

41st Street QuikTrip Plaza and Playground

Tulsa, OK

Project Purpose

QuikTrip Corporation decided to commemorate its 50th anniversary by giving back to the community with the 41st Street QuikTrip Plaza and Playground. The “project purpose” evolved to provide a signature plaza and a playground as an innovative outdoor environment with unique, flexible space for children’s play, special events and all kinds of gatherings. An underlying concern for the initiative was to help children at risk and improve the quality of life in Tulsa. QuikTrip president Chet Cadieux expressed it the following way: “Our theory is that we can make some kind of difference in the life of a child, much less lots of children, then that will solve a lot of society’s problems in the next generation”. The plaza and playground was supported by other generous donors, including the George Kaiser Family Foundation.

Project Goal

The design goal was driven by QT’s determination to provide a uniquely innovative play experience for children coupled with a comfortable family friendly plaza/gathering area within the River Parks along the Arkansas River. QT approached the project with the intent of developing a landmark destination along Tulsa’s popular River Parks trail system that would provide a new benchmark for any future gathering areas planning along the length of the 22 mile urban trail. The landscape architect (LA) collaborated extensively with members of QT’s management to have a clear understanding of QT’s vision for the space. QT is well known for innovation in their own industry. This carried over into the design meetings where QT never failed to keep the level of creativity high. The design intent for the children’s activity area was to bring the river to the children through innovative high play value water elements in close proximity to cutting edge playground equipment. All of this was to be provided with an emphasis on family fun. Pleasant settings for adult supervision was in integral part of our plan, not a couple of benches placed as an afterthought.



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Design (built)

Role of the Landscape Architect

- The Landscape Architect served as the prime/lead for the project with responsibility to facilitate and manage the overall process from schematic design through construction. We 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 QuikTrip.
- As the prime/lead the LA either provided or guided the overall aesthetics of the site elements including the architectural features. The LA hired and coordinated the efforts of the architect and engineer through the entire design process. In addition, the LA coordinated the efforts of the fountain engineer, irrigation consultant and geotechnical engineer. The LA was exclusively responsible for obtaining the 404 Permit from the US Army Corps of Engineers and finding of “no adverse impact” to federally listed species from the US Fish and Wildlife Service due to the proximity to the Arkansas River.
- The LA had responsibility for managing the general contractor through all aspects of the construction and coordinating activities of specialized subcontractors (fountains and playground). This included pay application review, budget review and coordinating client purchased features (approximately 10% of the overall construction budget).
- QuikTrip and River Parks were responsible for providing review and comment during all phases of design/construction and coordinating with the project team during weekly design/construction meetings facilitated by the Landscape Architect.

Special Factors and Project Significance

Unique Requirement

- Creating a landmark “family” destination along Tulsa’s popular River Parks trail system that would provide a new benchmark for any future gathering areas planned in the length of the 22 mile urban trail.

Special Factors

- A unique challenge was that of the 12’x12’ arched drainage culvert that ran through the plaza site requiring utility re-routing and leaving only 2” for the plaza fountain drains to slope downward into the 8,000 gallon reservoir.
- The project site was in the FEMA 100 YR Regulatory Floodplain and the City of Tulsa Urban Regulatory Flood Plain of which each were at a different elevation and had differing municipal and federal development requirements. LA was required to provide compensatory storage for fill within the FEMA 100 YR and special architectural detailing for the restroom, which happened to fall below the CoT Regulatory, but was out of the FEMA 100 YR.
- Special design considerations for fountain vault, 8,000 gallon reservoir, connections to sanitary sewer due to proximity to the Arkansas River and elevation below the FEMA 100YR.
- Design and 404 Nationwide Permit approval (through USACE) for over 700 LF of hardened bank stabilization above the 60K CFS flow elevation of the Arkansas River (By LA).
- Design and 404 Nationwide Permit approval (through USACE) for stormwater outflows to the Arkansas River (By LA).
- Obtain finding of “no adverse impact” on federally listed species by the US Fish and Wildlife Service.
- LA addressing Oklahoma Department of Health state laws and regulations for the interactive fountains.

Significance to Profession

- The first high profile public project of this magnitude to be lead by a Landscape Architect in Tulsa. The Landscape Architect was identified on numerous occasions through local media both newspaper and television.
- Being the lead/prime LA on such a high profile, successful project, that is utilized by the public as a recreation destination within the City of Tulsa, increases awareness and appreciation for the profession.
- The Landscape Architect’s understanding of complex site issues (USACE, USFWS, FEMA, CoT Regulatory Floodplain, 12x12 Arch Storm Sewer, 60 Sanitary Sewer Force Main, OK Dept. of Heath, etc.) and implementing a successful signature destination for the community has shown community leaders the breadth of our profession.

12x12 Conc. Arch Storm Sewer



Arkansas River 43,000 CFS



Arkansas River Bank Stabilization



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Incorporating Green Design

- The playground was carefully designed around a beautiful existing large ash tree to preserve its character and its ability to shade most of the playground.
- LED lighting was used in the up lights and shelter lighting to save on electricity
- Even though fountains are a main feature of the park, water use is conserved by recycling and treating water used for the fountains. Other water conservation was incorporated through low water needs plant material and native plant material, by not irrigating a majority of the sod areas, and by using areas of synthetic turf that do not require watering.
- Transit oriented development is important with green design as well as saturated residential and commercial areas such as the location of the plaza at 41st and Riverside. Local bus routes, parking, proximity to the most widely used trail in Tulsa, solar powered credit card bike rental, and potential for future river taxi all create safe and convenient access for all users, including pedestrians of all ages and abilities, bicyclists, motorists, and public transit vehicles.
- The use of local materials such as the surface limestone that was widely used on the building, seat walls, shelter columns, and flagstone used as wall caps.



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On-going Success of 41st Street QuikTrip Plaza

- The new 41st Street QuikTrip Plaza is a water-loving kid's dream come true, and Tulsans are water-lovers by nature given the city's hot summer climate and its location along the Arkansas River. The park's fountains are key to its family friendly design and provide a central theme for its purpose—a main city park and a “front porch” for the whole town, as civic leaders call it.
- Since the dedication May 1st, 2009 the 41st Street Plaza has gained a surge of activity surrounding and magnifying its observable success with all Tulsans. Local vendors are dishing out hot dogs and scooping out sno-cones to keep the hungry fed and hydrated.
- The launch of ‘Rhythm on the River’, a free Friday night music event, highlights the evening sunset off the Plaza's observation deck while a gathering of all generations enjoys the talents of local musicians. The plaza also hosts morning gatherings for ‘Friday's in the Park’ and Thursday's popular ‘Story in the Park’. Its popularity also found it host to this years' Operation Aware Fund Drive and took part in ‘Christmas in the Park’ with multi-colored lights and themed holiday displays throughout the month of December.



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Design (built)

Schematic Collaboration

- Schematic collaboration between LA and design firm is shown in the left image to meet the budget requirements of the client. Rendering at the right was produced by the LA to as a part of the Design Development phase and was published in the Tulsa World Newspaper.



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Design (built)

Design Development Sketches (sketch-up renderings)

Slides below show the final rendition of the entry arbor, restroom, plaza paving, shelter, upper deck seating area and interactive plaza fountains.



Design Development Sketches (sketch-up renderings)

Slides below show the final rendition of the KOMPAN playground area in relation to the interactive children's fountains, geometric berms, and the plaza features.



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Design (built)

Plaza Area

Construction Photos:

- Steel Entry Arbor/Shelter
- Plaza Fountain
- Entry Arbor/Restroom
- Overlook Plaza Deck Forms



Interactive Areas

Construction Photos:

- *Artificial berms*
- *KOMPAN equipment with rubber safety surface*
- *Four Fountain Features*
- *Interactive Play Fountain*



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Design (built)

Plaza Area

Photos:

- Plaza Fountain
- Eating Area/Restroom
- Seating Areas
- Deck/Overlook



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Design (built)

Plaza Fountain

Photos:

- Plaza Fountain
- Plaza Fountain at Night
- Eating Area/Restroom
- Plaza Fountain Lighting



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Design (built)

Kids Fountains

Photos:

- *Stepped Fountain*
- *Bubbler Fountain*
- *Arched Fountain*
- *Lazy River*



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Design (built)

Kids Interactive Fountain

Photos:

- *Interactive Play Fountain*
- *Seamless transition from play Equipment to fountains*



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Design (built)

Pyramidal Berms

The berms are covered in a plush artificial turf that keeps maintenance simple and sweet...a leaf blower in most cases.



The berms are placed to provide separation from the trail and they have quickly become a popular place for adults and children to lounge and observe the playground.

Playground Area

Photos:

- KOMPAN's *GALAXY* for Ages 5-12
- KOMPAN's *ELEMENTS* for Younger children



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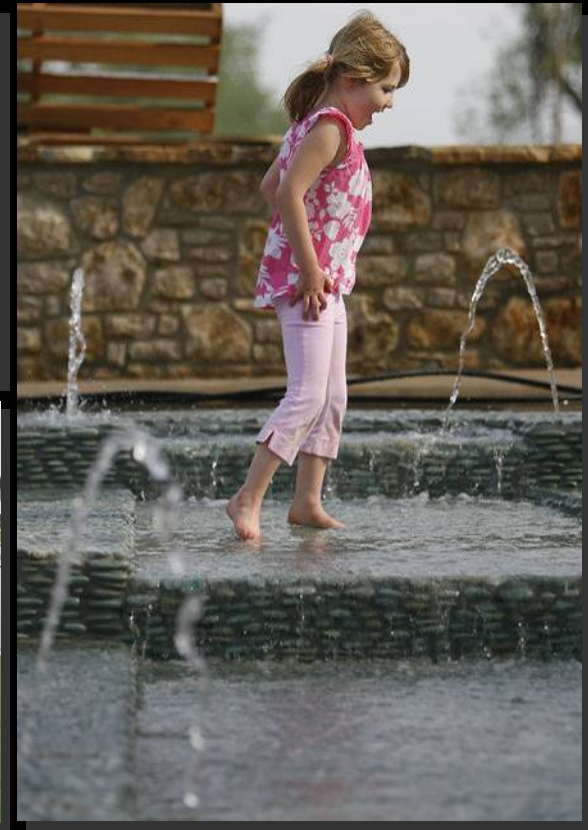
Design (built)

Activities at the Plaza

- Day gatherings for 'Story in the Park' and 'Friday's in the Park'
- 'Rhythm on the River' Friday evenings



'Rhythm on the River', a free Friday night music event, highlights the evening sunset off the Plaza's observation deck while a gathering of all generations enjoys the talents of local musicians.



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