MHT 5 Lot 27

REPLACEMENT SYSTEM VARIANCE REQUEST

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST

This form shall be attached to an application for the proposed replacement system which does not comply with the Rules. The LPI shall review the Replacement System Variance Request and Application and may approve the Request if all of the following requirements can be met, and the variance(s) requested fall within the limits of LPI's authority.

1. The proposed design meets the definition of a Replacement System from the rules.
2. A system cannot be designed and installed in total compliance with the Rules.
3. The design flow is less than 500 GPD.
4. There will be no change in use of the structure.
5. The replacement system is determined by the Site Evaluator and LPI to be the most practical method to treat and dispose of the wastewater.

GENERAL INFORMATION

Town of Orland

Permit No. 1049 E

Date Permit Issued 4-8-97 (MONTH/DAY/YEAR)

Property Owner's Name: Carroll P. Page Tel. No. _____

System's Location: Gilpen Road (STREET)

Orland (TOWN) Maine _____ (ZIP)

Property Owner's Address: 3111 Highland Ave. (STREET)
(if different from above)

Manhattan Beach, Calif. 90266 (TOWN / STATE / ZIP)

SPECIFIC INSTRUCTIONS TO THE:

LPI:

If any of the variances exceed your approval authority and/or do not meet all of the requirements listed under the Limitations Section above, they you are to send this Replacement System Variance Request, along with the Application, to the Department for review and approval consideration before issuing a Permit. (See reverse side for Comments Section and your signature.)

SITE EVALUATOR:

If after completing the Application, you find that a variance for the proposed replacement system is needed, then complete the Replacement Variance Request with your signature on reverse side of form.

PROPERTY OWNER:

It has been determined by the Site Evaluator that a variance to the Rules is required for the proposed replacement system. This variance request is due to physical limitations of the site and/or soil conditions. Both the Site Evaluator and the LPI have considered the site/soil restrictions and have concluded that a replacement system in total compliance with the Rules is not possible.

The **OWNER** shall sign this statement. Therefore, having read both this Replacement Variance Request and the attached Application, I understand that the proposed system is not in total compliance with the Rules and hereby release all those concerned with this Variance, provided they have performed their duties in a reasonable and proper manner.

X Carroll Page
PROPERTY OWNER'S SIGNATURE

3-27-97
DATE

VARIANCE CATEGORY	VARIANCE REQUESTED	LIMIT OF LPI'S APPROVAL AUTHORITY		VARIANCE REQUESTED TO:	
SOILS					
Soil Profile	Ground Water Table	to 6"		9"	inches
Soil Condition	Restrictive Layer	to 6"			inches
from HHE-200	Bedrock	to 10"			inches
SETBACK DISTANCES (IN FEET)	FROM:	TREATMENT TANK	DISPOSAL AREA	TREATMENT TANK	DISPOSAL AREA
Potable Water Supplies	1. Well: > 2000 gal/day	100[a]	300[a]		
	2. Well: < 2000 gal/day a. Neighbor's	50'[b]	60'[b]		
	b. Property Owner's	25'	50'		50'
	3. Water Supply Line	See note 'a'			
Waterbodies	1. Perennial	50'	60'		
	2. Intermittent	15'	20'		
	3. Manmade drainage ditch	10'	15'		
Downhill Slope	Greater than 3:1 (33%)	5'[c]	10'[c]		
Buildings	1. With Basement	5'	10'		
	2. Without Basement	5'	10'		
Property Line		4'	5'		

OTHER

1. Fill extension Grade—to 3:1

2.

3.

Footnotes:

a. This setback distance cannot be reduced by variance. See Table 6-2.
b. Written Permission from the owner of a well is required when a replacement system will be located less than 100 feet but closer to that well than the system it is replacing.
c. Sufficient distance shall be maintained to assure that the toe of the fill does not extend to the 3:1 slope.

Eric Lafuse 00175 — SITE EVALUATOR'S SIGNATURE
01-06-96 — DATE

LPI STATEMENT

I, _____, LPI for the Town of _____ have conducted an on-site inspection for the proposed replacement system and have determined to the best of my knowledge, that it cannot be installed in total compliance with the Rules, applicable Municipal Wastewater Disposal Ordinances, or the Local Shoreland Zoning Ordinance. As a result of my review of the Replacement System Variance Request, the Application, and my on-site investigation, I (check and complete either a or b):

☑ a. (☑ approve, ☐ disapprove) the variance request based on my authority to grant this variance. Note: If the LPI does not give his approval, he shall list his reasons for denial in **Comments** Section below and return to the applicant.

—OR—

☐ b. find that one or more of the requested Variances exceeds my approval authority as LPI. I (☐ recommend ☐ do not recommend) the Department's approval of the variances. Note: If the LPI does **not** recommend the Department's approval, he shall state his reasons in Comments Section below as to why the proposed replacement system is not being recommended.

Comments: _____

Daniel Fuse — LPI'S SIGNATURE
4-8-97 — DATE

FOR USE BY THE DEPARTMENT ONLY

The Department has reviewed the variance(s) and (☐ does ☐ does not) give its approval. Any additional requirements, recommendations, or reasons for the Variance denial, are given in the attached letter.

_____ SIGNATURE OF THE DEPARTMENT
_____ DATE

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 FAX (207) 287-4172

PROPERTY LOCATION

wn or intation	Orland
Street Subdivision Lot #	Gilpen Road

PROPERTY OWNERS NAME

Last: Page First: Carroll P.

Mailing Address of Owner	
Daytime Tel. #	

ORLAND Date Permit Issued: 4 8 97 — 1049 TOWN COPY — $ 81.00 FEE — ☐ If Double Fee Charged

Gerald Gerue — Local Plumbing Inspector Signature — L.P.I. # 1672

Municipal Tax Map # _____ Page # _____

Owner Statement

I state that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

X _____ Signature of Owner/Applicant — Date

Caution: Inspection Required

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

Gerald Gerue — Local Plumbing Inspector Signature — 4-11-97 Date Approved

PERMIT INFORMATION

THIS APPLICATION IS FOR:
1. ☐ First Time System
2. ☐ Multi-User System
3. ■ Replacement System
4. ☐ Expanded System
   a. ☐ One-time exempted
   b. ☐ Non-exempted
5. ☐ Experimental System
6. ☐ Seasonal Conversion

THIS APPLICATION REQUIRES:
1. ☐ No Rule Variance
2. ☐ First Time System Variance (Municipal)
3. ☐ First Time System Variance (State)
4. ■ Replacement System Variance
   a. ■ Local Plumbing Inspector approval
   b. ☐ State & Local Plumbing Inspector approval
5. ☐ Minimum Lot Size Variance
6. ☐ Seasonal Conversion Variance

DISPOSAL SYSTEM COMPONENT(S)
1. ■ Non-Engineered System
2. ☐ Primitive System
3. ☐ Alternative Toilet
   Specify _____
4. ☐ Non-Engineered Treatment Tank
5. ☐ Holding Tank _____ Gallons
6. ☐ Non-Engineered Disposal Area (only)
7. ☐ Separated Laundry System
8. ☐ Engineered System (+2000 gpd)
9. ☐ Engineered Treatment Tank (only)
10. ☐ Engineered Disposal Area (only)

SIZE OF PROPERTY
18 ± ac

DISPOSAL SYSTEM TO SERVE:
1. ■ Single Family Dwelling Unit
2. ☐ Multiple Family Dwelling Unit
   Number of Units _____
3. ☐ Other _____ SPECIFY

SHORELAND ZONING
☐ Yes ■ No

TYPE OF WATER SUPPLY
Existing Well

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
1. ■ Concrete
   ☐ Regular
   ☐ Low Profile
2. ☐ Plastic

SIZE 1000 Gallons

DISPOSAL AREA TYPE/SIZE
1. ■ Stone Bed 1350 Sq. Ft.
2. ☐ Proprietary Device _____ Sq. Ft.
   ☐ Clustered ☐ Linear
   ☐ Regular ☐ H-20
3. ☐ Trench _____ Lin. Ft.
4. ☐ Other _____

GARBAGE DISPOSAL UNIT
1. ■ No
2. ☐ Yes
   ☐ Multi-compartment tank
   ☐ Tank in series
   ☐ Increase in tank capacity
   ☐ Filter on tank outlet

CRITERIA USED FOR DESIGN FLOW
(Show Calculations)

$\frac{1350\ ft^2}{5} = 270$ GPD

3 Bedroom
re: Table 901.1

DESIGN FLOW: 270 GPD (Gallons/Day)

PROFILE & DESIGN CLASS

PROFILE	DESIGN
9	D

DEPTH TO MOST LIMITING FACTOR 14"

DISPOSAL AREA SIZING
1. ☐ Small 2.0
2. ☐ Medium 2.60
3. ☐ Medium-Large 3.30
4. ☐ Large 4.10
5. ■ Extra-Large 5.00

PUMPING
1. ☐ Not required
2. ☐ May be required
3. ■ Required

DOSE 40-70 Gallons

SITE EVALUATOR'S STATEMENT

On 01 / 03 / 97 (date) I completed a site evaluation on this property and state that the data reported is accurate and that the proposed system is in compliance with the Subsurface Wastewater Disposal Rules.

E.M. Rafuse — Site Evaluator Signature — 00175 SE # — 01-06-97 Date

E. M. RAFUSE — Print Name — 207-942-3659 Telephone

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering

Town, City, Plantation: Orland

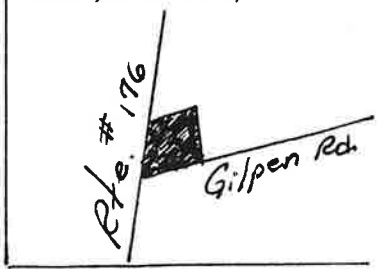
Street, Road, Subdivision: Gilpen Road

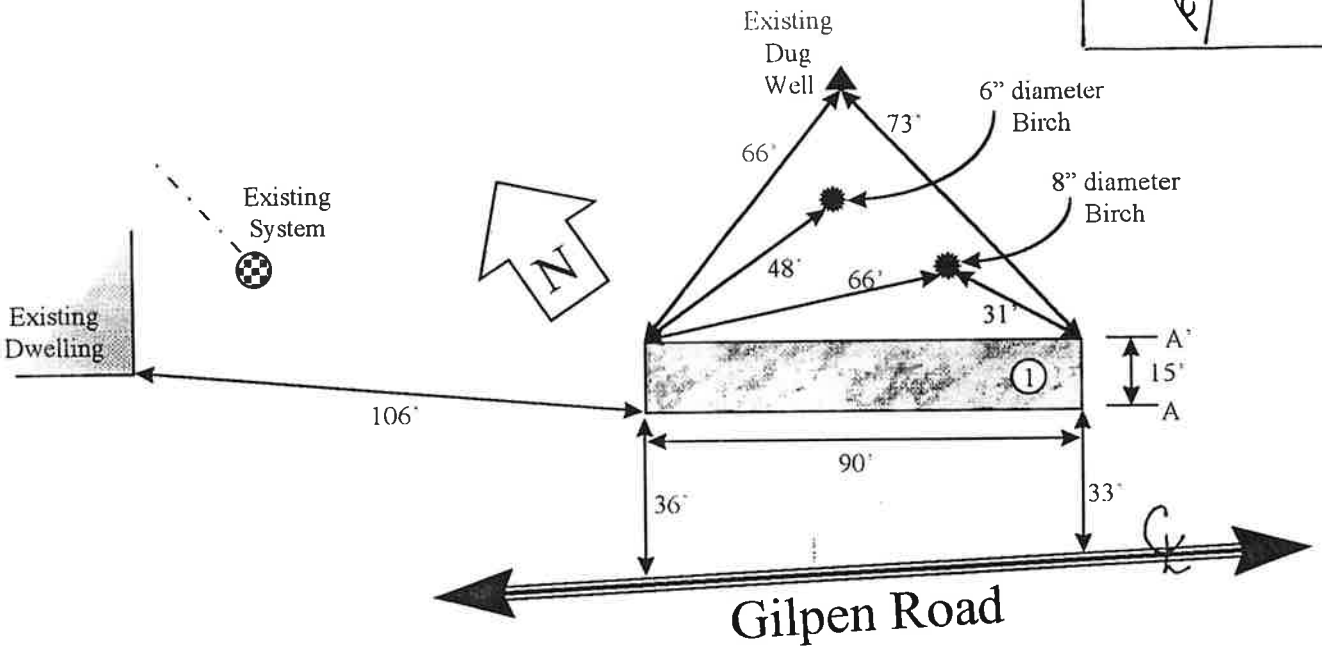
Owners Name: Carroll P. Page

SITE PLAN

Scale 1" = 40' Ft.

SITE LOCATION PLAN (Attach Map from Maine Atlas for New System Variance)





SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 1 ■ Test Pit ☐ Boring

0" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)

	Texture	Consistency	Color	Mottling
0				
6	Silt Loam		10YR 5/3 Brown	
10				
15				14"
20	Silty Clay	Somewhat Firm	2.5Y 4/2 Dark Gray Brown	
30				
40				
50				

Soil	Classification	Slope	Limiting Factor	
9 (Profile)	D (Condition)	5 %	14"	■ Ground Water ☐ Restrictive Layer ☐ Bedrock

Observation Hole _____ ☐ Test Pit ☐ Boring

_____ " Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)

	Texture	Consistency	Color	Mottling
0				
6				
10				
15				
20				
30				
40				
50				

Soil	Classification	Slope	Limiting Factor	
(Profile)	(Condition)	%		☐ Ground Water ☐ Restrictive Layer ☐ Bedrock

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering

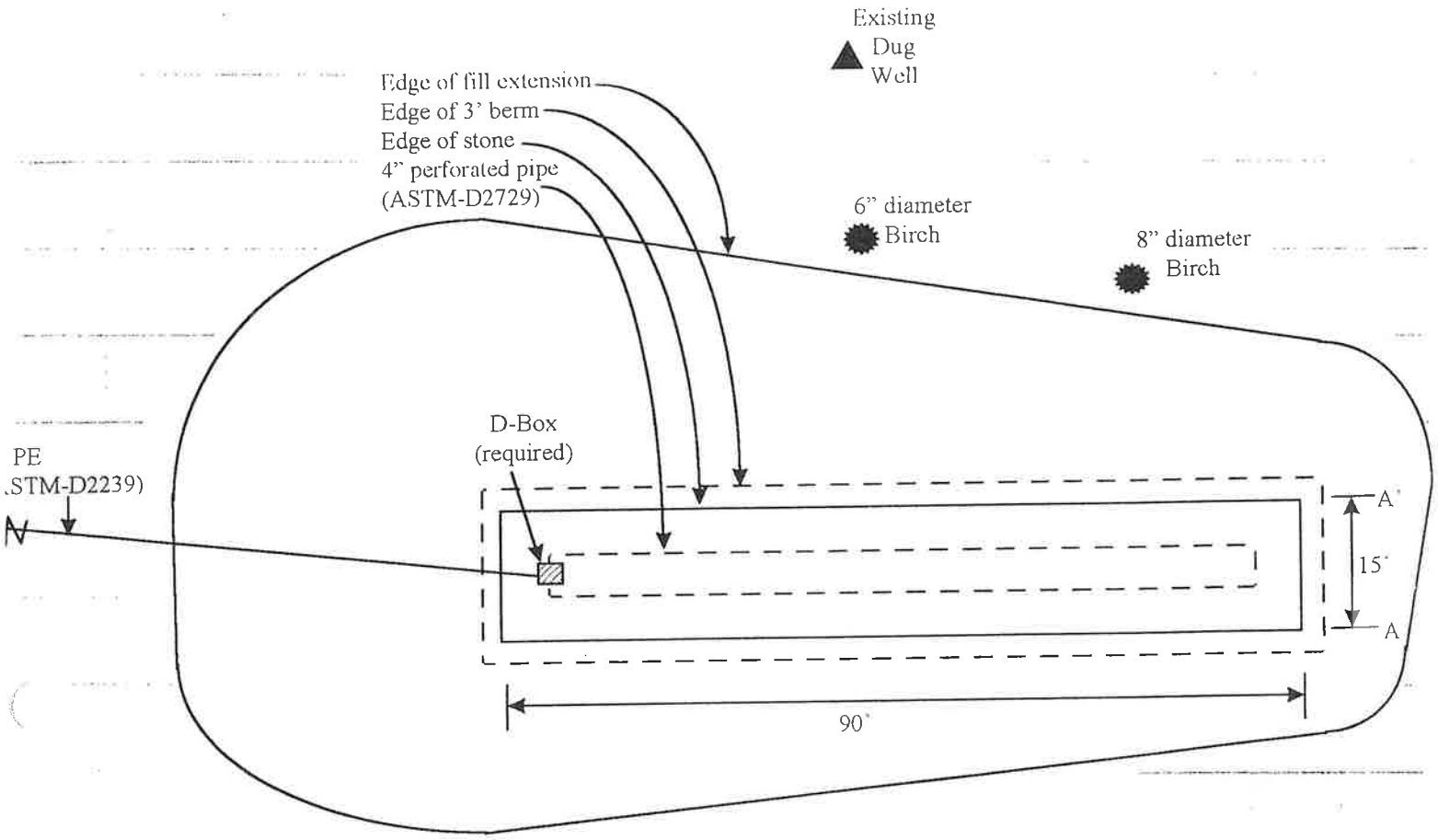
Town, City, Plantation: ORland

Street, Road, Subdivision: Gilpen Road

Owners Name: Carroll P. Page

SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1" = 20' Ft.



FILL REQUIREMENTS

	A	B	
Depth of Fill (Upslope)	28"	82	"
Depth of Fill (Downslope)	37"	86	"
	15'	34'	

CONSTRUCTION ELEVATIONS

Reference Elevation is	1000'
Bottom of Disposal Area	99.53'
Top of Distribution Lines or Chambers	100.45'

ELEVATION REFERENCE POINT LOCATION & DESCRIPTION

6" & 8" dia. nail in: Birch Trees

DISPOSAL AREA CROSS SECTION

Scale:

Vertical: 1 inch = Ft.

Horizontal: 1 inch = Ft.

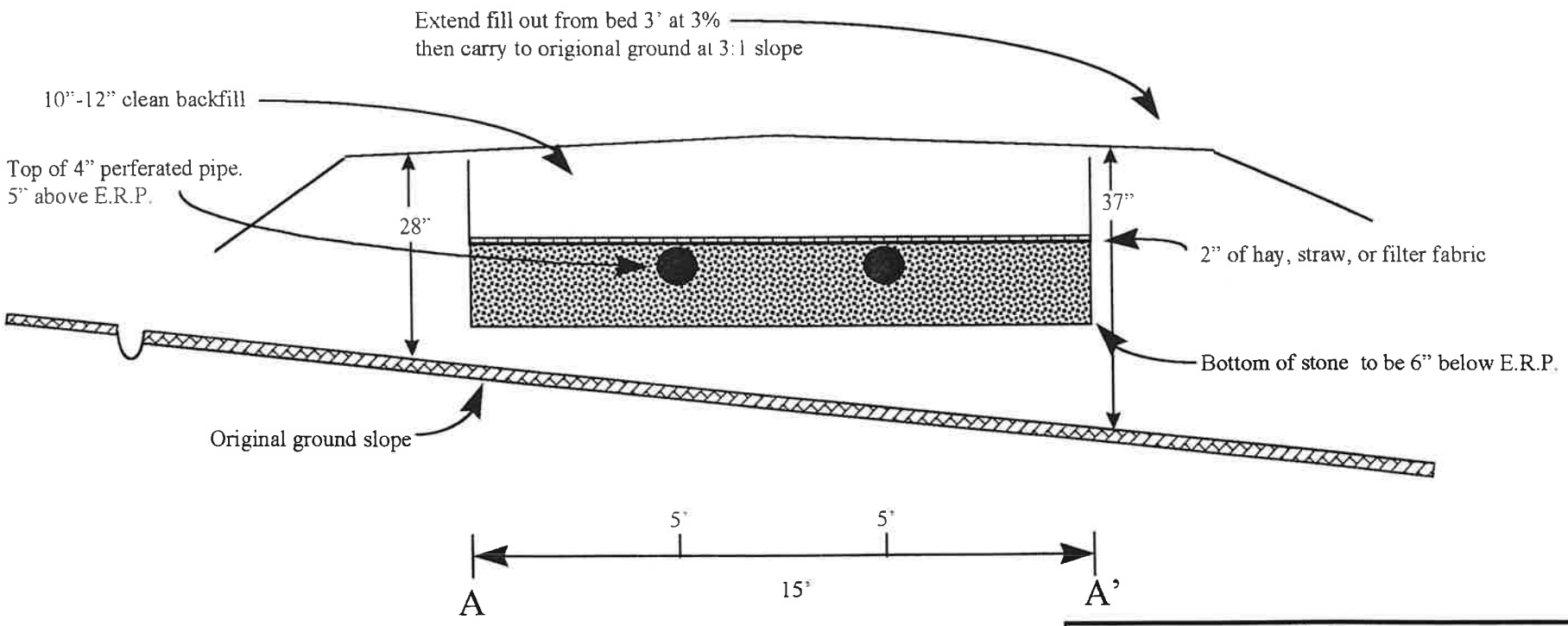
See Cross-Section Page 4a & 4b

STATE OF MAINE
EARLE M. RAFUSE JR.
L.S.E. 1 P.L.S. 0431

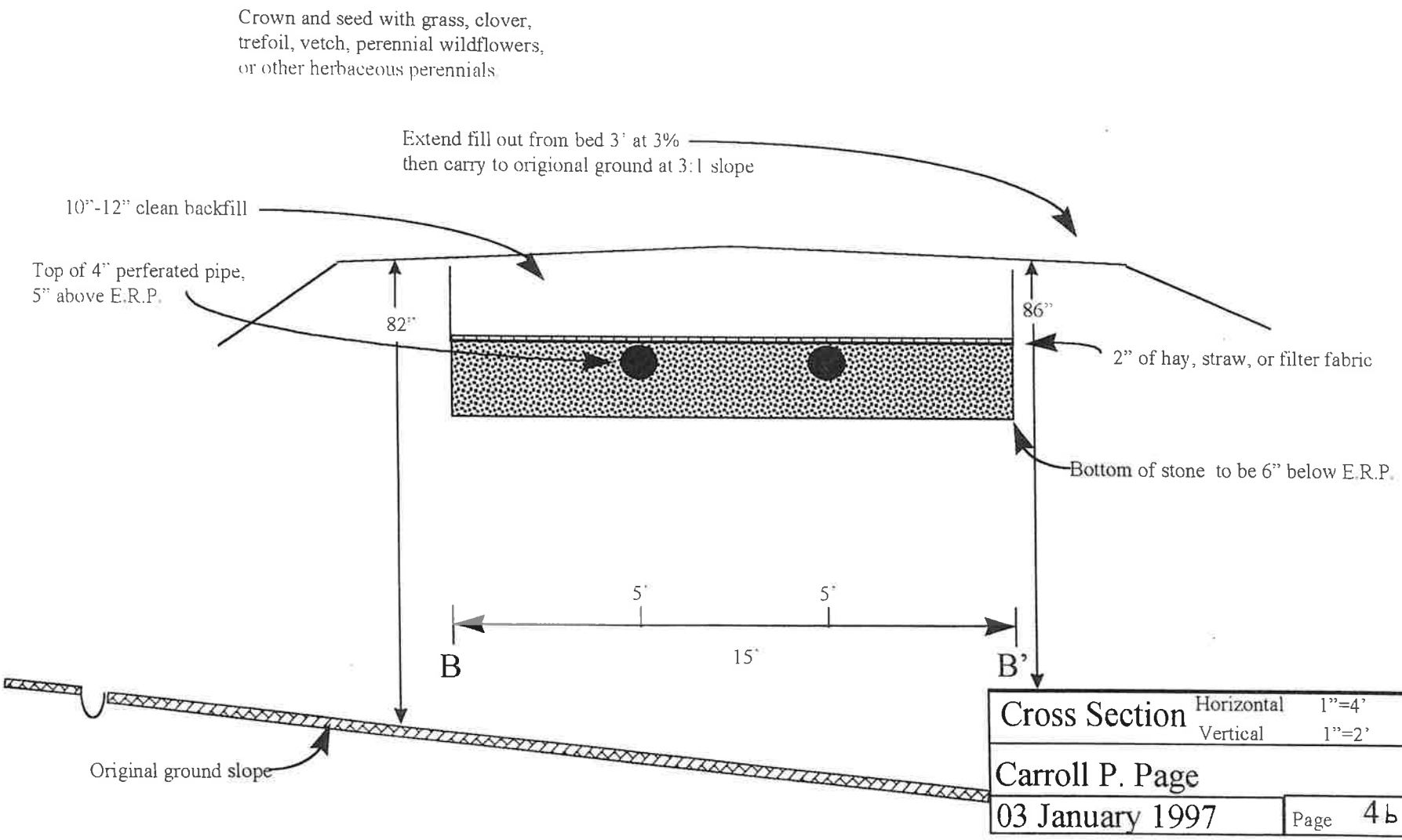
Site Evaluator Signature

01-06-97
Date

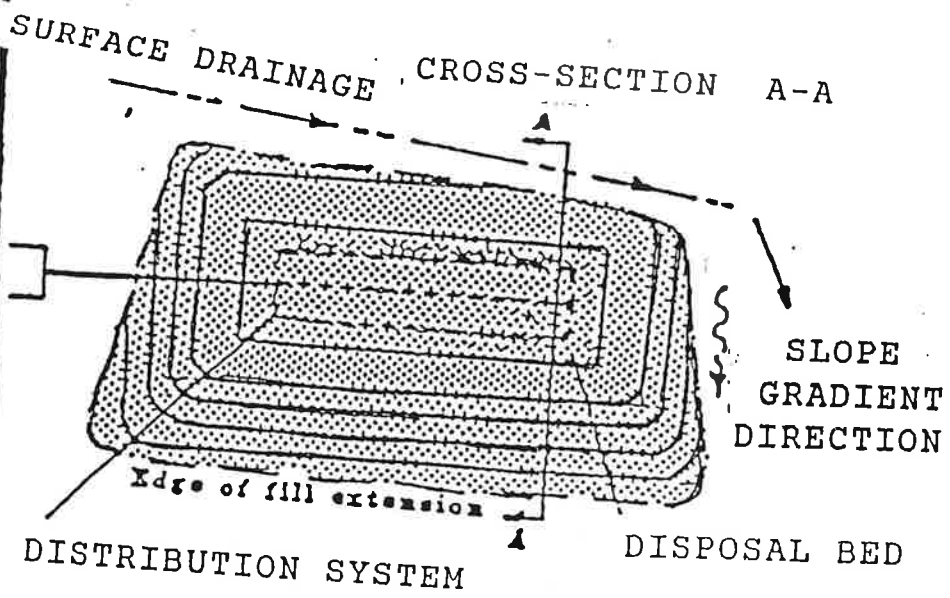
Crown and seed with grass, clover,
trefoil, vetch, perennial wildflowers,
or other herbaceous perennials.



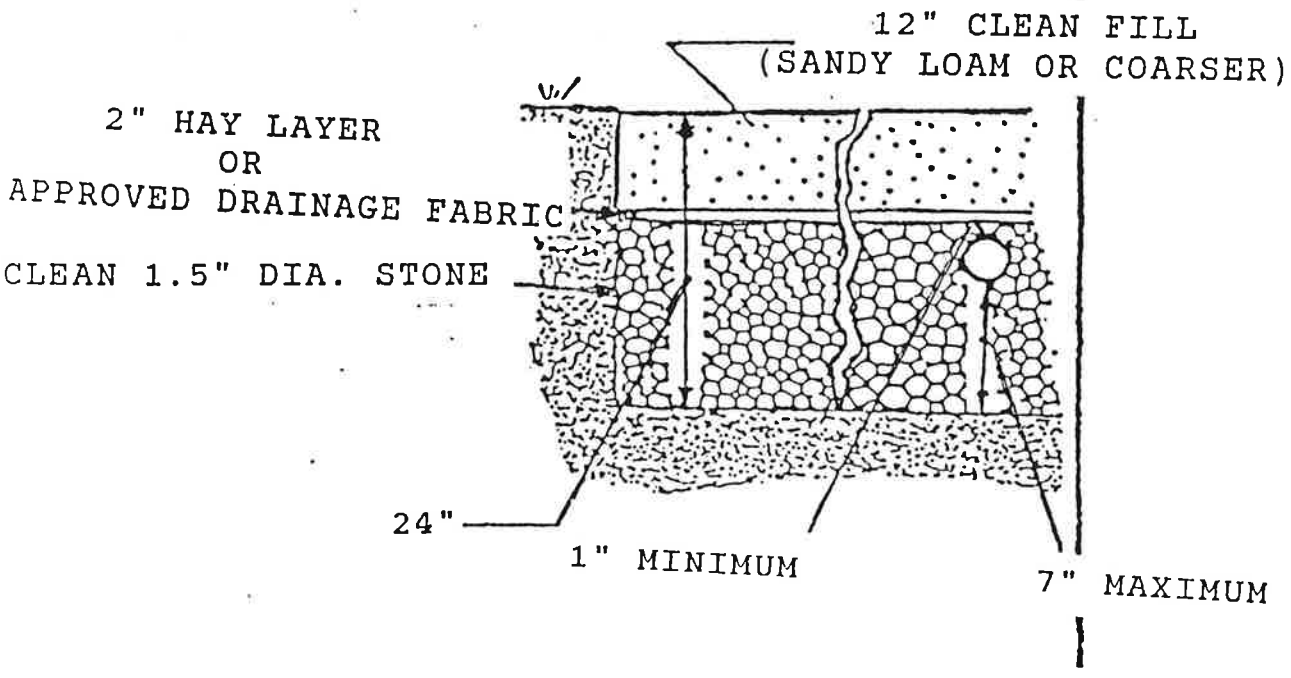
Cross Section	Horizontal Vertical	1"=4' 1"=2'
Carroll P. Page		
03 January 1997	Page	4a


Crown and seed with grass, clover, trefoil, vetch, perennial wildflowers, or other herbaceous perennials
Extend fill out from bed 3' at 3% then carry to origional ground at 3:1 slope
10"-12" clean backfill
Top of 4" perferated pipe, 5" above E.R.P.
82"
86"
2" of hay, straw, or filter fabric
Bottom of stone to be 6" below E.R.P.
5'
5'
15'
B
B'
Original ground slope
Cross Section
Horizontal 1"=4'
Vertical 1"=2'
Carroll P. Page
03 January 1997
Page 4b

PLAN OF BED AREA



DETAIL #1

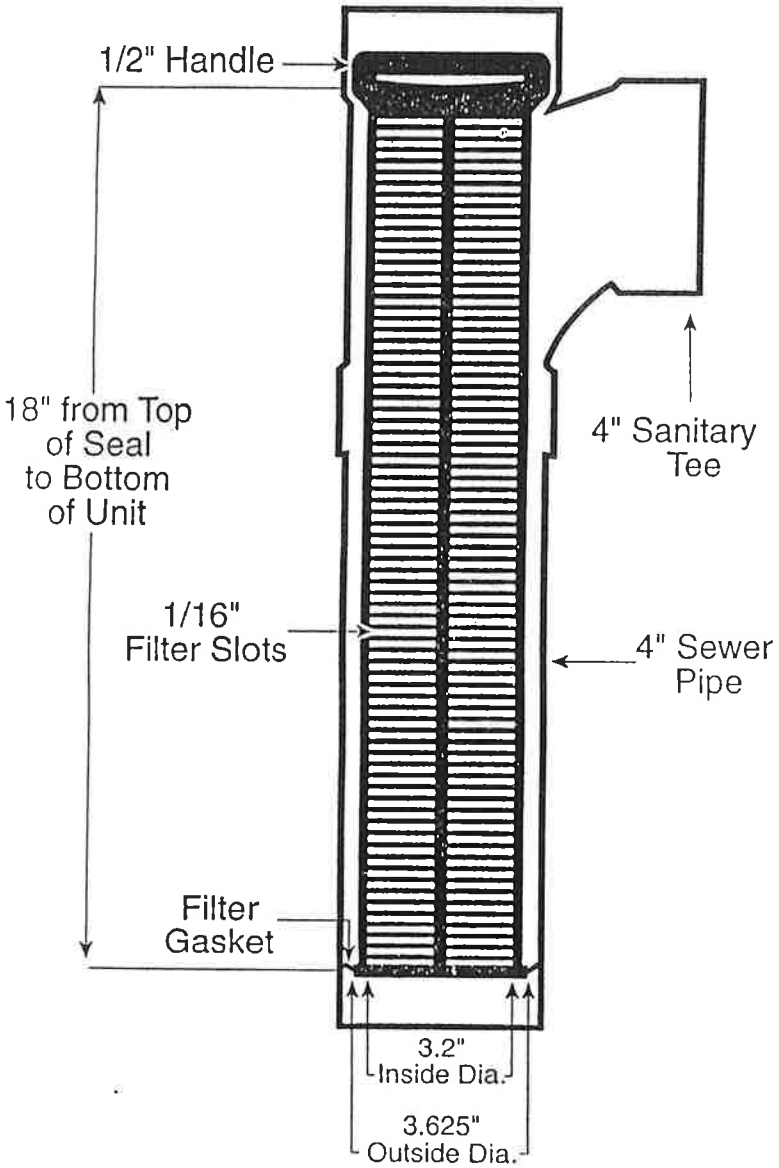


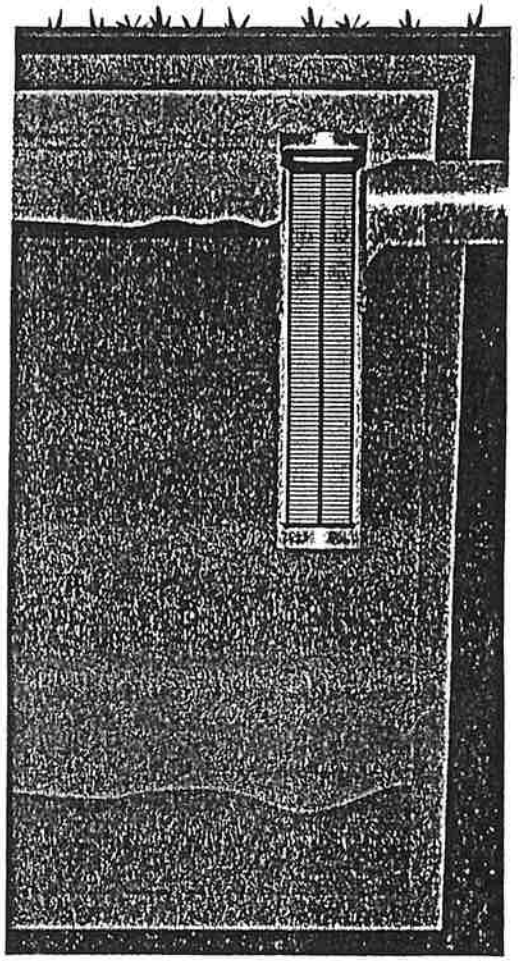
Tim Schoppe
President

Down East Concrete Products, Inc.
RFD #3, Box 1304
Bangor, Maine

Telephone
(207) 848-3043
1-800-540-TANK

Zabel A1800 Residential Septic Tank Effluent Filter Specifications





Typical A1800 Installation

Application: Single family homes not to exceed three bedrooms and two and 1/2 baths in size.

Flow Rate: 800 gpd.

Installation: The A1800 Effluent Filter Cartridge will fit any 4" sanitary tee and sewage pipe used as a septic tank outlet baffle. Extend the sewage pipe at least one inch below the bottom of the filter cartridge gasket.

Service: Grasp filter handle and pull up to remove from Sanitary Tee. Lightly hose off taking care to wash the effluent back into the tank and not on the ground.

Service Frequency: Clean the filter cartridge when the tank is normally inspected and pumped.

Materials: Injection molded PVC.

Lifetime Warranty: Covers the filter cartridge—labor for removal and re-installation is not included.

RECOMMENDED DISTRIBUTION BOX INSTALLATION

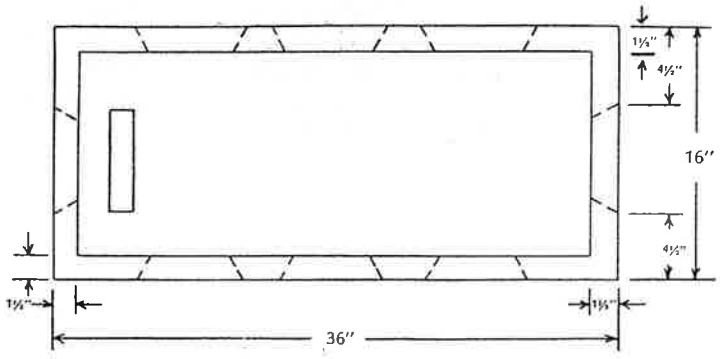
DISTRIBUTION BOX TO BE PLACED UPON ORIGINAL PREVIOUSLY UNDISTRUBED SOIL. SOIL TO BE CUT SO AS TO PROVIDE LEVEL BASE FOR BOTTOM OF DISTRIBUTION BOX, FOUR (4") INCHES MINIMUM OF CLEAN 1 1/2" STONE TO BE PLACED UNDER DISTRIBUTION BOX. IF FILL IS NEEDED TO PROVIDE LEVEL BASE, USE 1 1/2" STONE UNDER DISTRIBUTION BOX.

DISTRIBUTION BOXES SHALL BE WATER-TIGHT AND CONSTRUCTED OF SOUND AND DURABLE MATERIALS THAT WILL RESIST DECAY OR CORROSION BY SULFURIC ACID, FROST DAMAGE, CRACKING OR BUCKLING DUE TO BACK-FILLING OR OTHER ANTICIPATED STRESSES. "D"-BOXES THAT HAVE EFFLUENT PUMPED TO THEM SHOULD BE CONNECTED TO THE PUMP LINE BY A HOLE FASHIONED IN THE BOTTOM OF THE "D"-BOX WHICH IS THEN GROUTED TO BE WATER TIGHT. THIS WILL HELP PREVENT FREEZING.

OUTLET PIPES OF THE DISTRIBUTION BOX SHOULD BE PROVIDED WITH DIAL-TYPE FLOW ADJUSTORS AS SOLD BY ECO-TECH, OR THEIR EQUIVALENT. DISTIBUTION BOX SHOULD BE FLOODED AND FLOW ADJUSTORS REGULATED TO PROVIDE EQUAL DISTRIBUTION. THIS SHOULD BE CHECKED BY THE CONTRACTOR AND THE PLUMBING INSPECTOR PRIOR TO BACK-FILLING TO INSURE EQUAL DISTIBUTION. THE "D"-BOX FLOW SHOULD BE AGAIN INSPECTED BY THE OWNER OR CONTRACTOR IN THE SPRING TO BE SURE THE BOX DIDN'T FROST HEAVE.

FOUR INCHES (4") OF CLOSED-CELL INSULATION PLANKING SHOULD BE PLACED OVER THE TOP OF THE DISTRIBUTION BOX AND TO EXTEND TWO (2') FEET BEYOND THE EDGES OF THE "D"-BOX. A MINIMUM OF TWELVE INCHES (12") OF TOPSOIL IS RECOMMENDED OVER INSULATION AND PIPING.

CONCRETE DISTRIBUTION BOX



TOP

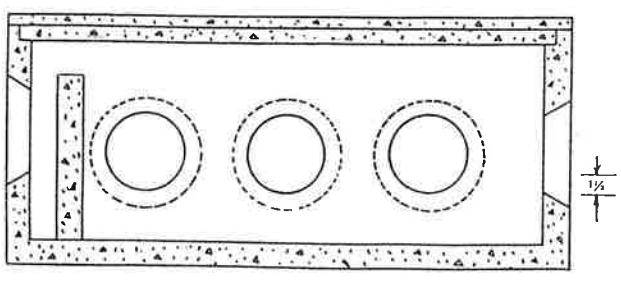
REINFORCED WITH 6x6 10/10 WIRE

ITEM NO. 290
16" x 16" x 36"

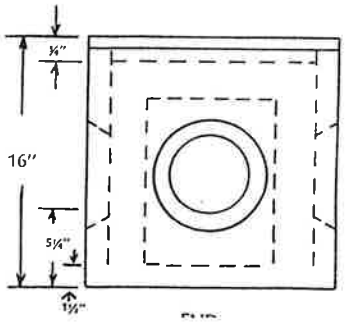
1 Inlet and 7 Outlet Knockout Plugs.

REINFORCED WITH 6x6 10/10 WIRE MESH

Complete with Inlet Baffle to Slow Flow



SIDE



*NOTE: DO NOT WORK SOIL WHEN WET OR FROZEN

GENERAL: THIS DESIGN (HHE-200 FORM) IS INTENDED TO ONLY REPRESENT FACTS PERTINENT TO THE STATE OF MAINE SUBSURFACE WASTEWATER DISPOSAL RULES, PART II, CHAPTER 241, LATEST REVISIONS.

ON SITES WITH FINE SOIL TEXTURES, EXCAVATIONS THAT EXPOSE THE LEACHING INTERFACE OF THE DISPOSAL AREA SHALL NOT BE CARRIED OUT WHEN THE SOIL MOISTURE CONTENT IS ABOVE THE PLASTIC LIMIT. THIS MEANS THAT WHEN A LUMP OF SOIL, TAKEN FROM THE DEPTH OF THE EXCAVATION, CAN BE ROLLED OUT WITH THE FINGERS TO FORM A WIRE OR ROD 1/8th OF AN INCH AND DOES NOT CRUMBLE WHEN HANDLED, THE SOIL MOISTURE CONTENT IS TOO HIGH TO PROCEED WITH THE EXCAVATION. ADDITIONALLY, DISPOSAL AREAS SHOULD NOT BE INSTALLED IN FROZEN GROUND, IF POSSIBLE, OR WHEN AMBIENT AIR TEMPERATURES ARE BELOW FREEZING, ESPECIALLY IF CONSTRUCTION WILL TAKE PLACE OVER SEVERAL DAYS.

NATURAL RESOURCE PROTECTION ACT PERMIT or PERMIT BY RULE - WHEN WORK ASSOCIATED WITH THE INSTALLATION OF A SEPTIC SYSTEM RESULTS IN SOIL DISTURBANCE OR PLACEMENT WITHIN 100 FEET OF CERTAIN WETLANDS OR WATER BODIES, THE APPLICANT MAY BE REQUIRED TO FILE A "PERMIT BY RULE" NOTIFICATION FORM OR WETLANDS ALTERATION APPLICATION FORM WITH THE D.E.P. THIS IS TRUE EVEN IF YOUR SEPTIC SYSTEM REQUIRES A VARIANCE APPROVAL FROM THE LPI/CEO OR STATE DIVISION OF HEALTH ENGINEERING. PLEASE CHECK WITH YOUR LPI/CEO OR A D.E.P. LAND BUREAU STAFF MEMBER.

D.E.P. OFFICES ARE LOCATED IN THE FOLLOWING TOWNS:

SO. PORTLAND - 776-4763	AUGUSTA - 289-2111
PRESQUE ISLE - 764-2040	BANGOR - 941 - 4570

BEFORE CONSTRUCTION BEGINS: THE SYSTEM INSTALLER OR CONTRACTOR SHALL REVIEW THE ELEVATION AND LOCATION OF ALL POINTS GIVEN IN THIS APPLICATION (HHE-200 FORM). IF A DISCREPANCY IS NOTED BETWEEN THE PLANS AND WHAT IS OBSERVED IN THE FIELD, THE DESIGNING SITE EVALUATOR SHALL BE NOTIFIED IMMEDIATELY. THE INSTALLER/CONTRACTOR SHALL ALSO COMPARE ELEVATIONS SHOWN ON THE PLANS WITH THE DISPOSAL AREA CROSS-SECTION AND ANY DISCREPANCY NOTED SHALL BE IMMEDIATELY REPORTED TO THE DESIGNING SITE EVALUATOR.

1. REMOVE VEGETATION AND THE ORGANIC DUFF LAYER FROM GROUND SURFACE UNDER DISPOSAL AREA AND FILL EXTENSION.

2. SCARIFY OR TILL SURFACE UNDER THE DISPOSAL AREA, CHAMBERS (OR INFILTRATORS) AND EXTENSION AREA TO MINIMIZE GLAZING OF ORIGINAL SOIL. RAKE OR SCARIFY BOTTOM AND WALL AREA OF DISPOSAL AREA. IF LARGE HOLES ARE LEFT AS A RESULT OF STUMP REMOVAL, THESE HOLES SHALL BE FILLED WITH SUITABLE FILL MATERIAL. DO NOT WORK SOIL WHEN WET.

3. THE BOTTOM OF THE DISPOSAL AREA OR THE CHAMBERS SHALL BE LEVEL WITH A MAXIMUM GRADE TOLERANCE OF 1 inch PER 100 feet.

EXCAVATION SHALL BE CARRIED OUT IN A MANNER THAT WILL AVOID UNNECESSARY COMPACTION OF THE LEACHING INTERFACE (both sidewalls and bottom area). HEAVY EQUIPMENT SUCH AS BULLDOZERS OR FRONT-END LOADERS SHOULD NOT BE DRIVEN OVER THE EXPOSED LEACHING INTERFACE. EXCAVATION SHOULD BE CARRIED OUT WHEN POSSIBLE BY A BACK-HOE OPERATING FROM OUTSIDE THE PERIMETER OF THE PREVIOUSLY EXCAVATED PORTIONS OF THE DISPOSAL FIELD.

IF ANY PORTION OF THE LEACHING INTERFACE BECOMES SMEARED OR COMPACTED, THAT PORTION SHOULD BE SCARIFIED TO REOPEN SOIL PORES. ROTOTILLING MAY BE NECESSARY TO REACH THE LIMIT OF COMPACTED SOIL DEPTH.

IN THE CASE OF INFILTRATOR CHAMBERS: FILL SIDE WALL AREA AROUND PERIMETER AND BETWEEN ROWS WITH COARSE SHARP SANDY GRAVEL UP TO THE TOP OF SLOTS AND "WALK" IN PLACE TO GIVE PROPER SUPPORT TO SIDES. FILL SHALL BE FREE OF FOREIGN MATERIAL, PLACED IN 8" LIFTS, OR LESS, AND COMPACTED AS PLACED.

4. IF STONE IS INDICATED: USE 12" OF 1.5" DIAMETER STONE, FREE OF FINES, DUST, ASHES OR CLAY, UNLESS OTHERWISE INDICATED.

THE STONE AND/OR CHAMBERS/INFILTRATORS SHALL BE COVERED WITH 4" OF HAY/STRAW OR APPROVED DRAINAGE FABRIC. IF DRAINAGE FABRIC IS USED THE EDGES OF ADJACENT SHEETS SHALL BE OVERLAPPED BY A MINIMUM OF 6".

5. ANY FILL USED SHALL BE FREE OF COBBLES AND FOREIGN MATERIAL, PLACED IN 8" LIFTS, OR LESS, AND COMPACTED BY DRIVING OVER THE AREA IN A CONTROLLED PATTERN USING TRACKED VEHICLES. MECHANICAL VIBRATORS, "SHEEPS FOOT" ROLLERS AND RUBBER TIRE VEHICLES ARE PROHIBITED. FILL SHALL BE COARSE SHARP SANDY GRAVEL.

6. THE FINISHED GRADE OF THE BACKFILL OVER THE DISPOSAL AREA SHALL BE CROWNED FROM THE CENTER OF THE DISPOSAL AREA AT A 3% SLOPE AND EXTENDED 3' TO 5' BEYOND THE EDGE OF THE DISPOSAL AREA. AT THAT POINT THE FILL SHALL BE SLOPED AT A UNIFORM GRADE OF NO GREATER THAN 25% (14°) (4:1) TO THE ORIGINAL GROUND. RAIN RUN-OFF FROM THE HOUSE ROOF AND DRIVEWAY SHALL ALSO BE DIVERTED AROUND AND AWAY FROM THE DISPOSAL AREA. THE PERIMETER OF THE DISPOSAL AREA AND FILL EXTENSION SHALL BE GRADED AND DIVERSION DITCHES INSTALLED TO DIVERT GROUND AND SURFACE WATER AROUND AND AWAY FROM THE DISPOSAL AREA. FINAL GRADING SHALL BE COMPLETED IN SUCH A MANNER THAT SURFACE WATER WILL NOT COLLECT OVER THE DISPOSAL FIELD. SERIAL DESIGNED SYSTEMS SHOULD NOT BE "CROWNED".

7. IMMEDIATELY AFTER COMPLETION OF FINAL GRADING, THE FILL SURFACE SHALL BE MULCHED AND SEEDED, OR SODDED, TO ESTABLISH A GOOD VEGETATIVE COVER TO PREVENT EROSION. THE FINISHED DISPOSAL AREA AND FILL EXTENSIONS SHALL BE SEEDED TO PREVENT EROSION; GRASS, TREFOIL, VETCH, PERENNIAL WILD FLOWERS, OR OTHER HERBACEOUS PERENNIALS MAY BE UTILIZED FOR THE DISPOSAL AREA SURFACES. WOODY SHRUBS ARE UNACCEPTABLE. WOODY SHRUBS IN CONJUNCTION WITH A HARDY PERENNIAL GROUND COVER MAY BE USED ON THE FILL EXTENSIONS ONLY.

8. ANY FILL OR SCARIFIED AREA UNSEEDED FROM SEPTEMBER 15 THROUGH MAY 1 SHOULD BE MULCHED IMMEDIATELY WITH HAY, STRAW, OR OTHER SUITABLE MATERIAL AT THE RATE OF TWO (2) BALES PER 500 SQUARE FEET. SEEDING SHOULD BE DONE AS SOON AS POSSIBLE AFTER MAY 1.

9. THE TREATMENT TANK (SEPTIC TANK) OR HOLDING TANK AND LIFT STATIONS (PUMP CHAMBERS) SHALL BE ADEQUATELY ANCHORED TO PREVENT FLOATATION IN AREAS WHERE THERE IS HIGH GROUND WATER. EXISTING TREATMENT TANKS/HOLDING TANKS OR LIFT STATIONS SHALL BE PUMPED, THE BAFFLES INSPECTED AND TESTED FOR WATER TIGHTNESS TO PREVENT GROUND WATER INFILTRATION. WATERTIGHT RISERS WITH AN INSULATED COVER AT THE GROUND SURFACE FOR EASY ACCESS IS RECOMMENDED.

   THE BACKFILL AROUND SEPTIC TANKS/HOLDING TANKS AND LIFT STATIONS SHALL BE FREE OF LARGE STONES (COBBLES), ROOTS, OR FOREIGN OBJECTS, SHALL BE PLACED IN THIN LAYERS, NOT TO EXCEED 8 INCHES AND SHALL BE THOROUGHLY TAMPERED IN A MANNER THAT WILL NOT PRODUCE UNDUE STRAIN ON THE SEPTIC OR HOLDING TANK. IN THE CASE OF PRE-FABRICATED PLASTIC OR FIBERGLASS TANKS, THE BACK FILL SHALL BE NO THICKER THAN RECOMMENDED BY THE MANUFACTURER.

   DISTRIBUTION BOXES SHALL BE WATER-TIGHT AND CONSTRUCTED OF SOUND AND DURABLE MATERIALS THAT WILL RESIST DECAY OR CORROSION BY SULFURIC ACID, FROST DAMAGE, CRACKING OR BUCKLING DUE TO BACK-FILLING OR OTHER ANTICIPATED STRESSES. "D"-BOXES THAT HAVE EFFLUENT PUMPED TO THEM SHOULD BE CONNECTED TO THE PUMP LINE BY A HOLE FASHIONED IN THE BOTTOM OF THE "D" BOX WHICH IS THEN GROUTED TO BE WATER TIGHT. THIS WILL HELP PREVENT FREEZING.

   PUMP STATIONS SHALL BE EQUIPPED WITH AN AUDIBLE HIGH LEVEL ALARM INSTALLED ON A DIFFERENT ELECTRICAL CIRCUIT FROM THE PUMP; IN A LOCATION THAT WILL BE READILY DETECTED BY THE OWNER/USER. PUMPS SHOULD BE PROPERLY SIZED BY CONTACTING A PUMP SALES DISTRIBUTOR OR PUMP MANUFACTURER FOR RECOMMENDATIONS.

   USE OF A GARBAGE DISPOSAL UNIT IS NOT RECOMMENDED AS THEY CAN SIGNIFICANTLY INCREASE THE AMOUNT OF GREASE AND PARTICULATE MATTER ENTERING YOUR SEPTIC SYSTEM WHICH CAN RESULT IN PREMATURE FAILURE. HOWEVER, IF YOU PLAN TO INSTALL A GARBAGE DISPOSAL IN YOUR HOME ANY-WAY, YOU SHOULD HAVE THE NEXT AVAILABLE SIZE SEPTIC TANK INSTALLED. ALSO, YOU SHOULD HAVE A ZABEL INDUSTRIES INC. MULTI-PURPOSE FILTER, MODEL# A100, OR IT'S EQUIVALENT INSTALLED ON THE OUTLET END OF THE SEPTIC TANK. IT IS YOUR RESPONSIBILITY TO SO INFORM THE CONTRACTOR/ INSTALLER.

10. FROST PROTECTION: HOLDING TANKS, SEPTIC TANKS, PUMPING CHAMBERS AND OTHER COMPONENTS INSTALLED FOR SEASONAL USE STRUCTURES SHALL BE PROTECTED AGAINST SEPARATION BY FROST ACTION. PUMP AND GRAVITY LINES INSTALLED IN EXPOSED AREAS WITH LITTLE OR NO SNOW COVER, AND/OR LESS THAN 4' DEPTH OF FILL COVER, SHALL BE PROTECTED AGAINST FREEZING AND FROST ACTION.

SILT FENCING AND HAY BALE BARRIERS

WHAT ARE THEY?

Silt fencing and hay bale barriers are two types of filter barriers. They are temporary structures which are installed across or at the toe of a slope. They are used to control sheet flow - a very thin film of water. They are not suitable for use in areas of concentrated flows such as ditches or waterways.

WHERE SHOULD THEY BE LOCATED?

Install filter barriers along the downslope side of any construction area to catch the sediment. They can also be used along the perimeter of any sensitive areas -- perennial and intermittent streams, ponds, lakes, or wetlands for example. The total drainage area above a filter barrier should not exceed 1/4 an acre per 100 feet of barrier.

WHERE SHOULDN'T THEY BE LOCATED?

Don't put silt fencing or hay bales across big ditches or across streams! If they are correctly installed, they become small dams. Water cuts around the edges and makes a worse erosion problem! If they are not correctly installed, they flow out and block downstream areas.

HOW TO INSTALL A HAY BALE BARRIER

1. Dig a trench the width of the bales and 4 inches deep.

2. Place the bales in a row with the ends tightly together. The bales will be embedded. Gaps between bales should be chinked with straw to prevent water from escaping from between them.

3. Drive stakes or re-bars through the bales (two per bale). The first stake in each bale should be angled toward the previously laid bale to force the two bales together.

4. Sprinkly loose hay over the area immediately uphill from the barrier. This will increase barrier efficiency.

FILTER BARRIER MAINTENANCE

1. Inspect barriers after each rainfall and repair any damage.

2. Remove sediment deposits once they reach 1/2 the height of the barrier. Dispose of the sediment wisely (in a location far away from sensitive areas on the property).

3. Replace sections of the barrier that decompose or no longer filter properly.

