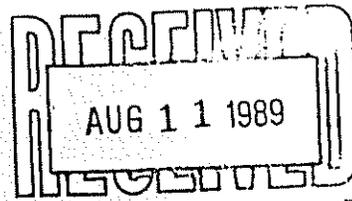


John R. McKernan, Jr.
Governor



Ray

Rollin Ives
Commissioner

STATE OF MAINE
DEPARTMENT OF HUMAN SERVICES
AUGUSTA, MAINE

ADDRESS REPLY TO

August 10, 1989

Permit # 1707

Town Copy

Gabriel Dostie
RFD 3 Box 1102A
Augusta ME 04330

SUBJECT: Approval of New System Variance Request, Dostie property, Middle Road, Augusta

Dear Ms. Dostie:

Our review of your Application for a New System Variance indicates that a new disposal system cannot be installed on your property in full compliance with the Rules. You have requested the following:

To allow a disposal system to be installed on soils that do not meet the minimum criteria. Specifically, the seasonal high groundwater table is located 11 inches below grade.

The Division approves of the application dated June 20, 1989 by William Noble, SE.

Mr. Noble shall be retained to establish the system location and elevation at the time of construction.

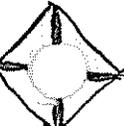
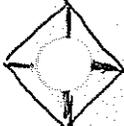
Gary Fuller, the Local Plumbing Inspector shall issue a permit prior to the system's installation. The system shall be constructed in compliance with the submitted application.

Yours very truly,

Brent L. McCarthy
Brent L. McCarthy
Wastewater & Plumbing Control
Division of Health Engineering

BLM/lid

cc: Gary Fuller, LPI
William Noble, SE



NEW SYSTEM VARIANCE REQUEST

This form shall accompany an Application for a proposed new system which requires a Variance to certain provisions of the Subsurface Wastewater Disposal Rules. A check or money order for \$20.00 payable to the Treasurer of the State shall accompany this request form.

The local plumbing inspector shall not issue a Permit for the installation of a subsurface wastewater disposal system until approval has been received from the Department.

GENERAL INFORMATION

Town of Augusta

Property Owner's Name: Gabriel V. Dostie

System's Location: Middle Road

Property Owner's Address: RFD 3, Box 1102A
(if different from above)

Augusta, Maine 04330

VARIANCE CONDITIONS

The Department has the authority to vary the requirements of the Rules in accordance with CMR 241.16 of the Rules if all the following criteria are satisfied:

- a. The variance request has the approval of the LPI.
- b. The Municipal Officials have indicated that the variance does not conflict with any local wastewater disposal ordinances.
- c. The variance request demonstrates that there is no practical alternative for wastewater disposal, such as access to public sewer or the potential for an easement.
- d. The proposed system does not conflict with any provision controlling subsurface wastewater disposal in the Shoreland Zone.
- e. The site offers potential for a system which will dispose of the wastewater with minimal threat to public health, safety, or welfare.
- f. The property owner has indicated an awareness of the variance and any limitations or added costs the proposed system may require.

SPECIFIC VARIANCE REQUESTED (To be filled in by Site Evaluator)

SECTION OF CODE

1. Minimum depth requirement to seasonal groundwater table 6.B.3

2. _____

3. _____

IF VARIANCE REQUEST IS FOR SEC. 6.B.3 SUITABLE SOIL CONDITIONS, FILL IN TABLE BELOW.

SOIL, SITE AND ENGINEERING FACTORS FOR ASSESSING NEW SYSTEM VARIANCE POTENTIAL

(SEE TABLE 16-1)

	CHARACTERISTIC	POINT ASSESSMENT
Soil Profile	Profile 8	10
Depth to Groundwater	11"	6
Size of Property	1.75+ acres	2
Terrain	knoll-like	5
Waterbody Setback	150'	3
Water Supply	drilled well	3
Type of Development	sing. fam. dwell.	0
Design Flow	min. +66%	10
Separation Distance	min. +100%	10
Additional Treatment	press. distr.	3
TOTAL POINT ASSESSMENT		52

LOCAL PLUMBING INSPECTOR

The local plumbing inspector shall review all New System Variance requests prior to submission to the Division of Health Engineering. The LPI shall inform the Division of Health Engineering of any factors relative to the variance request not specifically noted by the property owner or the site evaluator.

The proposed system does does not conflict with any provision controlling subsurface wastewater disposal systems in the Shoreland Zone.

CONCLUSIONS: I, Nancy R. Zuller, the undersigned, have visited the above property and find that it is not possible to conform to certain provisions of the Rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property.

Therefore, I recommend the issuance of a permit for the system's installation as proposed by the application.

Nancy R. Zuller 2/10/89
SIGNATURE OF LPI DATE

STATEMENTS, JUSTIFICATIONS AND RESPONSIBILITIES

PROPERTY OWNER

The property owner shall provide accurate information to the Site Evaluator, the LPI, and the Department and elaborate below the reasons for requesting the variance(s).

(ATTACH ADDITIONAL SHEETS, IF NEEDED)

I, Gabriel N. Doster, am the Owner prospective owner of the subject property. I understand that the installation on the Application is not in total compliance with the Rules. I have indicated my reasons for requesting the variance(s). 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.

Gabriel N. Doster

SIGNATURE OF OWNER
SIGNATURE OF PROSPECTIVE PURCHASER

7/10/89
DATE

HAS REVIEW FEE BEEN ENCLOSED

SITE EVALUATOR

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

A variance to Section 6.B.3 of the Subsurface Wastewater Disposal (SSWD) Rules is being requested because the soil at the subject property does not meet the minimum required depth to the seasonal high water table (SHWT). The SHWT at the site proposed for a subsurface wastewater disposal area occurs at a depth of 11" from the original mineral soil surface in 8-D profile/condition soil. A variance to Section 6.B.3 is felt to be justified in that the proposed site for the subsurface wastewater disposal area has been determined to be the most favorable location, because it is the topographically highest area at the property, being a knoll-like feature with no upgradient watershed, and it is anticipated that the SHWT at this area is of relatively short duration. In order to overcome soil limitations, a pressure wastewater distribution system is proposed for the disposal chambers, to ensure a uniform application of sewage throughout. Design assumptions and calculations for the proposed pressure distribution system are presented on an attached sheet. In addition, the proposed disposal area has been designed at a conservative wastewater flow rating to provide for a more absorptive area of soil for wastewater, and the disposal area bottom/SHWT separation distance is proposed to be 100% of the minimum distance required by the Rules. The disposal system as designed should adequately accept the volume of wastewater anticipated to be generated from normal home use, and should function properly, provided that the system is properly constructed, utilized, and maintained.

(ATTACH ADDITIONAL SHEETS, IF NEEDED)

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

William T. Noble

SIGNATURE OF SITE EVALUATOR

6-20-89

DATE

MUNICIPAL OFFICER(s) (Selectman, Councilman, Alderman, Mayor, Town Manager)

We the municipal Officer(s) of Richard G. Dumont have reviewed this application and are aware that the applicant is applying to the Division of Health Engineering for a variance to the Subsurface Wastewater Disposal Rules because the proposed system does not meet all requirements of the Rules. The proposed variance request does does not comply with all Municipal Ordinances relating to subsurface wastewater disposal.

Richard G. Dumont

SIGNATURE FOR THE MUNICIPALITY

Councilman

TITLE

7-10-89

DATE

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

PROPERTY ADDRESS

Town Or Plantation	Augusta
Street division Lot #	Middle Road

PROPERTY OWNERS NAME

Last: Dostie First: Gabriel V.

Applicant Name: Gabriel V. Dostie

Mailing Address of Owner/Applicant (If Different)
RFD 3, Box 1102A
Augusta, Maine 04330

Owner/Applicant Statement

I certify that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Local Plumbing Inspector to deny a Permit.

Gabriel V. Dostie 7/10/89
Signature of Owner/Applicant Date

Augusta **Caution: PERMIT # 1,707 TOWN COPY**

Date Permit Issued: 8/11/89 Fee: \$410.00 Double Fee Charged

John F. Luller L.P.I. # 18510
Local Plumbing Inspector Signature

Caution: Inspection Required

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules.

John F. Luller Sep. 7, 1989
Local Plumbing Inspector Signature Date Approved

PERMIT INFORMATION

<p>THIS APPLICATION IS FOR:</p> <p>1. <input checked="" type="checkbox"/> NEW SYSTEM 2. <input type="checkbox"/> REPLACEMENT SYSTEM 3. <input type="checkbox"/> EXPANDED SYSTEM 4. <input type="checkbox"/> EXPERIMENTAL SYSTEM</p>	<p>THIS APPLICATION REQUIRES:</p> <p>1. <input type="checkbox"/> NO RULE VARIANCE 2. <input checked="" type="checkbox"/> NEW SYSTEM VARIANCE Attach New System Variance Form 3. <input type="checkbox"/> REPLACEMENT SYSTEM VARIANCE Attach Replacement System Variance Form a. <input type="checkbox"/> Requiring Local Plumbing Inspector Approval b. <input type="checkbox"/> Requires State and Local Plumbing Inspector Approval 4. <input type="checkbox"/> MINIMUM LOT SIZE VARIANCE</p>	<p>INSTALLATION IS:</p> <p>COMPLETE SYSTEM</p> <p>1. <input checked="" type="checkbox"/> NON-ENGINEERED SYSTEM 2. <input type="checkbox"/> PRIMITIVE SYSTEM (Includes Alternative Toilet) 3. <input type="checkbox"/> ENGINEERED (+ 2000 gpd)</p> <p>INDIVIDUALLY INSTALLED COMPONENTS:</p> <p>4. <input type="checkbox"/> TREATMENT TANK (ONLY) 5. <input type="checkbox"/> HOLDING TANK _____ GAL 6. <input type="checkbox"/> ALTERNATIVE TOILET (ONLY) 7. <input type="checkbox"/> NON-ENGINEERED DISPOSAL AREA (ONLY) 8. <input type="checkbox"/> ENGINEERED DISPOSAL AREA (ONLY) 9. <input type="checkbox"/> SEPARATED LAUNDRY SYSTEM</p>
<p>SEASONAL CONVERSION n/a to be completed by the LPI</p> <p>5. <input type="checkbox"/> SYSTEM COMPLIES WITH RULES 6. <input type="checkbox"/> CONNECTED TO SANITARY SEWER 7. <input type="checkbox"/> SYSTEM INSTALLED - P# _____ 8. <input type="checkbox"/> SYSTEM DESIGN RECORDED AND ATTACHED</p>	<p>IF REPLACEMENT SYSTEM: n/a YEAR FAILING SYSTEM INSTALLED _____ THE FAILING SYSTEM IS: 1. <input type="checkbox"/> BED 3. <input type="checkbox"/> TRENCH 2. <input type="checkbox"/> CHAMBER 4. <input type="checkbox"/> OTHER: _____</p>	<p>DISPOSAL SYSTEM TO SERVE:</p> <p>1. <input type="checkbox"/> SINGLE FAMILY DWELLING 2. <input checked="" type="checkbox"/> MODULAR OR MOBILE HOME 3. <input type="checkbox"/> MULTIPLE FAMILY DWELLING 4. <input type="checkbox"/> OTHER _____ SPECIFY _____</p>
<p>SIZE OF PROPERTY 1.75⁺ acres</p>	<p>ZONING</p>	<p>TYPE OF WATER SUPPLY proposed drilled well</p>

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

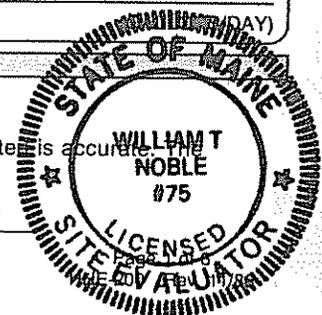
<p>TREATMENT TANK</p> <p>1. <input checked="" type="checkbox"/> SEPTIC: <input checked="" type="checkbox"/> Regular <input type="checkbox"/> Low Profile 2. <input type="checkbox"/> AEROBIC</p> <p>SIZE: <u>1000</u> GALS.</p>	<p>WATER CONSERVATION</p> <p>1. <input checked="" type="checkbox"/> NONE 2. <input type="checkbox"/> LOW VOLUME TOILET 3. <input type="checkbox"/> SEPARATED LAUNDRY SYSTEM 4. <input type="checkbox"/> ALTERNATIVE TOILET SPECIFY: _____</p>	<p>PUMPING</p> <p>1. <input type="checkbox"/> NOT REQUIRED 2. <input type="checkbox"/> MAY BE REQUIRED (DEPENDENT ON TREATMENT TANK LOCATION AND ELEVATION) 3. <input checked="" type="checkbox"/> REQUIRED DOSE: <u>200</u> GALS.</p>	<p>CRITERIA USED FOR DESIGN FLOW (BEDROOMS, SEATING, EMPLOYEES, WATER RECORDS, ETC.)</p> <p>3-bedroom, single family dwelling sized per Table 7-1 of the SSWD Rules (10-144A CMR 241) (conservative flow) DESIGN FLOW: <u>450</u> gpd</p>
<p>SOIL CONDITIONS USED FOR DESIGN PURPOSES</p> <p>PROFILE: <u>8</u> CONDITION: <u>D</u> DEPTH TO LIMITING FACTOR: <u>11</u></p>	<p>SIZE RATINGS USED FOR DESIGN PURPOSES</p> <p>1. <input type="checkbox"/> SMALL 2. <input type="checkbox"/> MEDIUM 3. <input type="checkbox"/> MEDIUM-LARGE 4. <input checked="" type="checkbox"/> LARGE 5. <input type="checkbox"/> EXTRA LARGE</p>	<p>DISPOSAL AREA TYPE/SIZE</p> <p>1. <input type="checkbox"/> BED _____ Sq. Ft. 2. <input checked="" type="checkbox"/> CHAMBER <u>900</u> Sq. Ft. <input checked="" type="checkbox"/> REGULAR <input type="checkbox"/> H-20 3. <input type="checkbox"/> TRENCH _____ Linear Ft. 4. <input type="checkbox"/> OTHER: _____</p>	

SITE EVALUATOR STATEMENT

On 5-13-89 (date) I conducted a site evaluation for this project and certify that the data reported is accurate for the system I propose is in accordance with the Subsurface Wastewater Disposal Rules.

William J. Noble 75 6-20-89
Site Evaluator Signature SE# Date

(Local Plumbing Inspector's Signature if permit is for Seasonal Conversion.)



SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering

89009

Town, City, Plantation

Street, Road, Subdivision

Owners Name

AUGUSTA

MIDDLE ROAD

GABRIEL V. DOSTIE

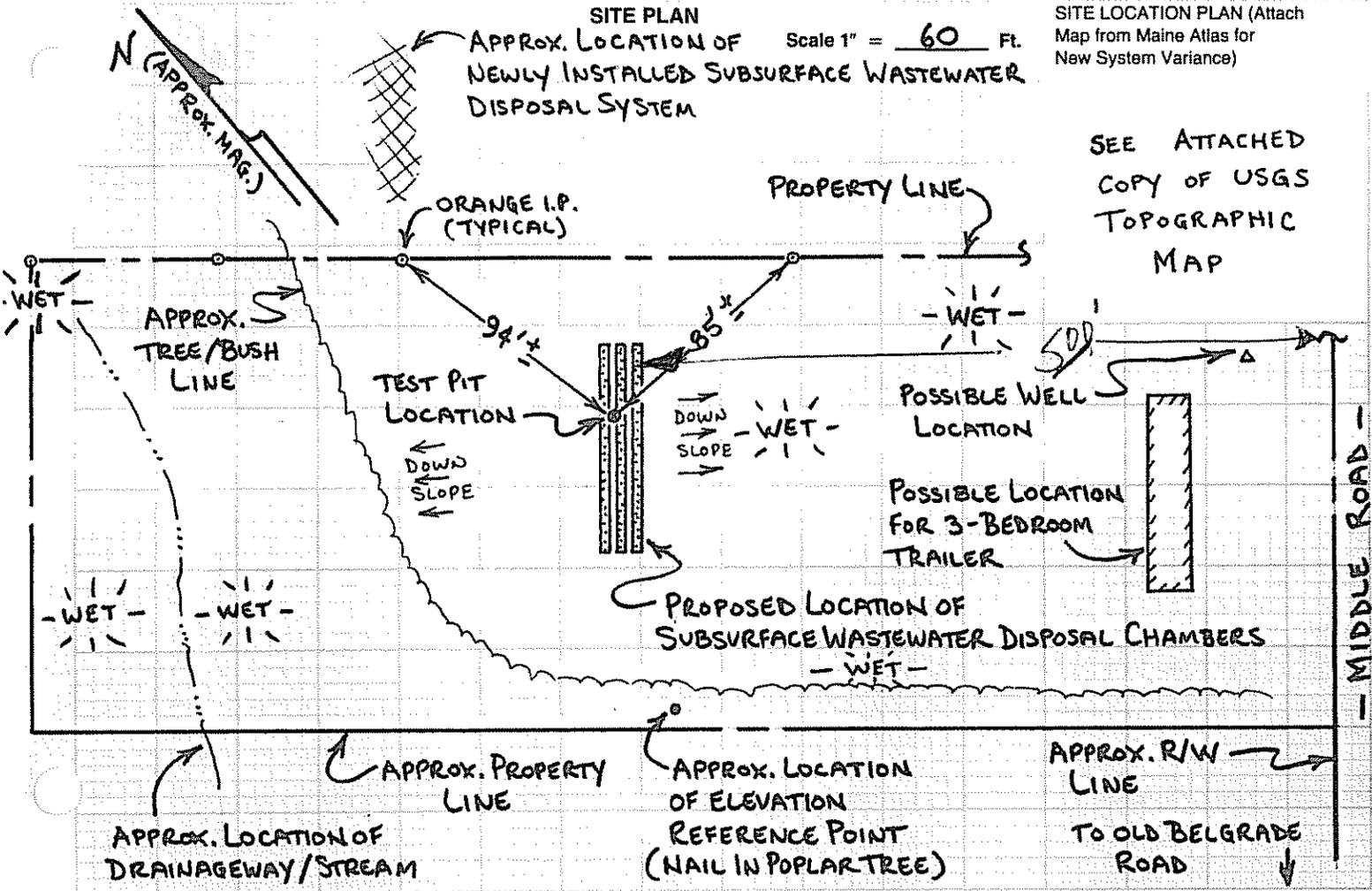
SITE PLAN

Scale 1" = 60 Ft.

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

APPROX. LOCATION OF NEWLY INSTALLED SUBSURFACE WASTEWATER DISPOSAL SYSTEM

SEE ATTACHED COPY OF USGS TOPOGRAPHIC MAP



SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 1 Test Pit Boring

" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)	Texture	Consistency	Color	Mottling
0	LOAM	FRIABLE	DARK BROWN	
6			BROWN	
10			DARK YELLOWISH BROWN	
15	VERY FINE SANDY LOAM	FIRM	OLIVE	MANY PROMINENT
20				
30				
40	LOAMY VERY FINE SAND (STRATIFIED)		OLIVE GRAY	
50				

Soil Profile 8 Classification D Slope NO % Limiting Factor 11 Ground Water Restrictive Layer Bedrock

Observation Hole _____ Test Pit Boring

" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (Inches)	Texture	Consistency	Color	Mottling
0				
6				
10				
15				
20				
30				
40				
50				

Soil Profile _____ Classification _____ Slope _____ % Limiting Factor _____ Ground Water Restrictive Layer Bedrock

William J. Noble
Site Evaluator Signature

75
SE#

6-20-89
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

89009
 Department of Human Services
 Division of Health Engineering I.P.

Town, City, Plantation
AUGUSTA

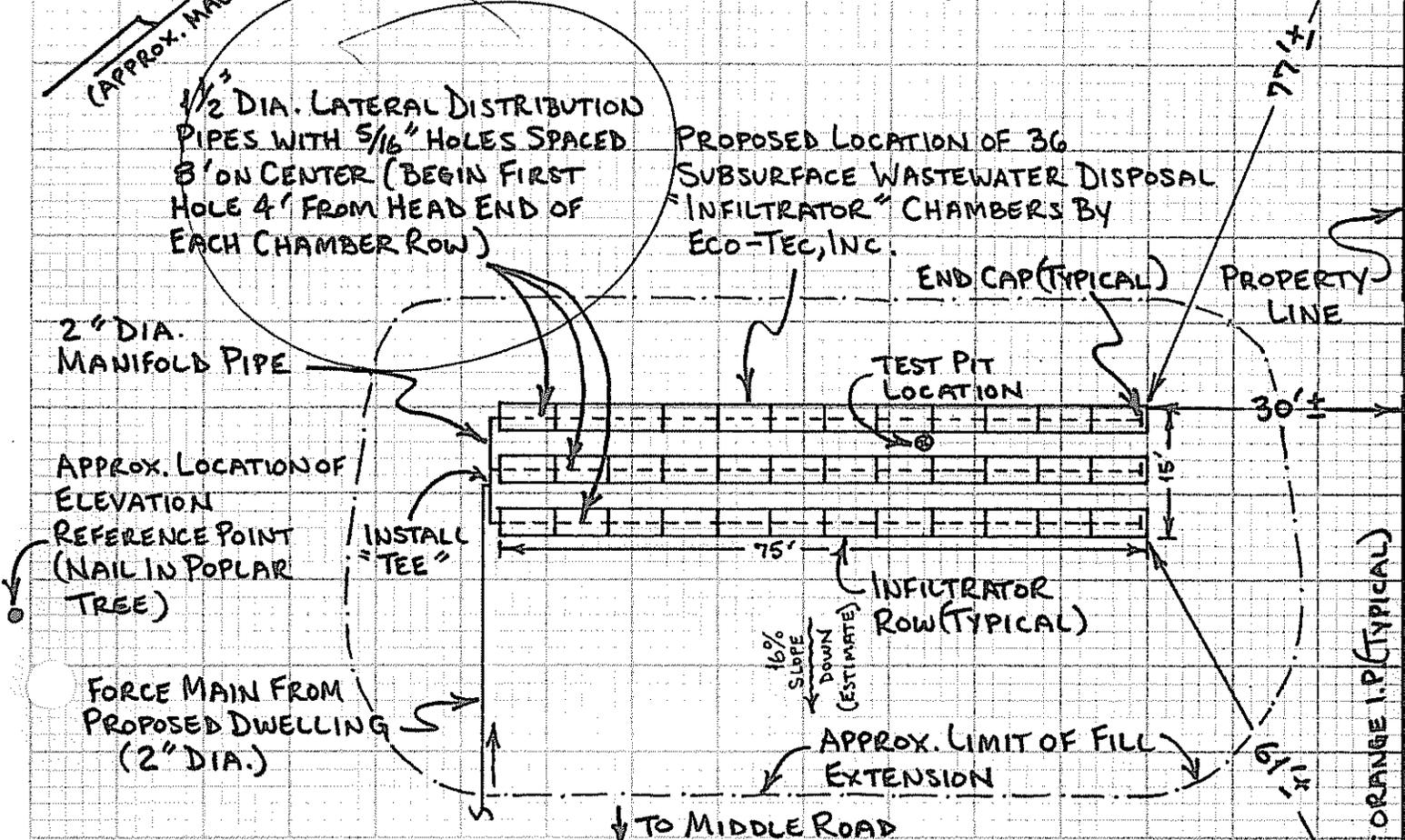
Street, Road, Subdivision
MIDDLE ROAD

Owners Name
GABRIEL V. DOSTIE

SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale 1" = 20' FL.

NOTE: THIS DRAWING IS NOT ORIENTED THE SAME AS THE SITE PLAN ON THE PREVIOUS PAGE.



FILL REQUIREMENTS

Depth of Fill (Upslope)	36"
Depth of Fill (Downslope)	42"

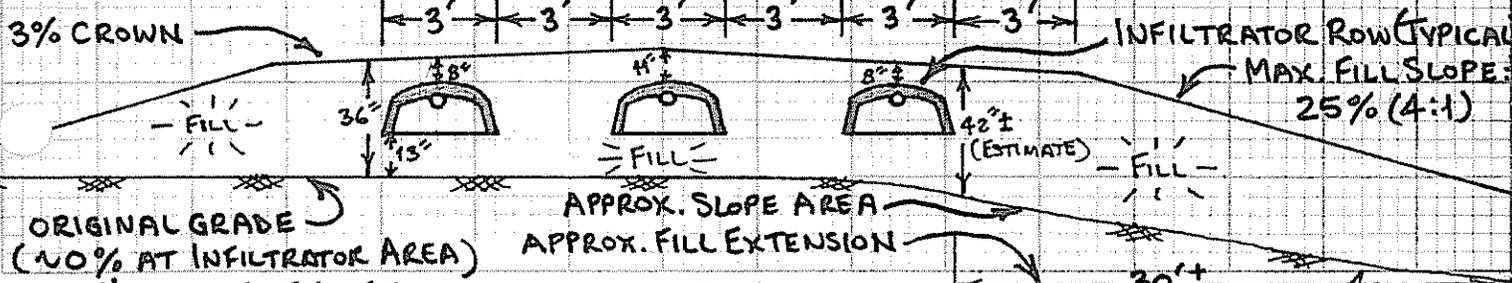
(SEE NOTES 5 AND 9 BELOW)

CONSTRUCTION ELEVATIONS

Reference Elevation is	0.0'
Bottom of Disposal Area	-53.0'
Top of Distribution Lines or Chambers	-38.0'

ELEVATION REFERENCE POINT LOCATION & DESCRIPTION
 NAIL WITH ORANGE FLAGGING IN YOUNG POPLAR TREE, 51" ABOVE GROUND LEVEL AT BASE OF TREE.

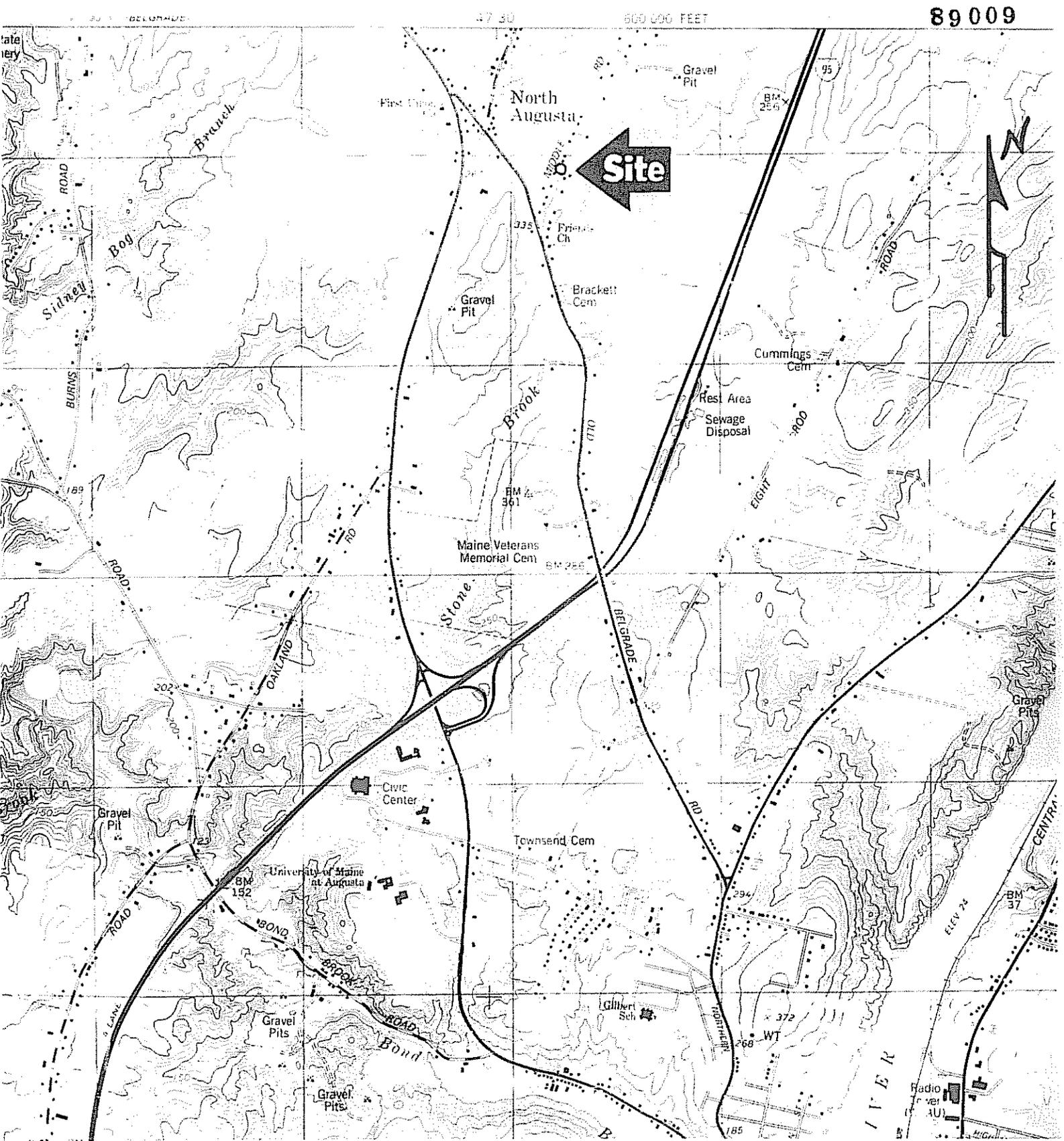
- NOTES:**
1. INSTALL INFILTRATORS AS DIRECTED BY Eco-TEC, INC.
 2. BACKFILL & PERIMETER FILL TO BE SANDY LOAM IN TEXTURE.
 3. GRADE LAND AROUND INFILTRATORS TO DIVERT ANY WATER FROM THE AREA.
 4. REMOVE ORGANIC LAYER & SCARIFY THE SOIL SURFACE BEFORE INSTALLING FILL.
 5. REQUIRED FILL DEPTHS MAY VARY FROM THOSE SHOWN DUE TO IRREGULARITIES IN SOIL SURFACE.
 6. BOTTOM OF INFILTRATORS TO BE LEVEL WITH MAX. GRADE TOLERANCE OF 1" PER 100'.
 7. LOCATE TEST PIT ON THE LOT & POSITION INFILTRATORS OVER PIT AS SHOWN IN ABOVE PLAN.
 8. FINISH GRADE TO BE VEGETATED PER SECTION 11. D. 6 OF THE SSWD RULES (10-144A CMR 241).
 9. MIN. OF 13" FILL TO BE INSTALLED ON ORIGINAL SOIL BELOW BOTTOM OF INFILTRATORS.



William J. Noble
 Site Evaluator Signature

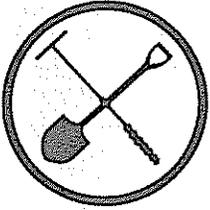
75
 SE#

6-20-89
 Date



AUGUSTA QUADRANGLE
 MAINE—KENNEBEC CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 SE.4 AUGUSTA 15' QUADRANGLE
 Scale: 1:24,000

PROPERTY LOCATION
 Gabriel V. Dostie Property
 Middle Road
 Augusta, Maine



William T. Noble

Licensed Site Evaluator / Certified Soil Scientist

RFD 3, Box 186
Augusta, Maine 04330
Tel.: 547-3252

DESIGN CRITERIA AND CALCULATIONS

for Pressure Wastewater Distribution System

Gabriel V. Dostie Property, Middle Road, Augusta, Maine

Design for a 36 InfiltratorTM chamber wastewater disposal system with an end manifold, from which extend three 75-foot (approx.) lateral distribution lines.

Hole diameter and hole spacing selected: $5/16$ " holes spaced 8 feet apart (on center)

Lateral pipe diameter selected: $1\frac{1}{2}$ " (from Table 7-28 of Design Manual*)

Lateral pipe discharge rate: 9 holes/lateral x 1.63 gpm/hole (Table 7-13 of Manual)
= 14.67 gpm/lateral

Manifold pipe size: 2" (per Fig. 7-29 of Manual), 12 feet long

Minimum dose volume: 200 gallons (per Fig. 7-30 of Manual)

Minimum discharge rate: 3 laterals x (14.67 gpm/lateral) = 44.0 gpm

Pump specifications:

Friction loss in 2" diameter force main of approx. 155 feet in length is
2.88 ft./100 ft. x 155 feet = approx. $4\frac{1}{2}$ feet (Table 7-14 of Manual)

Assume elevation head of 5.0 feet

Pressure to be maintained at 2.0 feet.

Total of $4.5 + 5.0 + 2.0 = 11.5$ feet of head

Pump is needed that will deliver a minimum of 44 gpm against 11.5 feet of head

*Reference: Design Manual - On-site Wastewater Treatment and Disposal systems.
October, 1980. U.S. Environmental Protection Agency. pp. 278-296.