

# Task Force on Kai Tak Harbourfront Development

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For discussion  
on 18 November 2015

TFKT/11/2015

## **Multi-purpose Sports Complex at Kai Tak Proposed Master Layout Plan and Findings of Planning Study**

### **PURPOSE**

To brief Members on the indicative master layout plan for the Kai Tak Multi-purpose Sports Complex (the MPSC) and the findings of a planning study on aspects related to the design of the complex.

### **THE MPSC PROJECT**

2. The MPSC is located at the North Apron of the former Kai Tak Airport and occupies an area of about 28 hectares. Its location is at **Annex A**. When completed, it will be the biggest sports park in Hong Kong, with an array of high-quality international event venues, sports facilities, open space for the community, park features, office accommodation, retail, and food and beverage outlets. Key sports facilities of the MPSC include a 50 000-seat multi-purpose main stadium with a retractable roof, a public multi-purpose sports ground with seating for at least 5 000 spectators and a multi-purpose indoor sports centre with at least 5 000 seats. These new facilities will enable us to organise more major sports events, thereby creating more opportunities for our athletes to compete at world level and improve their competitiveness. The MPSC will also help to alleviate the shortage of public sports facilities in the East Kowloon, and on a broader front, it will provide further impetus to the Kai Tak development and regeneration of East Kowloon. We briefed this Task Force the general scope of MPSC in January 2014, the ensuing paragraphs give an update on the project's planning.

### **INDICATIVE MASTER LAYOUT PLAN**

3. The indicative master layout plan and 3D model for the MPSC are at **Annex B**. The key elements of the layout plan are briefly described in the following paragraphs.

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## **Configuration of the MPSC site**

3.1 The site is divided by Shing Kai Road (under construction) into northern and southern sections. Shing Kai Road will allow vehicular traffic from Ma Tau Kok and To Kwa Wan to access the Central Kowloon Route and serve the residential developments in the former North Apron area. The speed limit of the section of Shing Kai Road bisecting the MPSC will be 50 km/hour.

## **Access to the MPSC**

3.2 Shing Kai Road will provide vehicular access to the car parking and loading and unloading areas of the MPSC.

3.3 For pedestrians and cyclists, a landscaped podium and at-grade light-controlled pedestrian crossings will connect the northern and southern sections of the MPSC. There are two passageways on the podium: a central passageway (about 120 m wide) and another passageway (about 30 m wide) at the western boundary of the site, providing access to the hotel and office buildings.

## **Venues and facilities in the northern section of the site**

3.4 Two major sports venues – the indoor sports centre and public sports ground – will be located in the northern section of the MPSC site, close to residential areas and the future To Kwa Wan and Kai Tak MTR stations. The public sports ground is located above the existing Kai Tak Tunnel, as the lightweight and wide span of the venue will help avoid heavy structural loading over the tunnel.

3.5 Under the approved Kai Tak Outline Zoning Plan (OZP), the area to the east of the indoor sports centre is zoned as an open space, and will provide for park amenities and ball courts, complementing the indoor sports centre and public sports ground.

## **Venues and facilities in the southern section of the site**

3.6 The major sports venue in the southern section is the

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main stadium, about 670m from the future To Kwa Wan station and 940m from the future Kai Tak Station. To the east of the main stadium is an open space, and to the west are the proposed office and hotel buildings, located close to the future To Kwa Wan MTR Station and oriented to give views of the harbour.

## **FINDINGS OF PLANNING STUDY**

4. The HAB has engaged a consultant to study (a) the need to increase the height limit for the main stadium; (b) the connectivity between the northern and southern sections of the site; and (c) the need for a hotel within the MPSC site (**Annex C**) to support our related planning application to the Town Planning Board later this year. The consultant has largely completed the study and the findings are set out in the following paragraphs.

### **(a) Height limit on the main stadium**

4.1 In planning the MPSC, provision has to be made for the installation of a retractable roof for the 50,000-seat main stadium to provide an all-weather venue for major events and to cater for events held in the evening. To facilitate comparison, the consultant studied 12 overseas stadia with 50 000 to 60 000 seats and a retractable roof (**Annex D**) by analysing their building height, footprint, retractable roof systems and other characteristics. The study shows that none of these 12 stadia could be replicated at the MPSC site within a building height of +55mPD, the limit stipulated in the OZP. An increase in the height limit by 20m to +75mPD is necessary and justified by comparison with stadia internationally, so as to allow for flexibility in stadium design.

### **(b) Connectivity between northern and southern sections**

4.2 To improve the connectivity between the northern and southern sections of the MPSC, an additional podium connection is proposed at the west edge of the site to provide direct access from the future To Kwa Wan MTR Station and Sung Wong Toi Park to the main stadium and the proposed office/hotel block. A drawing comparing the configuration of the landscaped deck over

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Shing Kai Road shown in the OZP and the proposed revised configuration is at **Annex E**.

4.3 Two other measures to enhance connectivity between northern and southern sections of the site have been considered, namely a “footbridge” option and a “ramp” option (**Annex F**). As there are at-grade light-controlled pedestrian crossings across Shing Kai Road, and as the indoor sports centre will provide escalators and lifts to take visitors from the northern open space to the landscaped deck, the functionality of these options is limited. Moreover, the “footbridge” and “ramp” options are at odds with the overall layout - for example, the “ramp” option would negate part of the open space and compromise the eastern entrance of the indoor sports centre.

## **(c) Need for a hotel within the MPSC**

4.4 The consultant has studied the location, scope, scale and viability of the proposed hotel at the MPSC. The study, which identified international examples of hotels within or close to a stadium complex and made reference to tourism trends in Hong Kong and similar sports facilities elsewhere, concluded that a 300-bedroom 3 or 4-star hotel within the site would be commercially viable and would contribute to the successful hosting of major sports events at the MPSC by minimising travel for athletes and officials. The study also showed that a hotel could be integrated with the sports facilities at the MPSC and would contribute to the vibrancy of the harbour-front.

## **HARBOUR PLANNING PRINCIPLES**

5. Reference has been made to the Harbour Planning Principles and the Harbour Planning Guidelines, and the proposals are considered to be in line with them, as follows.

### *Principle 1: Preserving Victoria Harbour*

5.1 The proposals do not involve reclamation within the Harbour. The proposed maximum building height of +75mPD for the main stadium is lower than the heights of the residential sites in the vicinity. The building height of the proposed hotel will not

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exceed the current restriction in the OZP. As shown at **Annex G**, the study concludes that the MPSC will not be incompatible in the context of the current and planned developments in Kai Tak when viewed from the selected viewing points.

## *Principle 2: Stakeholder Engagement*

5.2 We consulted the Leisure and District Facilities Management Committees of the Kowloon City, Kwun Tong and Wong Tai Sin District Councils on the scope and planning of the MPSC between December 2014 and January 2015. They expressed support for the project and have requested its early implementation. We briefed this Task Force in January 2014, and regularly consult the Sports Commission and its MPSC Task Force on progress of the MPSC project. The operations consultant appointed by HAB in late July 2015 has been engaging the sports sector and other potential users of facilities at the MPSC since September this year. We briefed the Home Affairs Panel of the Legislative Council (LegCo) in early 2014 and again in February 2015 on the progress of the project. The project had also been thoroughly discussed in the Public Works Sub-committee and the Finance Committee of LegCo in the course of seeking funding approval for the pre-construction works of the MPSC project.

## *Principle 3: Sustainable Development*

5.3 The MPSC will provide world-class event venues and new sports facilities for Hong Kong. By offering new community sports facilities, it will enhance the health, well-being and quality of life of Hong Kong people, contributing significantly to the sports development in Hong Kong, and benefitting present and future generations. Technical assessments are being carried out to ensure that the MPSC is sustainable in terms of traffic, air ventilation and other environmental impacts.

## *Principle 4: Integrated Planning*

5.4 The MPSC is surrounded by open space projects including: Station Square, Metro Park and Sung Wong Toi Park. HAB is working with other government departments and agencies to ensure connectivity and compatibility between the MPSC and

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projects in the neighbourhood, including the open space projects, the future MTRC Sha Tin to Central Link, the Central Kowloon Route, Shing Kai Road, Road D3, the Environmental Friendly Linkage System, and the Kai Tak cycle track network.

## *Principle 5: Proactive Harbour Enhancement*

5.5 The main stadium of the MPSC will be a significant new landmark at Kai Tak and will add visual interest to the Harbour. The urban design concepts of stepped height profile rising from the waterfront to inland areas and undulating height profile along the ex-runway have been maintained. Careful consideration has been given to building height compatibility in the harbour-front areas.

## *Principle 6: Vibrant Harbour*

5.6 The MPSC will be a significant centre for sport, entertainment and other events, offering hospitality, leisure, entertainment, retail, and food and beverage, which will contribute to the creation of an attractive and vibrant destination on the harbour-front alongside other developments on Kai Tak.

## *Principle 7: Accessible Harbour*

5.7 The MPSC will be a gateway from inland to key harbour-front features such as the dining cove and Metro Park, which leads to the 6-star hotel developments and the Cruise Terminal. The proposed configuration of the landscaped deck will improve connectivity within the site, which in turn will improve access from inland to the harbour-front.

## *Principle 8: Public Enjoyment*

5.8 The MPSC will give the public more options for enjoying the harbour-front. The landscaped deck will be an elevated vantage providing views over the Harbour towards the skylines of Hong Kong and Kowloon. The proposals here are compatible with the harbour-front developments and do not require additional land on the harbour-front.

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## **ADVICE SOUGHT**

6. Members are invited to comment on the proposed master layout plan and the findings of the MPSC planning study.

## **ATTACHMENTS**

- Annex A Location Plan
- Annex B Indicative Master Layout Plan and 3D Model
- Annex C Items in the Planning Study
- Annex D List of Reference Stadia
- Annex E Comparison of the Disposition of Landscaped Deck
- Annex F Options for enhancing connectivity of the two open spaces
- Annex G Viewing Points and Photomontages

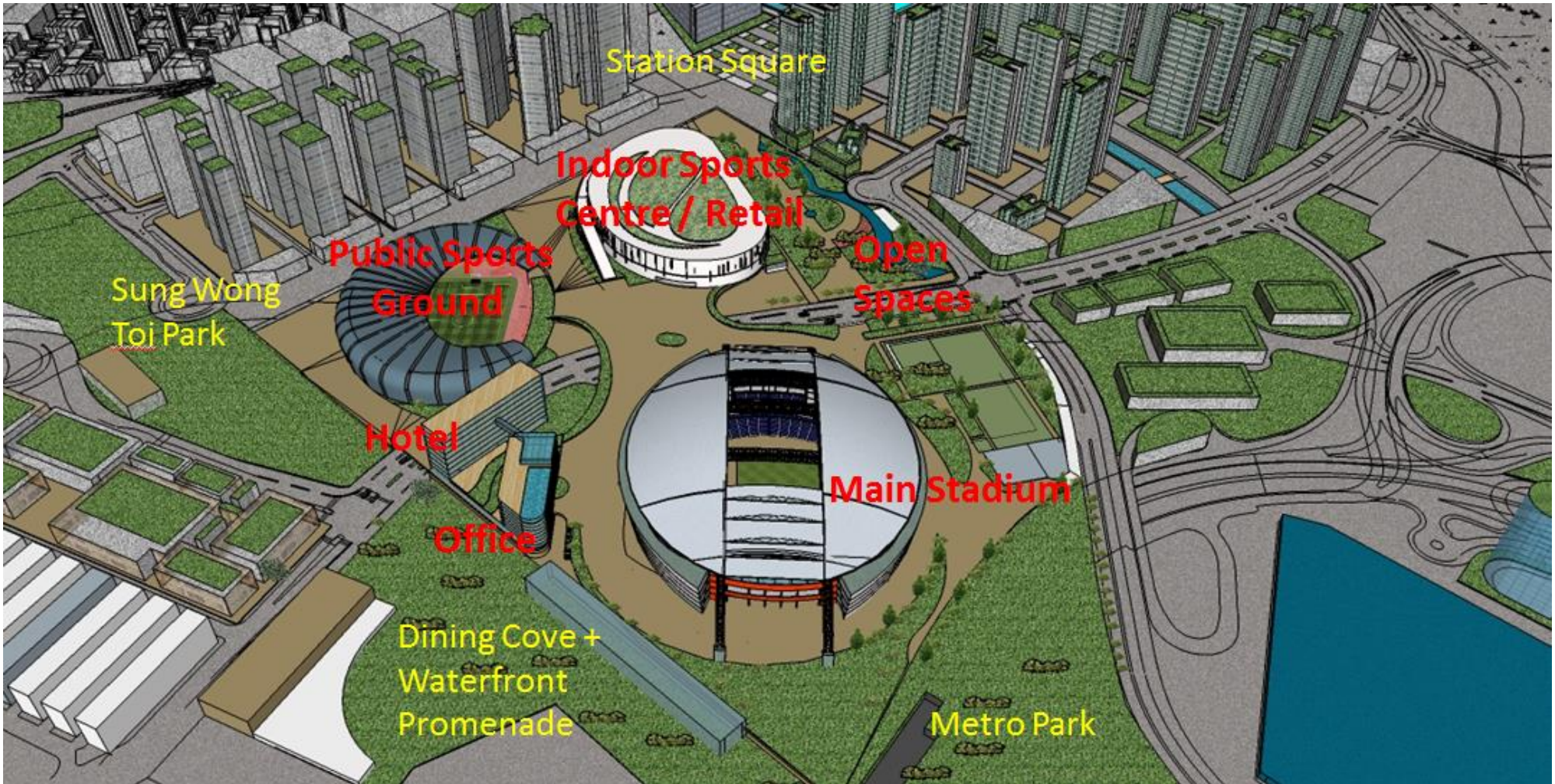
**Home Affairs Bureau  
November 2015**





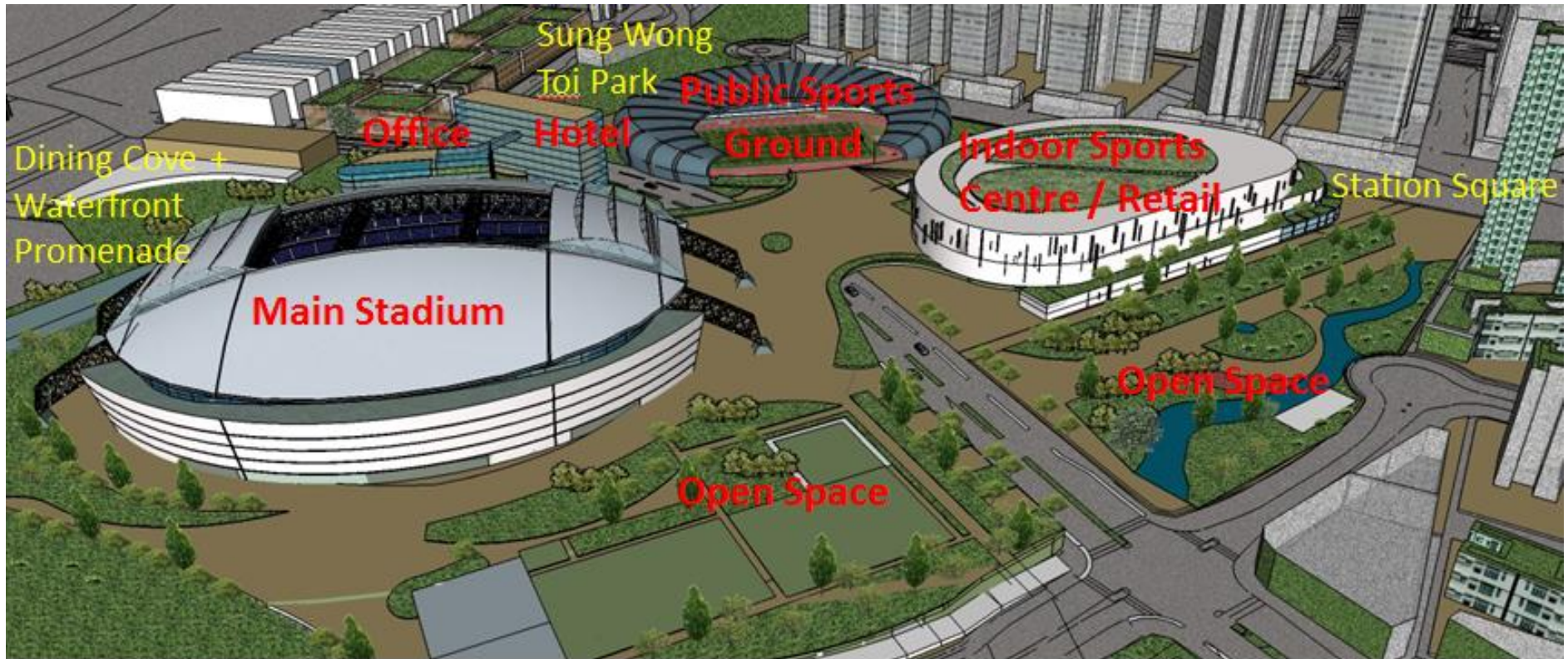






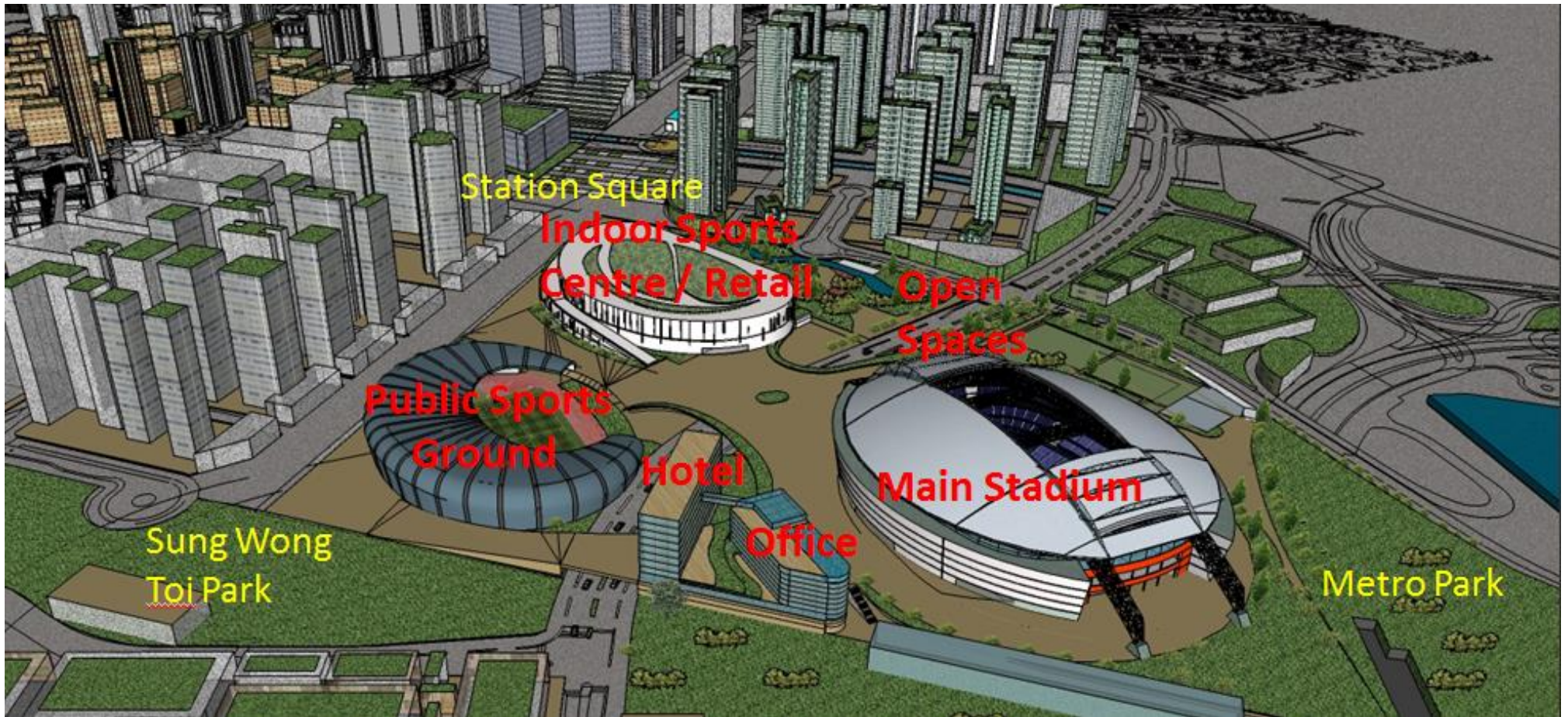
Indicative 3D Model - Viewing from the South





Indicative 3D Model - Viewing from the East





Indicative 3D Model - Viewing from the West



## Multi-Purpose Sports Complex at Kai Tak

### Items in the Planning Study



①

Relaxation of Building Height Restriction from 55 to 75 mPD

②

Development of a Hotel

③

Amendment to the Disposition of Landscaped Deck over Shing Kai Road

## Multi-purpose Sports Complex at Kai Tak

## List of Reference Stadia

	Name, Location, Completion year	External height (m)	Seated capacity and use	Photo
1.	<b>National Stadium</b> Kallang, Singapore (2014)	83	55,000 (football) 52,000 (cricket)	
2.	<b>National Stadium</b> Warsaw, Poland (2011)	78	58,145 (football) 72,900 (concert)	
3.	<b>Amsterdam Arena</b> Amsterdam, The Netherlands (1996)	77	53,052 (football) 68,000 (concerts)	
4.	<b>BC Place</b> Vancouver, British Columbia, Canada (2011)	62	54,320 (football) 59,841 (American football)	
5.	<b>Veltins Arena</b> Gelsenkirchen, Germany (2001)	58	53,951 (football)	
6.	<b>Friends Arena</b> Stockholm, Sweden (2012)	55	50,653 (football) 62,000 (concert)	

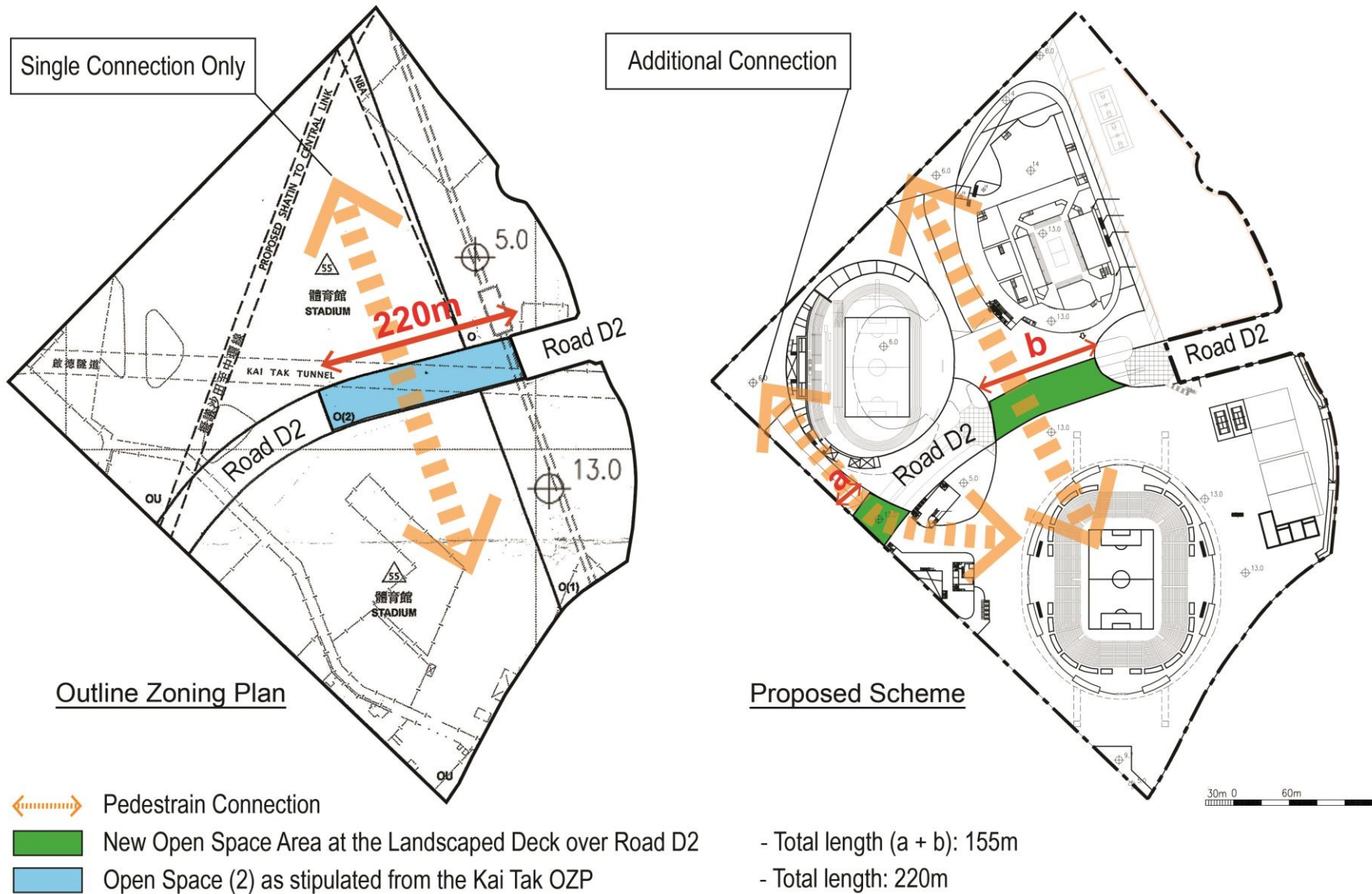


## Annex D

	<b>Name, Location, Completion year</b>	<b>External height (m)</b>	<b>Seated capacity and use</b>	<b>Photo</b>
<b>7.</b>	<b>Stade Pierre-Mauroy</b> Villeneuve d'Ascq, France (2012)	<b>51</b>	50,186 (football)	
<b>8.</b>	<b>National Arena</b> Bucharest, Romania (2011)	<b>50</b>	55,634 (football)	
<b>9.</b>	<b>Dongsheng National Fitness Center Stadium</b> Ordos, China. (2012)	<b>50</b>	50,000 (football)	
<b>10.</b>	<b>Commerzbank-Arena</b> Frankfurt, Germany (2005)	<b>46</b>	51,500 (football) 60,000 (concerts)	
<b>11.</b>	<b>Esprit Arena</b> Dusseldorf, Germany (2004)	<b>40</b>	54,600 (football) 66,500 (concert)	
<b>12.</b>	<b>Etihad Docklands Stadium</b> Melbourne, Australia (2000)	<b>38</b>	52,000 (Australian rules football)	

### Multi-purpose Sports Complex at Kai Tak

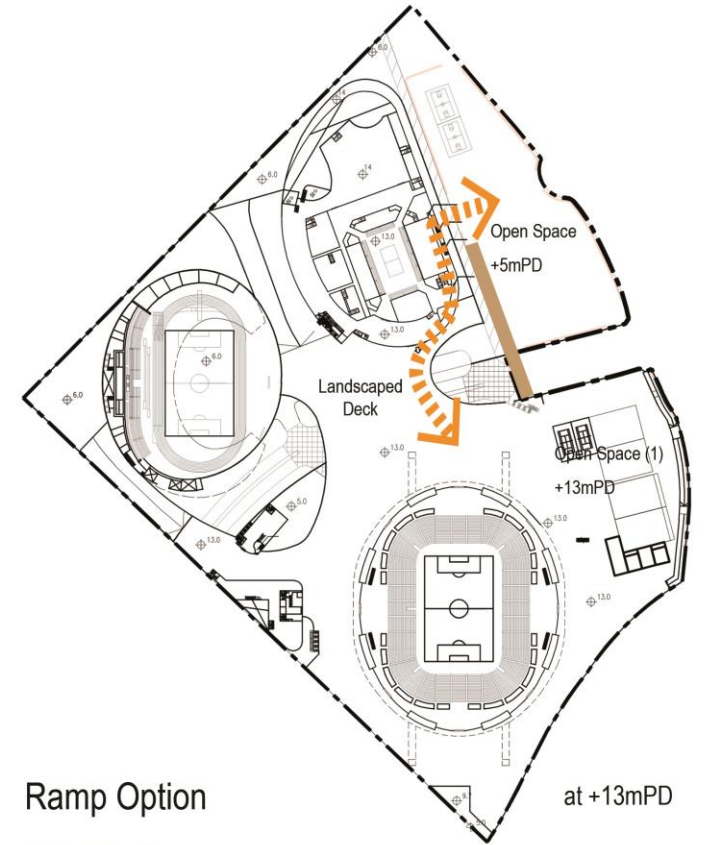
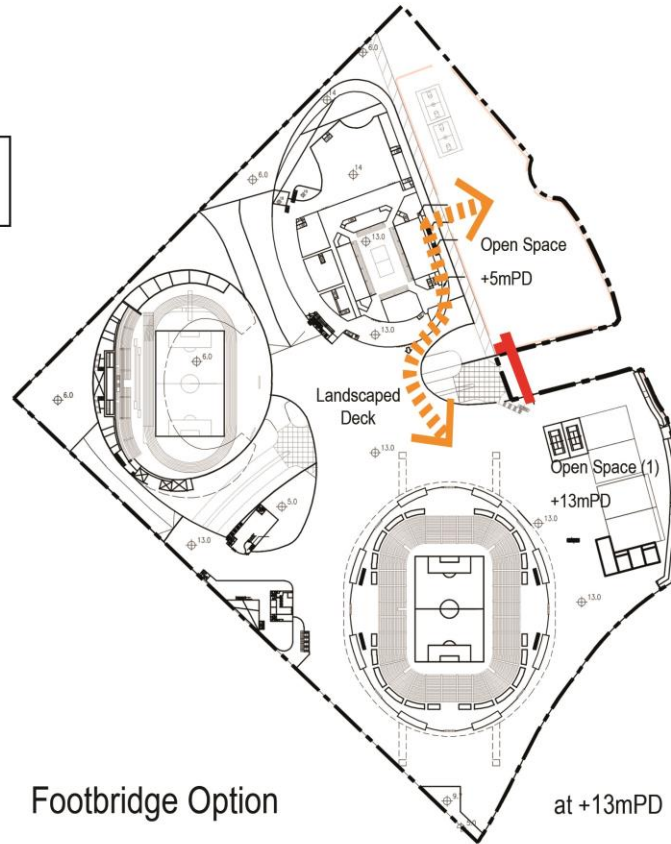
#### Disposition of Landscaped Deck over Shing Kai Road (Road D2)





# Multi-purpose Sports Complex at Kai Tak

## Options for Enhancing Connectivity of Two Open Spaces



Orange dashed arrow: Connection with internal elevator/escalator in Indoor Sports Centre

Red line: Footbridge with Elevator/ Stairs

Brown line: Ramp

Cons:

- 1. Additional Maintenance for external elevator
- 2. Unsightly and at odds with the overall design

Cons:

- 1. Long and sterilized part of the Open Space
- 2. Unsightly and at odds with the overall design



# Viewing Points and Photomontages

- Initial Assessment Area
- Visual Envelope and Viewing Points

## Legend:



**VP1: Metro Park**

**VP2: Kai Tak Cruise Terminal Park**

**VP3: Kowloon Bay Park**

**VP4: Proposed Kai Tak MTR Station**

**VP5: Proposed Sung Wong Toi Park**

**VP6: Hoi Sham Park**

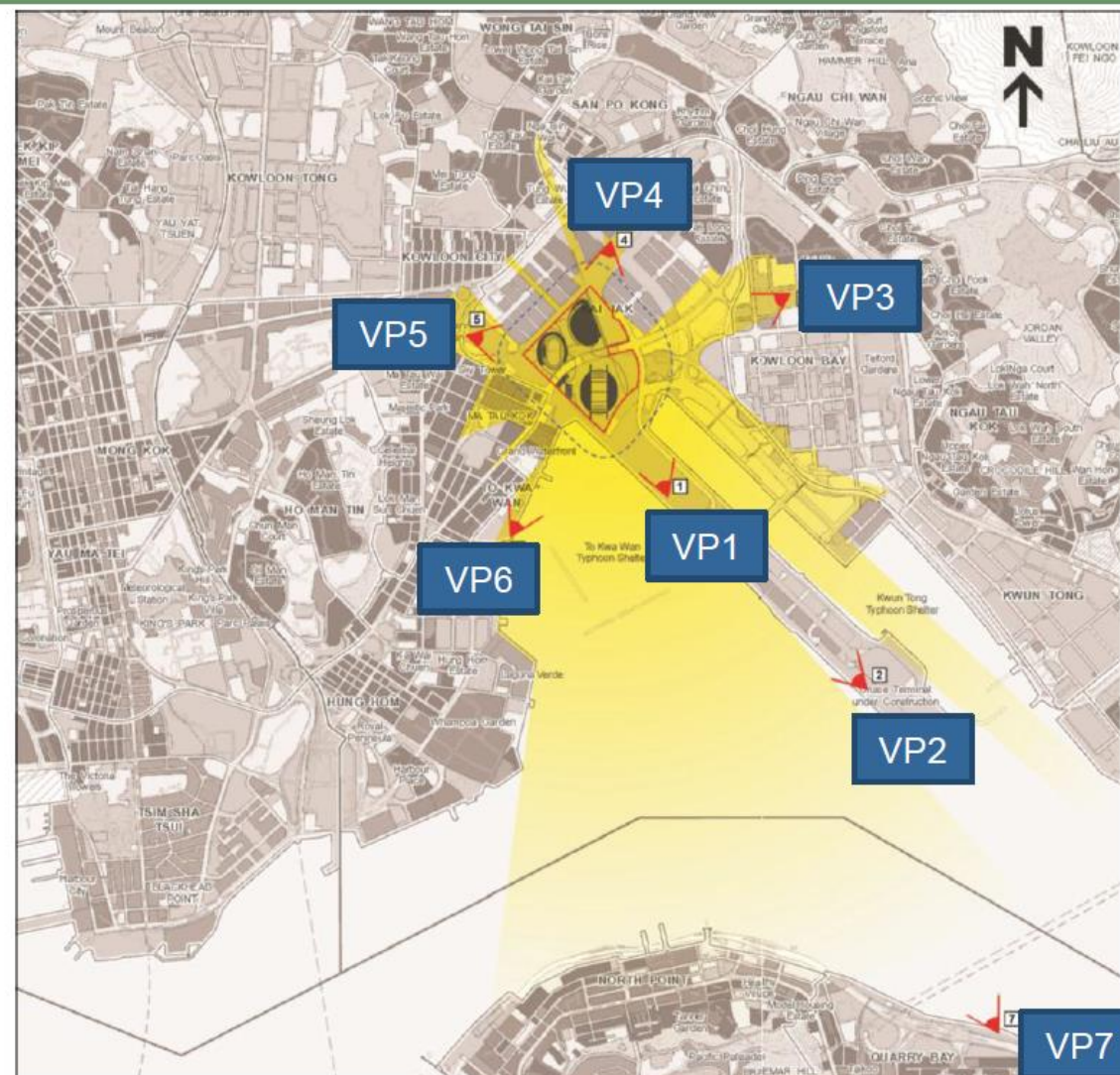
**VP7: Quarry Bay Promenade**

 **The Site Boundary**

 **The Proposed Development**

 **Initial Assessment Area Boundary (IAAB) (i.e. 3H+215m)**

 **Visual Envelope**





# Viewing Points and Photomontages

## ▣ Viewing Point 1 – Metro Park

- ▣ Effect on Public Viewers: the resultant visual impact of the proposed MPSC development as viewed from VP1 will be **Partly Enhanced/Partly Adverse**. Care should be taken that the MS is of innovative design and its facades surface does not present large expanses of inactive walls to this view.





# Viewing Points and Photomontages

## Viewing Point 2 – Kai Tak Cruise Terminal Park

- Effect on Public Viewers: The change in visual composition from existing to proposed will have a positive effect on public viewers, due to the innovative and distinctive design of the stadium compared to the surrounding buildings of the Kai Tak Development. In conclusion, the resultant visual impact of the proposed MPSC development as viewed from VP2 will be **Enhanced**.



# Viewing Points and Photomontages

## ■ Viewing Point 3 – Kowloon Bay Park

- Effect on Public Viewers: Due to the fact that the bulk of the proposed MPSC development will be behind existing structures, the resultant visual impact as viewed from VP3 will be **Negligible**.





# Viewing Points and Photomontages

- **Viewing Point 4 – Proposed Kai Tak MTR Station**
- **Effect on Public Viewers:** The resultant visual impact of the proposed development as viewed from VP4 will be **Enhanced** due to the varied design and disposition of the MPSC development and its relatively restrained height.





# Viewing Points and Photomontages

- ▣ **Viewing Point 5 – Proposed Sung Wong Toi Park**
- ▣ Effect on Public Viewers: The resultant visual impact of the proposed development as viewed from VP5 will be **Negligible to Slightly Adverse** due to the relatively restrained height and the disposition of the MPSC development.





# Viewing Points and Photomontages

## Viewing Point 6 – Hoi Shum Park

- Effect on Public Viewers: The resultant visual impact of the proposed development as viewed from VP6 will be **Slightly to Moderately Adverse**. Care would be taken that the facades of the Main Stadium do not present large expanses of inactive walls to this view.





## Viewing Points and Photomontages

- ▣ **Viewing Point 7 – Quarry Bay Promenade**
- ▣ Effect on Public Viewers: Due to the lack of change between the existing situation and the proposed, the resultant visual impact of the proposed development as viewed from VP7 will be **Negligible**.

