

Emergency Repair – Anderson Building

The Problem

During construction activity around the dock of the Anderson Building, workers got an unpleasant surprise when a 60 ft segment of a 2-story un-reinforced masonry wall partially collapsed as the footing beneath was accidentally disturbed.



Rock at base of wall to stabilize

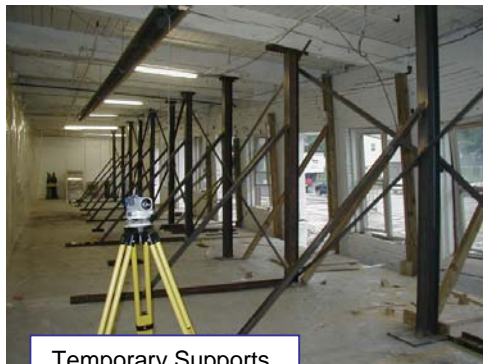
Project: F. Anderson Bldg Wall Reconstruction
Client: Sun Windows of Owensboro, KY

Assessment

THA Engineering Solutions was called out by Sun Windows to help assess damage and to develop an action plan. Recognizing that the 2-story wall was failed beyond repair, but second floor deck and roof were salvageable, our goal was to stabilize the structure for safe controlled demolition of the failed wall.

Stabilization

First, approximately 100 tons of rock were placed at the base of the wall for lateral stability. Then, temporary steel columns were placed beneath 2nd floor timber beams, carefully located at a safe distance to provide support and to allow room for reconstruction. Finally, a second line of temporary timber columns was placed directly above the steel columns to stabilize the roof.



Temporary Supports



New Wall Construction

Solutions

THA Engineering Solutions designed a new wall section for the dock and 2-story building. Constructability was a key in working with Contractor to design a solution to facilitate construction around existing structure. The wall was replaced within weeks of the accident.



The Anderson Building