



North Carolina Museum of Art

West Building

In Spring 2010, the North Carolina Museum of Art underwent a profound transformation with a major gallery expansion, the integration of new sculpture gardens and Museum Park.

INTRODUCTION



Jesse Turner Photography

The North Carolina Museum of Art – the first major art museum collection in the country to be formed by state legislation and funding – is North Carolina’s greatest cultural gem. The facility is unique among American museums in that it is surrounded by the nation’s largest art museum park, with walking paths, bike trails, ecological projects and commissioned site-specific works set in a rolling green landscape. The centerpiece of the recently completed Museum expansion is the new 127,000-square-foot, \$ 78 million dollar West Building and Sculpture Gardens. In December 2006 the new gallery building and gardens officially broke ground, and was opened to the public on April 24, 2010.

The Sculpture Gardens connect the West Building galleries with the broader campus landscape in a dialogue with nature. Designed as a continuum, the museum landscape is expressed through the display of natural processes, crafted landscapes and indigenous Piedmont environments. The continuum begins with the refined courtyards adjoining the building, progresses to managed sculpture gardens, to the Museum Park’s more naturalistic meadows and tree groves, and transitions to a native woodland preserve.

The completed design achieves three main goals:

1. Connectivity

The site design for the new West Building was envisioned and implemented in a way that conceptually and functionally links the new galleries, existing East Building and Amphitheater, and the newly enhanced 164-acre Museum Park. The Entry Plaza creates a new symbolic and physical “center” for the museum experience. Extremely simple in its design, the plaza is enclosed on two sides by the West and East Buildings, and on two sides by elegant tree groves. From the north and south parking areas, all visitors enter the plaza space to easily find their way to various Museum offerings. The space allows visitors to move effortlessly from West to East Buildings and also allows limited vehicular drop off and handicapped parking. The simply designed plaza is ultimately flexible and programmable.

- A WEST BUILDING
Thomas Phifer and Partners, 2010
- B EAST BUILDING
Edward Durrell Stone, 1983
- C ENTRY PLAZA
- D AMPHITHEATER
- E SOUTH SCULPTURE GARDEN
- F SOUTH COURT
- G CANTOR COURT (RODIN)
- H WHEELER COURT
- I EAST COURT
- J MAIN ENTRY WALK
- K SOUTH PARKING
- L NORTH PARKING
- M MAIN VEHICLE ENTRANCE

photo, cover: Karen Malinofski, NCMA



Scott Frances Photography

Entry Court / Canopy

Under the American Elm allee visitors congregate along the glass and metal entry canopy in simple bistro tables and chairs. Visitors to the Museum Cafe can be served outdoors.



Meadow

In the South Sculpture Garden, the design team chose a balanced use of meadow and managed fescue to create a visually interesting and sustainable landscape.

2. Dialogue with Art

The gardens and courtyards at the West Building provide a beautiful and serene setting for sculpture of all types. Within the grounds, a wide range of outdoor spaces and transitions allow the placement and interaction among art pieces to be managed while not making competing statements. The landscape of the West Building shares a conceptual link with both the natural character of the museum campus and the modern design of the new building. Nature flows from the park to the gardens and from the gardens to the building. The minimalistic aesthetic of the building reverberates into the landscape forming a common language that joins the two in a seamless design and visitor experience. As the Architect's use of gallery views to nature the infusion of natural light into the galleries creates a quietly striking ambiance, the landscape architecture of the Sculpture Gardens, in its restrained, reduced form, helps to unify the building with the environment. By focusing on simple, but powerful arrangements of trees, grass, earth and water, visitors enjoy a visually compelling landscape and a peaceful setting for experiencing sculpture.



KC Ramsay Photography

3. Site Sustainability

The project aggressively manages stormwater runoff to reduce the landscape's dependence on potable water resources. The management plan goes beyond the regulatory requirements of stormwater treatment, using rain gardens, porous pavements, rooftop collection and plant selection to achieve measurable environmental benefits without aesthetic compromise. In many cases, innovative stormwater features coexist with the most designed courtyards, plazas and gardens providing simple beauty and function, enhancing opportunities for sculpture placement. The museum's stormwater management and water quality program is most powerfully apparent at the Museum Park's the pond renovation project – a statement of the Museum's commitment to pollutant reduction, stormwater detention, habitat creation, ecological restoration and water reuse.



KC Ramsay Photography

DESIGN CONCEPT



THE SETTING

The North Carolina Museum of Art has a unique mission to create a community gathering place that fosters dialogue about the relationships between art and public space, art and landscape design, and art and the natural environment. The new West Building provides a cutting-edge venue to showcase the Museum's outstanding permanent collection of more than 5,000 objects spanning antiquity to the present day. The 164-acre Museum Park is also unique in its dedication to site-specific and environmentally-messaged works of sculptural art, responding to the characteristics of the Park's indigenous and designed landscapes. Recent improvements to the Park include the pond restoration, House Creek Greenway, a signage program, new trails, a pavilion, and the placement of numerous site-derived sculptures such as Thomas Sayre's "Gyre" and Martha Jackson-Jarvis's "Crossroads".

House Creek Greenway

The Museum Campus is directly connected to Raleigh's recreational system through the Greenway System. The popular House Creek Greenway traverses the Park on its way from downtown Raleigh, passing through nearby NC State University and Meredith College, on its way to Umstead State Park.



LANDSCAPE CONCEPT

The campus of the North Carolina Museum of Art is a canvas where nature is managed as a continuum that ranges from native woodlands, to grassy meadows, to constructed landscapes. The continuum of natural processes and the relationship with nature through human interaction forms the narrative of the Museum Park experience – a dialogue between park visitors, nature, art, landscape and garden. These elements are bound together by the shared experience of natural form, materials and processes: **form** – expressed the rolling topography of the region; **materials** – in the use of trees, grasses, water, and stone; and **processes** – in the treatment of nature through varying degrees of management. By moving from one Park environment to another, visitors can see, comprehend and enjoy the diversity of nature. As one moves upslope toward the West Building the gradations of form, materials and processes are apparent:

A - In the lowest elevations of the Park along House Creek, the streamside landscape responds according to influences of competition, micro-climate and geomorphology toward becoming a more stable, natural riparian corridor. Each year the natural ecological processes advance toward the woodland's successional maturity creating its own version of an indigenous woodland garden.

B - Moving uphill to the mid-slopes of the Park, the landscape is managed as a meadow and natural succession is expressed in a suspended state through annual mowing. In the meadow, grasses regenerate and trees are contained in managed groves.

C - At the "Picture This" Amphitheater, human intervention adds a layer of functionality to the landscape as 100,000 visitors attend films and concerts each year. At the Pond, the processes of stormwater movement and cleansing are revealed in planted terraces and the visible relationships of water, habitat and vegetative species.

D - At the northwest end of the Park, in the West Building's immediate landscape and exterior courtyards, nature and design merge to create a simplified and ordered expression of nature that focuses attention on the basic garden elements of trees, grass, earth and water.

Through this multi-layered experience, the Museum campus becomes at once a place of revelation, interpretation, inspiration and grounding in one's place in the aesthetic and natural environment. The culmination of the art and nature continuum occurs at the West Building, where the holistic site concept merges with the architectural expression in quiet repose, reflectivity, green courtyards and natural light.



Karen Malinofski, NCMA

Cantor Courtyard

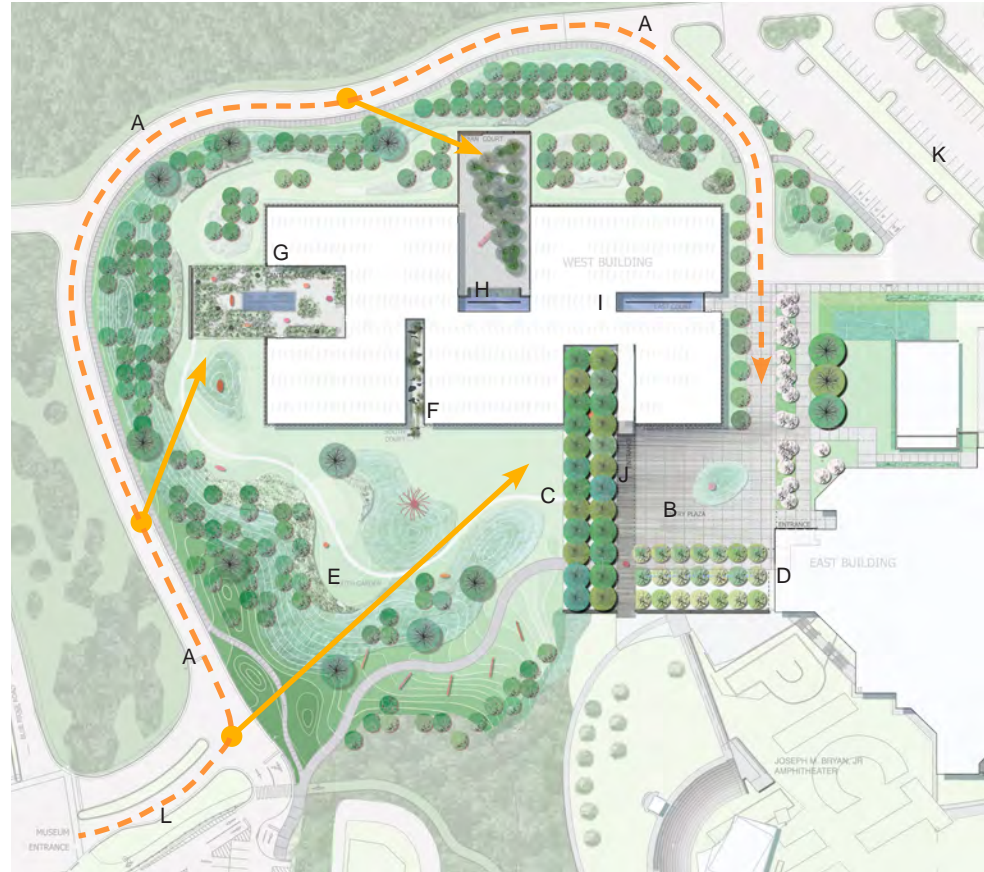
Visitors ponder Rodin's "Three Shades" in a quiet courtyard of stone, bamboo and water.



KC Ramsay Photography

The five-acre landscape that immediately surrounds the new West Building wraps the structure in a green swath of grasses, undulating earthforms and a stylized forest of oaks trees placed on an irregular grid. The soft green landscape offers filtered views of art and architecture from the entrance drive and pedestrian walkways – glimpses of the museum experience to come. In the three-acre South Sculpture Garden, the design simplifies nature and creates a place for human activity – one that allows walking, lounging, thinking, and observing. This is a garden that reduces complex natural systems to just a few powerful elements – **trees** – **grass** – **earth** – **water** – and arranges them into spaces with their own visible and objective form. These garden spaces focus and calm the environment allowing natural processes to be expressed in subtle and nuanced ways – as the trees grow and compete for sun, as the meadow comes to seed and regenerates itself, as rain flows between sculpted earth forms, and water reflects the changing aspects of the sky.

ELEMENTS OF ARRIVAL



- A ENTRY DRIVE APPROACH
- B ENTRY PLAZA
- C ELM ALLEE
- D RIVER BIRCH GROVE
- E SOUTH SCULPTURE GARDEN
- F SOUTH COURT
- G CANTOR COURT (RODIN)
- H WHEELER COURT
- I EAST COURT
- J MAIN ENTRY WALK
- K NORTH PARKING
- L MAIN VEHICLE ENTRANCE

A carefully crafted sequence of garden and courtyard views orients the visitor and provides glimpses into the Sculpture Gardens.

THE ENTRY DRIVE APPROACH

The low rectangular volume of the new West Building blends seamlessly into the Museum’s reconfigured arrangement of architecture, gardens, and uncultivated landscape. As visitors approach the Museum via a descending entrance road at Blue Ridge Road, the West Building – clad in anodized aluminum panels with large areas of glass – appears to dematerialize into soft reflections of the surrounding landscape and sky. The structure’s distinctive roofline is defined by a rhythmic series of curves that expresses a system of light vaults and mimics the undulating, grass-covered earth forms. The simplified use of trees on grid, meadow and shaped earth forms a blanket around the metal-skinned building whose reflections merge sky and landscape. As the visitor drives around the west and north of the building, a choreographed experience unfolds. Forming a filtered screen along the entry drive, the tree grid and ribbon of shaped earthen meadows is eased at several points to create specific and purposeful vistas. Anticipation is built by revealing select views of the South Sculpture Garden, and the Cantor and Wheeler Courtyards that seem to emerge out of the building. The building approach and drive experience culminate at the Entry Plaza.



Karen Malinofski, NCMA

Above - The Plaza framed by the West Building, the Elm Allee, and the River Birch Grove.

Below - During major events the Plaza comes alive with people.



Karen Malinofski, NCMA

ENTRY PLAZA

The 24,000 square foot Entry Plaza is a powerful nexus of arrival, gathering and programmed events. The Plaza is framed by the architecture of the East and West Buildings on two sides and grand allees of trees at its other edges, creating a defined outdoor room and forming the gateway to the museum experience. It is an elegant design in its simplicity and is reduced to its necessary elements – but layered with functionality. In a single gesture, the Plaza provides the point of orientation and wayfinding as it links entrances to the East Building, the new West galleries, “Picture This” Amphitheater, and the Museum Park beyond. The Plaza is designed to be both a vehicular drop off and a central festival space. The spacious design allows vehicles easy maneuvering, but the concept of “shared space” removes most signage and vehicular cues to slow traffic, making pedestrians dominant.

The openness of the Plaza allows its use as a tented space for outdoor events, pre-function space, and outdoor lobby for the Amphitheater, or as drop-off and handicapped parking for patrons. With its simple geometry, room-like sense of enclosure, and gentle gradients, the space is a welcoming focus for the museum’s various venues.



KC Ramsay Photography

Princeton American Elms gracefully transition the visitor from the Entry Plaza to the South Sculpture Garden. The strong and simple landscape produces powerful sculpture placements.

THE ELM ALLEE

The West Building's main entrance is configured as a slot into the building that injects light and natural elements into the gallery experience. The American Elm Allee is the dominant exterior element in this gesture and is framed by a 26' wide, granite paved band that connects the gallery entry to the new Amphitheater entrance. The stately Elm Allee also serves as a transition between the Entry Plaza and the South Sculpture Garden. Set in simple gray granite gravel with an innovative drainage system, the American Elms create a strikingly simple and serene space. The use of the American Elm marks a return of a once cherished American street tree that has been genetically improved to resist the devastating imported disease that nearly wiped out the species within its natural habitat. As the Elms in this allee mature they will represent a horticultural success story in the American landscape.



Jesse Turner Photography

A simple row of fountains and seating under the dappled shade of River Birch frames the Plaza.

RIVER BIRCH GROVE

Along the southern edge of the Entry Plaza, a subtle grove of River Birch forms a tree-lined walkway into the East Building and a pre-function space for the "Picture This" Amphitheater. The Birch Grove also forms an informal transitional edge to the amphitheater and the Museum Park beyond. The grove is comprised of 21 triple-trunked native River Birch trees that characteristically shed dappled light to the ground and provide a textural element with their exfoliating white bark. Along the plaza edge, the grove overlaps into the granite pavement in planting pits and toward the Amphitheater, the trees are set in grey granite gravel. A line of low fountains along the center row of birches animates the space, rising out of and disappearing into the gravel without visible pooling.



Karen Malinofski, NCMA



KC Ramsay Photography

SOUTH SCULPTURE GARDEN

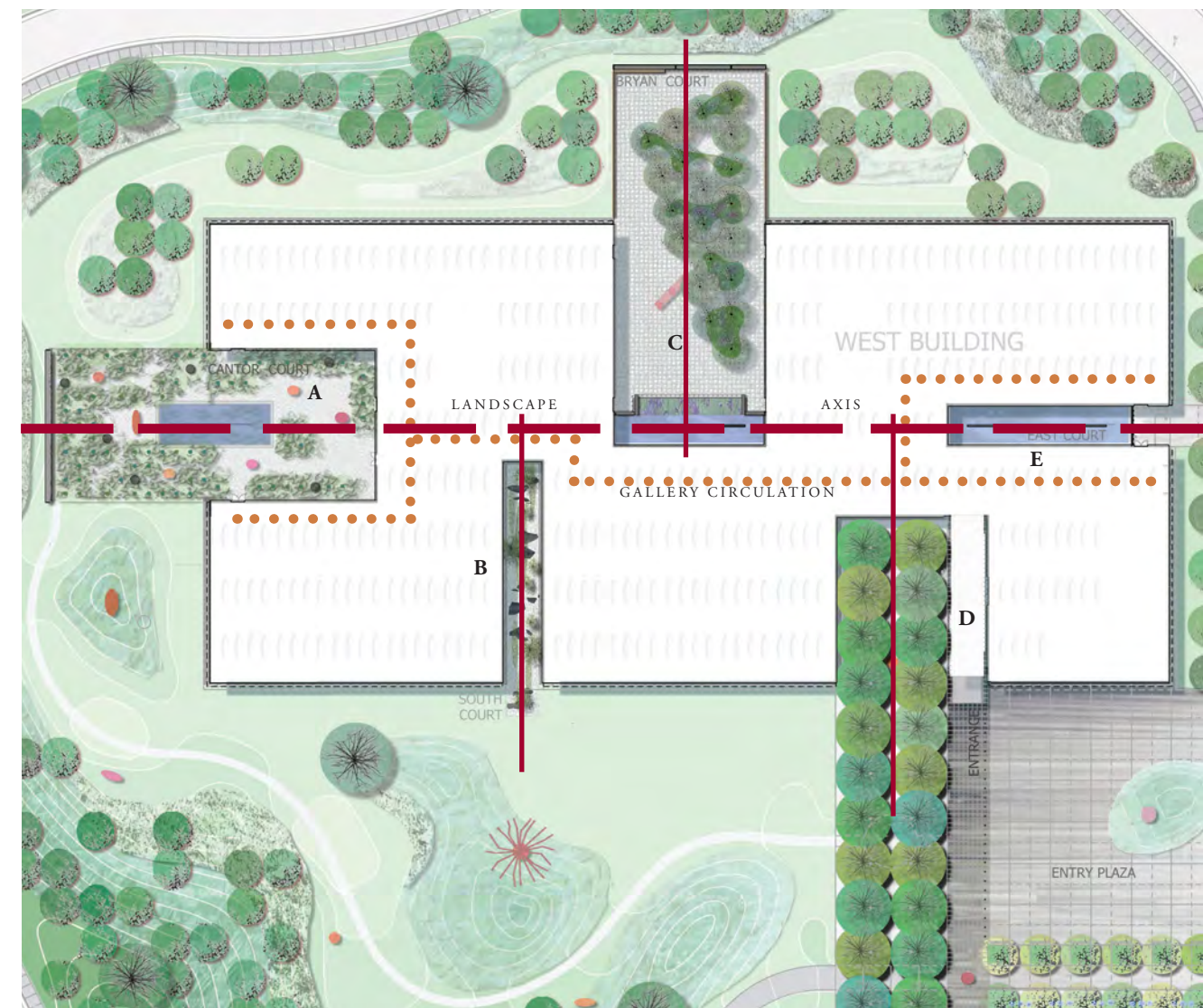
For most patrons, the pedestrian experience will begin at southern parking areas. As visitors descend along a meandering walkway offering layered views of the landscape and building, the prominent sculpture “Askew” by Roxy Paine announces the union of art and nature presented in the South Sculpture Garden. The landscape is reduced in complexity, diversity and the random quality of nature to reveal a crafted landscape in which the building nestles. Once inside the South Garden, the shaped earth forms, natural pathways reinforced by the texture, line, and color of the meadow contrasted with intensely green and trimmed fescue lawn guide visitors along an episodic sequence of views toward the Ursula von Rydingsvard sculpture “Ogromna” and the Cantor Rodin courtyard beyond. Tall native grasses react to the prevailing winds that sweep down from the southwest adding movement and sound to the Garden. Planted native oaks and the South Garden’s soft rolling earth forms create a transition to the more naturalistic Museum Park landscape.

Anticipation urges visitors down the meandering meadow path to the Entry Plaza.

COURTYARDS

The five landscape courtyards at the West Building form the union between architecture and landscape, while extending the museum experience beyond the walls of the structure. The courtyards form a visual and spatial transition to the greater landscape that is linked to the natural systems of the Museum Park. Upon entering the building visitors will find themselves in a sculpture hall that serves as the circulation spine around which forty exhibition galleries are organized. The courtyards form the framework for the gallery’s common circulation space. While each courtyard has a different character, they all deliver natural light and visual connection to natural stone, water and plants through the glass walls of the galleries and are directly accessible from the outdoor walks. All courtyards except for the East Court are directly accessible from the interior gallery spaces, allowing patrons to freely walk from indoors to outdoors.

- A - Cantor Court – a serenely simple space with five major works of Rodin, bamboo, reflective pool and gravel.
- B - South Court – a rock garden on the south façade.
- C - Wheeler Court – a granite paved courtyard on the north side that houses sculpture, reflecting pool and planting islands.
- D - Entry Court – a gravel courtyard that borders the building entrance canopy and serves as an outdoor dining/seating area.
- E - East Court – a 100’ x 25’ courtyard completely filled with a reflecting pool.





Scott Frances Photography

CANTOR COURT

The Cantor Court is a calm and serene garden of gravel, water, and bamboo – an ideal setting for the display of Rodin’s large figurative bronzes. Striking in its quiet nature, Cantor Court connects the museum landscape with the interior Rodin gallery. The Cantor Court landscape forms a space that envelops the sculpture in a light veil of finely textured bamboo. The bamboo grid creates a transition to the greater landscape, changing from a light density inside the building line to a heavier density as it projects beyond the building toward the native woods beyond. From the surrounding entrance road, the bamboo’s texture will be a noticeable enticement to the visitor, drawing attention to the courtyard and reflective building face. Bright green bamboo trunks contrast with the gray granite gravel paving and black concrete end wall and compliment the dark bronze sculpture. Sound is subtly introduced in this garden with the thin sheet of water slipping into the stainless steel center slot of the reflection pool, the soft rustling of wind-blown bamboo leaves and the crunch of gravel under foot.

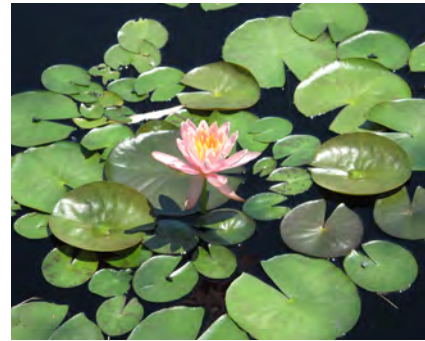
To achieve the serenity of the garden, several innovations take place just below the surface. To maintain the flatness and uniformity of the ground plane, utility structures are custom detailed so they are not visible. The pavement is completely permeable to allow rain to percolate to below-grade drainage structures and into the stormwater recycling system. Handicapped accessibility is accommodated through an application of a stabilizer that fixes the gravel as a stable surface, but still allows the walking surface to maintain its audible and tactile dimension. Underground root containment controls the aggressive spreading nature of the bamboo and incorporates drainage and irrigation.



Scott Frances Photography



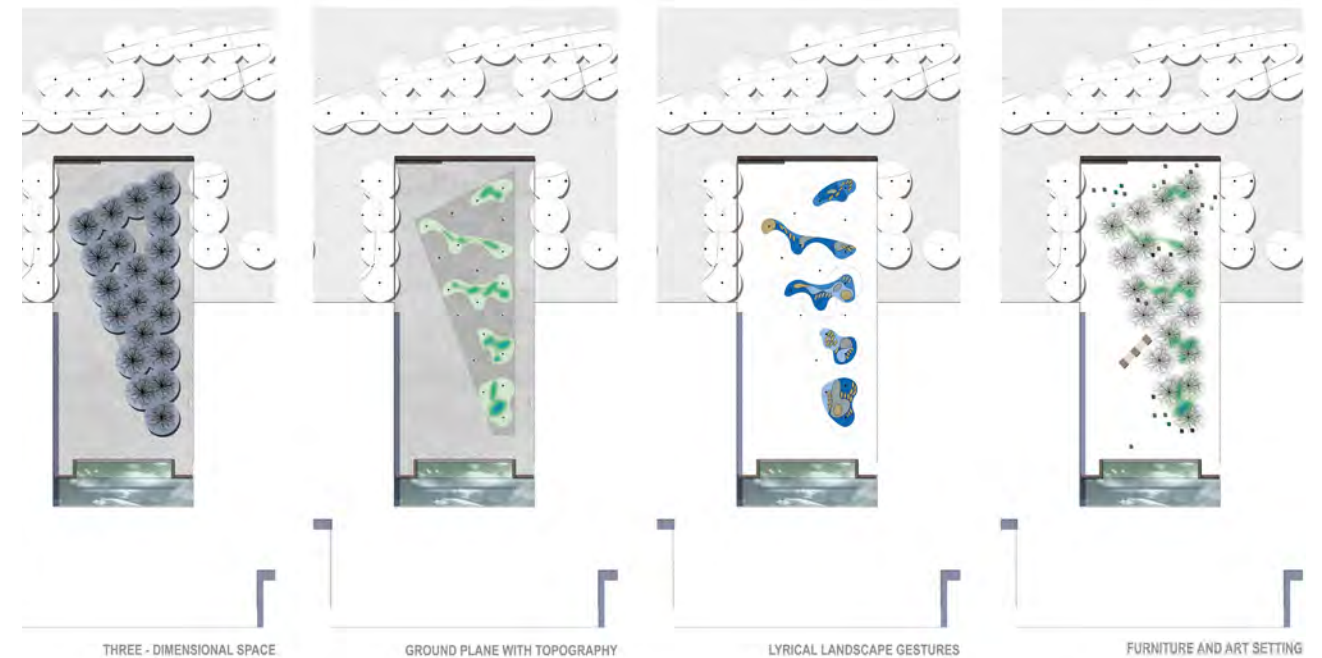
KC Ramsay Photography



WHEELER COURT

Flexible and programmable, Wheeler Court both displays art and functions as a museum event space. To achieve this goal the design is based upon a parti of equal opposites. The rectangular space of the courtyard is divided into two equal triangles, one being paved and sun-filled, and the other being enclosed by a grove of Chinese Elm trees that create a shaded and green overhead canopy. The grove begins as a single tree but widens to occupy the full width of the courtyard. The trees float in irregularly-shaped mounded beds of rich perennials surrounded by granite pavement. As plantings mature, these landscape islands will form niches for the display of small scale sculpture. Robert Bladen’s “Three Elements” is placed upon the diagonal seam of the two spaces, emerging from the shade. In the open, granite paved portion, the museum will program dinners, tented events and meetings.

Along the building face, a rectangular reflecting pool with an adjoining bed of flowering lotus anchors the space and provides visual continuity from the interior aisles and galleries. In a stylized move to recall the native boulders of the South Court, the space is enclosed at its opposite end by a freestanding black concrete wall, hand-crafted to expose veins of aggregate and irregular cavities.





KC Ramsay Photography

SOUTH COURT

The South Court is an assemblage of North Carolina native stone, carefully placed in a loosely constructed line and resting in a simple bed of vinca and helleborus ground cover. The six million year-old stone comes from the Highlands area of the southern Appalachian Mountains and exhibits a rich patterning of veins and folds. From the gallery windows views intersect with the stone-on-a-green-carpet imagery, bringing nature into the gallery experience. On axis looking south, the boulders form a directional cue that references Roxy Paine's tree-like, dendritic structure "Askew", set in the undulating meadow of the South Sculpture Garden.

EAST COURT

The East Court has a strong architectural character and is dominated by a reflection pool that floats less than an inch below the interior floor level, providing a compelling indoor-outdoor connection. Light from the sky is reflected back into the gallery ceilings. Water quietly enters the pool from concealed side troughs and returns into a linear stainless steel slot in the center of the pool. This detail allows the water surface to remain still and reflective, while producing a quiet ambient sound of moving water. Approaching the building from the east, the visitor will come upon a single clump of bamboo that frames the axial arrangement of pavement, building roof elements and linear pool. At night, the simple form and luminescent color of the Stanislav Libensky and Jaroslava Brychtova "Green Eye of the Pyramid", is reflected from inside the building.



SUSTAINABILITY

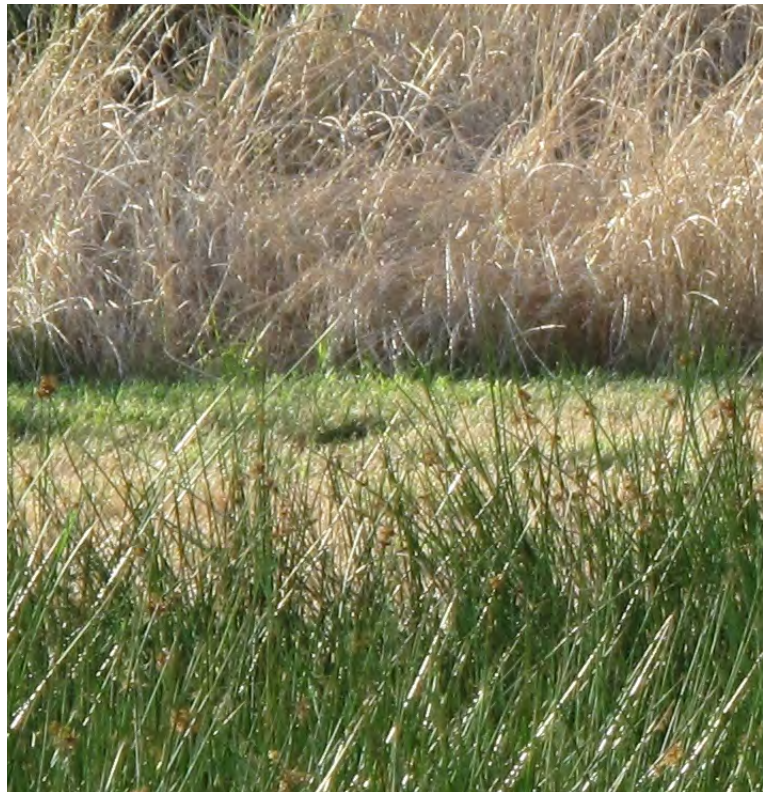
The site design for the new West Building brings to life the Museum’s mission to create a place that brings together the appreciation of art, nature and environmental stewardship. Conservation and sustainable development practices are integral to the function and aesthetics of the Museum site. Comprehensive stormwater management and water reuse strategies demonstrating function and aesthetics, the preservation and enhancement of natural areas, as well as an approach to the constructed landscape that reflects an understanding of natural systems and the Piedmont North Carolina environment are all incorporated into the Museum landscape.

Porous Pavements – The extensive use of bound aggregate provides porous paved walking surfaces that reduce stormwater runoff and provide handicapped accessibility. Porous pavements are used in the American Elm Allee and the River Birch Grove where loose and porous gravels allow water to penetrate into specially-mixed soils where tree roots can efficiently absorb and utilize water. Excess water flows into stormwater inlets and is conveyed to the bio-retention terraces and stormwater pond located in the lower reaches of the Park. In the Cantor Court, decorative gravel is mixed with a binder to form a durable, smooth and accessible surface, while remaining porous to allow infiltration of rainwater to the native soil below. Excess stormwater moves to stormwater inlets and is conveyed to the underground cistern system for reuse.



Karen Malinofski, NCMA

Meadow – Drought-tolerant native plantings and the extensive use of meadow grasses in lieu of managed fescue lawn are an important part of the sustainable landscape strategy. Lessening energy and resources demands of traditional landscapes, the South Garden relies on a carefully crafted combination of meadow lawn to create a beautiful but more sustainable landscape. These meadows are not only beautiful but also an integral part of the landscape. The balanced approach of meadow and lawn provide aesthetic, ecological and cost advantages over a total application of lawn. Over a year, the meadow grasses will require no added water beyond normal rainfall, saving up to 2,000,000 gallons of water, utilize 50% less fertilizer and 30 times less time and resources typically required for mowing, edging and maintenance of fescue lawn.



Bio-retention Gardens – Along the northern side of the West Building, three stormwater rain gardens are incorporated into the landscape design to collect nearby entrance drive runoff. This water moves into the bio-retention gardens where groves of maple trees, native grasses and a mix of porous engineered soils remove pollutants. After cleaning suspended solids and excess nutrients, the water moves into the underground cistern for storage and re-use.



Cistern and Irrigation System – Another major feature of the site’s sustainability strategy is the placement of a 90,000 gallon underground cistern at the northeast corner of the West Building. The main function of the cistern is to collect rainwater from about one-half of the roof structure, site runoff from the Cantor and Wheeler Courtyards, cleansed water from bio-retention gardens and captured HVAC condensate for re-use as landscape irrigation water and recharging the courtyard pools. A strategy for managing irrigation establishes priority plantings to receive water during periods of drought and potable water restrictions.

Bio-retention Terraces and Pond – Downstream, in the lower reaches of the Museum Park, a naturalized bio-swale and series of bio-retention terraces leading to the wetland edge and open water of the pond continues the management and treatment of stormwater generated from the West Building, the Museum Park and campus impervious surfaces. Funded in large part by a substantial grant from the North Carolina Clean Water Management Fund, the bio-retention terraces and pond create an innovative blend of environmental technology and landscape aesthetics. The overall stormwater management system not only meets current regulatory standards but, most importantly, improves water quality in the House Creek basin while providing valuable wildlife habitat and an artful landscape feature for Park visitors to enjoy.

PLANTINGS

The lush setting for the West Building – the focus of the art / nature concept – expresses a balance between landscape design and sustainable environmental practices. Drought-tolerant and native plant species are used to minimize or eliminate irrigation requirements, disease and pest problems and routine maintenance as well as to provide a connection to the indigenous Piedmont North Carolina ecology.

From a design perspective, plant selections are based on their ability to create a desired spatial quality through specific characteristics of size, form, color and texture. The variety of spaces found throughout the Museum campus allows for a wide range tree species, shrubs, native grasses and perennials to be used effectively and create a cohesive, yet diverse environment. In addition to visual and spatial effects, proper plant selection must also respond to the specific micro-climate of the intended location – shade and sun exposure, moisture, wind, adjacency of pedestrians – as well as the horticultural requirements of the plant species itself. The changing characteristics of plants over time – seasonal and yearly – introduces yet another dimension to the complexity of the landscape design decision-making process.

Plantings throughout the Museum grounds contribute to the richness of the visitor experience. Location and arrangement of trees provide enclosure, help configure and shape space. Planting compositions within individual spaces present an

interplay of form and texture, and a thoughtful sequencing of seasonal color. The result is a holistic landscape design that is an integral part of the Museum’s art / nature concept, one that actively engages the visitor in the dialogue and experience of art, design and environment.



Karen Malinofski, NCMA



Karen Malinofski, NCMA

WEST BUILDING PLANT LIST

Common Name	Scientific Name
Meadow	
Highpoint Nuttal Oak	Quercus nutalli ‘QNFTA”
Panache Shumard Oak	Quercus shumardii ‘QSFTC’
Little Bluestem	Schizachrum scoparium
Meadow Mix	70% Hard Fescue, 10% Tall Fescue, 10% Little Bluestem, 10% Love Grass

South Entry Walk	
Yaupon Holly	Ilex vomitoria ‘Shadows Female’
Spring Glory Barberry	Berberis juliania ‘Spring Glory’
Red November Amur Maple	Acer ginnala ‘red November’

South Court	
Periwinkle	Vinca minor
Heleborus	Heleborus orientalis ‘Candy Love’

Entry Plaza	
October Glory Red Maple	Acer rubrum ‘October Glory’
Dura Heat River Birch	Betula nigra ‘Dura Heat’
Princeton American Elm	Ulmus Americana ‘Princeton’
Elsley Geranium	Geranium X ‘John Elsley’
Snowflake Catnip	Nepeta ‘Snowflake’
Heleborus	Heleborus orientalis ‘Candy Love’
Little Gem Magnolias	Magnolia grandiflora “little gem”
Dark Alexandria Magnolia	Magnolia X soulangiana ‘Dark Alexander’
Dwarf Bamboo	Pleioblastus distichus ‘mini’



KC Ramsay Photography



East Court		
Dwarf Black Bamboo	Phyostachys nigra ‘Hale’	
Hightower Willow Oak	Quercus phellos ‘QOSTA’	
Sizzler Holly	Ilex cornuta ‘Sizzler’	
Yaupon Holly	Ilex vomitoria ‘Shadows Female’	
Panicum virgatum ‘Shenan- doah’	Red switch grass	
Sunny Knockout Rose	Rosa RADsunny ‘sunny knockout rose’	
Florida anise	Illicium floridanum	
Wheeler Court		
Alee Lacebark Elm	Ulmus parviflora ‘Emer II’	
Momo-Botan Lotus	Nelumbo ‘Momo Botan’	
Var. Palm Sedge	Carex muskingamensis ‘Oemhe’	
Periwinkle	Vinca minor	
Japanese Tassel Fern	Polystichum ‘Polyblepharum’	
Cantor Court		
Water Lilly	Nymphaea ‘Charlies Choice’	
	Nymphaea ‘Colorado’	
	Nymphaea ‘Attraction’	
Bamboo	Phyllostachys nuda	
Rain Gardens		
Soft Rush	Juncus effusus	
Red Sunset Red Maple	Acer rubrum ‘Red Sunset’	
Sunny Knockout Rose	Rosa RADsunny ‘sunny knockout rose’	

PROJECT FACT SHEET

Existing East Building	184,000 sq. ft.	Opened 1982
	Ground level: 65,000 sq. ft. of daylit galleries, increasing permanent collection space by 54%	
	Basement level: Operations and mechanical equipment connects to a service tunnel and art lift.	
New West Building	127,000 sq. ft.	Opened 2010
West Building Construction	\$ 72.2 million	
Courtyards, Gardens, and Pools	\$ 4.5 million	
Pond Improvement Project	\$ 1.8 million	

EXTERIOR
Roof: 362 barrel-shaped light covers transmit north light into galleries below
Skin: 230 anodized aluminum overlapping panels with polished stainless steel infill

MUSEUM PARK
Size: 164 acres with three miles of recreational trails and site-specific sculptures
Greenway: 650 ft. pedestrian bridge connects House Creek Greenway to Meredith College and N.C. State University to the east, and Umstead State Park to the west.

Commissioned artists: Bill and Mary Buchen, Patrick Dougherty, Chris Drury, Martha Jackson-Jarvis, Barbara Kruger, Ledelle Moe, Roxy Paine, Thomas Sayre, Steven Siegel, Vollis Simpson, Steed Taylor, Ursula von Rydingsvard, and Tim Purus

CLIENT
North Carolina Department of Cultural Resources
Director, North Carolina Museum of Art: Lawrence J. Wheeler
Director of Planning and Design, North Carolina Museum of Art: Daniel P. Gottlieb

CREDITS

Landscape Architect:	Lappas + Havener, PA—Durham, N.C.
Architect:	Thomas Phifer and Partners—New York, N.Y.
Architect of Record:	Pierce Brinkley Cease + Lee Architects-Raleigh, N.C.
Civil:	Kimley Horn—Raleigh, N.C.
	ArtifexED, Inc.—Denver, C.O.
Contractors:	Barnhill-Balfour Beatty, joint venture
MEP:	Altieri Sebor Wieber—New York, N.Y.
	Stanford White Associates
Structural:	SOM—Chicago, I.L.
	Lassiter Hopkins—Raleigh, N.C.
Electrical Lighting:	Fisher Marantz Stone—New York, N.Y.
Daylighting Design:	Arup—London, Eng. and New York, N.Y.

Lappas + Havener, PA Responsibilities

Lappas + Havener, PA was interviewed by Thomas Phifer in 2007 and began work on the evolving site plan and building concepts. With substantial contributions from staff landscape architects Grayson Baur, Anja Pohlars, and Jesse Turner, Walter Havener, Principal of Design at Lappas + Havener, PA developed the plan and oversaw construction over a four year period. As with much of the design work at Lappas + Havener, PA, the landscape architect takes a central role in design and responsibility for all matters in the exterior environment including site design, civil, structural, electrical, landscape and irrigation design. Similarly on this project Lappas + Havener, PA's responsibilities included all exterior design which incorporated sidewalks, courtyards, pools and fountains, plazas, gardens, roadways, parking, storm drainage, rain gardens, underground cistern, egress, site fire protection, accessibility, site security and site lighting.



