

Sustainable features:

- Innovative soil reclamation strategies
- A specific mix of plant species and types which can regenerate high performing ecologies
- 2.8 acres of new landscape(124,000 sf)
- Rain garden plazas
- 10,000 SF wildflower and prairie grass green roof
- Bio-Infiltration basin network
- 90 plant species added to garden collection
- Landscape based storm water management
- 42" diameter/75' tall gingko tree transplanted

Brooklyn Botanic Garden Visitor Center

Designer: HMWhite | Location: New York, USA

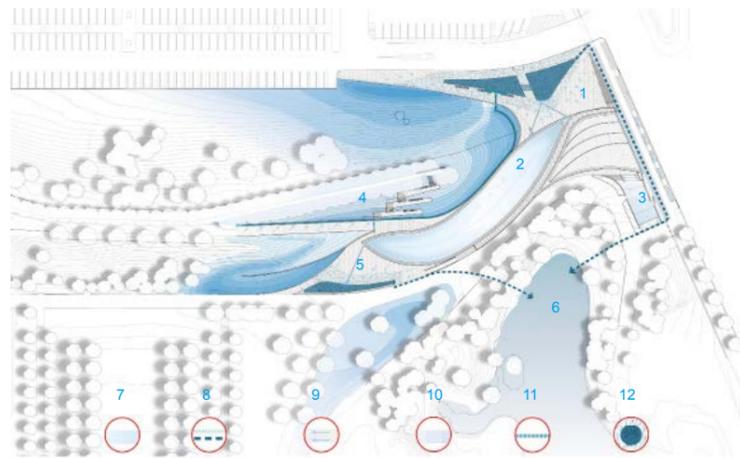
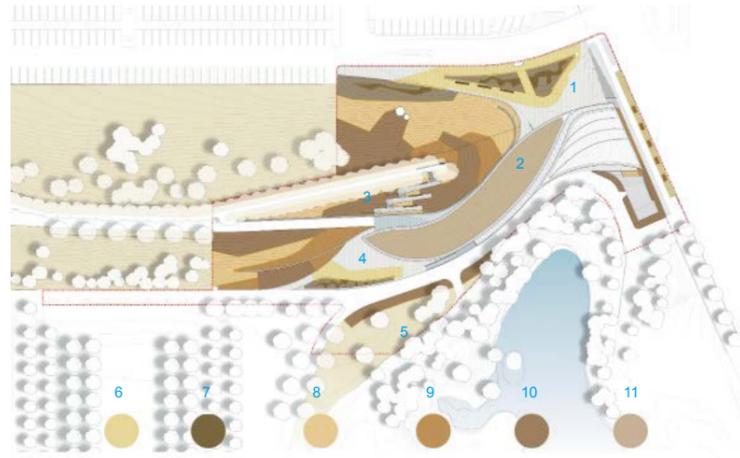
Project name:
Brooklyn Botanic Garden Visitor Center
Completion date:
2012
Photographer:
Aaron Booher, HMWhite
Client:
Brooklyn Botanic Garden
Area:
11,330sqm
Award information:
2013 ASLA National Chapter Honor Award
2013 ASLA New York Chapter Honor Award

SOILS GRADING DIAGRAM

1. Entrance plaza
2. Green roof
3. Garden terraces
4. Event plaza
5. Retail terrace
6. Structural soil
7. Bio-infiltration basin soils
8. Meadow/ground covered soil
9. Shrub soil
10. Tree soil
11. Extensive growing medium

STORMWATER DIAGRAM

1. Entrance plaza
2. Green roof
3. Retail terrace
4. Garden terraces
5. Event plaza
6. Japanese garden pond
7. Green roof
8. Subsurface connections
9. Hard surface water runoff
10. Vegetated surface water runoff
11. Stormwater channel
12. Infiltration basin



1. Visitor center's terraces and valley
2. A mature allée of Ginkgo trees forms the edge of the Garden



- MASTERPLAN**
1. Visitor parking
 2. The overlook
 3. Cranford rose garden
 4. Cherry esplanade
 5. Ginkgo allée
 6. Visitor centre
 7. Japanese garden pond

Honored by the NYC Design Commission with an Award for Excellence in Design in 2008 for integration of form, function and sustainable practice, the new visitor center to the Brooklyn Botanic Garden establishes a visionary public interface between the city and the garden. The landscape's central feature is the building's living roof design, conceived as a seamless, inhabitable extension of the Garden that merges landscape and architecture and redefines physical and philosophical relationships between visitor and garden, exhibition and movement, culture and cultivation.

Site Context

At the northeastern perimeter of the 210 436 sqm botanic garden, between the Brooklyn Museum and the Japanese Hill-and-Pond Garden, a 7.6m high berm crested by a mature allée of Ginkgo trees forms the edge of the Garden and the spine of the Visitor Center project. The berm is a remnant of the original, uncompleted design for the Brooklyn Museum and contains contaminated soils from the property's former use as an urban ash dump in the late 1800s.

Fusing contemporary site engineering technology with sustainable landscape and horticultural design, the Visitor Center landscape design



marks the Garden's centennial. Demonstrating the institution's commitment to environmental stewardship and conservation, the Center provides a new pedagogical paradigm with this high performance landscape design and new botanical exhibit for its next 100 years of public service and education.





Site Design

The 12 140sqm site design greets visitors with a large plaza at Washington Avenue and features an elegant building designed by Weiss/Manfredi Architects emerging from the landscape and forming the Garden’s entrance gateway. The high-performance building houses visitor information, ticket and retail services as well as education, exhibition and event spaces.

The complex is cinematically revealed in the landscape as an unfolding procession never fully visible at once, framing a series of views into and over the gardens. The landscape design molds the landform to highlight the berm’s topographic dominance and extend the terrain over the building with a vegetated green roof to develop a distinct verdant backdrop. Grade transitions physically integrate the building into the landform, extend pathways above, around and through the building and merge exterior social spaces with a system of depressions to collect, filter and infiltrate storm water runoff.

Stormwater Management

A network of storm water collection features an extensive green roof, storm water channel, vegetated swales and bio-infiltration basins. Collectively, these elements retain storm water on site to facilitate natural filtration and ground water recharge and discharge to the municipal sewer.

Soil Reclamation

Contaminated soils in the historic fill demanded remedial action. Distinct soil profiles were designed to reconstruct existing soils and restore viable soil biology to support each diverse horticultural conditions. The bio-infiltration basin’s loose deep soils absorb water and filter pollutants and expand the volume of storm water capture. Structural soils in plazas provide



contiguous expansive soil volumes to sustain limitless tree root growth under paved areas.

Horticultural Exhibit:

The planting design demonstrates how a specific mix of plant species and types can regenerate high performing ecologies. Informed by native plant communities, botanic collections are organized in bold drifts, from upland to lowland typologies that knit the Visitor Center landscape into the existing and establish a resilient design structure for future garden expansion.

- 1. Visitor center approach from cherry esplanade
- 2. Sweet Bay Magnolia
- 3. Pathways leading to the visitor center
- 4-5. Green roof and terraces

