

## **GEESD IV (May 18-22, 2008)**

### **Seismic Modeling of a 135-Foot-Tall MSE Wall**

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#### ***Abstract***

This paper describes the seismic modeling performed for the design of a 135-foot-tall mechanically stabilized earth (MSE) wall for the Third Runway Project at the Seattle-Tacoma International Airport. The FLAC finite difference program was used to model the MSE wall under construction and seismic loading conditions. This wall was constructed in 2005 and is the tallest MSE wall in North America. The wall was built of granular fill reinforced with steel strips. Wall fascia consists of concrete facing panels. The wall was designed in accordance with the 1996 AASHTO standard guidelines incorporating the interim revisions through 2000. The numerical modeling was performed to provide the design team with additional insight into the static and seismic performance of the MSE wall.