

considerable amount of renovation was done at the same time to the main structure. The Spout Baths at Whakarewarewa have been entirely repainted and renovated, and considerable repairs were effected to the bath attendant's residence also. In addition to the foregoing special works, the usual maintenance work in connection with the various baths, Sanatorium, and other departmental buildings, including the staff residences at Te Wairoa, Waimangu, and Okere, was attended to.

*Water-supply.*—The outstanding feature of the year's operations has been the completion of the work of substituting cast-iron mains for the previous system of wooden water-mains. There are now no wooden pipes in the system, and the maintenance costs will be very considerably reduced. The work was primarily under the control of the Public Works Department, but as that Department has no mechanical establishment in Rotorua the actual work was carried out in its entirety by this Department's waterworks staff, augmented by temporary labour. During the year seventy-one new consumers were connected. The progress of the town, as evidenced by the closer settlement of suburban lands, calls for a considerable amount of further capital outlay, as mains will have to be laid in new streets, and localities which have hitherto been served with galvanized piping will now require cast-iron mains to cope with the increased population and provide fire-prevention utilities.

*Drainage.*—As previously reported, this system is in a very unsatisfactory condition in those parts of the town where the sulphur is more prevalent. Frequent blockages have occurred, due to the disintegration of the concrete jointing and, in some cases, the pipe material. In response to representations, the Public Works engineering staff inspected the system, and furnished a report on its condition. It has been decided that a very considerable portion of the system will be renewed, and in the new work the present system of having a main sewer running down the centre of the street will be abandoned. It is intended to run a sewer under the footpaths on each side of the streets. Thirteen new premises were connected with the system during the year. The various blockages were cleared, and all maintenance work in connection with the drainage and sanitary appliances of the various departmental buildings was given the necessary attention.

*Baths Mineral-water Supply.*—The pipe-line carrying the supply of hot water from Whakarewarewa to Rotorua, being of wood, has proved very unsatisfactory, and it has been found necessary to replace the wooden pipes with cast-iron ones. The work is in progress now, and is necessarily slow, as the men can only work about half-time each day so as to minimize the interruption of supply to the baths.

*Electrical.*—A fair demand has set in for rural supplies for farms adjacent to the transmission-line. In this connection two pole substations have been erected on the transmission-line to give a supply at Te Ngae and at Mourea. The Diesel auxiliary plant was brought into commission early in the year, and proved a very valuable auxiliary. It has been used during interruptions to supply from Okere, and is brought into use each evening to assist with the peak load. The total number of units generated during the year was 53,900. The installation of the Diesel necessitated considerable alterations in the substation in the matter of changing over 3,000-volt single-phase feeders to 3,000-volt three-phase. This alteration has provided for future increases of load for a considerable period ahead. A fair amount of work has been done throughout the town in the matter of changing the feeders from single-phase to three-phase. Additional cables have been erected to provide for increase of business, and transformers have been changed to suit variations of load in different localities.

For the last few years it has been evident that the increasing demand for energy by the town and suburbs could not be met by the Okere plant even when assisted latterly by the auxiliary Diesel plant, and for some considerable time past the question has been under consideration as to whether a new station should be constructed at Okere with largely increased power, or whether the supply should be brought to Rotorua from another source. The Chief Electrical Engineer has now decided that the additional supply shall be obtained from Horahora, and a transmission-line will therefore be erected from Horahora to Rotorua via Ngongotaha. This will be constructed by the Electrical Branch of the Public Works Department. It will also bring the main feeder to the corner of Pukuatua Street and the old Taupo Road, and from this point the Department's existing lines will be available to conduct the supply into the town substation. An arrangement has been entered into with the Public Works Department whereby they will sell to this Department the bulk supply, delivered to a substation to be erected at Ngongotaha, at 6,600-volt pressure. This Department will then retail the energy at Ngongotaha and all suitable points *en route* to Rotorua. The conditions of the agreement provide that the Okere plant and the Diesel plant must be maintained in full working-order, ready for emergency use at any time, but this Department will have the right to use these two plants in the evenings in order to minimize the peak load, which will have to be purchased from the Public Works Department.

Street-lighting has received the usual attention, and additional lights have been erected from time to time as requested by the Borough Council. The usual maintenance work in connection with the various departmental buildings has been carried out.

*Deer-stalking.*—The season ended on the 26th April, 1924. Owing to numerous complaints received from settlers as to damage being done to their property by deer, a departure was made this year from the procedure of former years in abolishing limitation as regards the number of licenses issued or the number of animals (stags and hinds) which could be shot. This easement of conditions resulted in a large number of licenses being taken out, and a consequent heavy shooting—so much so that many of the stalkers made representations at the close of the season that the shooting had been overdone, and that unless conditions were tightened up somewhat the herds would be depleted in a season or two. To endeavour to meet this condition the Rotoiti and Okareka herds frequenting the most closely settled area were amalgamated, with no limit as regards the number of licenses or animals which should be shot. On the strong representation of stalkers the Galatea and Tokaanu herds were closed, and