## City of San Antonio Development Services Department

# Tree Preservation Ordinances "What Works and What Doesn't"



Debbie Reid, City Arborist October 4, 2006

#### History in San Antonio

- First Tree Preservation ordinance adopted in 1997 with a provision to review effectiveness in 3 years.
- Review was delayed for 6 years.
- Urban Ecosystem Analysis completed and initiated creation of a stronger ordinance.
- Council adopts revised ordinance in March 2003.
- Mayor amends in May 2003.

#### Applicabilty:

- Development in the city and its ETJ.
- Redevelopment or tree removal on such properties.
- Public property.
- Any project receiving public financial assistance.
- Municipal and utility entities' projects.

#### Shall not apply to:

- Clearing of understory for a boundary survey.
- Trees determined to be:
  - diseased or dying,
  - a safety hazard as a result of a natural event such as a flood,
  - within the clear vision area
  - preventing the reasonable use of a right-ofway

#### **Protected Trees**

#### Two size designations:

- Significant trees are all species at 6 " DBH except the six small tree species.
- Heritage are all species at 24" DBH except the six small tree species.

#### • Six small tree species:

- Texas Persimmon, Texas Redbud, Texas Mountain Laurel and Condalia and in flood plains, the Crabapple and Possum Haw.
- Significant size is 2" DBH and Heritage is 8" DBH.

## Inventory Areas and Percent Preservation

#### **Commercial:**

- Significant trees 6" DBH or greater preserved at 40% excluding easements and street rights-of-way (ROW) and
- Significant small trees greater than 2" DBH preserved at 40% excluding easements and street rights-of-way. (may be by total count). OR
- 40% of the tree canopy.
- Heritage trees excluding ROW preserved at 100%.

#### Inventory Areas and Percent Preservation

#### **Residential:**

- Significant trees 6 "DBH or greater within each platted lot preserved at 35% excluding easements and ROWs and
- Significant small trees greater than 6" DBH within each platted lot preserved at 35% excluding easements and street rights-of-way. (may be by total count). OR
- 35% of the tree canopy on each lot.
- Heritage trees within each platted lot preserved at 100%.
- Builder will plant two 2 inch caliper native shade trees on each lot with a home.

## Inventory Areas and Percent Preservation

#### 100-year Flood Plain:

- Significant trees are preserved at 80%.
- Heritage trees preserved at 100%.
- Flood Plain Administrator determines 100-year flood plain(s).
- Preservation in flood plain shall not apply to preservation requirements on remainder of site.

#### **Tree Stand Delineation Option**

## Alternative to an on-the-ground tree survey:

- Use for heavily wooded sites.
- Delineate tree canopy area on site.
- Locate Heritage trees.
- Preserve 25% of the tree canopy area with the understory (no disturbed soil surface).
- Preserve 100% of the Heritage trees.
- Can use excess tree canopy for mitigation.

#### Mitigation

10% of the trees must remain on site.

- Mitigation ratios:
  - Significant 1:1
  - Heritage 3:1
- Mitigation methods:
  - Replant new trees on site.
  - Pay into the Tree Mitigation Fund.
  - Preservation of smaller trees on site.
  - Preservation of "natural areas".

#### **Root Protection Zone (RPZ)**

#### Commercial and Public Projects -

- Radius from the trunk of 1 ft per diameter inch.
- A minimum of 50% of the RPZ preserved at the natural grade with no cutting, filling or trenching.
- Sidewalk construction is allowed if excavation does not exceed 3 inches.
- Approved alternative construction methods may be used.
- During construction, a 6 inch layer of mulch will be maintained.

## Warranty for Commercial and Non-Residential Projects

- In lieu of establishing a RPZ, a Tree Preservation Warranty may be provided.
- Term of warranty is for 5 years.
- If the trees dies, then it must be replaced or mitigated.
- If the tree(s) are not replaced then the recipient will not be able to receive other permits.

#### **Root Protection Zone (RPZ)**

**Residential Development** - no RPZ

#### **Protection Barrier**

- A physical protection barrier is required for all preserved trees and/or natural areas.
- Fencing is required before site work is initiated and must be maintained throughout the construction process.
- Fence may be erected as close as 5 feet on one side of the trunk.

#### Trees on ROWs or other Public Property

- Requires approval to remove or damage existing trees of protected size within existing rights-of-way or easements.
- City has right to maintain trees and shrubs within all public properties to ensure safety and protect improvements.
- No person may attach rope, nails, etc. to or cut, carve, transplant, injure any tree unless authorized by the city.

#### Maintenance

## Preserved trees must be maintained in a healthy state all times.

- Pre-construction activities.
  - Proper pruning or tying back branches that may be in conflict.
  - Mulching the RPZ.
  - Installing tree protection barriers.

#### Maintenance Cont'd

- During construction activities:
  - Watering preserved trees' RPZs and foliage.
  - Proper pruning of broken branches and roots including cutting roots cleanly.
  - Maintaining fencing during construction.
  - \* Oaks' wounds occurring within commercial or residential projects must be painted within 30 minutes per Oak Wilt ordinance.

## City of San Antonio Development Services Department

# Plan Submittal Requirements for the Revised Tree Preservation Ordinance



**June 2003** 

#### Plan Submittal Requirements

- Master Development Plan Stage
- Platting Stage
  - Residential
  - Commercial
- Building Permit Stage
  - Residential
    - Tree Preservation Plan
  - Commercial
    - Tree Preservation Plan
    - Landscape Plan

#### Master Development Plan Stage

## Tree Stand Delineation with non-committal information:

- An aerial photo (6 inch pixel and 1":400'scale minimum);
- Boundaries of property/project and phases;
- Existing and proposed streets;
- Tree canopy delineated with basic information:
  - Square footage/acres of tree canopy
  - Type of large trees
  - Type of understory plants



Project Name Ralph Fair

Project Addre 11021 I-10 V

Contact: R. Smith

Major large tr Cedar elm, l

Major small tr Tx persimme

Fee: \$200 for 2 a



#### **Plat or Building Permit**

#### Complete submittal:

- Copy of the plat,
- Fees
- Completed Streetscape Form,
- Completed Tree Affidavit/Permit application,
  - Option 1 no protected size trees,
  - Option 2 protected trees, but none will be removed
  - Option 3 project is exempt; requires VRP #
  - Option 4 a percent of the protected trees will be removed and a tree preservation plan is included.

#### **Tree Preservation Plan**

If Option 4, Tree Preservation Plan is included (3 sets):

- Site Plan with survey
- Inventory
- Protection notes/specifications



U.S. HWY 6

TREE SURVEY

2004 DEVELOPMENT PROCESS ISSUES

#### **Alternative to Tree Survey**

#### Tree Stand Delineation Option For Wooded Sites:

- An aerial photo (6 inch pixel minimum):
- Project and site information is the same as for other plans
- Delineation of Significant tree canopy with information on the square footage of tree canopy;
- Heritage trees located;
- Indication of portion of Significant tree canopy to be preserved.
- Basic information on the types of large trees and understory plants.



#### Fees

Residential-Affidavit/Permit \$35/lot

**Commercial:** 

• Tree Permit-Option 4 \$75/acre

• Affidavit:

Option 1- No Trees \$75/acre with \$2,000 max

Option 2- Yes Trees \$75/acre

Plan review fee \$75 per plan review

**Pre-Construction Meetings** No additional charge

#### Landscape Ordinance

- 25% shading requirement to all parking areas.
  - preserved trees credited at 100%.
  - new trees 75% on the interior and 50% on the perimeter.
- 70 Elective points required with increase in credit available for preserving existing trees.
- 15 additional elective points available for preserving planting understory plants with canopy trees in parking areas (no irrigation required).

#### **Issues**

- Vesting
- Applicability in the ETJ and Ag Exemption
- Measuring the multi-trunk protected small tree species
- Protecting Ashe Juniper, Hackberry, Mesquite, Huisache and protected small tree species.
- No RPZ for residential.

#### Room for Improvement

