FORM 3A - CERTIFICATE OF COMPLIANCE
No. 00 -62
COMMONWEALTH OF MASSACHUSETTS  Board of Health, Town OF AMHERST, MA.
CERTIFICATE OF COMPLIANCE
Description of Work: ☐ Individual Component(s) ☐ Complete System
The undersigned hereby certify that the Sewage Disposal System;
Constructed (), Repaired (**, Upgraded (), Abandoned ()
by: D. M.O. Const.
at: 116 MIDDLE STREET
has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the
approved design plans/as-built plans relating to application No. 00-02
dated 4/25/60 . Approved Design Flow (gpd)
Installer D. M.O. Cas Vall Males

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.



Date

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No.2600-62

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### COMMONWEALTH OF MASSACHUSETTS Board of Health, Town OF AMHERST, MA.

#### **DISPOSAL SYSTEM CONSTRUCTION PERMIT**

Permission is hereby granted to: Construct() Repair( Upgrade() Abandon() an individual
sewage disposal system at 116 MIDDLE STREET
as described in the application for Disposal System Construction Permit No. 2000 - 02,
iated 4/25/2000
Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.
Date 4/25/00 Board of Health Clevel & Jagenshy
for Aniker Health Che 11h



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### AMHERST Massachusetts

TOWN HALL 4 BOITWOOD AVENUE AMHERST, MA. 01002-2351 INSPECTION SERVICES DEPARTMENT Fax (413) 256-4076 Phone (413) 256-4030

Date:

March 3, 2000

To:

Amherst Board of Health

From:

David Zarozinski, Sanitarian

Re:

Local Upgrade to Title V, 116 Middle Street

Mr. and Mrs. Francis Downie of 116 Middle Street, Amherst, MA., would like to request a variance from Title V provision 310 CMR 15.405 (1)(2). To allow a vertical separation distance of three (3) feet between the bottom of the proposed leach field and the high ground-water elevation (copy enclosed).

On February 1, 2000, a percolation test was conducted at 116 Middle St., Amherst, MA., by Mr. Richard Scott, Civil Engineer and witnessed by myself, David Zarozinski. The perc rate for this three bedroom home was eighteen (18) minutes an inch with soil mottels at fifty (50) inches.

I would recommend approval of this variance for the following reasons:

- 1. Town water is available
- 2. Garbage grinder will be removed
- 3. To meet the four (4) foot separation regulation, a pump would have to be installed which I believe would cause an economical hardship.

Finally, it is my opinion that with the new Title V regulation, a degree of environmental protection required under this code can be achieved without strict application of this particular provision.

VANIMER PRISEL

VANIMER PRISEL

BY BIDD



Richard Scott, P.E. 31 Shutesbury Road Pelham, MA 01002 (413) 256-0647

Dave Zarozinski Health Department Town Hall – Boltwood Avenue Amherst, MA 01002-2351

February 28, 2000

Subject: Title 5 Septic System Repair Design for 116 Middle Street (Property of Francis & Virginia Downie)

Dear Dave:

Enclosed is the Application for Permit and a copy of the supporting materials for the septic system repair, which is proposed for the subject property. I believe W.W. Clark Excavating will be doing the installation but the Downies may seek other quotes as well. The Downies will stop by to sign the permit application. Will you call them at the appropriate time? I think all the test and application fees were paid at the time of the soil testing.

This proposed design includes a raised leach field to achieve the required separation above groundwater but the slope in the rear yard does allow the repair to be completed without use of a pump. The large tree in the yard does not need to be removed but the owners may opt to do so in order to save some cost of fill. My notes on those two options are included on the plan sheets.

At the rear of the property, there is a surface drainage, which runs to the under-road drain. The separation from the leach field is more than 50 feet so I have not made any submission to or contact with the Conservation Commission.

To minimize the area required for the repair and to maximize the separation to the surface drainage, I have not proposed use of the 1.25 "Amherst Factor" for leach field area. The design presented here meets all the State requirements of 310 CMR 15.000 without variance. As we discussed at the site, I have designed for three-feet groundwater separation. Form 9A for Local Upgrade Approval is included.

If you have questions at any time when you review this package, please call me. If you have no further requirements, please call the Downies directly at 253-5758 so they can proceed with their installation cost estimates. Thanks, Dave.

Sincerely,

cc: Francis & Virginia Downie, Owners Sally Malsch, Realtor

Richard Scott, P.E.

Richard Scott

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No. 00-62

Fee 160

#### COMMONWEALTH OF MASSACHUSETTS

Board of Health, Town OF AMHERST, MA.

#### APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for a Permit to: Construct () Repair (V Upgrade () Abandon ()

☑ Complete System	□Individual Components
Location 116 MIDDLE STREET	Owner's Name FRANCIS & VIRGINIA DOWNIE
Map/Parcel#	Address 116 MINDLE ST. AMHERST, MA 01002
Lot#	Telephone# 4/3-253-5758
Installer's Name W.W. CLARK EXCAVATING	Designer's Name RICHARD SCOTT, P.E.
Address 23 PRATT CORNER RD. SHUTESOURT, MA 01072	
Telephone# 4/3-259-14//	Telephone# 413-256-0647
Plan: Date 2-23-00 Number of sheets 2 Title Septic System Design At 1	Ulated design flow 330 gpd Revision Date  Revision Date  MIDDLE STREET  AND. SEE "SOIL SUITABILITY ASSESSMENT" REPORT.  Evaluator Rehard Scott
ALTERATIONS INSTALL NEW BUILDING JEWE	R, JEPTIC TANK AND LEACH FIELD.
The undersigned agrees to install the above described with the provisions of TITLE 5 and further agrees not of Compliance has been issued by the Board of Healt signed	to place the system in operation until a Certificate h.



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### Commonwealth of Massachusetts Town of Amheest, Massachusetts

# Application for Local Upgrade Approval Title 5, 310 CMR 15.000 DEP-Approved form required by 310 CMR 15.403(1)

To be submitted to Local Approving Authority/Board of Health: For the upgrade of a failed or nonconforming system with a design flow of < 10,000 gpd, where full compliance, as defined in 310 CMR 15.404(1), is not feasible.

To be submitted to DEP: For the upgrade of a failed or nonconforming system with a design flow of 10,000 up to 15,000 gpd and/or for upgrade of a state or federal facility, where full compliance, as defined in 310 CMR 15.404(1), is not feasible.

NOTE: Local upgrade approval shall not be granted for an upgrade proposal that includes the addition of new design flow to a cesspool or privy or the addition of new design flow above the existing approved capacity of a system constructed in accordance with either the 1978 Code or 310 CMR 15.000.

1)	Facility/system owner	
	Name FRANCIS ÉVIRGINIA DOUNIE	
	Address 116 MIDDLE ST. AMHERST, MAY, 01002	
	Phone # 413 - 253 - 5758	
	Address of facility 116 MIDDLE ST.	
	AMHERST.	
	· · · · · · · · · · · · · · · · · · ·	
2)	Applicant (if different from above)	
	Name	
	Address .	
	Phone #	
3)	Type of facility	
	residential commercial school	
	institutional	
	(Specify)	



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### FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 2 OF 5

4)	Type of existing system privycesspool(s)conventional system Other (describe)
	Type of soil absorption system (trenches, chambers, pits, etc.)  18' + 35' LEACH FIELD
5)	Design flow based on 310 CMR 15.203
	a) Design flow of existing system ? gpd Approved?yes approval date/960\$no why?
	b) Design flow of proposed upgraded system 334 gpd c) Design flow of facility 330 gpd
6)	Proposed upgrade of existing system is  a)/ Voluntary Required by order, letter, etc. (attach copy) Required following inspection required by 310 CMR 15.301 (provide date inspection form was submitted to the approving authority)(date)
	b) Describe the proposed upgrade to the system  RELOCATE BUILDING SEWER PIPE TO HIGHER ELEVATION, INSTALL  NEW SEPTIC TANK AND LEACH FACILITY
	c) Which of the following are applicable to the proposed upgrade?  Reduction of setback(s) (list setbacks to be reduced with proposed setback distances)
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	Percolation rate of 30-60 minutes per inch (state actual perc rate)



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## FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 3 OF 5

	Up to 25% reduction in subsurface disposal area design requirements (state required & proposed size)
_	Relocation of water supply well (identify well, describe relocation)
_	Reduction of required separation between bottom of SAS & high groundwater (specify proposed reduction & perc rate) 3'-0" SEPARATION. PERCRATE = 18
	Other requirements of 310 CMR 15.000 that cannot be met (specify sections of the Code)
15.40	n upgrades that cannot be performed in accordance with 310 CMR 15.404 & 5, or in full compliance with the requirements of 310 CMR 15.000, require a nce pursuant to 310 CMR 15.410-15.417.
of the Evalua	proposed upgrade involves a reduction in the required separation between the bottom soil absorption system and the high groundwater elevation, an Approved Soil ator must determine the high ground water elevation pursuant to 310 CMR 5(1)(i)(1). The evaluator must be a member or agent of the local approving authority:
	Distance from soil absorption system to high groundwater
	As determined by:
	Evaluator's name RICHARD Scott, P.E.  Evaluator's signature Richard Scott  Date of evaluation FEB. 1, 2000



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#### FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 4 OF 5

#### 8) Notice to Abutters

No application for upgrade approval in which the setback from property lines or a private water supply well is reduced shall be complete until the applicant has notified all abutters whose property or well is affected by certified mail at least ten days before the Board of Health meeting at which the upgrade approval will be on the agenda. Such notice shall include the date, time and place where the upgrade approval will be discussed.

If the Department is the approving authority, then such notice to abutters must be completed prior to the date of submission of the application to the Department.

The notices to abutters shall include a copy of the completed application form and shall reference the standards set forth in 310 CMR 15.402 through 15.405.

List of affected Abutters:

Abutter Name		Date notified
Address		
Abutter Name		Date notified
Address		
Abutter Name		Date notified
Address		
Abutter Name		Date notified
Address	",	

- 9) Explain why full compliance, as defined in 310 CMR 15.404(1), is not feasible (each section must be completed):
  - a) an upgraded system in full compliance with 310 CMR 15.000 is not feasible:
    To Achreve 4 Separation Would Require A Pump. Not Economicaut Justineo.
  - b) an alternative system approved pursuant to 310 CMR 15.283-15.288 is not feasible:



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### FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 5 OF 5

	NOT ECONOMICALLY FEA	SIBLE	
	d) connection to a sewer is not SEWER IS > 1/2 MILE		
10)	An application for a disposal system (e.g. plans & specifications, site eva DSCP application attached?yes_	duation forms), must accom	
11)	Certification		
	"I, the facility owner, certify under attachments, to the best of my know complete. I am aware that there ma false information, including, but not imprisonment for knowing violation.	riedge and belief, are true, and be significant consequence timited to, penalties or fine	es for submitting
		~	~
	Facility owner's signature	Date	
	FRANCIS DOWNIE		
	Print Name		
	RICHARD SCOTT	2-23-00	
	Name of preparer	Date	
	413-256-0647 3154	WESBURY ROAD PELH	AM, MA 01002
	Telephone # & address of preparer		

**NOTE:** Title 5, 310 CMR 15.403(4), requires the system owner or operator to submit to the Department a copy of the local upgrade approval upon issuance by the Board of Health and prior to commencement of construction.



a shared system is not feasible:

c)

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### Commonwealth of Massachusetts Town of AMHERST, Massachusetts

#### LOCAL UPGRADE APPROVAL ISSUED PURSUANT TO 310 CMR 15.404 & 15.405

Facility/system owner:	Name: Francis Down Address of facility	Address: //	6 MIDDICST. AN	MHERST, MA	01002
Type of facility:	residential institu design flow per 310 CM	itional com	mercial schoo	*	
System designer:	Name RICHARD SCOTT	P.E. Address 313	HUTESBURY RO. PEL	HAM, Phone N	0.413-256-06
Local Upgrade Appro	oval granted for:		pitt	01002	
reduction in s	etback(s) (specify)				
perc rate of 3	0-60 min./inch (specify rate	e)			
reduction in S (specify % re	SAS area of up to 25%duction & size of SAS)				
reduction in s SAS & high (specify reduc	groundwater Traction & perc rate)	SEPARATION PARE = .	S 18 MIX./M		
relocation of	a well (explain)				
			i i		
List local variances gr	ranted (no DEP approval rec	quired per 310 CM	R 15.412(4))		
List variances granted	requiring DEP approval		E - W		
Board of Health Appr	roval of proposed upgrade		Name & Title		*
Sign	ature	City/town		Date	

THE SYSTEM OWNER OR OPERATOR SHALL PROVIDE A COPY OF THIS LOCAL UPGRADE APPROVAL TO THE APPROPRIATE REGIONAL OFFICE OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER POLLUTION CONTROL UPON ISSUANCE BY THE LOCAL APPROVING AUTHORITY & BEFORE COMMENCEMENT OF CONSTRUCTION.



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pd 2-2-2000 \$160.00 CK#205

#### FORM 11 - SOIL EVALUATOR FORM Page 1 of 3

No	Date: 2 7 80
Commonwealth of Ma , Ma Soil Suitability Assessment for C	assachusetts
Performed By: Red Scatt Witnessed By: David ZAFORINSTAI	Date: 2-1-00
	ume FRANCIS J. DOWNIE JR.  IN 116 MIDDIE ST.  253-5758
Office Review	
Published Soil Survey Available: No Yes	
	Soil Map Unit
Surficial Geologic Report Available: No  Yes	X 5
Year Published Publication Scale Geologic Material (Map Unit) Landform	
Flood Insurance Rate Map:	
Above 500 year flood boundary No Yes	*
Within 500 year flood boundary No Yes	
Within 100 year flood boundary No Yes	
Wetland Area: National Wetland Inventory Map (map unit) Wetlands Conservancy Program Map (map unit)	
Current Water Resource Conditions (USGS): Month	•
Range : Above Normal Normal Below Normal	
Other References Reviewed:	



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Location Address or Lot No.	116	middle	55.	

### On-site Review

eep Hole Num	ber	Date: 2/	1,100	Time:	05:30	Weather Sunny /c
ocation (identif						
and Use				Surface		
egetation		iei A				The state of the s
						3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -
osition on land	scape (sketch	on the back)			ug n ge	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ater Body	feet	Drainag	e way	feet	
Possible	Wet Area	feet	Propert	y Line	feet	
Drinking	Water Well	feet	Other			
		DEEP OB	SERVAT	ION HO	LE LOG	•
Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	(Structur	Other re, Stones, Boulders, Consistency, % Gravel)
A 4"	4	Fire Sand	10 XE	4/3		
B 18"	Bu	FIRE SAND	1/0 YR 4	14		and bear

318" Buy Snul Lengley 4 4 File Snul Lean

1086" C1 LONDY S 10421/2 50" That 1090 9m well

126" C2 Snuly Loss 7.5 xx44 515/6

\* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) \_\_\_\_\_\_\_\_ DepthtoBedrock: \_\_\_\_\_\_\_\_ Weeping from Pit Face: \_\_\_\_\_\_\_ Estimated Seasonal High Ground Water:



		* * * * * * * * * * * * * * * * * * *
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Location Address or Lot No
Determination for Seasonal High Water Table
Method Used:
Depth observed standing in observation hole inches Depth weeping from side of observation hole inches Depth to soil mottles inches Ground water adjustment feet
Index Well Number Reading Date Index well level
Adjustment factor Adjusted ground water level
Depth of Naturally Occurring Pervious Material
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?
If not, what is the depth of naturally occurring pervious material?
Certification
I certify that on (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.
Signature Date



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-7.00 V 2.00			
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MI della 57

TALK

Sti Omaple

Shed

Location Address or Lot No.	116	Mis	de le	50.	
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### COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*						
Date:	Feb 1,00	Time:				
Observation Hole #	@ 39"					
Depth of Perc	39 "					
Start Pre-soak	9100					
End Pre-soak	9115					
Time at 12"	9:15					
Time at 9"	9:54					
Time at 6"	10:48					
Time (9"-6")	5-4					
Rate Min./Inch	18	. (18)				

reserve area.	·	· · · ·
Site Passed  Site Failed		
Performed By: Ric 4	Scott	
Witnessed By:	1 Jarozins Hi	
Comments:		



FRANCIS J. DOWNIE	0205
VIRGINIA P. DOWNIE PH. 413-253-5758 116 MIDDLE STREET AMHERST, MA 01002-3012	DATE 2-1-00 53-7098/2118
PAY TO THE ORDER OF	of Amberst \$ 160-
One hundre	I and sixty only DOLLARS 1 months had
Country Bank Ware, Massachusetts	
FOR fail testing of	lie Fee Jugina P. Dawne

RECEIVED FEB 2 2000

R#1105

Richard Scott, P.E. 31 Shutesbury Road Pelham, MA 01002 (413) 256-0647

Dave Zarozinski
Health Department
Town Hall – Boltwood Avenue
Amherst, MA 01002-2351

February 28, 2000

Subject: Title 5 Septic System Repair Design for 116 Middle Street (Property of Francis & Virginia Downie)

Dear Dave:

Enclosed is the Application for Permit and a copy of the supporting materials for the septic system repair, which is proposed for the subject property. I believe W.W. Clark Excavating will be doing the installation but the Downies may seek other quotes as well. The Downies will stop by to sign the permit application. Will you call them at the appropriate time? I think all the test and application fees were paid at the time of the soil testing.

This proposed design includes a raised leach field to achieve the required separation above groundwater but the slope in the rear yard does allow the repair to be completed without use of a pump. The large tree in the yard does not need to be removed but the owners may opt to do so in order to save some cost of fill. My notes on those two options are included on the plan sheets.

At the rear of the property, there is a surface drainage, which runs to the under-road drain. The separation from the leach field is more than 50 feet so I have not made any submission to or contact with the Conservation Commission.

To minimize the area required for the repair and to maximize the separation to the surface drainage, I have not proposed use of the 1.25 "Amherst Factor" for leach field area. The design presented here meets all the State requirements of 310 CMR 15.000 without variance. As we discussed at the site, I have designed for three-feet groundwater separation. Form 9A for Local Upgrade Approval is included.

If you have questions at any time when you review this package, please call me. If you have no further requirements, please call the Downies directly at 253-5758 so they can proceed with their installation cost estimates. Thanks, Dave.

Richard Scott

cc: Francis & Virginia Downie, Owners Sally Malsch, Realtor

Richard Scott, P.E.

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No.00-02

Fee 166 pd

#### COMMONWEALTH OF MASSACHUSETTS

Board of Health, Town OF AMHERST, MA.

#### APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

Application for a Permit to: Construct () Repair (V Upgrade () Abandon ()

Complete System	□Individual Components
Location 116 MIDDLE STREET	Owner's Name FRANCIS É VIRGINIA DOWNIE
Map/Parcel#	Address 116 MINDLE ST. AMHERST, MA 01002
Lot#	Telephone# 4/3-253-5758
Installer's Name W.W.CLARK EXCAVATING	Designer's Name RICHARD SCOTT, P.E.
Address 23 PRATT CORNER RD. SHUTESOURT, MA 01072	
Telephone# 4/13-259-14/1	Telephone# 413-256-0647
Type of Building: Residential  Dwelling - No. of Bedrooms 3  Other - Type of Building  No. of persons Showers ( ), Cafeteri  Other Fixtures	Lot Sizesq.ft.  Garbage grinder ( )  a ( )  SCOTT SCOTT CIVIL
Design Flow (min. required) 330 gpd Calc Design flow provided 334 gpd  Plan: Date 2-23-00 Number of sheets 2	TO PEGISTERED LET
Title SEPTIC SYSTEM DESIGN AT 1	116 MIDDLE STREET
Description of Soil(s) UNDERLYING SOIL IS LOAMY S. Soil Evaluator Form No. // Name of Soil Date of Soil Evaluation 2-1-00	AND. SEE "SOIL SUITABILITY ASSESSMENT "REPORT.  EVALUATOR RICHARD SCOTT
DESCRIPTION OF REPAIRS OR ALTERATIONS <u>FASTALL NEW BUILDING SEWE</u>	R, SEPTIC TANK AND LEACH FIELD.
The undersigned agrees to install the above described with the provisions of TITLE 5 and further agrees not of Compliance has been issued by the Board of Healt Signed Trancol Journal Inspections	to place the system in operation until a Certificate h.



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NO	e	ree
	COMMONWEALTH OF MASSACHUSETTS rd of Health, Town OF AMHERST, M	IA.
ِ D	ISPOSAL SYSTEM CONSTRUCTION PERMIT	
Permission is hereby	granted to: Construct() Repair( Upgrade() Abandon	() an individual
sewage disposal syste	em at 116 MIDDLE STREET	
as described in the ap	oplication for Disposal System Construction Permit No	
dated		
Provided: Construction conditions must be m	ion shall be completed within three years of the date of thinet.	s permit. All local
Date	Board of Health	



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No
COMMONWEALTH OF MASSACHUSETTS  Board of Health, Town OF AMHERST, MA.
CERTIFICATE OF COMPLIANCE
Description of Work:   Individual Component(s)   Complete System
The undersigned hereby certify that the Sewage Disposal System;
Constructed (), Repaired (), Upgraded (), Abandoned ()
py:
it: 116 MIDDLE STREET
has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the
pproved design plans/as-built plans relating to application No
lated (gpd)
nstaller
Designer:Inspector
Date
he issuance of this permit shall not be construed as a guarantee that the system will

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.



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# Town of Amheest, Massachusetts

# Application for <u>Local Upgrade Approval</u> Title 5, 310 CMR 15.000 DEP-Approved form required by 310 CMR 15.403(1)

To be submitted to Local Approving Authority/Board of Health: For the upgrade of a failed or nonconforming system with a design flow of < 10,000 gpd, where full compliance, as defined in 310 CMR 15.404(1), is not feasible.

To be submitted to DEP: For the upgrade of a failed or nonconforming system with a design flow of 10,000 up to 15,000 gpd and/or for upgrade of a state or federal facility, where full compliance, as defined in 310 CMR 15.404(1), is not feasible.

NOTE: Local upgrade approval shall not be granted for an upgrade proposal that includes the addition of new design flow to a cesspool or privy or the addition of new design flow above the existing approved capacity of a system constructed in accordance with either the 1978 Code or 310 CMR 15.000.

1)	Facility/system owner	
	Name FRANCIS & VIRGINIA DOWNIE	
	Address 116 MIDDLE ST. AMHERST MAY 01002	/
	Phone # 413 - 253 - 5758	
	Address of facility 116 MIDDLE ST.	
	AMHERS T.	
2)	Applicant (if different from above)	
	Name	
	Address .	
	Phone #	
	,	
3)	Type of facility	
	residential commercial school	
	institutional	
	(Specify)	



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# FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 2 OF $5\,$

4)	Type of existing system privycesspool(s)conventional system Other (describe)
	Type of soil absorption system (trenches, chambers, pits,etc.)  18' × 35' LEACH FIELD
5)	Design flow based on 310 CMR 15.203
	a) Design flow of existing system ? gpd Approved?yes approval date /960\$no why?
	b) Design flow of proposed upgraded system 334 gpd c) Design flow of facility 330 gpd
6)	Proposed upgrade of existing system is  a)/ Voluntary Required by order, letter, etc. (attach copy) Required following inspection required by 310 CMR 15.301 (provide date inspection form was submitted to the approving authority)(date)
	b) Describe the proposed upgrade to the system  RELOCATE BUILDING SEWER PIPE TO HIGHER ELEVATION, INSTALL  NEW SEPTIC TANK AND LEACH FACILITY
	c) Which of the following are applicable to the proposed upgrade?  Reduction of setback(s) (list setbacks to be reduced with proposed setback distances)
	Percolation rate of 30-60 minutes per inch (state actual perc rate)



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# FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 3 OF 5

	Up to 25% reduction in subsurface disposal area design requirements (state required & proposed size)
	Relocation of water supply well (identify well, describe relocation)
_	Reduction of required separation between bottom of SAS & high groundwater (specify proposed reduction & perc rate) 3-0" SEPARATION. PERCRATE=18
	Other requirements of 310 CMR 15.000 that cannot be met (specify sections of the Code)
15.40	m upgrades that cannot be performed in accordance with 310 CMR 15.404 & 5, or in full compliance with the requirements of 310 CMR 15.000, require a nce pursuant to 310 CMR 15.410-15.417.
of the Evalu	proposed upgrade involves a reduction in the required separation between the bottom e soil absorption system and the high groundwater elevation, an Approved Soil lator must determine the high ground water elevation pursuant to 310 CMR 05(1)(i)(1). The evaluator must be a member or agent of the local approving authority:
	Distance from soil absorption system to high groundwater  feet
	As determined by:
	Evaluator's name Richard Scott, P.E.  Evaluator's signature Kickard Stoth  Date of evaluation FEB. 1, 2000



7)

	:	:

# FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 4 OF 5

### 8) Notice to Abutters

No application for upgrade approval in which the setback from property lines or a private water supply well is reduced shall be complete until the applicant has notified all abutters whose property or well is affected by certified mail at least ten days before the Board of Health meeting at which the upgrade approval will be on the agenda. Such notice shall include the date, time and place where the upgrade approval will be discussed.

If the Department is the approving authority, then such notice to abutters must be completed prior to the date of submission of the application to the Department.

The notices to abutters shall include a copy of the completed application form and shall reference the standards set forth in 310 CMR 15.402 through 15.405.

List of affected Abutters:

Abutter Name	1	Date notified
Address		
Abutter Name		Date notified
Address		
Abutter Name		Date notified
Address		
Abutter Name		Date notified
Address	′,	

- 9) Explain why full compliance, as defined in 310 CMR 15.404(1), is not feasible (each section must be completed):
  - a) an upgraded system in full compliance with 310 CMR 15.000 is not feasible:
    To Achreve 4' Separation Would Require A Pump. Not Economically Justifiel
  - b) an alternative system approved pursuant to 310 CMR 15.283-15.288 is not feasible:



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# FORM 9A - APPLICATION FOR LOCAL UPGRADE APPROVAL PAGE 5 OF 5

- c) a shared system is not feasible:

  Nor Economically HEASIBLE
- d) connection to a sewer is not feasible:

  SEWER IS > Vemue Away
- 10) An application for a disposal system construction permit, including all required attachments (e.g. plans & specifications, site evaluation forms), must accompany this application. Is the DSCP application attached? yes no

### 11) Certification

"I, the facility owner, certify under penalty of law that this document and all attachments, to the best of my knowledge and belief, are true, accurate, and complete. I am aware that there may be significant consequences for submitting false information, including, but not limited to, penalties or fine and/or imprisonment for knowing violations."

Facility owner's signature	Date
FRANCIS DOWNIE	*
Print Name	
RICHARD SCOTT	2-23-00
Name of preparer	Date
4/3-256-0647 3/SHA	UTESBURY ROAD PELHAM, MA 01002

NOTE: Title 5, 310 CMR 15.403(4), requires the system owner or operator to submit to the Department a copy of the local upgrade approval upon issuance by the Board of Health and prior to commencement of construction.



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# Commonwealth of Massachusetts Town of AMHERST, Massachusetts

### LOCAL UPGRADE APPROVAL ISSUED PURSUANT TO 310 CMR 15.404 & 15.405

Facility/system owner	Name: FRANCIS Don	Address: /	16 MIDDIEST. AMHER	25T, MA 01002
	Address of facility	116 MIDDLEC	F. AMHERST	
Type of facility:	residential instituted	utional con AR 15.203	nmercial school gpd	
System designer:	Name RICHARD Scott	P.E. Address 31	SHUTESBURY RO. PELHAM. MA 0100	Phone No. <u>413-256-0647</u>
Local Upgrade Appr	oval granted for:			
reduction in s	etback(s) (specify)			
perc rate of 3	0-60 min./inch (specify ra	te)		
	SAS area of up to 25% duction & size of SAS)			
reduction in s SAS & high (specify reduc	eparation between groundwater Train & perc rate)	SERARATI ERC RATE =	18 MIN./M	
relocation of	a well (explain)			
			,	
List local variances gr	anted (no DEP approval re			.*
List variances granted	requiring DEP approval			-8°
Board of Health Appr	oval of proposed upgrade			4
board of Hearth Appl	ovar or proposed apgrade	•	Name & Title	
Sign	ature	City/town	*	Date .

THE SYSTEM OWNER OR OPERATOR SHALL PROVIDE A COPY OF THIS LOCAL UPGRADE APPROVAL TO THE APPROPRIATE REGIONAL OFFICE OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER POLLUTION CONTROL UPON ISSUANCE BY THE LOCAL APPROVING AUTHORITY & BEFORE COMMENCEMENT OF CONSTRUCTION.



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### RICHARD SCOTT, P.E. REGISTERED CIVIL ENGINEER

SITE ENGINEERING PERC TESTS SEPTIC SYSTEM DESIGN FORM 11 - SOIL EVALUATOR FORM Page 1

No.

31 SHUTESBURY ROAD PELHAM, MA 01002

(413) 256-0647

Date 2-1-00

Town of Amherst, Massachusetts

# Soil Suitability Assessment for On-site Sewage Disposal

LOCATION ADDRESSED ING MIDDLE STREET	Owner's Name, Table 4
MAP	Address, and FRANCIS & VIRGINIA DOWNIE Trippens , 116 MIDDLE ST.
PARCEL#	AMHERST, MA 01002
New Construction - Repair	413 253-5758
Office Review	
Published Soil Survey Available: No	Yes 4
Year Published 1981 Publication Drainage Class T Soil Limitatio	Scale L: 15.840 Soil Man Hair Par Par
Surficial Geologic Report Available: No	
Year Published Publication Geologic Material (Map Unit)	Scale
Geologic Material (Map Unit)	Scale
Geologic Material (Map Unit)	Scale
Geologic Material (Map Unit) Landform Flood Insurance Rate Map:	Scale
Geologic Material (Map Unit) Landform Flood Insurance Rate Map: Above 500 year flood boundary	No Yes
Geologic Material (Map Unit) Landform  Flood Insurance Rate Map: Above 500 year flood boundary Within 500 year flood boundary Within 100 year flood boundary  Wetland Area:	No Yes No Yes No Yes No Yes
Geologic Material (Map Unit) Landform  Flood Insurance Rate Map: Above 500 year flood boundary Within 500 year flood boundary Within 100 year flood boundary  Wetland Area: National Wetland Inventory Map (ma	No Yes No Yes No Yes No Yes
Geologic Material (Map Unit) Landform  Flood Insurance Rate Map: Above 500 year flood boundary Within 500 year flood boundary Within 100 year flood boundary  Wetland Area: National Wetland Inventory Map (ma	No Yes No Yes No Yes No Yes (map unit)

KESULTS TO NORTH HND YOUTH OF THIS LOCATION.

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# RICHARD SCOTT, P.E.

REGISTERED CIVIL ENGINEER

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

SOIL EVALUATOR FORM Page 2

31 SHUTESBURY ROAD PELHAM, MA 01002

(413) 256-0647

# On-site Review

Location (identify on site plan)	2-1-00 Tir	ne: 9:00 A.M.	Weather CCEA	R 25°
Vegetation LAWN	Slope (%) 0-3% S	Surface Stones Fe	5W	
Landform GLACIAL OUTWASH PLA Position on landscape (sketch on the Distances from:	41N			
Possible Was A	eet Drainage w eet Property Li feet Other	The state of the s		·

		DEEP	OBSERV	ATION I	HOLE LO	OG
	Depth from Surface (Inches)	Suil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders,
Deep Hole	0-4 4-18	A Bw	FASSANDY LOAM SANDY LOAM	1078 4/3		Consistency, % Gravel)
DHI OUND SURFACE EL = 96.1 NATER EL= 91.9	18-66 66-126		LOAMY SAND SANDT LOAM	10 YR 7/2	51R5/6@	FINE LOAMY SAND 410% GRAVEL FIRM IN PLACE
Deep Hole	06-126	-2	SAHOT LOAM	7.5186/4		PIRM IN PLACE
						a

Parent Material (geologic)	GLACIAL OUTWASH	 Depth to Bedrock:	>126"

Depth to Groundwater: Standing Water in the Hole: 60" Weeping from Pit Face: 60"

Estimated Seasonal High Ground Water: 50"

			· ·

# RICHARD SCOTT, P.E. REGISTERED CIVIL ENGINEER

SITE PROMITE

SITE ENGINEERING
PERC TESTS SEPTIC SYSTEM DESIGN

31 SHUTESBURY ROAD PELHAM, MA 01002

(413) 256-0647

Page 3

Determination for Seasonal High Water Table
III (VIII) E STORE
Method Used: Town Amherst
Depth observed standing in observation hole inches  Depth weeping from side of observation hole inches  Depth to soil mottles 50 inches  Ground water adjustment feet
Index Well Number Reading Date Index well level  Adjustment factor Adjusted ground water level
Depth of Naturally Occurring Pervious Material
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? Yes
If not, what is the depth of naturally occurring pervious material?
Certification
Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.
Signature Richard Frott Date 2-2-00

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*			

### RICHARD SCOTT, P.E.

REGISTERED CIVIL ENGINEER

# SITE ENGINEERING PERC TESTS SEPTIC SYSTEM DESIGN

FORM 12 - PERCOLATION TEST

31 SHUTESBURY ROAD PELHAM, MA. 01002

(413) 256-0647

# COMMONWEALTH OF MASSACHUSETTS

Town of AMHERST, Massachusetts

Percolation Test						
: Date: 2		Time	e: 9:0	o A.M.		
Observation Hole #	P			•		
Depth of Perc Bottom	39"		٠.	₹g.;;	:	
Start Pre-soak	9:00					
End Pre-soak	9:15 "					
Time at 12"	. 9:15					
Time at 9"	9:54"					
Time at 6"	10:48					
Time (9"-6")	54					
Rate Min./Inch	18			£ <b>4</b> 0		

Site Passed	Site Failed	**	
		· · · · · · · · · · · · · · · · · · ·	
Performed By:	RICHARD SCOTT, P.E.	CERTIFIED VOIL EVAL	DATOR
Witnessed By:	DAVE ZAROZINSKI, H	LEALTH AGENT, CERTIF	TED SOIL EVALUATOR

Comments: 12" TO 9" = 39 MINUTES. THE INTERIM REJULT IN ACCEPTABLE TO HEALTH AGENT TO PROCEED WITH THE REST OF THE PERC TEST.

# SYSTEM DESIGN CALCULATIONS

3 BEDROOM × 110 GPD PER BEDROOM = 330 GPD DESIGN FLOW

MINIMUM EFFECTIVE SEPTIC TANK VOLUME = 2.0' × 330 = 660 GALLONS

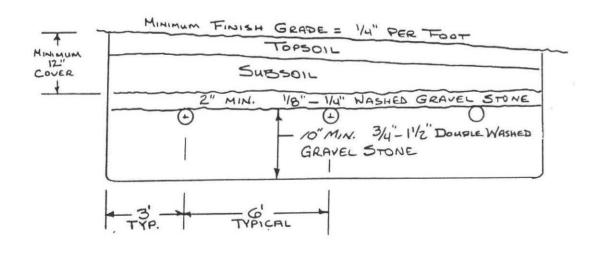
SPECIFIED TANK VOLUME = 1500 GALLONS

PERCOLATION RATE = 18 MINISTES PER INCH -> DESIGN LOADING = 1.89 SQUARE FEET PER GALLON FOR BOTTOM LEACHING ONLY.

MINIMUM LEACH FIELD BOTTOM AREA = 1.89 × 330 = 624 SQ.FT.

LEACH FIELD SPECIFIED FOR THIS SITE = 18' × 35' = 630 SQ.FT.

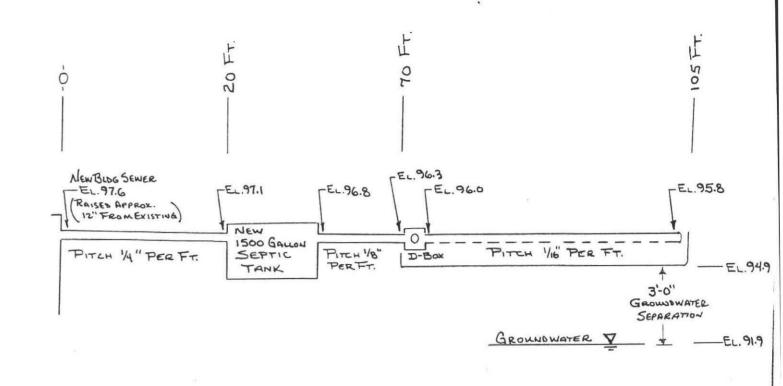
SPECIFICATION: ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH MASSACHUSETTS 310 CMR (TITLE 5)



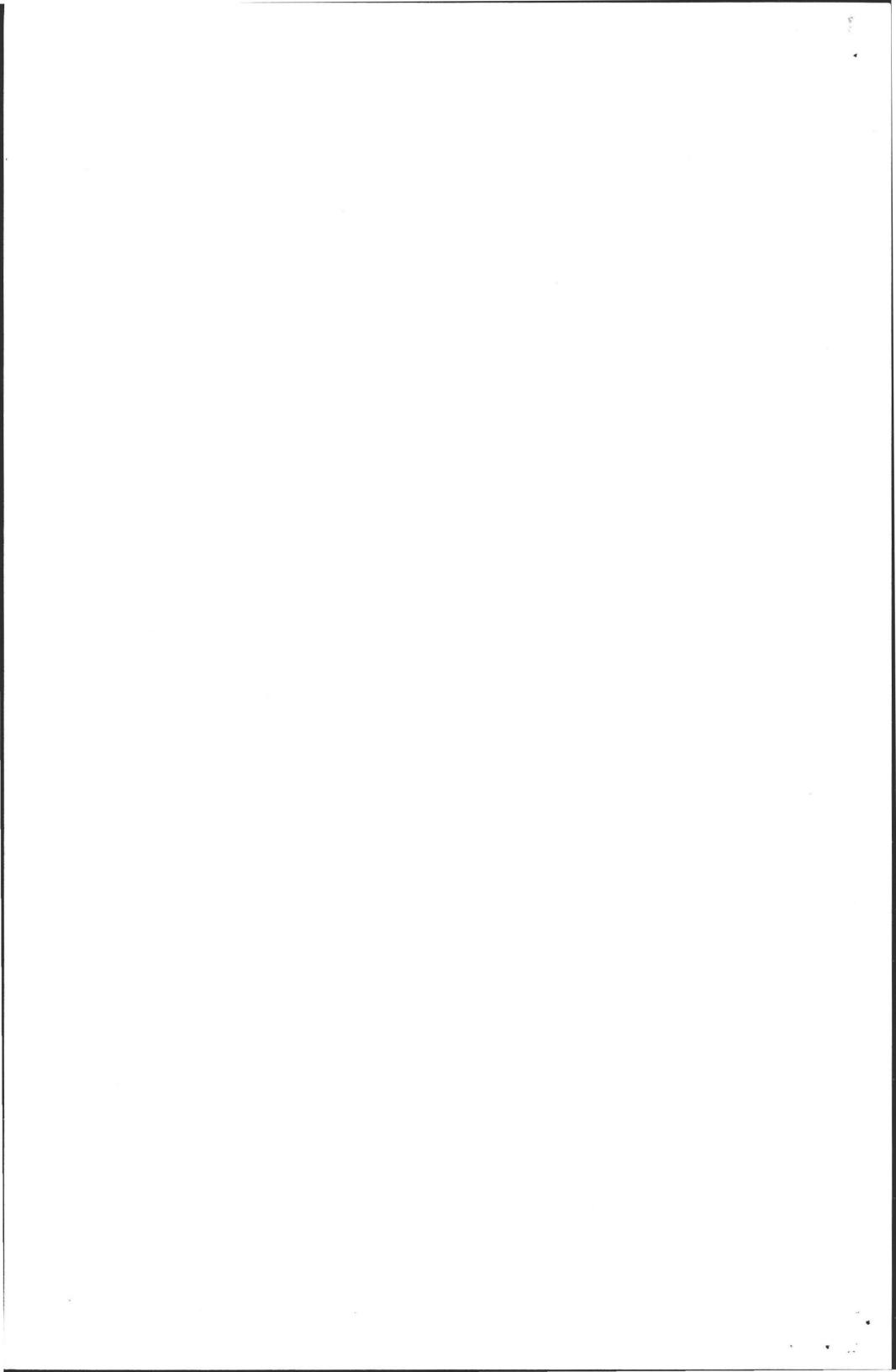
18 × 35 LEACHFIELD HEADER PIPES FROM DISTRIBUTION BOX
TO BE 4" 5CH 40 PUC OR SCH 35 SDR NON PERFORATED
AND ARE TO BE LAID LEVEL. 105 LINEAL FEET OF 4"

SCH 40 PUC OR SCH 35 SDR PERFORATED DISTRIBUTION
PIPE TO BE LAID AT MINIMUM .005 PER FT. (1/16" PER FT.)

ALL PIPE ENDS TO BE CAPPED.



11			SHEET 10F2
Fishard Scott		YSTEM DESIGN DOLE STREET AMHERST	
E No. 211383, 5	SCALE: N.T.S.  DATE: 2-23-00	APPROVED BY:	REVISED
A STATE OF THE PARTY OF THE PAR		HARD SCOTT, P.E.	,
			DRAWING NUMBER



# 50 MINIMUM DIFSET TO SURFACE DRAW V SHED 10 MINIMUM OFFIET FROM TREE BURIED ELECTRIC -IVETO SHED EXISTING SIWER MAPLE TOREMAIN 0 SEPTIC TANK EXISTING SEPTICTANK & LEACH PIT 100.00 EL. DATUM -= DECK SURFACE ATTOPORTERS TO BE DISCONTINUED OPEN DECK RET'G WALL EXISTING 3-BR RET'S WALL HOUSE ( APPROX.) MUNICIPAL WATER SUPPLY RICHARD M. SCOTT CIVIL No 31199 SIONAL MIDDLE STREET

### CONSTRUCTION NOTES

THIS DESIGN HAS BEEN COMPLETED AND CONSTRUCTION IS TO BE CARRIED OUT IN ACCORDANCE WITH 310CMR-15.00 (TITLE 5) 12-27-96 REVISION.

BUILDING SEWER IS TO BE RE-LOCATED TO HIGHER ELEVATION AS SHOWN ON SHEET 1 OF 2 AND COUPLED WITH A LEAK-TIGHT COUPLING TO NEW PIPING TO THE NEW 1500 GALLON SEPTIC TANK.

EXISTING SEPTIC TANK IS TO BE PUMPED, CRUSHED, FILLED WITH SAND AND BURIED IN PLACE.

NEW SEPTIC TANK TO BE INSTALLED IS 1500 GALLONS WITH INLET AND OUTLET PIPE TEES AND GAS BAFFFLE PER 310CMR-15.223. SEPTIC TANK AND D-BOX TO BE SET ON LEVEL 6" BASE OF CRUSHED STONE.

THE DESIGN AS PRESENTED WILL PRESERVE THE EXISTING SILVER MAPLE TREE. IF THE PROPERTY OWNERS CHOOSE TO REMOVE THE TREE AS PART OF THIS CONSTRUCTION, THEN THE NEW LEACH FIELD MAY BE INSTALLED APPROXIMATELY 15 FEET WEST OF THE LOCATION SHOWN. ELEVATIONS OF THELEACH FIELD WOULD NOT CHANGE BUT THE REQUIRED VOLUME OF SAND FILL WOULD BE REDUCED.

ALL TOP & SUBSOIL IS TO BE REMOVED FROM THE AREA OF THE SOIL ABSORPTION SYSTEM + 5 FEET ON ALL SIDES. MACHINE-COMPACT SAND MEETING 15.255 REQUIREMNENTS TO ESTABLISH A CONSISTENT BASE ELEVATION AS SHOWN ON SHEET 1 OF 2.

= EXISTING ELEVATION CONTOURS.

= PROPOSED FINISH CONTOURS.

THE SOIL ABSORPTION SYSTEM IS RAISED PRIMARILY ON THE EAST SIDE. HOLD ELEVATION 96.2 OUT 15 FEET THEN RETURN TO ORIGINAL GROUND AT 1:3 SLOPE.

THIS DESIGN DOES NOT INCLUDE CAPACITY FOR A GARBAGE GRINDER. EXISTING GARBAGE GRINDER IS TO BE REMOVED. RE-INSTALLATION OF A GARBAGE GRINDER IS NOT ALLOWED.

PER AMHERST REGULATION, IN-PROCESS INSPECTION AND FINAL AS-BUILT INSPECTIONS ARE REQUIRED. FOR INSPECTIONS CONTACT:

DESIGNER:

(413) 256-0647

HEALTH AGENT:

(413) 256-4030

	5	HEET 20F2
	STEM DESIGN DDLE STREET AMHERST	11
CALE: /" = 20' ATE: 2-23-00	APPROVED BY:	DRAWN BY RMS
	CIS & VIRGINIA DOWNIE ARD SCOTT, P.E.	
***************************************		DRAWING NUMBER

			•	٠,:

# RECEIVED MAY 0 9 2005

Richard Scott, P.E. 31 Shutesbury Road Pelham, MA 01002 (413) 256-0647

Dave Zarozinski, Health Agent Town Hall – 4 Boltwood Avenue Amherst, MA 01002-2351 May 3, 2000

Subject: Septic System Repair at- 116 Midle Street (Property of Francis & Virginia Downie)

Documentation of In-Process and Final As-Built Inspections

### Dear Dave:

On March 19, 2000 I completed the in-process inspection for this septic system repair installation at the subject property. Per Amherst regulations, this first inspection was to check the removal of unsuitable soils from beneath the soil absorption system and check those "subgrade" elevations. The excavation had been completed and I was able to confirm that the unsuitable soils were removed. The subgrade elevations vary from approximately 94.1 to 94.9 so the fill material below the system will be 12" or less.

On March 25, 2000 I completed the final as-built inspection with you. The as-built dimensions triangulated from the house and the as-built elevations are documented on the enclosed plan copies. The locations of the installed components are per the approved plan and the elevations are within a tenth of a foot. As a whole, the installation has been very well done despite somewhat difficult access from the road and the need to remove a very large tree.

The only remaining item for Rich Misterka to complete was to add a short riser on the inlet cover of the septic tank. This is to assure an adequate air space over the inlet tee. Rich said he would do this later in the day on March 25 and would then proceed with backfill, seeding and mulching of the ground surface.

Thanks, Dave for your help in getting this project completed. Please call me if there is anything else I need to do.

Sincerely,

Richard Scott, P.E.

Vichard Sett

cc: Francis & Virginia Downie, Owners Sally Malsch, Realtor Rich Misterka, DMO Construction, Installer

# CALCULATIONS SYSTEM DESIGN

330 GPD DESIGN FROM 3 BEDROOM X 110 GPD PER BEDROOM

=660 GALLONS MINIMUM EFFECTIVE SEPTIC TANK YOLUME = 2.0'x 330 1500 GALLONS SPECIFIED TANK VOLUME =

- DESIGN LOADING= 021 LEACHING FOR BOTTOM PERCOLATION RATE = 18 MINUTES PER INCH = 1.89 SQUARE FEET PER GALLON

EL. 94.9

PITCH 1/6" PER FT.

D-Box 0

PERFT.

NEW 1500 GALLON SEPTIC TANK

PITCH 14" PER FT.

(RAISES APPROX.

08:56

77 201

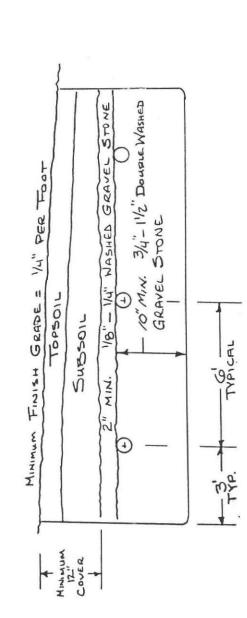
TO FT.

77 OS

EL. 95.8

EL. 91.9

18' x 35' = 630 50, Fr. 1.89 x 330 = 624 SQ. FT 11 HINIMUM LEACH FIELD BOTTOM AREA LEACH FIELD SPECIFIED FOR THIS SITE SPECIFICATION: ALL MATERIALS AND CONSTRUCTION SHALL BE 6 310 CMR (TITLE MASSACHUSETTS IN ACCORDANCE WITH



SDR PERFORATED DISTRIBUTION SCH 40 PVC OR SCH 35 SDR PERFORATED DISTRIBUTION POE TO BE LAID AT MINIMUM. 005 PERTT. (116 PERTT.) TO BE 4" SCH 40 PUC OR SCH 35 SDR NON PERFORMTED PIPES FROM DISTRIBUTION BOX 105 LINEAL FEET OF 4" CAPPED 18'x 35' LEACHFIELD HEADER AND ARE TO BE LAID LEVEL PIPE ENDS TO BE ALL



SCALE: N.7.5. a N

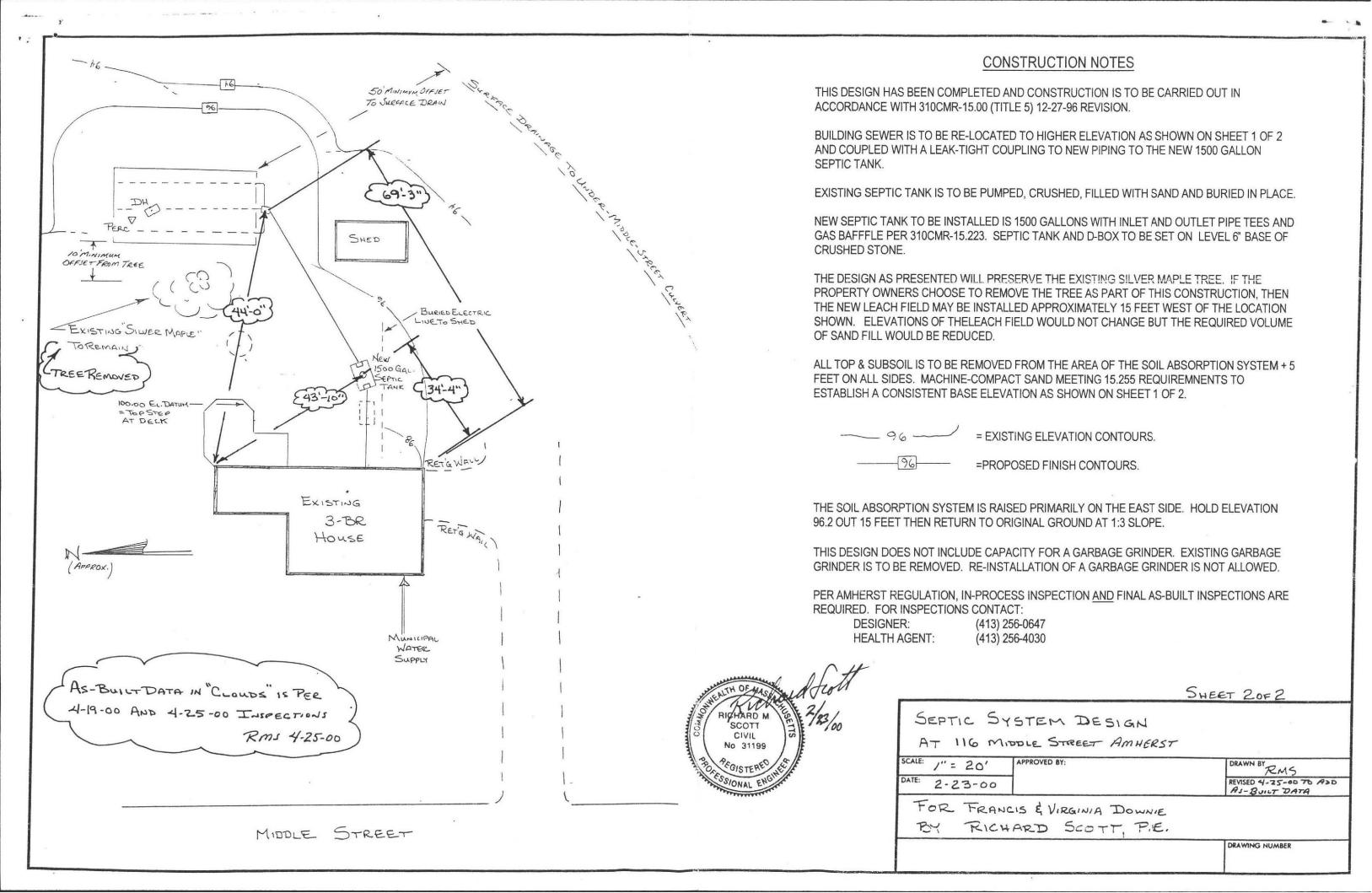
SYSTEM DESIGN	116 Marie STREET AMMERST
SEPTIC	- 116
M	4

SHEET 10F2

FOR FRANCIS VIRGINIA DOWNIE  BY RICHARD SCOTT, P.E.	REVISED 4-25-00 TO A1- GOILT DATA	DRAWING NUMBER	TOWN OF THE PARTY
FOR 7	2-23-00	SY RICHARD SCOTT, P.E.	

To ADD

DRAWN BY RMS



.... 2

### P 746 225 294



# Certified Mail Receipt

No Insurance Coverage Provided Do not use for International Mail

(See Reverse) Sent to Perginia & Fran Derenie Street & No. 116 middle Street P.O., State & ZIP Code amperst, Na.010 Postage Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt Showing to Whom & Date Delivered Return Receipt Showing to Whom, Date, & Address of Delivery TOTAL Postage & Fees Postmark or Date

S Form 3800, June 1990

## STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE, CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES (see front).

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- 2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.
- 3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to the back of article. Endorse front of article RETURN RECEIPT REQUESTED adjacent to the number.
- 4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
- 5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.
- 6. Save this receipt and present it if you make inquiry.