Rooftop Haven for Urban Agriculture Chicago, Illinois, U.S.A.

In a neighborhood with little access to safe outdoor environments, the Gary Comer Youth Center Roof Garden serves as an urban farm and after-school learning space for community youths and seniors. Located in Chicago's Grand Crossing neighborhood, the 8,160-square-foot green roof sits atop of a state-of-the art youth learning center that offers a range of extracurricular activities and classes for the community's school children. Given its urban location, the rooftop garden provides a rare opportunity for students to engage in horticultural learning and food production while gaining awareness and appreciation for nutrition and the environment. As they become entwined with the planting, growing, and harvesting process, students' lifestyles become ingrained with healthy eating habits. Students become anxious to sample the fresh fruits and vegetables they help grow.

The Gary Comer Youth Center Roof Garden is a model for urban agriculture, making use of traditionally underutilized space to farm organic fruits and vegetables that supply the surrounding community with fresh, locally-grown, organic produce. Each year, the garden produces more than 1,000 pounds of organic food. The crops include spinach, turnips, potatoes, carrots, cabbage, lettuce, tomatoes, and strawberries. The fruits, vegetables, and herbs are used for the Center's cooking classes and for the daily meal preparation that helps feed more than 175 students at the center's café. In addition, seasonal produce grown on the roof is often purchased by local restaurants seeking the freshest ingredients.

Located on the second floor above the center's gymnasium and café, the garden's 24-inch soil depth provides insulation for the rooms below, helping to lower energy costs associated with heating and cooling.

The garden is encircled by a two-story ring of classrooms and hallways fitted with floor-to-ceiling windows. Students circulating inside the building are inspired by scenic views of color and texture that embody the working garden. Recycled plastic barriers separate plant beds and form pathways within the garden that align with the courtyard garden's window frames. Circular metal elements scattered throughout the garden bring artistic expression to the landscape, while also functioning as skylights that bring natural illumination to the building's gymnasium and café below.

Adding to the environmental sustainability of the site, the green roof absorbs rainwater rather than diverting it to city storm sewers. This helps to reduce water pollution and the likelihood of urban flooding. In addition, the landscape architect's minimal use of concrete and other heat-conducting building materials has led to lower temperatures on the green roof compared to those on the street. The cooler microclimate makes the roof a haven from the harsh, summer heat.

Project Resources

LANDSCAPE ARCHITECT

Hoerr Schaudt Landscape Architects Peter Lindsay Schaudt, FASLA, Partner

ARCHITECT

John Ronan Architect John Ronan, Principal

STRUCTURAL ENGINEER

Arup

Nancy Hamilton, Principal

GARDEN MANAGER

Gary Comer Youth Center Marjorie Hess, Garden Manager

IRRIGATION DESIGN

ICON

Eric Davis

DESIGNING OUR FUTURE: SUSTAINABLE LANDSCAPES

Rooftop Haven for Urban Agriculture

Project Resources Cont.

LANDSCAPE CONTRACTOR

Walsh Landscape Construction, Inc.

GENERAL CONTRACTOR

W.E. O'Neil Construction Co.