



Audubon Park

**Audubon Park Master Plan
50% DRAFT**

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Introduction

Audubon Park is one of New Orleans' most cherished assets, providing quality recreational opportunities for millions of people annually. In developing the Audubon Park Master Plan, the Audubon Commission's highest priority was to continue its stewardship of the unique character of Audubon Park that has been the source of enjoyment for generations of New Orleanians. Therefore, the Site Plan contained in Section A reflects no major changes to land uses in Audubon Park. Within this existing framework of uses in Audubon Park, however, the Commission must continue to improve the beauty of the Park and the quality of the services it provides to the entire New Orleans community, consistent with its more than one hundred years of stewardship of Audubon Park. The six sections of this 50% Draft Master Plan document delineate those actions the Commission preliminarily deems appropriate for the future of Audubon Park.

The response to the Audubon Commission's request for public input on the Audubon Park Master Plan has been great and we appreciate all of the interest that it has generated. The public meeting on January 13th had over 150 attendees and the comment period after the meeting resulted in many written responses, over 100 email comments, numerous telephone comments, and meetings between staff and interested groups and individuals.

The 50% Draft Master Plan is being published and disseminated at this early stage in order to provide an opportunity for the public to review and comment on all aspects of the Master Plan early in its development. To this end, the Draft Master Plan attempts to address all of the issues applicable to the Park's Master Plan which have been identified by Audubon staff, its consultants and the general public over the last several years, and particularly during the last four months of public comment and meetings. This Draft Master Plan then attempts to briefly explain the philosophy related to each issue and broadly outline how the final Master Plan may address each issue. It is the intention of the Audubon Commission that this methodology will facilitate a public comment process that is informed, specific and productive before a detailed 90% Master Plan is completed and disseminated for final public comment and action by the Commission.

A public meeting to receive comments on the Draft Plan will be held at 7:00 p.m. on Wednesday, July 9th in the Audubon Tea Room. This schedule will allow the public sufficient time to review the Draft, ask questions and prepare specific comments for the Commission at the public meeting or via written or email communication.

After the July 9th public meeting, further public comment will be solicited by the Commission until the end of July. The Commission will then continue the Master Plan development to the 90% stage, publish the 90% Draft Plan and hold another public meeting and comment period before completing the plan and voting on it at a Commission meeting in late 2003 or early 2004.

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Section B: Tree Program

Introduction

The Audubon Commission recognizes that the trees in Audubon Park are perhaps its most important historical, aesthetic and environmental asset. Therefore, the long-term maintenance, preservation and development of the entire tree infrastructure of Audubon Park remains one of the highest priorities of the Commission and the Audubon Park Master Plan. The Master Plan anticipates accomplishing this objective using several primary means: an ongoing inventory and assessment of all trees in Audubon Park; an ongoing program of maintenance for all major trees in Audubon Park; long-term tree planting program to ensure the diversity of the tree infrastructure within Audubon Park long into the future; and an operating budget, including permanent Audubon staff and equipment, to appropriately implement all aspects of the program. Note that major funding for this program will be derived from the operating revenues of the Audubon Park Golf Course and private fund raising.

Tree Inventory

The Audubon Commission has recently completed an inventory of all trees above six inches in diameter in Audubon Park. This inventory includes the species, GPS location within Audubon, overall condition of the tree and any identified maintenance/pruning/removal needs associated with the tree.

Included in the Master Plan is information from this tree inventory, including a list of all species in Audubon Park and the number of trees identified which need removal or pruning. This information will be updated on a periodic basis and used to develop the specific operational programs associated with both the maintenance/pruning of the Audubon Park trees as well as the long-term removal/planting program to maintain a healthy and diverse tree inventory throughout Audubon Park.

Maintenance Program For Major Trees

The tree maintenance program will begin by developing specific programs for the major trees in Audubon Park. These include the trees along the jogging path; the Oak Grove area in the vicinity of the Audubon Park Golf Clubhouse and lagoon; the avenue of oaks between the Newman Bandstand and the Odenheimer Aquarium; and all of the other major oak/other species of trees throughout Audubon Park between St. Charles Avenue and the railroad tracks which exceed twenty-four inches in diameter. Other trees will be added as necessary or as staff/funding/resources permit. Please note that the current total inventory of trees in excess of six inches in diameter in Audubon Park is approximately 4,000, including 1,400 live oak trees.

As an example of the type of program that will be developed for all the major trees in Audubon Park, the Audubon Commission contracted for the development of a program for the Oak Grove area of the Park. Included in this draft Master Plan is that sample program. It includes pruning, removals, aeration and mulching. It also discusses some of the overall “needs” of the trees.

Termites also pose a significant threat to the trees in Audubon Park, as they do for trees throughout the City of New Orleans. The 90% draft Master Plan will include a professional analysis of the situation and an outline of a long term program to attempt to control the termite problem.

Tree Staff and Equipment

The Audubon Commission will soon have on staff a three person tree crew, all of whose efforts will be devoted to the care and maintenance of the trees in Audubon Park. They will have the necessary equipment and expertise to perform the vast majority of tree work in the park. As necessary, outside professionals will be contracted for certain work and additional equipment and materials will be purchased over the years as the need requires and funding is available. Primary funding for this function is coming from operating revenues from the Audubon Park Golf Course and private fund raising. It is anticipated that the annual funding level for this new function will be \$200,000 in 2004 when the staff and equipment will be available for a full year.

April 2, 2003

Tree Evaluation/Preservation "Oak Grove" Audubon Park

The "Oak Grove" site consists of a mature interlocking/cathedral canopy of Live Oak trees (68) and other tree species ((10) - Crape Myrtles, (7) - Bald Cypress, (6) - American Elm, (5) - Water Oaks, (5) - Southern Magnolia, (4) - Black Cherry, (4) -Catalpa, (2) - Red Maple, (2) - Sweet Gum, (1) – Red Oak and (1) - Camphor). The trees seem to have adapted well to the site and appear to be in good condition, with the exceptions noted below.

First, I examined all the trees on the site to ascertain which trees would be good candidates for preservation. All major tree species listed above are long-lived beyond 100 years, while some exhibit shorter longevity. (Water Oaks, Black Cherry, Red Maple, and Camphor). Trees recommended for removal include (1) dead American Elm, (1) dead Water Oak and (1) Water Oak with excessive trunk decay.

Secondly, I have provided the following recommendations for Tree Preservation:

I. Tree Pruning

1. All trees within the site shall be pruned to:
 - a. clear the crown of diseased, crossing, weak and dead wood to a minimum size of 1 1/2 inches diameter;
 - b. provide 14 feet of vertical clearance over streets and structures and 8 feet over sidewalks, decks and lawns;
 - c. remove stubs, cutting outside the wound wood tissue that has formed around , the branch;
 - d. reduce end weight on heavy, horizontal branches by selectively removing small diameter branches, no greater than 2 to 3 inches, near the ends of the scaffolds
2. All pruning shall be performed by a qualified arborist.
3. All pruning shall be in accordance with the Tree-Pruning Guidelines (International Society of Arboriculture) and the ANSI A300 Pruning Standard (American National Standard for Tree Care Operations) and adhere to the most recent edition of ANSI Z133.1.
4. Interior branches shall not be stripped out.
5. Pruning cuts larger than 4 inches in diameter, except for deadwood, shall be avoided.
6. Pruning cuts that expose heartwood shall be avoided whenever possible.
7. No more than 20 percent of live foliage shall be removed within the trees.
8. Vines shall be cut at grade 2-3 weeks prior to commencement of pruning operations in order to facilitate safe and easy removal of vine and prevent damage to trees. Vines harbor wood boring insects, shield the inspection of tree trunks, interfere/prevent photosynthesis by the tree, add to tree's wind resistance and girdle branches/limbs.

9. While in the tree, the arborist shall perform an aerial inspection to identify defects that require treatment. Any additional work needed shall be reported to the owner.

10. Brush shall be chipped, put through a tub grinder and the mulch shall be spread underneath tree drip line within the tree protection zone to a maximum depth of 6 inches, leaving the trunk clear of mulch. This procedure will mimic nature's process by providing an organic leaf litter layer composed of existing tree material.

II. Root Zone Therapy with Grow Gun

The objective of Root Zone Therapy is to prevent and/or reverse the effects of soil compaction on the tree's root system. Soil compaction can cut off the root's access to air, water and nutrients - all of which are essential to the root system. Therefore, I recommend performing Root Zone Therapy with Grow Gun on the Live Oak trees.

III. Mycorrhizae Treatment (Mycor)

Mycor is the trade name for a root-stimulating product that contains beneficial fungi and a root growth hormone. Mycor is an excellent product for trees which have or may receive root damage due to construction or otherwise. While the root growth hormone stimulates the tree to produce more fine root hairs, the symbiotic relationship between the roots and the fungus begins. The fungus attaches itself to the root surface and spreads out into the soil. Once established, it aids in the absorption of water and nutrients; providing these elements to the tree in return for some of the starches it receives from the tree's root system. I recommend treating all of the Live Oak trees to be preserved.

IV. Fertilization

The objective of fertilizing, in this case, is to provide all of the desirable trees with an adequate source of nutrients. The fertilizer will be liquefied, high Nitrogen (27), low Phosphorus (9) and Potassium (9) blend incorporating micronutrients, biostimulants, nitrogen-fixing bacteria and phosphate-solubilizing bacteria. I recommend that the fertilization be conducted 3 months after the Mycor application has been performed. This timing will allow the beneficial fungi to become established and allow root growth before a dose of fertilizer causes the tree to use its energy on new shoot growth. I recommend treating all of the Live Oak trees scheduled to be preserved.

MASTER PLAN INFORMATION: Audubon Park Tree Inventory

In 1992 and 2002 the Audubon Commission retained outside experts to inventory all trees in Audubon Park whose trunk was at least 6 inches in diameter. A summary of the 1992 and 2002 data is included, as well as the details of the 2002 inventory. The 2002 inventory also contained the GPS location of each tree and an analysis of the its condition . Included on this web page is the definition of the major removal and trimming categories and the number of trees in each category. All this data will be used to develop the Tree Program portion of the Master Plan. The Audubon Commission considers the Tree Program to be one of the most important parts of the Master Plan.

Tree	2002	1992	Change
Live Oak	1407	1161	+246
Tallow	369	317	+52
Water Oak	253	326	-73
Black Willow	45	185	-140
Bald Cypress	277	261	+16
Crape Myrtle	234	148	+86
other	1327	1122	+205
Total # of trees	3912	3520	+392



Maintenance Needs

Maintenance Type	Definition	# Trees Requiring
Removal One	Trees designated as immediate removals are dead or have one or more defects that cannot be cost-effectively managed. The majority of the trees in this category have a large percentage of dead crown and are potential safety hazards. Large dead and dying trees that are high liability risks are included in this category.	156
Removal Two	Trees that should be removed, but that pose minimal liability to persons or property will be identified in this category (example: transplant failure, amenity removal).	175
Priority One Prune	Trees that require priority one pruning are recommended for trimming to remove hazardous deadwood, hangers or broken branches. These trees have broken or hanging limbs, hazardous deadwood and dead, dying or diseased limbs or leaders greater than 4 inches in diameter.	350
Priority Two Prune	These trees have dead, dying, diseased or weakened branches between 2 and 4 inches in diameter and are potential safety hazards.	396

**MASTER PLAN
INFORMATION:
Complete Tree
Inventory**

Common Name	Amount
AMERICAN SYCAMORE	46
ASH, GREEN	27
ASH, OTHER	16
ASH, WHITE	3
ATLANTIC WHITE CEDAR	3
BALDCYPRESS	277
BAYBERRY, SOUTHERN	2
BEECH, AMERICAN	1
BIRCH, RIVER	20
BOXELDER	9
CAMPHOR	10
CATALPA, SOUTHERN	37
CEDAR, ATLAS	1
CHERRY, BLACK	24
CHERRY, OTHER	1
CHINESE FAN PALM	9
CHINESE PARASOL TREE	23
CHINESE TALLOW	369
CHOKECHERRY, AMUR	1
CITRUS SP	1
COMMON CRAPEMYRTLE	234
COTTONWOOD, EASTERN	12
DATE PALM	54
EASTERN REDBUD	1
EASTERN REDCEDAR	21
ELM, AMERICAN	56
ELM, CHINESE	73
ELM, OTHER	1
ELM, SIBERIAN	32
ELM, SLIPPERY	1
EUCALYPTUS	5
FISHTAIL PALM	9
GINKGO	1
GOLDENRAIN TREE	28
HACKBERRY	6
HOLLY, AMERICAN	2
JERUSALEM THORN	3
LAURELCHERRY, CAROLI	1
LONDON PLANETREE	1
MAGNOLIA, OTHER	1
MAGNOLIA, SOUTHERN	53
MAPLE, RED	30
MAPLE, SILVER	1
MEXICAN SABAL PALM	74
MIMOSA	10
MULBERRY, RED	1
MULBERRY, WHITE	6
OAK, LAUREL	4
OAK, LIVE	1407
OAK, NORTHERN RED	3
OAK, OTHER	29
OAK, PIN	25
OAK, SAWTOOTH	2
OAK, SHUMARD	2
OAK, WATER	253
OAK, WHITE	3
OAK, WILLOW	1
ORCHID TREE	1
PALM, OTHER	4
PEAR, CALLERY	10
PEAR, COMMON	30
PECAN	30
PINE, LOBLOLLY	225
PINE, OTHER	9
PINE, SLASH	19
PRIVET SPECIES	15
S WASHINGTONIA	21
SLASH PINE, S FLORIDA	19
SUGARBERRY	79
SWEETGUM	52
TULIP TREE	14
WILLOW, BLACK	45
WILLOW, WEEPING	3
YAUPON	10
Total Species: 74	Total Trees: 3912