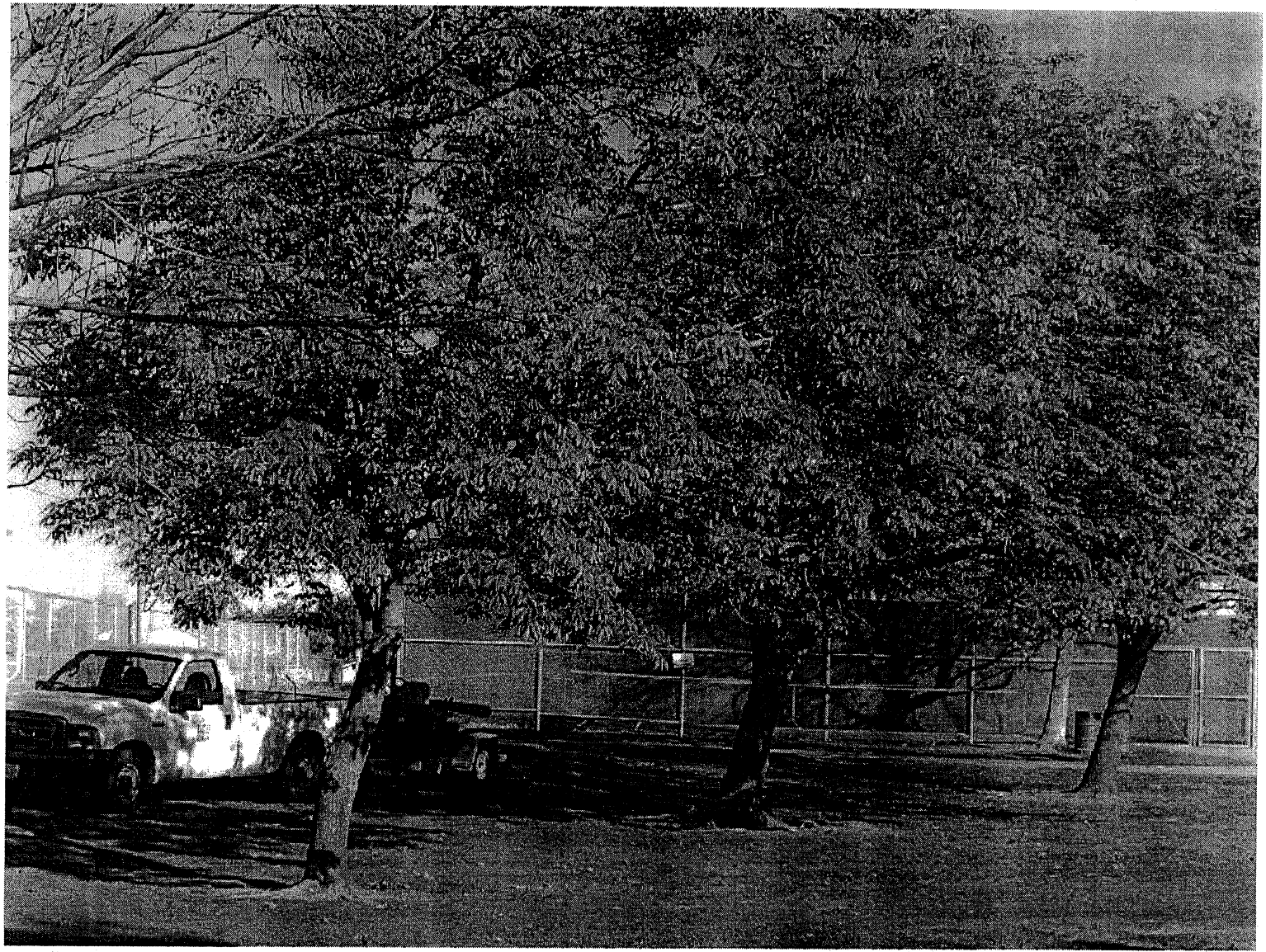
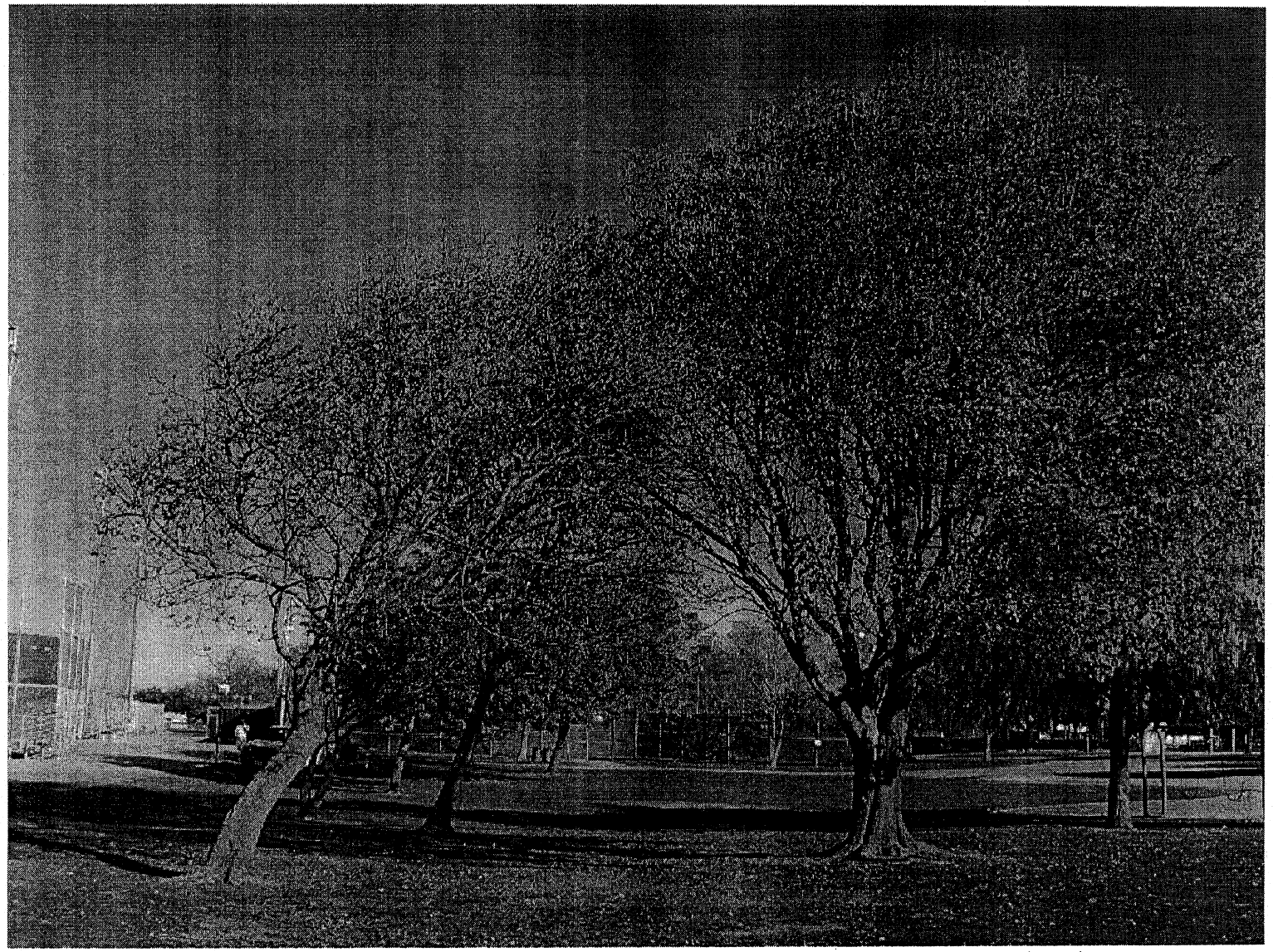


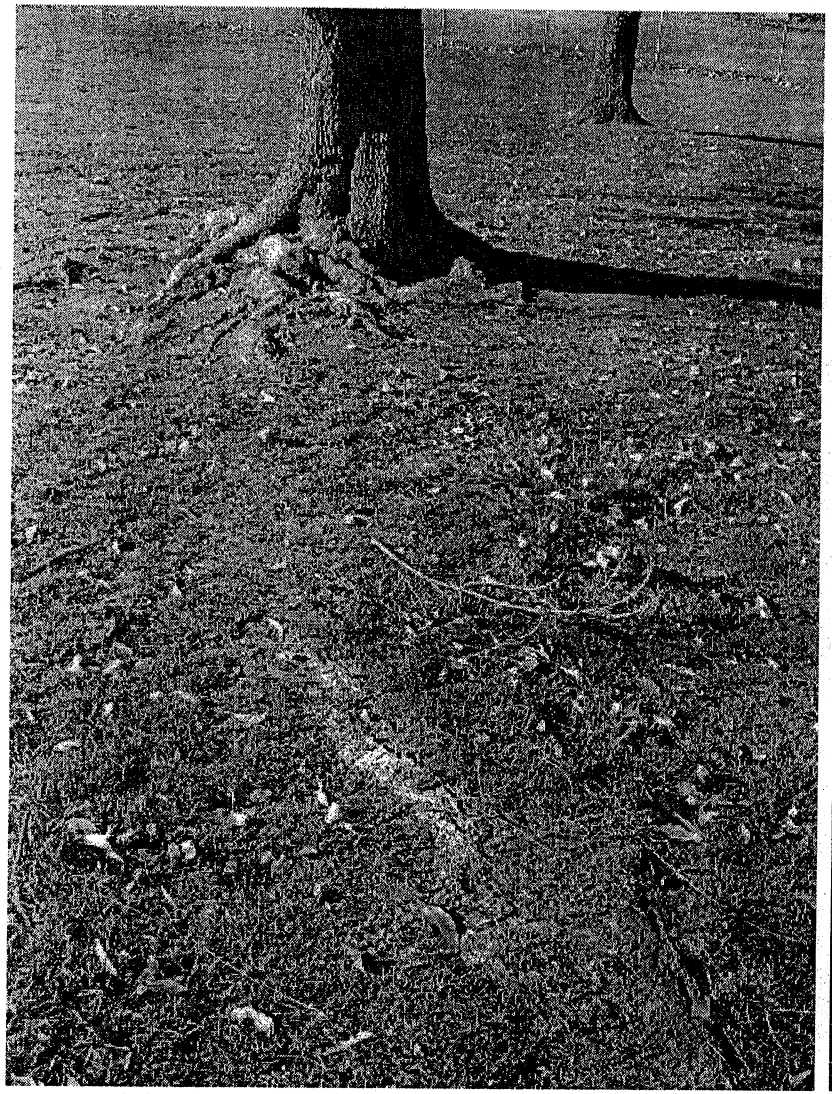
Tag #266, Fraxinus uhdei – Note needless parking of the truck in the shade even during winter. This damages roots and compacts soil.

ATTACHMENT NO. 7

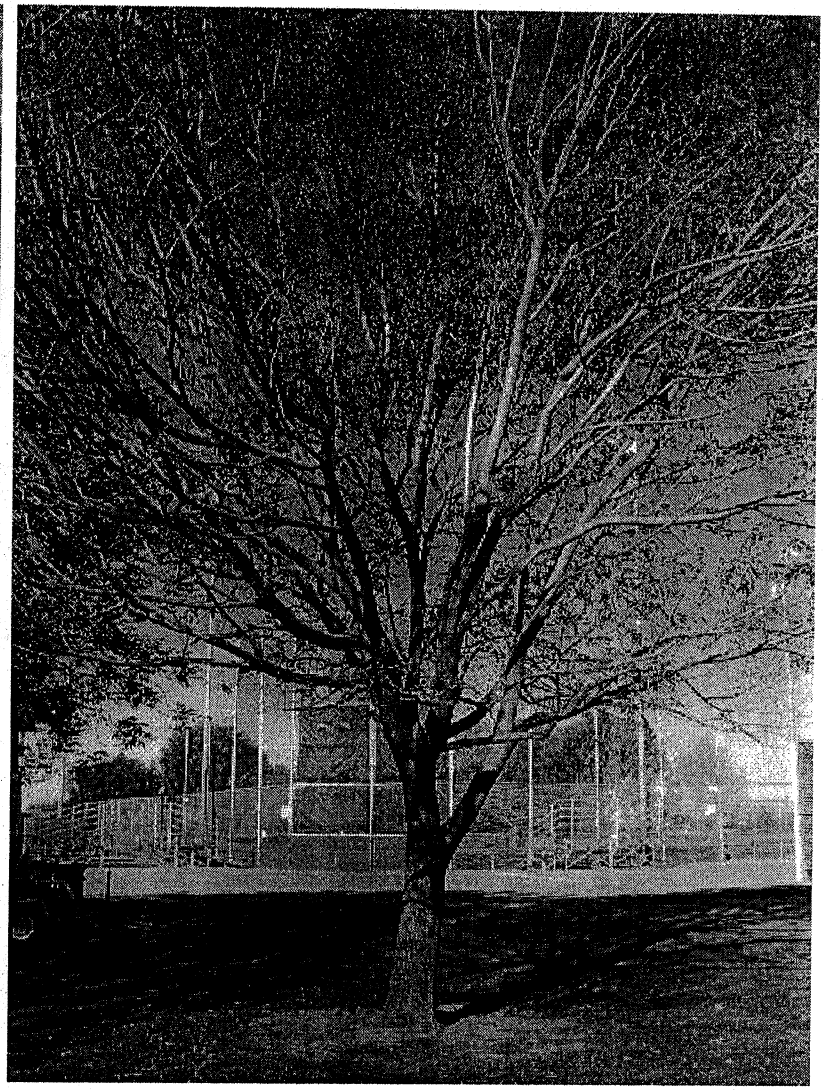


Tags #265 - 270, Fraxinus uhdei - the lean appears to be wind caused. Note large trunk split or seam at right (#265).

ATTACHMENT NO. 7
82

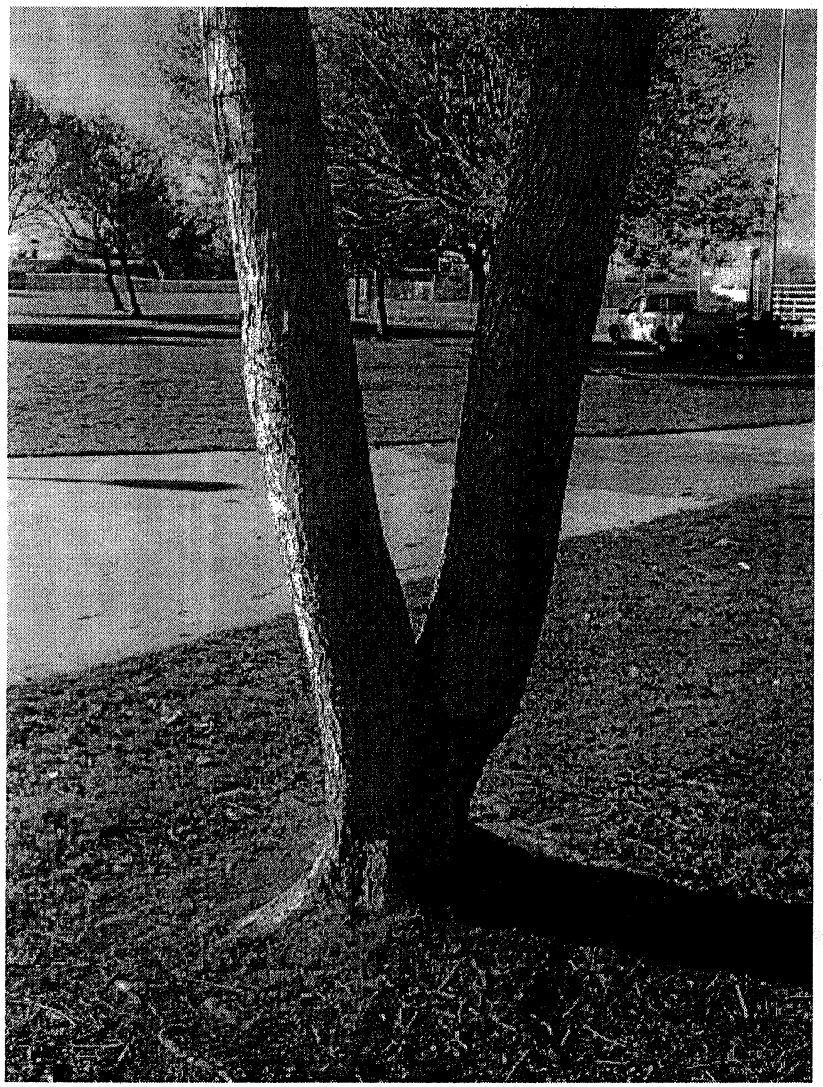


Fraxinus uhdei – note roots shaved by mowers.



Tag #271, Fraxinus uhdei – note two limbs ^ that split out.

ATTACHMENT NO. 7
67



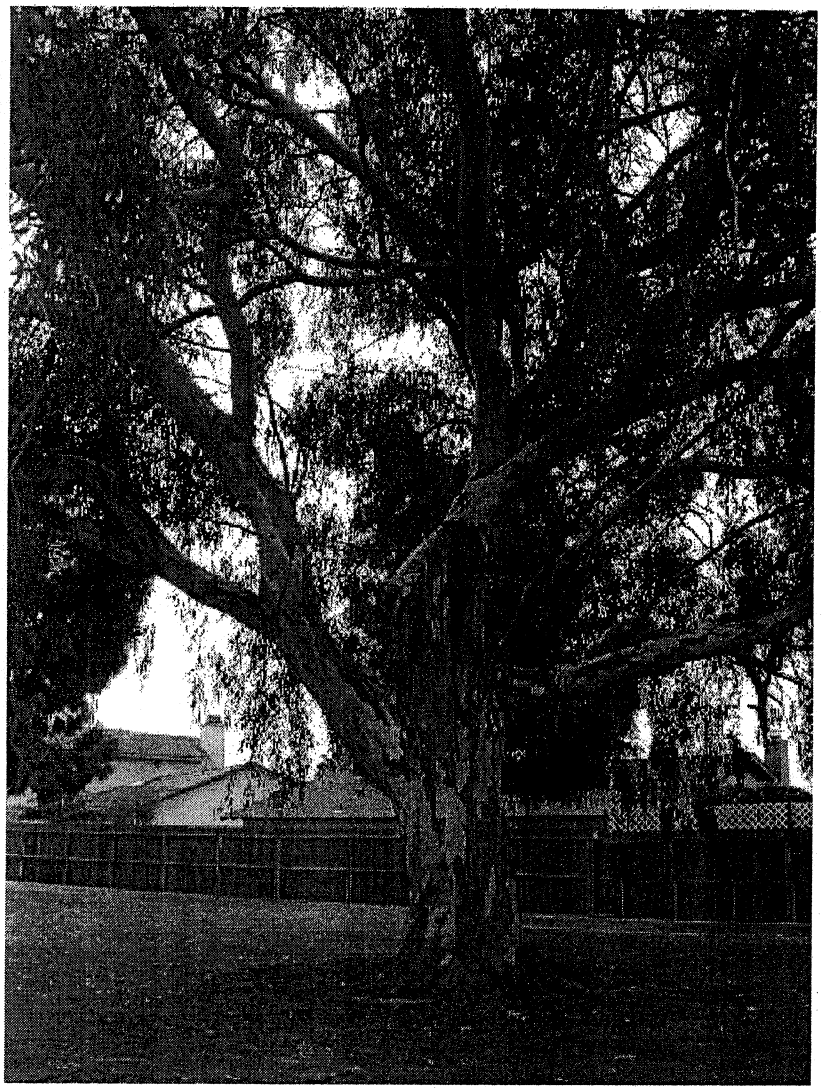
Tag #273, Liquidambar with codominant trunks and included bark.

Flush cuts on trunk resulted in velvet stem (Flammulina velutipes) decay

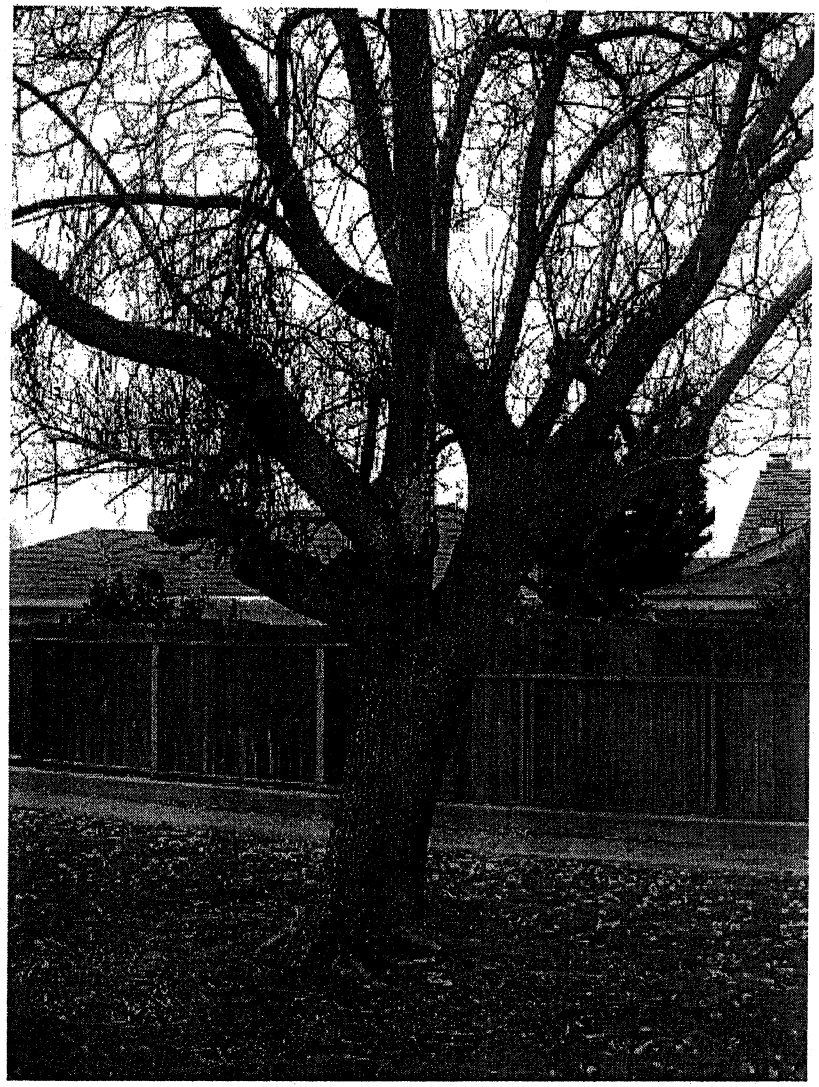
ATTACHMENT NO. 7.30

181, Pinus pinea with very crowded codominant trunks that are likely to split out. Consider cabling or removing a couple main limbs.

ATTACHMENT NO. 7-31

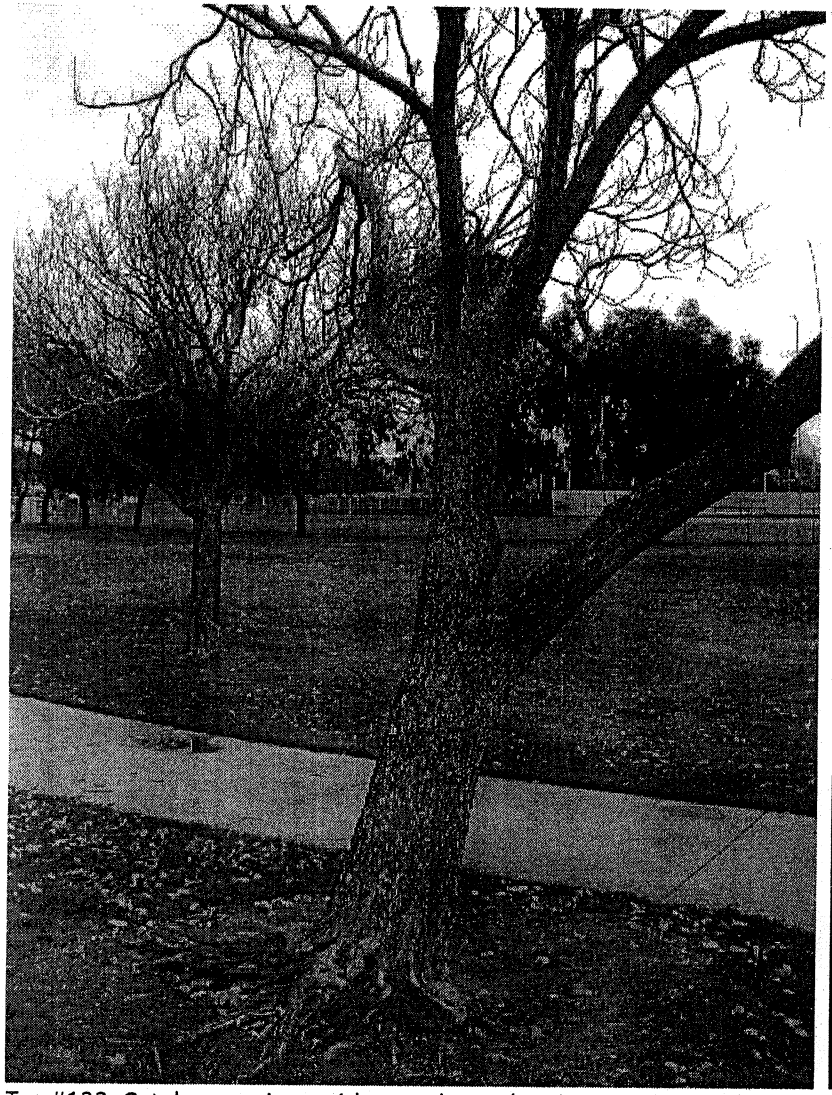


Tag #128, Eucalyptus camaldulensis with tear outs and large hanger.

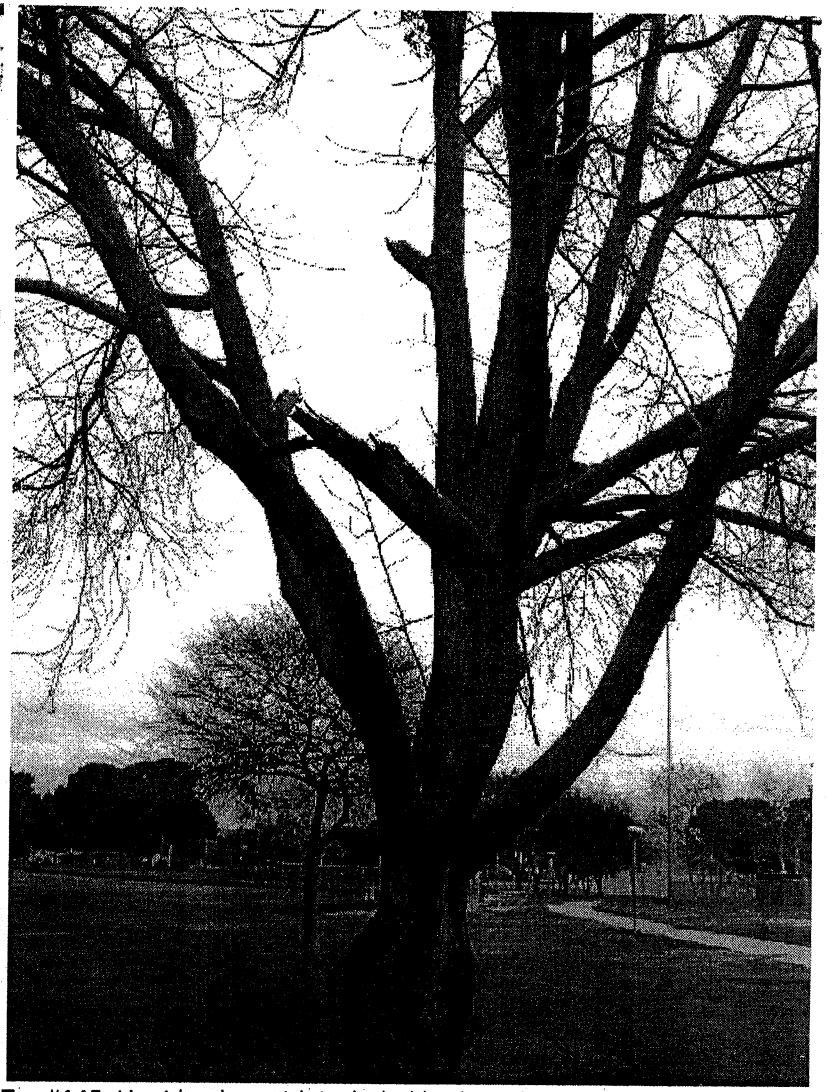


Tag #130, Catalpa speciosa – note turf now kept back from trunk.

ATTACHMENT NO. 2

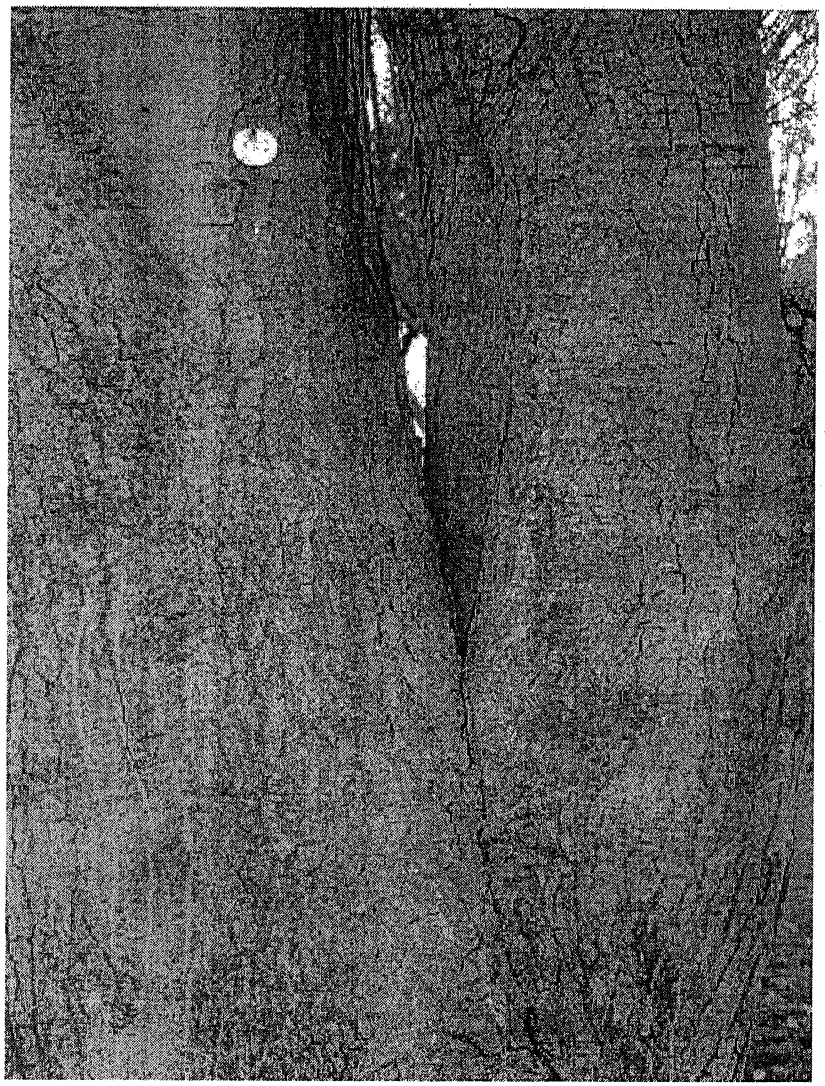


Tag #133, Catalpa speciosa with root decay, leaning at sidewalk.



Tag #145, Liquidambar with included bark, codominant, broken limbs.

ATTACHMENT NO. 7.33



Tag #145, Liquidambar with codominant limbs and included bark.

Tag #45, Cupaniopsis anacardioides is awkward and chlorotic.

ATTACHMENT NO. 24

Analysis

The main purpose of this report is to identify trees that are of sufficient health, condition and value to justify the cost of boxing, storing and replanting on site, as well as to identify trees that should be removed just due to very poor health or instability. Any other use of this report should consider the lack of detailed testing and reporting of internal decay and underground root defects.

Trees that were clearly close to death and unrecoverable and those that were clearly unstable are recommended for removal. All the trees that are in the path of new improvements cannot remain in their present location, but nearby trees can be preserved if their roots and canopies are protected at a sufficient distance from their trunk.

In the recommendations matrix to follow I list those trees that should be removed solely due to their health or structural condition; those that would be reasonable to transplant considering their species, health, structure and value; I list the average radius of their driplines; a recommended clearance and protective fencing radius; and the proper season for transplanting. Generally conifers and deciduous trees move best in winter, broadleaf evergreens move best in spring just before new growth, and sub-tropicals move best in late spring or early summer.

Eucalyptus, eucalyptus relatives and certain other trees do not transplant well in any season. Some species like Magnolia grandiflora transplant adequately when they are young but become increasingly difficult to move successfully as they age. Overall, successful transplanting requires healthy trees, the proper season, suitable species, the right size box for the tree, and an experienced and knowledgeable transplant contractor.

Since long term guarantees are rare or expensive from tree movers, and since construction schedules do not often consider tree needs, I tend to err on the side of removal and replacement. Since tree moving contractors usually only offer one year or no guarantee and when they do replace a tree, it is from their stock, they tend to err on the side of transplanting almost anything. In my opinion an independent expert with no financial interest provides the most reliable guidance.

Transplanting specifications are found in the appendix of this report.

ATTACHMENT NO. 7.35

Recommendations

Since the exact construction plans are not known, but are flexible to some degree, the recommendations below are general and intended most to aid the landscape architects' design development work. The clearance radii in the matrix below are approximate, and should be adjusted to accommodate leaning trees or trees with damaged or one-sided root systems. The clearance radii on the side opposite the lean should be increased proportionately to the degree of lean.

Trees in good health, that can be preserved, will need to be protected during roto-tilling, soil treatments, grading, and irrigation trenching, as well as other construction. Fencing and clear marking of those to be preserved will be needed. When grading near trees to remain, preliminary trenching at the limits of the protection zone will prevent backhoes and graders from tearing roots back into the protection zone.

At the time Edison Park was designed and installed, it was more common to place "shade trees" in turf. The redesign of the park can be improved by placing a significant percentage of new trees in areas adjacent to, but separate from the broad lawns. In this way irrigation needs of trees and turf, which are so different, can each be optimized. Soil preparation for and maintenance of a mulch bed below a tree grove can made more efficient and effective.

New and replacement tree species must be carefully selected to be tolerant of soil and environmental conditions, and need little maintenance. And of course, we would not want to repeat planting more of the tree species that have previously failed at Edison Park.

The use of a well-diversified pallet of trees is the safest approach to selection when there is a combination of difficult soil conditions and turf. Planting amendments and soil preparation should be determined by a soil laboratory report. However, this report should also contain recommendations that deal with mitigation of compaction outside the root zones of trees. General planting strategies are needed to protect new trees and enhance their growing environments. New trees should stay clear of

ATTACHMENT A