Hybrid Road Barrier Design As Aesthetic Safety Feature and Urban Furniture

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***Abstract*— There are various types of road barriers such as steel W beam, steel cable, concrete and wooden (timber) that have been used all over the World. They all have some advantages and disadvantages from different kinds of aspects such as construction time, ease of installation, low-cost, proven effectiveness, impact resistance, durability, service life, maintenance, etc. but to attain a more pleasant drive especially in historical and natural urban roads or scenic highways, installing wooden (timber) barriers can be considered as a more aesthetically pleasing alternative. In addition to aesthetic, wooden barriers can be preferred for their impact energy and sound absorption capabilities especially in urban roads. With the design, it is also estimated that light effect of oncoming traffic will be blocked. The main idea is to use hybrid barriers for both aesthetic safety feature in scenic or historical roads and urban furniture. This paper also summarizes comparisons among conventional road barrier systems considering the European standard EN 1317, Road Restraint Systems and provides a discussion of future designs.**

***Index Terms*—road restraint system, timber barrier, hybrid barrier, road barrier, urban furniture**

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