Urban Tree Management for Homeowner's Associations

DEM RHODE ISLAND

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Urban & Community Forestry Program

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Introduction

The Emergence of HOA's

The number of community or homeowner associations (HOAs) has increased dramatically over the last several decades, with that growth continuing to accelerate. According to the Community Associations Institute there were approximately 10,000 community associations in 1970, and in 2015 there were over 335,000, with 21% of the American Population (68 million) living in these common interest communities.

The cause of this dramatic rise in the number of HOAs is most likely the nature of suburban development, which tends to sprawl out into un-incorporated areas, not confined by municipal jurisdictional boundaries. Often counties require the establishment of HOAs as a condition of zoning and permitting because of the fiscal challenges counties face in providing these developments with support services. This results in the privatization of public functions such as trash collection, road maintenance, snow removal, storm water management, recreational services, and others.

The privatization of essential services and maintenance of infrastructure are a given in HOAs, however, maintaining and enhancing an HOA's urban forest tends to be an afterthought for many of these communities. Only after development is underway, or completed, do residents begin to realize that their urban forest, which is an essential part of their infrastructure and identity, requires attention. This guide is intended to help HOAs navigate through the process of establishing sensible policies to protect, maintain, and improve their urban forest resource.

Why Manage Trees as a Community?

Trees are the most visible and, perhaps, dominant features in the landscape, occupying the private yards and common areas of communities under collective management. The trees under all ownerships within a community is referred to as the "urban forest".

> Common areas are properties within the community that may be jointly owned, or otherwise available for use by the entire community. These areas are typically rights of ways, tree lawns, parks, trails, nature areas, and recreation areas such as playground, pools and tennis courts.

Due to the wide range of benefits derived from the urban forest, it should be considered an important part of a community's infrastructure. Unlike grey infrastructure (roads, sewer and storm utilities, distribution systems), which depreciates over time, the urban forest increases in value. The more trees grow and the healthier they are, the greater their environmental contribution, and the higher their value.

It is not enough to plant trees, or retain existing trees through development, management and maintenance is necessary in order for them to survive and thrive: resistant to insect, disease, and weather extremes; healthy and structurally sound. This is necessary as trees in urban and urbanizing environments are impacted by human influences, such as heat, glare, compacted soils,

competition with turf, and construction related damages. Any negative impacts like messy fruit, allergies, damage to structures (such as heaving sidewalks), restricted sight distances, and risk from falling trees or tree parts, must also be managed.

Some HOAs may have tree standards in place at the time of their establishment to address tree removal and management but, as development continues or the HOA expands, issues can arise challenging the initial standards and the overall maintenance and retention of trees. Thus, there is the need for policies, which are more sophisticated, to meet the reality of tree management, tree planning, and tree maintenance. It makes sense for HOAs to develop policies, programs and practices to manage and maintain their urban forest across the complexity of multiple stakeholders and ownerships, specific to their needs and priorities.

The Benefits of Trees

Air Quality

Tree reduce air pollution such as particulate matter, absorb carbon dioxide, and produce oxygen.

Energy Conservation

An appropriately placed tree can reduce direct heating and cooling costs by shading structures from direct sunlight or, or buffering structures from cold wind. Tree can reduce local air temperatures from evaporative cooling (the evaporation of moisture from leaf surfaces) and can collective reduce the "urban heat island effect" caused by dense concrete and asphalt surfaces.

Conserve Water, Improve its Quality, and Reduce Flooding and Erosion

During rain events the canopy of trees intercepts rainwater, holds and evaporates some of it, and channels some to the ground where it can infiltrate into the soil. This reduces the overall rate and volume of storm runoff. Tree roots also hold soil in place, reducing erosion.

Carbon Sequestration

The burning of fossil fuel results in the release of carbon dioxide into the atmosphere, which traps heat and results in climate change. Trees help offset this release by absorbing carbon and converting it into wood. Carbon can remain trapped in wood for many years until burning or decay releases it. When used as a wood product, carbon could stay trapped for hundreds of years or more.

Mental and Physical Health

Several studies have found that access to nature yields better self-discipline, and greater overall mental health. One study even found that hospital patients who can see trees out their windows are hospitalized 8 percent fewer days than their counterparts, healing more quickly and with less medicine.

Economic Benefits

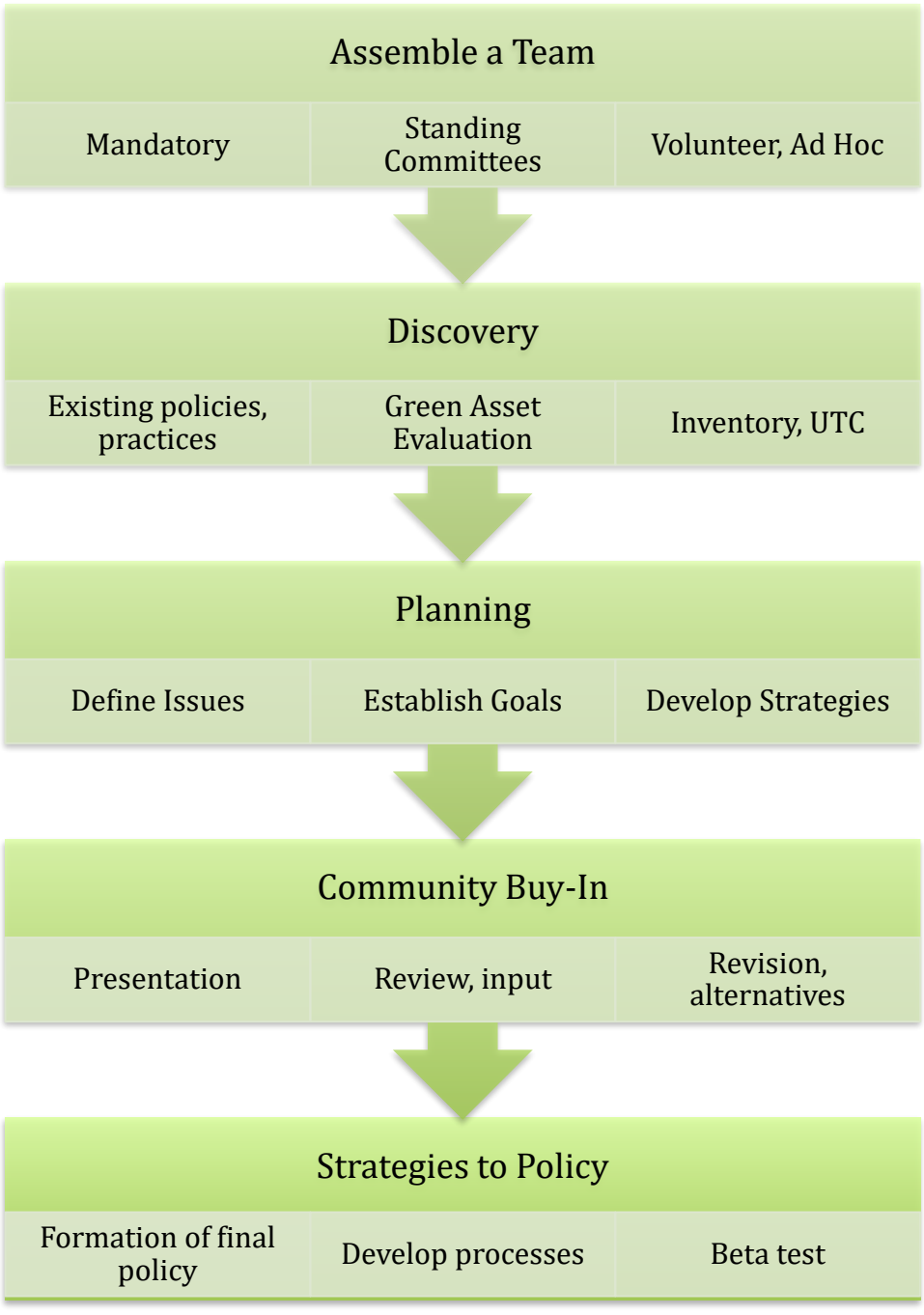
Studies have indicated that trees draw people to homes and businesses. They are willing to pay more for homes with trees and remain longer and spend more in retail environments with green landscapes.

Additional Information:

The Benefits of Urban Trees
Trees and Human Health

Approach

A systematic approach can be followed in the development of urban forestry practices and policies for a HOA. This approach is outlined in the following flow chart, and each major heading is described further.



Based on your existing structure and bylaws

What do you know? What do you need to know?

What resources and/or assistance do you have? Or can access?

Engaging with the community

Developing and testing the results

Assemble a Team

Addressing urban forest policy and management needs is best accomplished through committee work, integrated into the existing HOA committee structure.

Homeowner associations can be thought of as volunteer organizations. Even those with professional management running the daily operations, still rely on committees, which are comprised of HOA members to fulfill important decision-making role. There are three basic types of HOA committees: mandatory, standing, and ad-hoc.

Mandatory committees are created in the HOA governing documents, specifically named and described in detail. This description may include the responsibilities, as well as the authority (advisory or decision making) of the committees. Examples include Architectural Review, Nominations and Elections, Grievance, and Audits.

Standing committees are also often established in HOA declarations or by-laws, or can be identified by the board of directors. These committees are "function" oriented, providing a clearly defined function in the HOA. Examples include budget and finance, communications, or recreation.

Both mandatory and standing committees remain in place indefinitely, whereas ***ad-hoc committees*** are task-oriented and are assigned to address a specific need or issue within the community. Once this task is complete, the committee is disbanded.

While it is likely that an HOA may address some tree issues through their architectural review committee, or their landscape and grounds committee, it is appropriate to consider the development or enhancement of that policy as a single task, accomplished by an *ad-hoc committee* (which will be referred to as the *"**tree policy committee**"* in this publication). It is possible that the work of this ad-hoc committee could result in the establishment of a new standing committee to implement the new policies and practices, which will be discussed later in this publication.

It is recommended that the *tree policy committee* be comprised of members with various strengths and backgrounds. Examples of these backgrounds could include master gardeners, planners, communicators, architects, engineers, and policy makers. It is also important to include the HOA management company in committee deliberations. And it is important that members are somewhat knowledgeable and passionate about tree issues in the community and are willing to stay committed through task completion.

Finally, it is important for the tree policy committee to obtain the services of a professional urban forester, or arborist, to help them better understand their tree issues, why they are occurring, and the best management and policy approaches to address them.

Professional Assistance

These professionals have formal education and experience in the management of individual trees, and tree populations, located where people live, work and play. Their educational background typically integrates multiple disciplines such as tree biology, arboriculture, soil science, pest management, urban planning and design, forest ecology, and urban wildlife.

Discovery

The next step in the process is exploratory, to learn as much as possible about the management of trees in the HOA, and their actual condition.

There are several steps that can be taken in the Discovery step:

1. Review existing documentation
   The tree policy committee must explore the presence (or absence) of specific written policies, requirements, or standards that pertain to trees within common areas, along rights of ways, on private properties, and on developing property.

   This information could be contained within HOA charters, architectural design and review standards, and covenants. If the HOA has a standing committee that addresses landscape issues, or a management company responsible for the maintenance of common areas, it may be helpful to review work orders or agreements to see how work is specified. Examples of general types of questions that could help guide this initial discovery phase are provided in the text box below.

Initial Discovery Phase – Questions to Explore

Are there any existing policies related to trees?
Are there requirements related to the qualifications of contractors or consultants conducting tree work?
Are there clear lines of authority, or established decision rules, regarding trees in common areas or along rights of ways?
Is there dedicated funding for the maintenance and planting of trees in common areas or along rights of ways?
Do any plans exist for tree management, to address their potential risk for failure, or for risk from wild fire, or for response after disastrous storms?
Are there any references to tree management standards, best management practices, or firewise landscaping?

2. Assess the Status of the HOA's Urban Forest
   An HOA may also choose to have a field evaluation of the trees within the community (*Green Asset Evaluation*) carried out. This field evaluation can reveal the condition of the trees and their growing sites, provide indications of the effectiveness of existing policies, demonstrate the need for specific management practices to improve tree condition, identify potential planting opportunities, and identify potential risk for tree failure or wild fire.
   An even more comprehensive approach to green asset evaluation is to conduct an *inventory* of trees within common areas, or along rights of way. This may be a costly procedure, and requires professional expertise, but the data collected can provide information that can be used for long-term planning and budgets by providing justification for management priorities, planting or replacement trees, recommended species, long-term maintenance, and risk management.

   Information collected in a tree inventory includes:
   - the tree's spatial location (GPS)
   - species, size, condition (of all parts of the tree)

- notation of any structural defects, insects and disease
- condition of growing sites, and surrounding conflicts (sight distance, utilities, etc.)
- location and availability of planting spaces

The intensity or type of inventory can be defined to meet a community's specific concerns. For example, a more detailed inventory may be appropriate in high-use public areas, like trees along streets and sidewalks, whereas in lower use areas a risk analysis may be sufficient for trees that are adjacent to trails within natural areas.

Tree Risk Analysis

This analysis or assessment of risk is a detailed and comprehensive process that should be conducted by an arborist certified by the International Society of Arboriculture (ISA) with the ISA Tree Risk Assessment Qualification. This additional qualification ensures the use of the latest professional standards and best management practices for assessing tree risk and making recommendations for mitigating risk.

The risk assessment considers factors such site characteristics; tree defects and conditions the affect the likelihood of tree failure; load factors; tree health and species' profiles; and potential targets (things a failing tree or tree part could strike). These elements are factored into a risk categorization based on the likelihood of tree failure, the possibility of a failure impacting a target, and the consequences of a failure. The following link provides more information on tree risk assessment: Tree Risk

3. Urban Tree Canopy Analysis (UTC)
   For expansive or complex HOA properties, one additional process may provide useful information that may be helpful in this discovery phase, an analysis of the HOA's urban tree canopy. Urban tree canopy analysis (*UTC*) is a "birds-eye" view of the total spatial coverage of tree canopy within a given area, in this case, the boundaries of the community governed by an HOA.

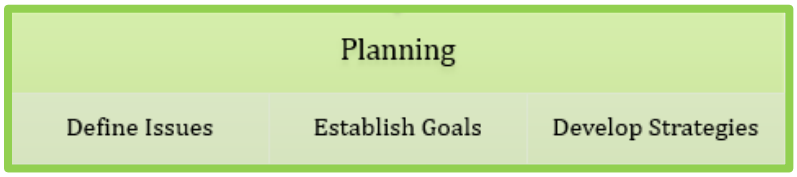
   UTC analysis is usually conducted professionally, using aerial or satellite imagery. The US Forest Service has developed a tool that can be used by non-professionals called i-Tree Canopy that estimates canopy cover and the economic value of environmental benefits for a given area using a simple random sampling process. While the generated results from this tool are estimates, they are usually sufficiently accurate (within a 5% to 7% margin of error) to provide information to assist the planning and decision-making process.

The Discovery Process and Wildfire Prevention

HOA communities are often developed in or adjacent to forested areas that are at an increased risk for wildfires. This risk is a result of many factors, including historic fire suppression. It is important to consider this risk during the discovery process. Some factors to consider include:

- Identification of high-risk fire areas
- Wide access roads for emergency vehicles, and multiple access and exit routes
- Fire resistant architectural material for homes and other structures
- Defensible space around homes and other structures.
- Fire resistant plants

RIDEM Forest Fire Program can help your community conduct a wildfire risk assessment, and develop a plan to reduce wildfire risk.



Planning

The discovery process should lead to tree policy committee discussions about current urban forest conditions in terms of:

- what is present – both acceptable and unacceptable
- what should be changed or maintained
- what are the desired characteristics for the long-term

The gap between existing conditions and desired future conditions can help identify:

- what is realistically achievable
- the actions necessary to achieve desired goals
- the costs associated with reaching those goals

During the planning stage, it is even more important that the HOA has contracted the services of a professional, certified arborist. The urban forestry expertise provided is essential for context, biological understanding to tree growth and response, professional practices, as well as the impacts of potential practices and policies. An example is provided in the box below.

During the discovery process the tree policy committee has discovered that there is a greater incidence of tree failures on properties that have been more recently developed. The urban forester can explain the practices that may contribute to these failures, how trees respond to these practices, and what new or adapted practices would be necessary to reduce failures. Such failures can have multiple causes and understanding cause and effect is invaluable:

- "Wind throw" when a once protected stand of trees is opened by land clearing, and trees are now exposed to wind forces.
- Damage during construction typically results in tree decline.
- Mechanical damage to the structural roots of trees is common.

Once the *issues* are identified, discussion can then shift to possible solutions (practices and policies). These solutions should start with goals, which are accomplished through specific strategies.

Goal setting is one of the more important parts of this process as these goals will eventually be vetted through the entire community, as the HOA converts then to policy. Goals should be clearly articulated, specific, realistic, and measurable. Once the goals are established, **strategies** needed to accomplish them must be identified. Strategies can take the form of activities or programs, and specific practices.

Programs are a planned series of future events

Example of Goals

Goals should be specific, realistic, and measurable. For example:

- Increase the total canopy cover by 10%.
- Stop the topping of trees.
- Increase the diversity of tree species in common areas.
- Reduce soil erosion and storm water runoff.
- Reduce mowing costs by planting trees.
- Improve habitat for songbirds and pollinators.
- Reduce the loss of trees from construction and land development.
- Reduce the incidence of tree failure.
- Reduce conflicts between trees and infrastructure and utilities
- Create defensible space around 90% of the homes.

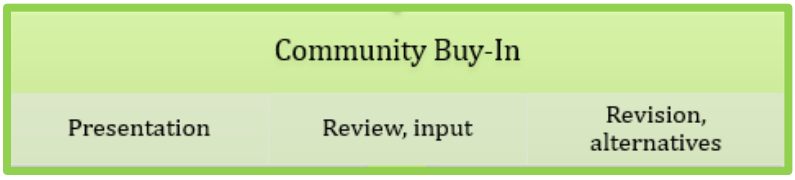
such as educational programs or community tree planting initiatives. Programs do not typically become part of HOA policy. However, they can be very effective in accomplishing goals. For example, educational programs targeting homeowners on proper tree care and maintenance, or volunteer tree planting activities, could make a strong contribution towards achieving a goal, like increasing the community's tree canopy.

Strategies can also take the form of a practice, which applies science and management knowledge to the care of trees. Practices are typically expressed in the form of policy for an HOA. Using the same goal example as above, strategies to increase canopy (as a practice and not a program or activity) might include a protocol for replacing trees that are removed; or requiring that tree services employ industry best management practices when conducting work within the HOA.

Examples of Strategies

- Implement tree protection standards for construction sites.
- Establish an annual tree planting and maintenance budget for common areas.
- Require ISA certification for tree care services in the community, and tree care specifications based on national tree care industry standards.
- Create a recommended tree species list.
- Establish a prioritized annual tree maintenance plan for trees in the common area.
- Commission a tree risk assessment for trees in common areas and along trails.
- Conduct educational homeowner tree care workshops.
- Host volunteer tree planting projects in the community.

Well thought-out strategies can also accomplish multiple goals. For example, a tree planting program would help achieve canopy goals, but could also result in the increase in the diversity of tree species; reduce soil erosion and storm water runoff; and improve habitat for song birds, pollinators, etc.



Community Buy-In

The next step is engagement with the broader HOA membership, to build their support for, and acceptance of, the goals and strategies. This important step helps educate the community about:

- The tree issues that the community faces and the policies address
- Why these issues are important to the HOA and its residents
- The solutions being presented as the goals and strategies.

There are a several steps to this process.

1. *Presentation* of committee plans at a community meeting: which should be a joint presentation by the urban forester assisting the tree policy committee, along with a member(s) of the committee.

   As much specific information as possible should be presented, including community responsibilities and the resulting process. By the end of this presentation HOA members

should be able to visualize what these proposed policy changes mean to them as individual homeowners, and to the community.

- The issues that were identified by the tree policy committee should be clearly articulated; along with the how these issues were defined.
- The urban forester should discuss the long-term implications of action and inaction in terms of urban forest health, ecosystem benefits, and potential risk.
- A committee member can present the goals and strategies, explaining how the committee developed these strategies, and how the community can become engaged in implementation (or how they may be impacted by implementation).

2. *Discussion* and community feedback: should walk through each of the individual goals and strategies, and solicit questions, suggestions, and alternatives.
    - Allow everyone the opportunity to provide feedback.
      Some people are not comfortable speaking in front of a group so other opportunities for input should be provided. One technique is handing out note cards prior to the presentation, with directions to write comments and suggestions, which can be collected and read during the discussion.
    - Allow email responses for a short period after the meeting.
      The format of such responses should be structured so HOA members stay focused on goals, strategies, suggestions and alternatives, so a form may be helpful.
    - Allow and document suggestions and alternatives.
      Homeowners may think of solutions that the tree policy committee may not have thought of, or they might present simpler or more flexible approaches to proposed strategies. These suggestions can become forms of "alternative compliance" that are built into the HOA policy.

Alternative Compliance

For many policies, when several alternatives are available, the community members tend to be more accepting of the proposed policy.

For example, if an HOA adopts a "no net loss" canopy goal, with a 1 for 1 tree replacement strategy, that strategy may become a policy that a homeowner must plant a tree for every tree they remove. This may seem inflexible if a homeowner wants to remove trees for a vegetable garden, since replacing the trees might interfere with that garden. With alternative compliance, the homeowner could instead plant trees in common areas, or donate the tree planting costs to a community tree bank for future planting. Communities could also choose to use these funds for the maintenance of trees in common area, or to hire professionals for community-wide tree care, maintenance, evaluations or inventory or UTC updates.

The tree policy committee should repeat these outreach sessions until they feel comfortable with the community's level of understanding and buy-in. Gaining consensus, or a sufficient quorum, can take time.

Strategies to Policy

Converting goals and strategies into policy can be a tedious task that starts with the assignment of these strategies to the appropriate documents within the HOA governance. To help facilitate this process, the *tree policy committee* should consider recruiting a member with strong familiarization with their HOA governance, as well as a representative of their management company most familiar with the routine processes of the HOA, if they have one.

Goals developed by the tree policy committee are usually converted into a narrative format, providing background information, and describing the intent of the policy. This is very similar to the expression of intent in city ordinances justifying the purpose of the ordinance.

Strategies could become policy in several ways:

- Revision to the HOA by-laws.
  This is necessary if there a change the committee structure is needed, or to establish a new standing committee. For example, the by-laws would need to be revised to address a strategy establishing a new standing committee to function as a tree board with the responsibilities of reviewing tree removal requests, tree maintenance specifications, and tree protections plans.
- Addition to HOA architectural standards or design guidelines.
  - Strategies can be scattered through the standards and design documents, depending where it is most appropriate. For example, strategies addressing the protection of trees during new development could be added to the architectural standards section pertaining to site design or environmental controls; while strategies improving the standards of care for tree maintenance could be placed in the sections that pertain to the maintenance of buildings and grounds.
  - Strategies can also be kept together in a single section under its own, amended to the architectural standards or design guideline. This approach presents the policy more like a tree ordinance. When using this approach, it is necessary to cross reference to other sections where the implementation might occur.

The final step is for the tree policy committee to map out processes and responsibilities. Again, the professional urban forester can be very helpful with this step. For example, if tree protection during construction is required, the committee must state:

- how this ties into the existing planning and site review processes
- the specific information required for tree protection planning
- how it is implemented in the field
- monitoring and follow-up requirements
- methods for corrections.

This level for detail is necessary for all strategies that might involve a process, such as tree removal and permits, contracting tree maintenance, etc. The generation of flow charts, timelines, and checklists for the new requirement processes can be helpful.

Finally, the tree policy committee should conduct some trial runs or beta tests to ensure the processes are effective and efficient and revise the process accordingly. The new policy is then ready for HOA board ratification.

Examples of more complex processes for HOAs with active development:

Sample Tree Protection Review Process

1. Have all the trees on the lot survey located.
2. Have an ISA certified arborist measure the trees on site (diameter at breast height (dbh) and evaluate their condition.
3. Develop a tree protection plan overlay on the proposed site plan, including all of the elements in the Tree Plan Design checklist (below).
4. Submit the Tree Protection Plan for review for compliance with the design standards, along with other permit documents and drawings for review to: Architectural Review Committee and the Tree Policy Subcommittee.
5. The Tree Policy Subcommittee conducts a field evaluation and plan review (within 2 weeks) for compliance with the design standards.
6. Plans are either returned for revision or approved for permitting.

Sample Checklist for Tree Plan Design

- ✓ Drawing showing location of protected trees on the site and location of proposed land disturbance activities.
- ✓ Radius in feet of critical root zone for each tree
- ✓ Location of proposed structures, drives, patios, and walkways
- ✓ Proposed grading and drainage.
- ✓ Location of underground utilities
- ✓ List of protected trees with species, dbh, and general condition description
- ✓ List of proposed tree removals
- ✓ Locations of proposed tree plantings
- ✓ If the community is located in a high fire risk area, thirty feet of defensible should be defined on the drawing for Firewise purposes.
- ✓ Tree protection and erosion control measures to be installed.
- ✓ Staging areas for material storage and debris dumpster
- ✓ Owner and builder 24-hour emergency contact information
- ✓ Detail Drawings and Specifications for tree protection fencing, erosion control devices, tree planting details, or any other applicable prescriptive or protective measures.

Case Study – Town Oaks at Blue Ridge*

* This case example is factual; the name of this HOA is fictitious.

Town Oaks at Blue Ridge (TOBR) is a modest-sized (675-acre) and growing community with currently about 700 homes under 501(c) 4 HOA governance and management, located in Western North Carolina. The community was established 15 years ago, adjacent to the Pisgah National Forest on previously forested land surrounding a 67-acre lake (TOBR Lake). Its setting can best be described as suburban within a rapidly growing, but mainly rural, county with an urban center. Most lots range in size from a third to half-acre, the streets and stormwater facilities are constructed to urban subdivision standards, and the community has full access to county utilities and emergency services.

TOBR contains landscaped community areas, including street trees; naturally forested community property; and individual private property. The community works hard to demonstrate environmental responsibility, and is committed to sustaining their beautiful physical environment. They have an active cadre of volunteers who have created and maintain an inventory of street trees in the neighborhood

The establishment of a "Forest and Grounds" ad-hoc committee was driven by a growing perception that tree canopy was being lost in the community due to building construction and resident tree removals, and replaced with smaller trees and shrubs.

To better understand their natural resources the committee hired a consulting forester to establish a base line of the natural resource conditions and to develop a "Forest and Grounds Plan", designed to be a reference for managers and residents of the community. The plan's recommendations prioritized actions to reduce soil erosion, improve water quality in TOBR Lake, manage exotic invasive species, establish natural community types, improve public safety, and facilitate tree protection. This report identified a baseline canopy cover of 51%, and recognized that canopy was being lost through building construction, natural mortality, and wind throw. The final recommendation was to develop a community tree ordinance to address these trends.

Assemble a Team

This final recommendation, along with the recognition of the value of a tree ordinance, to underscore the community's commitment to protecting and improving their urban forest, moved the Forest and Grounds committee to work towards developing an HOA tree policy. TOBR contracted the services of a professional urban forester to help them through the process.

Discovery

The Forest and Grounds committee embarked upon the *discovery process*, building upon the base line established with the Forest and Grounds Plan. Since a thorough natural resource assessment had already been conducted during the Forest and Grounds Plan, and a volunteer public tree inventory had been completed, the discovery process focused on:

- interviews with the Forest and Grounds committee and the HOA's management company,
- a review of charters, by-laws, the strategic plan, and design standards, and
- a green asset evaluation.

Early in the discovery stage it was determined that there were no standards for tree maintenance or protection in any of the documents, and trees were being removed without replacement. The community-wide concern for falling trees and tree parts resulted in HOA tree work being contracted without specifications requiring national industry standards for tree care (ANSI A-300, Parts 1-10).

The *green asset evaluation*, which occurred as a field tour of common areas, construction sites and residences within the HOA, showed that:

- Construction injury to trees was the primary cause of tree loss, decline, and risk.
- Many of the falling trees and tree parts were due to decline from construction damages.
- Residents were subsequently removing those trees and generally replacing them with smaller, understory trees, if there was any replacement done.

- While there was some separation of trees from construction activity on home construction sites, the tree protection was generally limited and unplanned.
- Some of the trees in the community were topped, both on private residences and in common areas.

Such issues indicated that the existing practices could possibly result in an overall loss of tree canopy, or result in tree decline and mortality. This conclusion moved the committee into the *planning* stage of policy creation.

Planning, Community Buy-In and Strategies to Policy

With the issues defined and working with the committee, TOBR's Consulting Urban Forester developed policy recommendations – a series of goals and strategies focusing on canopy loss, tree protection, tree management, tree risk management and community tree recognition. (Details of these goals and strategies are provided in Appendix 1.) The Forests and Grounds Committee simultaneously started the *community outreach process* to gain community buy-in by providing educations sessions focused on these issues.

The Forest and Grounds Committee accepted most of the recommended strategies submitted by the urban forester and worked through a revision process. It was decided to *convert these strategies to policy* by revising the HOA design guidelines (Appendix 2).

Two level of ratification were necessary since there is still active development in the community. The developers (referred to as the "Founders" in the HOA charter) had to approve the policy recommendations, as well as the board (comprised of homeowners). The Founders accepted all of the recommendations with the exception of the policy pertaining to tree protection for new construction. The board had accepted all the other policy recommendations and voted for approval, after implementation process details were refined.