

2009
Texas Tree Conference
Awards Luncheon

Round Rock, Texas
October 1, 2009



Award of Excellence

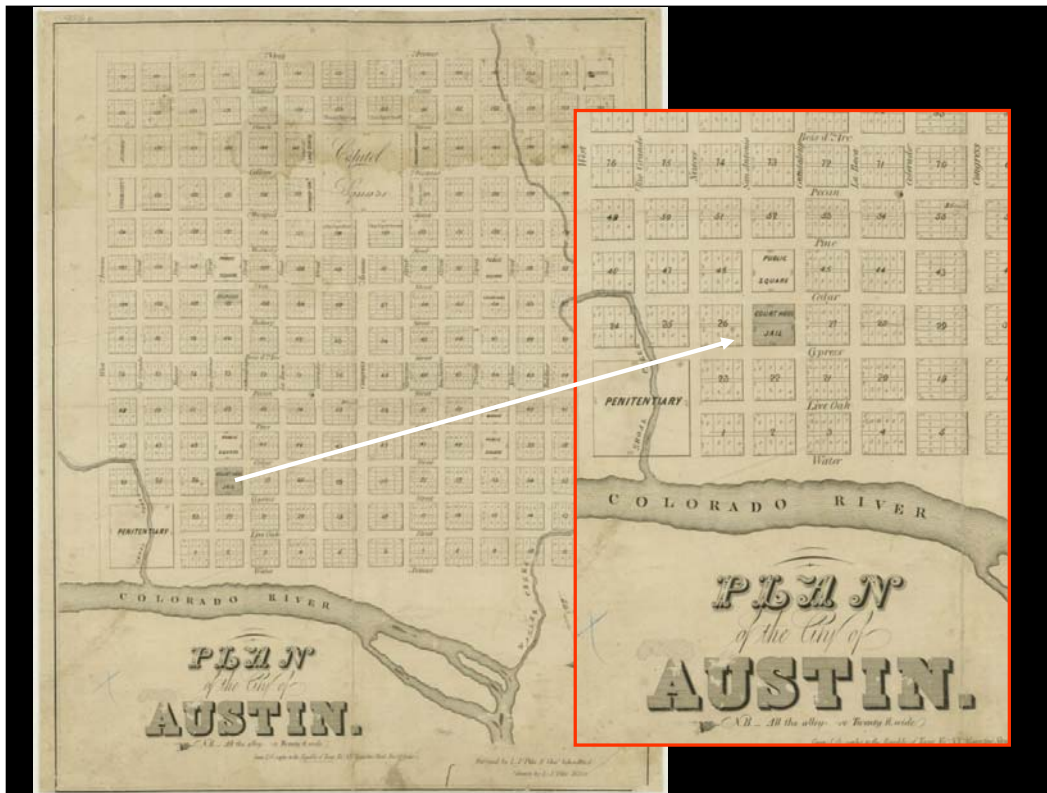
2009 Arboricultural Project of the Year

“Republic Square Tree Preservation Project”

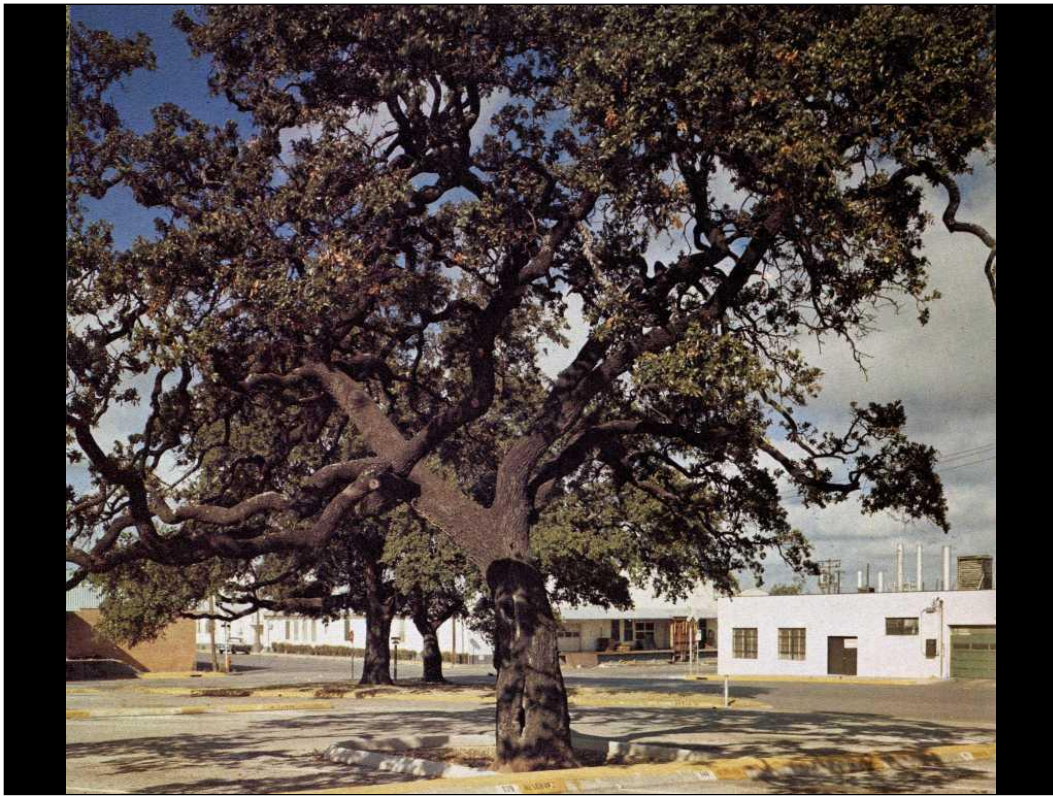
TBG Partners



Arboricultural Project Award: Recognition of a specific tree planting, care, or protection project that exemplifies modern arboricultural practices and customer service. Nominees may include arborists, tree care companies, landscape contractors, etc.



The **Auction Oaks** are, located in Republic Square at the southwest corner of the park at West 4th Street and San Antonio Avenue. In 1839, when the Republic of Texas was scarcely 3 years old, Texas Congress directed that a site for a new capital be located on the east bank of the Colorado River in what is now Travis County. Judge Edwin Waller was charged with laying out the capital city, which was to be named in honor of Stephen F. Austin. He was to set aside the most valuable lots for the capital and governmental buildings, and sell not more than half of the remaining lots at public auction. One square mile was surveyed on the bluff of gradually rising land overlooking the river and streets were established and lots laid out. Lots were set aside for churches, schools, a university, the president's house, a capitol, parks and home sites. In the shade of these live oaks, 301 city lots were auctioned. Prices paid for the lots ranged from \$120 to \$2,800.



From 1902 through World War I, the National Guard used the space for drilling exercises. As the area transformed into a manufacturing and service-oriented district, the park appears to have had little use during the 1930s and 1940s.



During the 1950s, the site became a parking lot until 1976, when it was restored as a park and named Republic Square in tribute to the Republic of Texas.



Since then, it has been used for a farmers market, outdoor movies and one of Austin's favorite pastimes, 'outdoor discussions'.



Auction Oaks prior to construction

When landscape architecture and planning firm TBG Partners set about redesigning Republic Square Park in downtown Austin, Texas, tree protection didn't have to compete for a top spot on the list of priorities. Staffing more than 20 LEED Accredited Professionals, TBG is dedicated to using sustainable design principles in its projects. Putting those principles into practice, TBG planned phase one of this project around preserving and enhancing Republic Square's famous Auction Oaks. This phase began in the spring of 2008.



TBG's rendition of what the new park might look like.

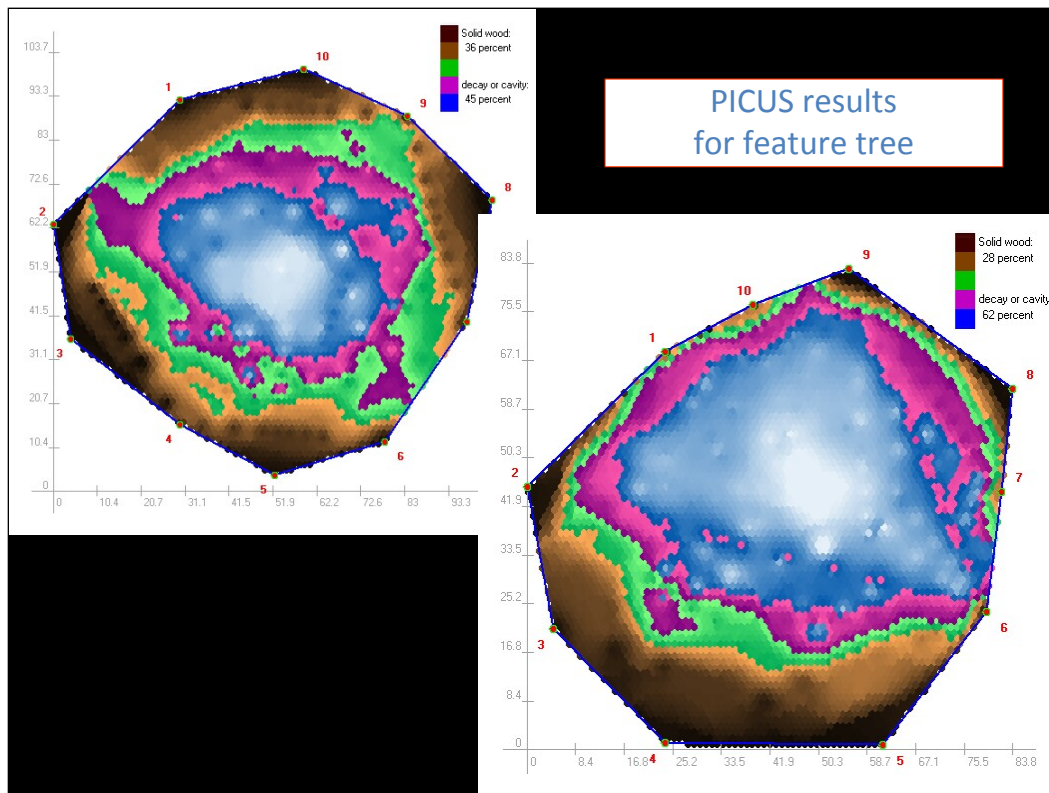
Working with the Austin Parks Foundation, Daniel Woodroffe of TBG asked Bartlett Tree Experts to assist with all phases of tree preservation, including diagnosing, prescribing, and treating for existing issues; anticipating problems and offering solutions during the redevelopment process; and recommending an aftercare program to bolster the trees' defenses against stresses and secondary invaders.



Completed root
invigoration process

Considering that the subject trees did not seem to have had care through the years, the canopies appeared to be in comparatively good shape. They exhibited some deadwood. Already featured in the park, the live oak closest to the center of the square showed a decay column on one side of the trunk. Since TBG intended to enhance this tree's featured status, investigating this decay was critical. Given the ages of all three trees, estimated at approximately 200 years each, and their presence in a public park, TBG requested that Bartlett Tree Experts perform a hazard tree analysis before any work proceeded.

After completion of the hazard analysis, Bartlett recommended for all three trees its Root-RX root invigoration program and an integrated pest management program. For the feature tree, Bartlett also recommended an exploratory excavation to determine whether roots would be affected by the proposed grade change.



The PICUS Sonic Tomograph was used to perform the hazard tree analysis. This technology provides a noninvasive way to assess tree decay. It works on the principle that sound waves will travel at different speeds through different wood densities - slower through decayed wood and faster through solid wood. The sound wave speed is calculated by sending the waves from different points around the tree. This process generates a cross-section that the arborist can view as a graphic representation of internal decay. Results indicated that while there was decay, the trees were in stable condition.



The next step was to promote new root development on a site where soil was compacted from years of pedestrian traffic. The site was also slated for significant grade changes, especially near the feature tree.

A Bartlett technician performed the patented root invigoration program on all three trees. This involved use of high-volume air to loosen soil and improve aeration without harming the root system. As part of the process, the technician also incorporated nutrients into the soil based on a prescription from soil analysis.

The prescription for the feature tree was additionally adjusted to use little or no nitrogen in the soil amendments. This would keep the tree from producing significant new leaf tissue, let it maintain close to its existing percentage of leaves, and redirect energy to the area around the compartmentalized decay in the lower trunk.



With completion of the root invigoration process, it was time to explore whether many roots would be located where a large berm existed west of the tree.



This was important to TBG because the construction plan called for removing this berm. Again using an Airspade®, the technician excavated the soil outside the small retaining wall that extended around the tree. The goal was to excavate past the wall's footer, which was about level with the final grade.



The results showed very few roots below this wall - an encouraging finding that meant removing the berm would not disturb the root system. Two berms on the west side of the park were also removed to provide a level grade throughout the park.



Commercial Project Award - Recognition of a shopping center, office park, industrial complex or other commercial project which demonstrates effective tree preservation methods, extra tree planting, proper tree maintenance, and environmentally sound planning and design. Nominations are encouraged from developers, landscape architects, engineers, architects, planners, businesses, arborists, landscape maintenance companies, etc.

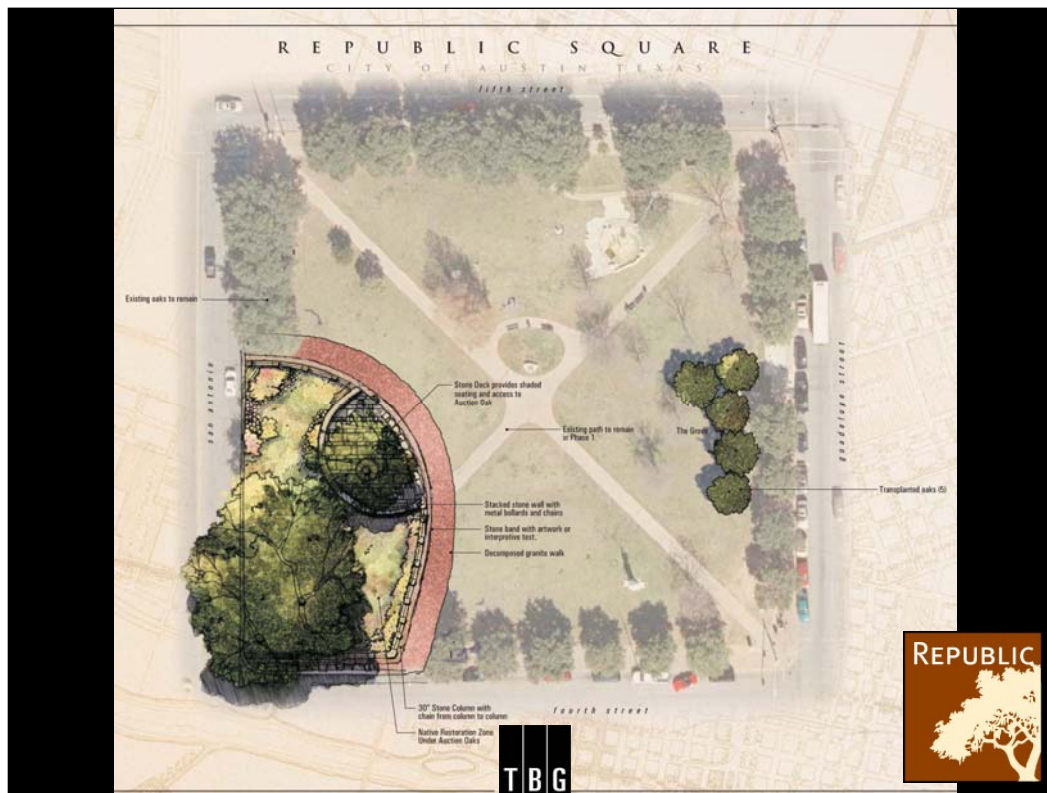


By August of 2009, TBG was ready to face another challenge: how to construct a deck under the feature tree - and over the critical root zone - without removing or damaging significant numbers of roots. Guided by what was best for the tree, TBG used an innovative construction plan that would safeguard the tree's root system. The deck would sit on I-beams with hand-dug holes for concrete piers to support the deck's weight. Each hole would be carefully dug with an Airspade® to avoid harm to roots.



Hole positioning would contain flexibility to rotate or move a few feet if needed for best accommodation of roots. If the technician encountered roots too large to be removed or otherwise accommodated, they would be encased with a half-section of pipe for protection; the pipe would be large enough to allow for root growth.

As of this writing, deck construction has begun, and TBG used a Bartlett technician to operate the Airspade® for digging. Deck completion is scheduled for mid October, and TBG is in frequent communication with Bartlett Tree Experts to see that the trees continue to receive the best of care.



TBG's conduct throughout this entire project illustrates the substance behind its approach to arboricultural project components. Familiar with the City of Austin's tree protection guidelines, TBG conducted this project in a way that treats tree protection as a central tenet of sustainable design rather than a drag on its budget and schedule.

TBG's handling of the Republic Square tree preservation project serves as a model of excellence for how a contracting business accomplishes successful tree preservation on a construction project. TBG's stature as a major landscape architecture and planning firm in Texas, its exemplary management of the Republic Square project, and its dedication to sustainable design make the company a powerful influence in furthering the aims of responsible arboriculture. **Please join me in congratulating TBG Partners for the 2009 Texas Arboricultural Project of the Year Award.**