

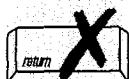


WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

David W. & Margaret Farrant

Name

E-Mail Address

37 Spring Water Pl

Mailing Address

Truro

City/Town

NS

State

B2N 5B1

Zip Code

978 263 5414

Phone Number

Fax Number (if applicable)

2. Representative (if any):

Acton Survey & Engineering, Inc.

Firm

Mark T. Donohoe

Contact Name

mdonohoe@acton survey & engineering.com

P.O. Box 666

Mailing Address

Acton

City/Town

MA

State

01720

Zip Code

978-263-3666

Phone Number

978-635-0218

Fax Number (if applicable)

B. Determinations

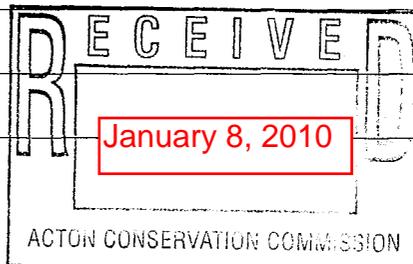
1. I request the Acton Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance or bylaw** of:

Acton

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).





WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

| | |
|---------------------------|---------------------------|
| <u>97 Newtown Road</u> | <u>Acton</u> |
| Street Address | City/Town |
| <u>Map E-3</u> | <u>Parcels 17, 20, 29</u> |
| Assessors Map/Plat Number | Parcel/Lot Number |

b. Area Description (use additional paper, if necessary):

The construction associated with the installation of a force main to service the septic system for Lot 3A on Newtown Road will be within the 75' to 100' buffer zone.

c. Plan and/or Map Reference(s):

| | |
|--|--------------------|
| <u>Proposed Subsurface Sewage Disposal System Plan</u> | <u>Jan 5, 2010</u> |
| Title | Date |
| <u> </u> | <u> </u> |
| Title | Date |
| <u> </u> | <u> </u> |
| Title | Date |

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

The construction associated with the installation of a force main to service the septic system for Lot 3A on Newtown Road will be within the 75' to 100' bubble zone.



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

David W. & Margaret Forrant

Name

37 Spring Water PL

Mailing Address

Truro

City/Town

NS

State

B2N 5B1

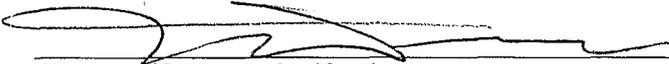
Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.


Signature of Applicant MARK Z. DOWNIE
AS AGENT

1-5-10
Date


Signature of Representative (if any)

1-5-10
Date

Andrea Ristine

From: Seth Donohoe [SDonohoe@actonsurvey.com]
Sent: Friday, January 08, 2010 9:59 AM
To: Andrea Ristine
Subject: 97 Newtown Road RDA

Dear Commission Members,

It is our understanding that the Commission will review the recently submitted Request for Determination of Applicability for 97 Newtown Road at 7:15 PM on February 3. We look forward to discussing the application with the Commission and waive the requirement that the Commission issue a response within 21 days of the receipt of the application. Please inform us if we can provide additional information prior to the scheduled meeting.

Very truly yours,

Seth Donohoe

For: Acton Survey & Engineering, Inc.
978-263-3666



ASSESSOR'S MAP E-3 PARCELS 17, 20 AND 29

97 NEWTOWN ROAD
 ACTON, MA 01720

PREPARED FOR: DOUGLAS BYERS

97 NEWTOWN ROAD
 ACTON, MA 01720

SCALE: 1" = 200'



**Acton Survey &
 Engineering, Inc.**

Since 1967

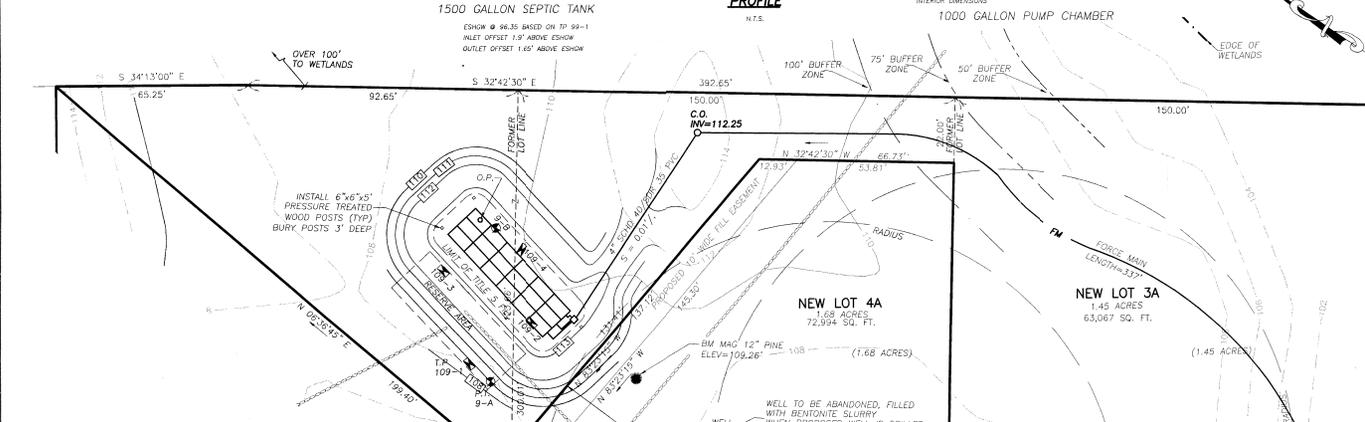
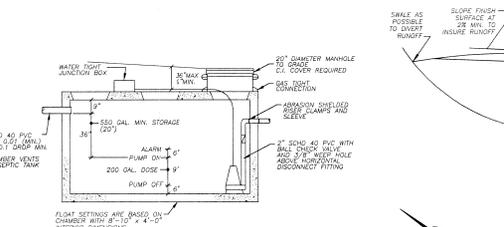
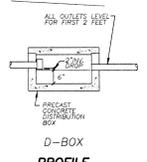
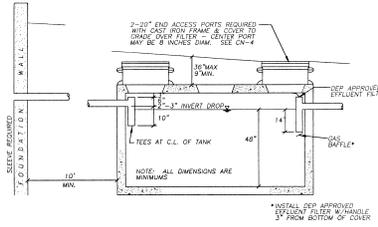
97 GREAT ROAD
 P.O. BOX 666
 ACTON, MA 01720
 PH. (978) 263-3666
 FAX (978) 635 0218

FILE#6733



GENERAL NOTES:

- PLAN WAS PREPARED FOR NAMED CLIENT TO SHOW THE DESIGN OF THE SUBSURFACE DISPOSAL SYSTEM AND TO OBTAIN THE BOARD OF HEALTH AND ANY MORE RESTRICTIVE REGULATIONS OF THE BOARD OF HEALTH AND THE DISTRICT HEALTH DEPARTMENT AND THE DISTRICT BOARD OF HEALTH.
- DESIGN IS BASED ON THE ASSUMPTION THAT THE PROPERTY IS UNDEVELOPED AND THE DISTRICT BOARD OF HEALTH HAS NOT YET REVIEWED THE PLAN.
- PROPERTY LINES ARE BASED ON THE PLAN REFERENCED AND SHALL BE CONSIDERED AS BEING MOST RECENT PRIOR TO CONSTRUCTION.
- PRIOR TO CONSTRUCTION, CONTRACTOR/OWNER SHALL REVIEW CURRENT ZONING ORDINANCES AND ALL OTHER REGULATIONS WHICH MAY AFFECT THIS PLAN.
- THE BOARD OF HEALTH AND STATE SANITATION COMMISSION MAY BE ALTERED WITH THE APPROVAL OF THE ENGINEER AND THE BOARD OF HEALTH.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO INSTALLATION OF CONSTRUCTION AND ALL DEFICIENCIES FOUND DURING CONSTRUCTION SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- ALL KNOWN EXISTING WATER WELLS WITHIN 200 FEET OF THE SEWAGE DISPOSAL SYSTEM SHALL BE STOPPED AT A MINIMUM OF 10 FEET FROM ANY SHAN OR PROPERTY LINE. 50 FEET FROM ANY SURFACE WATER OR WETLANDS. 100 FEET FROM DRINKING WATER WELLS OR AS OTHERWISE REQUIRED BY STATE AND LOCAL REGULATIONS.
- ANY ALTERATIONS WITHIN 100' OF WETLANDS REQUIRING A FILING WITH THE CONSERVATION COMMISSION.



CONSTRUCTION NOTES:

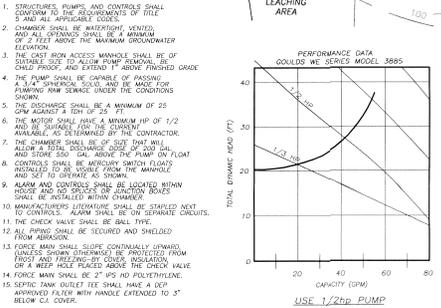
- ALL STRUCTURES SHALL CONFORM TO THE BOARD OF HEALTH AND ANY MORE RESTRICTIVE REGULATIONS OF THE BOARD OF HEALTH AND THE DISTRICT BOARD OF HEALTH.
- STRUCTURES, PIPE, STONE AND FILL SHALL BE INSTALLED ON SUITABLE BEARING MATERIALS, FREE OF ORGANIC MATTER.
- ALL STRUCTURES SHALL BE ON AN APPROVED DESIGN, SET LEVEL ON THE HIGHEST OF ORIGINAL SURFACE AND ALL WALLS/FOUNDATIONS EXCEPT TANK SHALL BE OF LENGTH REQUIRED BY TITLE 8, CHOSE SHOWN AND EXCEPT FOUR FOOT LIQUID SEPTIC TANKS, WETLANDS ARE REQUIRED ON ALL TANK ACCESS PORTS WHEN COVER EXCEEDS 3'.
- ALL GROUNDING SHALL BE 4" AND LEAD TRUE TO LINE AND GRADE WITH SECURE WATERTIGHT JOINTS AND BE BECEDED AND BACKFILLED AS REQUIRED BY MANUFACTURER.
- A. THE BUILDING SEWER SHALL BE SCHEDULE 40 PVC, CAST OR DUCTILE IRON OR AN APPROVED EQUAL.
- B. SOIL AND PERFORATED FIBER UNDER LAYMENT SHALL BE SCHEDULE 40 PVC, OF THE APPROVED EQUIVALENT.
- C. DISTRIBUTION LINES SHALL BE SCHEDULE 40 PVC, SDR 35 PVC, OR HDPE-ASTM D 3034.
- GRAVITY LINES SHALL HAVE THE FOLLOWING SLOPES:
 - BUILDING TO SEPTIC TANK: 0.02 FEET.
 - SEPTIC TANK TO DISTRIBUTION BOX: 0.01 FEET.
 - DISTRIBUTION BOX TO LINES: 0.005 FEET.
- DISTRIBUTION BOX OUTLETS SHALL BE LEVEL FOR THE FIRST TWO FEET AND AN INLET TIE CUT OFF ONE INCH ABOVE OUTLETS SHALL BE INSTALLED IF INLET PIPE EXCEEDS 100 FEET OF PIPE TO A FORCE MAIN.
- DOWN SLOPE SHALL BE EXTENDED BETWEEN 6 AND 9 INCHES OF FINAL GRADE WITH A PRECAST CONCRETE RISER FURNISHED BY D-BOX MANUFACTURER. PROPOSED 4" WIDE MOTOR RING 3 INCHES ABOVE AND BELOW JOINT.
- ALL LARGE BUILDERS, ROOTS AND OTHER UNSUITABLE MATERIALS DISCOVERED IN EXCAVATIONS SHALL BE REMOVED.
- ALL SURFACES SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF FILL OR STONE TO ENSURE WATERTIGHT CONTACTS.
- WHEN GRANTS FALL IS REQUIRED, ALL ORGANIC MATERIALS SHALL BE REMOVED AND ALL CONFORMS TO REQUIREMENTS OF ESDOM 75.05. BACKFILL SHALL BE PLACED IN A MANNER TO INSURE SUPPORT AND PERCOLATION.
- ALL STRUCTURES SHALL BE MARKED WITH MONUMENTARY MARKING, PER APPROVED EQUAL.
- SEPTIC TANK EXISTING TIE SHALL HAVE A DEEP EFFLUENT FILLER WITH MANHOLE EXTENDING TO WITHIN 3' OF C.I. FRAME AND COVER EXTENDED TO GRADE OVER OUTLET.
- SEPTIC SYSTEM COMPONENTS SHALL BE STAMPED BY PROFESSIONAL LAND SURVEYOR PRIOR TO CONSTRUCTION.
- A RESEER WILL BE PLACED OVER DISTRIBUTION BOX OR TANKS IF MORE THAN 9' BELOW FINISHED GRADE.

LEGEND:



P:\CARLSON\PROJECTS_67336221.BASE.DWG

RESIDENTIAL PUMP CHAMBERS



- STRUCTURES, PUMPS, AND CONTROLS SHALL CONFORM TO THE REQUIREMENTS OF TITLE 8 AND ALL APPLICABLE CODES.
- CHAMBER SHALL BE REINFORCED FIBER UNDER LAYMENT SHALL BE SCHEDULE 40 PVC, OF THE APPROVED EQUIVALENT.
- THE CHECK VALVE SHALL BE OF SIZE THAT WILL RESIST TOTAL DISCHARGE PRESSURE AND FLOW.
- CONTROLS SHALL BE MANUALLY SWITCH FLUENT TO OFF POSITION AND EXTEND 1' ABOVE FINISHED GRADE AND SET TO OPERATE AS SHOWN.
- ALARMS AND CONTROLS SHALL BE LOCATED WITHIN HOUSE AND 30 FEET FROM EXISTING WELLS SHALL BE INSTALLED WITHIN CHAMBER.
- MANUFACTURERS LITERATURE SHALL BE STAPLED NEXT TO CONTROLS. ALARMS SHALL BE ON SEPARATE CIRCUIT FROM ABSORBER.
- THE CHECK VALVE SHALL BE BALL TYPE.
- ALL PIPING SHALL BE SECURED AND SHIELDED FROM ABRASION.
- SEPTIC MAN SHALL-SLOPE CONTINUALLY UPWARD (UNLESS SHOWN OTHERWISE) BE PROTECTED FROM TOP AND FREE-FREZE COVER PROTECTION.
- ALARMS AND CONTROLS SHALL BE LOCATED WITHIN HOUSE AND 30 FEET FROM EXISTING WELLS SHALL BE INSTALLED WITHIN CHAMBER.
- FORCE MAIN SHALL BE 2" IPS HD POLYETHYLENE.
- SEPTIC TANK OUTLET TIE SHALL HAVE A DEEP APPROVED FILLER WITH MANHOLE EXTENDED TO 3' BELOW C.I. COVER.

SOIL TESTS

SOIL EVALUATOR: MARK T. DONOHUE
BOARD OF HEALTH AGENT: JUSTIN SHAW

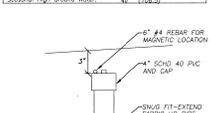
| PERCOLATION RATES (W/M, N) | DATE | DEPTH | DATE |
|----------------------------|----------|-------|----------|
| #1 6 M/M/N | 10/11/09 | 5' | 10/13/09 |
| #2 6 M/M/N | 10/11/09 | 5' | 10/13/09 |

| DEPTH | HORIZON | TEXTURE | COAR. | SOIL WETTING |
|--------|---------|---------|-------------------------------|-----------------------|
| 0-2' | Ap | SL | 10963/2 | more compact some air |
| 2-18" | Ba | LS | 10963/4 | more compact some air |
| 18-90" | C | LS | 2,576/2 2,576/3 2,576/4 | more compact some air |

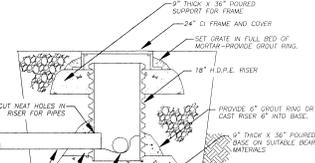
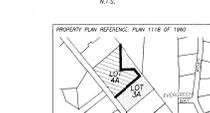
| DEPTH | HORIZON | TEXTURE | COAR. | SOIL WETTING |
|--------|---------|---------|-------------------------------|-----------------------|
| 0-3" | Ap | SL | 10963/2 | Stones, cobbles |
| 3-13" | Ba | LS | 10963/4 | more compact some air |
| 13-80" | C | LS | 2,576/2 2,576/3 2,576/4 | more compact some air |

| DEPTH | HORIZON | TEXTURE | COAR. | SOIL WETTING |
|--------|---------|---------|-------------------------------|-----------------------|
| 0-3" | Ap | SL | 10963/2 | Stones, cobbles |
| 3-12" | Ba | LS | 10963/4 | more compact some air |
| 12-80" | C | LS | 2,576/2 2,576/3 2,576/4 | more compact some air |

| DEPTH | HORIZON | TEXTURE | COAR. | SOIL WETTING |
|--------|---------|---------|-------------------------------|-----------------------|
| 0-4" | Ap | SL | 10963/2 | Stones, cobbles |
| 4-10" | Ba | LS | 10963/4 | more compact some air |
| 10-70" | C | LS | 2,576/2 2,576/3 2,576/4 | more compact some air |



ALTERNATE OBSERVATION PORT



SEWER CLEANOUT DETAIL

N.T.S.

DESIGN ELEVATIONS

| TOP OF FOUNDATIONS | ELEVATION |
|------------------------------|-----------|
| AT FOUNDATION | 109.00 |
| AT SEPTIC TANK INLET | 88.25 |
| AT SEPTIC TANK OUTLET | 88.00 |
| AT PUMP CHAMBER INLET/OUTLET | 87.50 |
| AT D-BOX INLET | 111.60 |
| AT D-BOX OUTLET | 111.42 |
| INVERT OF CHAMBERS/BREAKOUT | 111.25 |
| INVERT OF CHAMBERS | 111.71 |
| BOTTOM OF CHAMBERS | 111.00 |

DESIGN CRITERIA

- DESIGN IS BASED ON THE ASSUMPTION THAT THE PROPERTY IS UNDEVELOPED AND THE DISTRICT BOARD OF HEALTH HAS NOT YET REVIEWED THE PLAN.
- SYSTEM IS NOT DESIGNED FOR THE USE OF 100% RECYCLED WATER.
- FLOORS: 3 BEDROOMS @ 110 GPD = 550 GPD
- SEPTIC TANK: 2' FLOOR REQUIRED, 1500 GALLON SINGLE COMPONENT TANK
- MINIMUM SIZE
 - PERCOLATION RATE: 6 M/M/N
 - SOIL CLASS: 2
 - APPLICATION RATE: 0.60 GPD/SF
 - AREA REQUIRED: 100 GPD / 0.60 = 166 SF
 - AREA PROVIDED: 1116.0 SF
 - 1:1 CHAMBERS = 3' x 6' x 1' = 144 SF
 - EFFECTIVE AREA PER LF = 67 SF
 - EFFECTIVE AREA = 364 SF
 - CAPACITY PROVIDED: 0.60 x 364 x 50' = 579 GPD
 - MINIMUM GROUNDWATER OFFSET PROVIDED: 4' (COWD #4)
 - SITE IS NOT IN A WETLAND SENSITIVE AREA.

| NO. | DATE | REVISIONS |
|-----|----------|--------------------------|
| 1 | 3/15/10 | REVISED PROPERTY LINES |
| 2 | 12/22/09 | BOARD OF HEALTH COMMENTS |
| 1 | 12/14/09 | BOARD OF HEALTH COMMENTS |

PROPOSED SUBSURFACE SEWAGE DISPOSAL SYSTEM

95 NEWTOWN ROAD
ACTON, MASSACHUSETTS
PREPARED FOR: DOUGLAS BYERS
97 NEWTOWN ROAD
ACTON, MA 01720
SCALE: 1"=20'
DATE: NOVEMBER 24, 2009

Acton Survey & Engineering, Inc.
Since 1967
97 GREAT ROAD
P.O. BOX 666
ACTON, MA 01720
PH. (978) 263-3666
FX. (978) 635-0218

6733-5DS