

Sheet:
 Property ID:
 Lot #:
 File #:
 Code:

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner:

Applicant:

Address:

Date Evaluated: 3/20/07

Proposed Facility: 4 BEARCOM HOME Design Flow (.1949): 480 gpd

Property Size:

Location of Site:

Property Recorded:

Water Supply: Public Individual Well

Spring Other

Evaluation Method: Auger Boring Pit

Cut

Type of Wastewater: Sewage Industrial Process

Mixed

P R O F I L E #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941		OTHER PROFILE FACTORS				Profile Class & LTAR
			1941 Structure/ Texture	1941 Consistence Mineralogy	1942 Soil Wetness/ Color	1943 Soil Depth (IN.)	1956 Saprol Class	1944 Restr. Horiz.	
1	0-3%	0-6"	SBK CL	F2 ss/np	2.57 7/2 @ 13"				US
2		0-6"	SBK SCL	F2 ss/np					US/PS(FILL) .1
		6-30"	SBK C	F1 s/p	7.57 @ 7/1 @ 21"				
3		0-12"	SBK SCL	F2 ss/np					US/PS(FILL) .1
		12"	SBK C	F1 s/p	7.57 @ 7/1 @ 19"				
4		0-6"	SBK SCL	F2 ss/np					PS .4
		12-40"	SBK C	F1 s/p	7.57 @ 7/1 @ 27"				
57		0-16"	SBK SCL	F2 ss/np					US/PS FILL .1
		10-36"	SBK C	F1 s/p	CR 2 @ 18"				

Description	Initial System	Repair System
Available Space (.1945)	✓	✓
System Type(s)	FILL	FILL
Site LTAR	.1	.1

Other Factors (.1946): _____
 Site Classification (.1948): PS
 Evaluated By: OS
 Others Present: BM

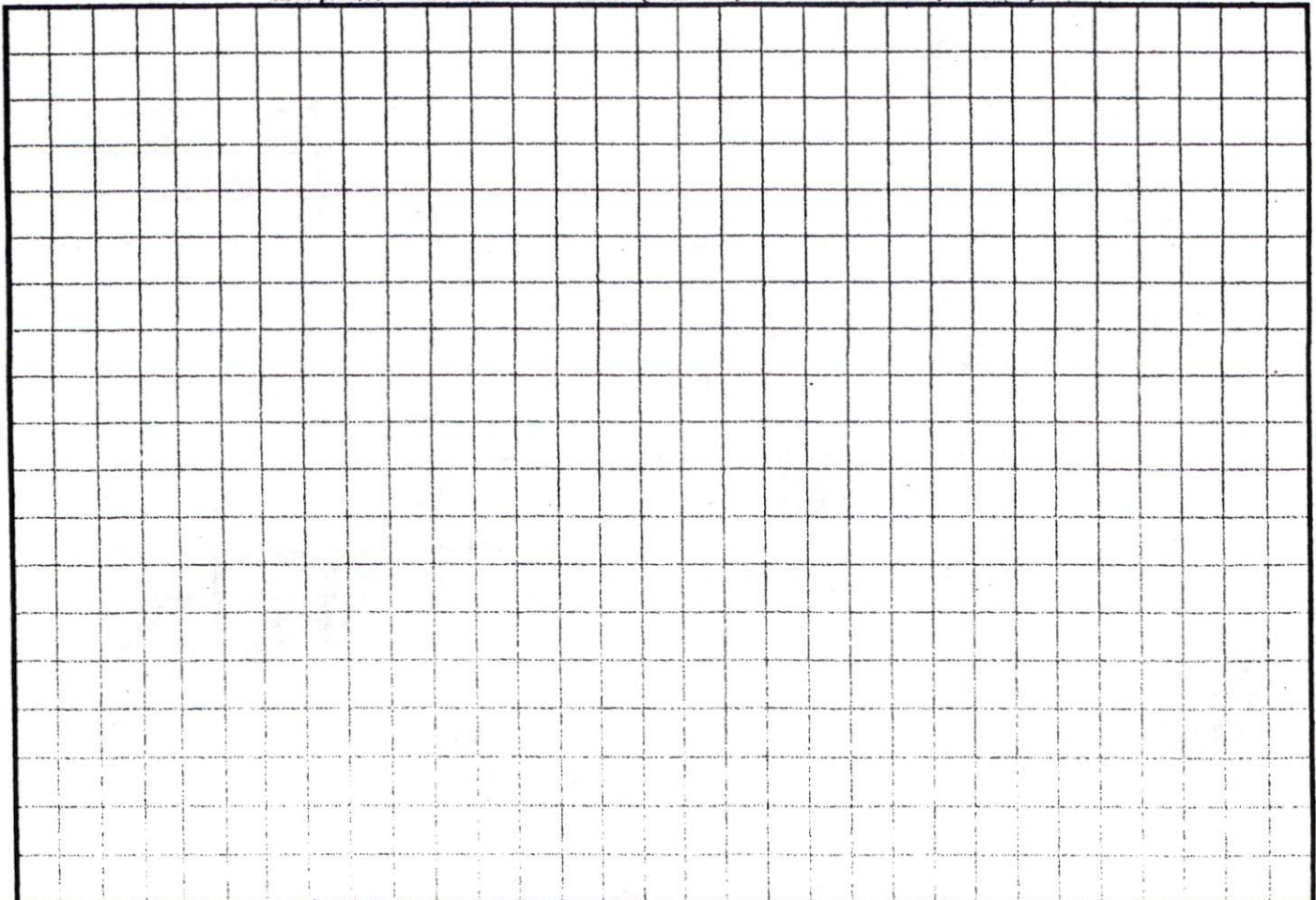
COMMENTS: _____

<u>LANDSCAPE POSITIONS</u>	<u>GROUP</u>	<u>TEXTURES</u>	<u>.1955 LTAR</u>	<u>CONSISTENCE MOIST</u>	<u>WET</u>
R-RIDGE	I	S-SAND	1.2 - 0.8	VFR-VERY FRIABLE	NS-NON-STICKY
S-SHOULDER SLOPE		LS-LOAMY SAND		FR-FRIABLE	SS-SLIGHTLY STICKY
L-LINEAR SLOPE	II	SL-SANDY LOAM	0.8 - 0.6	FI-FIRM	S-STICKY
FS-FOOT SLOPE		L-LOAM		VFI-VERY FIRM	VS-VERY STICKY
N-NOSE SLOPE	III	SI-SILT-	0.6 - 0.3	EFI-EXTREMELY FIRM	NP-NON-PLASTIC
H-HEAD SLOPE		SIL-SILT LOAM		SP-SLIGHTLY STICKY	
CC-CONCLAVE SLOPE		CL-CLAY LOAM		P-PLASTIC	
CV-CONVEX SLOPE		SCL-SANDY CLAY LOAM		VP-VERY PLASTIC	
T-TERRACE		SICL-SILTY CLAY LOAM			
FP-FLOOD PLAN	IV	SIC-SILTY CLAY	0.4 - 0.1		
		C-CLAY			
		SC-SANDY CLAY			

STRUCTURE
 SG-SINGLE GRAIN
 M-MASSIVE
 CR-CRUMB
 GR-GRANULAR
 SBK-SUBANGULAR BLOCKY
 ABK-ANGULAR BLOCKY
 PL-PLATY
 PR-PRISMATIC

MINERALOGY
 SLIGHTLY EXPANSIVE
 EXPANSIVE

Show profile locations and other site features (dimensions, reference or benchmark, and North).



Asst./Deputy Register of Deeds

SCALE 1 TO 60

CL..... Centerline
 CP..... Computed Point
 FRRS... Found Railroad Spike
 SRRS..... Set Railroad Spike
 AXF..... Found Axle
 FLK..... Found Lightwood Knot

SITE PLAN APPROVAL

DISTRICT None USE DwM H

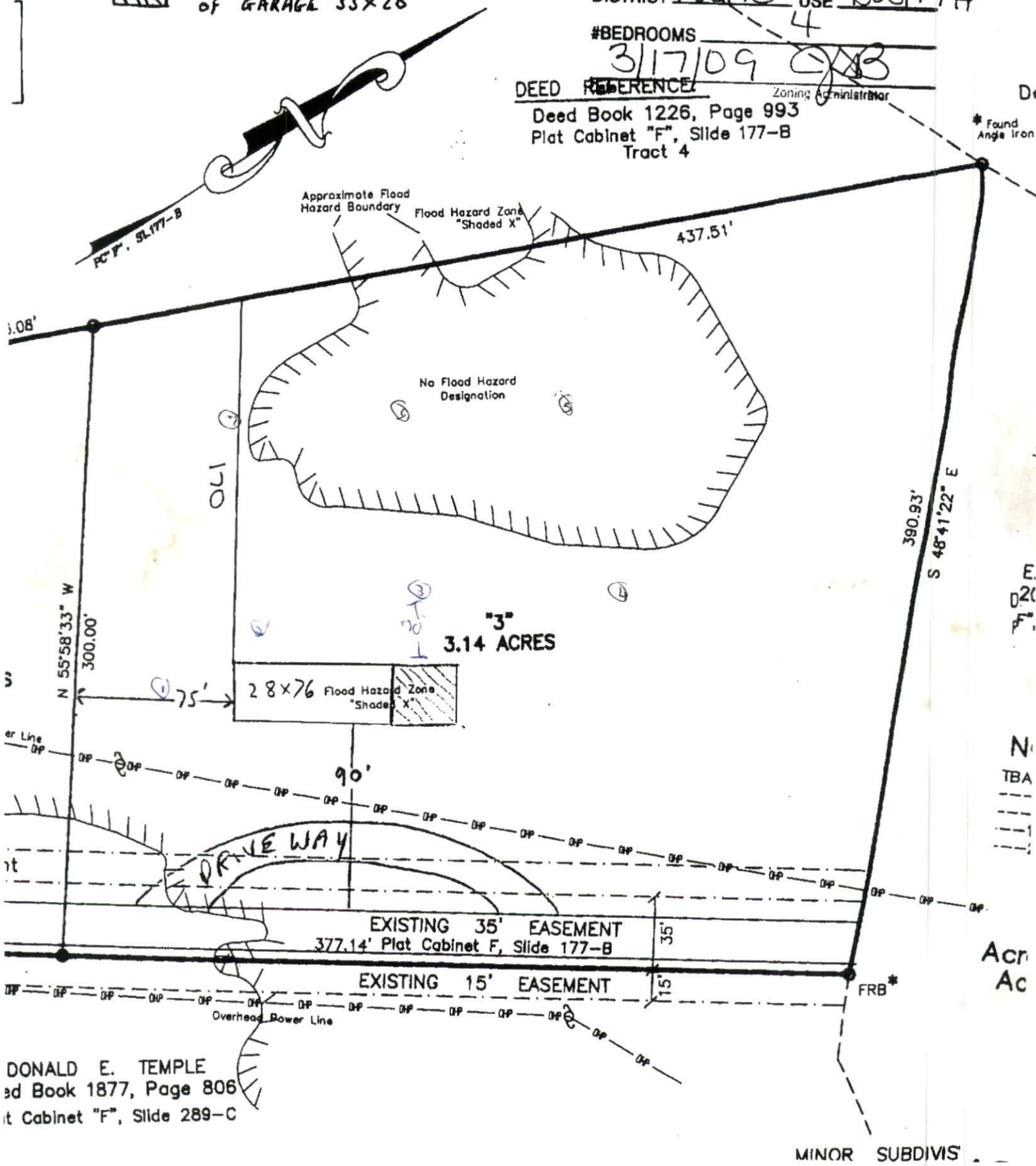
#BEDROOMS 4

3/17/09 QAB

DEED REFERENCE Zoning Administrator

Deed Book 1226, Page 993
Plat Cabinet "F", Slide 177-B
Tract 4

 INDICATES FUTURE SITE OF GARAGE 33x28



DONALD E. TEMPLE
Deed Book 1877, Page 806
Plat Cabinet "F", Slide 289-C

MINOR SUBDIVISION

Guideline For Design and Installation of Fill Systems with Conventional Trenches

I. Trench and Fill Specifications

<u>IV</u>	- Soil Texture Group	<u>180</u> ft.	- Length of Fill
<u>.1</u> gpd/sq. ft.	- Acceptance Rate	<u>104</u> ft.	- Width of Fill
<u>480</u> gpd	- Sewage Flow	<u>11232</u> sq. ft.	- Total Fill Area
<u>4800</u> sq. ft.	- Trench Bottom	<u>12</u> in.	- Depth of Sand
<u>3</u> ft.	- Trench Width		- Volume of Sand
<u>160</u> ft.	- Total Trench Length	<u>6</u> in.	- Depth of Topsoil
<u>10</u>	- Number of Trenches		- Volume of Topsoil
<u>160</u> ft.	- Length of each Trench		

II. Site Preparation

1. Place flags at the 4 corners of the area to be filled designated on the improvement permit. Failure to place fill in the permitted area may result in the fill having to be moved or the permit revoked.
2. Do not work when the site is wet. Working on soil when wet can destroy soil structure making the site unsuitable for a Construction Authorization.
3. Remove all above ground vegetation and root mat from area to be filled without removing topsoil. Removal of soil can result in revocation of the permit.
4. Disk the area to be filled to a depth of 6 inches to break up root mat.

III. Placement Of Fill

1. Add 3 to 4 inches of approved sand fill to area and disk again to thoroughly mix the original soil and the fill. Approved sand fill is a sand or loamy sand.
2. Add more sand fill to achieve a uniform height of SD (see diagram) in the middle of the fill area.
3. The fill shall be tapered from the top edge of the fill to the ground surface 2 feet from the boundary of the fill area. The top edge of fill is located 5 feet from the proposed trenches.

4. Six (6) inches of finer textured fill shall be placed over the sand fill and extend to the boundary of the fill area. Finer texture is necessary to establish a vegetative cover which will prevent erosion of the fill. Fill used for cover shall be a sandy loam, loam, silt loam or sand clay loam texture. See CD dimension of diagram. Side slope shall be 1 to 4 except for site with Soil Texture Group 1 which can have a side slope of 1 to 3.
5. Contact Health Department for inspection of fill before constructing trenches. A Construction Authorization must be obtained before proceeding.

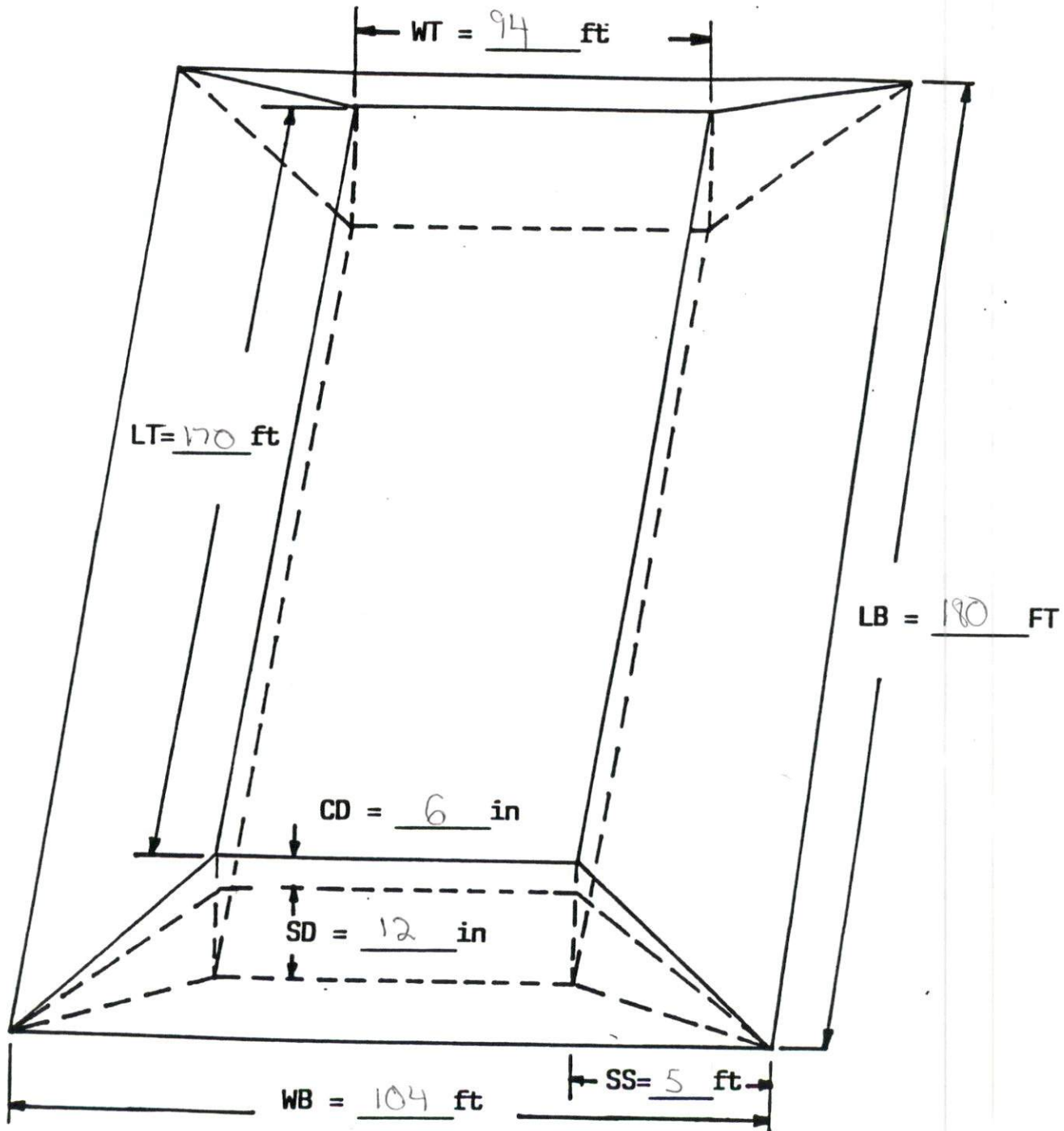
IV. Trench Construction

1. The outside edge of any trench shall be 5 feet from the top of the side slope of the fill.
2. This system is designed with 10 trenches which are 160 ft. long and 3 ft. wide. Trenches must have a spacing of 9 ft. on centers.
3. Trench bottoms shall be no deeper than 18 inches below finished grade of the fill.
4. Trench bottoms shall be constructed level.
5. Distribution boxes shall be located 5 feet from the top edge of the fill.
6. Call the Health Department for inspection after the trenches are finished.

V. Landscaping

1. The fill must be shaped to shed surface water and shall be stabilized with grass or other suitable cover to prevent erosion.
2. Vegetation must be maintained after established. Grass must be mowed.
3. Additional fill beyond what has already been specified may be necessary to cover and landscape around the septic tank.
4. Call the Health Department for inspection after landscaping is complete. The Operation Permit allowing use of the system is issued at this time.

DIMENSIONS OF FILL SYSTEM



DEFINITIONS

WT - width of top
LT - length of top
WB - width of bottom
LB - length of bottom

SS - side slope
SD - sand depth
CD - cover depth

Calculation of Fill Volume

Total volume of fill (TVF)

$$\text{TVF} = [(\text{LT} + \text{LB}) / 2 \times (\text{WT} + \text{WB}) / 2] \times \text{TFD}$$

$$\begin{aligned} &= [(\underline{170} \text{ FT.} + \underline{180} \text{ FT.}) / 2 \times (\underline{94} \text{ FT.} + \underline{104} \text{ FT.}) / 2] \times \underline{1.5} \text{ FT.} \\ &= \underline{25968} \text{ CU. FT.} \end{aligned}$$

Handwritten calculations: 350 / 2 = 175; 198 / 2 = 99; 99 x 1.5 = 148.5

(DIVIDE BY 27 CU. FT. TO OBTAIN CU. YDS.)

$$= \underline{962} \text{ CU. YDS.}$$

Total volume of sand (TVS)

$$\text{TVS} = [(\text{LT} + \text{LB} - 4) / 2 \times (\text{WT} + \text{WB} - 4) / 2] \times \text{SD}$$

$$\begin{aligned} &= [(\underline{170} \text{ FT.} + \underline{180} \text{ FT.} - 4) / 2 \times (\underline{94} \text{ FT.} + \underline{104} \text{ FT.} - 4) / 2] \times \underline{1} \text{ FT.} \\ &= \underline{1678} \text{ CU. FT.} \end{aligned}$$

Handwritten calculations: 346 / 2 = 173; 194 / 2 = 97

(DIVIDE BY 27 CU. FT. TO OBTAIN CU. YDS.)

$$= \underline{622} \text{ CU. YDS.}$$

Total volume of cover (TVC)

$$\text{TVC} = \text{TVF} - \text{TVS}$$

$$= \underline{962} \text{ CU. YD.} - \underline{622} \text{ CU. YD.}$$

$$= \underline{340} \text{ CU. YD.}$$

Key to abbreviations:

LT = length of top
LB = length of bottom
WT = width of top
WB = width of bottom

TFD = total fill depth
= SD + CD
SD = sand depth
CD = cover depth