



Outlying Parcels Master Plan

Final Report
June 2000



# University of Connecticut Outlying Parcels Master Plan





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### Introduction

#### **FOREWORD**

The University, with support from The State of Connecticut, is growing and evolving into a top-tier academic and research institution. The challenge lies in how the University can make the most effective use of its resources (people, facilities, and finances) to continue the forward momentum initiated by the Board of Trustee's Strategic Plan and the UCONN 2000 initiative. To enable its vision, the University understands the importance of utilizing its outlying parcels (those beyond the Academic Core). These parcels provide room for the future, where the University can establish critical strategic linkages while reserving the main campus for core academic land uses.

The optimal utilization and efficient development of its land holding is both essential to its mission and vision, and wise from a land planning standpoint. The State of Connecticut's Council on Environmental Quality observes that "inefficient land use is the common thread that runs through all of our serious remaining environmental problems." The University embraces this observation and commissioned this study to understand the optimal development potential for the outlying parcels immediately adjacent to the Academic Core. The study includes the Agriculture, North and Depot campuses.

Inherent in the planning process is the concept of sustainable design that builds from a conservation-based planning approach. Responsible use and management of the University's natural resources is an overarching planning principle embodied in the planning recommendations and one which all land grant institutions embrace. To ensure this principle, the planning process started with a research phase (personal interviews, public meetings, existing reports, data, and on-site investigation) utilizing environmental specialists and land planners to delineate the natural and man-built opportunities and constraints for development. The conclusions of this research are presented in an Environmental Framework Plan that clearly defines developable and non-developable parcels of land within each outlying campus parcel. The Framework Plan provides a quick macro-level synopsis of where the University can and should develop new facilities to address future academic and research initiatives in an efficient and environmentally sensitive manner.

Beyond the broad Framework Plan, the study provides specific recommendations for each identified development parcel relative to optimal and secondary land use potentials. Development considerations are provided to guide responsible and sustainable development. Floor area ratios (FAR) are also provided for purposes of estimating future development capacity and guiding long-range planning decisions.

Based upon a review of The State of Connecticut's Office of Policy and Management (OPM), Conservation and Development Policies Plan, and communications with OPM staff, we feel the recommendations contained herein are in alignment with their guidelines.

#### **PLANNING PROCESS**

The study of these sites began with planners and environmental scientists walking all the sites to observe, first hand, the complicated environmental and cultural issues. A review of previously prepared documents related to the sites was conducted, including: the aforementioned UConn Forest Parcels Management Plan, the College of Agriculture Capital Plan, and the Center of

### **Outlying Parcels Master Plan**



Excellence for Vaccine Research (CEVR) Environmental Assessment. Local and state officials from the Town of Mansfield, the Connecticut Department of Environmental Protection (DEP), State Department of Public Health, State Office of Policy and Management (OPM), and the state soil scientist at the United States Department of Agriculture (USDA), were personally interviewed.

Documents reviewed during the planning process include the Town of Mansfield wetland maps, The State of Connecticut Public Health Code, OPM's Conservation and Development Policies Plan for Connecticut, DEP's Protecting Connecticut's Groundwater A Guide for Local Officials, USDA's Important Farmlands of Connecticut, the Environmental Impact Evaluation(EIE) for the former Research and Technology Park, and FEMA floodplain maps, among others.

#### CAMPUS-WIDE PLANNING PRINCIPLES AND GOALS

Planning for the outlying parcels is coordinated with the goals, objectives, and planning recommendations of The University of Connecticut Campus Master Plan. The Master Plan provides the following planning principles and planning goals:

#### Planning Principles

- Respect what is already in place.
- All campus elements must inter-relate.
- A campus is about people, not just buildings and spaces.

#### Planning Goals

- Establish a clear organizational concept.
- Develop an articulated hierarchy of spaces and paths.
- Create a humane campus in scale, function, and materials.
- Provide a framework for growth that builds from existing elements and allows for future growth in support of the Master Plan's primary elements.

#### **OUTLYING PARCEL PLANNING GOALS:**

#### Strengthen strategic campus relationships.

Continue to build a strong campus center by locating land uses and facilities with strategic academic relationships adjacent to the Academic Core (as defined by: Route 195, North Eagleville, Bolton, and Hillside Roads). Strive to contain these strategic academic relationships within a 15 – 20 minute walk of the Academic Core's center.

#### Protect sensitive and regulated environmental resources.

Preservation and protection of sensitive natural features is not only a stewardship concept, it is also good land planning practice. Sensitive features such as wetlands, watercourses, aquifer recharge zones, conservation areas, steep slopes, prime farmland soils, and quality vegetative cover should be understood and development impacts minimized. These sensitive areas should be developed within state agency guidelines.

#### Respect important cultural features.

Viewsheds, historical features, existing development patterns, and other significant cultural features should be understood and respected. The Connecticut landscape is not a powerful one, but one of subtle beauty. The University's image benefits from this setting, thus development should be contextual.

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#### Promote sustainable design concepts.

The University should seek to cluster development (containing areas of higher development density in small yet interconnected geographic areas) for maximum utilization of its land resources and strategic academic adjacencies. Cluster development improves land use efficiencies, maximizes use of existing infrastructure (roads, utilities, etc.), and promotes a campus that enables interaction, idea sharing, and collaboration.

#### CAMPUS-WIDE ORGANIZATIONAL STRATEGIES

#### Academic Core

The Academic Core is the heart and soul of the campus. It should retain the highest development density for all University parcels. It maintains a strong magnetic pull for academic related uses.

#### Satellite Campuses

Adjacent parcels tie into the Academic Core, especially along common boundaries where they come into direct contact. The closer the proximity to the Academic Core, the more appropriate are academic related uses and similar development densities. As the concentric rings of campus development move away from the Academic Core, the density becomes less intense, and the uses become less academic related. Each satellite campus is unique with its own set of environmental and cultural opportunities and constraints. These opportunities and constraints help determine optimal land uses.

#### North Campus

Achieve a higher land use density on North Campus with strong preference for uses that have strategic ties to the Academic Core (housing, academics, academic related research, Commercial/retail, and remote parking). This parcel should be considered the highest priority for development potential.

#### Agriculture Campus

Maintain a low development density for the Agriculture Campus. New buildings should be clustered around existing development nodes and in context with the complicated environmental and cultural considerations. Focus development on University related agriculture research, education, and recreation.

#### Depot Campus

Utilize the Depot Campus for University related research, recreation, community outreach, incubator uses, public/private partnerships, and special educational programs that do not require strategic academic adjacencies with the Academic Core. Strengthen the connection between the Depot Campus and the Academic Core to create a more integrated overall University environment

In order to properly position the Depot Campus for private-sector development, its existing infrastructure must be upgraded. The development parcels must be primed and ready to accept future partners. This includes building demolition, road improvements, utility upgrades, and any required environmental remediation.

In addition, the public road system connecting this satellite campus to the Academic Core must be upgraded to handle increased traffic in a safe and efficient manner. This includes completing North Hillside Road to Route 44 and Bone Mill Road improvements.

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### Agriculture Campus

#### INTRODUCTION

The Agricultural Campus of The University of Connecticut consists of 886 acres located contiguous to the University's Academic Core between Route 195 and the Fenton River. The northern boundary is generally Old Turnpike Road, and the southern boundary is Gurleyville Road. Several outparcels of land (non-University owned) exist on the north, west, and south edges.

The predominant surrounding land use is low-density single family residential. The University's Academic Core is located across Route 195 to the west, which includes academic buildings as well as higher density student residence halls. Most of the Agriculture Campus lies outside of the 15 – 20 minute walk radius from the Academic Core's center, which determines the appropriateness of academic related uses. A gravel mining operation exists in the southeast corner of the site.

Approximately two-thirds of the site is forested and is currently utilized as a laboratory by the College of Agriculture and Natural Resources. The tree cover ranges from mixed hardwoods to stands of Hemlock and Pine of various ages. Most of this land had been previously farmed and has successionally reverted back to forest land. Detail can be found in The University of Connecticut Department of Natural Resources Management and Engineering's Plan of Conservation and Management for the Fenton Tract of the UConn Forest. The remaining acreage is being utilized for pasture land and various traditional agricultural activities, as well as passive recreation.

Numerous development areas currently occur on the site. Research barns for poultry, dairy, swine, beef, sheep, and horse study exist primarily adjacent to Horsebarn Hill Road and are spread throughout the site. In addition, two more densely developed areas exist: one adjacent to the Academic Core, consisting of academic classrooms, research facilities and residence halls; the other, at the southeast corner of Horsebarn Hill Road, consists of research facilities and various scattered and temporary storage buildings. Both are fully serviced by utilities. The development, as it currently exists, contributes to the site's typical New England agricultural feel and was indeed named a "favorite place" in a recent Windham Region Council of Governments (WINCOG) survey of area residents.

Steep slopes (15-20% and over) occur primarily on all sides of the Horsebarn Hill drumlins and in various places throughout the wooded areas. Slopes of 20% and greater are not recommended for development, and slopes between 15-20% should be developed in a very sensitive manner.

Numerous wetlands occur ranging from well-defined, regulated wetlands to non-field-verified wetlands mapped by the Town of Mansfield. Development should not occur within regulated wetland boundaries, and unregulated wetlands should be field-verified before development occurs in their vicinity. Appropriate development buffers should be maintained per state agency guidelines and regulations.

The Fenton River supplies drinking water for several area towns as well as The University of Connecticut. Several drinking water wells occur near the river within the Stratified Drift Aquifer. At the time of this study, preliminary Level A mapping has been done to delineate the aquifer recharge with final mapping due in the near future. State guidelines have been implemented by

### **Outlying Parcels Master Plan**



OPM and DEP for developing within an aquifer recharge area, and it has been our intent to conform to these guidelines with all recommendations.

The entire Agriculture Campus lies within the OPM classification of Conservation Areas. Conservation Areas are defined by OPM as a Priority 3 conservation area behind Existing Preserved Open Space (Priority 1), and Preservation Areas (Priority 2). OPM's Conservation and Development Policies Plan for Connecticut states that this classification "does not necessarily mean halting all development in such areas, but it does involve careful attention to ensure that the resources of concern are not harmed." It has been our intent to conform to the guidelines for development within Conservation Areas.

Views and viewsheds were very important cultural features that were considered. Two levels of viewsheds were determined to have varying impacts on the development on the site. Primary viewsheds are those which are apparent to the largest number of people and have the greatest impact on the enjoyment of the area. Views from Route 195, toward the Horsebarn Hill area in both north and south directions, views from Horsebarn Hill Road, and views from the top of Horsebarn Hill are considered primary views. The greatest care should be taken to reduce the visual impact of development in primary viewsheds. Secondary viewsheds are the next highest in importance and include the views from the less traveled roads such as Gurleyville Road and Old Turnpike Road.

These environmental and cultural features all contributed to the determination of development potential and considerations.

#### **BROAD PLANNING GUIDELINES**

The following planning principles are intended to provide development and organizational strategies for the entire Agriculture Campus.

- Cluster development density building off of current patterns.
- Prioritize development in areas where buildings, utilities, and access already occur.
- Strive for low-density, low impact development outside of high-density clusters.
- Respect important environmental features.
- Respect viewsheds.
- Develop within all applicable state of Connecticut regulations.
- Best Management Practices should be followed to treat stormwater runoff.
- Care should be taken to minimize impervious surfaces.

#### **IDEAL LAND USES**

- University related agricultural research and education (strategic adjacency to existing agriculture facilities)
- Traditional agriculture (pasture land, agricultural crops, support buildings, barns)
- Forest management and research
- Passive recreation
- Active recreation
- Core Academic (clustered near academic core)
- Student Residential (dormitory style, clustered near academic core)

### **Outlying Parcels Master Plan**



#### GENERAL DEVELOPMENT GUIDELINES

General development guidelines are proposed for each parcel identified as having the potential for development on the Agriculture Campus. Each parcel's development opportunity and/or limitation is presented through a graphic illustration and descriptive text. This text addresses site statistics, primary and secondary uses, site description, and important development considerations.

*Site statistics* detail the parcel's size and development potential.

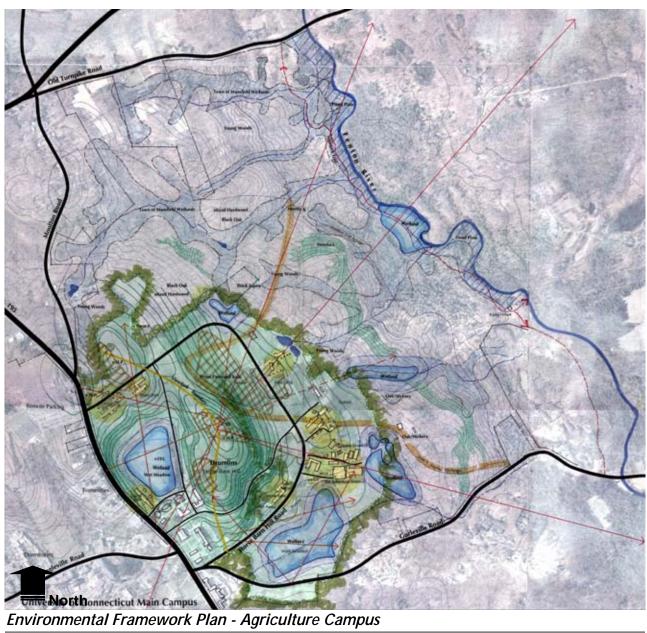
The *primary land use* is, in our opinion, the optimal development scenario for the particular parcel after taking into consideration all limitations. *Secondary land uses* are those that, in our opinion, are also allowable but are not the best use of the parcel. Land use assessments incorporate planning principles, organizational goals, and site characteristics.

The *site description* explains the development parcel, its boundary, its current state of development, and the important environmental and cultural factors that influence its development.

*Important development considerations* describe the priority for development, general guidelines for development, and any special considerations that must be accounted for when the parcel is developed.

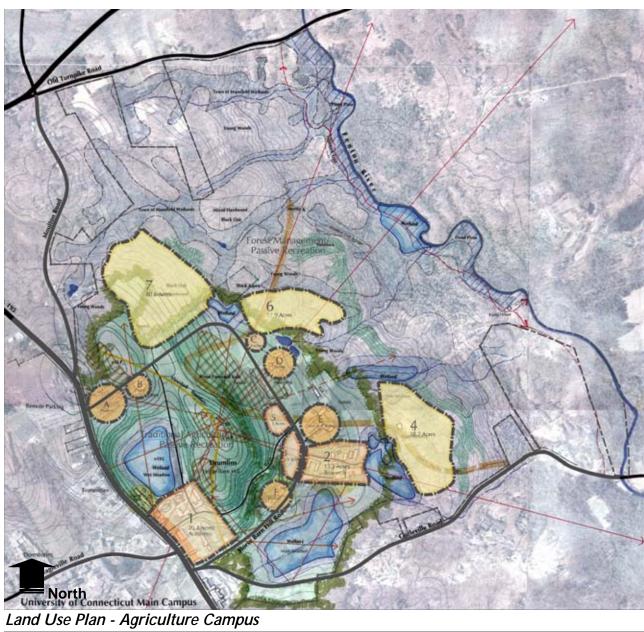
# University of Connecticut Outlying Parcels Master Plan





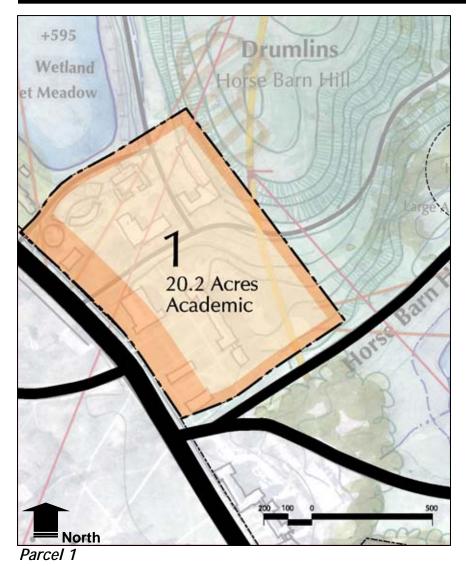
# University of Connecticut Outlying Parcels Master Plan

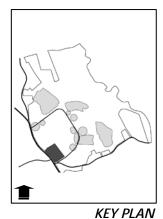




**Outlying Parcels Master Plan** 







#### SITE STATISTICS

- 20.2 acres
- Assuming .40 FAR, total development potential of 370,000 gsf

#### PROPOSED PRIMARY LAND USES

 Higher Density University Related Agricultural Academic and Research

# PROPOSED SECONDARY LAND USES

- Student Housing
- Active Recreation

#### SITE DESCRIPTION

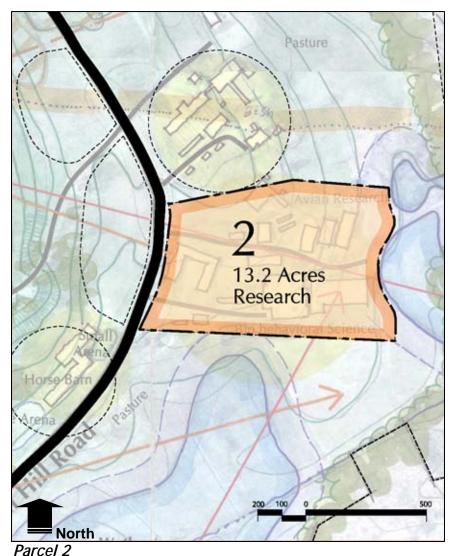
- Contains agricultural academic uses such as classrooms, residence halls, and research space.
- O Immediately adjacent to the Academic Core.
- Wetland edge defines north edge.
- Steep slopes of Horsebarn Hill define east edge.
- O Horsebarn Hill Road defines south edge.
- O Route 195 defines west edge.
- Relatively level land area.
- Non-academic should be relocated, which will open up infill development opportunities
- Serviced by all major utilities.
- Easily accessible from existing roads.
- O Not located within the Level A aquifer recharge area.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Because of the existing high development density, utility service, adjacency to the Academic Core, and lack of major environmental and cultural limitations, Parcel 1 should be a Highest Priority Development Zone on the Agriculture Campus.
- O Development densities, FAR, building heights, materials, and general architectural form should be consistent with the current development which occurs in this zone.
- Maintain all current setbacks from wetlands and the Route 195 and Horsebarn Hill Road corridors.
- O Take into consideration views from Route 195, Horsebarn Hill, and Horsebarn Hill Road.
- Will require relocation and/or demolition of some existing non-academic facilities.
- Actively consider reuse of yellow barn with synergistic uses that strengthen research and educational mission while preserving its historic outer façade.

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KEY PLAN

#### SITE STATISTICS

- 13.2 acres
- Assuming .35-.40 FAR, total development potential of 202,000-230,000 gsf

#### PROPOSED PRIMARY LAND USES

· Agriculture Related Research

# PROPOSED SECONDARY LAND USES

· Agriculture Related Academics

#### SITE DESCRIPTION

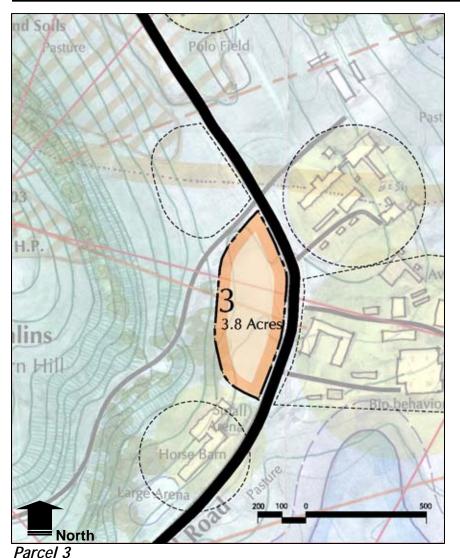
- O Haphazard arrangement of agriculture related research and storage buildings.
- Many current buildings are either temporary in their construction methods, trailers, and/or are in poor condition.
- Serviced by all major utilities.
- Easily accessible from existing roads.
- O Relatively level land area.
- O Not located within the Level A aguifer recharge area.
- Wetland edges define eastern and southern boundaries.
- O Horsebarn Hill Road defines western edge.
- Agricultural barns and pasture define northern edge.
- Within the Horsebarn Hill, Horsebarn Hill Road, and Gurleyville Road viewsheds.

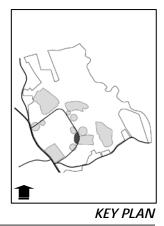
#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Existing high development density, utility service, adjacency to agricultural land, and lack of major environmental and cultural limitations make Parcel 2 a Highest Priority Development Zone.
- Achieve a high development density. The parcel is small and arrangement of current facilities haphazard. The area should be organized in a more efficient manner to achieve a high development density.
- O Development densities, building heights, materials, and general architectural form should be consistent with the current development in Parcel 1.
- O Consider views from Horsebarn Hill, Horsebarn Hill Road, and Gurleyville Road.
- O Continue implementing visual buffers and screening along the southern edge of the parcel.
- O Consider relocation of non-agricultural facilities.

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#### SITE STATISTICS

• 3.8 acres

#### PROPOSED PRIMARY LAND USES

Horse Arena

# PROPOSED SECONDARY LAND USES

- · Agriculture Related Research
- · Active Recreation

#### SITE DESCRIPTION

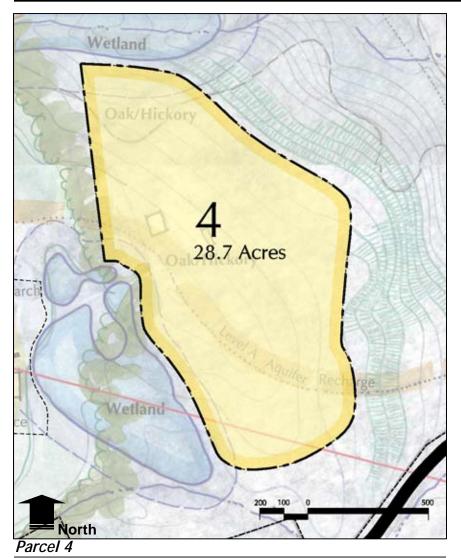
- Currently undeveloped.
- O Not serviced by major utilities.
- Easy access from existing roads.
- Relatively level land area.
- Not located within the Level A aquifer recharge area.
- O The steep slopes of Horsebarn Hill define the western edge.
- The horse facility defines the southern boundary.
- Horsebarn Hill Road defines eastern edge.
- Pasture, with prime agricultural soils, defines northern edge.
- This site is not within the Horsebarn Hill viewshed. There are view impacts from both Horsebarn Hill Road and Gurleyville Road.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- O The proposed Horse Arena is an appropriate use for this parcel.
- O Building heights, materials, and general architectural form should be contextual to preserve the agricultural feel of the area.
- Consider views from Horsebarn Hill, Horsebarn Hill Road, and Gurleyville Road.
- Will require a short extension of utilities into this parcel for development.

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KEY PLAN

#### SITE STATISTICS

28.7 acres

#### PROPOSED PRIMARY LAND USES

- · Low Impact / Low Density Agriculture Related Uses
- · Forest Management
- · Environmental Education

#### PROPOSED SECONDARY LAND USES

- · Recreation
- Prime Farmland Mitigation

#### SITE DESCRIPTION

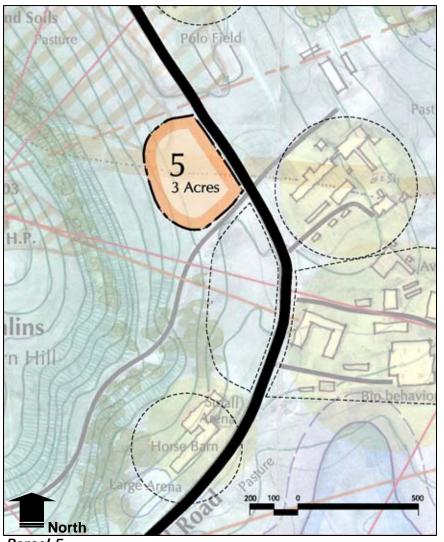
- O Relatively level piece of land.
- O Nearly entirely within the Level A aquifer recharge area.
- 0 Younger, more recently disturbed woods.
- 0 Parcel currently used for agriculture and forest preservation programs.
- O No utilities service this parcel.
- 0 Not within the Route 195 or Horsebarn Hill Road viewsheds. It is within the Gurleyville Road viewshed.
- 0 Significant road improvements and construction must occur for access.
- 0 Within the Horsebarn Hill viewshed.
- O Wetlands and pasture land define the western and northern edges.
- O Steep slopes define the eastern edge.

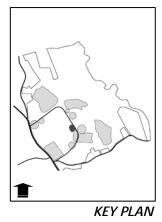
#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Remoteness, lack of utilities, infrastructure, and more extensive environmental limitations make this parcel one of the Lowest Priority Development Zones on the Agriculture Campus.
- Minimize impacts on high quality trees and topography.
- Develop low intensity uses related directly to agriculture or recreation, including small buildings and
- 0 Cluster development within this parcel to diminish environmental and visual impacts.
- Consider views from Horsebarn Hill and Gurleyville 0
- $\mathbf{O}$ Provide a wooded buffer between Gurleyville Road and Parcel 4.
- Vehicular access should occur only from Horsebarn  $\mathbf{O}$ Hill Road.
- Due to Level A aquifer recharge area, impervious 0 surfaces should be minimized.

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#### SITE STATISTICS

• 3 acres

#### PROPOSED PRIMARY LAND USES

 Low Impact / Low Density Agriculture Related Uses

# PROPOSED SECONDARY LAND USES

Recreation

### Parcel 5

#### SITE DESCRIPTION

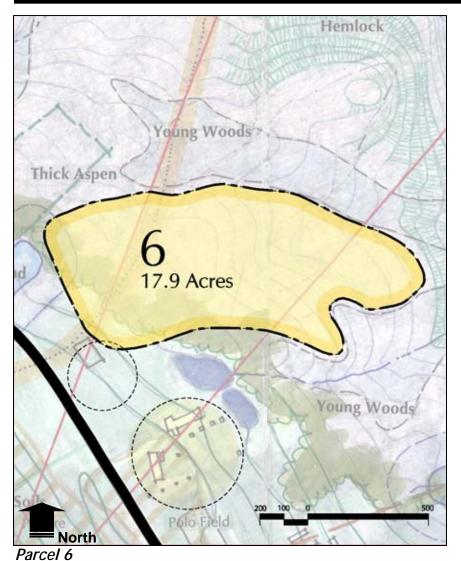
- Currently utilized for traditional agriculture.
- O Not serviced by major utilities.
- Easy access from existing roads.
- Relatively level land area.
- Half the parcel is located within the Level A aquifer recharge area.
- O The steep slopes of Horsebarn Hill define the western edge.
- O Development Parcel 3 defines the southern boundary.
- O Horsebarn Hill Road defines eastern edge.
- Pasture with prime agricultural soils defines northern edge.
- Within the Horsebarn Hill and Horsebarn Hill Road viewshed.

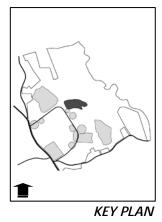
#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- O Building heights, materials, and general architectural form should be contextual to the parcel to preserve the agricultural feel of the area.
- O Consider views from Horsebarn Hill and Horsebarn Hill Road.
- O Due to Level A aquifer recharge area, impervious surfaces should be minimized.

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#### SITE STATISTICS

17.9 acres

#### PROPOSED PRIMARY LAND USES

- Low Impact / Low Density Agriculture Related Uses
- · Forest Management
- · Environmental Education

# PROPOSED SECONDARY LAND USES

- Recreation
- Prime Farmland Mitigation

#### SITE DESCRIPTION

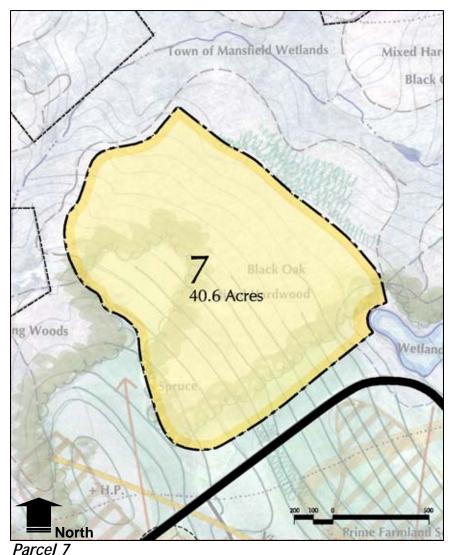
- Relatively level piece of land.
- O Nearly entirely within the Level A aquifer recharge area.
- Younger, more recently disturbed woods.
- Currently used for agricultural and forest management programs.
- O No utilities service this parcel.
- O Not within the Route 195 or Gurleyville Road viewsheds.
- Significant road improvements and construction must occur to access the site.
- O It is within the Horsebarn Hill viewshed.
- Town of Mansfield has identified possible wetlands which define the northern, eastern and southern edges of the parcel.
- Mapped wetlands and the Heifer barn define the western edge.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- O Because of its remoteness, lack of utilities, infrastructure, and more extensive environmental limitations, this parcel should be among the Lowest Priority Development Zones on the Agricultural Campus.
- O Minimize impacts on high quality trees and topography.
- Develop low intensity uses that are related directly to agriculture or recreation, including small buildings and trails.
- Cluster development within this parcel to diminish the environmental and visual impacts.
- O Consider views from Horsebarn Hill and Horsebarn Hill Road.
- A more detailed delineation of this parcel should be done before any development occurs.
- O Due to Level A aquifer recharge area, impervious surfaces should be minimized.

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KEY PLAN

#### SITE STATISTICS

40.6 acres

#### PROPOSED PRIMARY LAND USES

- · Low Impact / Low Density, Agriculture Related Use
- · Forest Management
- · Environmental Education

#### PROPOSED SECONDARY LAND USES

- Recreation
- · Prime Farmland Mitigation

### SITE DESCRIPTION

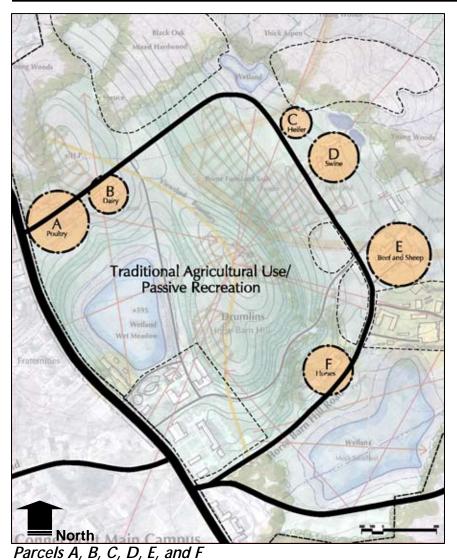
- O Moderately sloping piece of land.
- 0 Entirely outside of Level A aquifer recharge area.
- Younger, more recently disturbed woods and some open 0 agricultural land.
- 0 Currently used for agriculture and forest management programs.
- O No utilities service this parcel.
- 0 Partially within the Route 195 viewshed. It is within the Horsebarn Hill Road and Horsebarn Hill viewshed.
- Town of Mansfield has identified possible wetlands which define the northern edge of the parcel.
- $\circ$ Steep slopes and possible wetlands define the eastern edge.
- O Steep slopes and the cultural amenity of the Kessel gravesite area define the western edge.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Because of its remoteness, lack of utilities, infrastructure, and more extensive environmental and cultural limitations, this parcel should be among the Lowest Priority Development Zones on the Agricultural Campus.
- Minimize impacts on high quality trees and topography.
- Develop low intensity uses that are related directly to agriculture or recreation, including small buildings and
- The high cost of extending utilities into this parcel is a  $\mathbf{O}$ potential limitation for development options.
- 0 Take into consideration views from Horsebarn Hill, Horsebarn Hill Road, and Route 195.
- Development should consider the incorporation of vegetative buffers to minimize viewshed impacts.
- $\circ$ A more detailed delineation of the potential wetlands should be done before any development occurs.
- 0 Due to Level A aquifer recharge area, impervious surfaces should be minimized.

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KEY PLAN

#### PROPOSED PRIMARY LAND USES

 Expansion of Existing Agriculture Related Uses

# PROPOSED SECONDARY LAND USES

 New University Related Agriculture Research and Education

### SITE DESCRIPTION

- These parcels have existing agriculture related development, typically in the form of a complex of barns and assorted out-buildings.
- O They have been developed over the years in the typical New England farm pattern of clustering buildings with open agricultural lands in between.
- O This pattern adds to the inherent quality of the Horsebarn Hill area.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Allow for the expansion of existing facilities within the context of the existing pattern of development with utility service and access and/or ability to replace outdated facilities to meet educational and research needs.
- A and B are within critical viewsheds. Maintain current context.
- O C, D, E, and F are existing development parcels. Reserve for future university related agriculture research and academic uses.
- O Due to Level A aquifer recharge area, impervious surfaces should be minimized.
- O Building heights, materials, and general architectural form should be contextual to the parcel to preserve the agricultural feel of the area.

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#### REMAINING OPEN AGRICULTURAL LAND

The rest of the cleared land, not identified as buildable, on the Agriculture Campus has many limitations for development. Environmental limitations include steep slopes, prime farmland soils, and wetland soils. Cultural limitations include viewsheds from Route 195, Horsebarn Hill, Horsebarn Hill Road, and Gurleyville Road, as well as a general feel throughout the surrounding community that this area is one of their favorite spots. The prime land use for all cleared land on the Agriculture Campus, which is now utilized for pasture land and other traditional agricultural uses, should be maintained as 'Traditional Agricultural.' This includes pasture, active agriculture, crop and turf research, and any small shelters and watering facilities needed to support agricultural activity. These small structures add to the inherent agricultural feel of the area and should be clustered near the lowest corners of pastures or near roads or other built structures to reduce their visual impact.

A secondary land use for this area is passive recreation. That includes walking, hiking, bird watching, environmental education, and other low impact activities which allow the University, community, and others, access to this cultural amenity.

#### REMAINING WOODLAND

The remaining wooded areas comprise the largest land area on the Agriculture Campus. Known as "the Fenton Tract of The University of Connecticut," it is currently utilized as a research lab for forest management by the College of Agriculture. Because of its importance in the research mission of the College, its role in the water quality issues of the watershed, important wildlife considerations, difficult topography, soils, access, wetlands, and viewsheds, this area's primary land uses should be continued forest management and passive recreation. The University should continue to manage the forest parcel and continue to investigate the environmental research and education possibilities that this land offers.

This area should also be utilized as a recreational resource. The State Office of Policy and Management Conservation and Development Policies Plan for Connecticut states as a goal to "Provide a wide variety of high quality outdoor recreational opportunities to all citizens, emphasizing activities that broaden understanding of the contact with the natural environment." Also inherent in the document is the desire for recreational opportunities on public land. A well-marked system of trails exists and could be enhanced throughout the tract and connected to the existing Nipmuck Trail. Connections also should be made to trails throughout North Campus and the Depot Campus to increase public usage and aid in the educational experience of the University, community, as well as visitors and the general public.

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### North Campus

#### INTRODUCTION

Located at the corner of Routes 195 and 44 and adjacent to the academic core, this campus area lends itself to supporting the University's strategic academic and research initiatives. This site is positioned directly north and west of the Main Campus, providing direct connectivity to the heart of the University. Because of this proximity and the site's natural amenities, North Campus presents the greatest opportunity for both careful site development and components of natural preservation.

Before development initiatives and planning principles are recommended however, it is important to understand the context and specific natural features of this parcel. North Campus consists of 333 rolling forested acres with several man-made and natural development constraints. The site's natural features consist largely of mature hardwood forest, rolling topography, stream corridors, wetland areas, and prime farmland acreage. Many of the planning recommendations are geared specifically at preserving as many of the woodlands, wetlands, streams, steep slopes, and prime farmlands as possible. In general terms, the wetland and prime farmland areas comprise approximately one-half of North Campus. The remaining acres have been carefully identified and proposed for development opportunities. See the Environmental Framework Plan and Land Use Plan on the following pages.

According to the United States Geologic Survey (USGS), the site has a change in elevation of approximately 220 feet, sloping from a high point on its south edge of 739 feet northwest to a low point of 510 feet. Topographic slopes on the site range from approximately 4% to 20%. It is recommended that slopes above 20% should be preserved, or at least developed in a sensitive manner.

Adjacent to the site are several different, competing land uses that will shape the planning and development opportunities. The Agriculture Campus, a community cemetery, and university housing surround the North Campus on the east. West of North Campus is Consolidated Support Services (wastewater treatment plant, etc.), the former University landfill, and miscellaneous medium-density housing. North of the campus is a small commercial core and mixed residential uses. Located to the south is the Main Campus. Collectively, these adjacent land uses have helped shape a pattern of new development to accommodate the necessary buffering, separation, and/or "connectivity."

Vehicular site access occurs at two locations supporting a north-south "spine" roadway system. Primary access occurs off Route 44 (north of the site) and secondary access off North Eagleville Road (south of the site). Approximately one-half of North Hillside Road has already physically been constructed. The remaining alignment has been positioned to maximize parcel developability and parcel efficiency. Development of North Hillside Road is essential to provide a circulation system that supports future development and services the University as a new gateway/entrance to campus.

Several alignment options for North Hillside Road were studied in the Environmental Impact Evaluation Report which was prepared for the former Tech Park. This study implies no restriction to the further study or implementation of an alternative alignment for North Hillside Road. All recommended land uses remain valid whichever final alignment is chosen. When Hillside Road is connected to Route 44, its extension to South Eagleville Road becomes important. This

### **Outlying Parcels Master Plan**



connection would help tie the proposed hotel, and community center to campus, as well as reducing traffic congestion on Route 195. Bike lanes along the entire route would further connect areas of campus and reduce traffic by promoting alternative methods of transportation.

#### **BROAD PLANNING GUIDELINES**

The following planning principles are intended to provide development and organizational strategies for the entire North Campus.

- Provide a development density of 30-35% FAR for technology/research.
- Preserve prime farmland (47 acres must be maintained as an agricultural preserve), wetland areas, and as much of the wooded rolling landscape as possible.
- Minimize impacts to prime farm soils.
- Maximize synergistic relationship with the Academic Core, especially for uses within a 15 20 minute walk of its center.
- Utilize on-site stormwater detention and sedimentation basins at natural low points and utilize open vegetated swales to convey runoff.
- Implement pedestrian and bicycle corridors toward wooded areas, toward the agriculture campus, residential support area, recreation area, and toward campus.
- Minimize development impacts to trees and topography through sensitive and creative site design.

#### **IDEAL LAND USES:**

- University Related Research (strategic adjacencies to Academic Core)
- Student Residential (apartment style with residential support services, commercial/retail)
- Remote Parking
- Recreation
- Special Academic (proximity to Academic Core)
- Residential Support Services

#### GENERAL DEVELOPMENT GUIDELINES

The following section contains general development guidelines for parcels identified as having potential for development on North Campus. Each parcel has a graphic illustration that is keyed into its location within the overall North Campus Plan. Descriptive text is also included, which further explains the opportunities and limitations of the parcel. This text includes:

*Site statistics* detail the parcel's size and development potential.

- The number of total site acres.
- The number of buildable acres. Setbacks are removed from the overall site acres to determine this number.
- The floor area ratio (FAR). Expressed as a ratio of total development (square footage) to total site (square footage). For planning purposes, an FAR of .3 has been utilized for technology/ research land use. Generally, .1 to .3 is considered low and .5 and above is considered high. In order to reduce the impact on the natural environment (limiting the amount of grading, destruction of existing trees, and limiting overall site coverage) a .3 FAR is recommended.

### **Outlying Parcels Master Plan**



- The potential maximum gross square feet (gsf) of buildable space that can be accommodated on each parcel. This number is based on the FAR. For example, one acre (or 43,560 sq. ft.) at an FAR of .3 = approximately 13,000 gsf of potential building space.
- The number of parking spaces that can be accommodated on each parcel either to support building gsf or remote parking facility. For planning purposes, 145 cars/acre and 1 car per 300 gsf of technology/research has been used.
- The overall site coverage. Expressed as a maximum percentage of building footprint and parking footprint to total site area. Similar to the FAR, the site coverage remains in the 40% range. Development of technology/research land uses within this percent range will save trees, preserve site grades, and allow site design to respond to the character of the site.

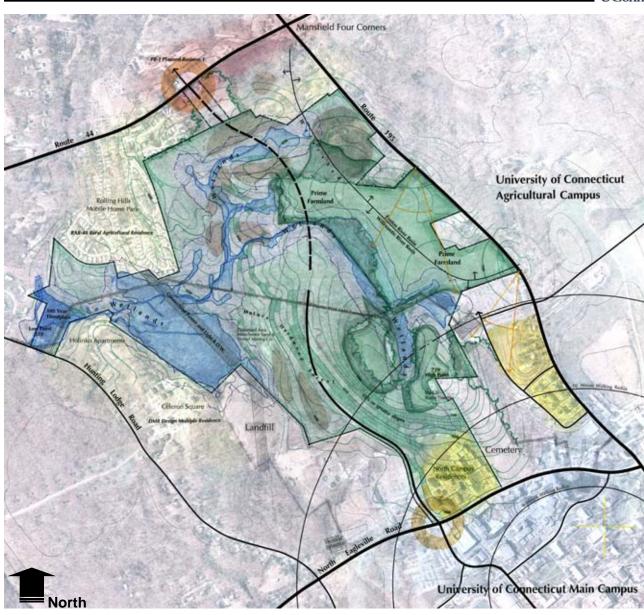
The *primary land use* is, in our opinion, the optimal development scenario for the particular parcel after taking into consideration all limitations. *Secondary land uses* are those that, in our opinion, are also allowable but are not the best use of the parcel. Land use assessments incorporate planning principles, organizational goals, and site characteristics.

The *site description* explains the boundaries of the development parcel, its current state of development, and the important environmental and cultural factors that influence its development.

*Important development considerations* describe the priority for development, general guidelines for development, and any special considerations that must be accounted for when the parcel is developed.

Outlying Parcels Master Plan

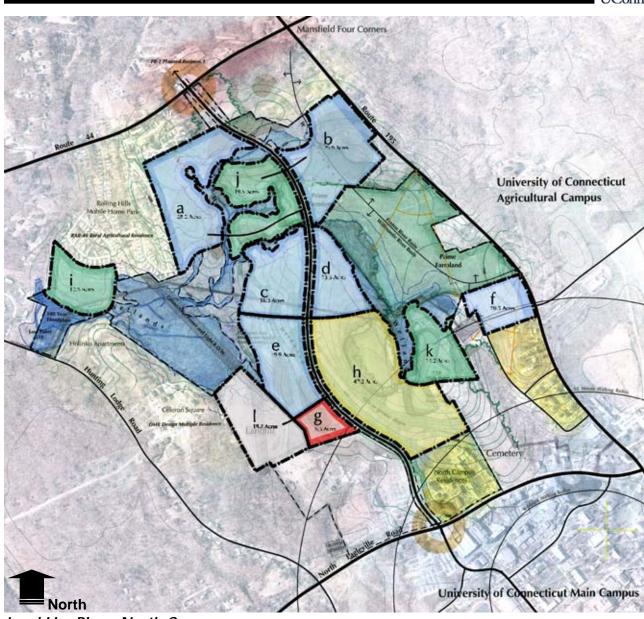




Environmental Framework Plan - North Campus

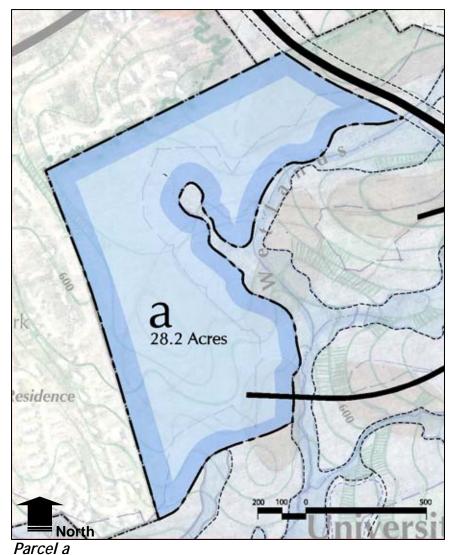
Outlying Parcels Master Plan





Land Use Plan - North Campus







KEY PLAN

#### SITE STATISTICS

- 28.2 acres
- 16.4 net buildable acres
- 0.3 FAR with 368,000 potential gsf
- 1,228 parking spaces @ 1 per 300 gsf on 8.5 acres
- 42.5% site coverage (12.0 acres of total site development)

#### PROPOSED PRIMARY LAND USES

· Technology / Research

#### PROPOSED SECONDARY LAND USES

· Residential (medium to high density)

#### SITE DESCRIPTION

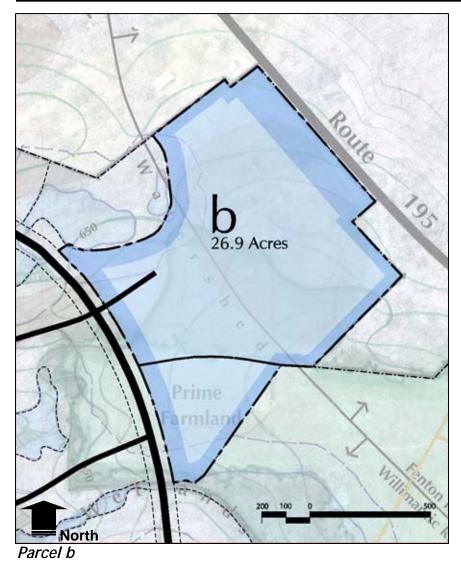
- Rolling wooded site is defined by peripheral drainage corridors.
- O This site occupies a relatively secluded location.
- 0 A wooded knoll is the prominent landscape feature.
- O Wetland edges define eastern and southern property boundary.
- O Residential land uses define western and northern boundary.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Buffer adjacent residential land uses with a wooded edge.
- Main access should occur from North Hillside 0 Road at two possible locations.
- 0 wetland edge as a site design opportunity, not as a constraint.
- Maintain views to upland wooded slopes and  $\mathbf{O}$ preservation areas.
- 0 Investigate potential functional/synergistic relationship with Parcel j.

### **Outlying Parcels Master Plan**







KEY PLAN

#### SITE STATISTICS

- 26.9 acres
- 18.9 net buildable acres
- 0.3 FAR with 351,000 potential gsf
- 1,172 parking spaces @ 1 per 300 gsf on 8.5 acres
- 42.5% site coverage (11.4 acres of total site development)

#### PROPOSED PRIMARY LAND USES

· Technology / Research

# PROPOSED SECONDARY LAND USES

- Remote parking facility (18.9 usable acres @ 145 cars per acre = 2,700 car capacity
- Residential
- Special Academic
- Recreation

#### SITE DESCRIPTION

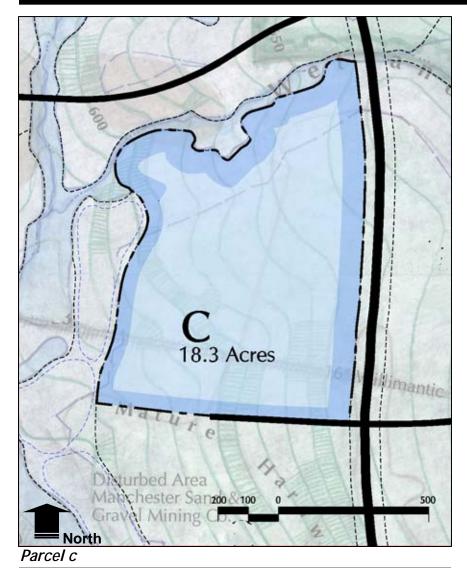
- Upland wooded site is defined by open farmland and proximity to Route 195.
- O This site occupies a visible location from Route 195.
- Wetland edges define the northwestern property boundary.
- Residential uses define northern and southern boundaries.
- The site is divided by the Fenton and Willimantic watershed boundary.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Consideration should be given to maximizing development areas outside of the open (nonwooded) prime farmland areas.
- O Minimize impact on prime farmland.
- O Provide a wooded buffer along Route 195.
- Vehicular access should occur only from North Hillside Road. Coordinate access to this parcel with Parcel j.
- O Maintain / create views to the open farm field.
- Provide for mitigation of prime farmland loss.

### **Outlying Parcels Master Plan**





**KEY PLAN** 

#### SITE STATISTICS

- 18.3 acres
- 12.5 net buildable acres
- 0.3 FAR with potential 239,150 gsf
- 797 parking spaces @ 1 per 300 gsf on 5.5 acres
- 42.5% site coverage (7.8 acres of total site development)

#### PROPOSED PRIMARY LAND USES

• Technology / Research

# PROPOSED SECONDARY LAND USES

- · Remote Parking
- Residential (medium to high density)
- Special Academic
- Recreation

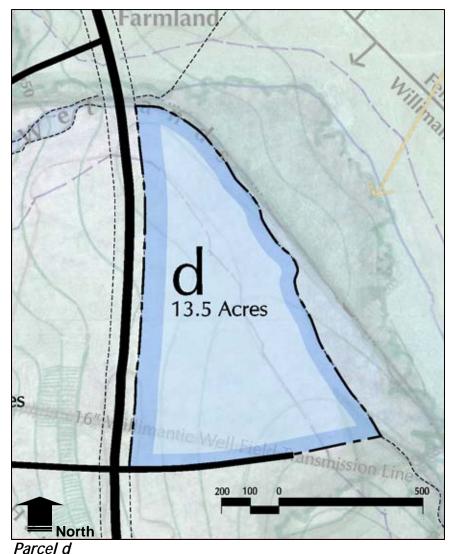
#### SITE DESCRIPTION

- O Wooded site is defined by strong topographic orientation to the west.
- O This site occupies the heart of North Campus surrounded almost entirely by mature hardwood forest.
- Wetland edges define the north and west property boundaries.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Restrict development in areas with slopes over 20%.
- O A portion of the site is separated by the Willimantic well field transmission right-of-way.
- O Vehicular access should occur only from the spine road. Coordinate access to this parcel with Parcels d, e, and h.
- Maximize the incorporation of scenic vistas to the west.
- O Potential site development coordination between Parcels c, d, and e.







**KEY PLAN** 

#### SITE STATISTICS

- 13.5 acres
- 9.1 net buildable acres
- 0.3 FAR with potential 176,400 gsf
- 588 parking spaces @ 1 per 300 gsf on 4.1 acres
- 42.5% site coverage (5.7 acres of total site development)

#### PROPOSED PRIMARY LAND USES

· Technology / Research

# PROPOSED SECONDARY LAND USES

- Remote Parking
- Residential (medium to high density)
- Special Academic
- Recreation

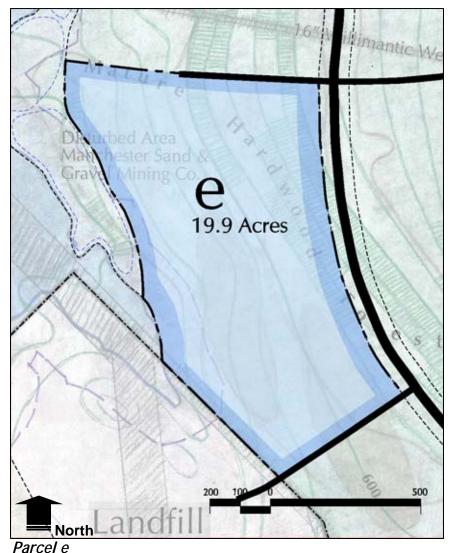
#### SITE DESCRIPTION

- Wooded site is defined by moderate topography.
- O This site occupies the heart of North Campus surrounded almost entirely by mature hardwood forest.
- Wetland edges define the northeast property boundary.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- O Utilize topography to capitalize on long views across the valley.
- A fraction of the site is separated by the Willimantic well field transmission right-of-way.
- O Main access should occur only from North Hillside Road. Coordinate access to this parcel with Parcels c, e, and h.
- O Potential site development coordination between Parcels c, d, and e.





**KEY PLAN** 

#### SITE STATISTICS

- 19.9 acres
- 14.7 net buildable acres
- 0.3 FAR with potential 261,000 gsf
- 871 parking spaces @ 1 per 300 gsf on 6.0 acres
- 42.5% site coverage (8.5 acres of total site development)

#### PROPOSED PRIMARY LAND USES

· Technology / Research

# PROPOSED SECONDARY LAND USES

- · Remote Parking
- Residential (medium to high density)
- · Special Academic
- Recreation

#### SITE DESCRIPTION

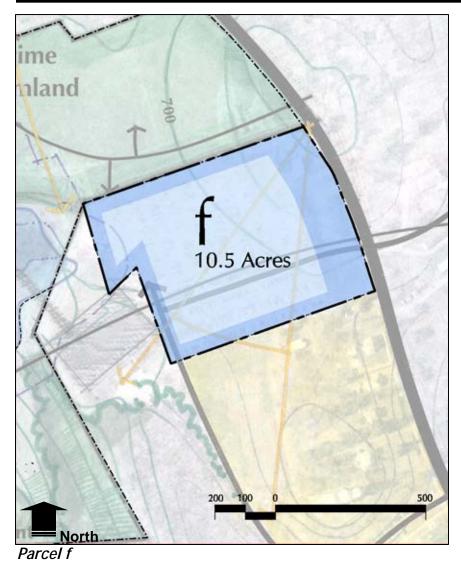
- Wooded site is defined by moderate topography.
- O This site occupies the heart of North Campus surrounded almost entirely by mature hardwood forest.
- Wetland edges define the west property boundary.
- O The former UConn landfill defines the southwestern edge.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Allow site design to buffer the landfill and capture long views to the valley.
- O Restrict development in areas with slopes over 20%.
- Main access should occur only from the spine road. Coordinate access to this parcel with Parcel q.
- O Potential site development coordination between Parcels c, d, and e.

Outlying Parcels Master Plan







**KEY PLAN** 

#### SITE STATISTICS

- 10.5 acres
- · 6.3 net buildable acres
- 0.3 FAR with potential 137,200 potential gsf
- 457 parking spaces @ 1 per 300 gsf on 3.2 acres
- 42.5% site coverage (4.5 acres of total site development)

#### PROPOSED PRIMARY LAND USES

· Technology / Research

# PROPOSED SECONDARY LAND USES

- Remote Parking
- Residential
- · Special Academic

#### SITE DESCRIPTION

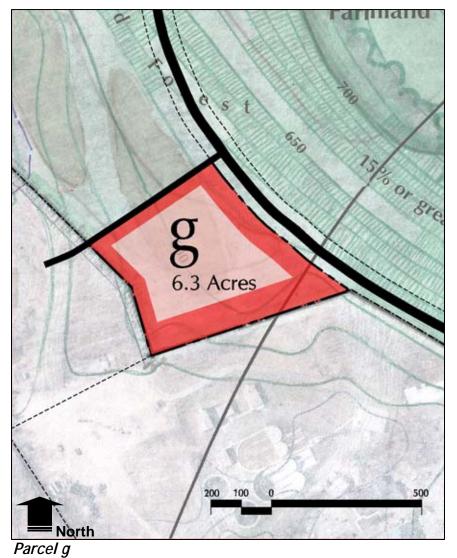
- Existing remote parking lot for UConn students.
- Site currently identified along and accessed by Route 195.
- Isolated site; detached from land area of North Campus.
- O Topography slopes away from Route 195.
- Residential land uses define the south property boundary.
- West and north boundaries defined by farmland, wooded wetland areas, and manmade reservoir 9.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Strengthen campus entrance experience by reintroduction of wooded open space and/or Connecticut landscape.
- O Building heights, materials, and general architectural form should be consistent with the rural nature of the surrounding landscape.
- A building in this location would be a visitor's first impression of campus. Therefore, a careful design treatment should be considered.
- Allow a buffer from Route 195.
- O Main access should occur from Route 195.
- O Site design should respond to proximity of Agriculture Campus, viewsheds, and landscape icons (Horsebarn Hill).

Outlying Parcels Master Plan







**KEY PLAN** 

#### SITE STATISTICS

- 6.3 acres
- 3.1 net buildable acres
- 0.22 FAR with 60,000 potential qsf
- 300 parking spaces @ 1 per 200 gsf on 2.0 acres
- 55% site coverage (3.4 acres of total site development)

#### PROPOSED PRIMARY LAND USES

Residential Support Services

# PROPOSED SECONDARY LAND USES

- · Technology / Research
- · Remote Parking
- Residential
- Recreation

#### SITE DESCRIPTION

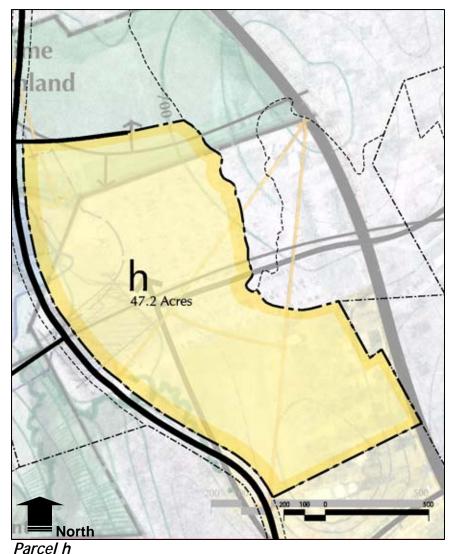
- Gently sloping wooded site.
- O Consolidated support services define the southern property boundary.
- O The former UConn landfill defines the western edge.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Allow site design to buffer the landfill and Consolidated Support Services.
- O Design parcel as a destination site for adjacent parcels.
- O Small neighborhood retail should be designed as support, convenience retail, and entertainment for the residential communities on North Campus. If Parcel "I" is developed as parking, uses should also be geared toward Parcel "I."
- O Main access should occur only from the spine road. Coordinate access to this parcel with Parcels "e" and "I."
- O Implement pedestrian and bicycle corridors along the south side of Parcels I and g, toward natural/preservation areas, toward Celeron Square apartments and toward campus.

**Outlying Parcels Master Plan** 







**KEY PLAN** 

#### SITE STATISTICS

- 47.1 acres
- 37.9 net buildable acres
- 32 students per acre or 8 units per acre
- 1,000 total students in approximately 300 units
- 1,000 parking spaces @ 1 to 1 on

#### PROPOSED PRIMARY LAND USES

Residential

#### PROPOSED SECONDARY LAND USES

- · Technology / Research
- Residential Support Services
- Recreation

#### SITE DESCRIPTION

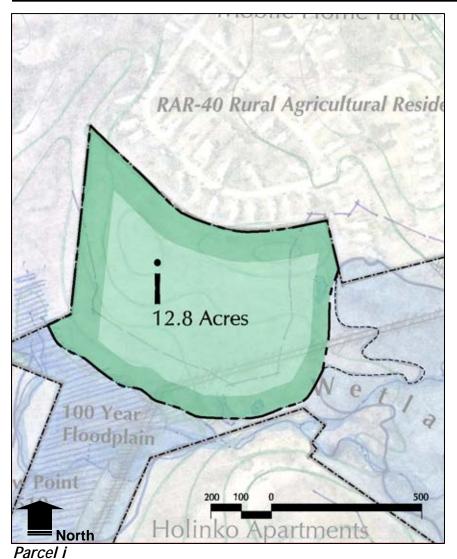
- Wooded site is defined by moderate to severe topography.
- 0 This site occupies the heart of North Campus surrounded almost entirely by mature hardwood forest.
- Wetland edges define the eastern property O
- UConn residential land use define the southern O edge.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Utilize topography to capitalize on long views across the valley and for creative terracing.
- Restrict the development of slopes 20% or 0 greater.
- 0 Main access should occur from two points along the spine road. Coordinate access to this site with Parcel d and the existing residence halls.
- $\mathbf{O}$ Connect existing with proposed residential units.
- $\mathbf{O}$ Small footprint, apartment-style housing and its associated parking can be terraced, whereas a larger footprint may be more difficult.
- 0 Within the 15 minute walk radius to the Academic Core, making it ideal for strategic academic relationships.

Outlying Parcels Master Plan







**KEY PLAN** 

#### SITE STATISTICS

- 12.8 acres
- Not developable because of isolated landlocked location and expense to provide utility

#### PROPOSED PRIMARY LAND USES

• Preservation / Open Space

#### SITE DESCRIPTION

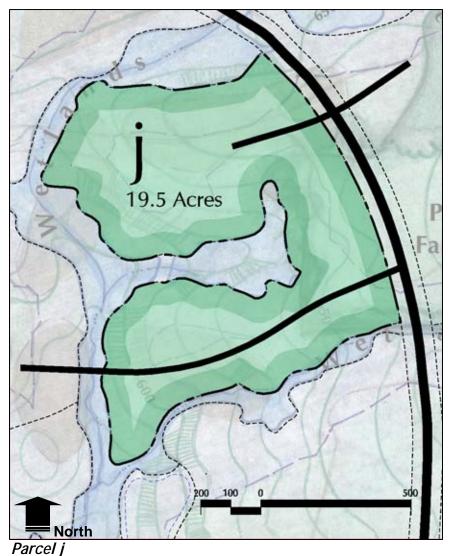
- Wooded site is located at the low point of North Campus in an isolated location.
- O This site contains floodplains, wetlands, and utility right-of-ways.
- The site is bounded by residential land uses.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Implement pedestrian and bicycle corridors to connect this parcel to the greater North Campus, wooded areas, and toward campus.
- O Utilize the site as an outdoor teaching laboratory and preserve.

**Outlying Parcels Master Plan** 







KEY PLAN

#### SITE STATISTICS

• 19.5 acres

#### PROPOSED PRIMARY LAND USES

• Special Academic / Retreat

#### PROPOSED SECONDARY LAND USES

- · Technology / Research
- Housing
- Preservation / Open Space

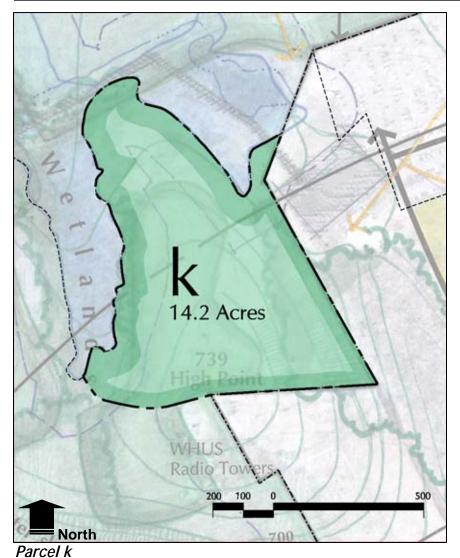
#### SITE DESCRIPTION

- Wooded site is located near the middle of North Campus.
- O Contains floodplains and prime farmland.
- 0 Bounded by other wooded mildly sloping sites within the campus.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- Northern half of the site presents greater development potential.
- $\mathbf{O}$ Southern half should be held in preserve to protect prime farmland.
- 0 Potential uses include faculty retreat center, nature center, or environmental research station.
- $\mathbf{O}$ Coordinate access with this parcel to Parcel b.
- 0 Possible synergistic relationship with the development of Parcel a.







### SITE STATISTICS

• 14.2 acres

#### PROPOSED PRIMARY LAND USES

Recreation

# PROPOSED SECONDARY LAND USES

- Preservation
- Agriculture

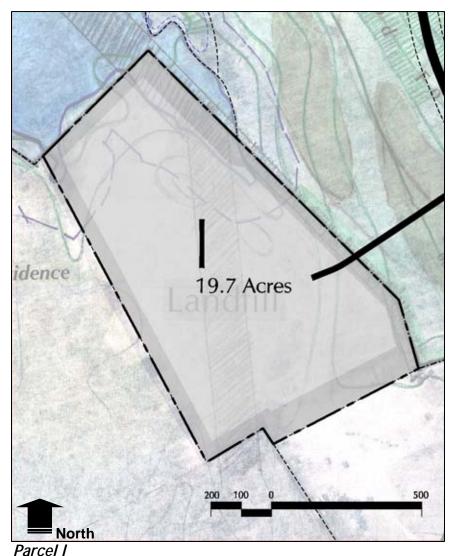
#### SITE DESCRIPTION

- Partially wooded site is located on the highpoint of North Campus.
- O Contains prime farmland, wetland edges, and several man-made obstacles (WHUS towers).
- Approximately one-half of the site is gently sloping open farm fields.
- Bounded by university housing and the community cemetery.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- O Multi-purpose athletic complex requires approximately 9 acres (2 baseball, 2 football and 1 soccer field) and 125 parking spaces.
- O Develop pedestrian connections to residential units, residential support services, and remote parking lots.
- Emergency and pedestrian access through residential parcel or from Route 195.
- O Consider views from Route 195.







KEY PLAN

#### SITE STATISTICS

- 19.7 acres
- 14.7 net buildable acres
- 14.7 net usable acres @ 145 cars per acre = 2,131 car capacity

#### PROPOSED PRIMARY LAND USES

Remote Parking Facility

#### PROPOSED SECONDARY **LAND USES**

Recreation

#### SITE DESCRIPTION

- O Former UConn landfill site.
- 0 This relatively flat site contains successionary growth and limited trees.
- 0 Defined by residential land use to the west and support services to the south.
- O Contains a significant utility right-of-way.

#### IMPORTANT DEVELOPMENT CONSIDERATIONS

- 0 No buildings are permitted on the landfill site.
- 0 Develop parking areas in pods of 250-400 cars with surface stormwater management features.
- 0 Provide landscaped buffers between residential uses and support services.
- 0 Connect pedestrians to residential units, residential support services, and the campus proper.
- 0 Vehicular access to the parcel should be coordinated with Parcels e and g.
- 0 Landfill cap should be designed appropriately for the use.

**Outlying Parcels Master Plan** 



## **Depot Campus**

#### INTRODUCTION

The University of Connecticut was conveyed the 300-acre Mansfield Training Center property from The State of Connecticut in 1993 for academic use. The property was formerly part of a state hospital complex.

The site is located approximately two miles from the main campus. It is bounded on the north by Route 44, on the west by Route 32, and on the east by Bonemill Road. The 300-acre site consists of numerous buildings and significant natural features preserved as part of its original development.

The site's natural features are unusually attractive, consisting of approximately 80 acres of mature woodlands and 40 acres of designated wetlands with stream courses conveying stormwater runoff. In addition, open space areas along the north and east edge of the property are recommended for setbacks and image enhancement zones adjacent to the roadways. The woodlands, wetlands, streams, steep slopes and roadside open space setbacks are recommended for preservation.

The site has a change in elevation of approximately 240 feet, sloping from a high point on its east edge of 550 feet southwest to a low point of 310 feet. Topographic slopes on the site range from approximately 2-20%. It is recommended that slopes between 10-20% should be preserved, or at least developed in a very sensitive manner.

Vehicular site access occurs at four locations. Primary access occurs off Route 44 and secondary access off Route 32 and Bonemill Road. A main connection must be established between Depot Campus and the Academic Core to physically tie the two campuses together. Bonemill Road is the most direct route to North Eagleville Road, which leads to the Core. Bonemill Road, in its current condition, will not handle the traffic demands that will be placed on it as a main connector. Improvements must be made to bring it up to DOT standards. The University does not own this road, so negotiations should begin immediately to improve it. The existing internal road network is confusing and poorly identified. Clarification of this system and improving its linkage with Route 44 will be essential to provide a circulation system that best supports future development opportunities.

In order to properly position the Depot Campus for private-sector development, its existing infrastructure must be upgraded. The development parcels must be primed and ready to accept future partners. This includes building demolition, road improvements, utility upgrades, and any required environmental remediation.

In addition, the public road system connecting this satellite campus to the Academic Core must be upgraded to handle increased traffic in a safe and efficient manner. This includes completing North Hillside Road to Route 44 and Bone Mill Road.

Existing buildings are haphazardly arranged on the property with no clear orientation to one another. This arrangement hampers the ability to establish a clear overall organizational concept. Furthermore, it does not allow for creation of a well-defined open space system, sense of scale,

#### **Outlying Parcels Master Plan**



hierarchy, or good orientation, all of which are important in establishing a comfortable campus plan. This study assumes the removal of those buildings identified in the 1995 study by ARP Incorporated. These buildings were identified as being too old and/or deteriorated for cost effective renovation. The challenge will be to organize future development in a way which engages with the remaining facilities and which establishes, as best it can, a clear organizational concept within individual development parcels.

The following is a summary of facilities which the 1995 study indicates will remain:

- 1. 22 buildings previously used for housing
- 2. 8 buildings identified as institutional
- 3. 6 buildings identified for service functions

Utility improvement will be required to support future development. The University is currently planning to extend its sanitary system to the site. The previous central plant has been decommissioned and future buildings will need to utilize stand-alone units for heating and cooling needs.

#### **BROAD PLANNING GUIDELINES**

The purpose of this study is to establish a physical framework within which opportunities for future development can be identified and guidelines established for their organization. The primary planning guidelines include:

- Develop a clear understanding of existing site features (both natural and man-made).
- Identify existing facilities by type which are worthy of renovation.
- Establish a primary vehicular circulation system by improving on the existing roadway network.
- Locate primary and secondary access points.
- Identify parcels which are most suitable for development.
- Understand the significant features and opportunities within each development parcel.
- Respect viewsheds.
- Develop within all applicable state of Connecticut regulations.
- Best Management Practices should be followed to treat stormwater runoff.
- Care should be taken to minimize impervious surfaces.

#### **IDEAL LAND USES**

- Public/private ventures
- Business incubators
- Special academic
- Recreation
- Community outreach
- Special short-term housing

#### **Outlying Parcels Master Plan**



University of Connecticut Outlying Parcel Planning Study Summary of Depot Campus Development Potential

		Exising Buildings to	Existing Buildings to be Demolished	Future Construction		
Parcel No.	Acreage	Stay (gsf)	(gsf)	Potential (gsf)*	Total (gsf)	Notes
1	23.2	131,000	59,149	184,000	315,000	
1b	3.4	48,800	-	-	48,800	
2	6.0	-	84,531	135,000	135,000	
2b	3.1	n/a	n/a	-	n/a	no existing buildings
2c	1.8	23,300	-	-	23,300	
3 and 3b	14.9	51,000	41,591	96,000	147,000	
4 and 4b	15.8	87,000	-	168,000	255,000	
5	7.9	69,104	-	-	69,104	
5b	8.2	n/a	n/a	80,000	80,000	no existing buildings
6	5.1	n/a	n/a	n/a	n/a	see note below
7	11.5	n/a	n/a	n/a	n/a	see note below
Totals	100.9	410,204	185,271	663,000	1,073,204	

<sup>\*</sup> This figure is the upper end of the range given in the Outlying Parcels Master Plan.

The following is a site-by-site description of future development potential as identified on the Framework Plan. The attached plans indicate potential development zones or envelopes within which buildings should occur for each parcel. They also show parking envelopes which provide the necessary support for academic facilities assuming ratios ranging from one space per 400 to one space per 500 gross square feet (gsf) of building. While actual building heights and densities can vary depending on actual future program requirements, the intent of this plan is to provide an order of magnitude for estimating approximate development capacities balanced by required parking. While these capacities are described in order of magnitude based upon general planning parameters, they do allow an understanding of how much development each parcel can support while achieving planning objectives. Parking is the most significant determinant of capacity.

#### Parcel 1

- This is the largest development parcel (23.2 acres) with approximately 131,000 gsf of buildings to remain and be renovated.
- With the removal of the three previously identified buildings and the internal roadways which supported them, approximately 9 acres are available for future development.
- The parcel affords a central location within the overall site and good vehicular access on all edges.
- Future facilities can establish a good physical relationship with existing buildings, thus creating a more unified organization pattern.
- Buildings should maintain a height consistent with adjacent facilities.
- Assuming a future program can work within buildings averaging two to three stories, it is
  estimated that a range of 121,000 to 184,000 gsf of additional development can be achieved.
- The future potential combined with existing facilities to remain will yield a potential capacity
  of 252,000 to 315,000 gsf with parking balanced at a ratio of one space for every 400 to 500
  gsf (630 spaces).

<sup>\*\*</sup> Parcels 6 and 7 are not included due to their potential disposition and limited use potential

#### Outlying Parcels Master Plan



#### Parcel 1b

- 3.4 acres with existing buildings suitable for reuse (built 1985).
- Attractive parcel with woodland preservation area to the south and west.

#### Parcel 2

- 6.0 acres visible from Route 44.
- All existing buildings (not including the Brown Building on Parcel 2c) are slated for demolition.
- Vehicular access available from the east and south.
- This is a high image parcel warranting an appropriate function and a high level of design quality.
- Assuming a future program with buildings averaging two to three stories, it is estimated that a
  range of 108,000 to 135,000 gsf can be achieved with a balance of parking at a ratio of one
  space for every 400 to 500 gsf (270 spaces).

#### Parcel 2b

• 3.1-acre site with moderately sloping topography. Recommended for preservation and open space.

#### Parcel 2c

- 1.8-acre site occupied by the Brown Building.
- Prominent site adjacent to Route 44.
- No expansion potential.

#### Parcels 3 & 3b

- 14.9-acre site with four buildings recommended for demolition.
- Currently utilized for maintenance and storage facilities.
- Strong physical separation from parcels to the east.
- Good potential for service related uses. Solid visual buffer required from Route 44 if used for service functions.
- Future potential combined with existing facilities to remain will yield a potential capacity of 147,000 gsf with parking balanced at a ratio of one space for every 700 gsf due to the storage and service related use designation. This equates to approximately 96,000 gsf of new facilities.

#### Parcels 4 & 4b

- 16.2 acres formerly used for the Longley School and recreation.
- Relatively level open land conducive to a wide range of development opportunities
- Development options should be influenced by adjacent land use pressures. For example, if Parcel 4b needs to expand, it could utilize the northern portion of Parcel 4.
- Existing building conducive for use as offices, classrooms, or dry labs.
- Assuming a future program with buildings averaging two to three stories, it is estimated that a range of 117,000 to 168,000 gsf can be achieved with a balance of parking.
- Future potential combined with existing facilities to remain will yield a potential capacity of 204,000 to 255,000 gsf with parking balanced at a ratio of one space for every 400 to 500 gsf (510 spaces).

#### Outlying Parcels Master Plan



#### Parcel 5

- 7.9 acres with no recommended demolition. Buildings (1975 construction) are in good condition and occupiable.
- Originally developed as residential cottages, currently being used by various programs including art, continuing education, and the small business center.
- Parcel configuration and location lends itself to continued use as small offices or potentially for housing.
- Potential special short-term housing.

#### Parcel 5b

- 8.2 acres currently undeveloped.
- Development limited by the stream and wetland which bisect this parcel.
- Assuming a future program with buildings averaging two to three stories, it is estimated that a
  range of 64,000 to 80,000 gsf can be achieved with a balance of parking at a ratio of one
  space for every 400 to 500 gsf (160 spaces).

#### Parcel 6

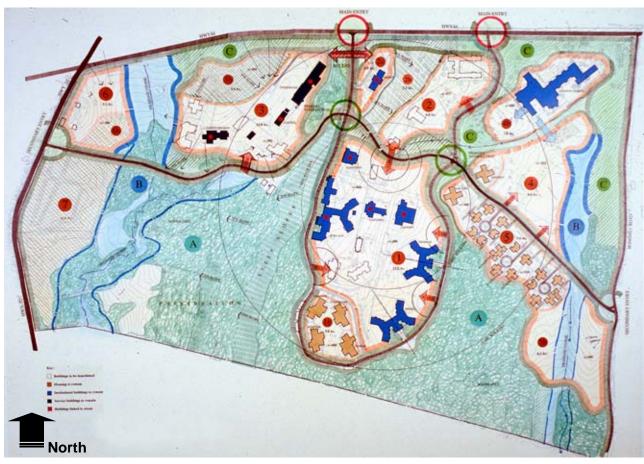
- 5.1 acres at the intersection of both Routes 44 and 32.
- Distinct parcel strongly separated from the remainder of the site.
- Development limitations imposed by steep slopes to the southeast.

#### Parcel 7

- 11.5 acres of moderately sloping property.
- Slopes ranging from 6-10% mandate special development strategies to minimize environmental impacts.
- Development density will be limited by topography.
- Distinct separation from remainder of site.

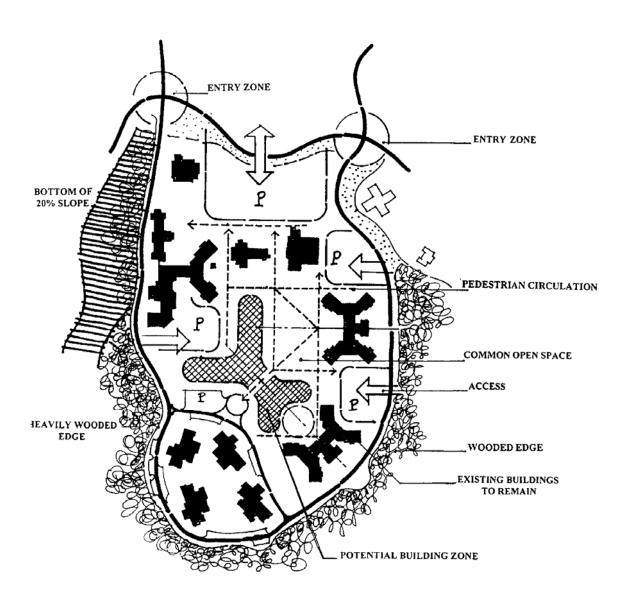
# University of Connecticut Outlying Parcels Master Plan





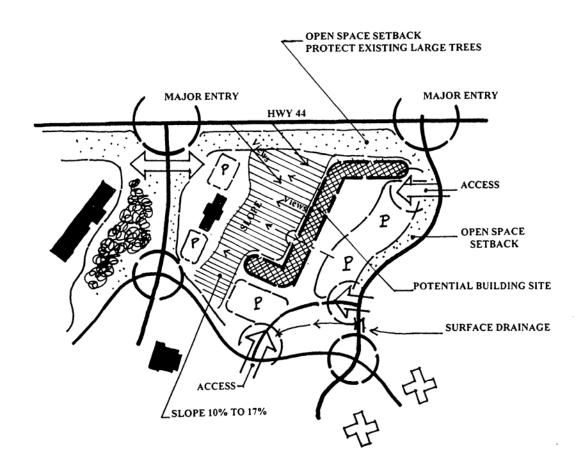
Land Use Plan - Depot Campus





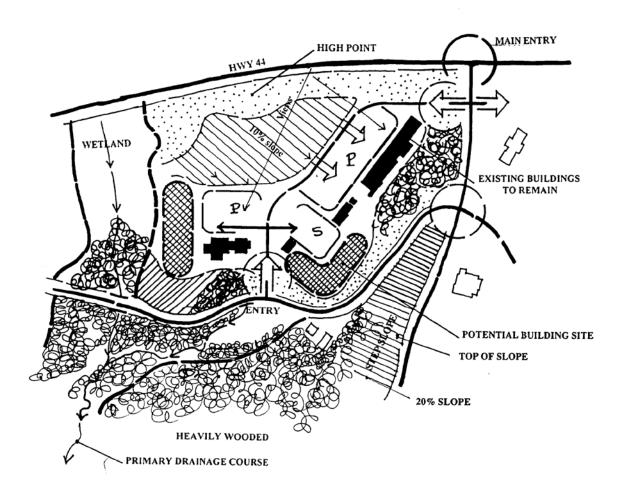
PARCEL 1





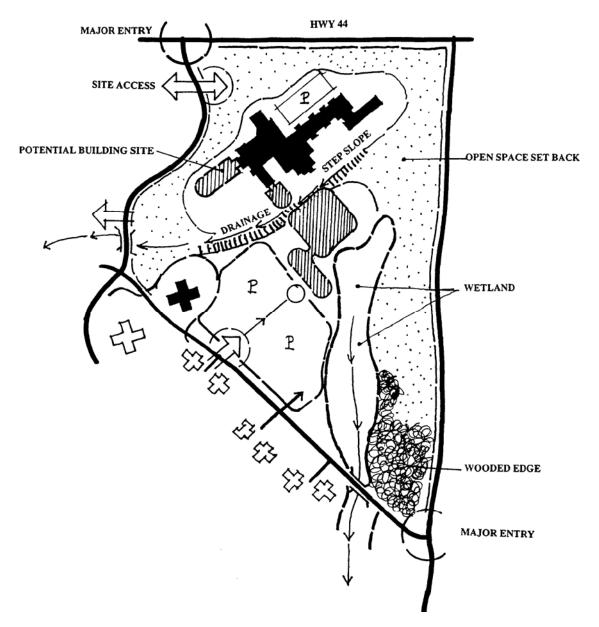
PARCEL 2





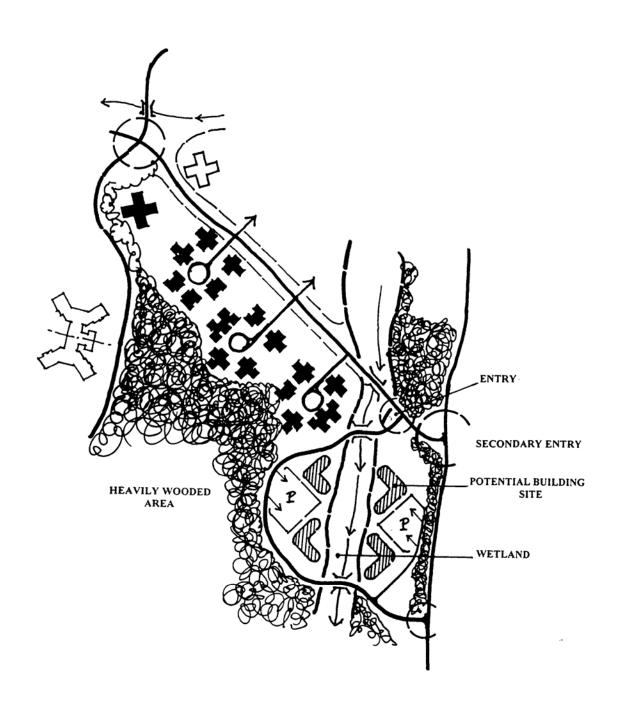
PARCEL 3





PARCEL 4





PARCEL 5

## University of Connecticut Outlying Parcels Master Plan



## North and Depot Campuses Design Guidelines

#### **INTRODUCTION**

The following set of design guidelines establishes principles for site development on individual parcels within the North and Depot campuses. These guidelines are geared toward sensitive site development of larger scale and larger footprint uses such as technology/research that are proposed on both the North and Depot campuses. Because the Agriculture Campus has a different set of recommended uses that are much lower in density and impact than the other campuses, these following guidelines need not apply.

These guidelines covering energy conservation, development density, site orientation, parcel layout, stormwater management, landscape, edges, entrances, circulation, open space, lighting, and signage do not dictate specific requirements, but provide general guidance for future development.

As individual sites are being developed, these general guidelines should be consulted to guide the development consistency with the overall University environment and sensitivity to the natural features of the Connecticut landscape.

#### **Outlying Parcels Master Plan**

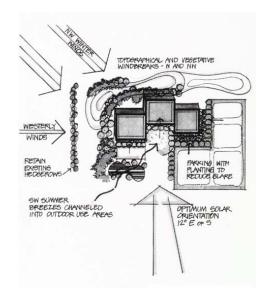


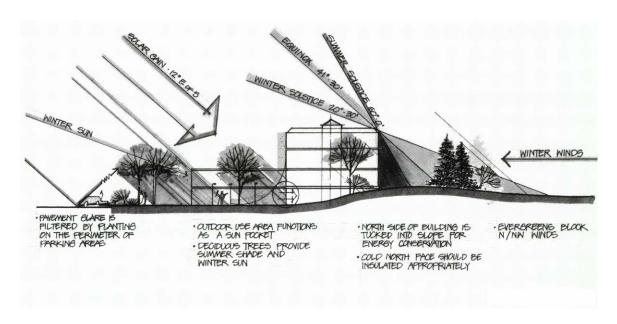
#### **ENERGY CONSERVATION**

Site planning and architectural design for each parcel should respond to appropriate passive energy conservation considerations. This goal is consistent with the planning of an open space system and conservation zones, an overall stormwater management system, a circulation layout which works with the physiography of the land, and a planting scheme which conforms with the natural site vegetation.

The following passive energy conservation criteria are general guidelines for all site development; however, the manner in which they are executed depends upon individual site characteristics.

- 1. Utilize southeast sun pockets.
- 2. Orient fenestrated facades south (12 degrees east of south).
- 3. Insulate north and west facades.
- 4. Plant effective wind buffers or diverters.
- 5. Channel favorable summer breezes into use areas.
- 6. Locate deciduous trees for summer shade and winter solar gain.





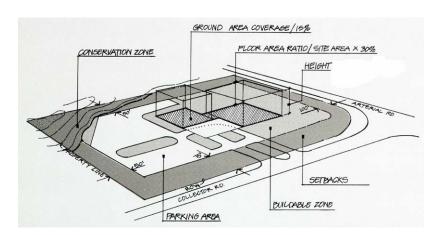
#### **Outlying Parcels Master Plan**



#### **DEVELOPMENT DENSITY**

Density is monitored by ground area coverage and floor area ratio restrictions. Ground area coverage (G.A.C) is determined by dividing that area of a lot covered by a building by the gross area of that lot. The intent of establishing a maximum coverage is to ensure that building and parking spaces share ground space with the appropriate amount of open green areas. Floor area ratio (F.A.R) is determined by dividing the gross floor area by all buildings on a parcel. Parking and outside storage areas are not included in the calculation of permitted floor area.

For technology/research, a G.A.C. of 15% and an F.A.R. of 30% are appropriate for developments. These regulations will ensure the desired soft campus-like image throughout the North and Depot campuses and preserve the natural environment.

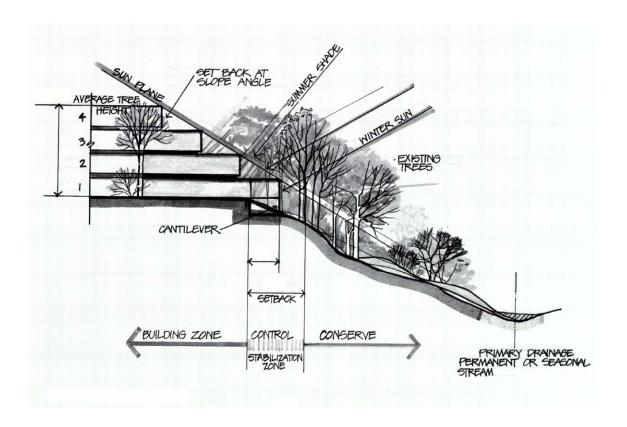


#### **Outlying Parcels Master Plan**



#### SITE ORIENTATION

Wooded valley sites should be developed with consideration for their natural characteristics. The key to site design is the preservation of as much of the major woods as possible. At the least, significant stands should be retained, strategically chosen to make a strong visual impact. Valley edges could be respected and set aside as conservation zones. These natural development restraints also afford the opportunity for unique and innovative building and site designs which utilize the slopes and vegetation as amenities.

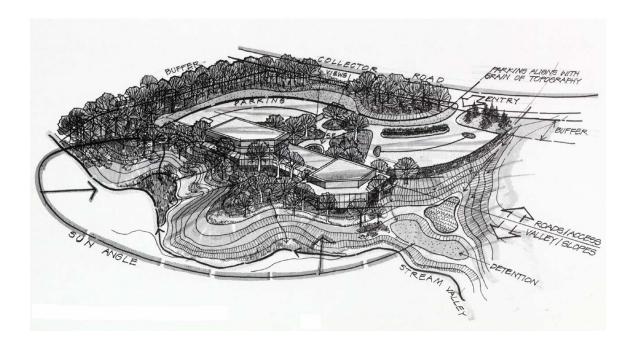


#### **Outlying Parcels Master Plan**



#### PARCEL LAYOUT

Along valley edges, small building clusters are more effective than large building masses. The natural character of the land is more effectively retained and views out over the valleys maximized. South facing slopes provide an excellent opportunity for passive solar gain. Specimen trees retained at building entries, along with the preserved vegetation in the setbacks and valleys, will project an image of the buildings tucked into the existing landscape. In addition, parking areas should be designed around existing major trees and might be divided into smaller units to preserve blocks of vegetation. Parking lots will also fit best on a sloping site if shaped to follow the contour lines. This will have the least impact on natural grades.

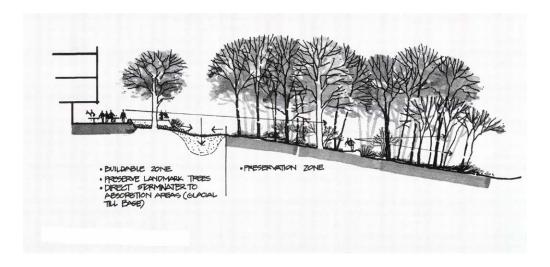


#### Outlying Parcels Master Plan



#### STORMWATER MANAGEMENT

A comprehensive stormwater management system is needed on each campus to ensure the treatment of water on site before it is released off site. Retention ponds for runoff and sedimentation control should be accommodated on each site, feeding small valley tributaries, and natural "holding points" that already exist. In this way, stormwater runoff is directed away from the steep slopes and direct entry into the valleys. Instead, it is caught in absorption zones before being discharged into the valley system. Release of runoff at a slower rate will then feed it through the natural filtration system of the valley, and impact to the valleys and wooded slopes is inconsequential. As on all sites, retention ponds should be graded to eliminate the need for safety fencing and erodible slopes planted with vegetation. Best Management Practices should be followed on all development parcels.



#### **PLANTING**

Any planting introduced in site development should be consistent in character with that already existing on the site. Native plant materials are encouraged for their relative vigor and ease of establishment. Slopes and slope vegetation should be only minimally disturbed during construction. For additional protection, temporary runoff and sedimentation control measures should be implemented during development until construction and a permanent water management system are complete.

#### **Outlying Parcels Master Plan**

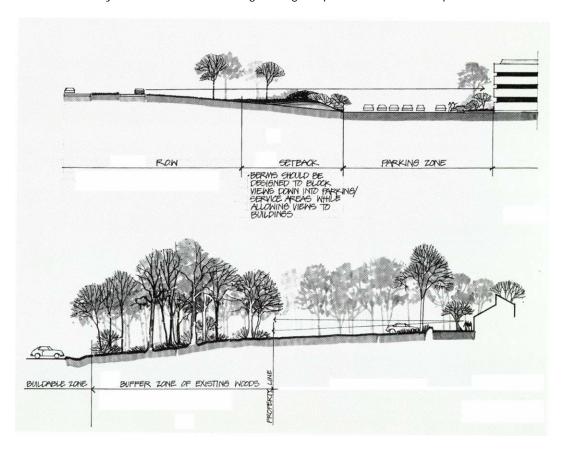


#### **EDGES**

North and Depot campuses will have positive visual impacts to those driving by. The edges thus establish the major character reference for the community and campus visitors. If the edges present a singular image, the campuses will appear as a unit.

The treatment within the road right-of-ways and setbacks, therefore, is critical to the image. Connecticut Routes 195 and 44 are the main edges of the campuses, and each should have wooded buffers in addition to their right-of-ways. Those edges of North Campus which abut existing residential areas should also have a wooded buffer.

Preservation of existing trees within setbacks and the use of planting and/or berming as additional screening wherever development might be open to off-site views are design treatments, which, used consistently, establish a unified image along the perimeter of the campuses.



#### **ENTRANCES**

The entrances to the North and Depot campuses present an important visual image to the visitor and, therefore, play an important role in setting the general tone of the campuses. The entrances should serve several functions. They should welcome and orient visitors, direct campus users, set the tone for the rest of campus, and serve as gateways to the University. Appropriate planting, lighting, and signage can accomplish these goals.

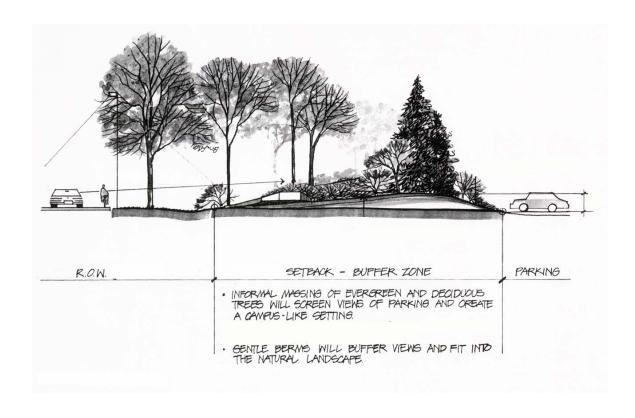
#### **Outlying Parcels Master Plan**



#### **CIRCULATION**

The layout and detailing of the circulation system and the general image presented to those traveling through the campuses is critical to how the development is perceived. The treatment of the building setbacks along the roads also impacts its quality and cohesiveness.

The design of the internal street system should work with the physiography of the site and, in conjunction with setback requirements, emphasize spaciousness within the campuses. Soft edges between the streets and adjacent properties are created through the use of planting and earth contouring and add to the intended character. An adequate proportion of green space should be maintained through setbacks on all internal roads. Provisions for pedestrian and bicycle circulation should be included with the internal street system setbacks on all internal roads.



#### **Outlying Parcels Master Plan**



#### **OPEN SPACE SYSTEM**

The conservation of the primary valleys, wetlands, and wooded slopes forms an open space system throughout the campuses and provides the basic framework for stormwater and sedimentation management. The consistent design treatment of these conservation zones will provide a major common physical component and expression of character for both North and Depot campuses.



#### LIGHTING AND SIGNAGE

This unified system of lights and signs presents a consistent image to anyone moving by or through the campuses. New campus standards that have been recently adopted should be continued throughout the campuses.