

Honor Award

NBBJ

Category: Environmental / Sustainable Design
 Client: Grange Insurance

Context

The Grange Insurance Headquarters Campus is situated on a two and a half block area located at the southern edge of downtown Columbus within the city's Brewery District. In 2006 our firm was asked to design the renovation and expansion of the existing facility adding approximately 200,000 square feet of office and support space with associated site improvements. The existing building was built in the 1970's and was a state of the art office building in its day. The facility accommodates approximately 800 employees and the company's projections suggest its workforce will likely double within five years.

Design Goals

The expansion program will transform the work environment of Grange while activating adjacent streets and the Brewery District. While electing not to pursue LEED certification for their project, the design team, working with the client, focused efforts to design responsibly by aggressively integrating the tenets of sustainable design through social, economic, and environmental sustainability.

Sustainable Strategies

Sustainable design strategies were developed following the LEED checklist are being implemented as construction progresses. The team studied the extent of site disturbance, storm water management, heat island effects, water efficiency measures, use of regional materials, building orientation and urban design principles within the urban core to inform the project. The concept resulted in several innovative features that fulfill the goal sustainability. These include:

Open Space Framework that organizes the campus around the major site use zones including a civic open space on the north for a multitude of planned and informal gatherings, preservation of natural park space along High Street for staff and community use. The project helps the area in becoming a civic hub in future and acts as a catalyst for a higher development density around the area.

Alternative Transportation: The plan accommodates multiple modes of transportation including bus routes and a future street car stop on the south end of the site.

Green Roofs: on the south and east sides of the building for access to nature and thermal cooling effects. This reduces the heat island effect and also reduces the storm water runoff.

Storm Water Management:

The Rain Garden on the southern side of the park harvests the runoff from the building roofs and through a series of elevated runnels and a bioswale. This reduces the runoff and also filters it to improve the quality.

The Underground Detention Systems: collectively store more than 30,000 cubic feet of runoff. Part of it is treated for water quality and another big part is used for irrigation hence resulting in water efficiency.

Restoration of Open Space in the south half of the site is restored into vegetated green space reducing the amount of impervious surface and avoid run-off.

The landscape architects and other design team members have developed a strong and respectful working relationship with the client and are implementing numerous sustainable design strategies that exemplify intelligent, responsible design that will have a positive influence on the employees of Grange Insurance and the community at large.



Plan

Plan: Urban Design Diagram - A before and after diagram displays the intentions of the design team to improve the scale and definition of outdoor urban spaces for Grange Employees and the community by integrating both sustainable design practices and urban design opportunities.

Figure A: Site Plan - The site plan highlights the main component pieces of the project and also describes the implemented sustainable design strategies.

Figure B: The diagram gives a holistic understanding of how the design team is managing the storm water systems of the Grange Insurance Headquarters Expansion.

Figure C: Public Plaza Enlargement - The image showcases all of the sustainable strategies that were developed specific to the Rain Garden and adjacent proposed building expansion.

Figure D: Section Detail - The Sections of the elevated runnel and bio-swale show exactly how water is filtered through the system after having been processed by the green roof. At the end of the system is a large detention component that feeds into the gray water irrigation for the site.

Figure E: Rain Garden Enlargement - The image showcases all of the sustainable strategies that were developed specific to the Rain Garden and adjacent proposed building expansion project.

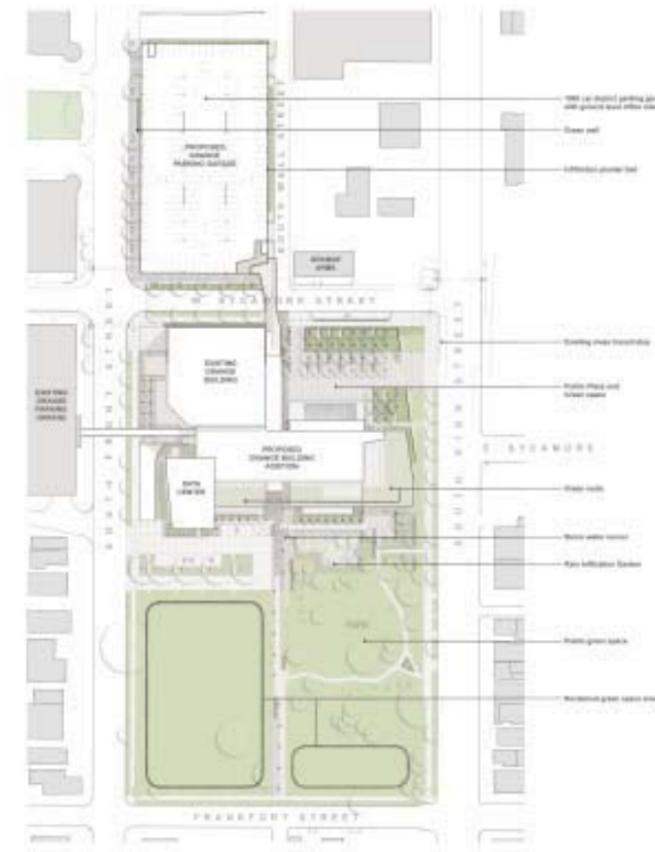


Figure A

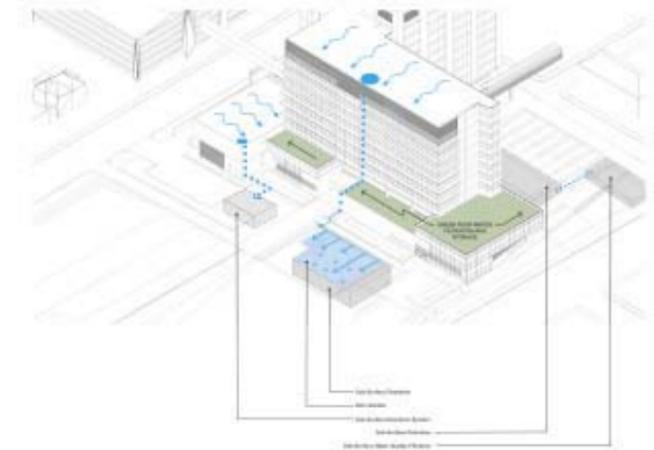


Figure B

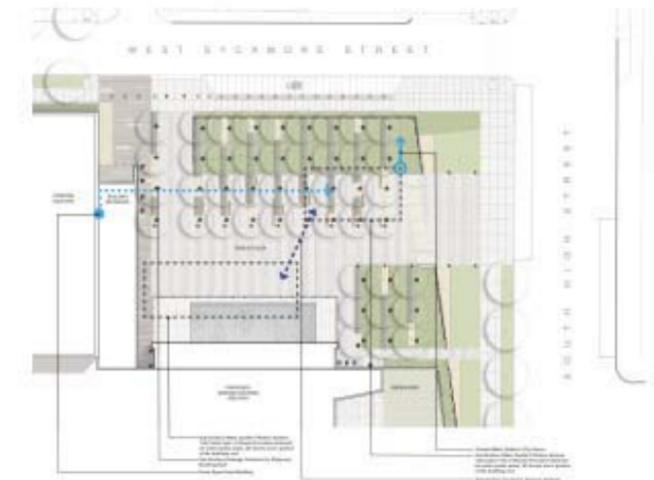


Figure C

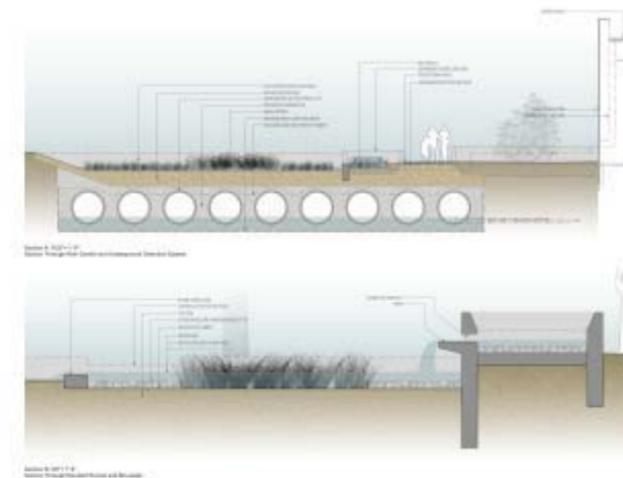


Figure D

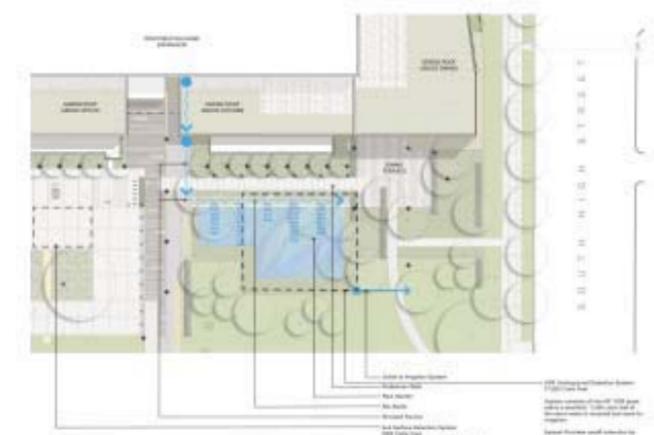


Figure E