

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Section 10 SHS
125 - 28 - 5672 FAX: 207 - 287 - 4112

PROPERTY LOCATION		>> Caution: Permit Required - Attach In Space Below <<	
City, Town or Plantation	PORTLAND, GREAT DIAMOND ISLAND	PORTLAND	PERMIT # 9996 TOWN COPY
Street or Road	46 WILLIS STREET	Date Permit Issued: 8/24/06	\$ 1100 <input type="checkbox"/> If Double Fee Charged
Subdivision, Lot #		Local Plumbing Inspector Signature: <i>Jeannie Bourke</i>	L.P.I. # 07312
OWNER/APPLICANT INFORMATION		83362-20066018	
Name (Last, First, MI)	RUDNICKI PAUL	Municipal Tax Map	83 B Lot 2
Mailing Address	42 DAFFODIL HILL LANE ROCHESTER, NH 03868	Lot	43 40' 52" N
Daytime Tel #	603-332-1472	Lon	70 12' 9" W

<p>Owner or Applicant Statement</p> <p>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.</p> <p>Signature of Owner/Applicant: _____ Date: _____</p>	<p>Caution: Inspections Required</p> <p>I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.</p> <p>Local Plumbing Inspector Signature: _____ (1st) Date Approved: _____</p> <p>_____ (2nd) Date Approved: _____</p>
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PERMIT INFORMATION

<p>TYPE OF APPLICATION</p> <p>1. <input type="checkbox"/> First Time System</p> <p>2. <input checked="" type="checkbox"/> Replacement System Year Replaced: <u>SINK DRAIN</u> Year Installed: <u>PRE-1974</u></p> <p>3. <input type="checkbox"/> Expanded System a. <input type="checkbox"/> Minor Expansion b. <input type="checkbox"/> Major Expansion</p> <p>4. <input type="checkbox"/> Experimental System</p> <p>5. <input type="checkbox"/> Seasonal Conversion</p>	<p>THIS APPLICATION REQUIRES</p> <p>1. <input checked="" type="checkbox"/> No Rule Variance</p> <p>2. <input type="checkbox"/> First Time System Variance a. <input type="checkbox"/> Local Plumbing Inspector Approval b. <input type="checkbox"/> State & Local Plumbing Inspector Approval</p> <p>3. <input type="checkbox"/> Replacement System Variance a. <input type="checkbox"/> Local Plumbing Inspector Approval b. <input type="checkbox"/> State & Local Plumbing Inspector Approval</p> <p>4. <input type="checkbox"/> Minimum Lot Size Variance</p> <p>5. <input type="checkbox"/> Seasonal Conversion Approval</p>	<p>DISPOSAL SYSTEM COMPONENTS</p> <p>1. <input checked="" type="checkbox"/> Complete Non-Engineered System</p> <p>2. <input type="checkbox"/> Primitive System (graywater & alt toilet)</p> <p>3. <input type="checkbox"/> Alternative Toilet specify _____</p> <p>4. <input type="checkbox"/> Non-Engineered Treatment Tank (only)</p> <p>5. <input type="checkbox"/> Holding Tank, _____ Gallons</p> <p>6. <input type="checkbox"/> Non-Engineered Disposal Field (only)</p> <p>7. <input type="checkbox"/> Separated Laundry System</p> <p>8. <input type="checkbox"/> Complete Engineered System (2000 gpd+)</p> <p>9. <input type="checkbox"/> Engineered Treatment Tank (only)</p> <p>10. <input type="checkbox"/> Engineered Disposal Field (only)</p> <p>11. <input type="checkbox"/> Pre-treatment, specify _____</p> <p>12. <input type="checkbox"/> Miscellaneous components</p>
<p>SIZE OF PROPERTY</p> <p>12,637 <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> acres</p>	<p>DISPOSAL SYSTEM TO SERVE</p> <p>1. <input checked="" type="checkbox"/> Single Family Dwelling Unit, No. of Bedrooms <u>3</u></p> <p>2. <input type="checkbox"/> Multiple Family Dwelling, No. of Units _____</p> <p>3. <input type="checkbox"/> Other _____</p> <p style="text-align: center;">SPECIFY</p> <p>Current Use <input checked="" type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input type="checkbox"/> Undeveloped</p>	<p>TYPE OF WATER SUPPLY</p> <p>1. <input type="checkbox"/> Drilled Well 2. <input type="checkbox"/> Dug Well 3. <input type="checkbox"/> Private</p> <p>4. <input checked="" type="checkbox"/> Public 5. <input type="checkbox"/> Other <u>SEASONAL</u></p>
<p>SHORELAND ZONING</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>		

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

<p>TREATMENT TANK</p> <p>1. <input type="checkbox"/> Concrete a. <input type="checkbox"/> Regular b. <input type="checkbox"/> Low Profile</p> <p>2. <input checked="" type="checkbox"/> Plastic</p> <p>3. <input type="checkbox"/> Other _____</p> <p>CAPACITY <u>1000</u> gallons</p>	<p>DISPOSAL FIELD TYPE & SIZE</p> <p>1. <input type="checkbox"/> Stone Bed 2. <input type="checkbox"/> Stone Trench</p> <p>3. <input checked="" type="checkbox"/> Proprietary Device a. <input type="checkbox"/> Cluster array c. <input checked="" type="checkbox"/> Linear b. <input checked="" type="checkbox"/> Regular d. <input type="checkbox"/> H-20 loaded</p> <p>4. <input type="checkbox"/> Other _____</p> <p>SIZE <u>1008</u> <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft.</p> <p><u>24 ELJEN IN-DRAIN UNITS</u></p>	<p>GARBAGE DISPOSAL UNIT</p> <p>1. <input checked="" type="checkbox"/> No 3. <input type="checkbox"/> Maybe</p> <p>2. <input type="checkbox"/> Yes >> Specify one below: a. <input type="checkbox"/> Multi-compartment tank b. <input type="checkbox"/> _____ tanks in series c. <input type="checkbox"/> increase in tank capacity d. <input type="checkbox"/> Filter on tank outlet</p>	<p>DESIGN FLOW</p> <p><u>270</u> gallons per day BASED ON: 1. <input checked="" type="checkbox"/> Table 501.1 (dwelling unit(s)) 2. <input type="checkbox"/> Table 501.2 (other facilities)</p> <p>SHOW CALCULATIONS - for other facilities -</p>						
<p>SOIL DATA & DESIGN CLASS</p> <table border="1"> <tr> <th>PROFILE</th> <th>CONDITION</th> <th>DESIGN</th> </tr> <tr> <td><u>3</u></td> <td><u>C</u></td> <td><u>1</u></td> </tr> </table> <p>At Observation Hole - <u>TP 1</u> Depth <u>30</u> " OF MOST LIMITING SOIL FACTOR</p>	PROFILE	CONDITION	DESIGN	<u>3</u>	<u>C</u>	<u>1</u>	<p>DISPOSAL FIELD SIZING</p> <p>1. <input type="checkbox"/> Small - 2.0 sq ft/gpd</p> <p>2. <input type="checkbox"/> Medium - 2.6 sq ft/gpd</p> <p>3. <input checked="" type="checkbox"/> Medium-Large - 3.3 sq ft/gpd</p> <p>4. <input type="checkbox"/> Large - 4.3 sq ft/gpd</p> <p>5. <input type="checkbox"/> Extra-Large - 5.0 sq ft/gpd</p>	<p>EFFLUENT/EJECTOR PUMP</p> <p>1. <input checked="" type="checkbox"/> Not required</p> <p>2. <input type="checkbox"/> May be required</p> <p>3. <input type="checkbox"/> Required >> Specify only for engineered or experimental systems</p> <p>DOSE: _____ Gallons</p>	<p>3 BEDROOMS AT 90 GALLONS PER DAY EACH = 270 GPD</p> <p>3. <input type="checkbox"/> Section 503.0 _____ readings ATTACH WATER TEST DATA</p>
PROFILE	CONDITION	DESIGN							
<u>3</u>	<u>C</u>	<u>1</u>							

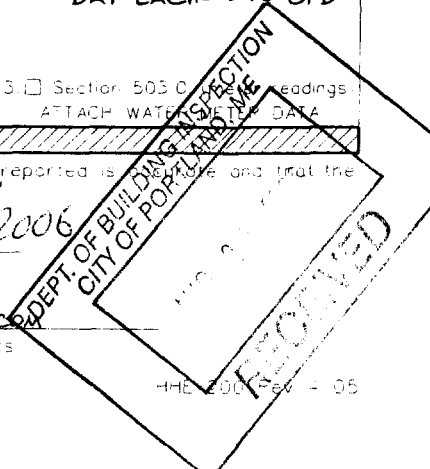
SITE EVALUATOR STATEMENT

I identify and/or 6/19/06 date, 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 (0-144A C.M.R. 241).

Site Evaluator Signature: *Albert Frick* SE # 163 Date: 7/10/2006

Albert Frick (207) 839-5563 E-mail Address: AFA@MAINE.RR.COM

Site Evaluator Name: Printed
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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Maine Department of Human Services
 Division of Health Engineering, Station 10, SHS
 (207) 287-5672 Fax: (207) 287-4172

Town, City, Plantation
PORTLAND, GREAT DIAMOND ISLAND

Street, Road, Subdivision
96 WILLIS STREET

Owner's Name
PAUL RUDNICKI

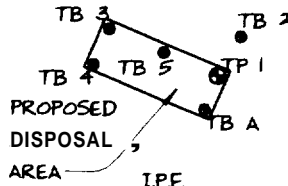
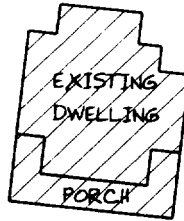
SITE PLAN

Scale: **1" = 40'**
 or as shown

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

CRESCENT AVENUE

103.63'



NEIGHBORING DWELLING

GRANITE MONUMENT

ERP

WILLIS STREET

110.76'

109.18'

NOTE: PROPERTY INFORMATION APPROXIMATED PER TOWN TAX MAP. VERIFY PROPERTY LINES IN FIELD PRIOR TO INSTALLATION TO ASSURE PROPER SETBACKS.

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			DARK BROWN	
10	SANDY LOAM	FRIABLE		
20			DARK YELLOWISH BROWN	
30	SANDY LOAM TO LOAMY SAND	FIRM	LIGHT OLIVE BROWN	FEW FAINT
40				
50				

Soil Classification: **3 C**
 Profile: **3** Condition: **C**
 Slope: **30°**
 Limiting Factor: **30"**
 Ground Water
 Restrictive Layer
 Bedrock
 Pit Depth

Observation Hole TB 2-5, A Test Pit Boring
 Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0				
10	TB 2 = 30" TO REFUSAL			
20	TB 3 = 30" TO REFUSAL			
30	TB 4 = 36" TO REFUSAL			
40	TB 5 = 40" + TO REFUSAL			
50	TB A = 32" TO REFUSAL			

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

Albert Frick
 Site Evaluator Signature

163
 SE

7/10/2006
 Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering Station 10 SHS
120 - 25 - 58 - 2 FAX: 120 - 26 - 4172

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

PORTLAND, GREAT DIAMOND ISLAND

96 WILLIS STREET

PAUL RUDNICKI

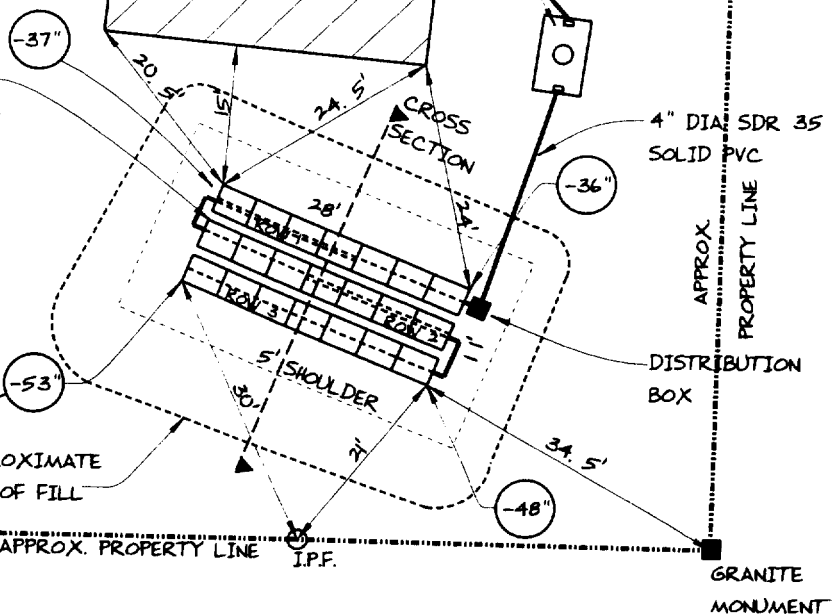
NOTE: THOROUGHLY SCARIFY (WITH ROTOTILLER OR EXCAVATOR TEETH) UNDER ENTIRE DISPOSAL FIELD, SHOULDER AREA, & FILL EXTENSION AREA PRIOR TO FILL PLACEMENT, THEN MIX FIRST 6" LIFT OF FILL INTO EXISTING SOIL SURFACE TO PROMOTE MIXING

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.

NEW 1000 GALLON CONCRETE SEPTIC TANK LOCATE WHERE FEASIBLE, 8' MIN. FROM BUILDING STRUCTURE SET AT HIGH ENOUGH ELEVATION TO PROVIDE GRAVITY FLOW

PROPOSED DISPOSAL AREA (3 ROWS OF 7 ELJEN IN-DRAIN UNITS)



EXISTING GRADE AT CORNER

APPROXIMATE TOE OF FILL

APPROX. PROPERTY LINE

NEIGHBORING DWELLING

ERP

GRANITE MONUMENT

FILL REQUIREMENTS

Depth of Fill (Upslope) : 11" - 12"
Depth of Fill (Downslope) : 13" - 18"
DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

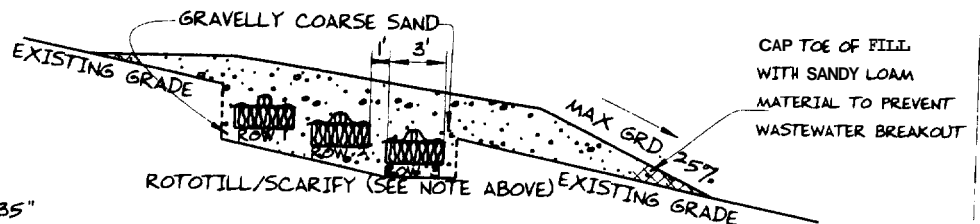
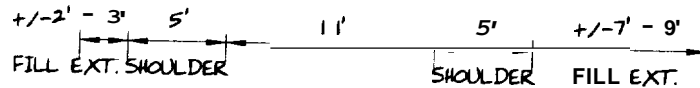
Finished Grade Elevation
Top of Proprietary Device
Bottom of Disposal Area

ELEVATION REFERENCE POINT

SEE DETAIL BELOW
Location & Description BOTTOM OF WHITE WINDOW FRAME ON NEIGHBORING DWELLING
Reference Elevation is: 0.0" or -----

DISPOSAL AREA CROSS SECTION

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



PROVIDE DOUBLE PIPES ON ROWS 1 & 2 PER MANUFACTURER'S SPECIFICATIONS)

	DEPTH BELOW ERP
CLEAN FILL	-25" -30" -35"
GEOTEXTILE FABRIC	-37" -42" -47"
OVER 4" DIA. PERF. PIPE	-41" -46" -51"
ELJEN IN-DRAIN UNIT	-48" -53" -58"
GRAVELLY COARSE SAND	-51" -59" -64"

Albert Frick
Site Evaluator Signature

163
SE *

1/10/2000
Date



Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators
 95A County Road Gorham, Maine 04058
 (207) 859-5565

PORTLAND, GREAT DIAMOND ISLAND

96 WILLIS STREET

PAUL RUDNICKI

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 law 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,

PORTLAND, GREAT DIAMOND ISLAND	96 WILLIS STREET	PAUL RUDNICKI
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 than 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 than 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.



Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators

95A County Road Gorham, Maine 04058
(207) 839-5565

Fill Estimation Worksheet

Albert Frick Associates Inc.

95A County Road

Gorham, Me 04038

839-5563 FAX - 839-5564

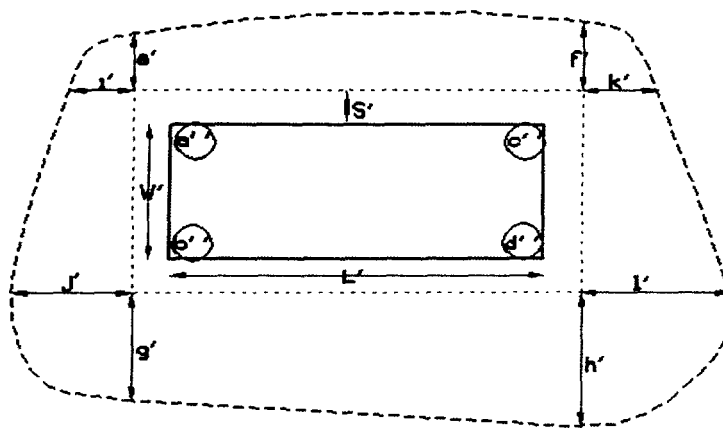
E-Mail - Albertfrick@worldnet.att.net

Town: Portland (Great Dia. Isl.)

Project owner/applicant: Paul Rudnicki

Address: *96 WILLIS STREET*
Portland (Great Dia. Isl.)

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)	28 feet
Width (W)	11 feet
Shoulder (S)	5 feet
<i>Depth of fill:</i>	
upper left (a)	12 inches
upper right (c)	11 inches
lower left (b)	18 inches
lower right (d)	13 inches
<i>Fill Extension:</i>	
left up (e)	3 feet
right up (g)	2 feet
left down (g)	9 feet
right down (h)	7 feet
upper left (i)	3 feet
lower left (j)	9 feet
upper right (k)	2 feet
lower right (l)	7 feet
Cost of fill per yard= \$	

Body	34 cubic yards
Fill Down	8 cubic yards
Fill Up	2 cubic yards
Fill left	3 cubic yards
Fill right	2 cubic yards
Fill upleft	1 cubic yards
Fill upright	1 cubic yards
Fill downleft	2 cubic yards
Fill downright	1 cubic yards

SubTotal=	54 cubic yards
Shrinkage %=	15 %
Total Backfill	62 cubic yards

Adjusted cost of Total Backfill= \$ -