

## NEW YORK CITY'S LINCOLN CENTER GOES GREEN

Silva Cells supply 800+ ft<sup>3</sup> of soil/tree in ultra urban environment



65th Street

Barclay Capital Grove

The Lincoln Center Development Project (LCDP) decided to renovate its beloved New York City landmark, but many of the trees on the site had suffered due to years of inhospitable growing conditions. The LCDP wanted the site to have large, visually arresting and healthy trees, and understood that any new design had to accommodate their needs.

Diller, Scofidio + Renfro with FX FOWLE were picked to design the renovation. Matthews Nielsen was the landscape architecture firm and James Urban of Urban Trees + Soils was the consultant for tree and soil details.

Two of the redesigned sites were a streetscape along 65<sup>th</sup> Street and an on-structure area called the Barclay Capital Gove adjacent to the Metropolitan Opera and used for outdoor concerts.



65th Street trees in May 2010

The LCDP knew they needed a new way to ensure that the trees on-site would be large and healthy, but the design specifics for 65th Street required review by the Art Commission. Signe Nielsen, of renowned landscape architecture firm Matthews Nielsen, was brought in by FX FOWLE to collaborate with James Urban, FASLA, on the use of the Silva Cells to optimize soil volume for the trees while taking into account the characteristics and requirements of each site. They presented their ideas to the Department of Parks and Recreation and the Department of City Planning, who accepted the design as the most cost-effective way to provide the lightly compacted soil volumes that the trees needed.

The area along 65<sup>th</sup> Street site had no depth limitations, allowing FX FOWLE to stack the Silva Cells three units high. They prepared site plans and sections that utilized about 33



Custom metal decks were used around the tree openings to make the lights work in the thinner paving.

triple stacks of Silva Cells, providing each tree along the street with 1,000 cubic feet of soil. Turner Construction selected D & B Cousins Construction as the installing contractor. Construction started in October 2008 and was completed two months later.

The outdoor on-structure Bosque concert area, which is in front of the Vivian Beaumont Theatre (designed by Finnish architect Eero Saarinen), needed to incorporate big trees without compromising ease of use as a performance venue. Diller, Scofidio + Renfro added a bosque of trees on top of the garage to soften the space. In order nourish these trees to maturity they would needsubstantial volumes of soil. They also needed to ensure that the planting area could support the weight of the temporary seating for Lincoln Center's planned outdoor events. FX FOWLE and James Urban worked together to solve these issues by using the Silva Cell to meet both the project's aesthetic and functional requirements.



June 2010: The Barclay Capital Grove is a popular summer destination for people seeking greenery and shade.

The excavation depth for the project was limited by the Grove sitting atop a parking garage, so rather than going three Cells deep they opted to use a combination of double and single stacks, with CU Structural Soil™ as a sub base. Turner Construction and its subcontractor, Kelco Landscaping, completed installation in May of 2009.

## Installation Summary:

Total soil volume per tree: 820-1,000 ft $^3$  (23-28 m $^3$ )

Number of trees: 14

Total Silva Cells: 1,150 frames, 390 decks

Installation date: September 2008

Installation type: Trees

Project site: Streetscape/On-structure Client: Lincoln Center Development

## For more information, please contact:

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