HEIFER INTERNATIONAL CENTER

LITTLE ROCK, ARKANSAS

GENERAL BUILDING DATA

Construction dates | February 2004 to January 2006 Construction method | Construction Management at Risk Height | 4 stories, 65 ft. Size | 98,000 GSF Cost | \$18 million



ARCHITECTURE

The semi-circular shape is influenced by Heifer International's goal to reduce world hunger and help communities in need. The circular form stems from the "ripple effect" produced from a community helped by the charity's donation of livestock. The LEED Platinum Building occupies a previously contaminated industrial site, that reclaimed wetland areas. An open floor plan maximizes day lighting gain and minimizes energy usage through light and occupancy sensors. The unique form of the roof diverts water to a five-story 20,000 gallon rainwater retention tank.

LIGHTING/ELECTRICAL

Building provided with 480Y/277V system, with a total of 2000A.

• 1600A transferred to MDP, running at 3phase, 4 wire

The L/E systems save approximately 57% over conventional buildings, due to:

- Natural day lighting
- Space occupancy sensors
- T5 lamps

MEP SYSTEMS

- Ventilation units provide outside air
- VAV Underfloor Air Delivery for heating and cooling system on all floors, at 14,500 CFM
 - High efficient underfloor system due to limited pressure required
- MEP controlled by temperature, humidity, carbon dioxide and pressure sensors

SIKANDAR PORTER-GILL | STRUCTURAL ADVISOR: DR. THOMAS BOOTHBY http://www.engr.psu.edu/ae/thesis/portfolios/2014/ssp5095/index.html

STRUCTURE

- Geopier[™] Foundation System, with traditional piers and grade beams, supporting a slab on grade
- Framing consists mostly of 2'-0" diameter HSS, supporting a 2 ½" concrete slab on 3" composite deck, supported by a beam and girder system
- Wind and seismic loading is resisted by a steel plate shear wall system acting in both directions, for both the floor and roof diaphragms