Review of Historic Preservation Projects

Technical Preservation Services
National Park Service, Washington, D.C.

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Subject: Structurally Deteriorated Historic Buildings: Documentation Required in Establishing the Structural Condition of a Building

There are occasions where the proposed demolition or substantial alteration to a historic building is based, in large part, on apparent or perceived structural deficiencies. The demolition or substantial alteration of income-producing properties, however, may have important Federal tax consequences as a result of section 2124 of the Tax Reform Act of 1976 and the Revenue Act of 1978. Property owners may wish to obtain approval for demolition or substantial alteration from the Department of the Interior in order to possibly avoid Federal tax penalties or to protect certain favorable income tax treatments.

For the Department of Interior to consider such proposals, it will be necessary for the property owner or designated representative to provide documentation establishing the structural condition of the historic resource; this is usually done through the services of a qualified structural engineer who is familiar with the archaic building system and materials involved.

The structural examination, analysis and evaluation that is undertaken should establish the extent of structural deterioration, the principal causes of material or systems failure, the technical feasibility of repair and be supplemented with appropriate cost estimates. Depending upon the size of the building, the complexity of the structural system, the extent of deterioration and other such related factors, the time and expense involved will vary accordingly. Foremost, the study should be objective and represent a full exploration of options for structurally reconstituting the building.

The results of the study should be presented in a clear and documented report, amply supplemented with appropriate photographs of any serious structural condition along with other useful illustrative material. In all cases, the following information should be presented:

1. A description and identification of the building's structural system and materials being examined.

2. A general classification of the structural components and materials as to the intactness, general load carrying capacity, deterioration, and damage. Photographic documentation is necessary, with photographs keyed to appropriate plans or sketches of the building. To be included in this general classification would be such components as (a) foundations and the influences of supporting soil; (b) vertical support systems such as columns, posts and bearing walls; and (c) horizontal support systems, including, for example, floors and roofs.

3. Reference should also be made to the effect of external influences of site, geography and environment; examples being ground water, site drainage, exposure to high winds, seismic condition, and corrosive elements.