

# 582-5224 Linda

called 8/17 9:35

Town Copy  
120.00  
FORMS

REPLACEMENT SYSTEM VARIANCE REQUEST

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST

This form shall be attached to an application (HHE-200) for the proposed replacement system which requires a variance to the Rules. The LPI shall review the Replacement System Variance Request an HHE-200 and may approve the Request if all of the following requirements can be met, and the variance(s) requested fall within the limits of LPI's authority.

1. The proposed design meets the definition of a Replacement System as defined in the Rules (Sec. 2006)
2. There will be no change in use of the structure except as authorized for one-time exempted expansions outside the shoreland zone of major waterbodies/courses.
3. The replacement system is determined by the Site Evaluator and LPI to be the most practical method to treat and dispose of the wastewater.
4. The BOD5 plus S.S. content of the wastewater is no greater than that of normal domestic effluent.

**GENERAL INFORMATION**

Town of Augusta

Permit No. 5849 Date Permit Issued 8/16/06

Property Owner's Name: Harold Tibbetts Tel. No.: 622-9207

System's Location: 1111 Tasker Road Augusta, Maine 04330

Property Owner's Address: Same

(if different from above) \_\_\_\_\_

**SPECIFIC INSTRUCTIONS TO THE:**

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

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

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

**PROPERTY OWNER**

I understand that the proposed system requires a variance to 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.

Harold Tibbetts SIGNATURE OF OWNER

Jul 5 06 DATE

**LOCAL PLUMBING INSPECTOR**

I, Maury E. Feltner, the undersigned, have visited the above property and have determined to the best of my knowledge that it cannot be installed in compliance with the Rules. As a result of my review of the Replacement Variance Request, the Application, and my on-site investigation, I (check and complete either a or b):

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

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

Comments: \_\_\_\_\_

Maury E. Feltner LPI SIGNATURE

8/16/06 DATE

HHE-204 Rev 10/02

**FORMS**

**Replacement System Variance Request**

VARIANCE CATEGORY	LIMIT OF LPP'S APPROVAL AUTHORITY						VARIANCE REQUESTED TO:	
	Disposal Fields			Septic Tanks			Disposal Fields	Septic Tanks
From	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	Less than 1000 gpd	1000 to 2000 gpd	Over 2000 gpd	To	To
<b>SOILS</b>								
Soil Profile	Ground Water Table			to 7"			inches	
Soil Condition	Restrictive Layer			to 7"			inches	
from HHE-200	Bedrock			to 12"			inches	
<b>SETBACK DISTANCES (in feet)</b>								
	Disposal Fields			Septic Tanks			Disposal Fields	Septic Tanks
<b>From</b>	<b>Less than 1000 gpd</b>	<b>1000 to 2000 gpd</b>	<b>Over 2000 gpd</b>	<b>Less than 1000 gpd</b>	<b>1000 to 2000 gpd</b>	<b>Over 2000 gpd</b>	<b>To</b>	<b>To</b>
Wells with water usage of 2000 or more gpd or public water supply wells	300 ft [a]	300 ft [a]	300 ft [a]	100 ft [a]	100 ft [a]	100 ft [a]		
Owner's wells	100 down to 60 ft	200 down to 100 ft	300 down to 150 ft	100 down to 50 ft [b]	100 down to 50 ft	100 down to 50 ft		
Neighbor's wells	100 down to 60 ft [b]	200 down to 120 ft [b]	300 down to 180 ft [b]	100 down to 50 ft [b]	100 down to 75 ft [b]	100 down to 75 ft [b]		
Water supply line	10 ft [a]	20 ft [a]	25 ft [a]	10 ft [a]	10 ft [a]	10 ft [a]		
Water course, major - for replacements only, see Table 400.4 for major expansions	100 down to 60 ft	200 down to 120 ft	300 down to 180 ft	100 down to 50 ft	100 down to 50 ft	100 down to 50 ft	62'	65'
Water course, minor	50 down to 25 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	25 ft [d]	25 ft [d]	25 ft [d]	25 ft [d]	25 ft [d]	25 ft [d]		
Slopes greater than 3:1	10 ft	18 ft	25 ft	N/A	N/A	N/A		
No full basement [e.g. slab, frost wall, columns]	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]	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		
Property lines	10 down to 5 ft [c]	18 down to 9 ft [c]	20 down to 10 ft [c]	10 down to 4 ft [c]	15 down to 7 ft [c]	20 down to 10 ft [c]		
Burial sites or graveyards, measured from the down toe of the fill extension	25 ft	25 ft	25 ft	25 ft	25 ft	25 ft		
<b>OTHER</b>								
1. Fill extension Grade - to 3:1								
2.								
3.								

Footnotes: [a.] Single-family well setbacks may be reduced as prescribed in Section 701.2.

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

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

[d.] Additional setbacks may be required by local Shoreland zoning.

[e.] Natural Resource Protection Act requires a 25 feet setback, on slopes of less than 20%, from the edge of soil disturbance and 100 feet on slopes greater than 20%. See Chapter 15.

[f.] May not be any closer to neighbors well than the existing disposal field or septic tank unless written permission is granted by the neighbor. This setback may be reduced for single family houses with Department approval. See Section 702.3.

[g.] The fill extension shall reach the existing ground before the 3:1 slope or within 100 feet of the disposal field.

[h.] See Section 1402.10 for special procedures when these minimum setbacks cannot be achieved.

*David P. Roogue*  
 \_\_\_\_\_  
 SITE EVALUATOR'S SIGNATURE

*7/1/06*  
 \_\_\_\_\_  
 DATE

**FOR USE BY THE DEPARTMENT ONLY**

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

\_\_\_\_\_  
 SIGNATURE OF THE DEPARTMENT

\_\_\_\_\_  
 DATE

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services  
 Division of Health Engineering, 10 SHS  
 (207) 287-5672 Fax: (207) 287-3165

## PROPERTY LOCATION >> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

City, Town, or Plantation: Augusta  
 Street or Road: Tasker Rd.  
 Subdivision, Lot #: \_\_\_\_\_

AUGUSTA PERMIT # 5849 TOWN COPY  
 Date Permit Issued: 8/16/06 \$ 120.00  If Double Fee Charged  
 Local Plumbing Inspector Signature: [Signature] L.P.I. # 850

### OWNER/APPLICANT INFORMATION

Name (last, first, MI): Tibbotts Harold S.  Owner  Applicant  
 Mailing Address of Owner/Applicant: 1111 Tasker Rd. Augusta, ME 04330  
 Daytime Tel. #: 622-9207

Municipal Tax Map # 66 Lot # 1

### OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any false information is reason for the Department and/or Local Plumbing Inspector to deny a Permit.  
 Signature of Owner or Applicant: [Signature] Date: \_\_\_\_\_

### CAUTION: INSPECTION REQUIRED

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

## PERMIT INFORMATION

### TYPE OF APPLICATION

1. First Time System  
 2. Replacement System  
 Type replaced: UNKNOWN  
 Year installed: 1964  
 3. Expanded System  
 a. Minor Expansion  
 b. Major Expansion  
 4. Experimental System  
 5. Seasonal Conversion

### THIS APPLICATION REQUIRES

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

0.7  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)

### TYPE OF WATER SUPPLY

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

### SHORELAND ZONING

Yes  No

Current Use  Seasonal  Year Round  Undeveloped

## 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: 1200  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

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

### SOIL DATA & DESIGN CLASS

PROFILE CONDITION DESIGN: 12, C, 1, 7  
 at Observation Hole # 1  
 Depth 24"  
 of Most Limiting Soil Factor

### DISPOSAL FIELD SIZING

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

### EFFLUENT/EJECTOR PUMP

1. Not Required  
 2. May Be Required  
 3. Required  
 Specify only for engineered systems:  
 DOSE: \_\_\_\_\_ gallons

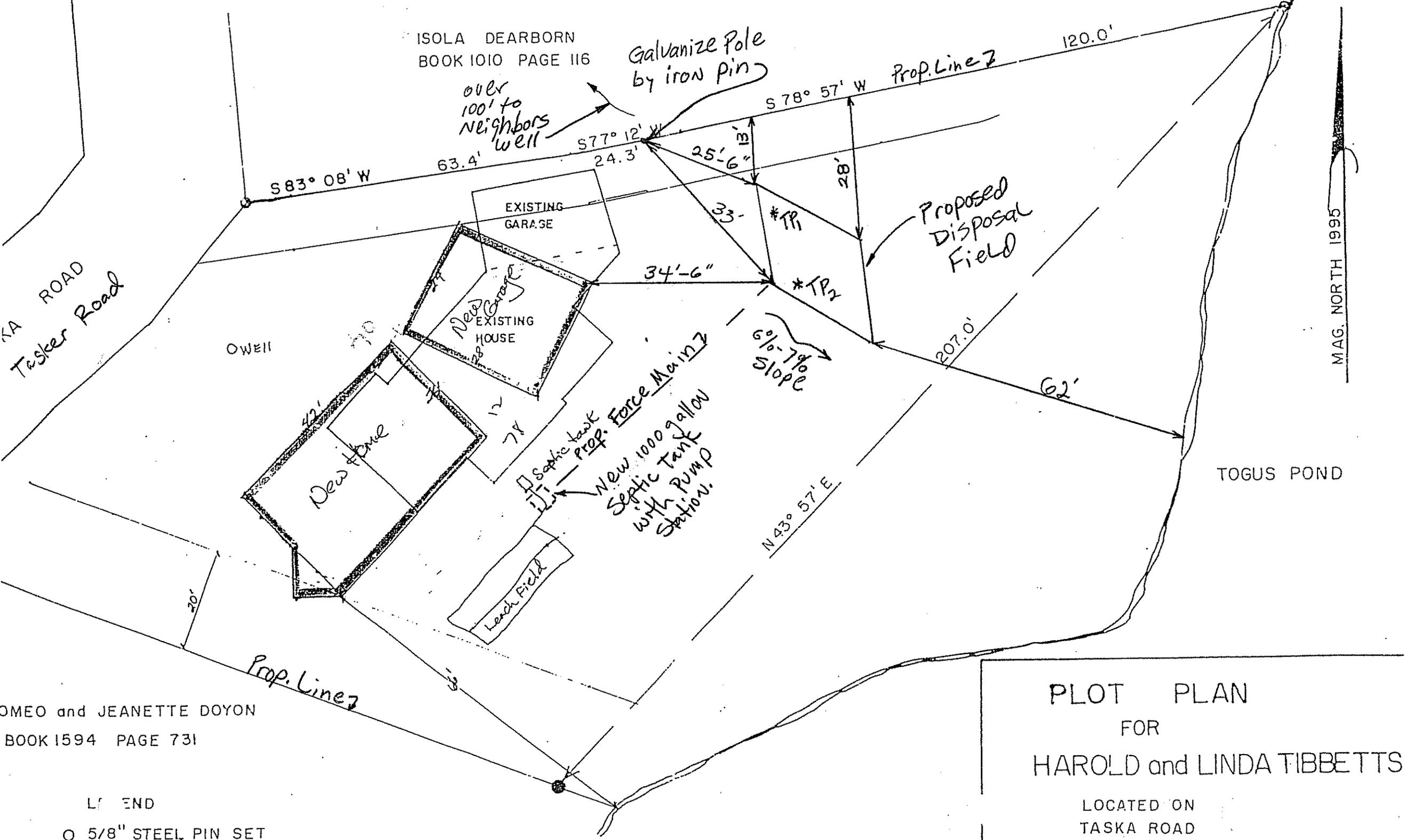
### ATTACH WATER METER DATA

LATITUDE AND LONGITUDE  
 at center of disposal area  
 Lat. 44 d 19 . 120  
 Lon. 69 d 39 . 905  
 If g.p.s. state margin of error: 30

## SITE EVALUATOR STATEMENT

I certify that on 7/1/06 (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: [Signature] SE #: 154 Date: 7/1/06  
 Site Evaluator Name Printed: David P. Rocque Telephone Number: 622-7487 E-mail Address: N/A



OMEIO and JEANETTE DOYON  
BOOK 1594 PAGE 731

PLOT PLAN  
FOR  
HAROLD and LINDA TIBBETTS

LOCATED ON  
TASKA ROAD

L' END  
O 5/8" STEEL PIN SET

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services  
Division of Health Engineering, Station 10  
(207) 287-5672 FAX (207) 287-3165

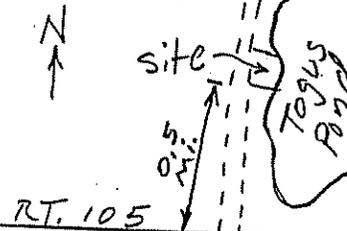
Town, City, Plantation  
**AUGUSTA**

Street, Road, Subdivision  
**1111 Tasker Road**

Owner or Applicant Name  
**Harold Tibbetts**

SITE PLAN  
Scale: 1" = **N/A** ft.  
**SEE ATTACHED SITE PLAN**

SITE LOCATION MAP  
(Attach map from Maine Atlas for First Time System Variance)



## ELGEN IN-DRAIN ELEVATIONS

ROW#	Bottom In-Drain	TOP pipe	Finished Grade
1	-40"	-29"	17"
2	-43"	32"	20"
3	-46"	-35"	23"
4	-49"	-38"	26"
5	-52"	-41"	29"

## SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # **TP1**  Test Pit  Boring  
SOD " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
Loamy Gravel		Dark	
Loam	Friable	olive	None observed
Loamy Fine Sand		Brown	
Fill			Saturated
LoE			
use Medium Large Design			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
12	C	6-8	24	

Observation Hole # **TP2**  Test Pit  Boring  
SOD " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
Loamy Gravel		Dark	
Fill	Friable	Brown	
Gravelly sandy loam			Saturated
Loam Fill			
use medium large Design			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
12	C	6-8	24	

**David P. Roque**  
Site Evaluator Signature

**154**  
SE #

**7/1/06**  
Date

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services  
 Division of Health Engineering, Station 10  
 (207) 287-5672 FAX (207) 287-3165

Town, City, Plantation

Augusta

Street, Road, Subdivision

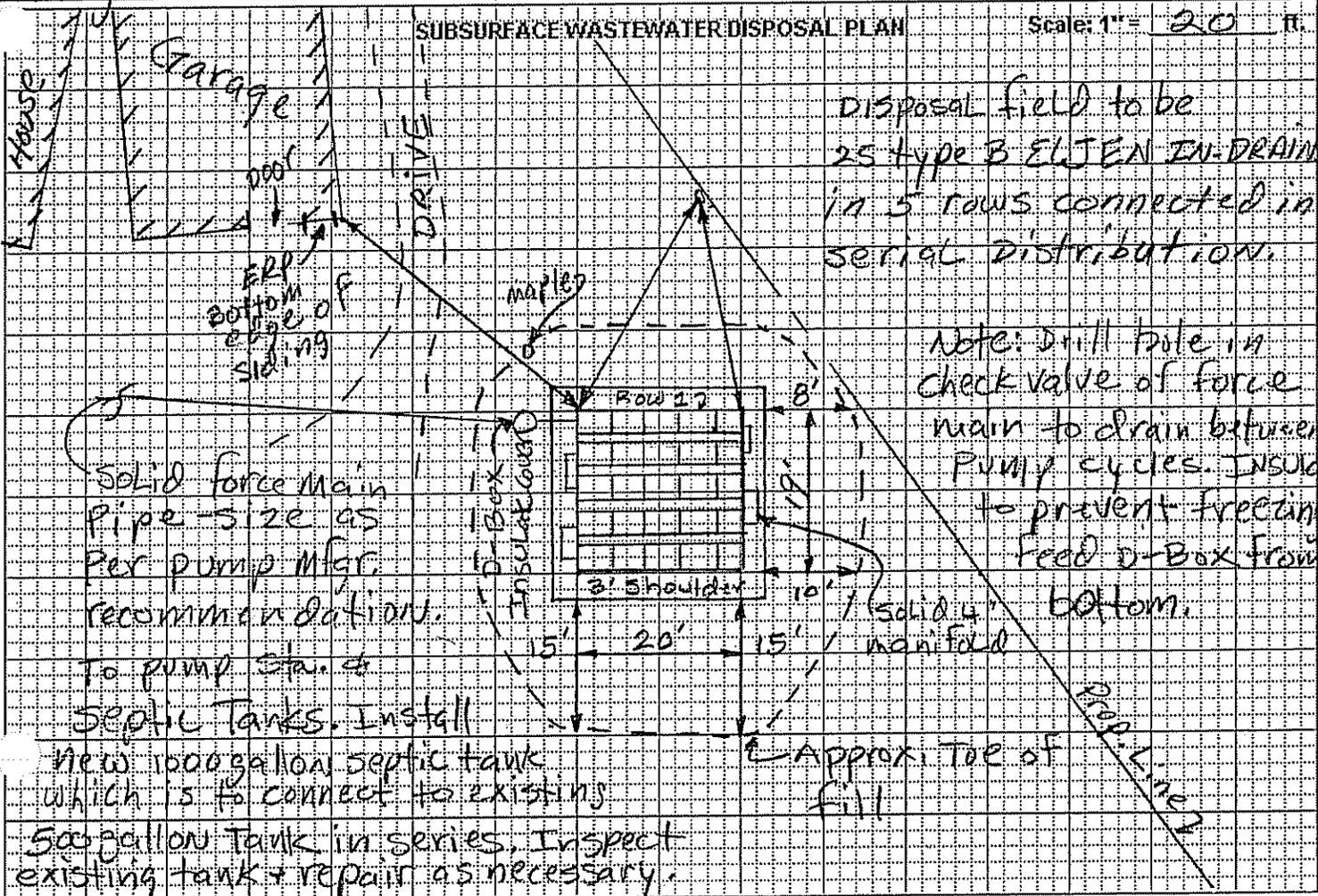
1111 Tasker Road

Owner or Applicant Name

Harold Tibbetts

## SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale: 1" = 20' ft.



### BACKFILL REQUIREMENTS

Depth of Backfill (upslope) 24"  
 Depth of Backfill (downslope) 24-28"  
 DEPTHS AT CROSS-SECTION (shown below)

### CONSTRUCTION ELEVATIONS

Finished Grade Elevation see page 2"  
 Top of Distribution Pipe or Proprietary Device \_\_\_\_\_"  
 Bottom of Disposal Field \_\_\_\_\_"

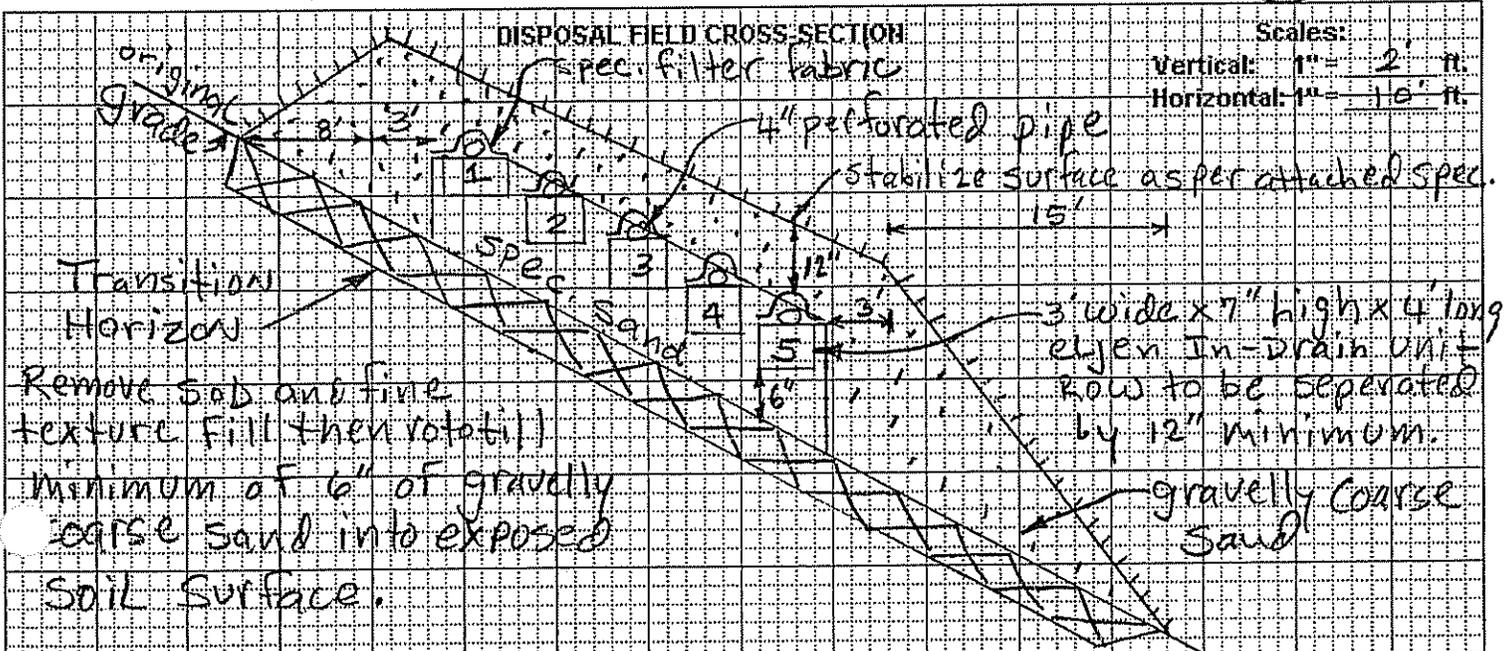
### ELEVATION REFERENCE POINT

Location & Description: bottom edge of siding on corner of garage  
 Reference Elevation is: 0.0" or: \_\_\_\_\_"

### DISPOSAL FIELD CROSS-SECTION

Scales:

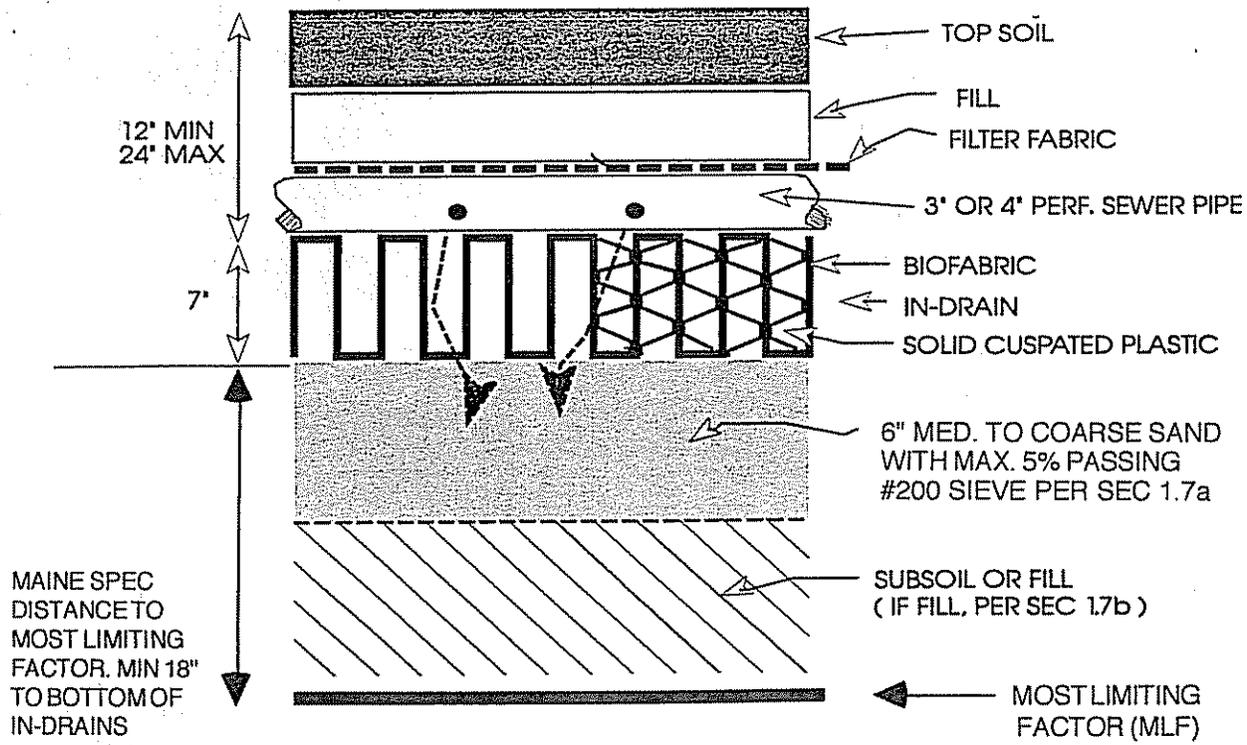
Vertical: 1" = 2' ft.  
 Horizontal: 1" = 10' ft.



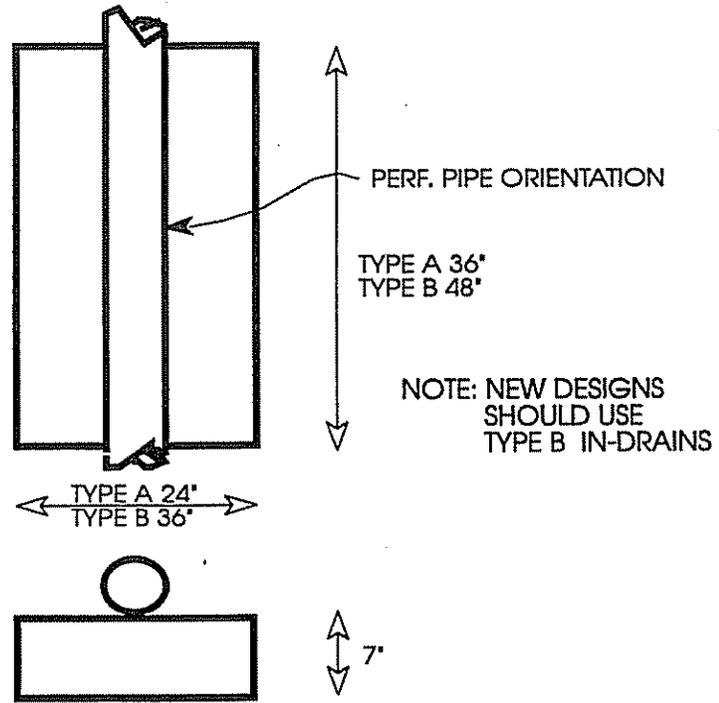
David P. Pogue  
 Site Evaluator Signature

154  
 SE #

7/1/06  
 Date



CONCEPTUAL CROSS SECTION



STANDARD IN-DRAIN MODULE

FIGURE 1

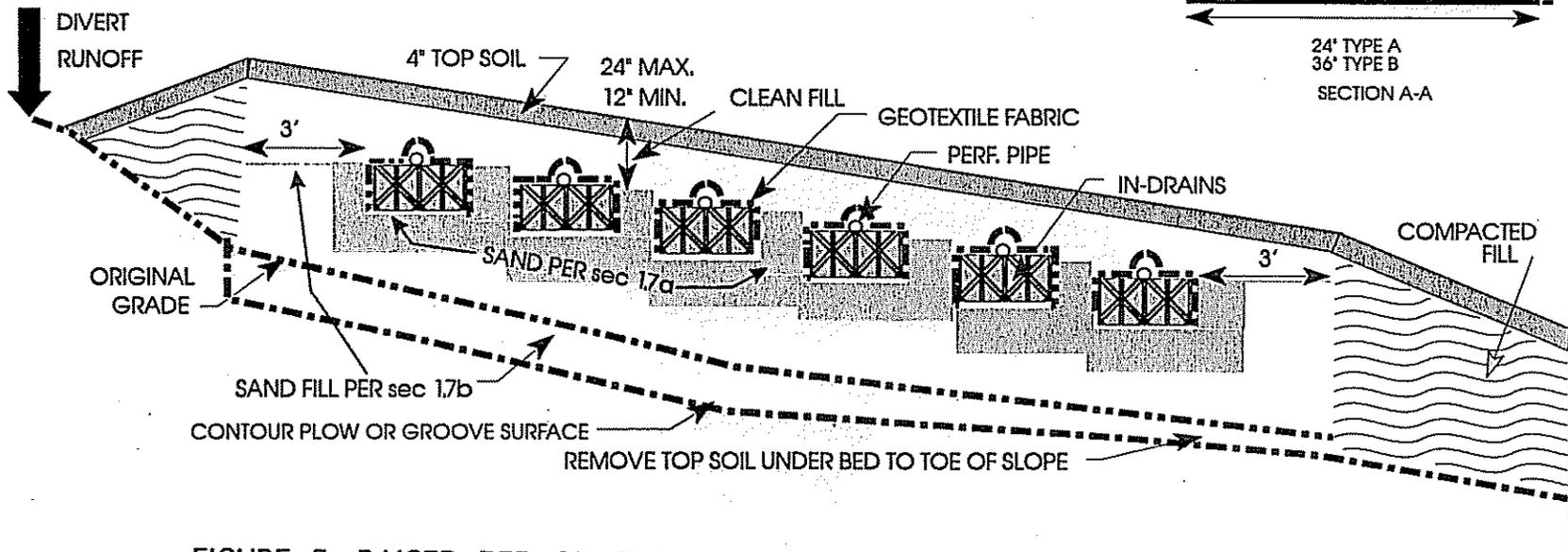
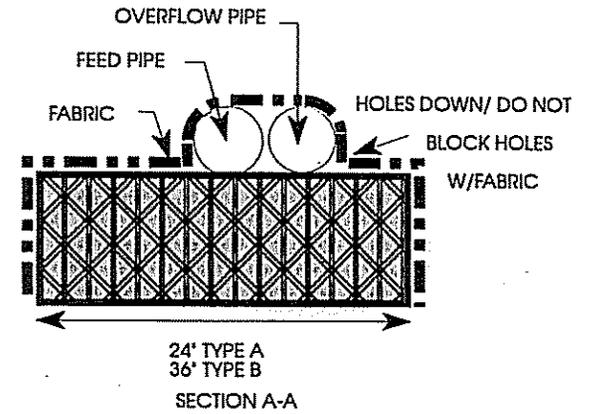
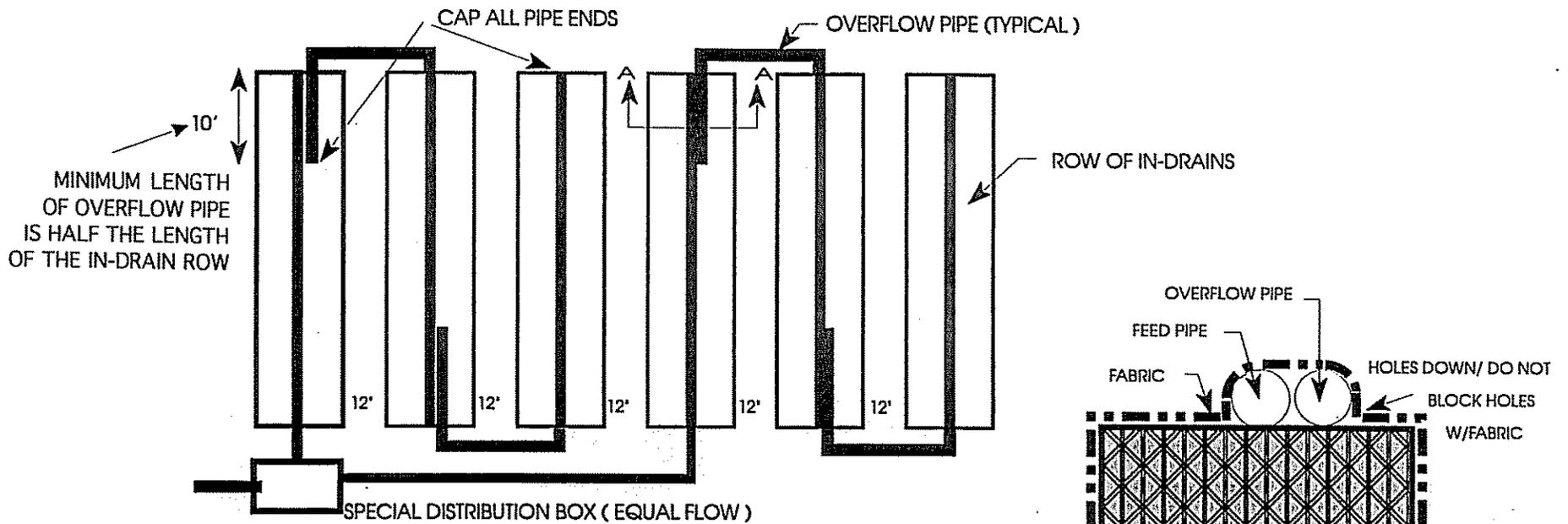


FIGURE 5. RAISED BED ON SLOPE WITH SERIAL DISTRIBUTION



# ELJEN™

## IN-DRAIN™ LEACHING SYSTEM



### Trench and In-Ground Cluster Installation

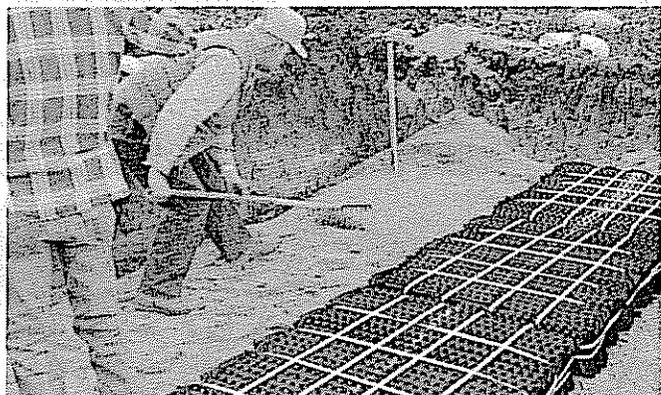
1 Prepare site according to local and state regulations. **Do not install system on frozen or saturated ground.**

2 Remove all organic soil and roots at disposal and fill extension areas.

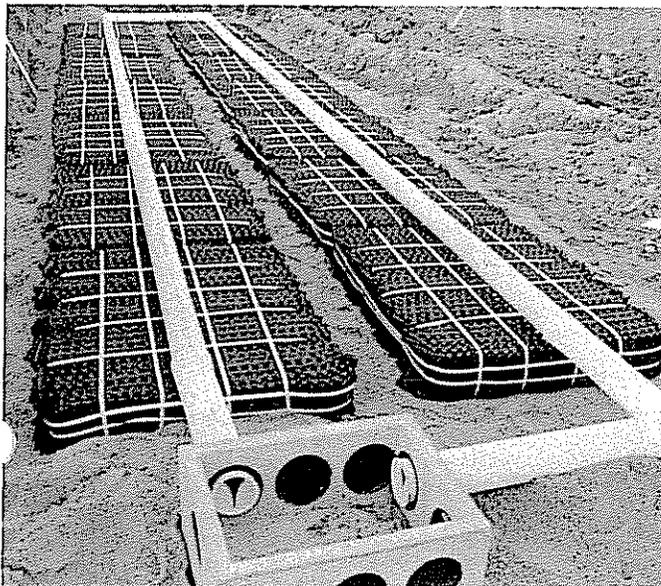
3 Scarify receiving layer to eliminate smearing.

4 Place 6" of D.O.T. or state highway specification **washed concrete sand** or sand known to be "medium to coarse with an effective size of .25 to 2.0 mm and no more than 5% passing a #200 sieve."

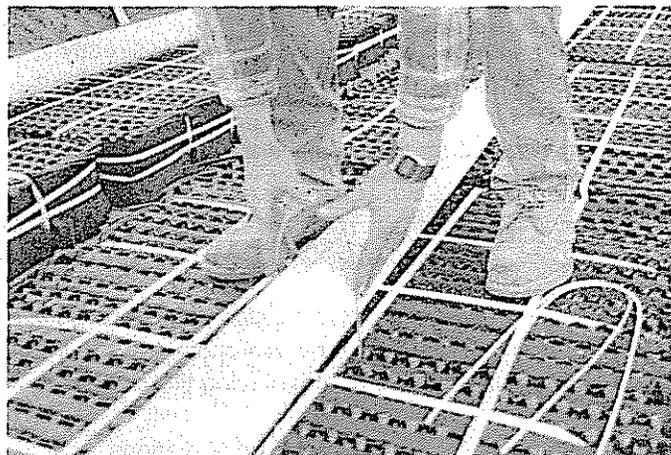
5 Avoiding footprints, place In-Drains with **painted stripe facing up**, end to end on sand in trench or bed. **Caution: Spacer cores can have sharp edges.**



6 Center 4" **perforated** distribution pipe over In-Drains. Use **solid pipe** over compacted sand from D-Box to In-Drains and to connect distribution lines at far end. Connect mid-points on rows over 40' long.

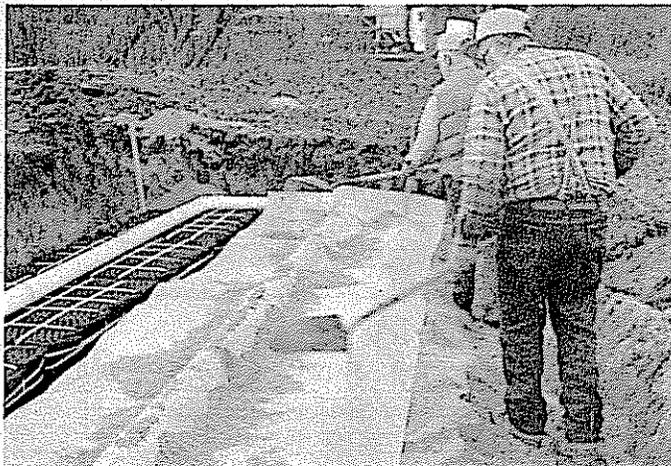


7 Install SSI Inc. flow equalizers or equal in D-Box. Use Type 1 in gravity systems, and Type P in pump systems.



8 Secure pipe with one Eljen clamp per In-Drain. Slide clamp into upfacing core. Force through fabric into sand.

9 Install Eljen cover fabric over rows of In-Drains. **Drape fabric straight down over pipe.** Secure with hand shoveled sand. **Don't block holes in perforated pipe.**



10 Place 12" medium to coarse sand (see step #4) between rows and 6" min. at the sides in trench or bed.

11 Complete backfill and loam to 12" min. over In-Drains. Fill should be clean, porous and devoid of large rocks. Use well graded sandy fill with a maximum 10% passing a #200 sieve. **Do not use wheeled equipment over system.** A light track machine may be used with caution, **avoiding crushing or shifting of pipe assembly.** Backfill in direction of perforated pipe.

12 Divert surface runoff. Finish grade to prevent surface ponding. Seed loam and protect from erosion.

## Raised or Fill Systems

- 1 Follow steps #1-3 for trench installation.
- 2 Compact fill, in max. 6" lifts, with a light tracked machine. Use clean soil free of organic material, clay, construction debris, stones larger than 6" and no more than 10% passing a #200 sieve.
- 3 Provide 6" sand bed, per trench step #4, directly under the In-Drains.
- 4 Complete system per trench steps #5-12.

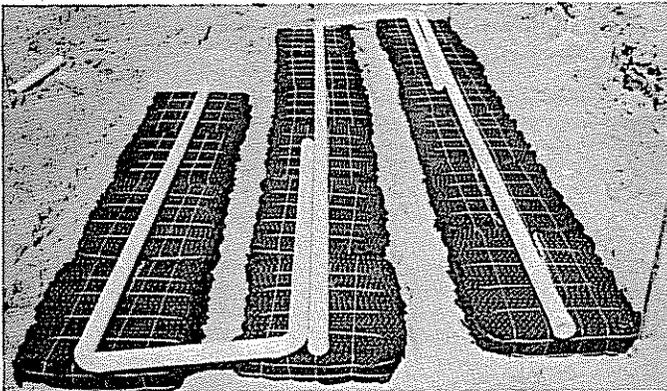
AUG 15 2006

BY:

- 4 Install a line of 4" **perforated** pipe on first row of In-Drains. Cap pipe at far end.
- 5 Place at least 10' of capped **perforated** overflow pipe at the far end and downhill side of the above pipe.
- 6 Connect overflow pipe to a line of **perforated** pipe on the next row of In-Drains with 2 elbows and a short length of **solid** pipe. Cap perforated pipe on opposite end.
- 7 Continue this procedure until the last row of In-Drains has an end capped line of **perforated** pipe.
- 8 Complete assembly by following steps #8-12 at trench installation.

## Serial Distribution on Slopes

- 1 Site preparation is the same as for trench and fill systems. Groove receiving layer by raking or contour plowing at right angle to slope before placing fill or sand.
- 2 Install rows of In-Drains at design elevations.
- 3 Provide a well anchored D-Box with velocity reduction tee or baffle. D-Box serves as an inspection port.



## Pumped Systems

- 1 Prepare disposal site as described above.
- 2 Provide a well anchored D-Box with a velocity reduction tee or baffle. Use SSI Inc. Type P flow equalizers or equal in the D-Box, one for each distribution line.
- 3 System assembly is the same as for gravity designs.
- 4 Pressure distribution does not result in reduced system size and is therefore not generally used for In-Drain disposal systems.

## Design Manual Available

Effluent pretreatment offered by in-Drain technology generally allows **substantial reductions** in leach field size **compared to conventional stone or chamber systems**. Sizing formula conforms with code variations from state to state. Consult your area distributor for a state specific Design and Installation Manual.

### Eljen Corporation

15 Westwood Rd., Storrs, CT., 06268

203-429-9486 • 800-444-1359

Fax 203-487-1124

Patent nos. 4,465,594 and 4,880,333

Additional Patents Pending

Distributed By:

**Construction  
Consultants, Inc.**

P.O. Box J  
Livermore Falls, ME 04254  
207-897-4072

#### LIMITED WARRANTY

1. Each In-Drain™ unit is warranted to the original purchaser against defects in materials and workmanship for one year from the date of manufacture when installed in accordance with manufacturer's instructions. Eljen Corp. must be notified within fifteen (15) days of the appearance of any defect during this period. Eljen Corp. will supply a replacement unit. Eljen Corp.'s liability specifically excludes the cost of removal and/or installation of the units.
2. The warranty does not extend to incidental, consequential, special or indirect damage. Specifically excluded from warranty coverage are: damage due to ordinary wear and tear, alteration, abuse or misuse, subjection to stresses or effluent loading greater than those prescribed in the design and installation instructions, the placement of improper materials by buyer into buyer's system, any event not caused by or under the control of Eljen Corp. In no event will Eljen Corp. be responsible for loss or damage to the buyer, the units, or any 3rd party resulting from its installation or shipment.
3. Buyer shall be solely responsible for insuring that installation of the system is completed in accordance with all applicable laws, codes, rules and regulations.
4. No warranties or representations at any time made by any representative of Eljen Corp. shall vary or expand the provisions hereof. No warranty applies to any party other than the original purchaser.

#### EXTENDED WARRANTY

Eljen offers a 10 year warranty for residential In-Drain systems. Conditions of system design, installation and maintenance apply. Please refer to detailed warranty available from Eljen or an authorized representative.

**Eljen™ ... Products for a clean, healthy environment**

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