

## Esquimalt and Nanaimo Railway Mechanical Terminal Facilities at Victoria, B.C.

The recently completed group of buildings forming the Esquimalt and Nanaimo Ry. terminal plant at Victoria West, B.C., comprises a locomotive house, machine shop, car repair shop, boiler and engine houses, store, etc.

The locomotive house has 10 stalls, each 13 ft. 7 ins. at the front, 26 ft. 5 ins. at the back, and 90 ft. deep. The walls are of 13 in. brickwork on strong concrete foundations, and the roof is of timber construction covered with felt and gravel. The usual locomotive pits are provided, together with one drop pit 7½ ft. wide. The walls of these are of 10 in. concrete, to which is fastened, by means of anchor bolts, the 6 by 12 in. timbers carrying trackage. For a width of 3 ft. all around the pit, 3 in. planking is spiked, the intervening floor space being finished off with cinders.

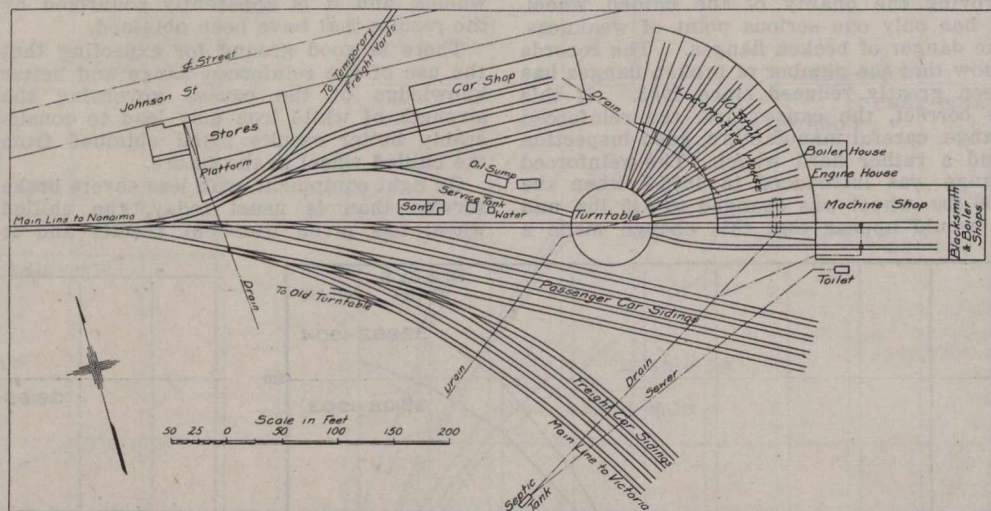
The machine shop is 68 by 112 ft., and 18 ft. high to the under side of roof truss, and is provided with two locomotive pits and one drop pit similar in construction to those in locomotive house. The shops abut end on to the back of the locomotive house, one track entering from the end stall, and one from the outside of the locomotive house, thus providing outgoing and incoming tracks over turntable. The roof is pitched and is carried by six timber trusses at 16 ft. centres; these are supported on brick piers standing out 4½ ins. from the 13 in. walls. Good lighting has been secured by three large skylights on the roof, together with ample sidelights, two windows being fixed in each bay. Bench accommodation has been supplied for the fitters, and the whole floor has been planked over. A width of about 36 ft., extending the length of the building, has been reserved for the installation of machinery tools, which are now being fixed, and include:—18 ft. wheel lathe, 16 ft. Bertram lathe, Bertram gap lathe, 20 ft. gap lathe,

be located the steam hammer, two circular and one oblong forges, together with one set of shears and one set of rolls. This building is 32 by 68 ft.

The engine room and boiler room are located in the angle formed by the two main buildings, the former being 31 ft. 10 in.

the usual features necessary for the economical handling of repair work.

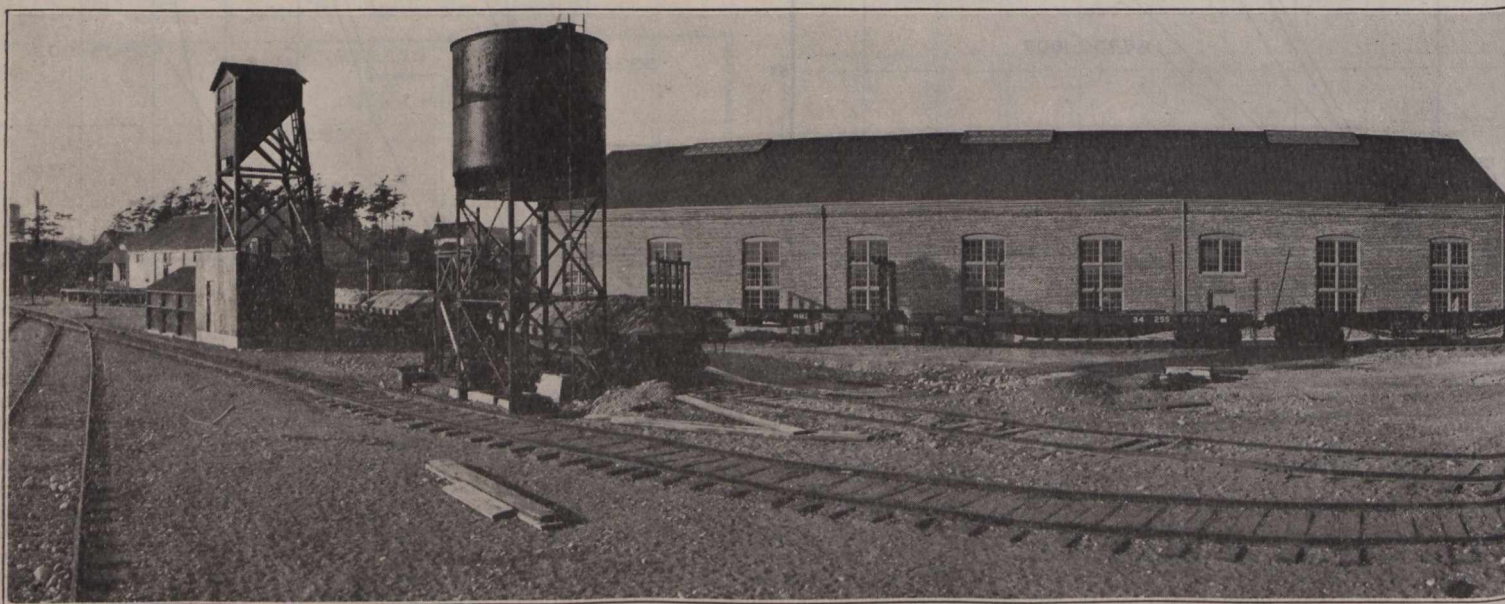
The store is one story and basement, the walls of the former being 13 in. brickwork, and of the latter of 18 in. concrete. On the ground floor a space of 38 by 56 ft. is reserved for the store proper and is equipped with a hand power elevator to serve the basement, and also shelving for the reception of supplies. At the east end of this floor there are three rooms, the outer two being offices for the Master



Esquimalt and Nanaimo Ry.'s Mechanical Terminal Layout at Victoria, B.C.

by 20½ ft. and the latter 45¼ ft. by 19¼ ft. The engine provided is 75 h.p. and of the tandem compound type. The air compressor is of the imperial cross compound steam driven type X, made by the Ingersoll-Rand Co. Two 100 h.p. standard C.P.R. locomotive type boilers, carrying 130 lbs. pressure, are being installed. They are equipped for fuel oil, which will be pumped to the burners from a 4 by 6 ft. circular auxiliary tank, located underground outside the building. This tank, in turn, will be

Mechanic and Storekeeper respectively, while the centre one is intended to house seven Bowser self registering oil pumps. The different varieties of oil to be used will be stored in 2 by 4 by 12 ft. oblong tanks, made of 3-16 in. plate. These are located in the basement in a reinforced concrete fireproof chamber, 15½ by 24½ ft., the feed piping leading direct therefrom to the Bowser pumps above. The remainder of the basement floor is intended for the storage of heavy material brought



Panoramic View Esquimalt and Nanaimo Railway Mechanical Terminal.

See opposite page.

8 ft. screwing machine, small Bertram lathe, a large and a small drill, wheel press, planer, and shaper. The main shafting will be bracket fixed to the brick piers, and the counter shafting to the underside of the roof trusses.

The blacksmith and boiler shop is a continuation of the machine shop, partitioned therefrom by a 9 in. brick wall. In it will

supplied by gravity from the service tank located near the turntable.

The car repair shop is 50 by 150 ft., and of 13 in. brickwork. The roof is pitched and covered with corrugated iron, the whole being carried by eight timber trusses at 16¼ ft. centres. Here, as in the other buildings described, car pits of concrete construction are provided, together with

down by the elevator. A platform has been erected round three sides of the building to facilitate the handling of deliveries from the track and street.

Eight feet from the centre of one of the tracks leading across the turntable is the concrete fuel oil storage tank, 22 by 8 by 10 ft. high, which is entirely underground. The walls are 10 ins. thick with a 12 in.