



BARBER & HOFFMAN, INC.
Consulting Engineers

PROJECT

Kent State University Kent Hall Renovation & Expansion



Kent, Ohio
\$11M



PROJECT DESCRIPTION:

A three-story expansion and renovation to an existing four-story educational building

ADDITIONAL PROJECT FACTS:

- 2-tier connector with vehicular underpass below
- A 17'-0"-tall first floor interstitial space produced large dynamic effects
- Ornamental canopy at main entrance

This project involved a three-story expansion and renovation to an existing four-story educational building at Kent State University. The new addition was designed to resemble that of the existing.

The existing building consisted of wall-bearing construction. The scope of work at the existing building included an extensive renovation including its HVAC systems and basement space. There were numerous existing masonry infill locations as well as new masonry openings. Many of the new openings were through bearing walls, so these walls had to be checked for load-carrying capacity. The existing building also included new areaways and new slab infill.

The addition included office and classroom space, as well as a 2-tier connector with vehicular underpass below. The connector bridged the existing building with the remainder of the new addition. The addition had a steel ordinary moment frame to resist seismic and wind loadings. A 17'-0"-tall first floor interstitial space produced large dynamic effects under lateral loads. These effects were mitigated to ensure movements were within the allowable range. There was an ornamental canopy at the main entrance and a penthouse level with mechanical space. Floor framing was entirely of steel beams. Stairwells consisted of curtain wall construction. Site and basement retaining walls were required.

