Lafayette Greens Detroit, Michigan, U.S.A.

Lafayette Greens is a 0.425-acre urban garden that was established on city land in downtown Detroit. The site is former home of the historic Lafayette Building, designed by C. Howard Crane., which was vacant for more than a decade before being torn down in 2010. Designed by Kenneth Weikal Landscape Architecture, the garden, which was commissioned and funded by the Compuware Corporation, is now a productive agricultural landscape, tended by volunteers, and an engaging public space.

The garden, which is downtown Detroit's first urban garden, offers a number of benefits to the community. Not only does the garden provide organically-grown produce to an area with limited access to such food but it is also an aesthetically-pleasing space where residents can retreat from the surrounding urban environment. Produce grown there is donated to Gleaner's Community Food Bank, the largest food-providing non-profit organization in Southeastern Michigan, and Freedom House.

In addition to engaging the local community, Lafayette Greens showcases environmental sustainability. Biodiverse planting design, material recycling, ecological stormwater management, and sustainable agriculture are just a few of the sustainable practices used throughout the site.

The majority of the site design, which draws inspiration from the previous building and Detroit's urban form. The awkwardly-shaped property presented a challenge to the landscape architects, but by arranging the 35 plant beds within the golden ration, the designers could impose a calming order across the site. The planters double as seating structures, encouraging more public use in a part of the city with little seating.

More than 200 plants -- including vegetables, herbs, flowers, heirloom fruit trees, vines, and berries -- were

incorporated. Biodiverse habitat for pollinators like bees and butterflies pollinator was added back into the urban environment through a native species-filled short orchard meadow and a bioswale. Also, lavender, which pollinators appreciate, is widely used throughout the public passages because of its documented ability to induce calm.

Lafayette Green manages stormwater with a bioswale that has informative signage to raise awareness about water issues in the Great Lakes region. Between two gabion curbs, a Red twig Dogwood hedge also keeps water off the bordering city streets. Impervious surfaces, which account for 70 percent of the site's surfaces, limit stormwater run-off. Drought tolerant fescue lawns and high-efficiency irrigation systems with adjustable drip lines limit and conserve water use.

The majority of the constructed elements are made from recycled materials. The gabion curbs, which help with stormwater management, were constructed from concrete rubble, while broken concrete sidewalk pieces from across the city re-used as pavers in the garden. Three garden sheds -- named Charles, Howard, and Crane after the Detroit architect who designed the Lafayette Building and 250 movie palaces across North America -- were constructed from reclaimed pallet wood and salvaged doors. The planters used in the children's garden were made from repurposed foodgrade steel drums.

Lafayette Greens is an example of a successful publicprivate partnerships. Compuware and the City of Detroit, who owns the land, negotiated a cooperative lease agreement that benefits the public. The nonprofit, Greening of Detroit, took over the garden in 2014 and now hosts many free evening classes, however Compuware employees still account for many of the long-time volunteers.

DESIGNING OUR FUTURE: SUSTAINABLE LANDSCAPES

Lafayette Greens

Although Lafayette Greens will never produce enough food to feed the entire community, its highly visible location and smart approach to community outreach has turned it into an educational space for discussions about food security and sustainable urban revitalization.

As food security continues to be a pressing issue in many cities, Lafayette Greens provides an example of a landscape that is not only beautiful and engaging, but innovatively helps solve a community health problem.

Project Resources

LANDSCAPE ARCHITECT

Kenneth Weikal Landscape Architecture

ARCHITECTURAL REVIEW AND GARDEN SHED CONSTRUCTION DETAILING

Fusco Shaffer and Pappas Inc.

CIVIL ENGINEERING AND PERMITTING

Zeimet Wozniak & Associates, Julian J. Wargo Jr., P.E.

ELECTRICAL ENGINEERING

TAC Associates, LLC,

Thomas G. Crow, P.E., LEED AP

GARDEN SHED CONSTRUCTION

Mackinac Woodworking Concepts, Keith Howie

GENERAL CONTRACTOR

Tooles Contracting Group LLC, President and CEO Damon Tooles

IRRIGATION CONSULTANT

Liquid Assets, LLC, Andrew Barnes

LANDSCAPE CONTRACTOR

WH Canon Company, Ed Ashcraft and Mark Marcero

STRUCTURAL ENGINEERING

Desai/Nasr Consulting Engineers, Athanacios Nasr, Ph.D., P.E., SECB

CLIENT

Copuware Corporation City of Detroit