

The Effectiveness of A Retrofit Method for Cantilever Slabs by Reinforced Concrete Beams

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We developed a new retrofit method, mainly for a cantilever of a rigid-frame viaduct, which installs a RC beam at each column of the viaduct to improve a performance of a cantilever against a strong wind load which will be generated by noise prevention barrier higher than before. In this paper, we tried to have an experiment and a FEM analysis to evaluate the effectiveness of this method. Firstly, we confirmed that this method is useful for a cantilever from the view point of increasing resistivity. Secondly, we confirmed that this method can make a cantilever have a about 5m barrier. Finally, we proposed a method calculating the allowable bending strength of this method.