



CITY OF RICHMOND

REPORT TO COMMITTEE

TO: Parks Recreation & Cultural Services Committee
FROM: Mike Redpath
Manager Parks Administration & Programs
RE: 2002 Parks Capital Program – Minoru Oval Artificial Turf Request for Proposal

TO: PARKS, REC + CULTURAL - APR 23/c
DATE: April 11, 2002
FILE: ~~7200-04~~ 2345-20 - MIN01

STAFF RECOMMENDATION

That a request for proposals be issued for the detailed design and construction of a synthetic turf outdoor sports playing field at the Minoru Oval field located in Minoru Park.

Mike Redpath
Manager Parks Administration & Programs

Att. 1

FOR ORIGINATING DIVISION USE ONLY

CONCURRENCE OF GENERAL MANAGER

STAFF REPORT

ORIGIN

The provision of high quality outdoor sports playing fields in Richmond has been the priority of the City, Richmond Sports Council, and sports user groups in Richmond for many years. With the increased growth in field sport participation the demand for well drained – all weather fields for seasonal use, has stressed the current inventory of facilities to the point of overuse causing the fields to become unplayable in the winter months.

Artificial turf sports field upgrades will ensure the provision of high quality surfaces to accommodate year round field usage of Richmond's currently overused inventory of fields. An artificial turf field would reduce the maintenance costs of a traditional grass field on an annual basis and also open up the opportunity for pay for play.

In the 2000 Parks Capital program the Sports Reserve Fund was established to finance the future construction of an artificial turf field in Richmond, annual contributions to this fund have occurred since 2000. The purpose of this report is to receive Council direction to issue a request for proposal for the design and construction of a synthetic turf field at the Minoru Oval field at Minoru Park (Map Attachment 1).

ANALYSIS

A typical artificial turf field installation requires the provision of an open space with essential amenities such as parking, lights, fencing, washroom, changeroom, fieldhouse, bleachers and if possible stadium seating. In most cases municipalities or private institutions must finance the cost of light installation, drainage, field base, the acquisition and installation of the synthetic turf product and related works. A typical installation cost for an artificial turf field can range from \$1 million to \$1.5 million.

Richmond Approach

Richmond's current inventory of full size high quality fields includes sand based fields with excellent drainage systems and lighting at 5 sites making 7 fields available for fall winter play in the rainy season when the days are shorter requiring lighting for play.

In addition to the well drained fields, lighting, and other amenities such as parking, washrooms, and fieldhouse exist at many of the premier sports facilities. A conversion of one of these sand fields with existing lighting and improved drainage is proposed thus creating efficiencies in the overall cost of acquiring an artificial turf surface for Richmond

Similar Installations

Richmond is currently one of the only lower mainland cities that does not have an artificial turf field. Existing artificial turf fields are located in the following municipalities: Vancouver (3), Burnaby (4), West Vancouver (installing field in 2002), North Vancouver (1 +1 installed in 2002), UBC (1 +1 installed in 2002), Delta (tendering for installation in 2002), Port Moody (1), Coquitlam (1), Port Coquitlam (installation in 2002). In discussions with Surrey, Abbotsford,

and Maple Ridge planning is also underway for installation of artificial turf surfaces in the next few years.

Staff have had an opportunity to network with Parks and Sport Services staff in each of these municipalities over the past few years to share information and learn from current installations.

What is Artificial Turf?

The following information provides a good overview of the benefits of artificial or synthetic turf surfaces:

- Accessible and used year round in all weather conditions
- Artificial turf is capable of hosting 2,080 prime-time games throughout the year whereas natural grass can host only 360 games per year, this equates to a 6:1 ratio of artificial turf versus natural grass usage
- Drains up to 10 inches of water per hour when properly installed
- Environmentally friendly, requires 1/6 of the land space to accommodate the same number of games on comparable grass fields
- 'Feels' and looks like natural grass
- Has unlimited use
- No irrigation, fertilization or chemicals required
- No special footwear is required for players
- Reduces overall maintenance costs of existing field, eliminating need for watering, grass cutting, fertilising, seeding, top dressing, lining for sport use among other efficiencies

Process for Site Selection

In February 2002, staff met with representatives from Richmond's field sport community to discuss the potential siting of an artificial turf surface at one of Richmond's premier sandfield sites with existing lighting and amenities. Site selection criteria, in addition to availability of lighting and improved drainage, is included the following:

- Parking, spectator seating, proximity to other fields for potential tournament use, potential for access by field sports including field hockey, soccer, and football, availability of a caretaker, concession, access to public transit, washroom/changeroom among other amenities.

It was determined that Minoru Park would be the most appropriate site for locating an artificial turf field.

Rationale for Minoru Oval

The drainage system in Fields 2 and 3 is not the typical system that is found in Minoru Oval and all other all-weather grass sand fields in Richmond. It was built for a cell system where the majority of the drainage pipes were also feeding pipes and installed in the sand growth medium in the root zone. These pipes are close to the surface and could be damaged or even totally removed with the vegetative material to make way for the artificial turf construction.

The cell system concept did not work and was abandoned in favor of conventional turf maintenance. The drainage system that remains does not work as well as the other systems.

Each of the 5 one acre cells that comprise Fields 2 and 3 has one deep collector drain pipe running east and west that is still reliable but there have been drainage problems. Field 2 was rototilled and reseeded due to standing water one year. The vertidrain aerator set for maximum depth has kept the field dry and functional by forcing 16-inch tines into the sand. This type of operation could not be accomplished once the carpet was in place.

Given the configuration of the existing drainage system under the Minoru Fields 2 and 3, in order to accommodate the potential retrofit from natural grass to artificial turf, significant drainage improvements would be required including a possible total reconstruction of the drainage system in these fields.

Minoru Oval has a reliable drainage system that will not present the same problems experienced on Fields 2 and 3, thereby making the Oval the most suitable field for artificial turf installation.

Request for Proposal Process

The scope of the proposed construction project at Minoru Oval shall generally include the following categories within the established budget of \$827,000:

- Design and Geotechnical work including development of a project schedule and smart sequencing of all work to be undertaken
- Civil works including removal of existing organic (grass) materials, infill of gravel, rough and final grading
- Removal of organic materials and existing fill will be transported to the City owned soil site at 6711 Sidaway Road thus eliminating the cost of part of the disposal fee
- Protection of the running surface on Clement Track (Minoru) during construction
- Supply and installation of artificial turf
- The creation of a perimeter asphalt or concrete surface
- The provision of other amenities such as a perimeter fence, and player bench areas
- Other works as proposed by the proponent

To ensure that the City's best interests are met in the selection process, it is proposed that a scorecard be developed for evaluating and ranking each proposal after issuing the request for proposals.

Timeframe

Based on similar installations in the Lower Mainland and industry advice, artificial turf field installations typically require a four to six month timeframe, as such staff recommend a summer 2002 installation with the target completion date early October 2002 in time for the fall/winter playing field season.

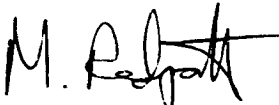
FINANCIAL IMPACT

This report proposes the issuing of a proposal. There are no financial implications to this process.

The existing project #40808 – Sports Reserve Fund is currently \$677,000 and \$150,000 was added to this in the 2002 capital program bringing available project funding to \$827,000. Upon receipt of submitted proposals, staff will undertake a selection process and as per Council purchasing policy for projects exceeding \$250,000, present a recommended consultant or firm to Council for final approval prior to any work being undertaken.

CONCLUSION

The addition of an artificial turf field to Richmond's heavily used outdoor sport playing field surfaces will be of benefit to all community field sport users. The proposed location at Minoru Oval presents the City with an excellent tournament site for existing and future events, and also increases the availability of much needed well-drained practise space in the fall/winter season. With the introduction of the artificial turf surface, the concept of cost recovery from pay for play has been presented to staff by Council, which for the first time will begin to recover costs of maintaining and providing the comprehensive inventory of Richmond's playing fields.



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