Attachment D -- PROJECT DESCRIPTION

<u>Project Title</u>: Improving Wind Resistance of and Reducing Potential Hazards from Gainesville's Right-of-Way Trees

<u>Proposal</u>: Request \$75,000 to add a contract tree crew to supplement the City of Gainesville's Recreation and Parks Department's in-house bucket truck crews. City match of \$25,000.

Storm Impact: During hurricane Frances in September 2004, winds 70 mph assailed Gainesville. One month later (before the City had completely finished clearing the streets), hurricane Jeanne hit with winds of equal force (Attachment 1). For the past 12 years, the City's four municipal tree surgeons have applied structural pruning practices, the value of which was proven by the fact that 70% of the downed trees blocking streets were from private property. Still, the clean-up job was massive (Attachment Group 2).

Subsequent to the hurricanes, the work of the Parks Division tree crew has changed. We have had to remove many more trees than normal, and consequently the number of trees receiving structural pruning has decreased substantially.

<u>Demonstrated Need</u>: Gainesville currently has a list of 163 trees (<u>Attachment 3</u>) with structural weakness. Many are sufficiently progressed to require removal; new trees are added to the list regularly. Gainesville's tree canopy coverage is 60%. With 26,000 street trees, to have this many declining trees is not unusual. However, in the wake of the hurricanes, people worry more about trees in declining health and plead passionately for their removal. We have turned down many requests from the public to remove healthy trees, but the stress of high winds has hastened deterioration of many. Since the hurricanes, Gainesville's tree crew has removed 93 trees, an increase of 400% over removals from fiscal years '03-'04 and '02-'03 (<u>Attachment Group 4</u>).

A problem of equal concern has been splitting Live Oaks due to the pressure of excessive end weight on co-dominant branches. With spring rainfall levels exceeding normal after a decade of drought, tree growth has been phenomenal. Branches heavy with new growth are vulnerable to breaking at points of included bark; normally these branches would have been pruned, but the tree crew has been overwhelmed with hazardous tree removals. Particularly vulnerable have been Live Oaks in the 12"-20" range. Thousands of topped trees were planted in the 1980's, before the Florida Division of Plant Industry's Grades and Standards emphasized central leader configuration. These trees are now approaching Heritage size in our community, but due to lack of recent pruning, they are failing before their time.

<u>Project Goal:</u> To re-deploy the in-house bucket truck crew led by ISA Certified Arborist Herb Poole from tree removal to structural pruning to improve tree wind resistance; the contract crew would handle most removals. This two-pronged effort to strengthen the urban forest will mean fewer tree failures in future storms.

<u>Objectives:</u> Three Arborists certified by the International Society of Arboriculture lead Gainesville's Urban Forest Management Team: Meg Niederhofer, City Arborist; Earline Luhrman, Urban Forest Inspector; and Herb Poole, Tree Surgeon II (<u>Attachment 5</u>). If funded, Mr. Poole and his assistant would be moved full-time to structural pruning; the

contract crew would be assigned to take-downs or, on occasion, canopy-lifting; Gainesville's other bucket truck crew would handle canopy-lifting first and take-downs second. The wind resistance of Gainesville's urban forest would be substantially enhanced by Mr. Poole's expert effort, while dangers to the public represented by hazardous trees would be alleviated by the contract crew (work Mr. Poole would normally be doing).

City of Gainesville Tree Crew Accomplishment Forecast*				
9/30/2005 to 9/30/2007	With Contract Crew (Proposal funded)	Without Contract Crew (Proposal not funded)		
Hazardous Tree Removals (Average diameter =)	100	100		
Dead Tree Removals (Average diameter =)	100	100		
Stumps Ground	200	200		
Structurally Pruned Young Trees	3000	300		
Canopy-Raised Trees (incorporating structural pruning principles)	5000	3700		

^{*}Assumes full complement of tree surgeons on Parks Division staff.

Summary: If the grant request is funded, we will prune an additional 2700 trees in the 2"-8" size range and an additional 1300 in the 8"-25" size range.

<u>Cost-Effectiveness</u>: Gainesville does contract removals of trees that grow partially on City property and partially on private land. The average cost of these removals (\$1820) (<u>Attachment 6</u>) suggests that the 100 trees we would expect the contractor to remove for \$100,000 would represent a comparable \$182,000 value, substantiating the claim for the cost-effectiveness of this proposal.

Gainesville Regional Utilities tree work is accomplished via a contract awarded through a competitive process. The City of Gainesville would piggy-back on this contract, achieving the financial benefit associated with a multi-million-dollar bid process (Attachment 7). The \$100,000 price tag would purchase 48 weeks of an Asplundh contract tree crew's assistance. This funding would be 75% from the requested grant and 25% from Gainesville government general revenue.

<u>National Arbor Day Foundation Affiliation</u> Gainesville has applied for and received certification as Tree City USA for every year since 1984 (Attachment Group 8).

Attachments

- June 1, 2005 Article from Gainesville Sun
- 2 Photos
- Wisual Tree Assessment List
- 4 Tree Removal Comparison Spreadsheets and Pie Charts
- 5 ISA Certifications
- 6 Contract tree removals list
- 7 GRU contract costs
- 8 Tree City USA documentation

Attachment 7

PROPOSED COST OF ONE YEAR FOR AN ASPLUNDH CONTRACT CREW				
	Hourly	Weekly	48 wks	
Aerial Lift	\$10.55	\$422	\$20,256	
Disc Chipper	\$3.99	\$160	\$7,660	
Chainsaw	\$0.48	\$19	\$922	
Chainsaw	\$0.48	\$19	\$922	
Foreman	\$19.39	\$776	\$37,228	
Apprentice Trimmer	\$15.85	\$634	\$30,432	
TOTAL	\$50.74	\$2030	\$97,420	