

Seismic Retrofit of Spliced Sleeve Connections for Precast Bridge Piers

Description

Meta Fields

Project Completion Year : 2016

Project Starting Year : 2012

Other Documents 0 Other Documents File : 1917

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Project Length : 48

Budget : 44138.00

Key Words :

Bridge construction; Bridge piers; Cyclic tests; Deformation; Earthquake resistant design; Retrofitting; Seismicity

Abstract :

There is a great need for research on suitable connections between precast concrete elements which will be able to withstand significant stresses and deformations in earthquakes. The splice sleeve connection is being considered for connecting such elements in Accelerated Bridge Construction (ABC). There is limited data for use of this connection in bridges located in moderate to high seismic regions. This proposal aims to extend the current pooled fund study project. There is a great need to be able to retrofit bridge piers that will use the spliced sleeve connections. Structural Managers at the Utah Department of Transportation (UDOT) after a recent scanning tour conducted by the Federal Highway Administration (FHWA) have recommended that such a study be conducted. The project will be carried out by performing cyclic tests to verify the capacity of the retrofitted splice sleeve connection for precast concrete elements such as columns connected to footings or bent cap beams.

Subject : Grouted Couplers

Group : Seismic

Category : Completed Projects