



Address?

Re: City of Austin Urban Forestry Board Recommendations for the Proposed Barton Springs Pool General Grounds Improvements

Dear ?:

At the August 15, 2012, Urban Forestry Board (UFB) meeting, the UFB was asked to comment on the proposed Barton Springs Pool (BSP) General Grounds Improvements. Given the site constraints, the UFB recommends the use of a suspended solid pavement, with irrigation and soil amendments permanently maintained, within the potential critical root zone (CRZ) of planted trees. Since shade and biomass are functionally important in this setting, smaller tree species should not be planted in lieu of large shade species with their future CRZs protected and maintained. Since these are new plantings, there may be no need to increase pavement grade to protect the CRZs.

Silva cells or similarly suspended pavement should accommodate the full CRZs of large shade tree species in the interior of the south parking lot, since these cells are suited for new construction where no existing trees interfere. Information on Silva cells may be found at <http://www.deeproot.com/blog/blog-entries/what-is-the-silva-cell-and-how-does-it-work> and <http://www.deeproot.com/blog/blog-entries/new-silva-cell-standard-details-released>. A soil medium is used within the cells, with pavement over the cells. Thus, the soil volume of the parking median may be increased without affecting the parking lot layout.

The tree roots should have a sufficient volume of uncompacted rich gardening soil under the pavement (no structural soil). The Urban Forestry Program currently uses 1.2 cu. ft. of soil per sq. ft. of mature canopy based on several papers. However, based on a review of these same papers, the UFB recommends 2.0 cu. ft. of soil per sq. ft. of mature canopy. The Deep Root blog (Silva cells) lists cities with soil volume requirements ranging from 212 to 1500 sq. ft. per tree (<http://www.deeproot.com/blog/blog-entries/municipalities-that-are-doing-more-for-trees>).

In summary, the UFB recommends that the full CRZs for large shade tree species is included in the interior of the south parking lot during the BSP grounds improvements. Please revise the plan for the south parking lot, in order to accommodate the CRZs with sufficient soil volume...

Thank you for your attention to this matter. Please acknowledge receipt of this letter.

Sincerely yours,

Patrick Brewer
Chair, Urban Forestry Board

Cc: Mayor Leffingwell and City Council members; Marc Ott, City Manager; Bert Lumbreras, Assistant City Manager; Sara Hensley, PARD Director; Michael Embesi, City Arborist; Kimberley Mc Neely, PARD Assistant Director; Tom Nelson, PARD Division Manager-Aquatics; Charles

Vaclavik, PARD Division Manager-Central Parks; Pat Fueller, PARD Division Manager-Forestry;
Angela Hanson, Acting PARD Forestry Manager