

ELIZA SPRING

Eliza Spring, one of the three principal springs of Barton Springs, is located behind the concession stand. It is surrounded by a concrete amphitheater that was built in 1903 by Andrew Zilker. Curiously, he built it as an outdoor meeting space for his Elk's chapter. The amphitheater is approximately oval-shaped with its long axis oriented southeast-northwest. It has several generous steps at the water's edge, suitable for lounging, and it has an access stair that enters from the northwest. In Zilker's original construction, the spring waters drained through a slot in the concrete to the southeast and then, open to the air, on to the creek beyond. Today those waters are carried in a buried concrete pipe and are drained, not into the Pool, but into the bypass tunnel.

Eliza Spring is currently home to the largest population of the endangered Barton Springs salamander. While the numbers of salamanders in the Main Spring are often in the tens these days, the numbers in Eliza are in the hundreds. In literal terms, the viability of the species is a complex matter. But the numbers show that the population at Eliza is very important.

After Zilker's construction, a number of additional construction efforts were undertaken at this site, involving additions or modifications to his work. The first two involved adding height to the amphitheater walls. A third involved pouring a concrete "floor" over the spring itself. Yet another effort involved closing a keystone-shaped opening with stone. Another change was to bury the spring run in a 24" concrete pipe. Because the date of the pipe is uncertain, it is not known if it was a part of one of the other modification efforts.

The first effort to add height to the walls was done sometime in the 1930s, and involved extending Zilker's walls with more concrete. The access stairs were also extended and the surrounding grades were raised with this construction. The second addition was more recent, and involved adding one or two courses of limestone wall to the top of the 1930s concrete wall. The purpose of this effort was to divert storm water from entering the vessel and compromising the water quality in the salamander habitat. It was done in conjunction with the addition of a stone flume that directs storm water to an area drain below the spring.

The concrete floor was the work of Beverly Sheffield, longtime Director of the Parks Department. His reasons for doing so have been lost to history. Thickness is estimated at 12" to 18".



Eliza Spring holds a unique position in both the cultural and the ecological history of the park. It is the home of the most robust population of the endangered Barton Springs salamander, and its concrete amphitheater construction is credited to Andrew Zilker himself. It is simply too important to let it remain in such poor condition and in such isolation, marooned as it is behind the concession stand.



Andrew Zilker's amphitheater has been altered over the years. Note the added band of concrete (the lighter color) and two courses of limestone. This plan recommends returning Eliza to Zilker's 1903 form.



View towards Pool. Stonework should be removed to reopen slot in amphitheater, allowing flow into recreated spring run.

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With the additions to Zilker's walls, the amphitheater is deeper and more stark than it was during his time. The hardscape that surrounds it is unrelieved by the softness of planting. The fence that surrounds it is old and in poor shape. There is only one interpretative graphic, and it is attached casually to the fence. There is no sign to indicate the name of the place. Eliza should be one of the premier interpretative destinations in the park.

Recommendations

First, reconstruct salamander habitat elsewhere

No recommendation can be made for Eliza Spring without first acknowledging its importance as an endangered species habitat. Since Eliza is currently the home of the largest salamander population, it is not unreasonable to say that the future of the species relies on the health of this habitat. With this in mind, any construction work should be undertaken with extreme caution, and mitigation efforts should be approved in advance by regulatory authorities.



Despite its location, tucked behind the concession stand, Eliza Spring is a popular park destination.

At the same time, Eliza should also be recognized for its unique place in the cultural history of the park, since the amphitheater was built by Andrew Zilker--the namesake of Austin's oldest and most important park--himself.

Eliza Spring should be recognized as an element of special significance, and should be planned for accordingly.

Before beginning any work at this site, efforts should be undertaken to reconstruct the habitat at other sites in the hope that it fosters increases in population. Sunken Garden, in particular, holds special promise in this regard. With stable populations at other spring sites, then the situation at Eliza can be evaluated to determine if proceeding with construction can be done prudently.

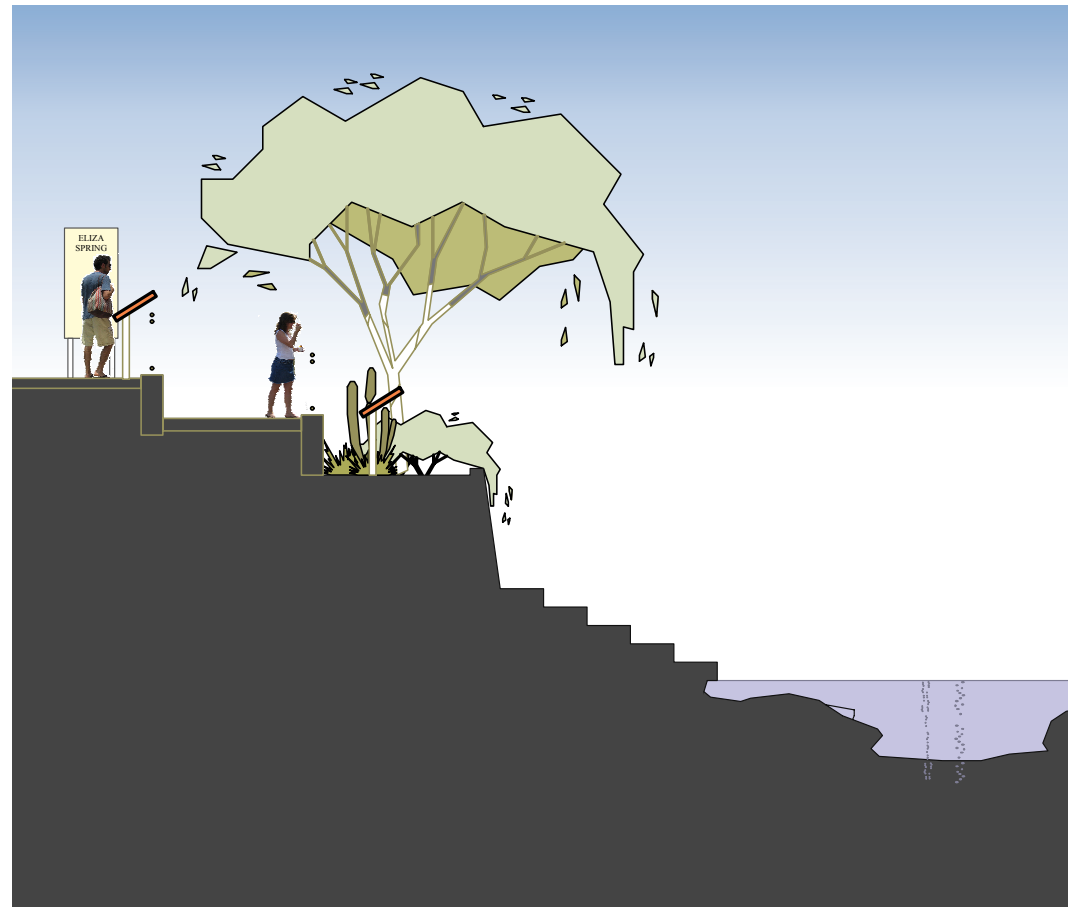
Reconnect Eliza Spring to the Pool

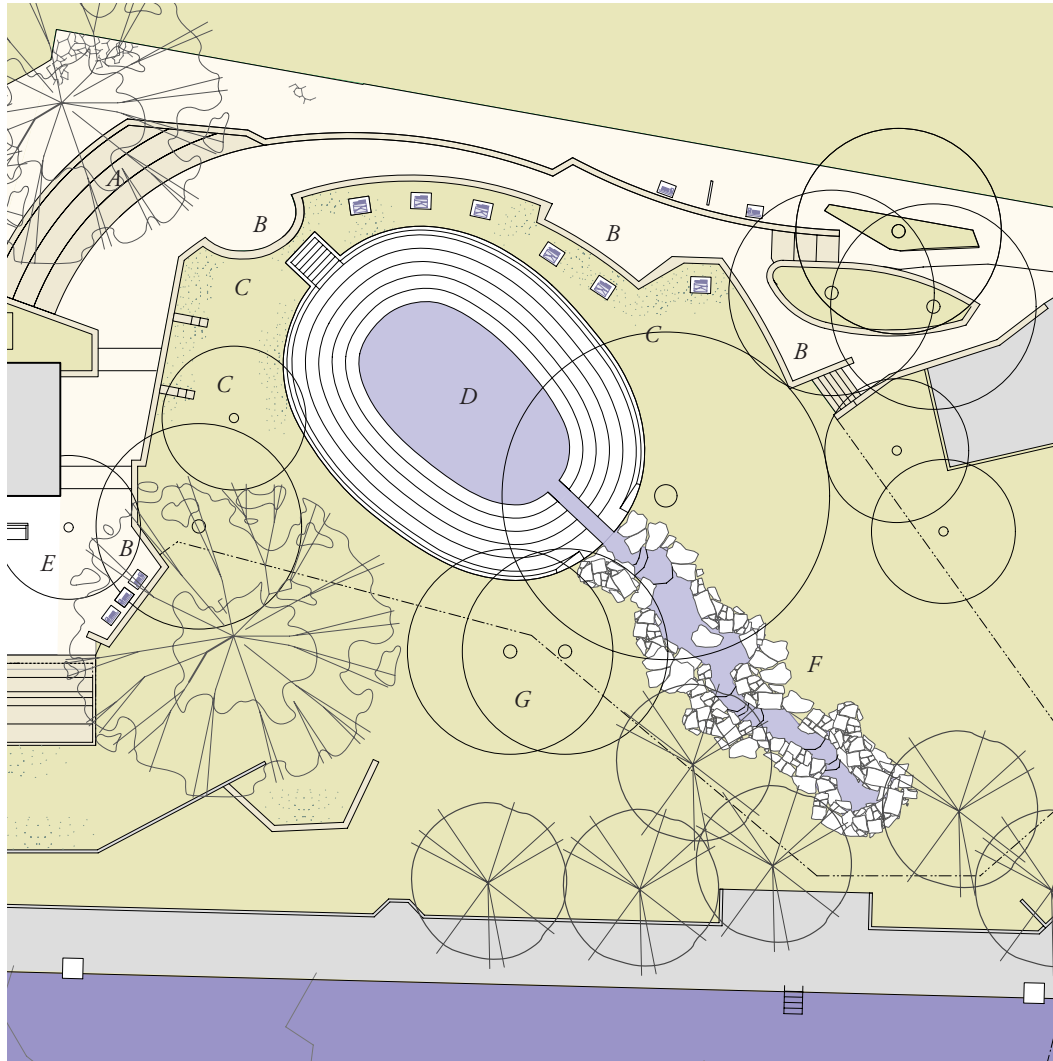
With this as a pre-condition, reconnect the waters of Eliza Spring to the waters of the Pool by building an open-to-the-sky spring run. This effort would, of course, involve the removal or abandonment of the existing concrete pipe, and it would require the study of passing the waters over (or under) the bypass tunnel. Remove the stonework blocking the southeast "keyhole" to visually reconnect the Spring to the Pool.

Remove concrete wall extensions and redesign area

Remove the post-Zilker concrete wall extensions and the recent stone wall extensions.

Section at Eliza Spring. After removing alterations, new walls should be built leaving a landscape buffer between overlook and vessel. Note the integration of interpretation and wayfinding materials. Note also that the concrete bottom has been removed.





Eliza Spring

- A. *New sweeping steps to reinforce the connection between Eliza Spring and the Tree Court.*
- B. *Create overlooks for viewing down into the bowl. Integrate interpretive materials into the experience to “tell the story” of the park.*
- C. *Create landscape buffer to gracefully frame the amphitheater with soft, attractive plants.*
- D. *Remove the concrete slab that covers the Spring. Coordinate with safety precautions to protect salamander.*
- E. *Wrap overlook around new, smaller concession stand to create a better connection to Tree Court.*
- F. *Rebuild spring run to connect the waters of Eliza to the waters of the Pool. Install operable sluice gates for operational flexibility.*
- G. *Regrade with berms or other landscape devices to mitigate against flooding.*



Recreated spring run should use native Texas riparian planting.

Lower the grades at the top of the amphitheater to create a generous planting bed at approximately top-of-wall (Zilker wall, that is) level. Build new retaining stone walls several feet back from the amphitheater perimeter to allow visitors visual access, while softening its presentation with a ring of appropriate plantings. New retaining walls should be built with Central Texas limestone. Redesign walks and approaches to include lookouts, interpretative materials and attractive landscaping.

The lawns between the train station and Eliza Spring presently has an old chain link fence for part of its length. Replacement of that fence with a more attractive permanent fence, with additional vine and shrub planting to serve as a barrier between the retaining wall and the heavily trafficked walk should be considered.

Replace lawns with more natural planting areas

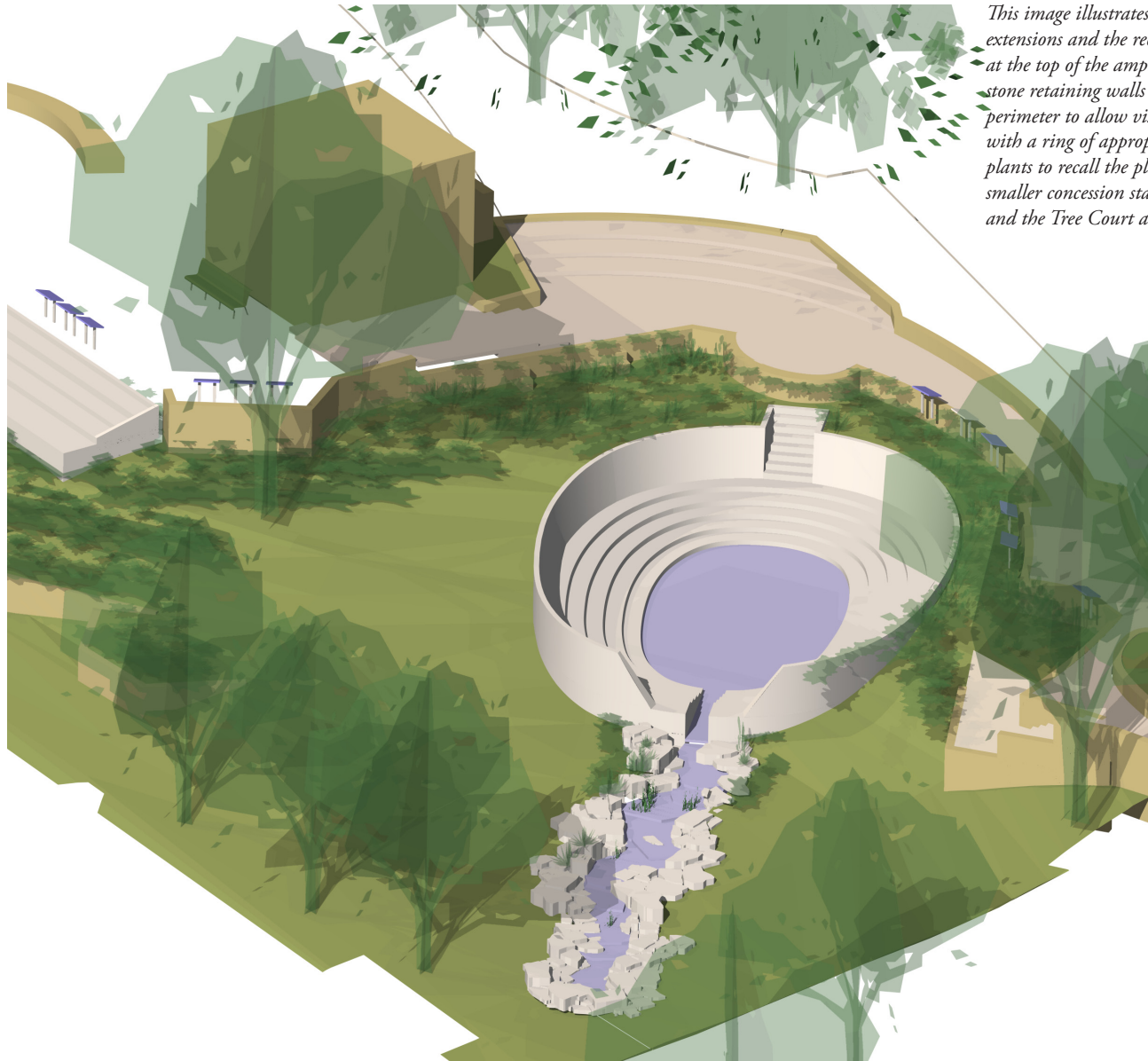
The lawn surrounding Eliza Spring should be replaced with native vegetation that would stabilize the slopes around the spring and require less maintenance. The area is large enough and sensitive enough that preparation of a planting plan will be required.

Reclaim storage area beside concession stand

The area to the north of the concession stand needs to be reclaimed from its current use as trailer parking and trash storage. That will allow for a clearer connection to the Tree Court.

Plant more trees

Eliza Spring is now shaded by a large cottonwood and a large elm, neither of which are in good condition. Because the salamander population in Eliza Spring is thriving, we assume that the current conditions of shade and leaf drop are agreeable to them. We recommend that new shade trees be planted to maintain the already dwindling shade, and that they be species with leaves that will decompose as readily as the leaves of the cottonwood and the American elm that currently shade the spring. We recommend the planting of river walnut (*Juglans microcarpa*), cedar elm (*Ulmus crassifolia*) and bald cypress (*Taxodium distichum*). The bald cypress should be from a hill country seed source, to be adaptable to our alkaline soil and water. While walnuts are known for allelopathic interactions with other plants, we have found no evidence of any negative interaction with animal life, and walnuts do occur naturally around hill country springs which would be assumed to have salamander populations.



This image illustrates the removal of the post-Zilker concrete wall extensions and the recent stone wall extensions. The grades are lowered at the top of the amphitheater to create a generous planting bed. New stone retaining walls are built several feet back from the amphitheater perimeter to allow visitors visual access, while softening its presentation with a ring of appropriate plantings. Plantings should be native Texas plants to recall the plant palette during Zilker's time. Note that a smaller concession stand allows for connections between Eliza Spring and the Tree Court around both sides of the concession stand.