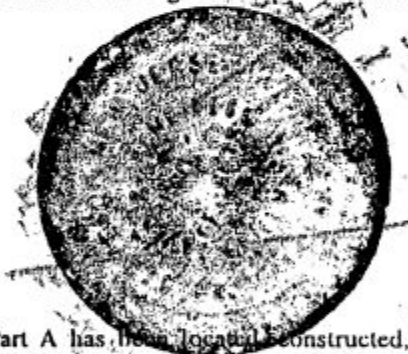
I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 7:9A-1 and the Application to Construct/Alter/Repair an Individual Subsurface Sewage Disposal system which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

(Signature) [Signature]

Name (Type or Print), License # DARIN SCHEIDT, 36515

Date: 5/26/98

SEAL



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 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: <u>5-28-98</u>	
Form Determined To Be: ☒ Complete ☐ Incomplete	Date Returned: <u></u>
	Date Received: <u></u>
Date Certification Approved: <u>5-28-98</u>	
Authorized Signature: <u>[Signature]</u>	

IN ACCORDANCE WITH ATTACHED
MODIFIED SITE PLAN
LAST REVISED 5-22-98

SOIL PERMEABILITY CLASS RATING DATA - Form 3C

1. Test Number 1 Replicate (Letter) _____
2. Sample Depth 12" Soil Pit/Boring Number select fill Date Collected 3/22/98
3. Coarse Fragment Content:
 Total Weight of Sample, WT, grams 189.7
 Weight of Material Retained on 2mm sieve, WCF, grams 4.0
 Weight % Coarse Fragment (WCF/WT. x 100): 2.1
4. Oven Dry Weight (24 hrs., 105°C) of 40 Gram Air Dry Sample, grams, Wt. 38.7
5. Hydrometer Calibration, Rc 2.8
6. Hydrometer Reading - 40 seconds, grams, R1 7.9
 Temperature of Suspension, °F 68
7. Corrected Hydrometer Reading, grams, R1 5.1
8. Hydrometer Reading - 2 hours, grams, R2 4.0
 Temperature of Suspension, °F 68
9. Corrected Hydrometer Reading, grams, R2 1.2
10. % Sand = (Wt. - R1)/Wt. x 100 = $(38.7 - 5.1) / 38.7 \times 100 = 86.8$
11. % Clay = R2/Wt. x 100 = $1.2 / 38.7 \times 100 = 3.1$
12. Sieve Analysis:
 a. Oven Dry Wt. (2 hrs., 105°C) Total Sand Fraction
 (Soil Retained in 0.047 mm Sieve), grams 32.2
 b. Wt. of Fine Plus Very Fine Sand Fraction
 (Sand Passing 0.25 mm Sieve), grams 6.9
 c. % Fine Plus Very Fine Sand (b/a) 21.4
13. Soil Morphology (Natural Soil Samples Only):
 Structure of Soil Horizon Tested _____
 Consistence of Soil Horizon Tested: Dry _____ Moist _____
14. Soil Permeability Class Rating (Based upon average textural analysis of this replicate and other replicate samples) K-4
15. I hereby certify that the information furnished on Form 3C of this application (and the attachments thereto) is true and accurate. I am aware that this is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as provided in N.J.S.A. 58:10A-4.8.
- Signature [Signature] Date 5/5/98
 Signature of Professional Engineer [Signature] License # 31175
 (please seal this form)

SOIL PERMEABILITY CLASS RATING DATA - Form 3C

1. Test Number 1 Replicate (Letter) A
2. Sample Depth 12" Soil Pit/Boring Number select fill Date Collected 3/22/98

3. Coarse Fragment Content:

Total Weight of Sample, WT., grams 224.3Weight of Material Retained on 2mm sieve, WCF, grams 3.1Weight % Coarse Fragment (WCF/WT. x 100): 1.3

4. Oven Dry Weight (24 hrs., 105°C) of 40 Gram Air Dry Sample, grams, Wt. 38.7
5. Hydrometer Calibration, Rc 2.8
6. Hydrometer Reading - 40 seconds, grams, R1 7.6
Temperature of Suspension, °F 68
7. Corrected Hydrometer Reading, grams, R1' 4.8
8. Hydrometer Reading - 2 hours, grams, R2 4.4
Temperature of Suspension, °F 68
9. Corrected Hydrometer Reading, grams, R2' 1.6
10. % Sand = $(Wt. - R1')/Wt. \times 100 = (38.7 - 4.8)/38.7 \times 100 = 87.5$
11. % Clay = $R2'/Wt. \times 100 = 1.6/38.7 \times 100 = 4.1$

12. Sieve Analysis:

a. Oven Dry Wt. (2 hrs., 105°C) Total Sand Fraction
(Soil Retained in 0.047 mm Sieve), grams 30.9b. Wt. of Fine Plus Very Fine Sand Fraction
(Sand Passing 0.25 mm Sieve), grams 8.6c. % Fine Plus Very Fine Sand (b/a) 27.8

13. Soil Morphology (Natural Soil Samples Only):

Structure of Soil Horizon Tested _____

Consistence of Soil Horizon Tested: Dry _____ Moist _____

14. Soil Permeability Class Rating (Based upon average textural analysis of this replicate and other replicate samples) K-4

15. I hereby certify that the information furnished on Form 3C 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 Site Evaluator _____

Signature of Professional Engineer _____

please seal this form

Date 5/5/98License # 36670

ROCKWELL

FINISH FLOOR ELEV.	143.00
FINISH CEILING AT BUILDING	141.50
WINDHOLE AT BUILDING	137.60
DISTANCE FROM SPOT TANK TO BUILDING	10'
WINDHOLE SPOT TANK (m)	37.39
WINDHOLE SPOT TANK (ft.)	123.31
DISTANCE FROM SPOT TANK TO PUMP DRAINAGE	4'
PAVED DRIVEWAY WIDTH (m)	13.78
PUMP DRAINAGE WINDHOLE (m)	13.09
ELEVATION TO LOW WATER	134.09
PAVED DRIVEWAY	134.10

2217-96

ENVIRONMENTAL ANALYSIS	DATE	OR STATE/INCH
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SOUL RECH

THE NATIONAL ARCHIVES COLLEGE PARK, MARYLAND

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1. 400 400 400

[illegible]

100

100
100
100
100

U.S.G.S MAP

 $\sigma_{\text{AT}} = 1.2 \times 10^6$

SOILS SURVEY MAP

year = 1999

ON SITE DISPOSAL SYSTEM

JACK J. GRAVLIN JR., PE

197 HDBL 73 COMPLES NEW JERSEY 08043
1-809-168-5729

BLACK 89 (1) 101 11

TOYINISE OF FASHION

HARRINGTON COUNTY NEW JERSEY

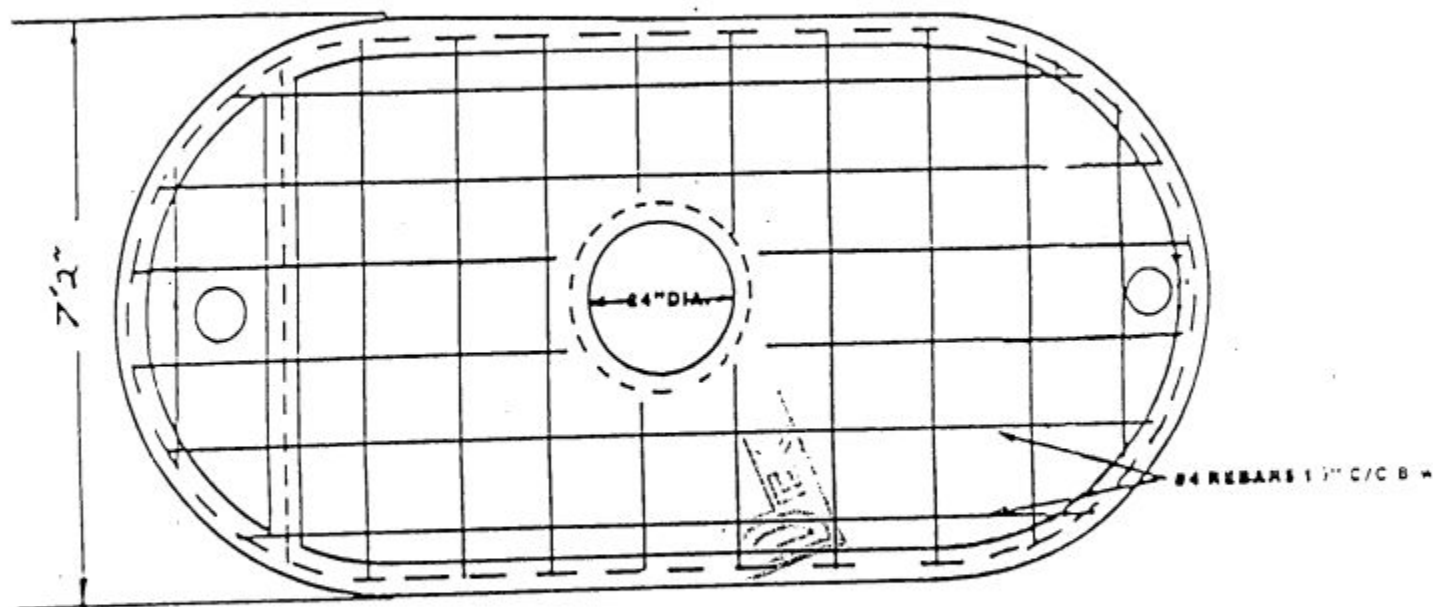
10/10/11

11/22/20

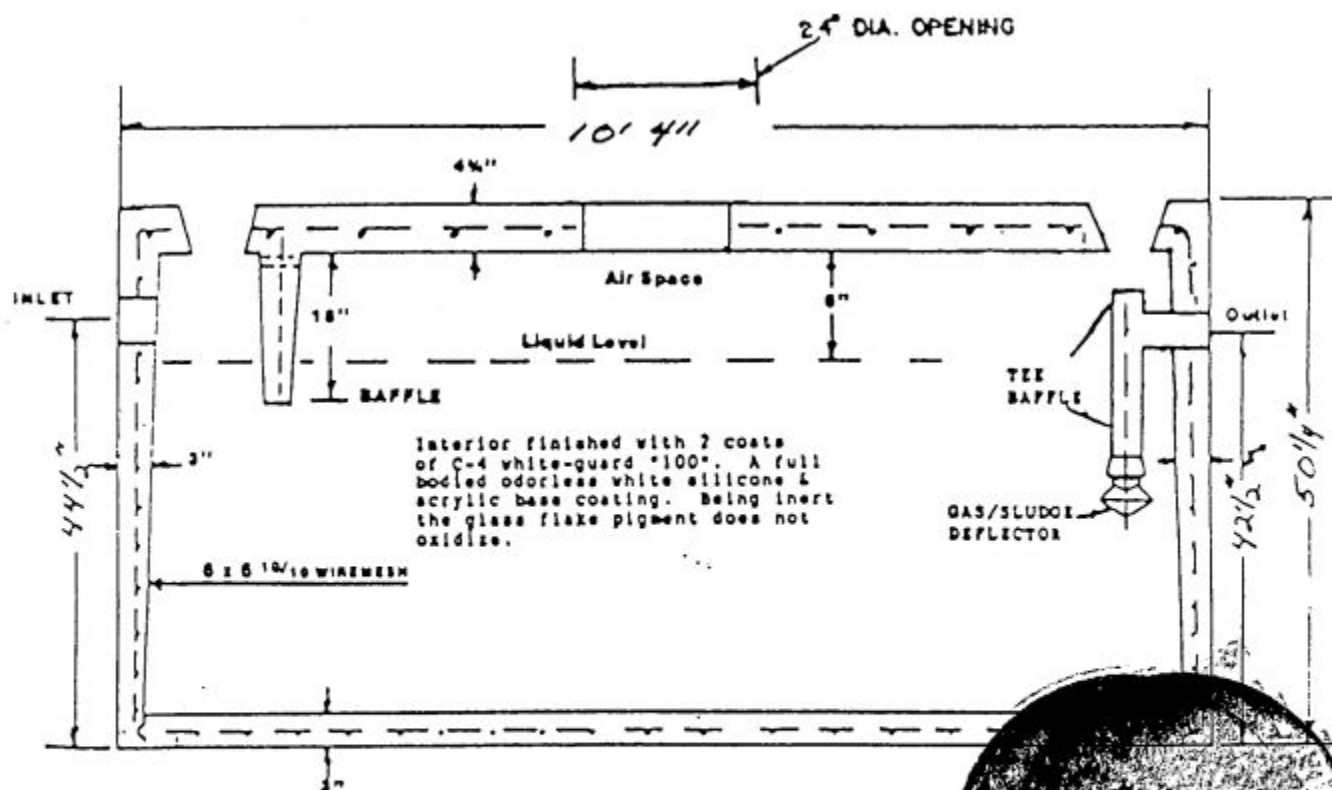
17-10-11

1000

1. *Journal of the American Medical Association*, 1997; 277: 1033-1037.



MANHOLE OPENING BUILT
TO GRADE BY OTHERS



DESCRIPTION: CAP. 1250 gal.
HEIGHT 50 1/4"
WIDTH 7'-2"
WEIGHT
CONCRETE 4000 PSI





SCHAEFFER & SCHEIDEGG
CONSULTING ENGINEERS, LLC
SUITE 5B LONDON SQUARE MALL
201 TILTON ROAD
NORTHFIELD, NEW JERSEY 08225
(609) 272-1166
FAX (609) 272-8411

May 4, 1998

Burlington County Health Department
15 Pioneer Blvd.
PO Box 6000
West Hampton, NJ 08060

Re: Septic system cert.
BCHD No. 2217-96
The Reserve
Block 89.01, Lot 11
Evesham Township, NJ

Dear Mr. Hendricks:

We have tested the select fill utilized as part of the septic system at the referenced site and find that it meets the proper permeability and was properly compacted. We are enclosing the permeability testing data sheets for your reference. In addition the system was constructed utilizing one (1) 1,250 gallon septic tank rather than a single two compartment 2,000 gallon tank, and the dose tank is a 1,250 gal. Rather than a 1,500 gal.. We have enclosed an as-built sketch illustrating the system as constructed. We also find that the other components of the system have been installed in accordance with the approved design plans including the pump and alarm.

If you have any questions or require additional information, please feel free to contact our office at 272-1166

SCHAEFFER & SCHEIDEGG
CONSULTING ENGINEERS, LLC

Sincerely,

David Scheidegg, P.E.



Board of Chosen Freeholders
Of The County of Burlington
MOUNT HOLLY, NEW JERSEY



Burlington County Health Dept.
Raphael Meadow Health Center
15 Pioneer Boulevard
P.O. Box 6000
Westampton, N.J. 08060

08060

February 4, 1997

Tele: (609) 265-5548
Fax: (609) 265-5541

Re: Septic Application 2217-96
Block 89.01 Lot 11
Evesham Twp.

Marlton Woods, Inc.
300 North Cooper Rd.
Berlin, NJ 08009

Your application for the installation of a proposed individual subsurface sewage disposal system is certified to be in compliance with the provisions of N.J.A.C. 7:9A and regulations as otherwise provided by N.J.S.A. 58:11-25.

☒ Based on Engineering Data Only.

☐ Based on Engineering data and Percolation Test(s) and Soil Boring(s) being witnessed by a representative of this Dept.

THIS CERTIFICATION BECOMES NULL AND VOID 2-4-98. Should this system not be installed by this date, contact this office for recertification instructions. This certification and approved design is not a permit to install the system. Said permit shall be obtained from the municipal agent responsible for insuring compliance with other applicable state & local laws.

NO CHANGE IN THE PLAN SHALL TAKE PLACE WITHOUT PRIOR APPROVAL OF THIS DEPARTMENT.

At the time of installation, the system shall not be covered from view until it has been inspected by a representative of this Department and permission to cover same has been given by that representative. Request for such inspection shall be made to this Department no later than 72 hours prior to the date of installation. **FINAL CERTIFICATION WILL NOT BE GIVEN BY THIS DEPARTMENT UNTIL THE DESIGN ENGINEER HAS CERTIFIED IN WRITING, BY SIGNATURE & SEAL TO THE FOLLOWING:**

☒ Excavation to a depth of 84" inches and back-filled to the bottom of the disposal field with fill material placed and compacted in conformance with NJAC 7:9A-10.4(f)3 meeting all the requirements of NJAC 7:9A-10.1(f) including compliance with permeability rates specified on the approved design. Results of permeability tests shall be indicated on this Department's standardized form.

☐ _____ inches of fill extending _____ beyond the limits of the disposal field with fill material placed and compacted in conformance with NJAC 7:9A-10.4(f)3 meeting all the requirements of NJAC 7:9A-10.1(f) including compliance with permeability rates specified on the approved design. Results of permeability tests shall be indicated on this Department's standardized form.

☒ Pumping equipment ☒ Alarm System ☒ Final Grading & Stabilization ☐ None of the above.

☒ Other: Engineer shall certify to all phases of construction

PLEASE NOTE: It is YOUR RESPONSIBILITY, as the owner, to insure that your building contractor, plumber, and the installer of the system are made aware of this approved design prior to the beginning of any construction. It is also your responsibility to insure that the system is installed in strict accordance with this approved plan. Any unauthorized deviation from the plan could result in legal action being instituted in Municipal Court against all parties concerned.

bk

cc: Board of Health
Construction Code Official
Design Engineer
file

Sincerely,

Kurt W. Hendricks
Kurt W. Hendricks
Sanitary Inspector



Commemorate the Past - Celebrate the Future with Burlington County

**BURLINGTON COUNTY HEALTH DEPARTMENT
WOODLANE ROAD
MOUNT HOLLY, NEW JERSEY 08060**

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

GENERAL INFORMATION - Form 1

1. Type of Permit needed (Check applicable categories):
☒ New Construction
☐ Deviation from Standards
☐ Alteration/Expansion or Change in Use
☐ Repairs to Existing System
☐ Alteration/Malfunctioning System
☐ Alteration/No Expansion or Change of Use
2. Location of Project:
 Municipality Evesham Twp. Block: 89.01 Lot: 11
 Street Address NORMAN ROCKWELL Zip 08053
3. Name of Applicant (print): MARLTON WOODS, INC.
4. Applicant's Present Address: 300 N. COOPER ROAD
BURLINGHAM, NJ 08009
5. Phone number: [REDACTED]
6. Type of Facility:
☒ Residential
☐ Commercial/Institutional
☐ Specify Type of Establishment: _____
7. Type of Wastes to be discharged:
☒ Sanitary Sewage
☐ Industrial Wastes
☐ Other - Specify _____
8. Other Approvals/Certification/Waivers/Exemptions (Attach to Application)
☒ Pinelands Commission
☐ NJDEP - Bureau of Flood Plain Management
☐ U.S. Army Corps of Engineers
☐ Other - Specify _____
9. I hereby certify that the information furnished above on Form 1 of this application is true. I am aware that false swearing is a crime in this State and subject to prosecution.

Signature of Applicant [Signature] Date 12/28/94

FOR AGENCY USE ONLY	
☐ Application Denied - Reason For Denial/Citation Of Rules Violated: _____	
☒ Application Approved	☐ Application Approved Subject To Approval By NJDEP
Date of Action <u>2-3-97</u>	Signature of Authorized Agent <u>[Signature]</u>
Name & Title <u>Russ W. Hendricks</u>	<u>SI</u>

GENERAL SITE EVALUATION DATA - Form 2A

1. Name of Site Evaluator (print): Soi Hech c/o Michael Higgins
2. Business Address of Site Evaluator: 105 Alston Rd, Box 90, Mtford, NJ 08055
3. Business Phone: [REDACTED]
4. Special Site Limitations Identified (Check Appropriate Categories):
☐ Flood Plains
☐ Sink Holes
☐ Bedrock Outcrop
☐ Sand Dunes
☐ Wetlands
☐ Steep Slopes
☐ Excessively Stony
☐ Disturbed Ground
☐ Other - Specify _____
5. Soil Logs - Enter on form 2B. Use one sheet for each soil log.
6. Considerations Relating to Disturbed Ground:
 a.) Type of Disturbance (Check appropriate categories):
☐ Filled Area
☐ Excavated Area
☐ Re-graded Area
☐ Subsurface Drains
☐ Other - Specify _____
 b.) Pre-existing Natural Ground Surface
 Elevation Relative to Existing Ground Surface _____
 c.) Suitability of Disturbed Ground
☐ Unsuitable: Objects Subject to Disintegration or Change in Volume
☐ Proctor Test Performed - % Standard Proctor Density _____
 Method of Identification: _____
7. Hydraulic Head Test:
 a.) Hydraulically Restrictive Horizon: Depth Top to Bottom _____
 b.) Piezometer A: Depth to Bottom _____ Depth of Water Level (24hrs) _____
 c.) Piezometer B: Depth to Bottom _____ Depth of Water Level (24hrs) _____
 d.) Witnessed by _____
 Signature [Signature] Date 2-3-97
 BY KWH
 BURLINGTON COUNTY HEALTH DEPARTMENT
 COUNTY NUMBER 2217-96
8. Attachments (Check items included):
☒ Site Plan
☒ Key Map Showing Location Of Site on 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 _____

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. 14:27-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator Michael Higgins Date 12-28-94
 Signature of Professional Engineer [Signature] License # 26816
 (please seal this form)



SOIL LOG & INTERPRETATION - Form 2B

Municipality Evesham Block 89.01 Lot 11

1. Log Number 1
 2. Soil Log
 Depth
 (inches)
 Top-Bottom

Method (Check One): ☒ Profile Pit ☐ Boring
 DATE SOIL LOG CONDUCTED 10/23/96
 Munsel Color Name & Symbol; Estimated Textural Class; Estimated
 Volume % Coarse Fragment, if present; Structure; Moist or Dry
 Consistence; Mottling - Abundance, Size & Contrast, if present

JOB #: 94-034
 TOWNSHIP: Evesham
 COUNTY: Burlington
 BLOCK: 89.01
 LOT: 11

DATE: 10/23/96
 WITNESSED: waived by K. Hendricks
 LOCATION: septic system

S.A.B. = Subangular Blocky

Test Pit #1

G.W.: N.E. ESH: 9'

DEPTHDESCRIPTION

0-2"	Root mat
2"-5"	Dark Brown (10YR 5/1) fine loamy sand, granular, friable
5"-108"	Yellow (10YR 7/8-8/6) fine to medium loamy sand, granular, friable
108"-136"	Light Brown to Pink (7.5YR 6/4-7/3) fine to medium sand, singl grain, loose

3. Ground Water observations:

Not Encountered

- ☐ Seepage - Indicate Depth _____
☐ Pit/Boring Flooded - Depth after _____ Hours _____

4. Soil Limiting Zones (Check Appropriate Categories):

- | | |
|--|--|
| ☐ Fractured Rock substratum - Depth to Top _____ | ☐ Massive Rock Substratum - Depth to Top _____ |
| ☐ Excessively Coarse Horizon - Depth Top to Bottom _____ | ☐ 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 <u>≥ 9'</u> |

5. Soil Suitability Classification: I

6. I hereby certify that the information furnished on Form 2B 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 Site Evaluator

Michael J. VigneriDate 11/14/96Signature of Professional Engineer
(please seal this form)[Signature]License # 26816

SOIL LOG & INTERPRETATION - Form 2B

Municipality EveshamBlock 89.01 Lot 11

1. Log Number 2
 2. Soil Log
 Depth
 (inches)
 Top-Bottom

Method (Check One): ☒ Profile Pit☐ BoringDATE SOIL LOG CONDUCTED 10/23/96

Munsell Color Name & Symbol; Estimated Textural Class; Estimated Volume % Coarse Fragment, if present; Structure; Moist or Dry Consistence; Mottling - Abundance, Size & Contrast, if present

JOB #: 94-034
 TOWNSHIP: Evesham
 COUNTY: Burlington
 BLOCK: 89.01
 LOT: 11

DATE: 10/23/96
 WITNESSED: waived by K. Hendricks
 LOCATION: septic system

S.A.B. = Subangular Blocky

Test Pit #2G.W.: N.E. ESH: $\geq 10'$ DEPTHDESCRIPTION

0-3"	Root mat
3"-6"	Dark Brown (10YR 5/1) fine loamy sand, granular, friable
6"-120"	Yellow (10YR 7/8-8/6) fine to medium loamy sand, granular, friable
120"-136"	Light Brown to Pink (7.5YR 6/4-7/3) fine to medium sand, singl grain, loose

3. Ground Water observations:
- Not Encountered

- ☐ Seepage - Indicate Depth _____
☐ Pit/Boring Flooded - Depth after _____ Hours _____

4. Soil Limiting Zones (Check Appropriate Categories):

- | | |
|--|---|
| ☐ Fractured Rock substratum - Depth to Top _____ | ☐ Massive Rock Substratum - Depth to Top _____ |
| ☐ Excessively Coarse Horizon - Depth Top to Bottom _____ | ☐ 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 $\geq 10'$ |

5. Soil Suitability Classification:
- I

6. I hereby certify that the information furnished on Form 2B 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 Site Evaluator

Michael Hendricks

Signature of Professional Engineer
 (please seal this form)

[Signature]Date 11/14/96License # 26816

SOIL PERMEABILITY DATA - Form 3A

Municipality Evesham Block 89.0 Lot 11

Assign a number for each test and a letter for each test replicate. Show test data and calculations on form 3B, 3C, 3D, 3E, 3F, or 3G. Use one sheet for each separate test or test replicate.

1. Summary of Data - Enter data for each test replicate on a separate line.

Type of Test	Test (number)	Replicate (letter)	Depth (inches)	Result*

* For tube permeameter, pit-bailing and piezometer tests report results in inches per hour. For soil permeability class rating, give soil permeability class number. For percolation test, report result in minutes per inch. For basin flooding test, report result as positive if basin drains completely within 24 hours after second filling, negative otherwise.

2. Design Permeability/Percolation Rate: Specify Test Number Select Fill, 6-20"/Hr.

- ☐ Average of Test Replicates ☐ Single Replicate
☐ Slowest of Replicates

3. Type of Limiting Zone Identified

Test Number

4. Attachments (Check items included):

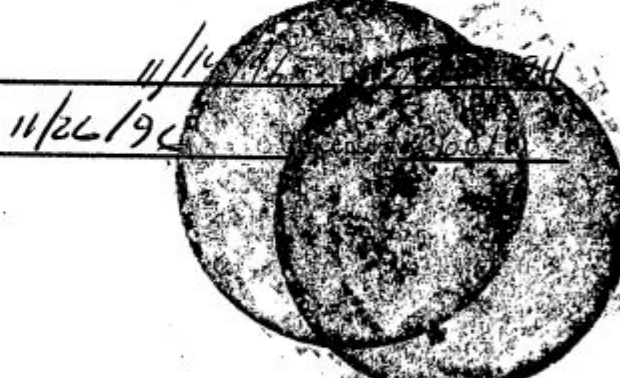
- ☐ Form 3B - Tube Permeameter Test Data - Number of Sheets _____
☐ Form 3C - Soil Permeability Class Rating Test Data - Number of Sheets _____
☐ Form 3D - Percolation Test Data - Number of Sheets _____
☐ Form 3E - Pit - Bailing Test Data - Number of Sheets _____
☐ Form 3F - Piezometer Test Data - Number of Sheets _____
☐ Form 3G - Basin Flooding Test Data - Number of Sheets _____

5. I hereby certify that the information furnished on Form 3A 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 Site Evaluator Michael J. Higgins

Signature of Professional Engineer
(please seal this form)

[Signature]



GENERAL DESIGN DATA - Form 4

1. Volume of Sanitary Sewage, gal. 650 GAL/DAY
☒ 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 in Use☐ Upgrade Existing Facilities☐ Correct Malfunctioning System☐ Other - Specify _____

b.) Describe Nature of Alteration or Repairs: _____

3. System Components:

a.) Grease Trap Capacity, gals _____

Show Calculation Used _____

b.) Septic Tank Capacities, gals:

☒ first (single) compartment 1333.34☒ second compartment 666.67☐ third compartment _____

c.) Effluent Distribution

Method: ☐ Gravity Flow☐ Gravity Dosing☒ Pressure Dosing

Dosing Device:

☒ Pump☐ Siphond.) Dosing Tank Capacities, gals: Total Capacity 1500 Dose Volume 163 Reserve Capacity 1309e.) Laterals: Number 12 Total Length 234 Pipe Size 1" Spacing 36"f.) Connecting Pipe: Size 4" Length 4'g.) Manifold: Size 3" Length 15'h.) Disposal Field: Type of Installation BOTTOM-LINED - SOIL REPLACEMENTDesign Permeability (Percolation rate) 6-20"/HR, SELECT FILL☐ Trenches: Width _____ Total Length _____☒ Bed: Area 900 S.F.

i.) Seepage Pits: Design Percolation Rate _____

Number of Pits _____ Total Percolating Area Provided _____

4. Attachments (Check items included):

☒ General Plan Showing Location of All System Components☒ X - Sections of Each System Component Including Grease Traps, Septic Tank, Dosing Tank, Disposal field, Seepage Pits and Interceptor Drains☒ Pump Performance Curve☐ Other - Specify _____

5. I hereby certify that the information furnished on Form 4 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 Professional Engineer
 please seal this form)



11/26/96

License No. 26816

DESIGN OF PRESSURE DOSING SYSTEM - Form 5

1. Configuration of Distribution network:

Type of manifold: ☐ End ☒ Central
 Distribution Laterals: Number 12 Length, ft. 19.5' Spacing, ft. 36"
 Hole Diameter, in. .25 Hole Spacing, in. 36"
 Diameter of Laterals, in. 1"

2. Lateral Discharge Rate:

Design Pressure Head at Distal End of Laterals, Hp, ft. 2.5
 Hole Discharge Rate, Q, gpm 1.18
 Number of Holes per Lateral, n 6
 Lateral Discharge Rate, (Q x n), gpm 7.08

3. Manifold Length, ft. 15' Manifold Diameter, in. 3"

4. System Discharge Rate, gpm 84.96

5a. Pump Selection:

Diameter of Delivery Pipe 3" Length of Delivery Pipe 35'
 Friction Loss in Delivery Pipe, Hf, ft. 0.54
 Elevation of Dosing Tank Low Water Level 134.09
 Elevation of Lateral Invert 134.40
 Elevation Head, He, ft. 4.3
 Total Operating Head, Ht (Hp + Hf + He), ft. 7.4
 Pump Model 3887 - GOULDS Rated Horsepower .33 HP
 Pump Discharge Rate at Total Operating Head, gpm 85.0

5b. Siphon Elevation:

Diameter of Delivery Pipe _____ Length of Delivery Pipe _____
 Friction Loss in Delivery Pipe, Hf, ft. _____
 Velocity Head, Hv, ft. _____
 Total Operating Head, Ht (Hp + Hf + Hv), ft. _____
 Elevation of Lateral Invert _____
 Elevation of Siphon Invert _____

6. Dose Volume:

Design Volume of Sewage, gal/day 650
 Design Permeability, in/hr 6-20"/HR or Percolation Rate, min/in _____
 Internal Volume of Distribution Network 27.91
 Dose Volume 163 GAL. (25%)(Q)

7. I hereby certify that the information furnished on Form 5 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 Professional Engineer
 (please seal this form)



11/26/96

License # 26816

SEPTIC COVER - UP

DATE 3-16-98

TOWNSHIP Evesham

Bl. 89.01 Lt. 11

APPLICATION # 2217-96

INSTALLER Dimiglio

OWNER Signature

PHONE # _____

READY FOR INSPECTION _____

INITIALS _____

☒ ^{Partial}
APPROVED

☐ DISAPPROVED

~~REASON FOR DISAPPROVAL~~ _____

OK to cover-up system

Final pending Eng Cert on
all phases

- Modified sit plan showing tank

loc/typ : field location / revised app.

Date 3-16-98

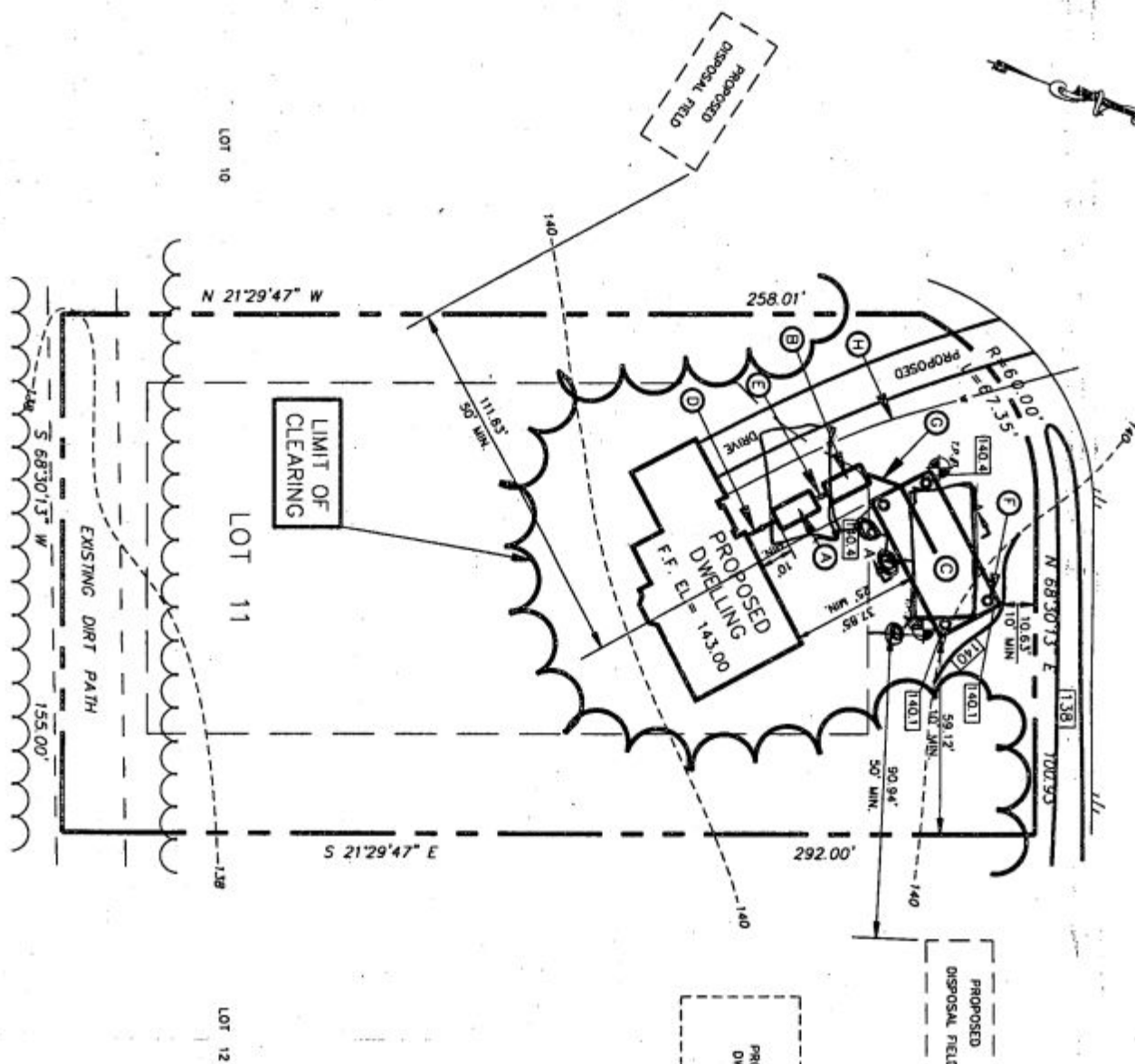
Time 1030 1100

INSPECTOR Kewit

Rec Eng Cert 5-28-98 Kewit

NORMAN

ROCKWELL



NOMENCLATURE

- Ⓐ DENOTES 2000 GAL. SEPTIC TANK (10' FROM HOUSE)
- Ⓑ DENOTES 1500 GAL. PUMP CHAMBER
- Ⓒ DENOTES DISPOSAL BED (20' x 45')
- Ⓓ DENOTES 4" P.V.C. (SCH. 40) SEWAGE LINE
2% SLOPE, 10 L.F. W/C.O.
- Ⓔ DENOTES 4" P.V.C. (SCH. 40) CONNECTION LINE
2% SLOPE, 4 L.F. W/C.O.
- Ⓕ DENOTES INSPECTION PORT (TYP.) ALL FOUR CORNERS
- Ⓖ DENOTES 3" P.V.C. (SCH. 40) DELIVERY LINE, PRESSURE
WITH 2 - 45 DEGREE BENDS, 35 L.F.
- Ⓗ DENOTES PROPOSED PUBLIC WATER SERVICE LINE WITH
BACKFLOW PREVENTER
- Ⓢ DENOTES TEST PIT LOCATIONS

TABLE OF ELEVATIONS

FINISH FLOOR ELEV.	143.00
FINISHED GRADE AT BUILDING	141.30
INVERT AT BUILDING	137.80
DISTANCE FROM SEPTIC TANK TO BUILDING	10'
INVERT SEPTIC TANK (IN)	137.59
INVERT SEPTIC TANK (OUT)	137.34
DISTANCE FROM SEPTIC TANK TO PUMP CHAMBER	4'
PUMP CHAMBER INVERT (IN)	137.26
PUMP CHAMBER INVERT (OUT)	137.09
ELEVATION TO LOW WATER	134.09
	136.40

CERTIFIED
THIS PLAN FOR A SEWERSHIP FACILITY IS TO BE IN SUBSTANTIAL COMPLIANCE WITH THE PROVISIONS OF CHAP. 189 P.L. 1954 AND THE STANDARDS FOR CONSTRUCTION AS PROMULGATED BY THE NJDEP AND THOSE PROMULGATED BY LOCAL ORDINANCE.



U.S.G.S. MAP

SCALE: 1" = 2,000'



SOILS SURVEY MAP

SCALE: 1" = 1,320'

DATE 2-3-94
BY KAH
BURLINGTON COUNTY HEALTH DEPARTMENT
COUNTY NUMBER 2217-96

ON SITE DISPOSAL SYSTEM

JACK J. GRAVLIN JR., P.E.
197 ROUTE 73, VOOHEES, NEW JERSEY 08043
1-609-768-5729

BLOCK 89.01 LOT 11

TOWNSHIP OF EVESHAM
BURLINGTON COUNTY NEW JERSEY

ENVIRONMENTAL ANALYSIS
SOIL TECH
ENVIRONMENTAL CONSULTANTS
109 ALDION ROAD, SUITE C, MIDDLETOWN, N.J. 08055
1-609-653-0878

REV.	DATE	DESCRIPTION
1	2/3/94	1" = 40'
2	2/3/94	1" = 40'
3	2/3/94	1" = 40'

JACK J. GRAVLIN JR.
PROFESSIONAL ENGINEER - L.C. NO. 26616
DATE 11/7/96
SCALE: 1" = 40'
PROJECT NO. 881014-1
SHEET NO. 1 OF 5

PLAN VIEW

SCALE: 1" = 40'

2217-96

**Board of Chosen Freeholders
Of The County of Burlington
MOUNT HOLLY, NEW JERSEY**



Burlington County Health Dept.
Raphael Meadow Health Center
15 Pioneer Boulevard
P.O. Box 6000
Westampton, N.J. 08060

08060

January 30, 1998

Tele: (609) 265-5548
Fax: (609) 265-5541

Garnet Environmental
Pinedge Corporate Center
230 Cooper Road
West Berlin, NJ 08091

Gentlemen:

Your applications for the below listed individual subsurface sewage disposal systems in Evesham Township, have been recertified to be in compliance with state and local standards:

COUNTY NUMBER	BLOCK	LOT
2171-96	89.02	7
2173-96	89.02	9
2174-96	89.02	10
2217-96	89.01	11
2222-96	89.01	14
2223-96	89.01	13
2224-96	89.01	15

THIS RECERTIFICATION BECOMES NULL AND VOID 1-30-99.

All provisions stipulated in our certification letters dated 3-5-97, 2-4-97 & 2-6-97 remains in effect.

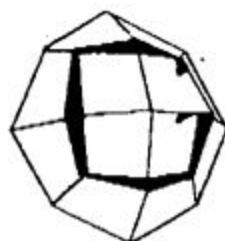
Should you have any questions regarding this matter, please do not hesitate to contact this office.

Sincerely,

Kurt W. Hendricks
Kurt W. Hendricks,
Sanitary Inspector

bk

c: Board of Health
Construction Code Official
file



GARNET ENVIRONMENTAL

CONSULTING and LAND DEVELOPMENT SERVICES

Pinedge Corporate Center
230 Cooper Road
West Berlin, New Jersey 08091

Tel: (609) 768-9100
Fax: (609) 767-5096

January 29, 1998

Burlington County Health Department
Raphael Meadow Health Center
15 Pioneer Boulevard
P.O. Box 6000
Westhampton, NJ 08060

BY TELECOPIER
(609) 265-5541

Attn: Tina Rizzo

Re: Sanctuary - Section 1 Septic Approvals
Evesham Township, Burlington County

Dear Tina:

Additional septic applications for Sanctuary Section 1 have expiration dates in early February and March, 1998:

<u>Block</u>	<u>Lot</u>	<u>Application No.</u>	<u>Expiration Date</u>
89.01	11	✓2217-96	2/4/98
89.01	12	2221-96 <i>Not in File</i>	2/6/98
89.01	13	✓2223-96	2/6/98
89.01	14	✓2222-96	2/6/98
89.01	15	✓2224-96	2/6/98
89.02	7	✓2171-96	3/5/98
89.02	8	✓2172-96 <i>Eng Data</i>	3/5/98
89.02	9	✓2173-96	2/4/98
89.02	10	✓2174-96 <i>Eng Data</i>	2/4/98

Please accept this letter as a request to extend the approval of the above-referenced applications for an additional year. Thank you for confirming this in writing at your earliest convenience.

NITRATE DILUTION CALCULATION

Marlton woods
000000
Evesham Twp.
BLUCK Various
LOT(S) Various

DATE: 7/29/94
STANDARD SYSTEM
USER ID # 009.1

DESCRIPTION OF WASTEWATER SOURCE:
328 SFD on 1050.89 Ac.

ASSUMPTIONS:

UNIT FLOW = 75 GAL/SQ FT OR GAL/C/DAY
NUMBER OF SQ FT OR PEOPLE = 1148
WASTEWATER FLOW = 86100 GALLONS/DAY
AVERAGE USE = 7 DAYS/WEEK, 365 DAYS/YEAR
WASTEWATER IN CONC. = 39.45 PPM
VEGETAL UPTAKE = 4.5 %
TYPE OF SYSTEM = STANDARD
SYSTEM DESIGN N REMOVAL = 0 %
DISPOSAL FIELD AREA = .64 SQ FT PER GAL PER DAY

$$\text{MODEL: } C = \frac{FLf}{(At - Af) Do + Dt}$$

$Af = .64 \text{ SQ FT/GAL} \times 75 \text{ GAL/UNIT} \times 1148 \text{ UNITS} \times 0.0929 \text{ SQ M/SQ FT} \times .0001$
 $\text{HA/SQ M} \times 4 \text{ EFFECTIVE AREA/ACTUAL AREA} = 2.047665 \text{ HA}$

$n = 10$

$Lf = ((75 \text{ GAL/UNIT} \times 1148 \text{ UNITS} \times 365 \text{ DAYS/YR} \times 39.45$
 $\text{MG/L} \times 3.785 \text{ L/GAL} \times .000001 \text{ KG/MG}) / (2.047665 \text{ HA}) \times .955 \text{ N REDUCTION FACTOR} =$
 $2188.535 \text{ KG/HA/YR}$

$Do = 50.8 \text{ CM/YR}$

$Df = (75 \text{ GAL/UNIT} \times 1148 \text{ UNITS} \times 365 \text{ DAYS/YR} \times 3785 \text{ CC/GAL}) / ((2.047665 \text{ HA} \times$
 $1E+08 \text{ SQ CM/HA} \times 1) + 50.8) = 631.7023 \text{ CM/YR}$

THE AVERAGE NO3-N CONCENTRATION AT THE 1050.89 ACRL PROPERTY LINE WOULD BE
1.97 PPM.

NITRATE DILUTION CALCULATION

Mariton Woods
000000
Evesham Twp.
BLUCK Various
LOT(S) Various

DATE: 7/29/94
STANDARD SYSTEM
USER ID # 009.1

DESCRIPTION OF WASTEWATER SOURCE:
328 SFD on 1050.89 Ac.

ASSUMPTIONS:

UNIT FLOW = 75 GAL/SQ FT OR GAL/C/DAY
NUMBER OF SQ FT OR PEOPLE = 1148
WASTEWATER FLOW = 86100 GALLONS/DAY
AVERAGE USE = 7 DAYS/WEEK. 365 DAYS/YEAR
WASTEWATER IN CONC. = 39.45 PPM
TARGET NO3-N CONC. = 2 PPM
VEGETAL UPTAKE = 4.5 %
TYPE OF SYSTEM = STANDARD
SYSTEM DESIGN N REMOVAL = 0 %
DISPOSAL FIELD AREA = .64 SQ FT PER GAL PER DAY

$$\text{MODEL: } A_t = A_f + \frac{\left(\frac{L_f}{C} - D_f \right) A_f}{D_o}$$

$$A_f = .64 \text{ SQ FT/GAL} \times 75 \text{ GAL/UNIT} \times 1148 \text{ UNITS} \times 0.0929 \text{ SQ M/SQ FT} \times .0001 \text{ HA/SQ M} \times 4 \text{ EFFECTIVE AREA/ACTUAL AREA} = 2.047665 \text{ HA}$$

$$f = 10$$

$$L_f = ((75 \text{ GAL/UNIT} \times 1148 \text{ UNITS} \times 365 \text{ DAYS/YR} \times 39.45 \text{ MG/L} \times 3.785 \text{ L/GAL} \times .000001 \text{ KG/MG}) / (2.047665 \text{ HA}) \times .935 \text{ N REDUCTION FACTOR} = 2188.535 \text{ KG/HA/YR}$$

$$C = 2 \text{ MG/L}$$

$$D_o = 50.8 \text{ CM/YR}$$

$$D_f = ((75 \text{ GAL/UNIT} \times 1148 \text{ UNITS} \times 365 \text{ DAYS/YR} \times 3785 \text{ CC/GAL}) / (2.047665 \text{ HA} \times 1E+08 \text{ SQ CM/HA} \times 1) + 50.8 = 631.7023 \text{ CM/YR}$$

$$\text{THE REQUIRED ACREAGE} = 1032.06 \text{ ACRES}$$

ENGINEER'S REPORT

ONSITE DISPOSAL SYSTEM

PRESSURE DISTRIBUTION DISPOSAL SYSTEM

BLOCK 89.01 LOT 11

EVESHAM TOWNSHIP, BURLINGTON COUNTY, NEW JERSEY

NOVEMBER, 1996

PREPARED BY :

 11/26/96
JACK GRAWLIN, P.E.
LICENSE #26816



PROJECT DESCRIPTION

THE PROPOSED PROJECT CONSISTS OF CONSTRUCTING AN ON-SITE WASTEWATER DISPOSAL SYSTEM TO SERVICE A 4 BEDROOM DWELLING.

A PRESSURE DISTRIBUTION SYSTEM HAS BEEN DESIGNED FOR EFFLUENT DISPOSAL.

DESIGN CRITERIA

THE DISPOSAL SYSTEM HAS BEEN DESIGNED BASED ON THE STANDARDS FOR INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS, N.J.A.C. 7:9A.

MAINTENANCE

THE OWNER OF THE PROPERTY MUST INSPECT THE ENTIRE DISPOSAL SYSTEM WEEKLY AND PUMP OUT THE SEPTIC TANK ON AN AS NEEDED BASIS OR A MINIMUM OF ONCE EVERY YEAR.

THE MISUSE OR ALTERATION OF THE ONSITE SUBSURFACE EFFLUENT DISPOSAL SYSTEM BY THE PROPERTY OWNER OR INSTALLER VOIDS THE ENGINEER'S LIABILITY OF THE DISPOSAL SYSTEM'S DESIGNED FUNCTION. THE DESIGN ENGINEER IS NOT RESPONSIBLE FOR THE OPERATION OR MAINTENANCE OF THIS SYSTEM.

PRESSURE DISTRIBUTION NETWORK - CENTRAL MANIFOLD

3' LATERAL SPACING (4/4 OF PERFORATION SPACING) CENTER FEED
2.5'-3'-3'-3'-3'-3'-2.5' (2.5' FROM EDGE OF DISPOSAL BED)

3.0' PERFORATION SPACING, 0.25" DIAMETER HOLES

12 LATERAL SEGMENTS, 19.5' IN LENGTH EACH

LATERAL SIZE = 1.0", FIG. 14 (DEP 1989)

LATERAL DISCHARGE RATE - FOR 2.5 FT. OF HEAD

HOLE RATE = 1.18 G.P.M., (7:9A- 9.7(a) 4. (DEP 1989)

NUMBER OF HOLES / LATERAL = $19.5' / 3' = 6$ HOLES / LATERAL

DISCHARGE RATE = 6×1.18 G.P.M. = 7.08 G.P.M. PER LATERAL

MINIMUM DISCHARGE RATE = 7.08 G.P.M. $\times$ 12 LATERAL SEGMENTS = 84.96 G.P.M.

MANIFOLD LENGTH 15.0' OF 3" PIPE (FIG. 15, N.J.A.C. 7:9A)

DELIVERY LINE: 35' OF 3" DIAMETER PIPE

EFFLUENT VOLUME

TOTAL DESIGN FLOW: (Q): 650 GAL/DAY

ABSORPTION BED
INSTALLATION

BOTTOM-LINED SOIL REPLACEMENT, DISPOSAL FIELD

SOIL PERMEABILITY - OF SELECT FILL IN ZONE OF TREATMENT = 6 - 20"/HR.

DISPOSAL FIELD AREA CONTAINS 2% SLOPES - ALL AREAS BELOW AND DOWNSLOPE OF THE DISPOSAL BED WILL BE USED FOR ABSORPTION EFFLUENT. ZONE OF TREATMENT TO BE SELECT FILL (SEE PLAN FOR DETAILS)

REQUIRED DISPOSAL AREA = 650 G/D X 1.33 G/FT²/DAY = 865 SQ. FT.
USE 20' X 45' = 900 SQUARE FEETDOSE VOLUME

PIPE VOLUME =	234 L.F. LATERALS	1.0" P.V.C.	9.55 GAL.
(V)	35 L.F. DELIVERY LINE	3" P.V.C.	12.85 GAL.
	15 L.F. MANIFOLD	3" P.V.C.	5.51 GAL.
			<u>27.91 GAL.</u>

USE MAX., DOSE = 25% Q = 650 GAL/DAY X 25% = 163 GAL/DOSE

PUMP REQUIREMENTS

FRICTION LOSS CALCULATIONS: (FIG. 16, APPENDIX A, N.J.A.C. 7:9A)

DELIVERY LINE = 35', 3" DIAMETER, 85.0 G.P.M.

$$\frac{1.55}{100} \text{ FT.} \times 35 \text{ FT.} = 0.54 \text{ FT.}$$

ELEVATION HEAD = 138.40 (LAT. INV. ELEV.) - 134.09 (DOSING TANK LOW WATER)

$$\begin{aligned} & 4.3 \text{ FT.} \\ \text{DESIGN PRESSURE HEAD} &= \underline{2.5 \text{ FT.}} \\ \text{TOTAL HEAD} &= 7.4 \text{ FT.} \end{aligned}$$

PUMP SPECIFIED - USE GOULD'S SUBMERSIBLE SEWAGE PUMP, 0.33 HP
MODEL 3887, (SEE PUMP CURVE) 85.0 GPM. AT 7.4 FEET
HEAD

PUMP CHAMBER DOSE VOLUME CALCULATIONS

USING 1500 GALLON J. GILLESPIE MODIFIED SEPTIC TANK :
RECTANGULAR SHAPE

DIMENSIONS : 13'-0" X 6'-6" (OUTSIDE)

HORZ. AREA (A) = 150"(L) X 72"(W) = INSIDE TANK DIMENSIONS
A = 10,800 SQ. IN.

LIQUID LEVEL DEPTH = 48"

GALS./INCH. = 10,800 SQ. IN. X 1 GAL./231 CU. IN. 46.75 GAL./INCH

LOW WATER LEVEL STORAGE VOL. = 12" X 46.75 GAL./INCH = 561.00 GAL.

MINIMUM DOSE VOLUME = 163 GALLONS (25% Q)

SET PUMP OFF SWITCH AT 6" ABOVE PUMP INTAKE

SET PUMP ON SWITCH AT 4.0" ABOVE PUMP OFF SWITCH (N.J.A.C. 7:9A-9.2)
(f) 711, 1989) FOR A DOSE VOLUME OF 183 GAL.

CALCULATED AS FOLLOWS :

$b \text{ (IN)} = (V_d + V_{cp} + V_{pd}) \times (231 \text{ CUL. IN./GAL.}) / A$

V_d = REQUIRED DOSE VOLUME

V_{cp} = VOLUME OF PIPES THAT WILL DRAIN BACK

V_{pd} = VOLUME DISPLACEMENT OF PUMP, FLOAT SWITCHES, RAIL UNIT
AND ELBOWS

A = 10,800 SQ. IN.

V_d = 163 GAL.

V_{pd} = 50 LBS. (PUMPS) + 10 LBS. (PIPES, SWITCHES, ELBOWS)
X 1 GAL. / 8 LBS. = 7.5 GAL.

V_{cp} = 12.85 GAL. (V OF DELIVERY LINE)

SET HIGH WATER ALARM SWITCH 4" ABOVE PUMP ON SWITCH

TOTAL STORAGE VOLUME AFTER HIGH WATER ALARM =

(48" - 12" - 4.0" - 4") = 28.0"

28.0" X 46.75 GAL./INCH = 1309.00 GALLONS



The Pinelands Commission

P.O. Box 7, New Lisbon, N.J. 08064 (609) 894-9342

May 30, 1991

Kettle Run Associates
302 North Cooper Road
Berlin, NJ 08009

Please Always Refer To This
Application Number

RE: App. No. 85-0516.02
Block 89, lots 8, 9, 10,
12, 15, 16 and 17
Evesham Township

Dear Sir or Madam:

You have been informed that prior approvals for the development of 73 lots in a 74 lot subdivision on the above referenced 194 acre parcel did not raise substantial issues with respect to the conformance of the proposed development with the provisions of the Comprehensive Management Plan. Please be further advised that the revised preliminary subdivision approval granted by the Burlington County Planning Board also does not raise any substantial issues with respect to the conformance of the proposed development to the minimum standards of the Plan. As a result, the revised preliminary subdivision approval will not be reviewed by the Pinelands Commission. You should submit a copy of this letter to any other reviewing agency.

Prior to receipt of final municipal subdivision approval, a recorded copy of the requisite deed restriction permanently dedicating the open space area required to meet the density requirements of Evesham Township's certified land use ordinances and the Pinelands Comprehensive Management Plan must be submitted to the Pinelands Commission.

The subdivision plan, consisting of 10 sheets, submitted to the Pinelands Commission was prepared by G.S. Winters and Associates, Inc., and dated as follows:

Sheet 1 dated October 12, 1989 last revised January 16,
1991

Sheet 2 dated October 12, 1989 last revised December 21,
1990

Sheet 3 dated October 12, 1989 last revised May 21, 1990

Sheet 4 dated October 12, 1989 last revised January 16,
1991

Sheet 5 dated October 12, 1989 last revised January 16,
1991

Sheet 6 dated October 12, 1989 last revised July 20, 1990

Sheet 7 dated October 12, 1989 last revised September 12,
1988

Sheet 8 dated October 12, 1989 last revised May 21, 1990

Sheet 9 dated October 12, 1989 last revised December 21,
1990

Sheet 10 dated October 12, 1989 last revised January 16,
1991

A 300 foot buffer to Helonias Bullata habitat must be maintained.

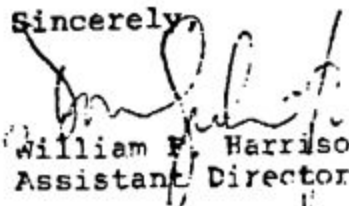
All development shall be located at least 200 feet from any fresh water wetlands.

The septic system shall be located in an area where the seasonal high water table is at least 5 feet below the natural ground surface.

To maintain the requisite scenic setback requirements of the certified municipal land use ordinances and the Pinelands Comprehensive Management Plan, all buildings shall be located at least 200 feet from the center line of all public paved roads.

If you have any questions, please contact the development review staff.

Sincerely,


William F. Harrison, Esq.
Assistant Director

WFH/ew

cc: Secretary, Evesham Township Planning Board
Evesham Township Construction Code Official
Evesham Township Environmental Commission
Secretary, Burlington County Health Department
Burlington County Planning Board
Stephen Samost, Esq.



The Pinelands Commission

P.O. Box 7, New Lisbon, N.J. 08064 (609) 894-9342

CERTIFICATE OF FILING

(Inconsistent)

January 25, 1988

STEPHEN D. SAMOST

Pachoango Associates
Flamingo Drive at
Kenilworth Lakes
Marlton, New Jersey 08053

Re: Application No. 83-10,233
Block 89, lots 11, 18-22
Block 90, lots 7 and 8
Evesham Township

Gentlemen:

This application for the subdivision of 129 single family lots and development of 128 single family dwellings on the above-referenced 471 acre tract is complete. There is an existing single family dwelling located on one of the proposed lots. The tract is located in a Pinelands Rural Development Management Area.

Any agency responsible for the review of the proposed development may determine that any application concerning the proposed development is complete. The agency may proceed to review and take action on the proposed development. The applicant must give notice to the Pinelands Commission of any modification of the proposed development and of any approval received for the proposed development within 5 days of receiving any approval. No approval shall take effect and no construction or development shall occur unless written notice from the Pinelands Commission has been received, indicating either that the Commission will not review the approval or that the Commission has approved the local approval.

The Subdivision Plan, consisting of 19 sheets, submitted to the Pinelands Commission was prepared by Korab, McConnell and Dougherty Associates, dated as follows:

Sheet 1 - September 15, 1987, revised to December 24, 1987

Sheet 2 - September 17, 1987, revised to December 24, 1987

Sheet 3 - September 23, 1987, revised to December 24, 1987
Sheet 4 - September 24, 1987, revised to December 24, 1987
Sheet 5 - October 2, 1987
Sheet 6 - September 15, 1987
Sheet 6A - November 17, 1987
Sheet 7 - September 15, 1987, revised to December 4, 1987
Sheets 8 and 9 - September 15, 1987
Sheets 10-16 - August 20, 1987
Sheet 17 - November 5, 1987, revised to December 24, 1987
Sheet 18 - November 5, 1987.

The proposed development is inconsistent with the wetlands and wetland protection standards of the Evesham Township Land Use Ordinance and the Pinelands Comprehensive Management Plan.

The applicant has specified his intent to utilize Section 160-25.4 of the Evesham Township Land use Ordinance to accommodate increase density for the proposed development. Until the applicant specifies the concerned acreage and demonstrates conformance with the ordinance requirements, the proposed development is inconsistent with the density standards of the Evesham Township Land Use Ordinance and the Pinelands Comprehensive Management Plan.

The storm water management plan is inconsistent with the storm water standards of Evesham Township's Land Use Ordinance and the Pinelands Comprehensive Management Plan.

The applicant has not provided sufficient information to determine the presence or absence of threatened or endangered species. Therefore, the proposed development has not demonstrated consistency with the threatened and endangered species standards of the Evesham Township Land Use Ordinance and the Pinelands Comprehensive Management Plan.

All development must maintain the requisite 200 foot scenic set back requirement from Hopewell Road in accordance with the Evesham Township Land Use Ordinance and the Pinelands Comprehensive Management Plan.

Each septic system shall be located in an area where the seasonal high water table is at least 5 feet below the natural ground surface.

-3-

THIS CERTIFICATE OF FILING DOES NOT CONSTITUTE AN APPROVAL. It does authorize any other agency to review and act on the proposed development. If either a municipal or county agency grants an approval or permit to the proposed development, that approval is subject to review by the Pinelands Commission.

If you have any questions, please contact Karen L. Young of our staff.

Sincerely,

William F. Harrison
Assistant Director

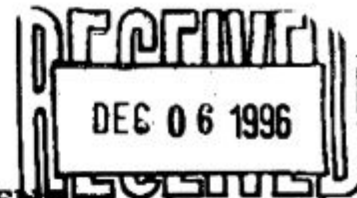
WFH/scb

cc: Secretary, Evesham Township
Planning Board
Evesham Township Construction
Code Official
Evesham Township Environmental
Commission
Burlington County Health Department
Burlington County Planning Board
Deerwood Associates
Stephen Samost, Esquire

6092655541 BURL CO HEALTH DEPT

489 P01

DEC 06 '96 11:49

✓
C15d 1/91**BURLINGTON COUNTY HEALTH DEPARTMENT
FAX COMMUNICATION****NOTICE OF SEPTIC SYSTEM APPLICATION RECEIVED**

Please be advised that it is the applicant's responsibility to supply the Pinelands Commission with a copy of the septic system application as necessary.

1. Applicant's Name Marlton Woods, Inc.
2. Applicant's Address 300 No. Cooper Rd., Berlin, NJ 08009
3. Township Evesham Block 89.01 Lot 11
4. County Application # 2217-96 Date Received 12/06/96
5. Pinelands Commission Application # ~~85-0516-02~~ 83-10, 23301
6. Type of Septic System
☐ Standard
☒ Pressure Dosing
☐ Ruck
☐ Other (specify) _____
7. Date of Plans 8/12/96 Prepared by Jack J. Gravlin, Jr.

Pinelands Commission Response

- ☒ Issue
☐ Non-Issue
☐ Conditional Non-Issue
☐ No Further Action by Commission

We have not yet allowed the county & township subdivision approval for proposed Section I of this project to take effect. This lot is in proposed Section I.

- ☐ Notify Pinelands Commission of Approval
☐ Notify Pinelands Commission of Approval and send plans

Reviewed by

KEN CARTER

Date

12/9/96



**BURLINGTON COUNTY HEALTH DEPARTMENT
FAX COMMUNICATION**

NOTICE OF SEPTIC SYSTEM APPLICATION RECEIVED

Please be advised that it is the applicant's responsibility to supply the Pinelands Commission with a copy of the septic system application as necessary.

1. Applicant's Name Marlton Woods, Inc.
2. Applicant's Address 300 No. Cooper Rd., Berlin, NJ 08009
3. Township Evesham Block 89.01 Lot 11
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5. Pinelands Commission Application # 85-0516.02
6. Type of Septic System
☐ Standard
☒ Pressure Dosing
☐ Ruck
☐ Other (specify) _____
7. Date of Plans 8/12/96 Prepared by Jack J. Gravlin, Jr.

Pinelands Commission Response

- ☐ Issue
☐ Non-Issue
☐ Conditional Non-Issue
☐ No Further Action by Commission

-
- ☐ Notify Pinelands Commission of Approval
☐ Notify Pinelands Commission of Approval and send plans

Reviewed by _____

Date _____

BURLINGTON COUNTY HEALTH DEPARTMENT

NOTICE OF ISSUANCE OF A CERTIFICATION TO A SEPTIC SYSTEM DESIGN

This form must be filed with the Pinelands Commission within five days following the issuance of a certification to a septic system design by the County Health Department in the Pinelands Area; except for development "exempted" by Section 4-101 of the Comprehensive Management Plan.

1. Applicant's Name Moulton Woods
2. Applicant's Address 300 N. Cooper Rd Berlin NJ 08009
3. Township Evesham Block # 89.01 Lot # 11
4. County Application # 2217-96
5. Pinelands Commission Docket Number as it appears on the Notice of Filing, Certificate of Compliance, Certificate of Filing or development approval 83-10233.01
6. Type of septic system design approved:

Method of distribution:

Gravity Flow _____
Gravity Dose _____
Pressure Dose X

Type of disposal field installation:

Conventional (C) _____
Soil replacement bottom lined (SRB) X
Soil replacement fill enclosed (SRE) _____
Mounded (M) _____
Mounded soil replacement (MSR) _____

Alternative design:

Specify type: _____

Any copies of the certified plan shall be provided by the applicant.

K. W. Hendricks
Signature of Sanitary Inspector

2-3-97 (609) 265-5515
Date Phone #

FAXED

FEB 05 1997

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**BURLINGTON COUNTY HEALTH DEPARTMENT
N.J.A.C. 7:9A APPLICATION REVIEW FORM**

Applicant(s) <u>Maiten Woods</u>	Application # <u>2217-96</u>	Date Received: <u>1-17-97</u>
Signature of Reviewing Official <u>KWH</u>	Municipality <u>Evesham</u>	Block: <u>89.01</u> Lot: <u>11</u>

<u>Type Establishment</u>	<u>Disposition</u>	<u>Date(s)</u>
☐ Commercial ☐ Institution	☒ Certified	<u>2-3-97</u>
☒ Single Family Dwelling	☐ Denied	_____

CONFORMANCE
Y N NA

GENERAL CRITERIA

3.5(d)		—	—	Four (4) copies of entire application submitted on standardized forms
3.5(d)		—	—	All copies of application, plans, specifications and other are legible
3.5(c) 7		—	—	Detailed engineering plans and specifications for all components of system are provided
3.5(d)		—	—	Inclusion of other approvals, certifications, waivers and exemptions attached
3.5(c) 1		—	—	USGS quadrangle or other accurate map and a USDA soil survey map provided
3.5(c)		—	—	All information submitted in connection with the design signed and sealed by a P.E.
3.5(d)		—	1	Application for an individual water supply system is included if required
1.6(e)		—	—	Public sewerage is not available within 100 feet of property
58:11-25		—	—	Individual Sewerage Disposal Code applies (municipal ordinance)
1.8		—	—	Sanitary waste only
1.8(a) 2		—	—	Less than 2000 GPD
1.8(a) 2		—	—	The system is connected to a single building, commercial unit or realty improvement.
3.9		—	—	TWA permit is not required
3.10		—	—	NJPDES permit not required

CONFORMANCE

Y N NA

3.6(a)				Soil evaluation and testing witnessed or legally waived
<u>SITE PLAN CRITERIA</u>				
3.5(c)				Signed and sealed by a P. E.
3.5(c)2				Prepared in accordance with NJAC 13:40-7 and drawn at a scale adequate to depict the system's features within a 150 foot radius
3.5(c)2i				Locates all components i.e. ST, GT, DT, DBox, Dis. Lat, Dis. fields, Interceptor Drains, SP
ii				Boundaries of lot are depicted
iii				Existing and proposed buildings, roadways, subsurface drains, wells and disposal areas on same and adjacent lots indicated
iv				Existing and finished grade topography (2ft contour interval) using absolute or relative elevations provided
v				Locates all surface water bodies, natural and artificial, and all springs or areas of ground water seepage
vi				Locates existing and proposed surface water diversions
vii				Locates outcrops of bedrock if discovered
viii				Conforms with setback requirements as required in NJAC 7:9A-4.3
ix				Locates all soil profile pits, soil borings and permeability tests
x				Locates stream encroachment boundaries for streams within the near vicinity of the site
xi				State approved boundaries of any wetlands areas or transition areas
3.5(c)3				Soil logs prepared as prescribed in NJAC 7:9A-5.3
3.5(c)4				Soil suitability class(es) determined as prescribed in NJAC 7:9A-5.4
3.5(c)5				Results of permeability test as prescribed in NJAC 7:9A-6 including all test data and calculations are included
3.5(c)6				Maximum expected daily volume of sanitary sewage and method of calculation is provided
3.5(c)7				Detailed engineering plans and specifications for all components of the system are included
3.5(c)8				All data and calculations used in the design of the sewage system are included

CONFORMANCE
Y N NA

3.16(a)2	+	—	—	Soil tests were conducted after December 31, 1989
3.18	+	—	—	Compliance with >10 realty improvement criteria (NJAC 7:9A-3.18)
3.18 (b,d-h)	—	—	+	Compliance with 50 or more realty improvement criteria (NJAC 7:9A-3.18b,d-h)
<u>SPECIAL LIMITATIONS ARE ADEQUATELY ADDRESSED AND COMPLY WITH ALL STATE AND LOCAL LAWS</u>				
4.2(b)1	—	—	+	Bedrock outcrops or areas with excessive stones
(b)2	—	—	+	Sink-holes
(b)3	—	—	+	Steep slopes with unstable soil such as landslide scars, slump blocks, fence posts or lower trunks of trees bending downslope
(b)4	—	—	+	Bare eroded ground, denuded of vegetation or with deep wheel ruts
(b)5	—	—	+	Highly disturbed ground i.e. remnants of foundations or pavements, buried building debris or plants
(b)6	—	—	+	Sand dunes
(b)7	—	—	+	Mine spoils, burrow pits, dumps or landfills
(b)8	—	—	+	Low-lying coastal areas exhibiting signs of tidal inundation or tidal-marsh vegetation
(b)9	—	—	+	Low-lying inland areas showing signs of ponding or freshwater wetland vegetation
(b)10	—	—	+	Flat low-lying areas adjoining streams
4.3	+	—	—	The minimum separation distance between components of the system and other features conform with table 4.3
4.4(a)	+	—	—	Disposal field or seepage pit is not located in an area where the slope is >25%
4.4(c)	+	—	—	Modification of slopes by regrading meets the requirements of NJAC 7:9A-10.3(b)
4.5(a)	+	—	—	Disposal field or seepage pit is not subject to surface runoff (drainage)
4.6(a)	—	—	+	Disposal system is not subject to surface flooding
4.6(a)	—	—	+	Disposal area adjacent to a stream or coastline and relative elevations does not subject system to flooding
4.6(b)1	+	—	—	Flooding not observed during a site inspection nor are there records or knowledge of past flooding
4.6(b)2	—	—	—	Maps in County Soil Survey Report do not indicate the presence of a soil type subject to flooding

CONFORMANCE

Y N NA

4.6(c)	+	—	—	Fill material proposed to elevate the ground surface subject to flooding meets requirements of 4.6(d) and 10.3(b)
4.7(a)	+	—	—	Site evaluation process considered the possible presence of freshwater wetlands
4.7(a)	—	—	+	Potential presence of wetlands is not within the proposed area of disturbance
4.7(a)	—	—	+	Evidence that the applicant has complied with applicable wetlands regulations
4.7(b)1	+	—	—	Periodic or seasonal surface ponding is not observed
4.7(b)2	+	—	—	Soil profile evaluation does not indicate a seasonally high water table shallower than 1.5ft
4.7(b)3	+	—	—	Maps contained in the County Soil Survey Report do not indicate a wetlands soil type (4.7(b)3)
4.8	+	—	—	Disposal area free from encroachments i.e. driveways, patios, decks, trees, additions
5.2(b)	+	—	—	Minimum number of profile pits and/or soil borings were conducted (as per 5.2(b))
5.2(c)1	+	—	—	Soil profile pits and borings are properly located in accordance with Figure 1 Appendix A
5.2(c)3	—	—	+	One profile pit or two soil borings performed for each seepage pit
5.2(c)1	+	—	—	Profile pits or borings excavated to 10ft. depth or no less than 8ft below level of infiltration 5.3(b)
5.3(b)	+	—	—	Soil logs contain depth and thickness of horizon
5.3(c)	+	—	—	Soil color indicated using Munsell System which includes alpha-numeric symbol and name
5.3(d)	—	—	—	Soil textural class noted using USDA system of classification
5.3(e)	—	—	+	Estimated volume percentage of coarse fragments noted, if present
5.3(f)	+	—	—	Abundance, size and contrast of mottles are indicated, if present
5.3(g)	+	—	—	Soil structural class (profile pits only) is noted
5.3(b)	+	—	—	Soil consistence is referenced
5.2(h)	+	—	—	Soil profile characteristics are reported in log form
5.6	—	—	+	Fractured rock or excessively coarse substratum
5.6	—	—	+	Excessively coarse horizon, identified if present
5.7	—	—	+	Massive rock or hydraulically restrictive substratum are identified, if present

CONFORMANCE
Y N NA

5.7	—	—	1	Hydraulically restrictive horizon, permeable substratum identified, if present
5.8(a)	1	—	—	Zone of saturation, regional, identified if present
5.8(c)	—	—	1	Zone of saturation, perched, identified, if present
6.1(a)	—	—	1	Soil permeability testing conducted within the disposal field
6.1(a)	—	—	1	Soil perm test conducted at the level of infiltration
6.1(a)	—	—	1	Conventional disposal field test conducted one to three feet below ground surface
6.1(b)	—	—	1	Additional test depths other than the depth of infiltration, required for other limiting zones, were conducted
6.1(d)	—	—	1	Tube perm. and soil permeability class rating consists of a minimum of two test replicates
6.1(d) 1	—	—	1	Variability of test results do not exceed limits in 6.2(i)2 which requires additional test
6.1(d) 1	—	—	1	Profile pits or borings do not indicate the presence of more than 1 soil type which requires additional tests
6.1(d) 1	—	—	1	Is the system designed based upon the most restrictive conditions found within the D. F.
6.1(d) 2	—	—	1	Piezometer test required for identification of limiting zone(s) was conducted and a minimum of one test conducted within or no further than 15ft. beyond D. F. boundaries
6.1(e) 6	—	—	1	Percolation test uniformly spaced in D. F. in acceptable patterns (Appendix C)
6.1(g)	—	—	1	Questionable results of permeability testing require that the test be repeated and the results are acceptable
6.2(i) 2	—	—	1	Results of all tube permeability tests fall within one soil permeability class or two adjacent classes
6.2(j) 1	—	—	1	Tube permeability acceptable range for design permeability at the LOI, the slowest replicate result was used
6.2(j) 2	—	—	1	Is the average tube permeability test replicate used to identify a hydraulically restrictive horizon or substratum

CONFORMANCE
Y N NA

6.2(j)2	—	—		Does the acceptable range average tube permeability test replicate, used to I.D. a Hr horizon or substratum, fall in KO class
6.2(j)3	—	—		Does the acceptable range average tube permeability test replicate, used to I.D. an excessively coarse horizon or substratum, fall in K5 class
6.2(k)1	—	—		Was the slowest tube permeability test replicate used for design purposes where results exceed the limits of variability
6.2(k)3	—	—		Was the fastest tube permeability test replicate used to I.D. an excessively coarse horizon or substratum where results exceed variability
6.2(k)2	—	—		Was the slowest tube permeability test replicate used to I.D. a Hr horizon or substratum where results exceed variability
7.3(a)1	—	—		Separate systems designed to receive only greywater or only blackwater conform with 7:9A-7.5
7.3(b)	—	—		Backwash from water softener or other drainage other than sanitary does not enter the system
7.3(c)	—	—		The facility does not engage in an activity which may result in the discharge of industrial waste
7.4(b)		—	—	Criteria for estimating the volume of sanitary sewage from residential sources is in conformance with 7:9A-7.4
7.4(c)	—	—		The volume of sanitary sewage from commercial or institutional establishment is based on size and type of facility
7.4(c)	—	—		The maximum expected number of persons that may be served during any single day of operation for commercial or institute is used
7.5	—	—		Was a variance from the Uniform Construction Code NJAC 5:23-3.5 obtained for a waterless toilet
7.5	—	—		Greywater system and blackwater system are a minimum of 75% the volume of sanitary sewage as per 7:9A-7.4
7.6	—	—		Seepage pit is only for greywater system (7:9A-7.5) or alteration to existing systems 7:9A-3.3
7.7	—	—		Construction note indicates building sewer is to be in conformance with the Uniform Construction Code NJAC 5:23
8.1(a)	—	—		Establishment does not discharge large quantities of grease which requires a grease trap

CONFORMANCE

Y N NA

8.1(b)	—	—		Grease trap is designed with a separate line located close to source with easy access for cleaning
8.1(e)	—	—		Grease trap is not smaller than 750 gallons in capacity
8.1(f)	—	—		Minimum requirements for construction, materials and foundation of grease trap same as septic tank
8.1(g)	—	—		Inlet and outlet of G.T. provided with "T" baffles extending 12" above tank floor and well above the liquid level
8.1(h)	—	—		Manholes for G.T. extending to finished grade provided with gas tight covers to withstand expected loads

SEPTIC TANKS

8.2(a)1		—	—	The S.T. precedes in series the aerobic treatment unit for batch processing aerobic treatment units
8.2(a)2	—	—		The S.T. follows in series the aerobic treatment unit for gravity flow aerobic treatment units
8.2(b)1		—	—	Minimum capacity 250 gal/bedroom and not less than 1000 gallons
8.2(b)1	—	—		Expansion attic is considered a bedroom if indicated on design
8.2(b)2	—	—		Other than single family dwellings, S.T. capacity 1.5 x Q when Q is less than 1500 GPD, not less than 1000 gallon tank
8.2(b)3	—	—		Each tank connected in series is at least as large as the succeeding tank
8.2(c)		—	—	Multiple compartments and 50% greater liquid capacity is provided for proposed garbage grinder units
8.2(d)		—	—	Institution or commercial establishment is provided with multiple compartment when flow >1000 gallons
8.2(d)1		—	—	The total capacity of multiple compartments S.T. is not less than 1000 gallons
8.2(d)1		—	—	The first compartment has a liquid capacity of 2/3 the total required liquid capacity
8.2(d)2		—	—	Not more than two compartments are provided for tanks having liquid capacities less than 1250 gallons
8.2(d)3		—	—	Multiple compartments are provided by partitions within a single tank or by connecting individual tanks in series
8.2(d)3	—	—		Single partitioned tank has vent holes near top of partition and two compartments are connected by pipe tee, baffle or SSR

CONFORMANCE
Y N NA

8.2(e)1		—	—	Water-tight and constructed of sound durable materials resistant to corrosion, decay, frost damage
8.2(e)2	—	—	—	Precast slab covers water-tight and 3" minimum thickness reinforced
8.2(e)3		—	—	Walls for poured-in-place concrete tanks not less than 6" thick, not less than 6" base
8.2(e)3		—	—	Sides and bottom of precast concrete tanks minimum 3" thick and adequately reinforced
8.2(e)4		—	—	P.E. certified to (ACI) standards for frost protection and water tightness for poured tanks
8.2(e)4		—	—	Precast tanks provided by manufacturer have (ACI) certification displayed on tank
8.2(e)6	—	—		Poured-in-place tank is proposed to be cast in one piece and not until 48 hr after base
8.2(e)7	—	—		Pre-fabricated polyethylene tanks conform with CSA standards
8.2(e)8	—	—		Pre-fabricated fiberglass tanks conform to ASTM standard D4021
8.2(f)		—	—	Calculations indicating tank is of sufficient weight or will otherwise be secured to prevent shift or float
8.2(e)5		—	—	All inside concrete surfaces are sealed with two coatings of an appropriate inert coating
8.2(h)		—	—	S.T. material is poured-in-place concrete, precast reinforced concrete, fiberglass, polyethylene or other approved by AA
8.2(i)1		—	—	The depth below the liquid level of the tank is not less than 36" or greater than 72"
8.2(i)2		—	—	Inlet and outlet arranged so flow is directed along the longest horizontal dimension of the tank
8.2(i)3		—	—	Rectangular tank in cross-section has an inside length at least twice the inside width
8.2(i)3		—	—	Rectangular tank inside length measured inlet side to outlet side is not less than 72"
8.2(i)3		—	—	Rectangular tank inside width is not less than 36"
8.2(i)4	—	—		Upright cylindrical tank has a minimum diameter of 52"
8.2(i)4	—	—		Horizontal cylindrical tanks have a minimum length of 72"
8.2(i)4	—	—		Horizontal cylindrical tanks have a minimum width at the liquid level of 36"

CONFORMANCE

Y N NA

8.2(j)2	—	—	—	A baffle or a pipe tee, no less than 4" in diameter, is utilized at the inlet of the tank
8.2(j)2	—	—	—	Bottom of inlet baffle or tee extends below the liquid level 25-33% of liquid depth
8.2(j)2	—	—	—	The invert elevation of the inlet is not less than 2" higher than the invert elevation of outlet
8.2(j)2	—	—	—	The invert of the inlets of subsequent compartments are a minimum of 1" higher than outlets
8.2(j)3	—	—	—	Outlet connections of tank or compartment is provided with a tee not less than 4" diameter or equivalent baffle
8.2(j)3	—	—	—	Outlet bottom opening extends below the liquid level 25-40% of the total liquid depth
8.2(j)3	—	—	—	Outlet baffle or tee is provided with a gas deflection baffle (as per fig. 12) except when a septic solids retainer is used in lieu of a baffle tee connection NSF approved for the specific use
8.2(K)	—	—	—	The space between the liquid surface and the top of the outlet tee or baffle is not less than 15% of total liquid depth
8.2(1)1	—	—	—	Each tank or compartment is provided with at least one access opening (manhole) minimum 24"
8.2(1)2	—	—	—	Manhole, as a minimum, extends within 6 inches of finished grade with permanent marker 3 inches in diameter at ground surface
8.2(1)2	—	—	—	Manhole is extended flush with grade by a riser with a water-tight cover
8.2(1)2	—	—	—	Manhole cover is bolted or locked
8.2(1)2	—	—	—	Manhole cover is cast-iron when a concrete riser is used
8.2(1)3	—	—	—	Inspection port extends to finished grade
8.2(1)3	—	—	—	Inspection port is 4" cast-iron or pvc
8.2(1)3	—	—	—	Inspection port is locked or has a bolted cap
8.2(1)3	—	—	—	Inspection port is over each tank or compartment inlet and outlet which is not directly below a manhole except for those outlets where a SSR is used
8.2(1)4	—	—	—	Fiberglass or polyethylene tanks are constructed with manhole risers and I.P. of the same material
8.2(m)	—	—	—	Construction note indicates backfill around S.T. is to be placed in thin 8" layers

CONFORMANCE

Y N NA

METHOD OF DISTRIBUTION

- | | | | | |
|---------|---|---|---|--|
| 9.1(a)1 | — | — | — | <u>GRAVITY FLOW METHOD</u> - discharges into a S.T. then into a single dis. lateral, an interconnected network of dis. laterals or to a distribution box discharging to two or more individual dis. laterals |
| 9.1(a)2 | — | — | — | <u>GRAVITY DOSING METHOD</u> - S. T. discharges to a D. T. with a pump or siphon which in turn discharges to a single distribution lateral, an inter-connected network of dis. laterals or to a distribution box discharging to two or more individual distribution laterals |
| 9.1(a)3 | — | — | — | <u>PRESSURE DOSING METHOD</u> - S. T. discharges to a D. T. with a pump or siphon which in turn discharges to an interconnected network of distribution laterals designed to distribute effluent under pressure |
| 9.1(b) | — | — | — | Each lateral in the distribution network receives an equal hydraulic loading |
| 9.1(b) | — | — | — | Distribution network conforms with serial distribution prohibitions |
| 9.1(c) | — | — | — | Less than 600 linear feet of distribution laterals are used for gravity flow |
| 9.1(d) | — | — | — | Alternately dosed disposal fields receive not more than the max. hydraulic loading rate as per (10.2) |
| 9.1(d) | — | — | — | Dis. fields with soil permeability >6"/hr are not rested >1 day unless pressure dosed with dose 25% Q |

DOSING TANK

- | | | | | |
|---------|---|---|---|---|
| 9.2(b)1 | — | — | — | D. T. using pump has sufficient capacity to distribute effluent equally to all parts of D.F. during each dose cycle |
| 9.2(b)1 | — | — | — | D. T. provides adequate reserve storage capacity in the event of a pump malfunction |
| 9.2(b)1 | — | — | — | The D. T. total liquid capacity is great enough to accommodate the minimum dose volume plus the minimum required reserved storage capacity |
| 9.2(b)1 | — | — | — | Additional D. T. volume is provided above the pumping level to accommodate Vcp & Vpd |
| 9.2(b)1 | — | — | — | Additional D. T. volume is provided below pumping level so that the pump is placed on pedestal |
| 9.2(b)2 | — | — | — | The dose volume is based upon the soil permeability or perc, daily volume (Q) and internal volume of the distribution network (V). Pressure dose; V = Volume of delivery pipe, manifold and laterals. Gravity dose; V = Volume of laterals only |
| 9.2(b)3 | — | — | — | Stand-by pump is provided in lieu of reserve capacity volume req. which will automatically switch on in the event the primary pump malfunctions |

CONFORMANCE

Y N NA

9.2(d)1	+	—	—	Construction criteria for D. T. is the same as those prescribed for septic tanks
9.2(d)1	+	—	—	Dosing tank is constructed as a separate unit or it shares a common wall with the S. T.
9.2(d)2	+	—	—	Dosing tank material is the same as those allowed for S. T. 8.2(h)
9.2(d)3	+	—	—	Dosing tank is constructed in a manner that will permit venting of the D. F.
9.2(d)4	+	—	—	Dosing tank which is prefabricated meets the installation requirements for S. T. 8.2(f)
9.2(d)5	+	—	—	Construction note indicates dosing tank is placed on a firm and stable foundation to minimize shifting or settling
9.2(d)6	+	—	—	Inlet of D. T. is above the highest water level attained when the entire reserve capacity is full
9.2(d)7	+	—	—	D. T. is readily accessible for service and repair
9.2(d)7	+	—	—	D. T. is provided with a removable water-tight cover or a manhole with a removable w.t. cover
9.2(d)7	+	—	—	Manhole for D. T. is 24" dia. or 24" square and is located directly over the pump
9.2(d)7	+	—	—	The top of D. T. or manhole riser extends to within 6 inches of finished grade as a minimum, with permanent 3 inch marker at ground surface
9.2(d)7	+	—	—	The top of D. T. or manhole riser extends to finish grade and is locked or bolted
9.2(d)7	+	—	—	When a concrete riser is used, that extends to finished grade the cover is of cast iron
9.2(d)8	+	—	—	Construction note indicates backfilling D. T. requirements are the same as for S. T.
9.2(f)	—	—	+	Duplicate pumps are not required by the administrative authority
9.2(f)1	+	—	—	D. T. pump is rated by the manufacturer to handle septic tank effluent
9.2(f)1	+	—	—	All pumping equipment is listed and identified for the intended use as determined in design
9.2(f)2	—	—	+	G. D. system pump rated and demonstrated to deliver total dose volume within 15 minutes or less. (Sum of elevation head and the friction head as calculated in 9.7(a)7)
9.2(f)3	+	—	—	Pump for pressure dosing system is in conformance with 7:9A-9.7(a)
9.2(f)4	+	—	—	Pump is set on a pedestal and intake is elevated several inches above bottom of D. T.
9.2(f)5	+	—	—	Easy or "quick-disconnect" couplings are used to facilitate removal of the pump

CONFORMANCE

Y N NA

9.2(f) 6			Pump discharge rate will not be exceeded by the max. expected rate of inflow at times of peak flow
9.2(f) 7			The pump is controlled by means of automatic switches controlled by levels of effluent
9.2(f) 7i			Pump switches are able to withstand the humid and corrosive atmosphere in the D. T.
9.2(f) 7i			Mercury or weighted float type switches are utilized in system design
9.2(f) 7i			Pressure-diaphragm type switches are prohibited and not utilized
9.2(f) 7ii			Pump-on and off switches provide a dose volume as required in 7:9A-9.2(b)2
9.2(f) 7ii			The pump-off switch is set 6" above the pump intake
9.2(f) 7ii			Pump-on switch is set at a distance, "d", above the pump-off switch. "d" formula is "d", in inches = $(V_d + V_{cp} + V_{pd}) \times (1 \text{ ft}^3 / 7.48 \text{ gal.}) \times (12 \text{ in} / 1 \text{ ft}) / A$ or; "d" inches = $(V_d + V_{cp} + V_{pd}) \times 1.6042781 / A$
9.2(f) 7iii			High water alarm switch is 4" above pump-on switch and activates visible and audible alarms
9.2(f) 7iii			Alarm and its switches are not on the same electrical circuit as the pump and its switches
9.2(f) 7iv			Electrical contacts and relays are located outside of the D. T.
9.2(f) 7iv			Gas-tight seal is provided where electrical conduits enter the dosing tank
9.2(f) 7v			All electrical lines from building to the pump control panel are protected by a conduit
9.3(a)			Connecting pipes and delivery pipes are not less than 1.5" in diameter
9.3(b)			Delivery pipe for P. D. network is PVC schedule 40, SDR-21, SDR-26, or ABS plastic ASTM 2661
9.3(b)			Connecting pipe material is PVC sch. 40 (ASTM D2665), SDR-21 or SDR-26 or ABS ASTM 2661, cast iron or other material acceptable to the AA
9.3(c)			Construction note indicates pipe joints in connecting pipes or delivery pipe are water-tight and protected against damage by roots
9.3(d)			Construction note indicates connecting pipe and/or delivery pipe is to be laid on a firm foundation satisfactory to AA

CONFORMANCE

Y N NA

9.3(e)i				Construction note indicates connecting pipe has a minimum grade of 1/4" per ft. unless otherwise authorized by AA
9.3(e)ii				Connecting pipe is laid in a continuous grade and in a straight line (as nearly as possible)
9.3(e)ii				Drop manholes to be installed if found necessary
9.3(e)ii				Horizontal bends, where required, are not sharper than 45 degrees
9.3(e)ii				The inside angle between adjacent sections of pipe is not less than 135 degrees
9.3(f)				When delivery pipe is subject to frost penetration, the delivery pipe will drain after dose cycle
9.3(f)1				When low-water level in D. T. is lower than invert of dis. network, the delivery pipe slopes back to D. T.
9.3(f)1				There is no check valve at the pump and delivery pipe drains back to D.T.
9.3(f)1				1/8" weep hole is provided at the invert of the pump discharge pipe, above the high water level in D. T.
9.2(f)2				1/8" weep hole is drilled in delivery pipe highest point in D. T. where L-W-L is higher than D.Box or dis. laterals
9.4(a)				A distribution box is required for all GF systems and all GD systems where the effluent is being distributed between two or more dis. laterals which are not interconnected
9.4(a)1				D. Boxes are water-tight and constructed of sound durable material
9.4(a)2				Construction note indicates D. Box is to be set perfectly level
9.4(a)2i				D. Box is installed directly on the filter material within disposal bed
9.4(a)2ii				D. Box in dis. trenches is set on a layer of gravel extending 6" laterally or concrete footing
9.4(a)3				D. Box provides a separate outlet for each dis. lateral
9.4(a)3				Inverts of all outlet are set at the same elevation and minimum 2" above bottom of box
9.4(a)4				Invert of inlet is at least 1" higher than inverts of outlets
9.4(a)4				D. Box has baffle or elbow for GD system or steep slope from S.T. or two D. Boxes

CONFORMANCE

Y N NA

9.4(a)5	—	—	—	D. Boxes are provided with a means of access
9.4(a)5	—	—	—	Small D. Boxes provided access by means of a removable lid
9.4(a)5	—	—	—	Access to large D. Box is provided by means of manhole and inspection ports with watertight covers
9.4(a)5i	—	—	—	D. Box access openings are adequate in size and located to facilitate removal of accumulated solids and inspection of the inlet and all outlets
9.4(a)5ii	—	—	—	All access openings are extended to within 12" to 18" of the finished grade surface
9.4(a)5iii	—	—	—	Access openings to D. Box will be constructed in a manner to prevent the entrance of water
<u>DISTRIBUTION NETWORK</u>				
9.5(a)	—	—	—	GF and GD networks consist of a single dis. lateral, two or more laterals connected by elbows or tees, or two or more separate distribution laterals connected independently or to a D. Box
9.5(a)1	—	—	—	Distribution laterals are a minimum of 3" in diameter
9.5(a)2	—	—	—	Distribution laterals consist of lengths of rigid perforated pipe connected with tight joints
9.5(a)3	—	—	—	Distribution lateral spacing and arrangement conforms with 7:9A-10.3(d)
9.5(a)4	—	—	—	Perforations in distribution laterals are evenly spaced along two rows running the length of pipe, on each side, midway between the invert and the center-line which separates upper and lower halves of pipe
9.5(a)4	—	—	—	Perforations are no smaller than 3/8" and no larger than 3/4" in diameter
9.5(a)5	—	—	—	Each distribution line is approximately level and capped or closed looped at end
9.5(a)5	—	—	—	The slope of the distribution lateral is not greater than 2"/100ft.
9.5(a)6	—	—	—	Inspection port is provided in each corner of disposal bed or at each end of disposal trench
9.5(a)6	—	—	—	Inspection port for distribution laterals consist of a perf. pipe with a removable cap
9.5(b)	—	—	—	Distribution laterals are of acceptable material i.e. clay pipe; plastic; ABS (ASTMD-2751); PVC (ASTMD-2729, D-3033, D-3034); styrene-rubber (ASTMD-2852, D3298); or polyethylene, straight wall (ASTMD-1248)

CONFORMANCE

Y N NA

(a)			Pipe network for P.D. system consists of two or more distribution laterals connected to central or end manifold
(a)1			P.D. laterals are 1" to 3" in diameter and chosen in conformance with 7:9A-9.7(a)3
(a)1			P.D. system manifold pipe was chosen in conformance with 7:9A-9.7(a)5
(a)2			Spacing and arrangement of P.D. laterals conform with requirements of 7:9A-9.7(a)5
(a)3			Construction note indicates all joints and connections water-tight. Solvent weld joints are used
(a)4			Holes are spaced evenly, in a straight line along the invert of each lateral
(a)4			Hole diameter is from 1/4"-1/2"
(a)4			Hole spacing is from 30"-60" (36" max when soil perm. > 6"/hr)
(a)4			In bed systems, holes in adjacent laterals are offset by 1/2 the hole spacing
(a)4			Construction note indicates all holes are to be deburred
(a)5			The ends of the P.D. laterals are capped
(a)5			A small hole is drilled horizontally in the end cap of each lateral, near the crown
(a)6			P.D. dis. lateral is approximately level or no >2"/100ft
(a)7			Inspection port is provided at each corner of disposal bed or at each end of disposal trench
(a)8			P.D. network is constructed of PVC plastic (ASTM D-2662), schedule 40, SDR-21 or SDR-26, or ABS plastic (ASTM 2661) pipe
			<u>DESIGN PROCEDURE FOR PRESSURE DOSING SYSTEMS</u>
(a)			Disposal bed or disposal trenches are at equal elevations unless designed with the provisions of 9.7(b)
(a)1			Distribution lateral's length, number, and spacing was determined based upon the required size of D.F. as per 10.2 and the requirements for spacing of dis. trenches or the requirements for spacing of dis. laterals within dis. beds as prescribed in 10.3(d)
(a)1			The number of dis. laterals is based on central or end manifold arrangements

CONFORMANCE

Y N NA

9.7(a)2	—	—	Hole diameter is a minimum of 1/4" but no larger than 1/2"
9.7(a)2	—	—	The minimum allowed hole spacing is 30"
9.7(a)2	—	—	The maximum allowed hole spacing is 60" except system installed in soil or fill with permeability >6"/hr or less than 15 MPI the maximum spacing is 36"
9.7(a)3	—	—	Based upon the hole diameter, hole spacing selected and length of laterals, the required diameter of laterals was determined using Fig. 14, Appendix A or if beyond scope, acceptable methods provided to A.A.
9.7(a)4	—	—	Minimum pressure head of 2.5ft. is maintained at the distal end of laterals
9.7(a)4	—	—	Based upon the hole diameter and the design pressure head at the distal end of the laterals, the hole discharge rate was determined from chart in 9.7(a)4
9.7(a)4	—	—	The lateral discharge rate was determined by multiplying the hole discharge rate by the number of holes per lateral
9.7(a)5	—	—	Based upon the number of laterals and the lateral spacing the manifold length was determined
9.7(a)5	—	—	The required manifold diameter was determined based upon the manifold length, the lateral discharge rate and the number of laterals, using Fig. 15 of Appendix A or if beyond scope, acceptable to A.A.
9.7(a)6	—	—	The system discharge rate was determined by multiplying the lateral discharge rate by the number of laterals
9.7(a)7	—	—	<u>PROPER PUMP SELECTION</u>
9.7(a)7	—	—	The friction head was determined based upon the system discharge rate and diameter and length of delivery pipe using Fig. 16 or if beyond scope, acceptable to A.A.
9.7(a)7	—	—	The total operating head (Ht) was calculated using the formula $H_t = H_f + H_e + H_p$
9.7(a)7	—	—	A pump was chosen which is rated by the manufacturer to deliver a flow rate equal to or greater than the system discharge rate when working against a total dynamic head equal to the total operating head
9.7(b)	—	—	If a trench system is proposed where the elevation of the LOI will not be the same as all trenches, P.E. has demonstrated with calculations to satisfaction of AA, equal hydraulic loading

CONFORMANCE
Y N NA

DISPOSAL FIELDS

10.1(a)		—	—	Disposal field is proposed for all new systems except as allowed in 7.6 (seepage pits)
10.1(a)		—	—	Disposal field consists of one or more dis. trenches or a disposal bed
10.1(b)	—	—	—	D. F. is underlain by a suitable ZOT and a suitable ZOD
10.1(b)1	—	—		"C" D. F. is installed directly within the native soil and the LOI is 1-3ft below existing ground
10.1(b)2		—	—	"SRB" -the excavation for D.Bed or each individual trench is extended below LOI and backfilled up to the LOI with suitable fill. The dis. bed or trenches are installed on top of the fill with the LOI 1-3ft below existing ground surface
10.1(b)3	—	—		"SRE" installation-the excavation is made below LOI and extends laterally minimum 2ft. beyond perimeter of D. F. on all sides. The excavation is backfilled with suitable fill, the dis. bed or trenches installed within the fill, and the LOI is 1-3ft below existing ground (Fig.19)
10.1(b)4	—	—		"M" installation-fill material is placed above ground surface, D. F. is installed within the fill, and the LOI is 1-4ft above existing ground surface (measured on the upslope side of the dis. bed or each individual dis. trench) as per fig. 20
10.1(b)5	—	—		"MSR" installation-excavation is made below ground surface, fill material is placed within the excavation and mounded up above the existing ground surface. The disposal field is installed within the fill and the LOI is between 1-4ft above the ground surface (measured on the upslope side of the disposal bed or each individual disposal trench)
10.1(c)		—	—	The type of D. F. installation permitted is determined based upon soil suitability class table 10.1
Table 10.1	—	—	—	Depth is measured from the existing ground surface to the top of the limiting zone
10.1	—	—		Disturbed ground-the depth to limiting zone is measured from pre-existing natural ground surface, as prescribed in 7:9A-5.10(c), or the existing ground surface, whichever is lowest

CONFORMANCE

Y N NA

10.1	—	—	+	Interceptor drain or other means of removing perched zone of saturation is required for "C" and "SRB" if perched zone of saturation is 2-5ft or less than 2ft.
10.1	—	—	—	Soils with compound soil suitability class, where > 1 limiting zone, the type of installation listed in table 10.1 is acceptable option for each soil suitability class
10.1(d)	+	—	—	ZOT a minimum of 4ft in thickness is present below the disposal field
10.1(d)1	+	—	—	ZOT is composed of suitable soil which meets 10.1(d)2 criteria, suitable fill material which meets 10.1(f) or a combination of suitable soil and suitable fill
10.1(d)2i	+	—	—	ZOT suitable soil has a coarse fragment content less than 50% by volume
10.1(d)2ii	+	—	—	ZOT suitable soil has a permeability less than 20 in/hr and > 0.2 in/hr or perc. 3-60 MPI
10.1(d)3	—	—	—	ZOT does not contain or is interrupted by fractured or massive rock substrata, hydraulically restrictive horizons or substrata, perched zones of saturation or regional zones of saturation
10.1(d)3	—	—	+	When excessively coarse horizons or substrata are present above, within or below the ZOT, these horizons are not considered part of the ZOT
10.1(d)4	+	—	—	The bottom of the ZOT does not extend greater than 8ft below finished grade
10.1(e)	+	—	—	ZOD (Fig. 22, 23, & 24) is a minimum of 4ft in thickness and is present below ZOT
10.1(e)1	—	—	—	ZOD is composed of "native" soil or rock material which has a perm. >.2"/hr or perc less than 60 MPI
10.1(e)2	—	—	+	When perm. of ZOD 2"/hr or >, the min. thickness may be reduced to 2ft. This determination was not made using the percolation test or basin flooding test
10.1(e)3	+	—	—	ZOD does not contain nor is interrupted by any hydraulically restrictive horizon unless the entire thickness of the horizon has been removed throughout the entire area of the D. F. and has been replaced with fill material meeting 10.1(f)5
10.1(e)3	—	—	—	In ZOD, the thickness of any restrictive horizon which has been removed is not counted

CONFORMANCE
Y N NA

10.1(f)1	—	—		"Soil replacement" installation-ZOT consists partly or entirely of fill material provided requirements of 7:9A-10.4 are satisfied and the fill material meets requirements of 7:9A-10.4(f)4
10.1(f)1		—	—	"Soil replacement" installation-the ZOD may contain a layer of fill provided that the fill material used within the zone of disposal meets the requirements of 10.1(f)5
10.1(f)2	—	—		"M" installation-the ZOT consists partly or entirely of fill material provided that the requirements of 7:9A-10.5 are satisfied and the fill material meets requirements of 7:9A-10.1(f)4
10.1(f)3	—	—		"MSR"-the ZOT consists partly or entirely of fill material provided requirements of 7:9A-10.1(f)4 are satisfied. The ZOD may contain a layer of fill provided the requirements of 7:9A-10.1(f)5 are met
10.1(f) 4i		—	—	Fill material used in ZOT has coarse fragment content less than 15% by volume or less than 25% by weight
10.1(f) 4ii		—	—	Fill material used in ZOT has a textural analysis (composition by weight, of size fraction passing the two millimeter sieve): from 85-95% sand, from 5-15% silt plus clay, minimum 2% clay
10.1(f) 4iii		—	—	Fill material used in ZOT has a permeability from 2-20in/hr or perc. 3-30 MPI
10.1(f) 5i	—	—	—	Fill material used in ZOD has a textural analysis (composition by weight, of size fraction passing the two millimeter sieve) 85% or more sand
10.1(g)1	—	—		In "sloping ground", the interface between filter material and the underlying soil or fill material at the bottom of each individual trench or bed is level
10.1(g)2	—	—		On strongly sloping sites the shape of the D. F. is elongated with the long axis parallel to topo contour
10.1(g)3	—	—		Slope > 10%, trenches are used rather than beds
10.1(g)4	—	—		"M" and "MSR" installations are restricted to slopes less than 10%
10.1(g)5	—	—		When disposal trenches are installed at different elevations and GF or GD are used, the distribution of effluent between trenches is accomplished by means of D. Box
10.1(h)		—	—	"C", "SRB" and "SRE"-the bottom of D. F. is 1-3ft below existing ground surface

CONFORMANCE

Y N NA

10.1(h)	—	—	+	"M" or "MSR"-the LOI is at an elevation no higher than 4ft above existing ground surface. (measured from the upslope side of the dis. bed or each individual dis. trench)
10.1(h)	+	—	—	In no case is the LOI > 3ft. below the finished grade
10.2(a)	+	—	—	Minimum required D.F. size or maximum allowable hydraulic loading rate is determined using sizing criteria based upon the volume of sanitary sewage and the results of perm. or perc.
10.2(a)1	+	—	—	The D. F. sizing criteria to be used is determined based upon the type of D. F. (trench or bed), D. F. installation (C, SRE, SRB, M or MSR) and the method of effluent distribution (GF, GD or PD)
<u>ALL D. F. USING "TRENCHES", EXCEPT SRB INSTALLATIONS, MEET THE FOLLOWING SIZE REQUIREMENTS:</u>				
10.2(b)1	—	—	+	The minimum required length of trenches per gallon of daily sewage volume, L/Q is determined from Table 10.2 (b) based upon the trench width selected and the results of perm. or perc. test
10.2(b)2	—	—	+	The minimum required length of trenches, L, was determined by multiplying the value of L/Q obtained from the table by the daily volume of sewage, Q. (As prescribed in 7:9A-7.4)
<u>ALL D.BEDS USING GF OR GD, ALL "C" DIS.BED USING P. D. AND ALL SRB TRENCH INSTALLATION USING GF OR GD MEET THE FOLLOWING SIZE REQUIREMENTS:</u>				
10.2(c)1	—	—	+	The minimum required bottom area of D. F. per gallon of daily sewage volume, A/Q, is determined from Table 10.2(c), based upon the results of perm. test or perc. test as prescribed in 7:9A-6
10.2(c)2	—	—	+	The minimum required bottom area was determined by multiplying the value of A/Q obtained from the table by the daily volume of sewage, Q, in gallons, determined as prescribed in 7:9A-7.4
10.2(d)	+	—	—	All D.Beds using P.D. except for "C" and all "SRB" trench installations using P.D. have a minimum size of 1.33 square feet of bottom area per gallon of daily sewage volume

CONFORMANCE
Y N NA

10.2				Where garbage disposal units are installed or proposed, the value obtained from Table 10.2(b) or (c) is increased by a factor of 25% for use in disposal field sizing
add. regs.				
<u>SPECIFIC REQUIREMENTS FOR CONVENTIONAL DISPOSAL FIELD INSTALLATIONS.</u>				
10.3(a)				A "C" installation is made by placing the D.Bed or each individual D.trench in an excavation made directly within the natural soil or, in disturbed ground, within pre-existing fill material
10.3(b)1				Sites which have been re-graded prior to site evaluation, soil evaluation or permeability testing are considered to be disturbed ground and all regs. relating to disturbed ground are met
10.3(b)2				When a site is re-graded after evaluation, soil evaluation or permeability testing, the re-grading is carried out in conformance with an engineering design approved by the AA
10.3(b)3				On a re-graded site, the D. F. is placed only in those areas which have been lowered by cutting and no portion of the D. F. is placed within those areas raised by filling
<u>CONSTRUCTION NOTES INDICATE:</u>				
10.3(c)1				Adequate measures shall be used to insure bottom of D.Bed or each individual trench is level
10.3(c)2				In soil textures other than sands or loamy sands, excavation which exposes the infiltrative surface of the D. F. is not carried out when the soil moisture content is above the lower plastic limit
10.3(c)3				Excavation will be carried out in a manner that will avoid unnecessary compaction of D. F.
10.3(c)3				Heavy equipment (bulldozers/front end loaders) will not be driven over the exposed infiltrative surface of D. F.
10.3(c)3				Excavation carried out with a backhoe operating from between D.Trenches or outside the perimeter of previously excavated portions of the disposal bed
10.3(c)3				If necessary to walk on Dis. field bottom, a suitable board shall be laid over soil

CONFORMANCE

Y N NA

10.3(c) 4	—	—	—	Smeared or compacted soil surfaces produced on bottom or sidewall of the excavation shall be removed to expose a fresh soil surface which is rough and uneven
10.3(c) 5	—	—	—	Work should be scheduled so that the bottom and sidewalls of the excavation will not be exposed to rainfall or wind-blown silt between time of excavation and time of final inspection and backfilling
10.3(c) 5	—	—	—	Any loose soil or debris which is washed into or deposited within the excavation shall be removed
CONSTRUCTION OF DISTRIBUTION NETWORK				
10.3(d)	—	—	—	"Disposal trenches" minimum spacing (sidewall to sidewall) is 6ft
1i	—	—	—	"Disposal trench" minimum width is 1.5ft
ii	—	—	—	"Disposal trench" maximum width is 3ft
iii	—	—	—	"Disposal trench" has 1 distribution line per trench
iv	—	—	—	"Disposal bed" has a minimum of two distribution lines
10.3(d)	—	—	—	The maximum distance from edge of bed to nearest distribution line shall be three feet
2i	—	—	—	The minimum distance from edge of bed to nearest distribution line shall be one foot
ii	—	—	—	The maximum spacing between distribution lines for gravity distribution shall be 3ft
iii	—	—	—	The required spacing between dis. lines for P.D. is from 3/4 to 5/4 of hole spacing
iv	—	—	—	The spacing between all distribution lines is equal and uniform
v	—	—	—	Holes in P.D. lines are aligned so that holes in adjacent laterals are offset by 1/2 the hole spacing
vi	—	—	—	"Filter material" covers the dis. lines and extends the full width of the trench or bed
vii	—	—	—	Filter material extends between 12"-18" deep beneath bottom and 2" above the top of lines
10.3(e) 1	—	—	—	Filter material is washed gravel or crushed stone, free of fines, dust, ashes or clay
10.3(e) 1	—	—	—	Filter material conforms in size and gradation to size #24, #3 or #4
10.3(e) 2	—	—	—	
10.3(e) 2	—	—	—	
(e) 2	—	—	—	

CONFORMANCE
Y N NA

10.3(e)3				Filter material is covered with drainage fabric, untreated building paper or 4"-8" of salt hay or straw
i				Drainage fabric or untreated building paper shall be overlaid a minimum of 6"
ii				Drainage fabric is specified in the eng. design to have requisite qualities
10.3(e)4				Construction note indicates filter material is to be laid into excavation using a backhoe, front-end loader or dump truck from sides
10.3(e)4				Construction note indicates tracked equipment may be used in large beds provided not > 8lb./sq. in. and filter material 1ft. below vehicle
10.3(f)1				Minimum 9" and no more than 18" of backfill is placed over top of D. F. filter material
10.3(f)2				Backfill material is of earth similar to that found at site free of stones, stumps or waste material
10.3(f)3				Backfill material is not more permeable than the surrounding soil
10.3(f)4				Backfill completely covers the entire disposal bed or each dis. trench and is to be graded into surrounding topography on all sides
10.3(f)5				Backfilled area over D. F. is seeded or sodded or otherwise stabilized acceptable to AA
				<u>SPECIFIC REQUIREMENTS FOR SOIL REPLACEMENT D. F. INSTALLATIONS</u>
10.4(a)				A soil replacement D. F. installation is made by installing the DIS. BED or each individual dis. trench on top of or within suitable fill material placed in an excavation below existing ground surface
10.4(a)				Bottom-lined installation (SRB)-the fill material is placed below the D. F. only
10.4(a)				Fill enclosed installations (SRE)-the fill is placed around the sides as well as below the D. F.
10.4(a)				<u>A FILL ENCLOSED INSTALLATION SHALL BE REQUIRED WHEN:</u>
1i				the limiting zone is a perched zone of sat. underlain by a Hr horizon and the slope across the dis. field is less than 5%
10.4(a)				when the limiting zone is an excessively coarse horizon or substratum
1. ii				
10.4(a)				SRE required when the limiting zone is a fractured rock substratum
1. iii				

CONFORMANCE
Y N NA

			<u>A BOTTOM-LINED INSTALLATION MAY BE PERMITTED WHERE:</u>
10.4(a)		—	the limiting zone is a Hr horizon and no perched
2i			zone of sat. is present
10.4(a)	—		when the limiting zone is a perched zone of
2ii			saturation underlain by Hr Horizon and the slope
			across the D. F. is 5% or greater
			<u>SRB SHALL BE CONSTRUCTED AS FOLLOWS:</u>
10.4(b)1		—	SRB excavation is made within the area occupied by the
			dis. bed or by each individual dis. trench and, where
			the limiting zone is a Hr. Horizon, the excavation
			extends a min. 2ft. below the bottom of Hr horizon
10.4(b)2		—	SRB excavation is backfilled to the L.O.I. with
			suitable fill material
10.4(b)3		—	SRB-D. F. is constructed on top of the fill material
			within the excavation
10.4(b)4		—	SRB system requires an interceptor drain to divert
			away from the D. F. laterally moving ground water
			which may be perched above any Hr. horizon penetrated
			by the excavation
			<u>SRE INSTALLATIONS SHALL BE CONSTRUCTED AS FOLLOWS:</u>
10.4(c)1		—	SRE excavation is made to required depth extending
			throughout the entire area to be occupied by the
			disposal field and beyond the perimeter of the D. F.
			minimum 2ft. in all directions
10.4(c)2		—	SRE excavation is backfilled with suitable fill
			material
10.4(c)3		—	SRE D. F. is constructed within fill material so that
			the entire disposal bed or each individual trench is
			surrounded by a minimum of 2ft. of fill material on
			all sides
10.4(d)		—	Requirements and restrictions relating to site
			regrading are the same as those prescribed for "C"
			installations 10.3(b)
10.4(e)		—	Construction note indicates excavation prior to
			the placement of fill material is to be carried
			out according to 10.3(c)2 thru 5
10.4(f)1		—	SRE or SRB fill material used below the D. F. meets
			the requirements for texture and perm. as stated in
			10.1(f)
10.4(f)2		—	The minimum depth of fill below the D. F. is one foot
			for soil replacement D. F. installations

CONFORMANCE

Y N NA

10.4	—	—	—	Compaction of fill method is indicated on the design
(f) 3i	—	—	—	
10.4(f)	—	—	—	Design notes fill material to be spread and compacted
3iii	—	—	—	in layers 1ft. or less in thickness
10.4(e)	—	—	—	Compaction will be accomplished manually or
3iv	—	—	—	mechanically by tamping, rolling, or driving over fill
	—	—	—	in controlled pattern
10.4(f)	—	—	—	Heavy equipment will not be driven directly on exposed
3v	—	—	—	area of the excavation. Minimum 1ft. fill below
	—	—	—	tracks all times
10.4(g)	—	—	—	Construction of the D. F. and dis. network are as
	—	—	—	prescribed for conventional installations 7:9A-10.3(d)
10.4(h)	—	—	—	Filter material is as prescribed for conventional
	—	—	—	installations 7:9A-10.3(e)
10.4(i)	—	—	—	Backfill and final grading is as prescribed for
	—	—	—	conventional installations 10.3(f) and extends minimum
	—	—	—	5ft. in all directions, beyond the perimeter of the
	—	—	—	filled area
	—	—	—	<u>SPECIFIC REQUIREMENTS FOR "MOUNDED" DISPOSAL FIELD</u>
	—	—	—	<u>INSTALLATIONS (M)</u>
10.5(a)	—	—	—	(M) D. F. installation is made by installing the D. F.
	—	—	—	within suitable fill which has been placed above the
	—	—	—	existing ground surface
	—	—	—	Construction notes indicate:
10.5(b)	—	—	—	Requirements and restrictions relating to site
	—	—	—	regrading are the same as "C" systems 10.3(b)
10.5(c)	—	—	—	On sloping sites, the (M) D. F. is elongated in shape
	—	—	—	with the long axis parallel to the topo contour
10.5	—	—	—	Prior to placement of fill, excessive vegetation shall
(d) 1.	—	—	—	be cut and removed
10.5	—	—	—	Large trees including the stumps shall be removed
(d) 1.	—	—	—	
10.5	—	—	—	Large holes left as a result of stump removal shall be
(d) 1.	—	—	—	filled with select fill (10.1(f) 4)
10.5(d) 2	—	—	—	The delivery pipe from the D. T. is to be installed
	—	—	—	and the excavation backfilled and completed prior to
	—	—	—	preparation of the ground surface for fill placement
10.5	—	—	—	The area within the perimeter of the mound is to be
(d) 3.	—	—	—	plowed or disked to produce a roughened surface

CONFORMANCE

Y N NA

10.5(d)3	—	—	Plowing is to be done using two bottom or larger moldboard plow or chisel plow and shall be parallel to the topographic contour in such a direction that each plow furrow will be thrown upslope
10.5(d)3	—	—	The soil will be broken up to a depth of 6" to 8", alternatively, rototilling is acceptable in "S" or "LS"
10.5(e)	—	—	Mound constructed by placing a layer of fill material over the ground within and adjacent to D. F.
10.5(e)1	—	—	(M) installation-the area of the fill layer includes the area of the D. F. plus a lateral extension of fill
10.5(e)2.	—	—	The minimum width of the lateral fill extension is 20ft. for G.F. and 5ft. for P. D.
10.5(e)3.	—	—	Within the area of the lateral fill extension, the top surface of the fill material is level with or higher than the inverts of the distribution laterals
10.5(e)4.	—	—	On sloping sites, the width of the lateral fill extension may be reduced on the upslope side of the D. F. provided that the top surface of the fill material is kept level with or higher than the invert of the distribution laterals up until the point where the top surface of the fill material intersects with the existing slope
10.5(e)5	—	—	At outside edge of the lateral fill extension, the mound terminates by sloping the top surface of the fill layer downward at a slope of 3 to 1 or less. Alternatively, lateral support for the fill layer may be provided by a retaining wall or a berm of soil material meeting the requirements of 7:9A-10.3(f)2 and sloped at a grade of 3 to 1 or less
10.5(e)6	—	—	Fill material below the disposal field and within the area of the lateral fill extension shall meet 10.1(f)4 reg.
10.5(f)	—	—	Construction and installation of the D. F. and distribution network is as prescribed for "C" installations (10.3d)
10.5(g)	—	—	Filter material is as prescribed for conventional installations in 7:9A-10.3(e)

CONFORMANCE

Y N NA

10.5	—	—	—	Immediately above the D. F. filter material, which has
(h)1.	—	—	—	been covered with suitable barrier material, (as per
	—	—	—	10.3e3), a layer of topsoil, 12"-18" in thickness at
	—	—	—	the center of the mound and 6"-12" in thickness at the
	—	—	—	edges, is placed over the entire mound, covering the
	—	—	—	top and side slopes
10.5(h)1	—	—	—	The topsoil is built up thicker along the long axis of
	—	—	—	the mound so that a convex profile is produced
	—	—	—	parallel to the direction of the slope
10.5	—	—	—	Construction note indicates the topsoil will be
	—	—	—	lightly compacted by tamping or rolling to prevent
	—	—	—	settlement
10.5(h)2	—	—	—	Construction note indicates immediately after
	—	—	—	completion of final grading, the mound surface will
	—	—	—	be mulched and seeded or sodded
	—	—	—	<u>SPECIFIC REQUIREMENTS FOR "MSR" DISPOSAL FIELD</u>
	—	—	—	<u>INSTALLATIONS</u>
10.6(a)1	—	—	—	MSR—an excavation is made to the required depth
	—	—	—	throughout the entire area of the D. F. and extended
	—	—	—	laterally in all directions a minimum of 2ft. beyond
	—	—	—	the perimeter of the D. F.
	—	—	—	Construction notes indicate:
10.6	—	—	—	The excavation will be backfilled with suitable
	—	—	—	fill material and the fill material mounded up over
	—	—	—	the excavation to produce a mound of the desired
	—	—	—	height in which to install the D. F.
10.6(a)3	—	—	—	The sides of the mound will be constructed with slopes
	—	—	—	of 3 to 1 or less
10.6(b)	—	—	—	Requirements and restrictions relating to site
	—	—	—	regrading are the same as those prescribed for "C"
	—	—	—	(10.3b)
(c)	—	—	—	Excavation prior to placement of fill material will be
	—	—	—	carried out as specified in 7:9A-10.3(c)2 thru 5
10.6(d)	—	—	—	Fill material will meet the requirements of 10.1(f)4
10.6(e)	—	—	—	Construction of the D. F. and dis.network will be as
	—	—	—	prescribed for "C" installations 7:9A-10.3(d)
10.6(f)	—	—	—	Filter material is as prescribed for "C" installations
	—	—	—	7:9A-10.3(e)
10.6(g)	—	—	—	Backfill and final grading is as prescribed for
	—	—	—	mounded installations (7:9A-10.5h)

CONFORMANCE

Y N NA

3.5c

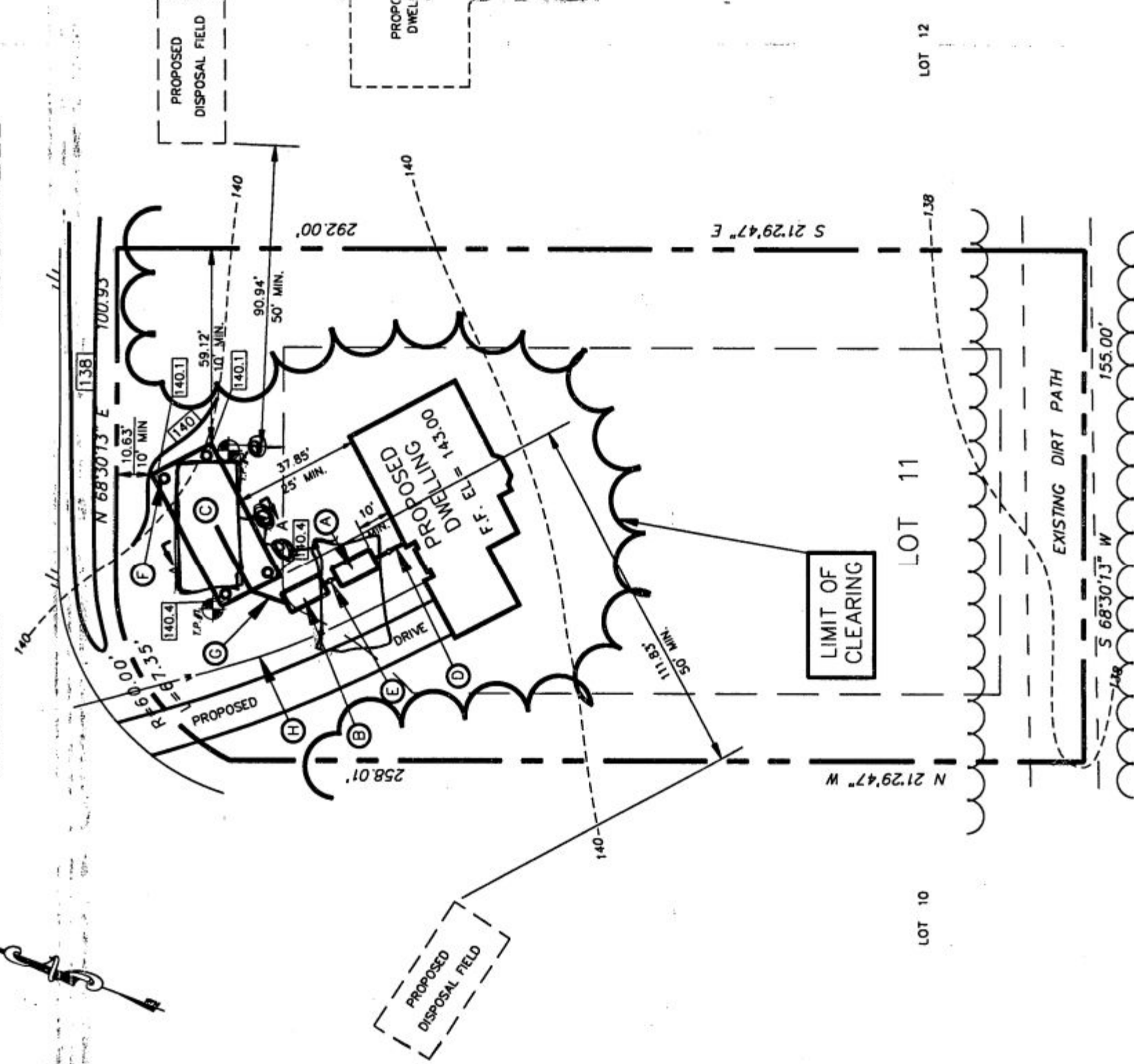


Information supplied on this Department's application form is correct and correlates with the plot plan and other engineering data

NOTES:

NORMAN

ROCKWELL



NOMENCLATURE

- (A) DENOTES 2000 GAL. SEPTIC TANK (10' FROM HOUSE)
- (B) DENOTES 1500 GAL. PUMP CHAMBER
- (C) DENOTES DISPOSAL BED (20' x 45')
- (D) DENOTES 4" P.V.C. (SCH.40) SEWAGE LINE WITH 2% SLOPE, 10 L.F. W/C.O.
- (E) DENOTES 4" P.V.C. (SCH.40) CONNECTION LINE WITH 2% SLOPE, 4 L.F. W/C.O.
- (F) DENOTES INSPECTION PORT (TYP.) ALL FOUR CORNERS
- (G) DENOTES 3" P.V.C. (SCH.40) DELIVERY LINE, PRESSURE WITH 2 - 45 DEGREE BENDS, 35 L.F.
- (H) DENOTES PROPOSED PUBLIC WATER SERVICE LINE WITH BACKFLOW PREVENTER
- (P) DENOTES TEST PIT LOCATIONS

TABLE OF ELEVATIONS

FINISH FLOOR ELEV.	143.00
FINISHED GRADE AT BUILDING	141.30
INVERT AT BUILDING	137.80
DISTANCE FROM SEPTIC TANK TO BUILDING	10'
INVERT SEPTIC TANK (IN)	137.59
INVERT SEPTIC TANK (OUT)	137.34
DISTANCE FROM SEPTIC TANK TO PUMP CHAMBER	4'
PUMP CHAMBER INVERT (IN)	137.26
PUMP CHAMBER INVERT (OUT)	137.09
ELEVATION TO LOW WATER	134.09
	138.40

CERTIFIED
THIS PLAN FOR A SEWERAGE FACILITY IS TO BE IN SUBSTANTIAL COMPLIANCE WITH THE PROVISIONS OF CHAP. 199 P.L. 1954 AND THE STANDARDS FOR CONSTRUCTION AS PROMULGATED BY THE NUDEP AND THOSE PROMULGATED BY LOCAL ORDINANCE.

BY **KWA** DATE **2-3-97**
BURLINGTON COUNTY HEALTH DEPARTMENT
COUNTY NUMBER **2217-96**

REV.	DATE	DESCRIPTION
1	2-3-97	ENVIRONMENTAL ANALYSIS
2	2-21-96	SOIL TECH
3		ENVIRONMENTAL CONSULTANTS
4		105 ATISON ROAD, SUITE C, MEDFORD, N.J. 08055
5		1-609-953-0878

PLAN VIEW
SCALE: 1" = 40'



U.S.G.S. MAP
SCALE: 1" = 2,000'



SOILS SURVEY MAP
SCALE: 1" = 1,320'

ON SITE DISPOSAL SYSTEM	JACK J. GRAVLIN JR., P.E. 197 ROUTE 73, VOORHEES, NEW JERSEY 08043 1-609-768-5729
BLOCK 89.01 LOT 11	TOWNSHIP OF EVESHAM BURLINGTON COUNTY NEW JERSEY
DRAWN BY: D.W.D. CHECKED BY: J.J.G. SCALE: 1" = 40' DATE: 11/96 PROJECT NO. 981014 SHEET NO. 1 OF 5	

SOIL REPLACEMENT DISPOSAL FIELD INSTALLATIONS

1. SOIL REPLACEMENT DISPOSAL FIELD INSTALLATION SHALL BE MADE ON TOP OF SUITABLE FILL MATERIAL WHICH HAS BEEN PLACED IN AN EXCAVATION MADE BELOW THE EXISTING GROUND SURFACE. THE EXCAVATION SHALL BE BACKFILLED TO THE LEVEL OF INFILTRATION.

2. ROUGH GRADING REQUIREMENTS:
a. IF SITE IS REGRADED AFTER SITE/SOIL/PERMEABILITY EVALUATION AND TESTING, THIS REGRADING SHALL BE CARRIED OUT IN CONFORMANCE WITH AN ENGINEERING DESIGN WHICH HAS BEEN APPROVED BY THE ADMINISTRATIVE AUTHORITY.
b. THE DISPOSAL FIELD SHALL BE PLACED ONLY IN THOSE AREAS WHICH HAVE BEEN LOWERED BY CUTTING AND NO PORTION OF THE DISPOSAL FIELD SHALL BE PLACED WITHIN THOSE AREAS WHICH HAVE BEEN RAISED BY FILLING.

3. DISPOSAL FIELD EXCAVATION REQUIREMENTS:
a. ADEQUATE MEASURES SHALL BE USED TO INSURE THAT THE BOTTOM OF THE DISPOSAL BED IS LEVEL.
b. IN SOIL TEXTURES OTHER THAN SANDS OR LOAMY SANDS, EXCAVATION WHICH EXPOSES THE INFILTRATIVE SURFACE OF THE DISPOSAL FIELD SHALL NOT BE CARRIED OUT WHEN THE SOIL MOISTURE CONTENT IS ABOVE THE LOWER PLASTIC LIMIT. THIS MEANS THAT WHEN A SMALL LUMP OF SOIL TAKEN FROM THE DEPTH OF THE PROPOSED EXCAVATION, CAN BE ROLLED OUT WITH THE FINGERS TO FORM A WIRE OR ROD ONE-EIGHTH OF AN INCH IN THICKNESS, AND DOES NOT CRUMBLE WHEN HANDLED, THE EXCAVATION SHALL BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE DISPOSAL FIELD BOTTOM AND SIDE WALLS.

HEAVY EQUIPMENT SUCH AS BULLDOZERS OR FRONT-END LOADERS SHALL NOT BE DRIVEN OVER THE EXPOSED INFILTRATIVE SURFACE OF THE DISPOSAL FIELD. EXCAVATION SHOULD BE CARRIED OUT WITH A BACKHOE OPERATING FROM OUTSIDE THE PERIMETER OF PREVIOUSLY EXCAVATED PORTIONS OF THE DISPOSAL BED. IF IT BECOMES NECESSARY TO WALK ON THE DISPOSAL FIELD BOTTOM, A SUITABLE BOARD SHALL BE LAID OVER THE SOIL TO AVOID TRAMPLING.
c. ANY SHEARED OR COMPACTED SOIL SURFACES WHICH HAVE BEEN PRODUCED ON THE BOTTOM OR SIDEWALLS OF THE EXCAVATION SHALL BE REMOVED TO EXPOSE A FRESH SOIL SURFACE WHICH IS ROUGH AND UNEVEN.

6. WORK SHALL BE SCHEDULED SO THAT THE BOTTOM AND SIDEWALLS OF THE EXCAVATION WILL NOT BE EXPOSED TO RAINFALL OR WIND-BLOWN SILT BETWEEN THE TIME OF EXCAVATION AND THE TIME OF FINAL INSPECTION AND BACKFILLING. ANY LOOSE SOIL OR DEBRIS WHICH IS WASHED INTO OR OTHERWISE DEPOSITED WITHIN THE EXCAVATION AS A RESULT OF THE EXCAVATION REMAINING OPEN TO THE ELEMENTS SHALL BE CAREFULLY REMOVED PRIOR TO BACKFILLING.

4. FILTER MATERIAL AND INSTALLATION REQUIREMENTS:
a. THE FILTER MATERIAL MAY BE LAID INTO THE EXCAVATION USING A BACKHOE, FRONT-END LOADER OR DUMP TRUCK PROVIDED THAT THIS OPERATION IS CARRIED OUT FROM SIDES OF THE SYSTEM RATHER THAN BY DRIVING ON TOP OF THE EXPOSED DISPOSAL FIELD INFILTRATIVE SURFACE. IN THE CASE OF LARGE BEDS, TRACKED EQUIPMENT MAY BE OPERATED WITHIN THE DISPOSAL BED PROVIDED THAT THE EQUIPMENT DOES NOT EXERT A GROUND PRESSURE IN EXCESS OF EIGHT POUNDS PER SQUARE INCH AND PROVIDED THAT THE FILTER MATERIAL IS PUSHED OUT IN FRONT OF THE VEHICLE WHILE MAINTAINING A MINIMUM THICKNESS OF ONE FOOT OF FILTER MATERIAL BELOW THE VEHICLE TRACKS AT ALL TIMES.

b. THE FILTER MATERIAL SHALL COVER THE DISTRIBUTION LINES AND EXTEND THE FULL WIDTH OF BED, SHALL EXTEND 12" MINIMUM TO 18" MAXIMUM BENEATH THE BOTTOM OF THE DISTRIBUTION LINES AND EXTEND 2" MINIMUM ON TOP OF DISTRIBUTION LINES. SEE DISPOSAL BED CROSS SECTION FOR DETAILS.
c. FILTER MATERIAL SHALL BE WASH GRAVEL OR CRUSHED STONE, FREE OF FINES, DUST, ASHES, OR CLAY. SEE DISPOSAL BED CROSS SECTION FOR DETAILS.
d. THE FILTER MATERIALS SHALL BE COVERED WITH FILTER FABRIC, 6" OVERLAP ALL SIDES. SEE PLAN FOR DETAILS. THE FILTER MATERIAL SHALL BE COVERED WITH DRAINAGE FABRIC, AS THE LAYING OF THE DISTRIBUTION LINES PROGRESS.

5. BACKFILL AND FINAL GRADING REQUIREMENTS:
a. A MINIMUM OF NINE INCHES AND MAXIMUM OF 18 INCHES OF BACKFILL MATERIAL SHALL BE PLACED OVER THE TOP OF THE DISPOSAL FIELD FILTER MATERIAL.
b. BACKFILL MATERIAL SHALL BE OF EARTH SIMILAR TO THAT FOUND AT THE SITE AND FREE OF LARGE STONES, TREE STUMPS, BROKEN MASONRY OR OTHER WASTE CONSTRUCTION MATERIAL.
c. IN NO CASE SHALL THE BACKFILL MATERIAL BE MORE PERMEABLE THAN THE SURROUNDING SOIL.
d. BACKFILL SHALL COMPLETELY COVER THE ENTIRE DISPOSAL BED AND SHALL BE GRADED SMOOTHLY INTO THE SURROUNDING TOPOGRAPHY ON ALL SIDES.

THE FOLLOWING PRACTICES SHALL BE FOLLOWED:
a. HEAVY MACHINERY, RUBBER-TIRED VEHICLES OR OTHER VEHICLES EXERTING A GROUND PRESSURE IN EXCESS OF EIGHT POUNDS PER SQUARE INCH SHALL NOT BE PERMITTED TO PASS OVER THE DISPOSAL FIELD AFTER THE FILTER MATERIAL AND DISTRIBUTION NETWORK HAVE BEEN INSTALLED.
b. TRACKED EQUIPMENT MAY BE USED FOR THE PURPOSE OF BACKFILLING AND FINAL GRADING PROVIDED THAT THIS EQUIPMENT DOES NOT EXERT A PRESSURE ON THE UNDERLYING SOIL IN EXCESS OF EIGHT POUNDS PER SQUARE INCH.
c. FINAL GRADING SHALL BE COMPLETED IN A MANNER THAT SURFACE WATER WILL NOT COLLECT OVER THE DISPOSAL FIELD.
d. AFTER COMPLETION OF BACKFILLING AND FINAL GRADING, THE AREA OVER THE DISPOSAL FIELD SHALL BE SEED, SODDED OR MULCHED TO ESTABLISH A VEGETATIVE COVER TO STABILIZE AGAINST EROSION.
e. BACKFILL AND FINAL GRADING SHALL EXTEND A MINIMUM OF FIVE FEET, IN ALL DIRECTIONS, BEYOND THE PERIMETER OF ANY FILLED AREA.

7. ADEQUATE MEASURES SHALL BE USED TO INSURE THAT THE BOTTOM OF THE DISPOSAL BED IS LEVEL.
8. THE FILTER MATERIAL SHALL BE COVERED WITH DRAINAGE FABRIC, AS THE LAYING OF THE DISTRIBUTION LINES PROGRESS.
9. BACKFILL MATERIAL SHALL BE OF EARTH SIMILAR TO THAT FOUND AT THE SITE AND FREE OF LARGE STONES, TREE STUMPS, BROKEN MASONRY OR OTHER WASTE CONSTRUCTION MATERIAL.
10. IN NO CASE SHALL THE BACKFILL MATERIAL BE MORE PERMEABLE THAN THE SURROUNDING SOIL.
11. BACKFILL SHALL COMPLETELY COVER THE ENTIRE DISPOSAL BED AND SHALL BE GRADED SMOOTHLY INTO THE SURROUNDING TOPOGRAPHY ON ALL SIDES.

12. THE FOLLOWING PRACTICES SHALL BE FOLLOWED:
a. HEAVY MACHINERY, RUBBER-TIRED VEHICLES OR OTHER VEHICLES EXERTING A GROUND PRESSURE IN EXCESS OF EIGHT POUNDS PER SQUARE INCH SHALL NOT BE PERMITTED TO PASS OVER THE DISPOSAL FIELD AFTER THE FILTER MATERIAL AND DISTRIBUTION NETWORK HAVE BEEN INSTALLED.
b. TRACKED EQUIPMENT MAY BE USED FOR THE PURPOSE OF BACKFILLING AND FINAL GRADING PROVIDED THAT THIS EQUIPMENT DOES NOT EXERT A PRESSURE ON THE UNDERLYING SOIL IN EXCESS OF EIGHT POUNDS PER SQUARE INCH.
c. FINAL GRADING SHALL BE COMPLETED IN A MANNER THAT SURFACE WATER WILL NOT COLLECT OVER THE DISPOSAL FIELD.
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e. BACKFILL AND FINAL GRADING SHALL EXTEND A MINIMUM OF FIVE FEET, IN ALL DIRECTIONS, BEYOND THE PERIMETER OF ANY FILLED AREA.

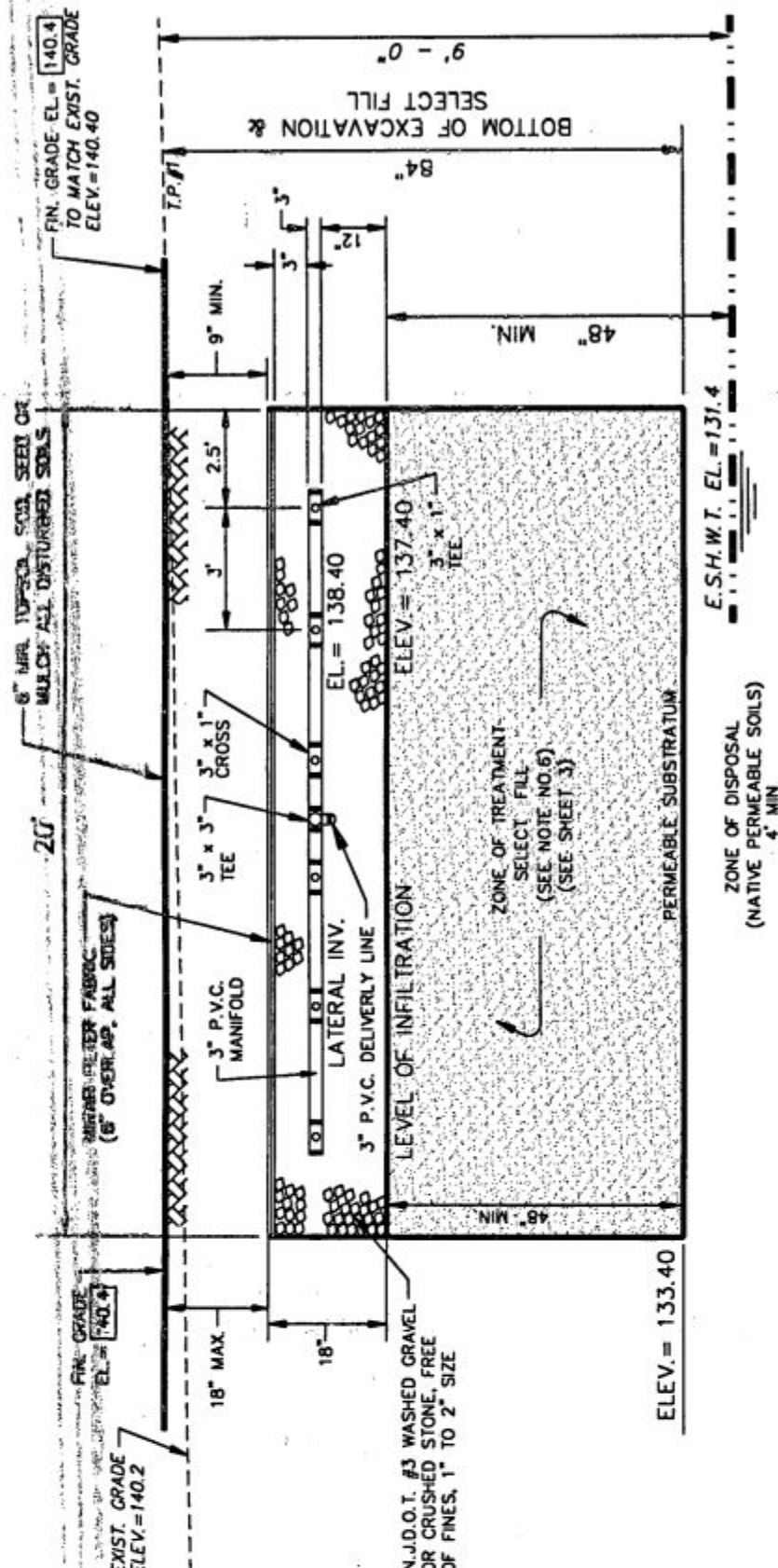
13. THE FOLLOWING PRACTICES SHALL BE FOLLOWED:
a. HEAVY MACHINERY, RUBBER-TIRED VEHICLES OR OTHER VEHICLES EXERTING A GROUND PRESSURE IN EXCESS OF EIGHT POUNDS PER SQUARE INCH SHALL NOT BE PERMITTED TO PASS OVER THE DISPOSAL FIELD AFTER THE FILTER MATERIAL AND DISTRIBUTION NETWORK HAVE BEEN INSTALLED.
b. TRACKED EQUIPMENT MAY BE USED FOR THE PURPOSE OF BACKFILLING AND FINAL GRADING PROVIDED THAT THIS EQUIPMENT DOES NOT EXERT A PRESSURE ON THE UNDERLYING SOIL IN EXCESS OF EIGHT POUNDS PER SQUARE INCH.
c. FINAL GRADING SHALL BE COMPLETED IN A MANNER THAT SURFACE WATER WILL NOT COLLECT OVER THE DISPOSAL FIELD.
d. AFTER COMPLETION OF BACKFILLING AND FINAL GRADING, THE AREA OVER THE DISPOSAL FIELD SHALL BE SEED, SODDED OR MULCHED TO ESTABLISH A VEGETATIVE COVER TO STABILIZE AGAINST EROSION.
e. BACKFILL AND FINAL GRADING SHALL EXTEND A MINIMUM OF FIVE FEET, IN ALL DIRECTIONS, BEYOND THE PERIMETER OF ANY FILLED AREA.

14. THE FOLLOWING PRACTICES SHALL BE FOLLOWED:
a. HEAVY MACHINERY, RUBBER-TIRED VEHICLES OR OTHER VEHICLES EXERTING A GROUND PRESSURE IN EXCESS OF EIGHT POUNDS PER SQUARE INCH SHALL NOT BE PERMITTED TO PASS OVER THE DISPOSAL FIELD AFTER THE FILTER MATERIAL AND DISTRIBUTION NETWORK HAVE BEEN INSTALLED.
b. TRACKED EQUIPMENT MAY BE USED FOR THE PURPOSE OF BACKFILLING AND FINAL GRADING PROVIDED THAT THIS EQUIPMENT DOES NOT EXERT A PRESSURE ON THE UNDERLYING SOIL IN EXCESS OF EIGHT POUNDS PER SQUARE INCH.
c. FINAL GRADING SHALL BE COMPLETED IN A MANNER THAT SURFACE WATER WILL NOT COLLECT OVER THE DISPOSAL FIELD.
d. AFTER COMPLETION OF BACKFILLING AND FINAL GRADING, THE AREA OVER THE DISPOSAL FIELD SHALL BE SEED, SODDED OR MULCHED TO ESTABLISH A VEGETATIVE COVER TO STABILIZE AGAINST EROSION.
e. BACKFILL AND FINAL GRADING SHALL EXTEND A MINIMUM OF FIVE FEET, IN ALL DIRECTIONS, BEYOND THE PERIMETER OF ANY FILLED AREA.

7. ADEQUATE MEASURES SHALL BE USED TO INSURE THAT THE BOTTOM OF THE DISPOSAL BED IS LEVEL.
8. THE FILTER MATERIAL SHALL BE COVERED WITH DRAINAGE FABRIC, AS THE LAYING OF THE DISTRIBUTION LINES PROGRESS.
9. BACKFILL MATERIAL SHALL BE OF EARTH SIMILAR TO THAT FOUND AT THE SITE AND FREE OF LARGE STONES, TREE STUMPS, BROKEN MASONRY OR OTHER WASTE CONSTRUCTION MATERIAL.
10. IN NO CASE SHALL THE BACKFILL MATERIAL BE MORE PERMEABLE THAN THE SURROUNDING SOIL.
11. BACKFILL SHALL COMPLETELY COVER THE ENTIRE DISPOSAL BED AND SHALL BE GRADED SMOOTHLY INTO THE SURROUNDING TOPOGRAPHY ON ALL SIDES.

SELECT FILL NOTES:

1. FILL MATERIAL SHALL BE SPREAD AND COMPACTED IN LAYERS ONE FOOT OR LESS IN THICKNESS.
2. 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. COMPACTION MAY ALSO BE ACCOMPLISHED BY PUDDLING.
3. WHEN HEAVY EXCAVATING EQUIPMENT IS OPERATED WITHIN THE EXCAVATION FOR THE PURPOSE OF PLACEMENT OF COMPACTION OF THE FILL MATERIAL, THIS EQUIPMENT SHALL NOT BE DRIVEN DIRECTLY ON THE EXPOSED BOTTOM OF THE EXCAVATION. A MINIMUM OF ONE FOOT OF FILL MATERIAL SHALL BE MAINTAINED BELOW THE VEHICLE TRACKS OR WHEELS AT ALL TIMES.
4. WHEN FILL MATERIAL IS UTILIZED WITHIN THE ZONE OF TREATMENT, THE FILL SHALL MEET THE FOLLOWING REQUIREMENTS:
 - a. COARSE FRAGMENT CONTENT LESS THAN 15 PERCENT BY VOLUME OR LESS THAN 25% BY WEIGHT.
 - b. TEXTURAL ANALYSIS (COMPOSITION BY WEIGHT OR SIZE FRACTION PASSING THE TWO MILLIMETER SIEVE): FROM 85 TO 95 PERCENT SAND FROM FIVE TO 15 PERCENT SILT PLUS CLAY MINIMUM TWO PERCENT CLAY; AND
 - c. PERMEABILITY FROM 6 TO 20 INCHES PER HOUR OR PERCOLATION RATE FROM THREE TO 15 MINUTES PER INCH.
5. WHEN FILL MATERIAL IS PLACED WITHIN THE ZONE OF DISPOSAL THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:
 - a. TEXTURAL ANALYSIS (COMPOSITION BY WEIGHT OR SIZE FRACTION PASSING THE TWO MILLIMETER SIEVE): 85 PERCENT OR MORE SAND; AND
 - b. PERMEABILITY GREATER THAN 6 INCHES PER HOUR OR PERCOLATION RATE FASTER THAN 15 MINUTES PER INCH.



SECTION A-A

DISPOSAL BED - PRESSURE SYS.

"BOTTOM LINED SOIL REPLACEMENT" N.T.S.

ON SITE DISPOSAL SYSTEM

JACK J. GRAVLIN JR., P.E.

197 ROUTE 73, VOORHEES, NEW JERSEY 08043
1-609-768-5729

REV. DATE DESCRIPTION

ENVIRONMENTAL ANALYSIS

SOIL TECH

ENVIRONMENTAL CONSULTANTS
105 ATISON ROAD, SUITE C, NEWFORD, N.J. 08856
1-609-933-3878

BLOCK 89.01 LOT 11

TOWN OF EVESHAM

BURLINGTON COUNTY NEW JERSEY

DRAWN BY: D.M.D.
CHECKED BY: J.L.B.
SCALE: NO SCALE
DATE: 11/26/94
PROJECT NO. 961074
SHEET NO. 2 OF 3

11/26/94
JACK J. GRAVLIN JR.
PROFESSIONAL ENGINEER LIC. NO. 26816

PRESSURE DOSING NOTES:

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF NJAC 7:9A STANDARDS AND ALL MUNICIPAL ORDINANCES.
- DISPOSAL SYSTEM - TO BE CONSTRUCTED AT LEAST 100' FROM ANY WELL, CAVED OR UNCAVED. WELLS TO BE CONSTRUCTED AT LEAST 100' FROM ANY DISPOSAL BED AND 150' FROM ANY SEEPAGE PIT.
- DISPOSAL AREA, SEPTIC TANK, AND DELIVERY LINE SHALL NOT BE SUBJECT TO TRAFFIC.
- DWELLING SIZE: 4 BEDROOMS, NO GARBAGE DISPOSAL.
- NO EXISTING WELLS OR DISPOSAL SYSTEMS ARE WITHIN 150 FEET OF PROPOSED DISPOSAL AREA.
- DISPOSAL BED AREA TO BE EXCAVATED TO ELEVATION 133.40 (7 FEET) AND BACKFILLED WITH A SELECT SAND WITH A PERMEABILITY RATE 6-20 IN/HR.
- SITE GRADE: 2% SLOPE
- ALL FINAL GRADING TO BE 3:1 TO EXISTING SURFACE.
- S.C.S. SOIL TYPE: E-VB
- MATERIAL COMPRISING DELIVERY AND CONNECTION PIPES SHALL BE PVC (ASTM D 2665) SCH. 40, SDR-21 OR SDR-26.
- MATERIAL COMPRISING PRESSURE DOSING NETWORK SHALL BE PVC (ASTM D-2662), SDR-21 OR SDR-26. SLOPE OF LATERAL SHALL BE 0-2"/100'.
- ALL PIPE JOINTS SHALL BE MADE WATERTIGHT (SOLVENT WELDED TO PROTECT FROM ROOT DAMAGE).
- DAILY FLOW CALC. = 1 BEDROOM (200 GALLONS) & 3 BEDROOM (450 GALLONS) = 650 GAL/DAY.
- SEPTIC TANK CALC. = 250 GAL PER BEDROOM X 4 = 1000 GALLONS, USE 2,000 GALLON DOUBLE COMP. SEPTIC TANK.
- DISPOSAL BED AREA CALC. : 1.33 SQ. FT. PER GAL/DAY X 650 GAL/DAY = 865 SQ. FT. REQUIRED, USE 900 SQ. FT. OR 20' X 45'.
- BACKFILL AROUND SEPTIC TANK AND PUMP CHAMBER TO BE PLACED IN 8" LAYERS AND COMPACTED TO AVOID SETTLEMENT OR SHIFTING AND SHALL BE FREE OF LARGE STONES, ROOTS OR FOREIGN OBJECTS.
- BUILDING SEWER TO BE CONSTRUCTED AS PER UNIFORM CONSTRUCTION CODE, NJAC 5:23
- CONNECTING AND DELIVERY PIPES TO BE LAID ON A FIRM FOUNDATION, SATISFACTORY TO THE ADMIN. AUTHORITY.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE GRAIN SIZE ANALYSIS AND PERM. VALUE OF SELECT FILL TO DESIGN ENGINEER FOR CERT. PRIOR TO INSTALLATION.
- IT IS THE RESPONSIBILITY OF THE INSTALLER TO CHECK SITE CONDITIONS AGAINST DESIGN CRITERIA UNUSUAL CONDITIONS WHICH DO NOT ALLOW COMPLIANCE WITH THE DESIGN OR THE INTENT OF THE SPECIFICATION DATA SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
- THE SEPTIC TANK & PUMP CHAMBER (AFTER INSTALLING ALL INSIDE COMPONENTS) SHALL BE FILLED WITH WATER AFTER BEING SET IN THE PROPER POSITION TO PREVENT SHIFTING.
- SEPTIC TANK AND PUMP CHAMBER SHALL BE WATERTIGHT. CONSTRUCTED OF SOUND AND DURABLE MATERIALS THAT ARE RESISTANT TO CORROSION, DECAY, FROST, DAMAGE OR CRACKING AND BUCKLING DUE TO SETTLEMENT OR BACKFILLING.
- SPACE LATERAL PERFORATIONS EVENLY ALONG INVERT FOR ENTIRE LENGTH OF PIPE. PERFORATED SIZE 1/4". SEE PERFORATION DETAIL.
- REMOVE ALL EXISTING VEGETATION WITHIN 10 FEET OF THE PROPOSED DISPOSAL BED.
- DRAINAGE FROM BASEMENT FLOORS, FOOTING OR ROOFS SHALL NOT ENTER THE INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM AND SHALL BE DIVERTED AWAY FROM THE AREA OF THE DISPOSAL FIELD. BACKWASH FROM WATER SOFTENERS SHALL NOT BE DISPOSED OF WITHIN THE SUBSURFACE SEWAGE DISPOSAL SYSTEM, BUT MAY BE DISCHARGED INTO A DRYWELL LOCATED AWAY FROM THE AREA OF THE DISPOSAL FIELD.

- IF ANY AMBIGUITIES OF DISCREPANCIES REGARDING THE PLANS, SPECIFICATIONS OR SITE CONDITIONS ARE DISCOVERED BY THE CONTRACTOR, ALL WORK SHALL BE DISCONTINUED UNTIL THE DESIGN ENGINEER IS NOTIFIED AND THE PROBLEM IS RESOLVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- ANY CHANGES MADE BY THE CONTRACTOR THAT VARIES FROM THE PLANS AND SPECIFICATIONS OR SUBSTITUTION OF ALTERNATE PROCEDURES OR MATERIALS WITHOUT THE WRITTEN APPROVAL OF THE DESIGN ENGINEER OR THE ADMINISTRATIVE AUTHORITY IS AT THE CONTRACTOR'S RISK AND THE DESIGN ENGINEER ASSUMES NO LIABILITY FOR THE SUBSTITUTION OR ALTERNATES.
- TANK MANUFACTURER MUST BE NOTIFIED IF ANY TANK IS SET DEEPER THAN 18" BELOW FINISHED GRADE IN ORDER TO CERTIFY STRUCTURAL STABILITY OF TANK.
- AS NOTED ON THE DRAWING A SYNTHETIC FILTER FABRIC AS MANUFACTURED BY MARAFI DUPONT OR APPROVED EQUAL SHALL BE INSTALLED ON TOP OF THE FILTER MATERIAL OR 4" OF SALT HAY MAY ALSO BE USED.
- PIPES IN SYSTEM SHALL BE CONNECTED WITH ELBOW JOINTS NOT EXCEEDING 45 DEGREE ANGLE.
- TOPOGRAPHY BASED UPON U.S.G.S. DATUM
- THERE ARE NO WETLANDS WITHIN 300' OF THE PROJECT.
- ALL MANHOLE COVERS TO EXTEND FLUSH WITH GRADE BY A CONCRETE RISER, AS NEEDED.
- CONNECTING PIPES SHALL HAVE A MINIMUM GRADE OF 1/4" PER FOOT UNLESS OTHERWISE AUTHORIZED BY THE ADMINISTRATIVE AUTHORITY.
- WHEN IT IS NECESSARY TO ABANDONED SYSTEM OR COMPONENTS OF A SYSTEM, ALL SEPTIC TANKS WHICH ARE TO BE ABANDONED SHALL BE EMPTIED OF WASTES AND REMOVED OR FILLED COMPLETELY WITH GRAVEL, STONES OR SOIL MATERIAL IN A MANNER WHICH IS ACCEPTABLE TO THE ADMINISTRATIVE AUTHORITY.
- INLET AND OUTLET CONNECTIONS OF EACH TANK OR COMPARTMENT SHALL BE ARRANGED SO AS TO OBTAIN EFFECTIVE RETENTION OF SCUM AND SLUDGE AND SHALL BE FASTENED WITH AND CONSTRUCTION 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, MANUFACTURED WATER PROOF PIPE COUPLING WHICH IS NONEXPANDING GROUT WHICH WILL ADHERE BOTH TO THE TEE AND TO THE BODY OF THE TANK WHERE THE TEE IS INSTALLED.
- SURVEY AND SUBDIVISION BY: WINTERS ASSOCIATES, BERLIN, N.J., DATE: 4/15/93 PREPARED FOR MARLTON WOODS ASSOC., INC., 304 N.COOPER ROAD, BERLIN, N.J.
- CONTRACTOR MUST USE ENGINEERS REPORT WHEN INSTALLING SYSTEM.
- ALL PHASES OF CONSTRUCTION MUST BE INSPECTED AND CERTIFIED BY ADMINISTRATION AUTHORITY AND ENGINEER AS REQUIRED.
- PERMANENT BENCHMARK TO BE SET PRIOR TO CONSTRUCTION START.
- COMPACTION & PERMEABILITY CERTIFICATION OF Z.O.T. SELECT FILL TO BE ISSUED PRIOR TO STONE INSTALLATION.
- PINELANDS APPLICATION NO. 85-0516.02

JOB #: 94-034
TOWNSHIP: Evesham
COUNTY: Burlington
BLOCK: 89.01
LOT: 11
DATE: 10/23/96
WITNESSED: waived by K. Hendricks
LOCATION: septic system

S.A.B. = Subangular Blocky

Test Pit #1
G.W.: N.E. ESH: 9'

DEPTH	DESCRIPTION
0-2"	Root mat
2"-5"	Dark Brown (10YR 5/1) fine loamy sand, granular, friable
5"-108"	Yellow (10YR 7/8-8/6) fine to medium loamy sand, granular, friable
108"-136"	Light Brown to Pink (7.5YR 6/4-7/3) fine to medium sand, singl grain, loose

JOB #: 94-034
TOWNSHIP: Evesham
COUNTY: Burlington
BLOCK: 89.01
LOT: 11
DATE: 10/23/96
WITNESSED: waived by K. Hendricks
LOCATION: septic system

S.A.B. = Subangular Blocky

Test Pit #2
G.W.: N.E. ESH: ≥ 10'

DEPTH	DESCRIPTION
0-3"	Root mat
3"-6"	Dark Brown (10YR 5/1) fine loamy sand, granular, friable
6"-120"	Yellow (10YR 7/8-8/6) fine to medium loamy sand, granular, friable
120"-136"	Light Brown to Pink (7.5YR 6/4-7/3) fine to medium sand, singl grain, loose

ON SITE DISPOSAL SYSTEM

JACK J. GRAVLIN JR., P.E.
197 ROUTE 73, VOORHEES, NEW JERSEY 08043
1 - 609 - 768 - 5729

BLOCK 89.01 LOT 11

TOWNSHIP OF Evesham
BURLINGTON COUNTY, NEW JERSEY

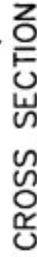
DRAWN BY: D.W.D.
CHECKED BY: J.L.G.
SCALE: NO SCALE
DATE: 11/96
PROJECT NO. 9610147
SHEET NO. 3 OF 5

ENVIRONMENTAL ANALYSIS

SOIL TECH

ENVIRONMENTAL CONSULTANTS
105 ATSON ROAD, SUITE C MEDFORD, N.J. 08055
1-609-953-0878

DATE: 9/4/96
SCALE: NO SCALE
PROJECT NO. 94-034
FILE NAME: ST101-3
SHEET 3 OF 9

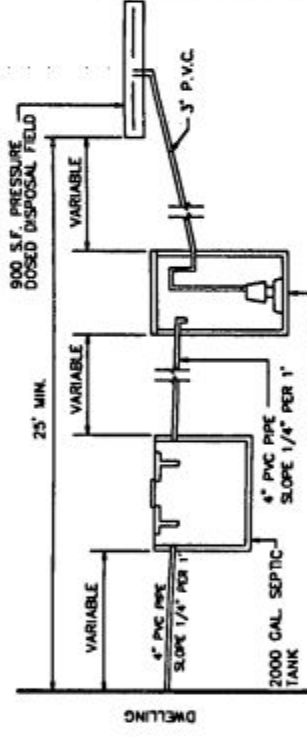
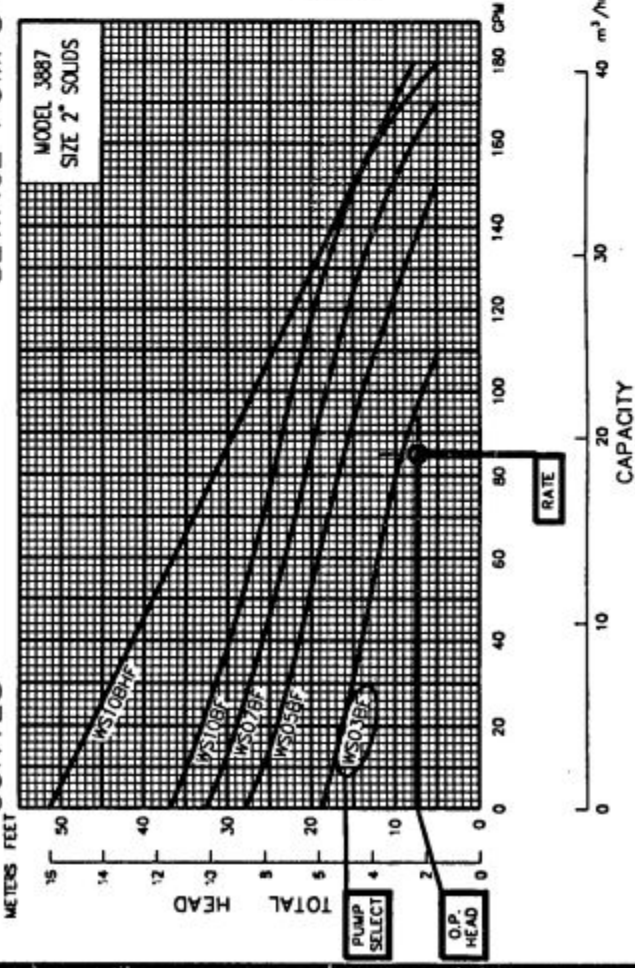


2000 GALLON DOUBLE COMPARTMENT

SEPTIC TANK DETAIL

N.T.S.

PERFORMANCE CURVES



SCHEMATIC PIPING DIAGRAM -
PRESSURE DOSED SYSTEM

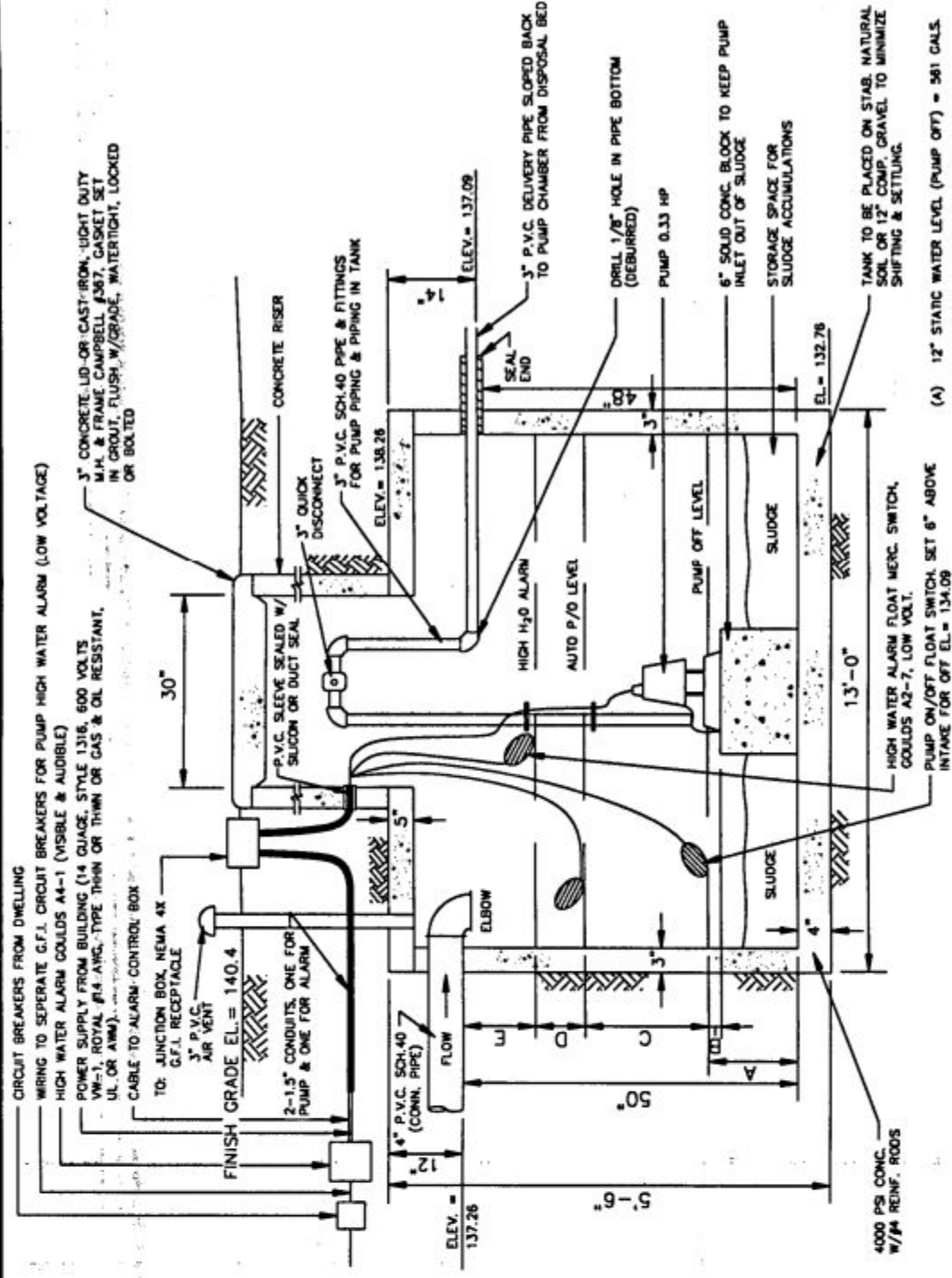
M.T.S.

- NOTES:
1. INTERIOR FINISHED WITH 2 COATS OF C-4 WHITE GUARD "100". A FULL BOOED COORLESS WHITE SILICONE & ACRYLIC BASE COATING, BEING INERT THE GLASS FLAKE PIGMENT DOES NOT OXIDIZE.
 2. CONCRETE USED IN THE CONSTRUCTION OF SEPTIC TANKS SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE (A.C.I.) STANDARDS FOR FROST RESISTANCE (A.C.I. 318-16-4.5.1) AND WATER-TIGHTNESS (A.C.I. 318-16-4.5.2)
 3. ALL JOINTS TO BE SET WITH NON-SHRINK GROUT.
 4. AS MANUFACTURED BY J.F. GILLESPIE, INC., VINELAND, N.J. OR APPROVED EQUAL
 5. E.S.H.W.T. WILL NOT CAUSE TANK TO FLOAT WHEN EMPTY.

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6. SEPTIC TANKS SHALL BE PLACED UPON A FIRM AND STABLE FOUNDATION SO THAT THE POTENTIAL FOR UNDESIRABLE SETTLEMENT OR SHIFTING IS MINIMIZED. TANKS SHALL BE CONSTRUCTED OR INSTALLED DIRECTLY ON UNDISTURBED NATURAL SOIL. IF THE EXCAVATION IS TWO FEET DEEP, IT SHALL BE BACKFILLED TO THE PROPER ELEVATION WITH SAND. WHEN THE TANK MUST BE CONSTRUCTED OR INSTALLED ON A LAYER OF FILL MATERIAL GREATER THAN ONE FOOT IN THICKNESS, THE FILL SHALL BE PROPERLY EMPLOYED AND COMPACTED AS DESCRIBED IN N.J.A.C. 9A-10.4(f)(1).

CONCRETE BAFFLES POURED MONOLITHICALLY
CAPACITY: 2,000 GAL.
OUTSIDE DIMENSIONS: 13'-0" X 6'-6" X 5'-6"
WEIGHT: 5,000#
CONCRETE: 4,500# P.S.I.



1. PUMP CHAMBER TO BE A MODIFIED 1500 GAL. SEPTIC TANK AS MANUFACTURED BY J.F. GILLSPY, INC., OR APPROVED EQUAL. MODIFICATIONS SHALL SPECIFY NO BATTLES & BE WATERPROOF BY MANU. (4000 P.S.I. CONC.)
2. ALL INSIDE SURFACES TO BE COATED WITH 2 COATS HEAVY DUTY EPOXY INLET MATERIAL AND 318-15-45-1 +4.5.2 STANDARD CERT. (DISPLAY ON TANK).
3. ALL SWITCHES MUST BE CORROSION & HUMIDITY PROOF

- (A) 12" STATIC WATER LEVEL (PUMP OFF) = 561 GALS.
- (B) 8" SEPARATION BETWEEN PUMP OFF LEVEL & PUMP INTAKE
- (C) 4.0" SEPARATION BETWEEN PUMP ON & PUMP OFF LEVEL, YIELDING A DOSE VOLUME OF 18.3 GALS.
- (D) 4" SEPARATION BETWEEN AUTO PUMP ON & HIGH WATER ALARM
- (E) 28.0" OF RESERVE STORAGE CAPACITY, IN CASE OF PUMP OR POWER FAILURE, EQUAL TO 1,309 GALS.

1500 GALLON PUMP CHAMBER

N.T.S.

ON SITE DISPOSAL SYSTEM

JACK J. GRAVLIN JR., P.E.

197 ROUTE 73, VOORHEES, NEW JERSEY 08043
1 - 609 - 768 - 5729

BLOCK	89.01
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TOWN OF FAYESHAM

BURLINGTON COUNTY NEW JERSEY

DRAWN BY: D.W.D.
CHECKED BY: J.J.G.
SCALE: NO SCALE
DATE: 11/96
PROJECT NO. 96101
SHEET NO. 4 OF 5

JACK J. GRAVELIN
PROFESSIONAL ENGINEER LIC. NO. 26816

DATE: 10/19/98	SCALE: NO SCALE	PROJECT NO. 94-034 FILE NAME: S1101-4	SHEET 4 OF 4
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