**HOW TO DETERMINE THE PROPER DIMENSIONS OF THE SITE PREPARATION
(A SOIL PAD OR CROWNED AND GRADED AREA UNDER THE HOME)
REQUIRED FOR A SINGLE WIDE MOBILE HOME INSTALLATION**

W = ½ of the width of the home, ft.

D = distance of pad from the edge of the home = 10 ft

d = Depth of the soil at the center of the home, inches.

d = (W + D)/2

example calculation:

A singlewide home is 14 ft wide by 60 ft long. The **dimensions of the soil pad** for this home will be
14 ft (width of home) + 20 ft (10 ft on each side of the home) = 34 ft wide
60 ft (length of home) + 20 ft (10 ft on each end of the home) = 80 ft long

Calculation for the depth of soil at the center of the home for a pad with a ½ inch per foot slope :

W = 7 ft

D = 10 ft

d = (7 + 10)/2 = 17/2 = 8.5 inches

Depth of soil at center of pad, inches = **d**

WS= ½ width of soil pad, ft

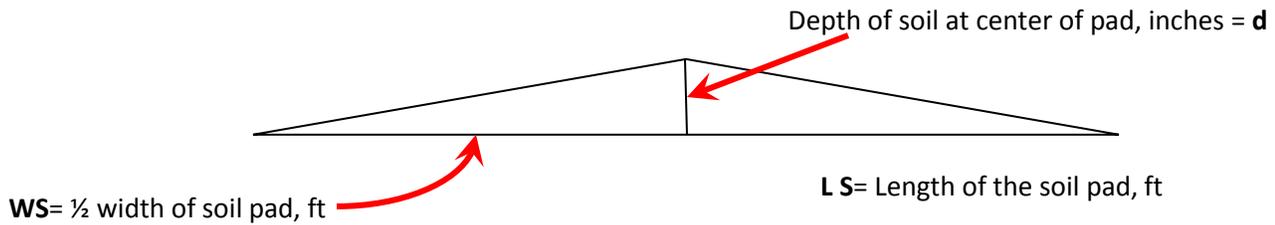**L S**= Length of the soil pad, ft

Figure 1a.

To perform an **approximate calculation of the volume of material to create the soil pad** the following equation can be used:

$$\frac{(d/12) \; X\textbf{WS} \; x \; \textbf{LS}}{27 \; \text{cu. Ft/yd}} \; = \; \text{Approximate number of yards of material to build the soil pad.}$$

Example calculation:

For a single wide home that is 14 ft X 60 ft in size the following is a calculation of the estimated number of yards of soil material required to create the soil pad with the ½ inch slope :

For the above size of the home the dimensions of the soil pad will be 36 ft wide by 100 ft long. Soil pad will extend out 10 ft beyond all sides of the home.

If:
d = depth of soil at the center of the soil pad, inches = 8.5
WS = ½ the width of the soil pad = ½ x 34 ft = 17 ft
LS = Length of the soil pad = Length of the home (60 ft) + 20 ft = 80 ft

Using the above equation :

$$\frac{(d/12) \; x \; WS \; X \; LS}{27} \; = \; \frac{0.75 \; X \; 17 \; X \; 80}{27} \; = \; \text{Approx. 38 \; yards of material will be needed.}$$

<mark>Loose sands or loose gravel or other material having a soil bearing capacity less than 2000 pounds per square foot (psf) are not to be uses as the soil pad fill material.</mark>