

Canadian Railway and Marine World

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National Transcontinental Railway Car Shops at Transcona.

The locomotive department buildings of the main repair shops which the National Transcontinental Ry. Commission is building at Transcona, Man., were described in Canadian Railway and Marine World for Feb., 1912, previous to which there appeared several progress articles. The locomotive buildings have since been placed in service by the Grand Trunk Pacific Ry. The development of the plans for the car department buildings was delayed for some little time on the change in Government in 1911, and in consequence, while the plans for the buildings themselves were prepared some time ago, and in most cases the buildings completed, it was only quite recently that

Transcona shops for the additional service of handling all repairs on the western lines for a considerable time to come at least. The G.T.P.R. took possession of the locomotive department buildings early last year, and is handling at Transcona all the repairs on its lines now in operation.

The site of the shops is on the open prairie, and in order to avoid trouble from flooding by spring freshets, and to secure a better surfacing than that afforded by the prairie soil, the site level has been raised about 4 ft. over the entire area occupied by the buildings, by a heavy gravel fill.

The various buildings have been grouped together as closely as possible to facilitate

latter with industrial tracks along the central midway. Additional intercommunication is obtained through an overhead 10 ton electric travelling crane, which runs the full length of the midway, connecting the front ends of all the main buildings. This crane is electrically operated, and the operator's cage is electrically heated by a heater of the street car type. All exposed parts of the crane are projected by hoods in the usual manner. Wherever possible, the steel runways are carried on abutments from the shop buildings, and the intervening steel columns are carried on concrete piers.

As shown in the isometric projection, the car department buildings are to the north,

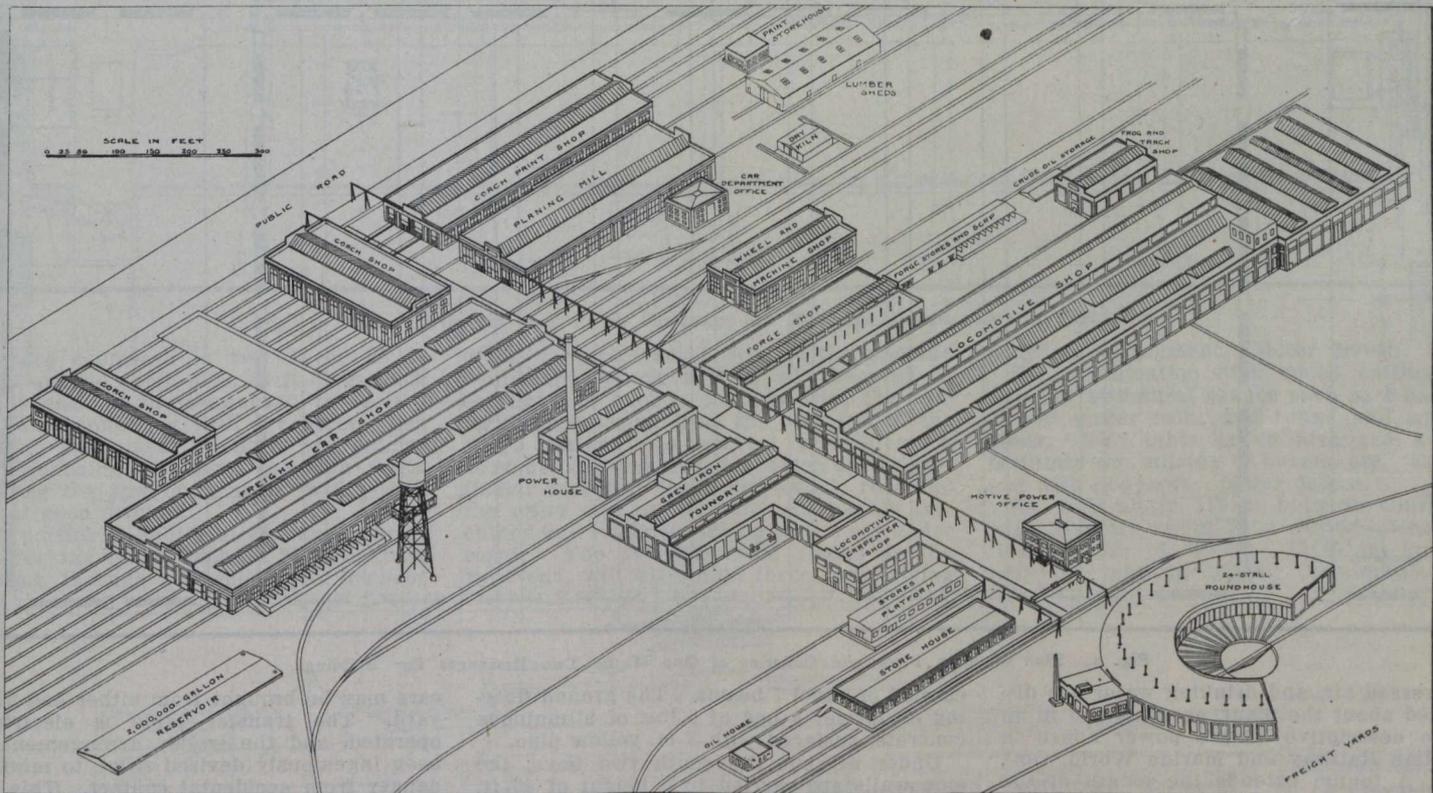


Fig. 1. Isometric Projection of Locomotive and Car Department Buildings, National Transcontinental Railway

the interior arrangement, including the machinery installation, was completely decided on prior to calling for machinery tenders. The plans as originally prepared were revised by W. J. Press, Mechanical Engineer, N.T.R., which involved considerable rearrangement and the selection and installation of machinery, was also carried out under his supervision.

The shops are located in Transcona, six miles east of Winnipeg, on the N.T.R. main line. In conjunction with the shops being built by the Commission at Quebec, a preliminary description of which appeared in Canadian Railway and Marine World for Sept., 1913, they were designed to handle the repairs on the whole 1,800 miles of line from Moncton to Winnipeg. The G.T.P.R., in the construction of its section of the transcontinental line from Winnipeg westwardly, did not build any shops, and will use the

intercommunication during the severe winter, the intervening distances being made as short as practicable, bearing in mind the advisability of future extensions. The accompanying isometric projection, fig. 1, shows that this feature has been very successfully developed, when it is remembered that the designers had in mind the future extension of the majority of the buildings upwards of 100%, without disturbing the general scheme. The total area of the combined shops will be about 17 acres.

The main buildings are arranged along a midway, which runs across the shop site from the public road to the locomotive house and freight yard adjoining the main line, and are served by a series of standard gauge and industrial tracks, the former connecting through the rear of the buildings to a ladder track at each end of the grounds and thence to the yards, and the

and the locomotive department to the south, the midway passing through each group of buildings. The divisional line is the through running track to the north of the power house, the latter being as centrally located as possible to reduce power and heat transmission losses to a minimum, as will be shown later in the article. The foundry and forge shop, being common to both groups, are located in a midway position, with the distinctively departmental buildings to the north and south.

The larger buildings of both groups are of steel construction, with self supporting steel frames on concrete foundations, with concrete walls carried up to the window level. The balance of the superstructure masonry is brick, carried up into a parapet wall all around the building, and capped with concrete coping. The roof drainage is carried down inside the building from re-