DESIGN OF WATER BUS FOR TRANSPORTATION AND TOURISM FOR PROBOLINGGO-SURABAYA ROUTE

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ABSTRACT

Surabaya is a metropolitan city which is the top destination for people living in East Java, including Probolinggo and Pasuruan region to get job, study, recreation and etcetera, so that a lot of people to Surabaya everyday. This is causing many negative impact, such as air pollution, traffic jam and fuel oil over used. To solve those problems, it's needed another transportation plan for alternative, that is water bus which can carry passengers and cargo with route through Probolinggo-Surabaya, 99.4 km transportation distance. Beside that purpose, water bus was also expected can increase tourism for marine transportation. In this final project, it's done a technic and economic analysis using a sisters ship with constrains checked before so that it's appropriate to draught of shipping route with 2.5 m LWS average. Based on the calculation, the optimum main dimension of the water bus are L=12.6 m, B=5.5 m, H=1.6 m and T=0.5 m. With cost of ship building Rp. 552,222,597.28. Lines Plan, General Arrangement and Safety Plan are drawn then.

Keywords: Water bus, Probolinggo-Surabaya route, transportation and tourism.