ROUNDTABLE

Building Bridges with City Departments, Part II



When elected officials, planners, engineers, urban foresters, and other stakeholders work together, they can create truly livable cities. Photos: Steve Cothrel

Roundtable participant and Milwaukee, Wisconsin Forestry Services Manager David Sivyer says, "Like trees in rural forests that are associates of various symbiotic plant communities, MAs exist in a community of municipal professionals that has symbiotic potential. To effectively manage urban forest resources, MAs must be equipped with skills and knowledge that extend well beyond forestry and other science-based curriculums to design and engineering, construction management, political science, and interpersonal relations."

In this issue, we hear about bridge-building relationships from Gene Hyde of Chattanooga, Tennessee; Gordon Mann of Redwood City, California; Nolan Rundquist of Seattle; and Melinda Adams of Fort Worth, Texas.

Building Bridges in Chattanooga:

A. Working with the Electric Utility–The Electric Power Board (EPB) of Chattanooga

- 1. In 2006 we piggybacked on a contract with the EPB for pruning and removal services. We were able to achieve economy of scale through the bidding process. Also, since the same contractor, Asplundh, provides crews for both the EPB and the City of Chattanooga, it works out well when a crew member from the power side is assigned to our urban forestry crew or vice versa. The individual does not drop in wages or raises—something that has eliminated the anger and resentment once a factor when switching crew members.
- 2. The EPB does not remove wood from on-site tree take-downs. We have worked out an arrangement

with them so that we can send a large knuckleboom truck to pick up woody debris as necessary.

- 3. Urban Forestry and the EPB have done joint training for the following: Certified Arborist training, Electrical Line Hazard training, and Bucket Truck Rescue.
- 4. This year the EPB funded our Tree Commission Annual Awards Banquet to the tune of \$1,500.
- 5. The EPB has adopted the standard of "lateral pruning" for powerline clearance.
- 6. The EPB requests permission for the removal of any tree on the ROW, and rarely do we refuse this request.
- 7. We notify the EPB when we see problems that are of concern to them.
- 8. We have agreed to share GIS data when we have compatible systems.
- 9. We have a strong plan-review function during the building permitting process. I have made it a priority to request our reviewer to ensure that no large trees are scheduled for planting under distribution lines. In this way, we head off potential conflicts between the lines and trees.
- 10. Unfortunately, we sometimes have budget shortfalls, and when this occurs the EPB has graciously agreed to let our contract crew work with them doing power line clearance until we get to the

new fiscal year. This keeps our crew intact and gives the EPB some extra help in accomplishing its pruning goals.

B. Working with the Pavement Management Section of Public Works

Early each year we receive a listing from Pavement Management of the streets within Chattanooga that will be repaved that year. We inspect these streets to determine the location of either city trees or private trees that overhang the street. If these trees are judged to be a hindrance to the repaving operations, we schedule that street for pruning. In this way we are able to accomplish these goals:

- 1. Provide clearance for milling and paving equipment
- 2. Accomplish routine pruning in new areas of the city each year
- 3. Reduce the number of angry residents who had branches ripped from their trees
- 4. Maintain a tree maintenance budget that allows us to be proactive

C. Working with the Stormwater Division of Public Works

- 1. As the City Forester, I have written the Stormwater Division's Best Management Practices (BMP) document for Pesticides, Herbicides, and Fertilizers. This was written to comply with EPA requirements. I've also written BMP documents for tree planting and horticulture operations as a reference for my Stormwater Division colleagues as they encounter various contractors.
- 2. Urban Forestry has planted trees in inner-city areas to provide polluted streams and creeks with shade to help lower water temperatures. This action will help re-establish aquatic life and reduce coliform bacteria counts.
- 3. Urban Forestry has assisted with tree removal on Stormwater Division projects in which the trees were either too large for them to remove or were near residences where they feared dropping a tree on a house. We have both the equipment and expertise to perform large and/or difficult removals.
- 4. The Stormwater Division has assisted us with the technical aspects of GIS systems and has helped with programming our handheld HP i-PAQ units.

Gene Hyde, City Forester, Chattanooga, Tennessee

Thave found that the best way to build interdepartmental relations is to help people get what they want while promoting what I want at every opportunity. For example, when I worked in the Engineering Department, I offered to review and advise on any plan that had trees on it. I worked to show the benefits of root cutting versus tree removal in the first several years of development of our sidewalk repair program (it only took four years to change the "R" word from "removal" to "root prune" each time an engineer looked at a tree.) I assisted the Parks Supervisor with management decisions relating to the urban forest when I was in the Community Development Department working on the sidewalk program. While in my current position in the Public Works Services Department, I jumped on board with Planning in the Community Development Department when they introduced the "Nice Places" initiative (lo and behold, 85% of the "nice places" shown in examples had trees!) I agreed to locate street trees and review plans for Community Development with new development projects.

Most of these efforts were not in my immediate job description or work assignment expectations. However, I want to make a difference in how urban trees are addressed. In the end, I believe our character comes through and is recognized by our colleagues, which builds trust, teamwork, and cooperation. I have had relationships with people in organizations that didn't agree with directions I was going or changed or overruled decisions I made. When that happens, I accept the situation, try to learn from it, and wait for the next opportunity.

Gordon Mann, Former Public Works Superintendent City of Redwood City, California

In 2006, the voters of Seattle approved a transportation initiative to repair and replace numerous types of long-neglected infrastructure. The passage of this initiative has funded \$1.2 million dollars of sidewalk repairs, mostly adjacent to street trees.

We've had a very good relationship with the Street Maintenance Division over the past few years, so we met to discuss how best to complete these repairs with the least amount of impact to the street tree population. The result of the meeting was a commitment by Street Maintenance to fund a position in the City Arborist's office to oversee mediation of root/sidewalk conflicts.

We're developing a toolbox in cooperation with Street Maintenance in order to streamline the process of sidewalk repairs and tree protection. Currently, over 200 sites have been cataloged for potential repairs. We realize that this accelerated program will undoubtedly result in some tree removal, but the cooperation among divisions promises to keep removals to a minimum.

Another positive aspect of this project in relation to Urban Forestry is partnering with Street Maintenance to update tree inventory information at the same time that the sidewalk condition is being inventoried. We had budgeted funds to collect data on approximately 40,000 trees per year, and we estimate that we will be able to collect data on an additional 20,000 trees per year for the next two years by combining our data collection efforts.

Another groundbreaking partnership was initiated in 2002 between Seattle Transportation and Seattle Public Utilities. Seattle's pilot Street Edge Alternatives Project (SEA Streets) is designed to provide drainage that more closely mimics the natural landscape prior to development than traditional piped systems.

To accomplish this, we reduced impervious surfaces to 11% less than a traditional street, provided surface detention in swales, and added over 100 deciduous and evergreen trees and 1100 shrubs. Essentially, we're using trees as a stormwater detention facility. The curvilinear roadway, one of the most prominent features of the project, is 14 feet (4 m) wide—18 feet (5.5 m) wide at the intersections. The project team focused on reducing the paved surfaces where possible. The roadway is wide enough for two standard size cars to pass each other slowly. The project helps creeks by reducing stormwater at the source. As Seattle has developed, stormwater running off impervious surfaces has had a major impact on our creeks and wildlife. SEA Streets provides an example of the environmental benefits that can be realized with natural systems instead of traditional systems, especially in areas that are installing new infrastructure.

Residents of this neighborhood enjoy walking along SEA Streets because it is a natural, soft-edged environment, in contrast to the hard edges of traditional linear streets. Also, more tree cover helps reduce summer heat, while absorbing air pollutants and rainfall. Two years of monitoring show that SEA Streets has reduced the total volume of stormwater leaving the street by 98% for a two-year storm event. For more information, visit the SEA Streets Web site at *www.seattle.gov* and search for "Street Edge Alternatives."

Nolan Rundquist, City Arborist, Seattle Dept. of Transportation

 \mathbf{Y} ou can't be everywhere. As a municipal arborist in a city the size of Fort Worth, there can be over a dozen tree issues needing your attention at any given time. That is why building a strong working relationship with city inspectors is a valuable tool in the conservation of street trees during sidewalk and street construction.

While it is true that you also need a healthy dialogue with city planners and engineers, the city inspector is the last chance in a long line of contacts to get it right. He or she is the final person to touch a project and can spot problems missed in the planning stages. Many engineers only visit a site a handful of times during the planning stage. They rely heavily on the accuracy of the survey for tree location as it relates to sidewalks, curbs, and driveways. While a small circle on a set of plans looks well out of the way of construction, in actuality a large aging post oak may be in jeopardy of having its roots cut on three sides. The city inspector who is often on the site daily during construction will be more likely to recognize a problem and will know when to call the city forester.

The city inspector has years of sidewalk and street construction experience. With the inspector's knowledge of construction techniques and the city forester's knowledge of arboriculture, between them they can make the last-minute changes required to minimize the impact on a unique specimen. Many city inspectors have also developed long-standing relationships with the contractor. The inspector will often know the capabilities of the contractor and can explain the special circumstances needed to preserve a tree worthy of extra effort.

In order for the city forester to develop such a cooperative relationship, the inspector needs an incentive to call him/her when they are needed. There are many advantages the arborist can offer to the forester/inspector partnership. He or she can assist by taking some of the heat off the inspector when a tree must be removed. Because the inspector is the most visible municipal employee during a street or sidewalk project, they are also the most likely target of anger and verbal abuse from the affected public. The city forester can deflect some ill will by offering a professional opinion to the citizen on what measures will be taken to minimize impact to their tree, or why the tree must be removed.

Many times an inspector would like to save a tree but is unwilling to assume the responsibility for the cost of a change order.

When development occurs, municipal arborists can help address municipal concerns about stormwater management, traffic calming, canopy retention, streetscape design, and much more.

The municipal arborist can assist by evaluating the likelihood that it can be saved. The inspector will often look to the arborist to make those tough decisions. It is always more comfortable to tell the project manager that the city forester said the sidewalk must be moved, or to tell a home owner the city forester said the tree must be removed. However, to be effective in that partnership, it is important to accept that not every tree can be retained. The forester must carefully weigh the value of the tree to the community, the likelihood the tree will survive construction, and the cost incurred to increase the chance of survival. If the forester can demonstrate to everyone involved that they are willing to balance benefit, cost, and safety, they will more likely be called upon again.

Though not every tree can be saved on a site, the inspector can offer some redress. The City of Fort Worth offers a five-gallon replacement tree to every citizen who loses a tree on the parkway. The city inspector gives a tree voucher to each citizen who has lost a street tree during construction. The inspector signs and dates the voucher and notes the width of the planting strip and if there are overhead utilities present. The voucher includes guidelines for planting trees on the parkway developed through a partnership between Traffic Engineering and the Forestry Section. The voucher is good for one year and can be redeemed one day each month at the City's tree farm. Citizen Foresters, trained certified volunteers, assist the homeowner in selecting a tree appropriate for their parkway and provide instruction on how to plant and maintain the tree.

The city inspector is the municipal arborist's eye in the field, identifying problems as they arise. They are the spirit of the arborist and encourage new street tree plantings by passing out tree vouchers. They are also the wisdom of the arborist and help minimize future infrastructure damage by measuring the width of the planting strip and determining if it is acceptable for tree planting. Citizen Foresters are the knowledge of the arborist by helping citizens select an appropriate tree species to be planted in the parkway. The citizens are the hands of the arborist by planting, watering, and caring for the new tree. With great partnerships, maybe you *can* be everywhere.

Melinda Adams, City Forester, Fort Worth, Texas