

**Setting Method of Excitation Position and Reference Position for Evaluation of Distance Attenuation
used by Ground Vibration Predictions**

Masanori NOYORI Seiji TSUNO Hidefumi YOKOYAMA

This report investigates an appropriate excitation position and a reference position used for the empirical prediction method of ground vibration when train runs along the rigid-frame viaducts. As a result, it is found that the empirical prediction well reproduces the observation record related to the ground vibration by setting the excitation position at the center of footing and the reference position at a few meters away from footing. Therefore, it is suggested that the ground vibration model with the center of footing as the excitation position is a model close to the actual mechanism of the ground vibration generated during railway running.