Staff Report

STEVEN L. SCHAINKER PLAZA AQUATIC FEATURES UPDATE

April 25, 2023

BACKGROUND:

The original plans for the Steven L. Schainker Plaza included two water features. The first being a spray pad and the second a water runnel. The spray pad included three column jets, three large ground jets, three tri-stream jets, two fog nozzles with light, and an activator post. The runnel was to have a constant flow of water ($\frac{1}{2}$ " to $\frac{3}{4}$ " deep) moving through it. Additionally, the runnel included three column jets, three tri-stream jets, and four fog nozzles with lights.

As a water conservation measure, City Council approved the use of a recirculation system, rather than a flow-through system. The recirculation system recirculates and chemically treats the water whereas a flow-through system pumps potable water through the water features and the wastewater goes directly to the sanitary sewer. The recirculation system will save millions of gallons of water versus using a flow-through system.

Since the water will be recirculated, the Iowa Department of Public Health (IDPH) Swimming Pool and Spa Code must be followed. Through multiple conversations with IDPH, it was determined that to get the runnel to meet code would be cost prohibitive, so alternatives were discussed. Options included eliminating the water runnel and not having a water feature in that area or replacing it with a linear spray pad that would connect with the spray pad in the original design. Staff believes the best option to pursue is to add a linear spray pad in place of the runnel.

UPDATED SPRAY PAD PLAN:

Based on the direction received from IDPH, staff has worked with the project consultant to develop an updated plan which includes converting the runnel area to a linear spray pad and connecting it to the original spray pad. This plan is shown in Attachment A. IDPH has reviewed this concept plan and has indicated it should meet, code but cannot make a final determination until the final drawings are submitted.

Several items from the original plan will need to be changed in order to accomplish the linear spray pad. Some changes will result in cost savings and some will add cost to complete the new design. These changes are shown below:

- 1. Remove the concrete footings that were necessary for the runnel.
- 2. Remove the curbs on both sides of the runnel.
- 3. Remove the undulations in the bottom of the runnel.
- 4. Reduce the concrete thickness of the runnel area from eight inches to six inches.

- 5. Add eight spray features to the linear spray pad to increase the fun factor in this space.
- 6. Add an activator bollard for the linear spray pad. This will allow spray features of the linear spray pad and the original spray pad to operate independently of each other.
- 7. Increase labor for plumbing and electrical installation associated with the eight spray features.
- 8. Add colored concrete for the linear spray pad.
- 9. Add salt retardant to the concrete.

COST:

The preliminary costs associated with the changes needed to convert the runnel to a linear spray pad are broken down as follows:

Item	Line Items	Cost	
Concrete changes	1-4, 8, 9	\$	(21,600)
Equipment	5, 6	\$	13,650
Installation	7	\$	24,700
Subtotal		\$	16,750
Contractor markup and bond (7%)		\$	1,173
Total Cost		\$	17,923

A final cost associated with these changes will need to be received from Henkel Construction and approved administratively by staff. There is \$88,641.53 left in contingency to cover the \$17,923 needed for this change. This will leave a contingency balance of \$70,718.53.

NEXT STEPS:

The following items will need to be completed in order to move forward with this conversion:

- Finalize spray pad drawings
- Submit the spray pad drawings to IDPH for final approval
- Submit the spray pad drawings to Henkel Construction for a Potential Change Order and final pricing
- Staff approves change order administratively
- Resume construction on the water features

STAFF COMMENTS:

Because the original runnel is no longer feasible, adding a linear spray pad in its place will still provide a water feature in this area of the plaza. Since there are no curbs associated with the linear spray pad, this feature will be safer and accessible to all potential users and still provide the fun factor we were seeking.

Staff believes the additional cost for the conversion should be the responsibility of the City. The reason being is that the City directed the consultant to design a runnel and that is what they did. Now that the runnel is not an option, the City is wanting to keep a water feature in this area and it seems appropriate the City pay for this change.

Absence any objection from the City Council, staff will proceed with a horizontal spray pad in lieu of the water runnel. The current estimated net cost of make this conversion is \$17,923. The final cost for the change order will be determined after the design drawings are finalized reflecting this change. As an alternative, the City Council could direct that the water runnel be eliminated with no replacement.