

was contemplated; that is, a floating dry-dock of 20,000 tons lifting capacity, so designed as to be capable of operating in sections as a number of smaller docks, an adequate shore plant comprising electric power generating plant with air compressors, machine shop, boiler and blacksmith shop and covered construction shed under which the pontoons of the floating dry-dock could be built.

The dock is to be of such a design and construction as to be almost entirely built upon the site. To accomplish this, the general plan provides for the practical completion and equipment of the shore plant before the dry-dock is commenced.

One of the controlling features in the general plan of this development was the fact that the city of Prince Rupert will be 600 miles from the nearest base of supply or point where any considerable assistance, mechanical or otherwise, can be obtained. It was therefore determined at the outset

the piling being on 10 x 5-foot centres. The pier will require about 600 piles.

At the same time, there will be built the platform at the shore end of this pier 80 feet wide by 930 feet long, having an area of 74,400 square feet, and will require about 1,600 piles on 5 x 10-foot centres.

At the western end of this platform there will be an extension off shore 350 feet long by about 100 feet wide and at right angles to this, an extension 560 feet long by 80 feet wide for the attachment of the floating dry-dock. It will be noticed that a double line of diagonal bracing is used in the pile work. This is on account of the excessive rise and fall of tide at Prince Rupert, which for spring tide is 25 feet. The tops of the piles are thoroughly secured by double 6 x 12 clamps and connected by 12 x 12 caps. The decking is to be 4 x 12 planking. Piles are to be creosoted. The total area of the platform and pier work will be 181,400 square

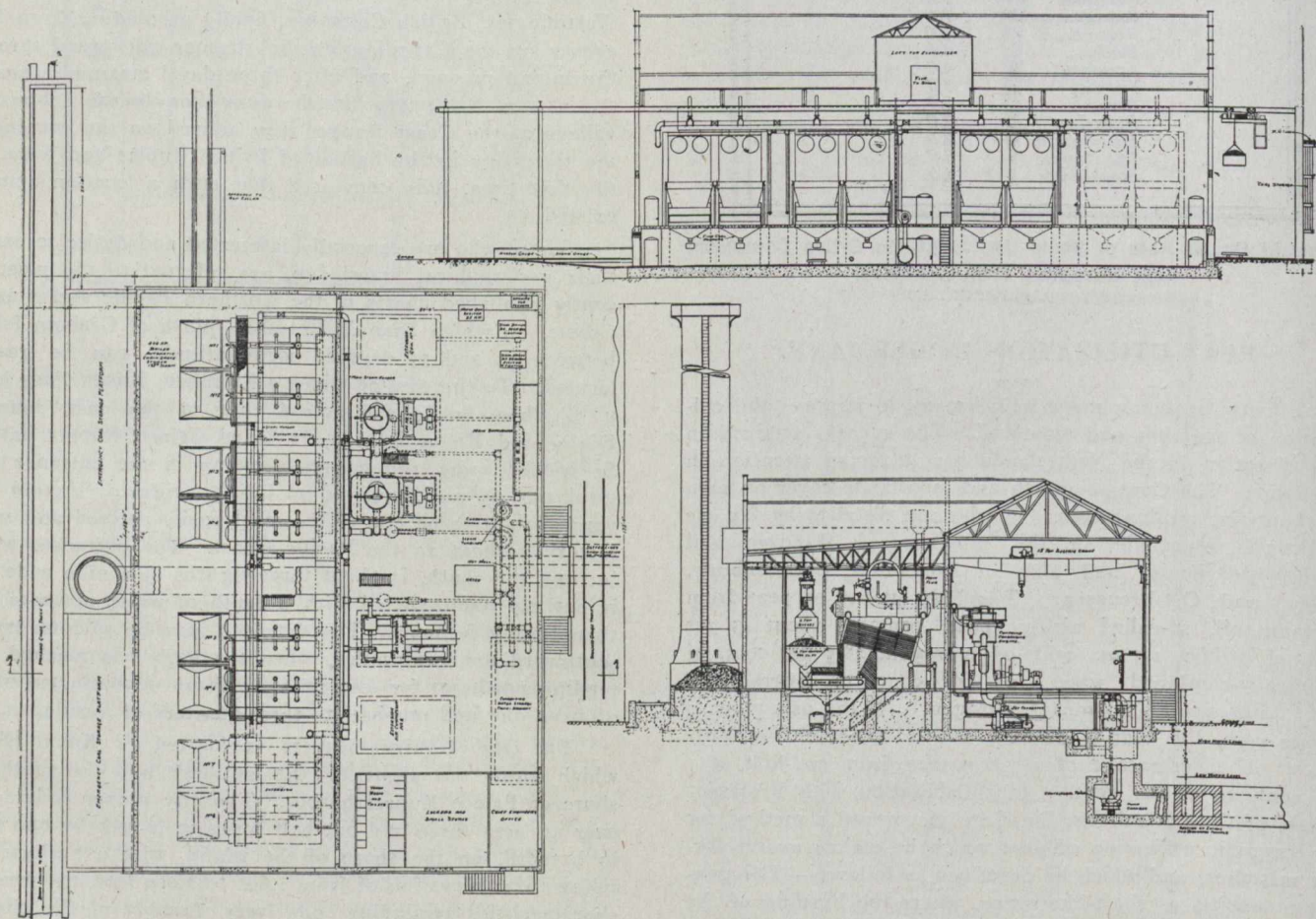


Fig. 1—Power Station for Prince Rupert Dry-Dock Ship-Repair and Shipbuilding Plant, Prince Rupert, B.C.

that the mechanical equipment, large tools, etc., must be of the very best and most complete. Also, that on account of the high price of labor on the Pacific Coast, ample provision for the use of power in every way possible should be made. This has resulted in the design of an electric power generating station with ample capacity for all present needs and with a large possibility of extension.

As the plans were laid out in such a manner as to make the development progressive, constructing those parts first which could, when completed, be used in the construction of the remainder, this outline will be followed in the description.

Pier and Platform Work.—The first work to be undertaken will be the pier, marked "Pier No. 1" on the general plan. This will be 420 feet in length and 60 feet in width,

feet. The completion of this work, it is expected, will provide ample space for the landing and handling of materials for the rest of the plant.

Launching Platform.—In front of the main platform, east of the pier, there will be built a launching platform for side launching. This will be 80 feet wide by 440 feet long and will be carried on 16-inch piles on 5 x 10-foot centres, braced and reinforced by heavy piling along the edge over which the launching will take place. The general arrangement and bracing of this piling can be seen by referring to Plate 2, showing the platform in connection with the building shed. It will be noticed that the outer half of the building platform has a slope of one and three-fourth inches to the foot, which is approximately the launching grade for side launching.