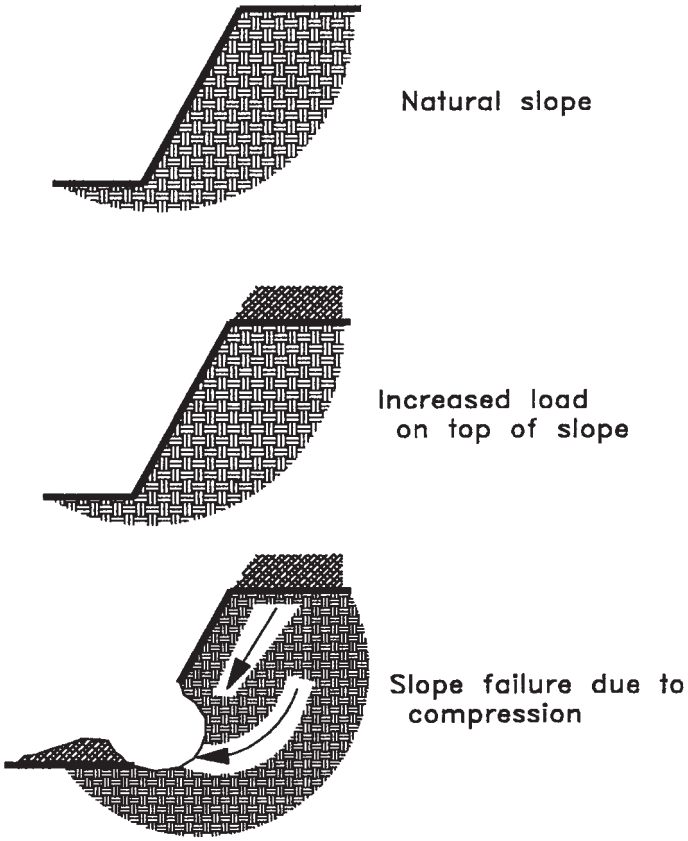

Figure 3.9 Slope failure caused by an increased load on top of the slope, which compresses the underlying material.

design in ways such as those illustrated in Figs. 3.9 through 3.12. Changes in surface conditions will alter the drainage conditions on the surface and subsurface. These changes may in turn impact the stability of the slope by increasing the amount of water in the slope material or by causing the erosion of the surface material. Providing adequate surface and subsurface drainage may be required. In many cases slope failure caused by changes in subsurface drainage is difficult to predict without fairly intensive study, and so these problems may emerge and have to be solved after the site has been altered. The location of facilities or appurtenances on fill or in the zone of influence for a slope should also be carefully evaluated.

Retaining walls

It is often not practical to consider reducing the weight or location of features, and so it is necessary to increase the slope's resistance to failure. Methods of