Seismic Design Procedure of Conventional Type Bridge Abutment and an Example of its Performance Verification

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Conventionally, in the seismic design of railway structure, when calculating the nonlinear response of the bridge abutment, the dynamic amplification characteristic was disregarded. Seismic design code for railway structure was revised in 2012, and the method for calculating the nonlinear response of conventional retaining bridge abutments was revised by the method of calculating by strength demanded spectra in consideration of the dynamic response characteristic. This report explains the performance verification by new seismic design code for two examples, the bridge abutment upon shallow footing foundation, and that upon pile group foundation.