

Canadian Railway and Marine World.

October, 1913

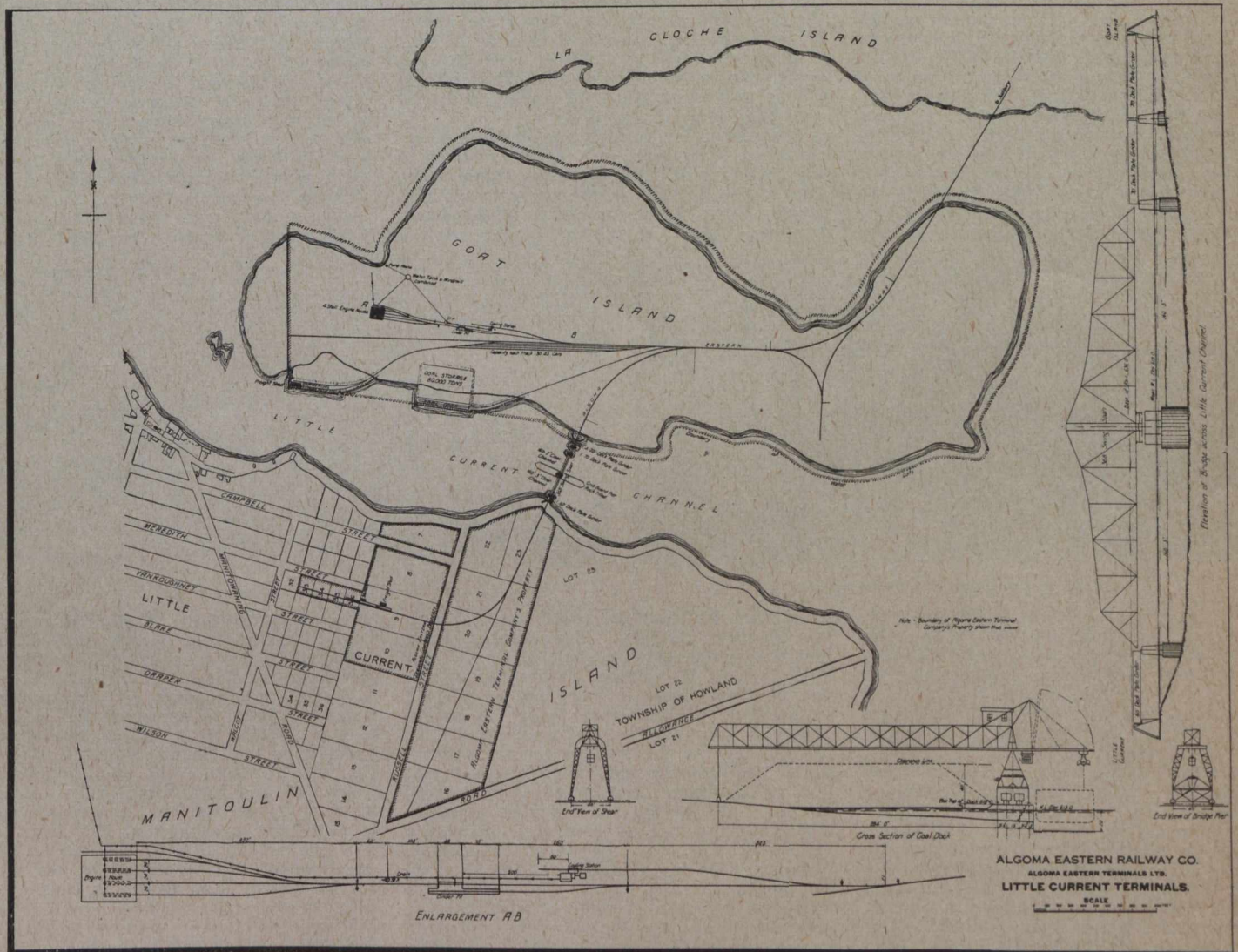
Algoma Eastern Railway Terminals at Little Current.

By R. S. McCormick, M. Am. Soc. C.E., Chief Engineer.

The Algoma Eastern Ry. Co. has its line completed as far as the site of the terminals on Goat Island, opposite Little Current, on Manitoulin Island, Ont. The terminal facilities are now being pushed to completion this autumn and include some interesting features. The work covers the extension of the main line from Goat Island, the site of the yard and docks, over the

is 17½ ft. and there is a clear opening for boats of 160 ft. each side of the centre pier. The foundations consist of two wing abutments, three intermediate piers and a pivot pier. These are of concrete, there being a total of 2,570 cu. yds. of concrete in the whole foundation. The protection, or rest pier, is composed of timber cribs filled with stone, extending at right angles to the

tract by the Foundation Co. on a cost plus a fixed sum basis. The work was let Sept. 27, 1912, and completed May 1, 1913—and is a very fine job of pier work. The piers in deep water were built inside cofferdams of heavy timber, concrete being deposited in the centre pier to within 2 ft. of low water, where the neat work begins. Gravel and broken stone were both used for the coarse



Little Current Terminals, Algoma Eastern Railway.

boat channel to Manitoulin Island, entering Little Current on the east side of the town. A small station building of frame construction, together with a small local freight house, is situated just at the edge of the town, easy of access and convenient for local business.

The bridge crossing the channel is made up of two 70 ft. deck plate girder approach spans on the Goat Island side, a 368 ft. through draw bridge span and a 60 ft. approach span on the Manitoulin side, making a total length between abutments of 573½ ft. The clear height above meanwater level

centre line of the bridge tangent. These cribs are built of round hemlock timber, well drift bolted together, extending to within 2 ft. of low water level; above this elevation square B.C. fir timber is used. The water is 24 ft. deep at this centre pier, the bottom is solid limestone rock, requiring very little work to prepare for sinking the cribs. At the pier points and abutment sites a little preparation, consisting of shooting up the bottom to level up and roughen up the smooth rock was done to guard against any tendency of the piers sliding. The foundation work was done under con-

aggregate for the concrete, care being taken to heat all material and the water in cold weather. While the channel where this structure is situated did not freeze up last winter, due to the swift current, ice formed at both ends of it and caused considerable trouble by breaking away and running through it. The current here runs both ways, depending upon wind conditions, and sometimes reverses its direction several times in 24 hours, so that great care had to be exercised in handling the dams and cribs.

The superstructure is of steel, from plans