

CHAPTER 4
GEOLOGICAL CONSIDERATIONS
SECTION 18 – INCLINATIONS OF STRATA

0401. Joint Systems. Rock formations are normally traversed by joint systems along which strata may tend to slide. There are often two joint systems one parallel to the dip of the rock bed (see Figure 4.1), the other at right angles to it (see Figure 4.2 and 4.3)

Sedimentary rocks contain bedding planes frequently in the form of the bands of clay and in harder rocks the major joints may be sufficiently open for water to have deposited clay within them.

If such joints dip downwards to an open slope below the road or less steeply than the sides of a cutting there is a danger that slabs of rock will slide and that landslips may occur after wet periods (see Figures 4.1 and 4.2).

0402. Faults:- Fault planes may cut across bedding and joint systems (see Figure 4.3). Their effects are localized but they are particularly dangerous as they are often “greased” with clay smeared along them during formation.