

Legislative Council Panel on Home Affairs

Tseung Kwan O Sports Ground

The purpose of this paper is to seek Members' support to increase the approved project estimate (APE) for **242RS Tseung Kwan O Sports Ground** (TKOSG) from \$293.1 million by \$59.2 million to \$352.3 million in money-of-the-day (MOD) prices.

Background

2. With the support of the Home Affairs Panel and on recommendation of the Public Works Subcommittee, the Finance Committee in February 2005 approved the upgrading of **242RS TKOSG** to Category A at an estimated cost of \$293.1 million in MOD prices. The project is to be delivered by a design-and-build (DB) contract whereby the selected DB contractor will be responsible for both the design and construction works for the project. The estimated project period is 36 months.

3. We invited tenders for the DB contract from the pre-qualified tenderers in June 2005. In September 2005, we received tender returns from three pre-qualified tenderers. According to the most advantageous tender, the total project cost amounts to \$362.9 million. This exceeds the APE of \$293.1 million by \$69.8 million.

4. We have circulated a paper to the Home Affairs Panel on 4 January 2006 to explain the case, which was subsequently submitted to the Public Works Subcommittee for consideration on 11 January 2006. The Public Works Subcommittee advised that the case should be discussed at the Home Affairs Panel.

The Tseung Kwan O Sports Ground

5. The approved project scope of **242RS TKOSG** comprises the construction of the sports ground with the following facilities –

(a) Main Sports Ground

- (i) track and field provisions conforming to the International Association of Athletics Federations (IAAF) standards, including an eight-lane 400-metre all-weather synthetic running track, a javelin-throw circle, high jump take-off runways and pits, long jump and triple jump runways and pits, pole-vault runway and landing area, steeple chase facilities, a hammer and discus cage, and a shot-put throwing area;
- (ii) an 11-a-side natural turf football pitch conforming to the Federation International de Football Association (FIFA) standards; and
- (iii) a covered spectator stand with a seating capacity of about 3 500, including a VIP section of 250 seats, and space for the provision of a temporary removable spectator stand with 1 500 seats.

(b) Secondary Sports Ground

- (i) warm-up track and field facilities up to the IAAF specifications, including a loop of at least 300-metre running track together with a 120-metre straight track and facilities for field events (i.e. long jump, triple jump, pole-vault, high jump, shot-put, discus and

hammer throw, javelin-throw and steeple chase); and

- (ii) a 7-a-side natural turf football pitch surrounded by the warm-up loop of running track mentioned in item (b)(i) above.

(c) Ancillary Facilities

- (i) vehicle parking spaces for 60 private cars and 10 coaches, a lay-by for taxis and two bicycle parking areas;
- (ii) entrance plaza with landscaped areas, a ticketing office, a main entrance foyer and associated facilities;
- (iii) modifications (including the provision of lift) to the existing footbridge near the entrance plaza; and
- (iv) ancillary facilities including changing rooms, toilets, doping control, first-aid, weight-lifting and massage rooms, administration offices, control and security rooms, press and interview facilities, store rooms, maintenance and service yards, refuse collection chambers, electrical and mechanical plant rooms, and an administration block near the secondary sports ground to accommodate the necessary facilities for organisation of events and conferences as well as holding of training exercises.

6. The proposed development will provide the Tseung Kwan O (TKO) new town with a much needed sports ground; and at the same time upgrade Hong Kong's athletic venues with a new sports ground equipped

with facilities up to international standards for holding large-scale athletic competitions, including the track and field events of the future 2009 East Asian Games (EAG). A summary of the local and long-term sports development need for the TKOSG is at **Enclosure 1** for Members' reference.

Increase in Approved Project Estimate

7. The D Arch S has reviewed the tender exercise. While there are higher-than-expected tender returns for some of the items of the project, the recommended tender is the most advantageous.

8. The original estimate of the project worked out by D Arch S was based on a preliminary conceptual layout as set out in **Enclosure 2** drawn up by the Department (ArchSD). Under the DB mode, the tenderers each proposed its own design option within the parameters of the Employer's Requirements (i.e. requirements and specifications of the project) to compete for the tender.

9. The D Arch S has critically examined the tender returns and the analysis carried out reveals that the higher-than-estimated construction and overhead cost¹ has led to the bid being in excess of the original budget. The higher-than-estimated costs submitted by the recommended tenderer may be attributable to the following factors –

- (a) we have relatively little experience in making estimate for developing sports ground project using the DB approach and there was under-estimation in the original budget;**
- (b) there has been a rising trend of construction and overhead costs in the local market. This has not been taken into account when the original budget was drawn up; and**
- (c) the recommended tenderer has come up with an innovative design which would enhance the quality of the sports ground but this also entails higher costs.**

¹ generally referring to design fee, site supervision and insurance costs in construction works.

10. In respect of paragraph 9(a), the TKOSG is the first ever sports ground project we have embarked on using the DB approach. We have relatively little experience and are lack of supporting cost data in making estimate for such scenario. There was under-estimation in the original budget.

11. In respect of paragraph 9(b), there has been a rising trend of construction and overhead costs in the local market in the light of the booming construction activities in neighbouring markets. The Tender Price Index (TPI)² of ArchSD during the period 2004-2005 indicate an upward trend by 3.42% (private sector TPI as provided by the QS Consultant employed by ArchSD is slightly higher at 3.66%). With the improvement in the economy, it is reasonable that the tenderers would anticipate that the increasing trend in construction and overhead costs in the local market to be continued in subsequent years. Consequently, they might have adopted a more conservative pricing strategy in their tender returns as reflected in the bidding prices on overhead, etc.

12. In respect of paragraph 9(c), the design of the recommended tender not only meets the stipulated requirement and the requisite standard, but is also more innovative than ArchSD's conceptual layout based upon which the original estimate was drawn up. The design of the recommended tender has the following merits/special features:

- (a) **Innovative design** with proposed combination of main spectator building and the administration block, which will facilitate organization of major athletic events. Under ArchSD's original conceptual layout, the main spectator building and the administration block are separate structures.
- (b) The employment of an **experienced and renowned international sports consultant firm** to provide expertise services to ensure that IAAF standards for holding international track and field competition are fully complied with. This would enhance the certainty for IAAF standards

² a quarterly index compiled primarily as an aid to adjust building cost data for estimating purposes

to be complied with and smoothen the certification process involved thus strengthening the reliability of the project. Besides, the consultant will conduct an in-depth wind and solar micro-climate study for the holding of sports events at the sports ground, and devise quality crowd management, security and logistics plan and other design standards required for holding major sporting events. All these would enhance the future operation as well as the reputation of the sports ground.

- (c) The offer of **crucial sports ground facilities** (such as floodlight system, electronic timing system and public address system) **with sound track record** for use in major international sports events to ensure quality and reliability. As a result, it is anticipated that the time and cost for future maintenance of these facilities would be reduced.
- (d) The provision of **a comprehensive and durable drainage system design for the storm and soil water system** for the spectator building and sports ground area. This is very useful as any defects in drainage system identified after design and construction stage would substantially affect the delivery of the project or the operation of the future sports ground.
- (e) The provision of **a paved entrance plaza with good segregation of spectators, VIP, and athletes circulation** for the purpose of holding major athletic events; the proposed openable boundary fence wall design is considered to be very effective in discharging mass crowd within a short period of time.

13. A comparison of the APE and the revised project estimate of **242RS TKOSG** in MOD prices, together with the detailed explanation for the proposed increase, is set out below:

	(A) Approved project estimate	(B) Revised project estimate	(B) – (A) Difference between the approved and revised project estimates
	\$ million	\$ million	\$ million
(a) Site formation	1.6	1.6	-
(b) Piling	30.1	35.3	5.2
(c) Main sports ground facilities	22.6	28.0	5.4
(d) Secondary sports ground facilities	10.7	13.6	2.9
(e) Spectator stand (including the ancillary facilities below)	81.6	99.7	18.1
(f) Administration block	28.9	34.3	5.4
(g) Building services	49.8	66.5	16.7
(h) Drainage	7.0	9.4	2.4
(i) External works	22.8	36.5	13.7
(j) Soft landscaping works	5.0	5.0	-
(k) Furniture and equipment	3.2	3.2	-
(l) Consultant's fee for contract administration	4.1	3.2	(0.9)
(m) Contingencies	25.7	16.0	(9.7)
Total	293.1	352.3	59.2

- (a) In respect of Item (b) (Piling), there is an increase of \$5.2M as additional piling works are required for the larger footprint of the more innovative spectator building design proposed by the tenderer. In addition, due to structural constraints associated with the existing footbridge on the connection works, the recommended tenderer has proposed, for technical reasons and to meet site constraints, different piling for spectator stand and footbridge connection, which has resulted in additional overhead costs of piling.

- (b) In respect of Items (c to f) (Building), an increase of \$31.8 million was mainly due to larger construction floor area for the main spectator building resulting from the recommended tenderer's innovative design and the proposed combination of main spectator building with the administration block. This would provide a well defined as well as segregation of circulation for spectators, management staff and athletes which would be conducive to efficient operation for holding international athletic events. This is different from the original ArchSD concept of separate spectator stand and administrative building. In addition, a renowned international sports consultant firm has been employed to provide expertise services to ensure that the IAAF standards for holding international track and field competitions would be fully complied with.

- (c) In respect of item (g) (Building services), an increase of \$16.7 million was mainly due to the following reasons:
 - (i) The floodlighting system proposed by the recommended tenderer, while complying with the technical requirements of the tender, have reliable track records of being used in major international sports venues to ensure that the quality of floodlighting would be in full compliance with the IAAF and FIFA standards and for television broadcasting. The

floodlights would have built-in design to reduce glare effect thus minimizing potential nuisance to adjacent buildings.

- (ii) Internationally recognized and reliable electronic timing system in full compliance with technical requirements being used in major international sports events was offered by the recommended tenderer.
 - (iii) The sports field public address system would use computer simulation of sound effect to minimize noise nuisance to the adjacent buildings.
- (d) In respect of item (h) (Drainage), an increase of \$2.4 million was mainly due to the recommended tenderer's offer to provide a comprehensive and durable drainage system design for the storm and soil water system of the spectator building and sports ground area.
- (e) In respect of item (i) (External works), an increase of \$13.7 million was mainly due to the recommended tenderer's proposed design of a paved entrance plaza which significantly enhances the segregation of spectators, VIP, and athletes circulation for holding major athletic events. Furthermore, the proposed openable boundary fence wall design at the main entrance plaza would be effective in discharging mass crowd within a short period of time for holding large scale athletic events.

14. The D Arch S has critically examined the tender returns and has compared the recommended tender with similar projects delivered by the Department. The building unit cost, building services unit cost and the overall building construction unit cost of the recommended tender are \$9,800/m², \$3,700/m² and \$13,500/m² respectively. These unit rates are considered to be fair and reasonable

in comparison with a similar project 212RS – Construction of Siu Sai Wan Sports Ground tendered in November 1994, where the corresponding unit rates are \$8,200/m², \$2,900/m² and \$11,100/m² (updated to current price) respectively. The higher unit rates for TKOSG are considered fair and reasonable as the complication of the project is higher than that for the Siu Sai Wan Sports Ground.

15. In conclusion, the D Arch S considers the building construction unit cost of the recommended tenderer for **242RS TKOSG** reasonable. The selected design is the most advantageous tender and is considered to be value for money.

Other Options

16. We have considered the option of re-tendering the project. In view of the tenderers' general anticipation of a rising trend in construction and overhead costs in the market, it is unlikely that the bids will be lower upon re-tendering. This would also delay the project commencement by more than half a year. We have also explored the option of reducing the approved project scope to trim down the cost but do not consider it advisable. This is because the current scope, devised in consultation with the Hong Kong Amateur Athletic Association, already represents the necessary requirements for constructing a sports ground conforming to the IAAF standards and suitable for the holding of major international athletic events. Other options including outsourcing the project by employing consultant or deploying in-house resource within the ArchSD to undertake the design and construction supervision had also been explored but considered not acceptable mainly because of the timing implication of substantially deferring the completion date of the project. Also, there is no guarantee that the tender price will be lowered.

Recommendation

17. In the light of the situation set out above, the D Arch S, with the support of the Secretary for Home Affairs, proposes to increase the APE for **242RS TKOSG**. In the light of the returned tenders which give a clearer indication of the project cost, D Arch S proposes to use part of the project contingencies to meet the increase in project cost. However,

in view that this project is still at the pre-construction stage, D Arch S considers it prudent to keep a suitable level of contingencies to cater for unforeseen incidences so as to ensure smooth implementation of the project. D Arch S therefore proposes to retain \$16 million out of the project contingencies of \$25.7 million and deploy the balance of \$9.7 million, together with savings of \$0.9 million under Consultant's Fee, to partially offset the \$69.8 million increase in the project cost. In the circumstances, it is necessary to increase the APE of **242RS TKOSG** from \$293.1 million by \$59.2 million to \$352.3 million in MOD prices to meet the increased project cost.

Public Consultation

18. The need for the development of the TKOSG was discussed at the Home Affairs Panel meeting in January 2005. We had also consulted the Sai Kung District Council and the Hong Kong Amateur Athletic Association on the development proposal before the Finance Committee approved the upgrading of the project to Category A in February 2005. Recent appeals to the Legislative Council by the Sai Kung District Council and the Hong Kong Amateur Athletic Association for support of the project is at **Enclosure 3** for Members' reference.

Advice Sought

19. Members are invited to support the submission of **242RS TKOSG** to the Public Works Subcommittee at its meeting on 15 February 2006 for an increase in the APE from \$293.1 million by \$59.2 million to \$352.3 million in MOD prices, such that the TKOSG project could start construction works in mid 2006 for completion in mid 2009.

Home Affairs Bureau
January 2006

Need for the Development of Tseung Kwan O Sports Ground

Need of the New Sports Ground

Tseung Kwan O (TKO) is a fast developing new town with a population of 341 800 in 2006 which will increase by about 12% to about 383 500 in 2013. As a reference, the Hong Kong Planning Standards and Guidelines suggest that a sports ground should be provided for a population of 200 000 to 250 000. Although there is currently the Sai Kung Tang Siu Kin Sports Ground in the Sai Kung district, it is located in Sai Kung town, geographically separated from TKO. Therefore, there is a need to provide a sports ground in TKO. This also ties in with the planning objective of developing TKO new town into a self-contained community.

2. The population profile in TKO is relatively young. According to the latest 2001 Population Census, there is a significant percentage of children and young adult in TKO. About 52% of TKO's population are below 34 years of age. This forms a strong potential user base for the proposed sports facilities. There are also 47 secondary and primary schools in TKO which could make use of the sports ground for organising athletic meets and other sports activities. The sports ground will be well served by public transportation including the Mass Transit Railway. It could be readily used by others outside the TKO area.

3. Currently, the Leisure and Cultural Services Department (LCSD) manages a total of 52 natural turf football pitches in Hong Kong. They are very popular with an average usage rate of almost 100%. At present, there are only one artificial turf football pitch and one hard-surfaced football pitch in Po Tsui Park and one hard-surfaced football pitch in Po Hong Park. Both parks are located at the northern part of TKO with very high usage rate (Po Hong Park: 88.2% peak-hour usage for hard-surfaced pitch in 2005; Po Tsui Park: 92.8% and 84.6% peak-hour usage for artificial turf and hard-surfaced pitch respectively in 2005). We

expect that the proposed natural turf football pitches of the new sports ground (an in-field 11-a-side natural turf football pitch in the main sports ground and a 7-a-side natural turf football pitch in the secondary sports ground), which is located at the southern part of the densely populated TKO new town, will be heavily patronized for football activities.

Usage of the Sports Ground

4. The proposed scope of the Tseung Kwan O Sports Ground (TKOSG) includes a secondary sports ground and other necessary event organisation and athletic facilities designed and built to the International Association of Athletics Federations (IAAF) standards suitable for holding international/regional track and field competitions including the athletic events of the 2009 East Asian Games (EAG). Apart from serving as the venue for large-scale international athletics competitions, the TKOSG will also enable the Hong Kong Amateur Athletic Association to organise sports clinics on athletics on a regular basis with a view to raising the sports standard of athletics in Hong Kong. The TKOSG will become the regular base of training for track and field events in Hong Kong. Local major cross-district and inter-school sports/athletic events will be able to use this venue.

5. In normal periods when there are no large-scale athletic events which will make use of both the main and secondary sports grounds, each of the facilities can operate independently and can be used simultaneously by different parties. The provision of the track and field facilities in the secondary sports ground will therefore provide additional opportunities for sports associations, schools, etc to conduct athletics programmes/training when the main sports ground is being used for athletic meets or football matches. The function rooms of the sports ground will also be used for local recreation and sports programmes such as yoga, social dances, table-tennis, tai-chi and judo, etc.

Public Consultation

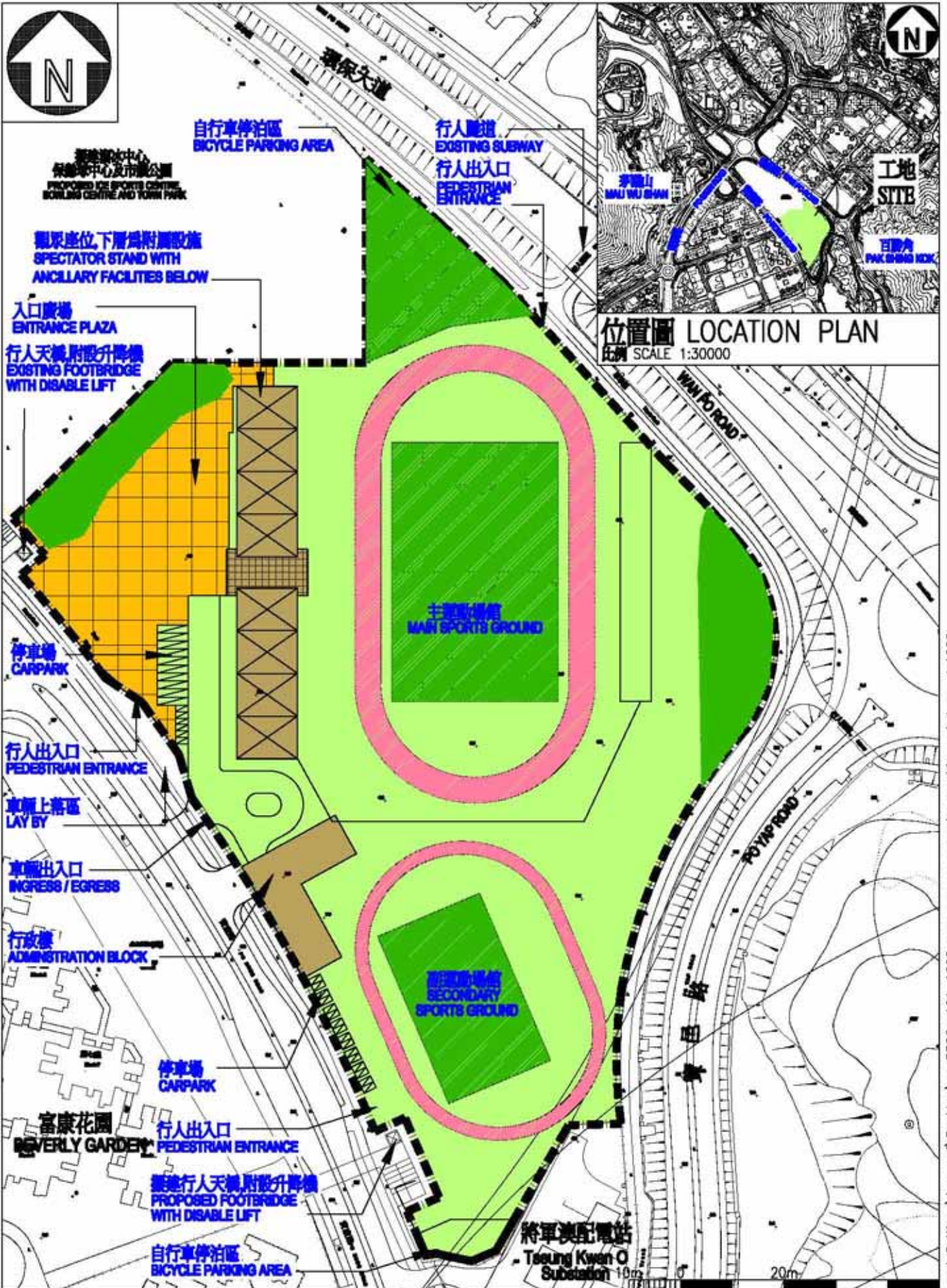
6. On 13 August 2002, the LCSD consulted the Culture, Recreation and Sports Committee of Sai Kung District Council on the proposed development of a district-based sports ground. Members

supported the proposal. In April 2004, the Sai Kung District Council was informed of the proposed upgrading of the TKOSG. Members strongly supported the proposed upgrading of the project scope. On 10 August 2004, the Culture, Recreation and Sports Committee of Sai Kung District Council was further consulted on details of the upgrading proposal, and Members rendered strong support to the project.


7. On 23 November 2004, the LCSD and Architectural Services Department updated Sai Kung District Council on the latest planning progress of the project and consulted Members on the proposed Design & Build mode of implementation, together with a conceptual layout (which would serve as a reference for inviting tenders). The Sai Kung District Council rendered strong and full support to the project proposal, noting that the detailed design would only be available at a later date from the successful bidder after the contract has been awarded. They also urged the Government to implement the project early to prepare for the organisation of the 2009 EAG.

8. The LCSD also consulted the Hong Kong Amateur Athletic Association, the organiser of major athletic events in Hong Kong, which also strongly supported the proposed development of the TKOSG, and advised that the proposed scope of the sports ground would be suitable for holding international athletics competitions including the track and field events of the 2009 EAG. Besides, the TKOSG would also be suitable for holding other international and regional competitions such as the Asian Athletics Championships, Asian Junior Athletics Championships, IAAF World Outdoor Meetings, IAAF World Athletics Series, Asian Grand Prix Series and Asian All-Stars Athletics Championships, etc.

9. The sports ground will become a much welcomed sports facility in the TKO new town. Enabling the sports community to organise major athletics events such as the EAG and Asian Championships as well as providing a base for athletic training, the completion of the TKOSG would be a major improvement to Hong Kong's athletic venues and a significant step forward in the promotion of sports in Hong Kong.



位置圖 LOCATION PLAN
比例 SCALE 1:30000

title 242 RS 將軍澳運動場 TSEUNG KWAN O SPORTS GROUND	drawn by M.F. LEUNG	date JAN 2006	drawing no. AB/5586/XA102	scale 1:2000
	approved W.Y. CHAN	date JAN 2006	 ARCHITECTURAL SERVICES DEPARTMENT	
	office ARCHITECTURAL BRANCH			

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西貢區議會
通訊處：西貢政府合署二樓



西貢區議會
Sai Kung District Council

SAI KUNG DISTRICT COUNCIL,
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電話：2163 9419

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傳真急件文件

(傳真：2521 7518)

中華人民共和國香港特別行政區
立法會財務委員會工務小組委員會主席
何鍾泰議員, S.B.St.J., JP

何主席：

將軍澳運動場增撥款項

在本年一月十日舉行的二零零五至零六年度西貢區議會第六次會議上，議員知悉民政事務局向貴會提交討論文件，建議增撥五千多萬元款項，用作支付將軍澳運動場的工程費用。經討論後，議員一致支持有關增撥款項的建議。現謹致函表達本會對有關增撥款項的支持意見，供各委員備悉及考慮。

西貢區議會

主席吳仕福

二〇〇六年一月十日



香港業餘田徑總會

Hong Kong Amateur Athletic Association

E-mail: inquiry@hkaaa.com Website: www.hkaaa.com

10 January 2006

Members of the Legislative Council
Legislative Council Chamber,
Hong Kong

Dear Sirs,

Appeal for support of additional funding on the construction of Tseung Kwan O Sports Ground

We are aware from newspapers announcement that the revised budget for construction of Tseung Kwan O Sports Ground would be revised from \$293M to \$352M. As this capital works project will be tabled at the coming Public Works Subcommittee meeting on 11 January 2006, we would like to appeal to you for your support for additional funding as the provision of an international athletics arena is vital in successfully staging of the EAG in 2009 as Athletics is a compulsory sport which must be included in the overall sporting program.

The additional funding is for upgrading the scale of development of the original district sports ground in Tseung Kwan O and to make it suitable for holding athletics events of the 2009 EAG. This will be an important milestone for the sports development in Hong Kong, in particular Athletics, as to make the EAG a success, we need sufficient high-quality facilities and concerted efforts from all sectors of our community to achieve this. We all will continue to strive to make Hong Kong as a world city for hosting international events in future.

The proposed Sports Ground is planned to equip with the warm-up and ancillary facilities necessary for holding large-scale track and field competitions, hence it will enable us, the Hong Kong Amateur Athletic Association, being the national governing body for Track and Field competitions in Hong Kong to organize major athletic events such as the EAG, Asian Championships, and other major international events in Hong Kong. It should provide also a permanent base for athletic training in the territory.



香港業餘田徑總會

Hong Kong Amateur Athletic Association

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We consider the proposed Design and Build approach for the project is appropriate and acceptable taking into account of the urgency and in the light of the nature of the project. The Hong Kong Amateur Athletic Association would continue to take an active part in providing professional advices for the project with the relevant Government Departments to ensure that the completed facility would meet the international standards for hosting international competitions. As we need to have the facility completed by late 2008 for soft commissioning before the 2009 EAG, we strongly urge you to consider approving this additional funding request so that an early commencement of the construction work can be achieved.

Yours sincerely,

William Ko
Chairman.