# Green Infrastructure & Stormwater Management CASE STUDY

# **DIY Home Center**

Location: South Lake Tahoe, CA

**Client:** DIY Home Centers

**Design Firm(s):** Brett T Long Landscape Architecture **Landscape architect/Project contact:** Brett Long, ASLA

Email: brett@btlong.com

ASLA Chapter: California, Sierra

# **Project Specifications**

**Project Description**: This project focuses on the removal of 13,000 sq/ft of asphalt from an old card dealership to create bioswales and stormwater retention for the 20-year storm event.

#### **Project Type:**

Commercial

A retrofit of an existing property

**Design features**: Bioretention facility, rain garden, and bioswale.

This project was designed to meet the following specific requirements or mandates: State statute, local ordinance, bi-state regulations for Tahoe Regional Planning Agency

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. 13,000 sq/ft of 170,000 sq/ft of impervious surface was removed.

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? The aesthetic importance was high because of the retail use of the site and the high visibility from a busy road.

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# **Cost & Jobs Analysis**

**Estimated Cost of Stormwater Project:** \$10,000-\$50,000 (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: Reduced cost of construction of BMPs and stormwater retention.

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).

Number of jobs created: Not available

#### Job hours devoted to project:

Planning and Design: 120

Construction: 800

Annual Maintenance: 10

#### **Performance Measures**

#### Stormwater reduction performance analysis:

The project was designed to meet the Tahoe Regional Planning Agencies requirement for stormwater retention of the 20-year storm event or one inch over one hour.

**Community & economic benefits that have resulted from the project:** A closed auto dealer was converted into a successful hardware store and home improvement center.

# **Project Recognition**

Tahoe Regional Planning Agency Best in the Tahoe Basin Award for Commercial Modification