

VICTOR DOLMAGE

- 6 -

TUNNEL SECTION IN SOILS AND  
MIXED SOIL AND ROCK

Although it is not within the terms of this assignment to discuss soils and though it was understood in the field that Mr. Huculak would accept full responsibility for soil stability, nevertheless the writer feels that the following geological observations concerning the soils in question may possibly be helpful. Particularly since some of the points stressed are not always taken into account in customary slope stability analyses and the critical strata not always present in the samples tested. In the time available at the site it was found possible to make a detailed examination of a section of these soils exposed in road cuts and natural slopes in the immediate area and which doubtless represent the materials in which most of the western part of the tunnel will be constructed. In these soils were found many similarities to clay-silt-sand formations with which the writer over the past 20 years has had much experience - some of it rather sad - working always with soils engineers of high repute.

*Substrate*  
This clay-silt-sand formation is a lake deposit laid down in relatively quiet water which once flooded the Columbia valley up to elevations well above the 3500 foot level. Since the draining off of this lake these deposits have remained undisturbed except for the removal of large masses by stream erosion. Their fine bedding planes still remain intact and generally horizontal.

The most significant features of this formation in relation to its stability are the following:

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File/dossier K60 Plans (3)

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