

Stamski and McNary, Inc.

Engineering - Planning – Surveying

1000 Main Street; Acton, MA 01720 (978) 263-8585

www.stamskiandmcnary.com

Request for Determination of Applicability

Under the Massachusetts Wetland Protection Act,
G.L. c. 131, s. 40 &
Town of Acton Wetland Protection Bylaw Rules
and Regulations

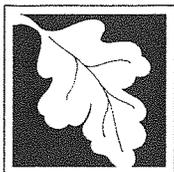
for

**8 Horseshoe Drive
(Map G4/Parcel49-15)
Acton, MA**

Prepared For: David Brown
8 Horseshoe Drive
Acton, MA 01720

Date: April 4, 2012

SM-4780



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

Acton
City/Town

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 Brown
Name

8 Horseshoe Drive
Mailing Address

Acton
City/Town

978-844-4192
Phone Number

E-Mail Address

MA
State

01720
Zip Code

Fax Number (if applicable)

2. Representative (if any):

Stamski and McNary, Inc.
Firm

Benjamin Ewing
Contact Name

1000 Main Street
Mailing Address

Acton
City/Town

978-263-8585
Phone Number

bre@stamskiandmcnary.com
E-Mail Address

MA
State

01720
Zip Code

978-263-9883
Fax Number (if applicable)

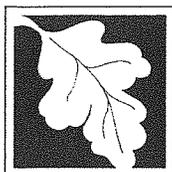
B. Determinations

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).



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C. Project Description

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

| | |
|---------------------------|-------------------|
| 8 Horseshoe Drive | Acton |
| Street Address | City/Town |
| G4 | 49-15 |
| Assessors Map/Plat Number | Parcel/Lot Number |

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

The area of proposed work is the side yard of an existing house. The closest Bordering Vegetated Wetland is located on the otherside of Horseshoe Drive.

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

| | |
|----------------------|----------|
| Sewage Disposal Plan | 2/2/2012 |
| Title | Date |
| | |
| Title | Date |
| | |
| Title | Date |

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

The work is associated with the replacement of a sewage disposal system for the existing dwelling. The breakout grading carries over into the edge of the 100 foot Buffer Zone of a Bordering Vegetated Wetland (BVW) located on the otherside of Horseshoe Drive. The soil absorption system will be located greater than 100 feet from the BVW.



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

C. Project Description (cont.)

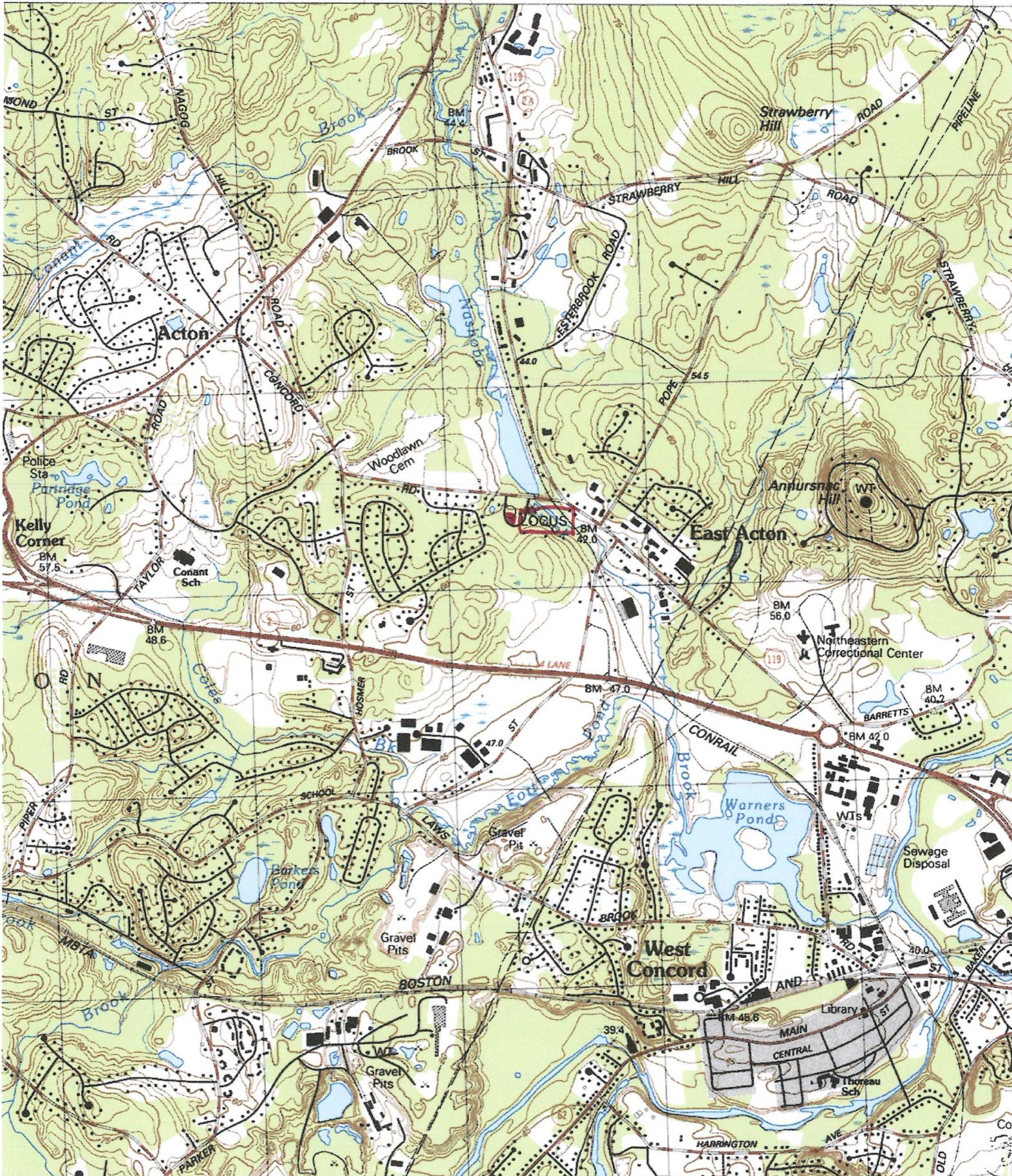
b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

10.03(3) Presumption Concerning 310 CMR 15.000: Subsurface Disposal of Sanitary Sewage. The proposed soil absorption system will be located greater than 50 feet horizontally from the boundary of the Bordering Vegetated Wetland.

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.)

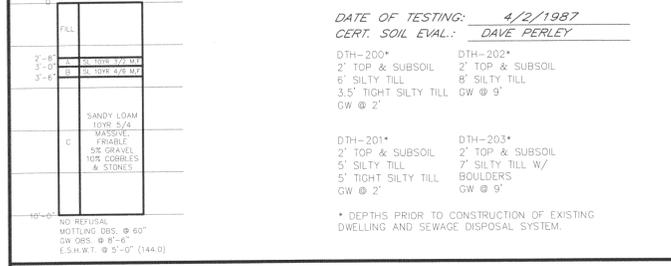
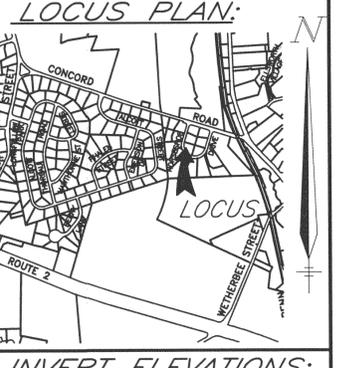
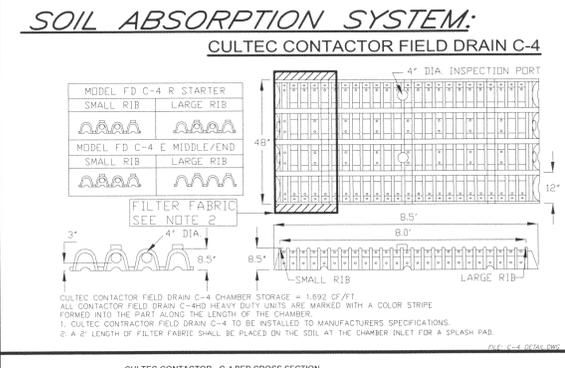
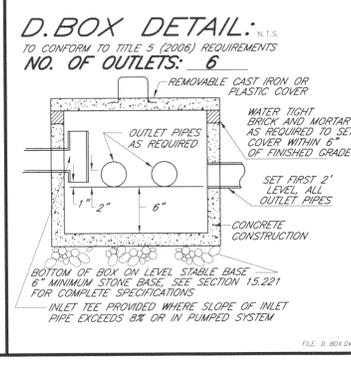
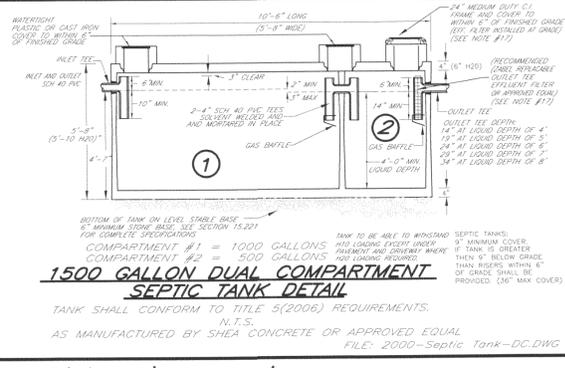
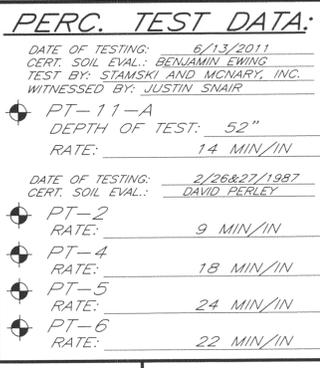
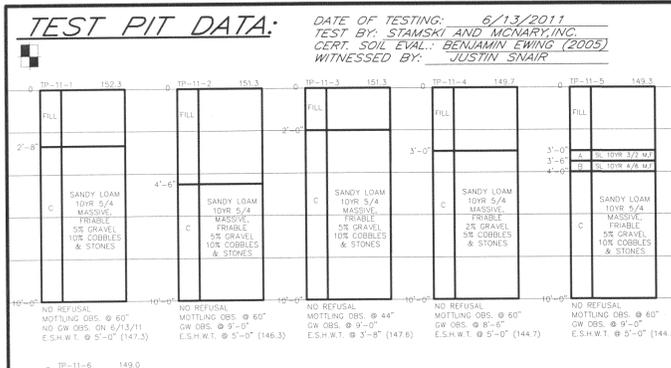


<Default> - 1 Markers, Length = 0 feet

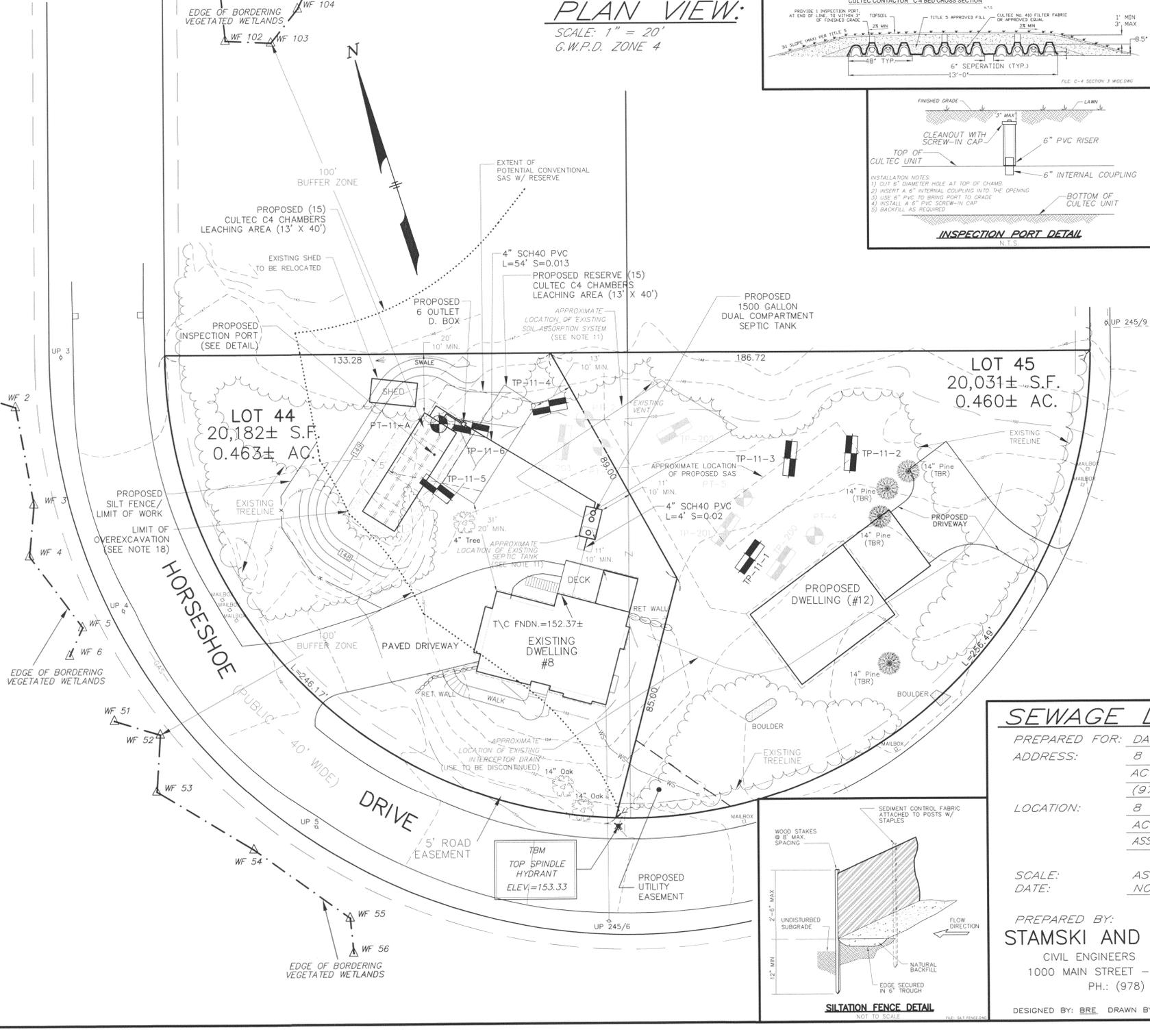
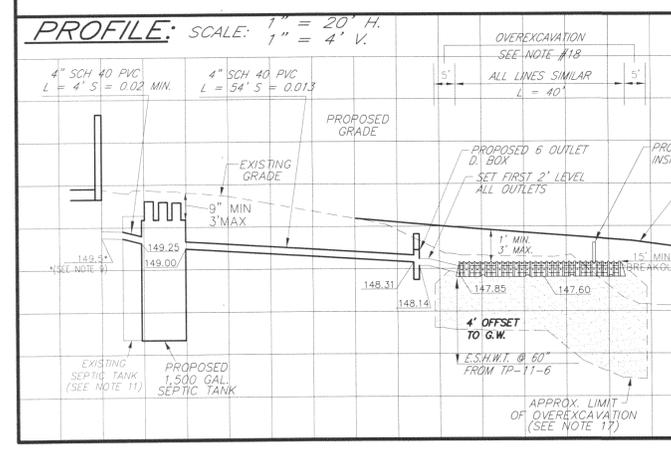
LOCUS - 042° 28' 37.9" N, 071° 25' 01.4" W

Name: MAYNARD
 Date: 4/19/112
 Scale: 1 inch equals 2000 feet

Location: 042° 28' 28.8" N 071° 25' 01.6" W
 Caption: 8 Horseshoe Drive
 Acton MA 01720
 SM-4780



- ### NOTES:
- THIS PLAN IS FOR THE DESIGN AND CONSTRUCTION OF A SEWAGE DISPOSAL FACILITY ONLY.
 - ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO TITLE 5 AND THE ACTON BOARD OF HEALTH REGULATIONS.
 - IF ALTERATIONS (REMOVAL OF VEGETATION, GRADING, EXCAVATIONS, ETC.) ARE TO BE MADE WITHIN 100 FEET OF WETLAND AREAS (POND, BROOKS, SWAMPS, ETC.) A REQUEST FOR DETERMINATION OF APPLICABILITY ACT (C131 S40A) SHOULD BE FILED WITH THE TOWN'S CONSERVATION COMMISSION. THE FILING OF A NOTICE OF INTENT MAY BE REQUIRED AND LOCAL BYLAWS MAY APPLY.
 - ACCEPTABLE MATERIAL SPECIFICATIONS FOR DISTRIBUTION LINES: PVC-SCHEDULE 40 (ASTM D 1785 & D 2665), SDR 35 (ASTM D 3034) ABS-SCHEDULE 40 (ASTM F 628) HDPE-SHALL MEET OR EXCEED ASTM F 810 FOR SMOOTH WALL POLYETHYLENE PIPE FOR USE IN DRAINAGE AND WASTE DISPOSAL FIELDS. SCHEDULE 40 PVC SHALL BE USED IN AREAS SUBJECT TO VEHICULAR TRAFFIC.
 - UNLESS OTHERWISE SHOWN, THERE ARE NO KNOWN WELLS WITHIN 150' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.
 - PER TITLE 5 REQUIREMENTS, THE DESIGN ENGINEER IS REQUIRED TO INSPECT THE CONSTRUCTION OF THE SEPTIC SYSTEM AND CERTIFY THAT THE SYSTEM IS CONSTRUCTED ACCORDING TO THE PLANS, LOCAL REGULATIONS, AND TITLE 5. IN MOST INSTANCES THE DESIGN ENGINEER IS ALSO REQUIRED TO PREPARE AN "AS-BUILT" PLAN. UNLESS OTHERWISE SPECIFICALLY STATED IN WRITING IN THE CONTRACT BETWEEN OWNER AND INSTALLER, THE INSTALLER SHALL BE RESPONSIBLE FOR COORDINATING INSPECTIONS WITH THE DESIGN ENGINEER AND PAY FOR THESE SERVICES. NOTIFYING THE DESIGN ENGINEER DOES NOT RELIEVE THE OWNER OR INSTALLER FROM THE RESPONSIBILITY OF HAVING THE REQUIRED INSPECTIONS ETC. BY THE BOARD OF HEALTH.
 - FINISHED GRADE OVER THE LEACHING AREA SHALL HAVE A MINIMUM SLOPE OF 2%.
 - THE FIRST TWO FOOT SECTIONS OF PIPE FROM THE D. BOX SHALL BE SET LEVEL.
 - INSTALLER SHALL FIELD VERIFY ELEVATIONS PRIOR TO THE INSTALLATION OF THE SOIL ABSORPTION SYSTEM, D. BOX OR SEPTIC TANK. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE PROCEEDING.
 - ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES. AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, OR PAVEMENT RESTORATION OR REPAIR. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED, INCLUDING THOSE IN CONTROL OF UTILITIES. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. D.I.G. SAFE TELE. NO.: 1-888-344-7233.
 - EXISTING LEACHING FIELD MAY BE ABANDONED IN PLACE, UNLESS IT IS ENCOUNTERED IN EXCAVATION AT WHICH POINT STONE AND SOIL SHALL BE EXCAVATED AND REPLACED WITH SAND IN ACCORDANCE WITH TITLE V (2006) SECTION 15.255 "CONSTRUCTION IN FILL". SOIL SPOILS MAY BE PLACED AS GENERAL FILL WITH ONE FOOT OF COVER. THE EXISTING SEPTIC TANK SHALL HAVE ITS CONTENTS PUMPED, ITS BOTTOM RUPTURED AND BACKFILLED WITH CLEAN SAND IN ACCORDANCE WITH TITLE V, SECTION 15.354 ABANDONMENT OF SYSTEMS.
 - ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED. (SEE 310 CMR 15.222)
 - THE CULTEC SYSTEM HAS BEEN CERTIFIED FOR GENERAL USE. THIS SYSTEM SHALL BE INSTALLED AND OPERATED IN COMPLIANCE WITH THE MODIFIED CERTIFICATION FOR GENERAL USE REVISED FEBRUARY 2, 2010.
 - ALL DISTURBED SURFACES SHALL BE RESTORED WITH 4" OF LOAM AND SEED.
 - THIS SEPTIC SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER.
 - SEWER MANHOLES BROUGHT TO FINISH GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.
 - IF ZABEL EFFLUENT TEE FILTER IS INSTALLED IT SHALL BE IN COMPLIANCE WITH APPROVAL ISSUED AUGUST 11, 1997. ALL SEWER MANHOLES AT FINISHED GRADE SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS. COVER SHALL BE PERMANENTLY MARKED "EFFLUENT TEE FILTER".
 - ALL TOP, SUBSOIL, FILL, BOULDERS, AND OTHER MATERIALS UNDER AND WITHIN 5' OF THE PROPOSED LEACHING AREA SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL ACCORDING TO TITLE V (2006) SECTION 15.255 "CONSTRUCTION IN FILL".



INVERT ELEVATIONS:

EXISTING INVERTS

| | |
|---|----------|
| 4" INV. @ BUILDING (EXISTING) | = 149.5' |
| 4" INV. @ SEPTIC TANK (EXISTING) | = 149.1' |
| * CONTRACTOR TO VERIFY INVERT SEE NOTE #9 | |
| 4" INV. @ SEPTIC TANK (IN) | = 149.25 |
| 4" INV. @ SEPTIC TANK (OUT) | = 149.00 |
| 4" INV. @ D.BOX (IN) | = 148.31 |
| 4" INV. @ D.BOX (OUT) | = 148.14 |

AT LEACHING FACILITY:

PRIMARY CULTEC CHAMBER (SET LEVEL)

| | |
|--------------------------|----------|
| TOP CHAMBER | = 148.31 |
| 4" INV. @ BEGIN CHAMBERS | = 147.85 |
| BOTTOM CHAMBERS | = 147.60 |

RESERVE CULTEC CHAMBER (SET LEVEL)

| | |
|--------------------------|----------|
| TOP CHAMBER | = 150.21 |
| 4" INV. @ BEGIN CHAMBERS | = 149.75 |
| BOTTOM CHAMBERS | = 149.50 |

DESIGN DATA:

DESIGN FLOW:

EXISTING
 4 BR. X 110 GPD/BR = 440 GPD
 NO GARBAGE GRINDER ALLOWED
 REQUIRED SEPTIC TANK: (TITLE 5)
 REQUIRED: = 880 GAL
 PROVIDED: = 1,000 & 500 GAL. = 1,500 GAL.

REQUIRED SIZE SOIL ABSORPTION SYSTEM:

PT-11-A = 14 MIN./INCH
 TITLE 5: CLASS II SOIL
 440 GPD/0.56 GPD/S.F. = 786 S.F.
 ACTON BOH REQ. = 800 S.F. MIN.

TYPE AND SIZE OF SOIL ABSORPTION SYSTEM PROVIDED:

TITLE 5:
 PRIMARY & RESERVE LEACHFIELD:
 CULTEC FIELD DRAIN CONTRACTOR C4
 EFFECTIVE LEACHING AREA PER L.F. =
 1.67' x 4 FT = 6.67 S.F./L.F.
 120 L.F. x 6.67 S.F./L.F. = 801 S.F.
 801 S.F. > 786 S.F. O.K.
 ACTON BOH REQ.:
 801 SF > 800 SF MIN. O.K.

SEWAGE DISPOSAL PLAN

PREPARED FOR: DAVID BROWN
 ADDRESS: 8 HORSESHOE DRIVE
 ACTON, MA 01720
 (978) 844-4192

LOCATION: 8 HORSESHOE DRIVE
 ACTON, MA 01720
 ASSESSORS MAP G4, PARCEL 49-15

SCALE: AS SHOWN
 DATE: NOVEMBER 29, 2011
 REVISED: FEBRUARY 2, 2012 (BOH COMMENTS)

PREPARED BY:
STAMSKI AND McNARY, INC.
 CIVIL ENGINEERS LAND SURVEYORS
 1000 MAIN STREET - ACTON, MA 01720
 PH.: (978) 263-8585

DESIGNED BY: BRE. DRAWN BY: BRE. JOB No. SM-4780 FILE: 4780_SDS1.DWG

