TREES PROTECTION SPECIFICATIONS

1.01 TREE PROTECTION

I. All trees that occur within the area of work, as shown on the plans, and not specifically designated for removal, shall be protected by the following means:

A. Determining the Tree Protection Zone (TPZ) - The radius (not the diameter) of the TPZ, measured from the outside of the tree trunk, shall be calculated by Recreation and Parks (RAP) Forestry according to the following:
   1. Single trunk trees - multiply the trunk diameter in inches, measured 4.5’ above grade, by 1.5 feet.
   2. Multi trunk trees - multiply the sum of the diameters of all trunks in inches, measured 4.5’ above grade, by 1.5 feet.
   3. Palm trees - 5’ from the base of the trunk.

B. Once determined, the TPZ is to be clearly shown on all plans, including concept plans, for discussion purposes, including at the RAP Capital Improvements Meetings.

C. Beyond the TPZ, the contractor shall also be responsible for protecting all trees within the boundaries of the construction zone, including vehicular access areas leading to the construction zone, lay down areas, and any other areas impacted by construction activities. Any damage to trees in these areas shall also be subject to the same monetary or replacement requirements specified in Section II below. Any necessary root cutting in this area must be confirmed with either the RAP or other approved arborist. See also the General Conditions for any damage done by the contractor to landscaping or other park amenities that fall outside the boundaries of the construction zone.

D. Within the boundaries of the construction zone (including the TPZ), the contractor shall be responsible for mitigating construction-related dust accumulation on all trees by spraying the trunks, limbs, and foliage with water to a maximum height of 30 feet during the months of April through November, at monthly intervals.

E. Within the TPZ, the contractor shall adhere to the following requirements, including, but not limited to:
   1. No stockpiling or storage of any material, debris, or soil.
   2. No storage of any construction equipment.
   3. No vehicular access.
   4. No cutting of roots.
   5. No disturbance of soil or grade changes.
   6. No objects of any kind to be attached to tree trunks.
F. The contractor shall install a 5’ high temporary chain link fence with one pedestrian access gate along the boundary of the TPZ. See 5’ HIGH TREE PROTECTION FENCE detail at the end of the document.

G. The contractor shall provide one sign per each 20 lineal ft. of fence bordering the TPZ indicating that fencing shall not be removed. See sign detail that is included as part of the temporary chain link detail.

H. No work is permitted within the TPZ without the approval of each of the following: 1) the project landscape architect, 2) the project manager, and 3) RAP Forestry staff. Any work authorized within the TPZ must be done in accordance with the recommendations of a RAP arborist and under the supervision of a Monitoring Arborist. A Monitoring Arborist must be: 1) an ISA Certified Arborist or a Registered Consulting Arborist, with verifiable experience in protecting trees during construction; 2) approved by RAP Forestry. The Monitoring Arborist shall be hired and paid by the contractor.

I. Irrigation to all trees not specifically designated for removal shall be kept in operation for the duration of the project. Contractor shall be responsible for hand watering all impacted trees if necessitated by temporary shutdowns to existing irrigation systems. Trees are to be irrigated deeply and infrequently so that soil moisture is detectable at a minimum depth of 18” using a soil probe.

J. Upon job completion, contractor shall remove all items installed to protect trees during the construction process.

K. Any of the following Southern California native tree species fall under Ordinance No. 177404 of the Los Angeles Municipal Code:
   1. Oaks, including Valley Oak (Quercus lobata), California Live Oak (Quercus agrifolia), or any other tree of the oak genus indigenous to California but excluding Scrub Oak (Quercus dumosa);
   2. Southern California Black Walnut (Juglans californica var. californica);
   3. Western Sycamore (Platanus racemosa);
   4. California Bay (Umbellularia californica).

Contractor shall comply with the requirements of the ordinance found at: http://cityplanning.lacity.org/Code_Studies/Other/ProtectedTreeOrd.pdf.

II. Consequences of violating the Tree Protection Specifications:
   A. ANY FAILURE BY THE CONTRACTOR TO ADHERE TO THE REQUIREMENTS SPECIFIED WITHIN THESE SPECIFICATIONS WILL RESULT IN THE SUSPENSION OF ALL CONSTRUCTION ACTIVITIES, TO BE DONE AT THE CONTRACTOR’S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT FOR OR REPLACEMENT OF ANY TREES DAMAGED THROUGH NON-COMPLIANCE WITH THESE
SPECIFICATIONS. The choice of whether the damaged trees are replaced or paid for will be determined by RAP Forestry.

1. **Monetary valuations** for damaged trees will be determined by RAP Forestry.

2. **How RAP determines the quantity, species, and location of replacement trees:**
   a) Measuring the diameter of the tree(s) being replaced:
      1) For single trunk trees, the diameter (DBH) is measured 4.5’ above the ground.
      2) For multi-trunk trees, the DBH of each of the multiple trunks is measured 4.5’ above the ground, then all are summed to arrive at a single diameter value.
   b) The ratio of the sum of calipers (as defined by RAP Nursery Specifications) of new trees planted vs. the sum of the diameters of existing trees removed shall be at least 1:1. The specific number of replacement trees will be determined by RAP Forestry staff and the project landscape architect.
   c) If the replacement ratio cannot be achieved within the project boundaries, then one of the following shall apply:
      1) Deliver the trees to RAP Forestry.
      2) Deliver the trees to the nearest RAP service yard.
      3) Plant the trees beyond the project on an approved, area-wide basis.
   d) RAP Forestry staff and the project landscape architect shall determine the replacement tree species/planting location and shall also ensure the health/quality of the trees.
NOTES:
1. CHAIN LINK FENCE MATERIALS SHALL CONFORM TO THE CHAIN LINK FENCE AND MISCELLANEOUS METAL CONSTRUCTION SECTION OF THE NOTICE TO CONTRACTORS.
2. THE BOTTOM OF THE FABRIC SHALL BE POSITIONED ONE INCH ABOVE FINISH GRADE.
3. PROVIDE FOR ONE 3' WIDE GATE PER ENCLOSURE.
4. ALL FENCING TO HAVE A STANDARD GALVANIZED FINISH

FENCING MATERIALS

1. POSTS: O.D., LINE POSTS 2-3/8 IN. O.D. POST SPACING TO BE 10'-0" MAX. POSTS TO BE DRIVEN 2' BELOW RELATIVE GRADE.
2. FABRIC: 9 GAUGE, 2 IN. MESH, KNUCKLE TOP AND BOTTOM, PLACE ON OUTER SIDE OF POST.
3. TIE WIRES: 11 GAUGE AT 12" O.C.
4. POST TOPS MALLEABLE IRON OR PRESS WIRE STEEL.
5. 24"x18" SIGN, ATTACH WITH TIE WIRES. SIGN TO BE PROVIDED BY RAP. SIGN TO BE WHT LETTERS RED. SIGN TO BE 20 MILS THICK

GATE

6. HINGES: INDUSTRIAL BULLDOG HINGE (180 SWING) 2 HINGES PER GATE, ONE TOP AND ONE BOTTOM.
7. GATE FRAME: SIDES, 2-3/8" DIA
8. LOCKABLE CAST ALUMINUM FORK LATCH POST TOPS MALLEABLE IRON OR PRESS WIRE STEEL.