

At the outlet of Lac du Bonnet are two falls about $1\frac{1}{2}$ miles apart; these can be combined at the lower fall, and at this site, known as the McArthur site, 18 feet would be available, which, under ordinary minimum flow conditions, will yield 25,250 continuous horse-power and 32,700 horse-power with regulated flow. Lac du Bonnet will form a pond for this plant 38 square miles in area and of immense value in carrying peak loads.

Four miles or so downstream we come to a series of falls known as the Du Bonnet Falls, which can be combined with the drop at White Mud Falls at what is known as the Du Bonnet site, 64 miles in a direct line from Winnipeg. The head available here is 58 feet, giving 81,300 continuous horse-power at ordinary minimum flow, and 105,400 horse-power with fully-regulated flow; this is probably the best site, economically, on the whole river.

The last site on the river, near where it enters Lake Winnipeg, is known as the Pine Falls site, where the fall in Silver and Pine Falls can be combined and a head of 37 feet secured, this under ordinary minimum



WINNIPEG RIVER—PINAWA CHANNEL
STREET RAILWAY COMPANY'S POWER HOUSE, SHOWING TAILRACE

flow would yield 51,900 continuous horse-power and 67,200 horse-power under regulated conditions at a cost per horse-power very little greater than for the last-mentioned site.

The Pine Falls site possesses certain attributes which offer splendid opportunities for its use as a pulp and paper manufacturing site. The entire river basin above is available as a source for pulpwood supplies. Widening of this source to include pulpwood areas adjacent to Lake Winnipeg assures access to vast pulpwood areas. Undoubtedly the site has great possibilities as a centre of development for the pulp industry.

Water will be drawn at the Pine Falls site from a deep, quiet pond direct into the turbine with a minimum disturbance, and will be entirely free from ice troubles. The power station has been designed for turbines of 10,000 horse-power capacity.