

## Stephen M. Ross School of Business Facilities Enhancement Project



### Project Description

The Stephen M. Ross School of Business Facilities Enhancement Project (RSB) is an approximately 270,000-gross-square-foot building with seven floors housing twelve state-of-the-art classrooms, an auditorium and colloquium, faculty offices, student service activities space, and a central gathering space that will provide seating areas and a food court. The heart of this project is a town square that will facilitate the spontaneous gathering together of the entire business school community. Programmatic components of the school such as auditorium, classrooms, and faculty offices have been composed around this central room in the form of an ascending spiral. The geometric properties of this rectangular spiral allow it to extend itself outward, joining the existing parts of the business school to its new parts through a series of unifying elements designed to create an intimate linkage between past, present, and future. The project is pursuing formal LEED certification at the Silver level.

### Energy Efficiency Measures

The design incorporates numerous energy conservation measures, including:

- Green roofs and roofing with a high Solar Reflectance Index to reduce heat island impact
- RSB enhanced energy savings through the implementation of individual room thermostats, and providing low temperature set-points during winter months, and high temperature set-points during summer months, for non-occupied spaces, such as stairwells
- Use of occupancy sensors in all rooms and offices, and automated variable light levels in the skylight Winter Garden through zoned photo sensor metering and lighting controls
- Use of enhanced commissioning to verify that the building's energy related systems are installed, calibrated and perform according to the owner's project requirements, basis of design, and construction documents

### Other Sustainability Features

- Storm water management practices involving storm water detention (underground tanks and green roofs), storm drainage percolation areas, porous concrete pavement, and vortex manhole sedimentation separator
- Use of an Erosion and Sedimentation Control Plan during construction to reduce pollution from construction by controlling soil erosion, waterway sedimentation, and airborne dust generation
- RSB constructed on a previously developed site in lieu of a greenfield site
- Provided on-site bike storage and a shower facility
- No new parking provided on-site (to reduce pollution and land development impacts)

- RSB sited on public and UM bus routes, encouraging use of public transit
- Limited use of potable water by planting native vegetation and using highly efficient drip irrigation
- Maximized water efficiency within buildings through the use of waterless urinals, dual-flush toilets, and faucets with aerators and motion sensors
- RSB has selected refrigerants and HVAC equipment that minimize the emission of compounds that contribute to ozone depletion and global warming
- Construction activities diverted more than 75% of the construction waste from this project away from landfills and incinerators and instead redirected the waste back into the manufacturing process as recovered resources
- RSB has helped to increase the market demand for recycled content materials by utilizing products and materials made from recycled content that make up more than 10% of the total value of the materials or the project
- RSB has helped to increase demand for building materials and products extracted and manufactured within 500 miles of the building site by utilizing materials from the region that make up more than 20% of the total value of materials for the project
- Developed and implemented an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building to help sustain the comfort and well-being of construction workers and building occupants
- Reduced the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants

#### **Project Data**

- Budget: \$145M
- Schedule: Completed Fall 2008
- Square Feet: 270,000 gsf