

water creeks. The arrangement of the valves and "Y" pipes below the tanks make provision for the future 18-inch pipe line extension up to the permanent intake at the waterfall mentioned above.

At the north shore of the Second Narrows there are placed three cast-iron "Y" pipes with 18-inch gate valves by which the 36-inch steel pipe is connected with the four 18-inch shore connections of the flexible cast-iron submerged mains which here cross the Second Narrows.

SUBMERGED MAINS

The new submerged mains are four in number, and are located along a line about 100 feet easterly from the old location. They are 18 inches in diameter and similar in all other respects to the two old ones installed.

The method of hauling these across the Narrows was somewhat similar to that adopted in hauling the old ones, except that a large logging donkey engine was employed instead of the capstans and horses used formerly, the arrangement of the hauling tackle being altered so that the actual hauling of a single line of pipes could be accomplished in a few hours instead of several days as formerly. Also an additional deckman was placed on the beach, which took half the strain.

Each line of flexible pipes has a length of 1,000 feet, and with the shore connections which are constructed of 18-inch lap-welded steel pipes built of 3/8-inch plate, give a total length across the Narrows of half a mile. The pipes were hauled across in parallel lines 10 feet apart, the easterly pipe being that one which will be used by the Municipality of Burnaby of which mention has been made.

At the south shore of the Narrows the crossing under the Canadian Pacific Railway is made by two small timbered tunnels in each of which are placed two 18-inch lap-welded steel pipes, it being the intention after the water has been turned on to fill up the space around the pipes with concrete.

After crossing under the C. P. R. tracks the four 18-inch pipes extend south about 80 feet where a large cast-iron "Y" pipe is placed to make the connection with the 32-inch continuous steel riveted pipe which extends into the city.

There are placed here four 18-inch gate valves and four 18-inch reflux valves and in addition an emergency connection with an 18-inch valve for the Municipality of Burnaby.

SUPPLY MAIN TO CITY

The 32-inch steel riveted supply main to the city extends south from this point to East Street, thence west along this street to Boundary Road, thence south to Cambridge Street, thence west