



Green Infrastructure & Stormwater Management CASE STUDY

Madera (community and model center) – very little information

Location: Gainesville, FL

Client: GreenTrends and the University of Florida IFAS Extension

Design Firm(s): Causseaux and Ellington, Inc. (Engineer)

Landscape architect/Project contact: Glenn Acomb, FASLA

Email: acomb@ufl.edu

ASLA Chapter:

Project Specifications

Project Description: See attached email.

Project Type:

Single Family Residential

Part of a new development

Design features: bioretention facility, rain garden, , , , , porous pavers, Limited clearing and grading of the existing hardwood forest Narrow ROW, 2-lane uncurbed road Rainwater collection of 1/3 of model center roof Natural drainage system Soil moisture sensor Limited turf (65% reduction from conventional).

This project was designed to meet the following specific requirements or

mandates: , , , , Developer/client preference, The project was a model LID community as determined by UF and in cooperation with the developer, with support from the Water Management District and the Alachua County Extension office.

Impervious area managed: 1 acre to 5 acres

Amount of existing green space/open space conserved or preserved for managing stormwater on site: greater than 5 acres. See plan in attached email.

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? Houses utilize state-of-the-art energy

savings (non-PV); Energy Star standards; model uses sustainable construction materials; all homes are designed and built to Florida Green Building Coalition standards; houses and model exterior is designed to Water Star and Florida Friendly Standards.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$50,000-\$100,000 (Public funding: , , Regional, , See attached email)

Related Information: See attached email that contains case study and article in Land Development Magazine. Cost of stormwater is an estimate for Phase I stormwater improvements, in 2003/2004 dollars.

Was a green vs. grey cost analysis performed? Yes See attached email. It was done as a post-construction evaluation, though. The project was undertaken as a model LID community.

Cost impact of conserving green/open space to the overall costs of the site

design/development project: The project continues to be one of the best values and most desirable communities in Gainesville. Water consumption has been documented to be reduced by 50%, using the comparison of a comparable community immediately across the collector road.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Significantly reduced costs (10% or greater savings). See attached email.

Number of jobs created: unknown

Job hours devoted to project:

Planning and Design: not readily available; would have to be determined

Construction:

Annual Maintenance:

Other:

Performance Measures

Stormwater reduction performance analysis:

100% on-site retention Natural drainage preserved

Community & economic benefits that have resulted from the project: See article. The community uses 50% less water than comparable nearby subdivision.

Project Recognition

Additional Information