The Canadian Engineer

A weekly paper for engineers and engineering-contractors

CASCADE RIVER POWER DEVELOPMENT

DESCRIPTION OF THE PROPOSED HYDRO-ELECTRIC PLANT AT BANFF, ALTA., FOR THE DOMINION PARKS BRANCH, DEPARTMENT OF THE INTERIOR.

N the following article, taken from a report of C. H. Mitchell, C.E., consulting engineer to the Water Power Branch, Department of the Interior, the feasibility and commercial economic development is considered of a hydro-electric power project capable of supplying power to be used by the Dominion Parks Branch

Elec of April 2010

The Copacity State o

Fig. 1.—General Plan of Minnewanka Storage Dam of the Calgary Power Company.

to furnish the town of Banff, Alta., with light, transportation, etc., and to develop various electrical undertakings in the Rocky Mountains Park in the vicinity of Banff.

The Cascade River, where flowing through the canyon in which it is proposed to develop the power, is immediately below the confluence of Devil's Creek, which empties from Lake Minnewanka. The total area drained by these rivers is about 213 sq. mi., and lies wholly within the Rocky Mountains; much of the water originates in mountain lakes and some in glaciers. Lake Minnewanka has an area of about 14 sq. mi., and was, during 1912, converted into a storage reservoir for power purposes to improve the power facilities of the Bow River in its power-producing reaches in the foot-hills of the mountains.

The power site is about 7 miles from the town of Banff. The nearest railway point is at Bankhead coal mines, three miles from the site. The small town site, one mile above, on the shore of Lake Minnewanka, is likely to become almost entirely a summer place; the village of Bankhead has a mining population of permanent character serving the mines. The power site and all the other portions of the project lie wholly within the Rocky

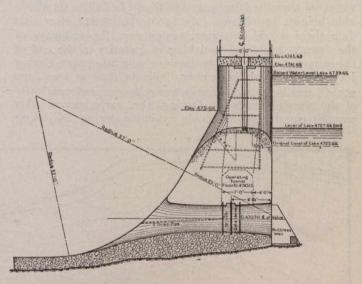


Fig. 2.—Section of Minnewanka Storage Dam.

Mountains Park and thus all water privileges, lands and rights of way are secured for the undertaking, the title being in the Crown through the Department of the Interior.

The natural water supply has been very much improved by regulating works which have been constructed just below the confluence of the Cascade River and Devil's Creek by the Calgary Power Company, Limited, under the supervision of the Department of the Interior. Primarily, these works are for increasing the water supply, especially in the winter months, to the Calgary Power Company's plants, one at Horseshoe Falls, and one more recently constructed, at Kananaskis Falls, on the Bow River, about 35 miles distant by river. It is contemplated, however, in the agreement entered into by the