

**Acton Board of Health
Agenda
January 12, 2009
Acton Memorial Library**

.....

7:30

I/A Approval
4 Ethan Allen Drive

7:45

Rosenfield

8:15

Sieve Analysis
5 Granite Rd

8:30

Vice Chairman

8:45

Board Reorganization

Minutes

December 15, 2008



INTRADEPARTMENTAL COMMUNICATION

Acton Board of Health - Telephone (978) 264-9634

TO: Board of Health
FROM: Justin T. Snair
RE: I/A Technology Use Approval
DATE: January 7, 2009

The Health Department is in receipt of a request for Acton Board of Health I/A Technology Use approval to allow for the repair of an On-Site Sewage Disposal System serving the 440 gpd building at 4 Ethan Allen Dr..

Request:

Use of MicroFast 0.5 in accordance with Modified Certification for Remedial Use issued by MA DEP dated January 23, 2008

Use of Perc-Rite Drip Dispersal System in accordance with Modified Certification for Remedial Use issued by MA DEP dated February, 26 2008

Local Approval pursuant with 310 CMR 15.287 (7) General Conditions for Use of Alternative Systems

The Health Department has reviewed the submitted plan and finds the following:

- 1) Approval of the use of I/A Technology for the proposed system is likely to improve existing conditions at site.
- 2) System has been designed in accordance with applicable MA DEP approval certifications.

Therefore the Health Department recommends approval with the following conditions:

- 1) The system shall, at all times, be maintained in compliance with the most recent Modified Certification for Remedial Use issued by MA DEP for MicroFast 0.5 and Perc-Rite Drip Dispersal Systems.
- 2) The septic tank shall be pumped once every two years.
- 3) The system shall be constructed in accordance with the above listed conditions and in accordance with the plan stamped by Duncan Brown, dated 12/11/2008

STAMSKI AND MCNARY, INC.

80 Harris Street
Acton, Massachusetts 01720
(978) 263-8585
FAX (978) 263-9883

WILLIAM F. MCNARY, P.L.S.
JOSEPH MARCH, P.E., P.L.S.

January 7, 2009

Acton Board of Health
c/o Doug Halley
472 Main Street
Acton, MA 01720

RECEIVED

ACTON BOARD OF HEALTH

Re: 525-541 Massachusetts Avenue
West Acton Village Project

Dear Mr. Halley,

On behalf of our client, Michael Rosenfeld, we have prepared the attached Conceptual Sewage Disposal Plan for the WAVE project. Also, please refer to the attached project summary and conceptual drawings for an overview of the entire proposal. The project site is comprised of the properties numbered 525, 531, 537 and 541 Massachusetts Avenue. Each of these properties is served by an on-site sewage disposal system (SDS). The present conceptual proposal will combine these properties, move some of the historic structures and construct additions. One of the four SDS's will be preserved at 541 Mass. Ave. with an existing approved design flow of 950 gpd. The SDS at 537 Mass. Ave will be upgraded in order to support a portion of the proposed parking lot and has an existing approved design flow of 550 gpd. A third system is proposed on property presently known as 525 Mass. Ave. and will have a Design flow of 3,140 gpd. A portion of the reserve area for this system will be located behind the relocated building at 537 Mass. Ave. and the remainder will be located near the primary area on the 525 Mass. Ave property. The street numbering is being referred to for clarity, ultimately these properties will comprise one facility. These SDS's are labeled on the Conceptual Sewage Disposal Plan and are summarized as follows:

SDS A; 525 Mass. Ave.; 3,140 gpd; new construction

The primary soil absorption system would be located within 100 feet of a Bordering Vegetated Wetland. The entire site is located within Zone 3 of the Acton Groundwater Protection District. A portion of the reserve area for this system would be adjacent to the primary area and the other portion would be adjacent to SDS B. Since the design flow for this system exceeds 2,000 gallons per day, Title 5 requires a pressure distribution and mounding analysis. The Board of Health regulations require a Nitrate loading assessment as well. All of these requirements and analyses will be provided. An alternative technology is proposed for treatment of effluent from this system. The proposed effluent

parameters are 30 mg/l TSS, 30 mg/L BOD and 25 mg/L Nitrogen. This treatment is proposed to mitigate the impact of the SDS since the setback to the wetland is less than

100 feet. The Nitrate Loading Assessment will evaluate the impact on the nearest sensitive receptor. In this case, Fort Pond Brook is the nearest sensitive receptor.

SDS B; 537 Mass Ave.; 550 gpd; upgrade

This system is proposed as an upgrade to an existing 550 gpd system. The system must be upgraded in order to construct a parking lot over it. The SAS of this system is presently set back about 57feet from the Bordering Vegetated Wetland. The upgraded SAS will be set back 81 feet from the Bordering Vegetated Wetland. This will result in a net improvement over existing conditions with no increase in design flow, thus no additional treatment is proposed in this instance.

SDS C; 541 Mass Ave.; 950 gpd; existing

This system will remain in its current condition. A title V inspection will be performed in order to verify that it is in good working order.

The overall concept requires that the local regulations be waived in as follows:

Acton Board of Health Rules and Regulations:

- **Article 11-6.1.2** No sewage disposal system with a capacity of 2,000 gallons per day or greater shall be constructed within one hundred (100) feet of any wetland (Any land area or surface area so defined by the Massachusetts Wetland Protection Act, MGL Ch. 131, s. 40 and/or the Town of Acton Wetlands Protection Bylaw.)
 - The proposed primary and reserve Soil absorption System (SAS) for System A is located more than 50 ft but less than 100 feet from a Bordering Vegetated Wetland.
 - A waiver is required to allow the proposed soil absorption system to be located within the 100' buffer zone. The soil absorption system will not have an adverse effect on the wetlands or groundwater because treatment is being provided to reduce the BOD, TSS, and total Nitrogen concentration beyond the Title 5 required levels. An alternative technology will be used to treat effluent to 30 mg/L BOD, 30 mg/L TSS, and 25 mg/L Total Nitrogen.
- **Article 16-4.2.10** All leaching areas within an aquifer zone shall be set back 100' from any recharge, retention, detention or surface drainage area.
 - The proposed primary area for SDS-A is located 12 ft from the proposed Rain Garden.
 - The proposed reserve area for SDS-B is located 70 ft from the proposed Infiltration Basin.
 - A waiver is required to allow the proposed soil absorption system to be located within 100 ft of the rain garden and infiltration basin. This waiver

Page 3 of 3
West Acton Village Project
January 7, 2009

would be necessary is due to significant site constraints. The project would meet Title V minimum standards overall and would exceed Title V standards with the proposed alternative technology.

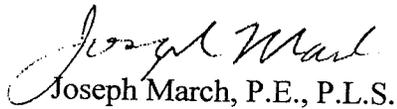
We look forward to discussing the project at your next meeting. Your support of the project concept is clearly critical prior to proceeding with the final design plans. Please feel free to contact us if you have any questions or need any additional information.

Respectfully yours,

Stamski and McNary, Inc.



George Dimakarakos, P.E.



Joseph March, P.E., P.L.S.

WAVE
PROJECT SUMMARY
AND
CONCEPTUAL DRAWINGS

West Acton Village Ecology / Dragonfly Community Arts Center

Project Summary

The *West Acton Village Ecology (WAVE)* is a sustainable, mixed-use project proposed for a rezoned portion of Mass Ave at the eastern entrance to West Acton Village. The project sensitively integrates a new community arts center, restaurant, retail, and office space with existing historic buildings and a redesigned pedestrian-oriented streetscape to preserve the scale and spirit of West Acton Village. The *Dragonfly Community Arts Center* sits at the heart of WAVE. Dragonfly will include a small 300-seat community theater flexibly designed to accommodate music, dance, lectures, films, workshops, and a variety of community uses.

Current social, environmental, and economic trends indicate a future of high fuel prices and limited natural resources. This reality precipitates both a need and a desire for more locally focused communities and economies. We hope WAVE can help West Acton Village adjust to this outlook by transitioning to a more vibrant, walkable, and accessible community resource filled with cultural, social, learning, working, shopping, and recreational opportunities.

Goals

The project name, “West Acton Village Ecology”, represents the project’s central theme of *connection*. Our **primary goal** is for WAVE to become a local resource that links people to new cultural opportunities and commercial services, the built and natural environment, local history, and a shared sense of community. We believe that strengthening these connections helps create a greater understanding, appreciation, and responsibility for each other and the places we inhabit.

In addition to this overarching goal, we hope to achieve the following **objectives**:

- 1) Create a model for environmentally, economically, and socially sustainable *community-oriented development* within historic village contexts.
- 2) Preserve and draw more attention to the village’s historic buildings, rhythm, and scale, while simultaneously restoring its *historic function* as a center for civic, cultural, and commercial activity that is suited for today’s needs.
- 3) Slow traffic on Route 111 to increase *pedestrian connectivity, accessibility, and safety*, and make the village a place geared toward people rather than cars.
- 4) Create new indoors and outdoors *public gathering space* that links the arts, commerce, recreation, and the community.
- 5) Minimize *resource, energy, and material consumption* in both construction and operations.

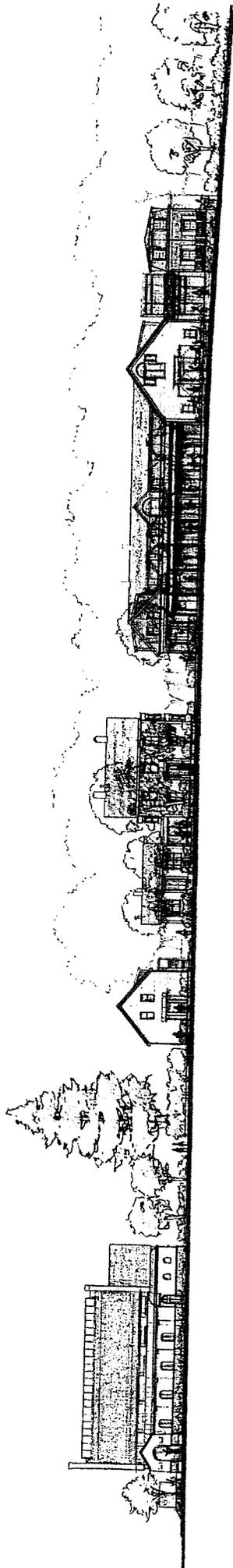
Program

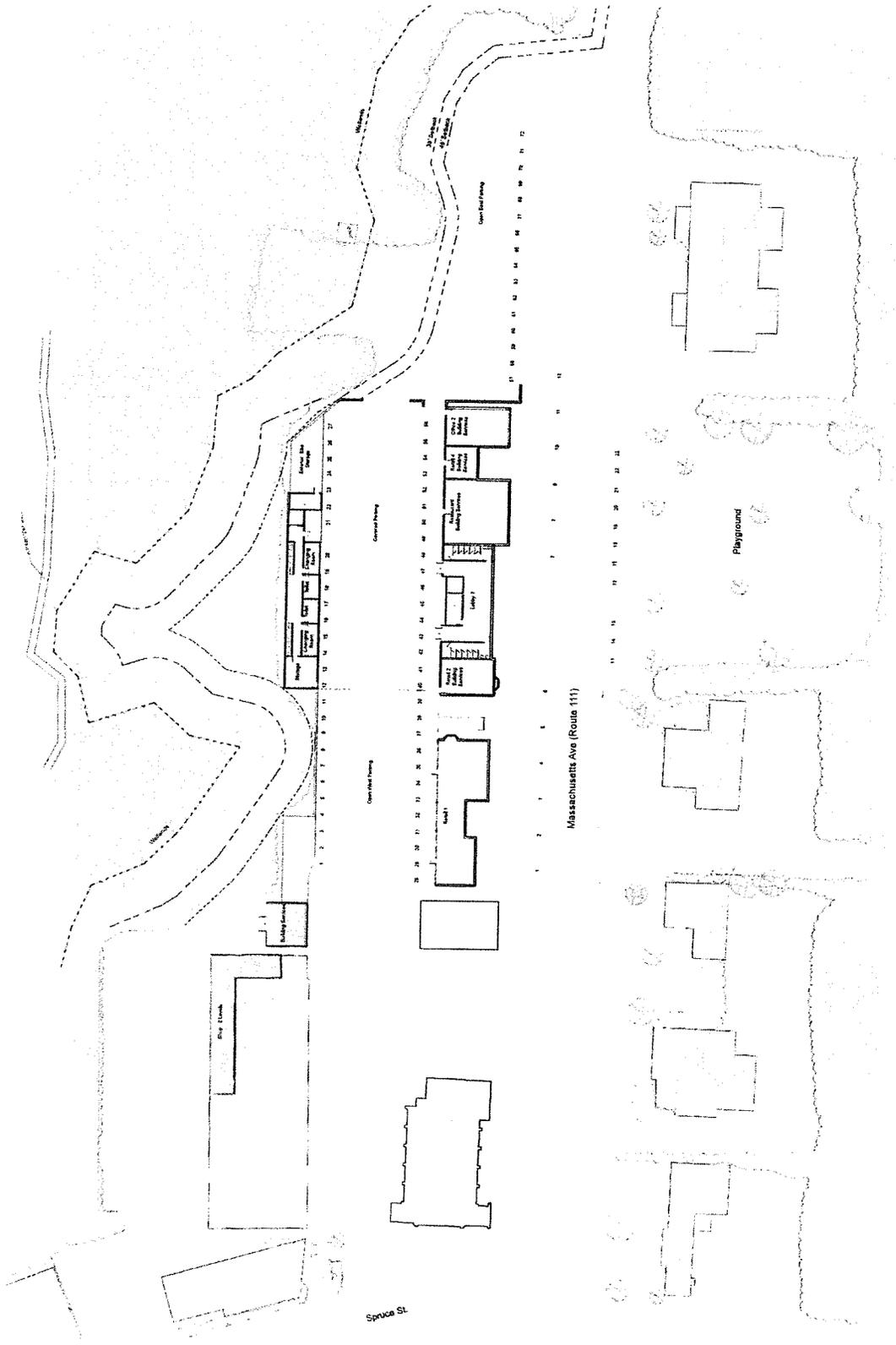
Theater and Community Arts Center: The Dragonfly Community Arts Center will be a multi-disciplinary resource for the region's strong cultural community. Dragonfly will contain studios, gallery space, and a 300-seat theater that can flexibly accommodate drama, music, dance, lectures, films, workshops, and variety of community uses. Dragonfly will be the permanent home to *Open Door*, a community theater group with roots in Acton extending back over 25 years. Several other groups in and around Acton, including the public schools, have expressed interest and enthusiasm in utilizing this proposed community resource.

Retail/Restaurant/Office: The existing historic buildings will be preserved and restored as retail, restaurant, and office space. Units are sized to accommodate smaller, local businesses.

Streetscape and Public Space: Traffic calming road design and signage will slow traffic entering the village to increase safety and transform Mass Ave from a high-speed thoroughway into a pedestrian-orientated village street. A new sidewalk will extend the length of the streetscape containing both new and preserved trees and plantings. A new crosswalk will connect to the existing playground, providing greater accessibility that will enable small outdoor events like arts fairs or farmers markets.

Parking: New on-street parking spaces will offer easy public access to the playground and eliminate the dangerous illegal parking on Mass Ave. Beneath the theater, an open-air but covered parking lot is built into the site's natural grade. The parking area will contain a covered public drop-off and roughly 65 new off-street parking spaces.

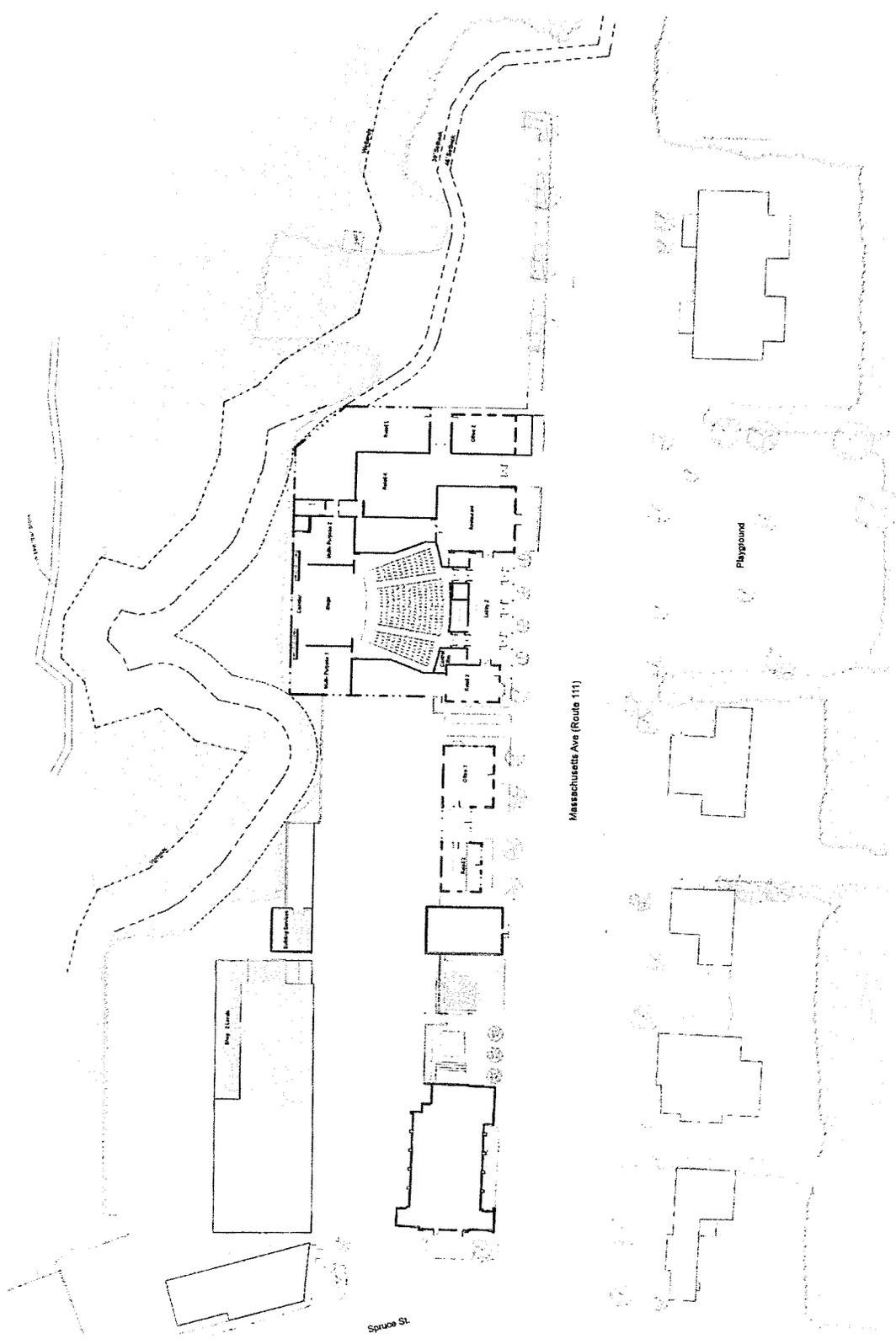




Parking Level
 1" = 20'

West Acton Village Ecology (WAVE)
 525-543 Massachusetts Ave, West Acton, MA

December 1, 2008
 New Habitat Partners | The Office of Michael Rosenfeld, Inc., Architects



Street Level

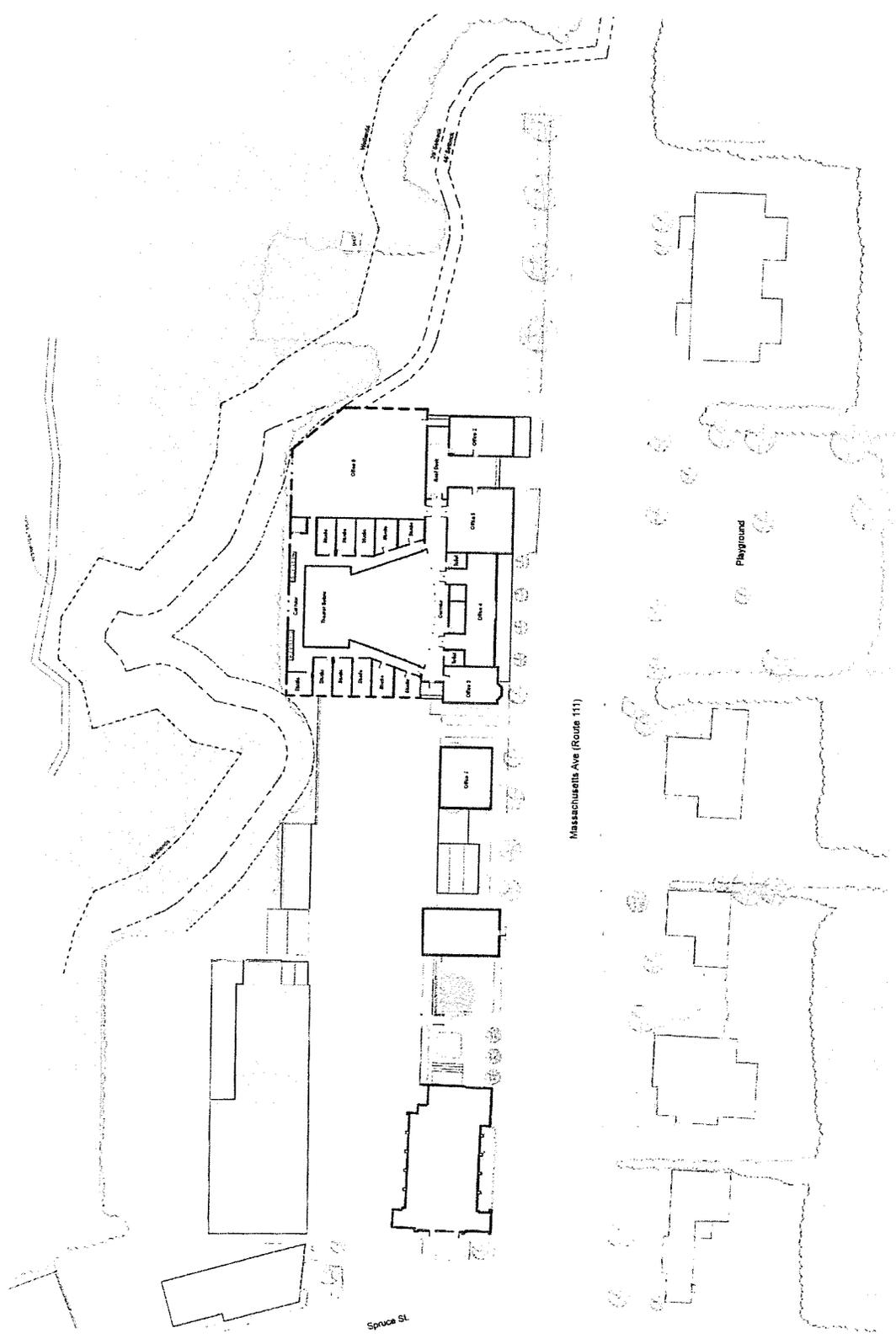
1" = 20'

West Acton Village Ecology (WAVE)

525-543 Massachusetts Ave, West Acton, MA

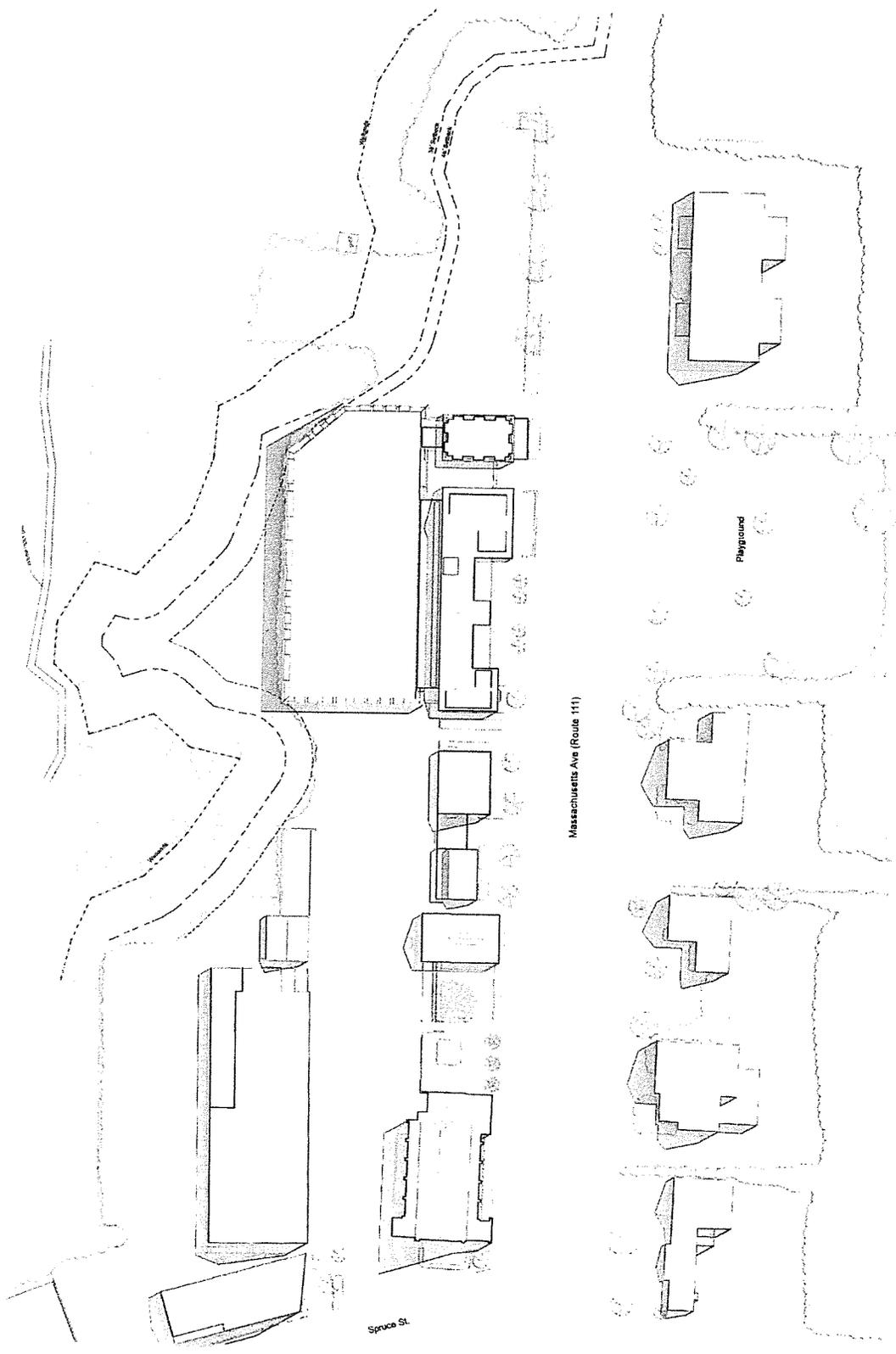
December 1, 2008

New Habitat Partners | The Office of Michael Rosenfeld, Inc., Architects



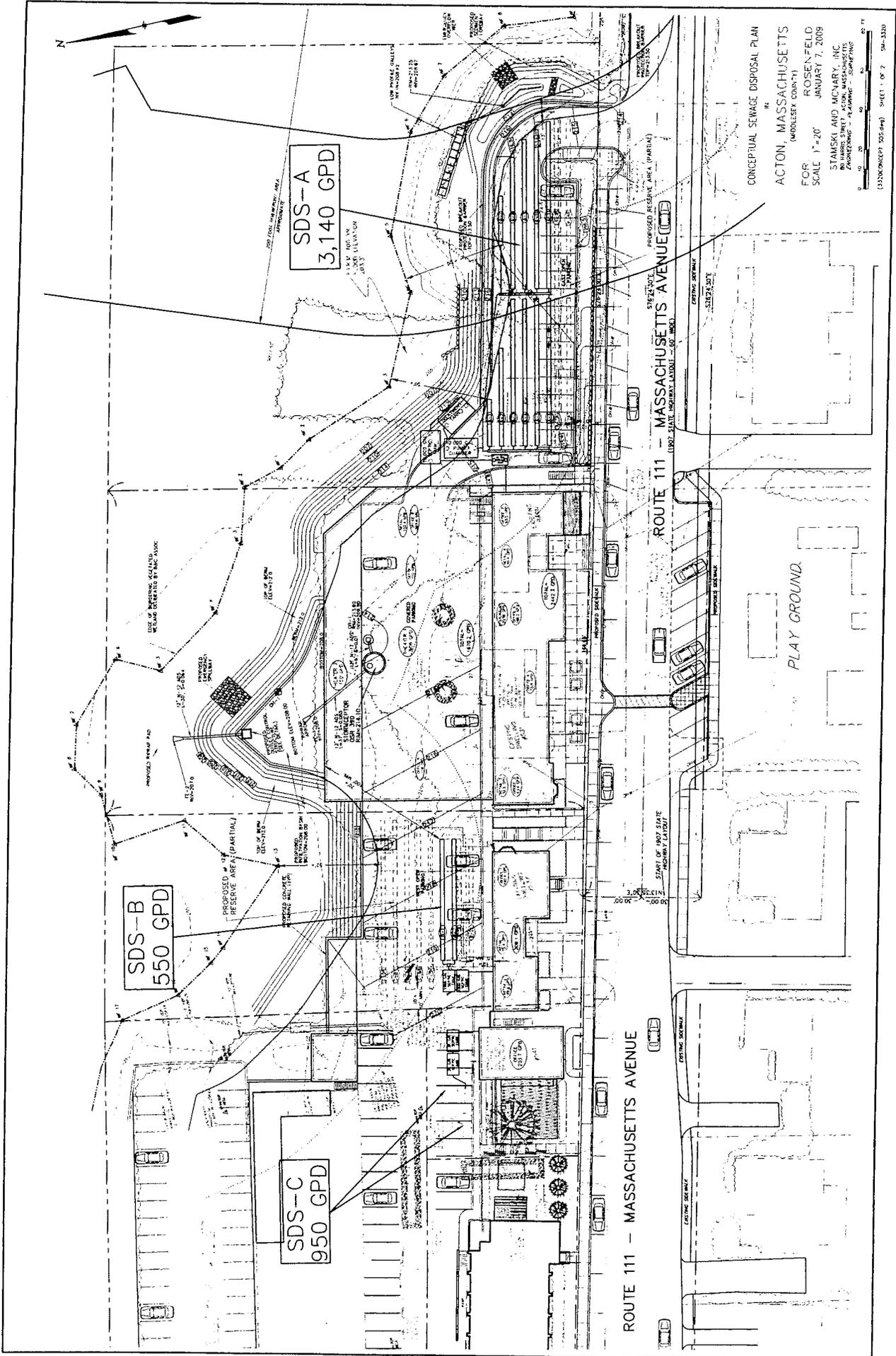
Upper Level
 1" = 20'

West Acton Village Ecology (WAVE)
 525-543 Massachusetts Ave, West Acton, MA
 December 1, 2008
 New Habitat Partners | The Office of Michael Rosenfeld, Inc., Architects



Roof Level
1" = 20'

West Acton Village Ecology (WAVE)
525-543 Massachusetts Ave, West Acton, MA
December 1, 2008
New Habitat Partners | The Office of Michael Rosenfeld, Inc., Architects



CONCEPTUAL SEWAGE DISPOSAL PLAN
 ACTON, MASSACHUSETTS
 (MIDDLESEX COUNTY)
 FOR ROSENFELD
 SCALE 1" = 20'
 JANUARY 7, 2009
 STANSKI AND MCNARY, INC.
 80 HARRIS STREET, ACTON, MASSACHUSETTS
 ENGINEERING - PLANNING - SURVEYING

(33328)09023 505-644 SHEET 1 OF 2 34-1200



INTRADEPARTMENTAL COMMUNICATION

Acton Board of Health - Telephone (978) 264-9634

TO: Board of Health
FROM: Justin T. Snair *JTS*
RE: Alternative Percolation Testing Approval
DATE: December 30, 2008

The Health Department is in receipt of a request for approval of alternative percolation test (sieve analysis) conducted at 5 Granite Rd, on November 20th, 2008.

Request:

Approval of sieve analysis conducted at 5 Granite Rd. in accordance with 15.404 (i), which states that:

"a sieve analysis may be performed in accordance with Department guidance if a percolation test in accordance with 310 CMR 15.104 and 15.105 can not be performed as determined by the local Approving Authority. "

Findings:

Saturated conditions prevented a percolation test from being conducted on site.

The following effluent loading rates have been determined:

Sample 1 Test Pit 4: C Horizon: Class I, 0.74 gpd/sf

Sample 2 Test Pit 4: B Horizon: Class I, 0.66 gpd/sf

The Health Department finds the submitted results in accordance with MA DEP Policy #: BRP/DWM/PeP-P00-4 (superseding P00-1) and recommend Sample 2 for approval as a percolation test substitute, as it is the most restrictive layer, with the following conditions:

1. Should any system using the aforementioned sieve analysis results fail, the system owner shall immediately notify the Board of Health, in writing, and make appropriate upgrades.

STAMSKI AND McNARY, INC.

80 Harris Street
Acton, Massachusetts 01720
(978) 263-8585
FAX (978) 263-9883

WILLIAM F. McNARY, P.L.S.
JOSEPH MARCH, P.E., P.L.S.

December 19, 2008

Town of Acton
Board of Health
472 Main Street
Acton, MA

RECEIVED

ACTON BOARD OF HEALTH

Re: Alternative Percolation Test
5 Granite Road

Members of the Board,

On November 20, 2008, soil testing was conducted at 5 Granite Road to evaluate the potential for an on-site sewage disposal system. The testing was witnessed by Board of Health agent Justin Snair. Due to saturated conditions we were unable to conduct a percolation test. Soil samples were taken from the usable testing location following Title 5 Alternative to Percolation Testing Guidance for System upgrades. The samples were tested by GeoTesting express of Boxborough and the results are attached. In accordance with DEP Policy #BRP/DWM/PeP-P00-1, we hereby request that you allow for the use of Effluent Loading Rate of 0.66 gdp/sf Class I soil for sample 2, taken from the B horizon of test pit 4. Sample 1 was taken from the C horizon and was found to have an 89% quantity of sand, and an Effluent Loading Rate of 0.74 gpd/sf. We request use of the Sample 2 loading rate as it is the more restrictive horizon, as in accordance with Title 5.

If you have any questions regarding this matter, please feel free to call.

Very truly yours,

Stamski and McNary, Inc.



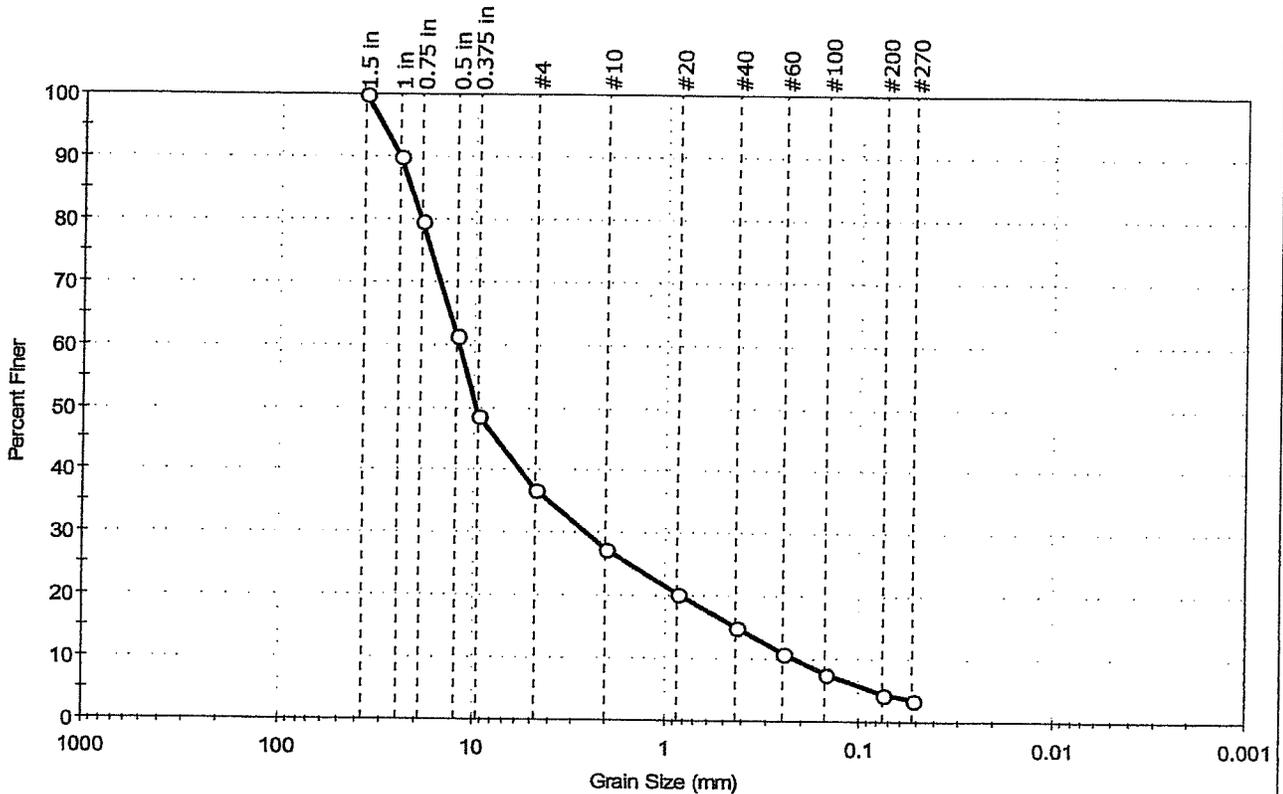
David Haslett, E.I.T.

GeoTesting express

a subsidiary of Geocomp Corporation

Client: Stamski & McNary, Inc.	Project No: GTX-8691
Project: 5 Granite Rd	Tested By: ap
Location: Acton, MA	Checked By: jdt
Boring ID: ---	Sample Type: bag
Sample ID: Sample 1 (wet)	Test Date: 11/21/08
Depth: --- 5C 1421202	Test Id: 142707
Test Comment: Less than 10% fines, Hydrometer not performed.	
Sample Description: Moist, light olive brown gravel with sand	
Sample Comment: ---	

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	63.3	32.3	4.4

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
1.5 in	37.50	100		
1 in	25.00	90		
0.75 in	19.00	80		
0.5 in	12.50	61		
0.375 in	9.50	49		
#4	4.75	37		
#10	2.00	27		
#20	0.85	20		
#40	0.42	15		
#60	0.25	11		
#100	0.15	8		
#200	0.075	4		
#270	0.053	3		

Coefficients	
D ₈₅ = 21.9019 mm	D ₃₀ = 2.5567 mm
D ₆₀ = 12.1311 mm	D ₁₅ = 0.4195 mm
D ₅₀ = 9.7881 mm	D ₁₀ = 0.2127 mm
C _u = 57.034	C _c = 2.533

Classification	
ASTM	Well-graded gravel with sand (GW)
AASHTO	Stone Fragments, Gravel and Sand (A-1-a (0))

Sample/Test Description	
Sand/Gravel Particle Shape :	ROUNDED
Sand/Gravel Hardness :	HARD
Dispersion Device :	
Dispersion Period :	1 minute
Specific Gravity :	2.65

Client:	Stamski & McNary, Inc.		Project No:	GTX-8691
Project:	5 Granite Rd		Tested By:	ap
Location:	Acton, MA		Checked By:	jdt
Boring ID:	---	Sample Type:	bag	
Sample ID:	Sample 1 (wet)	Test Date:	12/01/08	
Depth:	---	Test Id:	142709	
Test Comment:	---			
Sample Description:	Moist, light olive brown gravel with sand			
Sample Comment:	Only minus No. 10 sieve portion for USDA Classification.			

USDA Textural Classification

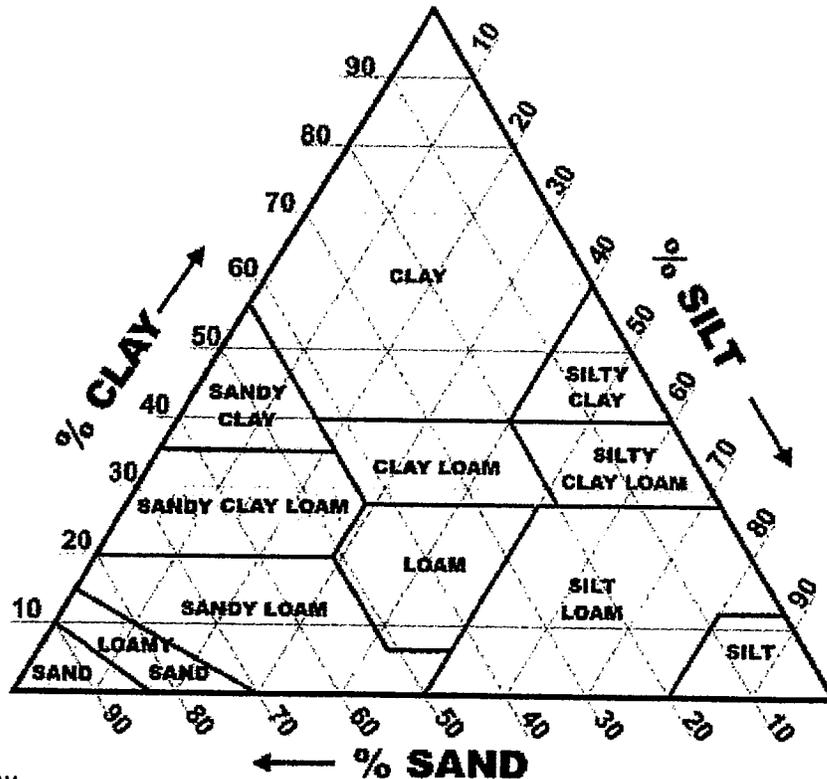
Boring ID	Sample ID	Depth	Sand, %	Silt, %	Clay, %	Classification
---	Sample 1 (wet)	---	89	12	-1	Loamy Sand

Classifications based only on material passing the #10 sieve

Sand: material passing 2.0 mm and retained on 0.05 mm diameter

Silt: material passing 0.05 mm and retained on 0.002 mm diameter

Clay: material passing 0.002 mm diameter

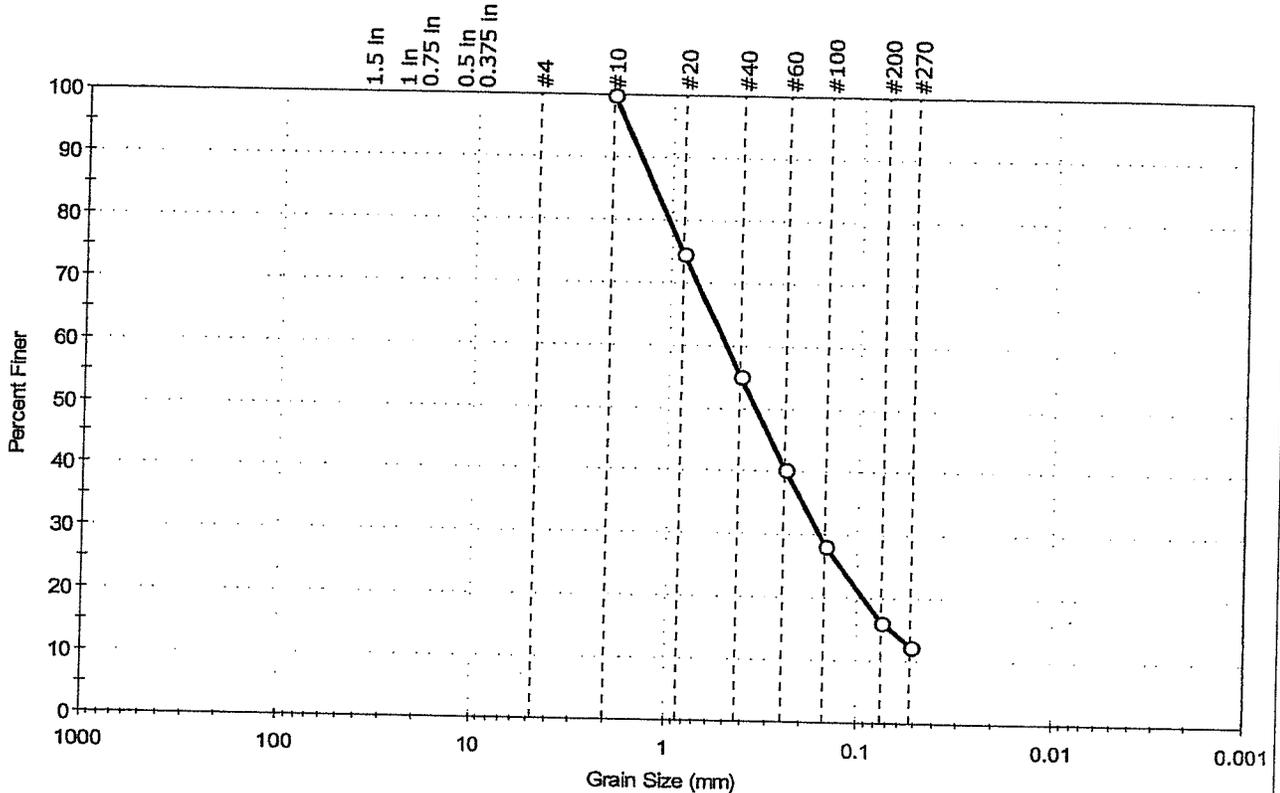


GeoTesting express

a subsidiary of Geocomp Corporation

Client: Stamski & McNary, Inc.	Project No: GTX-8691
Project: 5 Granite Rd	Tested By: ap
Location: Acton, MA	Checked By: jdt
Boring ID: ---	Sample Type: bag
Sample ID: Sample 1 (wet)	Test Date: 11/21/08
Depth: ---	Test Id: 142707
Test Comment: Less than 10% fines, Hydrometer not performed.	
Sample Description: Moist, light olive brown gravel with sand	
Sample Comment: Only minus No. 10 sieve portion for USDA Classification.	

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	83.8	16.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#10	2.00	100		
#20	0.85	75		
#40	0.42	55		
#60	0.25	40		
#100	0.15	28		
#200	0.075	16		
#270	0.053	12		

Coefficients

D ₈₅ = 1.2029 mm	D ₃₀ = 0.1614 mm
D ₆₀ = 0.5032 mm	D ₁₅ = 0.0669 mm
D ₅₀ = 0.3521 mm	D ₁₀ = 0.0487 mm
C _u = N/A	C _c = N/A

Classification

ASTM N/A

AASHTO Silty Gravel and Sand (A-2-4 (0))

Sample/Test Description

Sand/Gravel Particle Shape : ROUNDED

Sand/Gravel Hardness : HARD

Dispersion Device :

Dispersion Period : 1 minute

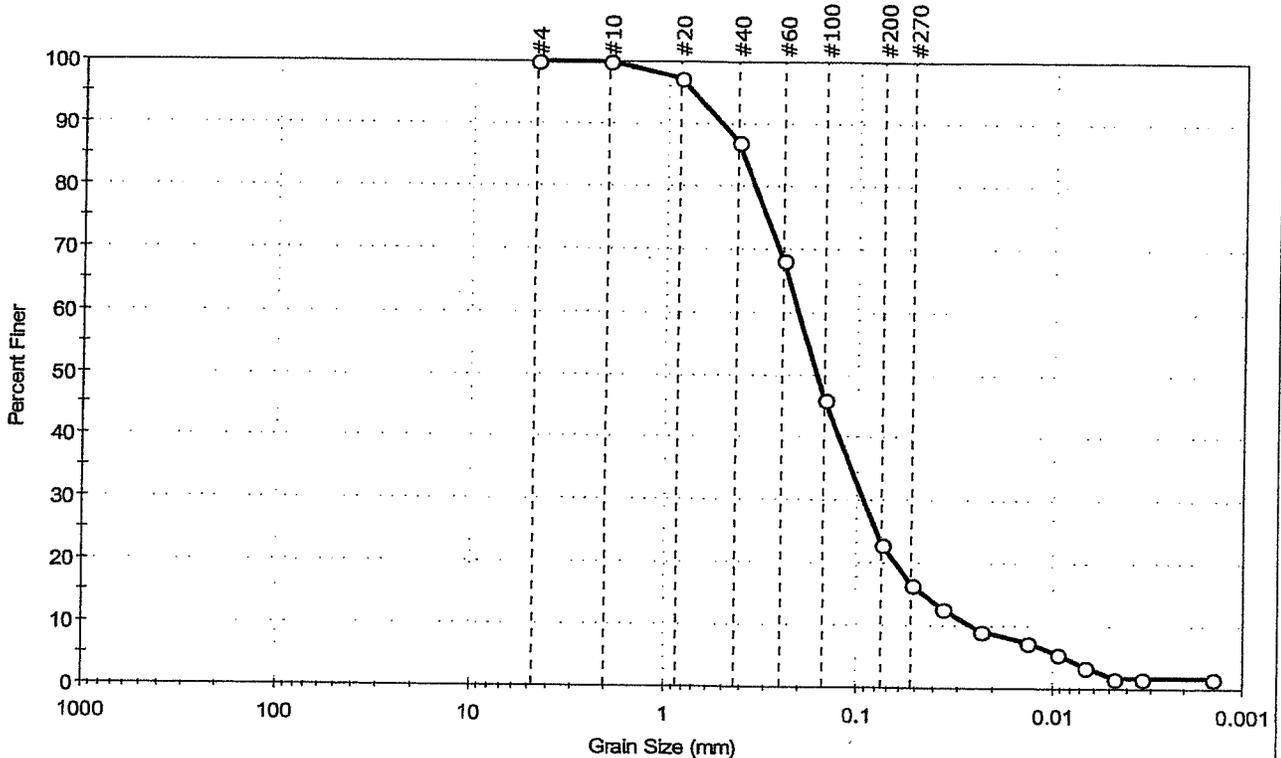
Specific Gravity : 2.65



a subsidiary of Geocomp Corporation

Client: Stanski & McNary, Inc.	Project No: GTX-8691
Project: 5 Granite Rd	Tested By: ap
Location: Acton, MA	Checked By: jdt
Boring ID: ---	Sample Type: bag
Sample ID: Sample 2	Test Date: 11/21/08
Depth: --- \rightarrow B Horizon	Test Id: 142708
Test Comment: ---	
Sample Description: Moist, light yellowish brown silty sand	
Sample Comment: ---	

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	—	76.9	23.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	97		
#40	0.42	87		
#60	0.25	68		
#100	0.15	46		
#200	0.075	23		
#270	0.053	16		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0366	13		
---	0.0232	9		
---	0.0134	7		
---	0.0094	5		
---	0.0067	4		
---	0.0047	2		
---	0.0033	2		
---	0.0014	2		

Coefficients	
D ₈₅ = 0.4026 mm	D ₃₀ = 0.0925 mm
D ₆₀ = 0.2076 mm	D ₁₅ = 0.0459 mm
D ₅₀ = 0.1646 mm	D ₁₀ = 0.0258 mm
C _u = N/A	C _c = N/A

Classification	
ASTM	N/A
AASHTO	Silty Gravel and Sand (A-2-4 (0))

Sample/Test Description	
Sand/Gravel Particle Shape	: ---
Sand/Gravel Hardness	: ---

Client:	Stamski & McNary, Inc.		Project No:	GTX-8691
Project:	5 Granite Rd		Tested By:	ap
Location:	Acton, MA		Checked By:	jdt
Boring ID:	---	Sample Type:	bag	
Sample ID:	Sample 2	Test Date:	12/01/08	
Depth:	---	Test Id:	142710	
Test Comment:	---			
Sample Description:	Moist, light yellowish brown silty sand			
Sample Comment:	---			

USDA Textural Classification

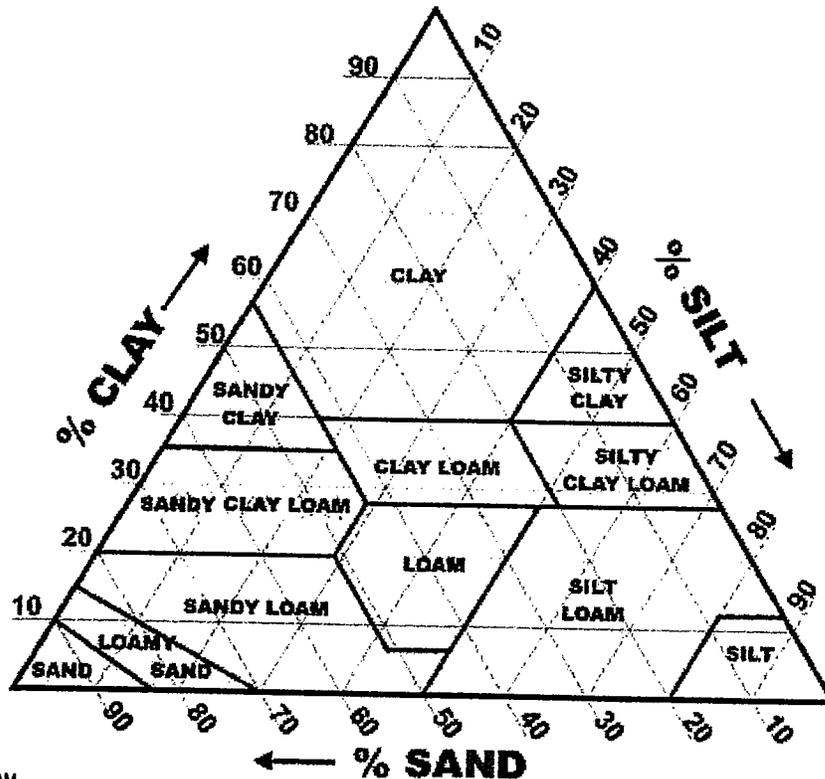
Boring ID	Sample ID	Depth	Sand, %	Silt, %	Clay, %	Classification
---	Sample 2	---	84	14	2	Loamy Sand

Classifications based only on material passing the #10 sieve

Sand: material passing 2.0 mm and retained on 0.05 mm diameter

Silt: material passing 0.05 mm and retained on 0.002 mm diameter

Clay: material passing 0.002 mm diameter

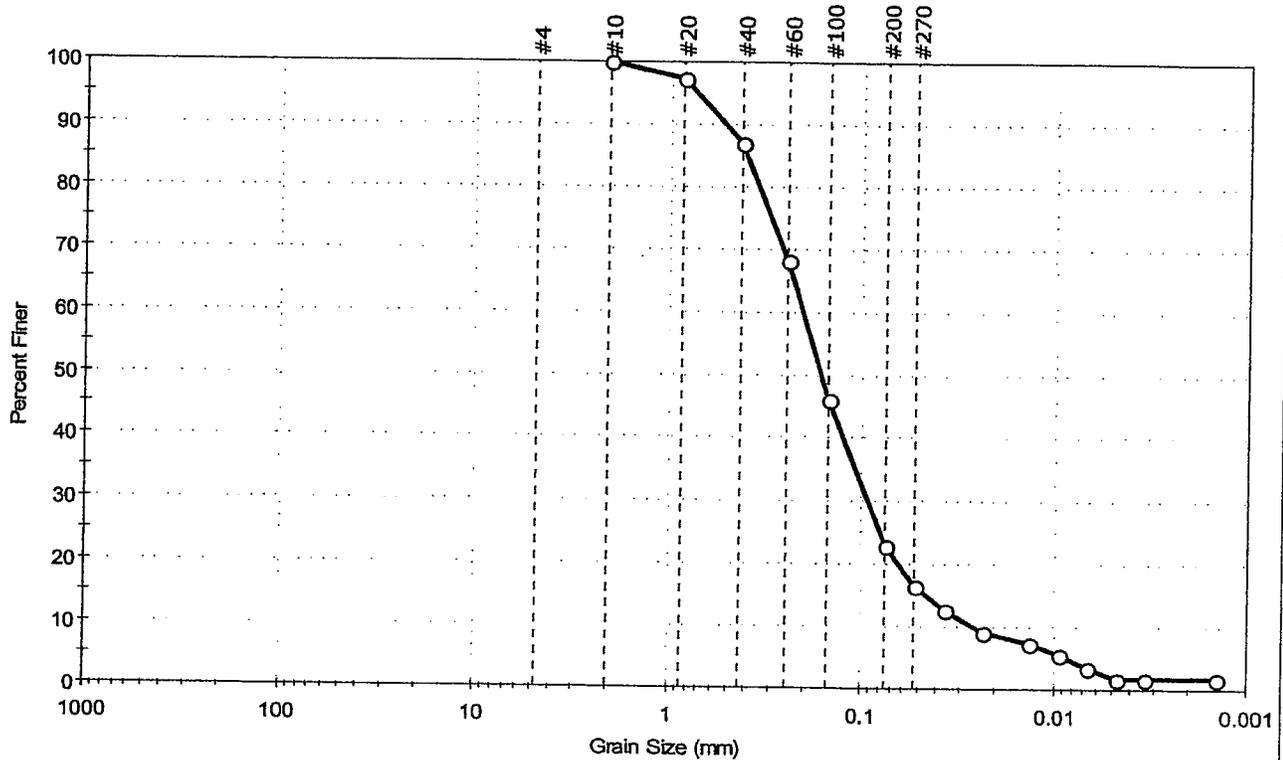


GeoTesting express

a subsidiary of Geocomp Corporation

Client: Stamski & McNary, Inc.	Project No: GTX-8691
Project: 5 Granite Rd	Tested By: ap
Location: Acton, MA	Checked By: jdt
Boring ID: ---	Sample Type: bag
Sample ID: Sample 2	Test Date: 11/21/08
Depth: ---	Test Id: 142708
Test Comment: Only minus No. 10 sieve portion for USDA Classification.	
Sample Description: Moist, light yellowish brown silty sand	
Sample Comment: ---	

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	—	76.9	23.1

Sieve Name	Sieve Size (mm)	Percent Finer	Spec. Percent	Complies
#10	2.00	100		
#20	0.85	97		
#40	0.42	87		
#60	0.25	68		
#100	0.15	46		
#200	0.075	23		
#270	0.053	16		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0366	13		
---	0.0232	9		
---	0.0134	7		
---	0.0094	5		
---	0.0067	4		
---	0.0047	2		
---	0.0033	2		
---	0.0014	2		

Coefficients	
D ₈₅ = 0.4017 mm	D ₃₀ = 0.0924 mm
D ₆₀ = 0.2073 mm	D ₁₅ = 0.0459 mm
D ₅₀ = 0.1644 mm	D ₁₀ = 0.0258 mm
C _u = N/A	C _c = N/A

Classification	
ASTM	N/A
AASHTO	Silty Gravel and Sand (A-2-4 (0))

Sample/Test Description
Sand/Gravel Particle Shape : ---
Sand/Gravel Hardness : ---



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

ARGEO PAUL CELLUCCI
Governor

JANE SWIFT
Lieutenant Governor

BOB DURAND
Secretary

LAUREN A. LISS
Commissioner

**TITLE 5 ALTERNATIVE TO PERCOLATION TESTING POLICY FOR SYSTEM
UPGRADES**

Effective Date: September 8, 2000 Policy #: BRP/DWM/PeP-P00-4

Program Applicability: BRP/DWM/Watershed Permitting/Title 5 Program

Supersedes Policy #: BRP/DWM/PeP-P00-1, dated January 7, 2000

Regulation Reference: 310 CMR 15.104

Approved by: Arleen O'Donnell (signed)

Purpose: This document contains the Title 5 Program's policy for reviewing applications for variances from the percolation testing requirements of Title 5 for the upgrade of on-site sewage treatment and disposal systems.

Applicability: This policy applies to applications for variances from the Title 5 requirements to conduct percolation testing for proposed system upgrades only. The alternative to percolation testing set forth in this policy may be used, under a variance from Title 5, when percolation testing is not possible due to high groundwater and the applicant seeks to proceed with a system upgrade, rather than wait for groundwater to recede to perform percolation tests.

The alternative outlined in this policy may be used only for the repair or upgrade of an existing system when no increase in design flow is proposed. Under the Title 5 variance provisions, 310 CMR 15.410 through 310 CMR 15.412, approval for a variance from the requirement for percolation tests must be obtained first from the Board of Health, when the Board of Health is the local approving authority, and then from the Department.

Title 5, 310 CMR 15.104, requires percolation testing as part of the site evaluation for a new system or a system upgrade. An applicant for a system to serve a new facility or for an increase in design flow (i.e. "new construction" as defined in Title 5), in many cases, can wait and schedule percolation testing during periods of low groundwater, or conduct dewatered

This information is available in alternate format by calling our ADA Coordinator at (617) 574-6872.

DEP on the World Wide Web: <http://www.magnet.state.ma.us/dep>

Printed on Recycled Paper

1) Demonstration that percolation testing cannot be performed

Percolation testing must be attempted in the presence of the local approving authority, or its authorized representative, and determined not to be possible due to high groundwater.

2) Determination of compacted vs. uncompacted soils

Without the benefit of percolation testing, more reliance is placed on the determination of soil compaction. Since compacted soils can be extremely firm in place, but friable when removed for a sample, the Soil Evaluator must make an in-situ determination of the soil structure and consistence. The Soil Evaluator, **with the written concurrence of the local approving authority**, must determine whether the soils in the area of the proposed SAS are compacted or uncompacted. The Soil Evaluator must use the techniques described in Appendix 1.

For uncompacted soils, the Soil Evaluator can use the results of the particle size analysis to determine the soil type and class, and, subsequently, the effluent loading rate. In compacted soils, such as dense, compact till, the compacted nature of the material results in a significant decrease in the amount of pore space necessary for groundwater flow and particle size analysis results alone are inadequate for determining an effluent loading rate.

3) Particle Size Analysis

In the presence of the local approving authority or its authorized representative, the Soil Evaluator must obtain a soil sample from the most restrictive layer of the four feet of naturally occurring pervious material for the particle size analysis. Although for purposes of obtaining an effluent loading rate, the particle size analysis is considerably more useful in the case of uncompacted soils, the analysis still is useful to characterize compacted soils, particularly where the soils have a high percentage of clay.

The particle size analysis, performed by a qualified soils laboratory, must be used to determine the percentages of sand, silt and clay in the soil sample. The analysis must be performed for both compacted and uncompacted soils. The particle size analysis must be performed in accordance with Appendix 2.

4) Determination of soil type

Once the relative percentages of sand, silt and clay have been determined through particle size analysis, the Soil Evaluator must use the USDA Soil Textural Triangle in 310 CMR 15.243(2) to determine the soil type.

5) Determination of soil class

Based on the soil type, the Soil Evaluator must classify the soil into one of the four soil textural classes described in 310 CMR 15.243 (1).

6) Design Criteria – uncompacted vs. compacted soils

Under a variance from the requirement for percolation testing issued under this policy, the local approving authority and the Department may approve an I/A system with one reduction criterion (# 3, #4 or #5, as described above), but **not** more than one. For such systems, no variance for the one reduction would be required beyond the variance from the requirement for percolation testing. A system upgrade requiring more than one reduction would require local approving authority and then DEP approval under BRPWP64c - approval of an alternative system for remedial use. Such applications to DEP should be submitted to the appropriate DEP regional office.

A system designed for compacted soils or Class III or Class IV soils, without the benefit of percolation testing, is a high risk option; it does not guarantee that sewage breakout or backup will not occur. Accordingly, any variance approval letter issued under this policy for such a system must provide that should the system fail, the system owner shall immediately notify the Board of Health and the Department, in writing, and then proceed with an appropriate upgrade. Additionally, variance approval letters for systems designed under this policy with an I/A treatment technology and a reduction in the required separation to high groundwater, the depth of naturally occurring pervious material or the SAS size, should contain a condition requiring the system owner to: a) by 45 days of a system failure, submit to the Department a complete application, including the local approving authority approval, for tight tank approval; b) by 14 days of issuance of the Department's tight tank approval, apply for a Disposal System Construction Permit from the local approving authority; and c) by 14 days of issuance of the permit, complete conversion of the system to or installation of the tight tank. Following any system failure, the Department and the local approving authority may require such interim measures as they deem appropriate.

Effluent Loading Rates for systems designed with a variance approved under this policy

Soil Type	Uncompacted Class I and Class II Soils ¹	All compacted soils and all Class III and all Class IV Soils ²
Class I	> 85% sand 0.74 gpd/sf 70 – 85% sand 0.66 gpd/sf	0.15 gpd/sf
Class II	0.33 gpd/sf	

- 1 The system must be designed based on the applicable effluent loading rate in this table and the requirements of Title 5.
- 2 The system must be designed based on a 0.15 gpd/sf loading rate, the design criteria on page 4 of this policy, and the requirements of Title 5.

Variance application process

Acton Board of Health

December 15, 2008

Members Present: William Taylor, Chairman, Joanne Bissetta, Vice Chairman, William McInnis, Member, Phil Alvarez, voting for Pam Harting-Barrat and Joseph Iannelli, Associate.

Staff Present: Doug Halley, Health Director and Sheryl Ball

Others Present: Merrily Evdokimoff, Nursing Administrator and Brent Reagor

The meeting was called to order at 7:32 p.m.

Minutes

On a motion made by Mrs. Bissetta seconded by Dr. Taylor, the Board unanimously voted to approve the Board of Health minutes dated November 17, 2008 as written.

Discussion – Acton Public Health Nursing Service (APNHS) - Merrily Evdokimoff

Merrily Evdokimoff, APNHS Administrator was before the Board to discuss the future of the Nursing Service. Merrily stated that the APNHS entered this fiscal year with a budget surplus, partially due to the old revenue that has actively been collected this year, however, new revenues have declined. Merrily also stated that she expects to completely utilize the FY 09 budget unlike previous years when surplus was present. Merrily stated that exact projections will not be available until the beginning of March. The Board asked why revenues are declining. Merrily stated that she feels it is a shift of the type of payers. The APNHS typically has 92% of their clients receiving Medicare reimbursement, however this year the amount is down to 70%. Merrily also stated that the APNHS has seen an increase in HMO payees which do not reimburse as well. Merrily stated that she is looking at trying to decrease expenses and increase revenues and will be presenting a smaller budget in FY10 as the town is considering funding the public health portion of their budget. The APNHS payroll currently equates to 75% of the budget and reducing some of the funding will be beneficial. The Board asked if these decreases were a result of the current economic downturn. Mr. Halley stated that in the 80's a lot of agencies

closed during a Medicare shift which we are currently facing right now and we survived due to our existing enterprise funds. Additionally our enterprise funds will keep the APHNS a float for the next few years but once those funds are depleted it may be the end of the Nursing Service. Mr. Halley feels that these enterprise funds can help us in the next few years during this economic downturn with the hopes that the future economic stability will have occurred by the time those funds would be depleted. Merrily feels that a transition plan will help see us through these times and is working on strategizing how to keep a float. Merrily stated that she is working on collaborative agreements with other towns in the contiguous area, meeting with discharge nurses at the local hospitals and is meeting with other agencies to see what we can do to help each other. One service Merrily would like to add is maternal care, however, staff training is required before this can happen. Merrily also would like to purchase private flu vaccines so we can begin giving shots early and tapping into that market. Merrily stated that she will come back to the Board sometime after January 15, 2009 to give the Board another update.

Variance – 26 Duggan Road

The Health Department is in receipt of a request from the owners of the property for a variance from Article 16-6.2.7 for a reduction in the distance to wetlands, Article 11-9.1 for a reduction in the minimum size leaching area and Approval for General Use 310 CMR 15.287(7) for the use of alternative system for the property located at 26 Duggan Road. The Health Department has reviewed the plans and finds that the site is restricted by wetlands and additional environmental compensation has been provided by the installation of an effluent tee filter and a two compartment septic tank. Mr. Reagor, representing the owner, was present to discuss the repair of the malfunctioning system. Mr. Reagor stated that they system is the original system and found it to be installed at a depth of 4 feet. Mr. Reagor stated that soil testing found interlocking boulders and in order to carry the contours the proposed system would need to be mounded toward the wetlands. Mr. Reagor stated that due to site restrictions the proposed system has been designed to meet maximum feasible compliance. On a motion made by Mr. McInnis, seconded by Philip Alvarez, the Board unanimously voted to grant a variance from Article 16-6.2.7, Article 11-9.1 and Approval for General Use 310 CMR 15.287(7) to the property located at 26 Duggan Road with the following conditions:

1. The system, shall at all times, be maintained in compliance with the most recent Modified Certification for General Use issued by the MADEP for the Cultec C4 Chamber Panels.
2. The septic tank shall be pumped once every two years.
3. The effluent tee filter shall be cleaned in accordance with the most recent MADEP approval.
4. The system shall be constructed in accordance with the above listed conditions and in accordance with the plan stamped by Brent Reagor, RS dated 12/2/2008.

Emergency Beaver Trapping Permit – Town of Concord/Nagog Water Supply

The Health Department is in receipt of a request from the Town of Concord seeking an Emergency Beaver Trapping Permit for their property located at Nagog Pond in Acton. The activity from the beavers has caused a threat to the surface water supply. DEP has conducted an inspection and has determined that there is a threat to the public water supply. The Health Department recommends approval of this request with one ten day permit beginning on December 16, 2008 and if needed an extension for an additional ten day period. If more time is need a 30 day extension can be applied for from the State. On a motion made by Mr. McInnis, seconded by Philip Alvarez, the Board unanimously voted to grant a ten (10) day Emergency Beaver Trapping Permit to the Town of Concord for a period of ten (10) days with an additional ten (10) days if needed.

Variance – 93 Great Road – Sieve Analysis

The engineers, Stamski and McNary, for the property located at 93 Great Road in Acton are seeking the Boards approval of a sieve analysis for the property located at 93 Great Road. The Health Department stated that a percolation test could not be conducted due to the saturated soils. The results of the sieve analysis showed the following:

1. Test Pit 2 – C2 Horizon, Class III, 0.15(60 mpi)
2. Test Pit 4 – C2 Horizon, Class III, 0.33(30mpi)

Mr. Halley recommended that Test Pit #4 be utilized for design purposes. On a motion made by Ms. Bissetta, seconded by Mr. McInnis, the Board voted to grant approval of the use of sieve analysis for the property located at 93 Great Road.

Board Reorganization

On a motion made by Mr. McInnis, seconded by Philip Alvarez, the Board unanimously voted to move Joanne Bissetta from Vice Chairman to Chairman for a one year term.

The Board stated that since two members are absent they will appoint the Vice Chairman at the next meeting when everyone is present. It was also suggested that we ask the two missing members if they have an interest in this position.

Title 5 Waiver – 208 Parker Street

The owners of the property located at 208 Parker Street have requested an extension of the Title 5 Waiver that was previously approved by the Board in July, 2008. The extension is needed due to the challenging market conditions and the owners have been unable to sell the property. The owners feel that this home will be razed and will need to be connected to the sewer once the new home is built. Mr. McInnis stated that he is comfortable granting an extension if the home remains vacant and if not, he would like to see the Health Department conduct an assessment of the onsite SAS in order to confirm that the existing system is not causing any environmental problems. On a motion made by Mr. Alvarez, seconded by Mr. McInnis, the Board unanimously voted to grant an extension to the Title 5 Waiver for the property located at 208 Parker Street with the following conditions:

1. The property located at 208 Parker Street shall connect to the Middle Fort Pond Brook Sanitary Sewer System within 120 days from the date of the extension waiver letter.
2. The onsite sewage disposal system will be serviced as necessary and an enforcement letter from the Acton Board of Health or the Massachusetts Environmental Protection Agency may shorten this waiver period should the system endanger the public or the environment.
3. The waiver, along with these conditions, shall be communicated in writing to the purchaser and any subsequent owners until the property at 208 Parker Street is connected to the Town of Acton Middle Fort Pond Sanitary Sewer System.
4. If the property remains vacant then no further action is required, however, if the property becomes occupied then an assessment of the soil absorption system needs to be

conducted by the health department to confirm that conditions of the septic pose no health risks.

Other

- Mr. Halley stated that the Town is getting payments from QRCC.
- Mr. Halley stated that Nancy Tavernier is seeking a Board member to attend a meeting on February 11, 2008 designed to give the citizens of Acton more awareness as to what Boards and Committees do. Bill Taylor will represent the Board.
- Mr. Halley explained that the Health Department is in the early stages of a program to encourage local restaurants to participate in providing healthy menu choices in exchange for a 10% reduction in their food service permit fees. This will equate to a \$1700 reduction if all restaurants participate. In addition to the Board's approval, the Board of Selectmen will also need to approve this request. On a motion made by Mr. McInnis, seconded by Joanne Bissetta, the Board unanimously voted to recommend the adoption of this program to the Board of Selectmen for their approval.

Adjournment

On a motion made by Ms. Bissetta, seconded by Mr. McInnis, the Board unanimously voted to adjourn at 8:38 PM.

Respectfully Submitted,

Sheryl Ball, Health Secretary
Acton Board of Health

William Taylor, Chairman
Acton Board of Health

Central Mass. Mosquito Control Project
 111 Otis St.
 Northborough, MA 01532
 (508) 393-3055

STANDARD WORK REPORT

DATE OF REPORT: 12/10/08

CITY/TOWN: ACTON

TRUCK REG # STATE 1477 JOB # _____

EMPLOYEE NAME(S): RICH GREIFE

JOB CODES

AC = Administrative Contact
 BC = Brush Cutting
 DD = Ditch Digging

PR = Public Relations
 SC = Stream Cleaning
 SS = Stream Survey

LC = Landing Count
 CC = Culvert Cleaning

JOB CODE	AMOUNT	LOCATION
AC		Town Hall - for covered workshop to B.O.H.
CC		Arlington St. - left of pole #78
CC		Hayward St. - rd. at pole #44
CC, SC	50'	- left of pole #23/29
CC, SC	50'	Charter Rd. - rd. at pole #21
CC, SC	300'	- rd. of pole #34
CC		- rd. of pole #39
CC		Arlington St. - left of pole #49
CC, SC	100'	Perkins Ln. - left of pole #2
CC, SC	100'	Arlington St. - along drive to house #117
CC		- rd. of pole #59
CC		- rd. of pole #66
CC, SC	125'	- along drive to house #39
CC, SC	50'	- left of drive to house #27
CC		- along drive to house #27
CC, SC	5'	- left of pole #2

Central Mass. Mosquito Control Project

111 Otis St.
Northborough, MA 01532
(508) 393-3055

STANDARD WORK REPORT

DATE OF REPORT: 12/15/08

CITY/TOWN: ACTON

TRUCK REG # STATE 1415 JOB # _____

EMPLOYEE NAME(S): RICH GREITE

SEAN HEALY

JOB CODES

AC = Administrative Contact
BC = Brush Cutting
DD = Ditch Digging

PR = Public Relations
SC = Stream Cleaning
SS = Stream Survey

LC = Landing Count
CC = Culvert Cleaning

JOB CODE	AMOUNT	LOCATION
cc		Newtown Rd. - left of pole # 38/50
cc, sc	4.5'	Fort Pond Rd. - rt. of pole # 11
cc		- along driveway to house # 53
cc, sc	20'	- rt. of pole # 74
cc, sc	15'	Nugget Hill Rd. - rt. of pole # 26/96
cc		Fort Pond Rd. - along driveway to house # 39
cc		- along driveway to house # 35
cc, sc	20'	Newtown Rd. - rt. of pole # 61
cc, sc	10'	- left of pole # 63
cc		- left of pole # 38/74
cc		- opp. house # 231
cc, sc	10'	Bellette Rd. - left of pole # 1
cc		- rt. of pole # 6
cc, sc	35'	Newtown Rd. - along driveway to house # 200 - # 226
cc, sc	10'	Chatin Way - adjacent corner Newtown Rd.
cc		Tarkson Dr. - rt. of pole # 5
cc		Musket Dr. - rt. of pole # 13
cc		Hayward Rd. - left of pole # 19
cc		- along access road to high school
cc, sc	30'	- rt. of pole # 25
cc, sc	5'	Ela St. - left of pole # 17
cc, sc	10'	Mohawk Dr. - left of house # 12
cc, sc	20'	- left of house # 14
cc, sc	15'	- rt. of pole # 18
cc		Algonquin Rd. - left of house # 12
cc		Seneca Rd. - left of house # 9
cc		Frederick Avenue Rd. - corner 61 to Barn Way
cc, sc	15'	Agawam Rd. - left of pole # 2

**CONFERENCE ROOM RESERVATION
MEETINGS FOR 2009**

BOARD OR COMMITTEE Board of Health

CONTACT PERSON Sheryl Ball PHONE 978-264-9634

ROOM REQUESTED Memorial Library TIME 7:30 PM

APPROXIMATE NUMBER OF PEOPLE ATTENDING 10-20

APPROXIMATE DURATION OF MEETING 2-3 HOURS

	<u>DATE</u>	<u>DAY OF WEEK</u>
JANUARY	12 & 26	Monday
FEBRUARY	9 & 23	Monday
MARCH	9 & 23	Monday
APRIL	13 & 27	Monday
MAY	11	Monday
JUNE	8 & 22	Monday
JULY	13 & 27	Monday
AUGUST	10 & 24	Monday
SEPTEMBER	14 & 28	Monday
OCTOBER	19	Monday
NOVEMBER	2 & 16	Monday
DECEMBER	14	Monday