



## **TREE PROTECTION HOMEOWNER'S PACKET**

The purpose and intent of the Sebastian Tree Protection code is to establish protective regulations for trees in order to make the city a healthier, safer and more beautiful place in which to live. The intent of these regulations are to:

- Preserve the low density and open space characteristics of the city.
- Encourage the protection of the maximum number of trees and of large specimen trees.
- Protect and expand the existing tree canopy in the city.
- Encourage the development of tree lined streets.
- Require screening and beautification in order to improve, protect and preserve the city's unique aesthetic characteristics

Properly planned home landscaping does more than just please the eye. There are many large and small enhancements you make to lend a personal touch to your home's exterior, while adding to the beauty and energy efficiency of your residence. Through wise planning, you can help save money on your energy bills while adding to the beauty and value of your home.

As part of the application for clearing and tree removal, you or your contractor must submit a detailed tree survey showing the botanical or common name and size of all trees on the property and noting which trees are to be saved and which trees are to be removed. Should more trees be necessary to meet the minimum requirement, the botanical or common name, size and proposed location of those trees must also be indicated on your site plans.

Please review your tree survey in detail and work with your contractor for the preservation of protected trees. Included in this packet is a summary of the tree protection code along with suggestions for tree protection during construction. Various other reference materials have also been provided for your assistance courtesy of Florida, Power and Light.

Please feel free to contact the Growth Management or Building Department, should you have any questions regarding this information. A complete copy of Article XIV "TREE PROTECTION" is also available upon request.

### Tree Protection During Construction:

Prior to development or construction activity, the developer shall erect suitable brightly colored tree protection barricades, a minimum 4 ft. tall, around trees to be preserved and shall remain in place until the construction activities are completed. The area within the tree protection barricade shall remain free of all building materials, dirt or other construction debris, vehicles and development activities. Barricade shall be erected at a minimum distance from the base of the trees to be preserved according to the following standards:

- a) For trees 10 in. or less DBH. Tree protection barricades shall be placed a minimum distance of 5 ft. from the base of each tree to be protected.
- b) For historic trees and trees greater than 10 in. DBH. Protective barricades shall be placed at a minimum distance of 10 ft. from the base of each tree to be protected plus an additional 1 ft. for each additional inch DBH greater than 10 in.

Changes to grade or construction of impervious surface or utilities within the required protective barricade shall be permitted subject to the following guidelines:

1. Changes in grade or construction within protected zone must be approved by the City Manager or his designee prior to the beginning of construction. Plans must be submitted which illustrate in detail protective measures necessary to protect the trees.
2. Impervious surfaces shall maintain minimum clearance from the bases of all trees to be protected. Trees 15 in. DBH or less shall have a minimum clearance of 6 ft. Trees over 15 in. DBH up to 20 in. DBH shall have a minimum clearance of 9 ft. Historic and trees over 20 in. DBH shall have a minimum clearance of 12 ft.
3. All roots outside the protective barricade to be removed during construction shall be severed clean.
4. All pruning of historic and specimen trees shall be done by a qualified tree service during construction.

Construction damage to trees is the most common cause of tree decline in urbanizing areas.

Symptoms of decline:

- Slow growth
- Scarce, undersized, distorted, often chlorotic leaves
- Browning of leaf margins
- Premature autumn color
- Abnormally large crops of fruit
- Progressive dieback of twigs and branches
- Adventitious sprouts

Causes of decline:

1. Direct Trunk Injury
  - Disrupts transport system of tree
  - May lead to decay and trunk hollows
  - Usually means severe root injury as well
2. Root Zone disturbance
  - Driving or parking on tree roots
3. Changes in Grade
  - Lowering grade around tree
    - Removes many lateral and feeder roots-May lead to tree desiccation and mineral deficiencies
    - Make tree unstable-Loss of major lateral and “sinker” roots
    - Changes drainage patterns on site
  - Placement of fill
    - Reduces aeration to root zone-Lowers O<sub>2</sub>, raises CO<sub>2</sub> and ethylene
    - Changes soil moisture environment
      - Different soil textures have different soil water potentials
      - Coarse material over fine better than fine over coarse
      - Fill placed over existing sod or leaves may create a smothering effect
4. Soil Compaction
  - May be caused unknowingly (driving equipment, storing materials, etc.) or purposefully (prelude to paving, foundations, etc.)
  - Reduces aeration/water filtration. Increases runoff
  - Soil type often a strong influence. Clay soils and organic soils compact far more easily and often have more roots close to the surface
5. Utility Installation
  - Very common injuries
    - Trenching
    - Damage to trunks by equipment
    - Bad pruning
    - Often unexpected-Heavy equipment gone, barricades removed
6. Chemical Injury
  - Motor fuels, cleaning agents
  - Herbicides
  - Fertilizers

### Tree Protection Strategies:

1. Barricades-At dripline or CPZ (Critical Protection Zone) 1 ft. radius/1 in. DBH
2. Terracing to maintain original grade
3. Tree wells and aeration systems
4. Tunnelling under roots
5. Pervious pavements
6. Heavy mulch cover 6 in. to 10 in. deep to reduce compaction
7. Invigorate trees prior to construction – light fertilizer (1 lb. N/1000 s/f) water, if possible
8. “Pre-cut” roots at limits of construction to prevent tearing by equipment
9. Favor groups of trees over individuals. Favor young over old trees. Favor “tough” species
10. Education is the key – most injuries are caused by ignorance

### Mitigation of Construction damage:

#### IF A SAFETY HAZARD - REMOVE

- Number 1 priority is water to prevent desiccation
- Aerate soil by drilling holes, removing fill
- Treatment of wounds to trunk or branches
- If very recent, tack bark back in place, cover with black plastic for 3 months
- If old, remove loose bark. Do not enlarge or paint wound.
- Pruning – Limit pruning to damaged or unwanted limbs. Wait for tree to show which other limbs need removal. Excessive pruning may lead to sprouting which will reduce root regeneration.
- Spray pines to prevent beetle infestation

REMEMBER – Injury may take 2 to 5 years to manifest itself

Often insects and disease are blamed for decline and death