



STATE OF MAINE  
DEPARTMENT OF HUMAN SERVICES  
AUGUSTA, MAINE 04333

BROWER, HARRY

DAVID E. SMITH  
COMMISSIONER

June 16, 1976

Mr. Harry Brower  
Pullen Road  
Augusta, ME 04330

Subject: Replacement Sewage System, Waiver to the  
Maine Plumbing Code, Part II, Brower Lot, Augusta

Dear Sir:

This will acknowledge receipt of a plan plus soils information by William Rideout, Jr., Certified Geologist, showing the proposed sewage disposal system for the subject project. It is not in compliance with the Maine Plumbing Code, Part II because of the size of the system, the reason for the waiver request.

In consideration of the plan dated May 21, 1976, and recommendations by Mr. Rideout, this office will grant the responsible Local Plumbing Inspector the right to waive certain provisions of the Maine Plumbing Code for the following disposal system under authority of Section 3.14:

The installation of a 1000 gallon septic tank to be followed by 7 type "F" concrete leaching chambers. The installation is to follow the plan submitted with this proposal.

Final approval of the sewage portion is subject to permit by the Local Plumbing Inspector before the construction of this system. A completed HHE-200 Form must be submitted to him for processing. The inspector is to be notified before covering the work, and the work is to be left uncovered until his inspection. He shall be supplied with copies of approved plans for his reference at inspection. Approval is also subject to any local ordinances.

Yours very truly,

W. Clough Toppan, Sanitary Engineer  
Plans and Standards Review  
Division of Health Engineering

WCT/mm  
cc: Richard Baker, LPI  
encl.

APPLICATION AND AGREEMENT

TO WAIVE CERTAIN PROVISIONS OF THE PLUMBING CODE

JUN 16 1976

I, Harry Brower (owner), hereby apply to the Maine State Department of Human Services for permission authorizing the responsible Plumbing Inspector to waive certain provisions of the Plumbing Code for an installation in connection with a dwelling or building at Pullen Road, Augusta (street) (city or town)

This may include materials, methods, dimensions or conditions not specifically approved by the Plumbing Code. Please draw a brief sketch of the property's location on the back of this form so an inspector can find it. Include landmarks, route numbers and street names.

Section of Code to be waived.	Description of specific waiver.
1.	Install bed in fill as per attached plan
2.	
3.	

(If additional space is needed, attach a list)

In all other respects, the installation will comply with the Code. The installation will be made in accordance with the ATTACHED PLAN. A permit is to be issued by the Plumbing Inspector if he is in agreement. The undersigned stipulates that he is the owner and occupant of the building involved and that the building is not for sale in the foreseeable future. The installation will be made by: \_\_\_\_\_, License No. \_\_\_\_\_

If any defects or inadequacies appear, I will promptly notify the State Department of Human Services and subsequently make such corrections as the Department shall find necessary

Owner's signature Harry Brower

Winter address Pullen Rd Augusta

Summer address name

Telephone 684 4913 Date 6/15/76

NOTE: A PLAN TO SCALE MUST BE ATTACHED

THE FOLLOWING TO BE FILLED IN BY THE PLUMBING INSPECTOR

I am (Local), (Alternate) Plumbing Inspector for the town of AUGUSTA. I have examined the plans for the installation described above and I find the building to be in my jurisdiction.

I (do), (do not) recommend the issuance of a special permit for the installation as described above.

Signed Richard B. Baker

Date 6/16/76

Return this form to the Division of Health Engineering, Department of Human Services Augusta, Maine. NO permit shall be issued for this waiver until the Local Plumbing Inspector receives notification from this office.

5/29/74

MAINE DEPARTMENT OF HEALTH AND WELFARE APPLICATION FOR PRIVATE SEWAGE DISPOSAL PERMIT		(For systems disposing of less than 2000 gallons per day)	This is NOT a permit; this form when completed must be presented to the Local Plumbing Inspector to obtain a permit		Page 1 of 2
Town <b>AUGUSTA</b>	Street, Road, etc. <b>PULLEN ROAD</b>	Permit No. <b>00798M</b>	Date <b>6-21-76</b>		
Owner of property <b>HARRY BROWER, PULLEN ROAD, AUGUSTA, MAINE</b>		Owner's address		Size of lot <b>14,000+</b>	<input checked="" type="checkbox"/> Sq. feet <input type="checkbox"/> Acres
Name & type of establishment if other than private home		Is lot Zoned? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Type of Zoning <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Resource Protection		
Name of applicant Owner's agent <b>Harry Brower</b>		Tel. No. <b>622-2913</b>		If you plan to use a previous subdivision approval in lieu of site investigation, please submit one of the following: <input type="checkbox"/> Deed restriction re. private sewage disposal <input type="checkbox"/> Copy of the subdivision's soils report <input type="checkbox"/> Soils report from a State Agency	
Applicant's address Street, Box, etc. <b>Pullen Rd</b>		Town <b>Augusta</b>		zip code <b>04330</b>	
Applicant's signature <b>Harry Brower</b>		Date <b>6/15/76</b>		Subdivision name Lot No.	

This application is for:  New System  Expanded System  Replacement System  Replacement of  Treatment Tank Only  Disposal Area Only

The water supply for this property is:  Dug well, depth \_\_\_\_\_, lining \_\_\_\_\_;  Drilled well, depth \_\_\_\_\_, lining \_\_\_\_\_;  Spring  Surface water  Body,  Course— with disinfection,  without disinfection.  Public Utility, name \_\_\_\_\_

**SITE INVESTIGATION** Show location of pits and/or borings on sketch on page 2, and refer to completed sample form and Chapter 4 of the Code, II.

Soil Profile No.	Soil Profile No.							
	<input type="checkbox"/> Pit	<input type="checkbox"/> Boring						
Organic strata	<b>THE SOIL IN THE AREA CONSISTS OF</b>							
Inches	<b>GLACIAL TILL. THE NUMBER OF CHAMBERS</b>							
1st strata	<b>ARE BASED ONLY ON THE AREA AVAILABLE</b>							
Inches	<b>FOR DISPOSAL FIELD.</b>							
2nd strata	Total Depth of observation hole Inches							
Inches	Max. Ground water table—mottling							
3rd strata	Impervious layer, clay, etc.							
Inches	Bedrock		Bedrock		Bedrock		Bedrock	
	Type of Bedrock		Type of Bedrock		Type of Bedrock		Type of Bedrock	
Surface slope	Surface slope		Surface slope		Surface slope		Surface slope	
Soil Group & Condition per Table 9-1 of the Code, II	Soil Group & Condition per Table 9-1 of the Code, II		Soil Group & Condition per Table 9-1 of the Code, II		Soil Group & Condition per Table 9-1 of the Code, II		Soil Group & Condition per Table 9-1 of the Code, II	

On **5/21/76** (date), a site investigation for this project was completed. I supervised this soil evaluation and certify that the results indicated above best represent the soil conditions found. I recommend the following type and size of private sewage disposal system. I also recommend the proposed private sewage disposal system layout and location shown on page 2.

Signature and Registration Certificate Number: **William W. Rideout**  
Date signed: **5/21/76**

Soil Scientist  
 Geologist  
 Soil Engineer  
 Other, must show current letter of certification to LPI

**PRIVATE SEWAGE DISPOSAL SYSTEM PROPOSED** Show location of system and details on sketches on page 2, and refer to completed sample form

<b>SYSTEM:</b> <input checked="" type="checkbox"/> COMBINED SYSTEM <input type="checkbox"/> SEPARATED SYSTEM If separated system—type of human waste disposal system to be used: <input type="checkbox"/> Sealed Vault Privy <input type="checkbox"/> Open Pit Privy <input type="checkbox"/> Compost Toilet <input type="checkbox"/> Incinerator Toilet <input type="checkbox"/> Chemical Toilet <input type="checkbox"/> Other, describe See Chapter 9 of the Code, II.	<b>TREATMENT TANK:</b> <input checked="" type="checkbox"/> Septic Tank <input type="checkbox"/> Concrete <input type="checkbox"/> Fiberglass <input type="checkbox"/> Metal Manufacturer— Size in gallons <b>1000</b> <input type="checkbox"/> Aerobic Tank Manufacturer— Model No. Size in gallons	<b>SUBSURFACE ABSORPTION AREA</b>		<b>SITE MODIFICATION</b>
		Type <input type="checkbox"/> Trench System: Total trench length _____ <input type="checkbox"/> Bed System Length _____ Width _____ <input checked="" type="checkbox"/> Chamber System Number <b>7</b> <input type="checkbox"/> Type A <input checked="" type="checkbox"/> Single File <input type="checkbox"/> Type F <input type="checkbox"/> Cluster <input type="checkbox"/> Mound System Length _____ Width _____ at base <input type="checkbox"/> Special System Length _____ Width _____ <input type="checkbox"/> Non-discharge System Bed-Length _____ Width _____ Holding Tank Size _____ Gal. Manufacturer _____ <input type="checkbox"/> Alarm device provided, type _____		Fill is— <input type="checkbox"/> required, <input checked="" type="checkbox"/> not required Fill will be _____ inches deep <b>DETAILS</b> <input type="checkbox"/> A Distribution Box is required Pumping is— <input checked="" type="checkbox"/> required, <input type="checkbox"/> is not required. The Dose will be <b>50</b> gallons <b>DISTANCES</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No: The proposed subsurface absorption area will be located at least 100 feet from any and all wells; springs; surface water bodies and courses (lake, pond, ocean, brook, stream, river); swamps; marshes; and bogs. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No: The proposed subsurface absorption area will be located at least 300 feet from any and all wells and springs producing 2000 gallons or more of water per day and any public water supplies.

PROPERTY / LOT LOCATION MAP  
**RT 3**  
**Weeks Mills Road**

FOR THE USE OF LPI ONLY

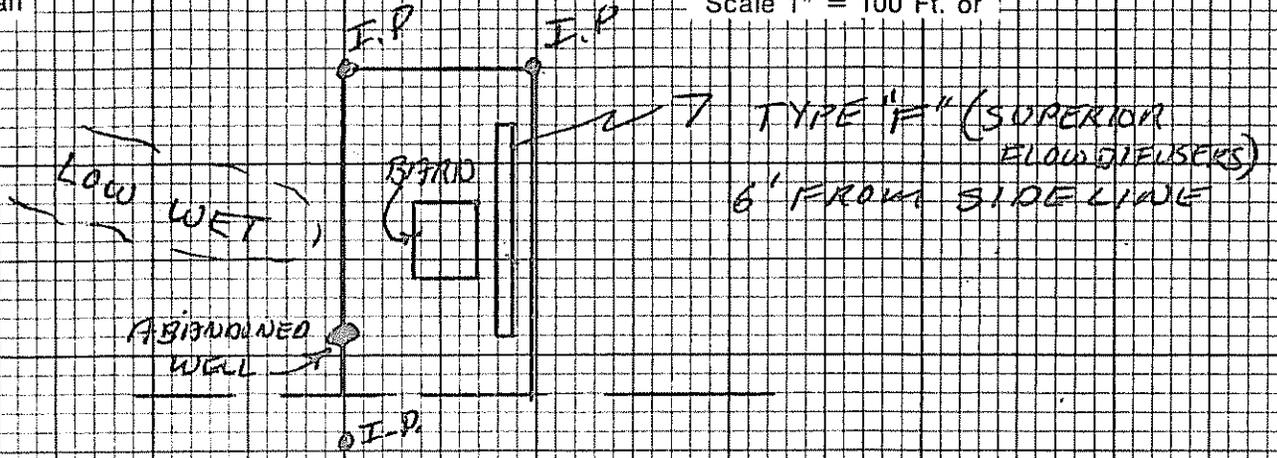
Denial: Application is denied for following reasons; portions of the Code II are cited.  
 Form is incomplete ( \_\_\_\_\_ pg.) as to  General info,  Site Investigation,  System Proposed,  Site Plan,  Disposal System Plan,  Cross-Section,  Statement. See Section 2.3.  
 Site Investigation indicates site is  totally unsuitable for disposal system; Sections 4.5 and 9.5, Table 9-1 Group 9 and 10.  Unsuitable for system proposed; Sections 4.3, 4.6, 9.5, Table 9-1.  
 System Proposed does not conform to Code; See Sections 9.  
 Site Investigation indicates site modifications are necessary; See Sections  4.3,  4.4,  4.6,  8.7.  
 Miscellaneous **SEE WAIVER** See Section \_\_\_\_\_  
 Acceptance: Application for permit is approved  with condition specified, comply with Section \_\_\_\_\_  
 without condition.  
 Signed LPI **Richard G. Bab** Date **6-21-76** HHE-200 5

APPLICATION FOR PRIVATE SEWAGE DISPOSAL PERMIT  
(For systems disposing of less than 2000 gallons per day)

Town	Street, Road, etc. If on water body, give name	Owner of property
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Site Plan

Scale 1" = 100 Ft. or



HOUSE  
LOCATED ON  
THIS LOT

INSTALL 1000 GALLON  
CONCRETE SEPTIC TANK  
AND PUMP TANK  
NEAR HOUSE.

Private Sewage Disposal Plan

TO GUS PD

Scale 1" = 20' or

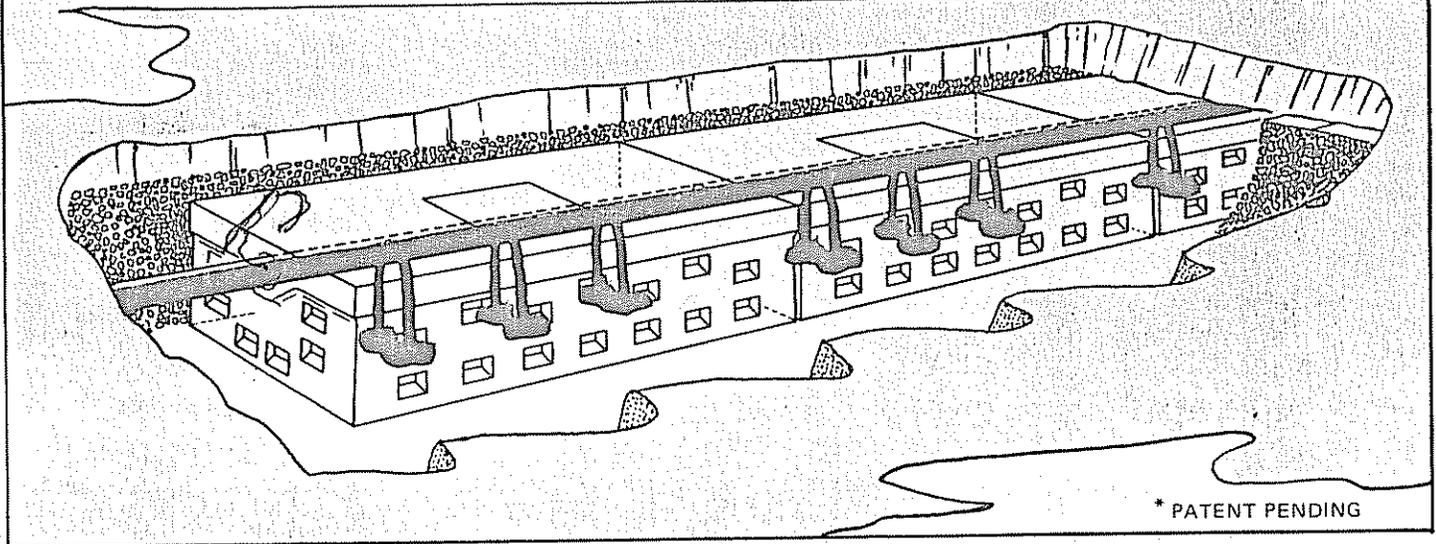
INSTALL FLOW DIFFUSERS \* AS PER  
ATTACHED LITERATURE

Subsurface Absorption Area Cross-section

Scale: Vertical 1" = 5' or

# Superior's FLOWDIFFUSOR™

## LEACHING CHAMBERS\*

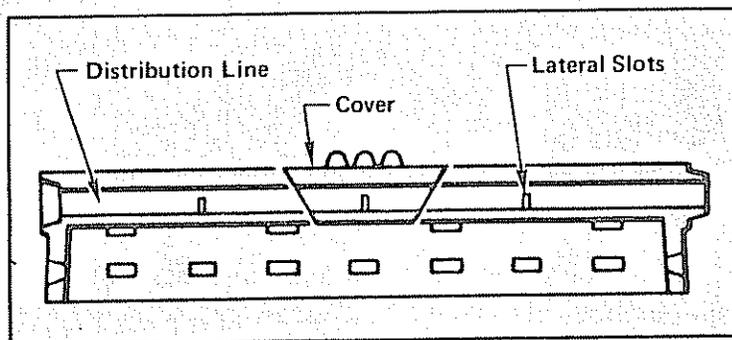


The Superior FLOWDIFFUSOR leaching chamber is a monolithically precast concrete open bottomed rectangular structure adapted to rest squarely on a prepared absorption bed and thusly enclose within its top, side and end walls a volume of free air space above the absorption bed. The liquid volume of each unit is 278 Gals.

The side and end walls of each chamber are provided with rows of inwardly bevelled openings above the absorption bed level to allow air movement, and after row levels are reached, allow fluid to spill over and out from one chamber to another. The openings are designed to preclude entry of stone and soil to the chamber interior and to allow air movement between chambers prolonging system life.

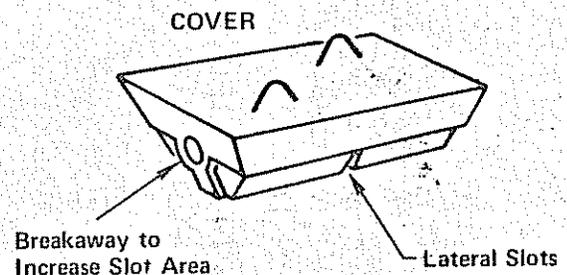
Each chamber is supported by the entire perimetral edge area of the side and end walls reducing any tendency to shift, fracture or be dislocated.

Each chamber is steel reinforced for a load capacity of 400 P.S.F. capable of withstanding H-20 wheel loading.



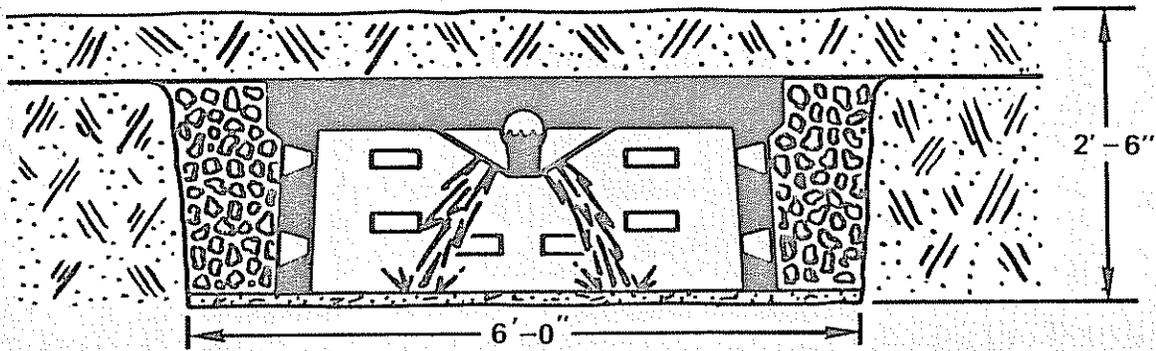
SECTIONAL VIEW

Within the ribbed ceiling top wall, which includes a removable inspection cover, a distribution line is formed extending end to end. The ceiling of the top wall is provided with slots at given intervals through lateral facing wall sections of the flow distribution line designed to meter flow into each chamber.



The inspection cover forming part of the top wall and a section of the distribution line includes centrally located slots affording flow between the distribution line and chamber. The end facing sides of the inspection cover are formed so that thin sections may be broken away to provide additional flow when desired. The inspection covers are removable to facilitate cleaning and renewal of the bed.

## CROSS SECTION OF TYPICAL INSTALLATION IN TRENCHES



Installation of the Superior FLOWDIFFUSOR leaching chamber is familiar. A trench is dug 6 feet wide and approximately 2½ feet deep. Preferably to facilitate cleaning, 2 inches of sand deposited in the trench bed. The chambers are then placed into the trench and interconnected. One foot of gravel stone is placed between chamber side walls and trench walls to the top surface of the chamber and covered with salt hay or tar paper. Grading with soil completes the job.

## HIGHLIGHTS

- Effluent carried to ends of trench assuring fair distribution to each chamber.
- Cascading effluent is oxygenated and absorption bed is aerated; this serves to inhibit slime formation and therefor clogging of the porous bed.
- The absence of stone in the chamber means that the exposed absorption surface area as compared to the conventional stone trench is greater by three times; thus for a given area the chamber is less prone to clog and is useable longer before slime accumulation clogs the bed. Beyond this and further increasing life is the action of aeration.
- When the bed becomes clogged, the slime layer, usually no more than an inch, may be removed by way of the cover opening.
- Side to side configuration are achieved with top wall edges abutting.
- Greater capacity is also realized because of greater volume for effluent which may accumulate in each compartment to the levels of side perforations and overflow for absorption into the lateral walls of the trenches, and adjacent compartments.
- Storage of fluid in each compartment serves to arrest movement of fluids to the lowest level of a bed. This is of particular advantage in view of the fact that it is usually impossible to maintain bed surface levels. This feature, together with slotted flow through the distribution lines to carry effluent to the entire system yet allowing portions of the flow to fall into each compartment for absorption, provides even distribution of effluent.
- Side wall drainage openings angled to keep out gravel and dirt.
- Adjustable slots in cover to differentially control flow in serial chambers according to grade.

