

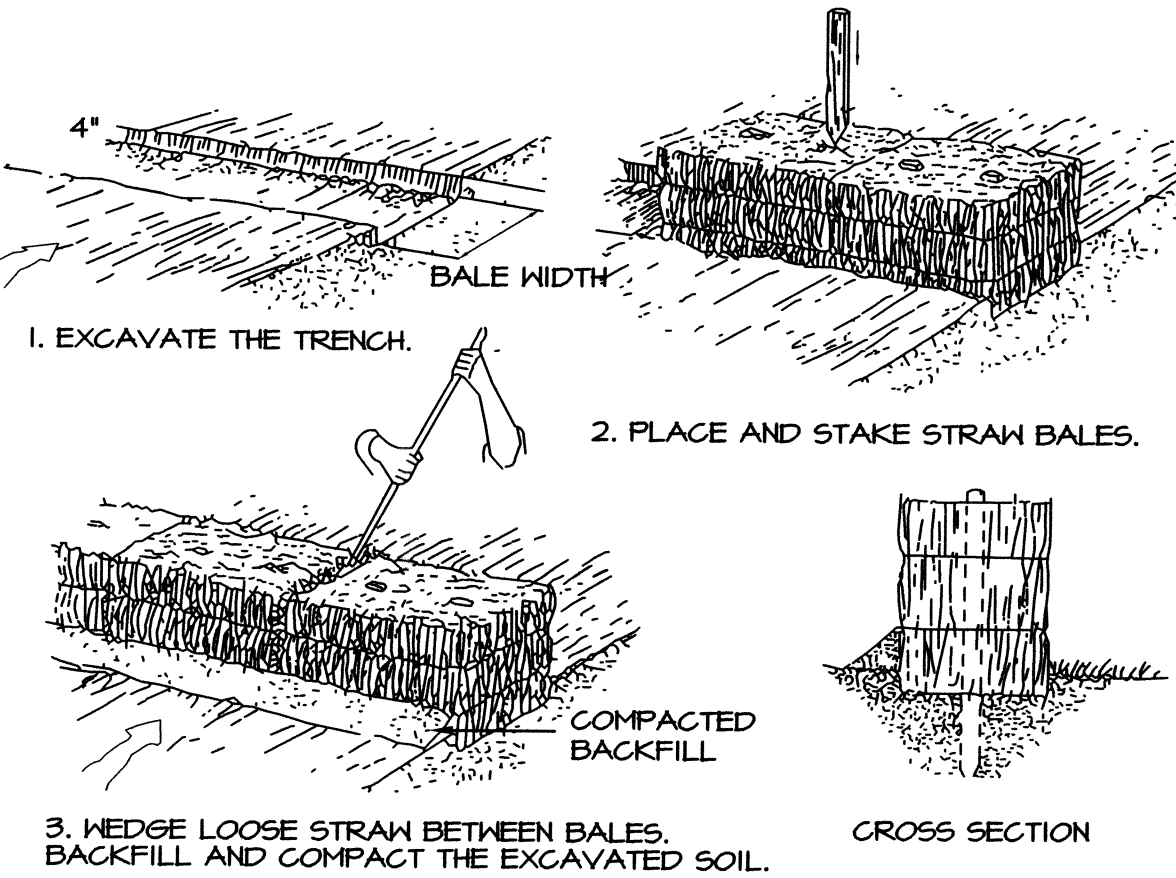
**DESIGN DATA:**  
 DAILY SEWAGE FLOW  
 PROPOSED BEDROOMS = 1  
 MINIMUM DESIGN FLOW, SINGLE FAMILY DWELLING - 330 GALLONS PER DAY  
 SEPTIC TANK REQUIREMENTS  
 DESIGN VOLUME = 2 x DAILY FLOW = 660 GALLONS  
 MINIMUM SIZE = 1,500 GALLONS  
 LOADING:  
 PERCOLATION TEST - <math>2 \text{ MPI}</math> - DESIGN FOR <math>5 \text{ MPI}</math>  
 EFFLUENT LOADING RATE - CLASS I SOIL - <math>0.74 \text{ GAL/SF/DAY}</math>  
 MINIMUM LEACHING AREA REQUIRED - <math>330 \text{ GPD}/0.74 \text{ GAL/SF/DAY} = 446 \text{ SQ. FT.}</math>  
 INFILTRATOR QUICK 4 PLUS STANDARD LP (3.5-INCH INVERT) - <math>4.73 \text{ S.F./L.F. IN FIELD}</math>  
 MINIMUM UNITS REQUIRED - <math>446 \text{ S.F.}/4.73 \text{ S.F./L.F.} = 94.3 \text{ UNITS}</math>  
 MINIMUM UNITS REQUIRED - <math>24 \text{ UNITS}</math>  
 TOTAL LEACHING AREA = <math>24 \text{ UNITS} \times 4.73 \text{ S.F./L.F.} \times 4 \text{ L.F./UNIT} = 454 \text{ SQUARE FEET}</math>  
 TOTAL LEACHING CAPACITY = <math>454 \text{ S.F.} \times 0.74 \text{ GAL/DAY/SF.} = 336 \text{ GAL/DAY} > 330 \text{ GPD}</math>



- NOTES:**
- ALL WORK SHALL CONFORM TO THE 310 CMR 15.00 STATE ENVIRONMENTAL CODE - TITLE 5, THE RULES AND REGULATIONS OF THE SEEKONK BOARD OF HEALTH AND THE LOCAL UPGRADES APPROVED FOR THIS DESIGN.
  - STRIP ALL TOPSOIL, SUBSOIL AND UNSUITABLE MATERIAL, TREE FEET AND STUMPS AND ANY OTHER IMPERVIOUS OR SPECIFIED SOIL IN THE AREA OF THE SYSTEM AND 5 FEET BEYOND THE EDGE OF LEACHING TRENCHES HORIZONTALLY IN ALL DIRECTIONS, WHERE POSSIBLE. AT A MINIMUM THE INSTALLER IS TO STRIP MATERIAL 3" VERTICALLY INTO THE NATURALLY OCCURRING PERVIOUS MATERIAL. REPLACE WITH GRANULAR FILL MEETING THE LATEST SPECIFICATIONS OF 310 CMR 15.255 FILL TO THE LIMITS INDICATED (BREAKOUT).
  - THE CONTRACTOR IS TO REMOVE ALL UNSUITABLE MATERIAL BELOW THE PROPOSED SOIL ABSORPTION SYSTEM PRIOR TO INSTALLATION. SEE DEEP OBSERVATION HOLES SOIL DATA FOR FURTHER INFORMATION. VERTICAL LIMITS MAY BE VARIABLE.
  - REMOVE ALL FOUNDATION WALLS WITHIN 20' OF PROPOSED SOIL ABSORPTION SYSTEM. REMOVE ENTIRE CELLAR FLOOR OF EXISTING BUILDING.
  - CONTRACTOR SHALL CONTACT "DIG-SAFE" PRIOR TO CONSTRUCTION. LOCATION OF UTILITIES ON THIS PLAN ARE FROM EXISTING INFORMATION, BUT ARE ONLY TO BE CONSIDERED APPROXIMATE.
  - ALL PIPE TO BE 4" P. V. C. SCHEDULE 40, UNLESS OTHERWISE NOTED.
  - SEPTIC TANK AND DISTRIBUTION BOX SHALL BE DESIGNED FOR HS-10, AND SHALL BE PROTECTED FROM VEHICULAR TRAFFIC BOTH DURING AND AFTER INSTALLATION.
  - PLACE 6" MINIMUM COMPACTED CRUSHED STONE UNDER SEPTIC TANK AND DISTRIBUTION BOX.
  - SOIL TESTING FOR THIS PROJECT WAS PERFORMED BY CAPUTO AND WICK LTD. AND WITNESSED BY THE SEEKONK BOARD OF HEALTH AGENT, BETH HALLAL. IF CONDITIONS ENCOUNTERED DURING CONSTRUCTION VARY SUBSTANTIALLY FROM THOSE SHOWN ON THIS PLAN, NOTIFY CAPUTO AND WICK, LTD. AND THE TOWN OF SEEKONK. HEALTH AGENT BEFORE PROCEEDING WITH CONSTRUCTION. IE IN DOUBT, ASK.
  - GARBAGE GRINDER IS NOT ALLOWED WITH THIS DESIGN.
  - BACKWASH OF WATER PURIFICATION OR FILTRATION DEVICES SHALL NOT BE DISCHARGED TO THE SEWAGE DISPOSAL SYSTEM.
  - INLET AND OUTLET TEES FOR SEPTIC TANK ARE TO BE LOCATED DIRECTLY BELOW ACCESS COVERS.
  - BREAKOUT ELEVATION = 101.33. NO FINISHED GRADE BELOW 101.33 FOR 15 FEET (MINIMUM) FROM THE EDGE OF THE CHAMBERS, UNLESS IMPERVIOUS BARRIER IS INSTALLED.
  - EXISTING WATER WELLS HERE FOUND WITHIN 200' OF PROPOSED SEWAGE DISPOSAL SYSTEM ARE SHOWN.
  - IT IS RECOMMENDED THAT THE SEPTIC TANK BE INSPECTED TWICE A YEAR, AND BE CLEANED WHEN THE SOLIDS ARE LESS THAN 12" BELOW THE OUTLET TEE OR EFFLUENT FILTER.
  - MATERIAL AND EQUIPMENT FROM ALTERNATE MANUFACTURERS MAY BE USED IF EQUAL. APPROVAL FOR ALTERNATE MATERIAL AND/OR EQUIPMENT REQUIRED FROM ENGINEER AND THE TOWN PRIOR TO CONSTRUCTION. FULL SPECIFICATIONS FOR ALTERNATE EQUIPMENT MUST BE PROVIDED BY THE CONTRACTOR.
  - THE DESIGNER EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR MONITORING, INSPECTING OR SUPERVISING THE ACTUAL CONSTRUCTION WORK. AFTER EXCAVATING AND PRIOR TO INSTALLING ANY IMPORTED MATERIAL, CONTACT THE BOARD OF HEALTH AGENT FOR A BOTTOM OF EXCAVATION INSPECTION. AFTER SYSTEM COMPONENTS ARE IN PLACE AND PRIOR TO BACKFILLING, CONTACT THE DESIGNER TO VERIFY THE LOCATION AND ELEVATION OF SYSTEM COMPONENTS AND PREPARE A RECORD DRAWING AS REQUIRED BY THE BOARD OF HEALTH.
  - THE DESIGNER EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR THE INSTALLATION AND MAINTENANCE OF THE SYSTEM. IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO CONSTRUCT THE SYSTEM IN ACCORDANCE WITH 310 CMR 15.00 AND LOCAL BOARD OF HEALTH REGULATIONS INCLUDING APPROVED LOCAL UPGRADES AND THE RESPONSIBILITY OF THE OWNER FOR PROPERLY MAINTAINING THE SYSTEM IN ACCORDANCE WITH 310 CMR 15.00 AND THE LOCAL BOARD OF HEALTH REGULATIONS. REFER TO 310 CMR 15.00 AND THE LOCAL BOARD OF HEALTH REGULATIONS FOR ADDITIONAL INFORMATION CONCERNING THE CONSTRUCTION AND OPERATION OF THE SYSTEM. THE INSTALLER AND OWNER SHOULD REVIEW AND APPLY 310 CMR 15.00 AND THE LOCAL BOARD OF HEALTH REGULATIONS.
  - REFER TO 310 CMR 15.00 AND THE LOCAL BOARD OF HEALTH REGULATIONS FOR ADDITIONAL INFORMATION CONCERNING THE CONSTRUCTION AND OPERATION OF THE SYSTEM. THE SYSTEM IS TO BE CONSTRUCTED BY A INSTALLER LICENSED BY THE SEEKONK BOARD OF HEALTH.
  - THE CELLAR FLOOR ELEVATION SHOWN HAS BEEN SUGGESTED AS A MINIMUM BASED ON OBSERVED GROUNDWATER CONDITIONS. SINCE THE GROUNDWATER LEVELS FLUCTUATE ANNUALLY, NO WARRANTY OF A DRY CELLAR IS EXPRESSED OR IMPLIED.
  - FILL MEETING THE REQUIREMENTS OF 310 CMR 15.255(3) MUST BE PLACED ON SCARIFIED, RELATIVELY DRY NATURAL SOIL. THE CONTRACTOR SHALL PROVIDE FOR DETERMINING AS REQUIRED AND ALL WORK SHALL BE PERFORMED UNDER DRY CONDITIONS PER 310 CMR 15.255(6). THE DISCHARGE WATER MUST BE PROPERLY DISPOSED OF AND SHALL NOT BE A SOURCE OF POLLUTION AND/OR EROSION.
  - INSTALL MAGNETIC TAPE OVER ALL PIPE AND SYSTEM COMPONENTS.
  - ALL DISTURBED AREAS NOT DEPICED TO HAVE OTHER FINAL SURFACE TREATMENT SHALL RECEIVE 4" LOAM AND SEED.
  - THE CONTRACTOR MUST BE FAMILIAR WITH THE PROPOSED ALTERNATIVE SOIL ABSORPTION SYSTEM TECHNOLOGY AND MUST STRICTLY FOLLOW MANUFACTURERS INSTALLATION INSTRUCTION AND MA. DEP CERTIFICATION.

**ELEVATION SCHEDULE**

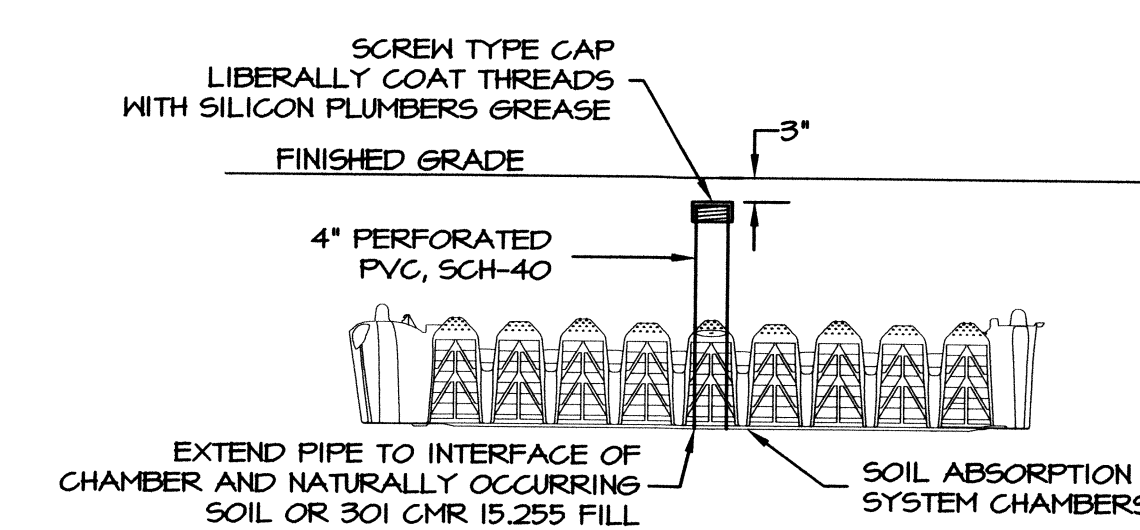
DESCRIPTION	ELEVATION
INVERT AT FOUNDATION	101.75
INVERT IN - SEPTIC TANK	101.50
INVERT OUT - SEPTIC TANK	101.25
INVERT IN - DIST. BOX	101.20
INVERT OUT - DIST. BOX	101.03
INVERT BEGINNING CHAMBERS	100.94
ELEV. TOP OF CHAMBERS (BREAKOUT)	101.33
ELEV. BOTTOM OF CHAMBERS	100.66
EST. SEASONAL HIGH GW	95.36



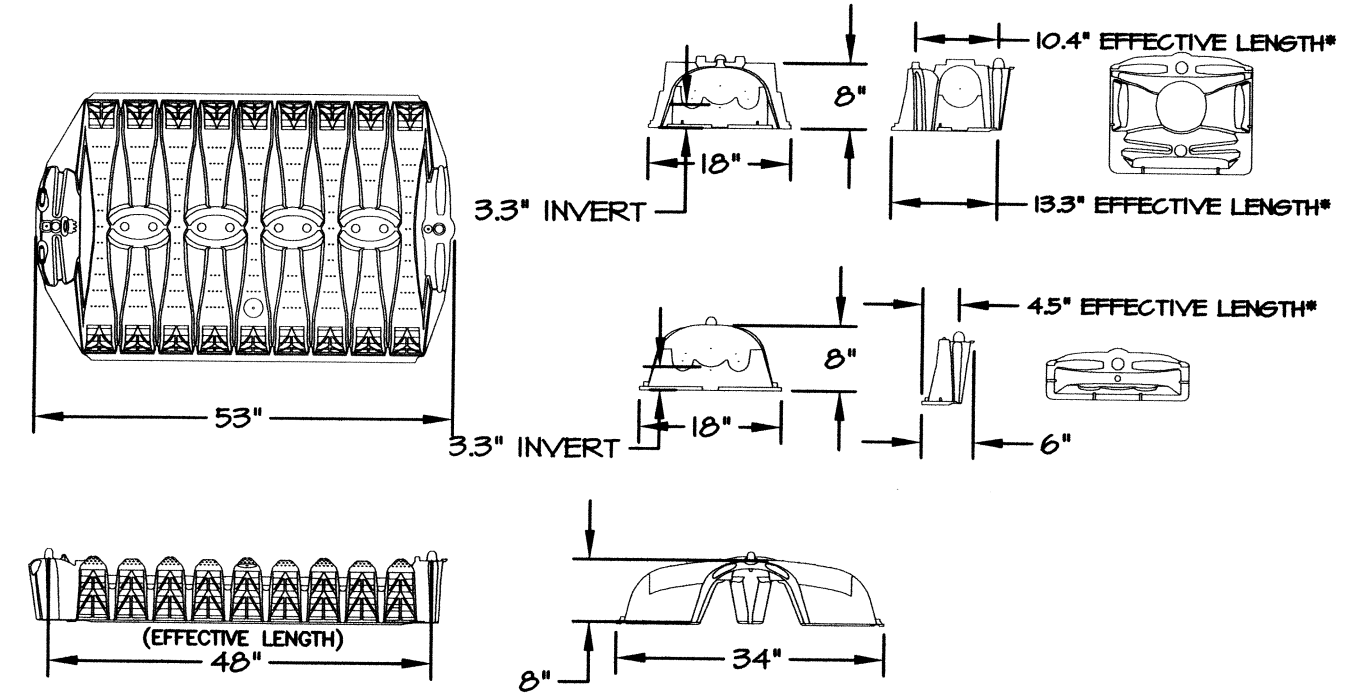
**HAY BALE DETAIL**

**EROSION & SEDIMENTATION CONTROL NOTES:**

- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK.
- ACCESSIBLE RESERVES OF HAY BALES AND STAKES ARE TO BE MAINTAINED ON SITE FOR ROUTINE MAINTENANCE AND IN THE EVENT OF UNANTICIPATED PROBLEMS REQUIRING EMERGENCY RESPONSE.
- HAY BALES SHOULD BE INSTALLED IN ACCORDANCE WITH THE DETAILS PROVIDED.
- NO WORK IS TO OCCUR ON THE WETLAND SIDE OF THE PERIMETER EROSION AND SEDIMENTATION CONTROLS. ALL PERIMETER CONTROLS SERVE AS THE PROJECT LIMIT OF DISTURBANCE.
- NO STONES, BRUSH, CONSTRUCTION DEBRIS, LITTER, OR OTHER MATERIALS ARE TO BE DEPOSITED ON THE WETLAND SIDE OF THE EROSION AND SEDIMENTATION CONTROLS.
- ALL DISTURBED SOILS NOT DESIGNATED FOR OTHER SURFACE TREATMENT ARE TO BE LOAMED AND SEEDED IMMEDIATELY FOLLOWING FINAL GRADING.
- APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO PREVENT THE TRANSPORT OF SOIL OFFSITE FROM CONSTRUCTION EQUIPMENT.
- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE PROPERLY MAINTAINED AND MUST REMAIN IN PLACE UNTIL THE SOILS HAVE BEEN STABILIZED TO THE SATISFACTION OF THE ENGINEER AND THE SEEKONK CONSERVATION COMMISSION.
- THE SPLIT RAIL FENCE SERVES AS THE LIMIT OF LAWN AND FUTURE YARD ACTIVITIES AND SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION.



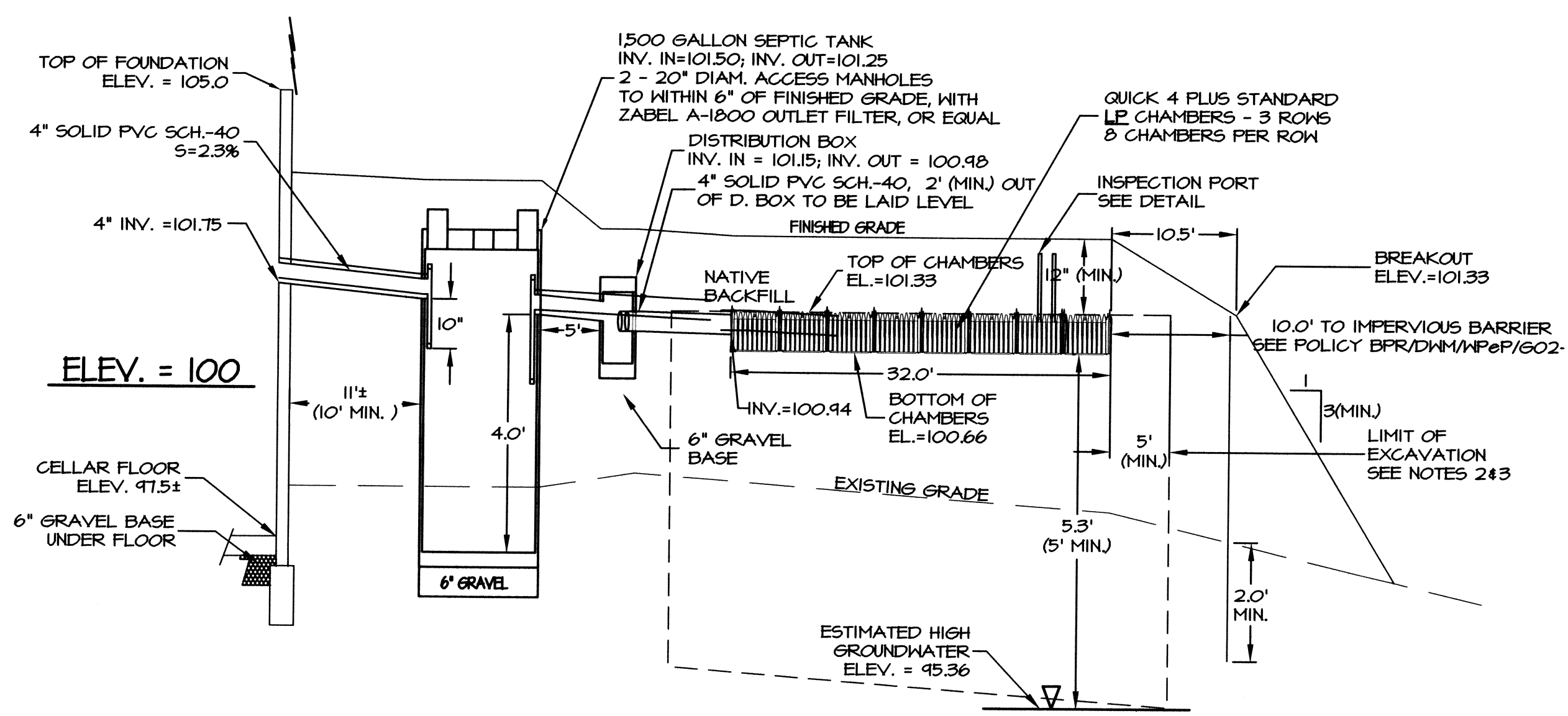
**INSPECTION PORT DETAIL**



**INFILTRATOR SYSTEMS INC. - QUICK4 PLUS STANDARD LOW PROFILE CHAMBER**

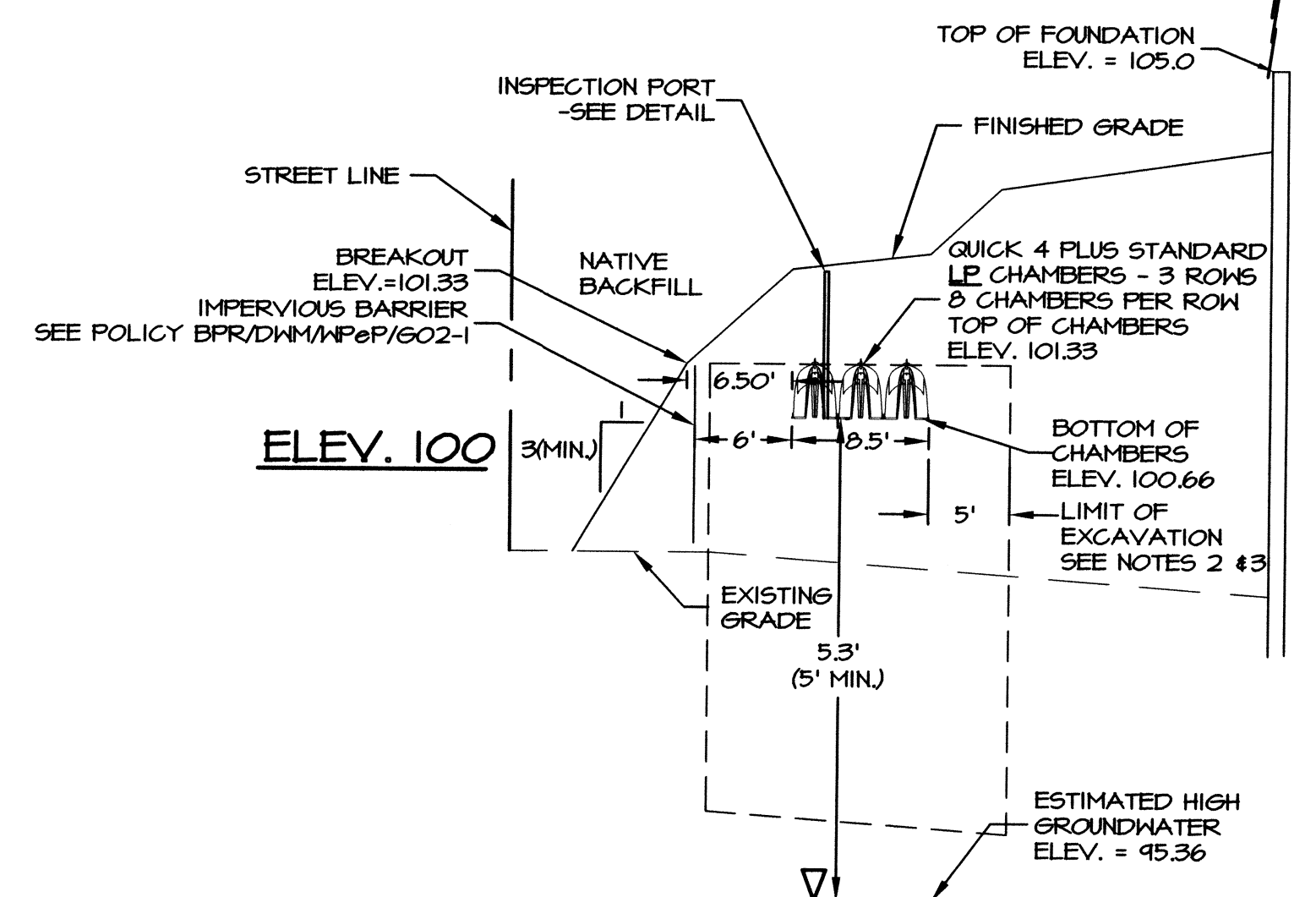
**PLANTING SCHEDULE**

SYMBOL	QUANTITY	COMMON NAME	SCIENTIFIC NAME	SIZE
IVF	4	WINTERBERRY	ILEX VERTICILLATA (FEMALE)	3'-4" BxH
VR	5	NORTHERN ARROWHOOD	VERBURNUM ROGNITUM	3'-4" BxH



**QUICK4 PLUS STANDARD LOW PROFILE CHAMBER TYPICAL BED PROFILE DETAIL**

SCALES: HORIZONTAL 1"=10'  
 VERTICAL 1"=2'



**QUICK4 PLUS STANDARD LOW PROFILE CHAMBER TYPICAL BED SECTION DETAIL**

SCALES: HORIZONTAL 1"=10'  
 VERTICAL 1"=2'

**DEEP OBSERVATION HOLE 1**  
 ORIGINAL ELEVATION - 98.03

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
0 - 12"	FILL & A	SANDY LOAM	10 YR 4/3		MASSIVE	FRAGILE	SOME FILL, GRAVELLY
12" - 34"	Bw	SANDY LOAM	10 YR 6/3		MASSIVE	FRAGILE	GRAVELLY
34" - 92"	C	M-C SAND	2.5 Y 3/3		48" COMM., DIST., COARSE	SINGLE GR.	LOOSE

STANDING WATER - 78" (ELEV. 91.53) WEeping WATER - 70" (ELEV. 92.00)  
 ESTIMATED SEASONAL HIGH GW - 40" (ELEV. 94.70) PERC. A @ 40" + 18" = 1 MPI  
 REMOVE TO 3" INTO C HORIZON

**DEEP OBSERVATION HOLE 2**  
 ORIGINAL ELEVATION - 99.33

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
0 - 7"	FILL & A	SANDY LOAM	10 YR 4/3		MASSIVE	FRAGILE	SOME FILL, GRAVELLY
7" - 37"	Bw	SANDY LOAM	10 YR 6/3		MASSIVE	FRAGILE	GRAVELLY
37" - 101"	C	M-C SAND	2.5 Y 3/3		48" COMM., DIST., COARSE	SINGLE GR.	LOOSE

STANDING WATER - 85" (ELEV. 92.25) WEeping WATER - 81" (ELEV. 92.58)  
 ESTIMATED SEASONAL HIGH GW - 48" (ELEV. 95.33) REMOVE TO 3" INTO C HORIZON

**DEEP OBSERVATION HOLE 3**  
 ORIGINAL ELEVATION - 99.28

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
0 - 9"	FILL & A	SANDY LOAM	10 YR 4/3		MASSIVE	FRAGILE	SOME FILL, GRAVELLY
9" - 36"	Bw	SANDY LOAM	10 YR 6/3		MASSIVE	FRAGILE	GRAVELLY
36" - 101"	C	M-C SAND	2.5 Y 3/3		48" COMM., DIST., COARSE	SINGLE GR.	LOOSE

STANDING WATER - 85" (ELEV. 92.20) WEeping WATER - 81" (ELEV. 92.53)  
 ESTIMATED SEASONAL HIGH GW - 48" (ELEV. 95.28) REMOVE TO 3" INTO C HORIZON

**DEEP OBSERVATION HOLE 4**  
 ORIGINAL ELEVATION - 99.36

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
0 - 12"	FILL & A	SANDY LOAM	10 YR 4/3		MASSIVE	FRAGILE	SOME FILL, GRAVELLY
12" - 35"	Bw	SANDY LOAM	10 YR 6/3		MASSIVE	FRAGILE	GRAVELLY
35" - 102"	C	M-C SAND	2.5 Y 3/3		48" COMM., DIST., COARSE	SINGLE GR.	LOOSE

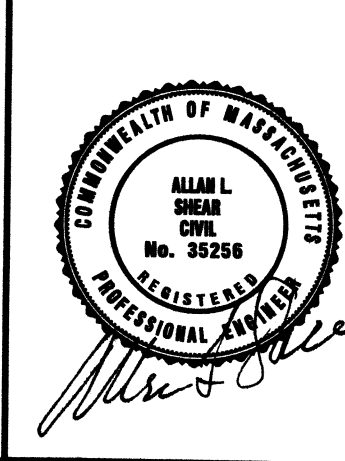
STANDING WATER - COLLAPSED  
 ESTIMATED SEASONAL HIGH GW - 48" (ELEV. 95.36) WEeping WATER - 82" (ELEV. 92.53)  
 PERC. B @ 43" + 18" = <math><2 \text{ MPI}</math> (UNABLE TO SATURATE)  
 REMOVE TO 3" INTO C HORIZON

WITNESS: BETH HALLAL, SEEKONK BOARD OF HEALTH  
 TESTING PERFORMED BY: CAPUTO AND WICK LTD.  
 DATE OF SOIL TEST - FEBRUARY 4, 2014

**LEGEND**

100	EXISTING CONTOUR	+ 100.00	FINISHED SPOT GRADE
-100	PROPOSED CONTOUR	X 100.00	EXISTING SPOT GRADE
MA, STD.	MASSACHUSETTS STANDARD	T.C.	TOP OF CURB
INV.	INVERT OF PIPE	B.C.	BOTTOM OF CURB
P. V. C.	POLYVINYL CHLORIDE PIPE	S	PROPERTY LINE
S.D.S.	STANDARD DIMENSION RATIO	ST	SEPTIC TANK
R. C. P.	REINFORCED CONCRETE PIPE	DB	DISTRIBUTION BOX
CONG.	CONCRETE (BIT. OR P. C.)	PT	PERCOLATION TEST
BIT.	BITUMINOUS		DEEP OBSERVATION HOLE
P. C.	POTLAND CEMENT		
TYP.	TYPICAL		

**LOT INFORMATION**  
 PREPARED FOR - SCOTT SMITH  
 25 RACINE AVENUE  
 ASSESSORS PLAT NO. 29, LOT 44 & 47  
 ZONE - R-1  
 TOTAL AREA = 15,408 S.F.



**SEWAGE DISPOSAL SYSTEM**  
 25 RACINE AVENUE  
 ASSESSOR'S PLAT 29 - LOTS 44 & 47  
 SEEKONK, MASSACHUSETTS

**CAPUTO AND WICK LTD.** DATE: MAY 5, 2014  
 SHEET: 1

1150 PAWTUCKET AVE.  
 RUMFORD, R.I. 02916  
 401-434-8880

I CERTIFY THAT I HAVE CONTACTED THE SEEKONK WATER DISTRICT FOR THE LOCATION OF THE EXISTING WATER SERVICE CURB STOP FOR PLAT 29, LOTS 44 & 47 AND WAS INFORMED THAT THERE IS NO CURB STOP CURRENTLY FOR THIS LOT. THE PROPOSED DWELLING WILL BE SERVED BY A PRIVATE WELL TO BE INSTALLED IN CONFORMANCE WITH THE SEEKONK BOARD OF HEALTH REGULATIONS.