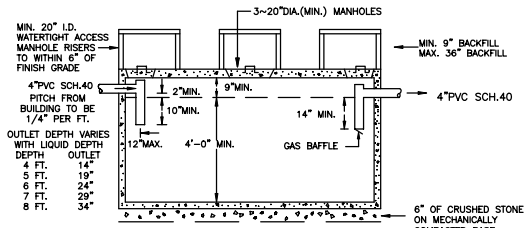
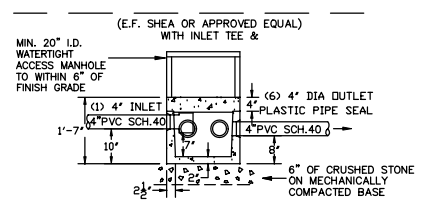
PROPOSED 1,500 GAL. SEPTIC TANK



NOTES:
INLET AND OUTLET TEES SHALL BE OF CAST IRON, SCHEDULE 40 PVC(OR APPROVED EQUIV) OR CAST-IN-PLACE CONCRETE, AND SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE THE FLOW LINE OF THE SEPTIC TANK AND BE ON THE CENTER LINE OF THE SEPTIC TANK LOCATED DIRECTLY UNDER THE CLEAN-OUT MANHOLE. THERE SHALL BE AN AIR SPACE OF AT LEAST 3 INCHES BETWEEN THE TOPS OF THE TEES AND THE INSIDE OF THE TANK COVER, AND THE TOPS OF THE TEES SHALL BE LEFT OPEN TO PROVIDE VENTILATION OR SEPARATE VENTILATION SHALL BE PROVIDED.

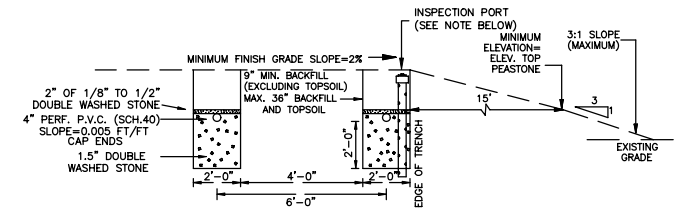
DISTRIBUTION BOX 6 OUTLET



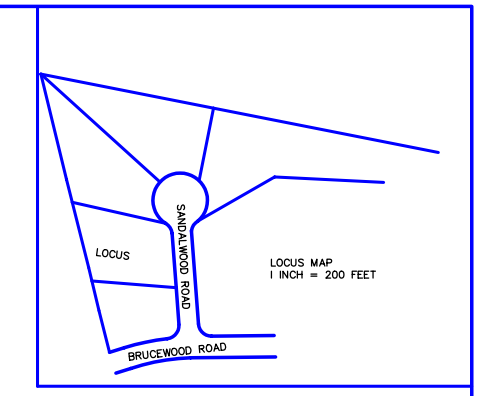
SECTION VIEW

DISTRIBUTION BOX NOTES:
1. BOX TO BE SET ON LEVEL BASE.
2. ALL OUTLETS TO BE LEVEL.
3. INLET TO BE 2" ABOVE OUTLET.
4. MINIMUM SLOPE OF OUTLET PIPES = 2%

LEACHING TRENCH DETAIL



NOTE: ALL SOIL ABSORPTION SYSTEMS SHALL HAVE A MINIMUM OF ONE (1) INSPECTION PORT CONSISTING OF A PERFORATED FOUR (4) INCH PIPE PLACED VERTICALLY DOWN INTO THE STONE TO THE NATURALLY OCCURING SOIL OR SAND FILL BELOW THE STONE. THE PIPE SHALL BE CAPPED WITH A SCREW TYPE CAP AND ACCESSIBLE TO WITHIN THREE (3) INCHES OF FINSIH GRADE. [310 15.240(3)]



SOIL TESTING

NOVEMBER 19, 2009
SOIL EVALUATOR: RUSS WILSON
BOH AGENT: JUSTIN SNAIR

DTH 1109-1 ELEV=199.1

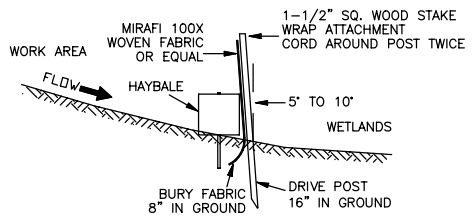
0-10"	A	SL
10-20"	B	LS
20-132"	C	CS/G (188.1)

NO SEEPAGE, NO STANDING WATER
NO MOTTLES

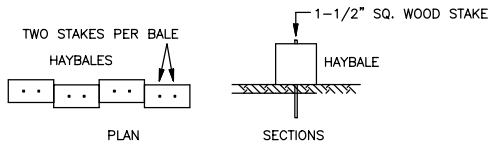
PERC A
2 MIN/INCH

PROPOSED ELEVATIONS	
TOP FOUNDATION	200.00
INV. AT HOUSE	197.33
SEPTIC TANK INLET	197.10
SEPTIC TANK OUTLET	196.85
D-BOX INLET	196.67
D-BOX OUTLET	196.50
TRENCHES	ALL
TOP PEASTONE, START	196.95
INV. START LINE	196.43
INV. END LINE	196.20
ELEV. BOTTOM, END	194.20

SILT FENCE W/HAYBALE DETAIL



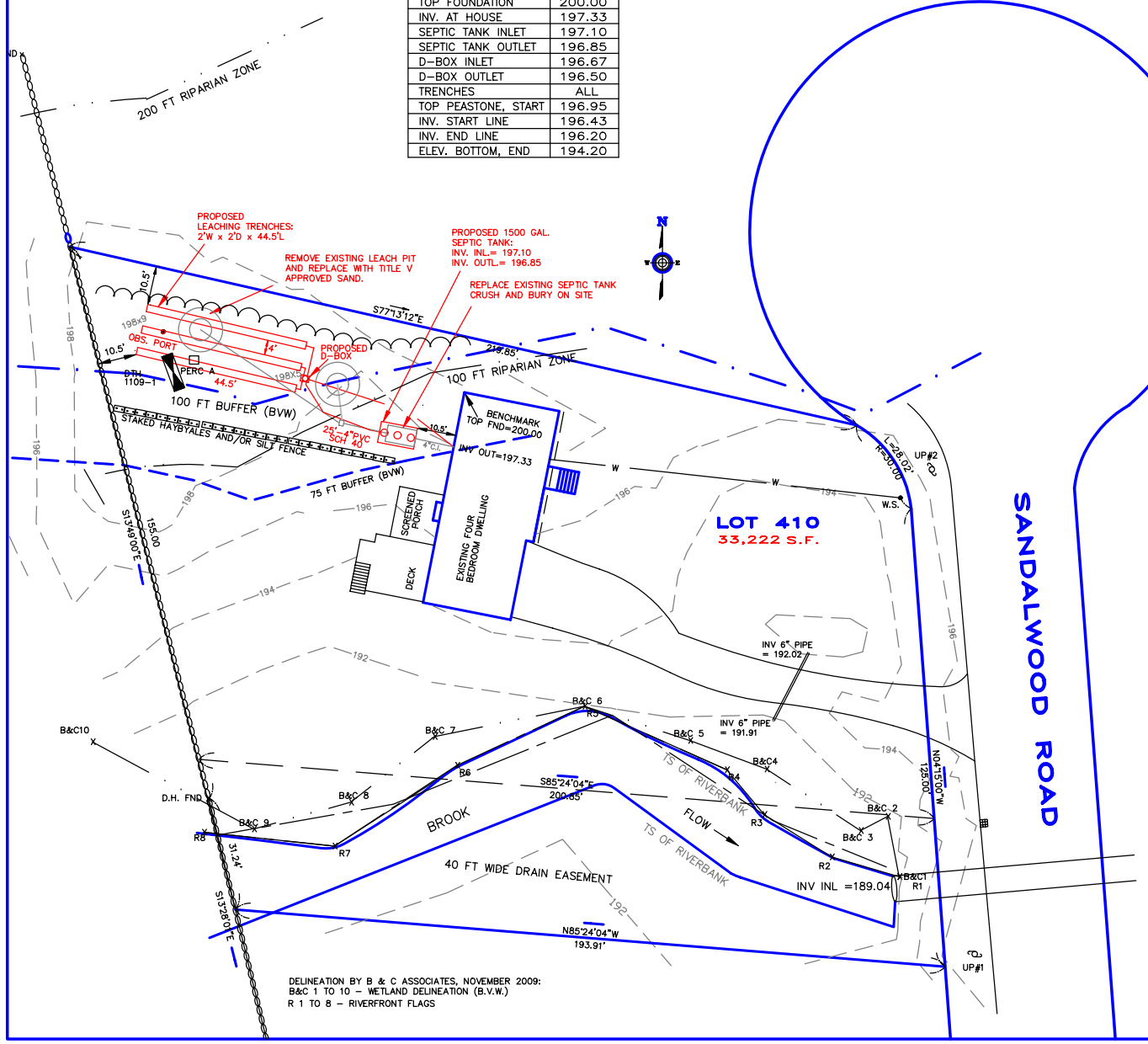
HAYBALE DIKE DETAIL



BALES TO BE BUTTED TIGHTLY TOGETHER SO THERE ARE NO GAPS

GRAPHIC SCALE

0 5 10 20 METERS
0 10 20 40 60 FEET



THE PROPOSED SYSTEM DESIGN IS FOR AN EXISTING FOUR BEDROOM SINGLE-FAMILY DWELLING.

THIS PLAN HAS BEEN PREPARED IN CONFORMITY WITH THE REQUIREMENTS OF TITLE 5, THE STATE ENVIRONMENTAL CODE, AND THE TOWN OF ACTON BOARD OF HEALTH REGULATIONS

DESIGN FLOW:
NO GARBAGE DISPOSAL
SINGLE FAMILY RESIDENCE
4 BEDROOMS x 110 GPD = 440 GPD

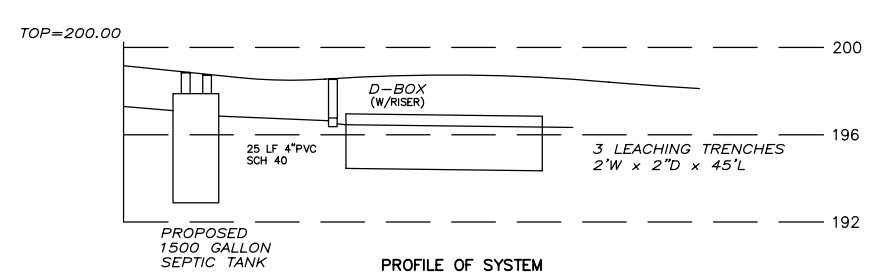
SEPTIC TANK:
200% x 440 GPD = 880 GAL.
USE EXISTING 1000 GALLON SEPTIC TANK

LEACHING TRENCHES DESIGN:
PERCOLATION RATE: 2 MIN./INCH
SOIL CLASS: 1
LTAR: 0.74

TITLE 5: 440 GPD / 0.74 GAL/FT = 594.6 SF LEACHING AREA REQUIRED
ACTON BD OF HEALTH REGULATIONS: 800 SF LEACHING AREA REQUIRED:
USE TRENCHES 2'W x 2'D = 6 SF/FT
800 SF / 6 SF/FT = 133.33 FT OF TRENCH REQUIRED
USE 3 TRENCHES 2'W x 2'D x 44.5' LONG = 133.5 LF TRENCH PROVIDED
801 S.F. OF TRENCH AREA PROVIDED

GENERAL NOTES:

1. THIS PLAN IS TO BE USED FOR THE INSTALLATION OF THE SUBSURFACE SEWAGE DISPOSAL SYSTEM, INCLUDING REQUIRED WETLAND RESOURCE PROTECTION, ONLY.
2. ALL TOPSOIL, PEAT OR OTHER UNSUITABLE IMPERVIOUS SOIL LAYERS SHALL BE REMOVED FROM BELOW AND 5 FT. AROUND THE LEACHING AREA AS SHOWN AND REPLACED WITH FILL MATERIAL PURSUANT TO TITLE 5 (310 CMR 15.255).
3. ANY DEVIATION FROM THE DESIGN OF THIS PLAN MUST FIRST BE APPROVED BY THE LOCAL BOARD OF HEALTH AND R. WILSON ASSOCIATES.
4. THE CONTRACTOR SHALL NOTIFY THE BOARD OF HEALTH AGENT AND OR ENGINEER A MINIMUM OF 24 HOURS BEFORE EACH REQUIRED INSPECTION.
5. ALL STRUCTURES SHALL BE PRECAST CONCRETE (MINIMUM STRENGTH 4,000 PSI AFTER 28 DAYS)
6. ALL PIPES AND JOINTS SHALL BE WATER TIGHT AND SHALL BE 4" PVC SCH. 40 (OR APPROVED EQUAL) UNLESS OTHERWISE INDICATED.
7. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED IN ORDER TO PREVENT EROSION.
8. THIS SEPTIC SYSTEM IS NOT DESIGNED FOR GARBAGE DISPOSAL UNIT. OWNERS OF SYSTEM SHALL TAKE STEPS TO ENSURE THAT GARBAGE DISPOSAL UNITS ARE NOT INSTALLED.
9. THE APPLICANT AND CONTRACTOR SHALL BE AWARE OF THEIR OBLIGATION TO COMPLY WITH THE REQUIREMENTS OF THE WETLANDS PROTECTION ACT (M.G.L. CH.131 SECT.40).
10. THE LOCATION OF ALL WATER COURSES AND WETLANDS WITHIN 100 FT. OF THE PROPOSED SYSTEM LOCATION ARE SHOWN.
11. THE LOCATION OF ALL SOURCES OF WATER SUPPLY (PUBLIC AND PRIVATE) WITHIN 400 FT. OF THE PROPOSED SYSTEM LOCATION IN THE CASE OF SURFACE WATER SUPPLIES AND GRAVEL PACKED PUBLIC SUPPLY WELLS; WITHIN 250 FT. OF THE PROPOSED SYSTEM LOCATION IN THE CASE OF TUBULAR WATER SUPPLY WELLS; AND WITHIN 150 FT. OF THE PROPOSED SYSTEM LOCATION IN THE CASE OF PRIVATE WATER SUPPLY WELLS ARE SHOWN.
12. ANY WATER LINE CONNECTIONS MUST BE AT LEAST 10 FT. FROM THE PROPOSED SEPTIC SYSTEM.
13. THERE IS NO FOUNDATION DRAIN PROPOSED FOR THE DWELLING SHOWN.
14. CONTRACTOR MUST VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. DIG-SAFE TELEPHONE NUMBER: 1-888-DIG-SAFE
15. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED. [310 CMR 15.22 (12)]
16. FOR SEPTIC TANKS AND D-BOXES EQUIPPED WITH RISERS, THE RISERS SHALL BE NO DEEPER THAN 6 (6) INCHES BELOW GROUND SURFACE. [310 CMR 15.22 (13)]



PROFILE OF SYSTEM
HORIZ: 1" = 20'
VERT: 1" =4'

PROPERTY ADDRESS: 4 SANDALWOOD ROAD

ASSESSORS REFERENCE: MAP G-4, PARCEL 206-3

ZONING DISTRICT: R2

GROUNDWATER PROTECTION DISTRICT: ZONE 3

DEED REFERENCE: BOOK 13379 PAGE 082
PLAN REFERENCE: BOOK 12773 PAGE 399, BY ACTON SURVEY & ENGINEERING, DATED OCTOBER 1, 1974

SEPTIC SYSTEM UPGRADE
FOR
4 SANDALWOOD ROAD
IN
ACTON, MASS.

OWNER: LEONARD AND JOYCE WEINER
4 SANDALWOOD ROAD, ACTON, MA 01720

SCALE: 1 INCH = 20 FEET DATE: DECEMBER 9, 2009

No.	REVISIONS	DATE
1	ACTON BOH COMMENTS	12/22/09

R.WILSON & ASSOCIATES, INC.
LAND SURVEYORS AND CIVIL ENGINEERS
312 GREAT ROAD P.O.BOX 236 LITTLETON, MA 01460
PHONE: 978-486-0203 FAX: 978-486-0644

FILE NO. 1676 DWG NO. 1676WP SHEET NO. 1 OF 1