Green Infrastructure & Stormwater Management CASE STUDY

Mary Bird Perkins Oncology Center

Location: Houma, LA Client: Chenevert Architects Design Firm(s): BROWN+DANOS landdesign, inc. Landscape architect/Project contact: Dana Nunez Brown, ASLA Email: <u>dbrown@browndanos.com</u> ASLA Chapter: Louisiana

Project Specifications

Project Description: A new oncology center at Terrebonne Medical Center was designed with pervious concrete, an underground cistern, rainwater harvesting for irrigation, native plantings, and a substantial green roof. The green roof is located on top of the radiation room, with a 10-foot thick concrete roof, allowing just about any plant materials, growing media, and paths to be designed in the green roof. Located adjacent to the chemotherapy room, where patients sit for hours for intravenous treatments, the roof garden is design with varying heights of plant materials, including trees, and plants that attract birds and butterflies. Water from the rest of the building's roof is directed through the green roof and down into a cistern located under pervious concrete parking, where it is harvested for irrigation.

Project Type:

Institutional/education Part of a new development

Design features: Bioswale, green roof, cistern, downspout removal, porous pavers, and curb cuts.

This project was designed to meet the following specific requirements or mandates: Developer/client preference

Impervious area managed: 1 acre to 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: 5,000 sq/ft to 1 acre

asla.org/stormwater

The regulatory environment and regulator was supportive of the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? One of the largest requests from the client was minimal maintenance.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: None)

Was a green vs. grey cost analysis performed? No

Cost impact of conserving green/open space to the overall costs of the site design/development project: Not significant cost difference.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Slightly increased.

Number of jobs created: Not available

Job hours devoted to project:

Planning and Design: 260 Construction: 60 Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis: All stormwater runoff from a 10-year, 24-hour storm is retained on site.

Community & economic benefits that have resulted from the project: Unknown at this time

Project Recognition

Received state award