HDC WICKERSHEIMER ENGINEERING

Structural Division - HDC Engineering, LLC

PROJECT PROFILE

McKinley Foundation Housing

Champaign, Illinois

Client: McKinley Foundation, Champaign, IL
Architect: Moorhead Gruber Architects, Champaign, IL
Contractor: Stevens Construction Corp., Madison, WI

Range of Services

- Structural design from schematic phase through construction documents
- Construction administration

Project Overview

The foundation for this 8 story steel framed building employed Helitech spirally driven piles in clusters that were concrete capped. The lateral load resistance system incorporated braced chevron frames in the short direction and moment frames in the long direction. The Helitech system resisted considerable tension overturning forces due to the wind and/or seismic forces generated from the RAM model load combinations. Floors were composite metal deck/concrete with steel beams, including one framed floor used for parking and one slab-on-grade used for parking as well. Steel shelf angles support brickwork around the periphery, which was complicated by the in-out wall pattern around the building. Balconies were pre-cast concrete, but supported by a cantilevering system of steel beams.

integrating STRUCTURAL design *focused on* quality