



Green Infrastructure & Stormwater Management CASE STUDY

Alto Park

Location: Santa Fe, NM

Client: City of Santa Fe

Design Firm(s): Morrow Reardon Wilkinson Miller, Ltd.

Landscape architect/Project contact: Gregory Miller, ASLA

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ASLA Chapter: New Mexico

Project Specifications

Project Description: Alto Park was the renovation of a large community park in Santa Fe. The park is adjacent to the Santa Fe River, so discharge of stormwater was a prime concern. The park renovation features a permeable concrete parking lot and bioswales, both intended to capture stormwater before it empties into the river.

Project Type:

Open space - park

Part of a redevelopment project

Design features: Bioswale, and porous pavers.

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: 1 acre to 5 acres

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 City of Santa Fe used this as a pilot project for future consideration of permeable concrete.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$100,000-\$500,000 (Public funding: Local)

Related Information: The entire project budget was over \$3million, with the stormwater components accounting for approximately 15% of the total budget.

Was a green vs. grey cost analysis performed? Yes, the design team reviewed options for both a standard asphalt parking lot and a permeable concrete solution.

Cost impact of conserving green/open space to the overall costs of the site design/development project: It increased the cost of the parking lot by approximately a third. The bioswales were no additional cost.

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: 25

Job hours devoted to project:

Planning and Design: 2,000

Construction: 10,000

Annual Maintenance: 150

Performance Measures

Stormwater reduction performance analysis:

All stormwater is collected in bioswales or allowed to infiltrate through the permeable concrete, before it is discharged.