CITY OF CALABASAS

# OAK TREE PRESERVATION AND PROTECTION GUIDELINES

REVISED DRAFT 29 April 1993

TABLE OF CONTENTS

# INTRODUCTION

Oak trees within the City of Calabasas are a valuable resource and are protected by the Oak Tree Ordinance. These guidelines describe methods, procedures and application materials required by the City to ensure that proper consideration is given to oak trees and their habitat in connection with development and other requests. An oak tree permit is required for the removal, encroachment or moving by development of an oak tree with certain exceptions as described below.

Certain work on an oak tree may be performed without a permit and therefore, the provisions of these guidelines do not apply. Please refer to the Oak Tree Ordinance and these guidelines for details if in doubt.

It is generally advisable to contact the City prior to beginning any construction or earthwork on property that has any oak trees within 200 feet. The City will be happy to answer your questions and assist you with your oak trees.

# OAK TREE PRESERVATION AND PROTECTION GUIDELINES

## I. PURPOSE

The City lies in a unique portion of Los Angeles County, the beauty and natural setting of which is greatly enhanced by the presence of large numbers of majestic oak trees. These indigenous oak trees are recognized for their significant historical, aesthetic and environmental value. They are indicator species for the natural communities in which they exist, supporting a broad spectrum of other native plant and animal species. As one of the most picturesque trees in the Southern California area, they lend beauty and charm to the natural and man-made landscape, provide over $5,000 per year in environmental enhancement by controlling soil erosion and water run-off, moderating air pollution and cutting heating and cooling costs, enhance the value of property and preserve the character of the communities in which they exist.

Development within the Calabasas area has resulted in the removal of a great number of oak trees. Further uncontrolled and indiscriminate destruction of this diminishing plant heritage would have a detrimental affect the general health, safety and welfare of the citizens of Calabasas. The preservation program and procedures outlined in these guidelines contribute to the welfare and aesthetics of the community and retain the great historical and environmental value of these trees.

No person, partnership, firm, corporation, government agency, or other legal entity shall cut, prune, remove, relocate, endanger or damage any tree protected by the City Oak Tree Ordinance on any public or private land located within the incorporated areas of the City of Calabasas except in accordance with the conditions of a valid oak tree permit issued by the City.

## II. OAK TREE POLICY

It shall be the policy of the City of Calabasas to require the preservation of all healthy oak trees unless compelling reasons justify the removal of such trees. This policy shall apply to the removal, pruning, cutting and/or encroachment into the protected zone of oak trees. The Planning Commission, in conjunction with an oak tree preservation consultant as necessary, shall have the primary

and overall responsibility to administer, evaluate and monitor this policy to assure strict compliance.

## III. DEFINITIONS

For the purposes of these guidelines, unless otherwise apparent from the context, certain words and phrases used are defined in this section.

"**Alter**" - Any action undertaken which may cause damage or cause injury, death or disfigurement to a tree. This includes, but is not limited to, removing, transplanting, detaching, cutting or pruning, poisoning, over watering, excavating, or paving within the protected zone of an oak tree.

"**Canopy Cover**" - The percentage of a site covered by oak canopy based on the sum of all oak crown canopies within the property boundaries .

"**Canopy Retention Standard**" - The amount of canopy that is to remain on any property following improvement. The City policy is to retain 75% of the baseline canopy within its jurisdiction, as of August 1992.

"**Certification Letter**" - A letter certifying that the work was performed under the general or direct supervision of an oak tree preservation consultant and that said work fully complies with the conditions of the development permit, the oak tree report and/or these Oak Tree Preservation Guidelines, as appropriate.

"**Crown Canopy**" - The leafy portion of the tree outlined using dripline measurements.

"**Cutting**" - The detaching or separating either in whole or in part, from a protected tree, any part of the tree including, but not limited to, any limb, branch, root, or leaves. Cutting shall include pruning and trimming.

"**Damage**" - Any action which causes or tends to cause injury, death or disfigurement to a tree. This includes, but is not limited to, cutting, poisoning, burning, over watering, relocating or transplanting a protected tree, changing or compacting the natural grade within the protected zone of a protected tree, changing groundwater levels or drainage patterns, or trenching, excavating or paving within the protected zone of an oak tree.

"**Dead Tree**" - A tree that does not contain any live tissue; i.e. green leaves or live limbs. Since Valley Oak (Quercus

lobata) are deciduous trees and are dormant in the winter, their status must be confirmed by the City's Oak Tree Consultant in the spring before being declared dead.

"**Deadwood**" - Limbs or branches that contain no green leaves or live tissues. A tree or limb may be considered dead if it does not show evidence of any green leaves or live branches over the span of 1 year, inclusive of prime growing weather.

"**Deadwooding**" - The process of trimming an oak tree of its deadwood.

"**DBH**" - Diameter at breast height is to be measured at 4 1/2 feet above grade on the high side of the tree.

"**Dripline**" - The outermost edge of the tree's canopy. When depicted on a map or on the ground, the dripline will appear as an irregular shape that follows the outline of the trees branches as seen from overhead.

"**Encroachment**" - Any intrusion into the protected zone of an oak tree which includes, but is not limited to, altering, pruning, grading, excavating, trenching, dumping of materials, animal corrals, storage of materials or equipment, or the construction of structures, paving or other improvements. For purposes of this section, encroachment shall not include the action of a person physically entering the protected zone of an oak tree.

"**Fencing Plan**" - A detailed design showing placement of protective structures around trees. Fences will be located outside the protected zone of a tree or group of trees, be a minimum of 5 feet high, with warning signs located on 4 sides.

"**Fine Grading Permit**" - An entitlement from the City authorizing certain grading work that must be conducted within the protected zone of an oak tree, designed to ensure proper drainage as required by the City of Calabasas Municipal Code.

"**Ground Plane Improvements**" - Improvements that do not disturb the soil within the protected zone of an oak tree.

"**Heritage Oak**" - Any tree in the oak genus with a diameter of 24 inches at 4 1/2 feet above natural grade. In addition, the Planning Commission and/or the City Council may classify an oak tree, regardless of size, as a heritage oak tree if it is determined by a majority vote thereof that such tree has exceptional historic, aesthetic and/or environmental qualities of major significance or prominence to the community.

"**Monitoring**" - The process of physically measuring various aspects of tree health and vigor to determine how the tree changes over time. This can include photographs, soil analysis, and measurements of water stem potential and flushing growth as well as visual assessment.

"**Multiple trunks**" - Refers to more than one trunk growing from one root system, with the aggregate diameters totaled, deemed to equal one tree.

"**Oak Tree**" - Any oak tree of the genus Quercus, including, but not limited to, Valley Oak (Quercus lobata), California Live Oak (Quercus agrifolia), Interior Live Oak (Quercus wislizenii), and Scrub Oak (Quercus dumosa), having a diameter greater than 1 inch when measured 12 inches above grade.

"**Oak Tree Consultant**" - An individual or firm with a degree of acceptable and relevant experience in landscape architecture and/or horticulture, including extensive experience in monitoring and maintaining the health of oak trees. A list of such individuals/firms will be available from the City.

"**Oak Tree Information Packet**" - A packet containing certain handouts concerning the care and maintenance of oak trees which will be distributed to property owners whose lots contain oak trees.

"**Oak Tree Permit**" - An entitlement from the City authorizing specific work to be performed within the protected zone of an oak tree pursuant to the provisions of the Oak Tree Ordinance.

"**Oak Tree Preservation and Protection Guidelines**" or "**Guidelines**" - The policy established by the City Council and the dministrative procedures and rules established by the Planning Commission for the implementation of the Oak Tree Ordinance.

"**Oak Tree Report**" - A report prepared by an oak tree consultant containing specific information on the location, condition, potential impacts of development, recommended actions and mitigation measures regarding one or more oak trees on an individual lot or project site.

"**Person**" - Any natural person, partnership, firm, corporation, governmental agency, or other legal entity; does not include the City of Calabasas.

"**Pre-Application Conference**" - A meeting between the applicant and appropriate City representatives, including the City oak tree consultant for the purposes of discussing the

requirements for submitting an application for an oak tree permit.

"**Pre-Construction Conference**" - A meeting with the applicant, his/her contractors, superintendent, engineers, oak tree consultants, and City representatives, including the City oak tree consultant, to delineate special procedures, limits of work, lines of authority and special conditions or procedures.

"**Protected Tree**" - The same as oak tree.

"**Protected Zone**" - A specifically defined area totally encompassing an oak tree within which work activities are strictly controlled. Using the dripline as a point of reference, the protected zone shall commence at a point 5' outside of the dripline, and no less than 15' from the trunk of an oak tree, or 50' from the trunk of a heritage tree. The perimeter of the protected zone shall be fenced during construction according to the specifications contained in these guidelines.

"**Pruning**" - Any and all cutting performed upon any portion of an oak tree. Requires a permit and must be conducted in strict compliance to ISA Pruning Standards.

"**Registered Oak**" - Any tree registered by the City or a City recognized entity.

"**Removal**" - Physically removing, or causing the death of a tree through damaging, poisoning, or other direct or indirect action.

"**Routine Maintenance**" - Actions taken for the continued health of an oak tree such as deadwooding. In special cases fertilization, insect control, limited watering and ground aeration may also be warranted. For purposes of the ordinance, routine maintenance shall not include pruning.

"**Stress**" - Any indication that the tree is suffering from changes in its environment.Stress can include, but is not limited to, change in leaf color, crown thinning, curling of leaves, early leaf drop, and reduced shoot growth.

## IV. OAK TREE PERMIT APPLICATION PROCESS

Any person who owns, controls, or has custody or possession of any real property within the City of Calabasas shall make a reasonable effort to maintain all oak tree(s) located thereon in a state of good health. Failure to do so will constitute a violation of the ordinance.

**Oak Tree Permit Required** - No person shall cut, remove, encroach into, or remove brush from the protected zone or remove or transplant any oak tree on any public or private property within the City of Calabasas, unless a valid Oak Tree Permit has been issued pursuant to the provisions of the Oak Tree Ordinance. The applicant shall be required to furnish all necessary information as determined by the Planning Commission together with a fee as established by Council Resolution.

There are two classes of permits:

1. Permit to Alter
   (prune, change grade, encroach, fuel modification;

2. Permit to Remove
   (which also includes relocations)

If the situation calls for both removal and encroachment, only the Permit for Removal is necessary.

No grading permits for properties containing oak trees will be issued without prior approval of an Oak Tree Permit.

STEP ONE: Pre-Application Conference

The purpose of this meeting is to familiarize the applicant with the City's permit process, review pertinent environmental constraints, identify the Canopy Retention Standard, discuss City guidelines on reasonable use of the property and identify the information and materials necessary to file an application for an oak tree permit or request to prune. Criteria for design constraints will be identified at this time and can include: locations of walkways, driveways, cut and fill, fencing individual or clusters of trees, staking surveyed corners of buildings.

A pre-application conference may be arranged by calling the City. Attending the meeting will be the appropriate City planning staff and the City oak tree consultant. For Permits to Alter, this step may be accomplished by phone.

STEP TWO: Formal Application

Once the applicant has completed all application forms and prepared all of the information identified during the pre-application conference, the applicant may formally submit the project application together with the applicable fee.

STEP THREE: Application Review

On receipt of an application for an oak tree permit or request to prune, the City shall review the application for accuracy and completeness and make an inspection of the project site.

The application will be reviewed by the City's oak tree consultant. Those situations requiring consultant review include, but are not limited to, projects involving significant numbers of protected trees, projects involving development activities in the immediate vicinity of protected trees, and/or projects where physical protective measures may be required for the continued health of the remaining trees.

Upon completion of application review and on-site inspections, the City's oak tree consultant shall submit a written report to the City outlining the findings and recommendations. Normally, this will occur within ten (10) working days of receipt of the application materials from the City.

STEP FOUR: Environmental Review

Pursuant to the requirements of the California Environmental Quality Act, the City staff shall determine the appropriate level of environmental review for the project. If an initial study is required, an Environmental Questionnaire and associated filing fee shall be needed.

STEP FIVE: Findings for Approval

After receiving all of the required information, the City may approve the request when one of the following findings can be made:

A. The condition of the protected tree(s) requires pruning to preserve health or maintain balance.

B. The condition of the protected tree(s) general health with respect to the perceived danger of falling over or dropping limbs and proximity to existing structures, high pedestrian areas such as roadways, pedestrian walkways, parking lots or interference with public utility lines cannot be controlled or remedied

through reasonable preservation and/or preventative measures.

C. The approval of this request will not be contrary or in conflict with the general purpose and intent of the Oak Tree Ordinance.

In evaluating requests for removal or encroachments based on the reasonable and conforming use section, the City shall take into consideration: comparison of proposed building(s) gross floor area and other on-site design features with other conforming developments in the same vicinity and zone, and any other factors that are unique to the property such as topographic constraints and other physical limitations. The applicant shall be responsible for submitting adequate information to demonstrate that reasonable and conforming use cannot be made of the subject property without removal(s) or encroachment(s) into the protected zone of an oak tree.

STEP SIX: Approval Procedure

A. The Planning Commission may approve, deny, or conditionally approve a request for the removal of three (3) or fewer oak trees comprising less than 25% of the total canopy cover on a single parcel except for Heritage Oak Trees as provided herein. The Planning Commission may also approve, deny, or conditionally approve a request for pruning or encroachment involving an unlimited number of oak trees.

B. The Planning Commission may refer any request for an oak tree permit directly to the City Council if the Planning Commission determines that special circumstances may exist with regard to the status of the tree(s), special community interest, or exceptional aesthetic, environmental or historical value.

C. The decision of the Planning Commission may be appealed to the City Council pursuant to the provisions of the Municipal Code.

D. Any request for removal of one (1) or more Heritage Oak Trees or greater than 25% of the canopy cover on a single parcel shall require a public hearing and three-fifths approval of the City Council.

E. Notwithstanding the Planning Commission's authority under the preceding paragraphs to act on requests relating to oak trees, whenever the request involves another entitlement requiring a recommendation or approval by the City Council, the Planning Commission shall refer the request to the City Council.

## V. CONDITIONS OF PERMIT APPROVAL

Conditions may be imposed on the permit at the discretion of the City including, but not limited to, any of the following mitigations:

A. It is the policy of the City to preserve and enhance its ecosystem, one element being the contribution of oaks to the total hardwood canopy and wildlife habitat. Therefore, the loss or gain of total oak tree canopy as reflected in a baseline inventory of these resources shall be described in terms of species, total inches of diameter of any tree, and/or aggregate inches of diameter for more than one tree, and the magnitude of impact.

B. Requiring the replacement or placement of additional trees on the subject property to offset the impacts associated with the loss of a tree, limbs or encroachment into the protected zone of an oak. For every inch of tree, limb or root removed, a minimum of one inch must be replaced.

C. Canopy Retention Standards recognize the need to protect and retain stands of trees, as well as individual trees which will be impacted by proposed development. It is the policy of the City of Calabasas to retain 75% or more of the baseline canopy of each subject property.

Canopy cover will be determined by using dripline measurements to determine crown canopy and by comparing the amount of the subject property covered by canopy to that without canopy.

D. Unless waived by the City Council, a refundable security deposit in an amount equal to the cost of the replacement trees and canopy shall be deposited in trust with the City of Calabasas to guarantee the implementation and success of this replacement. The deposit will be refunded upon satisfactory completion of all conditions, including successful establishment of replacement plantings according to the criteria outlined in section V.4. The dollar deposit shall be determined using the PRC method of determination as outlined in Appendix B.

E. A signed acceptance of the conditions of the oak tree permit for removal shall be executed by the applicant or his/her representative, and the refundable security deposit shall be made prior to the issuance of the oak tree permit.

F. The planting of new trees on-site or off-site will be required to offset the loss of a tree. The applicant shall be responsible for periodic submission of affidavits by a certified oak tree consultant according to the permit specifications. This will include, but not be limited to, reports at the conclusion of grading and construction, and annually for the next 5 years based on quarterly or bi-annual site visits and including monitoring observations. Such affidavit shall certify compliance with all conditions of the permit, establishment goals and the health of all replaced, remaining or relocated trees.

This requirement shall be supplemented by random inspections by the City of Calabasas. The applicant's acceptance of an approved permit and the exercise of the rights thereunder shall be deemed consistent with allowing City officials reasonable access to the property for the purpose of conducting such inspections.

A written proposal from a qualified transplantation company must be submitted stating the validity of transplanting any tree.

A written proposal from a qualified monitoring agency/ company must be submitted outlining the specific monitoring required for the site/project according to the protocol in Appendix D.

G. The timing of any pruning, removals or relocations will avoid disturbing nesting birds.

H. The monitoring schedule, and the maintenance and care program outlined in the Oak Tree Report be carried out by qualified professionals. This program is to insure the continued health and care of oak trees on the property. The cost of the report, monitoring and the City review shall be paid by the applicant.

I. Payment of a fee to the City based on the following criteria:

Class I: To alter.

The cost for the loss of more than 25% canopy impact to any one tree, or limbs or roots over 2 inches in diameter based upon PRC value of the tree before and after alteration.

Class II: To transplant.

The cost for monitoring, maintenance and replacement in accordance with the Guidelines, by a City approved agency or firm, in addition to the cost related to the PRC value of the tree.

Class III: To remove.

The cost for the loss related to total inches of diameter of the tree(s) removed, associated hardwood canopy cover loss, wildlife habitat loss, and reforestation.

All such funds will be used to provide for reforestation of equivalent sites within or outside the project area that will remain as open space, replace woodlands removed for development, provide for public acquisition of title to and permanent conservation easement on developable lands and provide for public environmental education regarding reforestation and habitat preservation.

As an alternative to the payment of all or part of the fees described above, donation of land suitable for oak reforestation to the City may also be acceptable at the discretion of the City Council. Fees imposed under this section may be reduced as mitigated by specific circumstances and corrective measures undertaken by the property owner.

J. All oak trees included in an Oak Tree Report shall be considered registered with the City. Persons wishing to register other oak trees are encouraged to do so with either the City or a City-approved entity such as the Topanga-Las Virgenes Resource Conservation District.

K. If applicable, a bonded assurance of performance for reforestation, monitoring or maintenance may be required, in an amount to be determined by the City.

## VI. PERMIT REQUIREMENTS: REQUEST TO ALTER

CONDITIONS REQUIRING A PERMIT TO ALTER

**Pruning Request**

Branches and roots under 2 inches in diameter and deadwood may be pruned without a permit.

The removal of live growth exceeding 2 inches in diameter requires application for an oak tree permit and approval of the Planning Commission. However, a property owner may remove limited live roots and branches under 2 inches in diameter considered to be unsafe because of decay, rot, cavities, cracks or splitting, based on the written description of the problem and recommendation for remediation by the property owner's oak tree consultant.

IT IS THE POLICY OF THE CITY OF CALABASAS NOT TO ALLOW THE REMOVAL OF LIVE TISSUE FOR THE PURPOSE OF ALTERING THE APPEARANCE OF AN OAK TREE. THEREFORE, ORNAMENTAL PRUNING, THINNING OUT, HEADING UP, OR ANY OTHER SIMILAR PRUNING WHICH INVOLVES THE REMOVAL OF LIVE TISSUE IS DISCOURAGED. THESE PROCESSES CONTRIBUTE TO THE ONSET OF INSECTS AND DISEASES.

Exceptions to this requirement are cases where clearance is required for utilities or public rights-of-way which are made known to the City in advance. All such pruning work shall follow proper arboriculture practices as outlined in the ISA Pruning Standards (Appendix A) and as approved by the City's oak tree consultant. Sealer should not be applied to cut ends. Research indicates that this aids the pathogens and not the tree.

**Encroachment within the Protected Zone**

Intrusion of any kind within the protected zone of an oak tree ( 15 feet from the trunk or 5 feet outside the dripline of trees under 24 inch DBH; 50 feetfrom all trees 24 inch DBH or greater) is to be avoided whenever possible. However, permits will be granted in those situations where such encroachment is unavoidable. Use of trenches for more than one utility service, proper trench design which minimizes root impacts, proper cutting and treatment of roots should all be detailed in the application.

**Change of Grade**

Any changes to the natural grade within or adjacent to the protected zone of an oak tree require a permit. Included in the application should be clearly detailed drawings indicating intended cut and fill, tree protection devices and other strategies as needed to meet or exceed City standards.

**Fuel Modification**

In accordance with Public Resources Code 4291 (Minimum Statewide Clearance of Brush) and recognizing the importance of the natural scrub oak communities within the City, the following standards shall be used to provide adequate clearance and protection from wildland fires.

1. Existing or Previously Approved Construction

When deemed necessary by the County of Los Angeles Fire Department, communities of scrub oaks are to be cleared of all deadwood, be limbed up a minimum of 48 inches above natural grade, and be thinned to allow at least 18 feet between groups of plants, for a distance of at least 100 feet from any structure, and not to exceed 200 feet. from any structure. Planting of low growing (below 18 inch) native groundcovers will be allowed within the cleared area to prevent erosion.

All work must have prior approval from the City and be supervised by a City approved arborist/landscaper.

2. New Construction

All new structures shall be sited 100 to 200 feet from scrub oak communities, or from the boundaries of any State or National Park lands. If the parcel size precludes this setback, the siting of structures will then be set back from the slope/pad intercept by at least 50 feet. Additional clearance of native vegetation may be required to provide adequate fire protection.

All work must have prior approval of the City and be supervised by a City approved arborist/landscaper.

In order to receive a permit for any of these activities, the following information must be submitted to the City, along with the necessary fee.

**Application Form**

Application shall be made on the standard application form supplied by the City. The signature of the property owner will be required in all cases.

**Data Sheet**

Data sheets are supplied by the City and must be completed for each tree involved.

**Justification Statement**

This is a written statement indicating the need for taking proposed actions involving oak trees. It should establish that the trees in the vicinity will be protected by meeting or exceeding the standards set by the City; that any encroachment, grade change or fuel modification will be done using approved preservation methods; and that one or more of the following findings can be made:

1. that the condition of the oak tree(s) with respect to disease, danger of falling, proximity to existing or proposed buildings and/or structures and parking lots, or interference with utility services cannot be controlled or remedied through redesign of the site elements or reasonable preservation procedures and practices;

2. that the retention or failure to allow some encroachment of the trees as described in the application prohibits the reasonable and conforming use of the property.

**Description of work**

Site plan showing tree locations and how proposed actions will impact the tree(s). In the case of fuel modification include a copy of the request from the Fire Department.

## VII. PERMIT REQUIREMENTS: REQUEST TO REMOVE

The materials required to complete an application are described below. The City may waive the filing of one or more of the items listed when deemed necessary to process the application. However, additional information may be required when deemed necessary for permit processing. The accuracy of all information, maps, and lists submitted shall be the responsibility of the applicant.

**Application Form**

Application shall be made on the standard application form supplied by the City. The signature of the property owner will be required in all cases.

**Justification Statement**

An application requirement which may not be waived is a written statement by the applicant or his/her oak tree consultant stating the justification for planned actions involving oak trees.

Statements should establish that the oak trees in the vicinity of the project or construction site will be protected by meeting or exceeding the standards set by the City; that any construction or use will be done with approved preservation methods; and that one or more of the following findings can be made:

1. That due to the condition of the oak tree(s), certain actions are required to maintain its health, balance, or structure.

2. That the retention of or failure to allow some encroachment as described in the application prohibits the reasonable and conforming use of the property.

3. That the condition of the oak tree(s) with respect to disease, danger of falling, proximity to existing or proposed buildings and/or structures, parking lots or interference with utility services cannot be controlled or remedied through redesign of the site elements, reasonable preservation procedures and practices.

**Site Plan and Oak Tree Map**

In those cases determined to require a site plan, the following information should be included.

NOTE: Existing site plans may be used provided the information is both current and accurate.

1. Size: Maps should not exceed 30" x 42" in size.

2. Scale: The scale should not be smaller than 1" = 20'.
   Note: Map size and scale may be decreased with prior approval.

3. Property address and legal description.

4. Title Block: In one corner of the map, indicate the name of the property owners, applicant, appropriate consultants, (such as surveyor and oak tree specialist), address(s) and phone number(s) of those involved in preparing the plans and application.

5. Physical characteristics: the body of the map should accurately portray the following existing and proposed features:

   a. property lines;
   b. streets, access easements and/or public or private driveways and any other paved areas;
   c. buildings or structures;
   d. setbacks of all buildings and structures from the property lines;
   e. parking and other paved areas;
   f. land uses on parcel (existing and proposed as applicable);
   g. proposed grading and construction, including utilities and subdrains.

6. Oak Tree Locations: The map shall indicate the exact location of all oak tree(s) proposed to be encroached upon, removed and/or relocated, and those trees within 200 feet of the project or construction area, even if this extends beyond the property boundaries. Surveying the exact location(s) of the tree(s) both horizontally and vertically is very important and must be accomplished by obtaining the services of a professional engineer or a licensed land surveyor whose signature shall be affixed to the site plan and oak tree location map as appropriate.

   Symbols shall be used to indicate the proposed status of the tree(s).
   - X - tree to remain
   - O - tree to be removed
   - * - tree to be relocated

7. Dripline(s) of the Tree(s): The exact location of the dripline of an oak tree is crucial in order to evaluate any impacts resulting from construction. Consequently, aerial photographs and rough approximations will not be acceptable. The dripline must be plotted in the following manner:

   a. Obtain and record four compass readings: N, E, S, W, plus any directions which have greater dripline dimensions.

   b. Perform a measurement of the dripline in the field at each compass point.

   c. Sketch in any variations as observed in the field.

**Tagging**

In anticipation of a field inspection, each tree having a caliper measure of 1 inch at 12 inches above grade shall be assigned a number on the plan and be physically tagged in the field. In order to standardize the system so that everyone may easily locate the tree number the following procedure is established:

1. A permanent tag, a minimum of 1 1/4" to 2" is to be used. The tag must be made from a non-corrosive, all-weather material and be permanently attached to the tree. For small trees that would be damaged by affixing the tag directly to the trunk, the tag may be tied with non-corrosive wire to a lower branch on the north side. It may need to be retagged more permanently at a later date.

2. The tag shall be affixed to the north side of the tree at 4 1/2 feet above natural grade.

3. Except for trees whose number has become obliterated, trees that were previously tagged properly need not be retagged.

4. Trees whose numbers have become obliterated shall be retagged using the required method.

**Canopy Retention Standards**

To promote woodland conservation, proposed development designs should make every effort to maintain groups of trees in contiguous areas that function as a cohesive habitat. No more than 25% of the total oak canopy cover for a given property as of August 1992 may be removed without City Council approval.

Total canopy cover will be determined by taking the sum of the individual tree crown canopies and comparing the percentage covered with the total area of the site.

Since preservation and reforestation are the long-term goals, special consideration should be given for protecting those areas having obvious natural regeneration and mixed age stands of oaks. The mitigations for loss of these resources will be determined by the City Council.

Short-term impacts due to construction can be mitigated by, but not limited to, the following;

1. Reserving some acres or percentage of property from development until reforested areas attain habitat value of oak woodlands lost, or

2. Specify open space deed restriction or donation of some property with equivalent oak resources on developable lands located outside the project area. Total area, canopy cover, woodland type and habitat value, in addition to any other pertinent resources shall be considered in determining equivalence of property.

**Oak Tree Report**

**1. General**

a. No Report Necessary

The determination of the requirement for an oak tree report will be made during the pre-application conference and will be predicated on the scope of the project and the nature of its impact on the surrounding trees. In general, the requirements for an oak tree report may be waived only in situations involving the removal of hazardous trees, subject to verification by the City's oak tree consultant. A modified oak tree report may be recommended by the City's oak

tree consultant should all of the trees on the property be a sufficient distance from the construction (no less than 200 feet), so as not to be impacted by construction or grading. Photographs, completed data sheets and protective fencing according to the standards outlined in the guidelines shall be required for those trees. Requests for pruning may also be subject to a modified report, subject to verification by the City's oak tree consultant.

b. New Report Necessary

In situations requiring the submission of an oak tree report, the document shall be certified by the applicant's oak tree preservation consultant to be true and correct and must be acceptable to the Planning Commission. Questions concerning the extent of the report's content or the acceptability of the report's preparer should be cleared with the City staff in advance.

c. Use of Existing Report

In cases where there is an existing oak tree report over two years old, on an earlier project that was not approved and/or constructed, the applicant may be required to provide a supplementary report rather than a new report. In addition to any design changes, the report will retain the original numbering system and include the current health and dripline of each oak tree on the project.

**2. Format for the Report**

A standard data sheet provided by the City will be completed for each tree. Additionally, the report shall discuss all grading and structures, required cutting, paving or trenching in and around the trees on the project and shall evaluate, to the extent possible, the impact of such activity on the tree, the impact on the overall canopy cover, as well as any mitigating measures proposed, including drainage modifications, and the anticipated effectiveness thereof.

In addition, the oak tree report shall be based on information requested on the data sheet, which includes the following information:

a. Location of tree
b. Tree tag number
c. Species
d. Diameter at 4 1/2 feet above natural grade
e. Height
f. Canopy cover information:
   - condition of crown canopy (% shade)
   - diameter based on actual ground measurements taken at 4 or more compass points
   - distance from natural grade to the first branch at 8 compass points
   - percentage of canopy cover

g. Health and Vigor Rating

Use the following criteria to describe the condition of the tree. Percentage (%) of canopy, trunk, branches and roots should be determined by visual inspection.

"A" = Outstanding

A healthy and vigorous tree characteristic of its species and reasonably free of any visible signs of stress, disease or pest infestation.

"B" = Above Average

A healthy and vigorous tree with less than 25% of the tree affected by visible signs of stress, disease and/or pest infestation.

"C" = Average

Although healthy in overall appearance, 25% - 75 % of the tree shows evidence of stress, disease and/or pest infestation.

"D" = Below Average/Poor

Greater than 75% of this tree shows evidence of stress, disease and/or pest infestation and appears to be in a state of rapid decline. The degree of decline may vary greatly.

"F" = Dead

This tree exhibits no signs of life at all.

h. PRC value of the tree

This value shall be calculated for each tree and will be used to determine the necessary mitigations. Refer to Appendix B for complete discussion.

TREE VALUE = (basic value) (0.1) (condition rating)

Basic value = $4,700 + $2,700 (d-7) when
(d = diameter in inches of trunk at 4 1/2' above natural grade)

Condition rating = based on visual evaluation

| | | |
|---|---|---|
| "A" | Outstanding | 90-100% |
| "B" | Above Average | 70-89% |
| "C" | Average | 50-69% |
| "D" | Below Average | 25-49% |

"F" Dead 0-24%

Note: Dead trees have important wildlife value and therefore receive extra valuation in certain circumstances).

EXAMPLE: Coast Live Oak (Quercus agrifolia) in good condition having a diameter of 25"

($4,700 + $2,700(25-7)) (0.1) (0.80) = **$42,640**

i. Existing tree environment:slope grade and aspect, soil description, list of surrounding vegetation

j. Physical Structure: broken branches, unbalanced crown, water traps, etc.

k. Horticultural evaluation: disease, pest identification and extent of damage

l. Tree vigor: new shoots, leaf color, bark characteristics, deadwood, crown thinning, dieback, etc.

m. Photograph of tree taken from stated distance and direction. Must be clear enough to discern important features of the crown and trunk. Additional photos may be needed to show health problems, unusual features, extent of fire damage, etc.

n. Recommendations: Suggestions made by the applicant's oak tree consultant regarding any need for stabilizing physical structure (cabling, bracing), drainage/irrigation changes, disease and/or pest control, monitoring schedule, intended action (remain, remove, relocate).

Drawn sections shall be submitted showing the tree and all impacts to the protected zone above and below natural grade.

Each identified disease symptom shall be accompanied by a statement as to the probable effect of the disease upon the life or structure of the tree.

## VIII. STANDARDS FOR PERFORMANCE OF PERMITTED WORK

### 1. Scope of Work

All work shall be performed as specified in the approved oak tree report and monitoring plan, oak tree permit and the requirements contained in these guidelines. Additional work such as spraying, watering, fertilization, cabling, bracing, etc. may be required as determined by the City's oak tree consultant. It must be remembered that these trees are living organisms and that the necessity for such additional work may be required due to any change in their condition after the original oak tree report is prepared.

### 2. Oak Tree Preservation Consultants

Generally, the services of an oak tree consultant are made necessary by the conditions of approval of various permits issued by the City of Calabasas. The importance of the consultant to the applicant/property owner is clear from the various requirements listed in this resolution.

From the City's perspective it is both necessary and critical that the applicant/property owner identify the consultant of record and allow him/her to act independently so as to be able to certify that all work was conducted according to the permit and these guidelines. Where encroachment and/or removal has been approved, the applicant/property owner must notify the City and the consultant in writing 48 hours before commencing any authorized work within the protected zone of oak trees. Moreover, it is mandatory that the applicant/property owner notify the City in writing within 5 days of any changes of their oak tree consultant of record. Monitoring of specific trees may need to begin at least 3 months prior to any encroachment or action within the protected zone.

A list of qualified oak tree consultants can be obtained by contacting the City.

### 3. Monitoring

A monitoring schedule for each site will be determined by the City's oak tree consultant based on the monitoring protocol (Appendix D). Monitoring will be conducted at quarterly intervals or more, during all grading and construction activities as warranted by the site conditions, for the first 3 years. Following construction, bi-annual monitoring is required for the next 5 years, or more if warranted. The specific monitoring protocol for each project will be determined based on the following:

- the number of trees to remain and their proximity to construction activities;
- the number of trees to be transplanted;
- the location and number of replacement trees required;

- the potential extent of impact to the overall canopy.

Annual reports will be submitted according to the schedule indicated in the permit.

Monitoring of relocated trees will commence at least 3 months prior to any encroachment or grading activities so as to provide important baseline information used to assess the changes in the tree following transplantation.

All monitoring will be done by a City approved agency/firm and the cost will be born by the applicant. Information provided by such monitoring will be used to establish realistic mitigation measures and to ensure the long term future of oak resources in the City.

**4. Inspections**

All work shall be conducted in accordance with applicable ordinances and procedures detailed in the guidelines. It is the applicant's responsibility to call for and secure all inspections required to approve such work in accordance with the schedule outlined in the permit.

**5. Work within the protected zone**

Because of the high sensitivity of oak trees, great care must be taken when work is being conducted within the protected zone. For this reason, the City has established specific procedures to ensure that the trees receive maximum protection. The procedures are as follows:

a. On-site Supervision

All work conducted within the protected zone of an oak tree shall be performed in the presence of the applicant's oak tree consultant, and be verified by the City's oak tree consultant.

b. Forty-eight Hour Notice

Except for deadwooding and pruning of limbs or roots under 2 inches in diameter, the applicant shall provide a 48 hour notice to the City and the appropriate oak tree consultant before beginning any work within the protected zone.

c. Hand Tools

Unless otherwise approved, all work conducted within the protected zone shall be accomplished using hand tools only. Use of tractors and other vehicles is prohibited. Roots will be severed cleanly with a saw, avoiding torn ragged or shattered ends.

d. Certification Letter

Certification letters are required for all work conducted upon oak trees. The applicant's oak tree consultant shall submit a certification letter within 10 working days after completion of such work certifying that all of the work was conducted in accordance with the appropriate permits and the requirements of these guidelines.

**6. New Plants around Oak Trees**

Planting is not recommended within the protected zones of oak trees. There should be nothing but a 3 inch layer of organic mulch (preferably oak leaves) within 6 feet of the trunk. Any planting within the dripline shall consist of oak associated natives of the Santa Monica Mountains. See Appendix E for the list prepared by the California Native Plant Society. These plants will not be irrigated.

Plants located at the perimeter of the protected zone shall consist only of drought tolerant species which are not susceptible to either Avocado Root Rot (Phytophthora cinnamomi) or Oak Root Fungus (Armillaria mellea). Irrigation should be limited. Spray emitters are prohibited.

**7. Replacement Trees**

**A. Types:**

In all cases, replacement trees of the following species (Quercus agrifolia, Quercus lobata, and Quercus dumosa) must be approved in advance by the City's oak tree consultant. Every attempt should be made to acquire trees grown from local acorns.

Top pruning and removal of branches on the lower two thirds of the trunk (lollypopping) destroys the natural structure of the tree and attracts boring beetle infestations. No specimens having been treated in this manner will be deemed acceptable. As the trees mature, removal of side branches may be permitted as outlined in the maintenance and care program.

Note: In some cases, where it is not possible to obtain appropriate nursery grown trees in the sizes required, an equivalent number of smaller container trees shall be planted in an amount equal to the cost of the larger unavailable trees.

**B. Sizes**

It is most advantageous to plant acorns and small oak trees (5 gallon), allowing them to develop in place. When larger container specimens are required, they must meet the following specifications:

| Size Container" | Height' | Spread' | Caliper" |
|---|---|---|---|
| 5 gallon | 6-8' | 12-24" | 1/2" |
| 15 gallon | 6-8' | 3-5' | 1 1/2" |
| 24" box | 8-10' | 5-6' | 2" |
| 30" box | 10-12' | 6-8' | 2 1/2" |
| 36" box | 12-14' | 8-10' | 3" |

**C. Quality of Stock and Inspection Criteria**

Nursery stock should be inspected by the applicant's oak tree consultant at the site before acceptance. The City requires that all trees be handled by their containers or root balls and not by the trunks.

At least 2% of the trees purchased should be removed from their containers and all other trees should be checked for the following:

1. Vigor: good shoot growth, large leaves and dense foliage, smooth, shiny bark, proper trunk taper, no evidence of extensive pruning.

2. Well-formed root systems: white root tips visible on perimeter of root ball, no kinked or girdling roots, firm, healthy older roots.

3. No serious disease or insect damage.

4. Well formed crown: strong central leader, no evidence of topping or lollypopping, side branches left intact.

5. No evidence of shipping damage or other injury.

6. Delivery of the exact species from the locale specified.

**D. Planting Requirements**

1. All holes will be no deeper than the container and at least 2 times wider than the container, with edges scarified. Check for and correct soil and drainage problems.

2. Unless otherwise directed by the oak tree consultant, backfill soil will not be amended.

3. The root crown will be level with or slightly higher than the surrounding grade.

4. Staking is not recommended. Under certain circumstances staking may be used at the direction of the City's oak tree consultant. In such cases, 2 stakes will be a minimum of 24" from the trunk and secured by the use of non-abrasive ties in a figure 8 pattern for the first 6 months. Be sure to remove the stack used for transporting the tree.

5. Watering should be by drip irrigation according to the following schedule:

**WATER SHOULD NEVER BE SPRAYED ON THE TRUNK.**

Year 1 - water weekly in the rainy season if needed to keep the soil moist. Slow, deep application is best. Summer watering should be spread out to every other week or more if the tree is well enough established.

Year 2 - extend the normal rainy season by supplemental watering through June, none in July or August, resuming as needed in September.

Year 3 - water only during the rainy season if necessary due to low natural rainfall.

6. Three to six inches of mulch should be applied under the dripline, but not touching the trunk.

**8. Location of Replacement Trees**

In determining the location for replacement tree planting, the Planning Commission shall consider, but is not limited to, the following factors:

A. The vegetative character of the surrounding area near the project site. These concerns are outlined in the California Native Plant Society guidelines for tree planting (Appendix C).

B. The number of oak trees subject to this ordinance which are proposed to be removed in relation to the total canopy existing on the site.

C. The anticipated effectiveness of the replacement oak trees in replacing lost canopy cover.

D. The development plans submitted by the applicant for the proposed construction or use of the project site.

E. The time frame of large scale, phased projects may necessitate planting over several years using oaks of

various sizes in order to promote development of a mixed age stand.

In cases where it is not possible to use the project site for planting replacement trees, the Planning Commission may consider the following options:

- providing for reforestation of equivalent sites that will not be subject to future development, or

- requiring donation of developable land for preservation.

**9. Relocation of Oak Trees**

In certain limited cases the City may consider the relocation of oak trees from one area of the project to another. The guidelines and limitations of this program are as follows:

A. Oak trees which are approved for relocation will be considered removals by the City and require appropriate replacement mitigation.

B. A refundable cash security deposit shall be made with the City. The amount shall be determined by the PRC value of the tree (Appendix B), plus the cost of planting and possible replacement. The deposit will be refunded upon the conclusion of the 5 year monitoring period, if in the opinion of the monitoring reports and the City's oak tree consultant, the relocated tree has survived and is in good health. If the health of the tree is unchanged or has declined, the applicant will remove the relocated tree and replace it with equivalent nursery grown tree(s) as specified.

C. The tree(s) being recommended for relocation must be approved by the City's oak tree consultant whose decision will be based upon factors including health, type, size, time of year and proposed location.

D. Inspections will occur during grading and construction according to the schedule established by the City's oak tree consultant.

E. Monitoring by an approved agency/firm will commence at least 3 months prior to any impact on the tree(s) and continue quarterly for the first 3 years, bi-annually for the next 2 years or longer as deemed necessary by the City's oak tree consultant.

Procedures for monitoring are outlined in Appendix D and may be modified to fit the needs of specific sites. However, quantitative measurements of tree health including, but not limited to, water potential and flushing growth are deemed necessary for accurate assessment and may not be deleted.

Yearly reports will be submitted to the City regarding the status of the tree(s). Cost of monitoring and inspections will be born by the applicant.

**10. Establishment Criteria**

In order to clarify the level of revegetation deemed satisfactory, the following criteria will be used to evaluate the success of oak tree preservation and replacement plantings:

Year 1 — 50-100% living cover on slopes, at least 80% of trees surviving.

Year 2 — 80-100% living cover on slopes, at least 90% of trees surviving on reduced irrigation as outlined in section V.1.5.

Year 3 — 100% living cover on slopes, at least 95% of trees surviving with limited watering and maintenance.

Year 4 and after — Continued growth of ground cover and trees with no supplemental water and little maintenance.

NOTE: Transplanted trees will always require more maintenance than replacement plantings. Special consideration for these trees will be given.

## IX. TREE MAINTENANCE

Oak trees require little active maintenance and limited removal of deadwood. They thrive on benign neglect. The tree is growing on a given site because the necessary environmental conditions are already present. For this reason, preserving existing grade and drainage is crucial to the future of the tree.

**1. Deadwooding**

This activity is exempt from the requirement to obtain a permit. See definition of deadwood. If uncertain as to whether it is deadwood or not, contact the City's oak tree consultant.

**2. Pruning Living Tissue**

All pruning of limbs or roots over 2 inches in diameter will be done according to the Western Chapter of the International Society for Arboriculture Standards (Appendix A) after receiving a permit to alter. Sealers will not be used. All cuts will be made with sharp tools leaving no ragged or torn ends. Natural Target Pruning techniques protecting the branch bark ridge is required.

**3. Unbalanced Trees**

Trees that are suspected of being physically unbalanced because of broken limbs or that may become unbalanced as a result of deadwooding will require an oak tree report and an oak tree permit before any work can be performed. The report will contain an analysis of the problem and a recommendation for whatever remedial work may be necessary to correct the situation.

**4. Roots**

Impact to roots 2 inches in diameter or larger shall require an oak tree permit. Where structural footings are required and roots will be impacted,the footings shall be bridged and the roots protected. All roots will be cleanly cut with a saw. Shattered or ragged root ends shall be cut cleanly. Cover all roots with wet burlap for the time that they are exposed. Do not use root seals, as these have proven to aid pathogens and not the tree.

**5. Fire Damaged Trees**

Although fire is considered a serious threat to oak trees, many trees can survive several damaging fires. During their life span they can continue to provide wildlife enhancement, watershed protection, and physical and aesthetic value to the community. Some trees may begin to exhibit visible signs of rejuvenation within a few weeks after a fire. It is desirable to postpone the cutting of a heavily charred oak trees for at least 2 to 3 years. Most trees will recuperate. Since there are many factors that will determine the survival of fire damaged trees, a careful assessment of each individual tree must be undertaken. Burned trees shall be assessed and rated according to the standard in section VII.2.g immediately after the fire and again 1 year later. Subsequent inspections may also be required before deciding on a specific course of action.

IT IS THE POLICY OF THE CITY OF CALABASAS TO REQUIRE A COMPLETE OAK TREE REPORT ON ANY AND ALL OAK TREES THAT HAVE BEEN FIRE-DAMAGED BEFORE ANY WORK CAN BE PERMITTED.

In preparing such a report, oak tree consultants may assess the extent of the damage using visual or other techniques as necessary. If the removal of any live tissue is indicated, an exception may be made to prune the tree in such a manner so as to permit the regeneration process to proceed unhindered by dead or unhealthy tissue.

**6. Diseased Trees - Pests and Insects**

Generally our native oak trees are a very hardy species. However, there are a variety of diseases and pests that can severely affect trees that are in a state of general decline. Since the entire subject of diseases, pests and insects is a highly technical matter, no diseased tissue may be removed, unless it is unsafe, without submitting an oak tree report and obtaining an oak tree permit.

**7. Cavities**

Trees have well developed defense mechanisms which can be disrupted when natural barriers around the perimeter of a cavity is broken. Other than removing loose debris and providing a screen cover to prevent further debris build up, no action should be taken. Concrete or other similar materials shall not be used to seal or fill cavities. No holes shall be drilled to provide drainage.

**8. Tree Removals**

Unless otherwise expressly approved in writing, authorized removal of oak trees shall be accomplished using the following guidelines:

a. All portions of the tree shall be completely chipped for mulch and/or removed from the site, and debris shall be relocated to a permitted refuse disposal site. Additionally, the stump must be completely removed and the hole or indentation filled with soil.

b. All tree wells that were created to preserve the tree shall be completely filled with soil to the satisfaction of the City Engineer and Building Official.

## X. PHASES OF CONSTRUCTION

The information contained in this section is divided into the four phases normally associated with new construction. Apart from the normal activities conducted during each phase, there are certain conditions associated with work around oak trees that are required to be completed during each of these phases. These requirements are expected to be completed for all residential, commercial and industrial projects.

**PRE-CONSTRUCTION PHASE**

This period is defined as the time between the approval of a development permit and the issuance of a grading permit. No work of any kind may occur on an approved project unless a stage grading permit, a grading permit or an oak tree permit has been obtained from the City of Calabasas. A grading plan for parcels with oak trees on the property will be reviewed and approved by the City's oak tree consultant before final approval. Generally, the following activities will occur before the commencement of grading operations.

A. Pre-Construction Conference

During this meeting City staff, including the City oak tree consultant will address various issues relating to the oak trees on the site. These issues shall include but not be limited to:

1. Fencing Plan

The applicant or his representative shall bring a copy of the fencing plan to the pre-construction meeting. Using the approved grading plan or the site plan, the fencing plan should be designed along the following guidelines:

a. A minimum 5 feet high chain link fence in concrete footings with posts installed every 8 feet and 2 feet deep into natural grade will be installed at the outermost edge of the protected zone of each oak tree or group of trees. Exceptions to this policy may occur in cases where oak trees are located on slopes that will not be grubbed or graded, or are located in areas where there is no activity planned or no currently approved grading plan.

The fences must be installed in accordance with the approved fencing plan and approved by City inspection prior to the commencement of any grading operations. The applicant's superintendent will be responsible for calling the City to arrange the inspection.

b. Signs must be installed on the fence at 4 cardinal points around each tree. For groups of trees signs will be placed at approximately 50 foot intervals around the grove. The signs must be a minimum of 2 feet by 2 feet square and must contain the following statement:

WARNING
THIS FENCE IS FOR THE PROTECTION OF THIS TREE AND SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE CITY OF CALABASAS.

2. Monitoring Plan
In some cases it will be necessary to begin monitoring 3 months prior to any encroachment or grading activities. The appropriate contract must be in place to ensure that this is done in compliance with the standards of these guidelines and the plan outlined in the permit.

3. Parking Lots and Pedestrian Walkways
Since it is City policy to preserve all healthy oak trees unless removal, pruning or relocation is absolutely unavoidable, architects should design their projects with these requirements in mind. Therefore, for public safety reasons, parking lots and pedestrian walkways must be designed so that only healthy oak trees are proposed to remain in a high vehicular and pedestrian place. Trees whose rating are confirmed to be a "D" or less should be avoided in pre-design or proposed for removal unless it is possible to restore the tree to a safe and vigorous condition.

To the extent possible, parking spaces should not be located directly under the canopy of oak trees. When this is not possible, pervious paving material shall be used to the satisfaction of the City. The applicant's licensed engineer and oak tree consultant will be required to certify that such work was accomplished under their personal supervision and in accordance with approved plans and permits. These issues will be discussed in the pre-application conference.

4. Cut and Fill Slopes
In general, every effort should be made to avoid cut and/or fill slopes within the protected zone of any oak tree. The oak tree report should delineate any remedial measures necessary to retain positive drainage away from the tree and preserve the root system. Where fill slopes are proposed, the oak tree report must include a soils report indicating whether or not it will be necessary to cut and recompact the area prior to

moving the fill material into position. These issues will be discussed in the pre-application conference.

6. Oak Tree Removals, Deadwooding, Pruning
Unless otherwise approved, the applicant is required to complete oak tree removals as approved by the oak tree permit for the entire project phase that is currently being graded. Deadwooding and pruning is to be accomplished prior to grading phase unless otherwise approved.

**GRADING OPERATIONS PHASE**

This period is defined as the time between the commencement of grading operations and the commencement of construction of the building improvements. It is understood that the construction phase may begin while grading operations are continuing and that grading may begin on a subsequent phase while construction is still in progress on a previous phase.

For purposes of this section, each phase is considered separate and the conditions and monitoring associated with each phase will be required to be completed at the start or during the operations of each phase. The City inspector will make that determination in the field.

In addition to the normal grading operations conducted during this phase, the applicant will be required to comply with the following:

**A. On-Site Documentation**

The following information must be located and permanently retained on the construction site from the start of grading operations. The superintendent will be required to call the City to request an inspection to verify compliance with this requirement.

1. Oak tree permit - with all proposed modifications
2. Oak Tree Report
3. Oak tree location map
4. Oak tree fencing plan
5. Oak tree monitoring plan
6. Stamped set of grading plans approved by the City Engineer and City Oak tree consultant
7. Permit and Tract Conditions:

A copy of the approved permit and tract conditions, and all current and future modifications approved by the City.

8. Oak tree inspection card

9. Oak tree ordinance

10. Oak tree preservation guidelines

11. Approved planting and irrigation drawings

**B. Retaining Walls Within the Protected Zone**

In cases where an oak tree permit has been approved for the construction of retaining walls within the protected zone of the oak tree, the applicant will be required to complete these improvements using hand tools before completion of grading operations and before commencement of the construction phase.

**C. Oak Tree Preservation Devices**

If required by the oak tree report and the oak tree permit, preservation devices such as air ventilation systems, oak tree wells, drains, special paving and cabling systems will be required to be installed before the completion of the grading phase and commencement of the construction phase.

These devices must be installed under the direct supervision of the applicant's oak tree consultant who will write a letter certifying all such work and submit it to the City within 10 working days. Advance notification (48 hours) of such work shall be given to the oak tree consultant and the City.

**D. Utility Trenching-Pathway Plan**

In order to avoid unnecessary damage to the root system, prior to the completion of the grading operations and the commencement of the construction phase, the applicant will be required to submit a utility trenching-pathway plan to the City for review and approval. The plan shall use the best alternative to trenching within the tree's protected zone. The plan will depict all of the following systems: storm drains, sub-drains, sewers, easements, area drains, gas lines, electrical service, cable TV, water mains, irrigation mainlines, and any other underground installations.

IT IS THE POLICY OF THE CITY TO COORDINATE SUCH SERVICES TO AVOID DUPLICATE TRENCHING AND TO ENCOURAGE TUNNELING UNDER ROOTS OR AROUND THE DRIPLINE. ALL WORK WITHIN THE PROTECTED ZONE SHALL BE DONE USING HAND TOOLS.

Additionally, the plan must show all lateral lines serving the residences. The plan must also show the surveyed

locations of all oak trees and an accurate plotting of the protected zone.

The plan should be developed considering the following guidelines:

A. All systems in this subsection shall avoid the protected zone of any oak tree.

B. Where it is not possible to avoid some encroachment, the design shall minimize the extent of encroachment by coordinating services using the trench, tunneling under roots wherever feasible and conducting all work using hand tools. A report of these encroachments will be made in a supplemental oak tree report.

**CONSTRUCTION PHASE**

This period is defined as the time during which building improvements are under construction.

**A. Ground Plane Improvements**

The following improvements may be installed within the protected zone of an oak tree subject to the approval of an oak tree permit issued by the City and the limitations and guidelines contained in this section: pervious patio covers, wood decks, garden walls, fences, gazebos, and other similar improvements. The guidelines and limitations are as follows:

1. An oak tree permit shall be approved by the City.

2. Any work conducted within the dripline of the tree will be done with hand tools only.

3. Tunneling under roots or using caissons or posts is preferred.

4. No soil will be stockpiled under the dripline.

5. All work shall be conducted in the presence of an oak tree consultant, subject to verification by the City's oak tree consultant. Both will receive 48 hour notice of impending actions.

6. Pruning of limbs and roots will be done in strict accordance with ISA Pruning Standards (Appendix A) and the standards outlined in these guidelines.

7. Monitoring quarterly for the first 2 years and bi-annually for the following 3 years will be required to verify the continued health of the tree.

**B. Fine Grading Permit (Oak Tree Lots Only)**

On most tracts, the drainage patterns for the lots will have been designed into the original grading plan. However, this is not the case with custom lots and custom lot tracts. Therefore, in an effort to avoid establishing drainage patterns that intrude into the protected zone of oak trees, the following procedures have been established.

1. Custom Lots and Custom Lot Tracts

   A fine grading permit will be obtained from the City in accordance with the oak tree permit. The landscape architect or the engineer shall design a pattern utilizing surface and/or subsurface drainage devices to avoid completely the protected zone. Additionally, the oak tree consultant will be required to submit an supplemental oak tree report to the City for review and approval prior to fine grading the lot. Supplemental monitoring may be required at that time.

   Following approval of the plan and the completion of the work, the oak tree consultant will submit a letter of certification within 10 working days. Additional reports may be required as per the monitoring schedule.

2. Other Lots and Projects

   On all other projects, grading plans will be designed at the outset to avoid the protected zone of the oak trees. The procedure for these lots will be as described in custom lots, above.

3. Inspections and Monitoring

   The City reserves the right to inspect the project at appropriate intervals and require further monitoring if deemed necessary.

**POST CONSTRUCTION PHASE**

This period is defined as the time following the completion of all building improvements. In residential projects, the construction phase and the post-construction phase will overlap as houses are completed and new houses are still being constructed. For purposes of this section, certain conditions will be required to be completed prior to receiving Certificates of Occupancy.

**A. Certification of Oak Tree Work**

On all lots containing oak trees, the City inspector will require that all of the oak tree work required by the conditions of the development permit, the oak tree report and the oak tree permit, as applicable, have been completed and certified by the applicant's oak tree consultant prior to City approval.

**B. Monitoring**

The continued monitoring of oak trees according to the oak tree report and the oak tree permit shall proceed until 5 years are passed, or longer as required by the oak tree permit.

**C. Oak Tree Information Packet**

In cooperation with the sales agent, the applicant will be required to provide and certify that an oak tree information packet, as approved by the Planning Commission, has been provided to the buyer of the property and the homeowner's association. The information to be included in this packet is as follows:

1. Oak Trees - Care and Maintenance
2. Compatible Native Plants for Around Your Oaks
3. Oak Tree Ordinance
4. Oak Tree Preservation Guidelines
5. Development Permit: Copy of the City-approved conditions of approval of the oak tree permit.

**D. Certification of Receipt**

Applicant/sales agent shall prepare a letter introducing the packet. The letter and packet shall then be sent by certified mail to the property owner. The applicant shall forward a copy of the letter and the signed return receipt card to the City where it will be recorded and stored.

## XI. ENFORCEMENT

**A. General**

The City, through its Code Enforcement Officers, shall vigorously enforce the provisions of the Oak Tree Ordinance and the Oak Tree Preservation Guidelines. Additionally, inspectors from Building and Safety and Public Works, in the course of their regular duties will monitor activities on-site on a daily basis. Any irregularities or suspected violations will be immediately reported to the Code Enforcement Section and the City's oak tree consultant for follow-up action.

**B. Stop Work Orders**

Whenever any construction or work is being performed contrary to the provision of the Oak Tree Ordinance, Oak Tree Preservation Guidelines, Oak Tree Permit or conditions of the appropriate development permit, the City's oak t
ree consultant or a City inspector may issue a written notice to the responsible party to "stop work" on the project on which the violation occurred or upon which the danger exists. The notice shall state the nature of the violation and no work shall be allowed until the violation has been rectified

and approved by the Code Enforcement Officer or the City's Oak Tree Consultant.

**C. Additional Remedies**

Any person who cuts, damages, moves or removes any oak tree within the City or encroaches into the drip line of an oak tree in violation of the City's oak tree ordinance shall be subject to the following mitigations in addition to any penalties provided by the Municipal Code:

1. A suspension of any building permits until all mitigation measures specified by the City are satisfactorily completed.

2. Completion of all mitigation measures as established by the City.

3. For removal of a non-exempt oak tree a building or improvement moratorium on the property for a period not to exceed 10 years and applying to any subsequent owner of the property until the term is completed.

4. A Notice of Non-Compliance may also be recorded on the property.

**D. Restitution**

It has been determined that the oak trees within the City are valuable assets to the citizens of this community and to the citizens of the State of California, and as a result of the loss or damage to any of these trees, the public should be recompensed.

Any person violating the provisions of this ordinance shall be responsible for proper restitution and may be required to replace the oak tree(s) removed or damaged. Replacement shall be made based on the PRC value (see Appendix B) or the actual replacement cost, whichever is higher, plus the cost of planting and maintaining the replacement trees. The number, size and location of said equivalent replacement oak trees shall be determined by the Planning Commission.

# APPENDIX B
## DETERMINING TREE VALUES - PRC METHOD

The City of Calabasas wishes to more realistically replace the value of oak woodlands and individual trees lost in the development process. Recognizing that the long-term goal of reforestation and preservation can only be accomplished with the implementation of short-term initiatives fostering tree conservation, the values of individual trees will follow the PRODUCTION REPLACEMENT COST (PRC) METHOD devised by arborist Alden Kelley. The more widely applied International Society of Arboriculture (ISA ) method is biased towards undervaluing oak trees, and is therefore not applicable.

The PRC method addresses tree value in terms of universally recognized criteria, the cost of replacement. Tree value is specified as the cost of providing and establishing an equivalent specimen to that being lost. The replacement tree would be of the same species, size, condition and installed in an equivalent location to the tree being removed.

Both the PRC method and the ISA method rely on several variables in determining the value of a given tree. First, the Basic Value is based upon the size (diameter at breast height at 4 1/2 feet above grade). Second, the condition of the tree, and thirdly the species value.

Basic value will be defined as $4,600 for the first 7 inches of diameter, and $2,700 for each additional inch of size. Those trees smaller than 8 inches in diameter are valued according to local nursery prices, including installation costs. These prices will be adjusted to remain consistent with industry standards.

The condition of the tree will be evaluated according to ISA standards. The data sheet for making these determinations is included. Value will be noted as a percentage.

The City has determined that all oaks have a species value of 100%.

Since the oaks under consideration are now growing in a location having all the essential elements for survival, location will not be considered a factor in determining value.

The formula for determining value is:

**PRC VALUE = Basic value x condition rating**

Basic Value = $4,600 + $2,700( diameter - 7)

Condition rating = percentage based on ISA evaluation standards

# DETERMINING PRC VALUES FOR OAK TREES
April 1993

When determining conditions of approval for impacting or removing oak trees, the City will use the following values. This document will be revised to reflect changes in **PRODUCTION REPLACEMENT COST** according to local nursery prices, including installation costs.

For trees under 7" in diameter 4 1/2' above grade

:

| Size (inches) | Box/ Ball Size (inches) | Value (Dollars) |
|---|---|---|
| less than 0.73 | 5 gal. | 175 |
| 0.75 | 15 gal. | 525 |
| 1-1.5 | 20 | 700 |
| 2 | 24 | 910 |
| 2.75 | 30 | 1,275 |
| 3.25 | 36 | 1,600 |
| 4 | 42 | 1,950 |
| 4.5 | 48 | 2,300 |
| 5 | 54 | 3,000 |
| 6 | 60 | 4,700 |
| 7 | 72 | 7,600 |

For trees over 7" in DBH, use the following equation to determine PRC Value:

1. Determine Condition Rating for the tree using the standard ISA form.
2. Fill in values and use the formula to determine value.

A = $4,600 + $2,700 (DBH - 7)

B = Condition rating (percentage: example 95%= 0.95)

**A x B = PRC Value**

EXAMPLE 1: 25" diameter Coast Live Oak in good condition

A = $4,600 + $2,700 (25-7) = 53,200
B = 0.80

53,200 x 0.80 = $42,640

Value of branches and roots impacted due to alteration can be determined by calculating the PRC value, estimating how much of the tree is impacted (percentage) and using that to determine mitigation.

EXAMPLE 2: 15% of the tree in Example 1 will be lost due to construction of a driveway

$42,640 x 0.15 = $6,396

## HEALTH AND VIGOR RATING

A = Outstanding: Healthy, vigorous tree, free of signs of stress, disease, pest infestation

B= Above Average: Less than 25% of the tree affected by signs of stress, disease /pest infestation

C= Average: Overall appearance healthy, 25-75% of tree shows evidence of stress, disease/pest infestation

D= Below Average/Poor: Greater than 75% of tree shows signs of stress, disease/pest infestation, appears to be in state of rapid decline. Degree of decline may vary.

F= Dead: Exhibits no sign of life at all.

# GUIDE FOR JUDGING THE CONDITION OF LANDSCAPE TREES

| FACTOR | VARIATION IN CONDITION FACTOR | POINTS | POINTS AWARDED |
|---|---|---|---|
| CROWN DEVELOPMENT | Characteristic of species - well balanced | (5) | |
| | Lacking natural or desired symmetry | (3) | |
| | Lacking full crown | (1) | _____ |
| TRUNK CONDITION | Sound and solid | (5) | |
| | Section of bark missing: | | |
| | less than 1/4 of circumference | (4) | |
| | 1/4 to 1/2 missing | (3) | |
| | 1/2 or more missing | (1) | |
| | Extensive decay or hollow | (0) | _____ |
| MAJOR BRANCH STRUCTURE | No defects | (5) | |
| | Die back limited | (4) | |
| | Few structurally important dead or broken branches | (3) | |
| | Several structurally important dead or broken branches | (1) | _____ |
| TWIG GROWTH RATE | Typical for species and age - usually 4-6 inches | (5) | |
| | Less than 1/2 normal growth rate | (3) | |
| | Growth rate greatly reduced - yearly decline | (1) | _____ |
| FOLIAGE | Normal size and color for species | (5) | |
| | Minor deficiency/pollution symptoms | (3) | |
| | Major deficiency/pollution symptoms | (1) | _____ |
| INSECTS & DISEASES | No insects or diseases apparent | (5) | |
| | Few controllable insects or diseases present | (3) | |
| | Severe infestation | (1) | _____ |
| ROOTS | No root problems apparent | (5) | |
| | Minor root problems | (3) | |
| | Severe root problems | (1) | _____ |

| Total Points | Condition Class | Formula % for Condition |
|---|---|---|
| 30 - 35 | Excellent | 90 - 100% |
| 24 - 29 | Good | 70 - 89 |
| 17 - 23 | Fair | 50 - 69 |
| 11 - 16 | Poor | 25 - 49 |
| 6 - 10 | Very Poor | 0 - 24 |

# APPENDIX E

## STANDARD DESIGNS FOR ENCROACHMENTS WITHIN THE PROTECTED ZONE

Understanding the basics of how oak roots work helps to prevent unnecessary damage. There are two kinds of roots. The woody roots support the tree and can extend down as much as 50 feet, in the case of Valley Oaks (Q. lobata). The non-woody roots absorb water and nutrients from the soil. They are concentrated in the upper 18 inches of soil and are potentially the most easily damaged. They require both air and water, thriving in soil that is not compacted. If damage is done to the absorbing non-woody roots, the tree will become stressed. If the woody roots are damaged, the tree could remain green and still be in danger of falling over.

Some general rules to keep in mind:

1. All work done within the protected zone of the tree shall be done with hand tools.

2. If a root is split during work, they should be cut cleanly above the injury if possible.

3. Any roots exposed during excavation should be covered with wet burlap to protect them from drying.

4. Do not pile dirt or change the soil grade around the tree trunk or dripline. This causes oxygen deprivation and the tree can suffocate.

5. Do not change the drainage systems around the trees.

6. Do not compact the soil within the dripline.

7. Do not fertilize the tree until at least one full growing season following impacts. This prevents the tree from expending energy in response to the fertilizer. A 3-6 inch layer of oak leaf mulch is the best fertilizer for the tree and should be applied immediately following completion of work.

8. Avoid any grade change within 6 feet of the trunk.

9. Irrigation and landscaping around the tree should be compatible with the standards established in the guidelines.

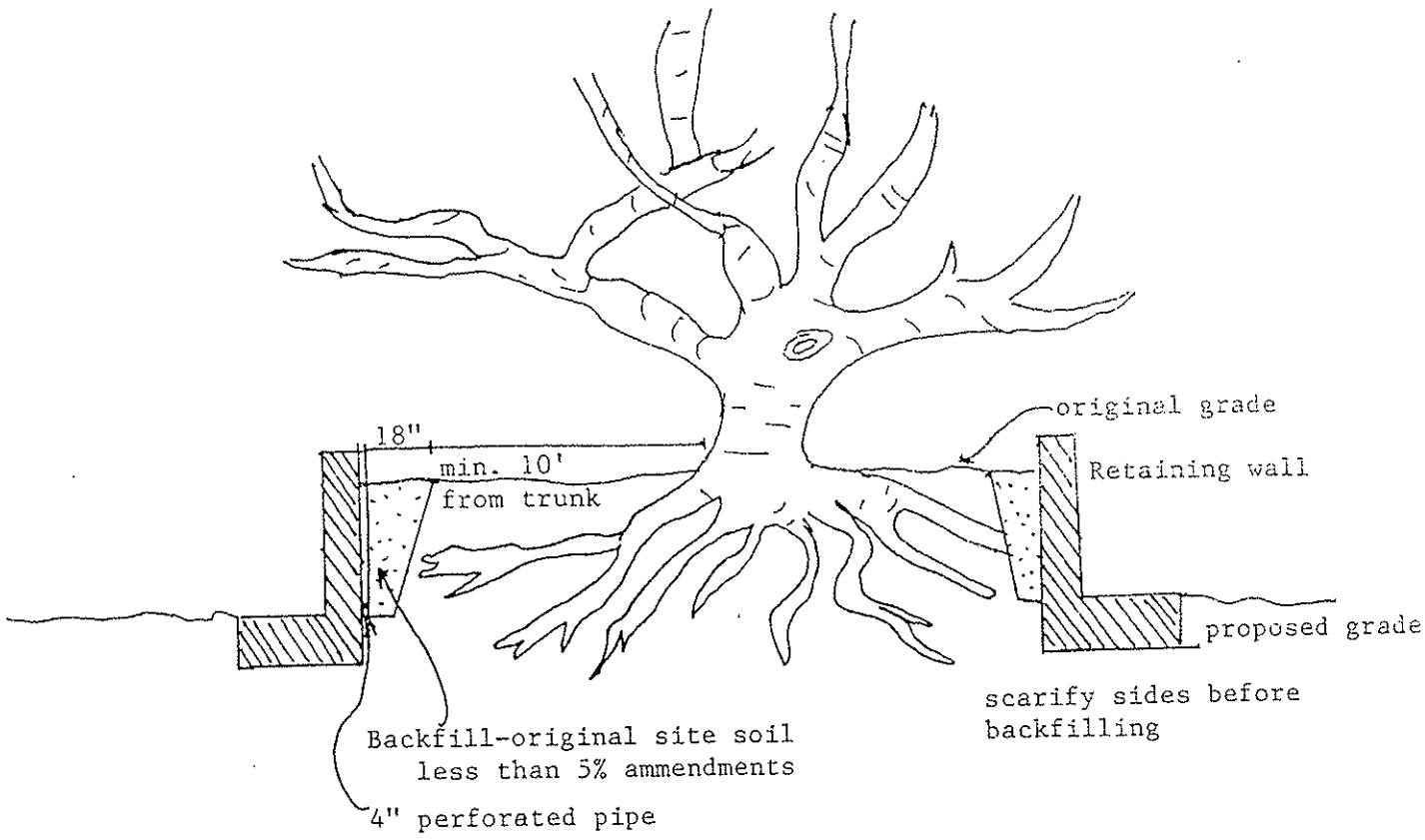
10. All work should be supervised by an Oak Tree Consultant.

## CUTS DEEPER THAN 6 INCHES

1. All work in the protected zone is to be done using hand tools only.

2. All roots are to be cleanly cut. No sealer should be used.

3. Permit approval for encroachment is necessary and applies only in special circumstances.



## FILLS GREATER THAN 6 INCHES

1. These diagrams apply only to fills greater than 6 inches. All other fills as directed.

2. Clean away soil using only hand labor under the direction of an Oak Tree Consultant.

3. Do not damage roots when placing rocks.

4. These details only apply in special circumstances following permit approval.