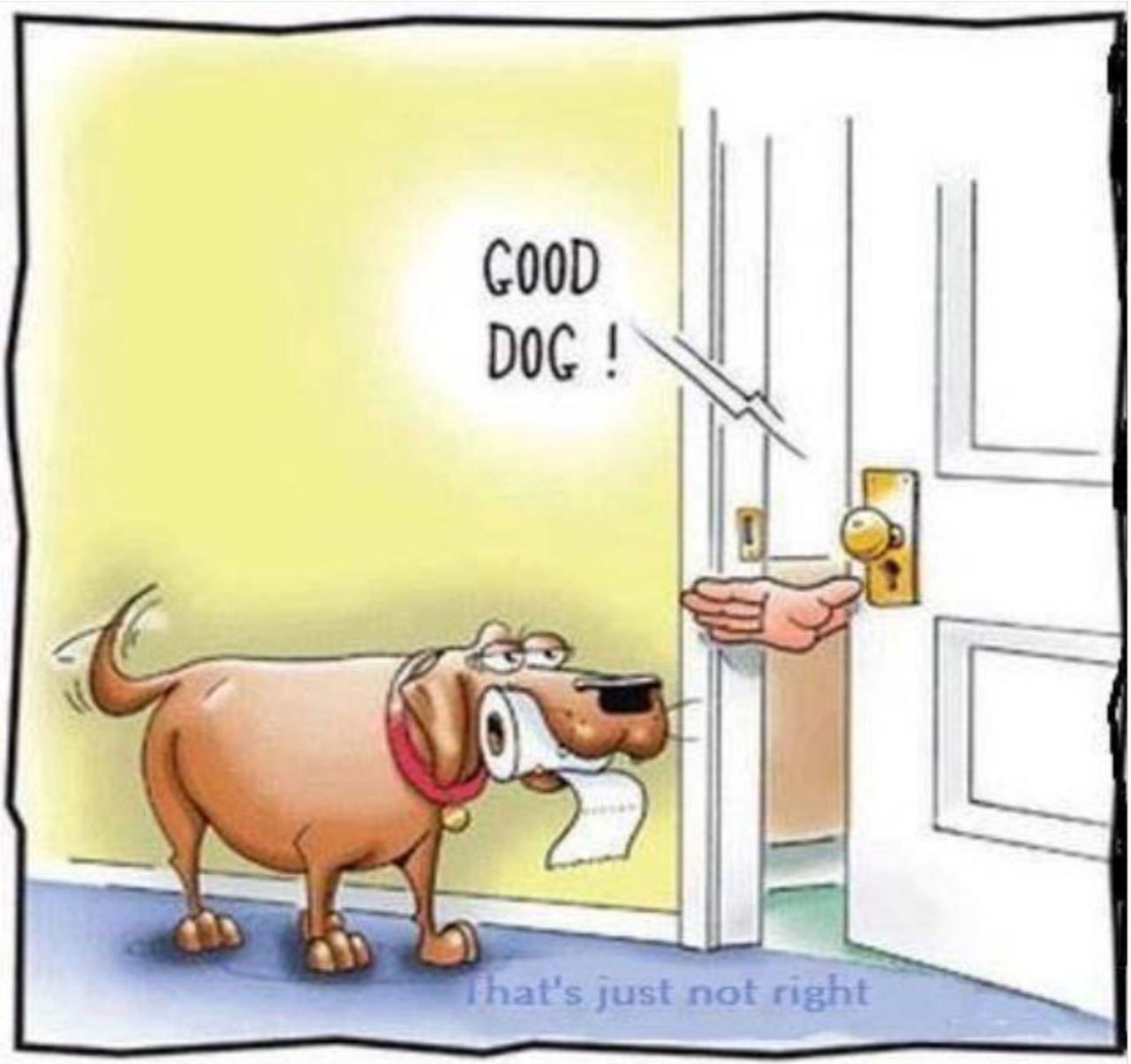


PERHAPS THE MOST NOBLE OF ALL RESCUE ANIMALS: THE LAVATORY RETRIEVER

LPI TRAINING SESSION
PORTLAND – BANGOR
HOULTON

BRENT LAWSON

GLENN ANGELL

FALL - 2015

HEALTH INSPECTION PROGRAM

PROGRAM THAT INSPECTS FOOD SERVICE LICENSES

WHEN THERE IS A SEPTIC REVIEW FOR A FOOD SERVICE LICENSE THAT REPORT WILL ALSO GO TO THE LPI

THE REPORT WILL STATE ITEMS LIKE:

SEPTIC IS OK FOR THEM TO OPERATE

SEPTIC IS NOT OK FOR THEM TO OPERATE..

UNDERSIZED
NO GREASE INTERCEPTOR
NO PERMIT FOR EXISTING SYSTEM
ETC..

ALSO #4

SECTION 6
APPROVED MATERIALS AND EQUIPMENT

L. EXTERNAL GREASE INTERCEPTORS

1. **General:** Any new commercial or institutional food preparation facility, such as a restaurant, cafeteria, institutional kitchen, or other facility subject to Footnote 2 of Table 4C, served by a subsurface wastewater disposal system, must install an external grease interceptor.

TABLE 4C
DESIGN FLOWS FOR OTHER FACILITIES

Type of facility	Design flow per user or unit
Airports	5 gpd per passenger plus 12 gpd per employee [1]
Assembly areas (Meeting hall, no seats)	2 gpd per person
Auditoriums/Stadiums:	5 gpd per seat
Bakery	100 gpd per bakery plus 12 gpd per employee [1, 2]
Bar/Tavern/Cocktail lounge	add 12 gpd per employee to each
w/ limited food	15 gpd per seat or13 gpd per patron
w/o food	10 gpd per seat or 7 gpd per patron
Barber shop	50 gpd per chair
Beauty salon	100 gpd per chair
Bed and breakfast	90 gpd per bedroom per operator's quarters and 75 gpd per rental room
Boarding houses with meals	180 gpd per house plus 40 gpd per boarder
Bottle club	10 gpd per seat plus 12 gpd per employee

NOTES:

1. The design flow for employees is based on the total number of employees present in any 24-hour period.

2. Multiply the hydraulic loading rate by 1.8 for sizing the disposal field. The initial value taken from the table is used to size the septic tank and for minimum lot size determinations.

3. 22 M.R.S. §1672 requires a public rest room for shopping centers containing 6 or more separate retail establishments with an off street public parking area of not less than 2 acres.

4. Requires an external grease interceptor sized and installed pursuant to Section 6(L).

5. Requires outlet filter in septic tank.

Disposal System Components	Fee	DWP %	DEP Surcharge
1. Complete Non-engineered System	$250.00	$62.50	$15.00
2. Primitive System (graywater & alt toilet)	$100.00	$25.00	
3. Alternative Toilet	$50.00	$12.50	
4. Non-engineered Treatment Tank	$150.00	$37.50	
5. Holding Tank	$100.00	$25.00	
6. Non-engineered Disposal Field	$150.00	$37.50	
7. Separated Laundry System	$35.00	$8.75	
8. Complete Engineered System	$200.00	$50.00	$15.00
9. Engineered Treatment Tank (only)	$80.00	$20.00	
10. Engineered Disposal Field (only)	$150.00	$37.50	
12. Miscellaneous Components	$30.00	$7.50	
First-Time System Variance	$20.00	$5.00	
Seasonal Conversion Permit	$50.00	$12.50	

SEPARATE CHECKS

Internal Plumbing Permits	Fee	DWP %
Minimum fee, includes up to 4 fixtures	$40.00	$10.00
Individual fixtures, each, above 4 total	$10.00	$2.50
Hook up to public sewer	$10.00	$2.50
Hook up to existing subsurface system	$10.00	$2.50
Piping relocation with no new fixtures	$10.00	$2.50
Permit transfer	$10.00	$2.50

Complete systems = $15.00 surcharge

Components = no surcharge

2 separate checks – 1 for surcharge & 1 for 25% permit fees to the State

Both checks mailed in with permits to the same place

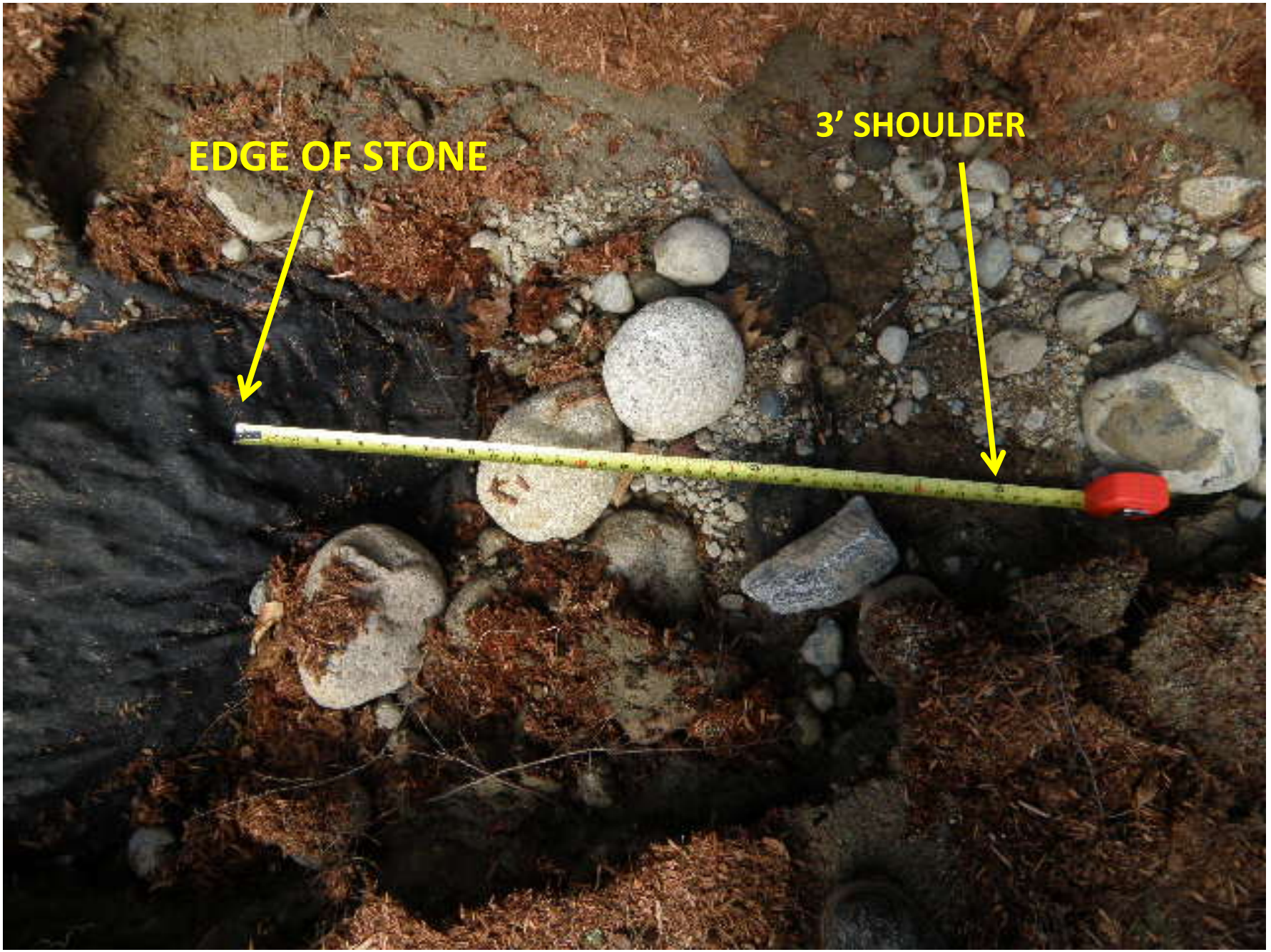
MANUFACTURED HOUSING

NEW
HOOK UP FEE UNLESS OTHER FIXTURES ARE ADDED ON SITE

NOT NEW
$10.00 PER FIXTURE


(c) 2009 Maine DHHS, DEH

THE IMPORTANCE OF THE SHOULDER AND FILL EXTENSIONS


EDGE OF STONE
3’ SHOULDER


5” COVER MATERIAL


GREY WATER LINE CUT OFF & REROUTED

SECTION 11
QUALITY ASSURANCE AND QUALITY CONTROL
B. SITE PREPARATION

Scarify the site:

The area under the disposal area must be thoroughly roughened. The soil should be broken up to a depth of 6 to 8 inches. Alternatively, a rototiller or the teeth of a backhoe or frost tooth may be used.

Transitional horizon:

On sites where the backfill material is coarser than the original soil, a minimum of 4 inches of backfill material must be mixed into the original soil to form a transitional horizon beneath the disposal area.

SECTION 5

APPLICATION FOR DISPOSAL SYSTEM PERMIT

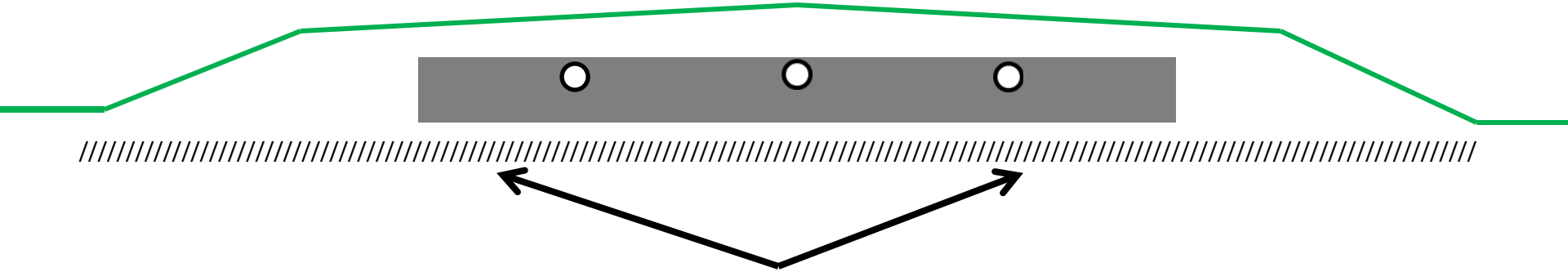
4. Page three of the HHE-200 form:

i. Original ground surface with notes for site preparation including scarification and transitional horizon;

SECTION 11
QUALITY ASSURANCE AND QUALITY CONTROL

The area under the disposal area should be thoroughly roughened and broken up to a depth of 6 to 8 inches.

A minimum of 4 inches of backfill material must be mixed into the original soil to form a transitional horizon.



Scarify to a depth of 6” – 8” and mix in 4” of backfill material to create a transitional horizon

SECTION 11
QUALITY ASSURANCE AND QUALITY CONTROL

D. CONSTRUCTION

1. **Construction:** The installer of the system must make certain that the system and all its component parts are installed in conformance with the requirements of these Rules, the plan prepared by the site evaluator, and with any special engineering design requirements approved or required by the Department, pursuant to an approved variance.

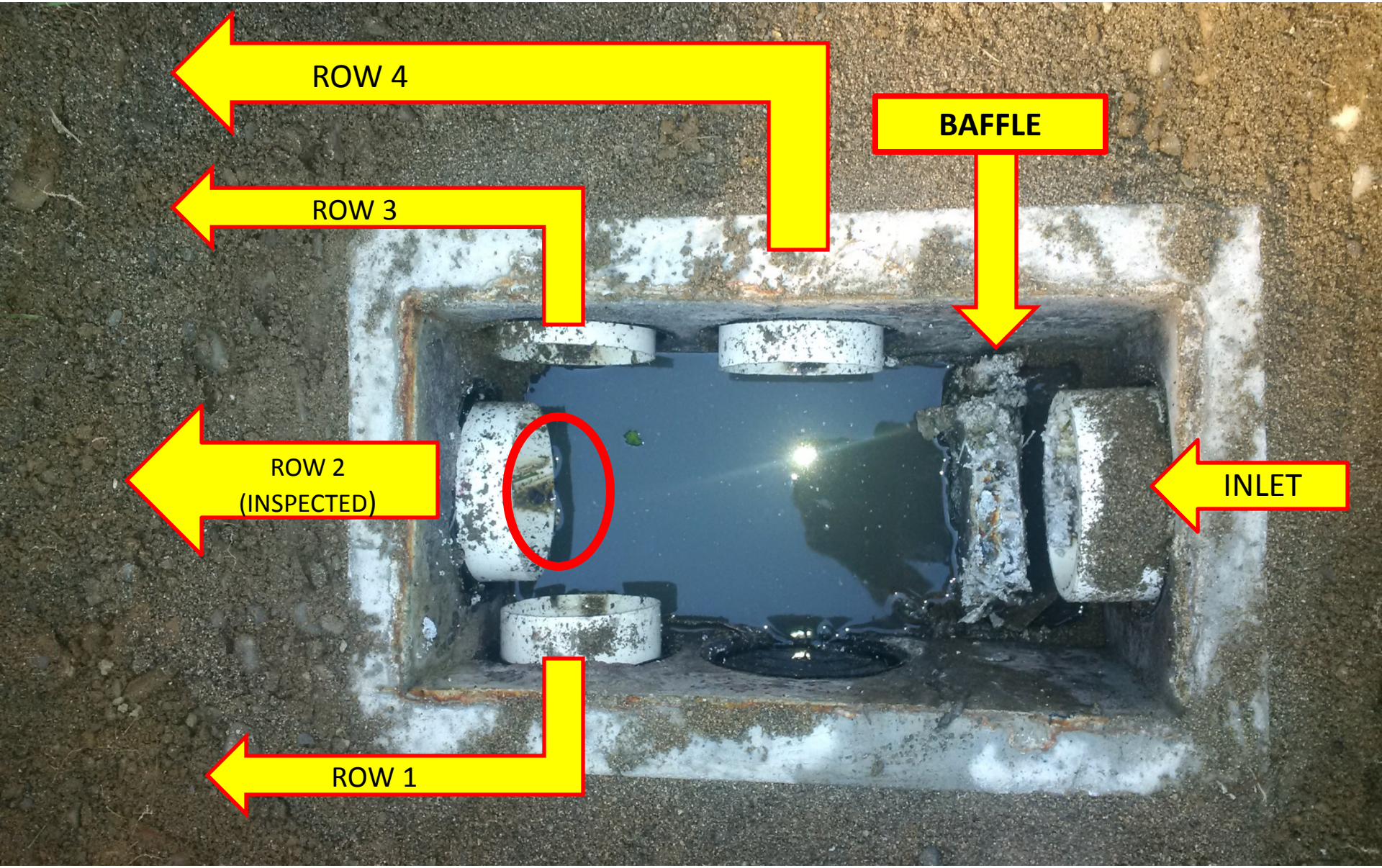
2. **Soil and backfill material:** The installer of the system must make certain that the construction and installation are performed without adversely affecting the capacity of the soil or backfill material to adequately absorb or treat the septic tank effluent.

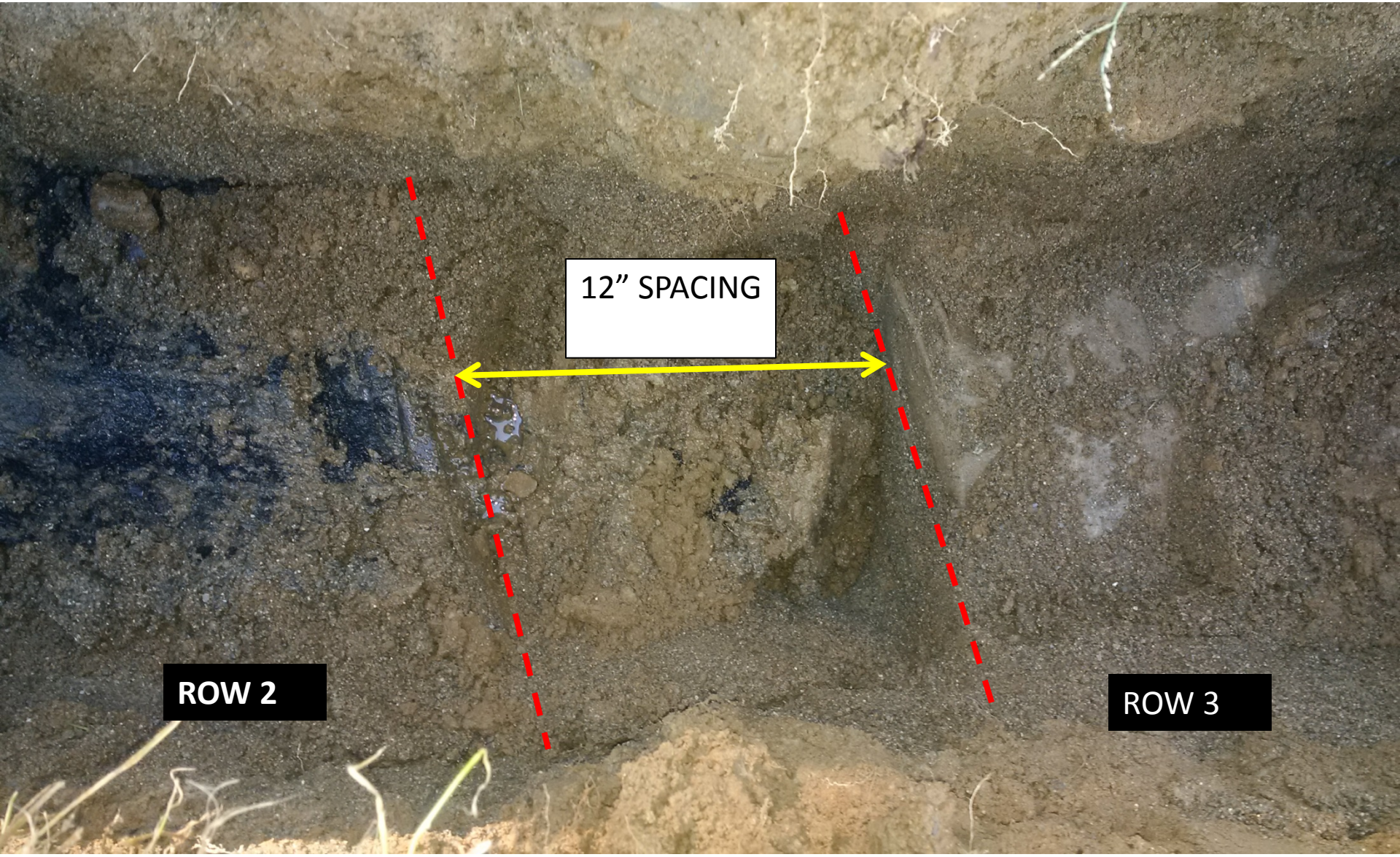

LAUNDROMAT SMOKING AREA
BUSINESS HOURS
INK-4-LIFE
TATTOOS & BODY PIERCING
DISCOVER
MasterCard
VISA
2014/07/28


POOPING FOR AN AVERAGE OF
10 MINUTES EACH WORK DAY
EQUALS 40 HOURS OF PAID
VACATION EACH YEAR
memecrunch.com

HOMEOWNER SELLING THEIR HOUSE

HAS THE 2 YEAR OLD SEPTIC SYSTEM INSPECTED AND FAILED BECAUSE OF THE ROW OF INDRAINS THAT WAS INSPECTED HAD A LOT OF BIOMAT


ROW 4
BAFFLE
ROW 3
ROW 2
(INSPECTED)
INLET
ROW 1


12” SPACING
ROW 2
ROW 3

WHAT IS A **BIOMAT?**

Biomat is a naturally occurring tar-like substance that forms on the bottoms and sides of the leaching bed trenches

It is made up of living anaerobic (without oxygen) organisms, which feed on organic matter in septic system wastewater

As the biomat ages it grows thicker slowing down the flow of wastewater to the surround soil.

As the wastewater passes through the biomat, pathogenic organisms and viruses are removed.

On the outside of the trench, beyond the biomat where the soil is not saturated, are living colonies of aerobic (with oxygen) bacteria.

These aerobic bacteria colonies feed on the biomat and keep it from becoming so thick that wastewater will no longer pass through.

When soil floods, these aerobic colonies will die off and no longer keep the biomat in check. The biomat will grow too thick and drainage will stop.

As these colonies die off they leave behind sulfides, which over time will clog soil passages stopping the flow of water, when the biomat grows too thick a waterproof barrier develops and absorption stops.

What happens when you mistake a pump station cleanout for an oil fill pipe ?


CAT

10-144

Chapter 241

STATE OF MAINE

SUBSURFACE WASTEWATER DISPOSAL RULES

DEPARTMENT OF HEALTH & HUMAN SERVICES
MAINE CENTER FOR DISEASE CONTROL & PREVENTION
DIVISION OF ENVIRONMENTAL HEALTH
11 STATE HOUSE STATION
AUGUSTA, MAINE 04333

EFFECTIVE DATE: August 3, 2015

Appropriation 014-10A-2426-012-2658

The New Subsurface Rules

The new Subsurface Wastewater Disposal Rules, 10-144 CMR 241 became effective on August 5, 2015. The following is a summary of the significant changes you should be aware of.

SECTION 2(E)
EXISTING SYSTEMS

This section was edited and “cleaned up "to make it easier to understand when faced with a system being proposed for reuse that has been unused for a period of time.

SECTION 2(E)
EXISTING SYSTEMS

THE RULES DO NOT INCLUDE ANY TIME LIMIT FOR REUSE.

A SYSTEM CURRENTLY NOT IN USE THAT IS COMPLETE AND WOULD LIKELY FUNCTION PROPERLY IF REUSED CAN BE REUSED

MUST BE LEGALLY EXISTING
(TOWNS CALL)

SECTION 2(E)
EXISTING SYSTEMS

MUST BE LEGALLY EXISTING
(TOWNS CALL)

INSTALLED WITHOUT A PERMIT?
DOESN'T LEGALLY EXIST

HOW TO PROCEED

"AFTER THE FACT PERMIT"
OR
THE SYSTEM MUST BE REMOVED

THAT'S THE RISK SOMEONE TAKES WHEN INSTALLING WITHOUT A PERMIT

SECTION 2(E)
EXISTING SYSTEMS

TO BE REUSED, THE DESIGN FLOW PROPOSED MUST NOT EXCEED THE SYSTEMS CAPACITY

EXCEPT AS ALLOWED IN SEC. 9 - EXPANSIONS

SECTION 9 – EXPANSIONS

IF IT REQUIRES ADDITIONAL CAPACITY, MUST BE APPLIED TO THE EXISTING SYSTEM

QUESTION;
CAN YOU MIX DIFFERENT TYPES OF SYSTEMS?
FOPR INSTANCE…

CAN YOU EXPAND A STONE BED WITH CONCRETE CHAMBERS?

SECTION 2(E)
EXISTING SYSTEMS

THE EXISTING SYSTEM CAN NOT BE MALFUNCTIONING

SECTION 2(E)
EXISTING SYSTEMS

RULES THAT DETERMINE IF A SYSTEM IS COMPLETE AND LIKELY TO FUNCTION

VALID PERMIT

THE SYSTEM IS COMPLETE BY MEANS OF INSPECTION..
SE - THIRD PARTY - LPI

AFTER THE FACT PERMIT

DESIGN RECORDED WITH THE REGISTRY OF DEEDS

DESIGN RECORDED WITH THE REGISTRY OF DEEDS

NO EXPIRATION DATE

MUST BE INSTALLED IF THE EXISTING SYSTEM FAILS

NEW WELLS ON ABUTTING PROPERTIES THAT PREVENT THE SYSTEM TO BE INSTALLED ARE PROHIBITED

NOTIFICATION TO ABUTTERS IS REQUIRED

EXPANSION CRITERIA FORMERLY FOUND IN SEC. 2 HAVE BEEN RELOCATED TO SEC. 9 - EXPANSIONS

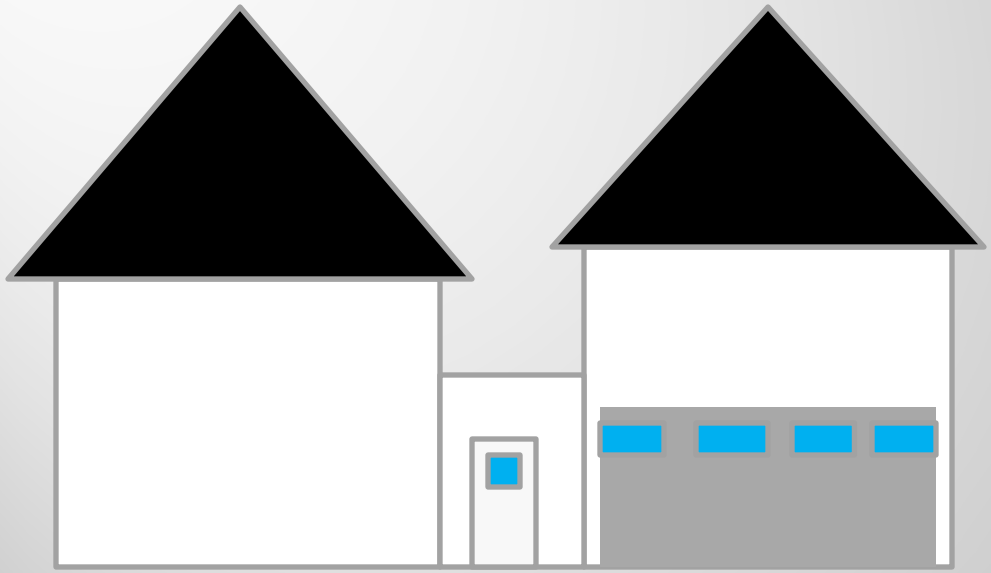
SEC. 4(E)
DESIGN FLOWS FOR DWELLING UNITS

IN-LAW APARTMENTS

120 GALLONS PER DAY DESIGN FLOW

ONE BEDROOM FOR EXPANSION PURPOSES IN SEC. 9 MUST BE ATTACHED TO THE PRIMARY STRUCTURE

NEW RULES = “IN LAW APARTMENT” 1 BDRM w/kitch = 120GPD ATTACHED



2- BEDROOM

GARAGE

DESIGN FLOW

MULTIPLE FAMILY

1 BE UNIT

+ 120 GP =

300GPD

SEC. 4(I)
PRIMITIVE AND LIMITED DISPOSAL SYSTEMS

LANGUAGE CLARIFYING THAT A PORT-A-POTTY IS NOT AN ALTERNATIVE TOILET AND IS NOT ALLOWED AS A PERMANENT ALTERNATIVE TOILET

PORT-A-POTTY COMPANY NAMES

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Upgrades for primitive systems:

Upgrading a primitive subsurface wastewater disposal to a full size, conventional system and a pressurized water supply requires compliance with the first-time system criteria.

Backup system reserve area required:

The site evaluator must delineate on the application (HHE-200 Form) a reserve area where a full-size subsurface wastewater disposal area can be installed in compliance with first-time system criteria. The owner may not take or allow any action which would prevent the use of the reserve area for a disposal area installation.

osal field

FLOW OF
vastewater

mps etc..

at A
ed.
l.

System upgrades:

Upgrading a limited system to a full size, conventional system must meet first-time system criteria.

TABLE 4(F)
MINIMUM PERMITTING CONDITIONS
CORRECTED ERRORS/ LANGUAGE ADDED TO FOOTNOTES FOR CLARIFICATION

SEC. 7(C)
CRITERIA FOR APPROVAL
DEPARTMENTS REVIEW CLARIFICATION OF FIRST TIME SYSTEMS
FOCUS WILL BE ON GROUNDWATER IMPACT – NATURAL RECOURSES - WELLS

FORMERLY IN SEC. 2 MOVED TO SEC. 9
SWITCHED TO MAJOR AND MINOR EXPANSIONS

1. Outside the shoreland area:

a. **Minor Expansion:** For the addition of one of the following - One bedroom, maximum wastewater flow increase of 25 percent for non-residential structures, pressurized water introduced to structure, replacement of an alternative toilet with a water closet, or an upgrade of the holding tank to a complete system, then the expansion must meet replacement system criteria, as described in Section 8;

b. **Major Expansion:** If there is an addition of more than one of the items listed above, or there is an increase of wastewater flow greater than 25 percent for non-residential structures, then the expanded system must meet first-time system criteria, as described in Section 7.

2. **Within the shoreland area:**

a. **Minor Expansion:** For the addition of one of the following - One bedroom, maximum wastewater flow increase of 25 percent for non-residential structures, replacement of an alternative toilet with a water closet, or an upgrading of the holding tank to complete the system, then the expansion must meet replacement system criteria to the LPI limits of approval only;

b. **Major Expansion:** If the addition of more than one of the items listed above occurs, and/or the addition of pressurized water to the structure, or an increase of wastewater flow is greater than 25 percent for non-residential structures, then the expanded system must meet first-time system criteria as described in Section 7.

c. **In-law apartments:** For the purpose of determining the appropriate design criteria in Sections 9(C)(1)(a) and (b) above, in-law apartments, as defined in these Rules, are considered one-bedroom and a minor expansion. The resulting system design must use the design flow of 120 gpd, as required by Table 4A.

Section 12 Wetlands and Waterbodies:

This section is totally new. The intent was to move all of the criteria for working adjacent to a wetland or waterbody into one section, and to edit the requirements to be compliant with DEP requirements.

It is highly recommended that Site Evaluators familiarize themselves with this section.

- Subsection 12 (A) details and clarifies permit requirements and responsibilities.
- Subsection 12 (B) details the standards for working with different types of wetlands and waterbodies. It is organized differently than in the past. Recourses that require a 75 foot disturbance free buffer are listed first, then those that require a 25 foot disturbance free buffer, followed by those with no buffer required, and finally how to handle stream crossings when required.
- Section 12 (C) details erosion control requirements.

To summarize, this section is organized to help lead a Site Evaluator through the process of identifying and then dealing with protected natural resources and to ensure compliance with applicable DEP regulations. The first subsection explains permit requirements, the second identifies resources and the standards that are applicable, and last sections details erosion control requirements. Taken together the section leads the designer from the permits required, the criteria for design, and the requirements for proper installation.

TABLE 7B
Setback distances for first-time systems

Site features vs. disposal system components of various sizes	Disposal Fields (total design flow)			Treatment Tanks (total design flow)		
	Less than 1,000 gpd	**1,000 to less than 2,000 gpd**	**2,000 gpd or more**	**Less than 1,000 gpd**	**1,000 to less than 2,000 gpd**	**2,000 gpd or more**
Wells with water usage of 2000 or more gpd or public water system wells	300 feet	300 feet	300 feet	150 feet	150 feet	150 feet
Potable Water Supply	100 feet [a]	200 feet	300 feet	50 feet	100 feet	100 feet
Water supply line	10 feet	20 feet	25 feet	10 feet	10 feet	10 feet
Water body/course, major [f] [h]	100 feet [c]	200 feet [c]	300 feet [c]	100 feet [d]	100 feet [d]	100 feet [d]
Water body/course, minor [e]	50 feet [e]	100 feet [e]	150 feet	50 feet	50 feet	50 feet
Drainage ditches	25 feet	50 feet	75 feet	25 feet	25 feet	25 feet
Slopes greater than 3:1	10 feet [f]	18 feet [f]	25 feet [f]	N/A	N/A	N/A
No full basement [e.g. slab, columns, posts]	15 feet	28 feet	40 feet	8 feet	14 feet	20 feet
Full basement [below grade foundation, frost walls]	20 feet [g]	30 feet	40 feet	8 feet	14 feet	20 feet
Property lines	10 feet [b]	18 feet [b]	20 feet [b]	10 feet	15 feet	20 feet
Burial sites or graveyard boundaries, measured from the toe of the fill extension	25 feet	25 feet	25 feet	25 feet	25 feet	25 feet
Stormwater infiltration systems	100 feet	200 feet	300 feet	100 feet	100 feet	100 feet
Wetponds, retention ponds, and detention basins (excavated below grade); Soil filters, underdrained swales, underdrained outlets, and similar structures	50 feet [i]	100 feet [i]	150 feet [i]	50 feet [i]	50 feet [i]	50 feet [i]
Stormwater detention basins (basin bottom at or above predevelopment grade)	25 feet	50 feet [i]	75 feet [i]	25 feet	25 feet	25 feet

Notes: If the disposal system application meets the requirements of the following note(s) a First-Time System Variance is not required.

(a)
18'-20'

(H) ADDED

(D) taken away

(E) ADDED

(i) ADDED

[a.] Potable water supply setbacks may be reduced, as prescribed in Section 7(A)(2). (A) ADDED
[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 maintain a minimum setback of 75 feet from the normal high water mark of the major water body/course and also must comply with these Rules pertaining to work adjacent to or within wetlands and water bodies (for more details see Section 12).
[d.] May be reduced by Site Evaluator to 50 feet, pursuant to water tightness standards found in Section 6(H)(8) or tanks of monolithic construction.
[e.] 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 minor water body/course must maintain a minimum setback of 25 feet from the normal high water mark of the minor water body/course, except minor water courses located inside the Shoreland Zone which require a minimum setback for disturbance of 75 feet, and also must comply with these Rules pertaining to work adjacent to or within wetlands and water bodies (for more details see Section 12).
[f.] For sites with sustained slopes steeper than 3 feet horizontal to 1 foot vertical (33%) within 25 feet from a protected natural resource. If a sustained slope of 33% or greater exists less than 25 feet from a protected natural resource, it does not count toward the 25 foot setback. Sustained slopes greater than 3:1 may be part of the 75 foot setback but cannot be counted as part of the 25 foot setback (for more details see Section 12). DELETED
[g] May be reduced to 15 feet, if the disposal area would be located down slope from the lowest point of the foundation footings.
[h] 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 perennial stream must maintain a minimum setback of 25 feet from the normal high water mark of the perennial stream except those perennial streams which have a Shoreland Zone or those located inside the Shoreland Zone of another major waterbody/course which require a minimum setback for disturbance of 75 feet, and also must comply with these Rules pertaining to work adjacent to or within wetlands and water bodies (for more details see Section 12).
[i] The setback may be reduced to 25 feet if the stormwater structure has an impervious liner and the fill extensions do not encroach onto the stormwater structure.

ADDED

TABLE 8A
Setback Distances for Replacement System, Limits of LPI Authority

Site features vs. disposal system components of various sizes	Disposal Fields (total design flow)			Septic Tanks and Holding Tanks (total design flow)		
	Less than 1,000 gpd	1,000 to 2,000 gpd	Over 2,000 gpd	Less than 1,000 gpd	1,000 to 2,000 gpd	Over 2,000 gpd
Wells with water usage of 2,000 or more gpd or public water supply wells	300 feet	300 feet	300 feet	150 feet	150 feet	150 feet
Potable supply well	100 down to 60 feet	200 down to 100 feet	300 down to 150 feet	50 down to 25 feet [a]	100 down to 50 feet [a]	100 down to 50 feet
Water supply line	10 feet	20 feet	25 feet	10 feet	10 feet	10 feet
Water course, major [c]	100 down to 50 feet	200 down to 120 feet	300 down to 180 feet	100 down to 25 feet [a]	100 down to 50 feet	100 down to 50 feet
Water course, minor [c]	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
Drainage ditches	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
Slopes greater than 3:1	10 feet	18 feet	25 feet	N/A	N/A	N/A
No full basement [e.g. slab, columns, posts]	15 down to 7 feet	30 down to 15 feet	40 down to 20 feet	8 down to 5 feet	14 down to 7 feet	20 down to 10 feet
Full basement [below grade foundation, frost wall]	20 down to 10 feet	30 down to 15 feet	40 down to 20 feet	8 down to 5 feet	14 down to 7 feet	20 down to 10 feet
Property lines	10 down to 5 feet [b]	18 down to 9 feet [b]	20 ft down to 10 ft [b]	10 down to 4 feet [b]	15 down to 7 feet [b]	20 down to 10 feet [b]
Burial sites or graveyards boundaries, measured from the toe of the fill extension	25 feet	25 feet	25 feet	25 feet	25 feet	25 feet
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 [d]	100 down to 50 feet [d]	150 down to 75 feet [d]	50 down to 25 feet [d]	50 down to 25 feet [d]	50 down to 25 feet [d]
Stormwater detention basins (basin bottom at, or above, predevelopment grade)	25 down to 12 feet	50 down to 25 feet [d]	75 down to 35 feet [d]	25 down to 12 feet	25 down to 12 feet	25 down to 12 feet

Notes:
[a] This distance may be reduced to 25 feet, if the septic or holding tank is tested in the LPI's presence and shown to be watertight pursuant to water tightness standards found in Section 6(H)(8) 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 or minor water body/course must comply with these Rules pertaining to work adjacent to or within wetlands and water bodies (for more details, see Section 12).
[d] The reduced setback distance may be further reduced down to 12 feet if the stormwater structure has an impervious liner and the fill extensions do not encroach onto the stormwater structure.

a

20'-25'

D

D

ADDED

HHE-200 PRE-PERMIT CHECKLIST

OWNER/APPLICANT:_____ **SITE EVALUATOR:**_____ **SE#**_____

PAGE 1

- ☐ Property Location, Owner/Applicant Information filled out with signature and date.
- ☐ All sections are filled out
- ☐ System to serve matches design flow-90 GPD/Bedroom or other
- ☐ Does it require a "STATE" variance? (not able to permit until approved by the State) -Proceed submittal of a Copy of the HHE-200 form to the State with all signatures on variance form.
- ☐ Does it require a local variance? Proceed reviewing at the local level.
- ☐ Site Evaluator has signed and dated HHE-200 form.

PAGE 2

Locations showing proper setbacks from the disposal field and treatment tanks to:

☐ Existing and proposed structures ☐ Roadways ☐ Potable water supplies ☐ Public water supply (if applicable)

☐ Water supply line ☐ Water bodies ☐ Wetlands ☐ Property lines ☐ Drainage ditches

LOCATIONS OF:

☐ Pump/dosing tanks (if required.) ☐ All observation holes ☐ Site location map ☐ North arrow

☐ Existing and proposed water diversions ☐ Connecting piping ☐ Proposed system ☐ Treatment tank

☐ Ground slope ☐ Fill extension limits ☐ Soil logs ☐ Limiting factor depth

PAGE 3

☐ Location and type of system ☐ Distribution piping ☐ Fill extension with shoulders ☐ Treatment tanks

☐ Elevation of all 4 corners of the disposal field ☐ System ties ☐ Backfill requirements

☐ Elevation Reference Point set at 0 ☐ Height of elevation reference point above the original grade in inches

☐ Construction elevations ☐ Cross section line ☐ Disposal field cross section

SEPTIC SYSTEM INSPECTION FORM

NAME:_____ **Permit #**_____

ADDRESS:_____

☐ **FULL SYSTEM** ☐ **FIELD ONLY** ☐ **TANK ONLY** ☐ **PIPING** ☐ **PUMP STATION**

OTHER:_____

FIRST INSPECTION DATE:_____

- ☐ **Elevation reference point in the correct location/correct height above ground per HHE-200.**
- ☐ **Disposal field is in the correct location according to the HHE-200 form/ERP.**
- ☐ **Vegetation has been cut and removed in the disposal field area. (footprint & fill extensions)**
- ☐ **Disposal field and backfill extensions has been roughened.**
- ☐ **Transitional horizon has been established. (footprint & fill extensions)**
- ☐ **Bottom of the disposal field at the correct elevation.**
- ☐ **Erosion and sedimentation control measures are in place.**

SECOND INSPECTION DATE:_____

- ☐ **Disposal field is in the correct location according to the HHE-200 form/ERP.**
- ☐ **Stone is correct size, clean.**
- ☐ **Pipes, correct # of proprietary devices are in place, level and at the correct elevation according to the HHE-200.**
- ☐ **2" of compressed hay or filter fabric overlapped 6" in place.**
- ☐ **Backfill material correct according to HHE-200/Rules/manufacturers specs.**
- ☐ **Septic tank level, baffles in place, filter if required, risers, inlet pipe ¼ per foot, outlet pipe 1/8 per foot, all piping cemented.**
- ☐ **Pump tanks/holding tanks have visible-audible alarm, separate circuits, working float switches.**
- ☐ **Curtain drains, diversion ditches, berms outlined on the design in correct location.**

LPI SIGNATURE:_____ **DATE:**_____

MINIMUM LOT SIZE

MINIMUM LOT SIZE RULES

144 CMR 243

SUMMARY

These rules describe the requirements
for minimum lot sizes
and for waivers to the
Minimum Lot Size Law,
12 MRSA § 4807.

BASIS STATEMENT: These Rules provide minimum State requirements for minimum lot sizes for developments using onsite subsurface wastewater disposal to assure environmental sanitation and safety. These Rules are intended to complement municipal planning, zoning, and land use control.

EFFECTIVE DATE: August 1, 2005

AUTHORITY: Title 12 MRSA § 4807

Department of Health and Human Services
Maine Center for Disease Control and Prevention
Division of Environmental Health
11 State House Station
Augusta, Maine 04333-0011
Telephone (207) 287-5689

Appropriation 014-10A-2426-012-2658

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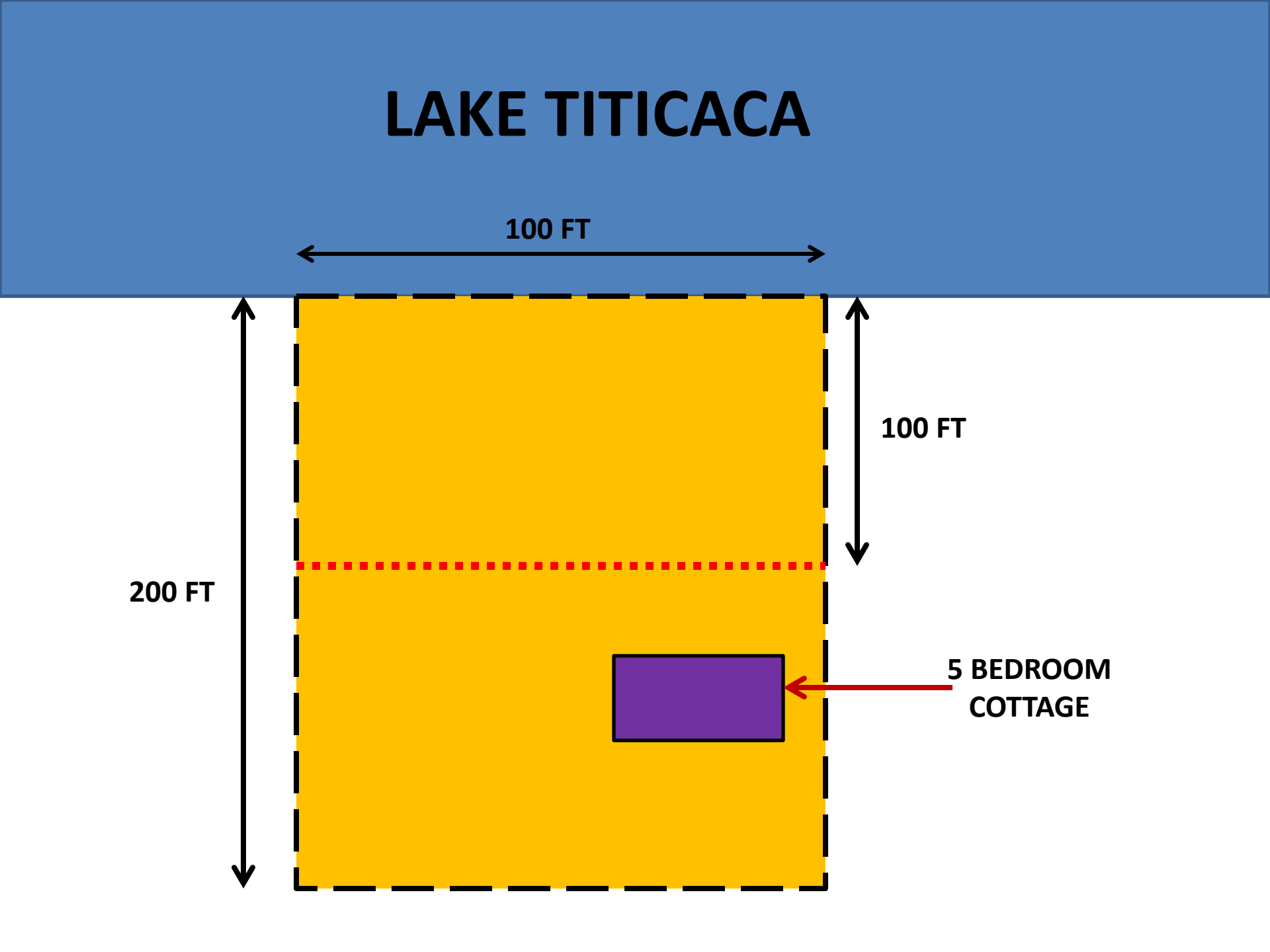
1000.1.1 Local Plumbing Inspector Approval: "A lot of less than the size required in §4807-A may be used for subsurface wastewater disposal if approved in writing by the duly appointed Local Plumbing Inspector for that municipality or unorganized territory, providing that the lot in question:

- has a current Application for Subsurface Wastewater Disposal (HHE-200) form, or equal, pursuant to rules of the Department, and
- can meet the provisions of a "First Time" subsurface wastewater disposal system, requiring no variances, and
- the system is not an engineered disposal system.

1000.4 Single family lots of record: This Code shall not apply to any lot which prior to January 1, 1970, was specifically described as an identifiable and separate lot either in the instrument conveying such lot to the then owner or in a valid and enforceable agreement for purchase and sale or was shown on a plan recorded in accordance with law, prior to January 1, 1970; provided that contiguous undeveloped lots in the same ownership on or after October 3, 1973 shall be considered as one lot for purposes hereof.

1000.6 Existing structures: This Code does not apply to any **structure** in existence and in place on or before October 3, 1973, which then or theretofore disposed of wastes by means of subsurface wastewater disposal; except that no person shall reduce the size of the lot upon which such structure is located to a size or frontage less than that allowed in Section 1001.1. The division of a lot upon which a number of such structures existed on or before October 3, 1973, into a number of lots not exceeding the number of structures, with one or more structures on each new lot is not subject to this Code, if the size of the lot, and/or the frontage has not been reduced since October 3, 1973.

1001.1.1 Single-family dwelling units: A lot on which a single-family dwelling unit is located shall contain at least 20,000 square feet. If the lot abuts a lake, pond, stream, river, or tidal area, it shall have a minimum frontage of 100 feet on the water body and any greater frontage required by local zoning. For purposes of this Code, a single-family residential unit shall be determined to be 300 gallons per day of wastewater.


LAKE TITICACA
100 FT
100 FT
200 FT
5 BEDROOM
COTTAGE

LOT = 20,000 SQUARE FEET

5 BEDROOM = 450 GPD

WRONG

20,000 SQUARE FEET PER 300 GALLONS and
100 FEET OF FRONTAGE FOR EVERY 300 GPD

450 /300 = 1.5

1.5 X 100 = 150 FEET OF FRONTAGE

X

SAME INSTANCE
1.5 X 20,000 = 30,000 SQUARE FEET NEEDED

MINIMUM LOT SIZE STATES:

300 GALLONS AND 100 FEET FRONTAGE PER RESIDENTIAL STRUCTURE IRREGARDLESS OF THE NUMBER OF BEDROOMS

NO WAIVER TO THE MINIMUM LOT SIZE IS NEEDED

ON A 6.5 ACRE LOT CREATED AND RECORDED IN 1955

LOT HAS 430 FEET OF LAKE FRONTAGE

DIMENSIONS ARE 430 FEET WIDE X 658.465 FEET DEEP

10 ROOM MOTEL WITH PRIVATE BATHS

30 SEAT RESTAURANT SERVING 3 MEALS PER DAY – FULL SERVICE

6 EMPLOYEES AND NO SHOWERS

(EMPLOYEES WILL BE STINKING AFTER THE FIRST DAY, THEY REALLY SHOULD HAVE A SHOWER)

QUESTIONS

1) **IS THIS LOT EXEMPT FROM THE MINIMUM LOT SIZE LAW?**

2) **IF NOT, CAN THE INTENDED USE BE DONE WITHOUT A WAIVER?**

3) **WHAT IS THE DESIGN FLOW?**

4) **WHAT WOULD THE SQUARE FOOTAGE OF THE DISPOSAL AREA BE?**

CALCULATIONS

MOTEL : 10 ROOMS @ 100 GPD PER ROOM = 1000GPD

RESTAURANT: 30 SEATS @ 30 GPD PER SEAT = 900 GPD

STAFF: 6 EMPLOYEES @ 12 GPD PER EMPLOYEE = 72 GPD

TOTAL: 1,972 GPD

1,972 GPD

MINIMUM LOT SIZE

1,972 DIVIDED BY 300 = 6.573

6.573 X 100 = 657.3 FEET OF SHORELINE

6.573 X 20,000 = 131,460 SQUARE FEET OF LOT AREA
OR
131,460 DIVIDED BY 43,560 = 3.018 ACRES

THE LOT LACKS SHORELINE LENGTH BUT IT'S LARGE ENOUGH

SEPTIC DISPOSAL FIELD

1 C SOILS ---- 4.1

1000 GPD X 4.1 = 4,100 SQUARE FEET

900 GPD X 1.8 = 1,620 X 4.1 = 6,642 SQUARE FEET

72 GPD X 4.1 = 295.2 SQUARE FEET

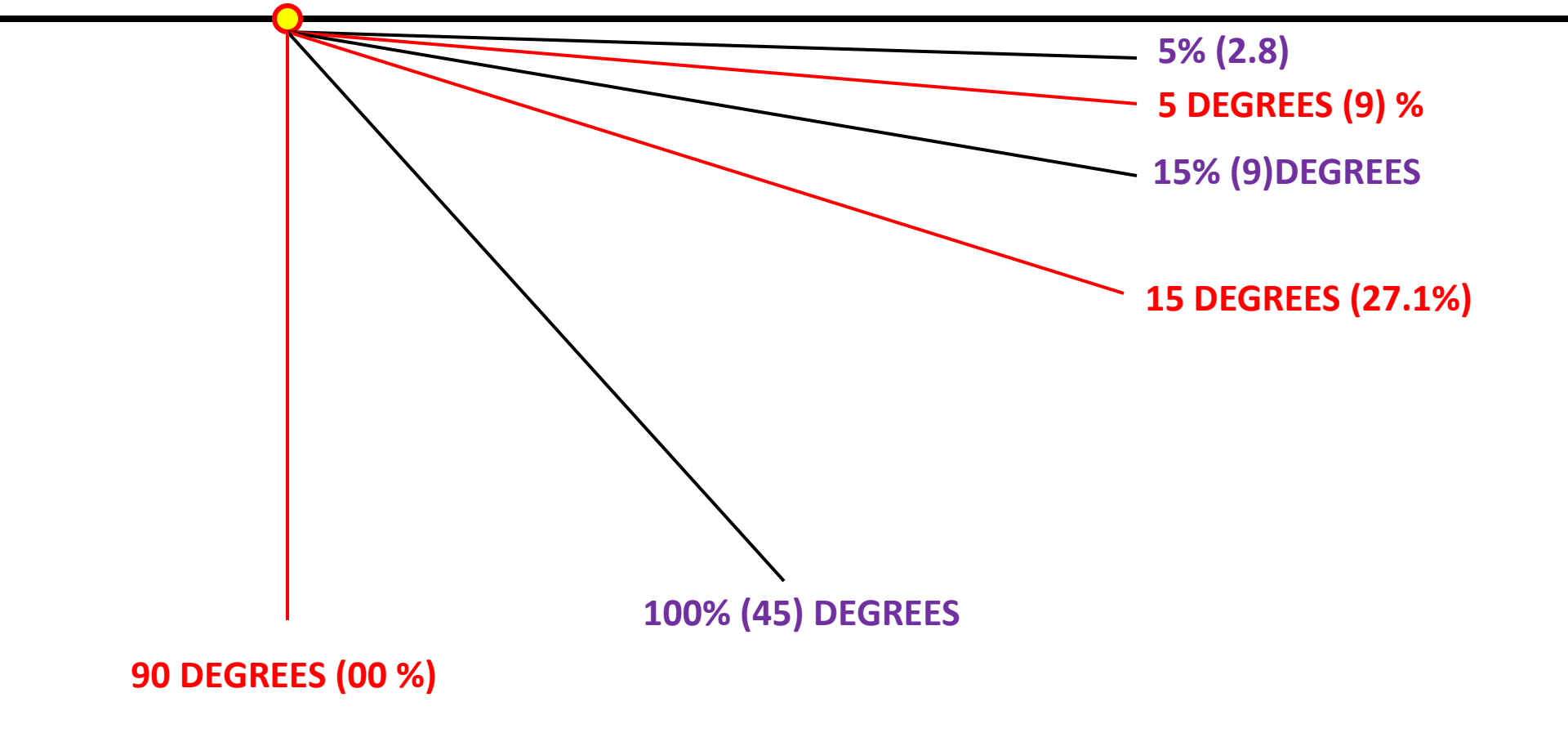
TOTAL: 11,037.2 SQUARE FEET

PERCENT SLOPE VS DEGREES OF SLOPE
(DEGREES OF SLOPE IN RED)

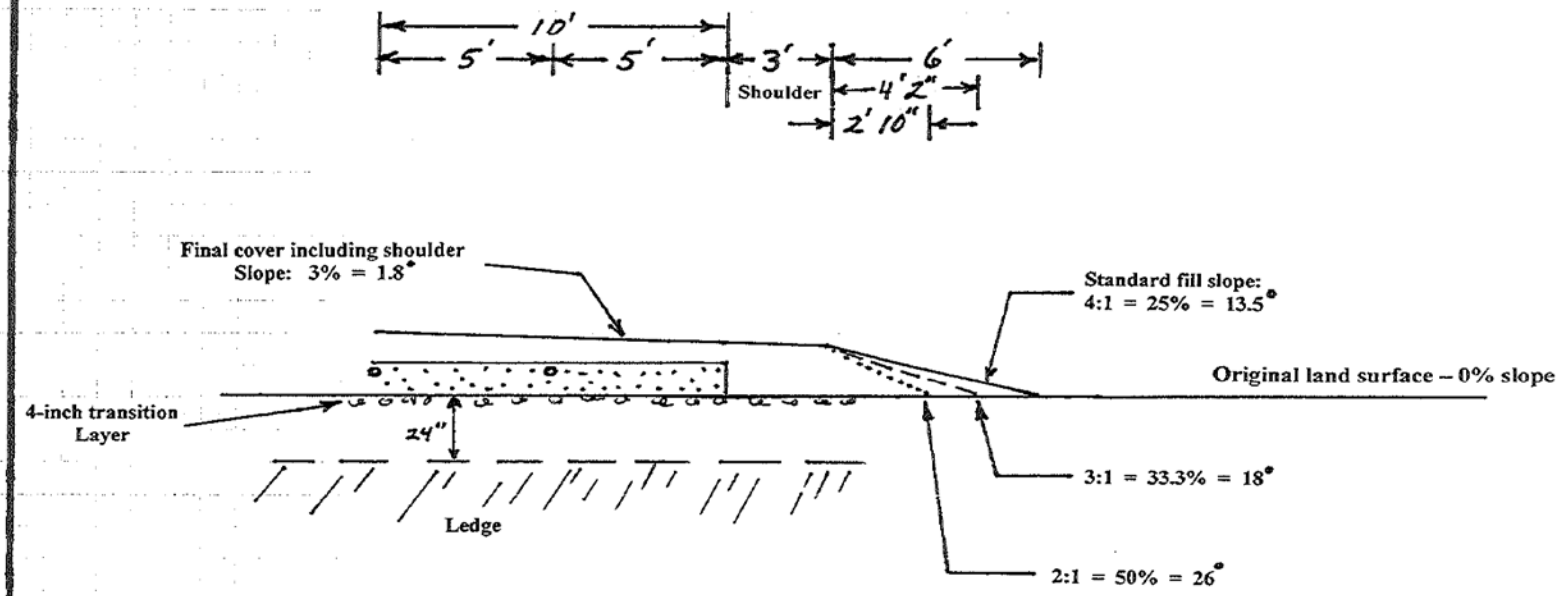
PERCENT SLOPE = AMOUNT OF VERTICAL RISE OR FALL OF THE LAND SURFACE PER 100 ' OF HORIZONTAL DISTANCE

FORMULA: (RISE OVER RUN) X 100 = % SLOPE

DEGREE OF SLOPE IS BASED ON THE 360 DEGREE CIRCLE



PARTIAL CROSS-SECTION OF 20-FOOT WIDE STONE BED
WITH VARYING STEEPNESS OF FILL SLOPES



SCALE: 1" = 5' (both horizontal & vertical)

KGS

SEASONAL CONVERSION

AND YOU….

10-144

Chapter 241

STATE OF MAINE

SUBSURFACE WASTEWATER DISPOSAL RULES

DEPARTMENT OF HEALTH & HUMAN SERVICES
MAINE CENTER FOR DISEASE CONTROL & PREVENTION
DIVISION OF ENVIRONMENTAL HEALTH
11 STATE HOUSE STATION
AUGUSTA, MAINE 04333

EFFECTIVE DATE: January 18, 2011

Appropriation 014-10A-2426-012-2658

10-144

Chapter 241

STATE OF MAINE

SUBSURFACE WASTEWATER DISPOSAL RULES

DEPARTMENT OF HEALTH & HUMAN SERVICES
MAINE CENTER FOR DISEASE CONTROL & PREVENTION
DIVISION OF ENVIRONMENTAL HEALTH
11 STATE HOUSE STATION
AUGUSTA, MAINE 04333

EFFECTIVE DATE: August 3, 2015

Appropriation 014-10A-2426-012-2658

10-144

Chapter 241

STATE OF MAINE

SUBSURFACE WASTEWATER DISPOSAL RULES

DEPARTMENT OF HEALTH & HUMAN SERVICES
MAINE CENTER FOR DISEASE CONTROL & PREVENTION
DIVISION OF ENVIRONMENTAL HEALTH
11 STATE HOUSE STATION
AUGUSTA, MAINE 04333

EFFECTIVE DATE: August 3, 2015

Appropriation 014-10A-2426-012-2658

10-144

Chapter 242

STATE OF MAINE RULES FOR CONVERSION OF SEASONAL DWELLING UNITS INTO YEAR-ROUND RESIDENCES IN THE SHORELAND ZONE

DEPARTMENT OF HEALTH & HUMAN SERVICES
MAINE CENTER FOR DISEASE CONTROL & PREVENTION
DIVISION OF ENVIRONMENTAL HEALTH
11 STATE HOUSE STATION
AUGUSTA, MAINE 04333

EFFECTIVE DATE: JANUARY 7, 2011

Requires 2 separate permits

TYPE OF APPLICATION

1. First Time System
2. Replacement System
Type replaced: _____
Year installed: _____
3. Expanded System
a. <25% Expansion
b. >25% Expansion
4. Experimental System
5. Seasonal Conversion

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation	Windham
Street or Road	15 Lake Road
Subdivision, Lot #	n/a

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Jones, Robert A. — ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant	James Smith
	Acme Realty Box 77 Windham ME 04092
Daytime Tel. #	(207) 123-4567

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.

Signature of Owner or Applicant _____ Date _____

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]
_____ L.P.I. # _____
Local Plumbing Inspector Signature
☐ Owner ☐ Town ☐ State

The Subsurface Wastewater Disposal System shall not 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.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED
I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.
_____ (1st) date approved
_____ Local Plumbing Inspector Signature _____ (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION
☐ 1. First Time System
☑ 2. Replacement System
Type replaced: trench
Year installed: +/- 1965
☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% 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 Permit

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 (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY
0.85 ☐ SQ. FT. ☑ ACRES

SHORELAND ZONING
☑ Yes ☐ No

DISPOSAL SYSTEM TO SERVE
☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: ____
☐ 3. Other: _____ (specify)
Current Use ☐ Seasonal ☐ Year Round ☐ Undeveloped

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
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

DISPOSAL FIELD TYPE & SIZE
☑ 1. Stone Bed ☐ 2. Stone Trench
☐ 3. Proprietary Device
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: _____ ☐ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT
☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW
270 gallons per day
BASED ON:
☑ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilites
3 BR SFD
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS
PROFILE CONDITION
5 / C
at Observation Hole # 4
Depth 42 "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING
☐ 1. Medium---2.6 sq. ft. / gpd
☑ 2. Medium---Large 3.3 sq. f.t / gpd
☐ 3. Large---4.1 sq. ft. / gpd
☐ 4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP
☐ Not Required
☐ May Be Required
☑ Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE
at center of disposal area
Lat. __ d __ m __ s
Lon. __ d __ m __ s
if g.p.s, state margin of error: _____

SITE EVALUATOR STATEMENT

I certify that on 06/15/11 _____ (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature	900 SE #	06/16/11 Date
John Doe Site Evaluator Name Printed	(207) 765-4321 Telephone Number	jdoe@isp.com E-mail Address

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

SECTION 1. DEFINITIONS

H. Seasonal dwelling:

A dwelling that existed on December 31, 1981, and which was not used as a principal or year-round residence during the period from 1977 to 1981. (30-A M.R.S. § 4201).

F. Principal dwelling or year-round residence:

G.

A dwelling that existed on December 31, 1981, and that was used as a principal or year-round residence during the period from 1977 to 1981.

Evidence of use as principal or year round residence includes, but is not limited to, (i) the listing of that residence as an occupant's legal residence for the purpose of either voting, filing a state tax return, or automobile registration; or (ii) occupancy of that dwelling for a period exceeding 7 months in any calendar year. (30-A M.R.S. §4201).

SECTION 3. SEASONAL CONVERSION PERMIT

C. Holding tanks prohibited:

A seasonal conversion permit may not be approved if a holding tank is used as a means of waste water disposal or storage. (30-A M.R.S. §4215 (2)).

D. Permit for seasonal conversion:

The LPI must issue a permit for conversion of a seasonal dwelling to a year-round or principal dwelling if one of the following requirements is met:

(1) Existing legal system:

A subsurface waste water disposal application, dated after July 1, 1974, exists, showing that the dwelling's system substantially complies with the Maine Subsurface Wastewater Disposal Rules (10-144 CMR 241) in effect at the time of application, and applicable municipal ordinances. The system must have been installed with the required permit and a certificate of approval must have been issued;

SECTION 4

(2) Legal replacement system:

A replacement for an existing onsite wastewater disposal system has been installed, so that it complies with Section C of these Rules and applicable municipal ordinances; or

(3) Public sewer available:

The dwelling unit's waste water is connected to an approved sanitary sewer system.

SECTION 4. SUBSTANTIAL COMPLIANCE

A. General:

A system is deemed to be in substantial compliance with these rules, providing the requirements in this section are met.

B. Municipal ordinances: The system meets applicable municipal ordinances;

C. Disposal field: The disposal field meets the requirements of Table A;

D. Septic tank: The septic tank meets the sizing requirements of Table B;

E. Site conditions: The site meets the siting requirements in Table C; and

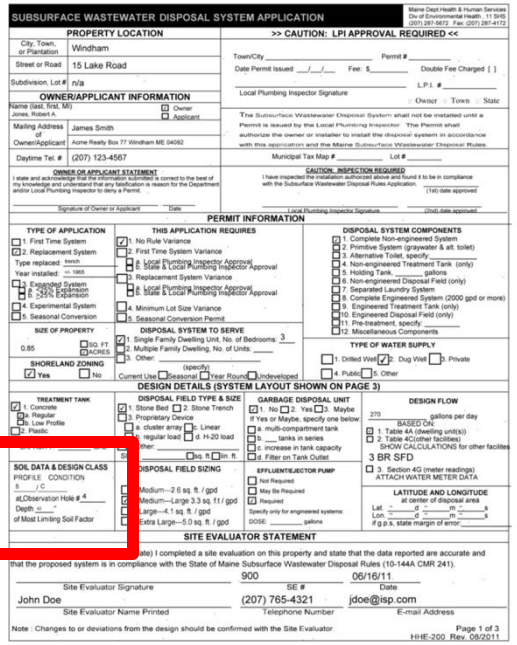
F. Setbacks: The setbacks meet or exceeds the minimum horizontal setback distances in Table D.

C. Disposal field: The disposal field meets the requirements of Table A;

TABLE A
MINIMUM PERMITTING CONDITIONS AND MINIMUM DESIGN REQUIREMENTS
NOTE: "NOT ALLOWED" INDICATES THAT A SEASONAL CONVERSION IS NOT ALLOWED.

	Limiting Factors						
Soil Profiles [b]	AI	AII	AIII	B	C	D	E
1, 2, 3, 4, 7, 8, 9	Not Allowed	Not Allowed	24 [a]	12 [a]	12 [a]	Not Allowed	Not Allowed
5,6	Not Allowed	Not Allowed	24 [a]	24 [a]	24 [a]	Not Allowed	Not Allowed

SOIL DATA & DESIGN CLASS
PROFILE CONDITION
_____/_____
At Observation Hole # _____
Depth_____"
Of Most Limiting Factor



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation: Windham
Street or Road: 15 Lake Road
Subdivision, Lot #: n/a

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Jones, Robert A.
☑ Owner ☐ Applicant
Mailing Address of Owner/Applicant: James Smith, Acme Realty Box 77 Windham ME 04062
Daytime Tel. #: (207) 123-4567

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.

Signature of Owner or Applicant — Date

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]
Local Plumbing Inspector Signature — L.P.I. # _____
○ Owner ○ Town ○ State

The Subsurface Wastewater Disposal System shall not 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.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. (1st) date approved

Local Plumbing Inspector Signature — (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION
☐ 1. First Time System
☑ 2. Replacement System: Type replaced: trench; Year installed: +/- 1965
☐ 3. Expanded System: ☐ A. 25% Expansion ☐ B. 100% 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 Permit

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 (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12 Miscellaneous Components

SIZE OF PROPERTY: 0.85 ☐ SQ. FT. ☑ ACRES

DISPOSAL SYSTEM TO SERVE
☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: ____
☐ 3. Other: _____ (specify)
Current Use: ☐ Seasonal ☐ Year Round ☐ Undeveloped

TYPE OF WATER SUPPLY
☐ 1. Drilled Well ☑ 2. Dug Well ☐ 3. Private
☐ 4. Public ☐ 5. Other

SHORELAND ZONING: ☑ Yes ☐ No

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
☑ 1. Concrete ☐ a. Regular ☐ b. Low Profile ☐ 2. Plastic

DISPOSAL FIELD TYPE & SIZE
☑ 1. Stone Bed ☐ 2. Stone Trench ☐ 3. Proprietary Device ☐ a. cluster array ☐ b. Linear ☐ c. regular load ☐ d. H-20 load ☐ e. Other: _____ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT
☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW
270 gallons per day
BASED ON
☐ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilities
3 BR SFD
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS
PROFILE CONDITION
5 / C
at Observation Hole # 4
Depth = "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING
☐ Medium—2.6 sq. ft. / gpd
☑ Medium—Large 3.3 sq. ft / gpd
☐ Large—4.1 sq. ft. / gpd
☐ Extra Large—5.0 sq. ft / gpd

EFFLUENT EJECTOR PUMP
☐ Not Required
☐ May Be Required
☑ Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE
at center of disposal area
Lat. ___ d ___ m ___ s
Lon. ___ d ___ m ___ s
If g.p.s., state margin of error: _____

SITE EVALUATOR STATEMENT

(date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature — SE # 900 — Date 06/16/11
John Doe — Site Evaluator Name Printed
(207) 765-4321 — Telephone Number
jdoe@isp.com — E-mail Address

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

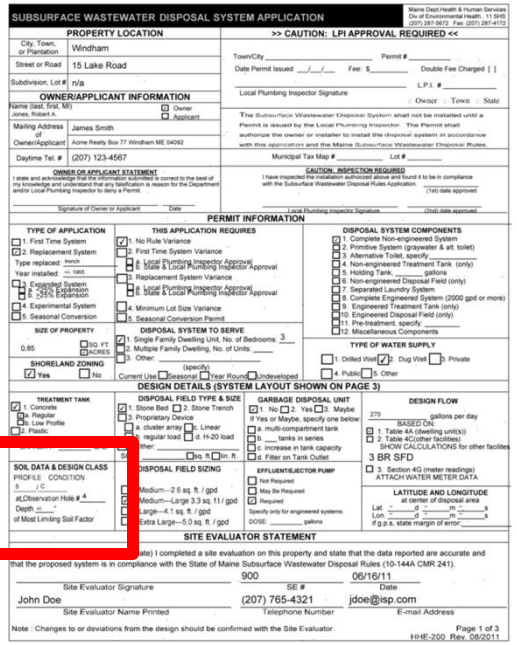
Page 1 of 3
HHE-200 Rev. 08/2011

C. Disposal field: The disposal field meets the requirements of Table A;

TABLE A
MINIMUM PERMITTING CONDITIONS AND MINIMUM DESIGN REQUIREMENTS
NOTE: "NOT ALLOWED" INDICATES THAT A SEASONAL CONVERSION IS NOT ALLOWED.

	Limiting Factors						
Soil Profiles [b]	AI	AII	AIII	B	C	D	E
1, 2, 3, 4, 7, 8, 9	Not Allowed	Not Allowed	24 [a]	12 [a]	12 [a]	Not Allowed	Not Allowed
5,6	Not Allowed	Not Allowed	24 [a]	24 [a]	24 [a]	Not Allowed	Not Allowed

SOIL DATA & DESIGN CLASS
PROFILE CONDITION
_____/_____
At Observation Hole # _____
Depth_____"
Of Most Limiting Factor



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation: Windham
Street or Road: 15 Lake Road
Subdivision, Lot #: n/a

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Jones, Robert A. — ☑ Owner ☐ Applicant
Mailing Address of Owner/Applicant: James Smith, Acme Really Box 77 Windham ME 04062
Daytime Tel. #: (207) 123-4567

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.

Signature of Owner or Applicant — Date

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit Issued ___/___/___ Fee: $_____ Double Fee Charged [ ]
Local Plumbing Inspector Signature — L.P.I. # _____
○ Owner ○ Town ○ State

The Subsurface Wastewater Disposal System shall not 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.

Municipal Tax Map # _____ Lot # _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. (1st) date approved

Local Plumbing Inspector Signature — (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION
☐ 1. First Time System
☑ 2. Replacement System: Type replaced: trench; Year installed: +/- 1965
☐ 3. Expanded System: ☐ A. 25% Expansion ☐ B. 50% 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 Permit

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 (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12 Miscellaneous Components

SIZE OF PROPERTY
0.85 ☐ SQ. FT. ☑ ACRES

DISPOSAL SYSTEM TO SERVE
☑ 1. Single Family Dwelling Unit, No. of Bedrooms: 3
☐ 2. Multiple Family Dwelling, No. of Units: ____
☐ 3. Other: _____ (specify)
Current Use: ☐ Seasonal ☐ Year Round ☐ Undeveloped

TYPE OF WATER SUPPLY
☐ 1. Drilled Well ☑ 2. Dug Well ☐ 3. Private
☐ 4. Public ☐ 5. Other

SHORELAND ZONING
☑ Yes ☐ No

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK
☑ 1. Concrete ☐ A. Regular ☐ B. Low Profile ☐ 2. Plastic

DISPOSAL FIELD TYPE & SIZE
☑ 1. Stone Bed ☐ 2. Stone Trench ☐ 3. Proprietary Device ☐ a. cluster array ☐ b. Linear ☐ c. regular load ☐ d. H-20 load ☐ Other: _____ ☐ sq. ft ☐ ln. ft.

GARBAGE DISPOSAL UNIT
☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW
270 gallons per day
BASED ON
☐ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C(other facilities)
SHOW CALCULATIONS for other facilities
3 BR SFD
☐ 3. Section 4G (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS
PROFILE CONDITION
5 / C
at Observation Hole # 4
Depth = "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING
☐ Medium—2.6 sq. ft. / gpd
☑ Medium—Large 3.3 sq. ft / gpd
☐ Large—4.1 sq. ft. / gpd
☐ Extra Large—5.0 sq. ft / gpd

EFFLUENT EJECTOR PUMP
☐ Not Required
☐ May Be Required
☑ Required
Specify only for engineered systems:
DOSE: _____ gallons

LATITUDE AND LONGITUDE
at center of disposal area
Lat. ___ d ___ m ___ s
Lon. ___ d ___ m ___ s
If g.p.s., state margin of error: _____

SITE EVALUATOR STATEMENT

(date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature — SE # 900 — Date 06/16/11
John Doe — Site Evaluator Name Printed
(207) 765-4321 — Telephone Number
jdoe@isp.com — E-mail Address

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

Page 1 of 3
HHE-200 Rev. 08/2011

C. Disposal field: The disposal field meets the requirements of Table A;

TABLE A
MINIMUM PERMITTING CONDITIONS AND MINIMUM DESIGN REQUIREMENTS
NOTE: "NOT ALLOWED" INDICATES THAT A SEASONAL CONVERSION IS NOT ALLOWED.

	Limiting Factors						
Soil Profiles [b]	AI	AII	AIII	B	C	D	E
1, 2, 3, 4, 7, 8, 9	Not Allowed	Not Allowed	24 [a]	12 [a]	12 [a]	Not Allowed	Not Allowed
5,6	Not Allowed	Not Allowed	24 [a]	24 [a]	24 [a]	Not Allowed	Not Allowed

SOIL DATA & DESIGN CLASS
PROFILE CONDITION
3 / AII
At Observation Hole # _____
Depth_____"
Of Most Limiting Factor

C. Disposal field: The disposal field meets the requirements of Table A;

TABLE A
MINIMUM PERMITTING CONDITIONS AND MINIMUM DESIGN REQUIREMENTS
NOTE: "NOT ALLOWED" INDICATES THAT A SEASONAL CONVERSION IS NOT ALLOWED.

	Limiting Factors						
Soil Profiles [b]	AI	AII	AIII	B	C	D	E
1, 2, 3, 4, 7, 8, 9	Not Allowed	Not Allowed	24 [a]	12 [a]	12 [a]	Not Allowed	Not Allowed
5,6	Not Allowed	Not Allowed	24 [a]	24 [a]	24 [a]	Not Allowed	Not Allowed

SOIL DATA & DESIGN CLASS
PROFILE CONDITION
3 / AII
At Observation Hole # _____
Depth_____"
Of Most Limiting Factor

[a.] Alternately, may meet substantial compliance criteria in Table C.

D. Septic tank: The septic tank meets the sizing requirements of Table B;

TABLE B
SEPTIC TANK CAPACITY PER DWELLING UNIT

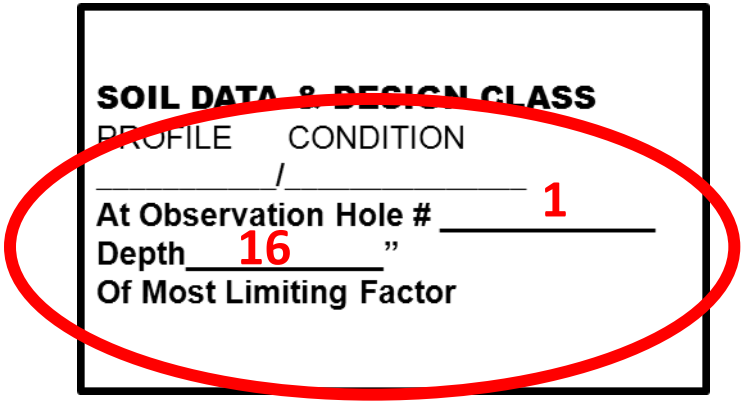
Number of bedrooms per dwelling unit	Minimum septic tank liquid capacity
1 Bedroom	750 gallons
2 Bedrooms	750 gallons
3 Bedrooms	1,000 gallons
4 Bedrooms	1,000 gallons
5 Bedrooms	1,250 gallons or greater
For each additional bedroom	250 gallons per bedroom

CORRECT SIZE TANK FOR # OF BEDROOMS

E. Site conditions: The site meets the siting requirements in Table C; and

TABLE C
SUBSTANTIAL COMPLIANCE FOR SITE CONDITIONS

Depth to restrictive layer/bedrock	15 inches
Depth to Seasonal High Groundwater Table	**9** inches
Maximum slope	25 % grade



SOIL CONDITION

SLOPE

LIMITING FACTOR

RESTRICTIVE LAYER

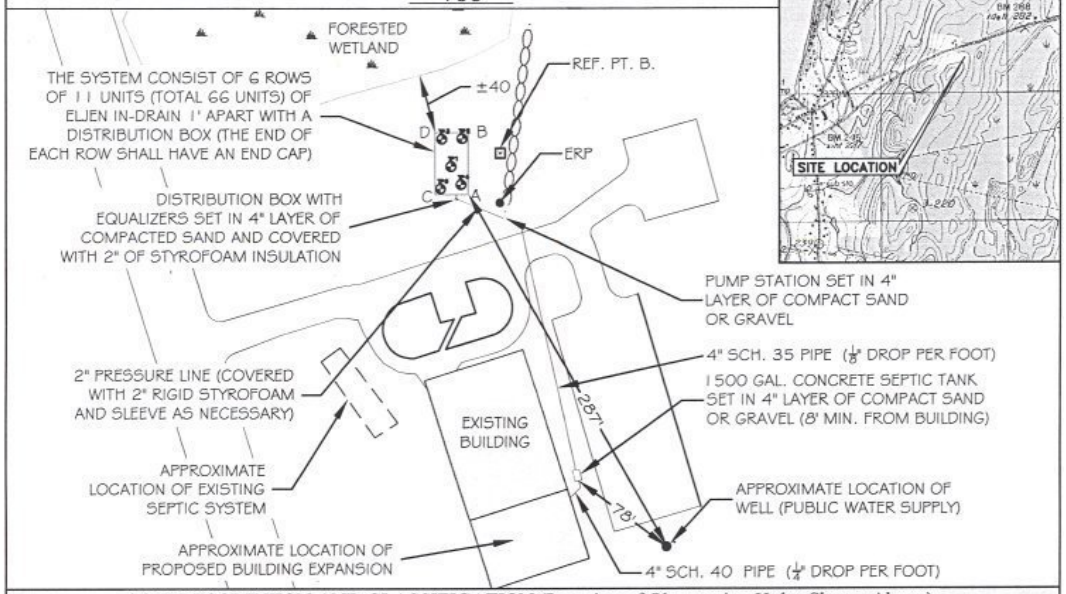
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner's Name
***	***	***

SITE PLAN

Scale 1" = 100 ft. or as shown



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
0–10	Fine sandy loam	Friable	Brown	None
10–20			Yellowish brown	
20–30	Silty clay	Firm	Olive gray	Common medium distinct light olive brown
30–40	Bottom of Back Hoe Pit			
40–50				

Soil Classification	Slope	Limiting Factor	
8 Profile / C Condition	11 %	16 "	■ Ground Water □ Restrictive Layer □ Bedrock □ Pit Depth

Observation Hole 2-5 ■ Test Pit □ Boring

0 " Depth of Organic Horizon Above Mineral Soil

Depth Below Mineral Soil Surface (inches)	Texture	Consistency	Color	Mottling
0–10	Fine sandy loam	Friable	Brown	None
10–20			Yellowish brown	
20–30	Silty clay	Firm	Olive gray	Common medium distinct light olive brown
30–40	Bottom of Back Hoe Pit			
40–50				

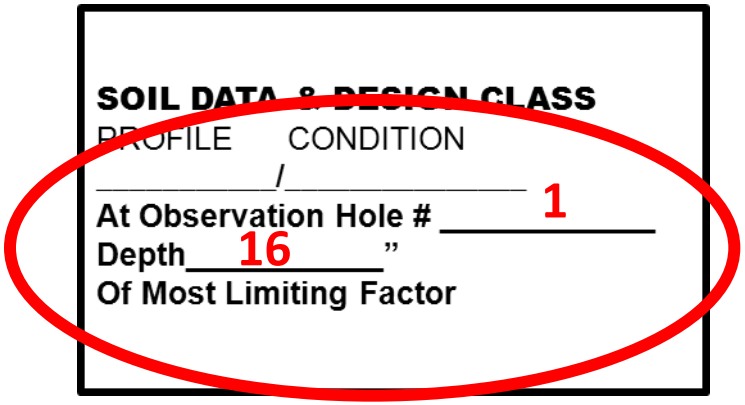
Soil Classification	Slope	Limiting Factor	
C Condition	11 %	16 "	■ Ground Water □ Restrictive Layer □ Bedrock □ Pit Depth

Site Evaluator Signature	SE #	Date
***	***	**/**/07

E. Site conditions: The site meets the siting requirements in Table C; and

TABLE C
SUBSTANTIAL COMPLIANCE FOR SITE CONDITIONS

Depth to restrictive layer/bedrock	15 inches
Depth to Seasonal High Groundwater Table	**9** inches
Maximum slope	25 % grade



[a.] Alternately, may meet substantial compliance criteria in Table C.

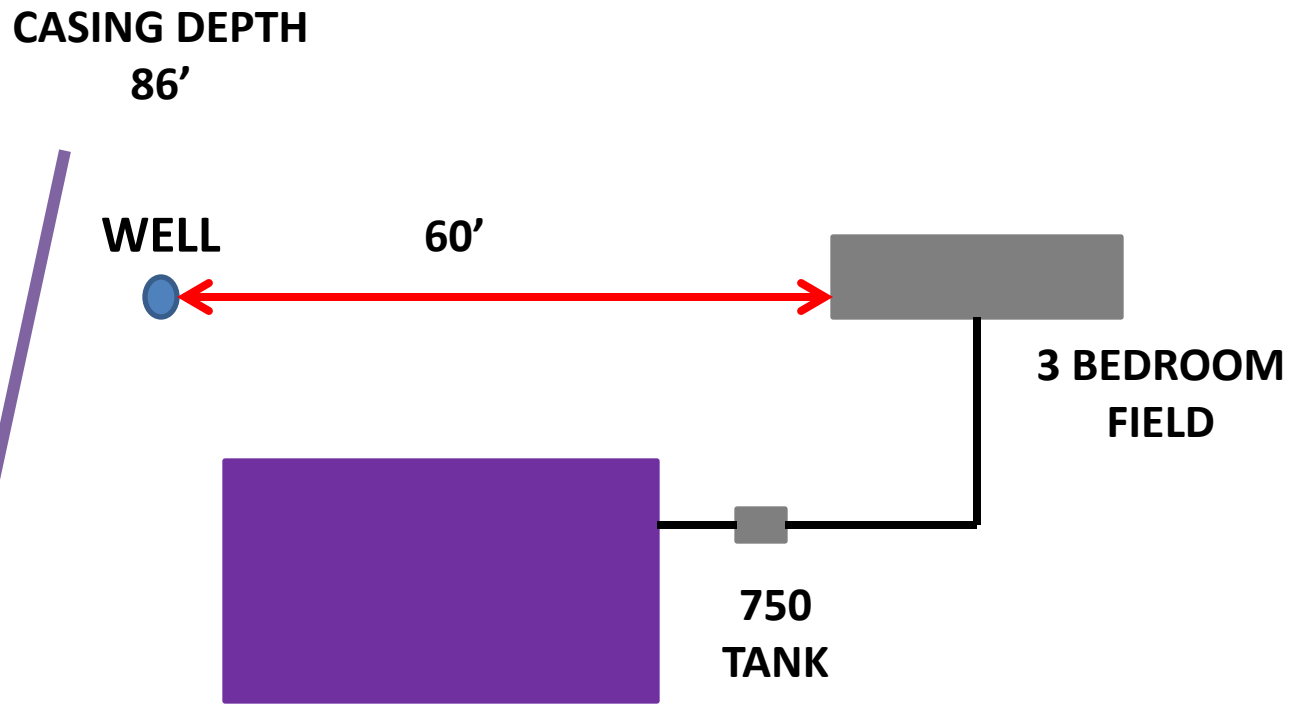
F. Setbacks: The setbacks meet or exceeds the minimum horizontal setback distances in Table D.

TABLE D
ALLOWED SETBACKS FOR SEASONAL CONVERSIONS
WITHIN THE SHORELAND ZONE

Site features vs. disposal system components of various sizes	Disposal Fields (total design flow)			Treatment Tanks (total design flow)		
	Less than 1,000 gpd	1,000 to 2000 gpd	Over 2,000 gpd	Less than 1,000 gpd	1,000 to 2,000 gpd	Over 2,000 gpd
Wells with water usage of 2000 or more gpd or public water system wells	300 feet	300 feet	300 feet	150 feet	150 feet	150 feet
Potable Water Supply	80 feet	160 feet	240 feet	50 feet	50 feet	50 feet
Water supply line	10 feet	10 feet	10 feet	10 feet	10 feet	10 feet
Water body/course, major	80 feet	160 feet	240 feet	40 feet	40 feet	40 feet
Water body/course, minor	40 feet	80 feet	120 feet	40 feet	40 feet	40 feet
Drainage ditches	20 feet	40feet	60 feet	20 feet	20 feet	20 feet
Edge of fill extension-- Coastal wetlands, wetlands of special significance, significant vernal pools	25 feet	25 feet	25 feet	25 feet	25 feet	25 feet
Slopes greater than 3:1	10 feet	14 feet	20 feet	N/A	N/A	N/A
No full basement [e.g. slab, frost wall, columns]	15 feet	28 feet	40 feet	8 feet	14 feet	20 feet
Full basement [below grade foundation]	20 feet	30 feet	40 feet	8 feet	14 feet	20 feet
Property lines	10 feet	14 feet	20 feet	8 feet	14 feet	20 feet
Burial sites or graveyards, measured from the toe of the fill extension	25 feet	25 feet	25 feet	25 feet	25 feet	25 feet
Stormwater infiltration systems	80 feet	160 feet	240 feet	50 feet	50 feet	50 feet
Wetponds, retention ponds, and detention basins (excavated below grade); Soil filters, underdrained swales, underdrained outlets, and similar structures	50 feet	100 feet	150 feet	50 feet	50 feet	50 feet
Stormwater detention basins (basin bottom at or above predevelopment grade)	20 feet	40 feet	60 feet	20 feet	20 feet	20 feet

THERE ARE NO PROVISIONS FOR VARIANCES IN THE RULES FOR SEASONAL CONVERSION

WATER BODY



Depth of well casing or liner seal below ground level	Reduction in the minimum 100 ft setback distance
>40 feet to 55 feet	100 down to 90 feet
>55 feet to 70 feet	100 down to 80 feet
>70 feet to 86 feet	100 down to 70 feet
>86 feet	100 down to 60 feet

10-144

Chapter 242

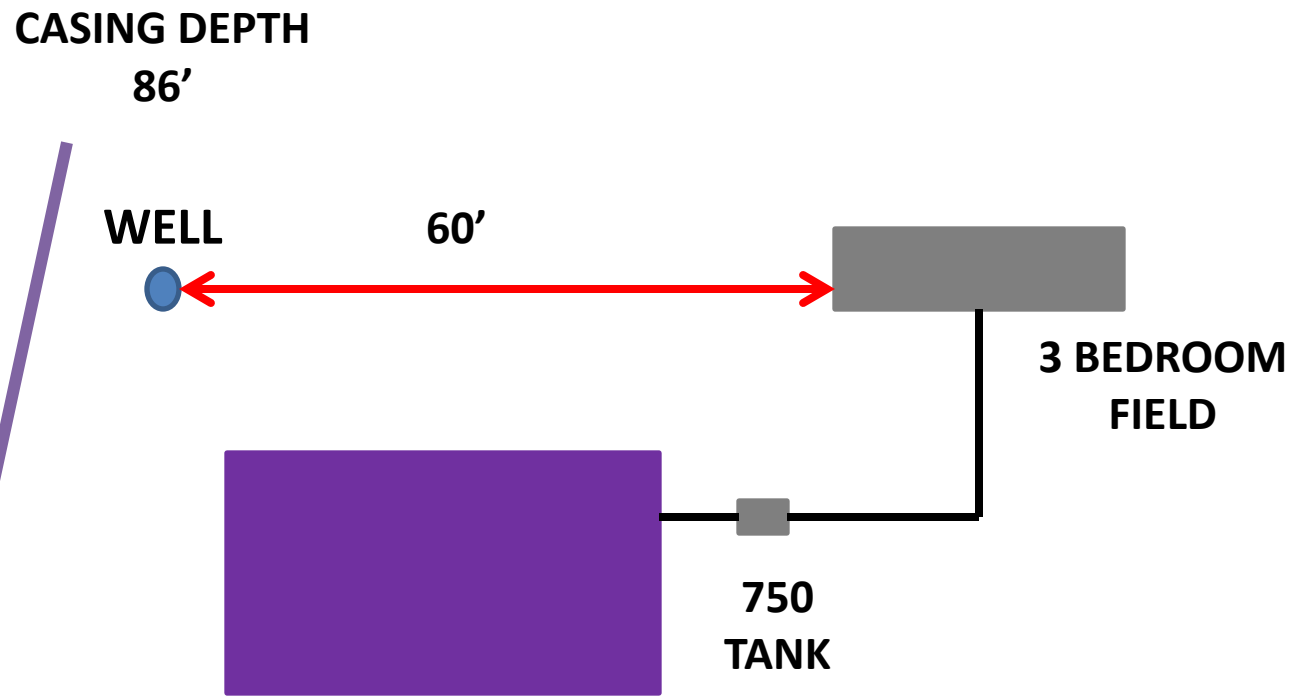
STATE OF MAINE RULES FOR CONVERSION OF SEASONAL DWELLING UNITS INTO YEAR-ROUND RESIDENCES IN THE SHORELAND ZONE

DEPARTMENT OF HEALTH & HUMAN SERVICES
MAINE CENTER FOR DISEASE CONTROL & PREVENTION
DIVISION OF ENVIRONMENTAL HEALTH
11 STATE HOUSE STATION
AUGUSTA, MAINE 04333

EFFECTIVE DATE: JANUARY 7, 2011

THERE ARE NO PROVISIONS FOR VARIANCES IN THE RULES FOR SEASONAL CONVERSION

WATER BODY



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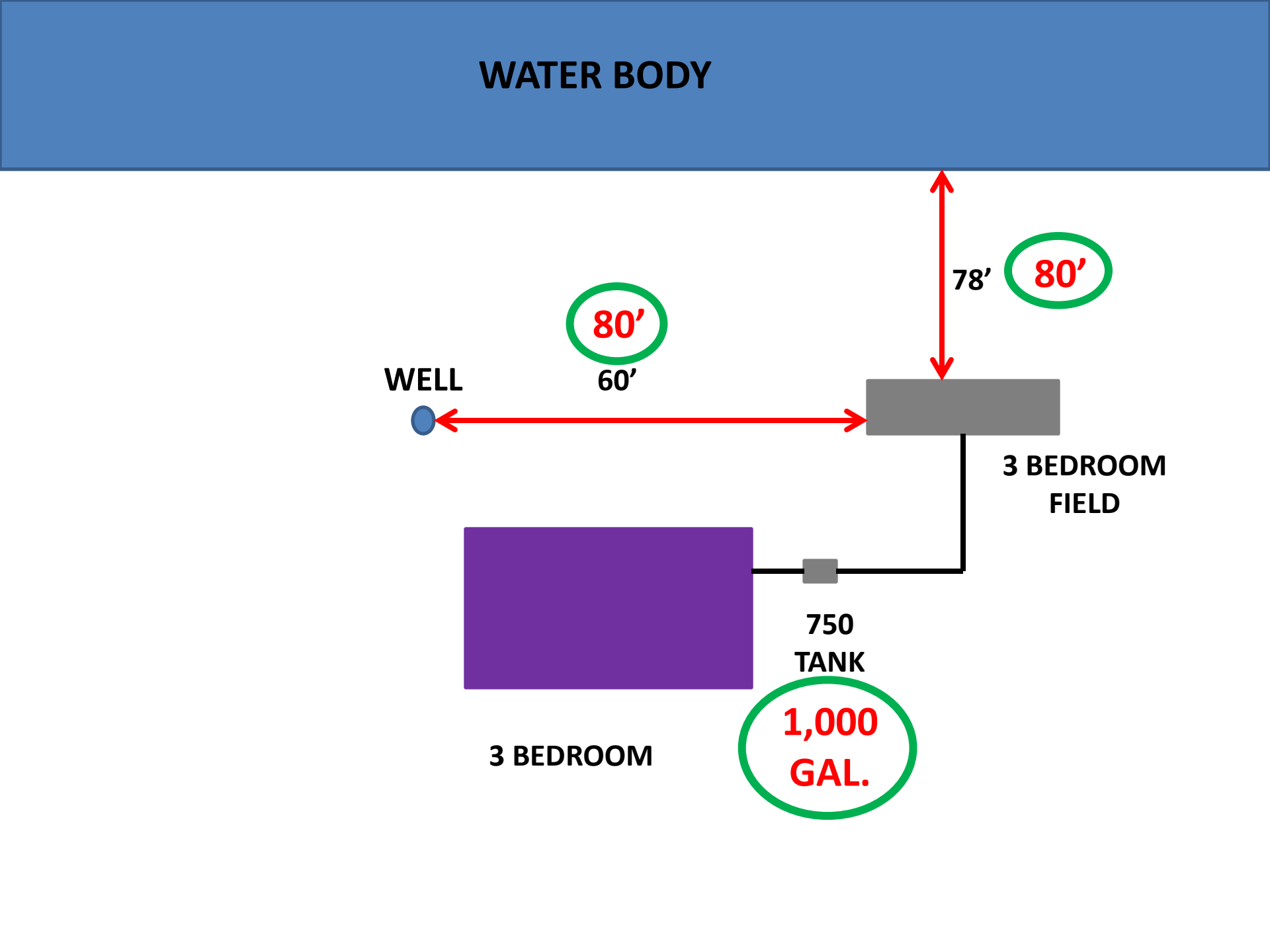
WATER BODY
78’
80’
80’
WELL
60’
3 BEDROOM
FIELD
750
TANK
1,000
GAL.
3 BEDROOM


HAPPY HALLOWEEN

Questions?

STATE PLUMBING INSPECTOR
BRENT LAWSON
BRENT.LAWSON@MAINE.GOV
592-7376

STATE SITE EVALUATOR
GLENN ANGELL
GLENN.B.ANGELL@MAINE.GOV
592-2084