

elements in common. These elements include the type of tree and the characteristics of the species as displayed by the specimen such as form, color, and shape and the tree's condition.

James Urban, ASLA, has developed a practical and usable approach to tree evaluation, and the method is shown in Table 2.1. While Urban's method was specifically developed for city trees, the fundamental approach can serve as a guideline to evaluating the trees on a given site, particularly during the early site analysis stage.

Current aerial photogrammetry

Aerial photogrammetry provides an accurate mapping of topographic and physiographic features using low-level aerial photography. The topography is interpolated from limited topographic data collected on the ground. Properly prepared photogrammetry will meet USGA *National Map Accuracy Standards* as listed in Table 2.2 and may be significantly less expensive than traditional field topographic methods, especially on large projects or projects with significant topographic variation or many features.

The ability to take aerial photographs may be hampered by vegetation that obscures the ground, and therefore these photographs may be collected only during winter months in some areas. In general, the cost of photogrammetry prohibits its use in the preliminary analysis stage. Many municipalities, however, have photogrammetric information available for review.

Historical aerial photography

Unlike photogrammetry, existing aerial photography can be a valuable source of information for the site designer at a relatively low price. In many places

TABLE 2.1 Urban's Tree Condition Methodology

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1. *Excellent condition.* No noticeable problems, branching regular and even, normal-sized leaves, normal color.
 2. *Good condition.* Full grown with no tip dieback, many minor bark wounds, thinner crowns, slightly smaller leaf size or minor infestations.
 3. *Fair condition.* One or more of the following: (a) minor tip or crown dieback (less than 10%); (b) small yellowed or disfigured leaves, thinner crown; (c) significant limb wounds; (d) recent large branch removed that minimally affects shape; (e) large insect infestation; (f) any problem that should be repaired without long-term effect on the plant's health.
 4. *Poor condition.* Any of the following: (a) crown dieback from 10% to 25%; (b) significantly smaller, yellowed, or disfigured leaves; (c) branch removal that affects the crown shape in a significant way; (d) wounding to the bark that will affect the tree's health.
 5. *Very poor condition.* Any problem that is so significant that it grossly affects the shape or the health of the tree. Trees that have little hope of survival.
 6. *Replace.* Some green may be seen, but the tree is not going to survive.
 7. *Dead.*
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