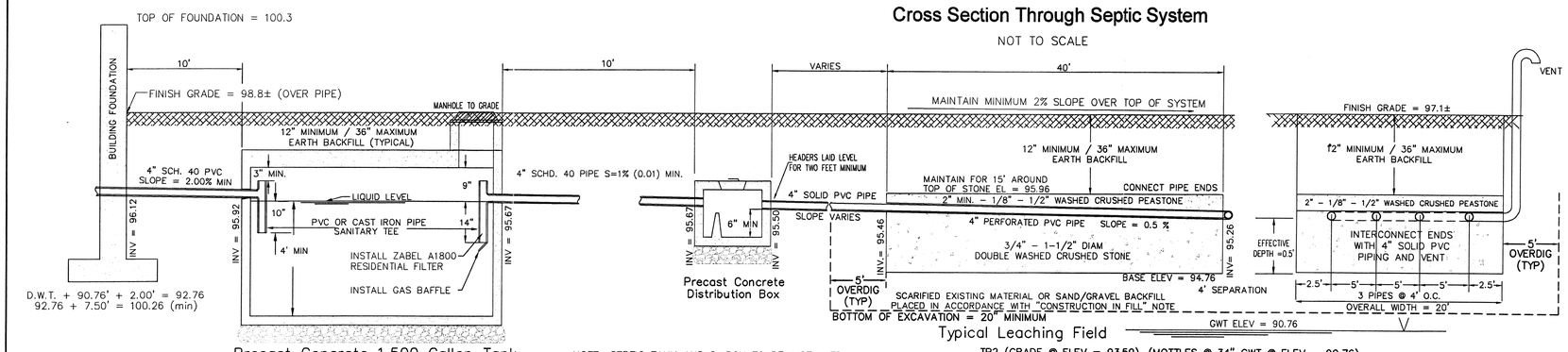
Cross Section Through Septic System

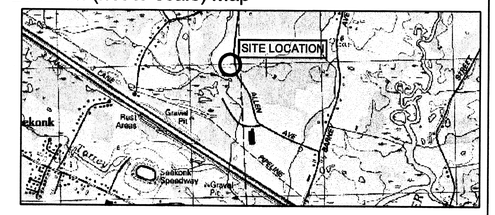
NOT TO SCALE



NOTE: SEPTIC TANK AND D-BOX TO BE INSTALLED ON MINIMUM 6" COMPACTED CRUSHED STONE BASE.

TP2 (GRADE @ ELEV = 93.59), (MOTTLES @ 34" GWT @ ELEV = 90.76)

Location (not to scale) Map



Notes & Specifications

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF 310 CMR 15 (TITLE V) OF THE COMMONWEALTH OF MASSACHUSETTS AND THOSE OF THE TOWN OF SEEKONK BOARD OF HEALTH.

THE REQUIRED INSPECTION SCHEDULE DURING THE PROCESS OF CONSTRUCTION SHALL BE ARRANGED BY THE CONTRACTOR WITH THE BOARD OF HEALTH & DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

1,500 GALLON SEPTIC TANK AND 5 OUTLET DISTRIBUTION BOX SHALL BE HEAVY DUTY DESIGN AS MANUFACTURED BY ROTONDO & SONS, INC. OR APPROVED EQUAL.

ALL PIPING SHALL BE 4" DIA. SCHD. 40 PVC, (CAPABLE OF H-20 LOADING) WITH ALL JOINTS SEALED WATERTIGHT.

ALL STONE SHALL BE DOUBLE WASHED AND FREE OF IRONS, CLAY OR FINES AND SHALL BE SATISFACTORY TO THE TOWN OF SEEKONK BOARD OF HEALTH.

THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL OR OTHER HIGH WATER USE UNITS.

THE PROPOSED SEPTIC SYSTEM IS NOT LOCATED WITHIN THE CONE OF INFLUENCE OF ANY MUNICIPAL WELL NOR ARE THERE ANY PRIVATE WELLS LOCATED WTHIN 100 FEET (RADIALLY) OF THE PROPOSED SYSTEM.

EXCAVATE ALL TOP, SUB AND ANY OTHER SOILS ENCOUNTERED DOWN TO THE SAND LAYER, 24" MINIMUM AND FOR A HORIZONTAL DISTANCE OF 5' ON ALL SIDES OF THE PROPOSED SYSTEM. BACKFILL TO ELEVATION = 95.96 WITH SELECT ON-SITE OR IMPORTED SOIL MATERIAL CONSISTING OF CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES AND MEETING THE SIEVE SIZE REQUIREMENTS OF 310 CMR 15.255(3) & (5) [CONSTRUCTION IN FILL].

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON ASSUMED ELEVATION – SEE BENCHMARK.

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF CONSTRUCTION.

WATER TABLE FLUCTUATES ANNUALLY, NO WARRANTEE OF A DRY BASEMENT IS EXPRESSED OR IMPLIED.

THE LOT DOES NOT LIE IN A FLOOD HAZARD ZONE.

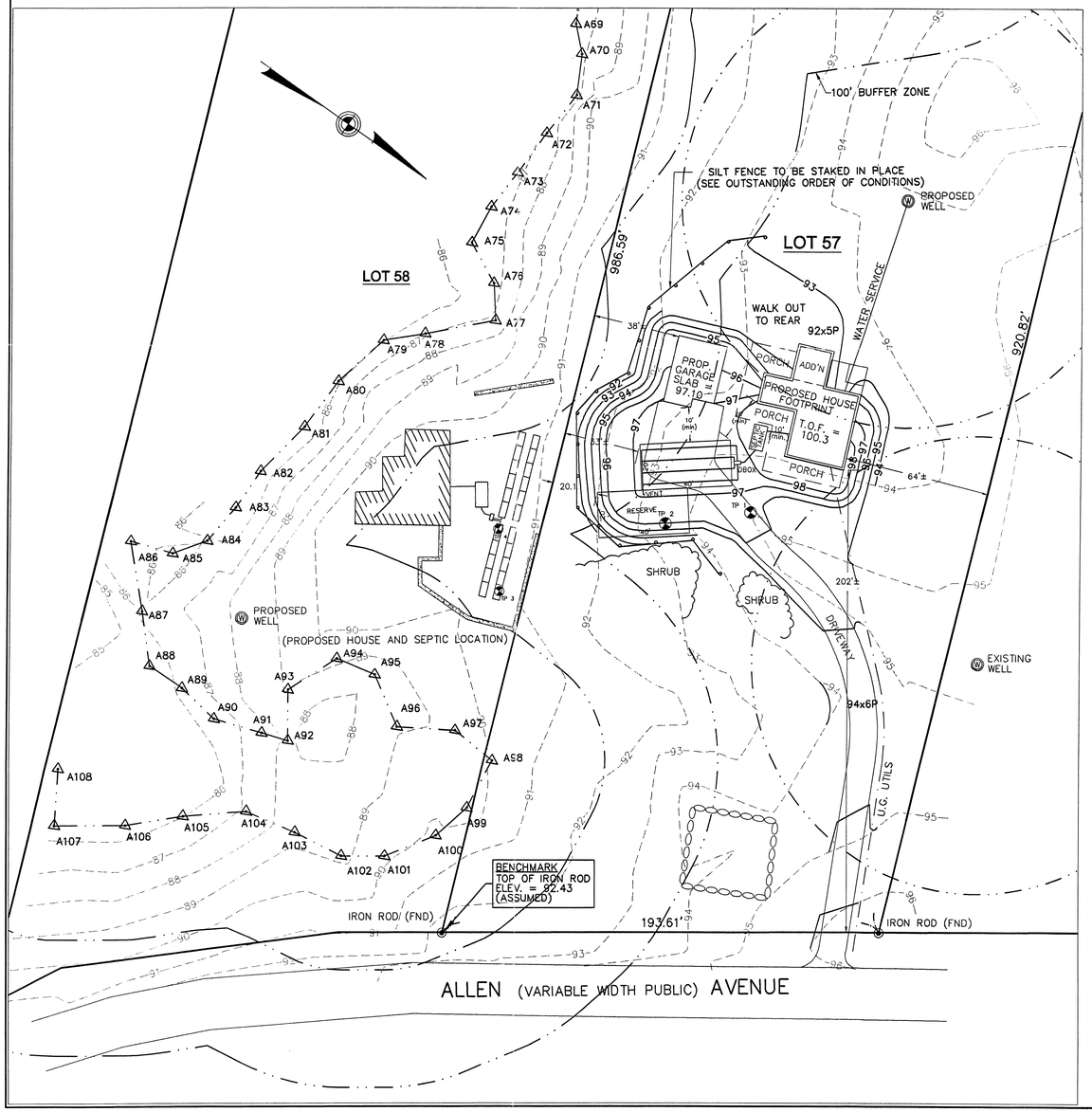
THE LOT DOES NOT LIE IN AN OVERLAY DISTRICT FOR GROUNDWATER AQUIFER PROTECTION.

SEEKONK WATER DISTRICT WAS NOTIFIED AS CERTIFIED ON PLAN BY CAPUTO AND WICK. TOWN WATER IS NOT CURRENTLY AVAILABLE FOR THIS LOT

NOTES: 1.) SEE PLAN BY CAPUTO AND WICK ENTITLED "SEWAGE DISPOSAL SYSTEM AP 3 – LOT 57 ALLEN AVENUE, SEEKONK, MASSACHUSETTS", REVISED THRU 2/14/06

2.) DIMENSIONS OF EXISTING HOUSE, GARAGE, AND LOCATION OF EXISTING SHRUBS WERE PROVIDED BY OWNER. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

3.) HOUSE AND GARAGE ARE BEING MOVING FROM OFFSITE LOCATION. FOUNDATION DIMENSIONS AND STAGING LOCATIONS ARE CRITICAL AND ARE THE RESPONSIBILITY OF CONTRACTOR.



DEEP OBSERVATION HOLE "1" LOG
ORIGINAL GRADE – 95.08

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0–12"	A	SANDY LOAM	10 YR 3/1	-	-
12–30"	B	LOAMY SAND	10 YR 6/8	-	-
36–160"	C	V.F. SAND	2.5 YR 6/1	36" 10 Y 5/8	COMMON MOTTLES

STANDING GROUNDWATER – 155"
OBSERVED GROUNDWATER – 32.5" (3/21/05)
PERC. RATE @ 50" = 4 MPI

WEEPING GROUNDWATER – 144"
ESTIMATED HIGH GROUND WATER – 30" (ELEV. – 92.58)
DATE OF TEST – 9/16/04

WITNESS: MR. CHENEVERT, B.O.H.
TESTING PERFORMED BY: DEAN MONSEES

DEEP OBSERVATION HOLE "2" LOG
ORIGINAL GRADE – 93.59

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0–12"	A	SANDY LOAM	10 YR 3/1	-	-
12–36"	B	LOAMY SAND	10 YR 6/8	34"-10YR 5/8	COMMON MOTTLES
36–120"	C	V.F. SAND	2.5 YR 7/1	-	-

STANDING GROUNDWATER – 110"
OBSERVED GROUNDWATER – 37.5" (3/21/05)
PERC. RATE @ 50" = 3 MPI

WEEPING GROUNDWATER – 108"
ESTIMATED HIGH GROUND WATER – 34" (ELEV. – 90.76)
DATE OF TEST – 9/16/04

WITNESS: MR. CHENEVERT, B.O.H.
TESTING PERFORMED BY: DEAN MONSEES

DEEP OBSERVATION HOLE "3" LOG
ORIGINAL GRADE – 91.25

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0–12"	Ap	SANDY LOAM	10 YR 3/1	-	-
12–24"	B	LOAMY SAND	10 YR 6/8	-	-
36–100"	C	M. – F. SAND	2.5 YR 6/1	30' - 10YR 5/8	COMMON MOTTLES

STANDING GROUNDWATER – 84"
OBSERVED GROUNDWATER – 11.5" (3/21/05)
PERC. RATE @ 45" = 4 MPI

WEEPING GROUNDWATER – 84"
ESTIMATED HIGH GROUND WATER – 11.5" (ELEV. – 90.30)
DATE OF TEST – 9/16/04

WITNESS: MR. CHENEVERT, B.O.H.
TESTING PERFORMED BY: DEAN MONSEES

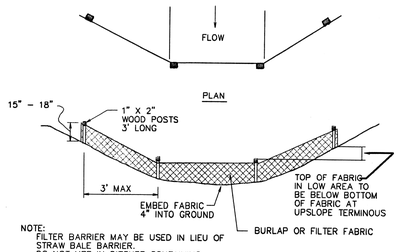
DEEP OBSERVATION HOLE "4" LOG
ORIGINAL GRADE – 90.48

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0–9"	A	SANDY LOAM	10 YR 3/1	-	-
9–24"	B	LOAMY SAND	10 YR 5/8	-	-
24–36"	C1	COARSE SAND	2.5 YR 6/1	24" – 10YR 6/8	COMMON MOTTLES
24–36"	C2	V.F. SAND	2.5 YR 7/1	-	MOIST

STANDING GROUNDWATER – 100"
OBSERVED GROUNDWATER – 16" (3/21/05)
PERC. RATE @ 50" = 4 MPI

WEEPING GROUNDWATER – 90"
ESTIMATED HIGH GROUND WATER – 16" (ELEV. – 89.15)
DATE OF TEST – 9/16/04

WITNESS: MR. CHENEVERT, B.O.H.
TESTING PERFORMED BY: DEAN MONSEES



NOTE:
FILTER BARRIER MAY BE USED IN LIEU OF STRAW BALE BARRIER.
DO NOT USE IN DITCHES CONTAINING MAJOR WATER FLOWS.

SILT FENCE DETAIL
N.T.S.

Design Calculations

Average Daily Sewage Flow (gallons per day)
PROPOSED 4 BEDROOM HOUSE @ 110 GPD PER BEDROOM
= 440 GPD

Septic Tank Sizing (gallons)
200% AVERAGE DAILY FLOW = 2 (440) = 880 GALLONS
REQUIRES 1,500 GALLON TANK (MINIMUM).

Leaching Area Calculation
SOIL CLASS II (SANDY LOAMS, LOAMS)
(USE 15 MPI PER B.O.H.)

PERK RATE IN TP2 WAS = 3 MPI
PERK RATE IN TP4 WAS = 4 MPI
DESIGN FOR 15 MPI PER B.O.H.

Required Minimum Leaching Area:
ADF = 440 GPD / 0.56 GPD / SF = 786 SF MINIMUM
TRY: LEACHING FIELD 20' WIDE AND 40' LONG
20' x 40' = 800 SF DESIGN TOTAL
DESIGN = 800 SF > REQUIRED = 786 SF OK

COMMONWEALTH OF MASSACHUSETTS
ROBERT L. DAVIS
CIVIL
NO. 27147
REGISTERED PROFESSIONAL ENGINEER

Legend

SOIL TEST PIT	TP
EXISTING CONTOUR	100
PROPOSED CONTOUR	100
EXISTING SPOT ELEVATION	×100
PROPOSED SPOT ELEVATION	x100

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

Septic System Design Plan

A.P. 3 Lot 57
Allen Avenue, Seekonk, MA

Received
JUL 17 2006
Con. Comm.

69-567

PREPARED FOR
Lisa Roberts
6 Old Providence Road, Rehoboth, MA 02769

DESIGNED BY: RLD DRAFTED BY: CIA CHECKED BY: PDC APPROVED BY: RLD

PREPARED BY

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Date: June 23, 2006
Revised: July 6, 2006

Scale: 1" = 30'

06-077

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