Preliminary Architectural Report Community Facilities Improvement Application

Wilson Park

City of Arkansas City, Kansas

Report Prepared By: LK Architecture 345 Riverview, Suite 200 Wichita, Kansas, 67203

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Jeffrey A. Best, PLA Landscape Architect (316) 268-0230 jbest@lk-architecture.com



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Section 1- Introduction

Arkansas City lies in the peninsula formed by the meeting of the wide Arkansas and swift Walnut Rivers, in Cowley County, one of 105 counties in Kansas. Prior to July 15, 1870, settlers in this part of the country were on Indian land and were obliged to pay head rights to Chetopa, Osage Indian Chief. But when Osage lands were opened for settlement on July 15, 1870, claims were accepted.

The town of Arkansas City was surveyed in 1870. Its newspaper began that year as well as a department store. Shortly thereafter, a post office, First Methodist School, sawmill, flour, and feed mills commenced operation. The year 1872 saw the incorporation of the town and the Santa Fe Railway extended its line from the north on December 3, 1879.

The town had its own waterworks by 1881, utilizing a spring as a source and pumping the water to a reservoir on a hill in the south part of town. From this point pipes to the town residences distributed it.

These were a few of the starts that were noticeable during the first years after this area came into the hands of the white man, but the Indian had been a contributing factor in the growth of Arkansas City. The town has played a vital role in the territorial development of Indian lands to the south in the state of Oklahoma.

When history's most fantastic races were made, Arkansas City was the starting point, i.e. the Run of 1889 and the even more exciting event in 1893 when the renowned Cherokee Strip was opened. The prize on this occasion was 8,000,000 acres of fertile ranch and farmlands. The starting point was the Kansas –Oklahoma border – four miles south of Arkansas City. Some months prior to the big land race, Arkansas City was the rendezvous point of 100,000 eager settlers who made plans and "big deals" before the first pistol shots were fired signaling the start of the race at noon on September 16, 1893. Jockeying for positions was every conceivable mobile vehicle of the time. Ox carts, bicycles, covered wagons, Indian ponies, and racehorses were all seen lined up. In addition, thousands walked and/or ran.

Industry, which now plays an important role in this southern Kansas town, first made its appearance with the construction of two steel barges for navigation on the Arkansas River in 1886. Those were the days when steamers plied the Arkansas between Arkansas City and Fort Smith carrying as much as 100,000 pounds of Kansas flour on every trip.

Ark City's illustrious history includes a Kansas Governor, Robert Docking, and two federal judges. By heritage its residents are not afraid of work – a healthy, strong, industrious people that welcome the opportunity to prove to everyone that they are welcome in Arkansas City, Kansas.

Arkansas City by the numbers:

Population: 11,997 Size: 9.3 Square Miles 1,287.6 People per Squre Mile

Section 1- Introduction

Wilson Park has been a continual center of activity and point of pride for the community since its creation in 1913. It is a foucal point for Arkalalah, the biggest festival in Cowley County) which begain in 1928 and Tacalalah, which celebrates multi-cultural cusine. The orginial rotunda built in the 1920's was rennovated a few years ago and now features a movie seies and music events.

In 2015, LK Architecture was retained by the City of Arkansas City to assist them with a master plan for Wilson Park. The original 4.5 acre park featured six tennis courts, the Rotunda, Train Engine, Playground, and resto-room building. An adjacent four acre property became available and the city wanted to reimagine Wilson Park. A stakeholder group was created of city staff, community groups and citizens to guide the planning process and vision for the park. At the conclusion, a master plan was presented to the public both on-line and at community events. The overall master plan included plans for a new, signature playground, splash pad fountain, farmer's market area, expanded plaza space, pathways, lighting and park amenities. Since then, the city has completed an initial phase of improvements which included removal of four tennis courts and the addition of a new parking lot and farmer's market building.

This report is based on LK Architectures previous work with the City on Wilson Park which included park observations, stakeholder meetings and input from the public and users. Arkansas City, working with LK Architecture is proposing to implement the next phase of improvements to Wilson Park by adding a new splash pad fountain and updating its current playground equipment with a signature, iconic, playground structure. The updates will draw additional usage not only from local residents but the unique play experience will attract families from surrounding communities as well.

Overall, the Wilson Park Improvement Project is a committment by city leadership to improving the quality of life for the community. This is a park that has a rich and significant history in the community and is in need of these improvements so that it can be that special place for future generations as it has been for so many before.



Original Park Master Plan

Completed in 2015, the master plan featured the additon of 4 acres, a community building, farmer's market, splash pad fountain, new restrooom/pumphouse, playground, parking, pathways, and lighting

Section 2 Location and Site

Wilson Park is generally located in the center of Arkansas City approximately 1/2 mile north of downtown on Summit Avenue. Summit Avenue is the major north/south roadway in the City.

The 4.5 acre park has residential to the west and south, commercial to the east and north. Directly north is a vacant, city-owned parcel of ground.

A complete survey was completed for the park at the time of master planning which indicated existing water, sewer, storm sewer and electrical around the perimeter and crossing the park.





Section 3 Analysis of Existing Facilities

A complete site survey was completed at the time of master planning. The survey indicates the existence of water, sanitary sewer, storm sewer and power. Two water lines cross the site north/south along with a storm sewer line. Sanitary sewer is located along Birch and in the alley to the west. Power is located in the alley and serves a panel at the Rotunda.

Playground equipment is dispursed into two general locations. The equipiment is dated and, in some cases, are damaged or fallen into disrepair. The most recent equipment was installed in 2001 and is subject to rusting at foundations and discontiued parts for repairs. Along with three more significant playground structures, there are various supporting play features for smaller children. The safety surface utilized is wood mulch and sand. The majority of the larger equipment observed appeared not to be ADA accessible.









Section 4 Need for Park Improvements

Upon review of the existing site the following issues were identified by city staff which need to be addressed. Deficiencies are identified as being related to physical condition, regulatory compliance or aligning with industry standards. The desire and need for a splash pad fountain and playground imprvements were a high priorty during the community engagement process as part of the original master planning effort completed in 2015.

- Existing playground equipment is in poor condition due to age and use and poses potential for injury.
- Existing playground equipment does not create a challenging nor intriquing element of play which reduces usership.
- Existing safety surface is inadequte to protect against injury.
- While the city provides a community swimming pool, it has a fee for use which does not allow for all members of the community to utilize it during summer months. 15.7% of residents fall below the poverty line which is higher than the national average of 12.5% making
- Community lacks a splash pad which better accomodates small children and is accessible for all (ADA Compliant)
- The addition of a splash pad and adding a signature playground element which features a diverse range of physical challenges aid in increasing the access the entire community has to recreation opportunities which aid in the physycal, mental, and social well-being of children.



Original Splash Pad Design

Completed in 2015, the master plan featured a splash pad fountain and restroom/pumphouse building. This fountain was originally to utilize recirculated, treated water for operation and would require underground water cistern.



Original Playground

The original master plan indicated an area for a new playground along with generic ideas for eventual equipment. The area was envisioned to be a destination and feature accessible features for children of all abilities.

Section 5 Proposed Park Improvements

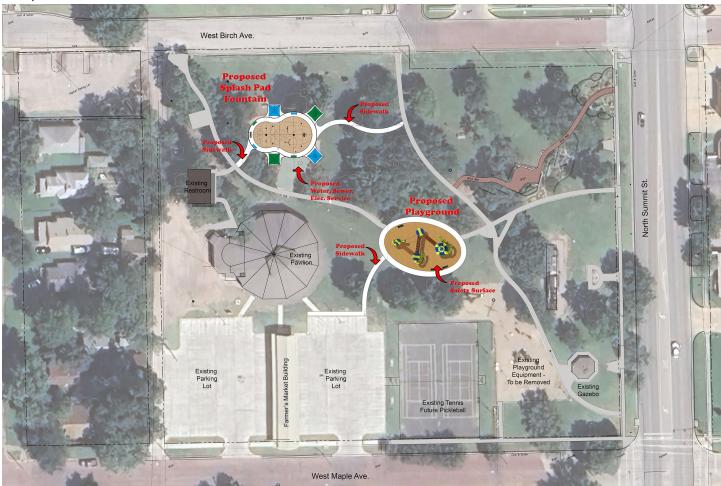
After review of the original master plan and discussion of alternatives (Section 6), the project is proposed to include a new splash pad fountain and playground. Additional planned improvements are to convert the remaing two tennis courts to pickleball courts, however, this work is not part of this phase of work. Below is a site plan showing the location and general scope of the proposed improvements.

- New Splash Pad Fountain
- New Playground Equipment
- Site Clearing & Earthwork
- Water Service, Storm Sewer, & Electrical (Splash Pad)
- New Accessible Sidewalks
- Fall Protection (Playground)
- Benches & Shade Canopies

The Owner currently holds all rights to the property and will incur no additional acquistion costs or costs.

The site is considered to be ready for construction with no utility main extensions necessary to serve the improvements.

Proposed Site Plan



Section 5 Proposed Park Improvements

Splash Pad Fountain

- Water-to-Waste System
- Activation Button
- Set to Timers
- Operation during same months as city swimming pool
- Various spray features to accomodate all ages use
- Fully ADA accessible
- Shade Canopies & Benches
- Approximate Size: 3,600 SF

Splash Pad Concept







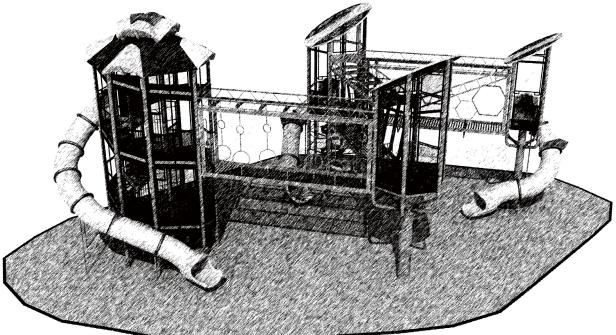
Section 5 Proposed Park Improvements

Playground Structure

- Tower Elements/Height
- Multiple Elevated & Ground Level Play Activities
- Large Capacity- 100+/-
- Compliant Fall Protection Surface
- Various features to accomodate multiple age groups
- Approximate Size: 52'X72'



Concept Playground Equipment





Section 6 Alternatives

Through the plannign process, the Owner reviewed the following alternatives to the selected option of adding a more economical splash pad fountain and destination-type playground structure. Both a splash pad and iconic playground were envisioned in the orginal master plan in 2015 with input from stakeholders and presented to the community.

Alternative 1 - No Improvements

- No park improvements made at this time.
- This option would maintain the existing site without addressing community needs and desires for improvements discoverd through the master planning process.
- No cost would be incurred by the Owner.

Alternative 2 - Original Splash Pad Design Only

- Implement original splash pad as envisioned by the Master Plan
- This option would include a splash pad with recirculation and treatment, pumphouse structure, underground cistern, winterization.
- Additional operational cost due to filtration and treatment of the water.
- The cost of this option with the pump house/restroom and equipoment is much higher than the cost of the option selected and would result in no improvements to the playground equipment.
- Anticipated Cost: \$936,000.00

Alternative 3 - Pickleball Courts + Splash Pad OR Playground

- Implement conversion of two tennis courts to pickleball courts and add sport court lighting along with either adding a the recommended splash pad OR the recommended playground.
- This option would include one of the two amenities which were prioritized by the community during master planning plus the conversion of two tennis courts to pickleball courts.
- The cost of this option was less than that of the splash pad and the playground as envisioned, however, it does not address the priorities of the community as per the original master plan.
- The pickleball conversion is slated for a future project.
- Anticipated Cost: \$230,000.00 + Cost of Splash Pad (\$380,945.00) OR Playground (\$492,900.00)

Alternative 4 - Splash Pad and Playground as Proposed in Report

- Water-to-waste splash pad fountain with activator button, multiple play zones, accessible walks, shade canopies and benches.
- New multi-play element playground structure with fall protection surfacing and accessible sidewalks.
- Associated site clearing and preparation.
- Provides the community with the two highest priority improvements to the park.
- Anticipated Cost: \$1,140,783.00

Section 7 Estimate of Proabable Costs

This report gives guidance for the potential costs associated with the options explored herein. The cost factors are outlined below for utilization of the Owner, grant adimistrators and their consultants in determining the value associated with the proposed project. Cost breakdowns are provided in the estimate to define the scope and understanding of the project.

Margin of Error: At the conceptual level of design, when project definition is achived, it is to be expected that the scope associated with the a given project is not fully understood. This along with the changing economic climate, cost of labor, cost of materials and overall timing of construction will all impact project costs and cannot be fully known at the this time. Therefore, it is to be expected that the final cost of the bid project will vary from project estimated costs to some degree.

Construction costs are the direct cost of construction while non-construction costs include, design fees, adminstrative fees, supervision fees, mobilization fees, materials testing fees and miscellaneous other Owner costs. The unit cost value for each planned improvement has been derived from previous projects in the region, consultation with product suppliers and contractors.

Escalation factor: Within the estimate we have included an escalation factor. This factor assumes an annual increase in construction materials cost and labor which should be applied accordingly to assist with a more accurate understanding of potential project cost if the project is delayed over a period of time.

Exclusions: The following costs are not fully represented in the report due to unavailability of information related to sub-grade conditions.

- Special geotechnical requirements pertaining to unstable subgrade conditions.
- Mitigation of unforseen subsurfae conditions and removal of undergroudn structures and/or hazzards.
- Identification or mitigation of contaminated soils or groundwater conditions.
- Identification or mitigation of archeological signifiant items.

Section 7 Estimate of Proabable Costs

Splash Pad Fountain Site Clearing Existing Playground Removal General Earthwork Concrete Sidewalk- 4" Non-Reinforced Water Supply Line- 3" Water Supply Tap, Meter, Backflow Preventer Storm Sewer- 12" SDR-35 Storm Sewer Mahhole Nyoplast Area Drain Elec. Conduit & Wire Site Restoration Splash Pad Equipment, Concrete Pad, Shades, Site Furnishings & Installation	8,000 1 450 700 36 1 180 1 1 125 3,500 1	SF LS CY SF LF EA LF EA LF SF LS	\$0.35 \$4,500.00 \$25.00 \$145.00 \$5,000.00 \$60.00 \$3,750.00 \$2,000.00 \$15.00 \$1.50 \$325,000.00	\$2,800.00 \$4,500.00 \$11,250.00 \$5,220.00 \$5,220.00 \$10,800.00 \$10,800.00 \$10,800.00 \$10,800.00 \$1,875.00 \$5,250.00 \$325,000.00 \$325,000.00
Playground Site Clearing General Earthwork Concrete Sidewalk- 4" Non-Reinforced Site Restoration Playground Equipment + Delivery Playground Equipment Installation + Safety Surface (Mulch-12" Depth) Sub-Total	8,100 500 2,000 2,850 1 1	SF CY SF LS LS	\$0.35 \$25.00 \$5.00 \$1.50 \$297,564.00 \$165,726.00	\$2,835.00 \$12,500.00 \$10,000.00 \$4,275.00 \$297,564.00 \$165,726.00 \$492,900.00
Total Opinion of Construction Cost		\$873,845.00		
Construction Staking, Inspection, Testing (5%) Mobilization/Demobilization A/E Fees (6%) Geotechnical Investigation Adminstration				\$43,692.00 \$140,000.00 \$52,431.00 \$6,000.00 \$25,000.00
Total Opinion of Project Cost				\$1,140,968.00

Section 8 Analysis of Operation, Maintenance, & Replacement Budgets

Following is a sumamry of anticipated operation, maintenance and replacement budgets for the project. Obviously, the better a facility is maintained over time, the less issues arise from operation, use and environmental issues. Additionally, a well-maintained facility should remain in good, usable condition well into the future.

A well-maintained and used facility also is a defence against vandalism and mis-use. When a facility is vandalized, it is important to correct the issue immediately to send a message that this is a high-value facility. Additionally, a well-used facility puts more eyes on the area which serves to community police against potential issues of vandalism and mis-use.

Operating & Maintenance Budget

The Owner currently budgets facility operations for a yearly allotment. The Owner has projected operating and maintenance budget ranges for the proposed park improvements. Recurring funding has been prepared by the Owner to cover annual operating and maintenance costs associated with the proejct. Such annual alooted funding amounts are intended to cover operation and utility costs, including adminstrative staff as well as to cover the expenditures for maintenance and associated staff. \$5,000 per year is being budgeted for operation and maintenance of the splash pad fountain and \$7,000 per year is being budgeted for the playground.

The largest operating cost expected to be incurred is water. Since the splash pad is anticipated to be a water-towaste system, all water utilized for the features will drain directly to the storm sewer. Following is a preliminary calcluation of water usage. Usage will vary by day and by season. It is assumed that the fountain will only operate during swim season and will be inactive when the park is closed.

- Estimated hours of operation (daily) 4- 6 hours
- Estimated water use: 114 GPM (average flow rate)
- Daily water use: 240-360 minutes x 114 GPM = 27,360- 41,040 gallons of water per day.

Replacement Budget

The city is budgeting \$500,000 over the next 25 years for replacement of the splash pad and \$550,000 over the next 20 years for replacement of the playground.

Section 9 Potential Consturction Issues/Conflicts

In review of the existing site survey which includes all above ground improvements and below grade utilities, there have been no apparent conflicts or issues identified that would impact the proposed improvements. No improvements are shown within building setback lines or easements.

Overall, the areas are realatively open green space or have above grade elements (playground) which are anticpated to be fully removed including foundations prior to beginning any new construction. Both the proposed splash pad and playground were sited to preserve existing trees in the park.

Potential constructability issues may arise with unknown subgrade conditions and/or hazards. These unknowns are inherent in most projects and could include poor soil conditions, existing abandoned utilities or foundations, etc. Many of these issues cannot be known until a soils investigation is conducted by the Owner and/or site clearing commences on the site.

Section 10 Conclusions and Recommendations

Per the analysis contained in this prelimianry report, the recommendation is to pursue financial aid through grant funding in order to provide improvements within Wilson Park in Arkansas City, Kansas per Alternative #4. Successful acceptance of the grant application will enable updates to the park which will increase community pride and and quality of life for residents. Additionally, the inclusion of significant and unique park elements can bring additional users from outside the community to Arkansas City.

Additionally, the proposed improvements make adjacent land more desirable for residential and commerical development (redevelopment). Increased usership should have a positive impact on the overall community and, especially, adjacent retail and restaurants.

The proposed improvements in this report represent only another step in an overall vision for Wright Park. Wright Park has had recent improvements to the historic Rotunda and addition of the new farmer's market. On the horizon, new pickleball courts will increase usership and broaden the demographics of park users. In the future, new concrete pathways are planned to give more opportunties for excercise and access throughout the park.

