2006 609

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10 SHS
(207) 287-5672 FAX (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	PORTLAND, GREAT DIAMOND ISLAND
Street or Road	42 SEAL COVE LANE
Subdivision, Lot *	

OWNER/APPLICANT INFORMATION

Name (last, first, MI)	LEE JUDY (Owner Applicant)
Mailing Address of ☐ Owner ☐ Applicant	GLENN RUESSWICK P.O. BOX 250
	KITTERY, ME 03904
Daytime Tel *	439-3399

>> Caution: Permit Required - Attach In Space Below <<

Mar 1 2007

PORTLAND PERMIT # 10105 TOWN COPY

Date Permit Issued: 11/30/06 $ 100 FEE ☐ If Double Fee Charged

Thomas Markley
Local Plumbing Inspector Signature

L.P.I. # 0144

83 EA 19

Municipal Tax Map * 83 Lot * EA 19 Lat. N 43 41' 13" Lon. W 70 11' 46"

Owner or Applicant Statement

I state and acknowledge 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

Judith A Lee
Signature of Owner/Applicant — Date

Caution: Inspections Required

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

Christopher Ott 6/11/07
Local Plumbing Inspector Signature — (1st) Date Approved

Disposal System 6/11 OK to cover

(2nd) Date Approved

PERMIT INFORMATION

TYPE OF APPLICATION

1. ■ First Time System
2. ☐ Replacement System
   Type Replaced: _____
   Year Installed: _____
3. ☐ Expanded System
   a. ☐ Minor Expansion
   b. ☐ Major Expansion
4. ☐ Experimental System
5. ☐ Seasonal Conversion

THIS APPLICATION REQUIRES

1. ■ No Rule Variance
2. ☐ First Time System Variance
   a. ☐ Local Plumbing Inspector Approval
   b. ☐ State & Local Plumbing Inspector Approval
3. Replacement System Variance
   a. ☐ Local Plumbing Inspector Approval
   b. ☐ State & Local Plumbing Inspector Approval
4. ☐ Minimum Lot Size Variance
5. ☐ Seasonal Conversion Approval

DISPOSAL SYSTEM COMPONENTS

1. ■ Complete Non-Engineered System
2. ☐ Primitive System(graywater & alt toilet)
3. ☐ Alternative Toilet, specify: _____
4. ☐ Non-Engineered Treatment Tank (only
5. ☐ Holding Tank, _____ Gallons
6. ☐ Non-Engineered Disposal Field (only)
7. ☐ Separated Laundry System
8. ☐ Complete Engineered System(2000gpd+)
9. ☐ Engineered Treatment Tank (only)
10. ☐ Engineered Disposal Field (only)
11. ☐ Pre-treatment, specify:
12. ☐ Miscellaneous components

SIZE OF PROPERTY

1.2 ACRES +- ☐ sq. ft. ☐ acres

DISPOSAL SYSTEM TO SERVE

1. ■ Single Family Dwelling Unit, No. of Bedrooms: 4
2. ☐ Multiple Family Dwelling, No of Units: _____
3. ☐ Other: _____ SPECIFY

Current Use ☐ Seasonal ☐ Year Round ■ Undeveloped

SHORELAND ZONING

■ Yes ☐ No

TYPE OF WATER SUPPLY

1. ☐ Drilled Well 2. ☐ Dug Well 3. ☐ Private
4. ■ Public 5. ☐ Other:

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

1. ■ Concrete
   a. ■ Regular
   or b. ■ Low Profile
2. ☐ Plastic
3. ☐ Other _____

CAPACITY 1000 gallons

DISPOSAL FIELD TYPE & SIZE

1. ☐ Stone Bed 2. Stone Trench
3. ■ Proprietary Device
   a. ☐ Cluster array c. ■ Linear
   b. ■ Regular d ☐ H-20 loaded
4. ☐ Other:

SIZE 1296 ■ sq. ft. ☐ lin ft.

27 ELJEN IN DRAIN UNITS

GARBAGE DISPOSAL UNIT

1. ■ No 3. ☐ Maybe
2. ☐ Yes >> Specify one below:
   a. ☐ Multi-compartment tank
   b. ☐ _____ tanks in series
   c. ☐ Increase in tank capacity
   d ■ Filter on tank outlet

DESIGN FLOW

360 gallons per day
BASED ON:
1. ■ Table 501.1 (dwelling unit(s))
2. ☐ Table 501.2 (other facilities)
SHOW CALCULATIONS
- for other facilities -

4 BEDROOMS AT 90 GALLONS PER DAY EACH

3. ☐ Section 503.0 (meter readings)
ATTACH WATER-METER DATA

SOIL DATA & DESIGN CLASS

PROFILE	CONDITION	DESIGN
2	A	1

AT Observation Hole * TBA
Depth 16 "
OF MOST LIMITING SOIL FACTOR

DISPOSAL FIELD SIZING

1. ☐ Small - 2.0 sq.ft./gpd
2. ☐ Medium - 2.6 sq.ft./gpd
3. ■ Medium-Large - 3.3 sq.ft./gpd
4. ☐ Large - 4.1 sq.ft./gpd
5. ☐ Extra-Large - 5.0 sq.ft./gpd

EFFLUENT/EJECTOR PUMP

1. ■ Not required
2. ☐ May be required
3. ☐ Required >>Specify only for engineered or experimental systems:

DOSE: Gallons

SITE EVALUATOR STATEMENT

I Certify that on 10/19/06 (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 (10-144A CMR 241).

Albert Frick
Site Evaluator Signature

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SE *

10/23/2006
Date

ALBERT FRICK
Site Evaluator Name Printed

(207) 839-5563
Telephone Number

AFA@MAINERR.COM
E-mail Address

ALBERT FRICK ASSOCIATES - 95A COUNTY ROAD ROAD GORHAM, MAINE 04038 - (207) 839-5563

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator

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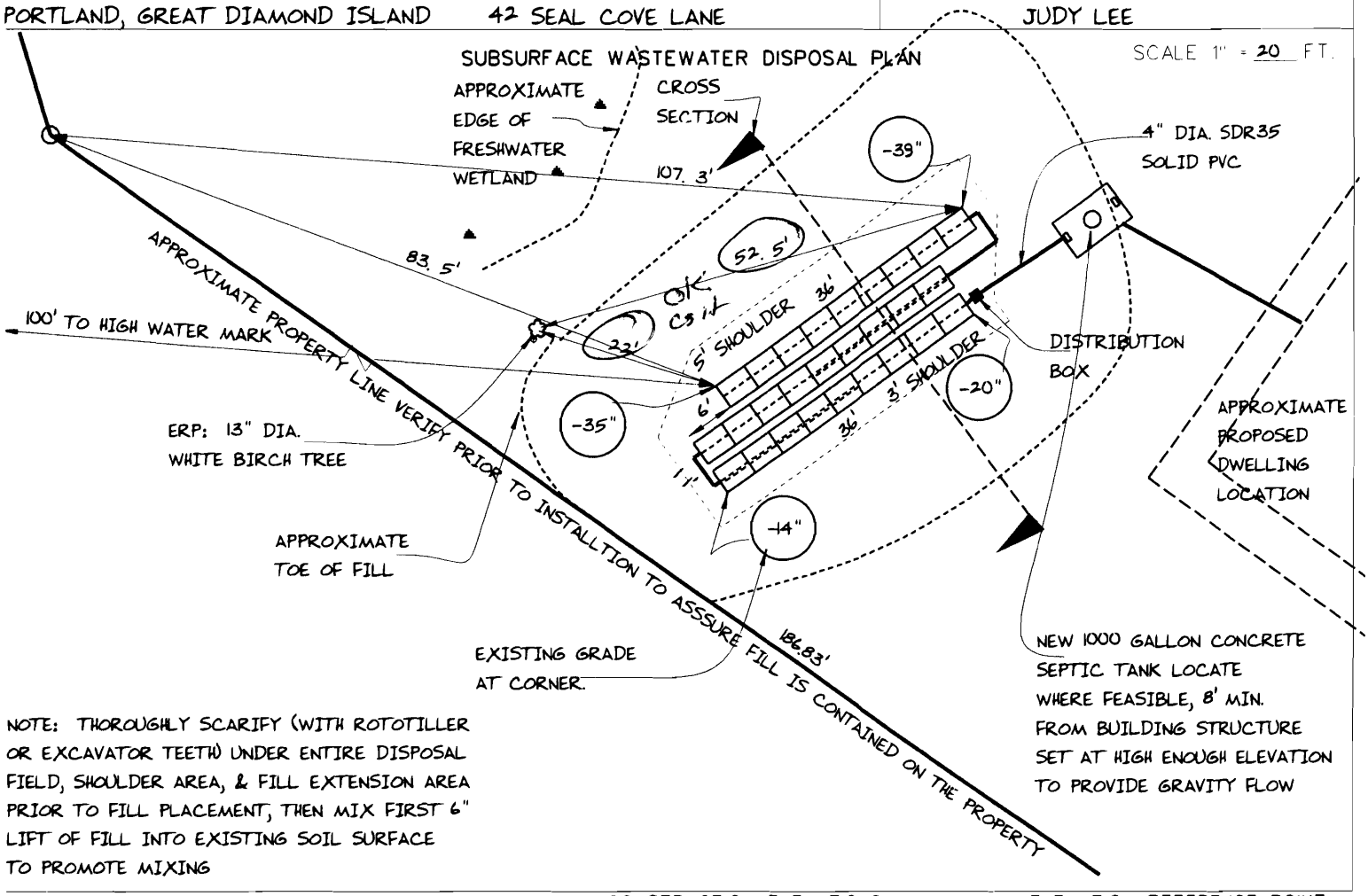
SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.



NOTE: THOROUGHLY SCARIFY (WITH ROTOTILLER OR EXCAVATOR TEETH) UNDER ENTIRE DISPOSAL FIELD, SHOULDER AREA, & FILL EXTENSION AREA PRIOR TO FILL PLACEMENT, THEN MIX FIRST 6" LIFT OF FILL INTO EXISTING SOIL SURFACE TO PROMOTE MIXING

FILL REQUIREMENTS

Depth of Fill (Upslope): 34" - 40"
Depth of Fill (Downslope): 37" - 41"
DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

Finished Grade Elevation
Top of Distribution Pipe or Proprietary Device
Bottom of Disposal Area

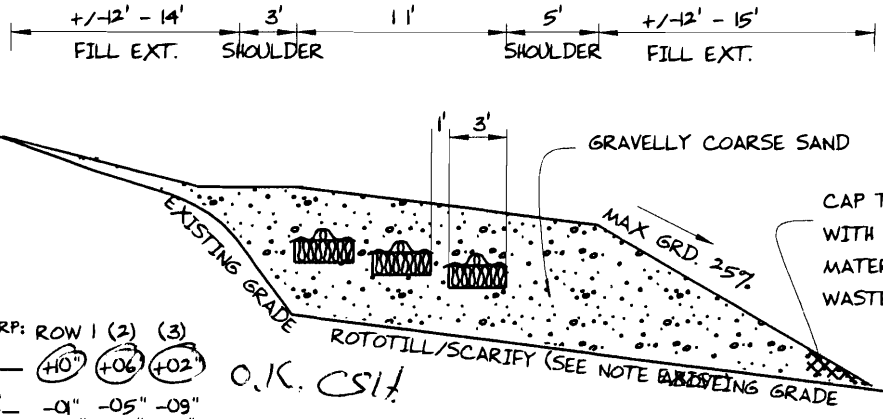
SEE DETAIL BELOW

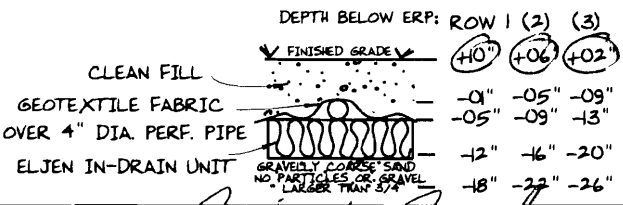
ELEVATION REFERENCE POINT

Location & Description: 13" DIA. WHITE BIRCH NAIL 62" ABOVE BASE OF TREE
Reference Elevation is: 0.0" or _____

DISPOSAL AREA CROSS SECTION

SCALE:
VERTICAL: 1" = 5 FT
HORIZONTAL: 1" = 10 FT





O.K. CS1.1

Albert Frick
Site Evaluator Signature

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SE *

10/23/2006
Date

ALBERT FRICK ASSOCIATES – 95A COUNTY ROAD ROAD GORHAM, MAINE 04038 – (207) 839-5563

6/11/07 O.K. to cover

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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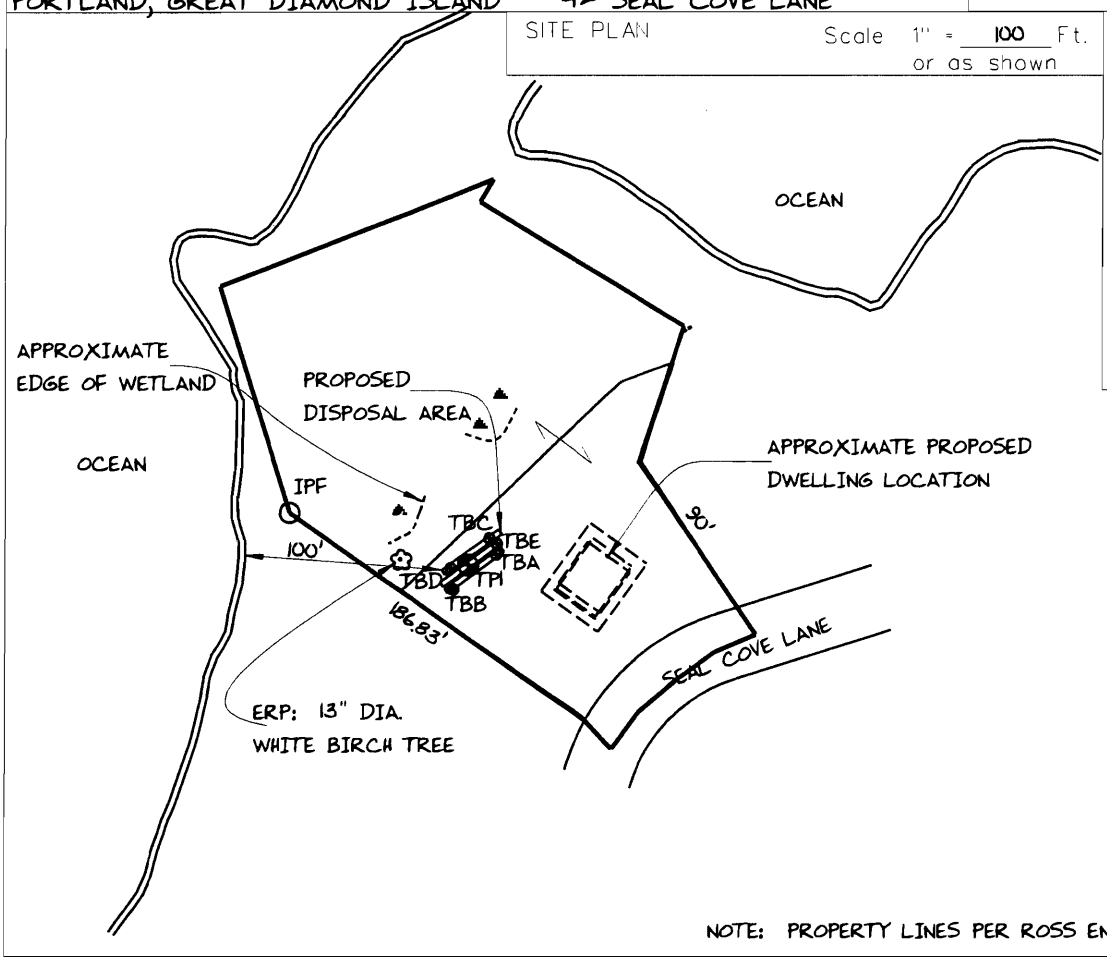
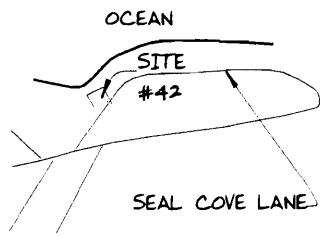
Town, City, Plantation	Street, Road Subdivision	Owner's Name
PORTLAND, GREAT DIAMOND ISLAND	42 SEAL COVE LANE	JUDY LEE

SITE PLAN — Scale 1" = 100 Ft. or as shown



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



NOTE: PROPERTY LINES PER ROSS ENGINEERING SITEPLAN

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

Observation Hole TP 1 ■ Test Pit ☐ Boring
_____" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0			BROWN	
10	GRAVELLY SANDY LOAM	FRIABLE	YELLOW BROWN	
20				FEW, FAINT
30		SOMEWHAT FIRM	OLIVE BROWN	
40		FIRM		
50				

Soil Classification		Slope	Limiting Factor	
3	C		23"	■ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth
Profile	Condition			

Observation Hole _____ ☐ Test Pit ☐ Boring
_____" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0				
10				
20	TBA = 16" TO REFUSAL TBB = 32" TO REFUSAL TBC = 28" TO REFUSAL TBD = 32"+ TO REFUSAL TBE = 32" TO REFUSAL			
30				
40				
50				

Soil Classification		Slope	Limiting Factor	
				☐ Ground Water ☐ Restrictive Layer ☐ Bedrock ☐ Pit Depth
Profile	Condition			

Albert Frick

Site Evaluator Signature

163
SE #

10/23/2006
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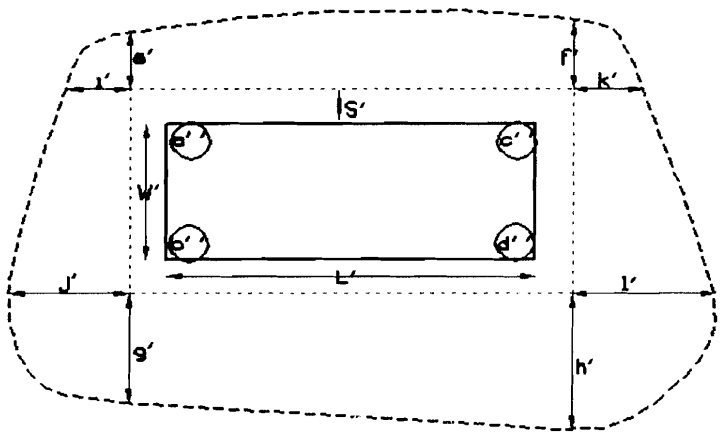
Fill Estimation Worksheet

Albert Frick Associates Inc.
95A County Road
Gorham, Me 04038
839-5563 FAX - 839-5564
E-Mail - Albertfrick@worldnet.att.net

Town: Diamond Island
Project owner/applicant: Lee
Address:

This worksheet is being provided as a complimentary tool to assist in estimating the **approximate** amount of fill required to construct the proposed system. This worksheet does not substitute for a personal visit to the site for your own estimate. These calculations are intended to serve as a check to your work. Site features beyond the model (terrain) can vary to effect model projections.



Length (L)	**36 feet**
Width (W)	**11 feet**
Shoulder (S)	**5 feet**
Depth of fill:	
upper left (a)	**34 inches**
upper right (c)	**40 inches**
lower left {b)	**36 inches**
lower right (d)	**41 inches**
Fill Extension:	
left up (e)	**12 feet**
right up (f)	**14 feet**
left down (g)	**12 feet**
right down (h)	**15 feet**
upper left (i)	**12 feet**
lower left (j)	**13 feet**
upper right (k)	**12 feet**
lower right (l)	**15 feet**
Cost of fill per yard= $	

Body	**113 cubic yards**
Fill Down	**37 cubic yards**
Fill Up	**35 cubic yards**
Fill left	**15 cubic yards**
Fill right	**18 cubic yards**
Fill upleft	**4 cubic yards**
Fill upright	**6 cubic yards**
Fill dwnleft	**5 cubic yards**
Fill dwnright	**8 cubic yards**

SubTotal=	**241 cubic yards**
Shrinkage %=	**15 %**
Total Backfill	**277 cubic yards**

Adjusted cost of Total Backfill= **$ -**

Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators
95A County Road Gorham, Maine 04038
(207) 839-5563

PORTLAND, GREAT DIAMOND ISLAND	42 SEAL COVE LANE	JUDY LEE
TOWN	LOCATION	APPLICANT'S NAME

1) The Plumbing and Subsurface Wastewater Disposal Rules adopted by the State of Maine, Department of Human Services pursuant to 22 M.R.S.A. § 42 (the "Rules") are incorporated herein by reference and made a part of this application and shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system Installer should contact Albert Frick Associates, Inc. 839-5563, if there are any questions concerning materials, procedures or designs. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the Rules and with all state and municipal laws and ordinances pertaining to the permitting, inspection and construction of subsurface wastewater disposal systems.

2) This application is intended to represent facts pertinent to the Rules only. It shall be the responsibility of the owner/applicant, system Installer and/or building contractor to determine compliance with and to obtain permits under all applicable local, state and/or federal laws and regulations (including, without limitation, Natural Resources Protection Act, wetland regulations, zoning ordinances, subdivision regulations, Site Location of Development Act and minimum lot size laws) before installing this system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations. Prior to the commencement of construction/installation, the local plumbing inspector or Code Enforcement Officer shall inform the owner/applicant and Albert Frick Associates, Inc of any local ordinances which are more restrictive than the Rules in order that the design may be amended. All designs are subject to review by local, state and/or federal authorities. Albert Frick Associates, Inc.'s liability shall be limited to revisions required by regulatory agencies pursuant to laws or regulations in effect at the time of preparation of this application.

3) All information shown on this application relating to property lines, well locations, subsurface structures and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based solely upon information provided by the owner/applicant and has been relied upon by Albert Frick Associates, Inc. in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties but not readily visible above grade should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.

4) Installation of a garbage (grinder) disposal is not recommended. If one is installed, an additional 1000 gallon septic tank or a septic tank filter shall be connected in series to the proposed septic tank.

5) The system user shall avoid introducing kitchen grease or fats into this system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment units) and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life.

6) The septic tank should be pumped within two years of installation and subsequently as recommended by the pump service, but in no event should the septic tank be pumped less often than every three years. All septic tank, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration.

ATTACHMENT TO SUBSURFACE WASTEWATER DISPOSAL APPLICATION

PORTLAND, GREAT DIAMOND ISLAND	42 SEAL COVE LANE	JUDY LEE
TOWN	LOCATION	APPLICANT'S NAME

7) The actual water flow or number of bedrooms shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed. If the system is supplied by public water or a private service with a water meter, the water consumption per period should be divided by the number of days to calculate the average daily water consumption (water usage (cu. ft.) x 7.48 cu. ft. (gallons per cu. ft.) divided by the # of days in period).

8) The general minimum setbacks between a well and septic system serving a single family residence is 100-300 feet, unless the local municipality has a more stringent requirement. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9) When a gravity system is proposed: BEFORE CONSTRUCTION/INSTALLATION BEGINS, the system installer or building contractor shall review the elevations of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum slope requirement. In gravity systems, the invert of the septic tank(s) outlet(s) shall be at least 4 inches above the invert of the distribution box outlet at the disposal area. When an effluent pump is required, provisions shall be made to make certain that surface ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and lid at or above grade. An alarm device warning of a pump failure shall be installed. Also, when pumping is required of a chamber system, install a "T" connection in the distribution box and place 3 inches of stone or a splash plate in the first chamber. Insulate gravity pipes, pump lines and the distribution box as necessary to prevent freezing.

10) On all systems, remove the vegetation, organic duff and old fill material from under the disposal area and any fill extension. On sites where the proposed system is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling to a depth of at least 8 inches over the entire disposal and fill extension area to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper that 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or differential setting). Do not use wheeled equipment on the scarified soil area until after 12 inches of fill is in place. Keep equipment off proprietary devices. Divert the surface water away from the disposal area by ditching or shallow landscape swales.

11) Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more that 5% fines (silt and clay).

12) Do not install systems on loamy, silty, or clayey soils during wet periods since soil smearing/glazing may seal off the soil interface.

13) Seed all filled and disturbed surfaces with perennial grass seed, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover system, Woody trees or shrubs are not permitted on the disposal area or fill extensions.

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