

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT

This is to certify that JOHN A ILMACLEOD

Located At 539 ISLAND AVE

Job ID: 2011-11-2799-SUBSRF

CBL: 090-R-003-001

has permission to: Install a Replacement w/ Non-engineered sub-surface system
provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

11/30/2011

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

*OK to close +
SCM
ALM*

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Required Inspections:

1. Septic field and extension inspection for bottom preparation/ scarification to verify removal of vegetation, established transitional horizon and erosion and sedimentation control measures.
2. Backfill inspection of septic field for approved materials, stabilization, slopes and extensions.
3. Exposed septic field installation and tank location inspection to check elevations, dimensions, piping, plumbing station and system design prior to covering.

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development
Penny St. Louis

Job ID: 2011-11-2799-SUBSRF

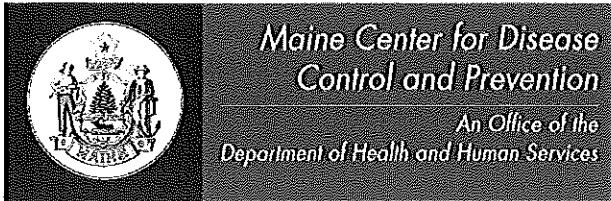
Located At: 539 ISLAND AVE

CBL: 090- R-003-001

Conditions of Approval:

Building

1. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
2. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm, HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.



Department of Health and Human Services
 Maine Center for Disease Control and Prevention
 286 Water Street
 # 11 State House Station
 Augusta, Maine 04333-0011
 Tel: (207) 287-5672
 Fax: (207) 287-4172; TTY: 1-800-606-0215

SUBSURFACE WASTEWATER DISPOSAL SYSTEM VARIANCE REQUEST

This form must accompany an application (HHE-200 Form) for any subsurface wastewater disposal system which requires a variance to provisions of the Subsurface Wastewater Disposal Rules. The Local Plumbing Inspector must not issue a permit for the installation of a subsurface wastewater disposal system requiring a variance from the Department of Health and Human Services until approval has been received from the Department.

GENERAL INFORMATION		Town of <u>Portland, Peaks Island</u>
Property Owner's Name: <u>John MacLeod</u>	Tel. No.: <u>603-969-1471</u>	
System's Location: <u>539 Island Ave</u>		
Property Owner's Address: <u>84 Boxwood Lane, Dover, NH</u>	Zip Code <u>03820</u>	
e-mail address: <u>jamacleod@comcast.net</u>		

The subsurface wastewater disposal system design for the subject property requires a replacement system variance first time system variance to the Subsurface Wastewater Disposal Rules. This variance requires local approval local and state approval.

SPECIFIC VARIANCE REQUESTED (To be filled in by Site Evaluator. Use additional sheets if needed.)	SECTION OF RULE
1. <u>see table 8a attached</u>	_____
2. _____	_____
3. _____	_____

SITE EVALUATOR

When a property is found to be unsuitable for subsurface wastewater disposal by a licensed Site Evaluator, the Evaluator shall so inform the property owner. If the property owner, after exploring all other alternatives, wishes to request a variance to the Rules, and the Evaluator in his professional opinion feels the variance request is justified and the site limitations can be overcome, he shall document the soil and site conditions on the Application. The Evaluator shall list the specific variances necessary plus describe below the proposed system design and function. The Evaluator shall further describe how the specific site limitations are to be overcome, and provide any other supporting documentation as required prior to consideration by the Department. Attach a separate sheet if necessary.

I, ALBERT FRICK, S.E., certify that a variance to the Rules is necessary since a system cannot be installed which will completely satisfy all the Rule requirements. In my judgment, the proposed system design on the attached Application is the best alternative available; enhances the potential of the site for subsurface wastewater disposal; and that the system should function properly.

Albert Frick
SIGNATURE OF SITE EVALUATOR

10/17/2011
DATE

PROPERTY OWNER

I, John A. MacLeod, II, am the owner agent for the owner of the subject property. I understand that the installation on the Application is not in total compliance with the Rules. Should the proposed system malfunction, I release all concerned provided they have performed their duties in a reasonable and proper manner, and I will promptly notify the Local Plumbing Inspector and make any corrections required by the Rules. By signing the variance request form, I acknowledge permission for representatives of the Department to enter onto the property to perform such duties as may be necessary to evaluate the variance request.

John A. MacLeod, II
SIGNATURE OF OWNER

SIGNATURE OF OWNER
 AGENT FOR THE OWNER

10/30/11
DATE

11-29-11

LOCAL PLUMBING INSPECTOR - Approval at local level

The local plumbing inspector shall review all First Time System Variance requests prior to rendering a decision.

I, Nicholas L Adams, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system (does does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I (do do not) approve the requested variance. I will will not issue a permit for the system's installation as proposed by the application.

NLA #1112
LPI Signature

11-30-11
Date

LOCAL PLUMBING INSPECTOR - Referral to the Department

The local plumbing inspector shall review all First Time System Variance requests prior to forwarding to the Division of Environmental Health.

I, _____, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system (does does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I (do do not) recommend the issuance of a permit for the system's installation as proposed by the application.

LPI Signature

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

- Notes: 1. Variances for soil conditions may be approved at the local level as long as the total point assessment is at least the minimum allowed. (See Section 7.B.4 of the Subsurface Wastewater Disposal Rules for Municipal Review.)
2. Variances for other than soil conditions or soil conditions beyond the limit of the LPI's authority are to be submitted to the Department for review. (See Section 7.B.3 for Department Review.) The LPI's signature is required on these variance requests prior to sending them to the Department.

SOIL, SITE AND ENGINEERING FACTORS FOR FIRST TIME SYSTEM VARIANCE ASSESSMENT WITH LIMITING SOIL DRAINAGE CONDITIONS (SEE TABLES 7C THROUGH 7M).

	CHARACTERISTIC	POINT ASSESSMENT
Soil Profile		
Depth to Groundwater/Restrictive Layer		
Terrain		
Size of Property		
Waterbody Setback		
Water Supply		
Type of Development		
Disposal Area Adjustment		
Vertical Separation Distance		
Additional Treatment		
TOTAL POINT ASSESSMENT:		

Minimum Points (Check One): Outside Shoreland Zone-50 Inside Shoreland Zone-65 Subdivision-65

REPLACEMENT SYSTEM VARIANCE REQUEST ATTACHMENT

Table 8A

Setback Distances for Replacement System, Limits of LPI Authority

VARIANCE CATEGORY	LIMIT OF LPI'S APPROVAL AUTHORITY						VARIANCE REQUESTED TO:	
	Disposal Fields (total design flow)			Septic Tanks and Holding Tanks (total design flow)			Disposal Fields	Septic Tanks
	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	To	To
SOILS								
Soil Profile	Ground Water Table						inches	
Soil Condition	Restrictive Layer						inches	
from HHE-200	Bedrock						inches	
Site Features vs. disposal system components of various sizes	Disposal Fields (total design flow)			Septic Tanks and Holding Tanks (total design flow)			Disposal Fields	Septic Tanks
	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	To	To
Wells with water usage of 2000 or more gpd or public water supply wells	300 ft	300 ft	300 ft	150 ft	150 ft	150 ft		
Potable Supply Well	100 down to 60 ft	200 down to 100 ft	300 down to 150 ft	100 down to 25 ft	100 down to 50 ft	100 down to 50 ft		
Water supply line	10 ft	20 ft	25 ft	10 ft	10 ft	10 ft		
Water course, major	100 down to 50 ft	200 down to 120 ft	300 down to 180 ft	100 down to 25 ft [a]	100 down to 50 ft	100 down to 50 ft		
Water course, minor	50 down to 20 ft	100 down to 50 ft	150 down to 75 ft	50 down to 25 ft	50 down to 25 ft	50 down to 25 ft		
Drainage ditches	25 down to 12 ft	50 down to 25 ft	75 down to 35 ft	25 down to 12 ft	25 down to 12 ft	25 down to 12 ft		
Edge of fill extension -- Coastal wetlands, special freshwater wetlands, great ponds, rivers, streams	20 ft	25 ft	25 ft	25 ft	25 ft	25 ft		
Slopes greater than 3:1	10 ft	18 ft	25 ft	N/A	N/A	N/A		
No full basement [e.g. slab,]	15 down to 7 ft	30 down to 15 ft	40 down to 20 ft	8 down to 5 ft	14 down to 7 ft	20 down to 10 ft		
Full basement [below grade foundation, frost wall, columns]	20 down to 10 ft	30 down to 15 ft	40 down to 20 ft	8 down to 5 ft	14 down to 7 ft	20 down to 10 ft		5'
Property lines	10 down to 5 ft [b]	18 down to 9 ft [b]	20 down to 10 ft [b]	10 down to 4 ft [b]	15 down to 7 ft [b]	20 down to 10 ft [b]		5'
Burial sites or graveyards boundaries, measured from the down toe of the fill extension	25 ft	25 ft	25 ft	25 ft	25 ft	25 ft		
Stormwater infiltration systems	100 down to 60 feet	200 down to 120 feet	300 down to 180 feet	100 down to 50 feet	100 down to 50 feet	100 down to 50 feet		
Wetponds, retention ponds, and detention basins (excavated below grade); Soil filters underdrained swales, underdrained outlets, and similar structures	50 down to 25 feet	100 down to 50 feet	150 down to 75 feet	50 down to 25 feet	50 down to 25 feet	50 down to 25 feet		
Stormwater detention basins (basin bottom at, or above, predevelopment grade)	25 down to 12 feet	50 down to 25 feet	75 down to 35 feet	25 down to 12 feet	25 down to 12 feet	25 down to 12 feet		
OTHER								
1.								
2.								
3.								

Notes:

[a.] This distance may be reduced to 25 feet, if the septic or holding tank is tested in LPI's presence and shown to be watertight or of monolithic construction.

[b.] Additional setbacks may be needed to prevent fill material extensions from encroaching onto abutting property.

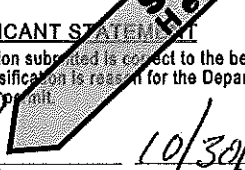
[c.] All ground disturbance or clearing of woody vegetation necessary for the installation of a subsurface wastewater disposal system that occurs within 100 feet of the normal high water mark of a major water body/ course must comply with these Rules pertaining to work adjacent to or within wetlands and waterbodies (see Section 11(M)).

117131

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Div of Environmental Health 11 SHS
(207) 287-5872 FAX (207) 287-3166

PROPERTY LOCATION		>>CAUTION: LPI APPROVAL REQUIRED<<	
City, Town, or Plantation	PORTLAND, PEAKS ISLAND	Town/City _____	Permit # _____
Street or Road	539 ISLAND AVENUE	Date Permit Issued _____	Fee \$ _____
Subdivision, Lot #		Double Fee Charged []	LPI # <u>1112</u>
OWNER/APPLICANT INFORMATION		Local Plumbing Inspector Signature _____	
Name (last, first, MI)	MACLEOD JOHN	The Subsurface Wastewater Disposal System <i>shall not</i> be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.	
Mailing Address of Owner/Applicant	84 BOXWOOD LANE DOVER, NH 03820	Municipal Tax Map # <u>90</u> Lot # <u>R003001</u>	
Daytime Tel. #	603-969-1471		

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.	CAUTION: INSPECTION REQUIRED I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.
 Signature of Owner/Applicant _____ Date <u>10/30/11</u>	Local Plumbing Inspector Signature _____ (1st) Date Approved _____ _____ (2nd) Date Approved _____

PERMIT INFORMATION		
TYPE OF APPLICATION <input type="checkbox"/> 1. First Time System <input checked="" type="checkbox"/> 2. Replacement System Type Replaced: <u>TRENCH</u> Year Installed: <u>UNKNOWN</u> <input type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. <25% Expansion <input type="checkbox"/> b. >25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	THIS APPLICATION REQUIRES <input type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input checked="" type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	DISPOSAL SYSTEM COMPONENTS <input checked="" type="checkbox"/> 1. Complete Non-Engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-Engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-Engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000gpd+) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous components
SIZE OF PROPERTY <u>.451</u> ACRES <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES	DISPOSAL SYSTEM TO SERVE <input checked="" type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: <u>3</u> <input type="checkbox"/> 2. Multiple Family Dwelling, No of Units: _____ <input type="checkbox"/> 3. Other: _____ (specify) Current Use <input checked="" type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input type="checkbox"/> Undeveloped	TYPE OF WATER SUPPLY <input type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input checked="" type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other:
SHORELAND ZONING <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
TREATMENT TANK <input checked="" type="checkbox"/> 1. Concrete <input checked="" type="checkbox"/> a. Regular <input type="checkbox"/> b. Low Profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: _____ CAPACITY: <u>1000</u> GAL.	DISPOSAL FIELD TYPE & SIZE <input type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input checked="" type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. Cluster array <input checked="" type="checkbox"/> c. Linear <input checked="" type="checkbox"/> b. Regular <input type="checkbox"/> d. H-20 loaded <input type="checkbox"/> 4. Other: _____ SIZE: <u>960</u> sq. ft. <input type="checkbox"/> lin. ft. <u>20</u> ELJEN IN DRAIN UNITS	GARBAGE DISPOSAL UNIT <input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. Multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. Increase in tank capacity <input type="checkbox"/> d. Filter on tank outlet	DESIGN FLOW <u>270</u> gallons per day BASED ON: <input checked="" type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities 3 BEDROOMS AT 90 GALLONS PER DAY EACH <input type="checkbox"/> 3. Section 4G (meter readings) ATTACH WATER-METER DATA LATITUDE AND LONGITUDE at center of disposal area Lat. <u>43</u> d <u>40</u> m <u>08</u> s Lon. <u>70</u> d <u>11</u> m <u>24</u> s If g.p.s., state margin of error
SOIL DATA & DESIGN CLASS PROFILE <u>12</u> / <u>C</u> at Observation Hole # <u>TP 1</u> Depth <u>38</u> " of Most Limiting Soil Factor	DISPOSAL FIELD SIZING <input type="checkbox"/> 1. Medium - 2.6 sq.ft./gpd <input checked="" type="checkbox"/> 2. Medium-Large - 3.3 sq.ft./gpd <input type="checkbox"/> 3. Large - 4.1 sq.ft./gpd <input type="checkbox"/> 4. Extra-Large - 5.0 sq.ft./gpd	EFFLUENT/EJECTOR PUMP <input type="checkbox"/> 1. Not required <input checked="" type="checkbox"/> 2. May be required <input type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ gallons	

SITE EVALUATOR STATEMENT		
I Certify that on <u>10/6/11</u> (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).		
Site Evaluator Signature <u>Albert Frick</u>	SE # <u>163</u>	Date <u>10/17/2011</u>
ALBERT FRICK Site Evaluator Name Printed	(207) 839-5563 Telephone Number	ALBERT@ALBERTFRICK.COM E-mail Address

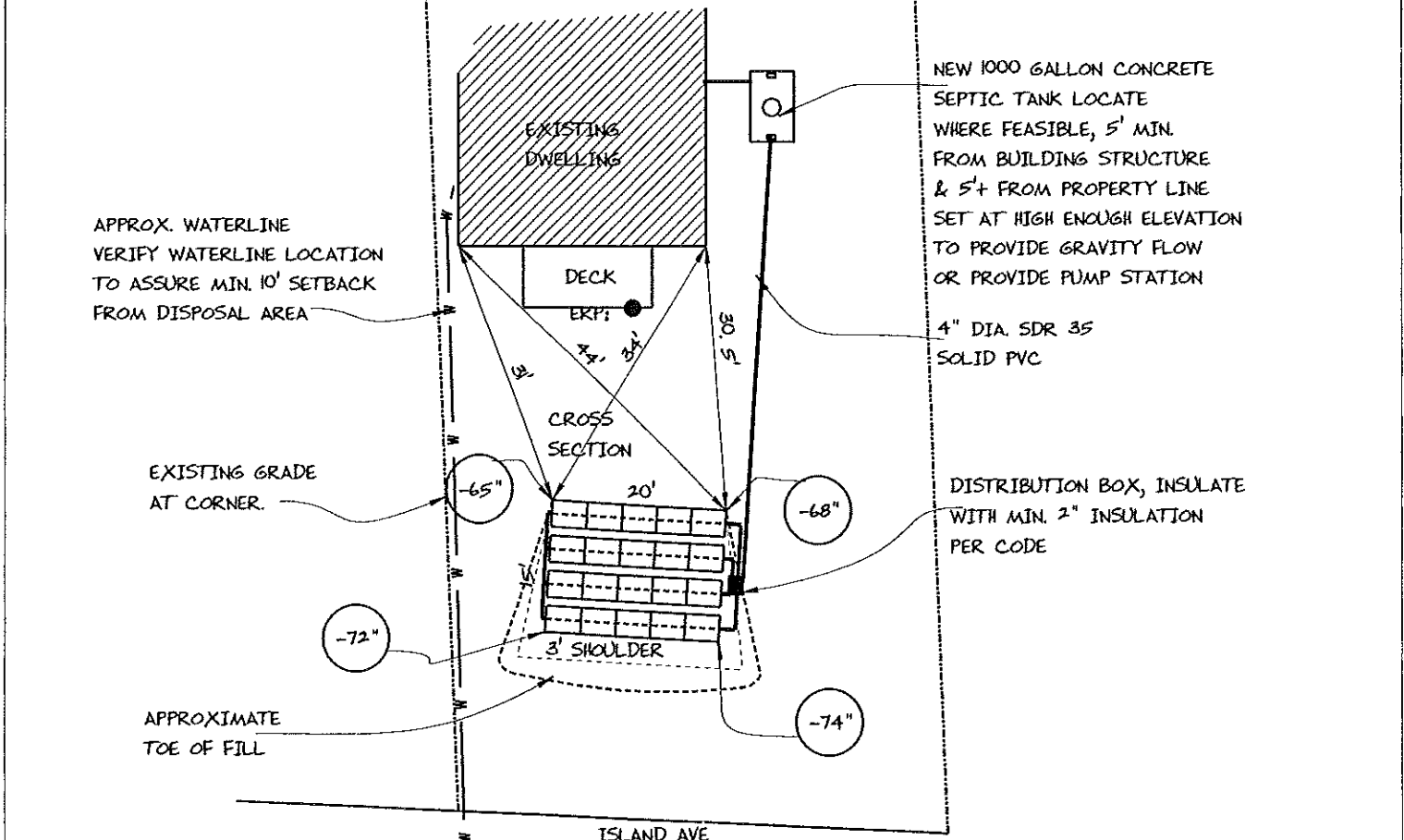
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

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

Town, City, Plantation PORTLAND, PEAKS ISLAND	Street, Road, Subdivision 539 ISLAND AVENUE	Owner's Name JOHN MACLEOD
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SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20 FT.



NEW 1000 GALLON CONCRETE SEPTIC TANK LOCATE WHERE FEASIBLE, 5' MIN. FROM BUILDING STRUCTURE & 5' FROM PROPERTY LINE SET AT HIGH ENOUGH ELEVATION TO PROVIDE GRAVITY FLOW OR PROVIDE PUMP STATION

4" DIA. SDR 35 SOLID PVC

DISTRIBUTION BOX, INSULATE WITH MIN. 2" INSULATION PER CODE

APPROX. WATERLINE
 VERIFY WATERLINE LOCATION TO ASSURE MIN. 10' SETBACK FROM DISPOSAL AREA

EXISTING GRADE AT CORNER

APPROXIMATE TOE OF FILL

FILL REQUIREMENTS

Depth of Fill (Upslope) : 0"
 Depth of Fill (Downslope) : 4" - 6"
 DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

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

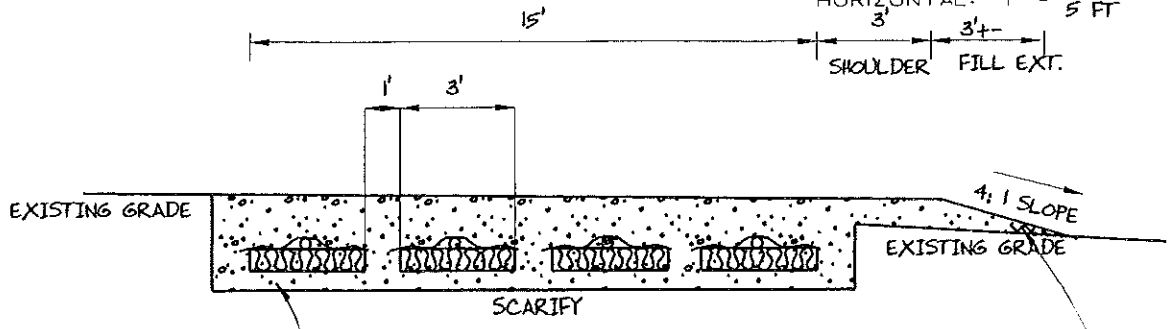
SEE
 DETAIL
 BELOW

ELEVATION REFERENCE POINT

Location & Description
 BOTTOM OF WHITE TRIM ON STAIRS 3" ABOVE GRADE
 Reference Elevation is: 0.0" or -----

DISPOSAL AREA CROSS SECTION

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



CAP TOE OF FILL WITH SANDY LOAM MATERIAL TO PREVENT WASTEWATER BREAKOUT

	DEPTH BELOW ERP
FINISHED GRADE	-65" TO -68"
CLEAN BACKFILL MAY INCLUDE LOAM / TOPSOIL AS NEEDED	-78"
GEOTEXTILE FABRIC	-82"
OVER 4" DIA. PERF. PIPE	-89"
ELJEN IN-DRAIN UNIT	-85"

MIN. OF 6" UNDERNEATH AND 1' ALONGSIDE OF GRAVELLY COARSE SAND

Albert Frick
 Site Evaluator Signature

163
 SE #

10/17/2011
 Date



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

PORTLAND, PEAKS ISLAND

539 ISLAND AVENUE

JOHN MACLEOD

TOWN	LOCATION	APPLICANT'S NAME
		<p>1) The Plumbing and Subsurface Wastewater Disposal Rules adopted by the State of Maine, Division of Health and 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.</p> <p>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 law) 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.</p> <p>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 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.</p> <p>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. Risers and covers should be installed over the septic tank outlet per the "Rules" to allow for easy maintenance of filter.</p> <p>5) 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. 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.</p> <p>6) All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion to within 6" of a finished ground surface. Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.</p>

ATTACHMENT TO SUBSURFACE WASTEWATER DISPOSAL APPLICATION

PORTLAND, PEAKS ISLAND

539 ISLAND AVENUE

JOHN MACLEOD

TOWN

LOCATION

APPLICANT'S NAME

- 7) The actual waste 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
- 8) The general minimum setbacks between a well (public or private) 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 pitch requirements. In gravity systems, the invert of the septic tank(s) outlet(s) should be at least 4 inches above the invert of the distribution box outlet at the disposal area.
- 10) When an effluent pump is required: Pump stations should be sized per manufacturer's specifications to meet lift requirements and friction loss. Provisions shall be made to make certain that surface and 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.
- 11) On all systems, remove the vegetation, organic duff and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on plan may be necessary to replace organic matter. 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 or scarifying with teeth of backhoe 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 settling). 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.
- 12) Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process.
- 13) Do not install systems on loamy, silty, or clayey soils during wet periods since soil smearing/glazing may seal off the soil interface.
- 14) Seed all filled and disturbed surfaces with perennial grass seed, with 4" min. soil or soil amendment mix suitable for growing, 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.
- 15) If an advanced wastewater treatment unit is part of the design, the system shall be operated and maintained per manufacturer's specifications.



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