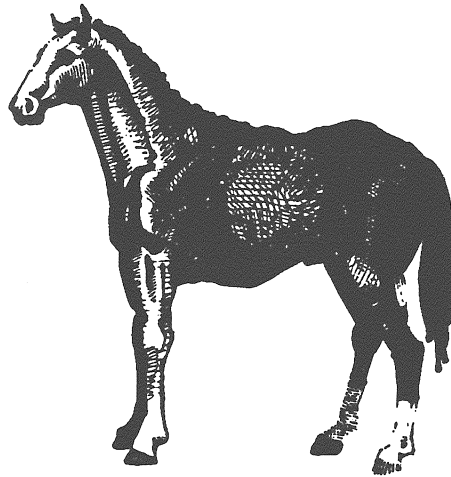


The Connecticut Equestrian Center



Hartford, Connecticut

EASTERN CONNECTICUT ENVIRONMENTAL REVIEW TEAM REPORT

EASTERN CONNECTICUT RESOURCE CONSERVATION & DEVELOPMENT AREA, INC.

**The Connecticut
Equestrian Center**
Hartford, Connecticut

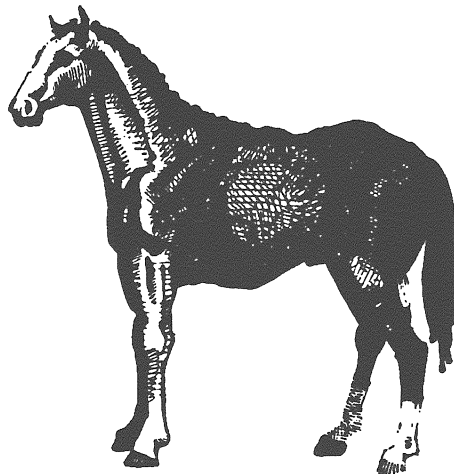
November 1995

Environmental Review Team Report

**Prepared by the Eastern Connecticut Environmental Review Team of the
Eastern Connecticut Resource Conservation and Development Area, Inc.
Haddam, Connecticut**

for the

Connecticut Department of Agriculture



Acknowledgements

This report is an outgrowth of a request from the Connecticut Department of Agriculture to the Hartford County Soil and Water Conservation District (SWCD). The SWCD referred this request to the Eastern Connecticut Resource Conservation and Development (RC&D) Area Executive Council for their consideration and approval. The request was approved and the measure reviewed by the Eastern Connecticut Environmental Review Team (ERT).

The ERT met and field checked the site on Thursday, September 7, 1995. Team members participating on this review included:

| | |
|---------------------|---|
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| | |
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Prior to the review day, each Team member received a summary of the proposed project, a list of the department's concerns, location map, topographic map, soils map and additional information. During the field review the Team members were shown where facilities were planned. A map showing preliminary layout and information regarding size and number of facilities was later mailed to all team members. The Team met with, and were accompanied by Frank Intino from the CT Department of Agriculture and Randy May, the DEP commissioner's appointee to the Horse Park Authority. Following the review, reports from each Team member were submitted to the ERT coordinator for compilation and editing into this final report.

This report represents the Team's findings. It is not meant to compete with private consultants by providing site designs or detailed solutions to development problems. The

Team does not recommend what final action should be taken on a proposed project - all final decisions rest with the State, Authority and towns. This report identifies the existing resource base and evaluates its significance to the proposed development, and also suggests considerations that should be of concern to the developer and the Town. The results of this Team action are oriented toward the development of better environmental quality and the long-term economics of land use.

The Eastern Connecticut RC&D Executive Council hopes you will find this report of value and assistance in making your decision on this proposed equestrian center.

If you require additional information, please contact:

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Contents

| | Page |
|---|---------|
| Acknowledgements ----- | ii - iv |
| Table of Contents ----- | v - vi |
| Introduction ----- | 1 |
| Physical Characteristics | |
| Topography and Geology ----- | 4 |
| Soil Resources ----- | 12 |
| Biological Resources | |
| Wetland Resources ----- | 27 |
| Forestry and Vegetation ----- | 32 |
| Wildlife Resources ----- | 38 |
| Fisheries Resources ----- | 44 |
| Natural Diversity Data Base ----- | 48 |
| Land Use and Planning Considerations | |
| State Park Planner Comments ----- | 49 |
| Land Use and Site Design Compatibility ----- | 52 |
| Animal Waste Management ----- | 54 |
| Regional Planning Comments ----- | 56 |
| Traffic Recommendations ----- | 59 |
| Archaeological Review ----- | 60 |
| Appendices | |
| Appendix A - Forestry Issues ----- | 64 |
| Appendix B - Wildlife/Land Use Statistics ----- | 70 |
| Appendix C - Fisheries/Policy and Position Statements ----- | 72 |

List of Figures

| | Page |
|---|------|
| 1. Location Map _____ | 3 |
| 2. Streams Map _____ | 6 |
| 3. Gullies Map _____ | 7 |
| 4. Surficial Geology Map _____ | 8 |
| 5. Sand Dunes Map _____ | 9 |
| 6. Pingos Map _____ | 10 |
| 7. Cross-section of Keney Park _____ | 11 |
| 8. Soils Map _____ | 15 |
| 9. Non Technical Soils Descriptions _____ | 16 |
| 10. Water Features _____ | 22 |
| 11. Building Site Development _____ | 23 |
| 12. Construction Materials _____ | 25 |
| 13. Wetland Resources Map _____ | 31 |
| 14. Vegetation Cover Type Map _____ | 37 |
| 15. Percent Land Use Cover _____ | 40 |
| 16. Land Use Map _____ | 43 |
| 17. General Plan for Keney Park _____ | 62 |

Introduction

An environmental review was requested by the Connecticut Department of Agriculture for the proposed Equestrian Center at Keney Park in Hartford.

The site proposed for the equestrian center is a portion of Keney Park in Hartford and Windsor and a small portion of Matianuck State Park in Windsor. The site the ERT was asked to review is approximately 150 acres in size. (See Figure 1)

A world class equestrian center is proposed that would be used by horse competitors from around the world. The project includes a coliseum, barns, rings, polo field, maintenance, administration and security buildings, riding trails, parking facilities and an area for RV camping. The site is expected to accommodate events with up to 1000 horses. Other uses discussed were the use of the facility by the Hartford Mounted Police, the Ebony Horsewomen and possible future educational programs.

This review was requested to provide the Department of Agriculture and the Horse Park Authority with environmental and planning information and recommendations to guide the development of plans for the facility in an environmentally sensitive manner.

The Environmental Review Team Process

Through the efforts of the Department of Agriculture and the Eastern Connecticut ERT, this environmental review and report was prepared for the Department. This report primarily provides a description of certain on-site natural resources and presents planning, management and land use guidelines. The review process consisted of 4 phases:

- 1) Inventory of the site's natural resources (collection of data);
- 2) Assessment of these resources (analysis of data);
- 3) Identification of resource problem areas, and
- 4) Presentation of planning, management and land use guidelines.

The data collection phase involved both literature and field research. The ERT field review took place on September 7, 1995. Mapped data or technical reports were also

perused, and specific information concerning the property was collected. Being on-site allowed some Team members to verify information and identify other resources. ²

Once Team members had assimilated an adequate data base, they were able to analyze and interpret their findings. Results of this analysis enabled Team members to arrive at an informed assessment of the property's natural resource opportunities and limitations. Individual Team members then prepared and submitted their reports to the ERT coordinator for compilation into this final ERT report.

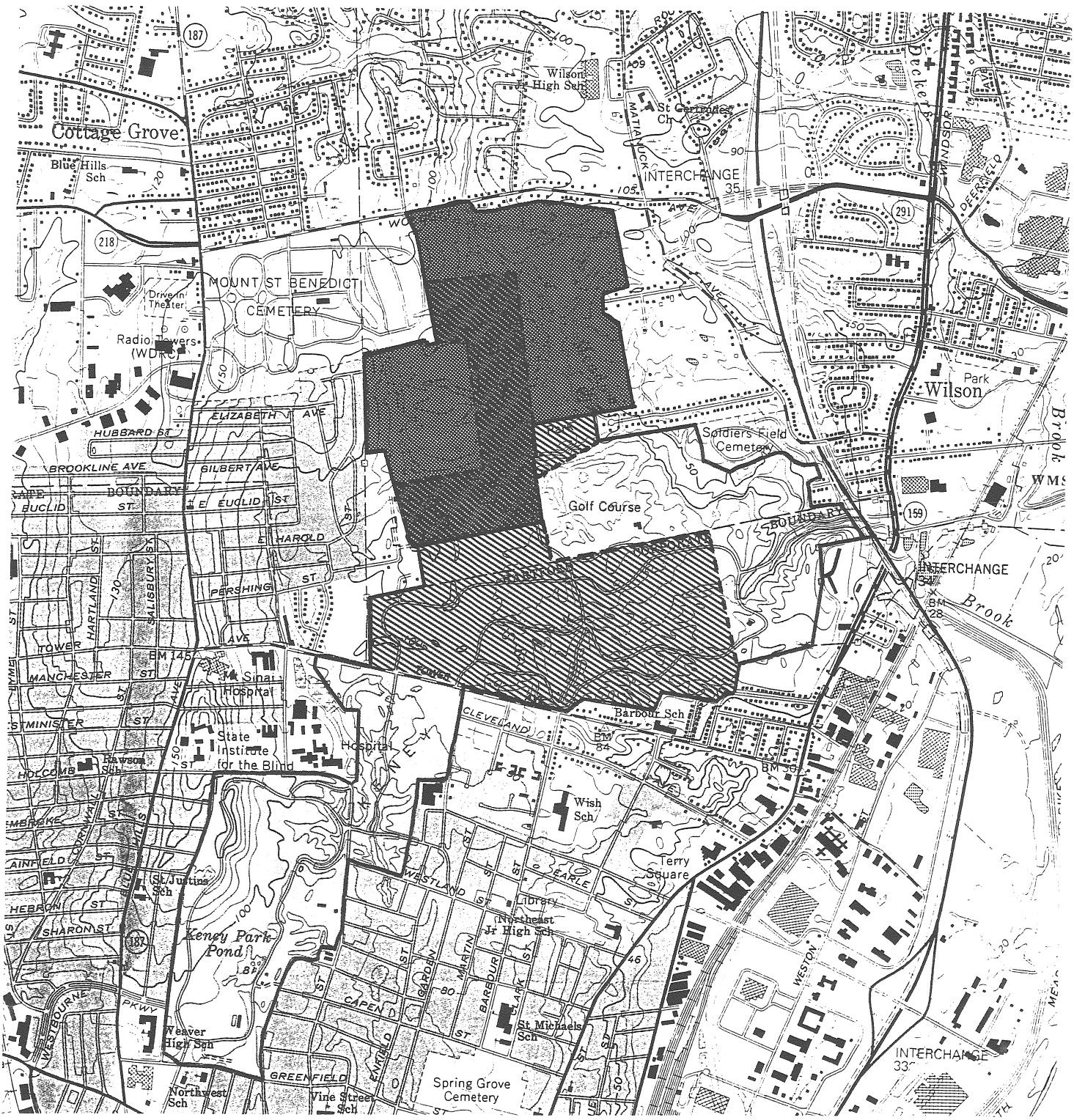
Figure 1

Location Map



Scale 1" = 2000'

Keney Park
 DEP Property
 Equestrian Center



Topography and Geology

Topography

The site of the proposed equestrian center in Keney Park and Matianuck State Park occupies approximately +150 acres, situated in the central area of Keney Park and bordered by Tower Avenue to the south and Route 156 to the east. The area is for the most part relatively flat, gently inclined towards the Connecticut River, but is sharply incised by several deep gullies with depths of fifteen to twenty-five feet.

Surficial Geology

The area is underlain by up to twenty-five feet of glacial lake bottom sediments that have been gullied and drain towards the Connecticut River. The original lake bottom surface is blanketed by windblown silts and sands averaging one to three feet thick, except where fine sands have accumulated to form irregular “dunes” up to twenty feet in thickness.

Among the more interesting features noted in the area are the sand dunes and “pingo scars”. The sand dunes are the result of aeolian deposition that occurred after the drainage of Glacial Lake Hitchcock. The sand dunes are now covered by grassy vegetation with some areas of exposed sand. These sand dunes are unique features and great care should be taken to preserve them. (Please refer to Figures 5 & 6.)

The “pingo scars” are rounded depressions with raised rims that dot the landscape. It has been proposed that these are the result of permafrost ice lenses (Stone and Ashley, 1992) or a type of dewatering feature formed just after the lake drainage. Typically these round depressions are approximately thirty to forty feet in diameter, although sometimes fifty to seventy feet diameters are seen. The depressions are usually no deeper than six to ten feet, and often are vegetated just like the rest of the surrounding landscape. (Refer to Figure 7 for a schematic cross section.)

Bedrock Geology

Underlying the area is a reddish shale (Pessl, Jr., and Langer, 1972) that is at a depth of approximately fifty feet in most of the area (Handmen and Hildreth, 1972). This shale is the result of deposition during a deep water lake that existed in the area approximately fifty to seventy million years ago. The only outcrop of note is located in the eastern part of Keney Park just to the south of the road that exits to Route 156.

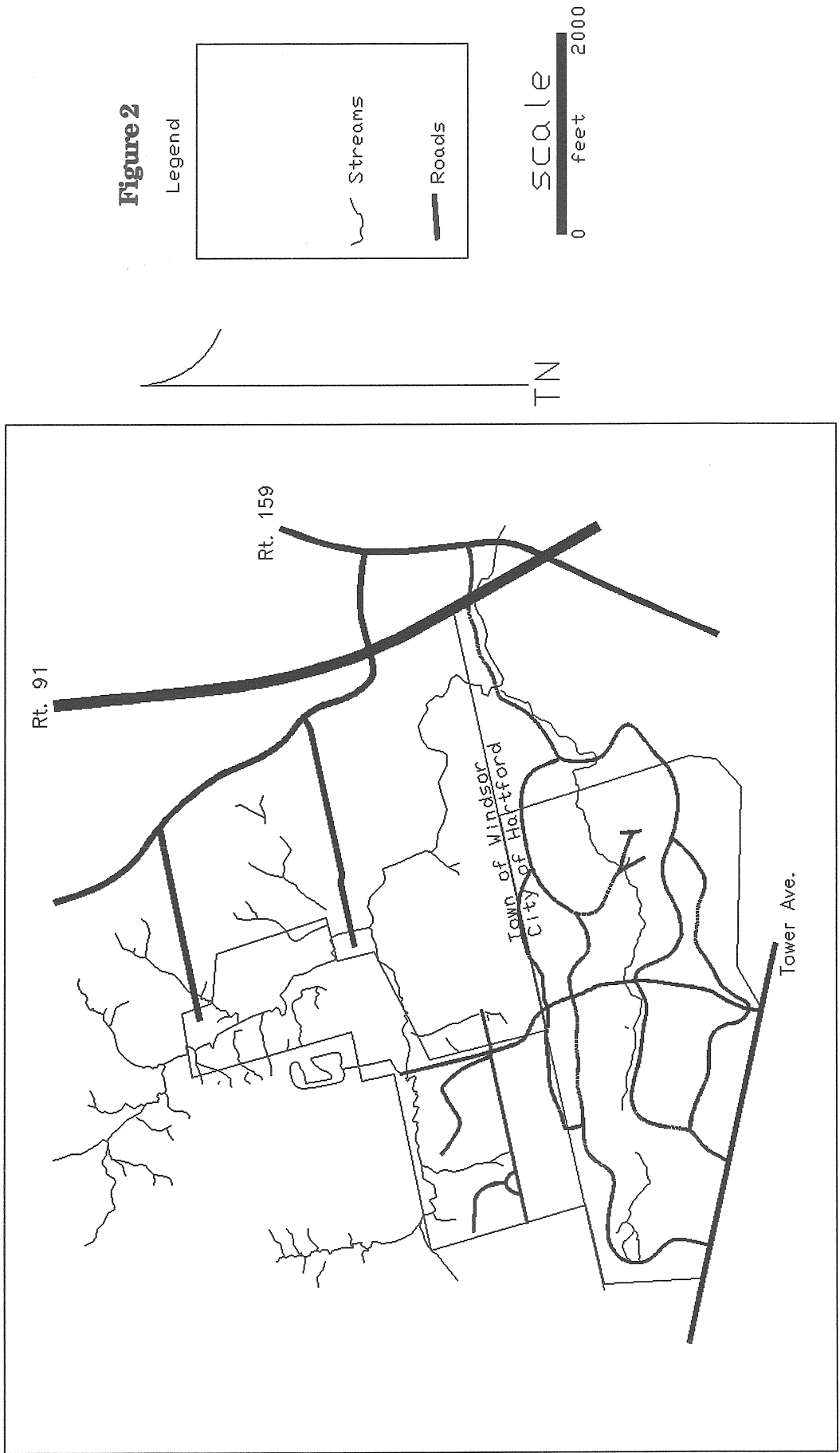
Geologic Recommendations

Great care should be given to the sand dunes in the park, these are delicate vegetated systems that could easily be destroyed. It appears that the Horse Park Authority is aware of the dunes importance and is willing to work around them to keep them from being disturbed. Additional consideration should be given to the placement of foundations on areas that are underlain by the lake clays. In reference to the above geologic information there seem to be no obstacles to the parks development at this time.

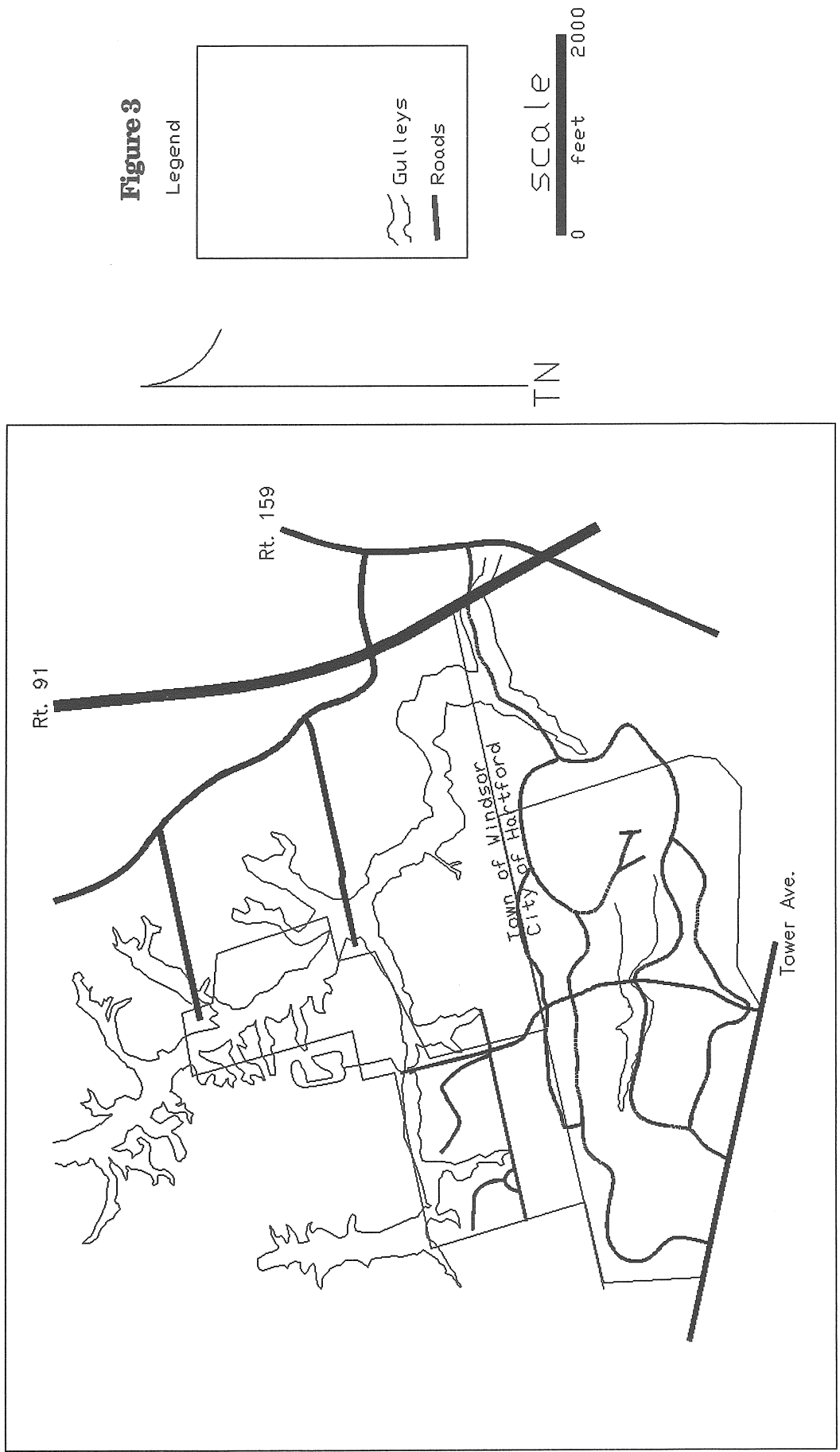
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Keney Park, North Hartford



Keney Park, North Hartford



Keney Park, North Hartford

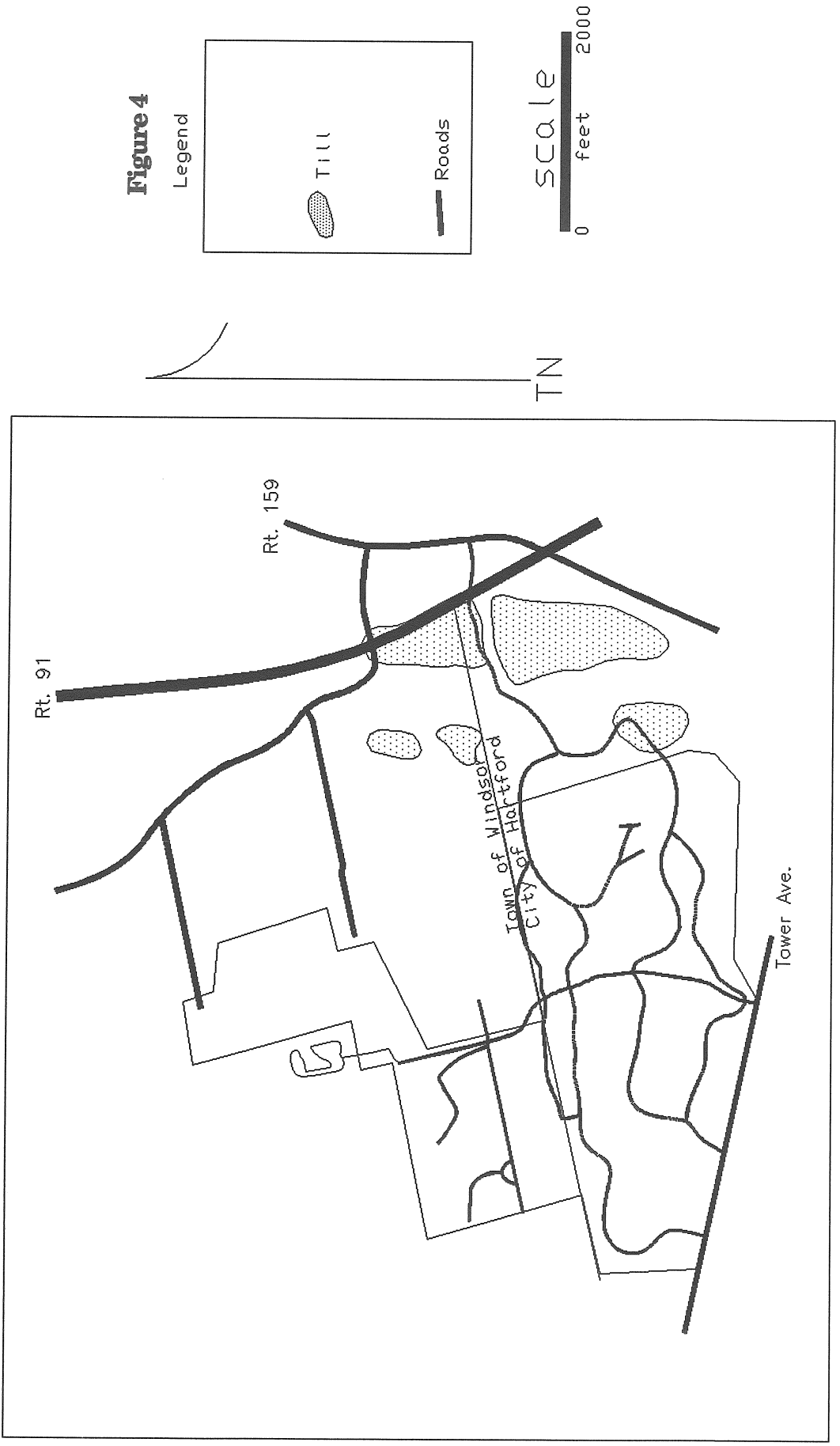
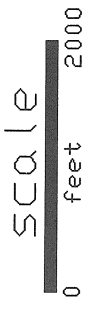
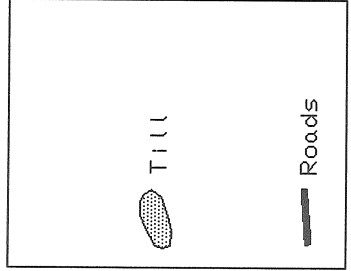
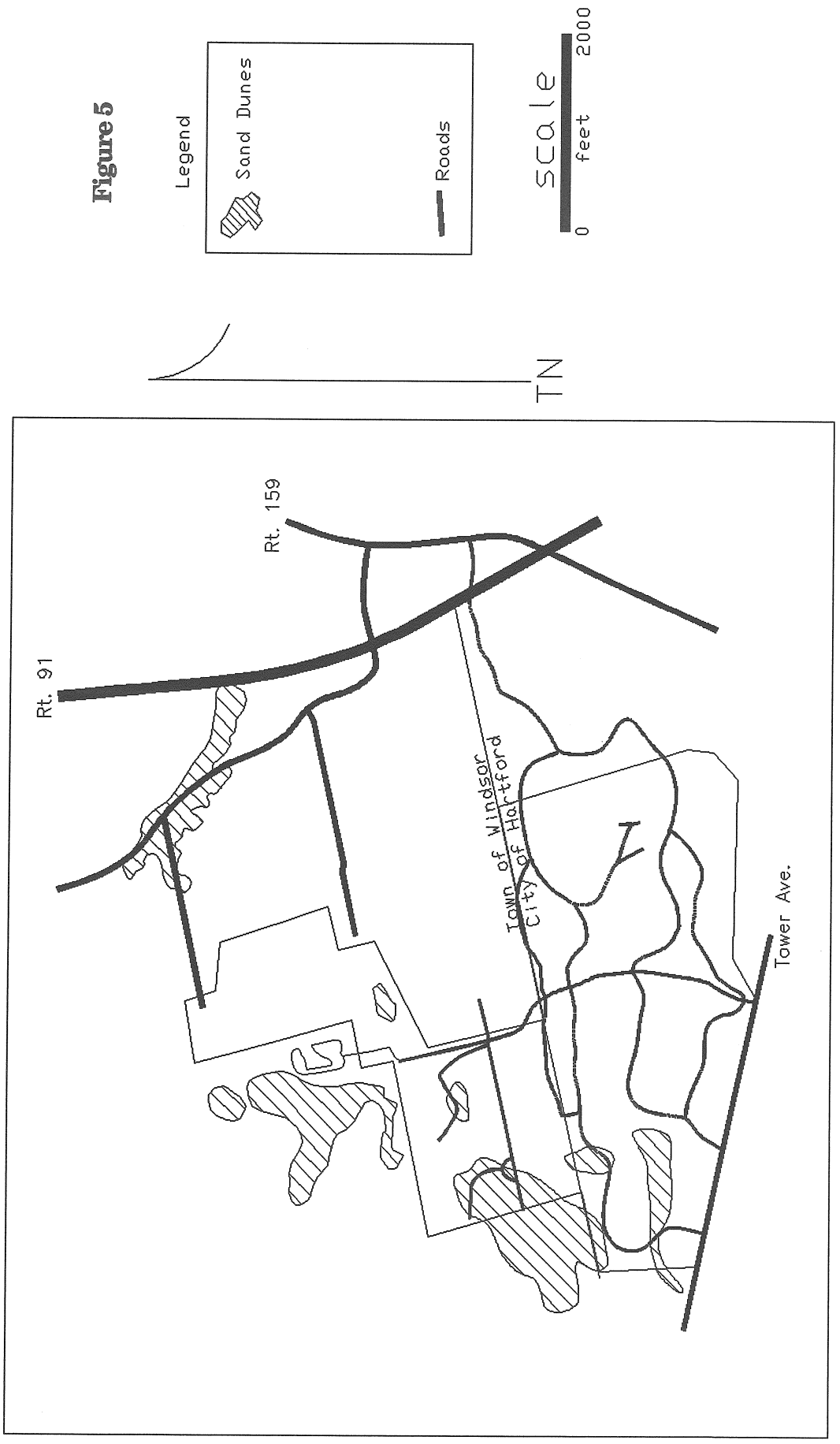


Figure 4

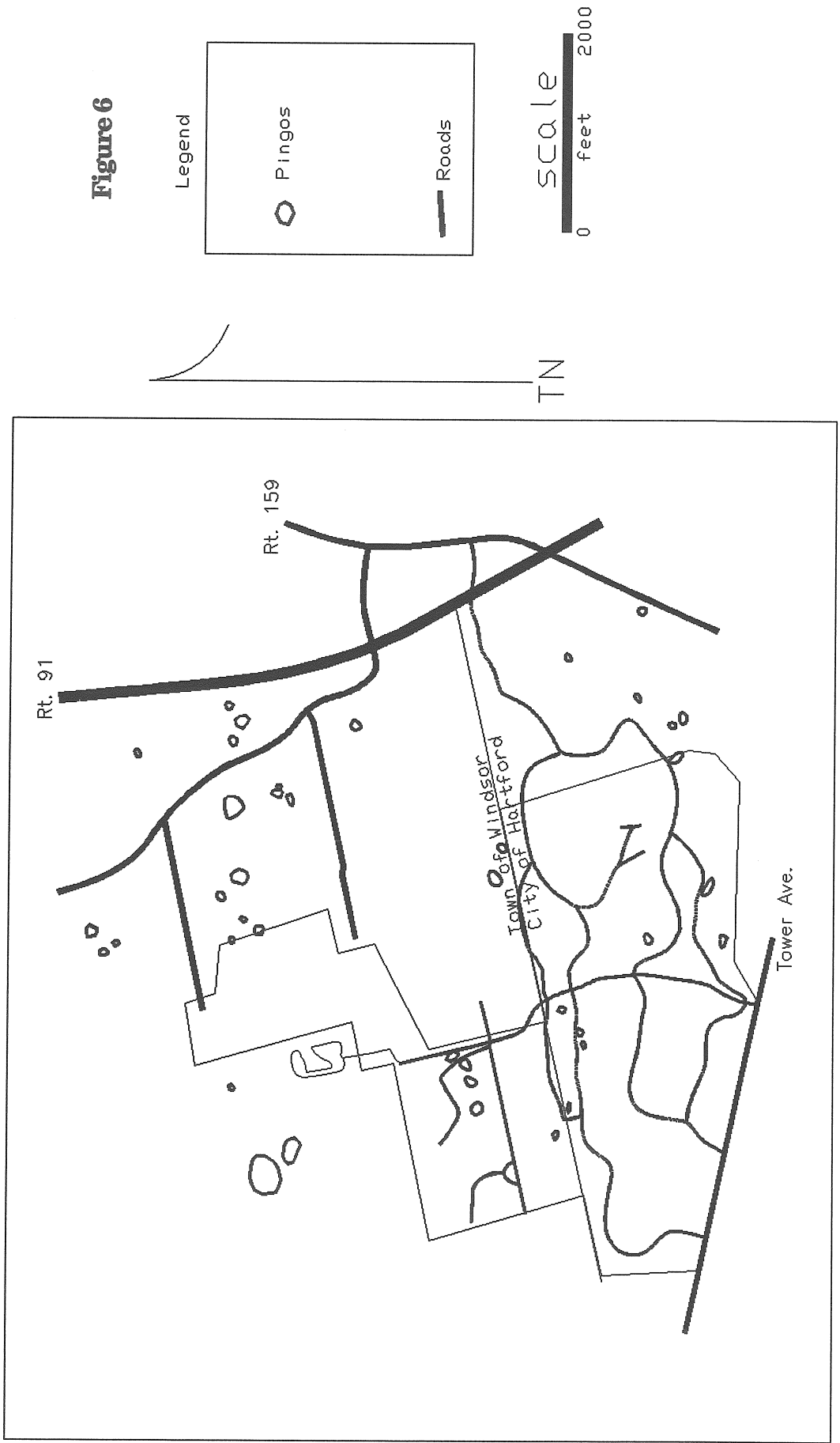
Legend

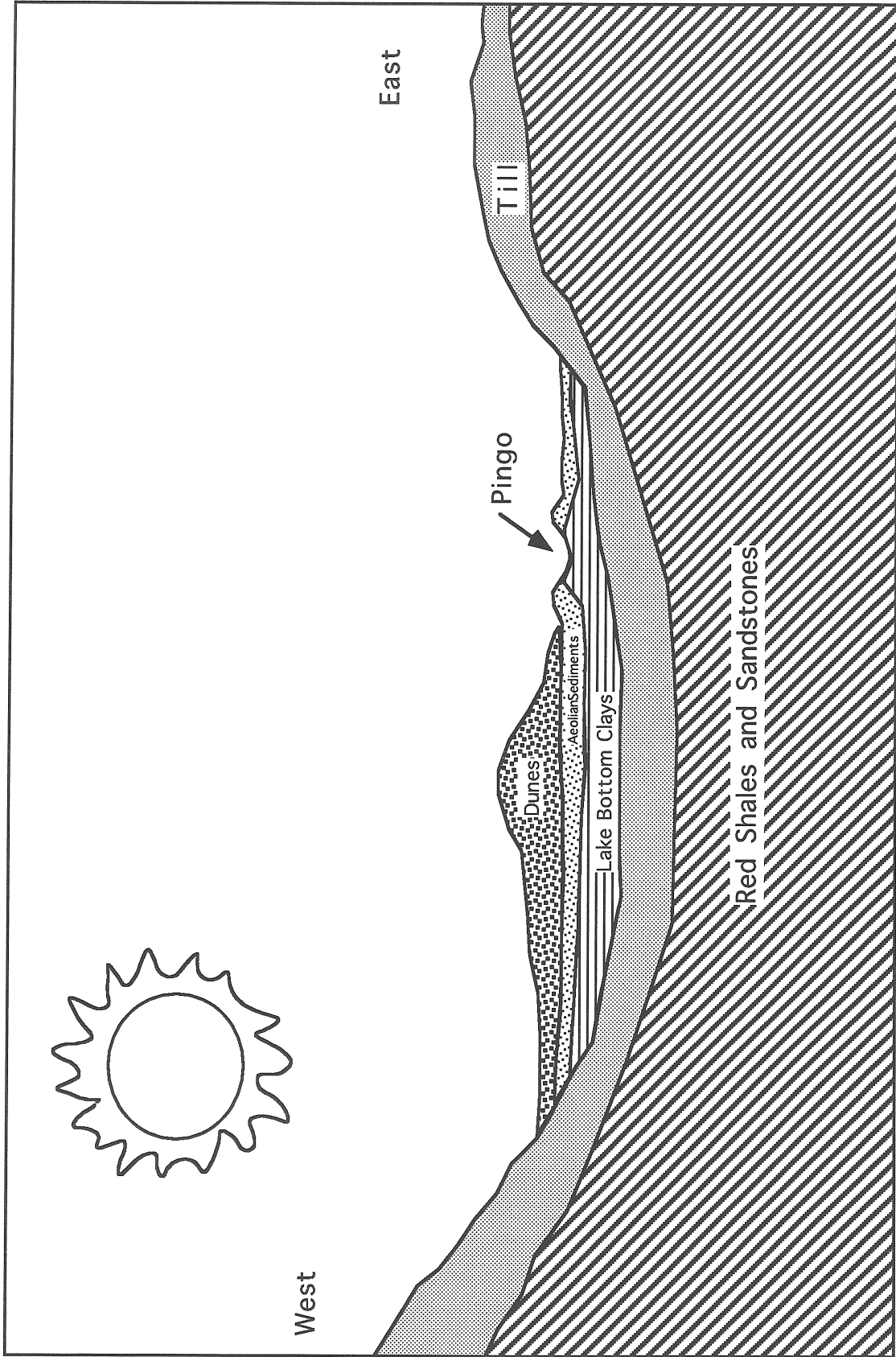


Keney Park, North Hartford



Keney Park, North Hartford





Schematic cross section looking north through Kenney Park

Figure 7

Soil Resources

The landscapes of the site are dominated by the soil association Agawam-Ninigret-Windsor. This association comprises a nearly level, narrow terrace that extends from Glastonbury to the Massachusetts State line. The surface is level to gently undulating or sloping. Site elevations range from 40 to 100 feet above sea level.

The soil map (Figure 8) has been created from the compilation of the atlas sheets 25, 26, 31 and 32 from the Soil Survey of Hartford County - 1962 and from air photo interpretation. The general suitability and limitations of these soil map units for the proposed uses will be discussed in the text of this report.

The soils of this site are well drained to very poorly drained, with the predominant drainage class represented by the moderately well to somewhat poorly drained soils. These soils range in texture from silt loams to sandy loams or sands. The Agawam and Ninigret soils are the most extensive soils on this parcel. A more complete description of the soils located on this parcel can be found in the Nontechnical Soils Description Report (Figure 9).

The most dominant soil feature of this site is hydrology. The Water Features table (Figure 10) shows that the soils on the parcel are characterized by a high water table and a limited infiltration rate (Hydrologic Soil Group C). These two features will be the most limiting soil features for the development of this site.

Three soil mapping units have been identified as state regulated wetlands (Limerick - LmA, Saco - ScA and Raypol WcA). Additionally, the site contains small areas (inclusions) of wetland soils less than 4 acres in size that are located within better drained (non wetland) soils. These inclusions were too small to delineate at the scale of the soil survey map. These inclusions are also state regulated wetlands.

The Soil Survey of Hartford County is not a substitute for an on-site investigation. It will be necessary to conduct an on-site investigation to accurately determine the type of soil for any use, or to identify the presence or absence of state regulated and federal regulated wetlands.

An additional important feature of soils found on this site is the inclusion of a geologic feature described as a "pingo-scar". These pingo-scars have been recognized as geologic features as well as wetland features. Pingo-scars play an important role in the hydrology of the site. These scars range from three meters to twenty meters in size. A more detailed on-site mapping effort will be needed to locate these features in order to develop an appropriate site plan and design. (Please also refer to the Geology section and the Wetland Resources section of this report for further information.)

The Building Site Development Report (Figure 11) lists site limitations based upon individual soils. These limitations range from slight to severe. The limitations are considered "slight" if soil properties or site features are favorable for the indicated use and limitations are minor and easily overcome. "Moderate" limitations occur if soil properties are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations. "Severe" limitations occur when soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs and possibly increased maintenance are required. A review of the Report will indicate that a majority of the soils on the parcel have severe limitations for development, primarily due to wet conditions and frost action. These limitations will need special attention in planning and design.

Additional information about the soils can be obtained from the Construction Materials Report (Figure 12). This report lists the soil's suitability as a "construction material". The soils found on the parcel have little value as construction materials. Special design consideration will need to be given to these soils when siting facilities, access roads and parking areas.

In addition to identifying areas that are regulated, such as wetlands and watercourses, other areas of concern should be identified and avoided. Areas mapped as Et (Elmridge) are steep and easily erodible. These steep slopes are difficult to work and stabilize. Additional steep areas may exist within existing map units and can be identified by use of topographic maps and on-site surveys. As with wetlands, efforts should be made to avoid these areas in the planning and design of the site. Often these areas receive stormwater runoff and eventually become destabilized. Corrective measures often exceed the initial costs of avoidance.

In site planning and design, special attention should be given to using materials and designs that improve surface water infiltration and reduces surface runoff. The use of geosynthetic materials has increased in the last several years, allowing the design and construction of areas with minimal impact to on and off-site resources. Planned access roads without gutters / curbs allow stormwater to run off roads and disperse into surrounding areas instead of having to be treated as concentrated flows. Road design should also consider the use of pervious materials which use geotextiles for support and separation of the road base, again aiding in the infiltration of surface water and reduction in runoff.

Staging areas, heavy use (traffic) areas, areas with little or no vegetation (rings and turnout areas) can also be designed with geosynthetic materials to improve site stability, infiltration and reduce surface runoff. New developments in technology for horse race tracks and polo fields can be incorporated in the design of the site to help reduce maintenance and operation costs and improve and protect both on and off-site resources.

Surface runoff from roofs and other impervious areas can be directed to either underground infiltration systems or "rain gardens". "Rain gardens" are depression areas planned and designed to receive surface runoff which will then allow for slow infiltration of stormwater into the ground over a 48 hour period. This type of system helps to replicate some of the natural systems lost in the development of the site. The system also will help to maintain the hydrology of the area and improve water treatment of runoff. These systems may also reduce the need for extensive (and expensive) stormwater detention structures.

The facility design will include the construction of stables, indoor and outdoor riding rings, turnout areas, access roads and parking / staging areas. Additionally, support facilities may be required, including work sheds, garages and the like. Each one of these identified facilities may have inherent operations that may impact the on-site resources. Consideration for storage and use of materials, including chemicals and fuels will have to be given in both design and siting appropriateness.

Figure 8

Soils Map



Scale 1" = 1667'

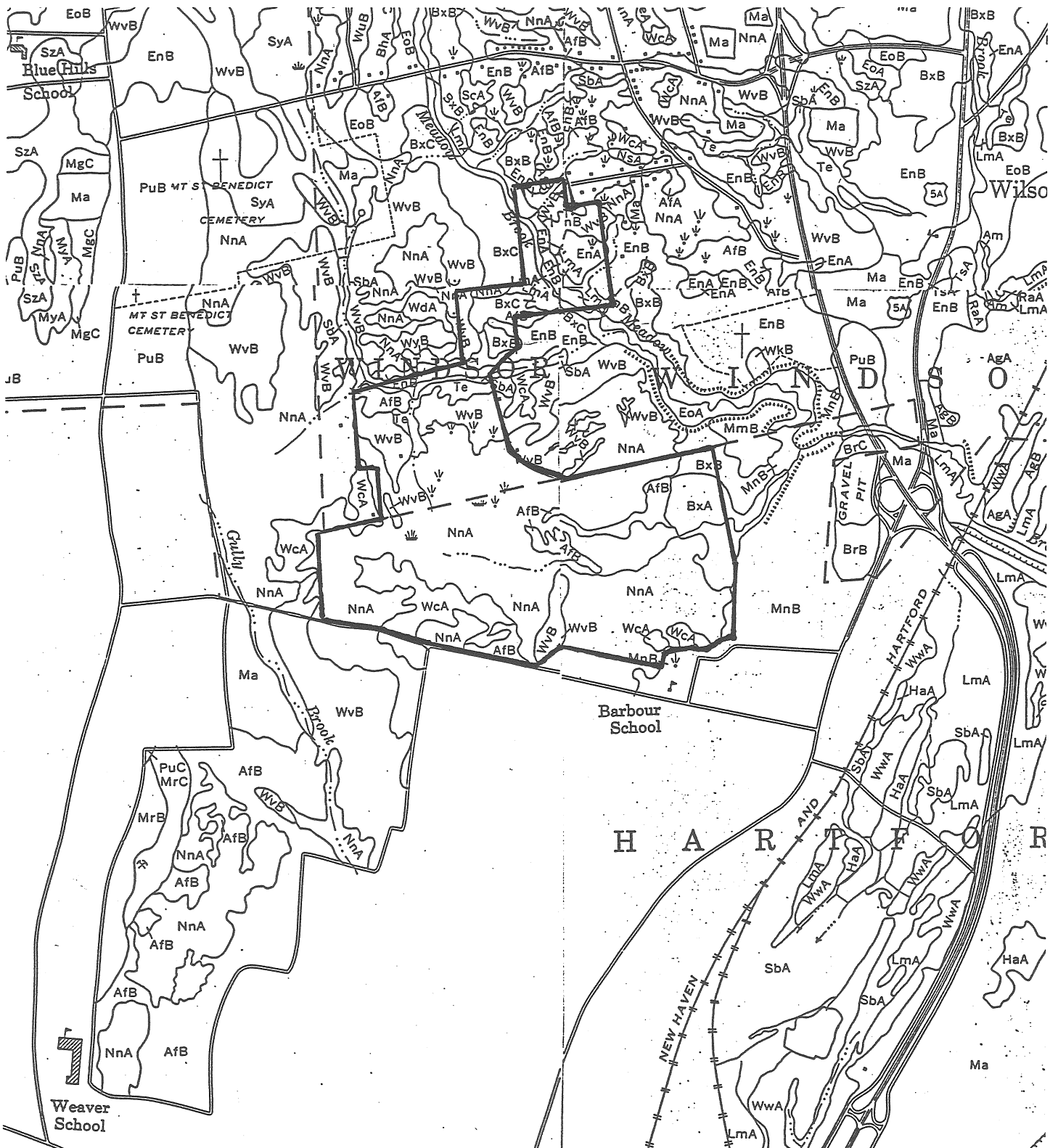


Figure 9

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map Symbol | Description |
|------------|---|
| AfB | <p>AGAWAM FINE SANDY LOAM 3 TO 8 PERCENT SLOPES These soils have slight limitations for cultivated crops. They are well drained soils with a moderate to high water holding capacity for plant growth. They are subject to erosion if left unprotected.</p> <p>This gently sloping, well drained soil formed in sandy water deposited materials. It is on outwash plains and stream terraces. Depth to bedrock is commonly more than 60 inches below the surface. The water table is commonly below a depth of 6 feet. Permeability is moderately rapid in the surface layer and upper part of the subsoil, moderately rapid or rapid in the lower part of the subsoil, and rapid in the substratum. Surface runoff is medium and the available water capacity is moderate.</p> |
| BxA | <p>BUXTON SILT LOAM, 0 TO 3 PERCENT SLOPES These soils have slight limitations for cultivated crops. They are moderately well drained soils with a moderate to high water holding capacity for plant growth. The seasonal high water table may be a limitation for some crops, and prohibit early spring planting and late fall harvests.</p> <p>This nearly level, moderately well drained to somewhat poorly drained soil formed in silty and clayey glacial lacustrine deposits. It is on slightly elevated portions of lacustrine terraces. Depth to bedrock is commonly greater than 60 inches below the surface. The soil has a seasonal high water table at a depth of 12 to 20 inches from fall to spring. Permeability is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, slow or very slow in the lower part of the subsoil, and very slow in the substratum. Surface runoff is medium to rapid and the available water capacity is high.</p> |
| BxB | <p>BUXTON SILT LOAM, 3 TO 8 PERCENT SLOPES These soils have slight limitations for cultivated crops. They are moderately well drained soils with a moderate to high water holding capacity for plant growth. They are subject to erosion when left unprotected. The seasonal high water table may be a limitation for some crops, and prohibit early spring planting and late fall</p> |

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map Symbol | Description |
|---------------|---|
| | harvests. |
| | <p>This gently sloping, moderately well drained to somewhat poorly drained soil formed in silty and clayey glaciolacustrine deposits. It is on slightly elevated portions of lacustrine terraces. Depth to bedrock is commonly greater than 60 inches below the surface. The soil has a seasonal high water table at a depth of 12 to 20 inches from fall to spring. Permeability is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, slow or very slow in the lower part of the subsoil, and very slow in the substratum. Surface runoff is medium to rapid and the available water capacity is high.</p> |
| BxC | <p>BUXTON SILT LOAM, 8 TO 15 PERCENT SLOPES These soils have moderate limitations for cultivated crops. They are moderately well drained soils with a moderate to high water holding capacity for plant growth. The seasonal high water table may be a limitation for some crops, and prohibit early spring planting and late fall harvests. If left unprotected the slopes are an erosion hazard for cultivated crops.</p> <p>This sloping, moderately well drained to somewhat poorly drained soil formed in silty and clayey glaciolacustrine deposits. It is on slightly elevated portions of lacustrine terraces. Depth to bedrock is commonly greater than 60 inches below the surface. The soil has a seasonal high water table at a depth of 12 to 20 inches from fall through spring. Permeability is moderate or moderately slow in the surface layer, moderately slow or slow in the upper part of the subsoil, slow or very slow in the lower part of the subsoil, and very slow in the substratum. Surface runoff is medium to rapid and the available water capacity is high.</p> |
| EnA | <p>ELMWOOD SANDY LOAM, 0 TO 3 PERCENT SLOPES These soils have slight limitations for cultivated crops. They are moderately well drained soils with a moderate to high water holding capacity for plant growth. The seasonal high water table may be a limitation for some crops, and prohibit early spring planting and late fall harvests.</p> |

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map Symbol | Description |
|---------------|-------------|
|---------------|-------------|

This nearly level, moderately well drained soil formed in a loamy mantle over clayey sediments from glaciolacustrine deposits. Depth to bedrock is commonly greater than 60 inches below the surface. This soil has a seasonal high water table perched at a depth of about 20 inches from fall to spring. Permeability is moderately rapid in the solum and slow or very slow in the substratum. Surface runoff is slow and the available water capacity is moderate.

EnB ELMWOOD SANDY LOAM, 3 TO 8 PERCENT SLOPES These soils have slight limitations for cultivated crops. They are moderately well drained soils with a moderate to high water holding capacity for plant growth. They are subject to erosion when left unprotected. The seasonal high water table may be a limitation for some crops, and prohibit early spring planting and late fall harvests.

This gently sloping, moderately well drained soil formed in a loamy mantle over clayey sediments from glaciolacustrine deposits. Depth to bedrock is commonly greater than 60 inches below the surface. This soil has a seasonal high water table perched at a depth of about 20 inches from fall to spring. Permeability is moderately rapid in the solum and slow or very slow in the substratum. Surface runoff is medium and the available water capacity is moderate.

LmA LIMERICK SILT LOAM, 0 TO 3 PERCENT SLOPES These soils have moderate limitations for cultivated crops. They are poorly drained soils with a moderate to high water holding capacity for plant growth. A seasonal high water table and flooding in the spring and fall is a limitation to crop production in most years.

These nearly level, poorly drained soils formed in alluvial deposits. They are on flood plains of major tributaries. Depth to bedrock is commonly more than 60 inches below the surface. These soils have seasonal high water tables at or near the surface and they are subject to frequent flooding. Permeability is moderate in the loamy layers and rapid or very rapid in the underlying sandy materials. Surface runoff is slow and the available water capacity is high.

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map Symbol | Description |
|------------|---|
| MnB | <p>MELROSE VERY FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES These soils have slight limitations for cultivated crops. They are moderately well drained soils with a moderate to high water holding capacity for plant growth. They are subject to erosion when left unprotected. The seasonal high water table may be a limitation for some crops, and prohibit early spring planting and late fall harvests.</p> <p>This gently sloping, moderately well drained soil formed in a loamy mantle over clayey sediments from glaciolacustrine deposits. Depth to bedrock is commonly greater than 60 inches below the surface. This soil has a seasonal high water table perched at a depth of about 20 inches from fall to spring. Permeability is moderately rapid in the solum and slow or very slow in the substratum. Surface runoff is medium and the available water capacity is moderate.</p> |
| NnA | <p>NINIGRET FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES These soils have slight limitations for cultivated crops. They are moderately well drained soils with a moderate to high water holding capacity for plant growth. They are subject to erosion when left unprotected. The seasonal high water table may be a limitation for some crops, and prohibit early spring planting and late fall harvests.</p> <p>This level to nearly level, moderately well drained soil formed in loamy over sandy and gravelly glacial outwash. It is on outwash terraces in slight depressions and broad drainageways. Depth to bedrock is commonly greater than 60 inches below the surface. The soil has a seasonal high water table at a depth of about 20 inches from fall to spring. Permeability is moderate or moderately rapid in the surface layer and subsoil, and rapid or very rapid in the substratum. Surface runoff is slow to medium and the available water capacity is moderate.</p> |
| SbA | <p>SACO SILT LOAM, 0 TO 3 PERCENT SLOPES These soils have major limitations for cultivated crops. They are generally considered unsuitable for agriculture without major alterations or expensive management practices. These soils contain one or more of the following</p> |

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- HARTFORD COUNTY, CONNECTICUT

Map
Symbol

Description

limitations: steepness, stoniness/rockiness, depth to bedrock, or wetness.

This nearly level, very poorly drained soil formed in silty alluvial deposits. It is on the low parts of the flood plains of major streams and tributaries. Depth to bedrock is commonly more than 60 inches below the surface. The soil has a water table at or near the surface during most of the year and is subject to frequent flooding. Permeability is moderate in the surface layer and upper part of the substratum and rapid or very rapid permeability in the lower part of the substratum. Surface runoff is slow to very slow and the available water capacity is high.

Te TERRACE ESCARPMENTS, SAND AND CLAY These soils have major limitations for cultivated crops. They are generally considered unsuitable for agriculture without major alterations or expensive management practices. These soils contain one or more of the following limitations: steepness, stoniness/rockiness, depth to bedrock, or wetness.

This map unit is a complex of moderately steep to very steep, excessively drained to moderately well drained soils formed in a sandy to loamy mantle over clayey sediments. It is on the side slopes of glaciolacustrine terraces, and on lake plains. Depth to bedrock is commonly greater than 60 inches below the surface. The soils on the lower part of the slope have a seasonal high water table at a depth of about 20 inches from fall through spring, on the upper part of the slope the water table may be at a depth greater than 6 feet. Permeability is moderately rapid to rapid throughout the soils on the upper part of the slope. The permeability of the soils on the lower part of the slope is moderately rapid to moderate in the solum, and slow to very slow in the substratum. Surface runoff is rapid and the available water capacity is moderate.

WcA WALPOLE LOAM, 0 TO 3 PERCENT SLOPES These soils have moderate limitations for cultivated crops. They are poorly drained soils with a moderate to high water holding capacity for plant growth. The seasonal high water table causes the soil to warm up and dry out slowly in the spring. Wetness limits the use of farming

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map Symbol | Description |
|---------------|-------------|
|---------------|-------------|

equipment in the spring and fall. The seasonal high water table is a limitation for crop production in most years.

This nearly level, poorly drained soil formed in loamy over sandy and gravelly glacial outwash. It is in shallow drainage ways and low-lying positions on terraces and outwash plains. Depth to bedrock is commonly more than 60 inches below the surface. The soil has a seasonal high water table at or near the surface much of the year. Permeability is moderate in the surface layer and subsoil and rapid or very rapid in the substratum. Surface run off is slow and the available water capacity is high.

WvB WINDSOR LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES These soils have moderate limitations for cultivated crops. They are excessively drained soils with a low to very low water holding capacity for plant growth. They are subject to drought in most years and respond to irrigation. They can be planted earlier and harvested later than other soils.

This gently sloping, excessively drained soil formed in water-sorted sands. It is on outwash plains, terraces, kames and eskers. Bedrock is commonly more than 60 inches below the surface. The water table is commonly below a depth of six feet. Permeability is rapid or very rapid throughout. Surface runoff is medium and the available water capacity is low.

Figure 10

WATER FEATURES

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map symbol and soil name | Hydrologic group | Flooding | | | High water table | | |
|-----------------------------|---------------------|----------|----------|---------|------------------|-------|---------|
| | | Freq | Duration | Months | Depth | Kind | Months |
| | | | | | (Ft) | | |
| AfB AGAWAM | B | NONE | | - | 6.0- 6.0 | | - |
| BxA BRANCROFT | C | NONE | | - | 1.0- 2.5 | APPAR | OCT-APR |
| BxB BRANCROFT | C | NONE | | - | 1.0- 2.5 | APPAR | OCT-APR |
| BxC BRANCROFT | C | NONE | | - | 1.0- 2.5 | APPAR | OCT-APR |
| EnA ELMRIDGE | C | NONE | | - | 1.5- 2.5 | PERCH | NOV-MAY |
| EnB ELMRIDGE | C | NONE | | - | 1.5- 2.5 | PERCH | NOV-MAY |
| LmA LIMERICK | C | FREQ | BRIEF | NOV-MAY | 0- 1.5 | APPAR | NOV-MAY |
| MnB ELMRIDGE | C | NONE | | - | 1.5- 2.5 | PERCH | NOV-MAY |
| NnA NINIGRET | B | NONE | | - | 1.5- 2.5 | APPAR | NOV-APR |
| SbA SACO | D | FREQ | BRIEF | OCT-MAY | 0- 0.5 | APPAR | SEP-JUN |
| Te ELMRIDGE | C | NONE | | - | 1.5- 2.5 | PERCH | NOV-MAY |
| WcA RAYPOL | C | NONE | | - | 0- 1.0 | APPAR | NOV-MAY |
| WvB WINDSOR | A | NONE | | - | 6.0- 6.0 | | - |

Figure 11

BUILDING SITE DEVELOPMENT REPORT

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map symbol, soil name | Shallow Excavations | Dwellings Without Basements | Dwellings with Basements | Small Commercial Buildings | Local Streets and Roads | Lawns, Landscaping, and Golf Fairways |
|--------------------------|--------------------------------|-----------------------------------|-----------------------------|------------------------------------|---|--|
| AfB AGAWAM | SEVERE Cutbanks Cave | SLIGHT | SLIGHT | MODERATE Slope | SLIGHT | SLIGHT |
| BxA BRANCROFT | SEVERE Wet | SEVERE Wet | SEVERE Wet | SEVERE Wet | SEVERE Low Strength Frost Action | MODERATE Wet |
| BxB BRANCROFT | SEVERE Wet | SEVERE Wet | SEVERE Wet | SEVERE Wet | SEVERE Low Strength Frost Action | MODERATE Wet |
| BxC BRANCROFT | SEVERE Wet | SEVERE Wet | SEVERE Wet | SEVERE Wet Slope Slippage | SEVERE Low Strength Frost Action | MODERATE Wet Slope |
| EnA ELMRIDGE | SEVERE Wet | MODERATE Wet | SEVERE Wet | MODERATE Wet | SEVERE Frost Action | MODERATE Wet |
| EnB ELMRIDGE | SEVERE Wet | MODERATE Wet | SEVERE Wet | MODERATE Wet Slope | SEVERE Frost Action | MODERATE Wet |
| LmA LIMERICK | SEVERE Wet | SEVERE Flooding Wet | SEVERE Flooding Wet | SEVERE Flooding Wet | SEVERE Wet Flooding Frost Action | SEVERE Wet Flooding |
| MnB ELMRIDGE | SEVERE Wet | MODERATE Wet | SEVERE Wet | MODERATE Wet Slope | SEVERE Frost Action | MODERATE Wet |
| NnA NINIGRET | SEVERE Cutbanks Cave Wet | MODERATE Wet | SEVERE Wet | MODERATE Wet | SEVERE Frost Action | MODERATE Wet |
| SbA SACO | SEVERE Cutbanks Cave Wet | SEVERE Flooding Wet | SEVERE Flooding Wet | SEVERE Flooding Wet | SEVERE Wet Flooding Frost Action | SEVERE Wet Flooding |
| Te ELMRIDGE | SEVERE Wet Slope | SEVERE Slope | SEVERE Wet Slope | SEVERE Slope | SEVERE Slope Frost Action | SEVERE Slope |
| WcA RAYPOL | SEVERE Cutbanks Cave Wet | SEVERE Wet | SEVERE Wet | SEVERE Wet | SEVERE Wet Frost Action | SEVERE Wet |

BUILDING SITE DEVELOPMENT REPORT

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map symbol, soil name | Shallow Excavations | Dwellings Without Basements | Dwellings with Basements | Small Commercial Buildings | Local Streets and Roads | Lawns, Landscaping, and Golf Fairways |
|--------------------------|-------------------------|-----------------------------------|-----------------------------|----------------------------------|----------------------------|--|
| WvB WINDSOR | SEVERE Cutbanks Cave | SLIGHT | SLIGHT | MODERATE Slope | SLIGHT | MODERATE Droughty |

Figure 12

CONSTRUCTION MATERIALS REPORT

Survey Area- HARTFORD COUNTY, CONNECTICUT

| Map symbol, soil name | Roadfill | Sand | Gravel | Topsoil |
|--------------------------|----------------------|----------------------------|----------------------------|--------------------------------------|
| AfB AGAWAM | GOOD | PROBABLE | PROBABLE | POOR Too Sandy Area Reclaim |
| BxA BRANCROFT | POOR Low Strength | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | FAIR Too Clayey |
| BxB BRANCROFT | POOR Low Strength | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | FAIR Too Clayey |
| BxC BRANCROFT | POOR Low Strength | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | FAIR Too Clayey Slope |
| EnA ELMRIDGE | POOR Low Strength | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | FAIR Thin Layer |
| EnB ELMRIDGE | POOR Low Strength | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | FAIR Thin Layer |
| LmA LIMERICK | POOR Wet | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | POOR Wet |
| MnB ELMRIDGE | POOR Low Strength | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | FAIR Thin Layer |
| NrA NINIGRET | FAIR Wet | PROBABLE | PROBABLE | POOR Small Stones Area Reclaim |
| SbA SACO | POOR Wet | PROBABLE | IMPROBABLE Too Sandy | POOR Wet |
| Te ELMRIDGE | POOR Low Strength | IMPROBABLE Excess Fines | IMPROBABLE Excess Fines | POOR Slope |
| WcA RAYPOL | POOR Wet | PROBABLE | PROBABLE | POOR Small Stones Area Reclaim |

WVB WINDSOR

GOOD

PROBABLE

IMPROBABLE
Too Sandy

Wet
POOR
Too Sandy

Wetland Resources

Included in this section are observations of the wetland resources, the impacts that the proposed activities may have on those resources and recommendations for future development of this parcel.

Existing Conditions

Existing, regulated water resources in this portion of Keney Park could be grouped into three categories. First are the watercourses including Meadow Brook and its tributaries. Meadow Brook drains the area of southwest Windsor and northern Hartford, flowing directly into the Connecticut River just north of the Hartford Landfill. Also included in this group are the numerous intermittent watercourses at the upper reaches of the permanent, perennial watercourses. These watercourses flow in response to individual storm events but are usually devoid of water. The second water resource includes the narrow bands of wetlands flanking the upper reaches of Meadow Brook and its tributaries. The third resource group is comprised of numerous, unique vernal pools located west and south of the golf course. Also present are two other small, isolated wetland areas that appear not to be of a vernal nature (see Figure 13 for approximate location of these features).

Wetland Functional Values

Generally, these wetland groups have significant value for many reasons. The fact that they exist among the heavily urbanized environments of Hartford, Windsor and Bloomfield serve to heighten these values even more.

The narrow bands of wetlands flanking Meadow Brook are classic representations of "riparian wetlands". This type of wetland exists as an extension of the watercourse itself. This combined habitat typically supports a very diverse community of plants and animals. In addition to an uncommonly diverse habitat, riparian wetlands serve to "buffer" its watercourse from harmful pollutants flowing in from adjacent upland regions. Similarly, riparian wetlands are often the last defense for capturing sedimentation eroded from adjacent, disturbed areas before they become suspended in the watercourse itself. Lastly, riparian wetlands usually function as a floodplain,

temporarily storing high flows and protecting downstream areas from flooding.

The most unique wetland feature of this site is the numerous vernal pools most of which are located west and south of the golf course. Vernal pools are small, shallow, circular depressions in the landscape which fill with water during periods of high Spring meltwater and storm-water run-off, becoming drier during the warm summer months. True vernal pools also support unusually high levels of wildlife. Much of this wildlife are dependent on these areas for one or more periods of their life cycle. Because of the absence of permanent water, fish do not live in these ephemeral pools, making these areas very attractive to invertebrate and amphibian populations. The possibility that rare and endangered wildlife can be found in these pools is significant. Additionally, being an area of such high biological productivity, vernal pools provide an abundant source of food for upland wildlife species.

Not only do these vernal pools have an exceptional level of biological noteworthiness, but geological significance as well. Refer to the Geology and Soil Resources sections of this report for a discussion of "pingo scars".

Aerial photo interpretation revealed a total of 40 of these pools within the study area, the largest of which is 100 feet in diameter with the majority being 30-50 feet in diameter. This is an unusually high concentration of vernal pools.

Proposed Activities

According to the supplied documentation, the proposed equestrian center will involve the construction of several different types of facilities including barns, riding rings, parking lots, camping areas, a coliseum and buildings for administration, maintenance and security. A rough location of these facilities was also documented.

Impact of Proposed Activities on Watercourses and Wetlands

It appears that a majority of the proposed facilities will not directly impact wetlands as a result of fill placement, excavation or clear-cutting. One area which is of particular concern however is the parking lot, rings, and stables planned for the region just west of the golf course. It appears that construction of these facilities would take place in that area supporting the highest density of vernal pools. Direct

impacts to these wetland areas would destroy their unique wildlife habitat value.

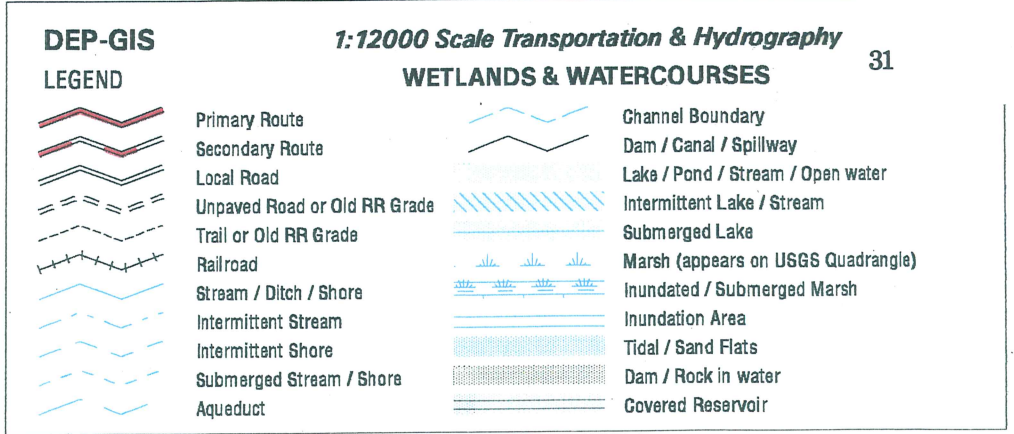
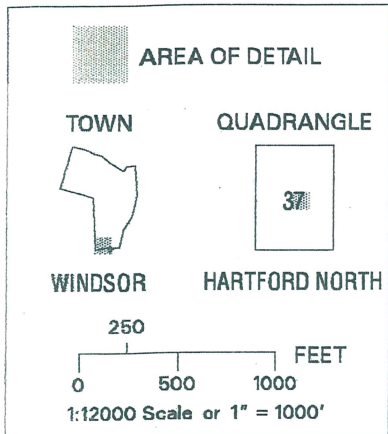
Also of concern are the indirect impacts that may occur to the wetlands and watercourses of this area due to excessive sedimentation resulting from temporarily disturbed soils during construction in adjacent upland areas, improper storm water management, and decreased water quality resulting from improper animal waste handling. The potentially highly erodible nature of some upland soils (see Soil Resource section) in this area should require that construction take place away from steeply sloped areas with adequate erosion and sedimentation control measures installed and diligently maintained. One such construction area is the polo field proposed to be built northeast of Pershing Street.

Many of the proposed features will act to transform what was once a highly pervious surface into less pervious or impervious surfaces (parking lots, roof tops, riding surfaces) producing concentrated areas of stormwater runoff. These conditions require that a proper stormwater management plan be devised. This need becomes even more critical for certain sections of this study area which have highly erodible soils and/or steep slopes, some of which may have restricting layers of clay below the surface further complicating matters.

- Site the facilities to avoid filling or excavation of wetlands and watercourses. This should include the numerous vernal pools on this property as well as any intermittent streams.
- Permanent, undeveloped "buffers" should be maintained between developed areas and wetland/watercourse resources. These setback areas would serve to further protect wetlands and watercourses from potential non-point source pollution (excessive sedimentation, parking lot runoff, animal waste run-off) as well as protect the upland habitat found next to wetlands which provide valuable nesting, feeding and roosting areas for wildlife species utilizing these wetland areas.
- Avoid development in areas next to steep slopes of unconsolidated material leading down to watercourses. Especially avoid the outletting of stormwater onto this type of area.
- Concentrate facilities in areas of previously disturbed, upland areas such as the

former Larado Ranch and the Sherwood Forest Zoo.

- To protect wetland resources, detailed Erosion and Sedimentation Control, Stormwater Management and Waste Handling plans should be included along with any Site Plan of Development. A more detailed wetland delineation map in those areas of proposed development should also be included.

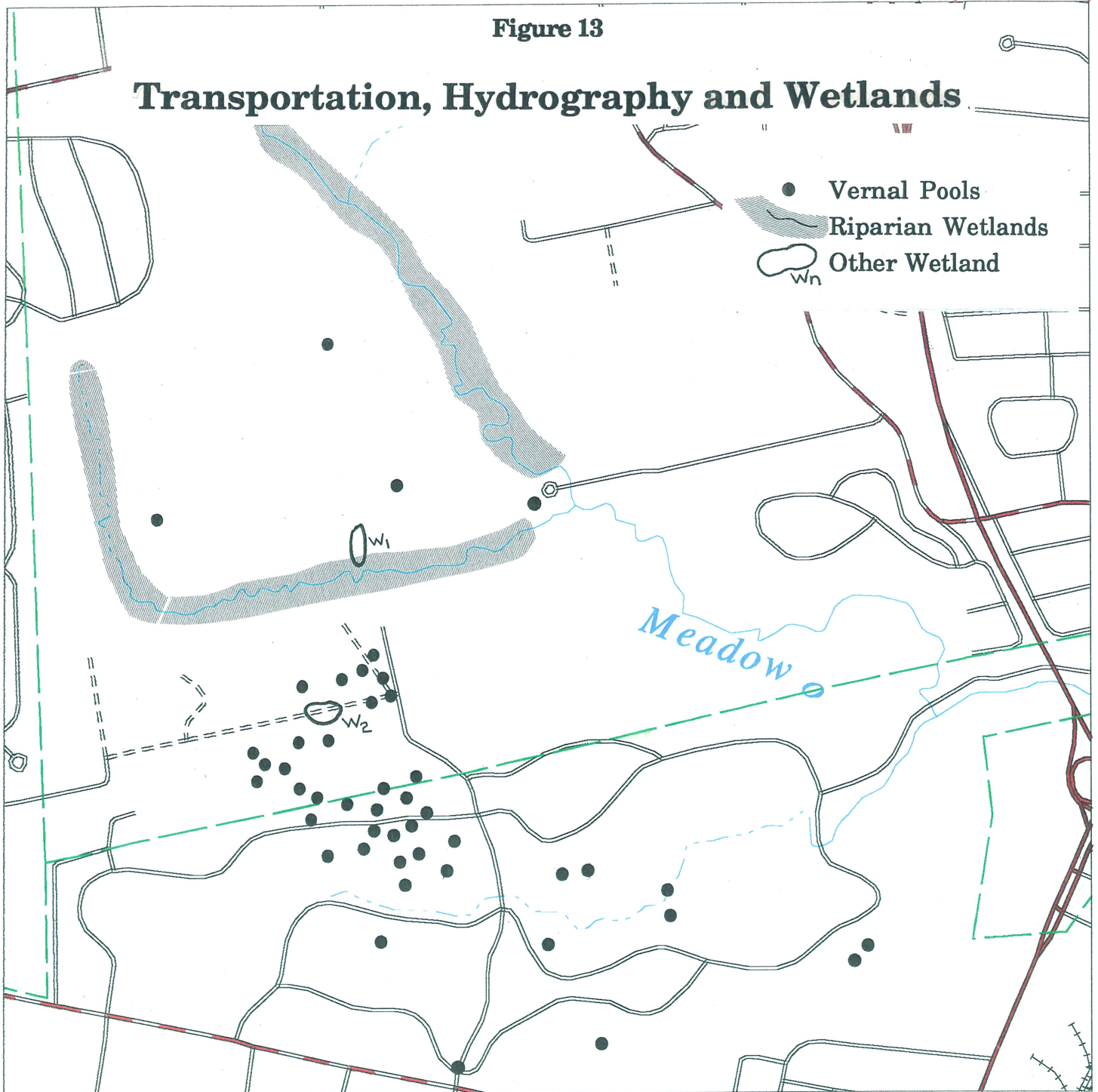


PLOTTED: 11/06/95 10.35.28 GIS

Natural Resources Center, Connecticut DEP

Figure 13

Transportation, Hydrography and Wetlands



Forestry and Vegetation

The review area is approximately 165 acres with 119 acres in Keney Park located in Hartford and Windsor, and 46 acres in Matianuck State Park located in Windsor. The vegetation description for this area can be divided into four main cover types which are: I. Open, one acre, II. Old Field, eight acres, III. Sapling/Poletimber, 31 acres, IV. Sawtimber, 125 acres. The Sawtimber type can be further broken down into IVa. Mixed Hardwood Sawtimber, 121 acres and IVb. Mixed Softwood Sawtimber, four acres.

The distribution of the cover types between the two properties are:

| <i>Matianuck State Park</i> | | <i>Keney Park</i> | |
|-----------------------------|-----------------|-------------------|------------------|
| Type II | 7 acres | Type I | 1 acre |
| Type III | 24 acres | Type II | 1 acre |
| Type IVa | 15 acres | Type III | 7 acres |
| | | Type IVa | 106 acres |
| | | <u>Type IVb</u> | <u>4 acres</u> |
| Total | 46 acres | Total | 119 acres |

These types are described in detail under the heading Vegetative Type Description. In general most of the area is heavily wooded with tree species common to New England.

The unique feature of the site is the historical aspect of Keney Park where the overstory forest was planted over 90 years ago in accordance with the design created by the Olmsted Brothers' renowned landscape architect, Charles Eliot. In an economical sense the value of the wood products in the area range from high to low. Of greater value is the role the forest plays in the region's aesthetics, the storm water storage capacity of the landscape, the wildlife habitat diversity, and the recreational opportunities.

Vegetative Type Description

Type I : Open - This area is an one acre former parking lot located north off of Tower Avenue in the City of Hartford's Keney Park. The parking lot was part of the former Old Sherwood Forest Zoo and is currently used by the City for leaf composting.

Type II : Old Field - This type is comprised of three parcels, one in Keney Park and two in Matianuck State Park. The vegetation present are grasses, sedges, weeds such as clover, golden rod, milkweed, and ragweed. Shrubs present are blackberry, highbush and low bush blueberry, red stemmed dogwood, sweet fern, Japanese knotweed, multiflora rose, staghorn sumac, and winterberry. Vines such as bittersweet, Virginia creeper, grape, greenbriar, and poison ivy are present on the trees and shrubs. Tree seedlings and saplings such as aspen, gray and white birches, red cedar, pin cherry, cottonwood, red maple, pitch and white pines are located around the edge.

Type III : Sapling/Poletimber - This type contains tree growth that are 25 years old or less. Tree species found here are apple, alder, aspen, gray and white birches, black and pin cherries, cottonwood, elm, norway, red and sugar maples, black, pin, red, scarlet and white oaks, sassafras, Tree-of-Heaven, black tupelo, and weeping willow. Shrub species present are elderberry, honeysuckle, mulberry, multiflora rose, and witch-hazel.

Type IVa : Mixed Hardwood Sawtimber - The tree species which make up the canopy of this type are white ash, beech, black, white and yellow birches, cucumber tree, elm, hemlock, hickories, red and sugar maples, white pine, black, pin, red, scarlet, swamp white and white oaks, sassafras, and black tupelo. These trees in the Keney Park are around 100 years old. Trees of this type found in the Matianuck Park are younger due to the past use of the property. The understory contains a variety of seedlings and saplings of the overstory species. Most prevalent are beech, sugar maple and surprisingly cucumber tree. In some areas of the type this species have formed a dense thicket and has excluded other more common species.

Type IVb : Mixed Softwood Sawtimber - This type is located at the entrance to the former Old Sherwood Forest Zoo off of Tower Avenue in Hartford. The four acre stand contains red, scotch and white pine, and hemlock in the overstory. The understory

contains beech and sugar maple saplings and rhododendron.

Management Considerations

The proposed equestrian center if developed will have a significant impact on the present vegetation cover of the site. At least 41 of the 165 total acres will be cleared for the construction of buildings, rings and parking lots. This does not include the area needed for access roads, horse trails or future building expansion. The distribution of the proposed construction and the cover type affected between the two properties are:

Matianuck State Park

| Facility | Cover Type Effected | Present Cover Area |
|-----------------------|----------------------------|---------------------------|
| Parking Lots 14 acres | Type II 2 acres | Type II 7 acres |
| Polo Field 9 acres | Type III 17 acres | Type III 24 acres |
| Rings 1 acre | Type IVa 5 acres | Type IVa 15 acres |
| Total 24 acres | 24 acres | 46 acres |

Keney Park

| Facility | Cover Type Effected | Present Cover Area |
|-------------------------|----------------------------|---------------------------|
| Structures 4.3 acres | Type I 1 acre | Type I 1 acre |
| Parking Lots 9.2 acres | Type II 0 acres | Type II 1 acre |
| Rings 3.5 acres | Type III 3 acres | Type III 7 acres |
| | Type IVa 13 acres | Type IVa 106 acres |
| | Type IVb 0 acres | Type IVb 4 acres |
| Total 17.0 acres | 17 acres | 119 acres |

Type III, sapling/poletimber, would be most affected by the development, 20 of 31 total acres would be cleared. This would reduce the areas diversity of tree age and size class. Although the sawtimber types, IVa and IVb, appear to be less impacted, the development would break up the continuity of the forest cover. This limits the ability to manage the type as a single entity.

Several factors have to considered in the maintenance of a forest. Wetland soils will have the water table close to the surface. This allows for shallow root penetration into the soil which increases the potential for windthrow of trees to occur. Light thinnings of trees on these soils may help to improve the stability of the remaining

trees. Openings and clearings in and along wetlands should be avoided. These soils are more sensitive to such disturbances. Alterations in the wetlands which permanently change the water table and or restrict the natural drainage may have a negative impact on the vegetation in and around these sensitive areas.

The overall management concern for the forest in the construction area should be for the maintaining and enhancing the vegetation remaining. It would be desirable to incorporate the retention of individual trees and clumps of trees and shrubs into the final site plan. These trees and shrubs should be identified and marked on the ground to insure their retention and protection. Plants are quite sensitive to changes in soil conditions. Development activities near trees may disturb the root zone and ultimately affect their health and vigor. Dead and dying trees reduce the aesthetic appeal of the area, become a threat to life and property, and become an expense to remove. Wherever practical groups of trees and shrubs should be retained to reduce the risk of soil disturbance and mechanical injury to the plants.

Trees which are presently unhealthy and not growing vigorously due to crowded conditions and old age are more susceptible to further degradation from the stresses of development activities and environmental factors. It would be beneficial to remove these undesirable trees to reduce the competition with healthier desirable trees for sunlight, water and nutrients. This improvement thinning is designed to allow the remaining trees to improve over time in health, vigor, quality and stability. Properly implemented, these thinnings can also improve the aesthetics of the area, the wildlife habitat and provide wood products.

The sawtimber types, IVa and IVb, in Keney Park are approaching their maximum "average" age. Black oaks, which make up the majority of Type IVa, generally do not live more than 100 to 125 years. As they approach this age their susceptibility to insects and diseases such as Gypsy moth defoliation increases. If it is the desire of the city to maintain oak as a major component of the park, than some form of silvicultural (forest management) activity may be an option that should be explored. Some plans will have to be made to answer the question of what should be done to keep the forest healthy and diverse.

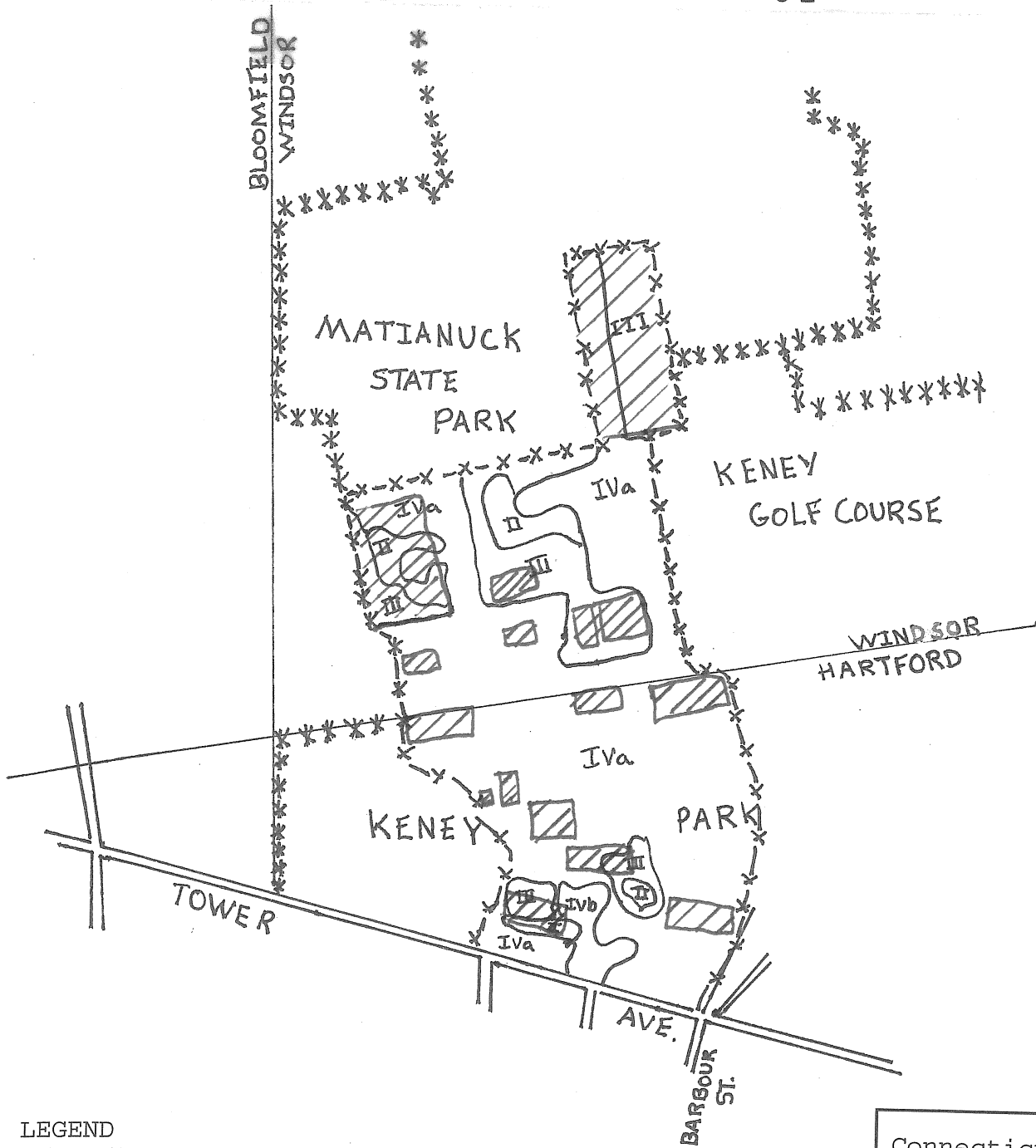
Any tree harvesting, whether it is done for forest management or site clearing, should take into consideration the value of the potential wood products. The proper

marketing of these products should be planned for. A public assistance forester or a private consulting forester may be of assistance in either on the ground planning or the marketing of potential wood products.

Included in this report are publications dealing with protecting trees during construction, improvement cutting, tree hazards in recreation sites and marketing wood products from municipal lands (See Appendix A).

Figure 14

Vegetation Cover Type




LEGEND

IVa COVER TYPE

x-x- SITE BOUNDARY

**** PARK BOUNDARY

 PROPOSED FACILITIES

Connecticut
 Equestrian Center
 ERT
 Hartford & Windsor,
 CT October 1995
 Scale: 1 in. = 1,000 ft.



Wildlife Resources

Introduction

The predominantly mixed hardwood forest and associated vegetation types of Keney Park and Matianuck State Park provide a variety of wildlife with a diversity of habitat components. Large forested blocks, such as Keney Park and Matianuck State Forest, serve as important refugia or reserves for wildlife, especially the forest-dwelling species that are in decline in heavily developed areas.

This report will address the following wildlife resource concerns:

- Current conditions
- Potential local effects of the proposed development on wildlife resources (using limited and general information given by the developers).
- Landscape view: potential regional effects of the proposed development on wildlife resources.
- Suggestions for reducing negative effects of the proposed development on the wildlife resource.

Current Conditions

The following wildlife were directly observed or evidence of their presence was noted by identifying tracks, scat, calls, or other sign: white-tailed deer, red or grey fox, raccoon, woodchuck, moles, gray squirrel, eastern chipmunk, meadow vole, red-tailed hawk, northern cardinal, downy woodpecker, red-bellied woodpecker, northern flicker, american robin, black-capped chickadee, tufted titmouse, mourning dove, american goldfinch, wood thrush, blue jay, american crow, white-throated sparrow and red-backed salamander. Many predicted forest interior migratory bird species were not observed due to the time of the year. The size of the forest on the Keney Park and Matianuck State Park (this includes only the projected development area) is large enough to support a number of forest-interior birds such as red-eyed vireo, black-and-white warbler, ovenbird, worm-eating warbler, and scarlet tanager (Bob Askins, personal communication, October 1995). These bird species decline as forest size shrinks and are fragmented by development. The habitats located in Keney Park and Matianuck State Park are important as stopover

sites for migrating birds that travel up the Connecticut River Valley on their way from the tropics to northern New England or Canada and also during southerly migrations in the fall. Forests in the immediate Hartford area are small and fragmented which increases the importance of the relatively large forest area included in this proposed development as wildlife refugia. Keney Park and Matianuck State Park provide forest wildlife species habitat in an highly urbanized part of the state.

As urban areas become developed, natural areas are divided into smaller, isolated pieces. Land that is in public ownership can be managed for the long term. In contrast, private land, which makes up 88 percent of the land in Connecticut, usually changes ownership and is mostly not managed for wildlife for the long term. Long range management of wildlife habitat that is in public ownership is critical as development reduces large forests to smaller isolated parcels. Wildlife areas close to urban centers are gaining popularity. Public opinion surveys of urban residents of five metropolitan centers in New York State indicated that 96 percent of the respondents felt that it was important for their children to learn about nature and 73 percent were interested in wildlife in their backyard or neighborhood area (Brown et. al. 1989). The forests and fields of Keney Park and Matianuck State Park can serve this purpose with proper planning.

Projected Impacts

(given the current information available about the scope of the development)

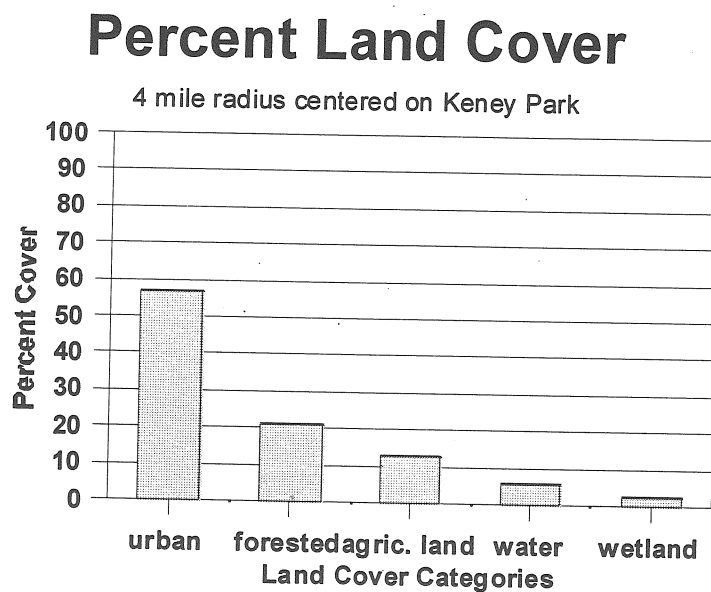
Currently the impacts of the proposed Horse Park are difficult to predict because accurate building locations, road grading, and landscaping regime have not been detailed. From the limited information provided, it can be expected that the removal of vegetation and fragmentation of the forest due to the clearing for buildings, roads, trails and training arenas will decrease the amount of interior forest area. The greater the amount of interior forest present, the better the habitat for interior forest species (especially birds). As the interior forest area is compromised by roads, buildings, parking lots and other developments, parasitic wildlife species such as the cowbird and generalist predators such as crows, blue jays and raccoons will increase and affect the less adaptable wildlife species which require larger unfragmented forests. Many scientific studies in urban wildlife ecology show a strong relationship between small forests and high human use leading to a declining function as

meaningful reserves for area-sensitive wildlife (Bond 1957, Levenson 1981, Hoehne 1981, O'Meara 1984, Askins et. al. 1987). The use of fragmented forests by migrating birds is common, although they may no longer successfully breed in them because of the higher nest predation and parasitism and marginal habitat size (Blake and Karr 1984).

Landscape Level View (see Figures 15 and 16)

Land management decisions affecting wildlife habitat can be aided by looking at the surrounding landscape habitat attributes. When analyzing GIS Landsat data for a four mile radius of Keney Park, it becomes acutely evident that the surrounding landscape is heavily urbanized (Figure 16). Approximately 57 percent of the land in the four mile radius is comprised of an urban landscape category (see Appendix B for DEP GIS statistics). Only 21.1 percent of the landscape coverage is forested. The Keney Park and Matianuck State Park lands are the largest publicly owned forest in the area.

Figure 15



Graph depicting land cover percentages for a 4 mile radius centered on Keney Park, Hartford. Data derived from DEP GIS Landsat data; DEP (see appendix for statistics).

Management Recommendations to Consider

Specific recommendations are difficult to give because of the lack of detailed information supplied, however the following recommendations can be used as guide to reducing wildlife habitat impact.

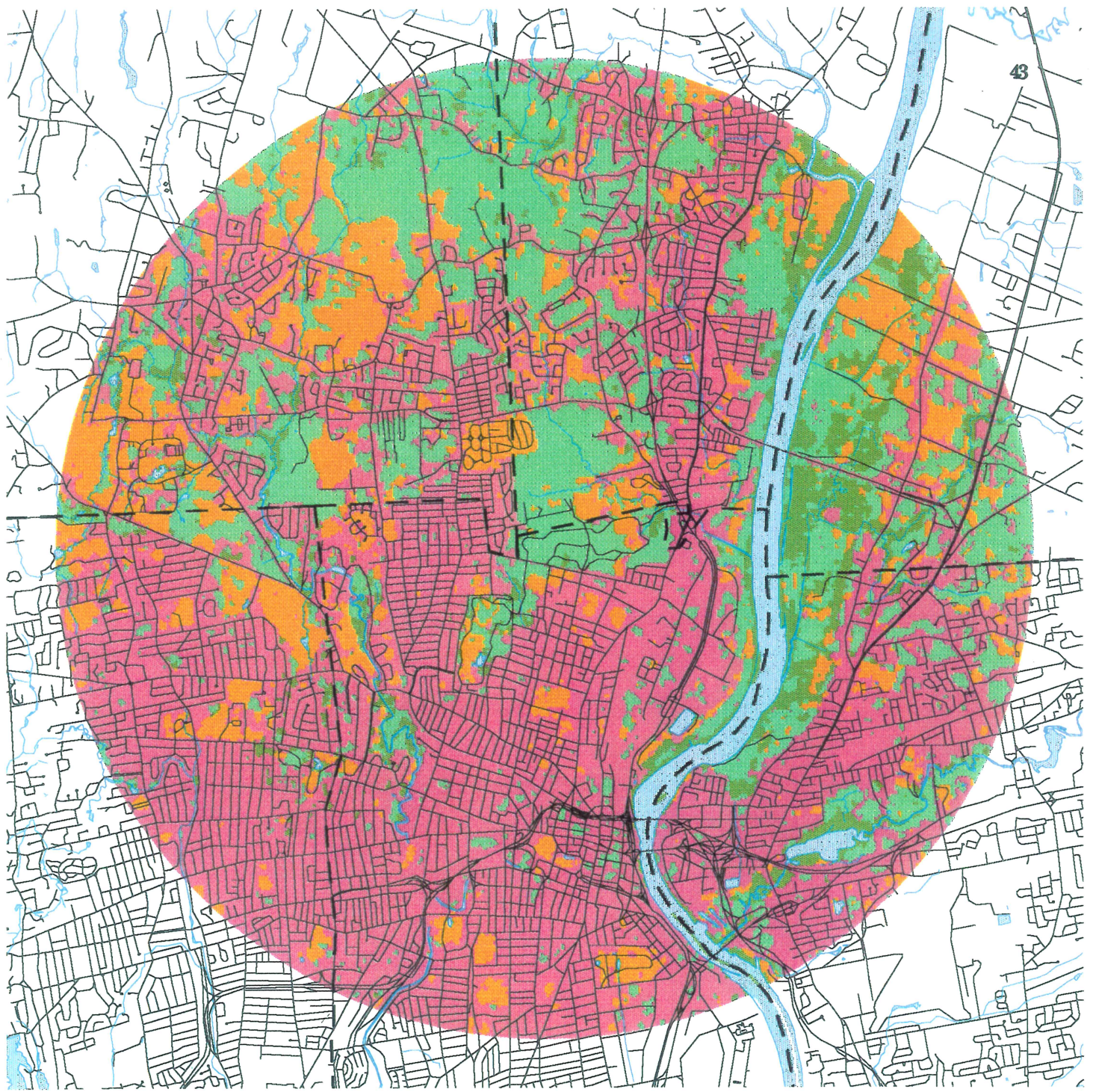
- If the forest cover of the property is to be altered, it should occur along the fringes of the property in order to maintain as large an interior forest as possible. With continued fragmentation of surrounding privately owned parcels, the forested areas of Keney Park and Matianuck State Forest will increase in importance as time goes by. Parking areas, buildings, and roads should be minimized as much as possible and placed along fringes of the forest rather than through the centers of forest blocks.
- Horse riding trails should be designed to have a closed forest canopy over them as much as practically feasible to reduce forest openings.
- Portions of the old field area (currently about 8 acres in size) should be maintained to provide habitat for wildlife using that habitat type. Old field habitats add diversity and should be maintained rather than having closely mowed pasture conditions. Specific recommendations are available upon request.
- Vernal pool areas should be identified and alteration of their immediate surroundings should be minimized.
- If any forest management practices are undertaken they should strictly conform to DEP Forestry Division and Wildlife Division guidelines.
- Nature educational trails and themes should be designed with the expertise of natural resource specialists and education specialists.

A more detailed development plan is required for more specific wildlife related recommendations and impact projections. One major point to consider, as the fate of this public property is planned, is that the majority of land in Connecticut (88 percent) is in private ownership and public land can be managed to maintain habitats that otherwise would not be considered in standard development proposals. The habitats that are part of Keney Park and Matianuck State Park are currently

servicing as wildlife refugia in a heavily urbanized part of the State. Minimizing the affects of fragmentation to wildlife and maintaining sizeable natural areas and using modern wildlife habitat management information should be a priority for publicly owned lands such as Keney Park and Matianuck State Park.

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**Landuse in Keney Park Area
of Hartford, Connecticut
Four Mile Radius around Park**

- Urban
- Forested
- Agriculture
- Wetland
- Water

Figure 16



Fisheries Resources

Site Description

Sections of Meadow Brook and an unnamed Meadow Brook tributary are located on the site within portions of Keney Park and Matianuck State Park proposed for the Connecticut Equestrian Center, Hartford-Windsor. Meadow Brook and the unnamed tributary are low to moderate in grade with surface flow predominated by moving pool interspersed by shallow riffle. Meadow Brook has a channel approximately 10 feet in width having bank full flow depths of averaging 1 foot. The unnamed tributary channel averages 5 feet in width and less than 1 foot in bank full flow depth. Substrate of both streams is composed primarily of coarse sand and sand-silt fines. Physical in-stream habitat is quite limited, provided by undercut banks and fallen woody debris.

Both streams are within watersheds which have undergone extensive development. With the exception of the section of Meadow Brook within Matianuck State Park which remains protected by dense growths of hardwoods and woody shrubs, urban and park development has altered riparian and in-stream habitat. The Department of Environmental Protection has classified this reach of Meadow Brook and its tributary as "Class A" surface waters.

Aquatic Resources

Formal fisheries resource inventories of either Meadow Brook or the unnamed tributary have never been conducted by the DEP Fisheries Division. Physical conditions would classify both streams as cool-water. Based upon surveys of similar streams in nearby watersheds, Meadow Brook and the unnamed tributary are anticipated to contain a fishery assemblage of common shiner, spottail shiner, blacknose dace, longnose dace, white sucker, tessellated darter, and American eel.

Impacts

Additional land use change associated with the proposed Connecticut Equestrian Center have the potential to promote further impacts to aquatic resources of Meadow Brook and the unnamed tributary stream should mitigative measures not be implemented. Anticipated impacts include:

- Soil erosion and subsequent sedimentation through increased runoff from unvegetated areas. Excessive erosion and sedimentation can degrade water quality and in-stream habitats in turn impacting the resident fishery population.

Specifically, excessive siltation has the potential to:

- cause a depletion of oxygen within the water column
- disrupt fish respiration and gill function
- reduce water depth resulting in a reduction of habitats used by fish for feeding, cover, and spawning
- reduce fish egg survival
- reduce aquatic insect production
- promote growths of aquatic plants

- Influx of stormwater drainage may cause aquatic habitat degradation due to the release of “pollutants” from developed areas; such pollutants include gasoline, oil, heavy metals, road salt, fine silts, and coarse sediments.

- Removal of riparian vegetation along stream courses can result in the following:

- remove the natural “filter” effect of vegetation which has the ability to prevent sediment, nutrients, fertilizers, and other non-point source pollutants from upland sources from entry into streams; such non-point pollutants can degrade water and habitat quality
- increase stream water temperature during the summer months (thermal loading) while decreasing winter water temperatures to levels where there may be a complete cover of ice
- decrease streambank stability thereby increasing instream siltation and aquatic habitat degradation
- eliminate or drastically decrease the supply of large woody debris to the stream; such material provides critical instream habitat features for numerous species of aquatic organisms

- reduce a substantial proportion of food for aquatic insects which in turn constitutes a reduction in a significant proportion of food available for resident stream fish
 - stimulate excessive aquatic plant growth
 - decrease of the riparian corridor's ability to serve as a "reservoir" storing surplus runoff for gradual release back into streams during summer and early fall base or low flow periods
- Nutrient enrichment from manure storage areas will stimulate aquatic plant growth.

Recommendations

The following should be considered in effort to mitigate impacts potentially affecting the aquatic resources of Meadow Brook and the unnamed tributary stream:

- Maintain, at a minimum, a 100 foot open space buffer zone along the development's closest encroachment to each watercourse. Activities resulting in alteration of riparian habitat should not be allowed within these zones. Research has indicated that buffer zones of this width prevent damage to aquatic ecosystems as buffers absorb surface runoff and the pollutants they may carry, before they enter wetlands and aquatic habitats. Please refer to documentation which presents Fishery Division policy and position regarding riparian buffers in Appendix C.
- Establish a comprehensive erosion and sediment control plan with mitigative measures (hay bales, silt fence, etc.) to be installed prior to and maintained through all development phases; land disturbance and clearing should be kept to a minimum with all disturbed areas being protected from storm events and restabilized as soon as possible.
- Design and implement an effective stormwater management plan to contain storm water runoff on-site and not be allowed to discharge directly into surface water courses; the stormwater detention basins/ponds should not be constructed in watercourses, rather they should be located in upland areas.
- Manure storage should be contained in a manner which eliminates all potential for

runoff to surface waters.

- Limit any permitted activities adjacent to riparian buffers to historic low precipitation periods of the year; reduced precipitation periods of summer - early fall provide the least hazardous conditions to work near sensitive aquatic environments.
- Limit liming, fertilizing, and the introduction of chemicals to developed land susceptible to runoff into watercourses.

Natural Diversity Data Base

The Natural Diversity Data Base maps and files for the area proposed for development reviewed, and according to our information, there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species occurring at the site in question. However, immediately north of the property is DEP-owned land purchased to protect the post-glacial sand dunes and its associated pitch pine "barren" vegetation (Matianuck State Park). This area and an associated buffer area should be excluded from any development at this site.

Natural Diversity Data Base information includes all information regarding critical biologic resources available to us at the time of the request. This information is a compilation of data collected over the years by the Natural Resources Center's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultation with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact the Natural Diversity Data Base if you have further questions (860-424-3585). Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

State Park Planner Comments

Introduction

The proposed Connecticut Equestrian Center is proposed to be located within a section of Hartford's Keney Park, north of Tower Avenue and west of the existing golf course and cricket fields. A portion of the adjoining Matianuck State Park Reserve also is proposed to be included within the center.

Physical Characteristics of the Site

The site consists of level to gently rolling fluvial soils ranging considerably from well-drained to poorly drained in physical character. Poorly drained areas include floodplain corridors along Meadow Brook and an unnamed tributary stream entering from the west, as well as scattered wet pockets in the area between the tributary brook and Tower Avenue.

Most of the site is heavily wooded with deciduous forest, although old field acreage is seen at the former "Laredo Ranch" in the southern part of the Matianuck State Park Reserve, south of the unnamed tributary brook. Other open areas include a number of small reverting clearings which mark the location of the facilities of the former Sherwood Forest Zoo plus a location just north of Tower Avenue currently used as a leaf composting operation.

Management Constraints

Several factors limit the acreage available for inclusion in the proposed Equestrian Center. By management entity these include:

1. **DEP** - The primary purpose for DEP acquisition for the Matianuck State Park Reserve was to protect the unique post-glacial sand dunes located west of Meadow Brook. Thus DEP's intent, in concert with the Towns of Windsor and Bloomfield which each have a conservation easement on the former Piggard property, has been to manage the area as a natural area preserve with no proposed development of facilities. In addition natural constraints include significant floodplain corridors

along Meadow Brook and an unnamed western tributary which are regulated inland wetlands.

2. City of Hartford - Pre-existing uses with Keney Park north of Tower Avenue include the golf course and the cricket fields and Barbour Recreation Area south of the golf course. These form an eastern limit to the available acreage, with scattered pockets of wetland soil within the proposed center area posing an additional constraint.

Because of these limiting factors, development of facilities other than trails will be limited to acreage south of the unnamed tributary of Meadow Brook, with the sole possible exception of the former "go cart" area north of said tributary. Also, within the area proposed for development, facilities necessarily must be located to avoid the scattered areas of regulated inland wetland.

Proposed Access

Because event participants and spectators are expected to come from throughout the northeast, many with trailers and campers, ready access to major highways is needed. Fortunately exit 34 on I-91 is in close proximity to the proposed site. To minimize traffic impact on park roads, primary public access will be via North Main Street and Tower Avenue, both major arteries capable of handling substantial volumes of traffic, and entering Keney Park at the Barbour entrance off Tower Avenue. A side road leading westerly off the park entrance road will then direct visitors into the Equestrian Center.

A secondary entrance off Windsor Avenue at the so-called Keney Gate will be available for exhibitors and event participants, minimizing their travel on local streets and enabling them to avoid possible traffic congestion at the main public entrance. The volume of traffic generated by these users should not seriously impact park roads or other, preexisting park uses such as the golf course.

Plan Feasibility

The feasibility of this proposed development is dependent on four factors: political, legal, physical-environment, and fiscal, the last of which falls outside the purview of

this analysis. The political factor involves the endorsement of the public entities owning the acreage in question, the City of Hartford and DEP, with Bloomfield and Windsor's support also necessary for the DEP property on which the towns have a conservation easement. So far, Hartford has endorsed the proposal, indicating that the core acreage is available and that the proposed use is acceptable.

DEP has stated that development south of the tributary brook in the former Laredo Ranch probably would be acceptable. In addition temporary use of the former "go cart" area north of the tributary brook by event participant campers may be acceptable, with equestrian trails also a possible use as long as the sensitive sand dune area is avoided. However, the Towns of Bloomfield and Windsor must agree to these proposed uses before DEP can officially endorse a given plan proposal.

The legal factor appears to provide no problems, as reportedly there are no deed restrictions in the gift of the property to the City of Hartford,. Therefore there seems to be no legal impediment to the site's use as an equestrian center.

However, physical and environmental factors do pose certain constraints as discussed above. On the one hand, the site physically seems to be large enough to house a center of the size proposed. On the other hand, wetland areas will require careful siting of specific facilities. Also location of facilities in cleared areas or former clearings to minimize large scale clearance of forest (and likely public protest) also will be necessary. Indeed trees should be retained wherever possible for aesthetic as well as shade provision purposes. Seemingly the proposed development plan recognizes these constraints and guidelines and appears to be environmentally acceptable. However this statement is made with the caveat that a more detailed site plan including mapping of inland wetland areas is needed to ensure the physical feasibility of the site to support this facility.

Land Use and Site Design Compatibility

The proposed project appears well suited to the site. Preliminary development proposals show parking, rings, stables and the arena located in areas that may be capable of supporting the intended use and away from obvious environmentally sensitive areas.

It is suggested that the final design attempt to follow the basic design principles developed by Olmsted, Olmsted and Eliot in their original plan for Keney Park. Of prime consideration might be the development of trails in wooded areas opening up to vistas of broad expanse. Likewise, parking areas should be designed so they blend into the natural landscape rather than becoming dominant elements in the visual mosaic.

Keeping with the objective of designing with natural features, parking lots, rings and trails should be built with pervious materials such as sand and wood chips rather than macadam or cement.

Water Quality

While the proposed use should have minimal adverse impact on surface and subsurface water quality, care should be taken to insure that nonpoint source pollutants such as nutrients, pathogens and sediment are properly managed on-site.

Uses of concern that might generate nutrients include, fertilizer applied to fields and horse urine and manure. Best Management Plans should be developed for field maintenance and animal waste. An adjacent use of the Park is a golf course, also a potential nutrient generator. It is suggested the Horse Park Authority and the golf course manager jointly develop a comprehensive Fertilizer and Pest Management Plan for turf areas.

The reduction or avoidance of impervious surfaces associated with trails and parking lots will help recharge surface runoff and filter out pollutants.

The basic design concept regarding water quality should be use of natural contours and drainage systems to handle water flow rather than designing elaborate engineered systems.

The Horse Park Authority and golf course lease holder should also jointly develop and follow a Stormwater Control Management Plan that addresses water quality as well as quantity.

Open Space/Aesthetics

The proposed use offers wonderful opportunities to provide a much needed recreational facility in a highly developed urban area. The Equestrian Center has the potential to meet all the needs of horse enthusiasts while at the same time retaining the general open nature of the site. Care should be taken to insure that the site plan not only protects the fragile and environmentally sensitive areas but also blends structures and activity areas into the natural landscape. In order to obtain the best design possible, a competition might be held where selected architects and landscape architects are provided small stipends to develop preliminary site plans. The Authority could then pick the best elements of the various proposals and then issue an RFP for the final design based on those desired elements. The Town of Madison recently used this approach quite successfully to obtain a high quality plan for its central business district.

The Horse Center is proposed on a spectacular site and great care should be taken to insure that the Center is developed in a way that is totally respectful of the site's natural resources.

Animal Waste Management

As in any operation where planned confinement and management of animals is anticipated, a well thought out, designed and approved animal waste management system will help to minimize, if not avoid, the pollution potential to on and off-site resources. Preliminary plans for the site call for a variety of potential uses of the facilities by the City of Hartford mounted police, the Ebony Horsewomen and scheduled equestrian events. Other incidental uses for recreation and education have been mentioned and will need to be planned for, if they become part of the overall plan.

The use of the facilities for year round purposes as well as for special events will most definitely create an unpredictable animal waste flow. Animal waste volumes will fluctuate from those short time periods where up to 1,000 horses will be on-site to those periods of time where animals that are stabled the year round, are the only generators of wastes.

Current plans are to have animal wastes collected and transported off-site to a mushroom operation. While this is an excellent use of the materials generated, caution should prevail. Dependence on an off-site facility leaves the plan lacking if an alternative for use or disposal of the waste is not available. Planners will need to keep in mind that a decline in the demand for mushrooms may result in a decreased demand for manure. Additionally, based upon the fluctuation of animal numbers on the property, the generation of the manure will also be on a fluctuating basis. Will a steady stream of manure be required by the mushroom operation, and if so, will this therefore necessitate an on-site storage facility at either the parcel or at the mushroom operation to meet this demand?

There may be another issue of concern in utilizing the manure by the mushroom operation and any other possible user. With the coming and going of groups of horses to the facilities, how will animal wastes be managed for quality of content? Knowing that mushroom operations are reluctant to accept horse manure with certain types of bedding, what would happen if a load of manure was rejected? As with any on-site septic system, the animal waste management system planned and designed for the parcel should have a back up or reserve system planned and ready for implementation.

The animal waste management system needs to consider how animal wastes are going to be collected, transported and stored on-site. This will involve a building design to aid in collection and siting of storage areas. Both long and short term storage should be considered in this planning process. Site layout of buildings, rings and turnout areas should be designed with access road systems so that clean water can be directed away from areas where contamination is possible. Contaminated runoff should be directed toward areas designed for treatment of polluted water.

Additionally, if water used for cleaning of facilities is contaminated, these waters should also be directed to areas for treatment. In the design of the facilities, consideration should be given to areas to be used for the storage of feeds and other materials that could become part of the waste stream. These materials may need to be stored separately from other waste materials, if required, as a condition of utilization of manure.

Regional Planning Comments

- Currently, Keney Park boasts a golf course, cricket fields, and walking trails. At one point in time, the park also hosted a petting zoo, a go cart track, and a few other more active as opposed to passive recreational activities. Adjacent to the Park is the undeveloped, predominantly wooded Matianuck State Park which is ideally suited to hiking trails. The siting of a large scale equestrian facility within the bounds of Keney Park is not expected to interfere with the continuation of the existing uses or the visual aesthetics of the park's surroundings. Indeed, the proposed facility can popularize the park and entice residents of the region to visit the park more frequently.
- As much as possible, the natural landscape should be preserved. Minimal cuts and fills should occur. Structures and rings should be located in open fields, while riding trails can be carved through wooded areas with minimal disturbance. Trees which must be removed can be chipped on site and used for trail beds.
- Food for animals and the public should be stored securely so as to discourage attracting rodents.
- The property should remain under the control of the City with a lease arrangement to the Horse Council (perhaps a 100 year lease?). The use is very compatible with the rural character of the land. Some additional compatible uses could be added at a later point in time to enhance the facility - a petting zoo, an educational agricultural facility, a riding academy for city youth, trail rides for hire, etc. Such recreational activities are in line with the original intent of the park. City students could benefit tremendously if activities were included for them. Perhaps plans for some city youth involvement could be made three to five years into the future once the primary facility is comfortably established and the needs of the community are more well-defined.
- Water hook-up should be made available for the RV camp areas as well as electricity.
- Sufficient bathroom facilities should be planned for event participants.

Traffic Considerations

- Road beds which provide access to the barns should provide traction and be suitable for use by emergency vehicles such as ambulances and fire trucks. A turn-around areas should be provided for these vehicles to exit the site.
- The main entrance to the equestrian facility has been indicated as the park entrance off Tower Avenue. Abutting land uses include residential homes as well as an elementary school. It is expected that a substantial amount of car, van, trailer, camper, and truck traffic would be entering and exiting the park due to normal activity associated with a large equine facility. This traffic mix and increased volume could affect the safety and ease of flow along that stretch of road and conversely may cause inconvenience to the users of the equestrian facility. For these reasons, it is recommended that the horse facility have more than one entrance for car, van, trailer, camper and truck traffic.
- A second access point is important to avoid loss of life or property in case of emergency. The Route 159 access could accommodate both horse and golf enthusiasts if the road was widened or appropriate signage was in place. The other access possible is off either Matianuck Avenue or Tower Avenue. Since horse shows and golf outings share the same season, some accommodations must be made so they can peacefully coexist at Keney Park. However, these recreational uses are compatible and should not interfere with one another.
- Since the facility will accommodate large horse trailers, busses, etc., a turn around areas with a suitable drop off area should be planned. A “lollipop” cul-de-sac design could serve this purpose.
- Interior roads should be widened and otherwise improved to accommodate the larger vehicles expected at this facility.

Economic Benefits

- Many events scheduled for the equestrian facility would require participants and spectators to stay for one to several days, creating a needy market for the lodging, restaurant and shopping facilities of the region. This economic boost would be

welcome. The municipalities of Hartford, Windsor, and Bloomfield may wish to take the lead in assessing which needs can be filled by existing businesses and what zone changes and zoning text amendments they can initiate to accommodate this new market. In addition, local attractions could benefit from the visitors to the equestrian facilities who may be prompted to take in the local sites while in town.

- The creation of an equestrian facility would be an enhancement itself to the list of cultural and recreational activities the region has to offer. Nationally, 2% of all households are horse-owning households, with an average of 2.5 horses per household. In Connecticut, there are approximately 6,000 horses on over 800 farms. The interest in horses and horse-related activities is evident in its many equine businesses, interest groups and clubs. The Capitol Region's Keney Park offers an accessible, central location for the proposed equine event facility.

Traffic Recommendations

It is recommended that a consulting engineering firm be retained to study the following traffic related aspects of the proposed project:

- Existing traffic within the study area.
- Proposed future traffic within the study area (Year 2020).
- Trip generation from proposed facility.
- Impact on State and local roads.
- Review of existing traffic controls.
- Analysis of “needs” for public transportation facilities.
- Development of a traffic management plan for the proposed facility.

Archaeological Review

Keney Park was one of the last design projects developed by renown landscape architect , Charles Eliot in 1895. Eliot prepared a general plan for the layout of the park that was slightly revised by the Olmsted Brothers Landscape Architects (Figure 17) after his death. The plans show a series of roads and footpaths to those areas offering “vistas through glades and woods, and glimpses of distant hills, and in general show(ing) how to utilize for the future enjoyment of the public at the natural advantages of the site” (Eliot 1903). Keney Park, one of the largest municipal parks at the turn of the 20th-century, offered a pastoral landscape for the city residents. Over a million plants were brought to Keney Park to enhance the “rurality” effect.

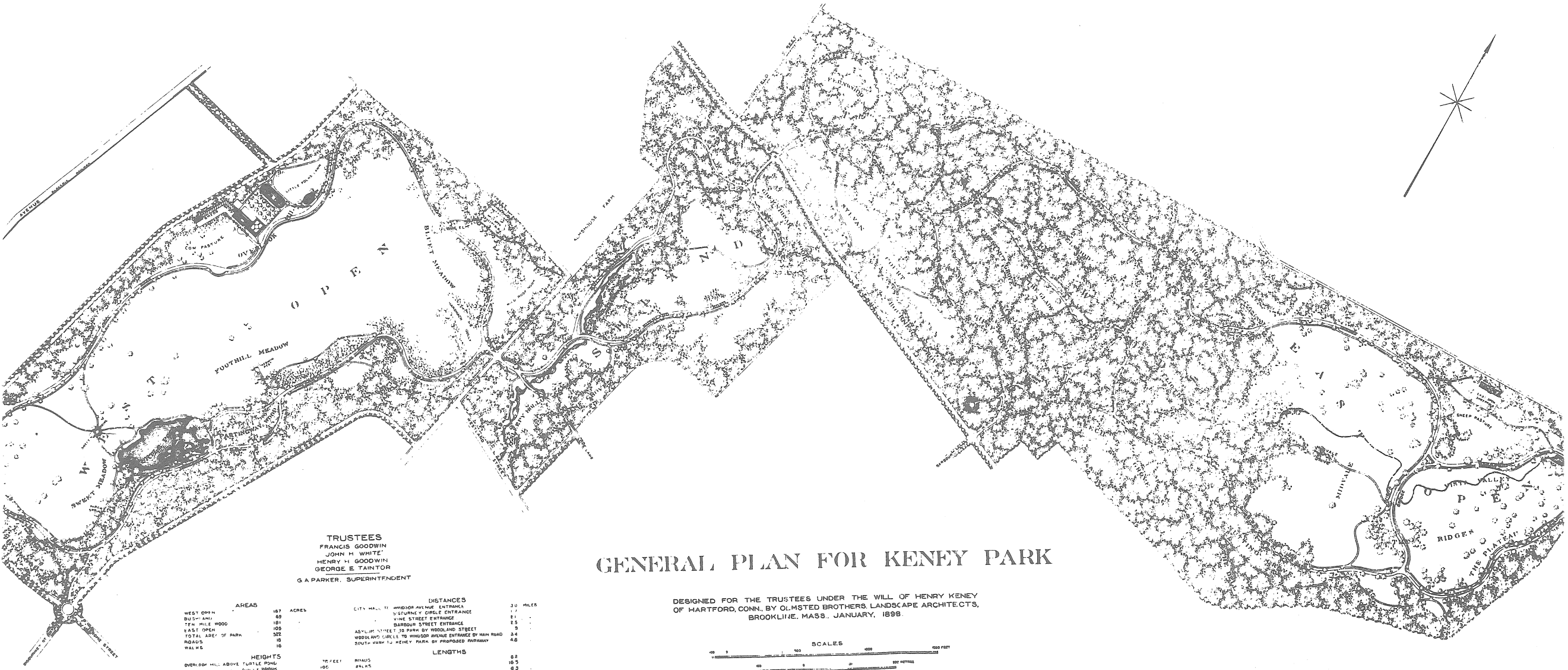
A review of the State of Connecticut Archaeological Site Files and Maps show no known archaeological site within Keney Park. However, areas of elevated, well-drained glacial outwash soils located adjacent to meandering water systems such as Meadow Brook offered important living spaces for prehistoric Native American hunters-gatherers. Keney Park provides landscapes of high sensitivity to the prehistoric settlements. The proposed project area should have minimal effect on these cultural resources. However, the Office of State Archaeology recommends that any construction activities proposed for areas of the park within 200 feet of Meadow Brook, or any other significant wetland, be surveyed for archaeological sites.

Field inspection of the area referred to as the “glacial sand dunes” yielded numerous historic artifacts broadcast throughout the exposed sandy feature. Artifacts recovered include window and bottle glass fragments, ceramics, slag and metal scraps. All cultural materials recovered date to the early-to-mid 20th century, after the park’s development. Historic research and field inspection showed no evidence of a mill or factory on the property. Artifacts appear to have been dumped in the sand dunes area and dispersed by the fragile movements of exposed sand during storms or other natural events. This area is located in the Town of Windsor and does not appear to be associated with the original plans designed by Eliot and later the Olmsted Brothers. The “glacial sand dune” site appears to have no historical significance.

In summary, state archaeological records show no known archaeological site within Keney Park. Hence, the proposed Equestrian Center should have minimal impact on any archaeological sites. However, archaeological settlements of prehistoric hunter-gatherer populations are often located on well-drained, elevated soils similar to those adjacent to Meadow Brook. The Office of State Archaeology recommends that any construction activities within 200 feet of the brook have an archaeological survey conducted to locate any archaeological resources which might exist in the project area. The Office of State Archaeology is prepared to offer any necessary technical assistance should this survey be conducted.

Figure 17

General Plan for Keney Park

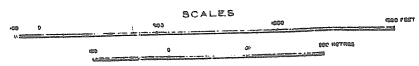


TRUSTEES
 FRANCIS GOODWIN
 JOHN H. WHITE
 HENRY H. GOODWIN
 GEORGE E. TAINTOR
 G. A. PARKER, SUPERINTENDENT

GENERAL PLAN FOR KENEY PARK

DESIGNED FOR THE TRUSTEES UNDER THE WILL OF HENRY KENEY OF HARTFORD, CONN., BY OLMSTED BROTHERS, LANDSCAPE ARCHITECTS, BROOKLINE, MASS., JANUARY, 1898.

| AREAS | | DISTANCES | | LENGTHS | |
|---------------------------------|-----------|--|-----------|--|-----|
| WEST OPEN | 167 ACRES | CITY HALL TO WINDSOR AVENUE ENTRANCE | 3.0 MILES | WINDSOR AVENUE ENTRANCE | 8.5 |
| BUSHLAND | 69 | WINDSOR AVENUE ENTRANCE TO SCURRY'S CIRCLE ENTRANCE | 1.7 | SCURRY'S CIRCLE ENTRANCE | 1.7 |
| TEN HILL WOOD | 101 | WINDSOR AVENUE ENTRANCE TO VINE STREET ENTRANCE | 2.5 | VINE STREET ENTRANCE | 2.5 |
| EAST OPEN | 105 | WINDSOR AVENUE ENTRANCE TO BARBOUR STREET ENTRANCE | 5.5 | BARBOUR STREET ENTRANCE | 5.5 |
| TOTAL AREA OF PARK | 352 | ASYLUM STREET TO PARK BY WOODLAND STREET | 9 | WOODLAND CURVE TO WINDSOR AVENUE ENTRANCE BY MAIN ROAD | 24 |
| ROADS | 10 | WINDSOR AVENUE ENTRANCE TO WINDSOR AVENUE ENTRANCE BY PROPOSED PARKWAY | 4.6 | SOUTH-WEST TO KENEY PARK BY PROPOSED PARKWAY | 4.6 |
| WALKS | 10 | | | | |
| HEIGHTS | | | | | |
| OVERLOOK HILL ABOVE TURTLE POND | 70 FEET | TRAILS | 8.5 | | |
| HEMLOCK | 100 | PARKS | 16.5 | | |
| | | BOUNDARY | 6.3 | | |



Appendix

For Appendix Information please contact
the ERT Office at 860-345-3977

ABOUT THE TEAM

The Eastern Connecticut Environmental Review Team (ERT) is a group of professionals in environmental fields drawn together from a variety of federal, state and regional agencies. Specialists on the Team include geologists, biologists, foresters, soil specialists, engineers and planners. The ERT operates with state funding under the supervision of the Eastern Connecticut Resource Conservation and Development (RC&D) Area — an 86 town region.

The services of the Team are available as a public service at no cost to Connecticut towns.

PURPOSE OF THE TEAM

The Environmental Review Team is available to help towns and developers in the review of sites proposed for major land use activities. To date, the ERT has been involved in reviewing a wide range of projects including subdivisions, landfills, commercial and industrial developments, sand and gravel excavations, elderly housing, recreation/open space projects, watershed studies and resource inventories.

Reviews are conducted in the interest of providing information and analysis that will assist towns and developers in environmentally sound decision-making. This is done through identifying the natural resource base of the project site and highlighting opportunities and limitations for the proposed land use.

REQUESTING A REVIEW

Environmental reviews may be requested by the chief elected official of a municipality or the chairman of town commissions such as planning and zoning, conservation, inland wetlands, parks and recreation or economic development. Requests should be directed to the chairman of your local Soil and Water Conservation District and the ERT Coordinator. A request form should be completely filled out and should include the required materials. When this request is approved by the local Soil and Water Conservation District and the Eastern Connecticut RC&D Executive Council, the Team will undertake the review on a priority basis.

For additional information and request forms regarding the Environmental Review Team please contact the ERT Coordinator: 860-345-3977, Eastern Connecticut RC&D Area, P.O. Box 70, Haddam, Connecticut 06438.