

City of Oklahoma City
Parks and Recreation Department



MP-0624

Will Rogers Garden Pavilions Improvements
Preliminary Report

Prepared By:



ARCHITECTURE

April 2024

THE CITY OF OKLAHOMA CITY

PRELIMINARY REPORT

APPROVAL SHEET

MP-0624

Will Rogers Garden Pavilions

Prepared by:

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Architect/Engineer

Recommended for Approval

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Director Parks & Recreation

Department

APPROVED by The City of Oklahoma City this 21ST day of MAY,
20 24.

ATTEST:

Amy K. Simpson

City Clerk



The City of Oklahoma City

PRELIMINARY REPORT

OKLAHOMA CITY DEPARTMENT OF PARKS AND RECREATION

PROJECT MP-0624

WILL ROGERS GARDEN PAVILIONS IMPROVEMENTS

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Scope:

Studio Architecture was contacted by the City of Oklahoma City through our On-call Contract with the City of Oklahoma City to investigate renovating the historic pavilions at the Will Rogers Garden to refurbish the existing masonry and rebuild existing heavy timber trellis and roof framing with new timber construction and roof shingles.

Project Location Map



Budget

The fixed limit of construction cost for the project is \$240,000 for both pavilions. The estimated construction cost for the two pavilions is \$239,500. This will cover all new heavy timber construction and masonry repairs. There are no utilities or any other cost. Landscape material and irrigation will have minor modifications.

Schedule

Final Plan Completion: Spring 2024
 Owner Review Spring 2024
 Bidding Summer 2024
 Begin Construction Summer 2024
 Construction Completion Fall 2024

	2023						2024									
	July 23	August 23	Sept. 23	Oct. 23	Nov. 23	Dec. 23	Jan. 24	Feb. 24	March. 24	May 24	June 24	July 24	August 24	Sept. 24	Oct. 24	Nov. 24
FINAL PLANS																
CITY REVIEW																
BIDDING																
CONSTRUCTION																

RECOMMENDATION:

Studio Architecture’s recommendation will be to stabilize the foundations of the masonry bases, repair all the masonry, repoint and clean existing masonry utilizing treatments for period masonry. Then a complete replacement of the existing heavy timber construction, roof deck and roofing utilizing as much historic construction joinery methods. Provide additional preservative treatments to make the masonry and the timber structure as maintenance free as possible. Modern construction materials will be utilized to weatherproof all building elements to achieve that but retain the historic appearance.

SECTION – 1 PURPOSE AND BACKGROUND AND EXISTING CONDITIONS

Purpose and Background

This report outlines the recommended improvements for Project MP-0624 initiated by the City of Oklahoma City Parks and Recreation & Public Works Departments. The project includes two of the historic park pavilions in Will Rogers Garden that have had significant deterioration and damage to over the years.

This preliminary report included the following:

- Assessment of existing conditions of Pavilions 1 and 2
- Waterproofing recommendations.
- Existing conditions and diagnosis

Existing Conditions

Studio Architecture has reviewed the existing conditions of both pavilions and found the following issues:

Small Pavilion is in good structural shape, but the heavy timber framing shows signs of distress from age water intrusion. The underside of roof deck has water staining and some deterioration. Masonry is still in very good condition although a couple areas need some repointing. Existing cedar shake roof needs to be replaced due to age and water.

Large Pavilion is in a much more distressed state, the biggest issue is at the south end of the pavilion trellis the masonry base and heavy timber framing have some rotation making it not plumb and out of alignment with the rest of the structure. The Park Department has commented that there used to be a large tree adjacent to this area of the pavilion and apparently a major branch fell and causing damage and this rotation. There are areas where the masonry needs to be re-tooled and repaired. The masonry base has been damaged from water intrusion and freeze/thaw events, exposing the steel saddles supporting the heavy timber framing. The steel saddles need to have the corrosion removed and new coating to protect them from future damage. Almost all the existing masonry base structures need some attention, some will require significant repairs, and all will have to be repointed to prevent water damage in the future. The roof deck was previously painted and is peeling showing signs of water intrusion and the cedar roof shakes need to be replaced. There was also an abandoned water fountain that has been grouted in and is quite unattractive.

Waterproofing

Studio Architecture's site observations found that the existing cedar shake shingles for both pavilions have outlived their lifecycle. As part of the improvements for both pavilions roofing shingles will be replaced with synthetic shingles to replicate the historic cedar shakes. There will also be an ice and water shield that will be provided under synthetic shingles to weatherproof on the roof decking to further weatherize these pavilions. We will recommend a fluid-applied sealer over the new heavy timber

along with a sheet metal shroud be placed upon the top of the heavy timber trellis members. All joints between wood to wood and wood to masonry and all new wood trim will be sealed with polyurethane sealant. The masonry repairs identified above will be critical.

SECTION 2 – PROJECT DATA COLLECTION

Existing Information

Search for original drawings of the pavilions was undertaken, however it was determined there was nothing in the city archives documenting these structures. Studio Architecture undertook performing “measured drawings” that is required for historic buildings. After multiple visits a virtual 3-dimensional model was created for utilization in preparation of the construction documents for the improvements.

Geotechnical Investigations

No geotechnical investigation was required, there were observations of rotation in the masonry base and in the trellis. In discussions with the Parks Department and observations it was determined that was external forces that damaged from an existing tree adjacent to the structure that had a large branch had fallen on the trellis and not subterranean forces.

Utilities

There are no utilities that serve these pavilions, there is no electrical required for lighting or power and no sewer or water required for these structures. So, utilities will be addressed.

SECTION 3 – ARCHITECTURAL/ENGINEERING DESIGN

Structural Design

Studio Architecture brought in a structural engineer to confirm some of some of the suspicions and determined that some repairs we will have to make the foundation to make the masonry square and plumb again. All the other masonry elements will require some historic conservation treatment for period masonry and will address those issues in the construction documents. All of the heavy timber framing will match the dimensional lumber and historical construction will be maintained as close as possible however utilizing modern construction techniques.

Architectural Design

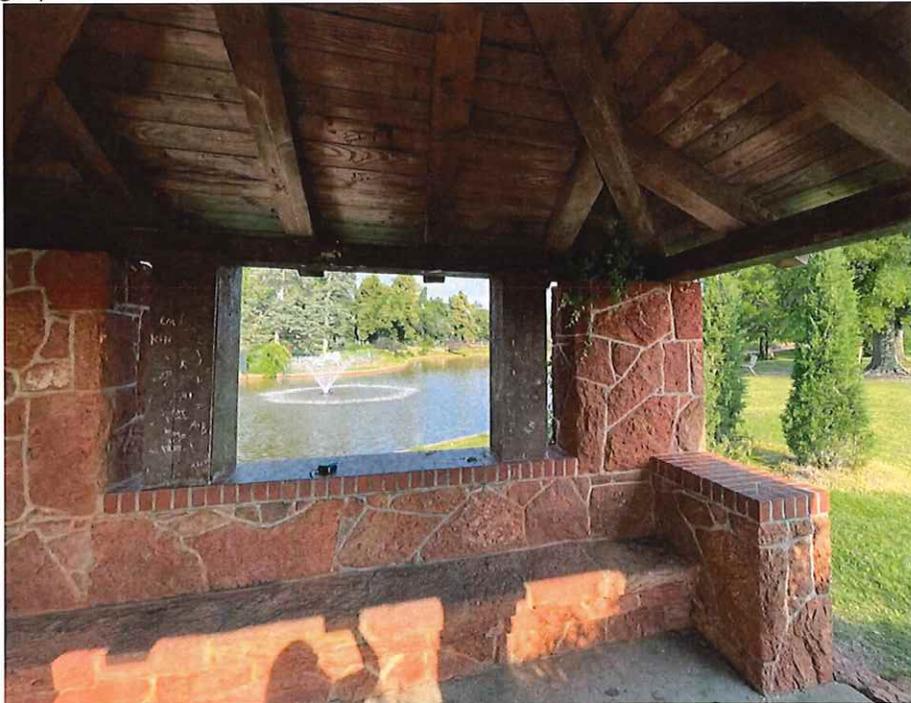
Maintaining a historic architectural appearance will be important to the success to these improvements. Modern construction materials will be utilized to provide better weatherproofing and eliminating any unnecessary water intrusion to protect construction materials exposed to the elements is paramount. Ice and water shield will be provided over new wood decking and synthetic shingles to replicate the original cedar shakes but will not require maintenance for the next 50 years. Wood preservative will be applied to the timber construction to preserve the original look and character of new wood.

EXISTING PHOTOGRAPHS

Photograph #1 – Small Pavilion Exterior



Photograph #2 – Small Pavilion Interior



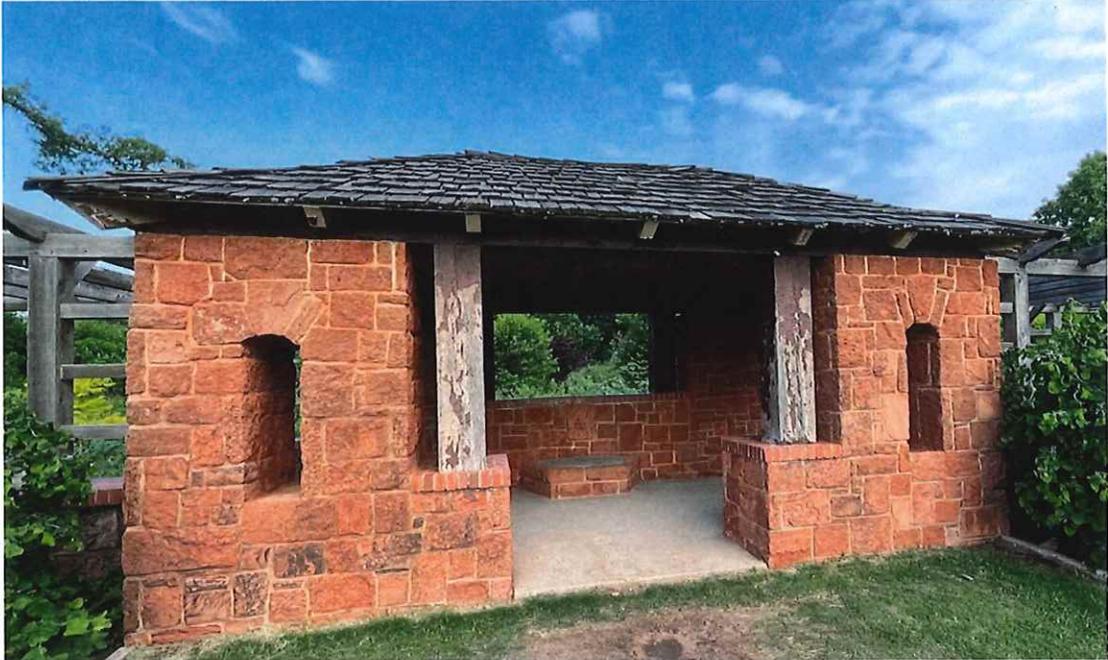
Photograph #3 - Interior corner detail showing deteriorated heavy timber framing.



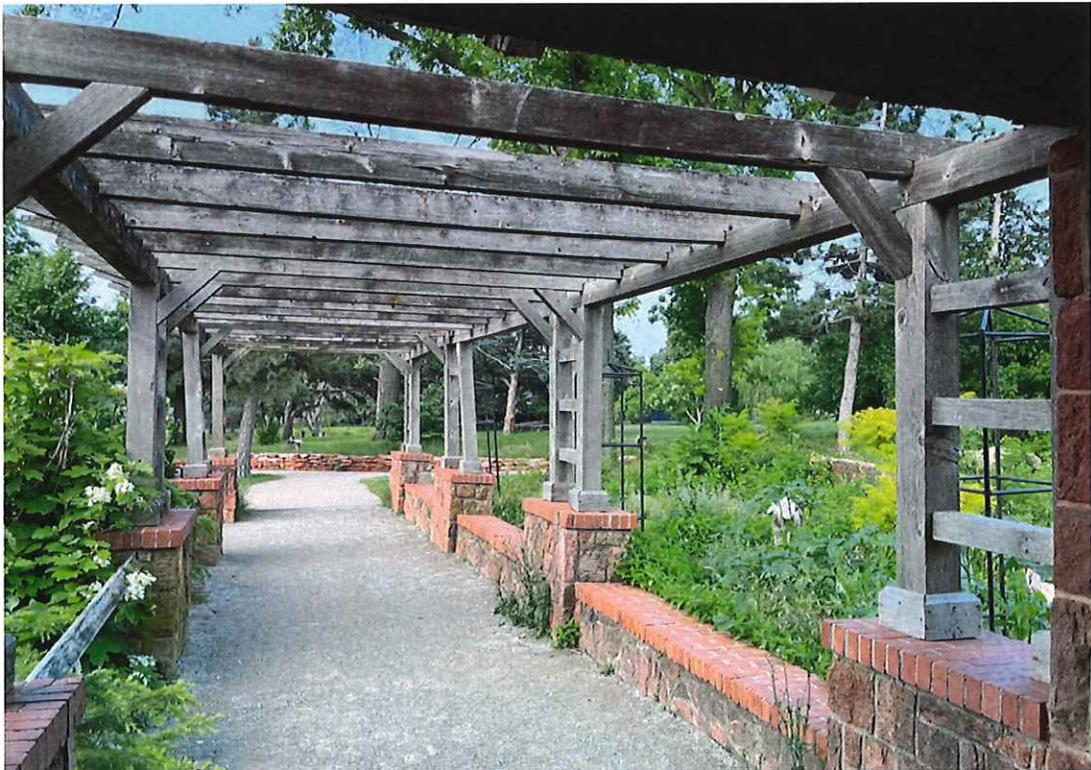
Photograph #4 – Deterioration of cedar shakes and heavy timber



Photograph #5 – Large Pavilion



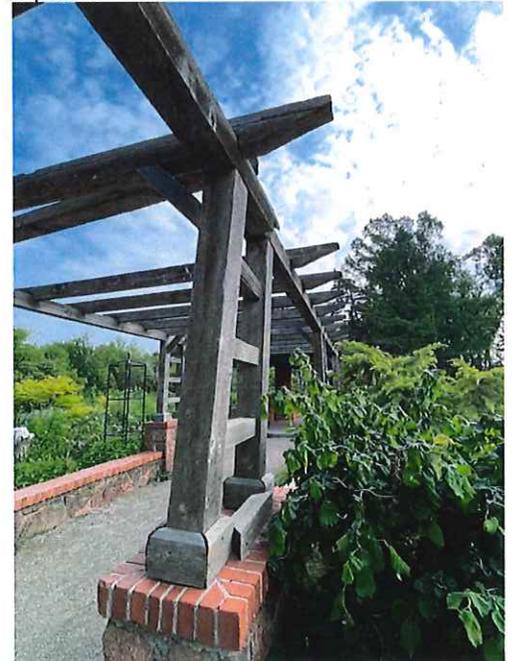
Photograph #6 – Large Pavilion Trellis



Photographs #7 & 8 – Water damaged masonry



Photographs #9 & 10 – Heavy Timber damaged and out of plane



Photographs #11 – Water damaged roof deck



CONCLUSION

Studio Architecture believes that if these recommendations are fully implemented the water damage will be mitigated and the structures will be brought back to their original appearance for the public to enjoy again and a continued asset to the Will Rogers Park and its gardens.

Another aspect we need to review as a design team is to evaluate the landscape material with the Parks Department that will be affected around these structures and modify the irrigation to not cause any unnecessary future damage.

After the acceptance of the recommendations in this report, Studio Architecture will begin to prepare documents for bidding and construction purposes. Thank you for this opportunity to help restore a significant asset to the City of Oklahoma City.

END OF REPORT



April 2024

City of Oklahoma City
MP-0624 Will Rogers Garden Pavilions
Improvements

Statement of Probable Cost

Pavilion 1 (small)

Demolish Existing Roof Structure	\$	5,000.00
Install New Heavy Timber Framing	\$	25,000.00
New Roof Deck	\$	10,000.00
New Synthetic Roofing Shingles	\$	10,000.00
Masonry Repointing	\$	8,000.00
Masonry Cleaning	\$	6,000.00

Subtotal \$ 64,000.00

Pavilion 2 (large with trellis)

Demolish Existing Roof Structure & Trellis	\$	8,000.00
Install New Heavy Timber Framing & Trellis	\$	45,000.00
New Roof Deck	\$	10,000.00
New Synthetic Roofing Shingles	\$	14,000.00
Masonry Repair	\$	10,000.00
Masonry Repointing	\$	10,000.00
Masonry Cleaning	\$	3,500.00
Foundation Repairs	\$	15,000.00

Subtotal \$ 115,500.00

Total \$ 179,500.00

Bonds & Insurance	\$	10,000.00
Overhead & Profit	\$	20,000.00
General Conditions	\$	30,000.00

Total Construction Cost \$ 239,500.00

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