

PROJECT

Natural History Building
University of Illinois
Champaign, Illinois

CLIENT

Hanson Professional Services
Springfield, Illinois

PROJECT DESCRIPTION

The Natural History Building on the campus of the University of Illinois was constructed in 3 different eras: 1894, 1908, and 1924. A series of diagnostic methods were used by Atkinson-Noland & Associates to evaluate masonry wall and concrete floor slab construction throughout the Natural History Building. Nondestructive evaluation and in situ test methods provide information about as-built conditions, material deterioration, and current conditions.

SERVICES PROVIDED BY ATKINSON-NOLAND

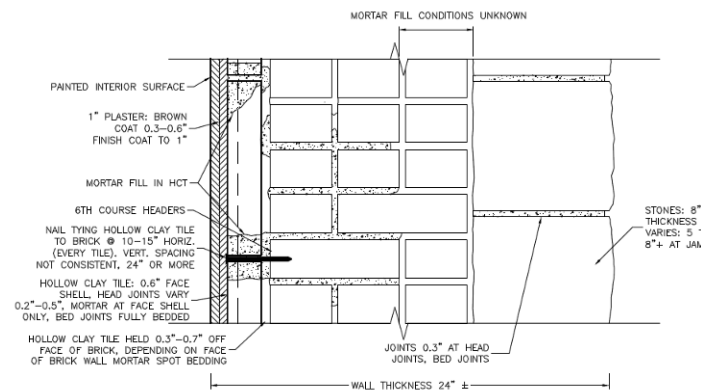
- Investigation of concrete structural elements and masonry walls to generate as-built section details using microwave radar scanning and borescope examination
- Infrared thermographic scanning used to evaluate the solidity of wall sections including internal fractures and damage, variations in moisture content, and air leakage
- Evaluation of moisture content at selected masonry walls using a moisture meter
- Flatjack testing to determine masonry compressive response, in situ stress, and mortar bed joint shear strength
- Mortar rebound hardness



Natural History Building, University of Illinois



Examining embedded steel columns with radar



Wall section generated from radar and borescope investigation



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