

This slope has been furrowed and broken, by the drainage of the country, into a series of sand hills, which are partially covered with clumps of scrub oak, poplar and brush. It stretches from Riding Mountain south-westwards to the International boundary line, and is intersected, at intervals, by the Valleys of the White Mud, Assiniboine and other streams. The earth works on this section will be rather heavy, averaging 33,000 cubic yards per mile.

The altitude at the seventh mile is 1,268 feet. Thence to the 21st mile the country is nearly level, the altitude at that point being 1,252 feet. The surface, however, is indented with numerous small ponds and hollows. It is generally prairie, and the soil is good.

From the 21st mile, it rises gradually westward up to the 40th mile, where the altitude is 1,761 feet. The surface is rather lumpy, and partially covered with clumps and belts of poplar and scrub. The soil is good.

From the last point, the line begins to cross the Valley of the Little Saskatchewan obliquely, descending to the river, with a gradient of 53 feet per mile, for  $4\frac{1}{2}$  miles, where the altitude is 1,531 feet. The ascent to the table land on the west side of the valley, at the 49th mile, is made in  $4\frac{3}{4}$  miles, with gradients varying from 36 to 53 feet per mile.

The earthwork in crossing the valley will be moderate, averaging a little over 16,000 cubic yards per mile, for nine miles, and the river can be bridged with one span of 120 feet at a height of 15 feet above the surface of the water.

Recently, a town plot (Rapid city) has been laid out in this valley, about  $1\frac{1}{2}$  miles north of the line where a saw and a grist mill have been erected. There are also a few farm homesteads, recently taken up, on each side of the valley near the line.

The altitude at the west side of the valley near the 49th mile is 1,696 feet. Thence the course of the line is straight, up to the 91st mile on the left bank of the valley of the Assiniboine, where the altitude is 1,509 feet. The inclination is very gradual, but the surface of the country is rather lumpy, slightly undulating, indented with numerous ponds and narrow coulees. It is chiefly prairie, interspersed with clumps of poplar and brush. The soil is good till approaching the valley of the Assiniboine, the slopes of which, and a belt of the country adjoining, are composed of boulders and gravel, covered with a thin coating of vegetable soil.

From the 91st to the 96th mile the line descends obliquely the slope of the valley, with a gradient of 53 feet per mile, reaching the bottom of the valley near the mouth of Bird's-tail Creek, where the altitude is 1,236 feet. The earth works in descending from the table land to the bottom of the Valley of the Assiniboine will be heavy, averaging 39,000 cubic yards per mile for five miles.