



Green Infrastructure & Stormwater Management CASE STUDY

Braddock Drive Elementary School and Gifted Magnet: Learning/Walking/Reading Garden

Location: 4711 Inglewood Blvd., Culver City, CA

Client: Los Angeles Unified School District (LAUSD)

Design Firm(s): Not applicable

Landscape architect/Project contact: Teague Weybright, Project Manager; Tony Tran,
Garden design concept/School Parent

Email: tweybright@gmail.com and ttranwla@yahoo.com

ASLA Chapter: No

Project Specifications

Project Description: The new 14,000 sq/ft learning/reading/walking garden at Braddock Drive Elementary School and Gifted Magnet creates a welcome, attractive amenity for the school and local community. The project is located in a diverse, multiethnic neighborhood in the Del Rey/Culver City area of Los Angeles. The school currently has a total of 450 students. The regular elementary school students come from the surrounding community, many of whom are residents of Mar Vista Gardens, a local housing project. Braddock Gifted Magnet students come from all areas of Los Angeles, many of whom riding buses to attend the school. By providing a much-needed natural green space of biodiversity on a site that had little shade and landscaping, the garden beautifies and transforms the mostly asphalt-covered campus, thereby enhancing the educational and enrichment benefits for students, staff and the community.

The garden concept creates an educational “Journey of Discovery” through the different spaces of the garden, highlighted by a plant palette has been selected for their native, drought-resistant properties as well as to attract fauna and wildlife to promote biodiverse habitats. A meandering configuration of curvilinear walking paths and seating areas define a richly landscaped sequence of “islands” and “zones” of trees, grasses and trees, including oaks, toyons, manzanita, fuschia, lilac and sage.

Planned to be highly sustainable in terms of the environment, the project is estimated to capture over 1-million gallons of stormwater per year. The new garden is located at the lower end of a gradual slope on the school playground, facilitating the optimal flow of stormwater and maximizing the retention of stormwater on the site.

Project Type:

Institutional/education

A retrofit of an existing property

Design features: Rain garden, bioswale.

This project was designed to meet the following specific requirements or mandates:

County ordinance, local ordinance, to meet funding criteria, developer/client preference

Impervious area managed: 5,000 sq/ft to 1 acre

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

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 main goal is to beautify the school by providing much needed green space and shade for students, staff and community in a diverse, multi-ethnic urban neighborhood lacking in sizable parks and gardens. Interpretive signs with plant/bird/insect names are planned to be installed to help students learn about plants and biodiversity. Plants have been selected for their native, drought-resistant properties as well to attract fauna and wildlife to promote biodiversity in the garden.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$10,000-\$50,000 (Public funding: Regional, local)

Related Information: Not available

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: Stormwater management was an inherent part of the approach regarding the location and design of the project, so it did not affect the overall costs of the site design/development project.

Cost impact of conserving green/open space for stormwater management over

traditional site design/site development approaches (grey infrastructure)? Slightly reduced costs (1-9% savings). Stormwater management was an inherent part of the approach regarding the location and design of the project. Information on costs savings or additional costs over traditional site design/site development approaches is not available at this time, although it can be assumed that costs savings for the neighborhood and city in regards to

stormwater management will be significant over the long run. One of this project's key functions is a rain garden that is estimated to capture over 1-million gallons of stormwater per year.

Number of jobs created: Not applicable. Much of the work was done by parent and student volunteers from the school community, and multiple local, state and national organizations (including crews from LAUSD and the Los Angeles Conservation Corps).

Job hours devoted to project:

Planning and Design: 80 hours (estimated)

Construction: 300 hours (estimated)

Annual Maintenance: 200 hours (estimated for watering, weeding, etc...)

Performance Measures

Stormwater reduction performance analysis:

This project is estimated to capture over 1-million gallons of stormwater per year. The new garden is located at the lower end of a gradual slope on the school playground, facilitating the optimal flow of stormwater and maximizing the retention of stormwater on the site.

Community & economic benefits that have resulted from the project: The project benefited from a highly collaborative and mutually supportive effort involving the Los Angeles Unified School District, the City of Los Angeles, other local and national organizations, as well as students, teachers, staff, and parents from a very diverse school community. Many people from the Braddock Drive Elementary School and Gifted Magnet community enthusiastically contributed their talents, skills and hard work over several work days (mostly on Saturdays) to bring the project to reality. The new Learning/Walking/Reading Garden provides a precious natural, biodiverse and educational amenity for students and staff on a site that previously had little shade and landscaping, thereby beautifying and transforming an ordinary, asphalt-covered campus while enhancing the educational and enrichment benefits for students and teachers. Other potential benefits include increasing student enrollment at the school, improving student performance, and possibly increasing property value effects in the neighborhood.

Project Recognition

This project was selected, promoted and launched by LAUSD as one of the featured projects for the Martin Luther King Jr. Day of Community Service on January 17, 2011. The initial groundwork and planting were done by mid-March 2011.

Additional Information

Links to images: Our school URL is http://www.lausd.k12.ca.us/Braddock_EL.

The school website is currently being updated to include images the new garden. In the meantime, we have drawings and photos that we can send to you as email attachments.

Prior to the first community work day on Monday, January 17, 2011, designated by LAUSD as the Martin Luther King Jr. Day of Community Service, LAUSD removed about 14,000 square feet of asphalt and then installed the current irrigation line. The District had also supplied around 200 yards of soil and 50 yards of Decomposed Granite, as well as delivering the header board materials. On January 17, about 150 people moved most of the soil with wheelbarrows and began installation of the header boards. Over the next few weeks, a few crews from LAUSD, Los Angeles Conservation Corps and school parent volunteers completed the soil distribution—about 50 yards of mulch were spread, header boards completed and most of the DG was spread and compacted. On Saturday, March 19, 2011, crews and volunteers spread the remaining DG and mulch, and planted roughly 380 plants. Additional elements are planned to optimize the benefits of the garden for the entire community, including the provision of interpretive signs and plant labels as an educational tool for students and teachers.