



Community Tree Plans:

A Guide for Tree Commissions and
Environmental Advisory
Councils



PENNSTATE



College of Agricultural Sciences
Agricultural Research and Cooperative Extension

Community Tree Plans:

A Guide for Tree Commissions and Environmental Advisory Councils



Introduction

There is a saying that if you don't know where you're going, any road will get you there. Getting to a place you want to go takes planning. Many tree commissions and environmental advisory councils will never know how they are going to manage public trees and landscapes because they have no plan to guide them. They move from project to project, controversy to controversy, without a plan that helps them reach desired outcomes and reduce conflict and argument.

Community tree plans are like road maps. They are not the destination, but they help get you there. To develop a community tree plan, a commission and its community members should participate in a planning process that involves long-range visioning and strategic thinking. This process may sound difficult and expensive, but it is not.

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A Planning Hierarchy

Planning has been defined as a process for determining appropriate future actions. It helps to identify strategies that will yield the best results while encouraging efficiency and rational action. Planning also reduces costs to organizations.

A planning hierarchy begins broadly with a vision and goals, and it ends specifically with strategies and actions expressed in annual work plans and budgets. The hierarchy from general to specific is: vision statement, goals, objectives, strategies, annual work plan, annual budget, and evaluation.

Costs of Not Planning for the Community Forest

Four types of “costs” result from not planning for the community forest:

1. Direct mistakes that take public revenues to correct (damage from tree and limb failure, conflicts with utilities, and safety issues).
2. Indirect mistakes that cause added municipal expense (added expense of maintenance caused by poorly selected and planted trees).
3. Loss-of-value mistakes that cause public and private property to depreciate (loss of property value because of poor public landscaping).
4. Failure to secure private investment that would have been made if appropriate planning and management had been completed (well-planned and attractive communities draw progressive businesses, people, and investments).

Setting a Direction: Putting Planning Into Practice

Simply put, planning processes allow you to collect and analyze information in order to make better decisions. But how do you tailor the elements of planning to suit your local situation and turn information and ideas into a community tree plan? Using the elements of planning, let’s walk through the process.

What Are Your Responsibilities?

First examine your responsibilities. Is your commission advisory, designed to provide commentary and advice to elected officials about regulations, processes, and work? Or is yours a board of authority, charged with making decisions that cannot be changed by elected officials? Most often, a commission’s responsibilities are spelled out in the street tree or other ordinance that created it. When writing a plan, it is important to understand your commission’s responsibilities and any ordinances, such as a street tree ordinance, that affect those responsibilities.

Introduction

Begin the plan with an introduction that includes a description of the community and its community forest. This chapter should provide information on the community’s history, the commission, the community’s trees, and other information, such as known soil or maintenance problems, that help set the stage for the plan.

Vision Statement

Next consider where you want to go. This is your vision, the desired future you wish to work for. A vision is a broad statement of intent that will serve to guide you. Often visions are never completely met, but they provide a compass for your commission’s work. Your vision may be a “healthier and greener community,” “improved economy and quality of life,” or both together. Developing a vision is important because it provides an opportunity for commission members to sit down and consider the future. This type of process work forms the core of planning.

Goals

Goals are also about the future; they force us to move toward our vision. Goals are statements of intent, but they are more realistic and achievable. They provide the stepping stones for moving toward a vision. Examples of goals are: “a variety of trees will be planted every year in the city”; “public trees will receive the highest quality maintenance”; or “the community forest will be kept safe through regular management and maintenance.”

COMMUNITY TREE PLAN	
Chapter 1:	Introduction, Visions, Goals and Objectives
Chapter 2:	Administration and Management
Chapter 3:	Liability Issues
Chapter 4:	Tree Evaluation and Removal
Chapter 5:	Landscape Design
Chapter 6:	Site Analysis and Tree Selection
Chapter 7:	Tree Planting
Chapter 8:	Tree Maintenance
Chapter 9:	Public Education and Support

Figure 1. Outline of a community tree plan.

Objectives and Strategies

To implement your goals, the next step is to develop a set of objectives. A community tree plan’s objectives should include:

- effective administration
- annual analysis and removal of hazardous trees
- proper site analysis
- proper site preparation
- proper tree selection and purchase
- proper tree planting
- proper maintenance
- quality design
- adequate funding
- community education and participation

These objectives become the chapters or sections of your plan. Strategies are then developed for each objective.

Annual Work Plan

After the long-range steps are identified, the short-term work begins with the creation of an annual work plan. The work plan identifies what the commission will focus on during the following year, working with the objectives and strategies developed in the community tree plan. The annual work plan can often be dependent on day-to-day realities such as funding, needs, and politics, but it should strive to work toward the objectives, goals, and visions of the tree plan.

Annual Budget

An annual budget is used to identify the resources needed to fulfill the annual work plan. Resources include not just money, but also people, time, materials, equipment, and donations. As an example, to work toward an objective of effective administration, the annual work plan would establish a time and date for a public hearing on tree removal requests and a time and date for a public hearing on tree planting requests.

Evaluation

An often-neglected step in the planning process is evaluating the strategies and actions taken thus far. A good community tree plan should provide for evaluation and revision every few years.

Developing the Written Plan

How do you go about writing a community tree plan? You begin the process by using the planning hierarchy discussed above. The process should be facilitated by a person knowledgeable about tree plans. This person might be an urban forester, a planner, an arborist, or an extension agent. Steps in writing a plan include the following.

Assemble the Planning Committee

The planning committee does not have to include just members of the commission. Gather together a variety of people: leaders, citizen activists, attorneys, green industry professionals, writers, business owners, and other interested people. Be sure to include people affected by the plan, such as downtown business owners and municipal department heads. Let the media know you are working on the plan.

Conduct a Needs Assessment

Discover what efforts are already taking place regarding community trees. Find out what your municipality really needs and can afford in terms of tree planting, maintenance, and removal. Has there been a budget in the past for community forestry work? What type of budget is realistic for a community forestry effort? Is there support from elected officials and department heads? Do the local business people support the effort? Are there possible allies in community organizations such as the garden club and conservancy? How will this plan fit into other municipal plans like the planning commission's comprehensive plan?

Evaluate Forces That Can Affect Implementation

It is important to understand the political and economic realities in your municipality. Conduct a SWOT analysis (identifying strengths, weaknesses, opportunities, and threats). Or conduct a "force-field analysis," in which you identify the forces that positively and negatively affect implementation of your plan and achievement of your vision. You can do these exercises with brainstorming to identify ways of enhancing positive forces and neutralizing negative ones.

Complete a Street and Park Tree Inventory

Your commission should also have some idea of the number and condition of the trees you are working with. Has a street and park tree inventory been completed? If so, it can provide you with information about work (tree planting, maintenance, and removal) that needs to be done. If no inventory exists, one alternative during the planning stage is to complete a "drive-around" survey. Contact your county extension office, the Pennsylvania Bureau of Forestry, or the Penn State School of Forest Resources for information on producing both drive-around and complete tree inventories. Having an inventory will make your plan more realistic, but not having an inventory should not stop you from writing a community tree plan.

Apply the Elements of Strategic Planning

Depending on the situation in your municipality, the planning process for developing a vision, goals, objectives, and strategies may need to be facilitated by an individual knowledgeable about brainstorming and other organized processes used to generate ideas. To encourage cooperation and working together, at the beginning your committee will have to agree on the guidelines and rules it will operate under. Guidelines for making decisions, such as by popular vote, and for discussion (to ensure everyone's participation) have to be agreed upon before planning starts. A good exercise, and a test of the committee's ability to work together, will be drafting and agreeing on a vision statement. Again, this visioning process helps point all committee members in the same direction.



Figure 2. People spend 12 percent more money in well-landscaped commercial areas.

The Planning Process for Goal-Oriented Management

1. Put together the planning group, to include all those interested, important, and affected.
2. Identify problems, issues, and opportunities, and come to mutual agreement (conflict resolution and facilitation may be needed here).
3. Gather information, do research, and perform analysis to gain understanding of problems and issues.
4. With planning group, develop vision, goals, and objectives for alleviating problems and making the most of opportunities.
5. With planning group, develop and evaluate alternative methods (strategies and actions) to attain agreed-upon goals and objectives.
6. From list of alternatives, prioritize and recommend appropriate courses of action, including implementation strategies such as funding, public relations, and working with elected officials.
7. Evaluate strategies and actions in terms of progress made toward agreed-upon objectives and goals.
8. Adjust strategies and actions in light of evaluation to account for changing circumstances and success in reaching vision, goals, and objectives.

Hold Planning Workshops for Citizens and Community Leaders

Residents, business people, and community leaders need to be given opportunities to review and comment on the plan. Place draft copies of the plan in the public library and other public places for review and comment. Providing opportunities for public review and comment at this point will reduce conflict and negative input later. Hold a public meeting to provide a forum for people to discuss their community forest. Toward the end of the writing process, circulate a draft plan outside the community to selected people who can help improve your ideas. Revise and refine your plan until you have a document you feel comfortable with, one that has the support of elected officials and the public.

Implementing the Plan

An often-overlooked step in developing plans is implementation. Implementing the plan, and finding ways to fund it, should be an objective discussed and planned for from the beginning.

Implementation can take many forms, and strategies can be scattered throughout plan objectives. Some implementation strategies are fundraising; applying for grants; making yearly reports to elected officials and department heads with an emphasis on needed funding; lobbying elected officials; working with the media to provide positive stories; working with local business people and groups; creating a newsletter; providing opportunities for volunteer tree planting and other forms of participation; and working with local teachers and schools.



Conclusion

Tree and environmental advisory commissions can use the elements of planning to bring about good decisions for both long- and short-term action. In this process, the strategies and actions built into annual work plans and budgets are used to carry out plan objectives, goals, and ultimately a vision for your community forest. Ensuring a firm foundation for the community tree plan is the commission's responsibility. By building on this foundation, you provide both a vision for the community forest and a series of actions to achieve that vision.

Figure 3. Healthy, safe trees need good management.

Sample Strategies for Tree Plan Objectives



Strategies for Effective Administration

- The commission will complete a tree inventory and keep it up-to-date by means of annual tree evaluations.
- A consulting arborist will be hired to assist in the annual assessment of trees.
- A permit process will be established and administered for tree planting, removal, and pruning.
- A process of public meetings and commission review will be established to approve and reject permit applications. The commission will hold an advertised public meeting at least once a year for tree removals and planting. Other requests will be heard during the commission’s advertised work sessions.
- An annual report will be made to the borough council or township supervisor describing needed funding and work to be completed.
- A borough council member or supervisor will sit on the tree commission as a liaison.
- An annual work plan will be developed in January based on the tree inventory and annual tree assessment.
- An annual budget will be developed in January based on the annual work plan and submitted to the borough council or supervisors.
- The commission will be responsible for ensuring that the street tree ordinance and rules of arbor work are technically correct and enforced.
- Utility representatives will be met with once a year to discuss needed tree pruning, removal, and planting.

- Utilities must notify municipality if removal or pruning of trees is necessary.
- Tree protection standards and tools will be provided for all construction projects that affect street or park tree health and structure.
- To help ensure better funding and management, the commission will work in cooperation with Penn State Cooperative Extension and the Pennsylvania DCNR Bureau of Forestry.

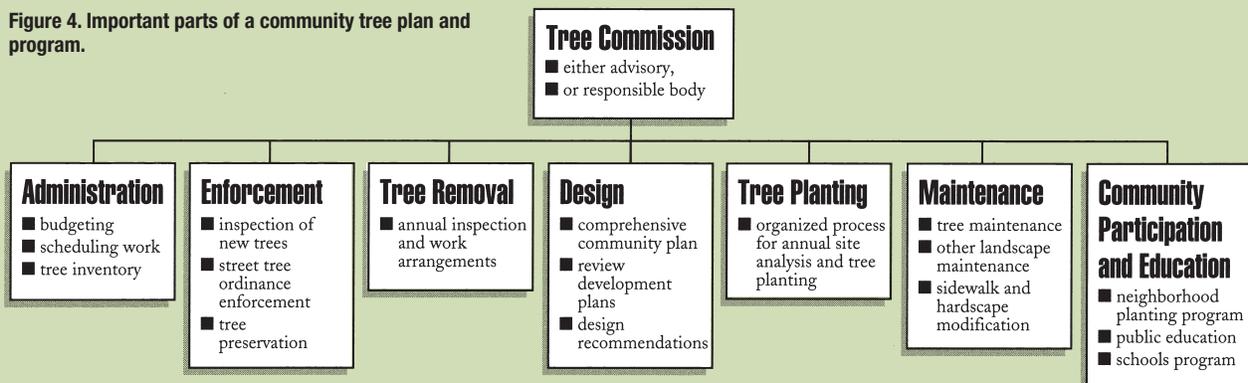
Strategies for Analysis and Removal of Hazardous Trees

- The tree inventory and an annual tree assessment will be used to identify hazardous trees and conditions. Accurate inspection records will be kept.
- All hazardous trees and conditions will be assessed by at least one qualified arborist using a standard tree risk procedure or evaluation form.



Figure 5. To lessen tree failure, tree risk should be evaluated at least annually.

Figure 4. Important parts of a community tree plan and program.



—An annual work plan for hazardous tree removal and pruning will be developed based on the annual review. Tree removal and pruning will be prioritized based on tree risk and completed in a timely fashion. The dates of removals and pruning will be noted.

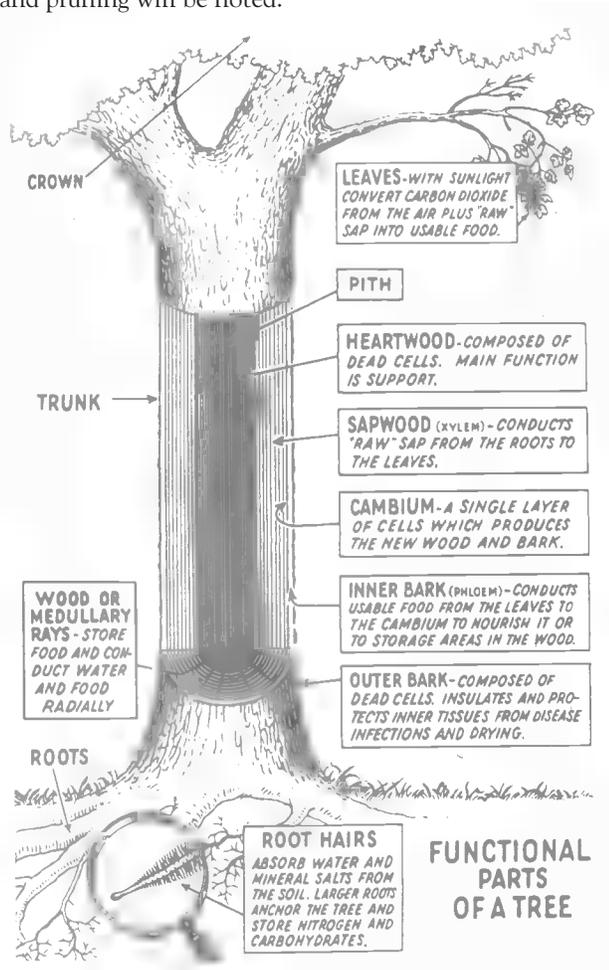


Figure 6. Many parts of a tree must be examined when evaluating tree risk.

—Whenever possible, trees to be removed will be identified by a sign, and a letter will be sent to affected property owners. Tree removal will be reviewed by the commission in a public hearing.

—Trees will be removed and replaced after serving a useful lifespan. Trees in poor condition for either health or structural reasons will be removed.

—Only trained, certified, and insured professionals who follow good arboricultural practices should be hired for any work on public trees.

—Visual clearance for intersections, traffic signs, and traffic signals will be maintained.

—Requests by property owners and others will be responded to promptly.

Strategies for Proper Site Analysis

—Before any tree is planted, the following factors will be understood: climate and weather (temperature extremes); soil (pH, compaction, fertility, salinity); growing space (amount of soil, space for growth, conflicts); functional desires (design themes, views); and attitudes of residents and business owners.

—Before any final decision is made about tree planting, all planting sites will be evaluated for soil conditions, safety concerns, and growing space that is limited by utilities, sidewalks, and curbs.

—A soil test(s) will be completed and used for all tree plantings.

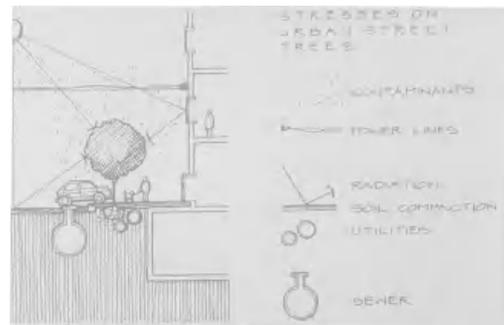


Figure 7. Many planting sites are tough and need excellent evaluation and modification.

Strategies for Proper Site Preparation

—Rubble and poor soils will be removed from a planting site and replaced with a fertile topsoil.

—Specially designed planting pits, which increase the amount of available soil and root growing area, will be used when trees are planted in sidewalks, patios, and parking lots. These planting pits will be a minimum of 5 feet long by 5 feet wide for a medium-growing tree and 12 feet long by 6 feet wide for a large-growing tree like oak.



Figure 8. Structural soils and other engineering can be used to better sidewalk and parking lot plantings.

Strategies for Proper Tree Selection and Purchase

Trees to be planted will be selected from an approved tree planting list found in the appendix of the tree plan. The tree list will identify trees for different areas such as downtown, neighborhoods, and parks.

—Planting material will conform to the latest version of the American Standard for Nursery Stock (American National Standards Institute [ANSI] Z60.1). Trees to be planted should be of standard quality or better, and should be true to name and type of their species variety.

—Street trees will be at least 1 1/3 inch in caliper, 8 feet in height, and free of branches in the lower 4 1/2 feet, and will have a single, straight trunk to 7 feet.



Figure 9. Bare-root plantings can save money and backs.



Figure 10. Planting trees too deep and poor irrigation are the two largest causes of death in newly planted trees.

Strategies for Proper Tree Planting

—Trees of the proper size will be planted in the given planting area. No trees will be planted in tree lawns less than 2 feet in width or in planting pits less than 5 feet long by 5 feet wide.

—No tree will be planted within 50 feet of any major intersection, or within 20 feet of a fire hydrant, a driveway, or a pole supporting a light.

—The burlap and twine from balled-and-burlap trees will be removed from the tree and the tree pit. Wire tree baskets may remain on the root ball, but the top one-third will be clipped and removed from the planting hole.

—Mulch will be placed around trees in a minimum 3-foot circle and 3-inch depth to protect trees from lawnmower damage and competition from turf; mulch will be kept away from tree trunks.

—Newly planted trees will be irrigated weekly during droughts in the growing season for three years.

—Every removed tree will be replaced with an appropriate tree not likely to cause any problems for which the original tree was removed.

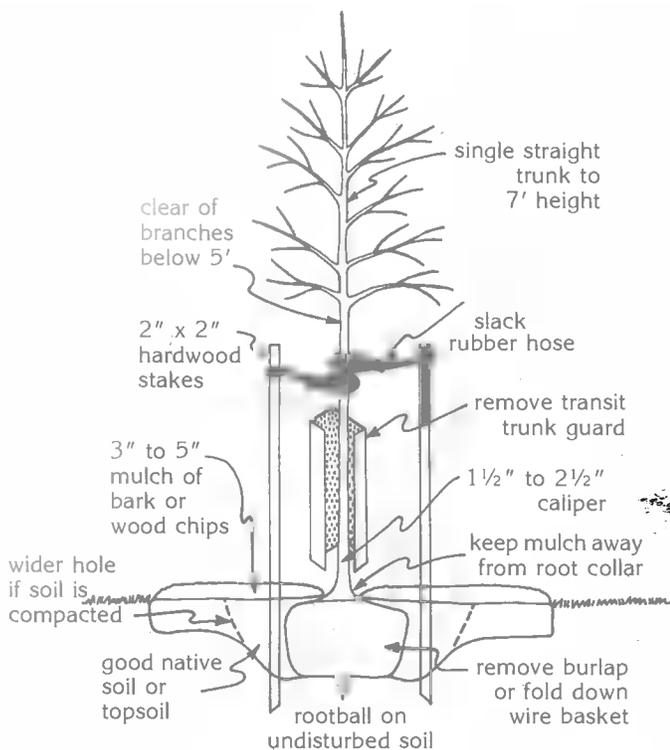


Figure 11. Proper tree planting standards must be used.

Strategies for Proper Maintenance

—All tree maintenance will be performed in accordance with current ANSI Standards for Tree Care Operations—Pruning, Trimming, Repairing, Maintaining, and Cutting Brush—Safety Requirements (ANSI Z133.1) and/or current International Society of Arboriculture maintenance standards.

—Only thinning and reduction cuts will be used to prune live trees in the municipality. Heading or topping will not be done.

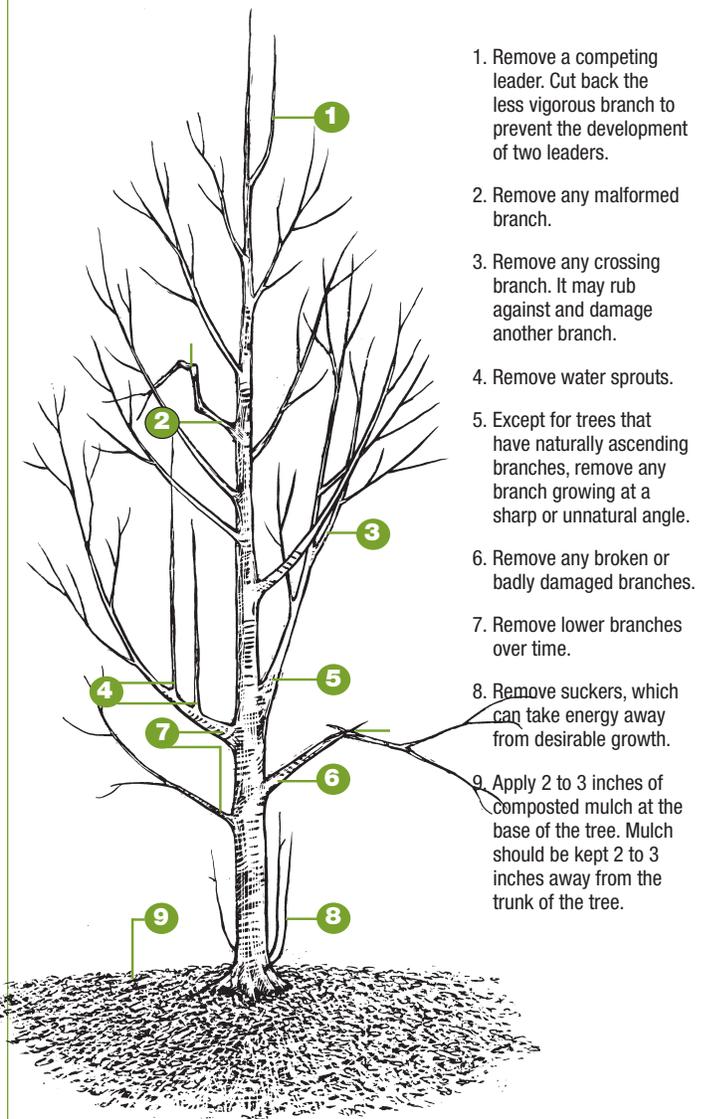


Figure 12. Proper pruning of young trees provides better long-term structure and is easier, cheaper, and better for the tree.

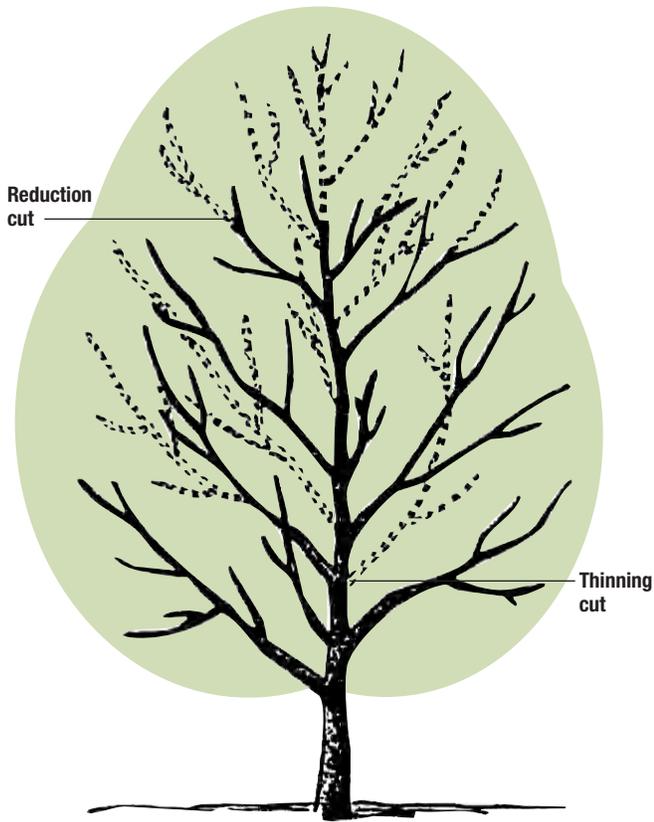


Figure 13. Reduction and thinning cuts and other proper pruning standards must be used.

—Correct climbing methods following the most current safety standards will be used. Spikes will not be used to climb live trees.

—Newly planted and young trees will be given correct pruning, staking, and mulching and will be irrigated during periods of hot, dry weather. Maintenance of newly planted trees during the first five years will be given priority over maintenance of older trees except in case of hazard.

—International Society of Arboriculture tree maintenance standards will be attached to the appendix of the street tree ordinance and known as the rules of arbor work for the municipality. Violations of the rules of arbor work will be treated as a violation of the street tree ordinance.

Strategies for Quality Design

—Important landscapes, such as business districts, neighborhoods, and main entrances and exits, will be identified and considered in tree and flower plantings.

—Traditional landscapes, such as neighborhoods with large trees, will be preserved through tree planting. An overall image of the municipality will be developed through the coherent planting of trees along streets.

—The final selection of trees for an important landscape should be made in the field while considering the elements of the landscape.

—A qualified landscape architect, knowledgeable about plant materials, should be consulted when planning for tree planting in important landscapes such as downtown.

—Overall, the community forest will contain a diversity of species and ages. This diversity will be achieved by planting a variety of tree species and by removing and replanting a certain number of declining or hazardous trees every year. No more than 15 percent of the total tree population will be composed of any one species. Older declining trees in poor condition or of poor structure will be removed each year and replaced with newly planted trees.

—The tree species chosen for planting, besides meeting design criteria, must be biologically adapted to site conditions and well suited to the level of care it will receive.

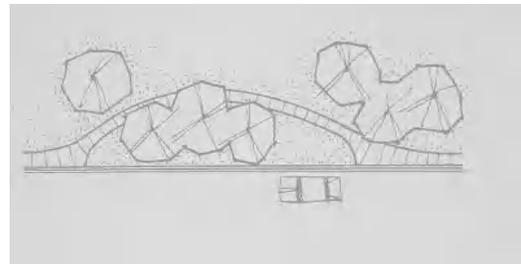


Figure 14. Creative design alternatives should be considered.

Strategies for Funding

—An annual report, work plan, and budget will be used to inform the borough council or supervisors of the commission's work and funding needs. An annual meeting will be held to discuss the commission's work and funding needs.

—A member of the borough council or supervisors will serve on the tree commission as a liaison.

—A Remembrance Tree Program will be used to raise funding for tree planting on streets and in parks. The program will provide an approved list of trees to be planted in remembrance of births, anniversaries, deaths, and other special times.

—Grants from the Pennsylvania DCNR will be applied for and used for tree planting and other environmental projects.

—Local civic organizations will be contacted annually to discuss their participation and support of commission activities.

—Community, family, and corporate foundations will be identified and considered for assistance in funding tree planting and other commission activities.



Figure 15. Creative fund-raising should be considered.

Strategies for Public Participation and Education

—Residents, organizations, and schools will be offered opportunities to participate in tree plantings.

—Residents and organizations will be given opportunities to learn how to maintain young trees and conduct tree inventories and annual assessments.

—Educational materials concerning trees and other natural resources will be provided to schools.

—Arbor Day will be celebrated as a reminder of the importance of the community forest, with the involvement of public officials and local schools.



Figure 16. Use tree planting and other volunteer opportunities.

—News articles and releases will be used to explain noteworthy activities, including planting, tree removals, pruning, and budget requests.

—Workshops and other educational programs will be sponsored by the commission in partnership with Penn State Cooperative Extension and other organizations.

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