



CLASS # 1

REMOVAL EFFICIENCIES
BASED ON AVERAGE OF VALUES
11 APRIL 1993 -- 28 OCTOBER 1993

	INFLUENT AVERAGE	EFFLUENT AVERAGE	REDUCTION	PERCENT REDUCTION
BIOCHEMICAL OXYGEN DEMAND MG/L	170	7	163	95.8 %
SUSPENDED SOLIDS MG/L	200	11	189	94.5 %

THE AQUAROBIC INTERNATIONAL, INC.
SAMPLE FILTER BED SYSTEM DRAWING
ON 120 MIN/INCH SOIL
WITH A MINIMUM OF 59" SEPARATION TO RESTRICTION

NOTES:
THE CONCEPT HEREIN DISCLOSED IS PROPRIETARY WITH AQUAROBIC INTERNATIONAL, INC. AND MAY NOT BE REPRODUCED OR USED WITHOUT PRIOR WRITTEN AUTHORIZATION.

NOTES:

600 GAL. / DAY AQUAROBIC MINI-PLANT™ AND FILTER BED SYSTEM ON TOP OF 12" OF 120 MINUTES / INCH SOIL TO LIMITING ZONE. (SAMPLE DRAWING)

**FILTER BED TOP SURFACE = 600 GAL./DAY
AT 4 GAL./SQ.FT./DAY = 150 SQ.FT. AREA
ACTUAL = 12'- 6" X 12' - 6" = 156.25 SQ.FT.**

**TOTAL RECOMMENDED CONTACT AND MANTEL AREA:
54'-6" X 54'-6" = 2,970 SQ.FT. AREA
2,970 SQ.FT. DIVIDED BY 600 GAL. = 0.20 GAL./SQ.FT./DAY APPLICATION RATE.**

**CONCRETE SAND 12" DEEP = 3,249 CU.FT. = 121 CU.YARDS
3/8" CLEAN PEA GRAVEL = 3,874 CU.FT. = 144 CU. YARDS
TOP SOIL ON TOP OF TOTAL BED AREA = 134 CU.YARDS**

PERC. 120 + MIN./ INCH USE FORMULA: $A = \frac{Q \times T}{25}$

**A = AREA
Q = QUANTITY OF WASTEWATER / DAY.
T = PERC. TIME IMMEDIATELY BELOW SAND LAYER**

TOTAL AREA = $\frac{600 \times 120}{25} = 2,880$ SQ. FT. REQUIRED

**600 GAL./DAY X 120 MIN./INCH = 72,000
72,000/25 = 2,880 SQ. FT. AREA OF CONTACT & MANTEL (SAND AREA)**

RECOMMENDED MINIMUM 54'- 6" X 54'- 6" = 2,970 SQ.FT

**PERK ABOVE 120 REQUIRED A DOUBLE RING INFILTROMETER TEST
THE PLANTING OF THE WATER LOVING TREES AND
KENTUCKY 31 TALL FESCUE GRASSES OVER THE TOTAL AREA INCLUDING THE
FILL MATERIAL THAT OVERLAPS THE CONTACT AREA IS PART OF THE TOTAL
AQUAROBIC INTERNATIONAL, INC.
MINI-PLANT & FILTER BED SYSTEM.**

WE RECOMMEND HYDRO SEEDING THE TOTAL AREA INCLUDING 3 TO 1 SLOPES

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Scale: N.T.S. Mini-Plant Model: F54291- -230V By: D. E. Pavon

**THE MINI-PLANT AND FILTER BED SYSTEM
600 GPD. FOR 120 MINUTE SOIL
ON FLAT GROUND SAMPLE DRAWING ONLY**

Drawing # 42104-3456 Date: 12 / 30 / 2009