DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers

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Technical Letter
No. 1110-2-366 | 31 August 1994

Engineering and Design

SEISMIC DESIGN FOR CIVIL WORKS BUILDINGS

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1. Purpose

The purpose of this engineer technical letter (ETL) is to ensure that the seismic design guidance followed for new military buildings, and new additions to these buildings, is followed for civil works buildings also.

2. Applicability

This letter applies to all HQUSACE elements, major subordinate commands, districts, laboratories, and field operating activities having design responsibilities for civil works projects.

3. References

a. E.O. 12699.

b. TM 5-809-10/NAVFAC P-355/AFM 88-3, Chap. 13, "Seismic Design for Buildings."

c. TM 5-809-10-1/NAVFAC P-355.1/AFM 88-3, Chap. 13, Sec A, "Seismic Design Guidelines for Essential Buildings."

d. *Uniform Building Code*, International Conference of Building Officials (ICBO), Whittier, CA.

e. *National Building Code*, Building Officials and Code Administrators International (BOCA), Country Club Hills, IL.

f. *Standard Building Code*, Southern Building Code Congress International (SBCCI), Birmingham, AL.

4. Discussion

a. For the design of civil works structures not covered by civil works design publications, it has been the practice to use applicable military programs design publications. For the seismic design of civil works buildings, this ETL clarifies the requirement for using TM 5-809-10 and TM 5-809-10-1.

b. In addition, Executive Order 12699 of January 5, 1990, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, requires that the construction of all new Federal buildings be in accordance with appropriate seismic design and construction standards. TM 5-809-10, TM 5-809-10-1, and the *Uniform Building Code*, and the *National Building Code* and the *Standard Building Code* since their 1992 supplements and additions, have been judged to be in compliance with the Executive Order.

5. Action to be Taken

TM 5-809-10 and TM 5-809-10-1 will be used as seismic loading and design criteria for all applicable civil works buildings. If the seismic zone and/or the occupancy category of a civil works building cannot be clearly established from these military criteria, the division engineer will be consulted.

6. Implementation

a. The requirements in this ETL will be immediately integrated into all building projects with buildings classified as essential or high risk, as defined in

TM 5-809-10-1, regardless of the stage of design or construction, and for all other building projects except where the structural design has progressed beyond the feasibility phase provided any of the following conditions apply:

(1) When the buildings have been designed to model code requirements. Buildings with structural designs conforming to the seismic requirements of the *Uniform Building Code*, and the *National Building Code* and the *Standard Building Code* including their 1992 supplements and additions, need not follow the seismic design provisions of TM 5-809-10.

(2) When immediate application of this ETL would cause any of the following conditions:

(a) Delay critical completion dates.

(b) Result in an economic loss greater than the cost of the construction already in place.

(c) Result in the loss of materials already delivered.

(d) Require increases in funding which would jeopardize the project or other projects in the same construction program.

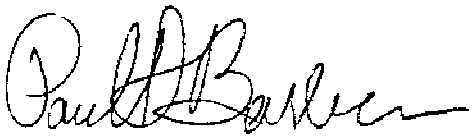
b. An exception to immediate application of this ETL based on any of the conditions in paragraphs 6*a*(1) and 6*a*(2) requires the authorization of the division engineer.

c. Bid openings will be postponed if necessary to implement this ETL.

7. Seismic Risks

Requirements and guidance for the evaluation and mitigation of seismic risks in existing civil works buildings are being prepared.

FOR THE DIRECTOR OF CIVIL WORKS:



PAUL D. BARBER, P.E.
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Directorate of Civil Works