

Equation 4-15 shows the calculation for the absorption bed area.

$$\frac{\text{Design Flow (GPD)}}{\text{Soil Application Rate (GPD/ft}^2\text{)}} \quad \text{Equation 4-15. Effluent application area.}$$

6. Slope of all sides must be 3 horizontal to 1 vertical (3:1) or flatter.
7. Sand fill area must be as long and narrow as practical, with plan view dimension G exceeding dimension F (Figure 4-30).
8. Slope correction factors as provided in Table 4-21 should be used to determine the downslope width of the medium sand fill for sloped sites.
9. Slope correction factors as provided in Table 4-22 should be used to determine the upslope width of the medium sand fill for sloped sites.

Table 4-21. Downslope correction factors for sloped sites.

Slope (%)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Correction Factor	1.03	1.06	1.10	1.14	1.18	1.22	1.27	1.32	1.38	1.44	1.51	1.57	1.64	1.72	1.82	1.92	2.04	2.17	2.33	2.5

Table 4-22. Upslope correction factors for sloped sites.

Slope (%)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Correction Factor	0.97	0.94	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.75	0.73	0.72	0.7	0.69	0.67	0.66	0.65	0.64	0.62

Figure 4-30 and Figure 4-31 can be used with Table 4-23 and Table 4-24 (sand mound design checklist) for flat and sloped sites.

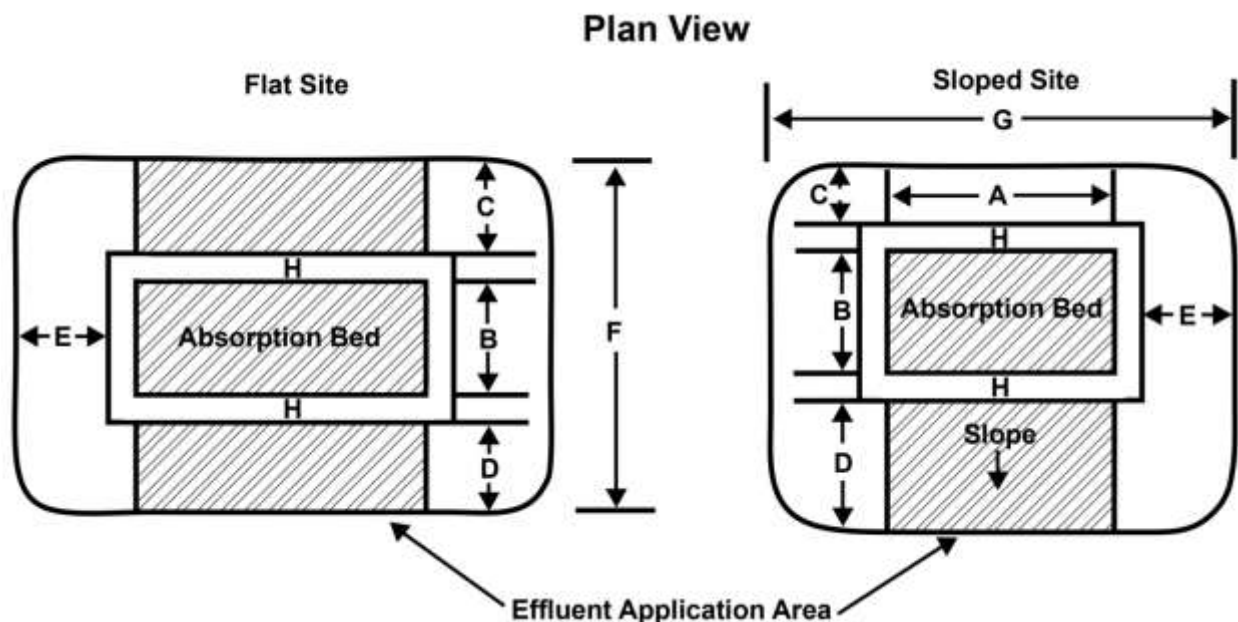


Figure 4-30. Design illustrations for sand mound installation on flat and sloped sites (use with sand mound design checklist).