20-2  SITE SEISMICITY FOR TEMPORARY BRIDGES AND STAGE CONSTRUCTION

All partially constructed bridges and temporary bridges that carry or cross over public vehicular traffic shall meet the requirements of Caltrans Seismic Design Criteria (SDC) except the Design Spectra shall be based on 10% probability of exceedance in 10 years. All partially demolished bridges that carry or cross over public vehicular traffic shall meet the requirements of Memo to Designers 20-4 except the Design Spectra shall be based on 10% probability of exceedance in 10 years. All bridges with an expected life longer than five years shall be designed using Appendix B of Caltrans SDC to determine the Design Spectra.

The seismicity requirements for the stage construction of Important and Non-Standard bridges shall be determined on a project specific basis. Bridges constructed under a ‘Declared Emergency’ or ‘Director’s Order’ (after landslides, earthquake, floods, etc.) are expected to be removed as soon as possible and do not need to conform to the provisions of this memo. Those emergency bridges that are planned to carry or cross over public vehicular traffic for longer than one year, must conform to the requirements stated above.

The Engineer is responsible for addressing the lateral stability of partially constructed and partially demolished bridges.

Original signed by Barton J. Newton

Barton J. Newton
State Bridge Engineer
Deputy Division Chief, Structure Policy & Innovation
Division of Engineering Services

Note: See Memo to Designers 15-14, “Loads for Temporary Highway Structures” for temporary bridges not carrying or crossing over public vehicular traffic.