Project Name:

Boiling Springs State Park

Project Location:

Woodward, OK

Project Purpose:

Boiling Springs State Park in western Oklahoma is home to a natural phenomena of a boiling spring that was showcased in the 1930's by a surrounding spring box and viewing shelter that was built by the Civilian Conservation Corps (CCC). These springs have the appearance of "boiling" as the sandy-bottomed spring is churned with the strong inflow of sub-surface water. The new plan replaces the existing, nondescript shelter with a new, Works Progress Administration (WPA) era design shelter using stained and un-milled logs with stone. The original boiling spring was encased in a square box to help define and protect the spring as a park feature. The new spring box



has been modified to an organic shape and treated with native limestone for a more natural park presence. The former non-compliant handicap ramp that allowed people to get to the spring was replaced with winding walkways that provide ADA accessibility. Design work also include improvements to surrounding park areas such as: playgrounds, parking areas, picnic areas, and lighting. The goal for this project was to implement all of the changes without interrupting the natural spring, allowing for conservation during construction and giving the park a more natural appearance while increasing its accessibility.

Project Impact:

Since the projects completion, an increase in the parks visitors has put this once forgotten state park back on the map. The park is now utilized as an educational, recreational, and ecological destination where nature inspires vacation. The parks natural resources have become community assets that maximize beneficial economic, ecological, and social uses.

2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Special Factors and Project Significance

- The Landscape Architect was asked by the Oklahoma Tourism and Recreation Department to make improvements on the playgrounds in the park and the shelter area housing the boiling spring. Plans were developed to eliminate the existing worn playground equipment and replace it with updated, ADA approved loose rubber surfacing, plastic borders and updated playground equipment incorporating rock climbing equipment. Parking spaces and sidewalks were also added or improved to meet ADA guidelines near the playgrounds.
- Preservation of the awe-inspiring wildlife within the park was imperative. Therefore, it was critical to build the improvements without disrupting the natural geological feature of the boiling spring or the sensitive ecological systems within the park.
- •New native stone walkways, stairways, red cedar gateways and overlooks were added to the site including a 980 square foot Red Cedar timber shelter. Custom Red Cedar furniture was designed and installed as part of the park improvements. A large stone plaza reflecting pool was constructed featuring large stepping stones making the site interactive for visitors. Over 375 tons of natural stone boulders were integrated into the design improvements.
- The site includes a natural spring fed stream that was planted with over 600 native plants. These plants are well adapted to the area and will require little additional care from the park service. This area along the stream is also sensitive and had to be designed in order to maintain the natural flow of the stream, improve the bank stabilization all while implementing the native planting improvements. Native plants were utilized throughout the site and include native Hibiscus, Indian Grass, Buttonbush, Cardinal Flower, Black Eye Susan and Goldenrod.
- •Boiling Springs State Park offers three scenic trails; Burma Road, Nature Trail, and River Nature Trail. In addition to the trails, the park offers biking, fishing, hiking, swimming, volleyball, wildlife viewing, and on-site lodging.

Role of the Landscape Architect

- •The Landscape Architect served as the prime/lead for the project and was responsible for facilitating and managing the overall process from schematic design through construction. The LA collaborated with a design firm in the schematic phase of design to revise the overall concept and to adjust the project within the budget requirements of the State Parks.
- •The LA was responsible for managing the general contractor through all aspects of the construction and coordinating activities of specialized subcontractors. This included pay application review, budget review and coordinating client purchased features.
- •As the prime/lead the LA either provided or guided the overall aesthetics of the site elements. In addition, the LA coordinated the efforts of the playground installation and all site amenities.

2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Site Plan



2011 OK ASLA Awards EntryGeneral Design (Constructed Projects)Project Name: Boiling Springs State ParkOK



Conceptual Graphic

•Shelter Over Boiling Springs



2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Existing Conditions

•Boiling Springs Observation Platform

•Inside Look of the Boiling Springs

•Overall View of Shelter and Boiling Springs







2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Keeping Things Boiling

•Preservation of the spring was the main consideration during the construction process.

•The spring churns out about 30 gallons of water a minute from beneath a sandy bottom giving the appearance of boiling.

•A large pipe and sump-pump were placed around the spring in order to maintain and not disrupt the boil.

•Removal of the old square framing that housed the spring allowed for a more natural form to take shape around the boil.



2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Shelter Area

Construction photos









2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Staircase and Stonework

Construction Photos



2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Shelter Area

•Native Red Cedar Log Construction

- •Local Limestone and Flagstone
- •Native Plantings Around Shelter
- •Boiling Spring
- •LED Shelter Lighting
- •Educational Signage







2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Playground

- •Equipment manufactured by Little Tikes
- •Rubber Mulch Safety Surface
- •Composite Rock Climbing Boulders
- Swing Set
- •ADA Accessible Ramps







2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



<u>Fountain</u>

•The boiling spring water flows into the reflection pond.

•Three suspended flat rocks then spills over into a meandering stream flanked by existing vegetation and boulders.









2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Site Amenities

•Stone Columns

- •Stained Cedar Beams
- •Flagstone Rest Areas
- •Stained Cedar Benches
- •Educational Signage





2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Interactive Signage and Planting

Benefits for using native grasses and wildflowers are less water, pesticides and fertilizers, cutting the cost for maintenance improving the habitat for butterflies, birds, and other wildlife. It also makes an aesthetic beauty that links the design to the natural environment and complements the stone and cedar beams in the shelter, seating, and staircase. New signage was placed around winding sidewalks to share the history of the springs and help immerse the visitors with their surroundings.







2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Bio-Retention Swale

This Bio-Swale is located down hill from the parking lot and provides stormwater treatment and flow retardation during heavy rains while removing finer particulates, dissolving pollutants, and providing oxygenation. It also acts to disconnect the impervious areas from downstream waterways and provide protection from frequent storm events by reducing flow velocities compared with piped systems.





2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Miscellaneous Site Photos



2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park



Miscellaneous Site Photos



2011 OK ASLA Awards Entry Project Name: Boiling Springs State Park

