## Province of British Columbia

secondary intake is placed within the tower, so designed that water may be drawn off at any desired elevation.

From the intake tower the water enters a tunnel about 2,000 feet in length, which passes under the spillway and also under the sluice tunnel. The lower end of the tunnel is connected by means of a pipe line, with a distributing chamber from which the water supply mains for New Westminster emerge. For the protection of the New Westminster water supply, extensive clearing operations were carried out along the shores of the Lake.

## COQUITLAM-BUNTZEN TUNNEL

The total length of the tunnel which conveys water from Coquitlam Lake to Lake Buntzen is 12,650 feet. This work was begun in 1902 and completed in 1903. A square section about 9 feet by 9 feet with rounded corners was adopted, and it was designed to carry 500 cubic feet per second.

The enlargement of this tunnel formed part of the programme in connection with the extension of the Lake Buntzen Plant. The section of the tunnel was increased to 192 square feet, which is sufficient for the ultimate development of the Coquitlam-Buntzen scheme. The work of enlargement was completed in June, 1911.

The intake of the Coquitlam-Buntzen Tunnel was rebuilt when the new dam was constructed; it consists of a heavy masonry retaining wall founded on bedrock and built against the steep hill above the tunnel entrance. This entrance is protected by a trash rack 41 feet wide and 35 feet high, supported by heavy steel cables and counterbalanced,



Coquitlam-Buntzen Development. Intake Valve House, Plant No. 2, looking towards Lake Buntzen.