



UConn | UNIVERSITY OF
CONNECTICUT

Campus Master Plan

B Appendix: Landscape Master Plan

SKIDMORE, OWINGS & MERRILL LLP
MAY, 2015





Executive Summary

Volume 1: Campus Master Plan

Volume 2: District Guidelines

Appendix: Sustainability Framework Plan

Appendix: Landscape Master Plan

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Appendix: Transportation, Circulation, and Parking Plan

Appendix: Utilities Master Plan

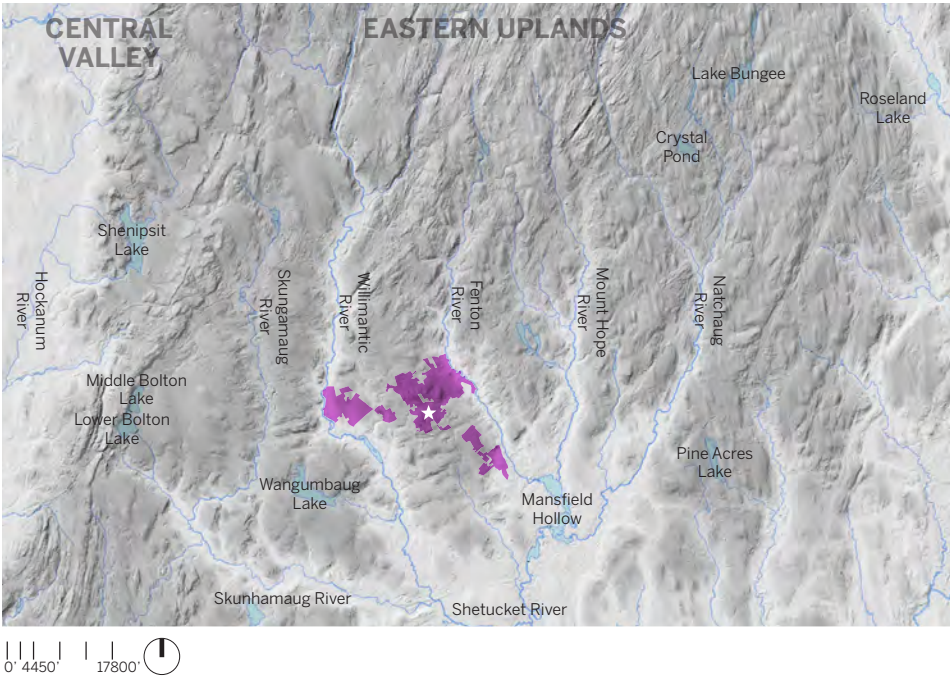
Appendix: Historic Preservation and Adaptive Reuse Plan

Appendix: Space Needs Analysis

Landscape Analysis

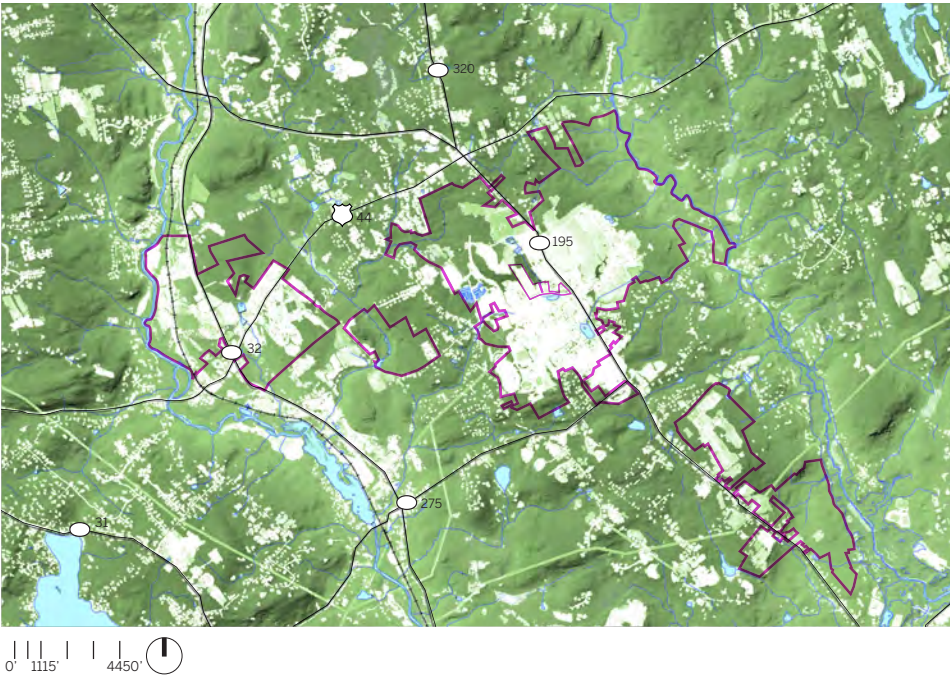
The Connecticut Context

Straddling the Fenton River and Willimantic River watersheds, UConn’s campus creates a nearly continuous transect of the ridge. Within this transect is a topographic microcosm of the larger geographic pattern that makes this region unique. At the same time, the Main Campus is an anomaly within the larger ecological mosaic – a vast, continuously open hilltop – containing little habitat diversity and virtually none of the spatial and experiential qualities that characterize the surrounding landscape. While early development of the UConn campus capitalized on its unique natural and cultural setting, the development pattern over much of its subsequent history has tended to conceal the underlying physical structure of the campus and its intrinsic connection to larger ecological patterns.



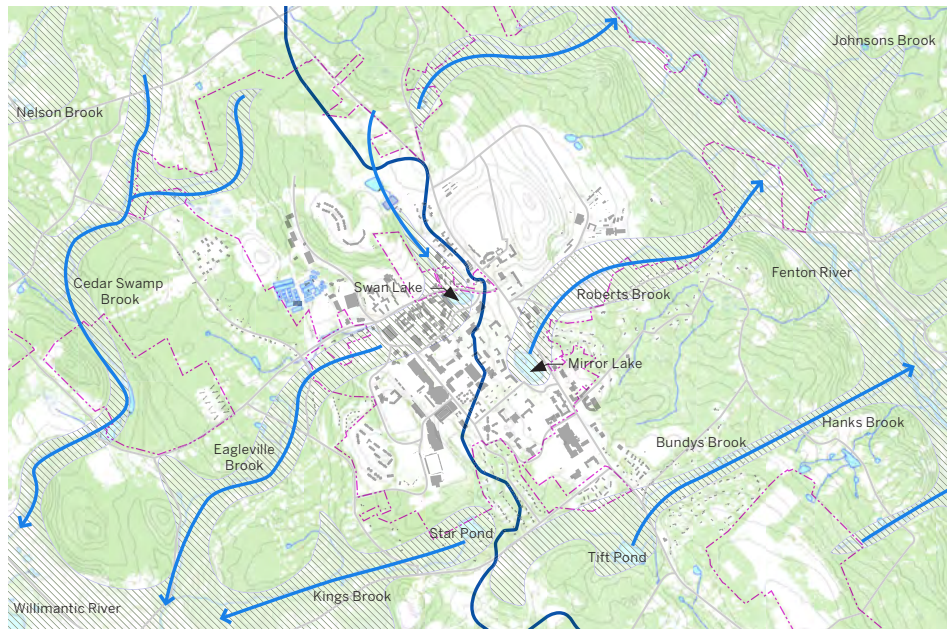
- ★ University of Connecticut
- Water Bodies

Topography
The UConn campus is situated along one of a series of north-south ridges comprising Connecticut’s eastern upland region.



- Campus Boundary
- Forest Cover
- Water Bodies

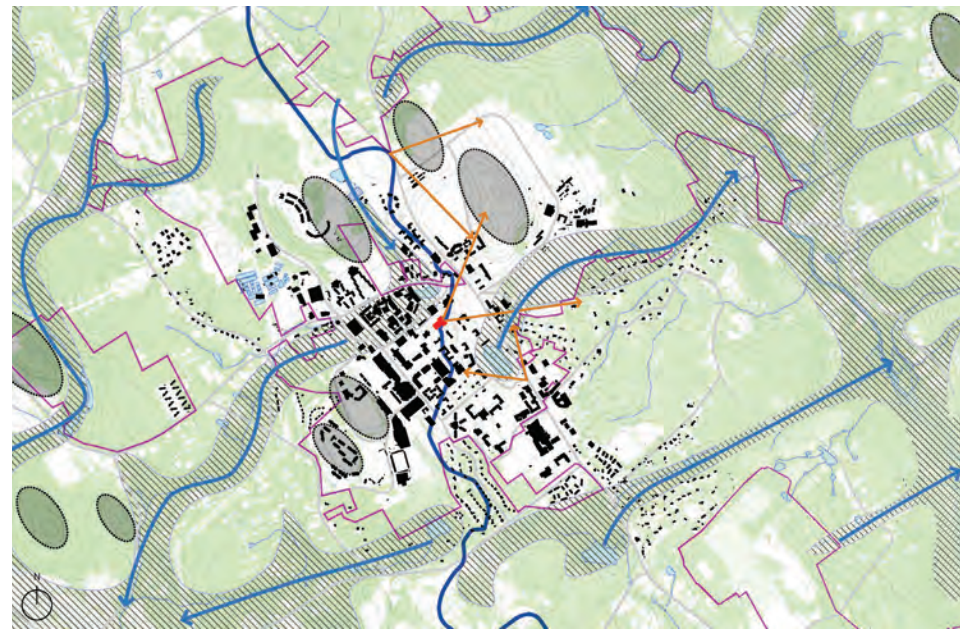
Forest Cover
Much of the campus lacks forest canopy cover, particularly as compared to its surroundings.



- Campus Boundary
- Forest Cover
- Water Bodies
- Valley Direction
- /// Valley
- Watershed Boundary

Regional Hydrology

The surrounding landscape contains a series of streams which carry runoff to the Fenton River and the Willimantic River.



- Existing Viewshed
- Drumlin

Landscape Structure

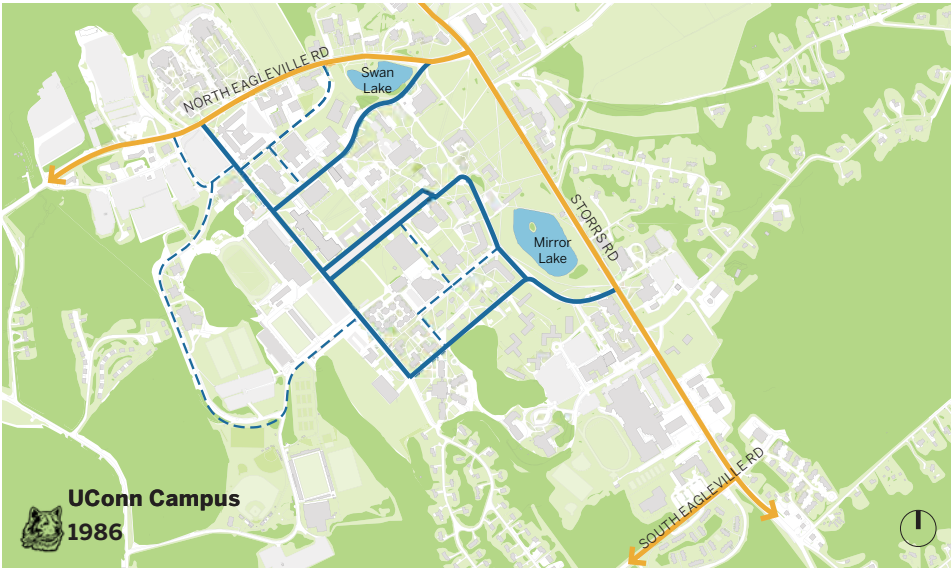
Together, these systems define the physical and ecological structure of the campus.

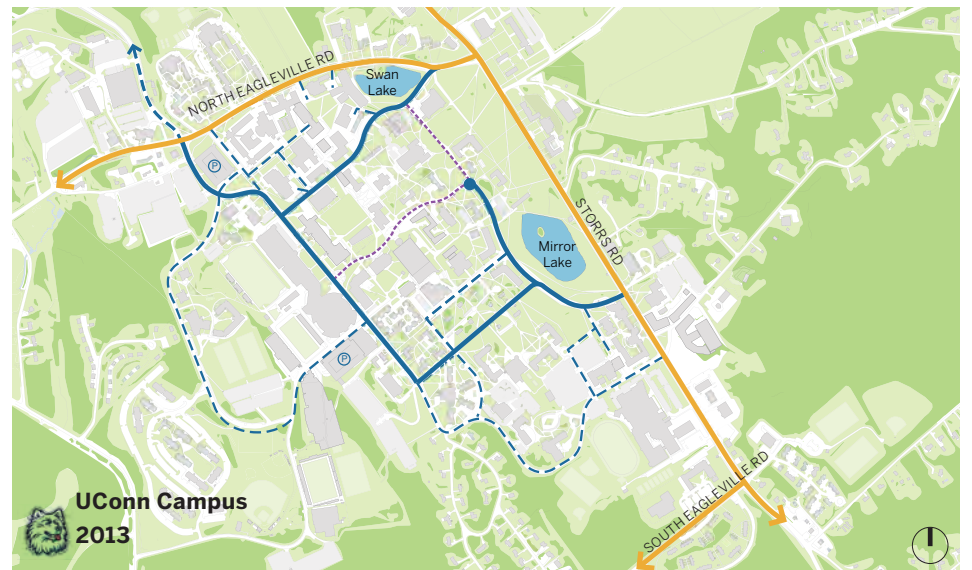
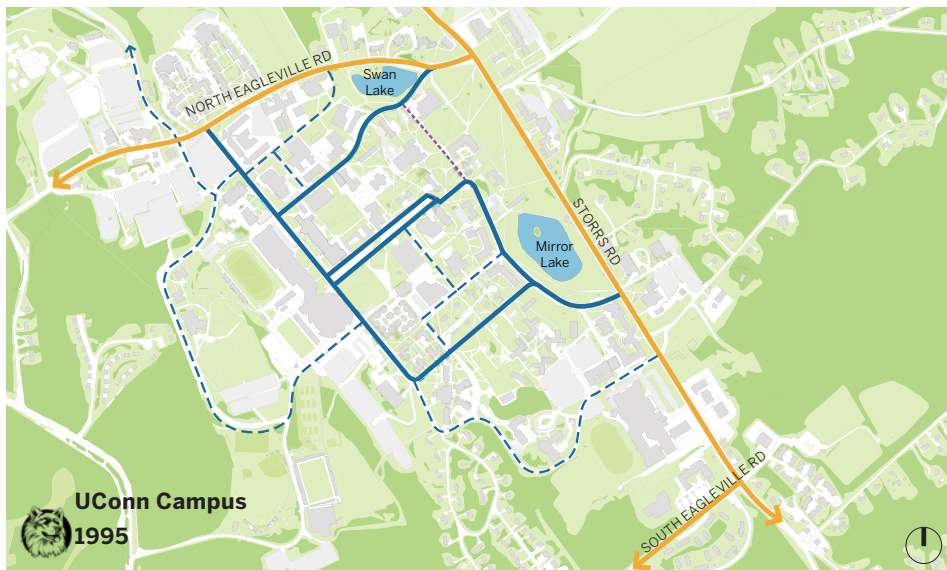
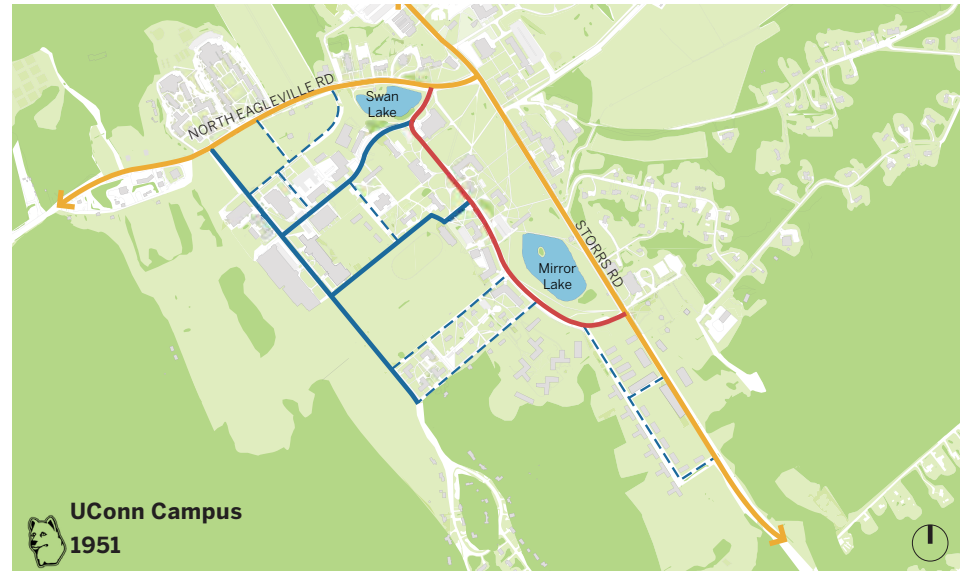
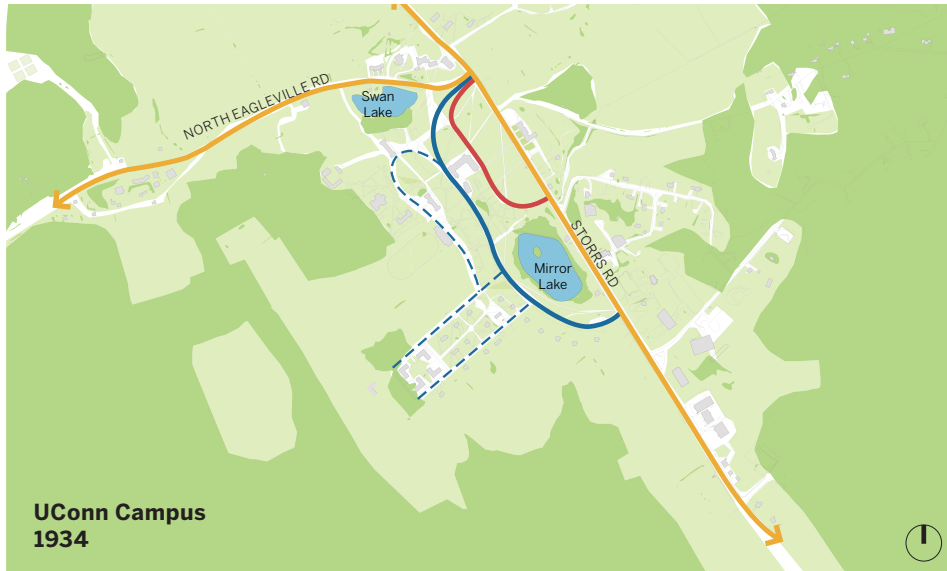
Landscape Analysis

Campus Growth

The development of the Storrs campus has followed a pattern that is relatively typical of large, rapidly growing institutions. From its origins as the Storrs Agricultural School, built along a rural crossroads, the campus experienced waves of intense growth throughout the 20th century. While development during this time largely followed an expanding network of campus roads, recent efforts to reduce the dominance of vehicles on campus have begun to strengthen the pedestrian experience by eliminating non-essential roadways. Major pedestrian routes now connect more seamlessly through landscape spaces.

- State Road
- Campus Road
- Secondary Road
- Ceremonial Drive
- Surface Parking
- Open Space
- Wooded Areas
- Multi-Modal Path





Guiding Principles

Three overarching principles guide the landscape framework plan:

1. Create a sense of place
2. Define campus precincts
3. Improve ecosystem health

First and foremost, the framework seeks to re-integrate the campus with its unique natural and cultural setting. This context has been unintentionally marginalized as a result of rapid growth, but it could be reintroduced to strengthen sense of place and campus identity. Multiple initiatives should be undertaken to make the rich mosaic of forests, fields, hilltops and ravines that characterize the Connecticut landscape more present in the campus landscape mosaic.

The second principle recommends a more comprehensive approach to organizing campus precincts around landscape experience. While loving attention has been given to landscape spaces that are contained by buildings, large portions of the existing landscape are underutilized and do not contribute to the social vitality or the experience of the campus. New landscapes operating at the scale of campus neighborhoods would help to extend the experiential and recreational value of the campus landscape.

The third framework principle is to utilize existing topography and natural systems to carve out new places for green infrastructure on campus, thus improving the quality of the water that UConn discharges into the region's rivers and streams and contributing to ecological performance at multiple scales.



Guiding Principles

Creating a Sense of Place



Existing Condition:

Campus Isolated from Its Surroundings



Proposed Condition:

Integrated Landscape Setting

Guiding Principles

Defining Campus Precincts



Existing Condition:

Landscapes Contained by Buildings

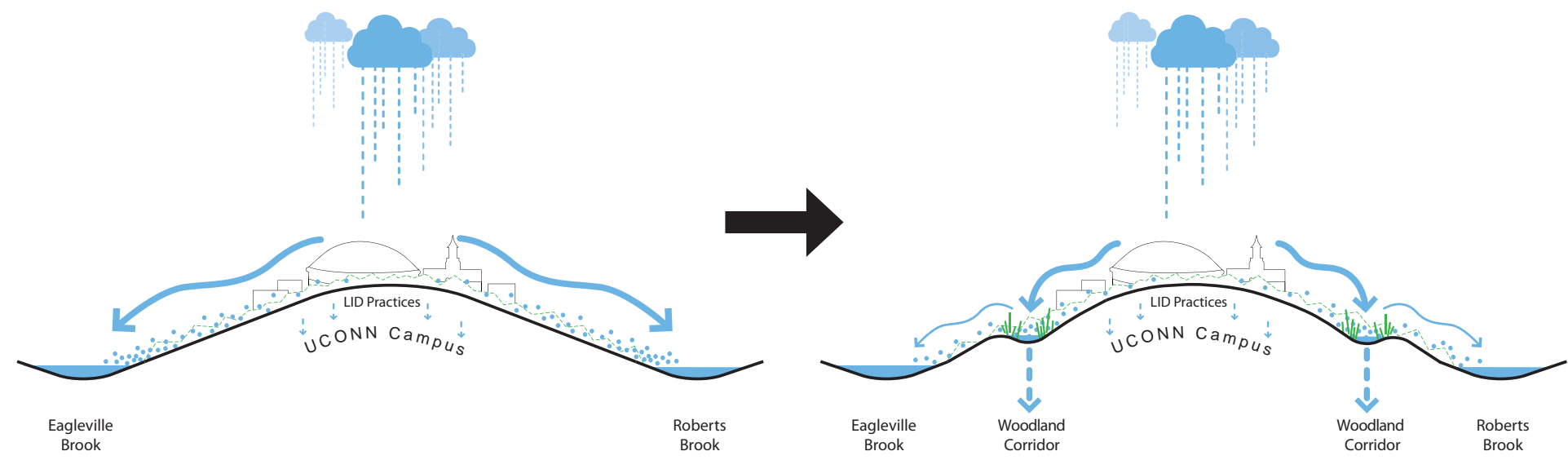


Proposed Condition:

Neighborhoods Organized by Landscapes

Guiding Principles

Improving Ecosystem Health



Existing Condition:
Untreated Stormwater Runoff and Faltering Stream Health

Proposed Condition:
Improved Water Quality with Sustainable Stormwater Management

Landscape Framework

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Landscape Framework

UConn is blessed with a series of landscape spaces and features that have become an integral part of its identity. Who can think of the Storrs campus without the Great Lawn, Horsebarn Hill, and Mirror Lake? Complementing these iconic landscapes are smaller gardens, groves, terraces, and courtyards that provide the setting for meeting, gathering, play, and relaxation. In aggregate, however, the UConn campus lacks a critical mass of landscape spaces in which experience takes precedence over utility, and where UConn's academic mission and values are manifest. Even the iconic spaces require updating. By making the creation of a unique and distinctive landscape one of the central ideas of the framework vision, the opportunity exists to enhance UConn's existing open space assets and link them to one another with new landscapes that will enrich the experience of daily life on campus.

Capitalizing on UConn's unique setting in rural Connecticut, the landscape framework asserts the primacy of larger topographical, hydrological, and ecological patterns in shaping future development. Corridors currently dominated by wide roadways and expansive parking lots are transformed into pedestrian-oriented spaces that evoke the natural landscape and allow stormwater runoff to be re-absorbed into the ground. The function and character of existing courtyards and quads is improved and new spaces for movement and gathering are created. Faculty Row is re-imagined as a new landscape commons within a grove of mature canopy trees. A new system of walkways that better serve the way pedestrians and bicycles move through the campus is proposed in areas of the campus where the existing system is inadequate. These recommendations and others contained within the landscape framework all seek to transform the Storrs campus over the next two decades into a place that is uniquely Connecticut, embraces its history and its future, is adaptable to changing circumstances, and is a source of pride for the UConn community.



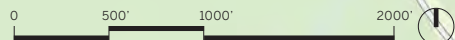
Mirror Lake



Horsebarn Hill

-
- 1 North Woodland Corridor
 - 2 South Woodland Corridor
 - 3 South Campus Commons
 - 4 Academic Way Improvements
 - 5 Fairfield Way Extension
 - 6 Hillside Road Improvements
 - 7 Eagleville Brook Connection
 - 8 Roberts Brook Connection
 - 9 Towers Quad Connections
 - 10 Trail System Connections
 - 11 Gateway Landscape Improvements

Landscape Framework Plan

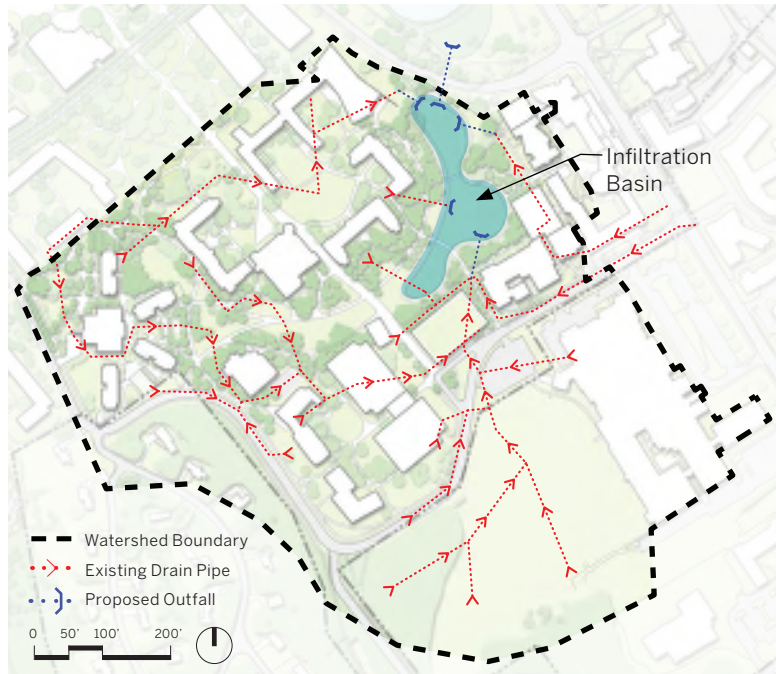


LANDSCAPE MASTER PLAN

Landscape Framework

Hydrology and Topography

Given its size, location, and the control that it has over its own watersheds, UConn has the unique opportunity to coordinate topography with stormwater capture and treatment strategies as the water is conveyed to adjacent waterways. In concert with low impact development (LID) strategies such as green roofs and rain gardens associated with individual building projects, larger stormwater management features are proposed, embedded within the proposed woodland corridors that weave through the heart of the North and South Campus and follow natural swales in the topography. Benefits would be both ecological and experiential and provide additional opportunities for outdoor learning.

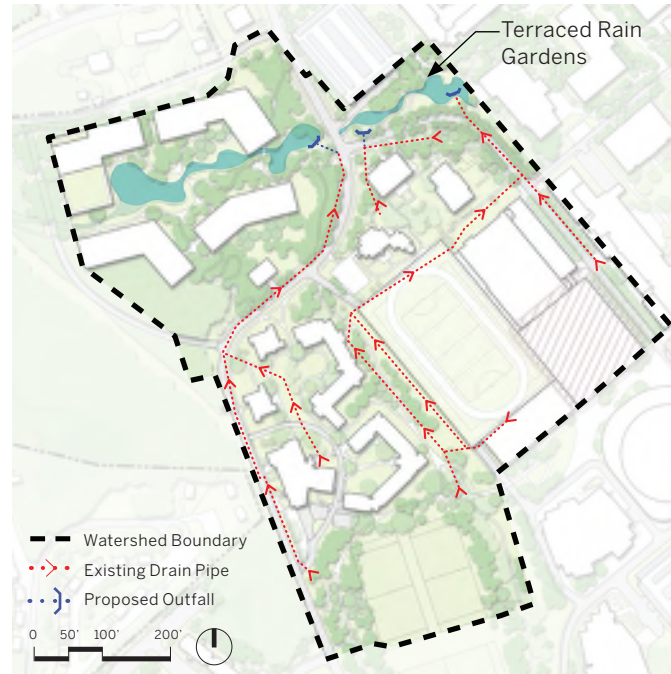


South Woodland Corridor Watershed

Size: 68 Acres

Impervious Coverage: 38%

Water Quality Volume: 93,300 cf



North Woodland Corridor Watershed

Size: 52 Acres

Impervious Coverage: 67%

Water Quality Volume: 125,000 cf



Hillside Environmental
Education Park

Horsebarn
Hill

Fenton Forest
Tract

Valentine Meadow

Swan Lake

Roberts
Brook

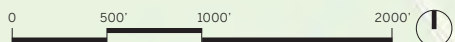
Mirror Lake

Eagleville
Brook

Fenton River
Watershed

- Property Line
- Watershed Boundary
- Sub-Watershed Boundary
- Existing Low Impact Development Project

Stormwater Management Features



Landscape Framework

Plant Communities

Embedded within the landscape framework of woodland corridors, courtyards and quads, garden corridors, and campus walks are significant opportunities to expand the diversity of planting types on campus and enhance the experiential qualities and educational value of the campus Arboretum. These landscape elements will allow the University to foster robust, diverse, and resilient plant communities on campus.

Summary of Recommendations:

- Increase overall species diversity
- Create unique and distinctive spaces through planting design
- Expand the focus of the Arboretum collection from individual specimens to combinations of plants that perform different functions in a variety of contexts
- Create and implement a succession plan to respond to the loss of mature trees over time
- Increase overall seasonal interest and variety
- Use combinations of plants to create horticultural 'events' timed to complement the seasonal rhythms of campus life



Precedent: Woodland Corridor Planting



Precedent: Courtyard Planting



- Property Line
- Existing Deciduous Trees
- Existing Evergreen Trees
- Proposed Garden Corridor Trees
- Proposed Formal Corridor Trees
- Proposed Woodland Corridor Trees
- Proposed Evergreen Groves
- Proposed Courtyard and Quad Trees

Planting Plan



Landscape Framework

Seasonal Interest

Given the local climate, a windswept hilltop location, and a relatively uniform landscape experience consisting of lawns and deciduous canopy trees, the UConn campus landscape can be a bleak, uncomfortable place for many months out of the year. Additional landscape complexity – including increasing the number of evergreen trees and selecting plants that provide exciting color or texture in late fall and early spring – could improve both the comfort and experience of the winter landscape. Maintenance practices that promote winter interest could also be considered. Likewise, cold-weather landscape program, such as a seasonal skating rink at Founder's Green or in South Campus, could help activate the winter landscape.



Program

Historic image of ice skating on Swan Lake.



Planting

Ilex verticillata (Winterberry) enlivens the winter landscape with dense, fine branches and brightly colored fruit.



Management

Aligning maintenance practices with experiential goals can increase winter interest.



- Potential Temporary Skating Rink Sites
- Existing Evergreen Trees
- Proposed Evergreen Trees

Seasonal Interest Features



Landscape Framework

Outdoor Art

As outdoor art installations are considered for the campus, the emphasis should be on works or collections that complement landscape experience. All work that is introduced into the campus setting should be carefully curated and of a quality that is consistent with the identity of UConn. Outside of very rare exceptions, outdoor art should be limited to temporary installations that are well-located, respectful of short-term landscape function, and not damaging to landscape environments.

In addition to the outdoor sculpture displayed near the Benton Museum, temporary art installations might work well along Fairfield Way, which already serves a partially civic function. South Campus Commons could be a good location for mounting larger shows, either of a single artist or works grouped around a given theme, while the Fine Arts complex should continue in its role as the most appropriate outdoor venue for student and faculty exhibitions.



Permanent Collections

Existing art in Art Woods outside the Benton Museum.



Temporary Installations

A show of multiple works by Roxy Paine as part of Madison Square Park's ongoing program of non-permanent exhibitions.



Student and Faculty Exhibitions

The Fine Arts complex provides a testing ground for student artists who are interested in outdoor installations.



- 1 Benton Art Museum Courtyard/Art Woods
- 2 Fairfield Way
- 3 South Campus Commons
- 4 Fine Arts Complex
- 5 Performing Arts Center (Proposed)
- 6 North Academic Walk
- Permanent Collection
- Temporary Installations
- Student and Faculty Exhibitions



Landscape Framework

Interpretive Landscapes

Thanks to the dedication of the Arboretum Committee – established in the 1980s and consisting of students, faculty, staff, and alumni – efforts are underway to protect, maintain, and enhance UConn's tree collection and further integrate this unique resource into the University's curriculum. In addition to expanding the Arboretum collection to increase species diversity and emphasize combinations of plants, the framework plan recommends providing additional opportunities for outdoor learning. In particular, the woodland corridors can be studied for their value as low-tech, high performance landscapes, filtering runoff and improving ecosystem health downstream, as well as providing wildlife corridors that can be studied to better understand habitat preferences of various species of fauna.



Existing View of Lot 9



Proposed View of North Science Quad



- Property Line
- Proposed Arboretum Walk
- Visitor Center
- Existing Champion Tree
- Existing Special Tree *
- Potential Conflict with Development
- Interpretive Landscape Feature
- Existing Deciduous Trees
- Existing Evergreen Trees
- Proposed Deciduous Trees
- Proposed Evergreen Trees

* Source: UConn Campus Tree Touring Guide

Interpretive Landscape Plan



LANDSCAPE MASTER PLAN

Landscape Framework

Campus Walks

Paradoxically, many areas of the UConn campus are extensively paved yet inadequately suited for pedestrian traffic. Campus walks are often too narrow and parallel roadway alignments rather than follow desired paths of travel. As proposed changes to vehicular circulation patterns within the campus are implemented and new buildings added, improvements to the pedestrian circulation network are also proposed.

Summary of Recommendations:

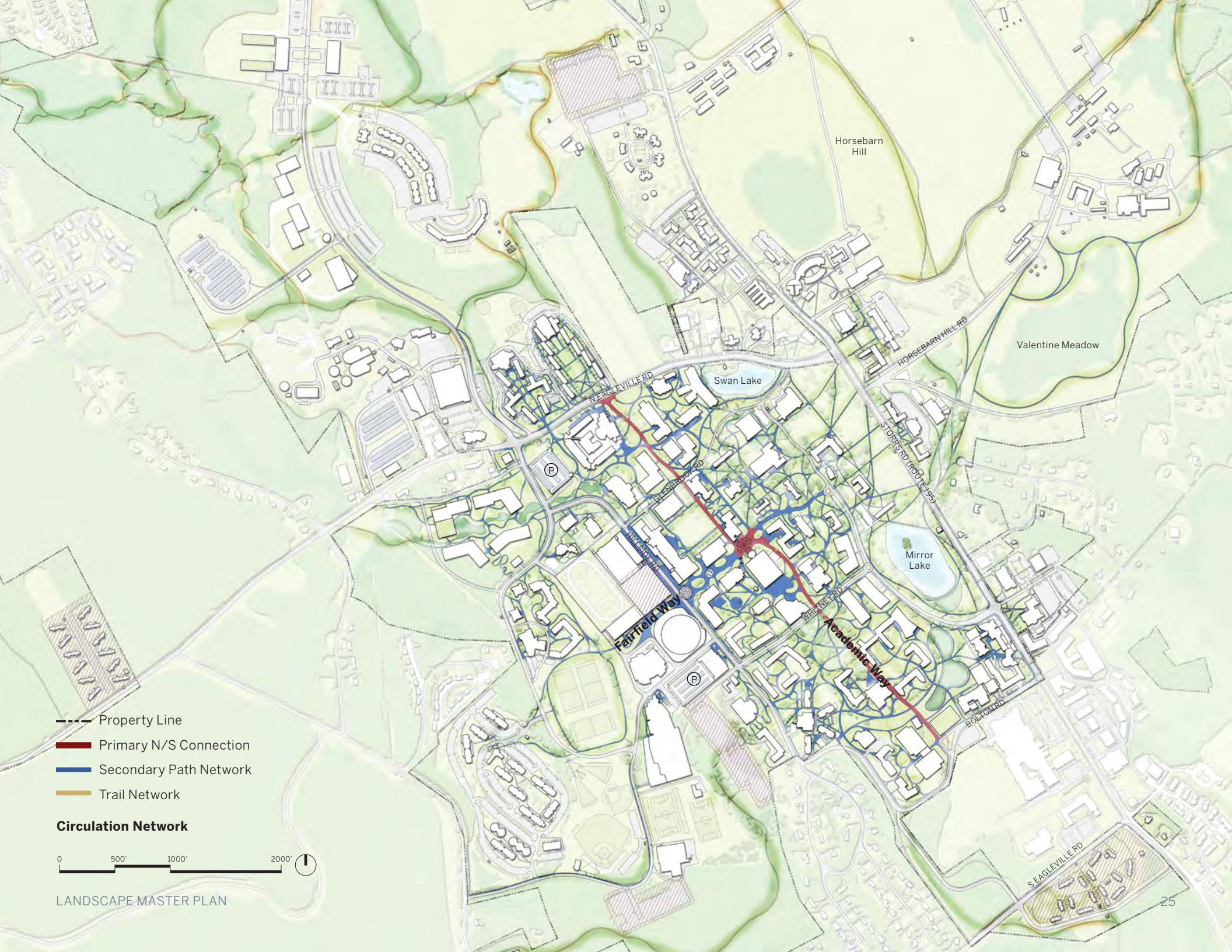
- Enhance and extend the Academic Walk to reinforce its primacy as the main north/south pedestrian spine for the campus
- Reduce the perceived distance between areas of the campus by providing experiential variety along walkways
- Create a networked circulation system that better accommodates how students move between areas of the campus
- Create a system of shared pedestrian, bicycle, and vehicular cartways to improve connectivity



Existing View from Glenbrook Road

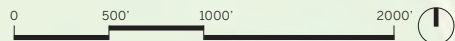


Proposed Academic Walk



- Property Line
- Primary N/S Connection
- Secondary Path Network
- Trail Network

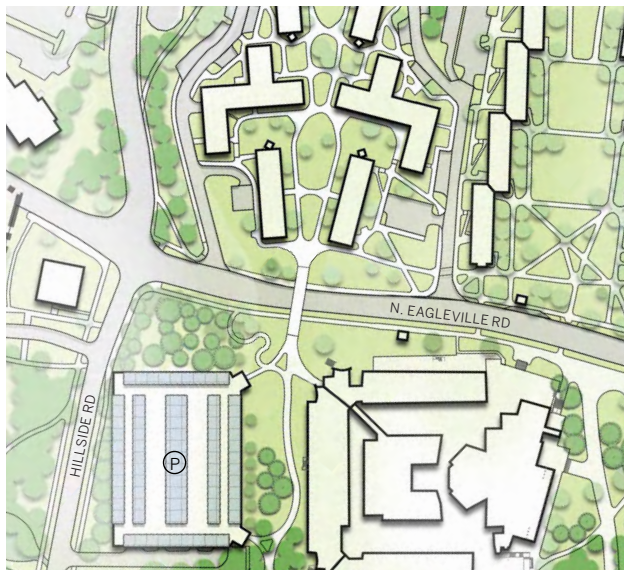
Circulation Network



Landscape Framework

Residential Connections

Many of the UConn residence halls are located at the periphery of campus – and often on hilltops – introducing an intrinsic challenge to the daily task of walking between residence halls and the campus core. This particular arrangement of architectural program has profound quality of life implications for students who live on campus, particularly those with mobility challenges. Efforts to make improvements to the function and experience of landscape connections to residential neighborhoods are therefore of paramount importance. In strategic locations, such as the Fairfield Way extension or potential pedestrian bridges over North Eagleville Road, existing and introduced topography can be used to support accessible landscape connections over major roadways.



Potential North Eagleville Pedestrian Bridge (Option)



Towers Residence Halls Connection



Fairfield Way Extension



- ① Garrigus Suites and Hilltop Apartment Complex
- ② North Campus and Northwest Residence Halls
- ③ Towers Residence Halls
- ④ Mansfield Apartments

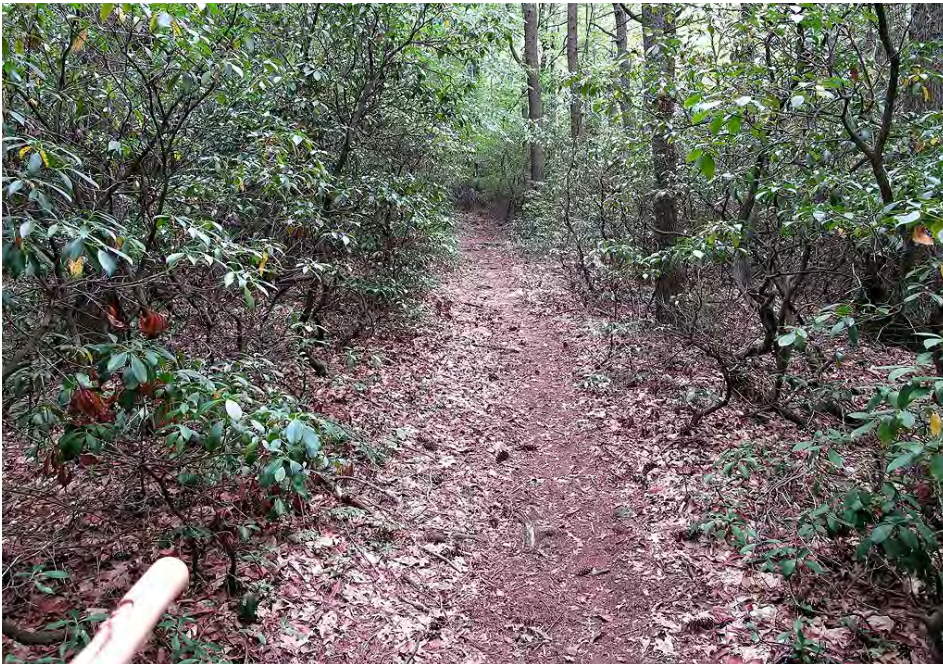
Residential Connections



Landscape Framework

Trail Network

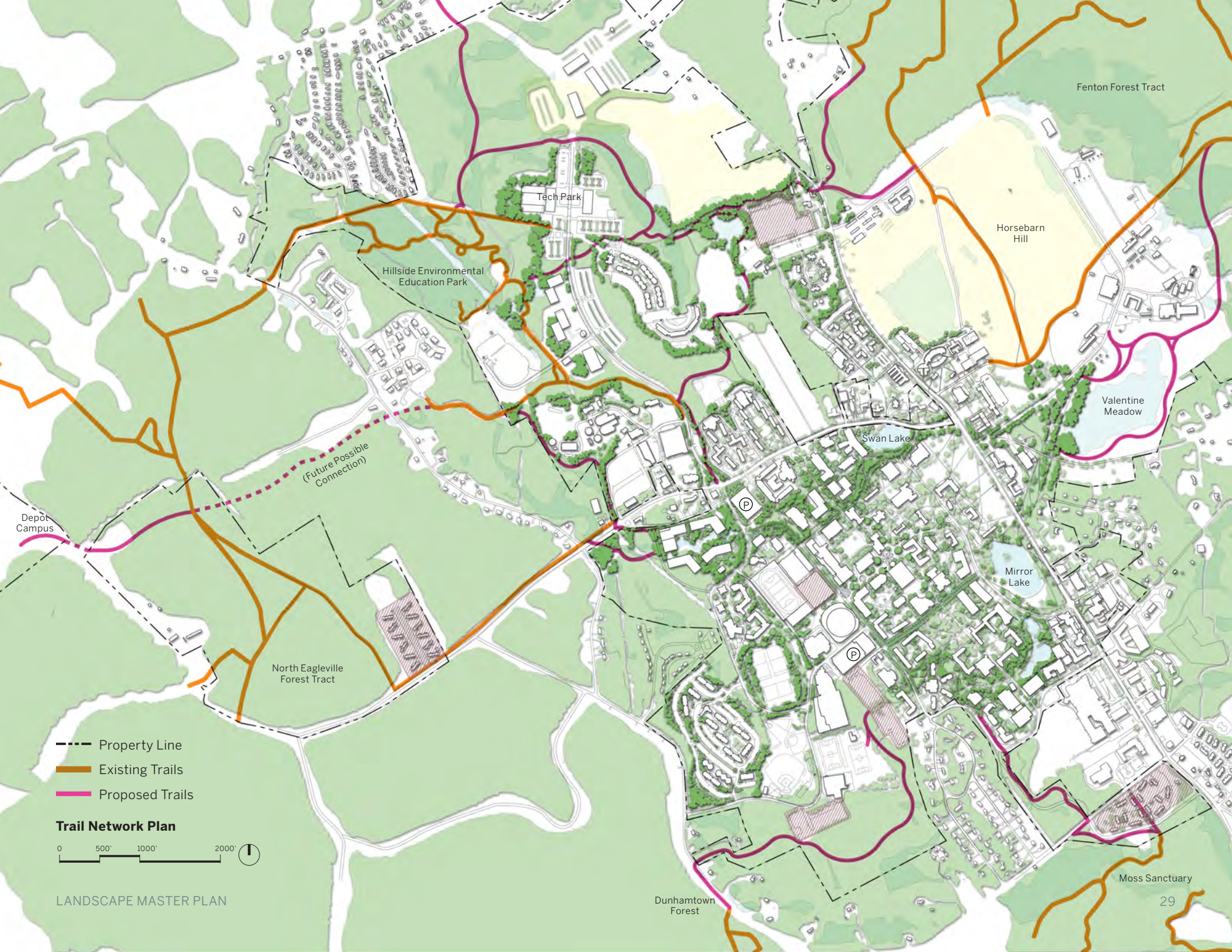
The University of Connecticut is surrounded by a mosaic of forests, farmland, wetlands, and trails that connect to larger recreation corridors. Due to UConn's extensive land holdings, the opportunity exists to create additional connections on UConn property between trail systems that are currently isolated from one another and between UConn's forest tracts and the campus core. In partnership with the Town of Mansfield and other land owners, additional opportunities may exist to improve regional connectivity, including to the Depot Campus.



Connect to Existing Trails



Connect to Connecticut's Natural History



Landscape Typologies

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The Great Lawn	34
Woodland Corridors	36
Courtyards and Quads	38
Canopied Yards	40
Garden Corridors	42

Landscape Typologies

Heritage Campus

Based on Charles N. Lowrie's 1910 General Plan, the configuration of many of the buildings and landscape spaces along Storrs Road embodies the democratic, egalitarian spirit of UConn's heritage as a land-grant institution and serves as the University's "front yard." Listed on the National Register of Historic Places, this precinct should remain largely as it exists today except for improvements that will enhance its long-term usefulness and vitality.

Summary of Recommendations:

- Identify and protect existing significant trees
- Identify and preserve important viewsheds
- Coordinate utilities upgrades with tree planting to mitigate the ongoing attrition of mature canopy trees
- Reinforce the area's unique combination of linear and meandering walkways
- Improve the functionality of Founder's Green for both day-to-day use and special events



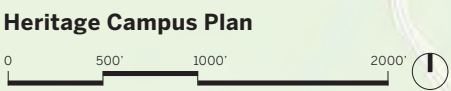
Existing View of Mirror Lake



Proposed View of Mirror Lake



- Property Line
- Existing Deciduous Trees
- Existing Evergreen Trees
- Special Arboretum Trees



Landscape Typologies

The Great Lawn

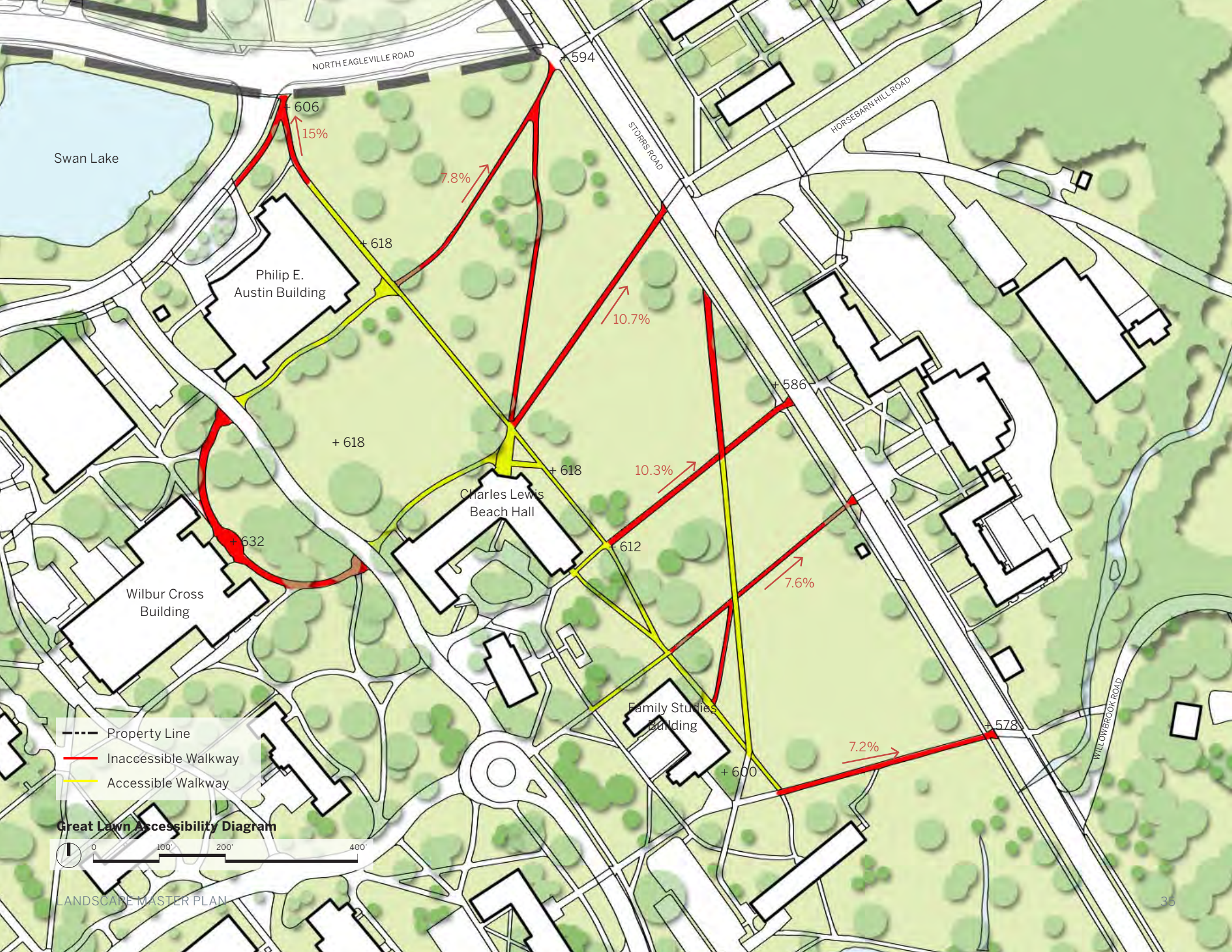
Given the approximately 50 feet of elevation change between Storrs Road and the front door of the Wilbur Cross building, traversing the Great Lawn can be a challenge for even the most vigorous student, faculty, or staff member. For those with disabilities, it can be next to impossible. Creating more gradual, comfortable, and ADA compliant routes with slopes of less than 5% through the Heritage Campus would have widespread benefit and should, therefore, be explored. Wherever possible, existing path alignments should be maintained at shallower gradients. New paths that climb the slope in a gradual manner between important destination points should also be considered.



The Great Lawn from Storrs Road

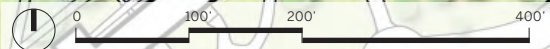


The Great Lawn with Horsebarn Hill Beyond



- Property Line
- Inaccessible Walkway
- Accessible Walkway

Great Lawn Accessibility Diagram



Landscape Typologies

Woodland Corridors

In order to better integrate the campus into its context and improve the day-to-day experience of moving through the campus, a series of woodland corridors are proposed. Replacing vast expanses of surface parking and over-scaled roadways, these corridors help organize campus pedestrian circulation and become filters for air, water, wildlife, and people. Where width between buildings permits, lawn areas for passive recreation are proposed within each corridor.

Summary of Recommendations:

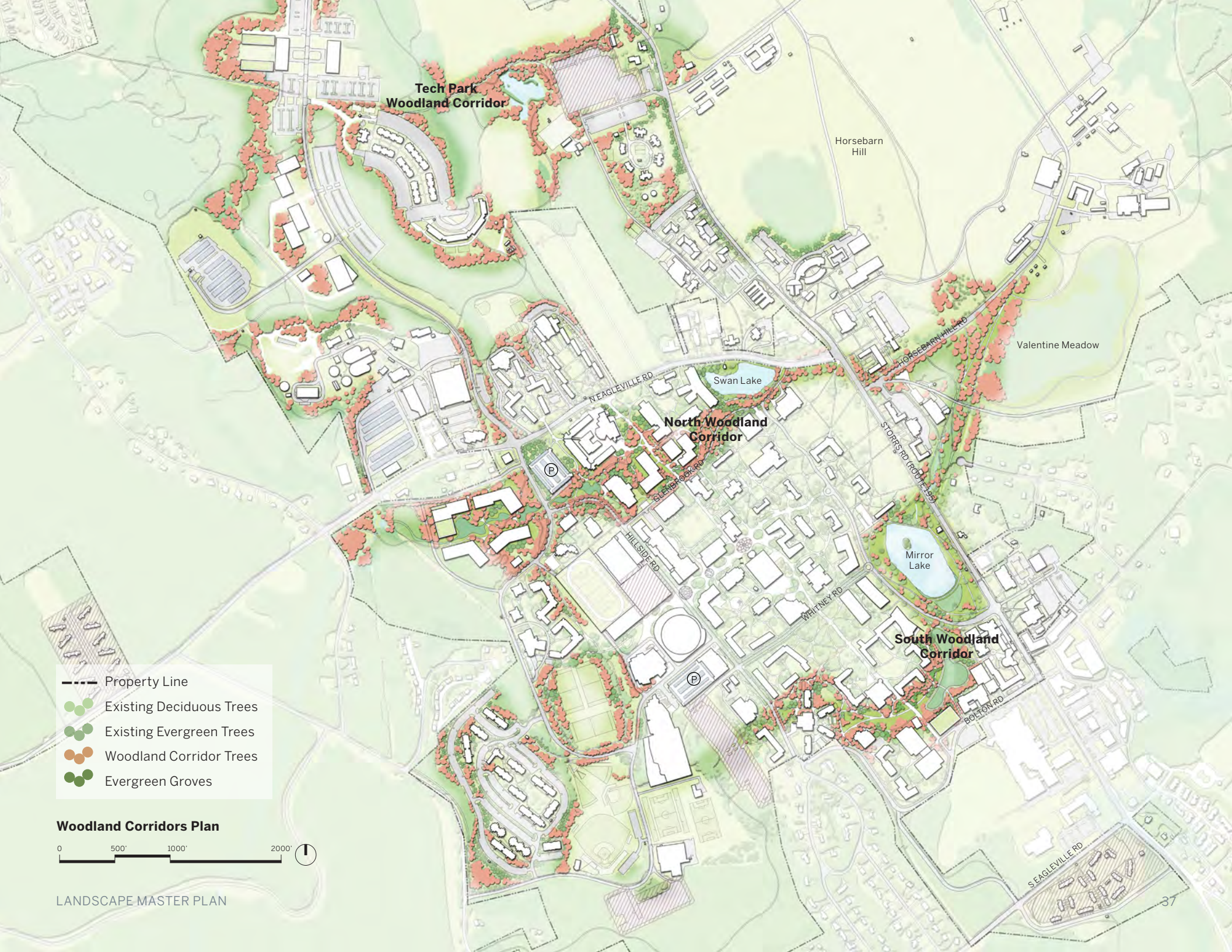
- Use dense plantings to engage adjacent buildings and increase the perceived depth and width of each space
- Maintain sight lines to ensure safety for pedestrians
- Incorporate evergreen trees to provide winter interest and serve as windbreaks
- Expand the Arboretum collection to include combinations of trees indicative of local plant communities



Existing View of S Lot



Proposed View of South Campus Woodland Corridor



**Tech Park
Woodland Corridor**

Horsebarn
Hill

Valentine Meadow

**North Woodland
Corridor**

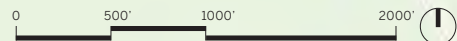
Swan Lake

**South Woodland
Corridor**

Mirror
Lake

- Property Line
- Existing Deciduous Trees
- Existing Evergreen Trees
- Woodland Corridor Trees
- Evergreen Groves

Woodland Corridors Plan



Landscape Typologies

Courtyards and Quads

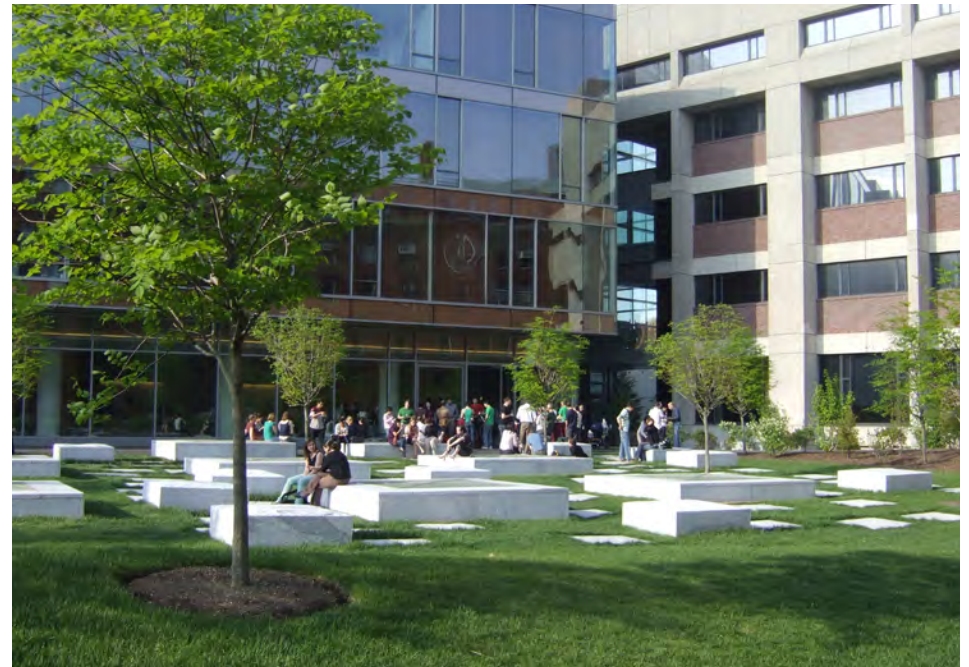
Since the early development of the Storrs campus, the arrangement of buildings around shared landscape spaces has been a central theme. The framework plan builds on this tradition by organizing many of the proposed buildings around new courtyards and quads that are intended to become outdoor centers of student life. Enhancements to existing spaces that do not yet serve this purpose effectively should also be considered.

Summary of Recommendations:

- Particularize courtyards to respond to their immediate adjacencies and surrounding buildings' activities
- Create strongly identifiable places through variation in topography, vegetation, and materials
- Provide year-round comfort by responding to the particular microclimate of each space
- Create a diversity of courtyard typologies on campus, with areas for both passive and active recreation, studying and exchange, rest and relaxation, and increased curation of the Campus Arboretum



Existing Pharmacy Quad



Precedent: Harvard University Science Yard



Landscape Typologies

Canopied Yards

Apart from the Art Woods within the Heritage District, the largest concentrations of mature canopy trees on campus occurs in an underutilized remnant of the Connecticut Agricultural College formerly known as Faculty Row. Situated along the Academic Walk and surrounded by potential building sites, this space is ready-made to become a distinguished landscape commons similar to those found at many other elite institutions of higher learning. The mature trees create three-dimensional landscape “rooms,” distinguishing the South Campus Commons and other canopied yards from more traditional quad spaces.

Summary of Recommendations:

- Protect existing significant trees
- Emphasize important existing movement lines and incorporate them into consolidated pathways to minimize fragmentation of the landscape
- Align new walkways and utilities to avoid damage to existing significant trees
- Plan for replacement of mature canopy trees over time
- Integrate high-quality, permanent or temporary art installations
- Employ strategies for preventing tree damage due to compaction



Existing Faculty Row



Precedent: Harvard University Harvard Yard



- Property Line
- Existing Deciduous Trees
- Existing Evergreen Trees
- Canopy Trees

South Campus Commons



Landscape Typologies

Garden Corridors

Building upon the latent potential for Fairfield Way and the Academic Walk to become places for both movement and respite in the heart of the academic core, a horticultural overlay that will transform these corridors into linear gardens is proposed. Complementing the proposed woodland corridors which connect the campus to its natural forest setting, these garden corridors would display a broader range of plant species adapted to the local climate.

Summary of Recommendations:

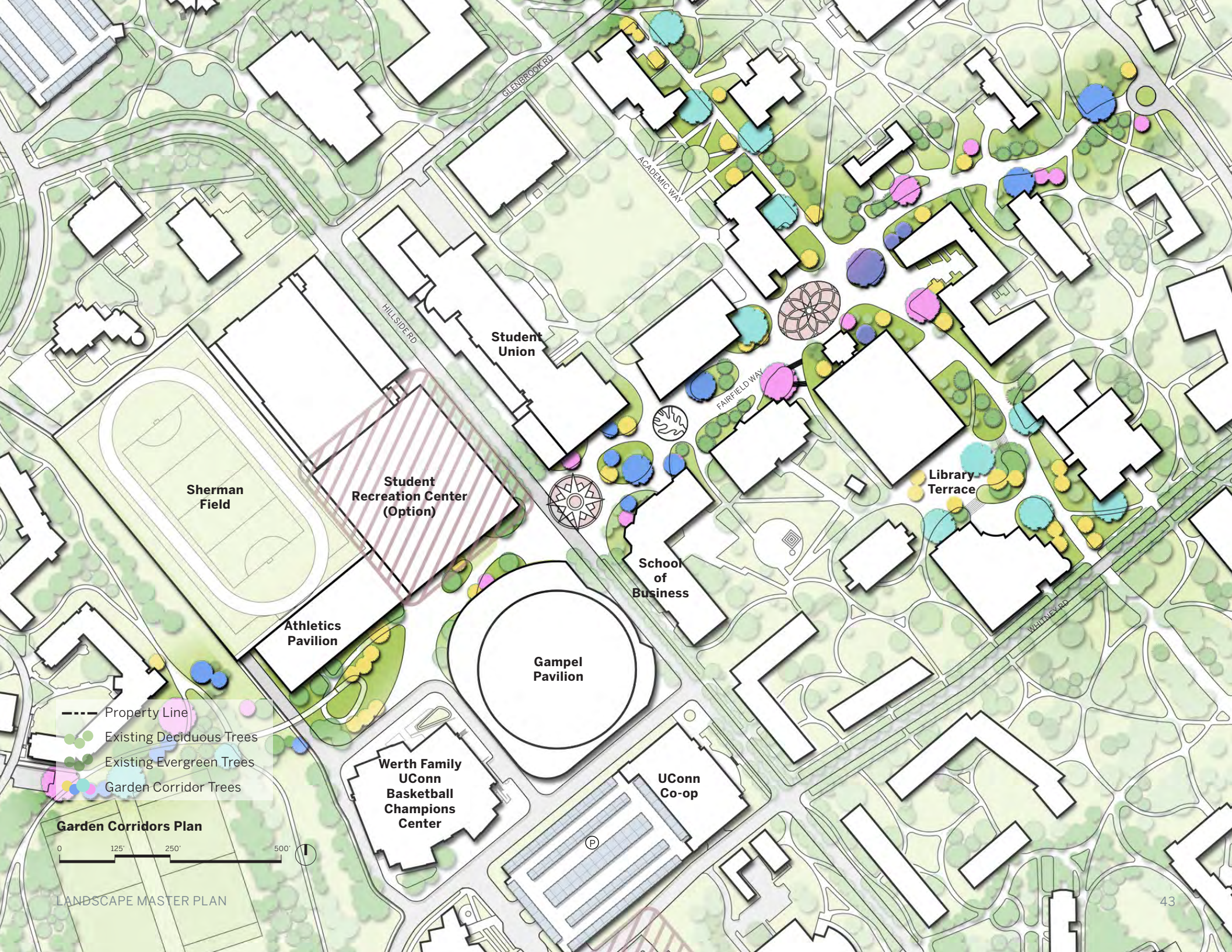
- Increase experiential range with a diverse and layered plant palette
- Provide choice and variety of circulation routes
- Integrate seating and areas for gathering without obstructing primary desire lines
- Improve connections to surrounding buildings so they contribute to the spatial definition of the corridors
- Integrate high quality, temporary art installations



Existing View from Hilltop Apartments



Proposed Garden Corridor and Transit Hub



GLENBROOK RD

ACADEMIC WAY

HILLSIDE RD

FAIRFIELD WAY

WHITNEY RD

Student Union

Sherman Field

Student Recreation Center (Option)

Athletics Pavilion

Gampel Pavilion

School of Business

Library Terrace

Werth Family UConn Basketball Champions Center

UConn Co-op

- Property Line
- Existing Deciduous Trees
- Existing Evergreen Trees
- Garden Corridor Trees

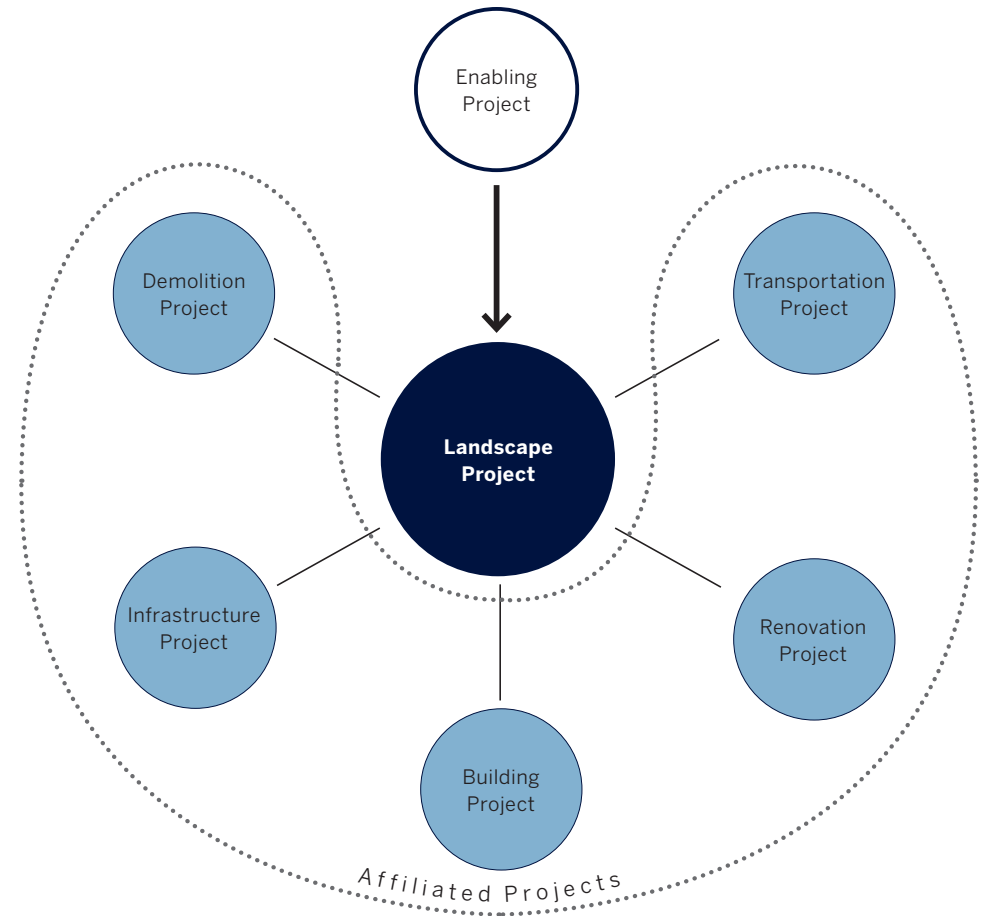
Garden Corridors Plan



Implementation

Building a Cohesive Campus Landscape

Successful campus landscapes are characterized by their cohesiveness and by an experiential autonomy that transcends administrative project boundaries. Building on the existing assets of the UConn campus, its pastoral surroundings, and the aspirations of students, faculty, and staff, the Landscape Master Plan proposes a framework in which the landscape itself provides the organizing structure for campus growth and modernization over the next 20 years. For the proposals contained within the Landscape Master Plan to succeed in achieving the goals of creating a sense of place, defining campus precincts, and improving ecosystem health, a sustained commitment to the centrality of landscape concerns within larger architecture, infrastructure, and transportation projects will be needed. With careful organization and guidance of the projects identified in the Master Plan, the once-marginalized landscape of the UConn campus can become one of its greatest assets.



Primary Landscape Project	Enabling Project(s)	Affiliated Project(s)
Northwest Science Quad		
Phase 1	Temporary Parking at Tech Park	STEM Research Center 1
		Science Quad Parking Deck
Phase 2		STEM Research Center 2
North Woodland Corridor		
Phase 1	Hillside Road Realignment	Glenbrook Road Improvements
		Utility Tunnel Extension - X Lot
		Gant Complex Renovation
Phase 2		Infirmery Demolition
		Glenbrook Road Improvements
		Central Plant Upgrades
South Woodland Corridor		
Phase 1		Mirror Lake Improvements
		New Service Drive
Phase 2	South Parking Deck	Academic Way Improvements
South Campus Commons	Faculty Row Houses Demolition	Utility Tunnel Extension - South Campus
		Honors Residence Hall
		Academic Way Improvements
		South Campus Residence Renovation
North Academic Way Extension	Torrey Life Sciences Demolition	Greenhouses Replacement
	Greenhouses Demolition	
Fairfield Way Extension	Guyer Gym Demolition	Student Recreation Center
	Natatorium Demolition	Sherman Field Parking Deck
		Sherman Field Replacement
		Hillside Road Improvements
		Access Road / Bus Drop-Off
Pharmacy Quad		Engineering and Science Building
Library Terrace Improvements		Babbage Library Renovation
		Academic Way Improvements



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