

For Information

Legislative Council Panel on Home Affairs

**The Design and Maintenance of the Artificial Turf Football Pitches
under the Management of the Leisure and Cultural Services Department**

Purpose

This paper briefs Members on the design and maintenance of the artificial turf football pitches under the management of the Leisure and Cultural Services Department (LCSD).

Background

2. Since the provision of the first artificial turf football pitch in Boundary Street Recreation Ground by the Urban Council in 1981, the Government has provided artificial turf football pitches in various districts to meet the keen public demand for turf football pitches and facilitate the promotion, training and development of the sport in Hong Kong. In 2003, the LCSD introduced the third generation (3G) artificial turf pitches and started to convert some of the existing natural turf pitches or first/second generation artificial turf pitches¹ into 3G turf pitches.

3. Following the passage of a motion by the Legislative Council on “Promoting the development of local football” in June 2008, the Home Affairs Bureau commissioned a consultant to review the development of local football. One of the recommendations of the consultant was to significantly increase the provision of football pitch facilities by providing more artificial turf pitches. The target was to raise the number of 3G artificial turf pitches from 11 to 34 within five years. The recommendation was discussed and accepted at the meeting of the Panel on

¹ A first/second generation artificial turf pitch is similar to an artificial turf carpet without rubber granules.

Home Affairs of the Legislative Council on 17 March 2010. In this connection, the LCSD started to plan for the conversion of more pitches into 3G artificial turf pitches.

4. There are currently 37 artificial turf pitches managed by the LCSD, 28 of them are 3G pitches. The remaining 9 are first/second generation pitches, 5 of which and the other 2 natural turf pitches are being or will soon be converted into 3G pitches. The number of 3G pitches is expected to increase to 35 by the end of 2016. Details of the pitches are set out in Annex 1 and Annex 2.

3G Artificial Turf Pitches

5. 3G artificial turf pitches are approved by the Fédération Internationale de Football Association (FIFA) as suitable for football activities, including training and competitions, and are used by many countries and regions for football training and competitions to make up for the shortage of natural turf pitches. Both the Hong Kong Football Association (HKFA) and Hong Kong Rugby Union support the use and additional provision of 3G artificial turf pitches.

6. The advantage of 3G artificial turf pitches over natural turf pitches lies in the significantly more sessions available for use. As natural turf pitches are vulnerable to external factors such as climate, sunshine and rainfall, and will suffer from wear and tear in varying degrees each time they are used, it is necessary to allow time for the turf to recover. While the maximum number of sessions provided by a natural turf pitch is 60 per month (90 minutes per session), an artificial turf pitch can be used for 270 sessions per month, which is 4 times that of the former. Besides, a natural turf pitch has to be closed for about two months every year for turf recovery and other maintenance work, whereas a 3G turf pitch is available throughout the year. Therefore, 3G artificial turf pitches can better meet public demand. Furthermore, it is more cost-effective to provide artificial turf pitches which, with less wear and tear, incur lower maintenance costs. It is also more environmentally friendly as no insecticide, herbicide or chemical fertiliser is used.

Pitch Design

7. 3G artificial turf, consisting of a fibre base planted with artificial turf and filled with sand and rubber granules, resembles natural turf in terms of texture, ball bounce and speed. All 3G artificial turf pitches are required to pass the tests conducted by independent accredited institutions and be in compliance with the FIFA Quality Concept for Football Turf. In addition, according to the standard required by FIFA, 3G artificial turf pitches must not contain any toxic substance. As stipulated by the Architectural Services Department (ArchSD) in the works contracts, the materials and the specification of works used by the contractors must be certified and in compliance with the relevant international standards. To ensure that the new artificial turf pitches have met the FIFA standard, the ArchSD also requires the contractors to submit certificates by independent accredited institutions regarding the tested performance and installation of the new pitches, as well as guarantees of the absence of toxic substances by the manufacturers of the artificial turf. Rain guns are included in the design and construction of the pitches, so that water can be used to cool the turf surface on scorching hot days. Filtering devices are also provided in the drainage channels surrounding the artificial turf pitches to collect wasted rubber granules for recycling.

Pitch Maintenance

8. The maintenance of 3G artificial turf pitches is relatively simple. We just need to remove debris, restore the synthetic fibres to their upright state, level the rubber granules to ensure the uniformity of the surface, and refill the rubber granules as and when required. Depending on actual needs (for example, on hot days), venue staff will water the pitch to cool its surface. Regular clearing of the drainage filters is also conducted to collect rubber granules for recycling.

Usage of Pitches

9. In the past three years, the usage rate of the 3G artificial turf football pitches managed by the LCSD exceeded 70% on average and reached as high as 90% during peak hours. Since the 2014-15 football

season, the 3G turf pitch in Kowloon Bay Park has been chosen by the HKFA as one of the venues for the Hong Kong Premier League, and a total of 19 top local football matches were held there in the last season. For the Hong Kong Premier League kicked off this September, the HKFA has continued to arrange for matches to be held in the said artificial turf pitch. It is evident that 3G artificial turf football pitches can really reduce the community's demand for natural turf pitches.

Conversion plan for 3G artificial turf football pitches

10. In view of the popularity of artificial turf football pitches, the LCSD plans to provide seven more 3G pitches by the end of 2016. Please refer to Annex 2 for details. After completion of the conversion works, the LCSD will provide a total of 35 3G artificial turf football pitches.

Way Forward

11. When planning new football pitches and before deciding on the turf system to be used, the LCSD will take into account the demand of the whole territory and individual communities for natural and artificial turf football pitches and the views of the District Councils and national sports associations concerned.

12. The LCSD will continue to closely monitor the development of artificial turf systems with a view to providing the public with quality pitch facilities.

13. Members are invited to note the above information on the design and maintenance of artificial turf football pitches managed by the LCSD.

Home Affairs Bureau
Leisure and Cultural Services Department
November 2015

Artificial Turf Pitch Facilities of the Leisure and Cultural Services Department

(as at November 2015)

District	Venue	Artificial Turf Pitch			
		First/Second Generation Artificial Turf Pitch		Third Generation Artificial Turf Pitch	
		11-a-side	7-a-side	11-a-side	7-a-side
Central and Western	1. Sun Yat Sen Memorial Park				1
Eastern	2. Quarry Bay Park		1		1
Southern	3. Wong Chuk Hang Recreation Ground			1	
Wan Chai	4. Happy Valley Recreation Ground *@		2	4	1
Kowloon City	5. Kowloon Tsai Park *			2	
Kwun Tong	6. Kowloon Bay Park			1	1
	7. Kwun Tong Recreation Ground				1
	8. Shun Lee Tsuen Park				1
Sham Shui Po	9. Shek Kip Mei Park *			1	
Wong Tai Sin	10. Lok Fu Recreation Ground @	1			
	11. Morse Park			3	1
	12. Po Kong Village Road Park *			2	
Yau Tsim Mong	13. Boundary Street Recreation Ground @	1			
	14. Cherry Street Park				1
Islands	15. Man Tung Road Park				1
Kwai Tsing	16. Tsing Yi Northeast Park			1	
North	17. Pak Fu Tin Sum Playground		1		
Sai Kung	18. Po Tsui Park @	1			
Sha Tin	19. Ma On Shan Recreation Ground			1	
	20. Tsang Tai Uk Recreation Ground	1			
Tai Po	21. Kwong Fuk Football Ground @	1			
	22. Kwong Fuk Park			1	
Tuen Mun	23. Wu Shan Recreation Playground			1	
Yuen Long	24. Tin Yip Road Park			1	
Total:		5	4	19	9
		37			

Remarks:

* Football-cum-Rugby

@ Football-cum-Hockey

**Conversion Plan for Third Generation Artificial Turf Pitches
Implemented by the Leisure and Cultural Services Department**

Conversion works in progress

District	Venue		Expected Completion Date
Wan Chai	1.	Happy Valley Recreation Ground ^*	December 2015
Sha Tin	2.	Tsang Tai Uk Recreation Ground #	January 2016
Tai Po	3.	Kwong Fuk Football Ground #	May 2016

Conversion works expected to be completed by the end of 2016

District	Venue	
North	4.	Pak Fu Tin Sum Playground #
Sai Kung	5.	Po Tsui Park #
Eastern	6.	Quarry Bay Park #
Southern	7.	Aberdeen Sports Ground ^

Remarks:

^ converted from natural turf

converted from first/second generation artificial turf

* Happy Valley Underground Stormwater Storage Scheme of the Drainage Services Department