

Staff Report

City Council
Doug Story, Director of Community Services
September 20, 2022

SUBJECT: Presentation of Sports Park Turf Reduction Study and Discussion of Future Sports Park Improvement Project

Background and Analysis:

The Beaumont Sports Park has approximately 655,000 square feet of playable surface (about 15 acres) and is a highly utilized facility; home to a variety of athletic leagues, tournaments, and special events. The volume of use on the fields has resulted in turf deficiencies which require extensive repair. On May 17, 2022, City Council approved a contract with Cooper Turf Solutions, Inc. in an amount of \$142,555 for a recommended turfplaning, a process which creates a more level field surface for sports activities by removing the high spots and exposing the low spots and allowing the field to be leveled. The process involves removing the top layer of the turf, the roots remain in place and allows the grass to grow back quicker compared to the process where the complete turf is removed.

The current drought restrictions and water use restrictions that were recommended by the Beaumont Cherry Valley Water District limited the amount of water to be used at the Sports Park and would negatively impact any potential for new seed to grow. As such, the decision was made to postpone the Sports Park turf and leveling project until a more appropriate time which would allow for the correct amount of water usage.

At the same meeting a request was made to bring back to City Council for discussion the feasibility of artificial/synthetic turf conversion at the Sports Park and to offer recommendations for turf conversion and water use reduction. RHA Landscape Architects have provided numerous agencies with turf and water reduction studies and the request was sent to RHA to provide a similar report and recommendations for the Beaumont Sports Park.

The following recommendations were provided by RHA:

- 1. Replace Football and Complete Soccer Fields with Synthetic Turf.
- 2. Replace Football and Complete Soccer Fields with Synthetic Turf with Turf Reduction.
- 3. Replace Football and Complete Soccer Fields with New Turf.
- 4. Replace Football and Complete Soccer Fields with New Turf with Turf Reduction.

All recommendations call for a removal of a perimeter of turf along the walking path, around the baseball fields, near the restroom/snack bar, and the small hill between the upper baseball fields/football field. This removal is an effort to reduce the amount of turf requiring water and will reduce the grass turf by 100,200 square feet. The new material is recommended as a decomposed granite groundcover and some additional low water tolerant trees and shrubs irrigated by drip irrigation. This decomposed granite is recommended in all options.

Recommendation 1 - Replace Football and Complete Soccer Fields with Synthetic Turf

This recommendation calls for the replacement of 422,000 square feet of grass turf with synthetic turf. This option keeps the amount of playing and usable surface the same as current conditions. This option would also account for the largest water reduction of over 18 million gallons annually with a saving of \$41,000. The total cost to replace the grass with synthetic turf and decomposed granite perimeter is \$8,800,000.

Recommendation 2 - Replace Football and Complete Soccer Fields with Synthetic Turf with Turf Reduction

This recommendation calls for the replacement of 362,142 square feet of grass turf with synthetic turf. This option will reduce the amount of playing and usable surface by 72,250 square feet as compared to current conditions. This option would account for the largest water reduction of over 18 million gallons annually with a savings of \$41,000. The total cost to replace the grass with synthetic turf and larger reduction area of decomposed granite is \$8,074,205.

Recommendation 3 - Replace Football and Complete Soccer Fields with New Natural Turf

This recommendation calls for the replacement of 485,450 square feet of grass turf with new natural turf. This option keeps the amount of playing and usable surface the same as current conditions. The water reduction for this option would account for a water savings of over 6.5 million gallons annually with a savings of \$18,000. The total cost to

replace the current deficiencies with new natural grass turf and decomposed granite perimeter is \$1,985,00.

Recommendation 4 - Replace Football and Complete Soccer Fields with New Natural Turf with Turf Reduction

This recommendation calls for the replacement of 485,450 square feet of grass turf with new natural turf. This option will reduce the amount of playing and usable surface by 72,250 square feet as compared to current conditions. The water reduction for this option would account for a water savings of over 6.5 million gallons annually with a savings of \$18,000. The total cost to replace the current deficiencies with new natural grass turf and a decomposed granite perimeter is \$2,401,945.

	<u>Cost</u>	<u>Water Savings</u> (Gallons)	<u>Water Savings (\$)</u>	<u>Playable</u> Space (Sq Ft)	<u>Water</u> <u>Conserving</u> <u>Decomposed</u> <u>Granite (Sq Ft)</u>
Recommendation 1	\$ 8,800,000	18,000,000	\$ 41,000.00	421,900	110,200
Recommendation 2	\$ 8,074,205	18,000,000	\$ 41,000.00	362,415	125,700
Recommendation 3	\$ 1,985,000	6,500,000	\$ 18,000.00	485,450	110,200
Recommendation 4	\$ 2,401,945	6,500,000	\$ 18,000.00	362,415	125,700

Additional Options to Consider

The nature of the improvements at the Sports Park allows for a phased approached making it possible to improve a smaller portion of fields at any given time. There is also an option to modify the recommendations presented by RHA to include a compromise of improvements (i.e., two fields converted to synthetic turf and two fields with new natural turf) or any combination of options. The proposed recommendations breakdown the cost for improvements into a per acre price. The average square footage for a large soccer field is approximately 70,000 square feet.

Annual Maintenance

The cost for annual maintenance of the Sports Park continues to rise as the cost for utilities is estimated to increase in the future. Depending on the recommendation chosen there are some additional maintenance costs to consider. The addition of synthetic turfs to our city parks will require the purchase of some new equipment that

our department does not currently possess including a power broom. This piece of equipment is estimated at \$12,000 - \$18,000.

Currently, City staff is tasked with maintaining the natural turf at the Sports Park weekly. This includes mowing, blowing, trimming, fertilizing, and aerating the entire park. This study used a median amount of \$16,500 per acre for maintenance costs and an average of \$4,500 per acre for irrigation watering costs. This \$21,000 per acre is the starting point for establishing the ongoing maintenance costs to maintain the fields. The chart below shows the annual numbers, per acre, for the ongoing maintenance of natural turf fields compared to the annual maintenance costs of a new synthetic turf field.



The large increases in years ten and twenty account for the replacement costs for synthetic turfs as the fields reach their recommended life span.

Fiscal Impact:

The cost for staff to prepare this report is estimated to be \$245.

Recommended Action:

Discuss the Sports Park Turf Reduction Study and provide direction to staff.

Attachments:

A. Sports Park Turf Reduction Study