

## ORIGINAL DAM, COQUITLAM LAKE

The original dam was built across the Coquitlam River a little below the outlet of the lake. It is a rock filled crib structure of the over-flow type, 170 feet in length, with the crest 443 feet above sea level and about 11 feet above the original level of the lake. It is 113 feet in length along the crest, and 9 feet of free board is provided.

## NEW COQUITLAM DAM

The precipitation and run-off records of Coquitlam Lake showed that in order to utilize the entire run-off from the watershed, a dam to raise the level of the lake another 60 feet was required. The site of the new dam at Coquitlam Lake is a little below the old crib dam, now buried in the upper toe of the new one. A dam of the hydraulic fill type with heavy rock toes was decided upon owing to the impracticability of obtaining a satisfactory foundation for a masonry dam, as bedrock was only revealed on the eastern portion of the site.

The new dam is built upon a natural barrier formed at the outlet of the lake by a receding glacier, and is formed of fine blue and grey glacial boulder clays together with interstratified layers of cemented gravel and boulders.

The new dam was built with its crest at El. 518 and with spillway at El. 503. The maximum height of the dam above the lowest point of foundation on the centre line is 100 feet; the extreme width at the base is 655 feet, and the length along the crest including



Coquitlam-Buntzen Development. General view of Coquitlam Dam with water flowing over the spillway.