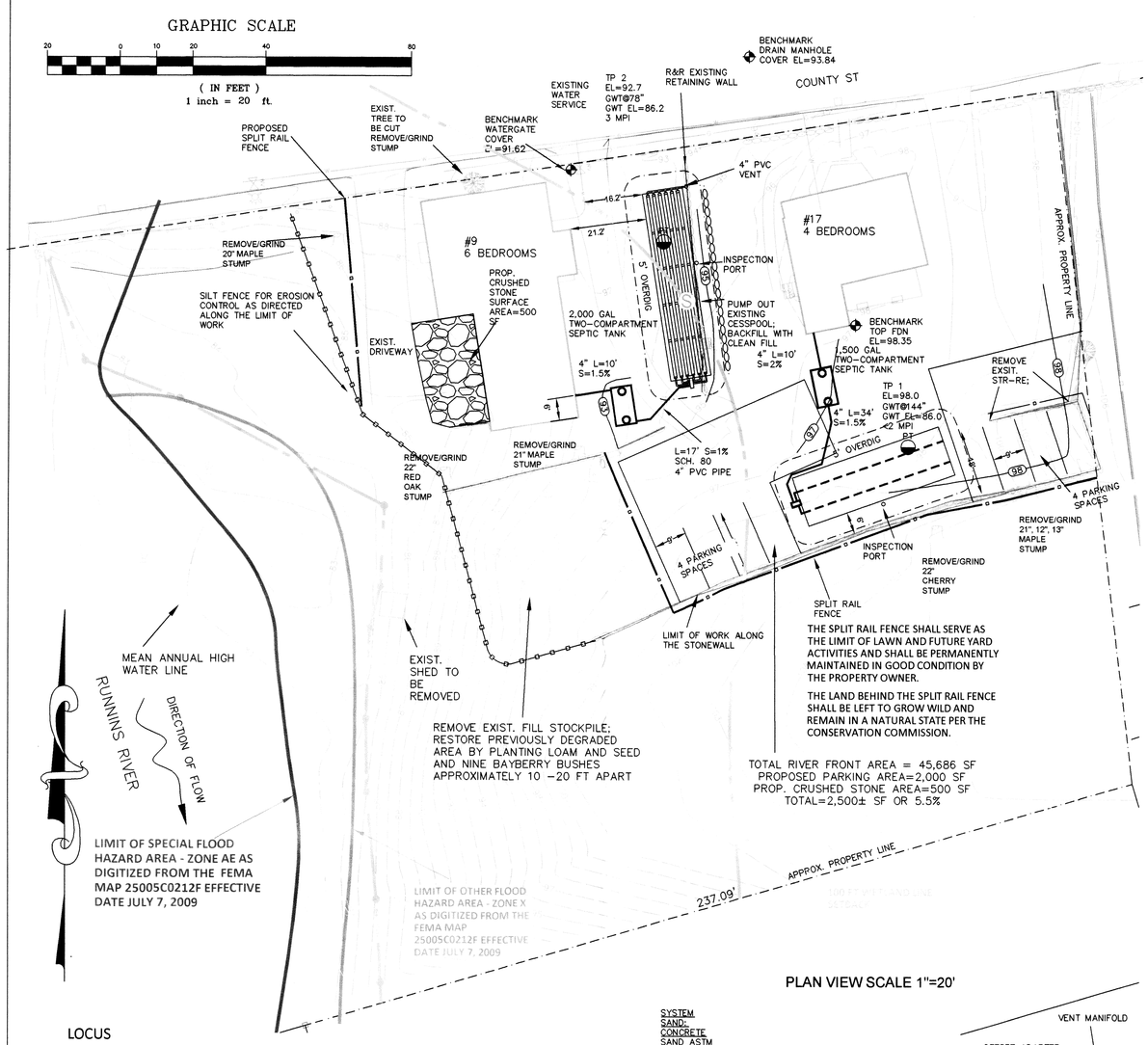
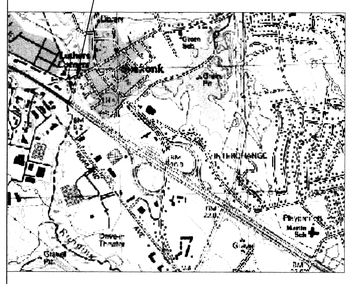
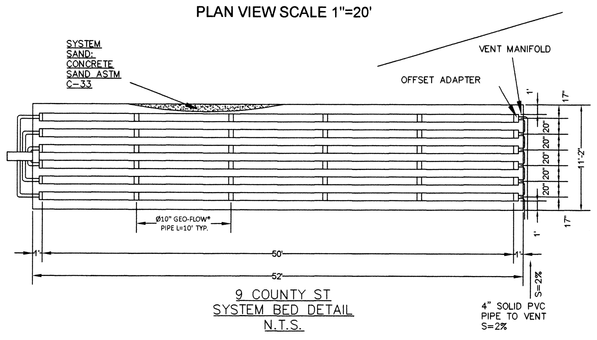


PLAN VIEW SCALE 1"=20'

LOCUS





9 COUNTY ST
SYSTEM BED DETAIL
N.T.S.

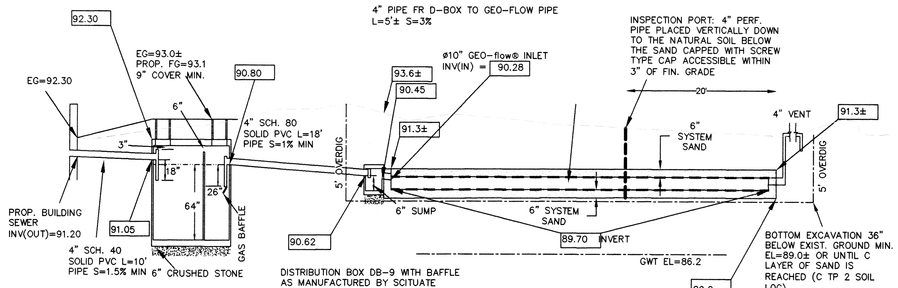
1. NO INSTALLER SHALL INSTALL THE SYSTEM UNLESS THE INSTALLER HAS BEEN TRAINED BY THE COMPANY ON INSTALLATION OF THE SYSTEM OR THE INSTALLATION IS OVERSEEN BY A COMPANY REPRESENTATIVE(S).

TEST PIT 1
DEEP OBSERVATION HOLE LOG: PERC RATE < 2 MPI EL=98.0;
DEPTH OF PERC TEST 54" EL=93.5; GTW @ 144" GWT EL=86.0

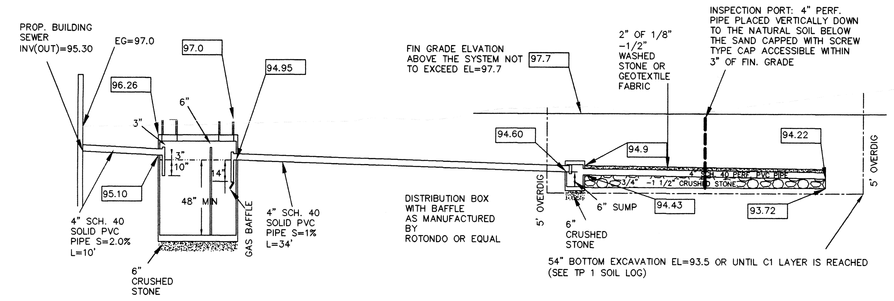
Depth from Surface (inches)	Soil Horizon	Soil Texture	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Organic)
0 - 10	A	SANDY LOAM	10YR 3/1		
10-20	B	SANDY LOAM	10YR 5/8		
20-84	C1	SAND	2.5Y 6/2		SOME COBBLES & STONES, COARSE CLEAN SANDS
84-144	C2	SAND	2.5Y 7/2		MEDIUM TO COARSE SANDS

TEST PIT 2
DEEP OBSERVATION HOLE LOG: PERC RATE < 2 MPI EL=92.7;
DEPTH OF PERC TEST 60" EL=87.7; MOTTLES AT 78" GWT EL=86.2

Depth from Surface (inches)	Soil Horizon	Soil Texture	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Organic)
0 - 36	GRAVEL/ FILL				
36 - 110	C	SAND	2.5Y 7/2	@78" COMMON 10YR 6/8	CLEAN COARSE SANDS, FIRM IN PLACE



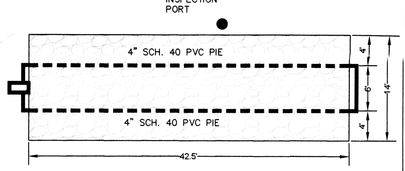
9 COUNTY ST
SEPTIC SYSTEM PROFILE
NOT TO SCALE



1,500 TWO-COMPARTMENT SEPTIC TANK ST5X10-15 BY ROTONDO OR EQUAL; INSTALL OUTLET FILTER AS MANUFACTURED BY ORENCO, ZABEL, OR APPROVED EQUAL, BRING INLET & OUTLET COVERS TO GRADE; OUTLET FILTER TO BE CLEANED EVERY THREE MONTHS

17 COUNTY ST
SEPTIC SYSTEM PROFILE
NOT TO SCALE

EG=98.0 GWT Ø144"
GWT EL=86.0



17 COUNTY ST
LEACHING FIELD TYPICAL DETAIL
SCALE 1"=10'

DESIGN CALCULATIONS

#9 COUNTY ST
6 BEDROOM DWELLING
110 GALLONS/BEDROOM & NO GARBAGE DISPOSAL DAILY FLOW:(6BDRM)X(110 GAL/BDRM)=660 GALLONS
DESIGN PERC. RATE: 1 INCH IN 3 MINUTES (TP 2); OBSERVED SOIL TEXTURAL CLASS I (SEE SOIL LOG)
EFFLUENT LOADING RATE: 0.74 GPD/SQ.FT.
SEPTIC TANK DESIGN:
USE TWO-COMPARTMENT TANK
FIRST COMPARTMENT:
VOLUME IS SIZED FOR 48 HOURS HYDRAULIC DETENTION TIME OF DESIGN FLOW =660 GPD X2 =1,320 GAL
SECOND COMPARTMENT:
VOLUME IS SIZED FOR MIN. 24 HOURS HYDRAULIC DETENTION TIME OF DESIGN FLOW = 660 GAL
TOTAL REQUIRED SEPTIC TANK VOLUME = 1,320+660=1,980 GAL
USE ROTONDO ST5X10-20 SEPTIC TANK WITH 6" BAFFLE (TWO COMPARTMENTS) OR EQUAL
PROVIDE OUTLET FILTER BY ORENCO FT0854-36 OR EQUAL

REQUIRED LEACHING AREA
(660GPD)/(0.74 GPD/SQ.FT.)=892 SQ.FT.

DESIGN GEO-flow PIPE LEACHING SYSTEM BY ADS.
FROM ADS DESIGN MANUAL:
STEP 1: FOR SIX BEDROOMS & PERC RATE 1-9 MPI FR TABLE I SELECT TOTAL LENGTH OF GEO-flow PIPES=300 FT
STEP 2: PERCENTAGE OF SLOPE AT THE SYSTEM LOCATION - 4 TO 5%
STEP 3: FOR SLOPE OF 0-10% AND PERC RATE 1-10 MPI MINIMUM CENTER-TO-CENTER SPACING -1.5 FT;
USE SIX PIPE LINES - 50 FT EACH (5 PIPES 10' EA PER LINE) SPACED 1'-8" O.C.
STEP 4: SYSTEM LAYOUT - L=50' W=1.67'X5=8'-4" ADDING TWO FEET TO THE LAYOUT WIDTH AND TO THE LAYOUT LENGTH:
SAND BED LENGTH=52' WIDTH=10'-4" SAND BED AREA=52'X10.33'=537 SF>535 SF (SEE TABLE III PART B) > 60% OF 892 SF=535 SF

#17 COUNTY ST
4 BEDROOM DWELLING
110 GALLONS/BEDROOM & NO GARBAGE DISPOSAL DAILY FLOW:(4BDRM)X(110 GAL/BDRM)=440 GALLONS
DESIGN PERC. RATE: 1 INCH IN 3 MINUTES (TP 2); OBSERVED SOIL TEXTURAL CLASS I (SEE SOIL LOG)
EFFLUENT LOADING RATE: 0.74 GPD/SQ.FT.
SEPTIC TANK DESIGN:
USE TWO-COMPARTMENT TANK
FIRST COMPARTMENT:
VOLUME IS SIZED FOR 48 HOURS HYDRAULIC DETENTION TIME OF DESIGN FLOW =440 GPD X2 =880 GAL
SECOND COMPARTMENT:
VOLUME IS SIZED FOR MIN. 24 HOURS HYDRAULIC DETENTION TIME OF DESIGN FLOW = 440 GAL
TOTAL REQUIRED SEPTIC TANK VOLUME = 880+440=1,320 GAL
USE ROTONDO ST5X10-15 SEPTIC TANK WITH 6" BAFFLE (TWO COMPARTMENTS) OR EQUAL
PROVIDE OUTLET FILTER BY ORENCO FT0854-36 OR EQUAL

REQUIRED LEACHING AREA
(440GPD)/(0.74 GPD/SQ.FT.)=595 SQ.FT.
DESIGN LEACHING BED SOIL ABSORPTION SYSTEM
BOTTOM=42.5'X14'=595 SQ. FT. SIDEWALLS=NOT INCLUDED
TOTAL LEACHING AREA: 595 SQ.FT. TOTAL DAILY FLOW PROVIDED: 440 GPD=440 GPD

DATE OF PERC. TEST: JULY 5, 2012
BY DEAN MONSEES; WITNESSED BY BETH HALLAL, SEEKONK BOARD OF HEALTH
TP 1: PERC RATE < 2 MPI EL=98.0; DEPTH OF PERC TEST 54" EL=93.5; GTW @ 144" GWT EL=86.0
TP 2: PERC RATE < 2 MPI EL=92.7; DEPTH OF PERC TEST 60" EL=87.7; MOTTLES AT 78" GWT EL=86.2

2 FT REDUCTION OF GROUND WATER TABLE SEPARATION (FROM 5' TO 3') FOR THE SAS SERVING 9 COUNTY ST IS REQUESTED ACCORDING TO THE FOLLOWING EXCERPT FROM THE MODIFIED LETTER OF APPROVAL FOR THE **GEO-FLOW® PIPE LEACHING SYSTEM** DATED JULY 10, 2009:

III. ALLOWABLE SOIL ABSORPTION SYSTEM DESIGN

1. THE FOLLOWING REDUCTIONS ARE ALLOWABLE FOR SOIL ABSORPTION SYSTEMS (SAS) WHEN DESIGNING THE SYSTEM.
   A. THE APPROVING AUTHORITY MAY ALLOW A REDUCTION IN THE REQUIRED SEPARATION BETWEEN THE BOTTOM OF THE SAS AND THE HIGH GROUNDWATER ELEVATION OF UP TO TWO FEET. THIS PROVIDES A MINIMUM SEPARATION OF TWO FEET (IN SOILS WITH A RECORDED PERCOLATION RATE OF MORE THAN TWO MINUTES PER INCH) OR A THREE FEET (IN SOILS WITH A RECORDED PERCOLATION RATE OF TWO MINUTES OR LESS PER INCH); OR
   B. THE APPROVING AUTHORITY MAY ALLOW A REDUCTION IN THE REQUIRED FOUR FEET OF NATURALLY OCCURRING PERVIOUS MATERIAL IN AN AREA WITH NO LESS THAN TWO FEET OF NATURALLY OCCURRING PERVIOUS MATERIAL, PROVIDED THAT IT HAS BEEN DEMONSTRATED THAT THE FOUR FOOT REQUIREMENT CANNOT BE MET ANYWHERE ON THE SITE.

IF A REMEDIAL SYSTEM NEEDS EITHER OF THE ALLOWABLE REDUCTIONS LISTED ABOVE, THEN THE REDUCTIONS MUST FIRST BE APPROVED BY THE LOCAL APPROVING AUTHORITY AND THEN APPROVED BY THE DEPARTMENT PURSUANT TO 310 CMR 15.284 THROUGH FILING A BRPWP 64C PERMIT APPLICATION.

GENERAL NOTES:
1. LEACHING AREA SHALL BE A MINIMUM OF 10' FROM PROPERTY LINES, 20' FROM CELLAR WALL, AND 100' FROM WETLAND AND NEIGHBORS' WELL.
2. ALL PIPE BETWEEN DWELLING AND LEACHING AREA SHALL HAVE WATER TIGHT JOINTS.
3. ALL ELEVATIONS ARE BASED ON ASSUMED BENCHMARK AS SHOWN ON THE PLAN.
4. FINISHED SURFACE AFTER SYSTEM INSTALLATION SHALL HAVE MIN. SLOPE OF 0.02 FT PER FOOT.
5. TOP OF ALL SYSTEM COMPONENTS SHALL BE INSTALLED NO MORE THAN 36" BELOW FINISH GRADE.
6. IN LEACHING FIELD AREA AND TO THE DISTANCE OF 5 FT IN ALL DIRECTIONS CONTRACTOR TO REMOVE TOPSOIL, SUBSOIL AND ALL OTHER IMPERVIOUS SOIL TO THE DEPTH OF 36" MIN., AND REPLACE IT WITH CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES. GRANULAR FILL MATERIAL SHALL MEET THE SPECIFICATIONS OF 310 CMR 15.255(3).
7. CONTRACTOR TO NOTIFY SEEKONK BOARD OF HEALTH AND DESIGN ENGINEER IF UNDERGROUND SOIL CONDITIONS DIFFER FROM THOSE RECORDED IN THE SOIL LOG.
8. THRE ARE NO WATER SUPPLY WELLS WITHIN 150 FT OF THE SYSTEM LOCATION.
9. THE PROPOSED SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE PROVISIONS OF 310 CMR 15.00 - STATE ENVIRONMENTAL CODE TITLE V AND TOWN OF SEEKONK REGULATIONS.
10. GRADING AND SPOT ELEVATIONS AS SHOWN ON THE PLAN AND PROFILE REPRESENT MINIMUM TITLE V REQUIREMENTS ONLY. ADDITIONAL SITE GRADING IF REQUIRED SHALL BE APPROVED BY THE ENGINEER.
11. THE INSTALLER SHALL VERIFY ALL ELEVATIONS, WELL SETBACK DISTANCES, AND DIMENSIONS PRIOR TO STARTING WORK. THE INSTALLER SHALL NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE PLANS IN WRITING TEN DAYS BEFORE BEGINNING THE WORK.
12. SDR-35 PIPE MAY BE USED.

BOARD OF HEALTH STAMPS

RECEIVED
OCT 26 2012
SEEKONK CONSERVATION

P.E. STAMP

COMMONWEALTH OF MASSACHUSETTS
ALEXANDER GORODETSKY
CIVIL
No. 38071
REGISTERED PROFESSIONAL ENGINEER
10-25-12

P.L.S. STAMP

SEWAGE DISPOSAL SYSTEMS - REPAIR

OWNER: JMV REALTY 14 BERKLEY ST E. PROVIDENCE RI 02914

ASSESSORS' PLAT & LOT: MAP 9 LOT 208
STREET LOCATION: 9-17 COUNTY ST, SEEKONK, MA

ENGINEERING FIRM:
GORODETSKY ENGINEERING, LLC

SCALE 1"=20' AND AS NOTED

69-745

DATE: SEPTEMBER 20, 2012
REVISED: OCTOBER 25, 2012

CONTACT PERSON: ALEXANDER GORODETSKY, P.E.
ADDRESS: 162 NORTH MAIN ST FALL RIVER MA 02720
TEL: (508) 324-1163