

INTISARI

Pergerakan logistik di kawasan industri Cirebon semakin meningkat seiring dikembangkannya Cirebon menjadi kawasan industri dan salah satu hub logistik di Pulau Jawa. Stasiun KA Waruduwur yang berada dalam rencana pengembangan Kawasan Industri Cirebon tersebut perlu dirancang sedemikian rupa agar dapat memfasilitasi pergerakan logistik yang ada. Tujuan dari desain ini adalah merancang *layout* Stasiun Waruduwur sebagai terminal barang dan menganalisis kinerja terminal barang tersebut yang direncanakan untuk melayani pergerakan di Kawasan Industri Cirebon.

Dalam merancang *layout* terminal barang di Waruduwur mengambil volume barang dari terminal barang tinjauan sebagai model perencanaan untuk mendapatkan luasan lapangan penumpukan dan gudang yang dibutuhkan. Selain itu dilakukan juga peninjauan lokasi perencanaan dan beberapa terminal barang yang ada di Indonesia untuk dijadikan pertimbangan desain di terminal barang Waruduwur.

Berdasarkan hasil analisis, Terminal Barang Waruduwur dirancang untuk melayani pergerakan 897 KA per tahun dengan *service time* bongkar muat 2,92 jam/KA. Luas total mencapai 106.200 m² dengan 3 *track* KA dengan panjang jalur 1 dan 2 yaitu 474 m dan jalur 3 yaitu 455 m. Kemudian, *container yard* dirancang dengan luas 28.105 m² dan kapasitas 915 TEUs dengan 3 tumpukan, sementara untuk *container freight station* dirancang dengan luas 16.320 m². Sistem penanganan bongkar muat menggunakan *truck trailer - reach staker* dengan kebutuhan sebanyak 3 unit.

Kata kunci : industri Cirebon, Waruduwur, *container yard*, kinerja pelayanan, dan *reach staker*

ABSTRACT

The movement of logistics in the industrial area of Cirebon has been increasing rapidly due to the development of Cirebon into an industrial area and one of the logistics hub in Java. Waruduwur Station, which is aligned with the Cirebon Industrial Area development plan, is necessary to be designed in such a manner in order to facilitate the movement of existing logistics. The purpose of this final project is to design the layout of the Waruduwur Station as a freight terminal and to analyze the performance of the freight terminal planned for servicing in the industrial area of Cirebon.

In designing the terminal layout, volume of goods from the freight terminal is used as a planning model in order to obtain the container yard and the container freight station. Furthermore, a field observation from the planned location and some freight terminal in Indonesia is executed in order to be considered in designing the freight terminal in Waruduwur.

Based on the analysis results, the Freight Terminal in Waruduwur is designed to service 897 Train per year with the server loading and unloading time of 2.92 hours/ train. The total area reaches 106.200 m² with 3 railway lines with length track 1 and 2 is 474 m and track 3 is 455m. The container yard is designed to 28,105 m² with the capacity of 915 TEUs with 3 stacks, while for the freight station container is designed to 16,320 m². The loading and unloading system uses truck trailer - reach staker with 3 units requirement.

Key words : Industrial Cirebon, Waruduwur, container yard, service performance, and reach staker