

WHY PAVERS?

*CASE
STUDY*



BASALITE GREEN PROJECT – CITY OF PITTSBURG



City of Pittsburgh Creates Community Focal Point

Prior to the economic downturn, Old Town Plaza in Pittsburg, CA was graded for the construction of a mixed-use commercial/residential building. When that construction stalled, the local community “adopted” the site to house events, including public gatherings, special events and the weekly farmer’s market.

The new plaza consists of a multiple-use, pedestrian-friendly areas, providing the City of Pittsburg a permanent home for civic events. A shade canopy creates a performance stage with ample audience gathering space. Banners and art elements acknowledge Pittsburg’s relationship with its five sister cities (Shenyang, China; Shimonoseki, Japan; Pohang, Korea; Isola Delle Femmine, Italy; Yahualica, Mexico).

On-site storm-water management, including pollutant filtration and reduced storm-water runoff, is achieved with 7,500 sq. ft of permeable pavers, bio-retention planters and Silva Cells. The pavers were manufactured by Basalite Concrete Products, LLC, installed by European Paving Designs of San Jose and specified by the prime consultant and project architect, Hansen McArdle, Inc.

Concrete Paver Solution

Project development required compliance with the National Pollutant Discharge Elimination System (NPDES) for storm water discharge, typically referred to as the “C.3” provision. This provision required the design of the plaza to detain or infiltrate storm water runoff so peak flows and flow durations match pre-project conditions. The design of the plaza had to incorporate measures which would help prevent pollutants from entering the municipal storm drain system.

During the design process, the project design team began looking into low cost, low maintenance paving options, ultimately choosing an interlocking paver system- specifically a “permeable paver”. Basalite permeable pavers were selected for their ability to support the recharging of the groundwater and irrigation of the plaza trees. Selection of this product ensured that the design team would be in compliance with the C.3 provision. In addition,



permeable pavers offered the team greater design flexibility in selecting sizes, textures and color variations for the paving treatment.

Permeable Paver Size and Color Options

After the design team selected the permeable interlocking pavers as the major pavement material for the plaza, the team approached the pavement design with keen interest in combining multiple colors, textures, and sizes that would create interesting and vibrant distinction of the main and lower plaza spaces.

Working with the product representative at Basalite, the design team explored incorporating custom coloring to help achieve the overall design vision. A custom color palette was ultimately selected and specified for the lower plaza. Paver colors selected for the main plaza were chosen from the standard manufacturer's color palette. In addition to color selection, paver textures and sizes were also given considerable thought in the design process. The result is a distinct and vibrant space that captures the attention of the community and visitors.

Silva Cell Installation

The design team researched what would complement the union of the permeable pavers and help further integrate the project's green infrastructure and design sustainability goals. The "Silva Cell" system was selected, manufactured by Deep Root Partners, L.P. Silva Cell is a load-bearing, subsurface modular framework, composed of a rigid fiberglass reinforced high-impact polypropylene material. In addition to supporting traffic and paver loads, this specialized system allows un-compacted import soil to replace the undesirable site soil as the growing medium to support large shade trees, and included alleviation of on-site storm-water. The Silva Cell system will also allow the Plaza trees to reach their full maturity without root damage to the surface.

Since its completion in the summer of 2010, Old Towne Plaza has received high reviews for incorporating eco-friendly landscape elements into a community centerpiece. The overall beauty of the Plaza combined with a flexible community event stage serves as a model for the revitalization of a downtown area with compelling economic benefits.