

REPORT

To the Honorable Mayor and City Council
From the City Manager

November 23, 1998

Subject

Street Tree Preservation and Sidewalk Repair Policy Goals

Recommendation

By Motion:

- 1) Lift the City Council moratorium on street tree removals enacted December 1, 1997 and resume sidewalk repair and replacement work as soon as possible.
- 2) Accept the five policy goals (presented and discussed at the October 21 public workshop) developed by the City Council Street Tree Policy Task Force. The goals are designed to better preserve street trees while repairing sidewalks.
- 3) Direct staff to proceed with implementation of the five policy goals on a trial/experimental basis from January 1, 1999 through June 30, 2000, utilizing existing budgeted funds (fiscal years 1998/1999 and 1999/2000).
- 4) Direct staff to prepare a report on the outcomes of the trial program, with cost analysis, performance effectiveness assessment, summary of citizen input and budget recommendations for Council consideration in the spring of 2000 for the next two-year budget cycle.

Background

Current program overview

The City of Redwood City has been implementing the Comprehensive Sidewalk Reconstruction Program since 1985. The goals of the program are to provide:

- a safe, acceptable walking surface
- proper street drainage
- a healthy urban forest

The program balances the requirements for tree growth with the need to repair sidewalks, curbs and driveways. As stated in the City's Sidewalk Repair and Tree Program literature,

"A sidewalk can be removed and replaced in one day. A tree may take 20-70 years to reach a size where site problems begin to show. It is usually worthwhile to try and save the tree by modifying the site.

The sidewalk or curb requires repair whether the tree remains or not. The vested time and value of the tree gives credence to the idea of modifying the repair to allow the tree to remain."

The current process is to evaluate damaged sidewalk locations, mainly where trees are involved, and determine if the location can be modified to allow the tree to survive. If the area cannot be reconstructed successfully, the tree is removed, the site modified to avoid the same problem developing in the future and an appropriate tree replanted.

The Sidewalk Reconstruction Program was designed to evaluate and repair sidewalks throughout the City on a systematic basis. At the funding level in 1985 of \$600,000 per year, sidewalks

throughout the City would be repaired in 20 years. The funding level was reduced to \$500,000 per year in 1989, increasing the time to complete the entire City. Based on this program, then, sidewalks must be adequately repaired to remain undamaged for 25 years, until the next cycle of repair begins.

The Street Tree Policy Task Force

In January 1998 a special Task Force of the City Council was formed to consider the current policies and implementation of the Sidewalk Repair and Tree Program. There was concern about removal of large trees and replacing them with small trees. Currently, when a large tree growing in a narrow parkway causes excessive sidewalk and curb damage and cannot be root pruned safely, it is removed and replaced with a small tree. The vision of the Task Force is for Redwood City's streets to be lined with medium to large size trees that mature to form a canopy over the streets. This objective cannot be met when large trees are removed and replaced with small trees. Recognizing this conflict, a moratorium was placed on removing street trees for sidewalk/curb repair until the Task Force could review the program and provide recommendations to the City Council.

Over the last 10 months the Task Force has been researching ways other municipalities deal with tree/sidewalk conflicts. A public workshop was held in January. As a result of these activities, the Task Force has compiled a broad mix of treatments to prolong the life of desirable trees (while providing for a safe walking surface) and increase the parkway width to adequately accommodate medium- to large-size trees. These treatments range from reducing the depth of root pruning to using alternative paving materials to modifying the sidewalk alignment to use the entire right-of-way space. All of these treatments have increased costs associated with them; either due to increased construction costs or increased frequency of repairs. In some cases enforcement of the existing right-of-way or claiming additional easements may occur.

Street Tree and Sidewalk Repair Program Goals

The Task Force has drafted five Street Tree and Sidewalk Repair Program Policy Goals. Those highlighted in **bold** type indicate policies that are significantly different than the current program:

1. *To preserve as many large, mature desirable trees as possible while providing for infrastructure stability and public safety on sidewalks and streets.*

- Impacts:*
- Sustain to the extent possible the current canopy cover.
 - Maintain high standards for public safety.
 - **Increase time for staff to evaluate sites and determine options for treatment.**
 - **Increase cost in instituting "optional" sidewalk/curb treatments.**

2. *To proactively replant those street tree sites in which existing trees cannot be safely preserved AND increase planting in vacant planting sites. The goal is to plant more trees than are removed. **Trees will be planted at the discretion of the City and the City will take responsibility for maintenance for the first two years.***

- Impacts:*
- Substantially increase canopy cover throughout City, enhancing aesthetics, property values and environmental benefits.
 - **Reduced discretion by citizens in determining if tree replanted, and in species selection.**
 - **Increased time for staff to locate vacant sites and select appropriate trees.**
 - **Increased labor and materials for City to select, purchase, plant and maintain trees for 2 years.**
 - **Increased costs to maintain additional trees through their life span.**

3. *To ensure that all trees planted are the largest species appropriate for the site. To accommodate that goal, sites will be modified to provide the largest planting area feasible.*

Impacts:

- Ensure substantial canopy cover for future generations, enhancing aesthetics, property values and environmental benefits.
- Increased staff time to determine what site modifications are required to allow adequate planting space.
- **Increased costs to retrofit existing parkways, even where repair work is not needed.**

4. *Where trees must be removed, to phase the removals and interplant with new trees so that the impact of canopy removal on a street is lessened.*

Impacts:

- Reduce exposure at any one time of neighborhoods under canopy cover, lessening negative visual and environmental effects.
- **Increased staff time to prepare phased removal and planting plan.**
- **Increased repair and installation costs from working in same area several times (work process is less efficient).**

5. *To foster citizen involvement and education regarding trees and sidewalks in their neighborhoods and to better notify them of work scheduled in their area.*

Impacts:

- **Increased public awareness and support for nurturing and growing Redwood City's urban forest.**
- **Increased staff time to organize and conduct neighborhood meetings for better communication.**
- Possibility of conflicts between neighborhood desires and goals of City Council and staff.

Proposed Standards

As a means of accomplishing the above five goals, the Task Force proposes the following Standards for the Street Tree and Sidewalk Repair Program:

1. Determine that the tree is healthy and structurally stable.

It is Redwood City's intent to sustain a healthy, structurally stable urban forest composed of primarily medium to large-size trees. In general, trees expected to survive less than 5 years should be removed and replaced.

2. Classify tree into one of three categories:

Category I Tree is healthy, structurally stable and has a useful life span in excess of 5 years AND has exceptional historical, aesthetic and/or environmental qualities in and of itself or as a component of the street's canopy. Trees in this category are considered of high value to the community. More expensive treatments (which may also be experimental) may be considered to allow its retention while repairing the infrastructure.

Category II Tree is healthy, structurally stable and has a useful life span in excess of 5 years. The standard sidewalk repair program applies to trees in this category.

Category III Tree is declining, structurally unstable, or expected to die within 5 years. In most cases trees in this category would be removed. The planting space

would be redesigned if necessary to accommodate a medium to large size tree, and a new tree planted.

3. Determine amount of root pruning that would be required to rectify sidewalk/curb conflict (Category I and II trees only).

Tree buttresses (flared area at base of trunk where roots join trunk) are to be protected from wounding.

- If root pruning would occur within 3' of the trunk or in the buttress, consider alternative sidewalk and/or curb alignments (e.g. moving sidewalk away from tree, moving curb into street). Gaining adequate space may require securing easements from the homeowner, or enforcing an easement in which the homeowner has encroached.
- If root pruning is beyond 3', but still considered excessive for the tree, consider root pruning to 8-10" depth rather than 18". Consider cost of more frequent sidewalk repair.
- If neither of the above is adequate to retain tree and tree is Category I, consider special design/construction techniques.

4. Where trees are removed, adequate planting space must be created to allow planting of medium to large trees.

This may be accomplished by realigning the sidewalk to provide a minimum 8' planting area, and preferably 10-12'. In many cases placing the sidewalk at the back-of-curb will provide the largest planting area. If root pruning is needed, it will be necessary on only one side of the tree.

Alternatives

- 1) Accept Task Force policy goals, lift removal moratorium and give direction as delineated herein.
- 2) Do not accept Task Force recommendations, renew removal moratorium and request further work from the Task Force.
- 3) Do not accept Task Force recommendations, lift removal moratorium and return to previous policies and procedures.

Fiscal Impact

For the remainder of Fiscal Year 1998/99 and for Fiscal Year 1999/2000 (January 1, 1999 through June 30, 2000), there will be no impact on the budgets that support the City's urban forestry program. Given affirmative Council action as delineated in "Recommendations" above, staff will manage the trial period activities within the total amount of appropriated funds for the 2-year budget. It is anticipated by the Task Force and the staff that there will be cost increases associated with each of the five policy goals and that the next 2-year budget recommendations may include requests for additional funding – both within the City's funds and via potential external grants.

Conclusion

The Task Force and the Public Works Services staff are pleased to have the opportunity to reevaluate the policies and procedures that guide street tree preservation efforts and sidewalk repairs. There are several other dimensions of the total urban forest management program that will require analysis and policy review, including the Heritage Tree Preservation Ordinance (governing private trees), development requirements and capital improvement project standards. Recommendations for changing these components will be brought to the City Council over the next several months for consideration and action. Setting the policy course for public street trees and sidewalks is an important first step.

Public Works Services Director

City Manager

Task Force Chair

Attachment

None