

Municipal Information

Municipal / County Information Form

MUNICIPALITY Township of Cranbury
COUNTY Middlesex
ADDRESS 23-A North Main Street
Cranbury, NJ 08512
CONTACT Debra Rubin, Secretary
PHONE (609) 664-3238
FAX & EMAIL (609) 395-8861 drubin@cranbury-nj.com
ORGANIZATION Shade Tree Commission

MAYOR'S
SIGNATURE

Glenn R. Johnson

* I Certify that this Community Forestry Management Plan was developed specifically and exclusively for the Township of Cranbury.

DATE SUBMITTED February, 2018
TIME PERIOD January, 2018 – December, 2022

CSIP PRACTICES
IDENTIFIED
IN PLAN

- ☒ CSIP #1 Training p. 23
- ☒ CSIP #2 Community Forestry Ordinance Establishment p. 18
- ☒ CSIP #3 Public Education & Awareness p. 26
- ☒ CSIP #4 Arbor Day p. 26, 27
- ☒ CSIP #5 Tree Inventory p. 7, 28
- ☒ CSIP #6 Hazard Tree Assessment p. 29
- ☒ CSIP #7 Storm Damage Assessment p. 38
- ☒ CSIP #8 Tree Maintenance & Removals p. 34
- ☒ CSIP #9 Insect and Disease Management p. 6, 35, 38
- ☒ CSIP #10 Wildfire Protection p. 38
- ☒ CSIP #11 Tree Planting p. 30
- ☒ CSIP #12 Tree Recycling p. 37
- ☒ CSIP #13 Sidewalk Maintenance Program p. 35
- ☒ CSIP #14 Stormwater Management p. 9
- ☒ CSIP #15 Other various sections

Official Use Only Certification

The above named municipality 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 this plan meets the standards set forth by the State and the NJ Community Forestry Council and is approved for the period covered.

Signed:

State Forester

[Signature]

5/10/18

Approved Date



2018–2022

Community Forestry Management Plan

Township of Cranbury

Middlesex County, NJ

2018 – 2022 COMMUNITY FORESTRY MANAGEMENT PLAN

Township of Cranbury Middlesex County New Jersey

Mayor & Council

Glenn R. Johnson, *Mayor*
David Cook
Daniel P. Mulligan III
Matthew A. Scott
James Taylor

Township Administrator

Denise Marabello

Township Clerk

Kathleen Cunningham

Shade Tree Commission

Kathy Easton, *Chair*
Jackie Johnson
Bonnie Larson
Marilee Nissen
Norma Swale
Debra Rubin, *Secretary*

Department of Public Works

Jerry Thorne, *Director*





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Signed:

Original Copy Signed & Dated

State Forester

Approved Date



Introduction

SCOPE

The Township of Cranbury has developed this fourth five-year Community Forestry Management Plan in accordance with statewide efforts to preserve and promote sustainable shade tree programs and resources. The following outlines the programs, policies and procedures by which shade tree resources within the Township will continue to be managed during the period of January 2018 through December 2022.

The Township recognizes that a healthy shade tree population is an essential component of Cranbury's unique beauty and character, and appreciates the value and benefits trees offer in improving the quality of urban and suburban life. It also acknowledges the responsibility of proper tree maintenance and the inevitability of tree mortality and replacement associated with these benefits.

This fourth five-year Plan builds upon the successes realized and addresses the challenges faced in implementing the Township's previous Community Forestry Management Plans from 2001 through 2017.

Further, it is expected that various elements of this Plan will continue to stimulate the public's appreciation for trees and the voluntary planting, protection and care of trees on private property for the benefit of the entire community.

MISSION STATEMENT

To improve the quality of life in Cranbury Township by maximizing the environmental, social, economic, and historic benefits of trees to the community while minimizing their costs and liabilities.

OVERALL PROGRAM GOALS

The New Jersey Community Forestry Council has identified fifteen Community Stewardship Incentive Program (CSIP) practices that comprise a complete and comprehensive community forestry program.

Within each of the Plan elements that follow, existing programs, policies and procedures are described, intermediate and element-specific goals are established, and CSIP-based objectives for the 2018 – 2022 management period are set.

Systematic fulfillment of these CSIP-specific goals and objectives will continue to move Cranbury Township's Shade Tree Program toward its overall program goals, which remain as follows:

1. Develop and perpetuate a beneficial and sustainable shade tree resource.
2. Maximize the benefits of trees to the community by achieving and perpetuating the public tree population at maximum practical stocking.
3. Maximize long-term stability and sustainability in the shade tree resource.
4. Optimize the balance between tree health, maintenance costs and budgetary constraints.
5. Minimize the risk of trees to public safety.
6. Minimize conflicts between trees and infrastructure.
7. Maintain public interest, appreciation and support for public shade tree programs.
8. Encourage the planting and proper care of trees on private property.

9. Increase tree canopy cover to 30% by 2030.
10. Meet all eligibility requirements of the New Jersey Shade Tree & Community Forestry Assistance Act.

TREE HAZARDS & LIABILITY

The Township of Cranbury recognizes the physical, environmental, economic, and social benefits that a well-established and properly maintained tree resource provides to the community.

It also recognizes, however, that the benefits of trees do not come without costs and liabilities. As with all municipal assets – perhaps even more so – trees require maintenance, they mature, and they eventually require replacement. During their life, it is inevitable that potentially hazardous conditions will emerge.

Experience has shown that comprehensive and proactive community forestry programs that strive to prevent, anticipate, and correct such problems will cost-effectively maximize the benefits of trees while minimizing the threat to public safety and exposure to liability.

Still, Cranbury Township acknowledges that, despite its best efforts, not all such hazardous conditions can or will be predicted. Comprehensive and proactive management will reduce the probability of hazards, but unpredictable events will still occur. The Township must work with limited resources and may not be able to meet every need immediately.

This plan is designed to optimize the balance between tree benefits and risks. Public safety will be a primary consideration in the implementation of all of its components, from tree planting, to maintenance, to eventual removal and replacement. The intent is to direct available resources toward the greatest needs and systematically develop and maintain a healthy community forest with a commensurate reduction in threats to public safety.

Public safety will be a primary consideration in the development and implementation of all public shade tree plans and programs. This plan provides a means of identifying and systematically addressing existing tree hazards. Further, it provides a means of reducing the potential for future hazards and liability through responsible planting and preventative maintenance.



2008 – 2018 SHADE TREE PROGRAM REVIEW

In implementing its 2013 – 2017 Community Forestry Management Plan, Cranbury Township was able to meet the basic needs of its public tree resource, despite the challenging budget constraints facing all municipalities. The Shade Tree Program was quite successful in completing most of the objectives it set in its 2013 – 2017 Plan, but a variety of circumstances prevented it from completing some others.

The following is a summary of the Shade Tree Program's activities and accomplishments as they relate to objectives outlined in its 2013 – 2017 Community Forestry Management Plan.

1. *Program Administration*

- a) The Township continued to implement all of its previously existing administrative programs, policies and procedures. (*Program Administration, Objective #1*)
- b) In its effort to ensure that public tree removals are not carried out without an opportunity for the Shade Tree Commission to approve them, the Township developed and implemented formal procedures for Shade Tree Commission review prior to Department of Public Works' removal of trees. (*Program Administration, Objective #2*)

2. *Training & Professional Development*

- a) Cranbury Township continued its existing training programs, met its New Jersey Shade Tree & Community Forestry Assistance Act, Training Skills & Accreditation Program continuing education requirements each year, and maintained continuous Approved Status under the Act. (*Training & Professional Development, Objective #1 and #2*)
- b) In 2013, one member of the Shade Tree Commission attended a Hazard Tree Identification workshop through the Rutgers Office of Continuing Professional Education. (*Training & Professional Development, Objective #3*)
- c) In 2014, two members of the Shade Tree Commission attended a Tree Pruning course through the Rutgers Office of Continuing Professional Education.
- d) In 2015, three members of the Shade Tree Commission attended the New Jersey Invasive Species Strike Team annual conference. One member attended the conference again in 2016 and 2017.
- e) In 2016, three Shade Tree Commissioners attended the NJ Forester's Annual Conference.
- f) In 2017, the Township hosted an in-house training session by a NJ Certified Tree Expert from Paul Cowie & Associates on pruning young trees for structure to develop sound scaffold limb architecture and mitigate potential future structural issues. This session was attended by 3 members of the Shade Tree Commission and 2 Department of Public Works employees. (*Training & Professional Development, Objective #5*)
- g) In 2017, one Shade Tree Commissioner attended a webinar on CSIP grants.
- h) Over the past several years, members of the Shade Tree Commission attended the New Jersey Shade Tree Federation Annual Meeting most years for training on a variety of shade tree topics.

3. *Public Education, Awareness & Outreach*

- a) The Township continued to implement its existing public education, awareness and outreach programs. (*Public Education, Awareness & Outreach, Objective #1*)

- b) The Shade Tree Commission continued to issue a variety of press releases to local media each year covering its activities and accomplishments and information of special interest to the public. In recent years, media releases have largely occurred through the Cranbury newsletter and digital media; the Township recently decided to stop publishing traditional press releases for general Shade Tree related public education as they no longer have the impact that they used to. *(Public Education, Awareness & Outreach, Objective #2)*
- c) Arbor Day celebrations continued to be held every year for the past 29 years in Cranbury and typically include tree plantings ceremonies and other activities at the elementary school or Township parks or, most recently, on Main Street, an official proclamation, and distribution of tree tublings. *(Public Education, Awareness & Outreach, Objective #3)*
- d) Cranbury Township has continued to apply for, receive and advertise its designation as a Tree City USA by the National Arbor Day Foundation for 29 consecutive years. *(Public Education, Awareness & Outreach, Objective #4)*
- e) Annual River Clean Up projects have been held to remove trash and debris from Brainerd Lake, Cranbury Brook and the Cranbury Brook Preserve.
- f) The Shade Tree Commission participated in an emerald ash borer overwintering larval study by Rutgers University in the Four Seasons Community where EAB infestation occurred.
- g) In 2016, the Shade Tree Commission coordinated a public education evening at the Cranbury Library about emerald ash borer and held an ash tree ID workshop for township volunteers and staff.

4. Tree Inventory & Assessment

- a) Cranbury Township continued to utilize information available regarding its current tree population to guide its tree planting and maintenance activities toward its overall program goals.
- b) The Township was unable to complete a planned Tree Inventory & Assessment Update due to insufficient budget, little or no available grant funding and the need to address damage from unusually frequent and severe storms as well as removals related to emerald ash borer. *(Tree Inventory, Objective #1)*
- c) Although the Township was unable to complete the full Tree Inventory & Assessment Update as planned, it did complete several surveys that provided quality updated management information, including:
 - i) An updated "1-2-3 Assessment" of Township trees within the Main Street area which identified trees requiring priority maintenance or removal.
 - ii) An updated "Empty Hole Survey" which identified available planting sites on Main Street.

5. Tree Hazard Management

- a) Through the efforts of the Shade Tree Commission and the Department of Public Works, the Township continued to implement its previously existing programs, policies and procedures for identifying and addressing trees requiring priority maintenance to minimize potential tree hazards on an ongoing basis. *(Tree Hazard Management, Objective #1)*
- b) The Shade Tree Commission's 2017 Main Street 1-2-3 Shade Tree Assessment identified a number of trees requiring maintenance or removal on a priority basis. Trees were quickly addressed in priority order to help minimize risks in the busy Main Street district. *(Tree Hazard Management, Objective #3)*

6. Tree Planting

- a) Though budget constraints prevented the Township from planting new trees beyond those planted as part of Arbor Day celebrations and via Beautification Grants, it strived to implement its previously existing tree planting programs, policies and procedures. *(Tree Planting, Objective #1)*

- b) The Shade Tree Commission was able to secure \$5,000 from the municipal budget for tree planting in 2016, but Shade Tree Commissioners determined that the funds would better serve the community if they turned them over to the DPW for ash tree removals. *(Tree Planting, Objective #2)*
 - c) The Shade Tree Commission completed an “Empty Hole Survey” in 2017 to identify and prioritize sites on Main Street where tree planting is required to replace those lost. This list will serve as the basis for new plantings when funds become available.
- 7. Tree Maintenance**
- a) The Township continued to implement its previously existing tree maintenance programs, policies and procedures. *(Tree Maintenance, Objective #1)*
 - b) The Township continued to address tree maintenance needs on a prioritized basis as they were identified via the Shade Tree Commission’s “1-2-3” survey program.
- 8. Tree Waste Recycling**
- a) The Township continued to implement all of its previously existing tree waste recycling programs, policies and procedures. *(Tree Waste Recycling, Objective #1)*
- 9. Tree Care Disaster Plan**
- a) Cranbury Township continued to implement its previously existing tree care disaster plan programs, policies and procedures when needed. In addition, it continued related efforts, such as proactive pruning and species diversification, to reduce acute vulnerabilities in the public tree population over the long term. *(Tree Care Disaster Plan, Objective #1)*
 - b) The Shade Tree Commission was able to secure \$5,000 from the municipal budget for tree planting in 2016, but Shade Tree Commissioners determined that the funds would better serve the community if they turned them over to the DPW for ash tree removals. The Township has largely eliminated the threat of widespread losses and hazards caused by emerald ash borer through proactive management.
- 10. Plan Preparation & Evaluation**
- a) The Township of Cranbury continually reviewed its Community Forestry Management Plan, monitored progress toward its goals and objectives, and made the necessary adjustments in the Shade Tree Program’s activities to address current needs. Overall, the Township was quite successful in completing its planned objectives, given difficult economic constraints. *(Plan Preparation & Evaluation, Objective #1)*
 - b) The Township submitted all necessary Annual Accomplishment Reports to the NJ Forest Service in accordance with the requirements of the New Jersey Shade Tree & Community Forestry Assistance Act and maintained its approved status under the Act. *(Plan Preparation & Evaluation, Objective #2)*
 - c) The Township has prepared this fourth five-year Community Forestry Management Plan for the 2018 – 2022 management period with the assistance of a NJ Green Communities Challenge Grant and based on a thorough review of its goals, objectives and current needs. *(Plan Preparation & Evaluation, Objective #3)*

Since it began implementing this Community Forestry Management Plan in 2001, Cranbury Township has realized several benefits, which include the following:

- 1. Training and professional development completed in accordance with the New Jersey Shade Tree & Community Forestry Assistance Act requirements has increased the number of employees and volunteers that have improved their level of knowledge in the principles and day-to-day practices of urban forest management.

**CURRENT
PUBLIC TREE
ASSESSMENT**

2. Despite a significant number of aging trees rapidly declining in health, the Township has remained relatively safe as a result of the Shade Tree Program regularly evaluating the public tree population, identifying potentially hazardous conditions, and directing efforts toward the pruning and removal of problem trees in logical order and in an efficient, proactive manner.
3. Having a Community Forestry Management Plan and approved status under the NJ Shade Tree & Community Forestry Assistance Act, the Township has benefited from grant programs that it would not otherwise have been eligible for.
4. With clearly stated goals, and methods and flexible schedules for attaining them, this Community Forestry Management Plan serves as an effective working manual for both the Shade Tree Commission and the Department of Public Works. Additionally, it serves as an excellent source of information and instruction for new Shade Tree Commission members, as well as Township residents.

Cranbury conducted a complete, computerized inventory of the existing public street tree population within the Village area of the Township in 2003 with the assistance of a 2002 Community Stewardship Incentive Program grant from the New Jersey Forest Service. The Township currently lacks a detailed inventory and assessment of trees in Township parks and on public properties, and within the right-of-way in new subdivisions.

Based on information gathered at the time of the 2003 inventory:

1. Streets within the Village section of Cranbury possess an approximately 1,654 sites capable of supporting trees.
2. The street tree planting was 91% stocked at the time of the inventory with 1510 trees, 16 stumps and 128 vacant planting sites.
3. The street tree population was comprised of 31 different species representing 19 different genera.
4. Oaks comprised a large portion of the population at 36%. The next most frequent genera were the maples (35%), pear (10%) and sweetgum (6%).
5. Overall, the tree population was found to have a somewhat even aged structure with 57% of the trees in the 13"-18" and smaller diameter classes and 43% in the 19"-24" and larger diameter classes.
6. Bacterial leaf scorch was found to be a significant problem among pin and red oaks, on both public and private property.

Based on the impressions of the Shade Tree Commission and the Public Works Director, removals of many ash trees during the 2013-2017 management period, and a 2017 1-2-3 tree maintenance survey, changes in the street tree population since 2003 include:

1. A reduction in stocking as overmature, bacterial leaf scorch-infected, or emerald ash borer-infested or -susceptible trees were removed at an increasing rate and replanting slowed to budget constraints.
2. A significant increase in the incidence and severity of bacterial leaf scorch among red and pin oaks.
3. An increase in species diversity in the younger age classes due to efforts to introduce additional species that are known to be resistant to bacterial leaf scorch.
4. A virtual elimination of ash trees from the Township's street tree population.

The Township is also proud to be the home of the historic and current State Champion paw-paw tree.

**TREE
CANOPY
COVER**

Statistics derived from the National Land Cover Database's (NLCD's) 2011 Multi-Resolution Land Characteristics Consortium (MRLC) indicate that public and private urban forest canopy cover collectively averages 23.5% over the total land area of Cranbury Township. This is slightly below the average of 30.9% for the total land area of Middlesex County.

While this data is derived from a national study and is therefore imprecise for areas as small as an individual municipality or county, it does provide a reasonable and useful estimate of the Township's average canopy cover.

At least 40% tree canopy cover is widely recommended for metropolitan areas in the northeast to ensure sufficient physical benefits community-wide and to address climate change.

Recognizing that the current level of agriculture in Cranbury – 21% of the land area – presents a significant limitation for expanding canopy cover, the Township has adopted a goal of achieving 30% canopy cover by 2030.

**RELATION TO
THE TOWNSHIP
MASTER PLAN**

All aspects of this Community Forestry Management Plan are consistent, compatible and supportive of the goals, objectives and general intent of the Township's Master Plan (2010) and Open Space & Recreation Plan Element (2007).

An overriding goal of the Master Plan is preservation of the Township's rural character:

Cranbury's rural character is defined by a variety of elements, including scenic views, country roads, open space, farmland, hedgerows and tree lines, barns, streams and ponds, and historic structures. Historic Cranbury Village is also an important element in preserving the rural character, but it has a vitality and distinctive development pattern of its own. The primary features defining the Village include a distinctive, well-preserved historic district, a compact development form, a mix of residential, commercial and civic land uses, a distinguishable border or "hard edge," a pedestrian orientation, and varied lot and building sizes. The preservation of these features is integral to maintaining the character and quality of life that identifies Cranbury Township.

Implementation of this Community Forestry Management Plan directly or indirectly contributes to satisfying many objectives of the Master Plan, including:

- *Protect scenic vistas and preserve natural resources.*
- *Minimize the visual and environmental impacts of new development.*
- *Establish a greenway network that provides a linear park connecting neighborhoods to other neighborhoods and community facilities, and facilitating passive recreational opportunities.*
- *Preserve the historic Village character.*
- *Maintain a walking Village that provides pedestrian connections and linkages with adjacent residential areas.*
- *Improve the image and visibility of the Route 130 highway commercial corridor.*
- *Provide outdoor recreation opportunities and pedestrian improvements, including benches, sitting areas and courtyards.*
- *Continue to enforce design standards to ensure good visual quality and design for all land use categories.*
- *Ensure that new development is visually and functionally compatible with the physical character of the Township, especially west of Route 130.*
- *Improve the visual and physical appearance of nonresidential areas.*
- *Require replacement plantings in areas of disturbance that reflect the natural vegetation in these areas.*

- *Preserve stands of mature trees to the maximum extent possible.*
- *Protect and preserve Cranbury's historic sites and districts to maintain the Township's unique rural character.*
- *Protect the quality of Cranbury's groundwater resources, including the Potomac-Raritan-Magothy aquifer.*
- *Minimize increased stormwater runoff from any new land development.*
- *Promote groundwater recharge.*
- *Decrease non-point source pollution, to the greatest extent feasible.*
- *Reduce soil loss and stream channel erosion resulting from impacts of development...*
- *Reduce soil and/or wind erosion resulting from development activities.*
- *Reduce the levels of runoff pollution due to development activities which would otherwise degrade the quality of water...*
- *Increase awareness of area residents and implement best practices for mitigating and adapting to global climate change.*
- *Reduce the energy consumption and the carbon footprint of the Township-owned and managed properties and resources.*
- *Encourage sustainable design and construction in the Township.*
- *Encourage increased recycling efforts and, where possible, increase the types of waste or refuse that are recycled.*

In addition, implementation of this Community Forestry Management Plan directly fulfills several action items of the Sustainable Jersey program, participation in which is a goal of the Green Buildings and Environmental sustainability element of the 2010 Master Plan.

RELATION TO THE TOWNSHIP'S STORMWATER MANAGEMENT PLAN

Cranbury Township's *Municipal Stormwater Management Plan*, which is included by reference as an element of the Master Plan, establishes policies and provides specific requirements and recommendations to minimize point and non-point contamination of local water bodies in accordance with State regulations.

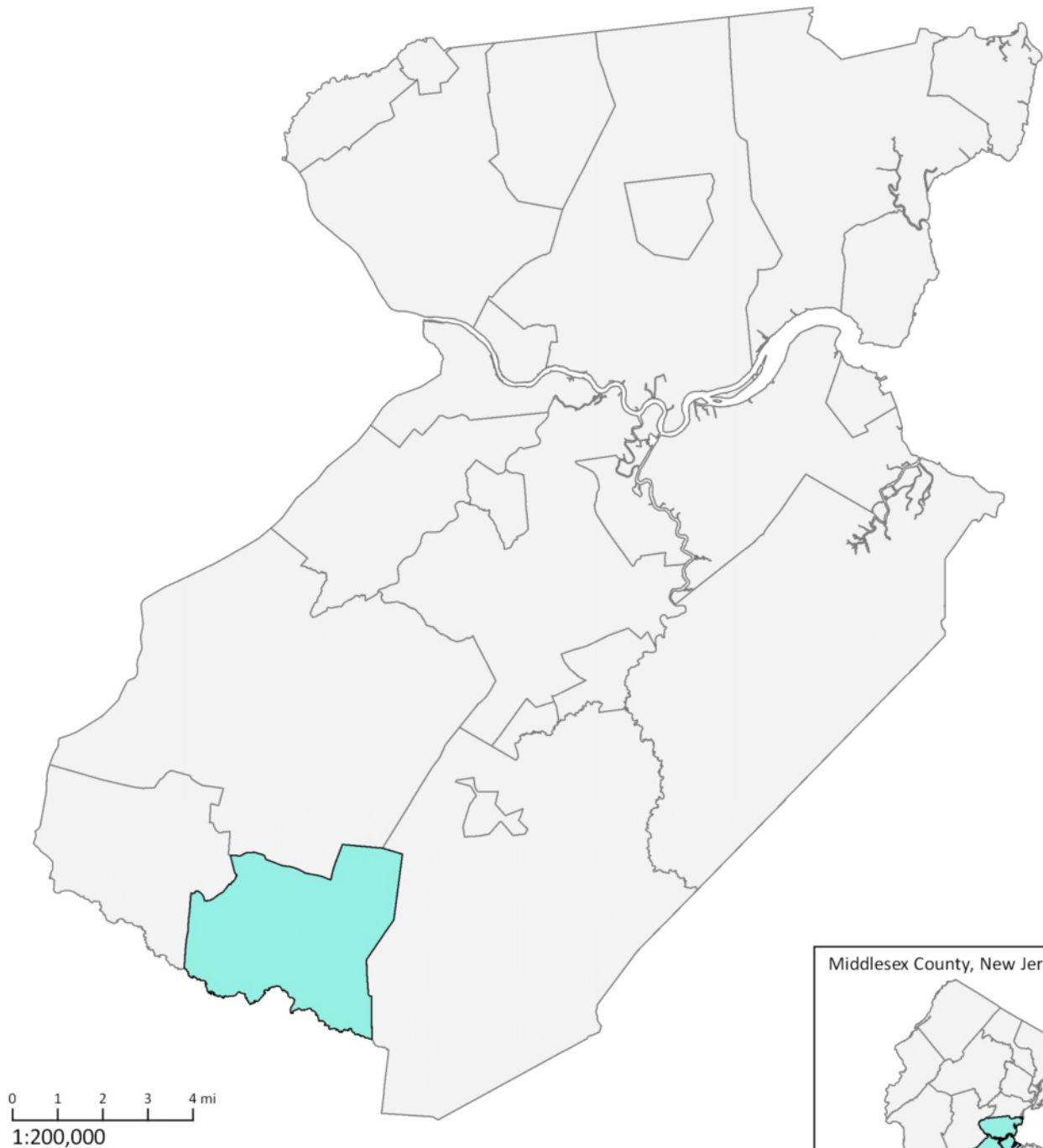
Chapter 150, *Land Development*, Article V, *Site Plan and Subdivision Standards*, Section 61, *Stormwater Management* contains specific code requirements for the management and mitigation of stormwater on developed lands within the Township.

Given that trees and other vegetation are a key component of the hydrologic cycle, stabilize and reduce the erosion of soils, improve percolation of surface water into the ground, and absorb pollutants, implementation of this Community Forestry Management Plan will contribute significantly to several goals and objectives of the Municipal Stormwater Management Plan, including:

- *Minimization of the increase in stormwater runoff volume from new development.*
- *Reduction of soil erosion and sedimentation of watercourses from development.*
- *Maintenance of groundwater recharge.*
- *Prevention of nonpoint source pollution.*
- *Maintenance of the integrity of stream channels for their biological function, as well as for drainage.*

- *Reduction of stormwater pollutants from new and existing development runoff to enhance water quality for protecting biota (fauna and flora of the region), provide for cleaner potable water supplies, and enhance sources of recreational activities.*

Increased levels of tree canopy and vegetative cover are directly correlated to improved water quality and reduced risk of flooding. As such, in addition to its municipal efforts, the Township encourages private property owners to preserve, plant and maintain trees, shrubs and other vegetation on their property to further reduce impervious groundcover, ensure efficient, natural drainage, reduce the risk and severity of flooding, and minimize the runoff of silt, nutrients, and pollutant laden stormwater into local water networks. The planting of low-maintenance landscapes that minimize pesticide usage is strongly recommended.

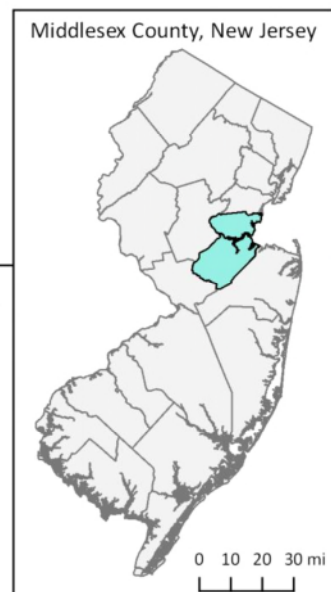


Cranbury Township within Middlesex County

Counties and municipalities maps generated from the NJ Office of Information Technology (NJGIT), Office of Geographic Information Systems (OGIS) "Municipalities of New Jersey (Clipped to Coast) Edition 20121228" data (2012).



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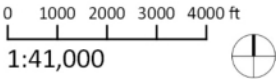


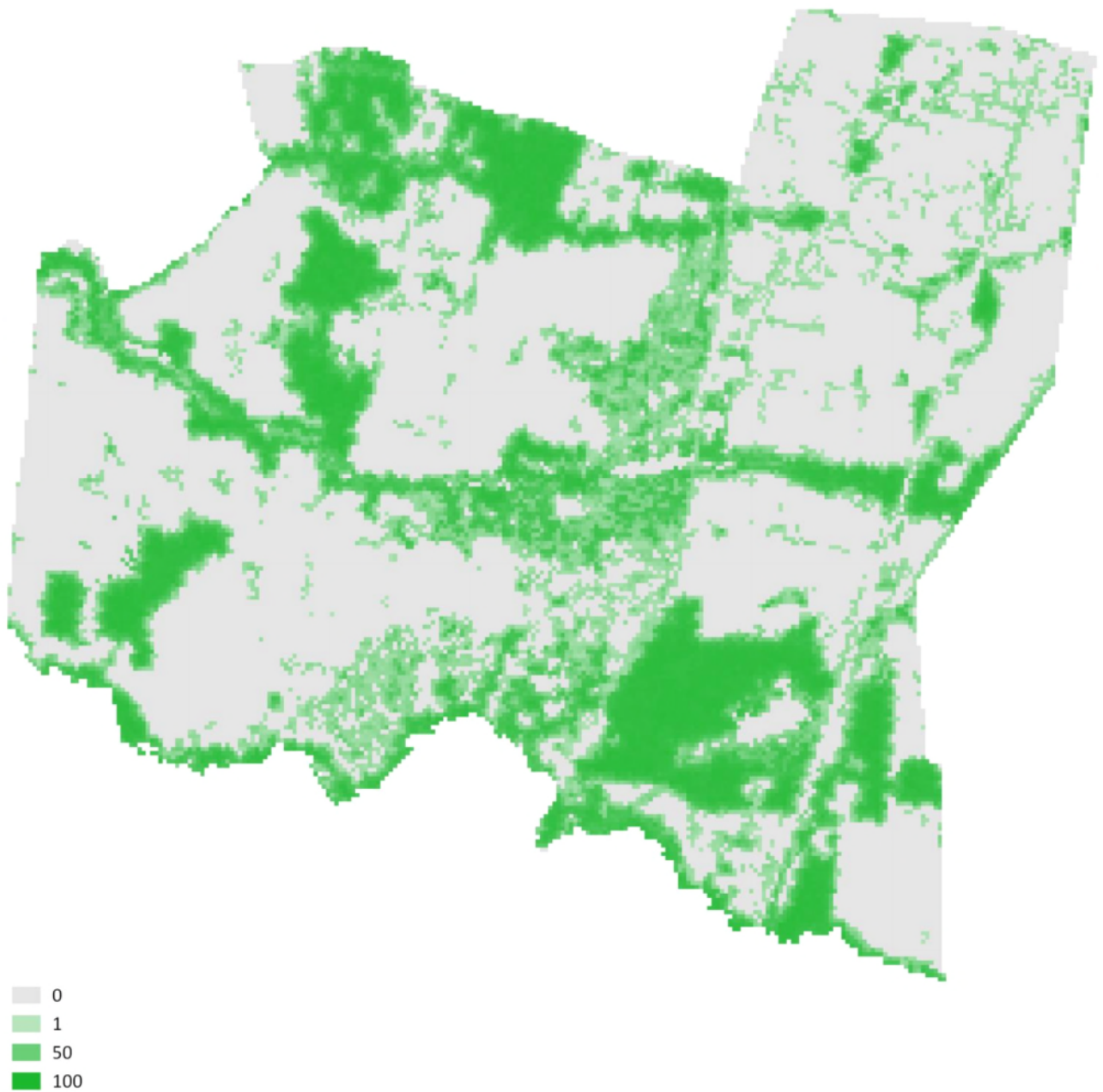
Aerial Imagery Map

Aerial imagery courtesy of the USDA National Agricultural Imagery Program (2015).



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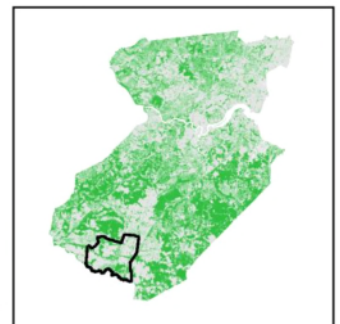
Percent Canopy Cover Map

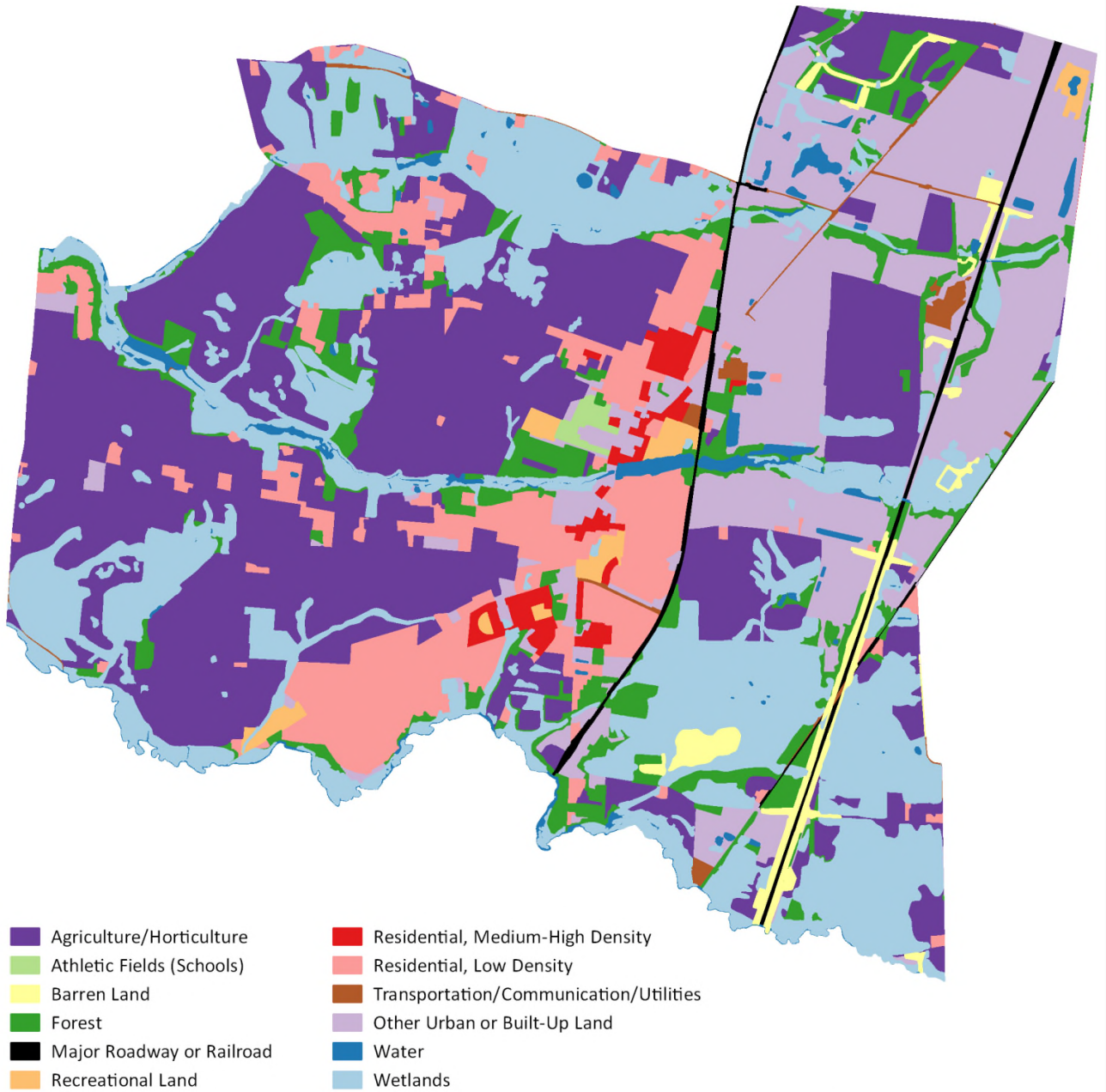
Percent canopy cover map generated from the National Land Cover Database (NLCD) Multi-Resolution Land Characteristics (MRLC) Consortium data (2011). Percentages shown in legend are for reference; each colored cell in the map has a percent canopy value between 0 and 100.



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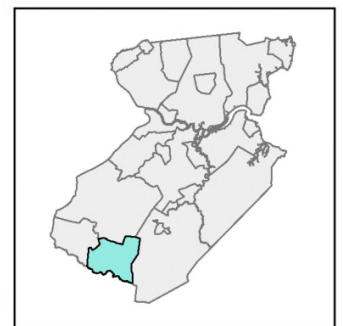
Land Use / Land Cover Map

Land use/land cover map generated from the NJOIT, OGIS "Land Use/Land Cover 2012 Update" data.



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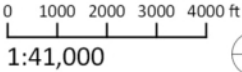


Roads Map

Roads data from US Census Bureau "TIGER/Line Shapefile, 2014, state, New Jersey, Primary and Secondary Roads State-based Shapefile".

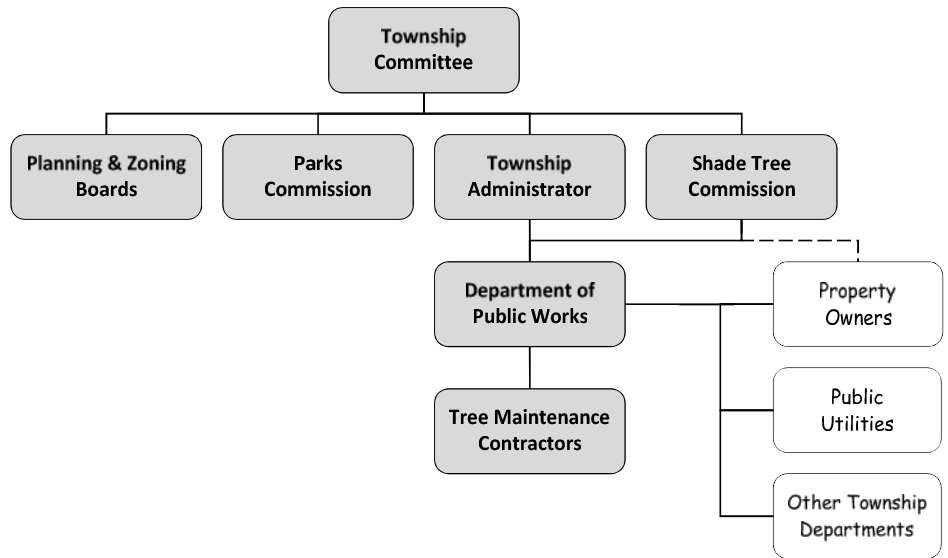


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SHADE TREE PROGRAM STRUCTURE

The Shade Tree Commission is primarily responsible for the management of public trees in the Township of Cranbury. However, the administration of Cranbury's Shade Tree Program is a cooperative effort between the Shade Tree Commission and the Department of Public Works, and other Township commissions, boards and departments, as follows:



SHADE TREE PROGRAM RESPONSIBILITIES

1. Township Committee

- a) The Township Committee is responsible for appointing the five members of the Shade Tree Commission.
- b) The Township Committee reviews the policies, procedures and plans of the Shade Tree Commission and is ultimately responsible for approving its budget.

2. Township Administrator

- a) The Township Administrator:
 - i) Serves as the chief administrative official of the Township.
 - ii) Approves, by purchase order, specific expenditures against the budget.
 - iii) Submits the Shade Tree Program budget to the Township Committee.
 - iv) Is responsible for the hiring, discipline and dismissal of department personnel.

3. Shade Tree Commission

- a) The Shade Tree Commission is a fully empowered commission per N.J.S.A. 40:64 – 1.

- b) The Shade Tree Commission is primarily responsible and accountable for the management of public trees in Cranbury Township. The Commission is a group of five citizen volunteers who are appointed by the Township Committee. The Shade Tree Commission, in cooperation with the Department of Public Works and with the approval of the Township Committee, is responsible for the following with regard to shade trees:
 - i) Exercising control over the regulation, planting and care of public shade and ornamental trees and shrubbery on any public right-of-way, Township park or Township property, except where specifically excluded by other jurisdictions.
 - ii) Regulating and controlling the use of the ground surrounding public trees to ensure the proper growth, care and protection of root systems.
 - iii) Recommending removal or other treatment for trees found to be dangerous to public safety.
 - iv) Adopting, amending or repealing ordinances necessary for carrying out its responsibilities.
 - v) Developing the goals that steer the Township's Shade Tree Program and the policies that govern its day-to-day operation.
 - vi) Planning and assisting in implementing various tree planting and maintenance projects.
 - vii) Reviewing and approving requests for tree removal received by the Department of Public Works.
 - viii) Receiving requests for tree planting and planning tree planting projects.

4. *Parks Commission*

- a) In practice, the Parks Commission is responsible for overseeing the planting and maintenance of trees in Township Parks in cooperation with the Shade Tree Commission and the Department of Public Works.

5. *Department of Public Works*

- a) The Public Works Director serves as a liaison to the Shade Tree Commission and is responsible for managing the day-to-day operations of the Township's Shade Tree Program. The Public Works Director reports to the Township Administrator and implements certain plans and programs of the Shade Tree Commission. Specifically, the Public Works Director is responsible for the following with regard to shade trees:
 - i) In cooperation with the Shade Tree Commission, administering applicable ordinances, rules and regulations relating to Township controlled trees.
 - ii) Planting and maintaining street trees and trees on Township properties, and completing related tasks.
 - iii) Receiving requests for the maintenance of Township trees from property owners and other sources and scheduling and completing the necessary inspections and work.
 - iv) Submitting requests received for tree removal to the Shade Tree Commission for review and approval prior to removing those trees, except in the case of emergencies.
 - v) Forwarding requests received for tree planting to the Shade Tree Commission.
 - vi) Providing emergency response service, when appropriate.
 - vii) Supervising public utilities and/or outside contractors working on or around public trees.

6. *Other Township Departments*

- a) Other Township departments assist the Shade Tree Program to the extent that they implement Township policies, procedures and ordinances that may relate to public or private trees and/or will notify the Shade Tree Commission of any conditions or plans that may affect trees, as follows:

- i) The Planning Board is responsible for ensuring that trees are planted in new developments in accordance with the Township Code, including the selection of appropriate species in accordance with the Shade Tree Commission's *Recommended Trees* (Exhibits A – F), and for the review of planned developments as they relate to the preservation and protection of trees and landscape buffers.
- ii) All Departments immediately notify the Public Works Director of tree related hazards for emergency response.

7. Tree Maintenance & Planting Contractors

- a) Most tree maintenance work and some tree planting is currently completed by outside contractors. While under contract with the Township, contractors report to the Public Works Director.
- b) Contractors are, within the terms of their agreement, responsible for:
 - i) Completing all planting, removal and other maintenance work under the direction and to the specifications of the Public Works Director in an efficient and safe manner.
 - ii) Following all current and accepted arboricultural standards and practices and abiding by all current and applicable safety standards relating to tree care operations.
 - iii) Providing proof of insurance, as required by the Township.
 - iv) Reporting any tree-related hazards or other problems immediately to the Public Works Director.

8. Property Owners

- a) Private property owners assist the Shade Tree Program to the extent that they:
 - i) Notify the Township of service requests for trees within Township rights-of-way (see procedures below).
 - ii) Are required to abide by Township ordinances relating to the preservation and protection of trees, especially heritage and historic specimens.
 - iii) Are asked to water new public tree plantings adjacent to their properties.
 - iv) Are encouraged to plant and properly care for trees on private property.

9. Public Utilities

- a) The role of public utilities in the Shade Tree Program is primarily to minimize conflicts between trees and their facilities.
- b) While working on or around Township trees, public utilities and their contractors are responsible for:
 - i) Abiding by all applicable ordinances.
 - ii) Keeping the Township informed as to their work plans and schedules.
 - iii) Exercising reasonable diligence in the installation and maintenance of their facilities so as to avoid damage to public and private trees.
 - iv) Not removing any tree without prior approval of the Township and its owner.
 - v) Following all current and accepted arboricultural standards and practices.
 - vi) Assisting Department of Public Works crews or Township contractors in completing tree removal and maintenance work around their facilities, where necessary.

- 1. Cranbury Township's Shade Tree Program is regulated by and with the authority of the following:
 - a) Chapter 41 of the Code of the Township of Cranbury, *Shade Tree Commission* establishes and empowers the Cranbury Township Shade Tree Commission (copy attached).

**TREE
SERVICE
REQUEST
PROCEDURES**

- b) Chapter 150 of the Code of the Township of Cranbury, *Land Development*, Section 56, *Landscaping*, which outlines landscaping requirements and approved species and spacing for Township tree plantings in accordance with new developments (copy attached).
 - c) Chapter 150 of the Code of the Township of Cranbury, *Land Development*, Section 57, *Screening and Buffers*, which outlines requirements for physically separating or screening buildings, structures, parking areas and truck loading and unloading areas from public view and block noise, lights or other nuisances and reduce adverse impacts (copy attached).
 - d) Chapter 150 of the Code of the Township of Cranbury, *Land Development*, Section 58, *Conservation Easements*, which outlines requirements for preserving conservation easement areas in their original natural state (copy attached).
 - e) Chapter 150 of the Code of the Township of Cranbury, *Land Development*, Article V, *Site Plan and Subdivision Standards*, Section 61, *Stormwater Management*, which contains specific code requirements for the management and mitigation of stormwater on developed lands within the Township.
2. These ordinances currently provide the Shade Tree Program with sufficient authority to fulfill its responsibilities and duties.
 3. Currently, there are no ordinances in effect that regulate the removal or care of trees on private property beyond the provisions within Chapter 41: *Shade Tree Commission*.

The Shade Tree Commission, Department of Public Works, or other Township departments do not currently have formal, written policies beyond what is dictated by applicable ordinances. However, they have developed and operate in accordance with certain unwritten policies, as indicated in the following sections.

Requests for the pruning, removal or other treatment of public trees are typically received from the adjoining property owners, but also may be initiated by Township departments and personnel.

All service requests are processed in the following manner:

1. Calls are received by or forwarded to the Department of Public Works.
2. All trees are inspected by the Public Works Director or his designee to determine whether the Township is responsible for the work, whether the request is justified, and what corrective work is necessary.
3. Requests for the removal of live trees are forwarded to the Shade Tree Commission, with the Public Works Director's recommendations, for approval or denial.
4. Necessary work is prioritized and scheduled by the Department of Public Works for completion by an outside contractor.
5. Emergency Service Requests are responded to immediately. All others are completed in order of priority and/or as time and resources permit.
6. Phone calls and/or face-to-face meetings keep property owners informed of the status of their requests.

**2018 – 2022
OBJECTIVES**

1. ***Ongoing Administrative Programs***
 - a) *2018 – 2022*
 - i) Continue implementing all administrative programs, policies and procedures already in effect.
2. ***Private and Heritage Trees Ordinance***
 - a) *January – March 2019*
 - i) Discuss the possibility of developing and implementing a new municipal ordinance which regulates the removal and/or disturbance of trees rooted on private property

within the Township. This ordinance would also have an element or focus on designating mature trees of desirable species as “Heritage Trees” requiring special protection and/or approval prior to removal. This ordinance may also contain special restitution requirements where such Heritage Tree(s) are removed for reasons other than due to hazardous, dying, diseased, or dead condition.

b) *April – June 2019*

- i) If the Private and Heritage Trees Ordinance is deemed desirable and feasible, begin drafting the ordinance for Township approval.**

c) *July – December 2019*

- i) Submit the final Ordinance for approval by the Township and inclusion into the municipal code, should it be approved.**



Budget & Resources

OVERVIEW	<p>The following is a summary of the annual resources available to Cranbury Township's Shade Tree Program, on average, in recent years.</p> <p>Objectives contained within this Plan will require resources beyond those currently available. The Township's ability to fully satisfy these objectives will be dependent upon its ability to secure additional funding through external sources and grant programs.</p>
2013 – 2017 GRANTS RECEIVED	<p>During the 2013 – 2017 management period, the Township of Cranbury received the following grants to assist its Shade Tree Program:</p> <ol style="list-style-type: none">1. The final phase of the No-Net-Loss Reforestation program grant from the NJ Forest Service, which was used to mitigate the loss of trees from the NJ Turnpike widening project: \$90,000.00 to plant 300 trees in 2014.
EMPLOYEE SALARY & WAGES	<p>Department of Public Works personnel Shade Tree Commission Secretary Other administrative personnel</p> <p><i>Subtotal (total salary and benefits prorated by percent of time dedicated to the Shade Tree Program)</i></p> <p style="text-align: right;"><i>\$53,800.00</i></p>
OPERATIONS	<p>Contracted tree pruning, removal and stump grinding Materials and supplies Training & professional development Memberships & subscriptions Other miscellaneous operating expenses</p> <p><i>Subtotal</i></p> <p style="text-align: right;"><i>\$65,000.00</i></p>
TOWNSHIP EQUIPMENT	<p>(2) Chip trucks (2) Chippers (1) Tractor with augur attachment (1) Backhoe Various chain saws and small tools</p> <p><i>Subtotal (estimated annual value based on value amortized over 5 – 15 year service life, plus annual maintenance, etc. and prorated by percent of time used by the Shade Tree Program)</i></p> <p style="text-align: right;"><i>\$22,294.00</i></p>

TREE PLANTING	Cost of trees purchased	
	Cost of contracted tree planting services	
	<i>Subtotal</i>	<i>\$300.00</i>
TREE WASTE RECYCLING	Cost of recycling wood, woodchips and leaves	
	Trucking and disposal costs	
	<i>Subtotal</i>	<i>\$0.00</i>
VOLUNTEER SERVICES	Shade Tree Commission members	
	Other community volunteers	
	<i>Subtotal (200 hrs per year average @ \$23.07)</i>	<i>\$4,614.00</i>
<hr/>		
TOTALS	<i>Township Resources</i>	<i>\$141,394.00</i>
	<i>Value of Volunteer Services</i>	<i>\$4,614.00</i>

TRAINING & PROFESSIONAL DEVELOPMENT GOALS

1. Ensure that individuals within the Shade Tree Program have sufficient knowledge to make sound and effective management decisions.
2. Ensure that tree inspections and evaluations follow accepted standard procedures and that the results are objective, technically correct and consistent.
3. Ensure that programs are implemented using the latest technical information and industry accepted standard practices.
4. Ensure continuity in the overall level of knowledge and expertise within the Shade Tree Program as individuals leave the Program and new ones join.
5. Satisfy the requirements of the New Jersey Shade Tree & Community Forestry Assistance Act, Training Skills & Accreditation Program without interruption, making the Township eligible for its benefits.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. ***Training Provisions & Funding***
 - a) Training and professional development opportunities in arboriculture and urban forestry continue to be made available to volunteers and employees serving the Township's Shade Tree Program.
 - b) These opportunities include CORE Training and Continuing Education as required under the New Jersey Shade Tree & Community Forestry Assistance Act.
 - c) The cost of training is funded by the operating budget of the attendee's respective commission or department.
2. ***Current Expertise, Licenses & Certifications***
 - a) Four members of the Shade Tree Commission are Rutgers Master Gardeners.
 - b) The Public Works Director is a Certified Public Works Manager (CPWM).
 - c) The Township Recycling Coordinator and the Public Works Director are Certified Recycling Professionals.
3. ***NJ Community Forestry's Training Skills & Accreditation Program***
 - a) At the time this Plan was prepared, the following had satisfied the CORE Training requirements of the New Jersey Shade Tree & Community Forestry Assistance Act Training Skills & Accreditation Program:
 - i) (2) Township employees
 - ii) (0) elected officials
 - iii) (5) Shade Tree Program volunteers
4. ***Recent Training Completed***
 - a) In 2013, one member of the Shade Tree Commission attended a Hazard Tree Identification workshop through the Rutgers Office of Continuing Professional Education.
 - b) In 2014, two members of the Shade Tree Commission attended a Tree Pruning course through the Rutgers Office of Continuing Professional Education.

	<ul style="list-style-type: none"> c) In 2015, three members of the Shade Tree Commission attended the New Jersey Invasive Species Strike Team annual conference. One member attended the conference again in 2016 and 2017. Three commissioners attended the NJ Forester's Annual Conference in 2016. d) In 2017, the Township hosted an in-house training session by a NJ Certified Tree Expert from Paul Cowie & Associates on pruning young trees for structure to develop sound scaffold limb architecture and mitigate potential future structural issues. This session was attended by 3 members of the Shade Tree Commission and 2 Department of Public Works employees. e) Over the past several years, members of the Shade Tree Commission attended the New Jersey Shade Tree Federation Annual Meeting most years for training on a variety of shade tree topics.
CURRENT TRAINING NEEDS	<p>The Township has evaluated its existing programs and personnel and identified the following areas in which training is currently needed or should be considered.</p> <ul style="list-style-type: none"> 1. Ongoing tree hazard identification and evaluation for Shade Tree Commission members and Department of Public Works employees. 2. Grant application writing training for Shade Tree Commission members to improve the Township's ability to apply for and receive State Community Stewardship Incentive Program grants. 3. Ongoing electrical hazard awareness and tree worker safety training for Department of Public Works personnel.
2018 – 2022 OBJECTIVES	<ul style="list-style-type: none"> 1. <i>Ongoing Training Programs</i> <ul style="list-style-type: none"> a) <i>2018 – 2022</i> <ul style="list-style-type: none"> i) Continue implementing the existing programs, policies & procedures listed above consistently and in a manner that maximizes the number of individuals who increase their level of expertise. ii) Attend training programs, in addition to the following objectives, that address the Current Training Needs listed above as appropriate programs become available. 2. <i>NJ Community Forestry's Training Skills & Accreditation Program</i> <ul style="list-style-type: none"> a) <i>January – March, Annually</i> <ul style="list-style-type: none"> i) Review training needs versus upcoming training opportunities. ii) Ensure that the Township will accumulate the necessary continuing education credits as required under the New Jersey Shade Tree & Community Forestry Assistance Act by the end of each calendar year. iii) Schedule NJ Community Forestry CORE Training for additional individuals, as necessary to maintain compliance with New Jersey Shade Tree & Community Forestry Assistance Act requirements. 3. <i>Tree Hazard Evaluation Training</i> <ul style="list-style-type: none"> a) <i>January – December 2018</i> <ul style="list-style-type: none"> i) Train at least one Department of Public Works employee and at least one Shade Tree Commission member who are responsible for completing tree inspections to further advance his or her skills in identifying and evaluating the severity of potential tree hazards using the latest information and techniques through an advanced level seminar. This training should include methods for determining the extent of internal decay.

4. *Tailgate Training Sessions*

a) *2019 – 2022*

- i) Conduct ongoing in-house training sessions for Department of Public Works personnel and Shade Tree Commission members.
 - The primary purpose of these sessions will be to refresh training previously received and to supplement it with new information and hands-on application.
 - These will be relatively brief (1 – 2 hours) sessions held at least quarterly on a continuous basis.
 - Each session will focus on very specific subject matter within a single topic taken from the Current Training Needs listed above.
 - When appropriate, these sessions may include guest speakers including arboricultural and other consultants, urban forestry managers from other municipalities, Cooperative Extension Agents, and others.

5. *CSIP Grant Writing and Grant Searching Training*

a) *January – December 2021*

- i) Train at least two Shade Tree Commission members on how to properly apply for New Jersey Community Stewardship Incentive Program grants for tree planting, maintenance, removal, and/or inventory. Training should be focused on finding grants, filling out grant applications correctly, communication with the State, and seeking out additional grant opportunities aside from the CSIP program.

6. *Planting Site Analysis & Species Selection Training*

a) *January – December 2022*

- i) Train at least one Shade Tree Commission member and one Department of Public Works employee in pre-planting site analysis, species selection and tree placement. Critical issues to be covered include:
 - Evaluating soil structure and drainage.
 - Recognizing potential root zone and aboveground restrictions and conflicts.
 - Selecting species whose site requirements and growth characteristics suit the existing site conditions.
 - Selecting an appropriate mix of species that will maximize long-term health and stability in the tree population while minimizing maintenance demands.



Public Education, Awareness & Outreach

PUBLIC EDUCATION, AWARENESS & OUTREACH GOALS

1. Increase and maintain public interest and support for Cranbury's Shade Tree Program.
2. Encourage the public's assistance in implementing various programs, protecting public trees, and beautifying the Township.
3. Encourage the planting, protection and proper care of trees on private property for the benefit of the entire community.
4. Educate citizens in the value of environmental stewardship.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. **Arbor Day**
 - a) Formal Arbor Day celebrations have been held annually in Cranbury Township since 1988.
 - b) Annual Arbor Day programs are organized by the Shade Tree Commission in cooperation with the Department of Public Work and typically include tree plantings ceremonies in honor of distinguished residents and Township employees at the elementary school or Township parks, an official proclamation distribution of tree seedlings, and press releases.
2. **Tree City USA & Other Awards**
 - a) Cranbury Township has been designated as a Tree City USA through the National Arbor Day Foundation every year since 1988.
3. **Media**
 - a) The Shade Tree Commission periodically issues media releases announcing or summarizing tree related programs and events via local media, such as the Township Website, the quarterly Cranbury Township Newsletter, The Journal, and the Township's Facebook page and other social media accounts.
 - b) The Shade Tree Commission and the Public Works Director periodically provide tree planting and maintenance tips to property owners.
4. **Education & Outreach**
 - a) The Shade Tree Commission created and began distributing a Tree Planting Door Hanger to provide homeowners with important information and instructions for trees planted adjacent to their properties.
 - b) Shade Tree Commission members no longer staff a table at the annual Cranbury Day event; instead, it is the Shade Tree Commission's goal to provide information and literature about Cranbury's Shade Tree Program to be displayed and distributed at the Environmental Commission and Parks table at Cranbury Day.

2018 – 2022 OBJECTIVES

1. **Ongoing Public Education, Awareness & Outreach Programs**
 - a) **2018–2022**
 - i) Continue all existing public education, awareness and outreach programs.

2. Media Postings

a) 2018 – 2022

- i) Continue to issue regular media releases each year via social media (including the Township's Facebook page), the Township newsletter, and the Township website.
 - Continue announcing and/or recapping Arbor Day activities, Tree City USA and other awards, tree planting and maintenance projects, etc.
 - Continue to issue at least three social media posts per year that provide general educational information geared to homeowners, rather than announcements of program events. Applicable subjects include general planting and maintenance tips, current insect and disease concerns, etc.
 - Focus at least one social media post per year on the many benefits that trees on private property contribute to the property owner as well as to the Township as a whole.

3. Annual Arbor Day Programs

a) January – April, Annually

- i) Continue to organize and conduct annual Arbor Day celebrations.
 - Continue to seek assistance from the Board of Education as well as local civic groups, local businesses, and others to help spread the workload and maximize exposure and attendance at the programs.
 - Vary the location, activities, and target audience each year to help increase interest and support for the Township's Shade Tree Program, awareness of the benefits of trees, and active environmental stewardship.

4. Tree City USA

a) October – December, Annually

- i) Continue to submit the annual application for designation as a Tree City USA through the National Arbor Day Foundation.
- ii) Prepare and submit the application for Tree City USA Growth Awards when eligibility requirements have been met.
- iii) Continue to advertise the designation throughout the Township and in other public relations materials (road signs, plaques, truck decals, stationary logo, etc.).

5. Library Education Programs

a) April – June, Annually

- i) Regularly hold education programs at the Township Library on topics related to tree care, the benefits of trees, tree identification, plant biology, and other tree-related topics. Place special emphasis on relatable, easily digestible programs that are appropriate for children and laypeople.



Tree Inventory & Assessment

TREE INVENTORY & ASSESSMENT GOALS

1. Provide accurate baseline information necessary for making sound management decisions and upon which proactive management programs can be established or improved.
2. Improve the efficiency of day-to-day tree management activities by identifying, prioritizing and scheduling planting, replanting, maintenance, and hazard abatement needs.
3. Track management activities and evaluate their long-term impact on the tree population and progress toward the overall goals and objectives of the Shade Tree Program.
4. Maintain records of maintenance for individual trees, where appropriate.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. *Current Tree Inventory & Assessment*

- a) Cranbury conducted a complete, computerized inventory of the existing public street tree population within the Village area of the Township in 2003 with the help of a 2002 *Community Stewardship Incentive Program* grant from the New Jersey Forest Service. As a result of the spread of bacterial leaf scorch through the Township's oak population, the spread of emerald ash borer through the Township's ash population, and the deterioration of other mature trees, this inventory has become outdated and needs updating.
- b) While seeking funding for a complete Tree Inventory & Assessment Update, the Township continues to complete other surveys to gather information that has assisted in maintaining effective management efforts.
 - i) A "1-2-3 Assessment" of Township trees within the Main Street area which identified trees requiring priority maintenance or removal.
 - ii) An "Empty Hole Survey" which identified available planting sites along the Main Street corridor.
- c) A current assessment of Cranbury's street tree population and how it is believed to have changed over the past five years is provided on page 7.
- d) The Township currently lacks a detailed inventory and assessment of trees in Township parks and on public properties, and within the right-of-way in new subdivisions and other parts of the Township located outside of the Main Street area.

2018 – 2022 OBJECTIVES

1. *Ongoing "1-2-3" Inventory and Expansion*

- a) *2018 – 2022*
 - i) Continue annual surveys of Township streets to assess priority maintenance needs using the Shade Tree Commission's "1-2-3" inventory method. Special attention should be paid to attempting to expand the survey scope to other areas of the Township once the Main Street area is complete.
 - ii) Surveys should be performed frequently enough that every Township-owned tree has been surveyed every 5 to 10 years.



TREE HAZARD MANAGEMENT GOALS

1. Minimize the risk of trees to public safety.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. *Tree Hazard Identification*

- a) Potentially hazardous conditions have been or are currently identified via:
 - i) Service requests from adjacent property owners.
 - ii) Observations by the Public Works Director and his crews and Shade Tree Commission members during the course of their daily activities.

2. *Tree Hazard Abatement Procedures*

- a) Priority tree pruning and removal needs brought to the Township's attention are addressed in the following manner:
 - i) The Public Works Director or his designee inspects all trees in question to determine the need for pruning, removal, or other treatments to mitigate the issue identified.
 - ii) With the exception of trees deemed as emergencies by the Department of Public Works, trees recommended for removal are forwarded to the Shade Tree Commission for review and approval.
 - iii) The necessary corrective work is prioritized based on the degree of hazard potential, and completed immediately, or when time and resources permit.

3. *Tree Hazard Record-Keeping*

- a) Records of service requests and priority tree maintenance work completed are maintained by the Department of Public Works.

2018 – 2022 OBJECTIVES

1. *Ongoing Tree Hazard Management Programs*

- a) *2018–2022*
 - i) Continue to implement all existing tree hazard management programs, policies and procedures.
 - ii) Continue to address hazard abatement needs as they are identified in order of priority.

2. *Tree Hazard Evaluation Training*

See Training & Professional Development, Objective #3.

3. *Ongoing “1-2-3” Inventory and Expansion*

See Tree Inventory & Assessment, Objective #1

TREE PLANTING GOALS

1. Achieve and perpetuate the street and public tree populations at maximum practical stocking (the total number of shade trees that is appropriate and which the Township can effectively manage, given available resources).
2. Optimize and maintain tree species and age diversity to maintain long-term stability in the public tree population.
3. Minimize conflicts between trees and sidewalks, utilities and other public and private fixtures.
4. Minimize future maintenance needs and costs.
5. Improve aesthetic appeal, seasonal variation and physical benefits to adjacent properties and the Township overall.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. ***Planting Jurisdiction***
 - a) The Township currently plants public trees:
 - i) In Township rights-of-way.
 - ii) In Township parks.
 - iii) On Township-owned properties.
 - iv) On Main Street as part of Arbor Day celebrations.
2. ***Planting vs. Removal Ratio***
 - a) Over the past five years, with the exception of 300 trees planted in 2014 as mitigation for trees removed under the NJ Forest Service's Not-Net-Loss Reforestation program, the Township planted 22 trees under Beautification Grants and 5 trees for annual Arbor Day plantings (one per year), for an average of about 5 trees planted per year.
 - b) In recent years, the Township has removed an average of 54 trees per year, primarily due to age, emerald ash borer infestation, bacterial leaf scorch deterioration, and storm damage.
 - c) This planting versus removal ratio has resulted in a net decrease in public street trees over the past 5 years. The trend in canopy loss Township-wide is likely somewhat worse given the prevalence of bacterial leaf scorch infection and emerald ash borer infestation on oak and ash trees on private lands.
3. ***Planting Location & Tree Placement***
 - a) Planting locations are determined by the Shade Tree Commission with input from the Department of Public Works and identified via:
 - i) "Empty Hole Surveys" which identify vacant planting sites in residential areas throughout the Township.
 - ii) Requests from adjacent property owners.
 - b) All street trees are planted within the right-of-way.
 - i) Trees are not planted until the placement has been inspected and approved by the Public Works Director or his representative with respect to potential hardscape, utility, and traffic conflicts.

- ii) Tree placement in Township parks and on Township properties is determined by the Parks Commission with input from the Shade Tree Commission.

4. *Species Selection*

- a) Species are selected by the Shade Tree Commission based on:
 - i) Suitability for shade production. Generally, only large (40' in height and larger at maturity) species are used where site conditions permit.
 - ii) Existing soil conditions and available growing space.
 - iii) Existing or desired planting patterns with adjustments to improve safety and other factors. Typically, an alternating sequence of at least three species is established and maintained along streets.
- b) In all cases, species are selected with consideration to:
 - i) Insect and disease resistance, with special emphasis on species resistant to bacterial leaf scorch.
 - ii) Future maintenance requirements and past species performance.
 - iii) Improving the overall species diversity of the Township's tree resource.

5. *Tree Supply & Installation*

- a) Trees planted by the Township are:
 - i) Purchased directly by the Township or through grant monies received.
 - ii) Installed primarily by Public Works crews and occasionally by outside contractors in the case of larger planting projects.

6. *Post-Planting Care*

- a) Post-planting maintenance includes:
 - i) Irrigation and protection of street trees by adjacent property owners.
 - ii) Irrigation of trees planted in Township parks and on Township properties by Department of Public Works personnel.
 - iii) Crown raising by Public Works crews or Township contractors 3-6 years after planting.
 - iv) Standard maintenance and guarantees by the planting contractor, when appropriate.

7. *Funding*

- a) Most tree planting by the Township is funded by the Shade Tree Commission budget. Plantings are occasionally funded, either entirely or in-part, by New Jersey State grants.

2018 – 2022 OBJECTIVES

1. *Ongoing Tree Planting Programs*

- a) *2018– 2022*
 - i) Continue implementing all existing tree planting programs where appropriate and with changes dictated by the following objectives.

2. *Grants from Local Businesses*

- a) *January – March 2018*
 - i) Contact local large businesses such as Amazon to see if they would be willing to contribute funds to help individual or annual tree planting events, to help increase the total number of plantings per year.

- b) *April – June 2018*
 - i) If any local businesses are interested or willing to contribute to tree planting in Cranbury, complete and submit any necessary paperwork to be eligible for funding, and consider contacting Township Committee to see if they will match any grant funds.
- c) *July – September 2018*
 - i) Plan for and implement tree planting with any received funds.

3. Annual Tree Planting Program Funding

- a) *2018 – 2022*
 - i) Continue to stress to the Township Committee the critical importance of consistent annual replanting to reestablish and perpetuate the Township's public tree resource.
 - ii) Support annual budget requests with lists of tree planting requests from Township residents, lists of vacant planting sites identified, charts of overall tree stocking levels, and the benefits of trees in reducing energy consumption and improving air quality.
- b) *October – December, annually*
 - i) Investigate the availability of New Jersey Community Forestry *Community Stewardship Incentive Program* (CSIP) grants, as well as other community development, transportation, and similar grant programs, for funding Township tree planting projects.
 - ii) When available, apply for grant funding to supplement the Township's tree planting budget.
- c) *January – June 2020*
 - i) Evaluate the feasibility of establishing an Adopt-A-Tree program and/or Memorial Tree Planting program through which residents may contribute money toward the planting of trees adjacent to their property, or elsewhere in the Township.
- d) *July – December 2020, and continuously thereafter*
 - i) If deemed feasible and desirable, establish the Adopt-A-Tree and/or Memorial Tree program(s) with consideration to:
 - How the Township will accept contributions and how the money will be held and spent.
 - What percentages of the donations will be used for maintenance of the trees.
 - Advertising the program(s) to ensure sufficient participation to keep the program(s) self-sufficient.
 - Publicly recognizing those that contribute.
 - ii) Once established, advertise and implement the Adopt-A-Tree and/or Memorial Tree programs on a continuous basis.
- e) *January – June 2021*
 - i) Investigate and evaluate the feasibility of establishing a Tree Trust Fund for the deposit of donations received for tree planting programs, remuneration for trees damaged, fines levied for tree ordinance violations, etc. to supplement the Township's tree planting budget.
- f) *July – December 2021, and continuously thereafter*
 - i) If deemed feasible, establish and begin depositing appropriate monies into the fund.

4. Do Not Plant List

- a) *January – March 2021*
 - i) Begin drafting a list of plant species and cultivars that the Township does not wish to have planted anywhere, either on municipal or private properties. Examples include invasive species such as *Ailanthus altissima*, undesirable forms such as the Bradford pear, and species with known disease issues such as ash trees (*Fraxinus spp.*). This list

will not be limited to only tree species and will include shrubs, bushes, vines, annuals, etc.

- ii) Utilize industry professionals, online resources, the NJ DEP website, and other helpful resources to ensure the list is reasonably exhaustive.

b) April – June 2021

- i) Publish the Do Not Plant list on the Township website and advertise it on the Township Facebook page and Shade Tree Commission page.

5. Approved Tree Planting List Update

a) July – September 2021

- i) Begin drafting a review and revision of the Approved Planting List of acceptable species contained in Chapter 150 of the Township Code. This list should be expanded again to include favorable native and non-invasive ornamental trees that do not present a threat to Cranbury's native flora or fauna or human life or property. Species should be selected based upon several factors:
 - The Township's desire to constantly improve species diversity to reduce the risk of future widespread insect and disease pest problems due to overpopulation of a particular species or genus.
 - Favorability as a food or habitat source for native fauna.
 - Other environmental benefits such as potential canopy cover, erosion control, stormwater buffering, and pollution control.
- ii) Utilize industry professionals, online resources, the NJ DEP website, and other helpful resources to ensure the list is reasonably exhaustive.
- iii) Where appropriate, remove trees currently on the Approved Planting List if the Township has reason to no longer approve their planting (such as ash trees, *Fraxinus spp.*).

b) October – December 2021

- i) Publish the updated Do Not Plant list on the Township website and advertise it on the Township Facebook page and Shade Tree Commission page.



TREE MAINTENANCE GOALS

1. Improve and maintain the long-term health and condition of the Township's shade tree population.
2. Maximize the service life of existing trees.
3. Minimize tree hazards and maintain public safety.
4. Maximize the benefits that trees provide to the community relative to the cost of maintaining them.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. *In-House Crews*

- a) The Township currently lacks in-house crews dedicated full-time to tree maintenance.
- b) Department of Public Works crews occasionally complete certain tree maintenance tasks.
- c) The Department of Public Works in-house crews complete approximately:
 - i) 5% of all tree removal work
 - ii) 75% of all tree pruning work
 - iii) 0% of all stump grinding work
 - iv) 5% of all emergency response, miscellaneous and specialty tree work
- d) Department of Public Works crews are currently equipped with:
 - i) (2) Chip trucks
 - ii) (2) Chippers
 - iii) (1) Tractor with auger attachment
 - iv) (1) Backhoe
 - v) Various chain saws and small tools

2. *Private Contractors*

- a) Most public tree maintenance is completed by qualified local tree maintenance contractors on a project basis under the direction of the Public Works Director.
- b) Generally, these contractors complete:
 - i) 95% of all tree removal work
 - ii) 5% of all tree pruning work
 - iii) 100% of all stump grinding work
 - iv) 95% of all emergency response, miscellaneous and specialty tree work
- c) Private contractors remain on call to provide emergency service during non-working hours.

3. *Inter-Local & Mutual Assistance Agreements*

- a) The Township currently lacks formal mutual assistance agreements for the sharing of equipment and personnel with neighboring municipalities or the County, but has recently worked informally with the Township of Plainsboro.

4. *Work Identification, Prioritization, Scheduling & Record Keeping*

- a) Maintenance of public trees is currently limited to property owner requests and observations by Township employees confirmed and prioritized by the Public Works Director.
- b) Records of recent tree maintenance work are maintained via Department of Public Works work logs and contractor purchase orders.

5. *Tree Removal*

- a) It is the Township's policy not to remove live public trees unless they pose a threat to public safety.
- b) Except in the case of emergencies, requests for tree removal received by the Department of Public Works are forwarded to the Shade Tree Commission for review and approval.
- c) Property owners may be granted permission by the Shade Tree Commission to remove right-of-way trees at their expense if there is a valid reason for doing so.
- d) In recent years, the Township has removed an average of 54 public trees per year.

6. *Insect and Disease Management & Specialty Treatments*

- a) Insect and disease control, fertilization and other specialty treatments are generally not completed for public trees.
- b) Occasionally cables will be installed in a high-value public tree to extend its service life and improve public safety.

7. *Sidewalk Maintenance*

- a) Adjacent property owners are responsible for replacing or repairing unsafe sidewalks, including those damaged or lifted by tree roots from Township trees.
- b) The Township attempts to select species and place trees in a manner that will minimize future conflicts between trees and sidewalks.

8. *Funding*

- a) The Department of Public Works operating budget typically covers the cost of tree maintenance completed by its crews.
- b) The Shade Tree Commission operating budget typically covers the cost of contractors hired to complete tree maintenance work.

**2018 – 2022
OBJECTIVES**

1. *Ongoing Tree Maintenance Programs*

- a) *2018 – 2022*
 - i) Continue implementing all existing tree maintenance programs, policies and procedures on a regular basis.
 - ii) Continue to address maintenance needs from the "1-2-3" surveys on an ongoing, prioritized basis as surveys are conducted.

2. *Structural Pruning for Young Trees*

- a) *2018 – 2022*
 - i) Develop and implement an ongoing process to provide pruning to improve the structure of trees planted in recent years. Such pruning is a cost-effective way to ensure the development of good form and sound structure as trees mature, minimize future pruning needs, and minimize the development of potentially hazardous structural defects.
 - ii) Development of this process will require:

- Scouting, identifying, and prioritizing the trees to be pruned. Generally, trees 3" – 6" in diameter will be targeted with priority given to trees in higher use areas and/or which exhibit the greatest need.
- Developing technically sound pruning objectives and specifications in accordance with the ANSI A300 Pruning Standard for "Structural" / "Young Tree Pruning."
- If appropriate, developing specifications for correcting root collar disorders such as girdling roots, deep planting, etc.
- Ensuring that the appropriate Department of Public Works employees have received the necessary training to successfully complete this specialized objective.



Tree Waste Recycling

TREE WASTE RECYCLING GOALS

1. Reduce the cost of tree waste disposal.
2. Provide beneficial recycled products to Township residents and for use on Township properties.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. ***Recycling Facilities***
 - a) The Township does not currently operate a recycling facility for tree waste generated by public or private trees.
2. ***Material Processing, Use & Distribution***
 - a) *Leaves*
 - i) Leaves collected by the Township are delivered to a local nursery for use in their operation.
 - b) *Wood Chips*
 - i) Wood chips generated by Township crews are delivered to a local nursery for use in their operation.
 - ii) Wood chips generated by private contractors hired by the Township are removed and properly recycled by the contractor.
 - c) *Bulk Wood*
 - i) All bulk wood generated by Township crews is delivered to a State-approved recycling facility for conversion into various recycled products.
 - ii) Bulk wood generated by private contractors hired by the Township is removed and properly recycled by the contractor.
3. ***Recycling Income***
 - a) Currently, no income is derived from the sale of tree waste materials or recycled products.

2018 – 2022 OBJECTIVES

1. ***Ongoing Tree Waste Recycling Programs***
 - a) *2018 – 2022*
 - i) Continue implementing all existing tree waste recycling programs, policies and procedures.



Tree Care Disaster Plan

TREE CARE DISASTER PLAN GOALS

1. Minimize tree-related damage and/or widespread tree losses caused by storms and other forces via technically sound and responsible planting, preventive maintenance and hazard identification and abatement, as detailed elsewhere in this plan.
2. Ensure that the Township is prepared to respond immediately to tree-related emergencies and disasters in a prompt and effective manner.
3. Provide the Township with the resources to repair or replace widespread tree damage or losses.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. ***Tree Emergency & Disaster Threats***
 - a) Severe weather is currently considered to be a serious threat to the Township's tree population. In recent years, severe storms have caused substantial damage to both public and privately-owned trees.
 - b) In addition to the threat to the trees themselves, the widespread structural failure of tree failures poses a serious threat to electrical service, communications, and the Township's ability to provide critical emergency services.
2. ***Insect & Disease Threats***
 - a) The impact of bacterial leaf scorch disease on the Township's public and privately-owned oak populations has reached a critical level. The effects of the disease have resulted in the removal of many mature trees over the past decade, and the need for removal will continue to accelerate for the foreseeable future. Susceptible oak species represent a significant portion of the community's urban forest.
 - b) The risk of widespread tree damage and losses to other biotic threats is currently considered moderate, but manageable through increased species diversity and cultivar selection. Currently, there is particular concern regarding:
 - i) Emerald ash borer, which is making its way to New Jersey from the Great Lakes area. Recent removals of all or most municipal-managed ash trees has reduced the threat posed by emerald ash borer considerably throughout the Township.
 - ii) Bacterial leaf scorch, which is pervasive throughout New Jersey and which has already caused significant damage and losses to Cranbury's oak tree population.
3. ***Wildfire Protection***
 - a) Wildfire is not considered to be a significant threat to public tree resources in Cranbury Township at this time.
4. ***Existing Emergency & Disaster Plans***
 - a) The Township's State-mandated Emergency Operations Plan outlines procedures for vital services and cooperative efforts between all Township departments and neighboring communities during an emergency or disaster.
 - b) The Township currently lacks a formal plan specific to the repair and replacement of widespread tree damage and losses beyond initial emergency response efforts.

**2018 – 2022
OBJECTIVES**

5. *Emergency Response*

- a) The Department of Public Works, in cooperation with the Office of Emergency Management, local utilities, and contractors, is responsible for clearing trees and debris to open roadways and permit restoration of electrical service and communications.
- b) The Department of Public Works and its contractors are on 24-hour call to respond to tree-related emergencies.

1. *Ongoing Programs*

- a) *2018 – 2022*
 - i) Continue implementing existing programs, policies and procedures.
 - ii) Implement or expand technically sound and responsible planting, preventive maintenance and hazard identification and abatement programs, as detailed elsewhere in the Plan, to reduce the risk of future tree failures.



Plan Preparation & Evaluation

PLAN PREPARATION & EVALUATION GOALS

1. Ensure that Cranbury Township's Shade Tree Program continues to follow a well-defined, consistent and efficient course of action toward its overall goals.
2. Provide a means of continually evaluating the success of past programs and activities and making adjustments to address changing conditions and needs.
3. Allow the Township to remain in compliance with and eligible for the benefits of the New Jersey Shade Tree & Community Forestry Assistance Act.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. Preparation of this fourth five-year Community Forestry Management Plan was the cooperative effort of the Cranbury Township Shade Tree Commission, the Department of Public Works, and their consulting arborist.
2. Goals and objectives contained in this Community Forestry Management Plan are based on the Township's implementation of its 2001 – 2018 Plans and ongoing review of its progress.
3. Preparation of this Plan was made possible through a Green Communities Challenge Grant from the New Jersey Forest Service and the in-kind services of Township volunteers and employees.

2018 – 2022 OBJECTIVES

1. **Annual Program Evaluation**
 - a) *December, Annually*
 - i) Evaluate the success of the year's activities and accomplishments relative to the goals and objectives contained within this Plan.
 - ii) Adjust programs and procedures, as necessary, based upon the evaluation.
 - iii) Prepare and submit the Annual Accomplishment Report to the New Jersey Forest Service in accordance with the requirements of the New Jersey Shade Tree & Community Forestry Assistance Act.
2. **Five-Year Evaluation**
 - a) *January – March 2022*
 - i) Evaluate the success of all objectives completed to date.
 - ii) Evaluate progress toward the overall goals of the Shade Tree Program.
 - iii) Begin formulating new objectives and adjustments to existing policies, programs and procedures, if necessary to address changing needs, for the 2023 – 2027 management period.
3. **2023 – 2027 Management Plan Development**
 - a) *April – September 2022*
 - i) Finalize new objectives and adjustments to existing policies, programs and procedures for the 2023 – 2027 management period.
 - ii) Prepare and submit a Community Forestry Management Plan for the 2023 – 2027 management period.
 - b) *October – December 2022*
 - i) Obtain Plan approval from the New Jersey Community Forestry Council.



Summary of 2018 – 2022 Objectives

Objectives / Tasks	2018	2019	2020	2021	2022
PROGRAM ADMINISTRATION					
1. <i>Ongoing Administrative Programs</i>					
<input type="checkbox"/> Continue all existing administrative programs, policies and procedures already in effect (p.19, #1.a.i)					
2. <i>Private and Heritage Trees Ordinance</i>					
<input type="checkbox"/> Discuss the feasibility of implementing a Private Trees and "Heritage Trees" ordinance (p.19, #2.a.i)					
<input type="checkbox"/> If deemed feasible and desirable, begin drafting the ordinance (p.20, #2.b.i)					
<input type="checkbox"/> Submit the final Ordinance for approval by the Township and inclusion into the municipal code, should it be approved (p.20, #2.c.i)					
TRAINING & PROFESSIONAL DEVELOPMENT					
1. <i>Ongoing Training Programs</i>					
<input type="checkbox"/> Continue all existing training programs on a regular basis and attend additional programs as they become available (p.24, #1.a.i-ii)					
2. <i>NJ Community Forestry Training Skills & Accreditation Program</i>					
<input type="checkbox"/> Review training needs and schedule training, as necessary, to maintain Approved Status (p.24, #2.a.i-iii)					
3. <i>Tree Hazard Evaluation Training</i>					
<input type="checkbox"/> Train at least one Department of Public Works employee and at least one Shade Tree Commission member in identifying and evaluating the severity of potential tree hazards using the latest information and techniques through an advanced level seminar (p.24, #3.a.i)					
4. <i>Tailgate Training Sessions</i>					
<input type="checkbox"/> Conduct ongoing in-house training sessions for Department of Public Works personnel and Shade Tree Commission members on a variety of pertinent subjects (p.25, #4.a.i)					

Objectives / Tasks	2018				2019				2020				2021				2022			
TRAINING & PROFESSIONAL DEVELOPMENT, cont'd																				
5. <i>CSIP Grant Writing and Grant Searching Training</i> <input type="checkbox"/> Train at least two Shade Tree Commission members on how to properly apply for New Jersey Community Stewardship Incentive Program grants for tree planting, maintenance, removal, and/or inventory, as well as seeking out additional grant opportunities aside from the CSIP program (p.25, #5.a.i)																				
6. <i>Planting Site Analysis & Species Selection Training</i> <input type="checkbox"/> Train at least one Shade Tree Commission member and one Department of Public Works employee in pre-planting site analysis, species selection and tree placement (p.25, #6.a.i)																				
PUBLIC EDUCATION, AWARENESS & OUTREACH																				
1. <i>Ongoing Public Education, Awareness & Outreach Programs</i> <input type="checkbox"/> Continue all existing public education, awareness and outreach programs on a regular basis (p.26, #1.a.i)																				
2. <i>Media Postings</i> <input type="checkbox"/> Continue to issue regular media releases each year via social media, the Township newsletter, and the Township website (p.27, #2.a.i)																				
3. <i>Arbor Day Programs</i> <input type="checkbox"/> Continue to plan, organize and conduct annual Arbor Day celebrations (p.27, #3.a.i)																				
4. <i>Tree City USA</i> <input type="checkbox"/> Continue to submit the annual application for designation as a Tree City USA; Prepare and submit applications for Tree City USA Growth Awards after eligibility requirements have been met; Continually advertise the designation by displaying the program’s promotional materials (p.27, #4.a.i-iii)																				
5. <i>Library Education Programs</i> <input type="checkbox"/> Regularly hold education programs at the Township Library on topics related to tree care, the benefits of trees, tree identification, plant biology, and other tree-related topics (p.27, #5.a.i)																				

Objectives / Tasks	2018				2019				2020				2021				2022			
TREE INVENTORY & ASSESSMENT																				
1. <i>Ongoing "1-2-3" Inventory and Expansion</i>																				
<input type="checkbox"/> Continue annual surveys of Township streets to assess priority maintenance needs using the Shade Tree Commission's "1-2-3" inventory method with expansion to new areas; Perform surveys frequently enough that every Township-owned tree has been surveyed every 5 to 10 years (p.28, #1.a.i-ii)																				
TREE HAZARD MANAGEMENT																				
1. <i>Ongoing Tree Hazard Management Programs</i>																				
<input type="checkbox"/> Continue all existing tree hazard management programs; Continue to address hazard abatement needs as they are identified in priority order (p.29, #1.a.i-ii)																				
TREE PLANTING																				
1. <i>Ongoing Tree Planting Programs</i>																				
<input type="checkbox"/> Continue all existing tree planting programs with changes dictated by the following objectives (p.31, #1.a.i)																				
2. <i>Grants from Local Businesses</i>																				
<input type="checkbox"/> Contact local large businesses to see if they would be willing to contribute funds to tree planting events (p.31, #2.a.i)																				
<input type="checkbox"/> Complete and submit any necessary paperwork to be eligible for funding (p.32, #2.b.i)																				
<input type="checkbox"/> Plan for and implement tree planting with any received funds (p.32, #2.c.i)																				
3. <i>Annual Tree Planting Program Funding</i>																				
<input type="checkbox"/> Continue to stress to the Township Committee the critical importance of consistent annual replanting to reestablish and perpetuate the Township's public tree resource; Support annual budget requests with lists of tree planting requests / vacant sites, charts of tree stocking levels, and the benefits of trees (p.32, #3.a.i-ii)																				
<input type="checkbox"/> Investigate the availability of New Jersey CSIP grants, as well as other community grants, for funding Township planting projects; When available, apply for these funding opportunities (p.32, #3.b.i-ii)																				
<input type="checkbox"/> Evaluate the feasibility of establishing an Adopt-A-Tree program and/or Memorial Tree Planting program (p.32, #3.c.i)																				
<input type="checkbox"/> If deemed feasible and desirable, establish the Adopt-A-Tree and/or Memorial Tree program(s); Once established, advertise and implement the program(s) on a continuous basis (p.32, #3.d.i-ii)																				

Objectives / Tasks	2018	2019	2020	2021	2022
TREE PLANTING, cont'd					
<input type="checkbox"/> Investigate the feasibility of establishing a Tree Trust Fund for the deposit of donations received for tree planting programs, remuneration for trees damaged, fines levied for tree ordinance violations, etc. to supplement the Township's tree planting budget (p.32, #3.e.i)					
<input type="checkbox"/> If deemed feasible, establish and begin depositing appropriate monies into the fund (p.32, #3.f.i)					
4. <i>Do Not Plant List</i>					
<input type="checkbox"/> Begin drafting a list of plant species and cultivars that the Township does not wish to have planted anywhere, either on municipal or private properties; Utilize industry professionals, online resources, the NJ DEP website, and other helpful resources to ensure the list is reasonably exhaustive (p.32, #4.a.i-ii)					
<input type="checkbox"/> Publish the Do Not Plant list on the Township website and advertise it on the Township Facebook page and Shade Tree Commission page (p.33, #4.b.i)					
5. <i>Tree Approved Planting List Update</i>					
<input type="checkbox"/> Begin drafting a review and revision of the Approved Planting List of acceptable species contained in Chapter 150 of the Township Code; Utilize industry professionals, online resources, the NJ DEP website, and other helpful resources to ensure the list is reasonably exhaustive; Where appropriate, remove trees currently on the Approved Planting List if the Township has reason to no longer approve their planting (p.33, #5.a.i-iii)					
<input type="checkbox"/> Publish the updated Do Plant list on the Township website and advertise it on the Township Facebook page and Shade Tree Commission page (p.33, #5.b.i)					
TREE MAINTENANCE					
1. <i>Ongoing Tree Maintenance Programs</i>					
<input type="checkbox"/> Continue all existing tree maintenance programs, policies and procedures on a regular basis; Continue to address maintenance needs from the "1-2-3" surveys on an ongoing, prioritized basis as surveys are conducted (p.35, #1.a.i-ii)					
2. <i>Structural Pruning for Young Trees</i>					
<input type="checkbox"/> Develop and implement an ongoing process to provide pruning to improve the structure of trees planted in recent years; Development of this process will require tree scouting, developing technically sound pruning objectives, developing specifications for correcting root collar disorders, and ensuring that personnel performing pruning have appropriate training (p.35, #2.a.i-ii)					

Objectives / Tasks	2018				2019				2020				2021				2022			
TREE WASTE RECYCLING																				
1. <i>Ongoing Tree Waste Recycling Programs</i>																				
<input type="checkbox"/> Continue all existing tree waste recycling programs (p.37, #1.a.i)																				
TREE CARE DISASTER PLAN																				
1. <i>Ongoing Programs</i>																				
<input type="checkbox"/> Continue all existing programs, policies and procedures; Reduce risks via other elements of this Plan (p.39, #1.a.i-ii)																				
PLAN PREPARATION & EVALUATION																				
1. <i>Annual Program Evaluation</i>																				
<input type="checkbox"/> Evaluate the prior year's accomplishments, identify objectives not yet completed, and adjust programs, as necessary; Prepare and submit an <i>Annual Accomplishment Report</i> to NJFS (p.40, #1.a.i-iii)																				
2. <i>Five-Year Evaluation</i>																				
<input type="checkbox"/> Evaluate the Shade Tree Program's accomplishments during the current 5-year management period; Evaluate progress toward the overall goals of the Shade Tree Program; Begin formulating new objectives and program adjustments (p.40, #2.a.i-iii)																				
3. <i>2023 – 2027 Plan Development</i>																				
<input type="checkbox"/> Finalize new objectives and program adjustments and prepare and submit a Community Forestry Management Plan for the 2023 – 2027 management period (p.40, #3.a.i-ii)																				
<input type="checkbox"/> Obtain State approval for 2023 – 2027 Community Forestry Management Plan (p.40, #3.b.i)																				



PRIMARY ORDINANCES

1. Chapter 41 of the Code of the Township of Cranbury, *Shade Tree Commission* establishes and empowers the Cranbury Township Shade Tree Commission.
2. Chapter 150 of the Code of the Township of Cranbury, *Land Development*, Section 56, *Landscaping*, which outlines landscaping requirements and approved species and spacing for Township tree plantings in accordance with new developments.
3. Chapter 150 of the Code of the Township of Cranbury, *Land Development*, Section 57, *Screening and Buffers*, which outlines requirements for physically separating or screening buildings, structures, parking areas and truck loading and unloading areas from public view and block noise, lights or other nuisances and reduce adverse impacts.
4. Chapter 150 of the Code of the Township of Cranbury, *Land Development*, Section 58, *Conservation Easements*, which outlines requirements for preserving conservation easement areas in their original natural state.

Chapter 41. SHADE TREE COMMISSION

[HISTORY: Adopted by the Township Committee of the Township of Cranbury 2-22-1999 by Ord. No. O-01-99-02. Amendments noted where applicable.]

GENERAL REFERENCES

Environmental Commission — See Ch. 16.

§ 41-1. Personnel, appointment.

The regulation, planting, care and control of shade and ornamental trees and shrubbery upon and in the streets, highways, public places and parks and parkways of the Township of Cranbury, except State highways, unless the Department of Transportation shall assent thereto, and except County highways, parks and parkways if a County Shade Tree Commission is operative and gives assent to, shall be exercised by and under the authority of the Cranbury Township Shade Tree Commission, which is hereby created. The Commission shall consist of five members. The members shall be appointed by the Mayor of the Township of Cranbury, who shall be residents of the Township and shall serve without compensation except as hereinafter provided.

§ 41-2. First Commission, subsequent Commissions; terms.

The first Commissioners shall be appointed within 60 days after the effective date of this chapter, and their terms of office shall commence upon the date of their appointment and shall be for the respective period of one, two, three, four and five years. The term of each appointee shall be designated in his or her appointment. All subsequent appointments, except to fill vacancies, shall be for the full term of five years, to take effect on January 1, next succeeding such appointment.

§ 41-3. Organization; salaries.

The Commission shall organize within 30 days after the appointment of its total membership for the remainder of the then calendar year, and thereafter annually by the election of one of its members as Chairman, and the appointment of a secretary, who need not be a member. The salary of the secretary, who may be compensated even if a member of the Commission, shall be fixed by the governing body of the Cranbury Township Committee, the salary of all other employees shall be fixed by the Commission in accordance with budgetary appropriations in the annual budget of the Township of Cranbury. All salaries shall be fixed as nearly as practicable in accordance with the salary schedule, if any, of the Township of Cranbury for corresponding positions.

§ 41-4. Vacancies.

Any vacancy occurring by reason of death, resignation or removal of any Commissioner shall be filled for the unexpired term by the Mayor of the Township of Cranbury.

§ 41-5. Powers of Commission.

The Shade Tree Commission organized under this chapter shall have power to:

- A. Exercise full and exclusive control over the regulation, planting and care of shade and ornamental trees and shrubbery now located, or which may hereafter be planted in any public highway and park or parkway, except such as are excluded pursuant to § 41-1 of this chapter, including the planting, trimming, spraying, care and protection thereof.
- B. Regulate and control the use of the ground surrounding the same, so far as may be necessary for their proper growth, care and protection.
- C. Move or require the removal of any tree, or part thereof, dangerous to public safety.
- D. Make, alter, amend and repeal, in the manner prescribed for the passage, alteration, amendment and repeal of ordinances by the Township Committee of the Township of Cranbury, and any and all ordinances necessary or proper for carrying out the provisions hereof.
- E. Administer treatment to, or remove, any tree situated upon private property which is believed to harbor a disease or insects readily communicable to neighboring healthy trees in the care of the Township of Cranbury and enter upon private property for that purpose, with the consent of the owner thereof, provided the suspected condition is first confirmed by certificate issued by or on behalf of the New Jersey Department of Agriculture.
- F. Encourage arboriculture.

§ 41-6. Cost of trees and improvements; charge and lien on property; exception.

- A. Except as hereinafter provided, the initial cost of all trees planted by the Commission, the cost of planting the same, the cost of the posts and boxes or guards used for the protection thereof, and the cost of the removal of any tree or part thereof dangerous to public safety shall, if the Commission shall so determine, in accordance with uniform rules and regulations promulgated for this purpose, be a charge upon the real estate in front of which such tree or trees shall be planted or removed as an improvement thereof. Such cost if it is so determined that it is to be paid by the owner shall, unless paid directly to the Commission, be certified by it to the Collector of Taxes of the Township of Cranbury, shall thereupon become and be a lien upon said real estate, shall be included in the next tax bill rendered to the owner or owners thereof, and be collected in the same manner as other liens against that property.
- B. The provisions of this section shall not apply to:
- (1) A planting to replace a tree or trees therefore planted by the Commission.
 - (2) A planting in connection with Arbor Day exercises or other educational demonstration.

§ 41-7. Planting and removal of trees; notice and hearing; emergencies.

In every case where the property of an abutting owner will be chargeable with the cost of the planting of any shade tree or trees, the Commission shall give notice of the meeting at which it is proposed to consider said planting by publishing the notice at least once, not less than 20 days before the meeting in the Cranbury Press, or by personal service of a copy of the notice upon the abutting owner at least 10 days before the meeting. The notice shall specify the street, streets, or portions thereof, on which such planting is proposed and require all persons who may object thereto to present their objections at the office of the Commission at or before the meeting. Before final action shall be taken, all objections so filed shall be considered. The Commission shall give reasonable notice of its intention to remove, or cause the removal of a tree, or part of a tree, dangerous to public safety, unless public safety requires immediate removal in which case no notice shall be necessary.

§ 41-8. Public improvements affecting trees; consent of Commission, County Park Commissions unaffected.

No statute giving any person or state, county or municipal board, body or official power or authority to lay any sidewalk along, or to open, construct, curb or pave any street, or to do any similar act, shall be construed to permit or authorize any interference with or injury to a highway shade tree without the consent of the Shade Tree Commission. In all cases such Commission shall reasonably cooperate with such person, board, body or official for the general public good. Nothing contained in this chapter shall be held to take away or diminish any of the powers or authority of the Middlesex County Park Commission over the trees or shrubbery in any Middlesex County Park or Parkway within its jurisdiction or to give any other commission or board any power or authority with respect to such trees or shrubbery.

§ 41-9. Annual appropriation; estimate; amount.

- A. During the month of December in each year, the Shade Tree Commission shall certify to the Township Committee the estimated sum necessary for the proper conduct of its work during the ensuing fiscal year, which shall include the sums estimated to be expended for such of the following items as it is anticipated expenditure will be made for, namely:
- (1) Payment of wages and salaries for employees;
 - (2) Expenses of Commission members in discharging official duties, including expenses incident to attendance at professional meetings;
 - (3) Purchase of trees and shrubbery; and
 - (4) Purchase of necessary equipment and materials and the cost of services for the prudent promotion of the work.
- B. The Township Committee shall annually appropriate such sum as it may deem necessary for said purposes.

§ 41-10. Penalty; jurisdiction of courts; copy of ordinance as evidence.

- A. The Commission may prescribe a fine for violation of its ordinances in an amount not exceeding \$1,500 for each violation, and the Cranbury Township Municipal Court shall have jurisdiction over actions for the violation of such ordinances, and its ordinances shall be enforced by like proceedings and process as that provided by law for the enforcement of ordinances of the Township of Cranbury. The officers authorized by law to serve and execute process for the Cranbury Township Municipal Court shall be the officers to serve and execute any process issued out of the Municipal Court for violations of the ordinances of the Commission.
- B. A copy of any ordinance of the Commission, certified to under the hand of its secretary or Chairman, shall be received in any court of this State as full and legal proof of the existence of the ordinance, and that all requirements of law in relation

to the ordaining, publishing and making of the same, so as to make it legal and binding, have been complied with, unless the contrary be shown.

- C. In addition to the penalties authorized by Subsection **A** of this section, the Commission may require a person who removes or otherwise destroys a tree in violation of a municipal ordinance to pay a replacement assessment to the municipality. The replacement assessment shall be the value of the tree as determined by the appraisal of a trained forester Certified Tree Expert retained by the Commission for that purpose. In lieu of an appraisal, the Commission may adopt a formula and schedule based upon the number of square inches contained in a cross section of the trunk of the tree multiplied by a predetermined value per square inch, not to exceed \$27 per square inch. The square inch cross section shall be calculated from the diameter at breast height and, if there is a multiple stem tree, then each trunk shall be measured and an average shall be determined for the tree. For the purposes of this section, "diameter at breast height" shall mean the diameter of the tree taken at a point 4.5 feet above ground level. The Commission shall modify the value of the tree upon its species variety, location and its condition at the time of removal or destruction.
- D. Any public utility or cable television company that clears, moves, cuts, or destroys any trees, shrubs, or plants for the purpose of erecting, installing, moving, removing, altering or maintaining any structures or fixtures necessary for the supply of electric light, heat or power, communication, or cable television services upon any lands in which it has acquired an easement or right-of-way shall not be subject to any penalty imposed by a Commission pursuant to Subsections **A** or **C** of this section. This subsection shall not exempt any public utility or cable television company from any penalty or replacement assessment imposed for negligent actions.

§ 41-11. Disposition of penalties.

All moneys collected, either as fines or penalties, for any violation of a rule or regulation of a Shade Tree Commission enacted by ordinance, or as a charge against real estate, under any provision of this chapter shall be forthwith paid over to the custodian of the municipal funds.

§ 41-12. Ordinances by Shade Tree Commission.

The Shade Tree Commission is hereby authorized and empowered to promulgate such ordinances as may be necessary, pursuant to statute, and for the proper interpretation, administration and enforcement of this basic chapter, provided that such ordinances do not conflict with this chapter and conform to the general standards prescribed by this chapter.

§ 41-13. Public notice.

All regulations adopted by the Shade Tree Commission shall be filed with the Municipal Clerk for inspection by the public during regular business hours.

§ 41-14. Severability.

If any section, subsection, paragraph, sentence, clause, phrase or word contained in this chapter shall be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this chapter which shall remain in full force and effect, and to this end the provisions of this chapter are hereby declared to be severable.

Chapter 150. LAND DEVELOPMENT

ARTICLE V. SITE PLAN AND SUBDIVISION STANDARDS (*portions*)

§ 150-56. Landscaping.

[Amended 11-27-2000 by Ord. No. O-10-00-33]

- A. Purpose. It is the objective of this chapter to require extensive landscaping as part of any development. Landscaping improves the livability of residential neighborhoods, enhances the appearance and customer attraction of commercial and industrial areas, improves the compatibility of adjacent uses, screens undesirable views and can reduce air and noise pollution. It is also the objective of this chapter to require applicants to expend a maximum effort to retain the existing natural features, including trees and plants on any site proposed for development.
- B. Landscape plan. Every application for approval of a site plan or subdivision shall include a comprehensive and detailed landscape plan. Said plan shall identify, locate and provide planting details for all proposed trees, shrubs, bushes, plant material and ground cover, all existing plant materials proposed to be retained and all ground cover and natural features. For all existing natural growth proposed to be retained, the plan shall state the method(s) proposed to be used for its protection during and after construction (e.g., fences, tree wells, curbing or similar devices).
- C. General standards. The landscape plan shall conform to the following requirements, as applicable:
- (1) Existing mature trees, hedgerows, tree lines, stone rows, woodlands, and existing vegetation shall be preserved and included as a design element in the landscaping plan for all development. Building placement shall preserve existing vegetation and the character of the site. Existing vegetated areas and natural resources of great importance and significant value (i.e., riparian corridors, floodplains, wellhead recharge areas, old-growth woodlands, etc.) shall be preserved within conservation easements and/or deed restrictions.
[Amended 6-23-2008 by Ord. No. 04-08-09]
 - (2) A minimum of 10 trees shall be planted for each acre of the tract not occupied by buildings or impervious coverage. The Board may waive or reduce this requirement when this standard is generally met by existing tree growth or the open space is proposed for agricultural purposes.
 - (3) At planting, shade trees shall have a minimum caliper of three inches and evergreen trees shall be at least five feet high. Shrubs shall be at least two feet in height or breadth at planting. All trees shall be balled and burlapped.
 - (4) Trees with calipers over eight inches in diameter shall be preserved, whenever possible. Grading, filling or impervious coverage must not intrude on the "drip line" of trees which are to be preserved.
 - (5) Existing trees or landscaping located within 20 feet of any street or lot line or zone boundary shall be maintained unless shown to be removed as part of an approved site plan. The existing grade within that space shall not be disturbed without such approval.
 - (6) Landscaping shall be provided in public areas, recreation sites and adjacent to buildings.
 - (7) The landscaping plan shall provide for a variety and mixture of plant materials, taking into consideration their susceptibility to disease; colors by season; textures; shapes; blossoms; and foliage. Native species, as illustrated in the attached list, and not manicured turf shall be included in the design for the revegetation of a developed site.
[Amended 6-23-2008 by Ord. No. 04-08-09]
 - (8) The choice of landscaping shall be appropriate to local soil conditions and availability of water.
 - (9) Low-maintenance, dense, ground cover and flat ground slope shall be used to prevent erosion and to provide a vegetative filter, in accordance with the standards of the New Jersey Stormwater Best Management Practices Manual.
[Amended 6-23-2008 by Ord. No. 04-08-09]
 - (10) The impact of any proposed landscaping plan at various time intervals shall be considered. Shrubs may grow and eventually block sight distances and foundation plants may block buildings.
 - (11) It is preferable to have fewer larger specimens than more smaller ones.

- (12) All landscaping shall be consistent with the natural surroundings and shall be properly maintained throughout the life of any use on said lot.
- (13) **(Reserved)**^[1]
[1] Editor's Note: Former Subsection C(13), regarding buildings or parking areas near streams or floodways, was repealed 6-22-2015 by Ord. No. 05-15-09. See now § 150-39.1, Riparian zones.
- (14) Irrigation systems for landscaped and lawn areas shall be designed in zones with timer controls to minimize water usage. Irrigation systems shall be provided with a precipitation detection timer bypass.
- (15) Sheet plastic and other impervious materials shall not be used in any landscape area. Weed retardant mulch, porous non-woven synthetic landscape fabric or other materials shall be used.
- (16) The Planning Board may require that the applicant submit prospective views of landscape treatment, for different time intervals, particularly in critical areas such as loading and unloading areas, to determine their effectiveness in buffering and shielding these areas.

D. Recommended plantings.

[Amended 3-14-2011 by Ord. No. 02-11-05]

- (1) Ornamental trees: Those trees set forth in the list on file with the Township Clerk's office known as Exhibit A to § **150-56** which are incorporated by reference herein.
- (2) Shrubs: Those shrubs set forth in the list on file with the Township Clerk's office known as Exhibit B to § **150-56** which are incorporated by reference herein.
- (3) Plantings in wooded settings: Those plantings set forth in the list on file with the Township Clerk's office known as Exhibit C to § **150-56** which are incorporated by reference herein.
- (4) Plantings in and around detention basins: Those plantings set forth in the list on file with the Township Clerk's office known as Exhibit D to § **150-56** which are incorporated by reference herein.
- (5) Plantings in large open areas: Those plantings set forth on the list on file with the Township Clerk's office known as Exhibit E to § **150-56** which are incorporated by reference herein.

E. Shade trees.

- (1) Recommended trees: Those trees set forth on the list on file with the Township Clerk's office known as Exhibit F to § **150-56** which are incorporated by reference herein.
[Amended 3-14-2011 by Ord. No. 02-11-05]
- (2) Planting. Shade trees shall be planted along all public rights-of-way and shall be spaced as follows. Trees on opposite sides of the street shall be staggered:
- (a) Large trees (40 feet high or more at maturity): every 60 feet.
- (b) Medium-sized trees (less than 30 to 40 feet high at maturity): every 50 feet.
- (3) Each tree shall have a minimum caliper of three inches.
- (4) Street trees shall not be closer than 15 feet to any existing or proposed streetlight or street intersection.
- (5) All trees shall be nursery-grown stock and shall have a root ball wrapped in burlap, with a replacement guaranty by the developer of two years.

F. Landscaping for nonresidential uses.

- (1) Purpose. Landscaping is required in nonresidential areas where the proper placement of trees and shrubs can soften the appearance of large buildings and reinforce the berms that screen parking lots, buildings and structures, loading areas, utility and telecommunications equipment and storage areas.
- (2) In addition to the general standards established in §§ **150-56C** and **150-57**, all nonresidential uses shall meet the following requirements:
- (a) The entire lot, except for areas covered by buildings, parking, recreation or service areas, shall be seeded, sodded or planted with ground cover and suitably landscaped in accordance with an overall landscape plan.
- (b) Landscaping shall be used to accent and complement buildings. For example, groupings of tall trees to break up long, low buildings and lower plantings for tall buildings.

- (c) Vines and climbing plants shall be considered for large expanses of wall.
- (d) Massing trees shall be planted at critical points rather than in a straight line along buildings.
- (e) Entrances to lots shall be given special landscaping treatment.
- (f) All landscaping in parking areas shall be carefully located so as not to obstruct vision. A variety of different types of trees shall be grouped to break up the mass of cars and as required in § 150-43B.

§ 150-57. Screening and buffers.

[Amended 11-27-2000 by Ord. No. O-10-00-33]

- A. Purpose. The purpose of buffers and screening is to provide open spaces, landscaped areas, fences, walls, berms or any combination thereof to physically separate or screen buildings, structures, parking areas and truck loading and unloading areas from public view and to separate or shield one use or property from another so as to visually separate such uses, shield one from another, block noise, lights or other nuisances and reduce adverse impacts.
- B. General application. Screening and buffers shall be required when topographical and natural features and/or existing landscaping does not provide reasonable screening to achieve the purposes set forth in § 150-57A, or when the Board determines that there is a need to shield buildings, structures, parking areas and truck loading and unloading areas from public view, and separate adjacent properties to minimize adverse impacts such as incompatible land uses, noise, glare and traffic and to provide privacy and protection. When building design and siting do not provide privacy and shielding, the Board may require additional landscaping, fences, berms, walls or similar devices to ensure privacy and provide shielding.
- C. General requirements.
 - (1) All buffers and screens shall be shown on the landscape plan.
 - (2) Visual screens provided through landscaping shall be designed in such a manner as to provide a solid barrier on a year-round basis around the view of the area to be screened.
 - (3) Existing vegetation within the buffer shall be preserved, where possible, and supplemented with plantings and other buffer devices to provide complete screening of residences.
 - (4) Buffer dimensions shall be measured from property lines and street right-of-way.
 - (5) Within any buffer area, utilities and streets may be permitted to cross at right angles to the buffer.
 - (6) No buildings, structures, storage of materials or parking shall be permitted within the buffer area.
 - (7) (All plantings shall be installed according to accepted horticultural standards.
- D. Materials and planting details. Buffers and screening may consist of open space areas, landscaping, plantings, plant clusters, deciduous and evergreen trees, evergreens, fencing, walls, berms, boulders, mounds, or any combination thereof to achieve the stated objectives and as approved by the Board. Examples of typical screen planting details are shown in Figure 26A following § 150-41I, Industrial Design Standards.
 - (1) Plant clusters. Plant clusters used as part of a buffer or screen must be designed as follows:
 - (a) Plant clusters shall consist of masses and groupings of shade, ornamental and evergreen trees, shrubs and/or berms designed in a free form manner to provide contrast and create a more natural effect. No less than 75% of the plants shall be evergreen.
 - (b) Buffer plantings shall include a variety of local species and have low maintenance requirements.
 - (c) The buffer shall be continuously planted with masses and groupings of evergreen, shade and ornamental trees and shrubs. The following quantities shall be provided:

Shade trees	25/1,000 linear feet
Evergreen trees	80/1,000 linear feet
Ornamental trees	10/1,000 linear feet
Shrubs	150/1,000 linear feet

- (d) Plants shall be provided in a mix of sizes with shade trees averaging two-inch to two-and-one-half inch caliper, evergreen trees six inches in height, and shrubs 18 inches in height. A mixture of large and smaller sizes shall be provided.
- (e) Landscape buffers, when used for screening and/or located at critical areas, such as truck loading and unloading bays, shall consist of double rows of staggered evergreen trees planted eight feet apart, with deciduous facing plants (i.e., lower plants in front of but not mixed with evergreens).
- (2) Berms. Berms used as part of a buffer or screen shall be designed as follows:
 - (a) Vertically and horizontally meandering berms shall be used to achieve a natural rolling parklike landscape. Berms shall be two feet to eight feet in height, averaging five feet. The width shall vary with side slopes of 1:5 to 1:3 without adversely affecting natural drainage.
 - (b) Berms shall be overlapping where drainage swales are required to pass through them. The final design must be reflected upon the drainage plan.
 - (c) Irrigation systems shall be installed on all berms.

E. Reverse frontage buffers.

- (1) Reverse frontage buffers shall be required where residential units and/or lots back onto any street.
- (2) The buffer shall be situated adjacent to the right-of-way line.
- (3) The buffer shall be not less than 25 feet in width. For lots backing up on arterial streets or highways, the buffer shall not be less than 50 feet.
- (4) The buffer area shall be used for no purpose other than landscaping, underground utilities or for any required sidewalk.
- (5) Sidewalks, if required, shall be designed in a meandering pattern to preserve existing trees. Such sidewalks shall not exceed a maximum pitch of one inch to 12 inches (vertical rise or change in grade to horizontal run or distance).
- (6) Street trees shall be planted as required in § 150-56F.

§ 150-58. Conservation easements.

[Added 9-25-2000 by Ord. No. O-08-00-24]

The purpose of these regulations is to preserve conservation easement areas in their original natural state to the extent possible. In conservation easement areas no trees, shrubs or other vegetation shall be removed, destroyed or altered except as permitted by these regulations. The original contours shall be maintained and no topsoil, sand, gravel, minerals or fill shall be excavated or added except as may be permitted by these regulations. If additional plantings or vegetation are proposed, they shall be consistent with the indigenous plant life. No buildings, structures or storage of materials shall be permitted. All conservation easement areas shall be governed by the following regulations:

- A. Minor maintenance, including removal of dead or diseased plants, thinning of undergrowth which does not reduce buffering or shielding and removal of noxious plants such as poison ivy shall be permitted only if performed with the use of hand tools. For purposes of this section, hand tools shall not include electric, motor or engine powered tools. Removal of diseased or damaged trees shall not be considered minor maintenance.
- B. The Township Engineer shall be notified of any planned activity in a conservation easement area that is not minor maintenance. The Township Engineer shall determine if the proposed activity falls within the purpose of these regulations and if it does, the activity may proceed. Where appropriate, the Township Engineer may request a site plan or sketch showing what is proposed.
- C. In determining whether the activity falls within the purpose of these regulations, the Township Engineer may request the person(s) proposing to undertake the activity to notify adjacent property owners with a brief description of the proposed activity and the name and phone number of the Township Engineer if they desire to offer any comments.
- D. In granting approval for the planned activity to proceed, the Township Engineer may impose reasonable conditions, such as alternate vegetation, changes in the location and spacing of vegetation and starting and completion dates.
- E. If the planned activity is permitted, the Township Engineer shall notify the approval agency and indicate what has been approved. The notification shall become part of the file of the subdivision or site plan and may include any site plans or sketches.

- F. If the conservation area where the activity is proposed is owned by a homeowners association (HOA), permission to proceed with the proposed activity shall be first granted by the HOA before the Township Engineer takes action.
- G. In the event the person desiring to undertake work in the conservation easement area (applicant) is denied permission to do so, or objects to the conditions imposed by the Township Engineer, the applicant may request a formal review of the proposed action by the Planning Board in accordance with the Land Development Chapter's provisions for minor subdivision or site plan review.
- H. On the Township Engineer's sole discretion, the Township Engineer may refer the request for activity in a conservation easement area to the Planning Board for their formal review. If a neighbor objects to the proposed activity in the conservation easement area and so informs the Township Engineer, the Township Engineer shall refer the matter to the Planning Board for formal review.