COMMUNITY FORESTRY MANAGEMENT AND STREET TREE MASTER PLAN

Township of West Windsor Mercer County, New Jersey

SUB-ELEMENT OF THE CONSERVATION PLAN ELEMENT

ADOPTED BY THE WEST WINDSOR SHADE TREE COMMITTEE FEBRUARY 24, 2000

Prepared by: March Associates Landscape Architects, P.C. In conjunction with Daniel Dobromilsky, Township Landscape Architect and the West Windsor Shade Tree Committee

January 6, 2000

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MUNICIPAL INFORMATION FORM

County: **County of Mercer** Address: P.O. Box 38 271 Clarksville Road Princeton Junction, NJ 08555 Contact Name and Title: Dan Dobromilsky, CLA, Township Landscape Architect Phone #: 609/799-2400 **Organization Name: West Windsor Shade Tree Committee** Mayor's Signature: Carole A. Carson Date of Management Plan: January 6, 2000 Time Period Covered in Management Plan: March 1, 2000 to February 28, 2005 Community Stewardship Incentive Program (CSIP) practices identified in your management plan: OCID #4 Dian Dran 0015 #0 T : :

•	CSIP#1	Plan Preparation	CSIP #2 Training
•	CSIP#3 CSIP#5	Public Awareness and Education	CSIP #4 Arbor Day Activities
•	CSIP #5	Assessment/Inventory	CSIP #6 Tree Hazard Identification
		755C55TTCTTZ TTVCTTCT Y	Plan
•	CSIP#7	Tree Planting	CSIP #8 Tree Maintenance
	CSIP#9	Tree Recycling Tree-Care	CSIP #10 Ordinance Establishment
•	CSIP#11	Disaster Plan	CSIP #12 Insect and Disease Management
_	CSIP#13		CSIP #14 Other
•	C31P # 13	Other	

Official Use Only Certification

Municipality: Township of West Windsor

The above named community has made formal application to the New Jersey Forest Service. I am pleased to advise you that after our review, the NJ Forest Service has concluded that the plan meet the standards set forth by the State and the NJ Community Forestry Council and is approved for the period covered.

Signed		 1 1 - 8 - 0 0	
	State Forester	 Approved Date	

2.1 INTRODUCTION

INTRODUCTION

The Township of West Windsor has prepared this Community Forestry Plan for the purpose of formalizing the organization of past, current and future programs related to the community's street trees and woodland areas.

Through the process of preparing this Plan, the Township was able to devise a clear, concise set of goals and objectives and to schedule the accomplishment of an action plan related to the objectives over the next five years. This Plan shows the commitment of the Township to trees, the landscape, and woodland preservation, and moves toward the goal of avoiding accidents and injuries, Elm Trees Along Washington Road and obtaining liability protection for damage or injury, caused by trees.



To some, the concept of an urban forest may appear something of an anomaly, and indeed, it stretches credulity to apply such a designation to the sparse greenery found in most of New Jersey's urban centers. In the case of urbanizing communities such as West Windsor, however, the situations somewhat more encouraging. Most, though not all, of our preurban forests are still intact, and efforts to preserve and expand them should be a prime objective of the community at large.

-Ron Rogers, News Article

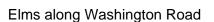


Specimen Tree at Cyanamid

The mission of the Community Forestry Program of the Township of West Windsor is to pro-actively expand, protect, and maintain street trees, landscaping, and natural woodland areas within our community, promote awareness of these resources, and to develop and manage an integrated open space and recreation system of greenbelt and parks in order to promote the health, safety, and welfare of our citizens.

In order to accomplish this mission, the Shade Tree Committee, the Environmental Commission, the Township Landscape Architect, the Director of Community Development, and the Public Works Department work together with the Mayor, Township Council, Planning Board, and Zoning Board. This dedicated group of volunteer and paid professionals ensures that existing trees, whether they be located in public parks, along public streets, or in publicly owned woodlands, are generally healthy, and do not present any obvious characteristics that may be hazardous to person or property. In addition, they are actively working to increase the actual numbers, acres, and quality of these individual trees and woodland areas.

The mission of the Community Forestry Program includes integration of this "green infrastructure" into the fabric of the community by weaving recreational activities, educational tools, emotional inspiration, and beauty together with the tree and woodland resources. By design, the result will increase the quality of life for township citizens, and bring about an awareness of these resources and their value. This will, in turn, encourage the citizens in the community to become involved in the promotion and protection of the present and future community forestry resources.





GOAL #1

Review and formally adopt current Township community forestry policies, and organize all shade tree and woodland resource management programs and processes within the Township of West Windsor.

Objectives:

- A. Re-establish the Shade Tree Committee with active and enthusiastic members in accordance with the Shade Tree committee ordinance adopted December 20, 1999.
- B. Prepare and adopt a Community Forestry Plan which provides a vision for the Township of West Windsor, illustrates the organization of parties involved in community forestry, discusses goals and objectives, and lists action items to achieve the goals for a five year period covering March 1, 2000 to February 28, 2005.
- C. Design and adopt master landscape plans for public areas of the Township of West Windsor.
- D. Review and update the landscape portion of the Site Plan Ordinance of the Township of West Windsor relative to current goals of the township review boards and recent advances in landscape design and installation techniques.

GOAL #2

Document the type, location, extent, and condition of all community forestry resources within the Township of West Windsor.

- A. Conduct an inventory of all individual trees and woodlands located within public rights-of-way, parks, and public facilities with the Township, record a body of specific information about each tree, and document the information using a standard database that allows easy updates, retrievals, sorting, and to the extent practical, coordinate with the Township's G.I.S. system.
- B. Delineate all woodland areas and forest stands (in both public and private ownership), collect specific information at random sample points, and document the information using a standard database that allows easy updates, retrievals, sorting, and to the extent practical, coordinate with the Township's G.I.S. system.
- C. Create a list of trees that may be hazardous and in need of prompt maintenance.

GOAL #3

Develop a plan and schedule for ongoing, routine maintenance of community forestry resources.

Objectives:

- A. Prepare a formal maintenance schedule that allows for regular, routine maintenance to sustain community forestry resources on a rotating basis within the maintenance budget of the Township.
- B. Develop an estimate of personnel, hours, and costs needed to provide adequate community forestry management and identify a highly qualified private contractor or Township employees that will be responsible for completing the work.
- C. Coordinate with the tree inventory to create a system for evaluating trees on a regular basis and tracking maintenance activities and dates using a standard database that allows easy updates, retrievals, and sorting and to the extent practical, coordinate with the Township's G.I.S. system.
- D. Adopt correct procedures for tree pruning, details for replacement of walkways that have been heaved by tree roots, and pest identification and treatment, and disseminate the information to maintenance personnel and to interested community residents.
- E. Review the recycling program as it relates to the reuse of leaves collected by the Township, mulching pruned bark and limbs, and cut trees.

GOAL #4

Develop a formal public relations campaign to foster volunteer participation in support of community forestry activities.

- A. Plan a standard format for the community Arbor Day Celebration that is widely advertised, well funded, and incorporates community volunteers, organizations, and leaders.
- B. Advertise community forestry milestones with emphasis on participation of specific community groups and leaders by issuing press releases to newspapers, radio, and television stations and through the Township's website and community bulletin board.
- C. Identify existing volunteer organizations, and/or form new volunteer organizations, that will participate in community forestry activities, create specific opportunities for them, and recognize their effort in formal public ceremonies.
- D. Foster tree planting and maintenance projects by Boy Scouts, Girl Scouts, Eagle Scouts, school programs, and other youth organizations.

 E. Maintain and foster relationships with the Lions Club, Rotary Club and the Friends of West Windsor Open Space as sponsors of community forestry program

GOAL #5

Provide educational programs and tools to the community to promote the selection of appropriate tree species and proper tree maintenance on public and private property.

Objectives:

- A. Achieve and maintain core training for shade tree personnel as required under the Community Forestry Act.
- B. Provide continuing education for West Windsor Township tree care professionals as required under the Community Forestry Act.
- C. Disseminate information about tree care and pruning to the community and tree care professionals through local newspaper articles and the Township's website and bulletin board.
- D. Design and implement an arboretum within the Township of West Windsor where the community can learn about the appropriate tree species selection and placement for new tree plantings.
- E. Review school lesson plan programs offered by tree organizations and consider interaction with the school district to implement them into the curriculum.

GOAL #6

Prepare a natural disaster plan to address the impact of community forestry destruction and debris in the event of an emergency.

- A. Identify areas of the community that have the greatest potential to be impacted by fallen trees and debris during a natural disaster and develop a plan that identifies anticipated personnel and actions necessary to restore safe conditions, control public access to the affected area, and clean up debris.
- B. Develop a system to prioritize emergency cleanup based on input by emergency officials, public utility officials, and local disaster relief organizations.
- C. Develop specific methods for cleanup, identify equipment and personnel that is required for the cleanup, and devise a notification system in the event of an emergency.
- D. Identify any special equipment or additional personnel that is needed to accomplish cleanup in a reasonable amount of time with no apparent risk to the health, safety, and welfare of the community and notify the Township Council of the need for special acquisitions or reservations.

GOAL #7

Plan for the appropriate allocation of community forestry resources and efforts to the street rights-of-way, greenbelt system, public open space areas, and public parks.

- A. Prepare Land Management Plans in conjunction with the Township Recreation Commission and Environmental Commission for each publicly owned open space tract, including the greenbelt system, which clearly defines landscape type and cover, management goals, maintenance tasks, and a maintenance schedule.
- B. Develop one public open space (such as the planned arboretum) specifically to accommodate regular community forestry events and provide a central bulletin board to advertise forestry programs.
- C. Strategically plant trees and woodlands in and around civic, social, and open spaces to promote interaction between the community and forest resources.
- D. Provide trees and woodland plantings to augment the greenbelt, reinforce circulation patterns, define spaces, and buffer land uses within the public realm, in accordance with the recommendations established by the Land Management Plan and/or Master Landscape Plan for each open space tract.
- E. Seek supplemental sources of funding for community forestry activities
- F. Develop a formal process and brochure for the Memorial Tree Donation and other Community Forestry Programs.

3 INTRODUCTION

LIABILITY STATEMENT

Street trees are an asset to the community. Because they are living organisms, it is inevitable that they will mature and require care, maintenance, and eventually, replacement. Care and maintenance, in addition to planting "the right tree in the right place", can help insure that community trees not only contribute to the environmental and economic vitality of the area, but also reduce the potential hazards to public safety.

Our community must work within a reasonable budget, which requires maintenance of portions of West Windsor Township on a rotating schedule. Therefore, it is the primary intent of this plan to focus available resources on the greatest need and develop a phased maintenance plan prioritized by need. The result will be a healthy community forest with commensurate reduced risks to public safety.

The Township, by taking logical steps outlined in this plan, hopes to garner public support for plan implementation and demonstrate the long-term benefits of trees and woodlands to the environment, and the public health, safety, and welfare of persons residing in the environment.

The Township is committed to a pro-active approach in the management and care of our trees. Through inventory and hazard assessment, the Township Shade Tree Committee will be able to recommend.

Following this plan will demonstrate that the corrective action prior to structural tree failure and other hazardous tree related conditions. It is acknowledged that not all hazardous conditions will be predicted and that with good maintenance and care the Township can reduce the probability of unanticipated events. To the extent that the Township can predict hazardous situations from developing, the Township is committed to doing so, but unexpected events will still occur.

Township of West Windsor is devoting reasonable levels of resources in a planned manner to reduce the number of tree related accidents and thereby reduce exposure to liabilities and increase public safety.

COMMUNITY HISTORY

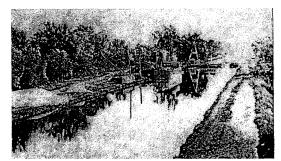
The Township of West Windsor was formed in 1797 by a division of the "Township of Windsor" into East Windsor and West Windsor. Several more changes in Township lines over the years resulted in the boundary of West Windsor that we know today.

West Windsor is one of thirteen municipalities in Mercer County, and is bounded by Princeton, East Windsor, Plainsboro, Hamilton, and Washington Townships. It covers approximately 26.84 square miles (16, 830 acres) and has been designated a "Tree City" by the National Arbor Day Foundation every year since 1979.

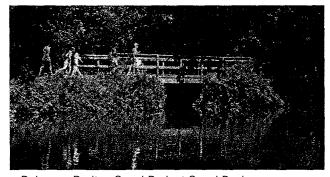
The Delaware and Raritan Canal, which plays a large role in the history of the area, forms the eastern boundary of the Township. The D&R Canal State Park is now an important recreational resource for West Windsor.

The Princeton Junction Rail Station is also important to the economic success of the area, both currently and in the past. West Windsor benefitted from both canal and rail transportation, and both elements play an important role in West Windsor today.

Although West Windsor was mainly agricultural, other industries related to the canal and commerce were located here during the time when the canal was functioning as a commerce route. These include basket making businesses, a coal yard, a lime kiln, and a sawmill. Coal, lumber, and produce were the major exports of West Windsor in the 1880's.



Coal Barge Unloading Near Alexander Street c. 1886 Photo provided courtesy The Princeton Corridor Rotary Club



Delaware Raritan Canal Park at Canal Basin Photo provided courtesy The Princeton Corridor Rotary Club

3.1 COMMUNITY OVERVIEW

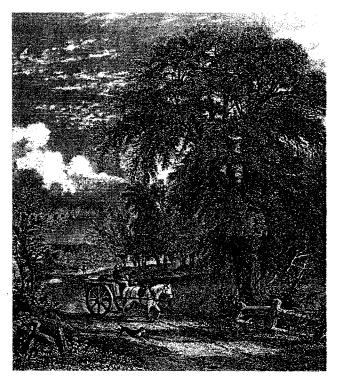


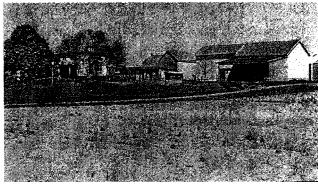
Photo provided courtesy The Princeton Corridor Rotary Club

3.1 COMMUNITY OVERVIEW

The Township of West Windsor remained largely agricultural until the 1960's, when an economic boom transformed the Township. Growth and settlement since that time have resulted in the patterns of development evident today.

At the time of European colonization, much of New Jersey was covered by native deciduous, hardwood forest. The settlers cleared most of that from the 17th to the 19th century to use for fuel, building materials, and to make way for agriculture. The woodlands that remained were generally located in areas that were difficult to access, such as wetlands.





Appleget Farm
Photos provided courtesy The Princeton Corridor Rotary Club

THE GREEN BELT PLAN

A Municipal Environmental Inventory was completed in 1974, categorizing forest types with the Township. In 1974, the West Windsor Environmental Commission, recognizing the forest infrastructure as a critical environmental asset of the community, initiated work on a plan designed to provide at least minimal protection for these forested areas.

After several years of work, the Commission published a <u>Green Belt Plan</u>, which was adopted in 1977 and was last updated in 1991. The plan specified an interconnected system of woodlands, wetlands, and open space that would form a continuous corridor of at least 400' in width throughout the Township.

The green belt would consist of nine conservation areas, seven associated with streams, and two overland connectors, The Commission envisioned that the overland corridors would be reforested, making use of tree species indigenous to the Township, as identified in the Natural Resource Inventory.

The Commission also identified upland forest nodes which were non-contiguous with the main corridors, and recommended their acquisition. Finally, the Commission urged acquisition of a substantial land tract which could be used for active recreation.

The West Windsor Municipal Greenbelt Plan was the first of its kind in New Jersey and has served as a model for other communities in the State. Twenty years after it's adoption, the Greenbelt itself is a reality.

At a macro level, West Windsor's forest infrastructure is arguably its most valuable asset. The loss of a significant portion of this infrastructure would have a most deleterious impact upon the character and ambiance of the community.

-Ron Rogers, News Article



THE MASTER PLAN

The Master Plan for West Windsor was last revised and adopted in 1986, but is currently undergoing a revision. The 1986 Master Plan contains a <u>Recreation, Conservation, & Greenbelt Plan</u>, as a sub-element to the <u>Community Facilities Plan</u>. A section called <u>Natural Environment Policies</u> is included there.

During completion and adoption of the new Master Plan, the <u>Community Forestry Management and Shade Tree Plan</u> will be adopted as a sub-element of the <u>Conservation Plan</u> element.

The aesthetic, educational, and recreational values of natural areas can all be justified by their enhancement of the quality of life for individuals in the Township. Each of us could surely add to such obvious examples of the aesthetic pleasures provided by nature as the attractiveness of a fine stand of trees, the beauty of mallows and wild roses on a May morning. It is the quiet enjoyment of such things as these and hiking, bird watching, canoeing, botanizing, or photography which publicly owned natural areas could provide for the many citizens who are not interested in using the Township's active sports facilities. For educational purposes these areas are important, too. The growing necessity for students to have a better understanding of the natural world and man's dependence on it is served by the preservation of areas where school children can witness the way an ecosystem works. They need to be able to experience at first hand the relationship between all the links in the chain of life.

Not only would natural areas preserve our varied plant life, but they would provide the necessary habitats for our numerous species of wildlife, since many of these species are incapable of adapting to the changed environment of developed areas. The opportunity to observe and enjoy wild birds and animals can bring pleasure to many people's lives. As energy problems increase, and extended travel to state and national parks becomes more restricted, nearby natural areas will gain in value to residents of communities which have been sufficiently foresighted to provide them.

-Memorandum from Martha Taylor and John Greene to the Environmental Commission 4/16/1976 taken from the Greenbelt Plan

THE OPEN SPACE & RECREATION PLAN

A new Open Space & Recreation Master Plan was completed in October, 1999. This plan will be adopted as an element of the newly revised master plan.

Currently, about 5,000 acres of the total 16,830 acres of land area in West Windsor is conserved, either publicly or privately, as open space and/or recreation. This represents approximately 30% of the Township.

The Mercer County Park is located within West Windsor, and makes up about 15% of the total land area of the Township. Another 9.5% is conserved as open space by West Windsor. About .7% is made up of Township parks, and about 3.3% of the total land area is owned as private open space. Another 19% of the land area is undeveloped farmland, and about 49% of the Township's land area is developed. The Community Forestry Plan will play a vital role in supporting the management and maintenance of the landscape within this open space system.

THE SHADE TREE COMMITTEE

West Windsor first formed a Shade Tree Committee in 1977. The Committee was active until it was abolished in 1993 as the result of a change in the form of government. When the charter was rewritten, the Shade Tree Committee was no longer authorized. Instead, the Environmental Committee formed a subcommittee called the "Forestry Committee", which took on the functions of the Shade Tree Committee.

Recently the Township of West Windsor decided to re-establish the Shade Tree Committee, and the Township Council voted on a resolution doing just that, which became effective December 20, 1999. See Appendix A. With the re-establishment of the Shade Tree Committee, the Forestry Committee was abolished.

The new Shade Tree Committee is composed of five volunteer members, appointed by the mayor with the advice and consent of the Township Council. The new Shade Tree Committee members were appointed in. January, 2000.

EXISTING STUDIES RELATING TO COMMUNITY FORESTRY

The <u>West Windsor Township Shade Tree Survey of July, 1977</u> listed tree species, diameter, relative condition, interferences, disease, injury, and recommendations for replacement.

Another informal tree survey was conducted by shade tree and forestry volunteers between 1992 and 1995. A comparison of the summary of the 1977 survey with the 1995 survey is shown below.

Total Number of Street Trees Counted

1977: 3,025 1995: 7,758

Most Prevalent Tree Species

1977: Pin Oaks (13% of total) 1995: Pin Oaks (14% of total)

Exotic/Invasive Tree Species

1977: Norway Maples (1 f% of total) 1995: Norway Maples (10.6% of total)

These two tree inventories provide a history of the types and quantities of street trees that have been present over time. However, the height, diameter, and condition of the trees were not recorded. A new tree inventory would provide a valuable base line for future comparison of the growth rates and survival of various street tree species, as well as documenting current conditions of this aspect of this community forest.

A great diversity of vegetation types in West Windsor Township is apparent on this distribution map. Diverse ecosystems are known to be more resilient to environmental disturbance than are ecosystems characterized by one or two dominant species. The maintenance of a wide spectrum of vegetative types helps to ensure the perpetuation of native wildlife species. Extensive area of natural vegetation contribute to the general environmental quality of the entire Township. Lush vegetation and dense root structures conserve soil by slowing runoff and erosion. Leafy vegetation and aquatic plants extract and utilize common air and water pollutants. Large stands of mature woodland help to moderate the local climate by breaking the force of winds and trapping heat reradiated from the earth's surface at night. The scenic value of naturally diverse vegetation makes West Windsor Township an aesthetically pleasing place to live.

-Ron Rogers, News Article

Both surveys show that the largest category of trees is pin oaks. It is expected that a new tree survey will reveal a lower percentage of pin oaks, as their use was reduced after the 1992 survey.

The second largest category of street trees listed in the 1977 survey is Norway Maple trees. Norway Maples also comprise a large percentage of the total trees listed in the 1992 survey, although the percentage decreased. This is an improvement, since Norway maples are an exotic/invasive species and tend to be somewhat short lived due to their tendency for self-girdling roots.

Some of the most common exotic/invasive plant species in the Central New Jersey area are:

Common Name	Latin Name	
Japanese Red Maple	Acer japonicum	
Tree-of-Heaven	Ailanthus altissima	
Multiflora Rose	Rosa multiflora	
Burning Bush	Euonymus alatus	
Russian Olive	Eleagnus angustifolia	
English Ivy	Hedera helix	
Wild Reed	Phragmites australis	

These plants tend to invade nearby native stands of woodlands, out competing the native trees and resulting in a monoculture. Indeed, there is some evidence of infestation by Norway Maple trees in woodland areas located in West Windsor. A new inventory would allow a comparison of the number of Norway Maple trees left in the Township, along with their size and health. An inventory of natural woodland areas would reveal information about the invasion of exotic/ invasive species.

A document called <u>Comprehensive Master Street Tree Plan</u> was prepared in 1979. This publication is now out of date, but was used as the foundation for community forestry by the Township for many years. It served as the basis for some of the landscape ordinances that are in effect today.



Red Maples along New Village Drive



Street Trees along Penn-Lyle Road

EXISTING ORDINANCES

A private, consulting landscape architect was hired to review site plans in 1985. Shortly after that, a landscape ordinance was prepared by the consultant (Mellilo & Bauer) and adopted in 1986. This ordinance is one of the most comprehensive landscape ordinances in the State of New Jersey, and has been used as a model for other municipalities. At this time, however, there is a need to revise and update that ordinance.

The ordinance includes provisions for the documentation and preservation of existing trees and woodlands as well as new landscape requirements for development applications.

The current landscape architect has been working in the Township of West Windsor for approximately 14 years (consultant and staff) using the existing ordinance and has a great deal of experience with enforcement of the ordinance during land development. Based on this experience, the ordinance is in need of minor refinement and updating.

The Shade Tree Committee is responsible for oversight of the community forestry management program, in consultation with Township staff, administration, development review boards, Environmental Commission, and Department of Public Works, who play key roles in support of the program. The Township Staff Landscape Architect/Tree Expert is responsible for administration of these programs.

The Shade Tree Committee consists of five volunteer members, appointed by the Mayor, with the advice and consent of the Township Council. As per the enabling ordinance, the Shade Tree Committee has the following powers:

- "Establish Township policy for the regulation, planting and care of shade and ornamental trees and shrubbery now located or which may hereafter be planted in any public right-of-way, park and all other property owned by the Township..."
- "Advise the Township concerning the appropriate use of the ground surrounding shade and ornamental trees and shrubbery in so far as may be necessary for their proper growth, care and protection."
- "Encourage proper arboriculture practices throughout the Township."
- "Encourage desirable horticultural planting and In order to request shade tree maintenance activities throughout the Township and particularly or services, residents may call the Township on public properties."
- "Administer Arbor Day activities within the Township."
- "Develop a community forestry and shade tree master plan for the Township, including a tree inventory and tree disaster plan."
- "Recommend to the Planning Board plans and programs for inclusion in the municipal master plan for the development and use of public land and right-of-way."

One member of the Environmental Commission is now a member of the Shade Tree Committee. This provides for a liaison between the two groups, allowing them to coordinate activities. This joint member will write provide regular activity reports to the Environmental Commission and the Shade Tree Committee and coordinate interactive projects.

The Department of Public Works provides services and support, including a landscape and grounds crew, and is composed of 4 employees. The Department is capable of providing only very basic services at this time. Generally, an outside, private contractor is called in for tree maintenance jobs. The private contractor is chosen by competitive bid for a term contract every year. The budget for community forestry services in 1999 was \$54,779.00.

In order to request shade tree maintenance or services, residents may call the Township or fill in a *Resident Request* form, included in Appendix B. If a resident makes the request and estimated date of completion are by telephone, a member of the Township staff will record the conversation on the form.

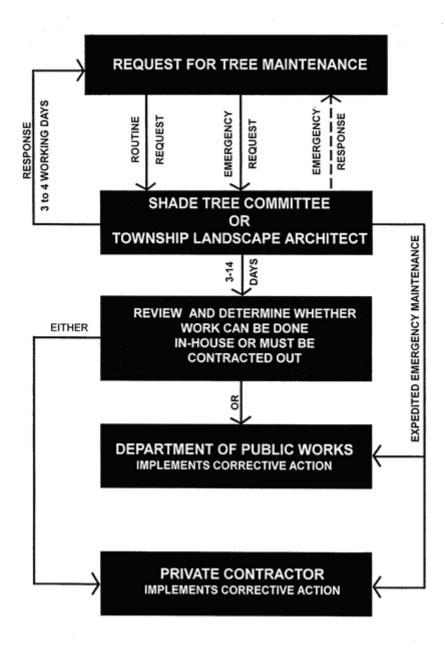
As shown on the form, the service request is then routed according to the flow chart

shown in Exhibit 1. Routine tree maintenance service requests from the public are received by the Township Landscape Architect, a Certified Tree Expert, and are processed in the order received. The Township Landscape Architect reviews the request to determine what work needs to be done and whether that work can be performed in-house by the Department of Public Works. If so, a request is forwarded to the Department of Public Works, and the work is performed in a timely manner relative to the severity of the problem, the season of the year, and available funding.

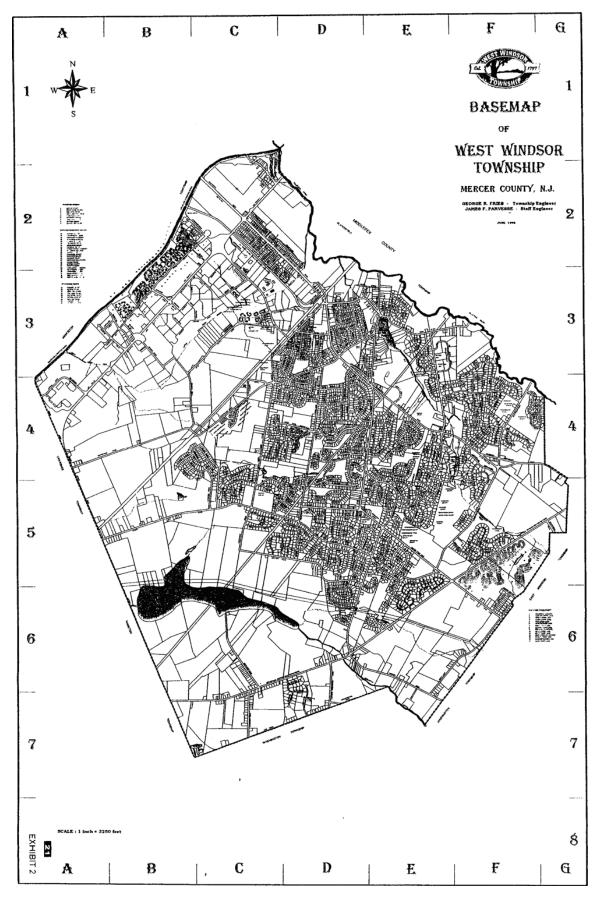
If the work is outside the scope of the Department of Public Works, a work order is sent to a private contractor. The private contractor performs the work in a timely manner to minimize potential hazards and relative to the severity of the problem.

The Township Landscape Architect responds personally to the resident or business that made the request either in writing or by a phone call within 14 days of the request. However, most requests are reviewed and an initial response is offered within 3 working days. The nature of work to be performed and estimated date of completion are determined and appropriate action by maintenance personnel is requested.

If the problem is deemed an emergency, expedited actions are implemented.



5 COMMUNITY MAP



6 TRAINING PLAN

One staff member and one volunteer have completed CORE training on behalf of the Township of West Windsor. They are:

- 1. Dan Dobromilsky, CLA, CTE
 - Township Landscape Architect
- 2. Kevin Appelget, Volunteer
 - Shade Tree Committee
 - Environmental Commission

They completed CORE training at the Shade Federation in October, 1999. Continuing Education Credits shall be maintained, with funding included in the yearly budget of the Shade Tree Committee. To maintain certification, one volunteer and one staff person must attend CORE Training.

Sources for gaining Continuing Education Credits are:

- Education sessions offered by the American Society of Landscape Architects.
- National Arborist Association sponsored programs.
- International Society of Arboriculture programs.
- Shade Tree Federation annual meeting education sessions.
- Courses offered by the Rutgers Continuing Education Program.
- Other education sessions and courses available from suitable organizations.

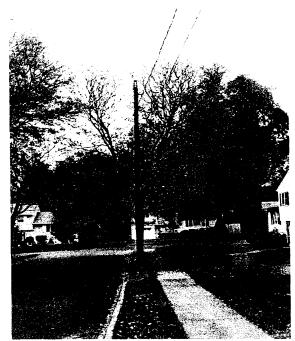
In the future, the Township of West Windsor may be able to provide CORE training to each of the Shade Tree Committee members. The opportunity to take the course will be offered to untrained members based upon available funding and schedules. In addition, there are approximately two other staff members within the Department of Public Works that may participate in the CORE training. The Shade Tree Committee will attempt to achieve CORE training and continuing education for each of these Tree personnel.

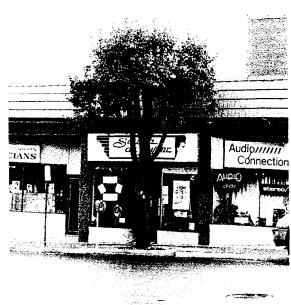
In addition to the CORE course, the need for training in specific areas has been identified. These are:

- Tree inventory skills.
- Tree planting methods.
- Tree pruning.
- Sidewalk/tree conflict repair.
- · Natural disaster and emergency planning.
- Tree disease and insect problems and current methods of control.

In order to meet be able to provide expertise in each of these areas, specific personnel will be identified to become proficient in one of the topics listed above. The topics will be prioritized, and when funding are available, these personnel will be asked to participate in seminars or short courses on the topic assigned.

6 TRAINING PLAN





LARGE TREES SHOULD NOT BE PLANTED UNDER UTILITY LINES. IMPROPER PRUNING OF TREES CAN LEAD TO THEIR DECLINE.

TREES PLANTED IN URBAN CONDITIONS NEED ADEQUATE SOIL VOLUMES AND DRAINAGE, AND SHOULD BE CHOSEN FOR URBAN TOLERANCE.

Public education, awareness, and outreach are seen as an important part of the success of the Community Forestry Plan in West Windsor. Public education will result in better placement and maintenance of trees on public and private land in the Township. Public awareness will result in strong community support for future Community Forestry fiscal budgets and grants. And public outreach will forge strong relationships with volunteers and community organizations, which will result in the implementation of new planting, programs, and activities.

Public education, awareness, and outreach for community forestry has been somewhat limited since the original Shade Tree Committee was abandoned. Arbor Day is the most reliable annual event, and is regularly celebrated. Community groups such as the Boy Scouts, the Lions, and the Rotary Club have been directly involved in the event.

The Township of West Windsor has been Tree City USA for the last twenty years, one of only three within the State of New Jersey.

The Township also implemented an informal "Memorial Tree Planting" program in Township parks that should be formalized.

Another opportunity for public relations includes exhibiting at local community festivals.

Members of the community that can be targeted for more involvement in community forestry activities are students and seniors.

The Shade Tree Committee will play a major role in formalizing and organizing public education, awareness and outreach for community forestry through the formation of Subcommittees for <u>Public Relations</u> and <u>Education</u>. Ideas for programs are provided in Section 9, Statement of Plan Implementation. The Subcommittees should organize programs, identify costs for formulation of a budget, and document the processes and programs sufficiently that new members can easily follow what was done the previous year.

The development of a Township arboretum offers tremendous opportunities for public education and outreach. In addition to the display of trees and woodlands, the arboretum could be programmed to:

- Become the focus of Arbor Day and Memorial Tree programs.
- Include a kiosk for display of posters and bulletins disseminating tree program and technical information.
- Include a natural reserve center for education programs in concert with school programs.

The budget in West Windsor for community forestry is not simple to define and document. Budgeted dollars are distributed over several departments under a variety of categories.

The Township utilizes several funding sources. There is a <u>Public Lands Maintenance Fund</u> that provides money for maintenance, replacement planting, and other projects that contribute to community forestry. Other funding sources include the operating and capital budgets of the departments of:

- Community Development
- Environmental Commission
- Public Works
- Recreation
- Engineering.

In 1999, \$63,352.00 was spent on tree maintenance and installation and is broken down as follows:

Tree purchase/installation	\$44,402.00
Tree maintenance (contracted)	\$ 4,950.00
Tree maintenance (Public Works)	<u>\$13,997.00</u>
	\$63,352.00

Generally, volunteer hours are not documented. For the purpose of matching funds for grants, the Township predominantly uses cash as the match, rather than volunteer labor. Since the opportunity to use volunteer labor could save the Township money, a system for documenting volunteer hours should be implemented. This is especially true since many volunteers and employees are already committing volunteer time to community forestry work.

The conservation of areas of natural vegetation, both as woodlands and floodplains, is the first step in preserving a healthy environment. It is on this foundation that all animals, including man, depend. All plant life, especially deciduous trees, makes an essential contribution by providing oxygen, cleaning the air of pollutants, slowing the rate of runoff in heavy rains, and preventing erosion. Woodlands also act as windbreaks, natural thermostats, and mufflers of noise, the last two functions becoming more and more important as development increases. The vegetation of floodplains plays a vital part as a natural filter system cleaning our streams and rivers. Because natural areas perform essential functions in preserving the environment, each community should provide them in land-use planning.

-Memorandum from Martha Taylor and John Greene to the Environmental Commission 4/16/1976 taken from the Greenbelt Plan

The statement of plan implementation is a series of specific actions that will be used to implement the goals and objectives of the Community Forestry Plan over the five years covered by the Plan. Each action item is listed along with the year in which it is projected to be accomplished, and who will be responsible for carrying out the specific action.

The action plan for years one through three are more specific than the action plans for

years four and five. This is because actions in the latter years of the plan are based on actions in the former years of the plan, and are subject to change. Action plans in the latter years should be revised at the beginning of the action year to reflect accomplishments in the previous years.

Some items in the plan are ongoing and/or they are action items that must be done yearly. Those items are listed under every year of the plan. As the five year time frame of this plan ends, a strategic planning session between all of the parties involved in community forestry issues should be scheduled. The purpose of that meeting should be to revisit the goals and objectives in this plan and to develop an updated Community Forestry Management and Shade Tree Master Plan for the next five years.

As with any action plan, it is important to place one person in charge of the task, with several other people to carry out tasks that lead to the completion of the action item.

Setting deadlines and time limits for the accomplishment of the task is also critical to success. It is not easy to fulfill an aggressive agenda with volunteer help, as

citizens must often fit the delegated tasks into a busy family and work life. Therefore, reasonable goals should be set, with plenty of time for volunteers to do their jobs.

In the case of special projects and grant writing, it is critical to plan well ahead, know when the grant applications are coming out so that volunteer help can be scheduled will in advance, and be organized. It is also best to limit the number of projects to those that can be reasonably accomplished with the resources available, so that they can be completed in a high quality way.

Plan of Action for Year One - March 2000 to February 2001

In the case of special projects and grant writing, it is critical to plan well ahead, know when the grant applications are coming out so that volunteer help can be scheduled will in advance, and be organized. It is also best to limit the number of projects to those that can be reasonably accomplished with the resources available, so that they can be completed in a high quality way.

Action	Team
1. Develop responsibilities and duties for the Shade Tree Committee. A. Organize Shade Tree Committee B. Review Committee duties, procedures, and projects and establish priorities C. Identify a yearly budget D. Identify outside funding sources	Shade Tree Committee Planning Board Mayor Town Council Township Landscape Architect Director of Community Development
and compile a list of grant opportunities with contact information and application timetables	Township Landscape Architect March Associates Landscape Architects Shade Tree Committee
E. Apply for community forestry grants on a regular basis	Mayor Town Council Township Engineer Director of Community Development
2. Set up an inventory system for street trees.	
 A. Decide which characteristics to inventory 	
B. Set up a spreadsheet using Microsoft Excel and G.I.S.	Township Landscape Architect
C. Conduct an inventory in a pilot	·
area to test the system	March Associates Landscape Architects Environmental Commission
 D. Enter the inventory data into the computer 	LIIVII OI II II GII (ai Ooi II II II I I I I I I I I I I I I I I
E. Sort the data to be sure the	Mayor
inventory system is adequate	Town Council
F. Delineate the Township into	Township Engineer
phased inventory areas using a	
street map	

3. Set up an inventory system for open space trees.

- A. Decide which parameters to inventory
- B. Set up a spreadsheet using Microsoft Excel and G.I.S.
- C. Conduct forest structure analysis in a pilot area to test the system
- D. Enter the inventory data into the computer
- E. Sort the data to be the inventory system is adequate
- F. Delineate forest stands within the Township into phased inventory areas

4. Begin street tree and open space tree inventories based on the above developed procedures.

- A. Conduct a training session with the Shade Tree Committee and any inventory volunteers before beginning work
- B. Each time a "hazard" tree is noted in the inventory, the Township Landscape Architect will be notified immediately

5. Prepare a formal community forestry management schedule.

- A. Use the delineated, phased, inventory areas to define areas of the Township that will be maintained on a cyclical basis
- B. Prepare the routine tree replacement and maintenance task checklist
- C. Establish maintenance details for special situations such as correction of sidewalk heaving by tree roots
- D. Calculate the amount of time it will take to perform routine maintenance for each phased area
- E. Decide who will do the work and budget the time and money for the work
- F. Publish this information in a maintenance manual in a format that

Township Landscape Architect Shade Tree Committee Environmental Commission Volunteers

Mayor

Town Council

Township Landscape Architect Public Works
Department Private Contractor

Mayor Town Council

Township Landscape Architect Director of Community Development Shade Tree Committee

Mayor Town Council can be easily modified

6. Review the Arbor Day Celebration and make improvements in future Arbor Day Celebrations.

- A. Review past celebrations to determine what improvements can be made to the event
- B. List advertising and press opportunities that are available
- C. List sources of funding and prepare a letter requesting regular funding in the Township's yearly budget
- D. Identify community organizations that can be included in the event
- E. List opportunities for involvement (specific projects) of community organizations and contact the organizations to find out if they are interested in participating
- F. Determine the location for the event
- G. Appoint a subcommittee with a leader and a schedule to organize the event

7. Maintain continuing education units (CEU's) as called for in the Community For estry Act.

- A. Identify the person in charge of tracking CEU's for the Township
- B. Identify the personnel eligible to qualify for CEU's
- C. Set up a form for tracking the CEU's each year and develop the approval process for obtaining funding for the education programs Township

8. Design an arboretum for the Township.

- A. Identify and acquire the land to develop the arboretum
- B. Prepare design drawings for the arboretum with phasing and costs
- C. Gain approval for the drawings by the

Landscape Architect
Public Works Department
Shade Tree Committee

Mayor Town Council

Director of Community Development
Township Landscape Architect
Shade Tree Committee
Friends of West Windsor Open Space
Arboretum Committee

Mayor Town Council Township's Governing Body and by community residents

9. Apply for Tree City USA.

A. Assemble data necessary to complete the application and to document compliance

with the four standards:

- Standard 1 A legally constituted tree body
- Standard 2 A community tree ordinance
- Standard 3 A community forestry program with an annual budget of at least \$2 per capita
 - Standard 4 Arbor Day proclamation and planting
 - B. Submit application

10. Prepare a land management plan for the open space and greenbelt system in the Township based on the inventory information and projected land use.

- A. Develop a system to name and identify properties
- B. Decide on the desired use and land cover for each property
- C. Determine how the land should be managed

Director of Community Development Township Landscape Architect Shade Tree Committee

Mayor Town Council

Township Landscape Architect Private Contractor
Shade Tree Committee
Environmental Commission

Planning Board Mayor Town Council

Shade Tree Committee
Township Landscape Architect

Plan of Action for Year Two - March 2001 to February 2002

Action	Team
Action	Township Landscape Architect
 Seek outside funding sources. 	Volunteers
A. Apply for community forestry grants on a	Private Contractor
regular basis	
Continue inventory of street trees.	Mayor
A. Inventory a percentage of the	Town Council
Township based on the Inventory plan	
prepared in Year One	
B. Analyze the partial inventory results	
C. Provide a list of hazard trees identified	Township Landscape Architect Environmental
during the inventory to the maintenance personnel for inclusion in high priority	Commission Volunteers
personnel for inclusion in high priority maintenance schedule	Private Contractor
	Mayor Town Council
3. Begin inventory of open space trees.	Town Council
Inventory a percentage of the Township based	
on the Inventory plan prepared in Year One	Township Landscape Architect Public Works
A. Analyze the partial inventory resultsB. Provide a list of hazard trees identified	Department Private Contractor
during the inventory to the maintenance	
personnel for inclusion in high priority maintenance schedule	Mayor
maintenance schedule	Town Council
4. Begin ongoing, routine community forestry	
management schedule.	
A. Evaluate maintenance procedures in	
the field to ensure that they are being	
done correctly; modify any	
maintenance details and procedures,	
as necessary	Township Landscape Architect
B. Continue with routine maintenance	Shade Tree Committee
of phased areas of the Township with	Mayor
changes implemented after evaluation	Town Council
E Implement changes and impressements to	
Implement changes and improvements to the annual Arbor Day Celebration.	Township Landscape Architect
A. Continue the Arbor Day	Public Works Department
subcommittee with a leader and a	Shade Tree Committee
schedule to organize the event	
	Mayor
	Town Council

6. Maintain continuing education units (CEU's) as called for in the Community Forestry Act.

- A. Identify the yearly need for CEU's for the Township
- B. Identify the personnel eligible to qualify for CEU's
- C. Track the educational program opportunities available and match them with the needs of the Township

7. Begin master landscape plans for key public areas of the Township.

- A. Identify key streets, town centers, gateway ntrances, parks, medians, and public spaces for inclusion in the master landscape plan
- B. Identify phasing for development of the landscape plans

8. Begin phased construction of an arboretum for the Township.

A. Complete design drawings for Phase I Construction

9. Review and update the landscape portion of the Site Plan Ordinance.

- A. Identify portions of the ordinance that need revision
- B. Work with the planning board to revise those portions of the ordinance

10. Advertise community forestry milestones.

- A. Establish a public relations subcommittee with a leader
- B. Identify a list of press opportunities and contacts
- C. Publish the results of the partial tree and woodland inventories in the newspaper and at the Arbor Day Celebration
- D. Promote the Arbor Day Celebration
- E. Advertise the progress of Arboretum development

Director of Community Development Township Landscape Architect Shade Tree Committee

Mayor Town Council

Director of Community Development
Township Landscape Architect
Shade Tree Committee
Recreation Department
Township Engineer

Mayor Town Council

Township Landscape Architect Shade Tree Committee Mayor Town Council Planning Board

Township Landscape Architect Shade Tree Committee

Mayor Town Council

Director of Community Development Township Landscape Architect Shade Tree Committee F. Advertise the routine maintenance schedule

Mayor Town Council

11. Apply for Tree City USA.

A. Assemble data necessary to complete the application and to document compliance with the four standards:

- Standard 1 A legally constituted tree
- Standard 2 A community tree ordinance
- Standard 3 A community forestry program with an annual budget of at least \$2 per capita
- Standard 4 Arbor Day proclamation and planting
- B. Submit application

Shade Tree Committee Township Landscape Architect

Plan of Action for Year Three - March 2002 to February 2003

Action	Team
Seek outside funding sources.	Township Landscape Architect
A. Apply for community forestry grants on a	Volunteers
regular basis	Private Contractor
Continue inventory of street trees.	Mayor
A. Inventory a percentage of the Township	Town Council
based on the Inventory plan prepared in Year	
One	
B. Analyze the partial inventory results	
C. Provide a list of hazard trees identified	Township Landscape Architect
during the inventory to the maintenance	Environmental Commission
personnel for inclusion in high priority maintenance schedule	Volunteers
maintenance schedule	Private Contractor
	Mayor
3. Continue inventory of open space areas.A. Inventory a percentage of the Township	Town Council
based on the Inventory plan prepared in Year	
One	
B. Analyze the partial inventory results	
C. Provide a list of hazard trees identified	
during the inventory to the maintenance	
personnel for inclusion in high priority	Township Landscape Architect
maintenance schedule	Public Works Department
ateranee eeneaare	Private Contractor
4. Continue ongoing, routine maintenance	Mayor
schedule.	Town Council
A. Evaluate maintenance procedures in	
the field to ensure that they are being done	
correctly; modify any maintenance details	Taumahin Landasana Azakitaat
and procedures, as necessary	Township Landscape Architect
B. Continue with routine maintenance of	Shade Tree Committee
phased areas of the Township with	Mayor
changes implemented after evaluation	Town Council
	10mii Oddiidii

5. Continue the annual Arbor Day Celebration.

A. Continue the Arbor Day subcommittee with a leader and a schedule to organize the event

6. Maintain continuing education units (CEU's) as called for in the Community Forestry Act.

- A. Identify the yearly need for CEU's for the Township
- B. Identify the personnel eligible to qualify for CEU's
- C. Track the educational program opportunities available and match them with the needs of the Township

7. Develop master landscape plans for key public areas of the Township.

A. Design drawings for Phase I

8. Continue phased construction of an arboretum for the Township.

- A. Complete construction documents for Phase II construction
- B. Implement previous phases as budget Allows

9. Finish revisions to the landscape portion of the Site Plan Ordinance.

A. Work with the planning board to revise the landscape ordinance

10. Advertise community forestry milestones.

- A. Continue public relations subcommittee
- B. Publish the results of the partial tree and woodland inventories in the newspaper and a the Arbor Day Celebration
- C. Promote the Arbor Day Celebration
- D. Publish the progress of Arboretum development
- E. Publish the progress of public landscape plans and implementation
- F. Advertise the routine maintenance schedule
- G. Publish award of grant monies

Township Landscape Architect Public Works Department Shade Tree Committee

Mayor

Town Council

Township Landscape Architect Shade Tree Committee

Mayor

Town Council

Township Landscape Architect
Shade Tree Committee
Friends of West Windsor Open Space
Arboretum Committee

Mayor

Town Council

Planning Board

Township Landscape Architect Shade Tree Committee

Planning Board Mayor

Town Council

Township Landscape Architect Shade Tree Committee

Mayor

Town Council

- H. Develop a list of community leaders and volunteer organizations that have contributed to Community Forestry efforts within the Township and give publicly recognize them at the Arbor Day Celebration
- I. Develop a formal program and brochure for the Community Memorial Tree Donation Program

11. Disseminate information about tree care and pruning to the community.

- A. Form a subcommittee with a leader that can take responsibility for develop and follow through with a formal education program in the Township
- B. Identify a list of existing publications from public sources that can be distributed to the community
- C. Identify ways to disseminate the information such as quarterly seminars by tree care professionals, the Townships website, direct mail, etc.
- D. Identify individuals and groups that would benefit from the information and the best way to communicate with them

12. Prepare an natural disaster emergency plan for the community.

 Appoint a subcommittee with a leader or hire an outside contractor to prepare the emergency plan

13. Review the recycling program.

- A. Request a review of the current recycling program by the Public Works Department and the Environmental Commission
- B. Submit recommendations to the governing body
- C. Document the recycling plan for the Township

14. Apply for Tree City USA.

A. Assemble data necessary to complete the application and to document compliance with the four standards:

Township Landscape Architect Public Works Department Shade Tree Committee

Mayor Town Council

Township Landscape Architect Public Works Department Shade Tree Committee

Mayor

Town Council

Township Landscape Architect

Public Works Department
Shade Tree Committee
Mayor
Town Council
Town Council
Director of Community Development Township
Landscape Architect
Shade Tree Committee
Shade Tree Committee
Mayor
Town Council

Plan of Action for Year Four - March 2003 to February 2004

 Seek outside funding sources. A. Apply for community forestry grants on a regular basis Complete inventory of street trees. A. Complete the tree inventory and analyze the final inventory results B. Provide a list of hazard trees identified 	Township Landscape Architect Volunteers Private Contractor
A. Apply for community forestry grants on a regular basis Complete inventory of street trees. A. Complete the tree inventory and analyze the final inventory results	Private Contractor
 A. Apply for community forestry grants on a regular basis 2. Complete inventory of street trees. A. Complete the tree inventory and analyze the final inventory results 	
A. Complete the tree inventory and analyze the final inventory results	
A. Complete the tree inventory and analyze the final inventory results	Mayor
the final inventory results	Town Council
·	Tayyanahin Layada sana Ayahita at
B. Provide a list of hazard trees identified	Township Landscape Architect
	Environmental Commission
during the inventory to the maintenance	Volunteers
personnel for inclusion in high priority	Private Contractor
maintenance schedule	Mayor
	Town Council
3. Complete inventory of open space areas.	
A. Complete the woodland inventory and	
analyze the final inventory results	
B. Provide a list of hazard trees identified	Township Landscape Architect
during the inventory to the maintenance	Private Contractor
personnel for inclusion in high priority	Shade Tree Committee
maintenance schedule	Environmental Commission
l. Implement the Land Management Plan for the open space and greenbelt system in the Township based on the inventory information.	
A. Design planting plans for supplemental	
and/or reforestation planting as identified in	
the Land Management Plan	
. Continue the ongoing, routine community forestry nanagement	
schedule.	Township Landscape Architect
A. Evaluate maintenance procedures in the	Public Works Department
field to ensure that they are being done	Private Contractor
correctly; modify any maintenance details	
and procedures, as necessary	Mayor
B. Continue with routine maintenance of	Town Council
phased areas of the Township with changes	

implemented after evaluation

6. Continue the annual Arbor Day Celebration.

A. Continue the Arbor Day subcommittee with a leader and a schedule to organize the event

7. Maintain continuing education units (CEU's) as called for in the Community Forestry Act.

- A. Identify the yearly need for CEU's for the Township
- B. Identify the personnel eligible to qualify for CEU's
- C. Track the educational program opportunities available and match them with the needs of the Township

8. Continue master landscape plans for key public areas of the Township.

- A. Design drawings for Phase II
- B. Implement previous phases as budget allows

Township Landscape Architect Shade Tree Committee

Mayor

Town Council

Township Landscape Architect Public Works Department Shade Tree Committee

Mayor

Town Council

Director of Community Development Township Landscape Architect Shade Tree Committee

Mayor

Town Council

10. Advertise community forestry milestones.

- A. Continue public relations subcommittee
- B. Publish the final results of the tree and woodland inventories in the newspaper and at the Arbor Day Celebration
- C. Promote the Arbor Day Celebration
- D. Advertise the Arboretum development progress

Director of Community Development Township Landscape Architect Shade Tree Committee Friends of West Windsor Open Space Arboretum Committee

Mayor

Town Council Planning Board

- E. Publish the progress of public landscape plans and greenbelt planting plans and implementation along with calls for volunteers for reforestation planting programs
- F. Advertise the routine maintenance calendar
- G. Publish award of grant monies
- H. Develop a list of community leaders and volunteer organizations that have contributed to Community Forestry efforts within the Township and give publicly recognize them at the Arbor Day Celebration
- I. Advertise the Community Memorial Tree Donation Program

12. Disseminate information about tree care and pruning to the community

 Continue the subcommittee and formal education programs in the Township

13. Begin implementation of the Natural Disaster Emergency Plan for the community.

14. Apply for Tree City USA.

- A. Assemble data necessary to complete the application and to document compliance with the four standards:
 - Standard 1 A legally constituted tree body
 - Standard 2 A community tree ordinance
 - Standard 3 A community forestry program with an annual budget of at least \$2 per capita
 - Standard 4 Arbor Day proclamation and planting
- B. Submit application

Township Landscape Architect Shade Tree Committee

Mayor Town Council

Landscape Architect
Public Works Department
Shade Tree Committee

Mayor Town Council

Township Landscape
Architect Public Works
Department
Mayor
Town Council

Director of Community Development Township Landscape Architect Shade Tree Committee

Mayor Town Council

Plan of Action for Year Five - March 2004 to February 2005

	T
Action	Team
1. Seek outside funding sources.	Shade Tree Committee
A. Apply for community forestry grants on	Township Landscape Architect
a regular basis	
2. Undertake reforestation planting, removal of exotic/invasive plants, streambank restoration, or other special projects based on recommendations of the Land Management Plan in greenbelt and open space areas.	
A. Design reforestation or other planting	Township Landscape Architect
plans for supplemental planting as identified	Private Contractor Shade Tree Committee Environmental
in the Land Management Plan	Commission
B. Develop proper procedures for	
implementation of reforestation plantings	Mayor
and clearing of exotic/invasive plants	Town Council
C. Train volunteer groups to plant	
seedlings and whips and to remove	
exotic/invasive plant material and	
organize projects on a regular basis	
3. Continue the ongoing, routine community forestry management schedule. A. Evaluate maintenance procedures in the field to ensure that they are being	Township Landscape Architect Public Works Department Private Contractor
done correctly; modify any maintenance	Mayor
details and procedures, as necessary	Town Council
B. Continue with routine maintenance	Town Council
of phased areas of the Township with	
changes implemented after evaluation	
changes implemented after evaluation	
4. Continue the annual Arbor Day Celebration.	Township Landscape Architect Shade Tree Committee
A. Continue the Arbor Day subcommittee with a leader and a schedule to organize the event	Mayor Town Council
5. Maintain continuing education units	

(CEU's) as called for in the Community Forestry Act.

- A. Identify the yearly need for CEU's for the Township
- B. Identify the personnel eligible to qualify for CEU's
- C. Track the educational program opportunities available and match them with the needs of the Township

6. Continue master landscape plans for key public areas of the Township.

- A. Design drawings for Phase III
- B. Implement previous phases as budget allows

7. Continue phased construction of an arboretum for the Township.

- A. Complete construction documents for Phase IV construction
- B. Implement previous phases as budget allows

8. Advertise community forestry milestones.

- A. Continue public relations subcommittee
- B. Publish the final results of the tree and woodland inventories in the newspaper and at the Arbor Day Celebration
- C. Promote the Arbor Day Celebration
- D. Advertise the Arboretum development progress
- E. Publish the progress of public landscape plans and greenbelt planting plans and implementation along with calls for volunteers for reforestation planting programs
- F. Advertise the routine maintenance calendar
- G. Publish award of grant monies
- H. Develop a list of community leaders

Director of Community Development
Township Landscape Architect
Public Works Department
Shade Tree Committee

Mayor

Town Council

Director of Community Development Township Landscape Architect Shade Tree Committee

Mayor

Town Council

Director of Community Development Township Landscape Architect Shade Tree Committee Friends of West Windsor Open Space Arboretum Committee

Mayor

Town Council

Township Landscape Architect Shade Tree Committee

Mayor

Town Council

Township Landscape Architect
Public Works Department Shade Tree
Committee

and volunteer organizations that have contributed to Community Forestry efforts within the Township and give publicly recognize them at the Arbor Day Celebration

I. Advertise the Community Memorial Tree Donation Program

9. Disseminate information about tree care and pruning to the community.

A. Continue the subcommittee and formal education programs in the Township

10. Ongoing review and revision to the Natural Disaster Emergency Plan for the community.

11. Apply for Tree City USA.

A. Assemble data necessary to complete the

application and to document compliance with the four standards:

- Standard 1 A legally constituted tree body
- Standard 2 A community tree ordinance
- Standard 3 A community forestry program with an annual budget of at least \$2 per capita
- Standard 4 Arbor Day proclamation and planting

B. Submit application

Mayor

Town Council

Township Landscape Architect Public Works Department

Mayor

Town Council

Director of Community Development Township Landscape Architect Shade Tree Committee

Mayor

Town Council

One of the goals of the New Jersey State Community Forestry Council is to provide funding through grant opportunities for the "Community Stewardship Incentive Program" (CSIP) projects. This section of the Community Forestry Plan identifies projects that fall into the categories of CSIP projects provided by the Council.

This list does not include every project that the Township of West Windsor will include in grant applications for the next five years. However, it does give an indication of the types of projects that are expected to be included. Other projects will, no doubt, be identified throughout the implementation of this Community Forestry Plan and may be included in future grant applications.

The Township of West Windsor is committed to maintaining full compliance with the conditions of the Community Forestry Act as set by the Community Forestry Council. As a result, the Township will be eligible for future grant opportunities.

CSIP #1 Plan Preparation

Preparation of Community Forestry Plan and future updates

CSIP #2 Training

- Core Training for additional Township staff and volunteers
- Continuing Education Units
- Special Training Needs

CSIP #3 Public Awareness and Education

- Brochure for Arboretum
- Educational Posters for Arboretum
- Brochure for Community Memorial Tree Donation Program
- Seminar/poster on tree selection and care for community residents
- Advertising costs associated with public awareness and education
- Direct mail campaigns

CSIP #4 Arbor Day Activities

- Advertising
- Trees for planting
- Awards for volunteer organizations and community leaders

CSIP #5 Assessment/Inventory

- Street Tree Inventory
- Open Space and Woodland Inventory

CSIP #6 Tree Hazard Identification Plan

- Hazard Tree Inventory
- Hazard Tree removal

CSIP #7 Tree Planting

- Planting in the Arboretum
- Street tree planting
- Landscape planting in public spaces
- Reforestation planting in designated greenbelt areas

CSIP #8 Tree Maintenance

- Routine scheduled maintenance plan
- High priority (hazard trees) maintenance
- Short term maintenance for new plantings

CSIP #9Tree Recycling

Tree recycling plan and implementation

CSIP #10 Ordinance Establishment

- Revision to the existing landscape ordinance
- Technical manual for landscape ordinance containing illustrations and construction details

CSIP #11 Tree-Care Disaster Plan

Natural disaster emergency plan

CSIP #12 Insect and Disease Management

- Routine scheduled or integrated pest management plan
- Special insect and disease management situations as required
- Maintenance manual

CSIP #13 Other

Master landscape plan for public streets, parks, and open spaces

CSIP #14 Other

 Land management plan for greenbelt and publicly owned farm preservation lands

The Shade Tree Committee will take the responsibility of tracking grant opportunities, applying for grants, and following through on the fulfillment of funded projects. Each year, projects must be prioritized and resources, including volunteer labor and funding must be allocated. New projects will be identified, and they must also be prioritized and included in the Plan of Action for each year.

¹ The Princeton Corridor Rotary Club, 1997, *West Windsor Then and* Now, Princeton Junction, New Jersey.

²Dobromilsky, Daniel, Open Space & *Recreation Master Plan,* Township of West Windsor, Princeton Junction, New Jersey, 1999.

³ Rogers, Ron, *West Windsor Township Street Tree Inventory Data Summary (1977,* 1992, & 1995), Rutgers University and Township of West Windsor, Princeton Junction, New Jersey.

Mercer County Planning Division, Office of the County Executive, *Comprehensive Master Street Tree Plan,* 1979, West Windsor Shade Tree Committee, Princeton Junction, New Jersey.

West Windsor Township Planning Board and RPPW, Inc., *Master Plan Update,* 1986, West Windsor Township, Princeton Junction, New Jersey.

West Windsor Greenbelt Plan, West Windsor Environmental Commission, August, 1977.

West Windsor Natural Resource Inventory, BCM Engineers, March 1979, Revised 1991.

West Windsor Community Forestry Budget 1999 Budget Totals

Salary and Wages Township Landscape Architect Certified Tree Expert Department of Public Works Crew Administrative Staff	\$20,000.00
Operations Professional Development Program Fees	\$500.00
Contracted Maintenance Services Department of Public Works Subcontractors Public Lands Maintenance	\$15,000.00
Volunteer In-Kind Hours Shade Tree Committee - 150 Hours	\$1,500.00
Tree Replacement Program Materials and Labor for Contracted Work	\$50,000.00
Totals Cash Dollars Volunteer Labor	\$85,500.00 <u>\$ 1,500.00</u> \$87,000.00

APPENDIX A



ORDINANCE 99-34

AN ORDINANCE TO AMEND AND SUPPLEMENT THE REVISED GENERAL ORDINANCES OF THE TOWNSHIP OF WEST WINDSOR (1999)

AN ORDINANCE AMENDING CHAPTER 4, "ADMINISTRATION OF GOVERNMENT," ARTICLE XIII, "SEPARATE AGENCIES AND BOARDS NOT ASSIGNED," OF THE REVISED GENERAL ORDINANCES OF THE TOWNSHIP OF WEST WINDSOR (1999) BY ADDING A SHADE TREE COMMITTEE

BE IT ORDAINED by the Township Council of the Township of West Windsor, County of Mercer, State of New Jersey, as follows:

<u>SECTION 1.</u> Chapter 4 of the Revised General Ordinances of the Township of West Windsor (1999), <u>Administration of Government</u>, Article XIII, <u>Separate Agencies and Boards Not Assigned</u>, Section 4-55, <u>Boards and agencies not assigned to township departments</u>, is amended by modifying subsection A as follows:

- A. The following boards and agencies of township government are not assigned to any department within the township.
 - (1) Affordable Housing Committee.
 - (2) Board of Health.
 - (3) Board of Recreation Commissioners.
 - (4) Cable Television Advisory Board.
 - (5) Emergency Management Council.
 - (6) Environmental Commission.
 - (7) Human Relations Council.
 - (8) Local Assistance Board.
 - (9) Parking Authority.
 - (10) Planning Board.

- (11) Shade Tree Committee.
- (41) (12) Site Plan Review Advisory Board (SPRAB).
- (12) (<u>13</u>) Stony Brook Regional Sewerage Authority.
- (13) (<u>14</u>) Zoning Board of Adjustment.

<u>SECTION 2.</u> Chapter 4 of such Ordinances, <u>Administration of Government</u>, Article XIII, <u>Separate Agencies and Boards Not Assigned</u>, is amended by adding the following NEW Section 4-61.1:

§ 4-61.1. Shade Tree Committee.

- A. Preamble. The township has acquired and will continue to acquire various public lands, and the township right of way has increased and will continue to increase with the future development of the township. It is in the best interests of the township to create a shade tree committee in order to encourage proper arboriculture and desirable horticultural activities, to develop and periodically update a community forest and shade tree plan for the care, planting and location of trees and shrubbery on public land and in public right-of-way and to set policy for the maintenance of the trees and shrubbery in such areas.
- B. Creation; appointment; terms of office; vacancies; compensation.
 - (1) There is hereby created a shade tree committee consisting of five members appointed by the mayor with the advice and consent of Township Council. They shall be residents of the township and shall serve without compensation.
 - (2) The members shall serve for terms of three years each. The initial appointments shall be staggered so that one term shall be for one year, two for two years, arid two for three years. Terms shall expire on June 30 of the year of expiration.
 - (3) All appointments to fill vacancies shall be for the unexpired term.
 - (4) A chairman shall be elected annually by the committee.
- C. Powers. The committee shall have, but not be limited to, the following powers:
 - (1) Establish Township policy for the regulation, planting and care of shade and ornamental trees and shrubbery now located or which may hereafter be planted in any public right of way, park and all other property owned by the township, except State and county highways unless the Department of Transportation or County of Mercer shall consent thereto. Tree and shrubbery care shall include trimming; removing any tree, or part thereof, dangerous to public safety; treating or removing any tree which is believed to harbor a disease or insects readily communicable to neighboring healthy trees; spraying; fertilizing; and other care and protection.

- (2) Advise the Township concerning the appropriate use of the ground surrounding shade and ornamental trees and shrubbery in so far as may be necessary for their proper growth, care and protection.
- (3) Encourage proper arboricultural practices throughout the Township.
- (4) Encourage desirable horticultural planting and activities throughout the Township and particularly on public properties.
- (5) Administer Arbor Day activities within the Township.
- (6) Develop a community forestry and shade tree master plan for the Township, including a tree inventory and tree disaster plan.
- (7) Recommend to the Planning Board plans and programs for inclusion in the municipal master plan for the development and use of public land and right-of-way.
- D. Community forestry and shade tree master plan. It shall be a function and duty of the shade tree committee to make, adopt and adhere to a master plan for the planting of shade and ornamental trees and shrubbery. This plan shall be reviewed and updated periodically.
- E. Municipal arborist. The shade tree committee may use the services of a
 Township employee as an arborist who shall consult with the committee on arboriculture tasks.
- (1) Qualifications. The arborist shall be thoroughly knowledgable and experience in tree species, tree diseases, insects affecting trees, tree damage, tree maintenance, soil conditions affecting trees and tree transplanting and shall be a certified tree expert (CTE).
- (2) Duties. The duties of the arborist may include:
 - (a) To inspect or supervise planting, maintenance and treatment work authorized by the shade tree committee.
 - (b) To assist the Township Engineer with inspection of plantings required with site development by the Planning Board, Zoning Board, Township Engineer or Township Council.

- (c) To advise or assist the committee in evaluation of plans, drawings or specifications involving existing trees or proposed tree planting in or affecting the township.
- (d) To perform other tasks in the field of arboriculture related to the township.
- (e) To oversee administration of the West Windsor "Trees" ordinance (Chapter 170 of the West Windsor Code) and this ordinance.
- F. Annual appropriation; estimate; amount. During the month of September in each year, the shade tree committee shall forward to the Director of Community Development the estimated sum necessary for the proper conduct of its work during the ensuing calendar year. The Township Council shall annually appropriate such sum as it may deem necessary for said purposes.
- G. Removal of committee member. The Mayor may remove any member of the committee for cause on written charges served upon the member and after a hearing thereon before the committee at which the member shall be entitled to be heard in person or by counsel.

<u>SECTION 3.</u> This ordinance shall take effect twenty days after action or inaction by the Mayor as provided by law or an override of a mayoral veto by the Council, whichever is applicable, and upon publication according to law.

INTRODUCTION: November 15, 1999 PUBLIC HEARING: November 29, 1999

ADOPTION: November 29, 1999

MAYOR APPROVAL: November 30, 1999 EFFECTIVE DATE: December 20, 1999

APPENDIX B

West Windsor Township
Department of Engineering and Community Development

RESIDENT REQUEST	
DATE Resident Address	[Public Works
Development Home Phone Work Phone	

Taken by:

ACTION TAKEN / DATE OF RESPONSE TO RESIDENT

Signed

Princeton Junction Study Area Subcommittee Report

I. INTRODUCTION

- 1.1 The full Planning Board created a three-member subcommittee to review the planning issues involving the Princeton Junction study area and to prepare proposed goals, objectives and land use policies for Princeton Junction study area for full Planning Board review and decision-making on what to include in the Master Plan.
- 12 The subcommittee members included:

Bill Benfer, Chairman

Steve Decter

Gretchen Fahrenbruch

John Madden served as the subcommittee planning consultant

- 13 Neighborhood participants were designated to represent the following Princeton Junction neighborhoods:
 - 1. Berrien City
 - 2. Sherbrooke
 - 3. Benford Estates
 - 4. Wellington/Sunrise
 - 5. Penns Neck
 - 6. Windsor Haven
 - 7. Bear Brook Road area
- 1.4 There were eight open public sessions to discuss Princeton Junction issues and proposals, and one non-public session (see December 11).

September 6 — Organization meeting. Homework assignments for each neighborhood group including: a rating of the four proposed location/alignments of the Alexander Road Railroad Bridge replacement; and a description of a vision for the Princeton Junction Center.

October 4 — Visioning session, Princeton Junction area concepts proposed by the various residential neighborhood groups in the study area.

October 11 — A review of the results of the visioning session and an attempt to identify areas of agreement.

October 25 — Review of videotape on Bus Rapid Transit (BRT) systems; and further discussion of visions for a center.

November 8 — A discussion with Carlos Rodriguez, Manager for Special Projects New Jersey Office of State Planning, on center designation requirements, alternative center possibilities, including those adjacent to railroad stations in New Jersey. Rodriguez showed a design concept for the Princeton Junction NEC railroad station to improve its appearance on the west side of the tracks.

November 29 — Strategies for implementing the center vision.

December 11 — Non-public meeting between the New Jersey Department of Transportation and representatives of West Windsor (the Mayor, township professionals, Council representatives, and two subcommittee members) See attached meeting report by NJDOT representative.

December 13 — Report by the subcommittee to neighborhood representatives on the meeting with NJDOT on the Alexander Road bridge replacement alternatives; circulation issues in the study area.

January 10 — Subcommittee draft report outline reviewed

II. PRIOR PLANNING PROPOSALS FOR THE PRINCETON JUNCTION STUDY AREA.

- 2.1 1992 Town Center/"Metropark" Plan approved by Planning Board. Regional Planning Partnership/Regional Plan Association developed computer-assisted design concepts based on the 1992 plan. This Plan was not pursued after the change in West Windsor form of government.
- 2.2 1998 Village Center Plan approved by Planning Board. Application to NJ Office of State Planning for village center designation was never officially acted upon, nor was written response to West Windsor ever given. Unofficial comments by representatives of the state indicated that the application did not include a growth component, and particularly new housing, to justify center designation.

III. PRINCETON JUNCTION STUDY AREA BOUNDARIES AND TYPE OF CENTER PROPOSED.

3.1 For the purposes of this report, the Princeton Junction Study Area was expanded by 307.5 acres from the area mapped in the Master Plan under consideration by the Planning Board to include lots abutting Clarksville Road in the Wellington/Sunrise neighborhoods; and on the

west side of the tracks, the 292 acre Estates at Princeton Junction site.

3.2 The subcommittee is not recommending strict compliance with center designation requirements of the Office of State Planning. It is our view that Princeton Junction study area be village-scale, with distinct residential and non-residential activity areas served by improved circulation.

IV. EXISTING CONSTRAINTS/PRESSURES AND OPPORTUNITIES IN THE PRINCETON JUNCTION STUDY AREA.

4.1 Constraints/Pressures

- The confluence of local and regional traffic, existing and forecast, with points of origin and destination in the Princeton Junction/railroad station area and the adjacent Route 1 Corridor employment centers
- 2. A road system with limited east-west connections across the railroad barrier and limited travel options for residents, commuters and workers to reach their destinations.
 - a. Impeding community integration of both sides of the tracks
 - b. Impeding access to emergency services especially west of the tracks.
 - c. Increasing traffic and congestion on local residential streets affecting safe access within neighborhoods and to schools and other community facilities, adversely impacting the quality of residential life in the Princeton Junction study area.
- The failure to date to implement key regional road projects like the Penns Neck Bypass and replacement of the Alexander Road railroad bridge.
- 4. Projected growth in local and regional development that will exacerbate traffic problems in the study area and will require circulation solutions beyond road improvements.
- 5. A contradiction between neighborhood desires to limit the capacity of CR 571 and local collector roads to two travel lanes, and the likely result that traffic will thereby spill over onto local residential streets in the study area.

A need to rethink the peripheral road concept previously adopted by the Township, that sought to concentrate regional peak hour traffic onto four-lane arterials and collector roads, in light of residents' preference for a more equitable distribution of such traffic burdens on local roads, and their seeming willingness to suffer congestion during

- extended peak hours rather than widen roads which would encourage higher traffic speeds during non-peak hours.
- Resident neighbor fears that any substantial center development or redevelopment would attract more vehicular traffic through existing residential neighborhoods, and their concerns about physical and environmental constraints in the commercial core of the study area.

4.2 Opportunities

- Community support evidenced at the initial hearings on the revised Master Plan, for the need of an improved center in West Windsor, most logically located in the Princeton Junction/Railroad Station area.
- 2. The combination of substantial railroad station usage and concentration of large employment centers and housing in place or already approved by the Planning Board could lead to support of traffic management and transit solutions, particularly a bus rapid transit system. The opportunity for the BRT could be further facilitated by transit friendly design of the Sarnoff and American Home Products properties integrated with and supporting future Princeton Junction center development and circulation infrastructure.

There seems to be some support for proposals to develop or redevelop in the Princeton Junction center if it involves transportation improvements to facilitate traffic movement (even if not reducing traffic volume), by better distributing traffic and avoiding traffic congestion, by facilitating pedestrian and bicycle access and safety, and by creating mass transit opportunities to replace vehicular trips.

- 3. The likelihood that the combination of rail commuters, employees at nearby employment centers and the proximity of neighborhood residents in the Princeton Junction area (including those projected to live at the Estates at Princeton Junction) would provide potential market support for a greater variety of convenience goods and services, located at developed or redeveloped activity areas both east and west of the railroad tracks.
- There is potential that a village-type commercial and service center could be designed to enhance the character of adjacent compact and historic residential neighborhoods.
- 5. The interest by the Office of State Planning and New Jersey Transit in a West Windsor center and transit-friendly railroad station development could be exploited even if we choose not to qualify for official state center designation.
- V. The subcommittee recommends that the Land Use Plan section of the Master Plan include the following goals and objectives and proposals for the Princeton Junction study area and the additional areas recommended for inclusion.

GOALS AND OBJECTIVES FOR THE PRINCETON JUNCTION STUDY AREA

5.1 Develop a center in Princeton Junction to enhance community identity and pride and to serve as a commercial, civic and cultural focal point that can integrate the diverse needs of various residential neighborhoods, local commuters and employees.

Proposals

- 1. Promote village-scale activity areas on both sides of the tracks to serve the needs of existing and projected residents, commuters and local employees.
- 2. Encourage a greater diversity of retail uses serving every day needs and the expressed desires for more specialty goods and services.
- Encourage development of nonprofit or commercial uses which add to the center's function and identity as a community meeting place, e.g. acquisition of the firehouse for community purposes and development of a health/ recreational facility etc.
- 4. Create a town green, plaza or central gathering place with civic features east of the tracks and incorporate other open spaces throughout the center
- Beautify or redevelop the commercial area on both sides of CR 571 between Wallace and Alexander Roads in a more traditional main street style design.
- 6. Improve the appearance and functioning of the Railroad Station by improving pedestrian movement through the station and by adding retail goods and services and local employment opportunities which allow for the performance of multiple retail tasks in one easy-to-walkto location which can reduce vehicular trips in the peak hour.
- 7. Promote use of the Maneely tract and plan it as a mixed-use village- scale area to serve the needs of existing and future residents, commuters and local employees.

8. Plan for retail and office development along an extended Vaughn Drive, with structured parking to replace existing surface parking lots that are located in the future rights-of way for the reconstructed Vaughn Drive and BRT system.

5.2 Protect and enhance the quality of life of the existing residential neighborhoods in the Princeton Junction study area.

Proposals

- 1. Retain two travel lane road cross-section on roads in the study
- 2. Promote development of CR571 through the center area with two travel lanes, left hand turn lanes at appropriate locations (including a left turn arrow at Wallace Road), and, if feasible, shoulders to facilitate snow removal and bicycle access and safety and medians to promote safe pedestrian crossings at key points.
- 3. Employ traffic calming techniques to maintain speed limits and promote safe pedestrian and bike access (e.g. lighted brick crosswalks and sidewalks for pedestrians, and paths and road shoulders for bicyclists).
- 4. Preserve existing features such as the Courtney Woods and the Wallace Pond as natural buffers, and incorporate other open space areas as part of center design.
- 5. Bury or relocate utility and power lines less than 69 KV and buffer power station and township facility on Wallace Road (and possibly relocate the latter).
- 6 Enhance the physical appearance of the center area by better organization, and a design vocabulary including street trees and plantings, street lights, signage, benches etc.
- 7. Evaluate all options to relocate the compost area remote from residential neighborhoods.

5.3 Develop multimodal transportation solutions to deal with peak hour traffic congestion.

Proposals

1. Promote the construction of the Penns Neck Bypass as an essential component of the center's traffic solution.

- 2. Extend Vaughn Drive to a realigned CR 571 on the west side of the railroad tracks linking the Penns Neck By-pass to Alexander Road (and Meadow Road to the south), to reduce the impact of peak hour traffic on Alexander Road and to divert regional traffic from minor residential streets.
- 3. Promote replacement of the Alexander Road Railroad Bridge to better distribute traffic and limit it to two travel lanes with shoulders for bicycles and /or sidewalks for pedestrians and bicycles.
- 4. Facilitate the development of bus rapid transit as a long-term solution for the Princeton Junction area as a way to improve circulation by offering an opportunity to reduce vehicular trips in the center and Route 1 Corridor, and to give an organizational structure to future development of the center. Improve conventional bus service as an interim solution.
- 5. Encourage alternatives to vehicular travel to reduce traffic in the center, including all modes of non-automobile dependent travel (mass transit, pedestrian and bicycle), or such traffic management programs as park and ride facilities.

5.4 Improve the circulation connections of all modes of travel within the center and from the center area to key community points like Community Park.

Proposals

- Improve all modes of east-west circulation movement across the railroad line.
- 2. Recognize the need to protect safety in accessing such community facilities as town hall, churches, the library and schools etc.
- 3. Facilitate safe pedestrian and bicycle crossing over the Alexander and Washington Road bridges and elsewhere in the study area.
- Install sidewalk improvements on both sides of all streets, where possible, to provide safe access to and from the train station and other locations in the center
- 5. Construct road improvements which serve to reduce peak hour traffic congestion, improve access by emergency vehicles and divert traffic from minor residential streets.

VI. CENTER IMPLEMENTATION RECOMMENDATIONS

6.1 Planning Board

- 1. Prepare alternative center plan concepts with visual illustrations of center proposals.
- 2. Prepare detailed circulation plans for autos, pedestrians and bicycles.
- 3. Conduct a zoning review on land use changes needed to implement a center plan.
- 4. Prepare design criteria to guide future center redevelopment.

6.2 Administration

- 1. Conduct a community survey on center goals and development options.
- 2. Include center issues and proposals on the West Windsor website.
- 3. Pursue financing options to implement center proposals.
- 4. Follow-up on Alexander Road bridge location issues to better determine its functions, traffic impacts, approach road engineering issues and costs, costs and feasibility of land acquisitions, environmental constraints etc. Pursue an interim solution to current bridge congestion.

Appendix

1 December 11, 2001 Alexander Road Bridge replacement meeting and Project Delivery Process.

MEETING MINUTES

Subject: Alexander Road Bridge Replacement

Meeting with Municipal Officials 12/11/01

Date of Meeting: December 11, 2001

Attendees: Shing-Fu Hsueh West Windsor Township Mayor

Allison Miller West Windsor Township Council
Rae Roeder West Windsor Township Council
Bill Benfer West Windsor Township Planning

Board

George R. Fries, PE, LS West Windsor Township Engineer

Stephen Dectin (sic.)

Sam Surtees

John Madden

West Windsor Township
West Windsor Township
John Madden & Assoc.

Thomas Carbone NJDOT - BPSD Abe Rezaeian NJDOT - BPSD

T. Alexander Meitzler, PE
William E. Anderson
T. Alexander Meitzler, PE
Vollmer Associates LLP
Vollmer Associates LLP
Vollmer Associates LLP

William

Location: E. Anderson West Windson Township Municipal Building

Prepared by:

Copies to: Attendees

A meeting was held at the West Windsor Township Municipal Building to discuss the four alternatives, suggested by West Windsor Township officials, for the NJDOT project to replace/rehabilitate the Alexander Road Bridge over Amtrak's Northeast Corridor Line.

Mr. Carbone started the meeting by re-emphasizing the NJDOT Project Delivery Process and that this project was part of the NJDOT efforts to Replace/Rehabilitate Orphan Bridges. The current schedule for this bridge replacement is to complete Concept Development by March 2002, and Feasibility Assessment by August 2003.

Summaries prepared by BPSD and Vollmer of the comments and perceived pros and cons for the four potential bridge locations by six community associations/homeowner groups were distributed. The options as presented are: Option #1, Old Alexander Rd alignment; Option #2, North Post Rd. connection; Option #3, replace on existing alignment; Option #4, Everett Rd connection. A discussion of the universality of the comments ensued and resulted in the Township representatives indicating that while

these comments were valid; they did not necessarily represent a cross section of the separate communities, and should not be characterized as such.

Mr. Rezaeian highlighted the impacts and benefits of each of the potential alignments and a lengthy dialogue resulted. Issues with each option raised included:

Option #1 - Old Alexander Road Alignment (North of the bridge)

The advantage of this alternative is that much of the required ROW is already publicly owned, as it follows an old alignment (pre-1941) of Alexander Road. Design challenges would include maintaining the appropriate railroad clearance for the bridge and obtaining a design that would minimize grade differentials at the Alexander Road/Wallace Road intersection. The diversion of additional traffic through an existing residential area seemed to be a major concern of township officials with this option.

Option #2 - North Post Road Connection (south of the bridge)

This is the alignment that has been indicated on the Township Master Plan for many years. Support for this alignment comes from those who see it as a means to divert traffic away from the northerly portion of Alexander Road. It was confirmed that the location of the bridge in this option, as indicated on the aerial mapping from the September 5, 2001, meeting, is shifted to the south of the existing sharp curve on North Post Road so that the impacts on the residential properties facing that road are diminished. This will result in the road being shifted toward the library on the south side of the roadway. The design challenge with this alignment is the fact that it is significantly removed from the existing bridge and may result in having to meet higher standards relative to railroad clearance. Additionally, because of the distance from the existing structure there was some concern that roadway construction costs may be beyond the scope of the current project. The skewed alignment will present some challenge but it is not critical. Roadway alignment alternatives to approach the bridge from the westerly side of the railroad and cost participation will have to be addressed if this option is pursued. Township officials also stated that Option 2 would not necessarily impact Toll brothers property.

Option #3 - Existing Alignment

Since the roadway will not be significantly displaced this alignment will have the least impact on existing residential properties. Two significant challenges with this proposal are the impacts on traffic while the new bridge is being constructed and the control of traffic at the intersection of Alexander Road and North Post Road. Interim intersection improvements by the Township at this intersection are anticipated in the near future and will include a traffic signal and minor roadway widening. The possibility of a modern roundabout, installed as part of the bridge project, was discussed and appeared to garner enough support that it should be considered as an alternative to a signalized intersection. Township officials stated that once constructed, Option 3 would provide better emergency vehicle access.

The Township representatives indicated that they intend to purchase the vacant parcel of land just to the south of the bridge, immediately east of Amtrak right of way. If accomplished, this action could help Option 3

Option #4 - Everett Road Connection (Far South of the bridge)

A structure at this location would be well south of the existing bridge and would involve the construction of more than 4000' of roadway on the westerly side of the railroad. Challenges to be addressed under this scenario include involvement with properties owned by Toll Brothers, potential wetlands, archeological involvement, substantially increased costs and potential need to improve Everett Road and its intersection with Clarksville Road. This alignment will provide for the best connection to the development to the west of the railroad from the new firehouse under construction at Clarksville Road and Everett Drive. This alignment has the potential to divert traffic away from the Benford Estates neighborhood, however the overall impacts on circulation will require further study.

There was concern expressed by some Township officials about the width of the proposed structure. It was indicated that the anticipated new bridge .would provide one travel lane, a shoulder and sidewalk for each direction. This would result in a bridge with a total width in excess of 50 feet. Township representatives also raised concern about the existing bridge and its life expectancy. It was indicated that the bridge's, superstructure and substructure are rated as poor and fair conditions respectively, but it is not posted for weight limitation. The existing physical condition of bridge does not warrant immediate attention, while planning it is appropriate to begin planning for its eventual replacement.

Issues of greatest concern to the Township were the impacts on residential properties of ROW takings for the new bridge, the proximity of traffic to residential properties and increased traffic in residential areas. The effect of construction on existing traffic flow was also of particular concern. It was noted that Options #1,2 and 4 would be built on alignments that would have limited impact on existing traffic during construction while option 3 may require a detour. During FA phase, a more in depth analysis will be made to assess the possibility of shifting the alignment of the new bridge slightly to the south and stage construction to limit offsite detours.

Mr. Carbone emphasized that the project, as currently envisioned, was for a replacement structure, which is most closely defined as either Option #1 or #3. He indicated that if the Township wished to actively pursue Options #2 and #4 it would be necessary to obtain approval of NJDOT management for the expanded scope of the project.

Township officials questioned whether the NJDOT would still pursue the project if the Township could secure a commitment to cQnstruct the approach roadways for Options #2 or #4 without State funds, but rather using local or private funding. The State representatives indicated that this public/private partnership option was potentially feasible, but the roadway would still have to be studied for environmental impacts subject

to FHWA regulations. Otherwise it would be viewed as segmentation of a federal project to circumvent federal environmental regulations, which is prohibited by law. The design of the roadway would also need to comply with AASHTO standards.

At the end of the meeting, the following key points were summarized and agreed upon:

- 1- West Windsor does not support a new four-lane bridge on any location. Only 2 lane alternatives for approach roads and bridges should be studied by BPSD.
- 2- The Township endorses the continued study of all four bridge location options as they provided to BPSD.
- 3- The Township believes there exists a reasonable possibility for Toll Brothers (or other developer funding source) to construct the approach roadway for either Option 2 or 4.

Vollmer Associates LLP will now move forward to close out the Concept Development phase of this project and supply information to the BPSD to support a request to the Capital Programming Committee to expand the scope of the project in the Feasibility Assessment phase.

Cc: Alex Brown (NJDOT-Office of Community Relations)

Appendix

Township Ordinance - Section 200-146 "Right to Farm"

- "A. The right to farm all land is hereby recognized to exist as a natural right and is also hereby ordained to exist as a permitted use everywhere in the Township of West Windsor, regardless of zoning designation and regardless of specified uses and prohibited uses set forth elsewhere in this Part 4, subject only to the restrictions and regulations for intensive fowl or livestock farms and subject to township health and sanitary codes. The right to farm as it is used in this section includes the use of large irrigation pumps and equipment, aerial and ground seeding and spraying, large tractors, numerous farm laborers and the application of chemical fertilizers, insecticides and herbicides, all for the purpose of producing from the land agricultural products such as vegetables, grains, hay, fruits, fibers, wood, trees, plants, shrubs, flowers and seeds. This right to farm shall also include the right to use land for grazing by animals, subject to the restrictions for intensive fowl or livestock farms. The foregoing uses and activities included in the right to farm, when reasonable and necessary for the particular farming, livestock or fowl production and when conducted in accordance with generally accepted agricultural practices, may occur on holidays, Saturdays, Sundays, and weekdays, at night and in the day, and the noise, odors, dust and fumes that are caused by them are also specifically permitted as part of the exercise of this right."
- "B. It is expressly found that whatever nuisance may be caused to others by such uses and activities so conducted is more than offset by the benefits from farming to the neighborhood and community and to society in general by the preservation of open space, the beauty of the countryside and clean air and by the preservation and continuance of farming operations in West Windsor Township and in New Jersey as a source of agricultural products for this and future generations."