



THE PROMENADE AT THE METROPOLITAN

INTERACTIVE PLAY AND EDUCATION IN AN URBAN ENVIRONMENT

MARYLAND ASLA CHAPTER 2018 AWARD SUBMISSION
ENTRY FOR GENERAL DESIGN | FEBRUARY 2018



NARRATIVE

PROJECT GOALS & CHALLENGES

The recently completed Metropolitan is the first mixed-use, multifamily development implemented in the master plan for Downtown Columbia, Maryland, signifying the start of the renaissance to create a vibrant, walkable downtown that will eventually replace an inwardly-focused mall.

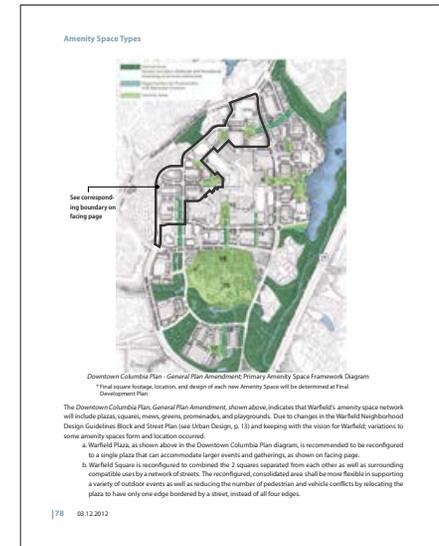
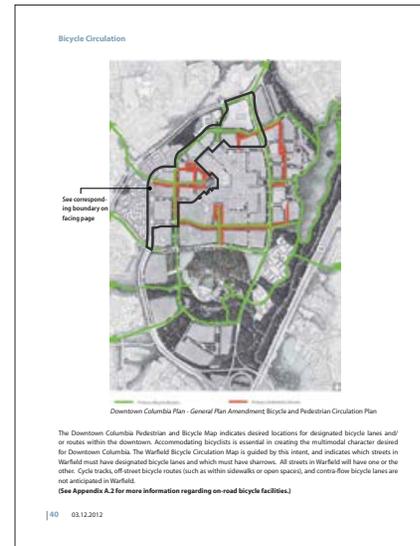
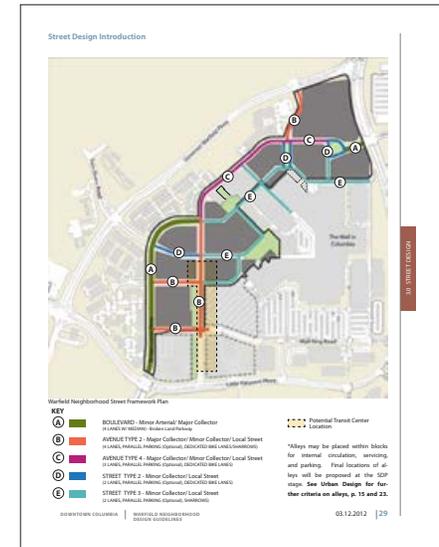
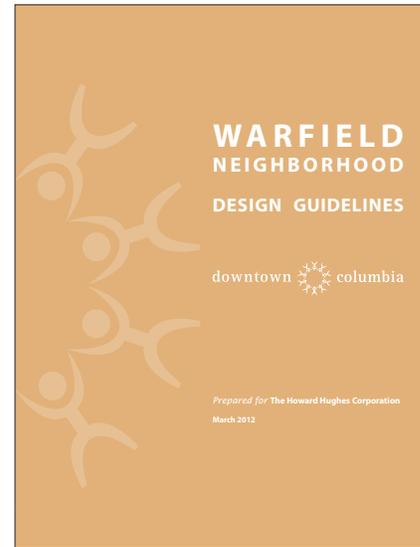
As part of the process, the design team was tasked with:

- » Conceptualizing a public art component and seeing it through design & fabrication;
- » Accommodating Howard County's requirement for a playground within an urban, linear open space per the masterplan;
- » Maryland's rigorous stormwater regulations.
- » Creating an iconic open space that serves as the core of Columbia, as both a destination amenity and a new vision for the area.

DESIGN SOLUTIONS

To accomplish the project goals, the designers focused on integrating the program requirements as part of the landscape design:

- » Interactive art and environmental education influenced by local ecology would be the framework for the design of the site. The brightly-colored and oversized interactive sculptures emulate the life cycle of the native tulip poplar tree and provide an engaging environmental narrative and experience for children.
- » Adjacent building uses, such as ground floor retail and walk-up residential units, influenced the framework of the open space design.
- » Horticultural Design, through stormwater management, provided another element to educate all site visitors using unique earth forms, planting, and signage. The majority of all planting on site acts as micro-bioretenion for treatment of stormwater.
- » Together, these elements encourage playful discovery, science education, experiential learning, and curiosity.



DOWNTOWN COLUMBIA MASTER PLAN- WARFIELD DESIGN GUIDELINES

The Metropolitan is part of the larger Warfield Neighborhood. The design team was responsible for site planning, design guidelines for the Warfield Neighborhood, and site design of the first redevelopment parcels. This directs land use, building heights, street framework, circulation, stormwater management, sustainable practices and landscape character.

4.1 Amenity Space Introduction

Overview

The amenity spaces within Downtown Columbia are integral components of the overall plan and include plazas, squares, greens, meens, promenades, parks and playgrounds, as well as preserved natural areas. From Columbia's inception, Downtown has been envisioned as a setting of natural beauty, with Lake Kittamaquidi and Symphony Woods Park as major attractions within an extensive open space network that serves and connects to all of Columbia. New components of the open space system will create public gathering spaces, provide ideal locations for public art, seating, fountains, and planting; preserve and restore existing streams, wetlands, and woodlands; offer locations for passive and active recreation; establish a Community Commons for each neighborhood; and contribute to the overall character and success of the Downtown.

Warfield Neighborhood
Lake Kittamaquidi
Symphony Woods

74 03.12.2012

Amenity Space Type: Linear Green - West Promenade and Playground

Overview:

The Linear Green, including West Promenade and Playground, is envisioned to be an amenity space extending from Warfield, through Symphony Overlook, to Symphony Woods, aligned by retail, residential, and office buildings ranging from 4- to 7-stories in Warfield to 15-stories tall in Symphony Overlook. As the Downtown Columbia Plan and the Downtown-wide Design Guidelines suggest, this prominent amenity space includes a distinguishable pedestrian zone in wide sidewalk studied by transit; provides programmable space for small events; and incorporates rainwater planters to extend and connect to the natural area and drainage system south of Little Patuxent Parkway.

The design of this linear green should be complementary to its surroundings, including design features, materials, plant material, and hardscape that accentuate the long rectilinear shape of the green and movement through the space, rather than attempting to portray a static, classical or romantic, design aesthetic.

The Linear Green will include a variety of design elements and will support a range of neighborhood-related events and activities, both planned and spontaneous. The linear green will serve, primarily, as a space for residents, children, and office workers of nearby buildings to informally gather and socialize, and, should be designed specifically with these users in mind. Occasionally, this linear green may be used for informal and low-impact activities, events, and festivals. Frequent events that may draw large crowds and include more intense and noisy activities should be reserved for other areas of Downtown.

The Linear Green presents an opportunity to express sustainability by showcasing rain water movement from buildings, across the ground plane, and into the earth. The Linear Green can act as a living laboratory for these sustainable techniques, highlighting these elements and educating through experience.

Size: The minimum size of the West Promenade within Warfield is 28,500 sf (see p. 77). The minimum size of the Playground, as required by Subpart C, Primary Amenity Space Framework Diagram, in the Downtown Plan, is 4,000 sf. Combined, 34,500 sf is required. (Reference p. 77 for the 5% Downtown Community Commons requirement.)

Circulation and Access
Organization of Green Space
Nodes of Activity

88 03.12.2012

Linear Green - West Promenade and Playground

Interest: Pop fountains, as part of the play experience, are also encouraged. Water elements as part of the rainwater planters and bioretention, especially where harvested rainwater may be used, are also encouraged.

Public art (as part of the CEPPA contribution) is encouraged to be placed in the green, particularly if it is part of the play experience, adds a whimsical element, and is safe for children to climb on.

Lighting: Lighting along the street edge of the Linear Green shall match the standard street lighting within the neighborhood (see p. 70). Lighting along the promenade shall include evenly spaced, pedestrian-scaled light poles and fixtures that accentuate the space's linear nature and enhance the importance of connectivity. For the remainder of the linear green, lighting shall be soft and subtle. Appropriately placed light poles, bollards, and/or other fixtures along paths and sidewalks are the recommended method for lighting these pedestrian areas. Spot lights are encouraged for public art and where children may be playing, but shall be designed or selected to minimize the impact on the night sky. Event lighting should be anticipated for both areas.

Reference plan on p. 89 for labels

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Linear Green - West Promenade and Playground

Sustainability:

The linear green provides an appropriate setting for celebrating green site design strategies. Like the furnishings, hardscapes, and plantings, bioswales (or rainwater planters) shall accentuate the linear nature of the open space. Placement should not create unnecessary obstructions or visual clutter, considering access to and within the green and the desire to accommodate various gatherings and events. Additional sustainable design strategies should include one or more of the following: 1) maximizing permeable surfaces; 2) porous paving and/or crushed/composed granite or stone for walking surfaces; 3) the use mix of regionally appropriate native and adaptive plant species; 4) the use of harvested rainwater for irrigation; 5) underground cisterns for collecting/harvesting rainwater; 6) collection of building roof runoff and ground water recharge; 7) protection of the night sky and 8) use of human-scaled, pedestrian-oriented shading devices.

* See the Material and Element Standards on the following pages for additional criteria.

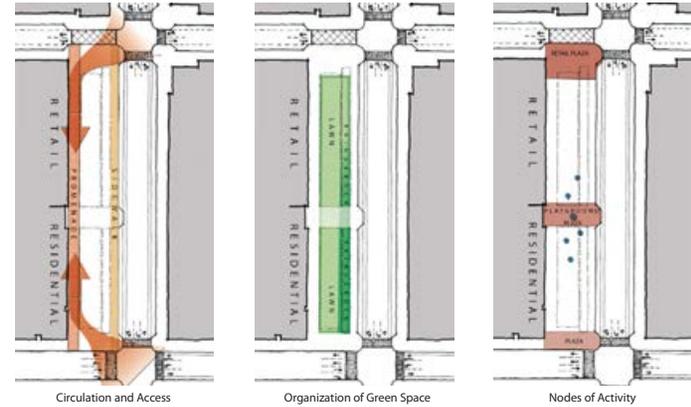
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OVERVIEW

“... the open space system will create **public gathering** spaces; provide ideal locations for **public art**, seating, fountains, and planting... offer locations for **passive** and **active** recreation... contribute to the overall **character** and success of the Downtown.”

OPEN SPACE



SUSTAINABILITY



“... setting for celebrating green site design strategies... **bioswales** (or rainwater planters) shall accentuate the linear nature of the open space... to accommodate various gatherings and events.

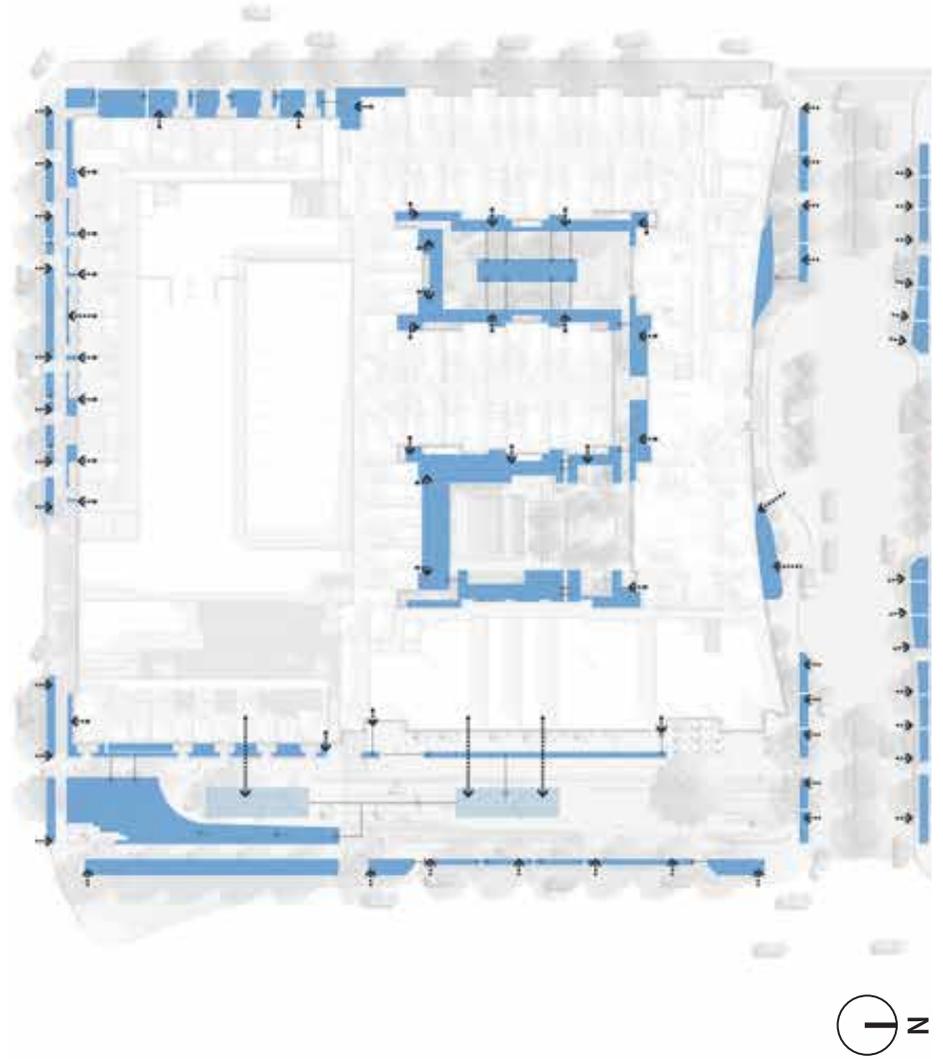
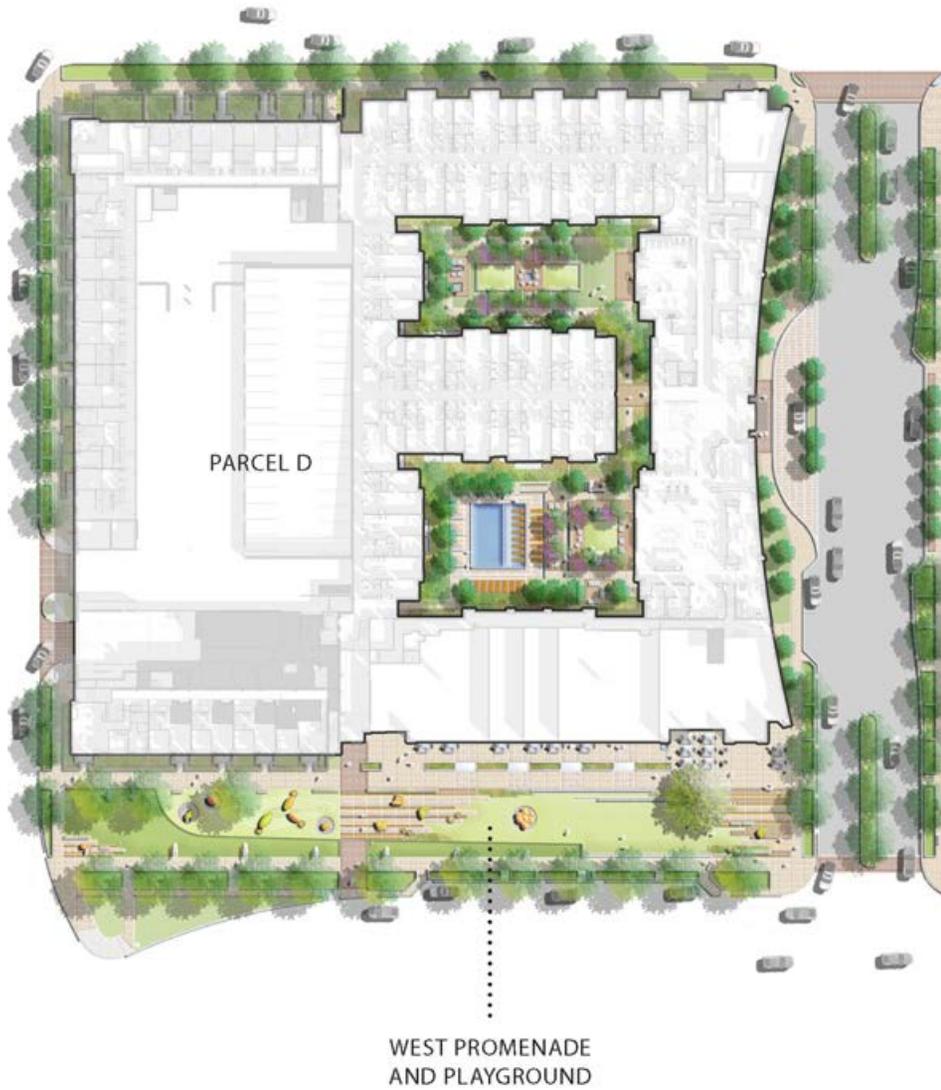
ART & PLAY

“ **Water elements** as part of the rainwater planters and bioretention... Public art is encouraged to be placed in the green... part of the **play experience**, adds a **whimsical** element, and is safe for children to climb on.”



DOWNTOWN COLUMBIA MASTER PLAN- WARFIELD DESIGN GUIDELINES

The amenity spaces within downtown Columbia are integral components of the overall master plan. The Warfield Design Guidelines, developed by the team, required a linear green and directed form, circulation and programming of the space. As the blocks developed, the linear green later became known as “The Promenade”.



STORMWATER & OPEN SPACE AS FRAMEWORK- THE PROMENADE

Stormwater was an integral element to the Warfield Design Guidelines. On the parcel of the Promenade, roof water is directed to surface bioretention in the Promenade and courtyards, in addition to large cisterns under the Promenade's lawn that provide water for the limited irrigation system.



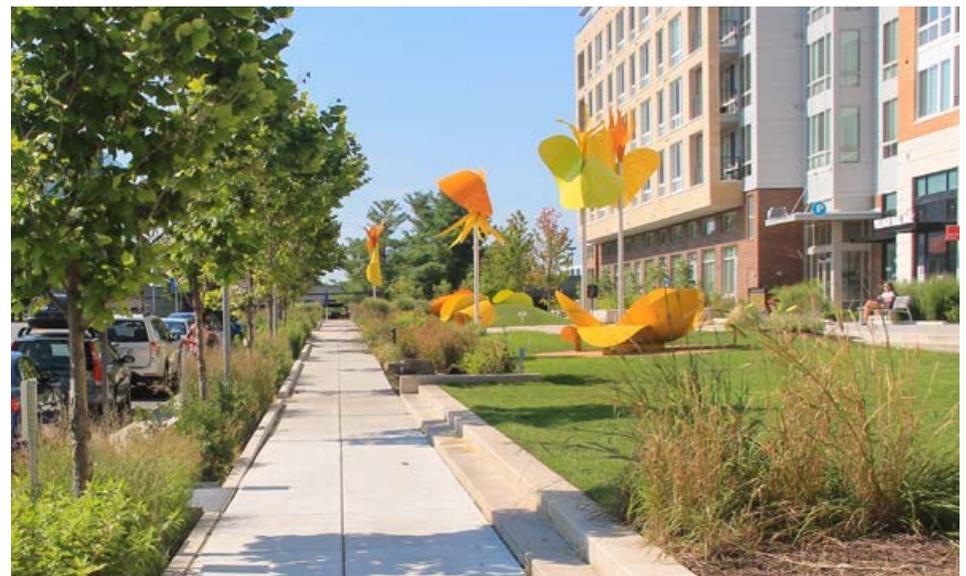
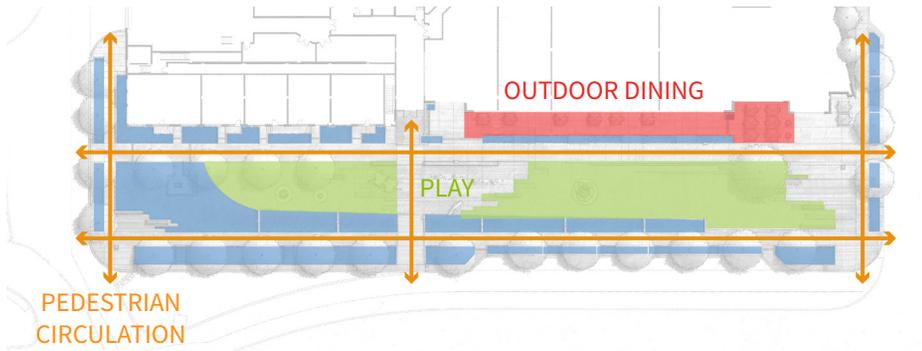
ARTFUL AND FUNCTIONAL STORMWATER

The linear shape of the open space informed the layout and scale of the planting. A large bioretention unit that runs along the lawn captures significant runoff from the surrounding sidewalks and streets. This system created an opportunity to combine a creative play space with environmental education.



ARTFUL AND FUNCTIONAL STORMWATER

The lawn serves as an open area for children to play, while the bioretention parallels the main walkway, doubling as a barrier to protect children from mall traffic. The tall, iconic sculptures provide a visual landmark in the community, anchoring the North and South corners of the site.



ARTFUL AND FUNCTIONAL STORMWATER

The edge of the lawn transitions to the retail core of The Promenade. Micro-bioretention planters help to separate the semi-private outdoor areas in front of the storefronts from the main circulation between the building and the lawn. This arrangement allows parents to dine while children play safely nearby within sight.



LOCAL ENVIRONMENT

Inspirational Movement Of Water And Growth Of The Tulip Tree



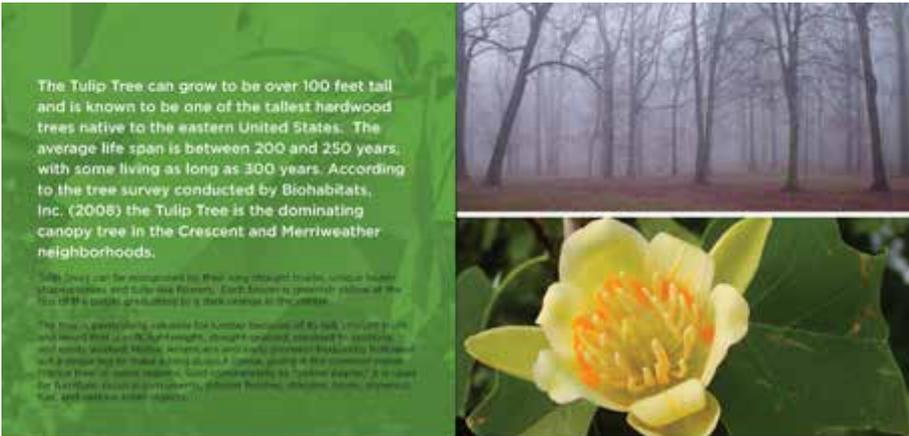
Stormwater is continuously recycled through a dynamic process that has existed for millions of years. This hydrologic cycle moves rainfall from the atmosphere to land, through surface and groundwater systems, to the ocean, and back into the atmosphere.

Water soaks into the ground, it filters down into the ground to become groundwater, evaporates, or flows over the surface of the earth. The runoff flows on surface water, but it also carries sediments, chemicals, and nutrients in trash, and other debris that pollute natural waters along with it.

Construction, trees, soil, and other natural areas act as buffers and barriers that slow stormwater flow or filter out pollutants, and reduce infiltration and absorption to ground. The more the natural landscape is altered, the more we affect the hydrologic cycle and its ability to deal with runoff.

Improving stormwater management programs can become a huge money saver for communities as it reduces the costs, not only for the treatment of wastewater from cities and factories, but also for the costs of treating runoff-related problems before they occur. It also saves economic costs.

STORMWATER CYCLE



The Tulip Tree can grow to be over 100 feet tall and is known to be one of the tallest hardwood trees native to the eastern United States. The average life span is between 200 and 250 years, with some living as long as 300 years. According to the tree survey conducted by Biohabitats, Inc. (2008) the Tulip Tree is the dominating canopy tree in the Crescent and Merriweather neighborhoods.

The tree can be recognized by their long straight trunk, unique heart-shaped leaves, and tulip-like flowers. Each flower is generally yellow at the top and pink at the bottom.

The tree is particularly valuable for timber because of its tall, straight trunk and heavy, resistant heart-shaped wood. It is also valued for its ornamental value. The tree is a popular tree for parks and urban areas. It is also used in the construction industry for its wood. The tree is also used in the construction industry for its wood. The tree is also used in the construction industry for its wood.

LIRIODENDRON TULIPIFERA, Tulip Tree



Curiosity, exploration, discovery are the magical and essential tools of childhood. Through every human sense, children meet the world and begin to create meaning and understanding. The seemingly mundane is instantly new and exciting, unknown and untested. From the exhilaration of climbing to the top of a hill and running down the other side to the mystery of a secret hiding place, playful discovery is where children's stories begin.

Children learn through play. Play is a natural and essential part of a child's life. It is through play that children learn to solve problems, to work with others, to explore their world, and to develop their imagination. Play is a powerful tool for learning and discovery.

The science of learning is a field that explores how children learn and how we can create environments that support their learning. It is a field that is constantly evolving and that is essential for creating a better future for all children.

SCIENCE OF LEARNING

the use of space to create enriched environments for learning

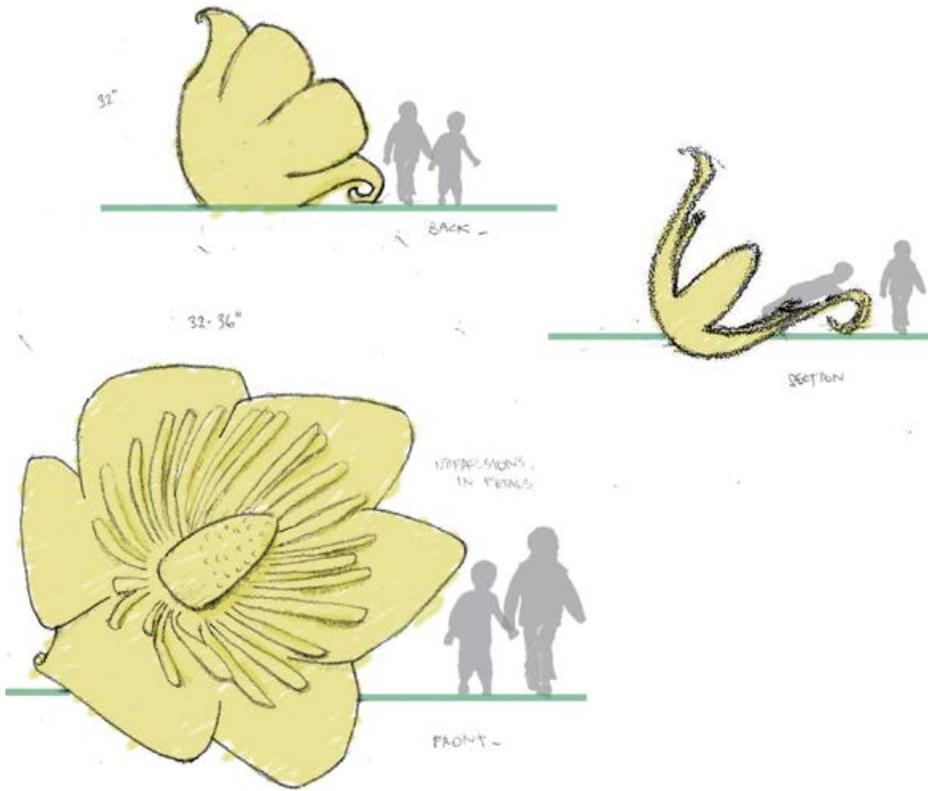
ARTFUL NARRATIVE

The sculptures seen in the previous images were central to the local art requirement and creating a sense of place. The Landscape Architect served a key role in establishing the art and play narrative. The proposed sculptures abstract the unique features of the tulip poplar, a locally significant native tree.



SCULPTURE DESIGN PROCESS

The design team included an early-learning education expert and a local artist who refined the initial concepts from the landscape architects. Several rounds of mock-ups were completed to ensure the design intent, functionality, and quality were accurate. Here you can see the full process from inception to installation.



ABSTRACT FORMS

The over-sized, simple forms and shapes create an “Alice in Wonderland” experience that allows children to use their imagination. Play can occur individually or in a group setting. Some spaces were designed for shade, shelter, or the occasional game of hide and seek. Below, our client takes a test run.



THE PROMENADE AT THE METROPOLITAN

GREEN

- Where does the white go when the snow melts?
- Open like a flower to the sun
- Plant seeds and grow
- Find colors in the mist
- What are the tree leaves whispering to you?
- What do trees smell like?
- Be a seed carried on the wind

YELLOW

- Dance like a bee in the poplar tree
- How do trees drink rain?
- Unzip, stretch, pull, jig in your
- Find the edge that never ends
- Plant your feet and grow roots
- Why do flowers look at the sun?
- Spin like a petal in the wind

ORANGE

- Let the wind spin you around and around
- How do you identify a tree?
- Stretch your wings and fly
- Be a tree in spring, winter, summer and fall
- Reach for the sky and grow your branches
- Be a hummingbird moving from flower to flower
- How many raindrops make a cup of water?



INTERPRETIVE EDUCATION

Signage for all ages known as “Petals of Thought” were included throughout the site. Questions and phrases placed on colorful plaques engage children and spark curiosity. Text was designed to engage a wide age range of children and promote critical thinking, creative interpretation, and to inform users of environmental processes.



MISTING FOUNTAINS

The owner requested a fountain to provide children an opportunity to cool off on warm days, however, they expressed concerns with children becoming soaked and unable to visit adjacent retailers. An interactive misting fountain was the ideal solution. Children can activate the misters by pushing buttons on an adjacent seatwall.



THE PROMENADE AT THE METROPOLITAN



NATIVE PLANTINGS

Native plantings are critical to the narrative of the site and success of the bioretention unit as they must be able to adapt to both drought and inundation conditions. Penstemon digitalis (left) is one of the selected plants that provides seasonal interest and creates habitat for pollinators.



PLANTING POST OCCUPANCY

To evaluate the true success of the bioretention basins, our team visits the site throughout the year to monitor the success rate of different species. This has allowed the team to gain a deeper understanding of ideal species for this type of designed green infrastructure.