

# 百載鴻圖現香江 又綠又金民共享

A Broad Brush Framework for Holistic Sustainable  
Development for HKSAR in the Coming 100 Years

-updated on 31 December 2010 & 11 Jan 2011

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# 百載鴻圖現香江 又綠又金民共享

## A Broad Brush Framework for Holistic Sustainable Development for HKSAR in the Coming 100 Years

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「香江永綠」是香港大學 HKU-ICEE <http://icee.hku.hk/> 的一個以環境為主題的重點研究項目，是為整個香港未來三十年至一百年，提供一個全面性和可持續的發展框架，以配合香港在2040年人口增長到九百萬（RTHK News 2010-07-29）及更長遠的發展所需。

A plan to meet the need of more than 9 million people in HKSAR by 2040 and beyond –

A research project of HKU- Initiative on Clean Energy & Environment,

<http://icee.hku.hk/index/index.html>

A HKU Strategic Research Area on Environment,

<http://www.hku.hk/research/sras/areas-and-themes.html>



# Outline 大綱

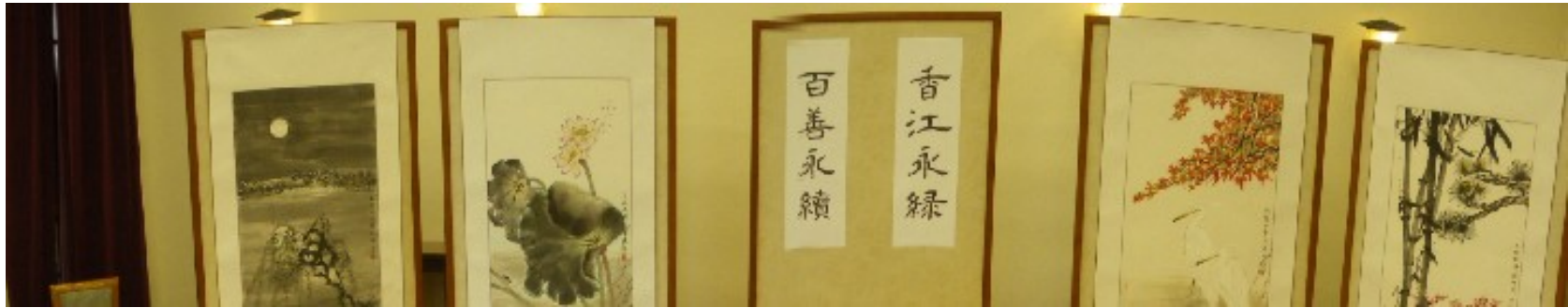
- Hong Kong Population in 2040 , and in 2100
- Multiple uses of functions in the vertical divisions on Reclaimed Land
- 填海區一塊地作多種用途,包括作地下城
- Parks + Traffic Hubs + Green Links  
公園 + 交通樞紐 + 綠化連接設施

Applying the principles of *Sustainable Development Principles* 可持續發展設計原則 TO:

- the city HKSAR –the HK Central : HKSAR Square,西九人行海隧登太平山頂綠徑暢道 : 西九 → 人行海隧 .. → 中區政府合署西翼 → .. 香港動植物公園...-> 太平山頂
- Kai Tak Development – The renewed concept of underground city, and supporting redevelopment of East-half of Kowloon
- West Kowloon Development - The renewed concept of underground city, and supporting redevelopment of West-half of Kowloon, and the formation of the 2<sup>nd</sup> Central Business District of HKSAR
- the Reclaimed land near Chek Lap Kok for providing Hong Kong Boundary Crossing Facilities (HKBCF) of Hong Kong-Zhuhai-Macao Bridge (HZMB) 港珠澳大橋 • 香港口岸設施-underground city and logistics hub, and above ground commercial and residential development to Tai Koo Shing scale
- Other significant infrastructure projects in the coming 30, 50 100 years



# Exhibitions, Publication and Knowledge Exchange



《香江永綠·百善永續》研究項目 – 1st exhibition- HKU-  
Oct 2009 – many mass media reports

<http://icee.hku.hk/exhibition/pearl/index.html>

《香江永綠·百善永續》研究項目 – 2nd exhibition- HKU-  
Jan 2010 – many mass media reports

<http://icee.hku.hk/exhibition/pearlOfTheWorldII/index.html>

HKU- Initiative on Clean Energy & Environment

香港大學「清潔能源與環境研究中心」

<http://icee.hku.hk/index/index.html>

Open Exhibition 開放展覽  
30 DEC 2009 (Wed) 9am-8pm  
31 DEC 2009 (Thu) 9am-8pm  
1 JAN 2010 (Fri) 9am-8pm  
2 JAN 2010 (Sat) 9am-6pm

Loke Yew Hall, Main Building,  
The University of Hong Kong  
香港大學本部大樓展覽室

聯絡: 梁小姐 HKU-ICEE 研究項目秘書, HKU-ICEE  
Contact: Miss Clara Ng, Project Secretariat, HKU-ICEE  
香港中環皇后大道中 601 號 601 室  
Tel: 28592709, E-mail: clara@icee.hku.hk

維港基石空百年  
千頃一碧兩岸前  
地下運城無價寶  
百善香江萬世傳

Pearl for the World (Phase 2 Exhibition):  
A Holistic Sustainable Scheme on Marine-land Parks and Green Links for HKSAR  
香江永綠·百善永續 (第二期展覽)



**Pearl for the World**  
A Holistic Sustainable Scheme on  
Marine-land Parks and Green links for HKSAR

# Exhibitions, Publication and Knowledge Exchange

- Exhibition in Queen Elizabeth School, July 2010 <http://icee.hku.hk/exhibition/pearlOfTheWorldII/ges.html>
- *Hong Kong Economic Times* 香港經濟日報- **General education unit** 綠色城規 (範疇：今日香港 x 能源科技與環境) <http://ls.hket.com/hk/liberalStudiesTopicsAction.do?action=listdetail&method=N&id=ff8080812b5670e8012ba6b7f8667185>
- Many mass media reports such as Roadshow in buses in Aug 2010, in news, e.g. [明報專訊] [2010年2月21日](#)
- 林鄭：深化考慮借啓德地助重建  
學者：可樓換樓安置舊區居民
- <http://www.specials.mingpao.com/cfm/News.cfm?SpecialsID=212&Page=3&News=aeaa0065bd734065cebca2677e114543abaa00477418010ba3ee8a48>
- A book chapter “啓德地下城連陸上寶·香港又綠又金民生好” written by 香港大學建築系張國斌副教授 & 香港珠海學院建築系系主任朱海山副教授 contained in “愛建家園：民建聯建港方略研究論集二..Edited by 民建聯研究部. Published by 香港：中華書局 (香港) 有限公司, Feb 2011.

## Submission to Government on 31 Dec 2010 →

香港北角渣華道333號，北角政府合署15樓，規劃署的特別職務組。

--- Original Message -- From: [K.P.Cheung](#) To: [sdpd@pland.gov.hk](mailto:sdpd@pland.gov.hk) Cc: [paulchu](#)

Sent: Friday, December 31, 2010 3:58 PM Subject: 中區政府合署新面貌公眾諮詢

Dear officers of 規劃署的特別職務組,

We refer to the planning news named “中區政府合署新面貌公眾諮詢延長”，  
[http://www.devb.gov.hk/tc/publications\\_and\\_press\\_releases/press/index\\_id\\_6290.html](http://www.devb.gov.hk/tc/publications_and_press_releases/press/index_id_6290.html) , and  
[http://www.devb.gov.hk/en/publications\\_and\\_press\\_releases/press/index\\_id\\_6290.html](http://www.devb.gov.hk/en/publications_and_press_releases/press/index_id_6290.html) of 24 Nov 2010. We would like to **object to selling of the land lot currently occupied by the existing West Wing of Central Government Offices**, and we would like to submit our recommendations on the captioned issue as follows:

1. The government-owned land lots at the Central district of Hong Kong, including the reclaimed land, are of extremely high value, because unless overriding reasons can be proved to preside, no further reclamation will be allowed on Victoria Harbour. Whatever we do now have to be put under a long term planning framework for HKSAR which we humbly submit herewith, as enclosed in an electronic pdf format, called
2. “百載鴻圖現香江，又綠又金民共享: A Broad Brush Framework for Holistic Sustainable Development for HKSAR in the Coming 100 Years -updated on 31 December 2010”.....



**Pearl for the World**  
A Holistic Sustainable Scheme on  
Marine-land Parks and Green links for HKSAR

# 香港特別行政區人口：（截至二零零九年年中） Population of HKSAR (as at mid-2009)

HK Island 港島	129 萬 : 1 290 500 [18.4%]
Kowloon 九龍	206 萬 : 2 060 600 [ 29.4%]
New Territories 新界	364 萬 : 3 607 400 [51.6% ]
水上居民 boat [ 2 100] + 其他 Others [ 43 200 ]	5 萬: 45 300 [0.6%]
Total總人口	<b>700 萬 : 7 003 800 [100%]</b>

Source :香港年報 HK Year Book 2009 : <http://www.yearbook.gov.hk/2009/tc/pdf/Appendices.pdf> - Table 29

香港10年後(2040)人口將達766萬人: [文匯網訊 2010-12-30]

**Hong Kong Population in 2040 → 8.89 million**

香港人口在2040年：889萬 (RTHK News of 2010-07-29 )

**Hong Kong Population in 2100 : → 11 million ??**

香港人口在 2100年：1100萬??

# Hong Kong population by 2040 – 30 years later -8.89 million

RTHK News of 2010-07-29 HKT 18:08

- 本港人口30年後達889萬 - 料男女比例更失衡 [ 27.4 % increase to HKSAR population 6 977 700 at end 2008 ]
- 統計處最新數字推算，30年後本港人口達到889萬，人口將持續老化，65歲或以上人口會由一成三升至近三成。男女比例失衡情況將會加劇，本港每千名女性相對的男性數目，會由約950降至800人。

Source: <http://rthk.hk/rthk/news/expressnews/news.htm?expressnews&20100729&55&687247>

香港10年後(2020)人口將達766萬人: [文匯網訊 2010-12-30]

據中新網報道，香港特區政府規劃署29日對外公佈一份人口推算報告預測，指未來10年香港人口增長大多會集中在新界和九龍地區，預計全香港人口約增長

66.37萬人，人口總數將達到766萬人。 .....

Source : [http://news.wenweipo.com/2010/12/30/IN1012300007\\_p1.htm](http://news.wenweipo.com/2010/12/30/IN1012300007_p1.htm)



# Three Main Regions of Reclaimed Land surrounding Victoria Harbour of HKSAR

–for PARK, underground city development, and some above ground buildings -page 7

A grayscale aerial map of Kowloon, Hong Kong, with three specific areas highlighted in color. A green area on the western side is labeled 'West Kowloon Park on Reclaimed land of 300 hectares for holistic sustainable development'. A blue area on the eastern side is labeled 'East Kowloon (Kai Tak) Park on Reclaimed land of 280 hectares for holistic sustainable development'. An orange area along the southern waterfront is labeled 'The Reclaimed Harbourfront of HK Island for development on strategic purposes'.

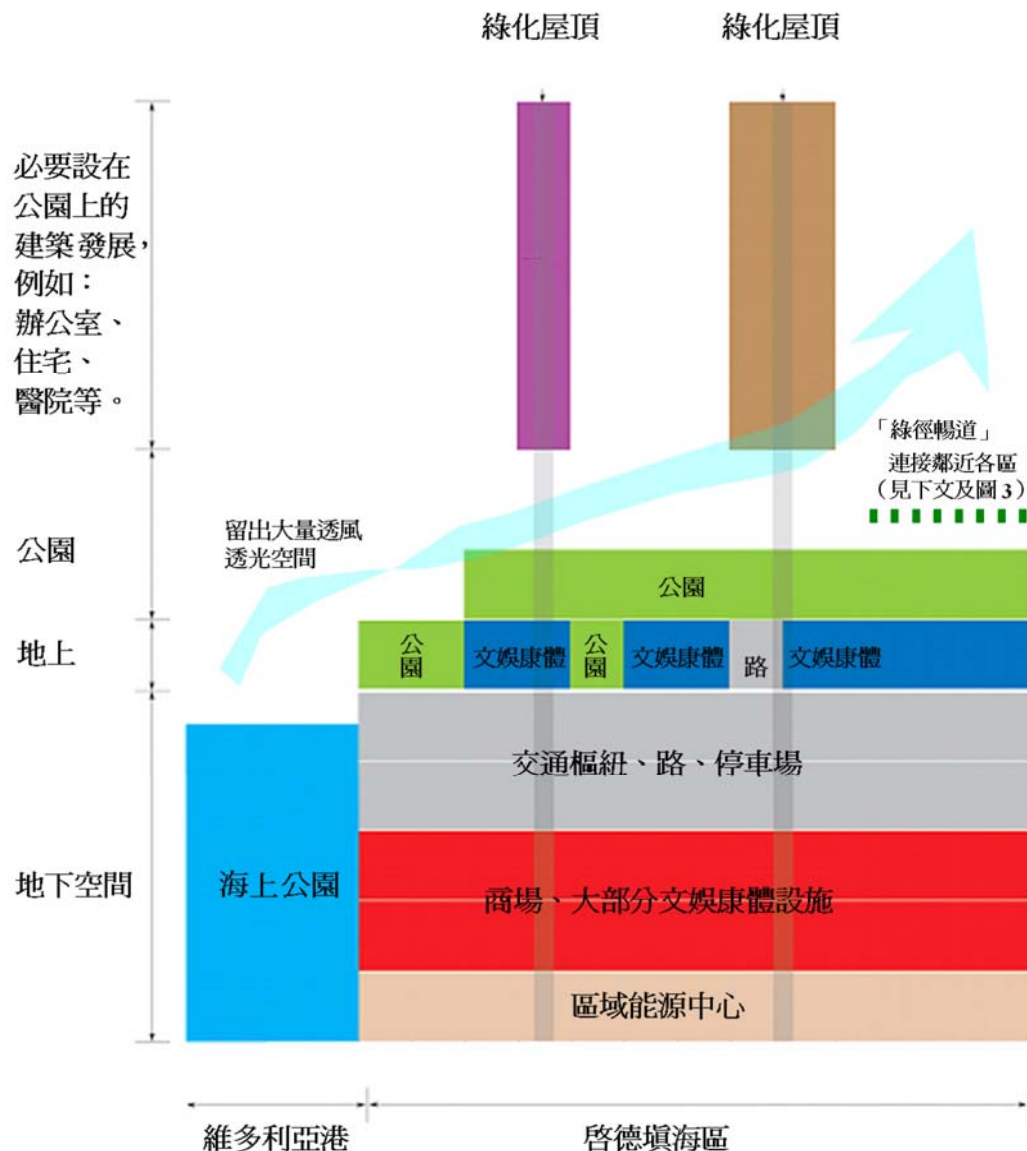
**West Kowloon Park on Reclaimed land of 300 hectares**  
for holistic sustainable development

**East Kowloon (Kai Tak) Park on Reclaimed land of 280 hectares**  
for holistic sustainable development

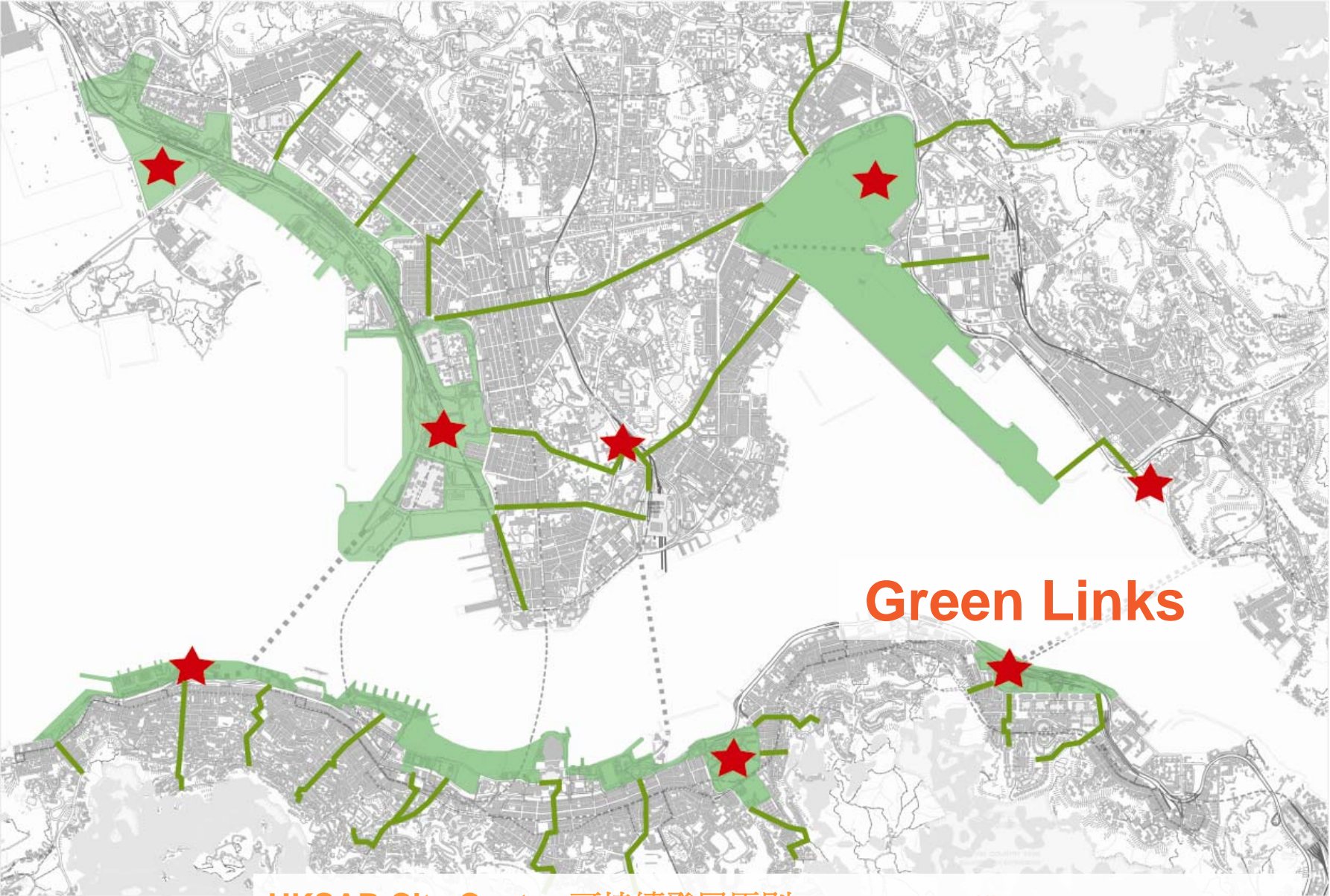
**The Reclaimed Harbourfront of HK Island**  
for development on strategic purposes



**Optimised use of reclaimed land in HKSAR is vital to cope with population growth:**  
**→ Multiple uses of functions in the vertical divisions on Reclaimed Land**  
**填海區一塊地作多種用途, 包括作地下城**

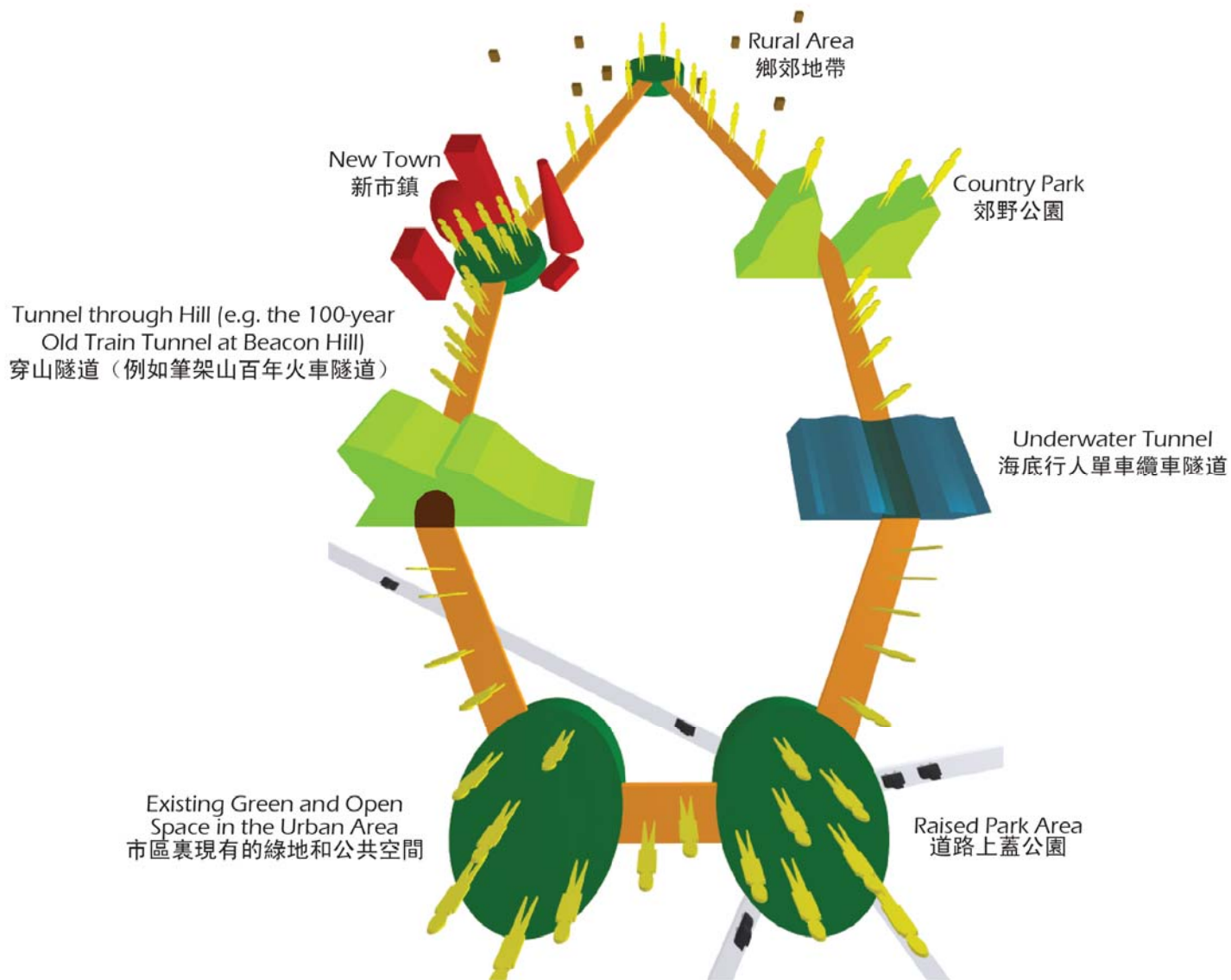


「一地多用」原則 - 可持續及多用途發展填海用地及地下城之立體建設模式  
 (See APPENDIX- A book chapter contained in “愛建家園：民建聯建港方略研究論集二  
 Edited by 民建聯研究部. Published by 香港：中華書局 (香港) 有限公司, Feb 2011. )



**HKSAR City Centre-可持續發展原則 - Parks + Traffic Hubs + Green Links**

公園 + 交通樞紐 + 綠化連接設施 - Solving the problems of traffic pollution and congestion in Causeway Bay and Central of HK Island, and Mongkok of Kowloon,..... :  
**BY the Flagship parks on Reclaimed Land, (and the electric transport systems inside the parks), and the Green links stemmed out from the parks, AND THE TRAFFIC HUBS**



**The Green links connecting urban parks and country parks and traffic and cultural, sports hubs.  
 ( The 100-year old Beacon Hill Tunnel shall be used for Pedestrian traffic, cycling and Cable Tram**

**- 100歲的畢架山舊火車隧道將給行人，自行車和纜車用使用- 隧道現在用作?? : <http://www.youtube.com/watch?v=aViPDeTi2-4> )**

## Sustainable Development Principles:

可持續發展設計原則：

THE **S3P2E4R4 BIREATH** [ UIREATH, CIREATH ] APPROACH:  
Building [Urban, City ] Integrated Renewable Energies and resources, and  
**optimal AIR quality Total Harvest** APPROACH

**S3 = Environmental and ecological, Economical, cultural sustainability**

**P2 = Pollution Prevention**

**E4 = Energy Efficient, Water Efficient, Material Efficient, Land Efficient**

**R4 = Reduce, Reuse, Recycle, Recover or Regenerate** source -

<http://hku.hk/bse/interdisciplinary/s3p2e4r4.pdf>

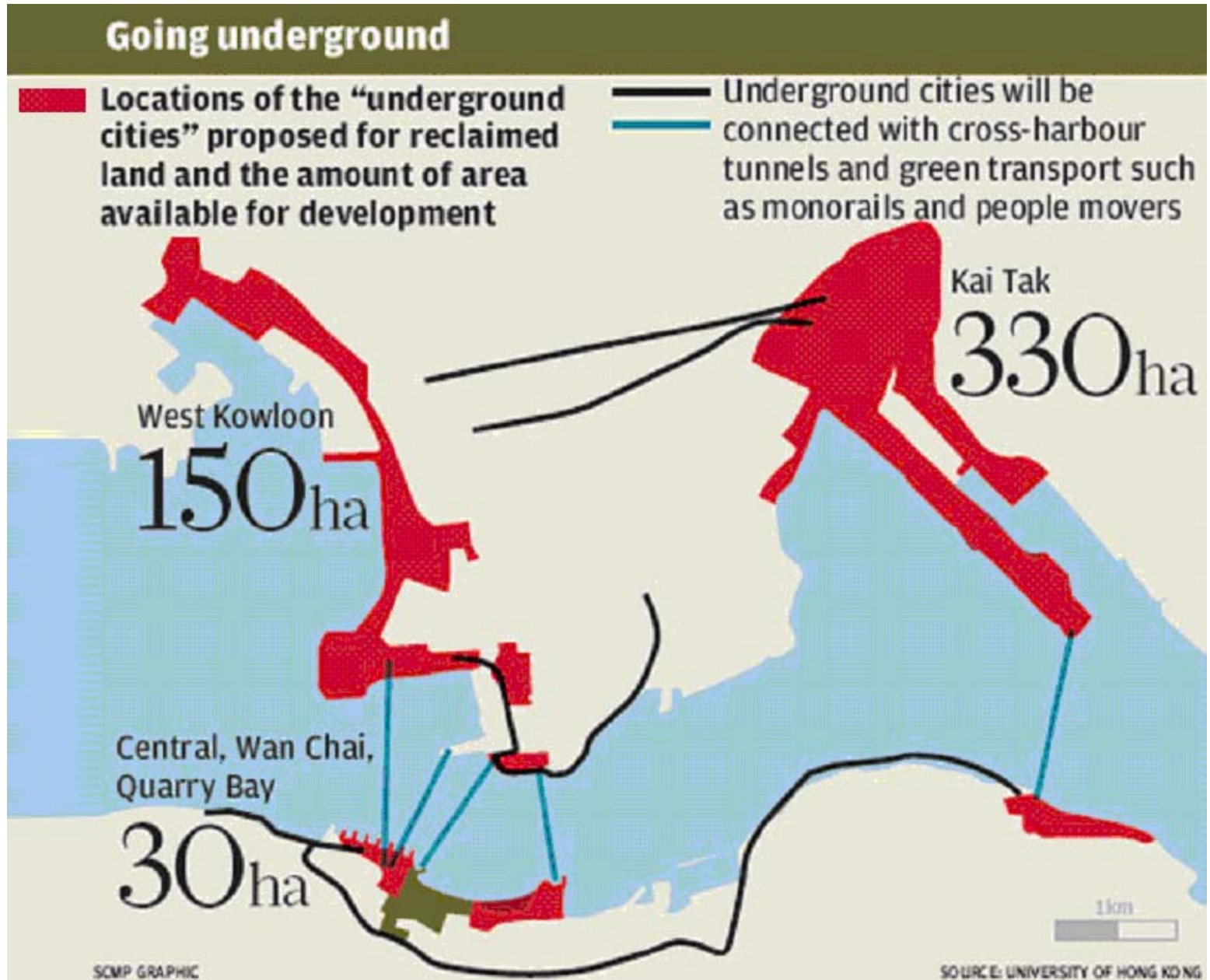
# Sustainable Development Principles

- **THE SUSTAINABLE DEVELOPMENT PRINCIPLES** - The Reclaimed land (as Flagship land parks) at harbour front of Hong Kong have unique values and situations, and their use shall be based on sustainable principles unique to HKSAR:
- On reclaimed land, long time ago water, past decades filled with sand and stones.
- Since no more reclamation is allowed, land at harbour front is of immense value.
- Since no more reclamation is allowed, shortage of harbour front land occurs, and each cubic meter volume of reclaimed land is of golden value.
- Since population of HKSAR is expected to be 8.9 million by 2040, 23 % more than the present population of 7 million, [ UN Population Report ] Use of reclaimed land at harbour front has to be optimized and maximized on ground, elevated above ground, and below ground for NOW and for the FUTURE.
- We all know park areas are lacking, and harbour front reclaimed areas are desirable locations for parks



# 1700 hectares of Marine-Land parks at the centre of HKSAR

-and proposed underground cities on reclaimed land- reported in South China Morning Post, HKSAR of 11 Jan 2010



# Underground Space development- The world trend

## - Associated research Centers for the Underground Urban space

- inaugurated in October 1997 in Montreal, ACUUS is an international, non-governmental organization dedicated to partnerships amongst experts who design, analyse and decide upon the use of our cities' underground spaces. [www.acuus.qc.ca/](http://www.acuus.qc.ca/)

**Mission** The ACUUS is an international non-governmental association actively promoting partnerships amongst all actors in the field of planning, management, research and uses of urban underground space. The ACUUS strives to bind these public, private and university levels into a cohesive network of mutual cooperation for the benefit of all parties involved.

### Objectives

- To facilitate the exchanges between the clientele and the expert knowledge worldwide in regard to the study of costs, potentialities and techniques of expansion in the urban underground;
- To raise the awareness of the private sector, the governments at all levels and the general public on the specific issues related to the sustainable use of the urban underground;
- To provide support and services to members of national organizations and research centers conducting similar activities in view of enhancing their relations and international radiance.

**Board of Directors** : Prof. Qian Qihu, 钱七虎, Director (China) is 1 of 8 members.

**Professor Qian Qihu, 钱七虎**：开发利用地下空间让城市瘦身- 中国科协2009年09月04日  
<http://www.cast.org.cn/n35081/n35473/n35518/11501962.html>

“十九世纪是桥梁的世纪，二十世纪是高层建筑的世纪，  
二十一世纪对人类来说则是地下空间的世纪。”

近期，在第十一届中国科协年会访谈上，中国工程院院士国际城市地下空间联合研究中心亚洲区主任、中国岩石力学与工程学会理事长钱七虎认为，中国的大城市需要减肥，其中一个主要的途径就是开发地下空间。 **On underground development**



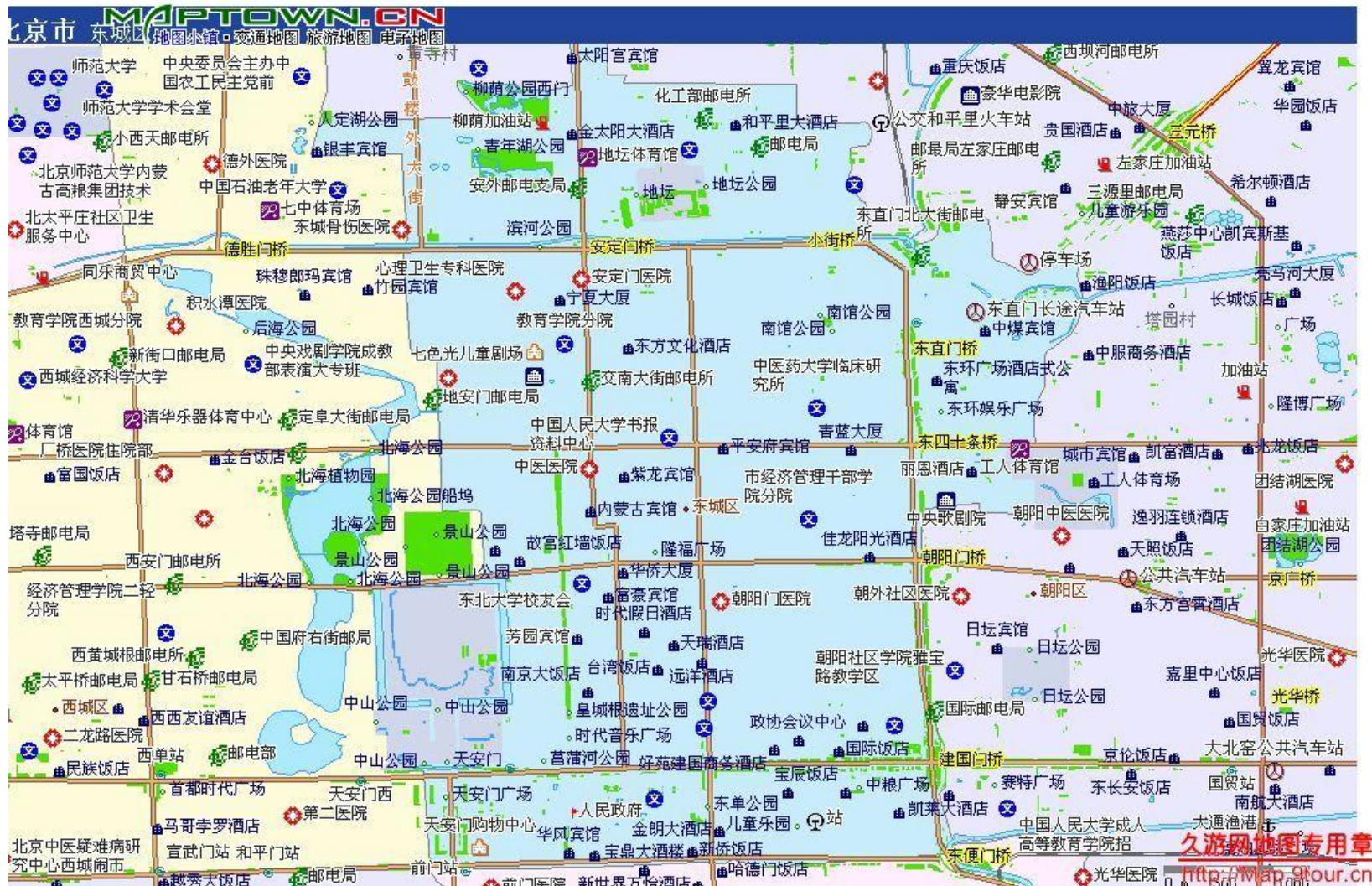
Pearl for the World

A Holistic Sustainable Scheme on  
Marine-land Parks and Green links for HKSAR

# 北京东单等地将建大型地下车场 相当于再造东城 -在8平方公里面积内开发地下空间三层 - 法制晚报

## 8 square km underground city being constructed in Beijing

<http://news.sohu.com/20100114/n269580357.shtml> 2010年01月14日



Pearl for the World  
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久游网地图专用章  
<http://www.jiyou.com>



# 北京东单等地将建大型地下车场 相当于再造东城



**-在8平方公里面积内开发地下空间三层** - 法制晚报

<http://news.sohu.com/20100114/n269580357.shtml> 2010年01月14日东城区区委书记杨柳荫

**8 square km underground city in Beijing of 3 levels for transportation, vehicular parking , shops, cultural facilities, food courts, restaurants- starting in 2010, completing by 2030**

在8平方公里面积内开发地下空间三层, 相当于再造一个东城, 未来**20年**—东单建国门将建大型地下停车场 解决交通拥堵和停车难问题。

东城区区委书记杨柳荫表示, 东城区目前已探明可开发地下空间的土地**8平方公里**, 今后**20年**, 将大力开发地下空间。 ....

胡同周边将尝试建地下停车场 **2010年**, 东城区将在个别区域试点“地铁站周边地下商业开发”、并选定部分胡同尝试“胡同周边地下停车场建设”, 解决老城区胡同居民停车难的问题.....

东直门附近将开挖地下商城 : 王府井商业街、东二环商务区、雍和科技园等三大区域也将利用地下空间开发提升区域经济发展。另外, 在机场高速起点东直门附近的万国城东南侧, 约**5万平方米**绿地范围内, 下挖可建成地下商城。.... 地下人行系统和地下车库尽可能连通, 形成立体化交通系统. 建国门立交桥西

北角的绿地, 可以建设大型地下停车场、文化娱乐设施、餐饮服务业等. ...



Pearl for the World

A Holistic Sustainable Scheme on

Marine-land Parks and Green links for HKSAR

# AN UNIQUE MACROSCOPIC SUSTAINABLE CITYMARK of HKSAR 香港宏觀可持續發展的城市特徵

## A Holistic Sustainable Scheme on Marine-land Parks and Green links for HKSAR

**西維港海陸公園群**  
Marine and land parks of West Victoria Harbour  
WMP1: 佔地85公頃的「西九龍水上公園」將現成的新油蔴地風車道修繕而成。  
WMP2: 佔地16公頃的「廣東東水上公園」將現成的廣東東海中區香港碼頭及其碼頭修繕而成；香港中國遊碼頭則遷移修到「西九龍水上公園」的北端，並在那裡興建。  
WMP3: 佔地330公頃，從西九龍文化區到荔枝角公園的「西九龍陸上公園」，當中包括多個綠地式日晷。  
WMP4: 現成的尖沙咀九龍公園，將以架空的正東西向地橋式「日晷平橋」跨越廣東東與「西九龍陸上公園」連接，橋中段設有觀景台，高達40米的塔樓，同時作為適合地橋式日晷的「觀景柱」。  
WMP5: 「中區日晷公園」佔地十公頃，包括兩台地橋式日晷，公園地發展交匯處，高塔及塔內中心，並以正北南向的香港中區海濱行人單車專用道與WMP1「西九龍陸上公園」連接，亦可繼續連接到尖沙咀海濱中心綠地式日晷和尖沙咀公園。  
WMP6: 「鐘樓日晷公園」- 目前的尖沙咀鐘樓、香港文化中心、香港太空館、香港警察及新嘉坡巴士總站和瑞士巴利花園再修建成以鐘樓主體的十公頃「鐘樓日晷公園」，當中包括三台鐘樓式地橋式日晷，又以架空的「綠色平橋」，將九龍公園與WMP2「九龍公園」連接。  
WMP7: 灣仔金業新公園，將現成的金業新廣場向西伸延，成為五公頃的「灣仔金業新公園」；該公園與現有人民廣場相連，又以金業新海濱行人單車專用道與尖沙咀WMP4「鐘樓日晷公園」連接；而尖沙咀九龍公園的日晷及「鐘樓公園」的日晷的「觀景柱」，均設定對準灣仔「金業新」成為一條直線。  
WMP8: 二十公頃的人民廣場，將現成和平紀念鐘，大會堂及鄰近公園修繕並擴大，與附近維多利亞灣相連而成人民廣場，將現成公園的單車專用道的樓宇拆卸，並將用地遷移到海濱，鄰近車庫碼頭，於新地段下設「龍牙塔」，將新放車庫碼頭及交通中心。  
WMP9: 西維港公園，以兩條海濱行人單車專用道為邊界，佔有兩二百公頃的「西維港公園」。



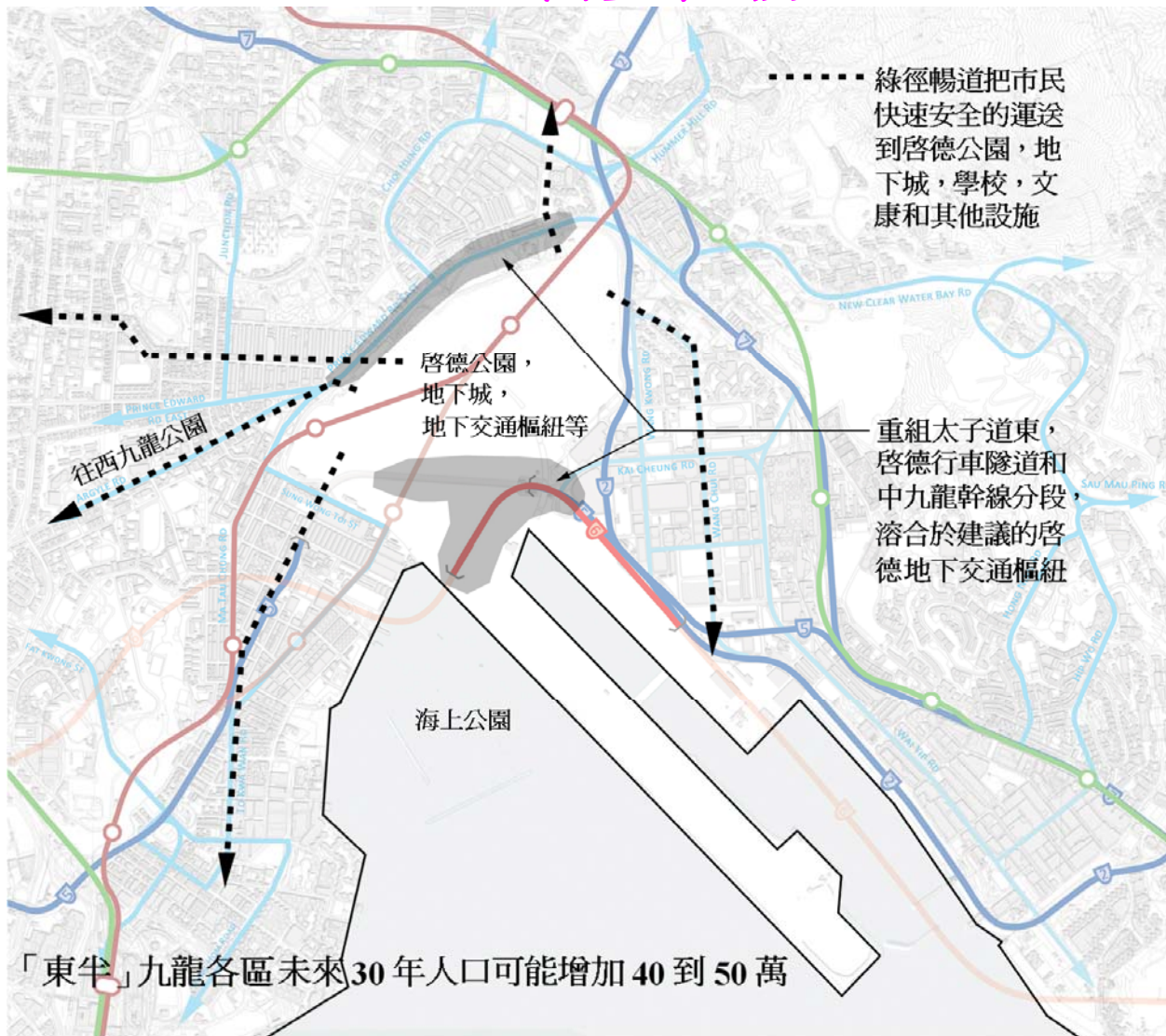
**東維港海陸公園群**  
Marine and land parks of East Victoria Harbour  
ELP1: 佔地三百三十公頃的「東九龍「綠地公園」，以地橋式公園、地下城則以一地多用開發，首要任務為支持東中北九龍可持續發展及重組，其次需支持香港傳統產業如「六次產業」發展，餘地再經修繕後使用。  
EMP1: 佔地十公頃的鐘樓公園，從明魚灣公園西端，向東延伸至西灣仔岸線，在東區海濱出口附近，以改善海濱行人單車專用道與觀景台單車專用道。  
EMP2: 佔地十公頃的鐘樓公園，從明魚灣公園西端，向東延伸至西灣仔岸線，在東區海濱出口附近，以改善海濱行人單車專用道與觀景台單車專用道。  
ELP2: 佔地十公頃的鐘樓公園，從明魚灣公園西端，向東延伸至西灣仔岸線，在東區海濱出口附近，以改善海濱行人單車專用道與觀景台單車專用道。  
EMP2: 東維港公園，「東九龍水上公園」以南，港橋以北，並位於鐘樓海濱行人單車專用道和尖沙咀地橋式日晷單車專用道之間的五百公頃水域定為「東維港公園」。  
Legend  
Our Proposal  
T TRANSPORTATION HUBS 運輸交匯  
GREEN LINKS 綠色平橋系統  
LAND PARKS 維港陸上公園  
MARINE PARKS 維港水上公園  
IMPROVED WATER PROVISION CYCLING CABLE TRAM 改善水質 單車專用道 高底行人單車專用道  
Current or Future Developments by HKSAR Government  
CENTRAL SHOWDOWN ROUTE 中央龍軒線  
Extension of New MTR Lines 現行及將建之 地鐵路線



Background image source: Courtesy of Google Earth

啓德填海區發展的建議：「啓德五結合模式」：「一地多用、填海區  
地下城、地面公園、海上公園、綠徑系統」的可持續發展模式，以支援「東半」九  
龍各區(包括九龍城區、土瓜灣區、碼頭圍區、彩虹區、牛頭角區、觀塘區..等)的

可持續發展及重組重建為**首要任務**(See Appendix )



「東半」九龍各區未來30年人口可能增加 40 到 50 萬

## 香港特別行政區人口增長和本文建議今後數十年增加基建設施概略-see appendix for details

地區	2009年年中香港人口 (香港年報 2009 : 表 29)	2040年香港人口	本文建議的基建都市學設計原則所帶動的 應對基建設施
港島	129 萬	建議增加11萬至140 萬	港島北填海區陸地公園、地下城和「綠徑系統」建設
九龍	206 萬	建議增加80萬至286 萬	以「一地多用」原則、全面性和可持續發展4公里長330公頃西九龍填海區陸地公園和300公頃;東九龍-啓德填海區陸地公園; 提供政府、機構和社區設施，休憩用地包括公園、運動場和遊樂場。地下城設商場、食肆、道路、交通樞紐等，以支援「西半」九龍和「東半」九龍的可持續發展及重組重建
新界+ 其他	365 萬	建議增加98萬至463 萬	搬遷石崗機場到西貢東龍洲島，發展石崗錦田成爲超過100 萬人居住區，在錦田建新界政府行政中心，建錦田林村港鐵綫連接東鐵(新建康樂園站) 和西鐵(錦上路站)等，並建議把石崗的高鐵緊急站，擴展爲「高鐵香港段的第二站-總站」和緊急站兩用站，(第一站在西九) (容後另文作討論)
總人口	700萬	889萬 (香港電台 2010-07-29新聞)	港島、九龍、新界以「綠徑系統」和低污染交通網絡連接

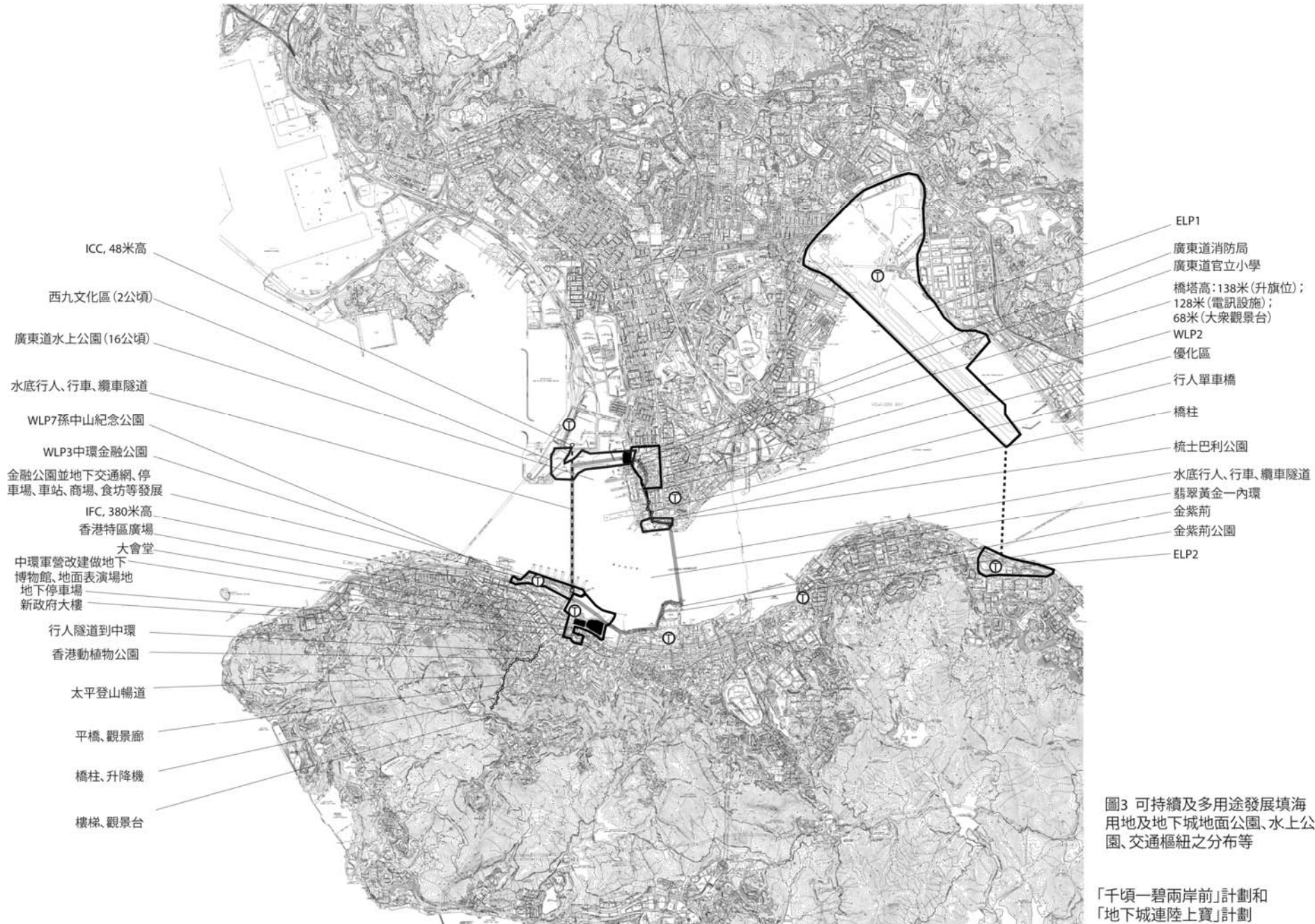


圖3 可持續及多用途發展填海用地及地下城地面公園、水上公園、交通樞紐之分布等

「千頃一碧兩岸前」計劃和  
「地下城連陸上寶」計劃

# 香港特別行政區- 建議今後數十年市區增加基建設施概略 -

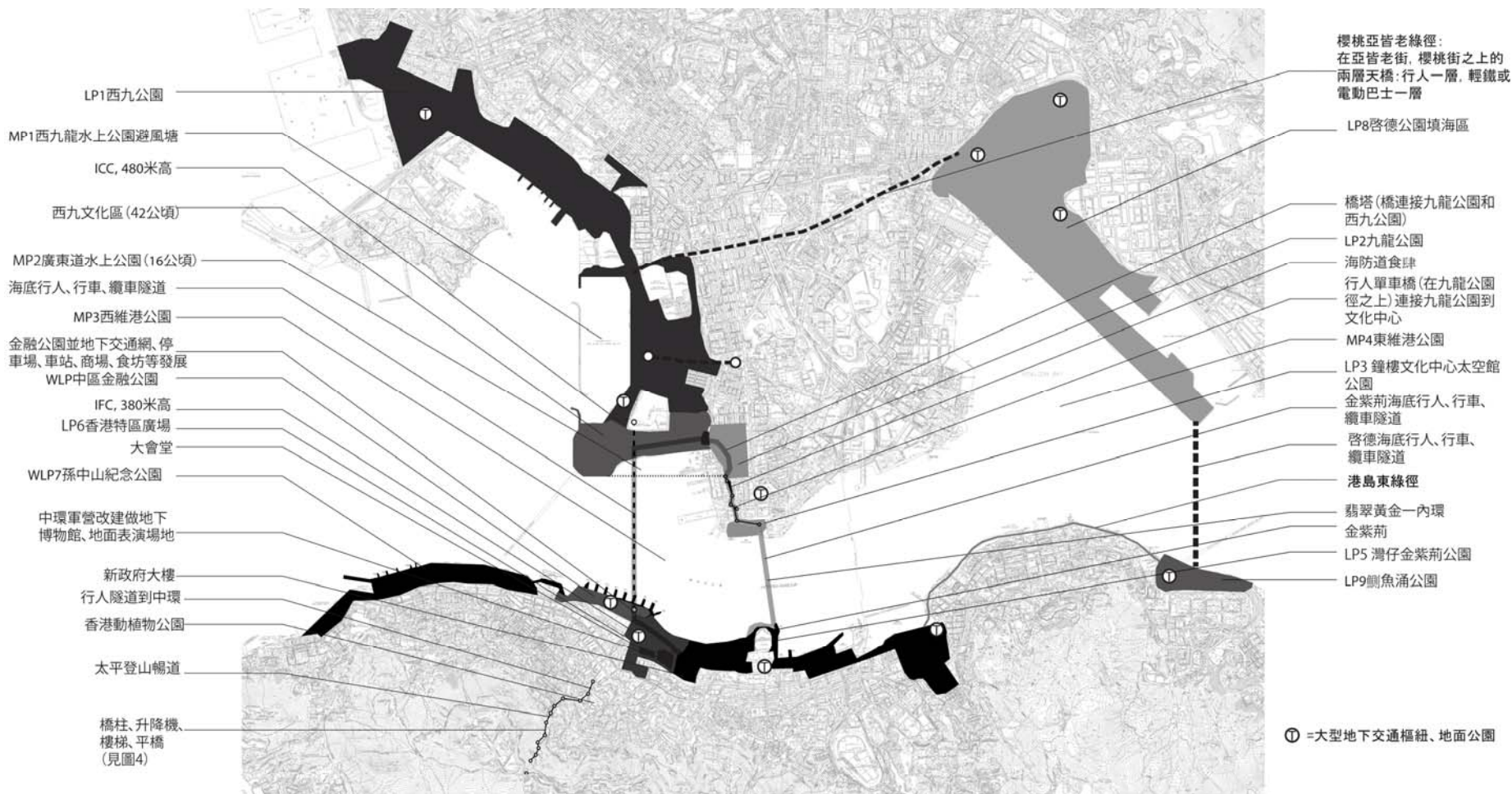
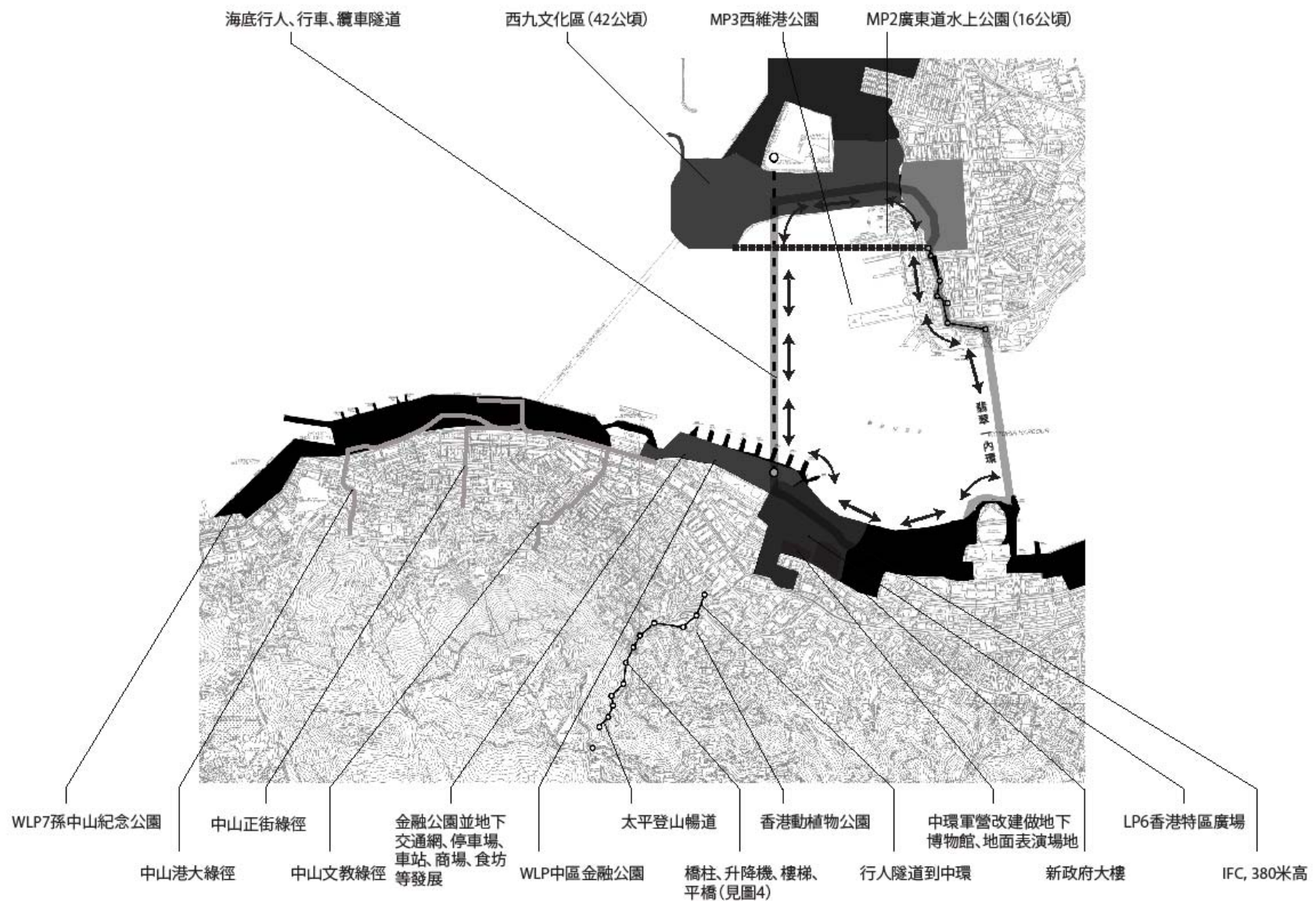


圖3 「千頃一碧兩岸前」計劃和「地下城連陸上寶」計劃

可持續及多用途發展維港兩岸填海用地及地下城地面公園、水上公園、交通樞紐之分布等

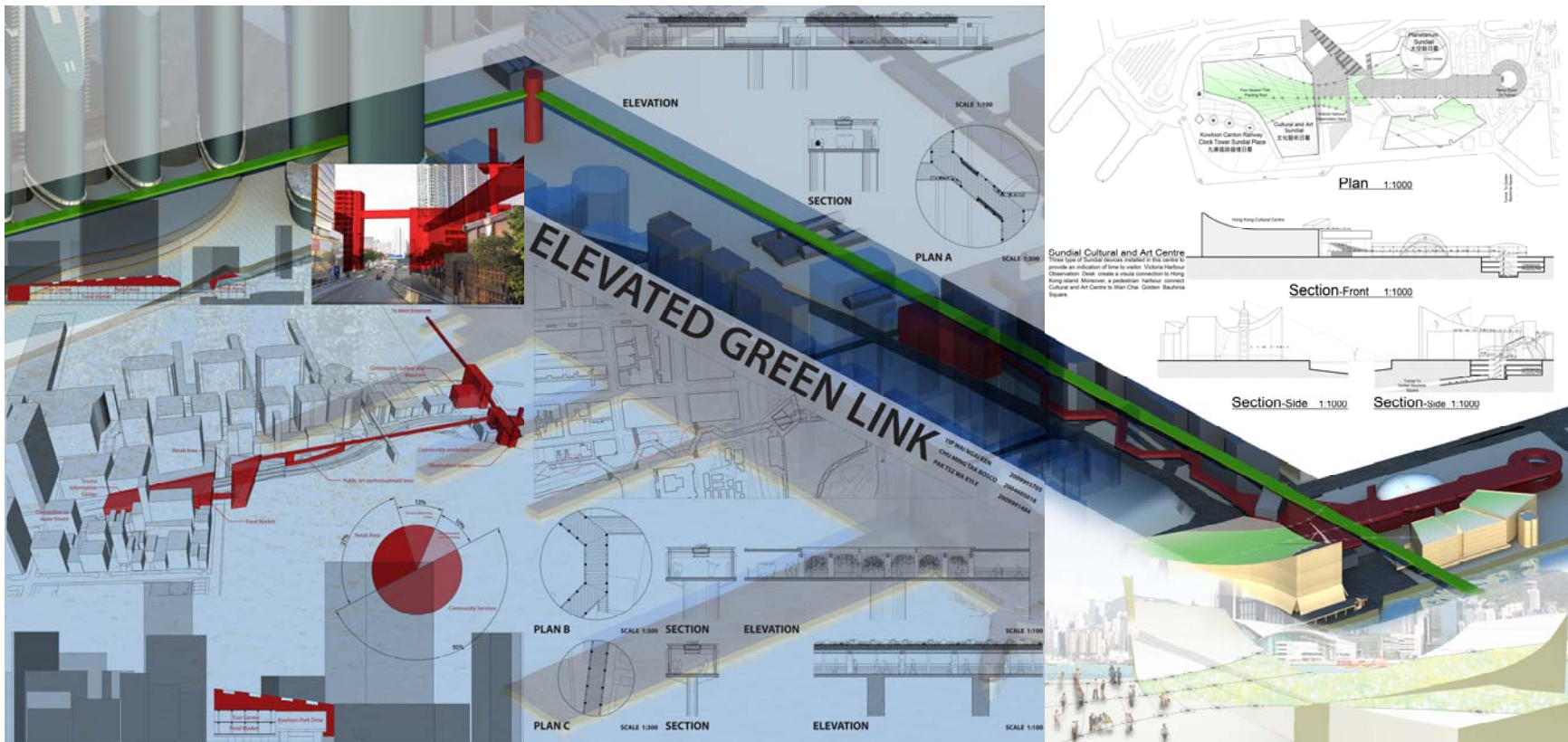
# AN UNIQUE MACROSCOPIC SUSTAINABLE CITYMARK of HKSAR

## 香港宏觀可持續發展的城市特徵 - 香港特別行政區- 建議今後數十年市區增加基建設施概略



# The Proposed HKSAR Land-Sea Green Circling Route ONE :

The historic Kowloon Park → Green Bridge over Kowloon Park Drive → TST Clock Tower, Cultural Centre, Space Museum, Salisbury Garden → Under water Walking-Cycling-Cable Tram Tunnel of 1 km → Golden Bauhinia Square Garden, Wanchai → The Golden Bauhinia Park along Wanchai shore → HKSAR Square at Queensway and Central → Central Seafront Park → Under water Walking-Cycling-Cable Tram Tunnel of 1.3 km → The West Kowloon Park [ & cultural-sports district] → The historic Kowloon Park [ Design: Courtesy of Architecture alumni/students, HKU, 2010]



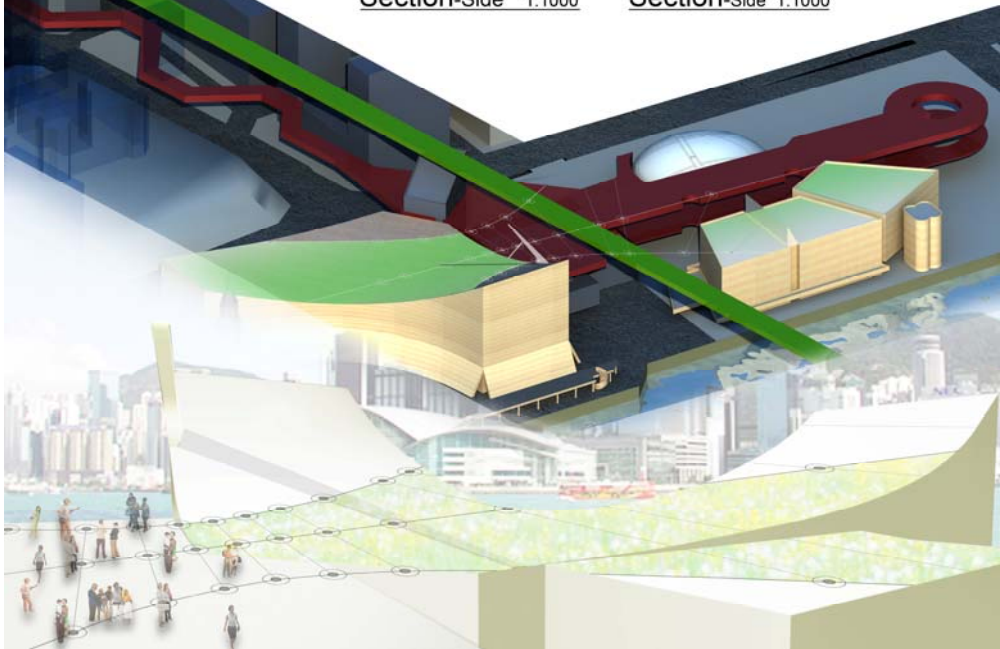
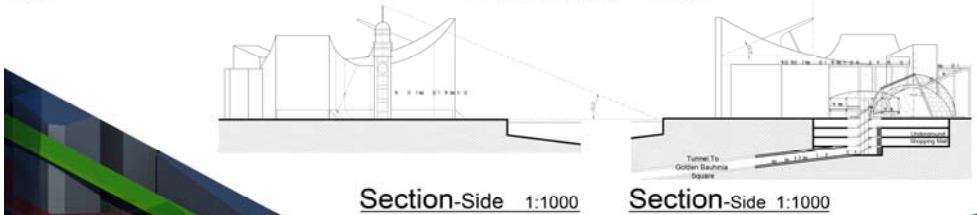
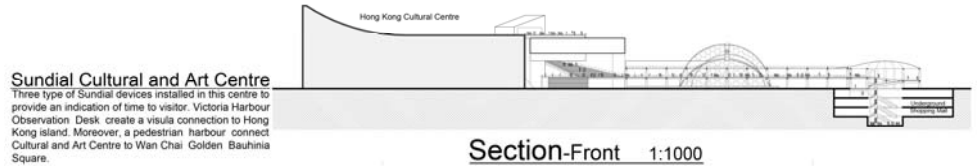
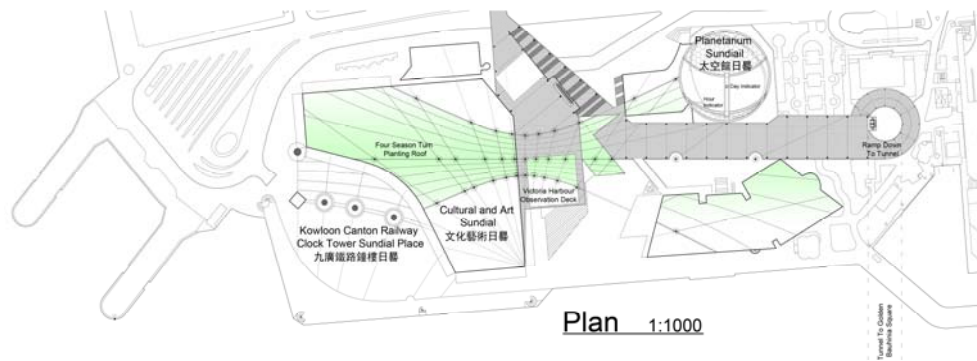


# The Proposed HKSAR Land-Sea Green Circling Route ONE :

... → TST Clock Tower, Cultural Centre, Space Museum, Salisbury Garden → Under water Walking-Cycling-Cable Tram Tunnel of 1 km → Golden Bauhinia Square Garden, Wanchai → ..

[ Design: Courtesy of Architecture alumni/students, HKU, 2010 ]

Pearl for the World A Holistic Sustainable Scheme on Marine-land Parks and Green links for HKSAR



**The Proposed Dr Sun Green Link**  
**中山文教康體綠徑 –another Green Link connecting countries parks of HK to urban parks:**

- West Park Sports Centre, Sun Yat Sen Memorial Park at Sheung Wan Harbour Front to Sheung Wan Gal Point to Central Bus Terminus at HK
- Macau Ferry Terminal [to be park at ground, with underground development later]
- Existing bridge to Western Market [to be enhanced]
- Bridge over New Market Street
- Bridge on pedestrian paths of Morrison Street
- Bridge over Tung Street, Tai Ping Shan Street [the plague site at 1905]
- Tung Street
- Bridge over Blake Garden adjacent to Kui In Fong
- Bridge over Caine Lane Garden and Caine Road Garden
- Bridge over Playground behind Hop Yat Church
- Bridge passing through Ying Wa Girls' School & the expansion adjacent to London Mission Building
- Bridge over the public land between no. 101 and no. 103 of Robinson Road reaching Conduit Road
- ..walking over existing roads to the Peak and country parks of HK Island south



**The Proposed Dr Sun Green Link**  
**中山文教康體綠徑 –another Green Link connecting countries parks of HK to urban parks, will link:**

- most Heritage Trails of HK Islands together
- [http://www.amo.gov.hk/en/trails\\_cw.php](http://www.amo.gov.hk/en/trails_cw.php) from Sheung Wan Harbour Front to The Peak, connecting to country parks to the south side of Hong Kong Island, without negotiating with traffic lights
- HKU and 20 secondary schools and primary schools near the link
- Sun Yat Sen Memorial Park and West Park Sports Centre at Sheung Wan Harbour Front, Sheung Wan Municipal Service Building, YMCA at Bridges Street
- At Sheung Wan sea front, to Central Seafront Park, hence other parks and green links of HK Island and across the harbour

**The Proposed Dr Sun Green Link**  
**中山文教康體綠徑 will :-**

- have transparent cover over bridge to shield off the rain, and optic fibre IT facilities, with suitable escalators, lifts, and flowers of choice of adjacent communities passing over government owned areas, and Ying Wa Girls' School which is planned for expansion
- be good for school children, residents, tourists, employees working in the districts, saving time of travel, minimizing traffic congestion and pollution

• Source of diagrams for background reference [http://www.amo.gov.hk/en/trails\\_west.php](http://www.amo.gov.hk/en/trails_west.php) - See nex page for the proposed routes of Green links



## The Proposed Dr Sun Green Link

中山文教康體綠徑：

港島西三道「中山登山綠徑暢道」

建議從信德中心至堅尼地城填海區，孫中山紀念公園，並建議增加以下多三道「中山登山綠徑暢道」：

綠徑一：中山港大暢綠徑

路線：中山紀念公園→沿山道行車天橋下面建行人天橋及電梯→港大任白樓→港大百周年校園  
(Traffic hub at transformed任白樓 for circling-route minibuses to travel at 般含道,堅道; and for Pokfulam going west)

綠徑二：中山正街暢綠徑（只需要興建部分設施與其他已有設施連接）

路線：中山紀念公園→天橋→正街→電梯→般含道

綠徑三：中山文教康體暢綠徑

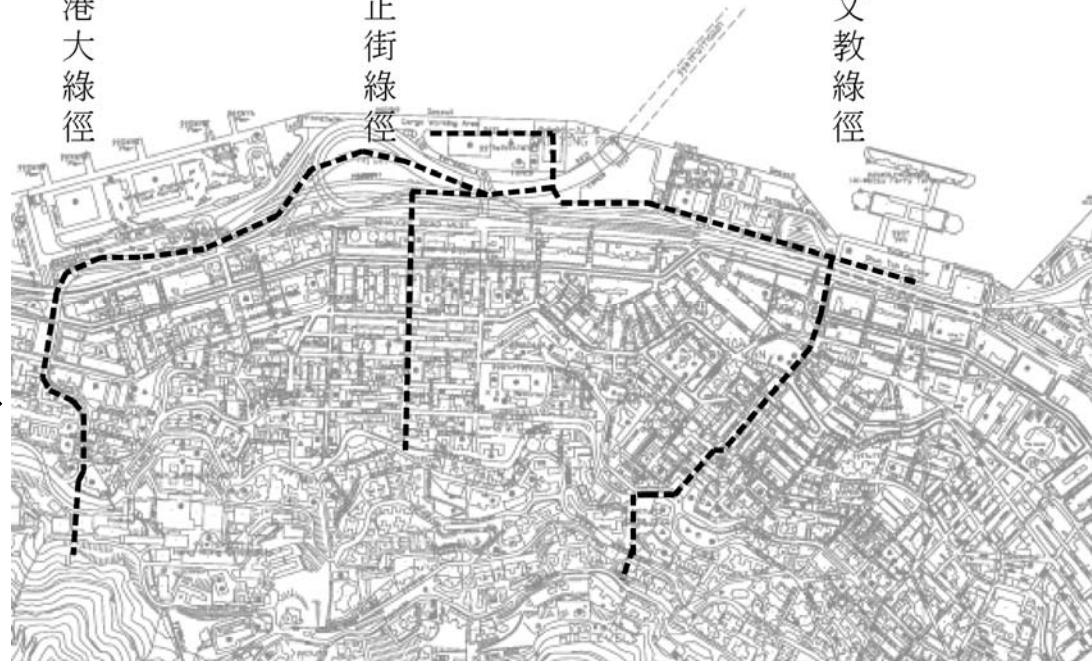
路線：西區公園體育館→中山紀念公園→上環大笪地→中環港澳碼頭巴士站〔未來將發展地下空間〕→現存連接西港城之天橋〔待優化〕→天橋〔新街市街→摩利臣街→東街→太平山街〔1895 曾為鼠疫疫區〕→卜公花園〔居賢坊旁〕→堅巷花園及堅道花園→合一堂→經英華女學校底座頂、倫敦會樓旁→羅便臣道101及103號間之政府土地→干德道

綠徑三：中山文教康體暢綠徑將可連接：由上環海旁至山頂等多條文物徑，港島南的郊野公園，香港大學及本區二十多所中小學，文康及政府設施，包括西區公園體育館、上環市政大廈及香港基督教青年會〔必烈者士街〕會所，使學生便捷安全來往學校和各類康體設施。加上在中山紀念公園，增設補助課室，大大舒緩區內學校擴校、重建學校的壓力。

綠化連帶一——中山港大綠徑

綠化連帶二——中山正街綠徑

綠化連帶三——中山文教綠徑

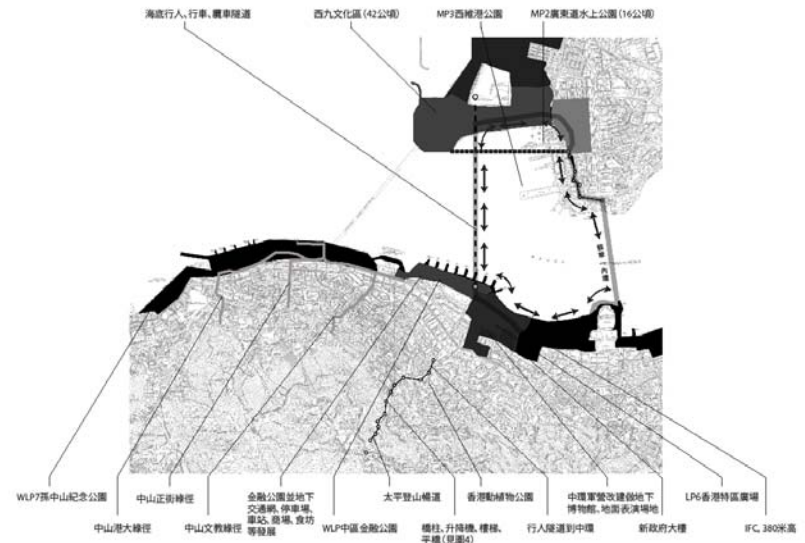


# 建議：西九人行海隧登太平山頂綠徑暢道

在中環至半山扶手電梯的東面，建議建設「西九人行海隧登太平山頂綠徑暢道路線」如下：

西九文化區 → 建議「西九維港行人單車及纜車過海隧道」(1.4公里)

- 中環金融公園 → 建議綠色平橋
- 建議中環特區廣場 → 香港大會堂
- 和平紀念碑 → 遮打公園 → 行人天橋
- 中區政府總部建築群(保留、改建)
- 行人天橋, 美利大廈 → 隧道及升降機
- 香港動植物公園 → 羅便臣道
- 己連拿利 → 香雪道 → 舊山頂道
- 舊山頂道休憩花園 → 山頂盧吉道



這登山綠徑以平橋和電梯結合，是無阻礙的暢通道路（簡稱暢道），坐輪椅者暢通無阻，是「全港通」活力徑的一部分。從山頂可經郊野公園到港島南海旁，從西九可往九龍塘，經「百年火車古道」步行或踏單車往羅湖去。「全港通」活力徑南端連接香港仔，北端至羅湖。建議之西九人行海隧登山徑路線為此活力徑之核心段。

# 中區政府合署新面貌: 建議 中區政府總部建築群 (保留、改建) transforming it into the Joint-University Institute on Culture and Creativity

green and cultural proposal, based on the future city development proposals described earlier

- a treasure for most people of HKSAR, with good memories,  
- best to be transformed into a Joint-University Institute on Culture and Creativity,  
a hub on promotion and development of culture and creativity for students and public of HKSAR

- also to be a hub of the 西九人行海隧登太平山頂綠徑暢道

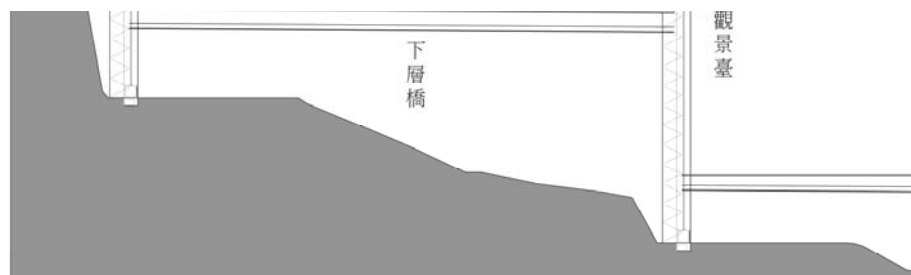
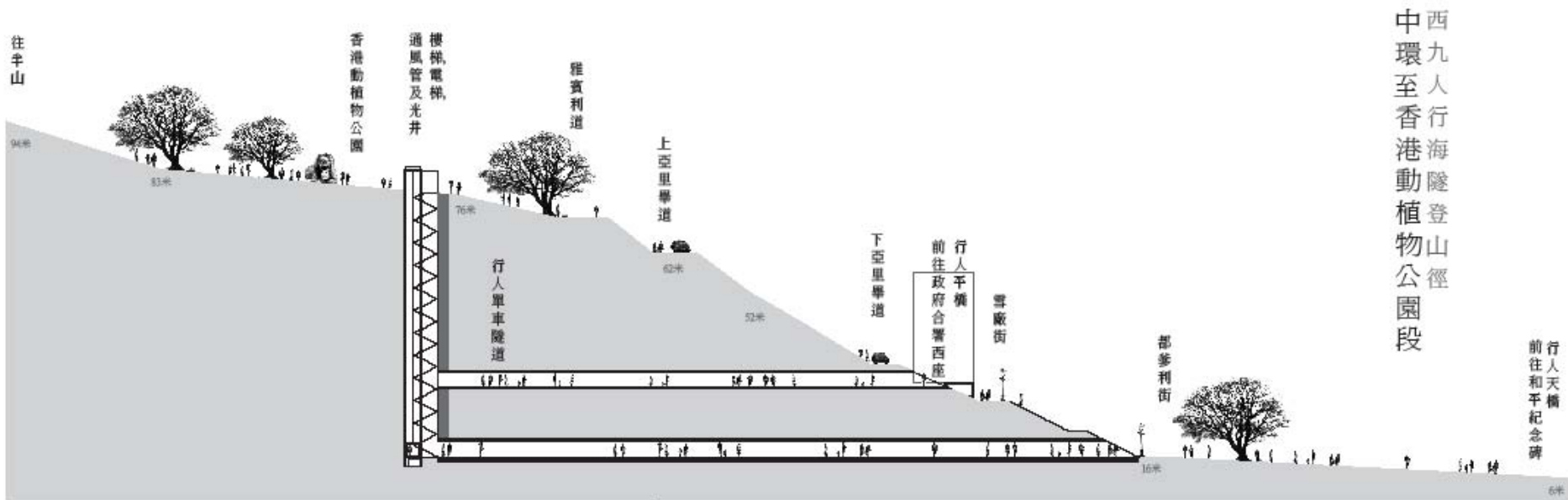
在中環至半山扶手電梯的東面，建議建設「西九人行海隧登太平山頂綠徑暢道路線」如下：

西九文化區 → 建議「西九維港行人單車及纜車過海隧道」(1.4公里) → 中環金融公園 → 建議綠色平橋 → 建議中環特區廣場 → 香港大會堂 → 和平紀念碑 → 遮打公園 → 行人天橋 → 中區政府總部建築群 → 行人天橋, 美利大廈 → 隧道及升降機 → 香港動植物公園 → 羅便臣道 → 己連拿利 → 香雪道 → 舊山頂道 → 舊山頂道休憩花園 → 山頂盧吉道

Because the current West Wing of Central Government Offices are well operating office space ready to rent out to users. Therefore before transforming it into the Joint-University Institute on Culture and Creativity, the premises can be leased out to office users on limited duration. In the long run, West Kowloon reclaimed land district shall be developed into the 2nd Business Centre of HKSAR, with park on ground level, and underground city below.

## 西九人行海隧登太平山頂綠徑暢道

在中環至半山扶手電梯的東面，建議建設「西九人行海隧登太平山頂綠徑暢道路線」如下：西九文化區 → 建議「西九維港行人單車及纜車過海隧道」(1.4公里) → 中環金融公園 → 建議綠色平橋 → 建議中環特區廣場 → 香港大會堂 → 和平紀念碑 → 遮打公園 → 行人天橋 → 中區政府總部建築群 → 行人天橋, 美利大廈 → 隧道及升降機 → 香港動植物公園 → 羅便臣道 → 己連拿利 → 香雪道 → 舊山頂道 → 舊山頂道休



# Sustainable Development Principles

## 可持續發展設計原則

- The basement of the land parks will serve as TRAFFIC HUBS. Large hub areas will be near cross harbour tunnel portals, so that vehicles will terminate at these HUBS, and many vehicles will park at these HUBS. Uses will change to the various convenient and non-polluting traffic systems provided by the parks and by MTR, and trams on HK Side, and other transportation means. GREEN LINKS connected from the parks will provide efficient access to inland locations. Expectedly the number of buses going on roads will be substantially reduced.
- GREEN LINKS, which are commonly elevated bridges at about 7 m above road level, will be provided with supports to install sea water pipes, rain water collection pipes, sometimes chilled water pipes, and CERTAINLY an extensive network of Healthy Low-Power wireless receiving and transmitting facilities comprising optic fibre installations and a large quantities of small power transmitters and receivers. This network will be similarly provide inside all the parks in HKSAR which are linked by the GREEN Links. This will serve a large population using the parks, the green links and the areas nearby the green links, including the buildings connected to the GREEN LINKS.



# Sustainable Development Principles 可持續發展設計原則

As applied to HKSAR : → Summary of Chinese Text contained at

[http://icee.hku.hk/exhibition/pearlOfTheWorldII/chinese\\_Project\\_Summary-2010.pdf](http://icee.hku.hk/exhibition/pearlOfTheWorldII/chinese_Project_Summary-2010.pdf)

維港宏基定百年 <http://icee/exhibition/pearl/index.html>

- 「香江永綠」是香港大學的一個以環境為主題的重點研究項目，是為整個香港未來五十年到百年，提供一個全面性和可持續的發展框架，以配合香港在2050年人口增長超九百萬及更長遠的發展所需。（聯合國2008年人口報告資料）
- 環境效益、技術許可和財政許可都是「香江永綠」的大前題。建議包括增加香港市區內的綠色空間，維港兩岸前建設多個水上、陸上公園，總面積達一千七百公頃下廣設交通網絡、連結式的地下城及地下海水能源中心，帶導整個維港兩岸及九龍內陸進入可持續發展及重整的新紀元。
- 建議更包括善用西九、東九及港島北岸填海得來的700多公頃的陸上公園上空，加建適量的高架建設如學校、商廈、酒店及室外設施，一地多用，大大提高土地使用效率。另外以有香港特式的「綠色平橋系統」(Green Links)，將市區內的公園與郊野公園連接，讓市民可以安全地、快捷地和舒暢地穿梭於公園間，遠離汽車廢氣和噪音的污染。





# Sustainable Development Principles 可持續發展設計原則

As applied to HKSAR : → Summary of Chinese Text contained at  
[http://icee.hku.hk/exhibition/pearlOfTheWorldII/chinese\\_Project\\_Summary-2010.pdf](http://icee.hku.hk/exhibition/pearlOfTheWorldII/chinese_Project_Summary-2010.pdf)

維港宏基定百年: The 100-year Sustainable Plan for HKSAR  
<http://icee/exhibition/pearl/index.html>

- **Pearl for the World** project brings forward a generic sustainable development framework for the entire HKSAR for the coming 50 years and beyond. The project particularly addresses Hong Kong's ever increasing population which is predicted to go beyond 9 million by 2050. [ UN Population Reports of 2008 ]
- Addressing environmental effectiveness, technical feasibility, and financial viability collectively, **Pearl for the World** is signified by a substantial increase in urban marine and land parks in the city centre of HKSAR to about 1 700 hectares. It is proposed to optimize the use of the 700 hectares of reclaimed land comprising the 300 hectares in West Kowloon from Jordan to Lai Chi Kok, and 330 hectares in Kai Tak at East Kowloon, and 60 hectares reclaimed land at the harbour front of Hong Kong Island. The surface of these 700 hectares of reclaimed land will generally be used as parks. Elevated above the parks will be built some schools, office buildings and hotels at certain selected locations. To optimized land use, the underground volumes will be developed into connected cities of traffic routes, vehicular parking facilities, a variety of electric transportation facilities, commercial and recreational and sports facilities, selected institutional and educational, and tourist facilities, and an enormous sea water centre and energy centres. All these facilities will support the sustainable developments in the park regions, and bring redevelopment of the Kowloon interior regions into a new energy efficient and sustainable era.
- A large system of **Green Links** which are proposed to connect all the urban parks to country parks in a network, enabling people to travel between the parks quickly and safely at an elevated level generally above and away from the noise and pollution of the motor traffic.



# Sustainable Development Principles 可持續發展設計原則

As applied to HKSAR : → Summary of Chinese Text contained at  
[http://icee.hku.hk/exhibition/pearlOfTheWorldII/chinese\\_Project\\_Summary-2010.pdf](http://icee.hku.hk/exhibition/pearlOfTheWorldII/chinese_Project_Summary-2010.pdf)

- **千頃一碧兩岸前** <http://icee/exhibition/pearl/index.html>
- **1. 西維港海陸公園群**
- 佔地**65**公頃的「西九龍水上公園避風塘」- 將現成的新油麻地避風塘修建而成。
- 佔地**16**公頃的「廣東道水上公園」- 將現成的廣東道香港中國客運碼頭及其航道修建而成；香港中國客運碼頭則遷移到赤立角港珠澳大橋·香港口岸
- 佔地**330**公頃，從佐敦西九龍文化區到荔枝角公園的「西九龍陸上公園」，當中包括兩台地標式日晷。
- 現成的尖沙咀九龍公園-將以架空的正東西直向地標式「日晷平橋」跨越廣東道與「西九龍陸上公園」連接，橋塔中段設有觀景台，高達**88**米的橋塔，同時作為這台地標式日晷的「晷針塔」。
- 「中區日晷公園」-佔地十公頃，包括兩台地標式日晷，公園地底發展交通網絡、商場及海水能源中心，並以正南北直向的香港中區海底行人單車纜車隧道與「西九龍陸上公園」連接；亦可選擇連接到尖沙咀海運中心碼頭末端或尖沙咀天星碼頭。
- 「鐘樓日晷公園」-目前的尖沙咀鐘樓、香港文化中心、香港太空館、香港藝術館及鄰近的巴士總站和梳士巴利花園將修建成以園境主導的十公頃「鐘樓日晷公園」，當中包括三台牆面式和樓頂式地標式日晷；又以架空建設的「綠色平橋」，沿九龍公園徑與「九龍公園」連接。
- 灣仔金紫荊公園-將現在的金紫荊廣場向西伸延，成為五公頃的「灣仔金紫荊公園」；這個公園與WLP6「香港特區廣場」相連，又以金紫荊海底行人單車纜車隧道與尖沙咀WLP4「鐘樓日晷公園」連接；而尖沙咀九龍公園徑的中綫及九龍公園的**88**米高的「晷針塔」，均設定對準灣仔「金紫荊」成為一條直線。
- 二十三公頃的「香港特區廣場」-將現成和平紀念碑，大會堂及鄰近公園連結並擴大，與鄰近新填海區組合而成「香港特區廣場」。將現成解放軍地段的樓宇改建成地下「羅浮宮」級解放軍博物館及文藝中心。
- 西維港公園-以兩條海底行人單車纜車隧道為邊界、佔海面二百公頃的「西維港公園」。

# Sustainable Development Principles 可持續發展設計原則

As applied to HKSAR : → Summary of Chinese Text contained at

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- 千頃一碧兩岸前 1700 hectares of harbour front green <http://icee/exhibition/pearl/index.html>

## 1. 西維港海陸公園群 : Marine and Land parks at West Victoria Harbour

- A West Kowloon Marine Park-Shelter of 65 hectares, by transforming the current New Yau Ma Tei Typhoon Shelter
- A Canton Road Marine Park of 16 hectares, by transforming the current Hong Kong China Ferry Terminal and its ferry passage, and relocating the terminal to the North end of the proposed West Kowloon Marine Park- Shelter, and expanding it there
- A West Kowloon Land Park of 330 hectares, covering the un-built area and roads of the reclaimed areas extended from Jordan West to Kai Chi Kok, in which there will be TWO ICONIC SUNDIALS
- The present Kowloon Park of Tsim Sha Tsui, to be linked to the West Kowloon Land Park by an East-West ICONIC SUNDIAL Bridge which will be built over and across Canton Road, with the sundial gnomon extended up from the mid-level watch tower to 88m high above ground
- A Hong Kong Central Sundial Park of 10 hectares, containing TWO ICONIC SUNDIALS, to be linked to the West Kowloon Land Park by a North-South HK Central Underwater Pedestrian-Cycling-Cable Tram Tunnel
- The existing region of Clock Tower, Hong Kong Cultural Centre, Hong Kong Space Museum, Hong Kong Museum of Art, and the adjacent bus terminus area, and Salisbury Garden of Tsim Sha Tsui, to be transformed into a landscaped Clock Tower Sundial Park containing THREE ICONIC SUNDIALS. This park shall be linked to Kowloon Park by an elevated Green Bridge to be built over Kowloon Park Drive.
- The Golden Bauhinia Park of 5 hectares, founded on the present Golden Bauhinia Square, to be extended westward to meet the HK Central Sundial Park. The Golden Bauhinia Park shall be linked to the Clock Tower Sundial Park of Tsim Sha Tsui by the Golden Bauhinia Underwater Pedestrian-Cycling-Cable Tram Tunnel. This tunnel shall align with a straight line joining the present Golden Bauhinia at Wanchai to the 88-m tall sundial gnomon of the proposed East-West Sundial Bridge of the present Kowloon Park.
- The HKSAR Square of 23 hectares, founded on the Peace Memorial of HK Central, containing the Statute Square, the extended City Hall district, the newly reclaimed land, extended to the Civic Square of the new Government Headquarters Building . The existing buildings of People's Liberation Army site will be transformed into a PLA museum and cultural complex to be built underground
- The West Harbour Park of 200 hectares bounded by the TWO lines of the TWO underwater tunnels

# Sustainable Development Principles 可持續發展設計原則

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千頃一碧兩岸前 1700 hectares of harbour front green

<http://icee/exhibition/pearlOfTheWorldII/index.html>

## 2. 東維港海陸公園群: Marine and Land parks at East Victoria Harbour

- Kai Tak Land Park of 330 hectares at East Kowloon
- East Island Land Park of 10 hectares, covering Quarry Bay Park , to be linked by green links to the reclaimed land at Wan Chai, connected to the Golden Bauhinia Park. It is proposed to build the Kai Tak Central Underwater Pedestrian-Cycling-Cable Tram Tunnel to connect the end section of Kai Tak Runway to the area near the Eastern Harbour Crossing at the East Island Land Park.
- The East Kowloon Marine Park of 200 hectares, covering the Kowloon Bay district from H
- The East Victoria Harbour Park of 500 hectares, covering the sea district bounded by –The East Kowloon Marine Park, HK Island, Kai Tak Central Underwater Pedestrian-Cycling-Cable Tram Tunnel, and Golden Bauhinia Underwater Pedestrian-Cycling-Cable Tram Tunnel.

The Kai Tak Park at East Kowloon will be connected by the 4-km Central Kowloon Route [most parts of which are underground] to West Kowloon Land Park. The Kai Tak Park at East Kowloon is also connected via the Kwun Tong Bypass and the Eastern Harbour Crossing to East Hong Kong Park at Quarry Bay.

# Sustainable Development Principles 可持續發展設計原則

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- 千頃一碧兩岸前 1700 hectares of harbour front green
- <http://icee/exhibition/pearlOfTheWorldII/index.html>
- 2.東維港海陸公園群
- 啓德公園—佔地三百三十公頃的東九龍「啓德公園」
- 佔地十公頃的港島東公園—從鰂魚涌公園西端，向東延伸至西灣仔岸邊。在東區海隧出口附近，以啓德海底行人單車纜車隧道與啓德跑道末端連接。
- 「東維港水上公園」—從紅磡海旁至啓德跑道郵輪碼頭的二百公頃的九龍灣對出海面建設成「東九龍水上公園」
- 東維港公園—「東九龍水上公園」以南，港島以北，並將位於啓德海底行人單車纜車隧道和金紫荊海底行人單車纜車隧道之間的五百多公頃水域定為「東維港公園」。
- 東九龍啓德公園以4公里長的「中九龍幹線」（大部分地下隧道）與西九龍公園接通，並以觀塘繞道連通東區現成海底隧道直達港島東面之鰂魚涌公園。

## Sustainable Development Principles 可持續發展設計原則

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### 千頃一碧兩岸前 <http://icee/exhibition/pearlOfTheWorldII/index.html>

各公園群均設有龐大相連的地下城，並在維港兩岸行車隧道出入口附近設置大型交通樞紐，每處皆可容數千輛車停泊。另外以電動快速交通工具穿梭於各陸上旗艦公園和交通樞紐，減低市區道路的車輛數量，大幅改善市區空氣質素和交通噪音。

- 以上所示的「旗艦公園群」包括多個水上及陸上公園共一千七百多公頃，碧綠一片，又以八台地標式日晷接連起來而成為一個整體。陸上公園、人民廣場相連，或在地面以「綠色平橋」連接，在水底又以多條行車行人海底隧道連接，達到循環互通；再加上無污染的水上交通設施連接維港兩岸，多個旗艦公園從此水陸相連、海岸祥和、生生不息。
- 「千頃一碧兩岸前」整體成為珍奇宏觀的香港特別行政區的城市標誌。 [http://icee/exhibition/pearlOfTheWorld/h\\_concept.html](http://icee/exhibition/pearlOfTheWorld/h_concept.html)

# Sustainable Development Principles 可持續發展設計原則

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## 千頃一碧兩岸前 1700 hectares of harbour front green

<http://icee/exhibition/pearlOfTheWorldII/index.html>

- The THREE regions of reclaimed underground space, namely at West Kowloon, East Kowloon, and the north coast of HK Island, will be developed into huge underground cities, all safely and sustainably connected. Also huge TRAFFIC HUBS will be built around the vehicular tunnel portals on both side of the Harbour, each with traffic interchange facilities to local electric traffic systems, and enormous park facilities for thousands of vehicles. The electrical traffic facilities will connect all parks and TRAFFIC HUBS, resulting in reduced traffic in existing roads, and hence reduced vehicular pollutant emissions and traffic noise.
- Hence, a System of many linked Green FLAGSHIP PARKS of marine parks and land parks, summing to about 1700 hectares will be formed, and will be symbolically linked together by EIGHT ICONIC GIGANTIC SUNDIALS to immerse harmoniously in the richness of nature. The green links, the underwater tunnels, and the Flagship land parks will constitute several circling routes. With further connection by non-polluting water transport, the marine land parks will be fully connected by both land and sea. This Holistic Sustainable System of FLAGSHIP Marine-land PARKS and their Green Links will form a **UNIQUE MACROSCOPIC SUSTAINABLE CITYMARK of The Special Administrative Region of Hong Kong.** [http://icee/exhibition/pearlOfTheWorld/h\\_concept.html](http://icee/exhibition/pearlOfTheWorld/h_concept.html)

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## 地下連城無價寶 <http://icee/exhibition/pearlOfTheWorldII/index.html>

- 維港已不再填海了，所以現存維港兩岸填海得來的土地價值非常高。因此，從地面向下到硬石，從地面向上至天高，都必需盡量善用，「一地四用」，包括：
  - 地面作公園，大量綠化。
  - 地下作地下城、交通網絡及停車場。
  - 地下城亦包括商場、體育設施、文化設施、旅遊設施和海水能源中心，地下雨水塘等。而各公園之地下城要彼此互通，並與鄰近交通站和地下設施連結，發揮地下城節約冷氣的好處。地下城與地面公園互動，以至下大雨時讓人從公園移步到地下城。
- 部分地面公園可設高架式辦公樓、酒店、學校、或住宅，甚至可設高架式康體設施如城市式高爾夫球中心和攀石中心，旨在不減少公園面積。
- 當香港人口再增多，土地極之缺乏，**連結的地下城實為香港的無價寶**。



# Sustainable Development Principles 可持續發展設計原則

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地下連城無價寶 **The Invaluable Interconnected underground cities**

<http://icee/exhibition/pearlOfTheWorldII/index.html>

- Since no further reclamation will be conducted in the Victoria Harbour, the existing reclaimed land is of immense value. Therefore, all the reclaimed space from the hard rock at sea bed to the ground level and to the air space above the ground has to be optimized for its current and future use:
  - 1. Parks will be built at normal ground level, providing huge green regions.
  - 2. Underground cities with huge systems of traffic routes, interchange, roads, and parking facilities.
  - 3. Underground cities will contain shopping malls, sports and recreational facilities, tourism facilities, huge rain water tanks, and sea water and energy saving centres. Since all the underground cities are interconnected and connected to other traffic stations, and underground facilities, offering the sure benefit of saving energy of air conditioning. Also people at the parks can have shelter inside the underground cities in rain and stormy days.
  - 4. At certain parts of the land parks will be built elevated offices, hotels, schools, and residential buildings, and even elevated sports facilities such as city golf ranges, climbing sports facilities, without recuing park area.

Populations increase will increase the pressure on land availability, the Interconnected underground cities will be invaluable assets to HKSAR.

The existing and future art and cultural facilities and other facilities surrounding the central part of the Harbour will all be embraced and interconnected by this system of FLAGSHIP PARKS and Green links, in harmony with their surroundings and nature.

# Sustainable Development Principles 可持續發展設計原則

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地下連城無價寶 The Invaluable Interconnected underground cities  
<http://icee/exhibition/pearlOfTheWorldII/index.html>

The 3 missions of 330 hectares of Kai Tak Park at East Kowloon:

1. **To support the sustainable redevelopment of the interior regions of East and north Kowloon, such as Kowloon City area, to meet the needs of the population increase in HKSAR.** Lots of low rise buildings in Kowloon offer high potential for sustainable redevelopment. This will include the construction of green links from Kai Tak Park to the interior regions to enable people to travel conveniently, safely, comfortably to Kai Tak Park, in which schools and other recreational and sports and cultural facilities will be provided collectively to serve the interior regional developments, thus substantially reducing the related land demand in redeveloped regions. This integrated cross-regional support urban planning and design is unique to HKSAR.
2. The ground level will be a big park, and the underground space will be developed into a big city, and a huge traffic hub and vehicular interchange with lots of parking facilities, targeted to support the traditional enterprises and “ the SIX ENTERPRISE” to meet the economic needs of HKSAR
3. The remaining space and areas of Kai Tak Park should be carefully kept for future sustainable use. This will mean that whatever construction to proceed NOW, shall not **COMPROMISE** the ability of the future generation to use the underground reclaimed space sustainably. For example the underground road tunnel to be constructed inside Kai Tak reclaimed park area shall have provisions, such that the space surrounding the underground tunnel can be used as part of underground city development in the future or NOW.

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地下連城無價寶 **The Invaluable Interconnected underground cities**  
<http://icee/exhibition/pearlOfTheWorldII/index.html>

## The 3 missions of 330 hectares of West Kowloon Park from Jordan to Lai Chi Kok:

1. To support the sustainable redevelopment of the interior regions of West and Central Kowloon, such as Shek Kip Mei area, to meet the needs of the population increase in HKSAR. Lots of low rise buildings in Kowloon offer high potential for sustainable redevelopment. This will include the construction of green links from West Kowloon Park to the interior regions to enable people to travel conveniently, safely, comfortably to West Kowloon Park in which schools and other recreational and sports and cultural facilities will be provided collectively to serve the interior regional developments, thus substantially reducing the related land demand in redeveloped regions. This integrated cross-regional support urban planning and design is unique to HKSAR.
2. The ground level will be a big park, with selected areas for construction of premium class office buildings [built in an elevated manner similar to HSBC HQ Building in Central] and hotels and residential buildings to meet the need for economic growth of HKSAR, making **WEST KOWLOON AS THE 2<sup>nd</sup> Central Business District of HKSAR**
3. **The land Park and Marine Park of West Kowloon from Jordan to Lai Chi Kok — Environmental protection district -Art and Cultural district, Sports district, Recreational district, Tourism district, Educational district, Residential district, Commercial district, Hotel district**
  - The ground level will be a big park, and the underground space will be developed into a big city, and a huge traffic hub and vehicular interchange with lots of parking facilities, targeted to support the traditional enterprises and “ the SIX ENTERPRISE” to meet the economic needs of 43 HKSAR.

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## 地下連城無價寶 <http://icee/exhibition/pearlOfTheWorldII/index.html>

- 三百公頃的東九龍「啓德公園」的三個重要任務：
- 一. 支持東九龍內陸區如九龍城區的可持續發展及重組重建, 配合香港人口增長所需
- 以一地多用原則發展地面作公園, 建設地下城, 並建設地下交通網絡及停車場。地面以上建設適量高架式建築物和學校、文娛康體設施。
- 並建設「綠色平橋」, 讓市民從東九內陸區安全、舒適地到達東九龍「啓德公園」, 使用公園內的一切學校文娛康體設施, 大大減低重建區內土地分配的壓力。這是香港特色的城市設計和規劃方案。
- 二. 善用支持香港傳統產業和「六大產業」發展, 例如建設適量高架式甲級寫字樓和酒店, 以滿足香港經濟發展所需。
- 三. 餘地再經細算後使用
- 我們應小心保存尚餘的啓德填海空地作長遠可持續發展之用。
- 並且無論現在開展甚麼工程, 都不可以剝奪下一代選擇開墾填海區地下空間作可持續發展的權利。例如在啓德填海空地內之地底隧道的興建應受規條約束, 致令地底隧道週遭的空間在現在或將來能夠作為可持續發展地下城的一部分。

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## 地下連城無價寶 <http://icee/exhibition/pearlOfTheWorldII/index.html>

- 三百公頃從佐敦西九龍文化區到荔枝角公園的西九龍公園的三個重要任務：
- 一．支持西九龍內陸區如深水埗區的可持續發展及重組重建，配合香港人口增長所需
- 建設「綠色平橋」，讓市民從西九內陸區安全、舒適地到達西九龍公園，使用公園內的一切學校文娛康體設施，大大減低重建區內土地分配的壓力。這是香港特色的城市設計和規劃方案。
- 二．以地面作公園，建設適量高架式甲級寫字樓和酒店，以滿足香港經濟發展所需
- 三．西九龍陸地公園及海上公園 — 清新綠色環保區的中心 - 文娛藝術區體育區康樂區旅行觀光區教育區住宅區商業酒店區
- 以地面作公園，地下城則以一地多用原則發展，建設交通網絡及停車場。善用支持香港傳統產業和「六大產業」發展，以滿足香港經濟發展所需

## Key proposals relating to enhanced efficiencies in electricity, energy, and water for underground cities developed on Reclaimed land

- -use of sea water for most parts of Kowloon and HK Island for rejecting the heat of air conditioning systems for gaining 20% to 30% energy efficiency over air-cooled systems
- -related use of electric heat pumps to pump heat from the warm sea water, obtained from heat extracted from air conditioning systems, to hot water users, gaining over 300% electricity energy input
- -the use of waste sea water for flushing, relieving the pressure of government sea water mains
- -the wide spread promotion of electric induction cooking for domestic users
- -district cooling to be used for West Kowloon region [current proposal] and Kai Tak Region at East Kowloon [government approved scheme]



# West Kowloon reclaimed land

## - High Economic significance to HKSAR

- ONE key Proposal of High Economic significance to HKSAR is the proposal to transform the road-laden West Kowloon reclaimed land of about 300 hectares, from **Jordan to Lai Chi Kok** into : park, underground city of traffic hub, shopping, sports, recreation, food centre and energy and sea/rain water centres, above ground district of **Grade A offices- West Kowloon –**

### **2<sup>nd</sup> Central Business District of HKSAR-**

甲級寫字樓 → 西九龍 -  
香港特別行政區的第二中央商務區

hotels, institutional buildings built in an elevated manner above the parks, AND using this region to support the redevelopment of interior of Kowloon.

- Kai Tak at East Kowloon shall primarily support redevelopment of East and North Kowloon, on underground city and park approach

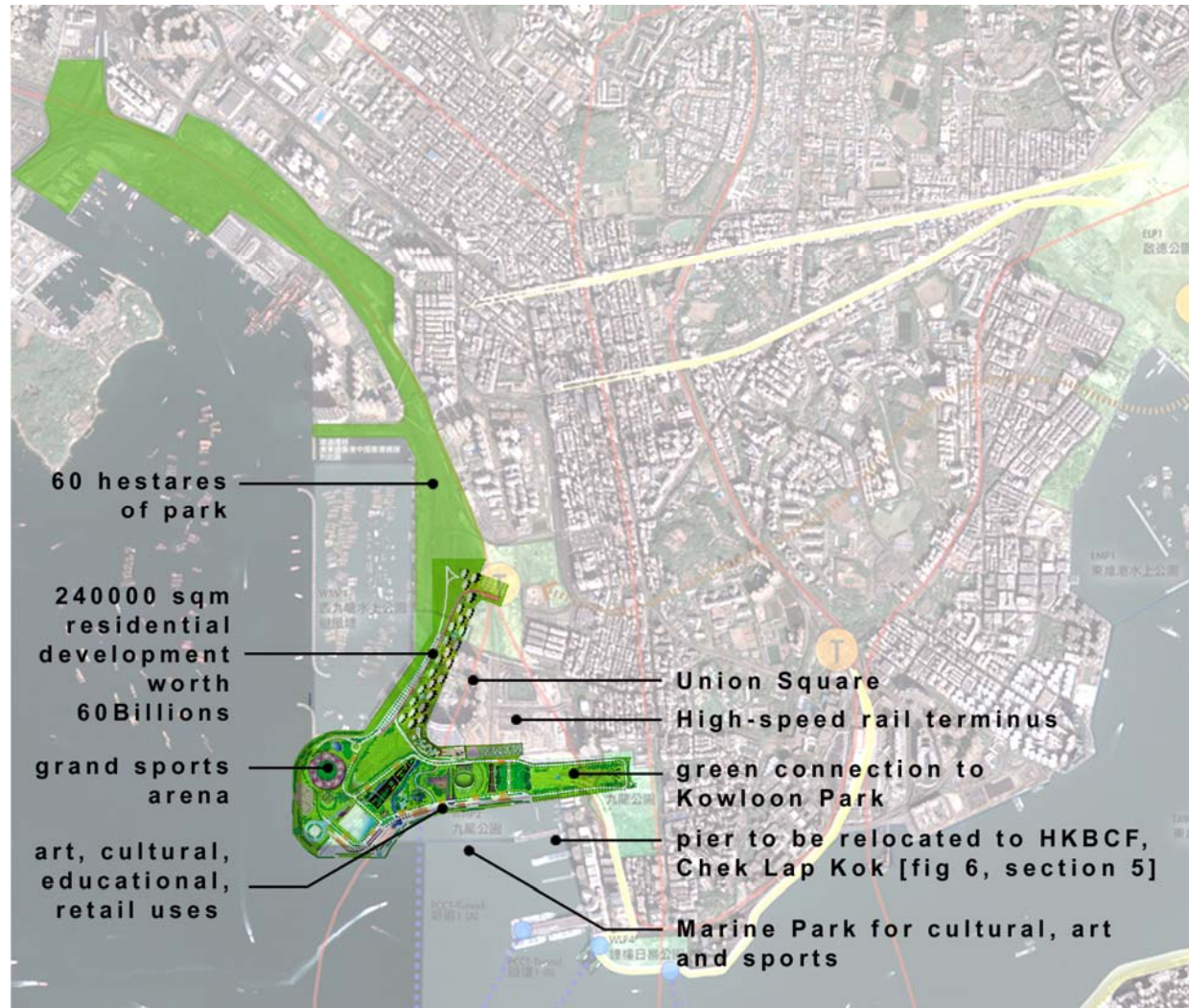


**Pearl for the World**

A Holistic Sustainable Scheme on

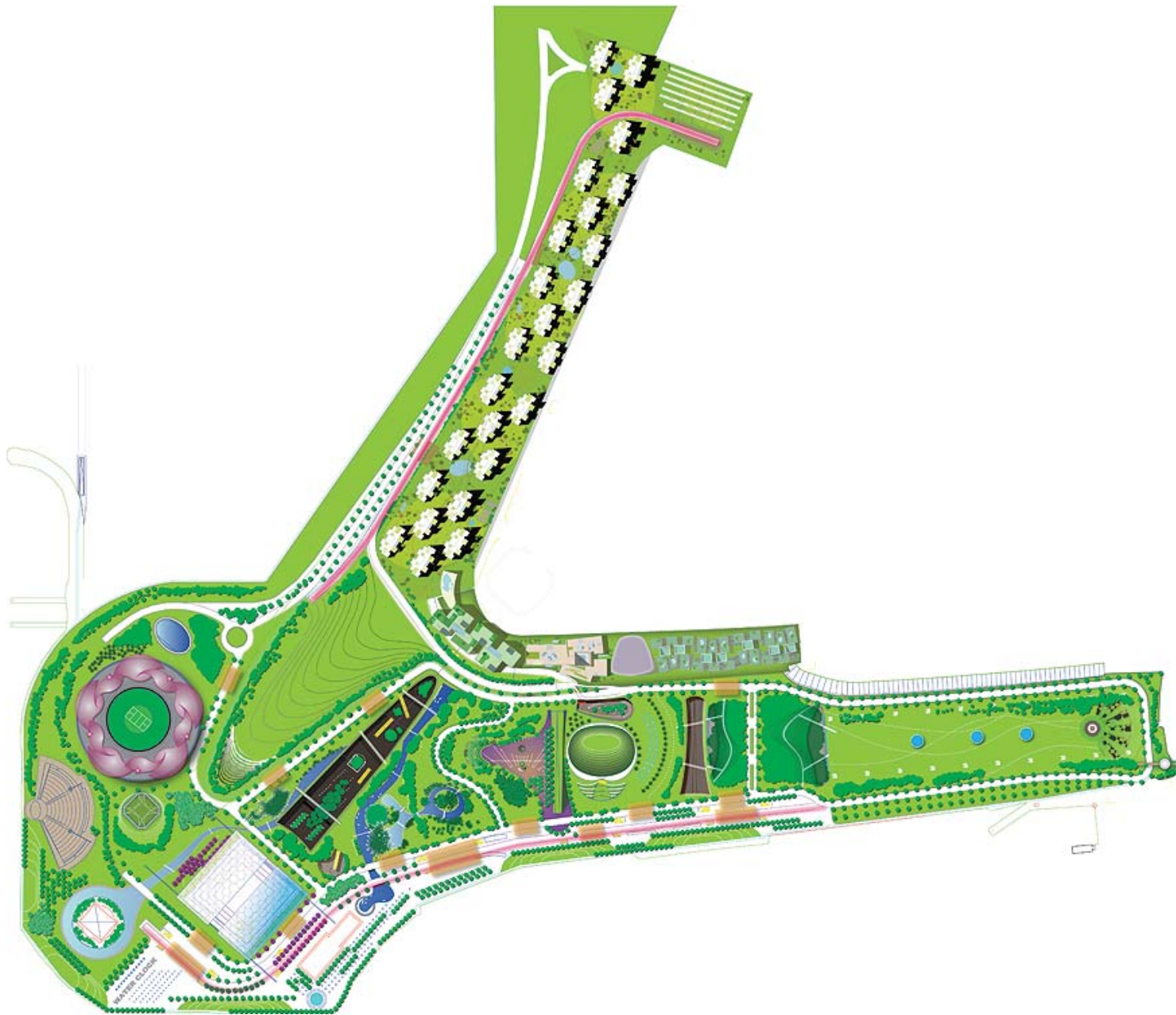
Marine-land Parks and Green links for HKSAR

**A video animating integrated West Kowloon Park development for environmental protection, Art and Culture, Sports, Recreation, Tourism, Education, Premium class residence, supporting adjacent Express Rail Terminus** - produced by students of Department of Multimedia & Internet Technology of IVE- Tsing Yi Campus



Background image source: Courtesy of Google Earth





西九龍公園  
West Kowloon  
Park-  
Please give  
West Kowloon  
Cultural  
Authority 84  
hectares, not 42  
hectares- and  
go for  
maximized and  
optimized  
development of  
underground  
city on  
reclaimed land  
for multi-  
purposes and  
multi-uses,  
including  
developing the  
nearby marine  
parks

-exhibited in Oct  
2009, HKU

ref. [icee.hku.hk](http://icee.hku.hk)



**Pearl for the World**  
A Holistic Sustainable Scheme on  
Marine-land Parks and Green links for HKSAR

# 西九龍陸上公園 <http://icee/exhibition/pearl/index.html>

部份向上架空七米高以上的空間，將是重點住宅項目，提供足夠數萬人 的居所，又可以容納一個大規模的地下商場及各類型的文化藝術運動場館及其他設施。

這個全面套用垂直式設計的概念，特別適合香港這個寸金尺土的地方，有助長遠地解決人口增長帶來的煩惱。

**西九龍陸上公園**計劃興建的文娛藝術設施，除了符合西九龍文化管理局的基本要求外，建議中的「旗艦公園」住宅群，設有多種新穎又可持續的科技裝置，包括太陽光追蹤及反光系統，以調節室內日照光線及溫度；每個單位均是三面通風，並擁有透光透氣的尖頂；還有綠化天臺、收集雨水系統、廢水循環再用、電磁爐、電熱泵、及更廣泛採用**LED**照明，全部可以節能節水及減低污染。「旗艦公園」的住宅，將成為「可持續家居」的典範。

另外，還有許多前瞻性的文化及體育設施，包括以文化典藏為首要的「旗艦公園圖書館」、演藝學院新校舍、文化藝術共融學院、廣闊的地庫展覽及存放空間、香港海上歷史博物館及佔地**6**公頃的廣場，足夠舉辦大型國際級盛事例如一連多月舉行的中國民族婚禮節及中國民族舞蹈節等文化活動；西九龍水上公園沿岸一帶設施更多元化，包括露天劇院及巨型的臨海廣場，足以容納四萬人同時欣賞龍舟競賽；還有置於渡輪上的表演區，市民可以舒適地從岸邊欣賞；再加上其他擁有香港特式印記的館藏，「香江永綠」的設施將是本地及國際旅遊業的新焦點。

**西九龍陸上公園**還設置了多個大小室內室外體育及康樂設施，包括一個符合奧運標準、全天候、可容**15,000**觀眾的體育館，還有奧運溜冰場、高台跳水池、游泳池、有環保教育意義的飄雪樂園及冰屋、架空高爾夫球練習場、攀爬運動館及其他設施。



# The proposed sustainable West Kowloon Park

<http://icee/exhibition/pearl/index.html>

The proposed sustainable West Kowloon Park shall provide additional space and facilities on top of the basic requirements of the West Kowloon Cultural District Authority. These additions include an open theatre at the West seafront, the future Academy of Performing Arts, a FLAGSHIP PARK Library specially enriched with art and culture facilities, a Common Institute for the Art and Culture communities in WKCD, a huge underground space for exhibition and storage, a HK Maritime Museum which will also use part of the proposed adjacent West Kowloon Marine Park-Shelter, a 6-hectare open piazza, where world class international cultural theme festivals and fairs can be hosted. All these together will offer a big boost to local and international tourism. A large open sloped area along the proposed West Kowloon Marine Park-Shelter will allow 40 000 people to watch dragon boat competitions and listen to performances conducted on floating vessels.

The proposed sustainable West Kowloon Park will also provide sports and recreation facilities which shall include a 15000-seat Olympics-class all-weather sports stadium, an Olympics-class ice skating ring, an Olympics-class 10-m high-platform diving swimming pool, an environmental education-oriented snow fun centre with igloos, an elevated golf driving range, a wall and net climbing centre, and other indoor and outdoor sports facilities.



Pearl for the World

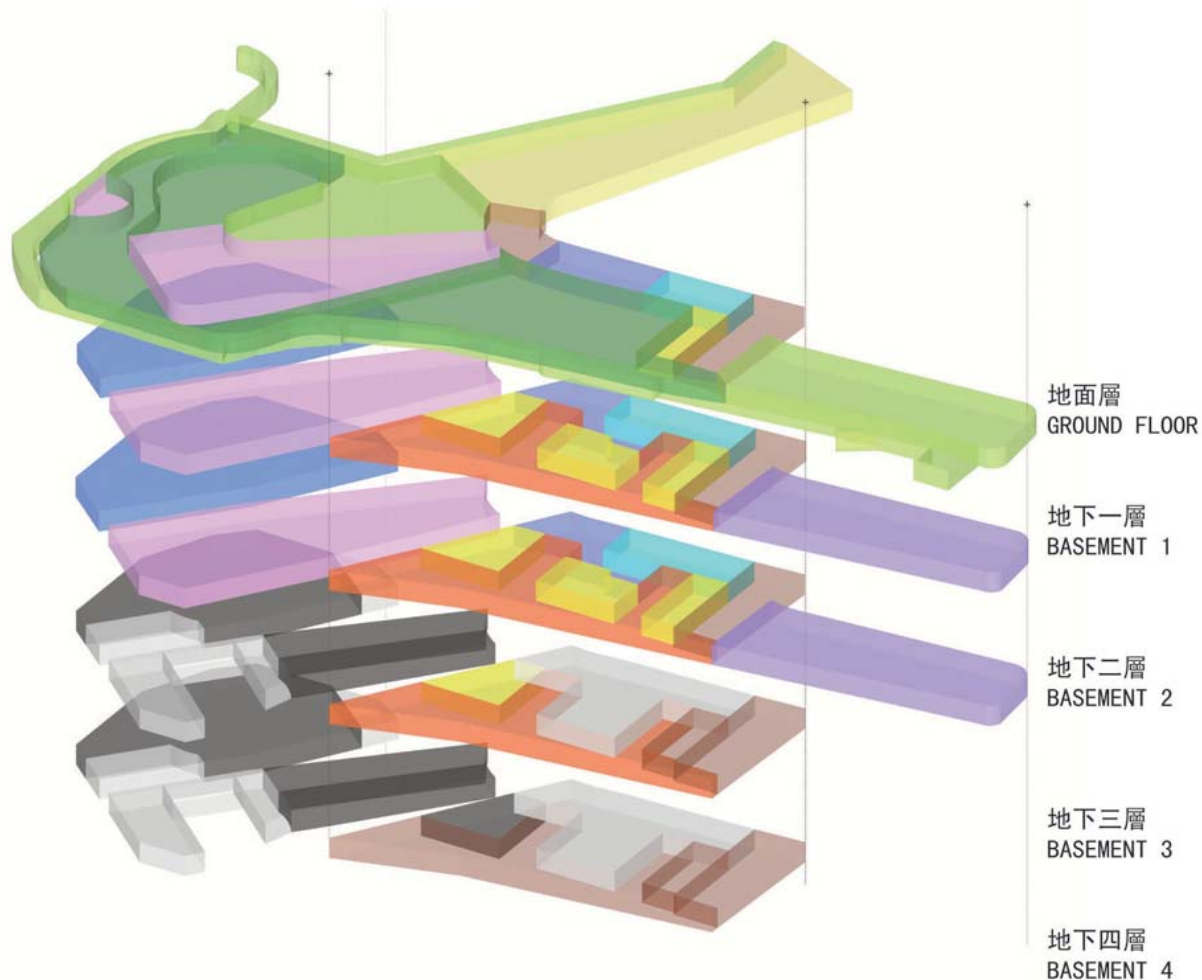
A Holistic Sustainable Scheme on  
Marine-land Parks and Green links for HKSAR

# 九龍公園 West Kowloon Park ..

exhibited in Oct 2009, HKU <http://icee/exhibition/pearl/index.html>

## 圖例 LEGEND

-  藝術中心 Arts Center
-  教育 Education
-  展覽場地 Exhibition Space
-  海濱長廊 Water-front Promenade
-  公共空間 Public Open Space
-  博物館 Museum
-  商廈/酒店 Office / Hotels
-  表演場地 Performance Space
-  公共設施 Public Facilities
-  住宅發展 Residential Development
-  康體場地 Sports Center
-  儲物空間 Storage Space
-  機電設備 Electric and Mechanical Service



**Pearl for the World**  
 A Holistic Sustainable Scheme on  
 Marine-land Parks and Green links for HKSAR

# 九龍公園 West Kowloon Park --

exhibited in Oct  
2009, HKU

<http://icee/exhibition/pearl/index.html>

## Potential for underground development and above ground facilities [1/2]

West Kowloon Cultural District reclaimed land from Victoria Harbour originally occupied by water

-NOW this “water space” becomes **gold for economic value**, for **sound and profound cultures**, for **GREEN park**, all based on optimized and maximized **UNDERGROUND city development** of these 42 hectares of current land given to West Kowloon Cultural District Authority, into 5 levels each of 30 hectares, and one level of 8 hectares, **PLUS 80 000 square meter above ground low rise buildings** → for **multi-purposes: culture, art, sports, education, commerce, traffic hub**, ..

- to meet *the population growth of HKSAR from 7 million in 2010 to 9 million in 2040 [ RTHK news of 2010-07-29]:*

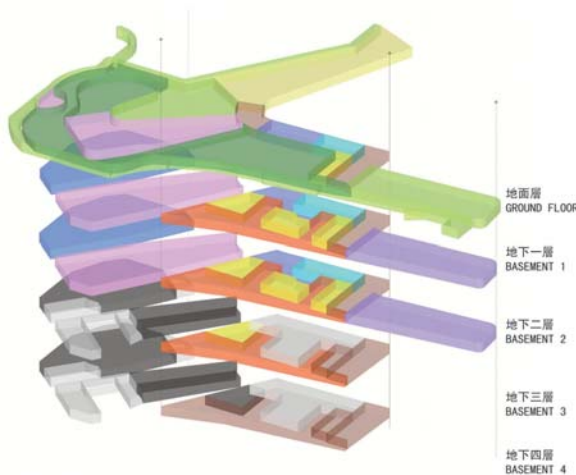
20% saleable underground space for commercial uses as shops, restaurants = 20% X [ 30 hectares x 5 levels] = 300 000 square metre

30% underground space - 西九文化區 basic cultural facilities PLUS additional 80000 square meter above ground low rise cultural space = = 30% X [ 30 hectares x 5 levels] = 450 000 square metre PLUS 80 000 square meter above ground low rise cultural space

50% - other space for sports, educational, traffic, energy centres, water tanks, car parking,.., etc= 50% X [ 30 hectares x 5 levels] = 750 000 square metre

**NOTE 1- 20% saleable underground space for commercial uses as shops, restaurants = 20% X [ 30 hectares x 5 levels] = 300 000 square metre → 300 000 square metre x HK\$300,000 per square metre → 90 billion selling price [ Feasible, compared with South China Mall, Location: Dongguan, China, Opened: 2005 Gross Leasable Area: 7.1 million square feet , 700 000 square metre**

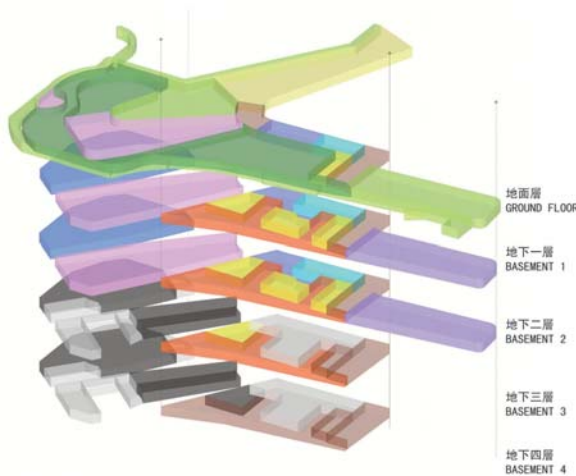
[http://www.forbes.com/2007/01/09/malls-worlds-largest-biz-cx\\_tvr\\_0109malls\\_slide\\_2.html?thisSpeed=15000](http://www.forbes.com/2007/01/09/malls-worlds-largest-biz-cx_tvr_0109malls_slide_2.html?thisSpeed=15000) ]



# 九龍公園 West Kowloon Park ..

exhibited in Oct  
2009, HKU

<http://icee/exhibition/pearl/index.html>



## Potential for underground development and above ground facilities [2/2]

**NOTE 2.** Assuming building cost for all cultural facilities and other facilities = 40 billion, → **50 billion will be surplus** [allowing **FLEXIBLY** above-ground residential and commercial towers not built now, or to be built later on overriding reasons]

**NOTE 3.** Government seed money of 21.5 billion NOW given to West Kowloon Cultural Authority, will be given back to the government in due course.

**NOTE 4.** Facilities in the site will contain some key **Asian/Olympics game facilities including all-weather sports ground of changeable flooring to suit various sports and performances**, the conversion of YauMaTei typhoon shelter into **Asian water game center and marine sports centre....etc**

**Huge steel Columns and beams and be relocated for Flexibly adjusting space for changing uses in the future**

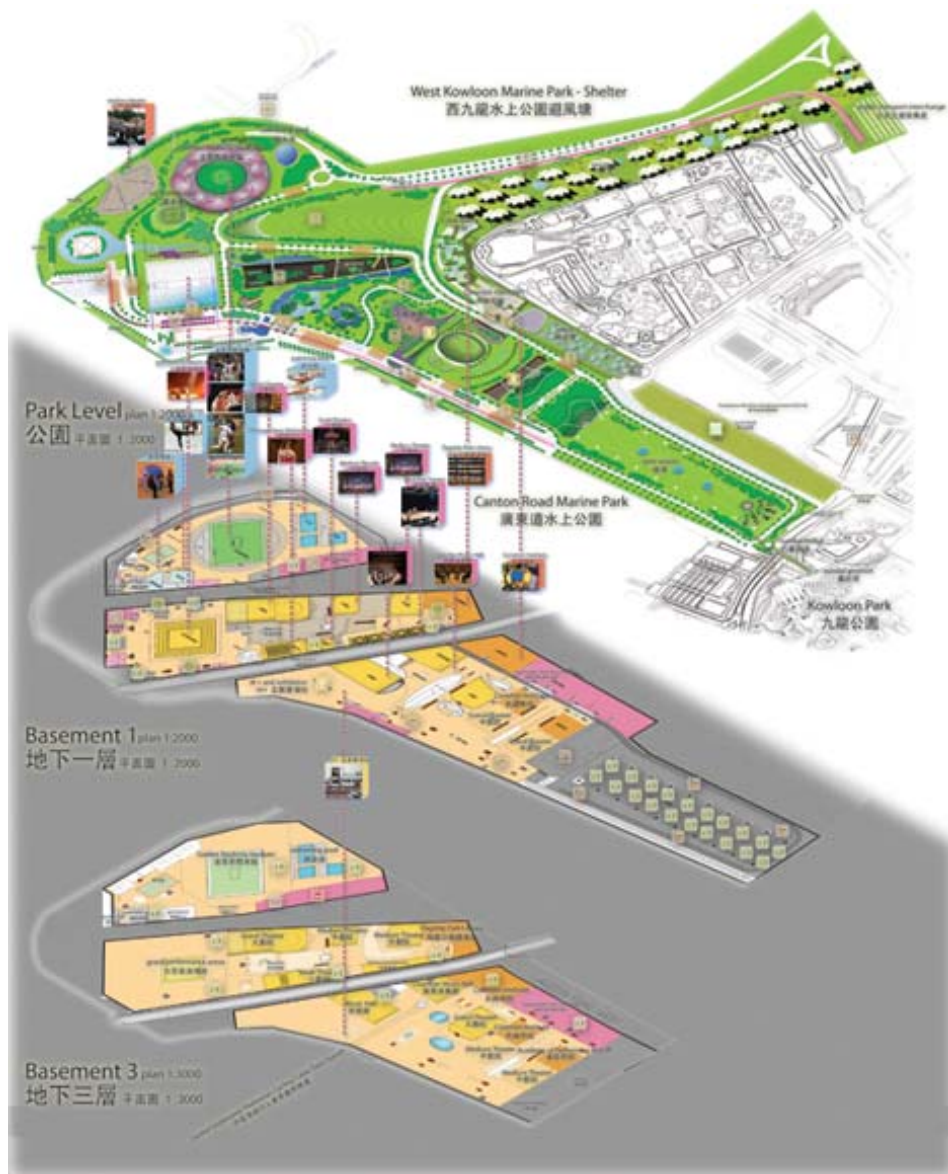
**NOTE 5.** Lots of surplus space on top of the basic WKCD demand, to be used for **educational, social welfare, park, commercial,... traffic**, .For example, each university will be given a mini campus in the WKCD area...

**NOTE 6.** Connectivity to high speed rail terminus via tunnels, to HK island via pedestrian and tram tunnel, to Kowloon Park via bridges, allowing provision of extension to West Kowloon extended park over the road system later when Western Crossing is given back to the government by 2023.

# 九龍公園

# West Kowloon Park

exhibited in Oct 2009, HKU <http://icee/exhibition/pearl/index.html>



## Selected parts above park 部分公園面積上層:

Premium class sustainable residential development, offices, hotel, library, common  
Institute for Art & Culture  
重點可持續住宅發展項目, 辦公樓, 酒店,  
圖書館, 文化藝術共融學院

## Ground level 地面:

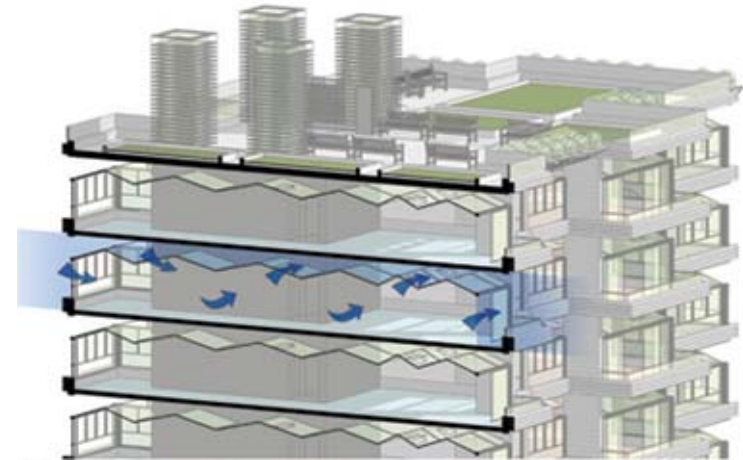
Green and open space 綠地和公共空間

## Underground Level 地庫:

Transportation facilities, art and cultural hubs, shopping centres, sports facilities, tourist attractions, institutional area...  
交通, 文藝, 商業, 公共團體,  
運動和旅遊設施...



**Residential Development in West Kowloon Park 西九龍陸上公園之住宅發展項目 – to be built outside and beyond the 42 hectares given to WKCD Authority - Sustainable Housing Typology 可持續住宅家居 -exhibited in Oct 2009,HKU <http://icee/exhibition/pearl/index.html>**



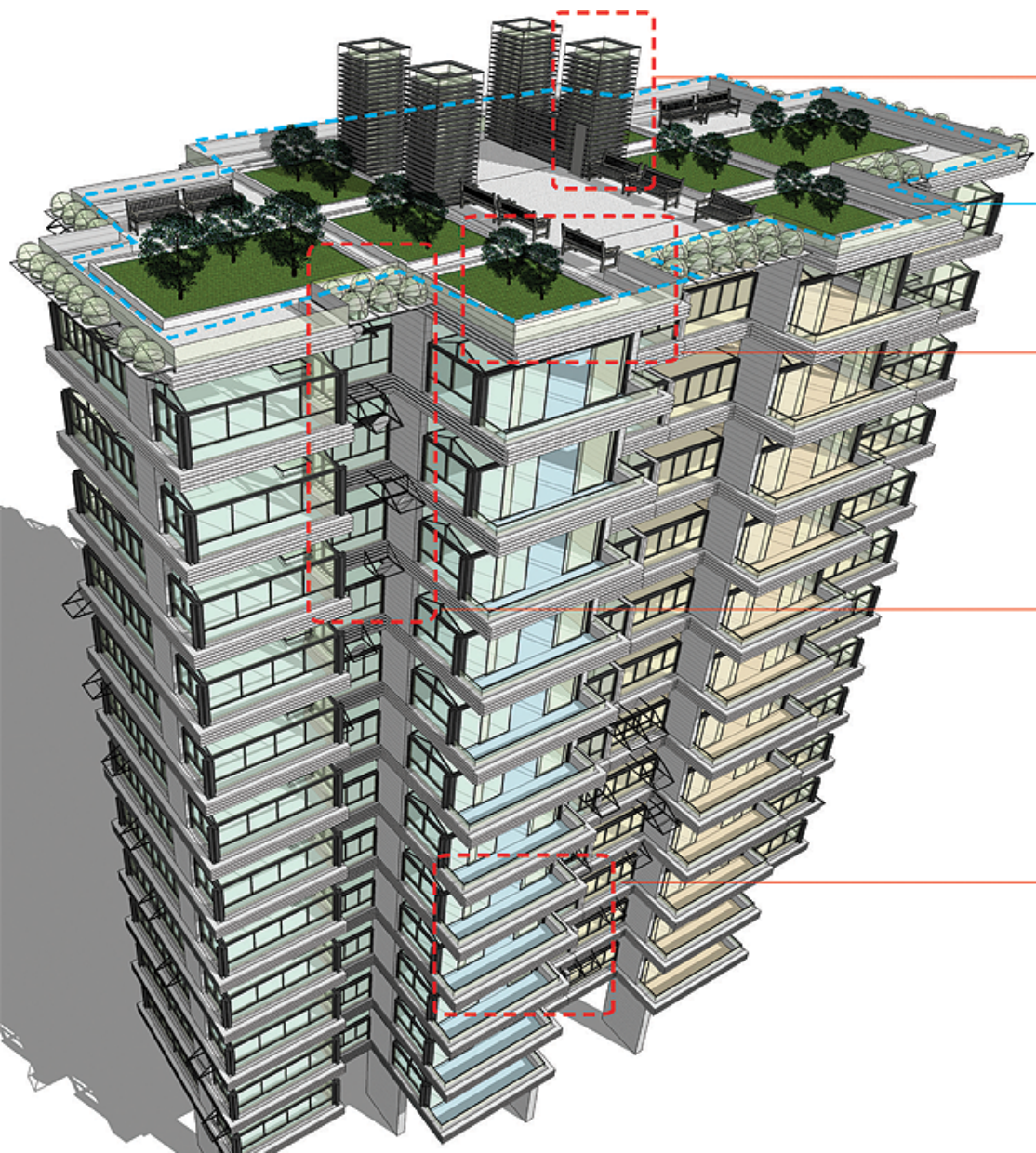
- Natural Ventilation
- 自然對流式通風



- Solar Tracking and Reflecting System
- 太陽光追蹤及反光系統



**Residential Development in West Kowloon Park 西九龍陸上公園之住宅發展項目 – to be built outside and beyond the 42 hectares given to WKCD Authority - Sustainable Housing Typology 可持續住宅家居** -exhibited in Oct 2009,HKU <http://icee/exhibition/pearl/index.html>



**Glass Chimney**

-for cleaning of exhaust from road system)

玻璃「煙囪」

-把底層汽車排出廢氣淨化

**Rain Water Collection System**

Rain water was collected for domestic use on

planting and flushing

雨水收集系統

收集雨水作為一般家用沖廁水或以灌溉用

**Green Roof**

-flat green roof provide valuable space in urban

area for leisure activities, Green House, small

swimming pool or small framing

綠化天台

-提供珍貴的都市空間予休閒活動、溫室、游泳

池及有機耕種

**Solar Tracking And Reflecting System**

太陽光追蹤及反光系統

**Balcony**

-There is a sea-viewing balcony in every flat in the

designed residential type.

環保露台

-每伙設計屋宇中都會提供一個向海環保露台

# ● 百善香江萬世傳

- 「綠色平橋」主要為行人設計，在適當的路程增設電動輸送帶；平橋亦適當地設有上蓋，甚至設計成管道，讓行人在下雨天無需打傘，全程遠離噪音及各類污染；四通八達的平橋，將所有的社區設施、學校、及樓宇平台等等連接；資訊網路及雨水收集系統的管道，亦可隨著平橋發展，最終貫通整個香港。
- 至於在香港島填海區範圍內興建的中環灣仔繞道，及在西九龍填海區範圍內興建的廣深港高鐵中之有關鐵路，其發展與建設都應受規條約束，致令中環灣仔繞道地底隧道週遭的空間，及廣深港高鐵底下的空間在現在或將來能夠作為可持續發展地下城的一部分。
- 換句話說，就是無論現在開展甚麼工程，都不可以剝奪下一代選擇開墾填海區地下空間作可持續發展的權利。



- **百善香江萬世傳 Fragrant-Harbour with Goodness flowing for generations**
- The use of the concept of “Vertical Sustainable Connection of Multiple Uses”, will make land use very efficient. Also the optimized use of the space below ground of the reclaimed land of the harbour front will enable HKSAR to possess invaluable interconnected underground cities. **This will mean that whatever construction to proceed NOW on reclaimed land of the harbour front, shall not COMPROMISE the ability of the future generation to use the underground reclaimed space sustainably.**
- For example the underground Central-Wanchai Bypass to be constructed on the reclaimed park area of HK Island, AND the Railway of the Rapid Railway System to be built on the reclaimed land of West Kowloon Park, shall have provisions such that the space surrounding the underground tunnel , and below the rapid railway line, can be used as part of **sustainable underground city** development in the future or NOW.
- The **Green Links** are normally elevated structures for people movement, and in some locations for electric transportation means as well. The **Green Links** shall be covered partially or entirely for rain shelter purpose. The Green Links shall also bring people away from air and noise pollution, provide convenient access to public facilities such as transportation hubs, designated walking zones, schools, allow connection to podium levels of buildings, allow information technology network installation, allow pipes to run from buildings to parks for rain water collection, and allow cycling if practicable and if safety issues can be managed.



# ● 百善香江萬世傳

- 所有建築物屋頂都以「綠化天台」為主導設計，使香港成為真正綠化城市。
- 現成天橋及單車徑之類的行人設施，亦可與新建的平橋連接，計劃中的筆架山百年火車隧道，將會被復修，定為受保護的歷史古蹟，並改造成為「綠徑」，在規定時段給單車及緩跑愛好者使用。這項改造火車隧道項目意義重大，對達成「全港通」活力徑有重大貢獻，單車徑最終可以貫通南北，市民可以踏單車由南面的香港仔為起點，經過香港市中心區的「旗艦公園群」和海底行人單車和纜車隧道及計劃中的筆架山百年隧道綠徑，再往北面的羅湖進發。另外，亦可同時考慮在這隧道內設置纜車，與單車、行人分時段使用。



- **百善香江萬世傳 Fragrant-Harbour with Goodness flowing for generations**
- Also the roof areas of buildings will be green roof, contributing to make Hong Kong areal green city.
- The **Green Links** can be new features or can be integrated with existing provisions such as existing cycling paths and elevated foot bridges. It is proposed to refurbish the **100-year old train tunnel at Beacon Hill as a Green Link for controlled use for walking, jogging and cycling**. This tunnel refurbishment and other green links will contribute to enhance the **Trans-HKSAR cycling and walking routes**, enabling people to cycle eventually from Aberdeen at HK South to Lo Wu at NT North via the Green Links and the FLAGSHIP PARKS at the central region of HKSAR.



# 百善香江萬世傳 Fragrant-Harbour with Goodness flowing for generations

- 其實香港還有不少島嶼，以精心綠化設計，  
可再創幾個「維港」
- 從太平山頂，甚至再從更高處的衛星鳥瞰，整個「旗艦公園群」與香港其他市區及郊野公園，全部以「綠色平橋」**Green Links**連接，在未來幾個十年至百年間，有助於令香港成為優秀的「可持續」發展都市，能與世界各地分享「香江永綠」的美麗、和平、和諧。「百善永續」



# 百善香江萬世傳 Fragrant-Harbour with Goodness flowing for generations

- In fact there are **many islands in HKSAR** which can be designed sustainably with nearby islands to create a few more “**Victoria Harbour**”.
- These **Land Parks** and **Marine PARKS**, together with other urban parks and country parks of the HKSAR, all connected by the **Green Links**, will help turn the **HKSAR into a premium class Sustainable City** in the coming decades.



# 香港特區 HKSAR : 2030 to 2100

Creating “ Victoria Harbour One ,Two , Three,..- proposed by Mr K C Ko, architecture alumnus, HKU

再創幾個新「維港」

## Creating “Victoria Harbour” Two, Three....

West Victoria Harbour Scheme: Land on large reclamation peninsula, with a few “Harbours” in between the artificial islands and natural islands.  
西維港計劃 — 在維多利亞港西面填海，有數個「海港」，夾在填海島與天然島之間。

East Victoria Harbour Scheme: Land on large reclamation peninsula, with a few “Harbours” in between the artificial and natural islands.  
東維港計劃 — 在維多利亞港東面填海，有數個「海港」，夾在填海島與天然島之間。

西維港計劃 西維港計劃



West Victoria Harbour Scheme: Land on large reclamation peninsula, with a few “Harbours” in between the artificial islands and natural islands.  
西維港計劃 — 在維多利亞港西面填海，有數個「海港」，夾在填海島與天然島之間。

東維港計劃 — 在維多利亞港東面填海，有數個「海港」，夾在填海島與天然島之間。





# The same Sustainable Development Principles are applied to Hong Kong-Zhuhai-Macao Bridge (HZMB)- Hong Kong Boundary

Crossing Facilities (HKBCF) 港珠澳大橋 · 香港口岸 - reclaimed site

OUTSIDE Victoria Harbour - video [ source : <http://www.hkbcf-design.hk/> ]



**Table 1 Hong Kong-Zhuhai-Macao Bridge (HZMB) Hong Kong Boundary Crossing Facilities (HKBCF) - Site development Potential of 150 reclaimed land with 3 levels of underground construction**

	Major Function Area [Within building height limit ]	Gross Floor Area (Square metres)	Value of Completed Premises/Spaces (HKD Billions)
	<b>Limitation:</b> building height limit ranges from 35 m to 60 m, Above Principal Datum [APD], averaged at 45m APD, assuming road level at 5m APD		
	Green Roof [viewing, cycling, replica of air plane watching of old days of Kowloon City, Sung Wong Toi]	750,000	Further research
1	Residential [above ground]	1,200,000	300
2	Shopping Centres [above ground]	1,200,000	400
	Commercial, conference areas [above ground]	300,000	20
3	Hotels [above ground]	400,000	45
4	Medical Centre -Private [above ground]	150,000	Annual rental income of 600 million per year
5	Hospital-Private [above ground]	50, 000	Further research
6	Government, Institutional, Cultural buildings [above ground], including the NEW HK-China Ferry Terminal	300,000	Further research
7	Podium level – Park, cycling routes and people circulation – above ground	900,000 [not counted in GFA]	N.A.
8	Ground level – entire level for Hong Kong Boundary Crossing Facilities, and roads	900,000 covered area counted in GFA	N.A.
	<b>TOTAL Gross Floor Area for Plot Ratio Calculation</b>	<b>4,500,000</b>	
	<b>Plot Ratio = TOTAL covered gross floor area above ground / Site Area</b>	<b>3 = 4,500,000 / 1,500,000</b>	
9	Logistics Centres, for forwarding and consideration of goods (underground, not for GFA calculation)	1,200,000	Rental income of 3 billion per year
	Storage or Logistics Centres or parking or <b>allowed for extension of Hong Kong Boundary Crossing Facilities</b> (underground, not for GFA calculation)	1,100,000	Rental income of 2 billion per year
10	Car Parking & Road (underground, not for GFA calculation)	1,200,000	Annual rental
	Energy centre, building services, rain water tanks (underground, not for GFA calculation)	100,000	Rental income of 750 Million per year
	<b>TOTAL GFA underground</b>	<b>3,600,000</b>	
	Note: 1 more basement level is desirable if rock conditions allow, for future extension of logistics centres, and enhanced layout [i.e. total 4 underground levels]	1,200,000 depending on conditions	High value
12	Marina Centre [ at sea nearby] 20m sea surface, extending out from South side and East side of site each of 1.2 km long	24,000	Further research

港珠澳大橋 · 建議  
香港口岸城- 地下城- 加上地面發展

**HKBCF 1000**

**Billion Project**

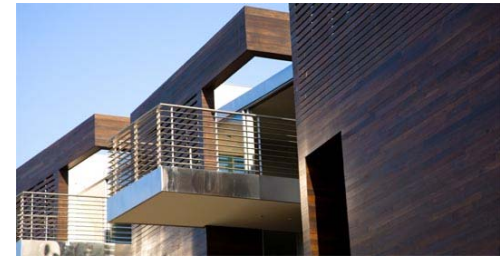
萬億元項目 → See

<http://www.hku.hk/bse/interdisciplinary/Cheung-Chu-paper-20100413.pdf>

Multiple Use of land- 3 levels underground city, 地下城-

Logistics centre,  
MTR station,  
Traffic Hub,  
Extensive parking space  
HK-China Ferry Pier,  
Shopping centre,  
Medical centre,  
Offices,  
Premium residential areas  
for 45 000,

	Major Function Area[Within building height limit ]	Gross Floor Area(Square metres)	Value of Completed Premises/Spaces (HKD Billions)
	<b>Limitation:</b> building height limit ranges from 35 m to 60 m , Above Principal Datum [APD] , averaged at 45m APD, assuming road level at 5m APD		
	Green Roof [viewing , cycling, replica of air plane watching of old days of Kowloon City, Sung Wong Toi]	750,000	Further research
1	Residential [above ground]	1,200,000	300
2	Shopping Centres [above ground]	1,200,000	400
	Commercial, conference areas [above ground]	300,000	20
3	Hotels [above ground]	400,000	45
4	Medical Centre -Private [above ground]	150,000	Annual rental income of 600 million per year
5	Hospital-Private [above ground]	50, 000	Further research
6	Government, Institutional, Cultural buildings[above ground], including the NEW HK-China Ferry Terminal	300,000	Further research
7	Podium level – Park, cycling routes and people circulation – above ground	900,000 [not counted in GFA]	N.A.
8	Ground level – entire level for Hong Kong Boundary Crossing Facilities, and roads	900,000 covered area counted in GFA	N.A.
	<b>TOTAL Gross Floor Area for Plot Ratio Calculation</b>	<b>4,500,000</b>	
	<b>Plot Ratio = TOTAL covered gross floor area above ground / Site Area</b>	<b>3 = 4,500,000/ 1,500,000</b>	



港珠澳大橋 · 建議

香港口岸城- 地下城-加上地面發展

HKBCF-萬億元項目 - See-

<http://www.hku.hk/bse/interdisciplinary/Cheung-Chu-paper-20100413.pdf>

9	Logistics Centres, for forwarding and consideration of goods (underground, not for GFA calculation )	1,200,000	Rental income of 3 billion per year
	Storage or Logistics Centres or parking or <b>allowed for extension of Hong Kong Boundary Crossing Facilities</b> (underground, not for GFA calculation )	1,100,000	Rental income of 2 billion per year
10	Car Parking & Road (underground, not for GFA calculation)	1,200,000	Annual rental
	Energy centre, building services, rain water tanks (underground, not for GFA calculation)	100,000	Rental income of 750 Million per year
	<b>TOTAL GFA underground</b>	<b>3,600,000</b>	
	Note: 1 more basement level is desirable if rock conditions allow, for future extension of logistics centres, and enhanced layout [i.e. total 4 underground levels]	1,200,000 depending on conditions	High value
12	Marina Centre [ at sea nearby] 20m sea surface, extending out from South side and East side of site each of 1.2 km long	24,000	Further research



港珠澳大橋・建議  
 香港口岸城- 地下城  
 -加上地面發展 -HKBCF-see  
<http://www.hku.hk/bse/interdisciplinary/Cheung-Chu-paper-20100413.pdf>



## 港珠澳大橋 - 建議的「香港口岸城」→萬億元項目

港珠澳大橋將在二零一五至二零一六年間落成。現在政府網頁看到，  
<http://www.hkbcf-design.hk/> 130公頃填海區及將會有的「香港口岸」和「珠澳口岸」

設施，是基本行車，泊車，關檢樓和消防局、警察局等等基本套配設施。  
建築面積很少，地積比率很低。

**建議**發展三層地下城，和地面上離地十米以上以柱擡高建築，  
用1.8地積比率去發展130公頃「香港口岸城」，算只能發展100公頃，  
則地面有1,000,000平方米 x 1.8 (1公頃=10000平方米)  
=1,800,000平方米，地下有3,000,000平方米，  
如果以建成面積每平方米HK\$100,000計算，**賣樓價值=1800億港元。**  
**如果地積比率是3.6，則賣樓價值是3600億**，如果每20平方米住一人，  
則分別**可住9萬人或18萬人**，是一個很大的高價屋苑。

設填海區路面在主水平基準以上(APD)6.5米，並設地上建築再在上10米高度以外，  
假設建築高度限制平均是APD40米，[因為近香港國際機場]  
則地面建築高度是(40-6.5-10-1.5米天台牆高度)米=22米，  
約可建6層每層3.67米高的建築，用地積比率3.6計算3,600,000平方米/6  
= 600,000平方米上蓋面積 site coverage =60公頃 = 46%，是優良的設計。

# 港珠澳大橋 - 建議的「香港口岸城」→萬億元項目

地面:建綠色頂樓平臺 [觀光, 踏單車, 花園], 住宅, 購物中心, 商業, 會議, 酒店, 醫療中心-私營, 醫院-私營, 平臺高度-公園, 單車徑,

→建一全新碼頭: 以替代現在尖沙嘴廣東道香港中國客運碼頭 [將現成的廣東道香港中國客運碼頭及其航道修建而成佔水面16公頃的「廣東道水上公園」

- to be designed integrally with the ADJACENT West Kowloon Cultural district]

→地底建物流中心, so that The Proposed Lantau Logistic Park of about –another 130 hectare to be reclaimed- seen at <http://www.hkbcf-design.hk/eng/pdf/annex/Annex7.pdf> can be located at the underground city of the 130-hectare currently reclaimed HKBCF Site, allowing the proposed 130-hectare LOGISTIC sea surface area for OTHER USES.

→地底建泊車中心, 能源中心供應區內冷凍及熱水需求, 雨水收集池, 容許跨境建設之延伸。

-儘量鼓勵私人車輛包括私家車、小巴泊車, 轉乘公共車輛過橋

-儘量把貨物整頓集裝, 把不同類別貨物以最有效的方法儘量裝滿貨車去最少數目的目的地, 以達到最平價運輸, 最少貨車過橋的目的。

如果減低乘車輛過橋, 橋邊又以成空間擴展業務, 或是更內用, 至於減低一成, 兩成或三成, 則有待研究

-因為「香港口岸」臨近「國際機場」, 也離國際貨櫃輪船碼頭不遠, 即是「海、陸、空」的交接處作物流中心則利益更高。

-地下城可發展商場, 文娛康體設施。口岸城海旁亦可發展遊艇中心等主題公園, 則價值是向一萬億進發。

## 調查：香港綜合競爭力被台灣取代 排第二位

RTHK 2010-07-08 HKT 17:04

<http://www.rthk.org.hk/rthk/news/expressnews/news.htm?expressnews&20100708&55&681954>

內地一本雜誌進行中國城市競爭力排行調查，香港的綜合競爭力由去年的第一位，跌至今年的第二位，被台灣取代。在創新城市排行榜，香港亦由第二位跌至第三位，首兩位分別是深圳和上海。調查收集港澳台地區及34個省市，關於經濟、社會、環境和文化四大系統的數據進行分析，香港只在高效率政府排行榜排第一位。中國城市競爭力研究會會長桂強芳表示，香港的整體競爭力較台灣低，主要是台灣本地生產總值較香港高，以及兩岸關係改善所致。研究會副會長黃良會表示，上海的競爭力正逐步增加，因為長三角地區的省份都向上海靠攏，而且上海的面積較大，反觀香港和珠三角地區地方小，可發展空間有限，預期上海的發展潛力會較香港高。

港珠澳大橋・建議香港口岸城- 地下城-加上地面發展

→ 大大提高香港綜合競爭力

Hong Kong-Zhuhai-Macau Bridge (HZMB) :

**Macao** Boundary Crossing Facilities (**Macao** BCF) :

港珠澳大桥 = Hong Kong-Zhuhai-Macau Bridge (HZMB)

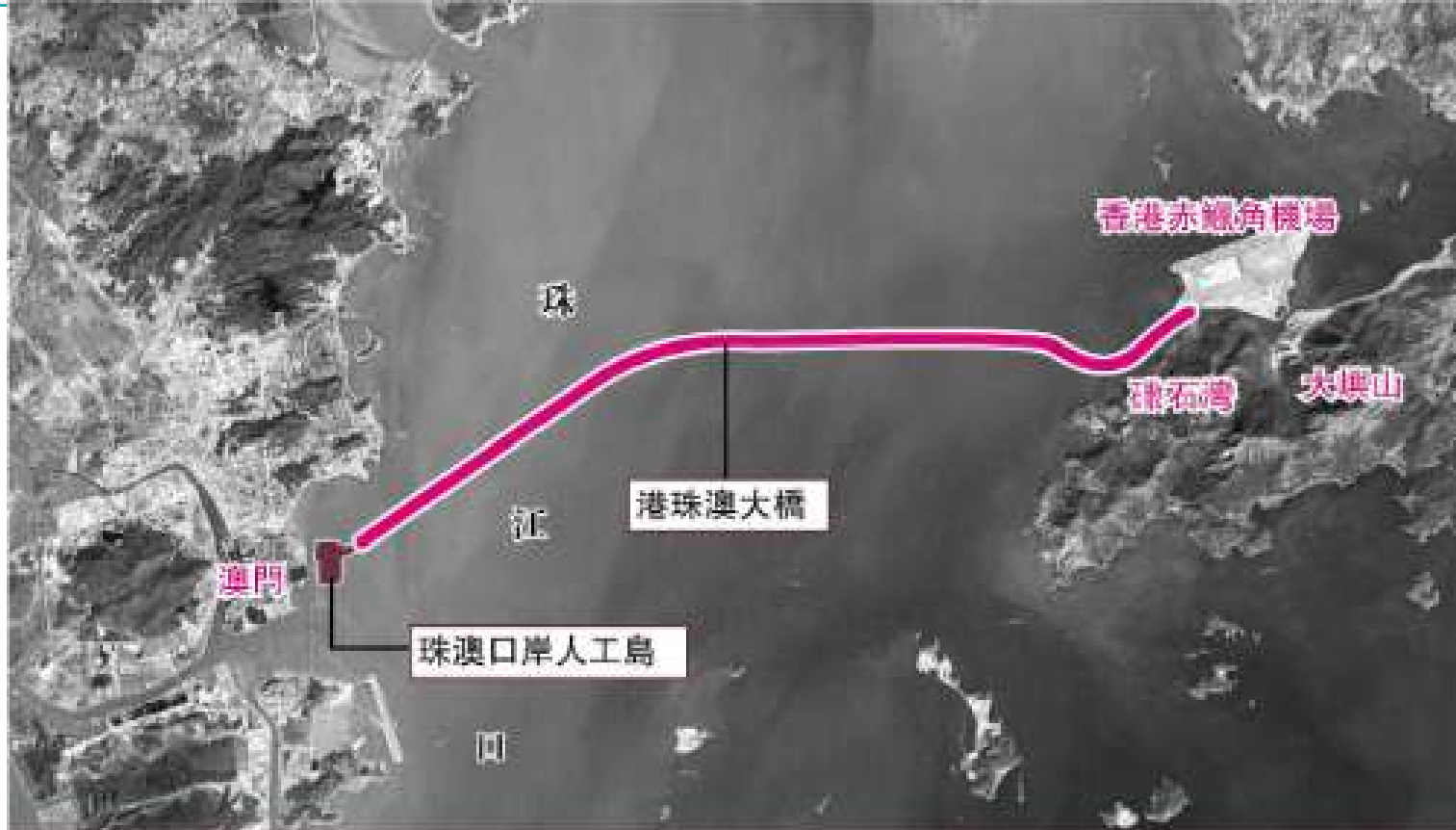
珠澳口岸人工岛 = Pearl-Macau Town

[ Pearl means 珠, i.e. 珠海、珠江、珠江三角洲 ]

Hong Kong-Zhuhai-Macau Bridge (HZMB) will be completed by 2015/2016.

The existing design as of 22 April 2010.

[http://www.takungpao.com/news/09/12/14/news\\_bredge-1186765.htm](http://www.takungpao.com/news/09/12/14/news_bredge-1186765.htm)



珠澳口岸人工島及全橋線路的设计效果圖



**Hong Kong-Zhuhai-Macau Bridge (HZMB) :**

**Macao** Boundary Crossing Facilities (**Macao** BCF) :

港珠澳大桥 = Hong Kong-Zhuhai-Macau Bridge (HZMB)

珠澳口岸人工岛 = Pearl-Macau Town

[ Pearl means 珠, i.e. 珠海、珠江、珠江三角洲 ]

**Hong Kong-Zhuhai-Macau Bridge (HZMB) will be completed by 2015/2016.**

**The existing design as of 22 April 2010.**

[http://www.takungpao.com/news/09/12/15/news\\_bredge-1187208.htm](http://www.takungpao.com/news/09/12/15/news_bredge-1187208.htm)



港珠澳大橋 - 珠澳口岸設施 - 建議的「珠澳口岸城」人工島地下城 - 加上地面發展

**Pearl-Macau Town of Hong Kong-Zhuhai-Macau Bridge (HZMB)**

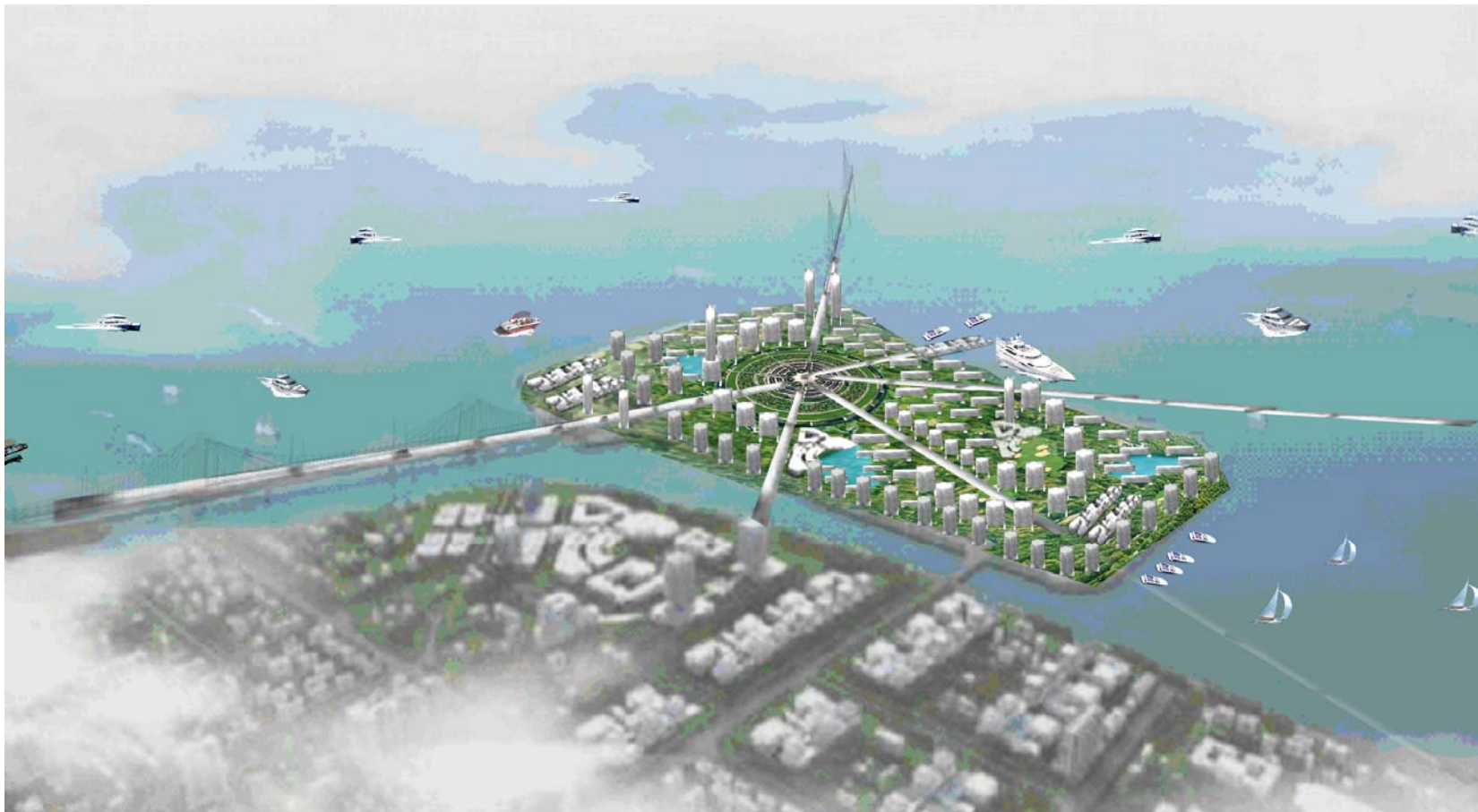
**Containing Zhuhai-Macau Boundary Crossing Facilities (Zhuhai-Macau BCF)**

**217公頃, hectare = 7.4 % of total land area of Macau at 2009**

**(<http://www.dsec.gov.mo/TimeSeriesDatabase.aspx?KeyIndicatorID=11>)**

**Proposal sent to Macao Government in August 2010**

- a 1000 billion Project 萬億元項目 of 3 level underground construction ,
- New Central Business District of Macao, New Government Admin Centre, Central Park, Logistics Centre, Marina Theme Park, 50 000 Premium class residence



# 港珠澳大橋: 珠澳口岸城(人工島)的地下城和地上全面可持續發展建議書

表 1. 珠澳口岸城: 港珠澳大橋: 珠澳跨境建設- 佔地二百一十七公頃之三層地下建設 [圖 4]

	主要建設地區[在建築物高度上限 80m 之內]	建築面積(平方米)	建成的物業/空間之價值 (十億港元)
1	綠色頂樓平台 [觀光, 踏單車, 小餐館, 花園]	80,000 [不適用於計算地積比率]	從衛星圖中盡顯澳門之美
2	住宅 [地面]	2,000,000	300
3	購物中心 [地面]	500,000	300
4	建立澳門中央商業區 商業, 會議地區 [地面]	2,000,000	200
5	酒店 [地面]	500,000	45
6	醫療中心-私營 [地面]	100,000	每年 6 億年租金收入
7	醫院-私營 [地面]	100,000	高價值, 須進一步調查
8	行政, 文化大樓 [地面], 包括一全新澳門大陸碼頭	100,000	
9	平台高度-公園, 單車徑, 來往穿梭 - 地面	1,200,000 [不適用於計算地積比率]	高價值
10	<ul style="list-style-type: none"> <li>- 澳門特別行政區政府行政中心,</li> <li>- 鄰近澳門人民廣場</li> <li>- 鄰近澳門中央公園</li> </ul>	-300,000 GFA square metre ~ on 300,000 sq. m. land [不適用於計算地積比率]	高價值, 須進一步調查
11	G/F - 由澳門和珠海來的車輛會從地面進入珠澳跨境建設的地面層, 道路, 圍繞海岸線的單車徑及行人路, 散步徑	800,000	N.A.
12	1/F - 由澳門來的車輛會從一樓進入珠澳跨境建設的一樓, 道路, 圍繞海岸線的單車徑及行人路, 散步徑	800,000	
	總建築面積適用於地積比率之計算	7,200,000	
	地積比率 = 總地面建築面積除以工地面積	$3.3 = 7,200,000 / 2,170,000$	
21	物流中心, 整理與轉運貨物 [地底, 不適用於計算地積比率]	1,600,000	高價值, 須進一步調查
22	儲存或物流中心或泊車或容許珠澳跨境建設之延伸 [地底, 不適用於計算地積比率]	1,600,000	高價值, 須進一步調查
23	大開放式園庭, 文化及體育設施, 為城市而設的道路及泊車設備 [地底, 不適用於計算地積比率]	1,500,000	高價值, 須進一步調查
24	能源中心供應區內冷凍及熱水需求, 建築服務, 雨水收集池 [地底, 不適用於計算地積比率]	100,000	大大節省能源開支, 須進一步調查
	總地下建築面積 [不適用於計算地積比率]	4,800,000	
(25)	註: 若岩石情況許可, 地底有多一層會更好, 容許物流中心在未來擴展, 及方便規劃[即地底共四層]	額外 1,600,000, 視乎	須進一步調查

珠澳口岸人工島 -  
港珠澳大橋-建議珠澳口岸設施地下城  
[見<http://icee.hku.hk/activities/workshops/doc/20110108/KPC-a.pdf>]

Pearl-Macau Town of  
Hong Kong-Zhuhai-Macau Bridge  
(HZMB)  
Containing Zhuhai-Macau  
Boundary Crossing Facilities  
(Zhuhai-Macau BCF)  
Proposal sent to  
Macao Government  
in 1 September 2010

## 港珠澳大橋-珠澳口岸設施-建議的「珠澳口岸城」人工島地下城-加上地面發展:

[見<http://icee.hku.hk/activities/workshops/doc/20110108/KPC-a.pdf>]

- 珠澳跨境建設在整個工地左上方，於地面兩層，被公園與建築物覆蓋。
  - 三層的地下建設包括大型物流中心、城市交通建設及購物商場。
  - 澳門政府行政樓和新中央商業區，環繞澳門蓮花廣場及中央公園興建。
- 餘下的土地將會被發展作優質住宅、文化及體育之用，如單車、跑步、世界級遊艇中心及國際生態旅遊中心。應用同一可持續及多用途發展填海用地及地下城之構念，配合建築物高度上限及准許地積比率3.3，珠澳口岸城可容納珠澳跨境建設，在未來廿五年積極發展，必會為澳門帶來多方面以倍數增長的收益。

珠澳口岸城會由以下建設組成:

基本的珠澳口岸城於地面以上兩層 [即地面及一樓，各有八十萬平方米，佔地八十公頃，即八十萬平方米X 2 =一百六十萬平方米建築面積，加上地底容許百分之五十的空間擴展]

大型泊車空間，容許珠澳跨境建設有百分之五十的空間擴展

能提供八萬個市民優質住宅建設，與兩倍香港太古城的人口相約

一大型物流中心，用作滙合及陸空轉運貨物。當連接香港與深圳機場的運輸鐵路建成後，珠澳口岸城與香港貨櫃口岸、澳門國際機場、珠海及深圳的距離就更接近。

澳門(內陸)中國碼頭提供統一陸路與航空的海關檢測。這個組合鞏固了珠澳口岸城的物流中央地位。這樣可方便中國大陸的同胞到珠澳口岸城購物，及享受達香港水平的醫療服務。更多人會被吸引從珠江三角洲經陸路及水路到珠澳口岸城。

一大型購物中心，服務中國大陸及來自世界各地的旅客，還有珠澳口岸城的八萬個居民。

一大型醫療中心及一私營醫院為有需要人士提供醫療服務。

充足的本地體育，文化及教育設施，行政與政府大樓。

澳門特別行政區政府行政中心，與澳門人民廣場及澳門中央公園為鄰。

澳門中央商業區- 一大型綜合大樓，包含商業設施、文化、教育及行政院大樓。

道路、平台及海旁空地將專為行人及單車而設，單車徑將伸延至各建築的綠色頂樓平台，成為一個壯觀的單車主題公園。綠色頂樓平台將成為一個大花園，包括單車及行人專用徑和小餐館。

一國際級大型遊艇中心，聯合現存與未來的遊艇，使澳門成為珠江三角洲的遊艇都會。

為大型私人飛機中心提供充裕的支援設備，加上部份相關的設備將由澳門國際機場提供，使澳門成為重點私人陸上與水上飛機都會。

就業及投資機會隨着這個城市及珠澳跨境建設的發展而大幅增加，在建設及運作階段亦一樣。

這個一萬億元計劃將會成為未來廿五年澳門經濟發展的最主要的動力，正面回應了澳門、香港及廣州政府領袖施政報告中的期望。

港珠澳大橋 - 珠澳口岸設施 - 建議的「珠澳口岸城」人工島地下城 - 加上地面發展:

[見<http://icee.hku.hk/activities/workshops/doc/20110108/KPC-a.pdf>] --> 提交澳門新城填海區規劃工作小組

Dear officers of 新城填海區規劃工作小組 of Macau SAR Government ,  
e-mail : [info@gcs.gov.mo](mailto:info@gcs.gov.mo) / [gcspress@macau.ctm.net](mailto:gcspress@macau.ctm.net) , 1 September 2010

I refer to the notice on “新城規劃分三階段公眾諮詢--首輪諮詢現啓動冀全民參與” of 2010-06-18, published in web link

<http://www.gcs.gov.mo/showNews.php?PageLang=C&DataUcn=45762&Member=0> ,

I would like to submit my opinions as follows:

**1. All the reclaimed land shown should be developed using the underground city development approach mentioned**

in : Professor Qian Qihu, 钱七虎 : 开发利用地下空间让城市瘦身- 中国科协 2009年09月04日 <http://www.cast.org.cn/n35081/n35473/n35518/11501962.html>

and 北京东单等地将建大型地下车场 相当于再造东城 -在8平方公里面积内开发地下空间三层 - 法制晚报 8 square km underground city being constructed in Beijing

<http://news.sohu.com/20100114/n269580357.shtml> 2010年01月14日

**2. The ENCLOSED proposal on 港珠澳大桥: 珠澳口岸城 (人工島)的全面性和可持續发展 A Holistic Sustainable Development for Pearl-Macau Town to contain**

**Macau-Zhuhai Boundary Crossing Facilities (MZBCF) and lots of other provisions**

written by K. P. Cheung, Department of Architecture, The University of Hong Kong and

P. H. S. Chu, Department of Architecture, Chu Hai College of Higher Education,

**shall lead the overall city planning for Macau.....**

# BOTH

Hong Kong-Zhuhai-Macau Bridge (HZMB) : Hong Kong Boundary Crossing Facilities (Hong Kong BCF)

<http://www.hku.hk/bse/interdisciplinary/Cheung-Chu-paper-20100413.pdf>

港珠澳大橋 · 建議 香港口岸城- 地下城-加上地面發展 → 萬億元項目

# AND

Hong Kong-Zhuhai-Macau Bridge (HZMB) : Macao Boundary Crossing Facilities (Macao BCF)

港珠澳大橋 - 建議的珠澳口岸城-地下城-加上地面發展 → 萬億元項目

[見<http://icee.hku.hk/activities/workshops/doc/20110108/KPC-a.pdf> → 港珠澳大橋:珠澳口岸城(人工島)

的地下城和地上全面可持續發展建議書 ] shall be developed together, utilizing their FULL reclaimed land potential, in a holistic sustainable manner for big economic, social and environmental benefits

→ 大大提高港 · 珠 · 澳綜合競爭力

## Win-Win for Hong Kong and Macau

[ examples : see <http://www.hkbcf-design.hk/eng/pdf/annex/Annex7.pdf> for gaining logistics land, and gaining longer life for the Bridge and the roads BY having logistics centres in the BCFs ]

# The blessings on HKSAR

維港宏基定百年  
千頃一碧兩岸前  
地下連城無價寶  
百善香江萬世傳

維港宏基定百年: A 100-year Sustainable Plan surrounding Victoria Harbour is set for HKSAR

千頃一碧兩岸前: Harbour front marine and land parks will grow to 1700 hectare

地下連城無價寶: The Interconnected underground-above ground invaluable treasures are multiplying

百善香江萬世傳: Fragrant-Harbour is flowing with Goodness for generations coming

Pearl of the Orient → Pearl for the World

東方明珠 → 世界的珍珠

AND MORE : A few 1000 Billion Projects 幾個萬億項目

# A few 1000 Billion Projects 幾個萬億項目

1. To relocate Shek Kong runway to Tung Lung Chau [ win-win situation] , and use the Shek Kong, Pat Heung, 錦田 Kam Tin, Lam Kam Road areas for accommodating 1 million people.
2. connecting East Rail and West Rail from Hong Lok Yuen to Shek Kong, Kam Tin, via Lam Chuen Valley area
3. transforming the emergency rescue station at Shek Kong to have an additional function as the second and terminal stop of the HKSAR section of the High Speed Rail, while maintaining the West Kowloon stop as the first stop from China, and the second stop from Shek Kong. This will help to retain about 20% non-busy people of NT to buy tickets in Shek Kong Terminus. These non-busy people would otherwise go to Futain in Shenzhen, causing deficit of the High Speed Rail of the HKSAR Section.
4. The Shek Kong- Kam Sheung district will from the government administration centre of central, north, and west regions of N T.





香港特別行政區  
HONG KONG  
SPECIAL ADMINISTRATIVE REGION

高速鐵路

現存石崗跑道將搬遷至東龍洲

建議新界中鐵路線  
連接錦田、石崗、荃灣、及葵興等

建議住宅區  
可容納一百萬人口，包括政府、機構及商業用途  
商業中心、公園及綠化帶

建議高速鐵路總站  
山翠谷近生車站及總站

將軍澳至藍田隧道  
及跨海連接路

港珠澳大橋  
香港口岸

建議高速鐵路首站  
仁大徑

建議東龍洲至將軍澳隧道

四百億的高級住宅項目  
及其他設施

海岸公園

**建議：**搬遷石崗機場到西貢東龍洲島，發展石崗錦田成為超過100萬人居住區，在錦田建新界政府行政中心，建錦田林村港鐵綫連接東鐵(新建康樂園站)和西鐵(錦上路站)等，並建議把石崗的高鐵緊急站，擴展為「高鐵香港段的第二站-總站」和緊急站兩用站，(第一站在西九)

- Map of Hong Kong, Future Development  
Scale 1:20,000
- Legend
  - Proposed Walking and Cycling Trails  
建議步行及單車徑
  - World Heritage Cultural Sites  
世界文化遺產
  - Green Open Space  
綠化地帶及公園
  - Coastal Development Zone  
海岸發展區
  - Green Core / Green Buffer Zones  
綠化核心區
  - Suburban New Towns  
新市鎮
  - Urban New Towns  
新市鎮
  - Urban Renewal Projects  
市區重建項目
  - Waste-to-Energy  
垃圾轉化
  - Small Scale Urban Extension  
小型城市擴展
  - South Island Line East  
南島綫(東段)
  - North Hong Kong Island Line  
北港綫
  - Western Line  
西綫
  - East to Central Link  
東區中環綫
  - South Island Line West  
南島綫(西段)

# 香港特別行政區人口增長 - 建議今後數十年增加基建設施概略 - Open space and G I C Land demand in Kowloon and HK Island by 2040

地區	2009年年中香港人口(香港年報 2009 : 表 29, 30 )	2040年香港人口	本文建議的基建都市學設計原則所帶動的應對基建設施
港島	129 萬	建議增加11萬至140 萬	港島北填海區陸地公園、地下城和「綠徑系統」建設
九龍	206 萬	建議增加80萬至286 萬 港島&九龍增加 91萬→ Additional Land Demand for GIC and Open Space, pro- rata of 2009 areas[91萬/ 700 萬]: Government, Institutional & Community Facilities - 3.12 square kilometer ; Open Space Includes parks, stadiums and playgrounds. 3.12 square kilometer→to be provided by 330公頃西九龍 填海區陸地公園和300公頃東 九龍-啓德填海區陸地公園	以「一地多用」原則、全面性和可持續發展4公里長330公頃西九龍填海區陸地公園和300公頃東九龍-啓德填海區陸地公園: 提供政府、機構和社區設施, 休憩用地包括公園、運動場和遊樂場。地下城設商場、食肆、道路、交通樞紐等, 以支援「西半」九龍和「東半」九龍的可持續發展及重組重建
新界+ 其他	365 萬	建議增加98萬至463 萬	搬遷石崗機場到西貢東龍洲島, 發展石崗錦田成爲超過100 萬人居住區, 在錦田建新界政府行政中心, 建錦田林村港鐵綫連接東鐵(新建康樂園站) 和西鐵(錦上路站)等, 並建議把石崗的高鐵緊急站, 擴展爲「高鐵香港段的第二站-總站」和緊急站兩用站, (第一站在西九)
總人口	人口7006 萬 - 表 29 Land - Table 30 - Land Usage Distribution : Government, Institutional & Community Facilities - 24 square kilometer ; Open Space Includes parks, stadiums and playgrounds. 24 square kilometer	889萬 (香港電台 2010-07-29新聞)	港島、九龍、新界以「綠徑系統」和低污染交通網絡連接

## 香港特別行政區人口增長 - 建議「錦田石崗百萬人居住區」計劃

錦田、石崗平原佔地很大，附近山上土壤不宜密林生長，不屬郊野公園區。石崗跑道提供飛機升降，所以石崗錦田區現在不建高廈。

建議把石崗及機場搬遷至香港東端的東龍洲島，然後把石崗、錦田區建成過百萬人居住區，和政府、機構及團體設施，和適量商業樓宇，並擴設公園和綠徑系統。現在錦田石崗區的低層樓宇將來也可以建高層樓宇，供應市場需求。

建議建設「新界中鐵路線」，西接西鐵錦上路站，經新高鐵總站，到石崗站、嘉道理站，經林村谷底（各站），並于大埔康樂園附近接駁現在的東鐵線。

建議的「新界中鐵路線」，接通西鐵、東鐵，便形成了「港鐵黃金新界環」。

# 幾個萬億項目 A few 1000 Billion Projects proposed for HKSAR

2023年香港申辦亞運 <http://www.asiangames.hab.gov.hk/b5/index.asp>

To integrate facilities & operation of 2023 Asian Games, 2040 Olympic games into  
**West Kowloon Park, Kai Tak Park**

-with Olympics standard swimming and Diving Pool, Tennis Courts, Basketball Court...

**Kai Tak Park, Kam Tin**,...taking a long term perspective

申辦提交期限為明年 1月 30日，當局現展開六星期公眾諮詢，至 11月 3日止

<http://source.takungpao.com/news/10/09/22/ZDSS-1307617.htm>

**2023年香港亞運預算開支**

連同啓德多用途體育館及原定計劃的項目

合共.....億外，另外亦計劃為大埔、

天水圍和馬鞍山三個新場館提升至亞運會、世運會規格，

以及為現有場館增加臨時設施共.....億，

連同預計亞運的營運開支.....億，

整個計劃將達.....億。

**2040 Olympics in HKSAR, PLUS 3 SARs PLUS Guangzhou→**

港·深·珠·澳·廣州聯辦奧運 (吉祥物：五福臨門)

# 萬億翠田 1000 Billion project proposed for HKSAR

Background image source: Courtesy of Google Earth

**西離海岸公園群**  
Marine and Land Parks of West Victoria Harbour

**WMP1** 佔地45公頃的「西九離水上公園總匯區」，將現成的新舊離地公園重新整合。

**WMP2** 佔地16公頃的「廣東水上公園」，將現成的廣東香港中華書院及文匯報舊址，與中國遊客導遊中心遷移「西九離水上公園總匯區」的北端，並在那裡興建。

**WMP3** 佔地330公頃，從西九離文化區到星洲的「西九離陸上公園」，當中包括台灣地帶式公園。

**WMP4** 現成的尖沙咀九龍公園，將以現成的正西貢地帶式「百萬年橋」與新舊東涌「西九離陸上公園」連接。橋中段設有觀景台，高達88米的橋塔，同時作為這地帶式公園的「設計燈」。

**WMP5** 「中環百萬年橋」佔地十公頃，包括兩地帶式公園，公園地帶發展交通設施、商業及海水浴灘中心，並以正西貢的會館區與「西九離陸上公園」連接，亦可選擇遷移到尖沙咀海運中心或新填地尖沙咀碼頭。

**WMP6** 「離地百萬年橋」佔地十公頃，包括兩地帶式公園，公園地帶發展交通設施、商業及海水浴灘中心，並以正西貢的會館區與「西九離陸上公園」連接，亦可選擇遷移到尖沙咀海運中心或新填地尖沙咀碼頭。

**WMP7** 佔地十公頃的人民廣場，將現成的和記交匯，六公頃及離地公園前地帶擴大，與新填地相結合而合成人氣廣場，將現成三公頃的解放軍地帶的樓宇拆卸，並將用地遷移到岸邊。解放軍地帶遷移於新填地「離地百萬年橋」與解放軍博物館及文藝中心。

**WMP8** 西離老公園，以離地海行人單車徑連接為發展，佔地二百公頃的「西離老公園」。

**東離海岸公園群**  
Marine and Land Parks of East Victoria Harbour

**EMP1** 佔地三百三十公頃的東九離「百萬年橋」，以地帶式公園，地下城以一些多層發展，主要任務為支持東中九離可持續發展及「六大產業」發展，綠地再發展發展。

**EMP2** 佔地十公頃的舊皇宮公園，從明倫宮公園西端，向東延伸至西灣仔岸邊。在東灣海出口附近，以離地海行人單車徑連接與舊皇宮地帶式公園。

**EMP3** 佔地十公頃的舊皇宮公園，從明倫宮公園西端，向東延伸至西灣仔岸邊。在東灣海出口附近，以離地海行人單車徑連接與舊皇宮地帶式公園。

**EMP4** 「東離老水上公園」，從桂灣灣旁五段前離地帶式公園的九龍灣對出海面建設成「東離老水上公園」。

**EMP5** 東離老公園，「東九離水上公園」以南，連地以之，並將位於離地海行人單車徑連接和企業發展地帶式或定為「東離老公園」。

**EMP6** 佔地十公頃的人民廣場，將現成的和記交匯，六公頃及離地公園前地帶擴大，與新填地相結合而合成人氣廣場，將現成三公頃的解放軍地帶的樓宇拆卸，並將用地遷移到岸邊。解放軍地帶遷移於新填地「離地百萬年橋」與解放軍博物館及文藝中心。



Figure 2/4. Proposed HKD 1000 Billion Projects for Future HKSAR



# 萬億得益 1000 Billion gain for HKSAR – 黃金高鐵達程前

滬杭高鐵試運最高時速416.6公里 刷新世界紀錄

(2010-09-28 HKT 15:50 <http://rthk.hk/rthk/news/expressnews/news.htm?expressnews&20100928&55&701416>)

滬杭高鐵今日試運，最高時速416.6公里，刷新世界鐵路最高速紀錄。由杭州到上海虹橋，單程最快40分鐘內到達。今次試行的是國產「和諧號」新一代高速列車，鐵道部表示，「和諧號」是目前世界上運營速度最快，科技含量最高的高速列車。現正為正式運營作最後準備，包括提升購票、候車等服務。滬杭高鐵連接上海、杭州兩大城市，全長202公里設計時速350公里，預計每年客運量是單向8000萬人次。

High Speed Rail from Shanghai to Hangzhou at Testing Record speed of 416.6 km per hour

(2010-09-28 HKT 15:50 , RTHK news)

High Speed Rail : London to Manchester and Scotland by 2030

( BBC news of UK, 26 August 2009 <http://news.bbc.co.uk/2/hi/8221540.stm> )

High Speed Rail: London to Beijing : 2 Days → London to Hong Kong 2.5 days

“King's Cross to Beijing in two days on new high-speed rail network” ( Telegraph News of UK, 8 Mar 2010)

(<http://www.telegraph.co.uk/news/worldnews/asia/china/7397846/Kings-Cross-to-Beijing-in-two-days-on-new-high-speed-rail-network.html>)

老撾國會批准興建一條高速鐵路，連接老撾和中國。

→老撾 to Hong Kong 3.5 hours

(RTHK News 2010-12-24 HKTime 00:33 <http://rthk.hk/rthk/news/expressnews/news.htm?expressnews&20101224&55&722069>)

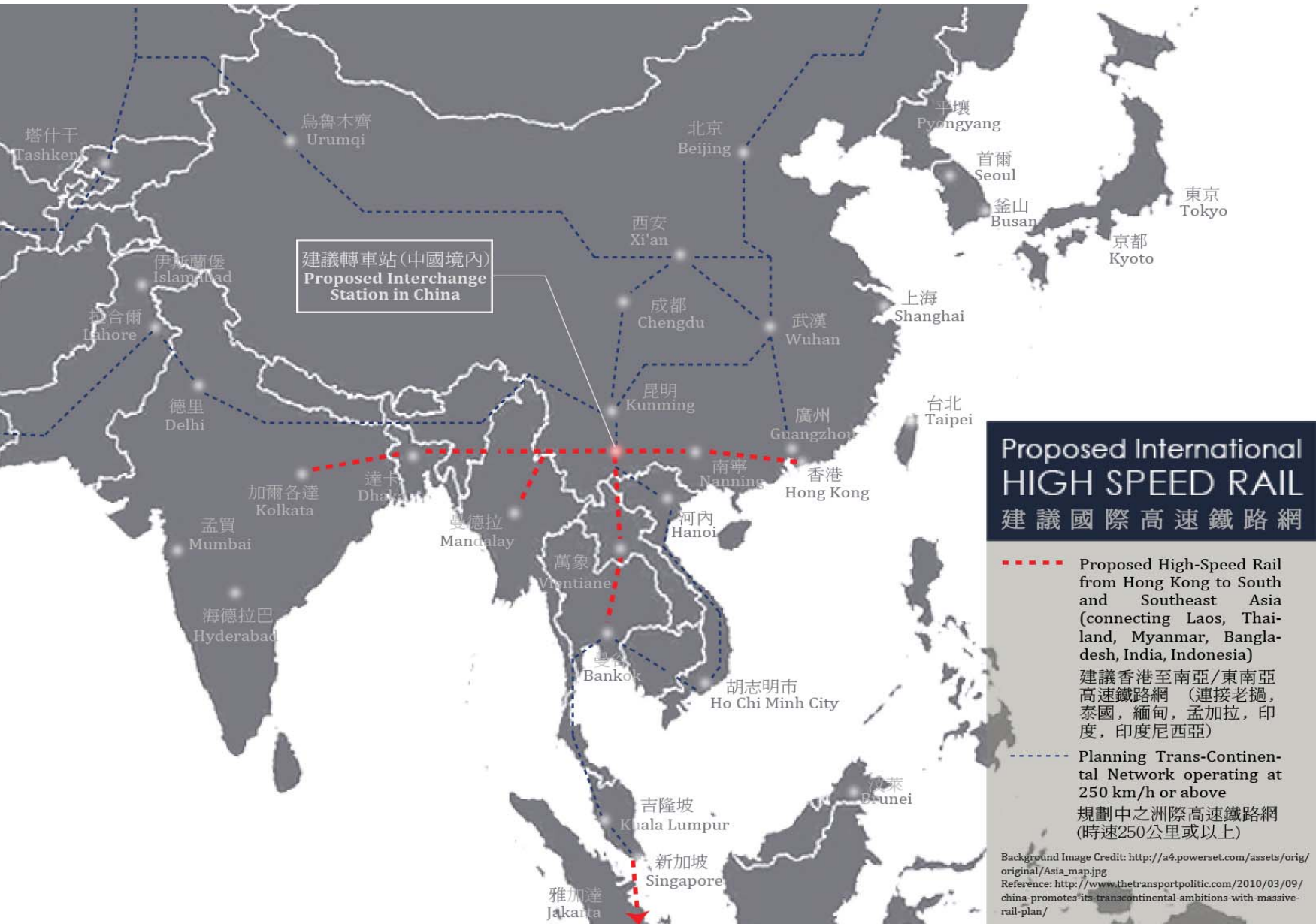
今年4月，老撾和中國達成協定，以建立合資公司的方式，建造一條連接昆明與老撾首都萬象的高速鐵路，未來將連接到新加坡。這條泛亞鐵路中線，從昆明經萬象至新加坡，總長度將達3900公里。



→ Dhaka達卡 to Hong Kong 6 hours ? Kolkata加爾各達 to Hong Kong 8 hours ?

# 萬億得益 1000 Billion gain for HKSAR - 黃金高鐵達程前

background image source - <http://www.thetransportpolitic.com/2010/03/09/china-promotes-its-transcontinental-ambitions-with-massive-rail-plan/>



# 萬億得益 1000 Billion gain for HKSAR - 黃金高鐵達程前



老撾國會批准興建一條高速鐵路，連接老撾和中國。

RTHK News 2010-12-24 HKTime 00:33

泛亞鐵路中線:從中國昆明經→老撾的萬象至→新加坡，總長度將達3900公里



# 萬億得益 1000 Billion gain for HKSAR - 黃金高鐵達程前

Image sources: BBC news August 2009 , [www.zeroextinction.org/map\\_europe.htm](http://www.zeroextinction.org/map_europe.htm) , [http://broadzhii.com/en/images/asia\\_map01.gif](http://broadzhii.com/en/images/asia_map01.gif) ,

High Speed Rail : London to Manchester and Scotland by 2030 ( BBC news of UK, 26 August 2009 ) -page 89

High Speed Rail: London to Beijing : 2 Days ( Telegraph News of UK, 8 Mar 2010 )

The Proposed High-Speed Link



# 萬億得益 1000 Billion gain for HKSAR - 黃金高鐵達程前

因著祖國高鐵成功發展，世界各地都討論建高鐵，包括兩天從倫敦到北京、在蘭州轉車加一天到新加坡。在十至二十年間，亞洲各國也都會踏入高鐵時代。

**建議在雲南邊境（中國境內）建設一或兩個高鐵轉車站，**接駁昆明、南寧，將來從香港乘高鐵，經深圳、廣州、南寧、雲南轉車站，到東南亞和南亞各國，遠至印度的加爾各達（Kolkatta）、孟加拉的達卡、印尼的耶加達。期望二三十年間，香港高鐵不但快捷來回祖國大城市，同時可達東南亞、南亞，甚至亞洲和歐洲的大城市。→**高鐵將成爲香港與祖國、亞洲、歐洲的大城市之間的人流、物流、經濟各方向面的高效率連結**

現在高鐵的總站在西九，乘客下車後，車便開往石崗區清潔、檢查、補給，再開往西九接客人後直接開到深圳。

上文建議石崗錦田區的百萬人口居住新區，將會是新界人口大增，對高鐵需求增加。如果因爲高鐵總站在西九會引致不少新界居民到深圳福田站乘高鐵，使香港段高鐵損失不少收入，則**建議改建現在在石崗設計的緊急站（現在不准客人用），作爲「高鐵香港段的總站」和緊急站兩用**，方便所有新界居民乘搭「香港段高鐵」，明顯提高經濟和民生效益。

這建議使將來高鐵從國內到香港，首先停在西九站，後再到石崗總站，從香港開出是從石崗總站起步，然後到西九接乘客，便跟著直接開往深圳去。建議的石崗高鐵總站和鄰近的建議港鐵新界中線石崗站，要連接起來，好方便高鐵乘客乘搭「**港鐵黃金新界環**」。

# 珠連璧合億萬兩

香港特區: 2030 至 2100 再創幾個「維港」由高竟祥先生撰寫。  
高先生是香港大學建築學士，1981年畢業，現為專業建築師。

西維港計劃: 佔地面積如整個九龍半島，有數個  
「優美海港」  
設於人造島嶼與天然島嶼之間。

東維港計劃: 佔地面積如整個九龍半島，有數個  
「優美海港」設於人造島嶼與天然島嶼之間。

建議再創幾個新「維港」的發展階段:

- 破浪設施-提供受保護的瀉湖作消遣體育康樂之用
- 使用更多海岸線以促進植物生長及生物多樣化
- 發掘再生能源: 在瀉湖設置發電風車，有可能發展海浪發電，  
培育能源植物燃料如藻類之生長，同時促進生物多樣化
- 建設對香港本地及國際皆重要的海上運動康樂中心
- 人造島嶼設「威尼斯式」或「蘇州式」民居及旅館，
- 延伸行車隧道及鐵路

西維港計劃- 提供另一條行車隧道及鐵路，將大嶼山及機場與香港島連接

其實香港還有不少島嶼，以精心綠化設計，可再創幾個「維港」。



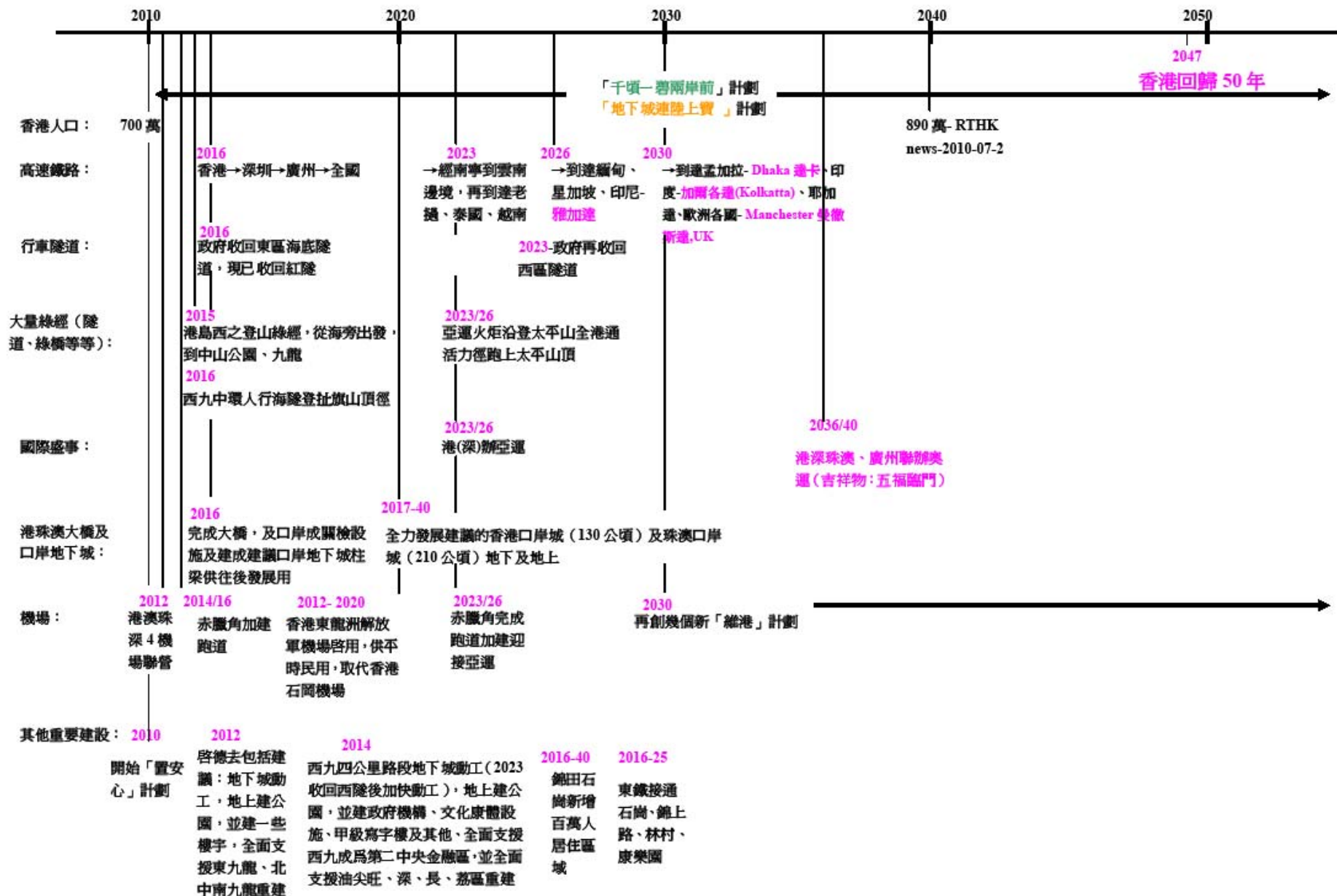


表 2 香港未來數十年的重要建設 - 多個萬億項目 (註：主要列出建議專案，很多已知專案沒有列出) -2011-01-01 建議

鳴謝：本研究專項《香江永綠·百善永續》研究項目爲香港

大學Initiative on Clean Energy & Environment「清潔能源與環境研究中心」[<http://icee.hku.hk/index/index.html>] 其中一項研究項目，承蒙香港大學發展基金資助。

## 對再創幾個「維港」的回應：

高先生的建議將帶來足夠土地和優美可持續發展的海陸互補優勢，加上作地下城發展，以「一地多用」的原則建設香港，將會得到「多遍萬億錦翠田」。「錦田」和多遍「翡翠田」，和維港內各建議永續發展的填海區都需要以快捷、方便、電氣化交通接駁起來，像珍珠鏈子把寶物串「連」起來一樣，故詩曰：

香江宏基裕百年 Le Grande Hong Kong coming years 100 rich  
多遍萬億錦翠田 Many a treasure & Jade field \$ Million 1000x1000 each  
珠連璧合億萬兩 Many matching complementing via pearl links multiplying  
黃金高鐵達程前 Railways of gold high speed to & from Asia & Europe running

璧合=錦田, 翠田(多遍), underground spaces 地下空間 of West Kowloon, Kai Tak, HK Island north,  
Reclaimed land outside Victoria Harbour, urban parks, Country parks,  
all to be harmoniously connected

BY 珠連 = high speed rail, local rails, electric vehicles, bridges, under water tunnels, underground roads,  
GREEN LINKS , all doing the connecting job

達= Manchester曼徹斯達, Dhaka達卡, Kolkata加爾各達, Jakarta 雅加達,

祝願：

Pearl of the Orient → Pearl for the World

東方明珠 → 世界的珍珠

「香江永綠」 • 「百善永續」

Thank You 謝謝

## 啓德地下城連陸上寶・香港又綠又金民生好

香港大學建築系張國斌副教授

香港珠海學院建築系系主任朱海山副教授

### 概要

本文根據香港 30 年後人口將增至近 900 萬 (香港電台 2010-07-29 新聞)，及至未來 50 年後人口更多時，提供一個長遠、全面性和可持續的都市基建發展框架 [表 1]，以解決人口膨脹與都市空間短缺的問題。本設計建議以基建都市學設計原則為起點，綜合「可持續發展 ‘Sustainability’」(包括環保效益 ‘green’ (綠)，經濟效益 ‘economic’ (金) 和民生效益 ‘social’ (民) 的三方面考慮，應用於本為填海區的啓德新發展區，以此為香港維多利亞港內其他填海區作可持續發展的模範。

表 1 香港特別行政區人口增長和本文建議今後數十年增加基建設施概略

地區	2009 年年中香港人口 (香港年報 2009: 表 29)	2040 年香港人口	本文建議的基建都市學設計原則所帶動的 應對基建設施
港島	129 萬	建議增加 11 萬至 140 萬	港島北填海區陸地公園、地下城和「綠徑系統」建設(容後另文作討論)
九龍	206 萬	建議增加 80 萬至 286 萬	以「一地多用」原則、全面性和可持續發展 4 公里長 330 公頃西九龍填海區陸地公園和 300 公頃東九龍-啓德填海區陸地公園: 提供政府、機構和社區設施，休憩用地包括公園、運動場和遊樂場。地下城設商場、食肆、道路、交通樞紐等，以支援「西半」九龍和「東半」九龍的可持續發展及重組重建 (見內文討論)
新界+ 其他	365 萬	建議增加 98 萬至 463 萬	搬遷石崗機場到西貢東龍洲島，發展石崗錦田成為超過 100 萬人居住區，在錦田建新界政府行政中心，建錦田林村港鐵綫連接東鐵(新建康樂園站) 和西鐵(錦上路站) 等，並建議把石崗的高鐵緊急站，擴展為「高鐵香港段的第二站-總站」和緊急站兩用站，(第一站在西九) (容後另文作討論)
總人口	700 萬	889 萬 (香港電台 2010-07-29 新聞)	港島、九龍、新界以「綠徑系統」和低污染交通網絡連接(見內文討論)

## 建議基建都市學設計原則一：地下之城

「十九世紀是橋梁的世紀，二十世紀是高層建築的世紀，二十一世紀對人類來說則是地下空間的世紀。」中國工程院院士錢七虎說（圖 1）。中國已剩下很少農地可以改作建築及城市化用途了（中國科協 2009-09-04），在城市可持續發展設計原則方面，地下城概念可以降低土地需求，減少地面污染，增加可用空間。例如在北京，東單等地將實現大型地下城計劃，相當於再造東城 - 在 8 平方公里面積內開發地下三層可用空間 [法制晚報 2010-01-14]。

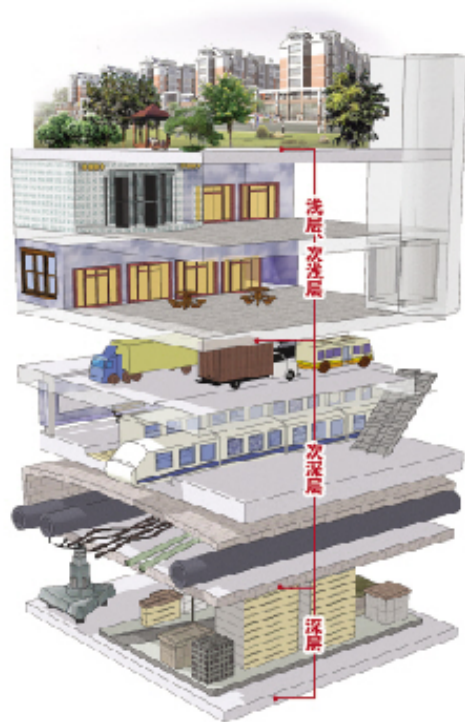


圖 1 中國工程院院士錢七虎描繪的「地下之城」[來源：重慶晚報 2009-8-20]

在香港維多利亞港內，除非證明到填海工程有凌駕性的工種需要，否則維港內已不可再填海了，所以現存維港兩岸填海得來的土地價值非常高。我們不能橫向增加可用空間，我們可以向下。因此無論現在在維港兩岸填海地區開展甚麼工程，我們都不應該剝奪市民將來選擇開墾填海區地下空間作可持續發展的權利。例如在啓德填海地區內之地底隧道（包括中九龍幹線）和港島填海區（包括中環灣仔繞道的地下段）的地下建設應受規條約束，以使隧道週遭的空間將來能夠成為可持續發展地下城的一部分。

**建議基建都市學設計原則二：一地多用** (香港大學「香江永綠」第一期研究展覽 2009-10)

「一地多用」的概念使都市多樣的功能互扣，使都市景觀活潑生動。啓德填海區可以「一地多用」原則建設地下及地面設施(圖2)：地下底層作海水能源中心和地下雨水塘；地下上層則包括商場、體育設施、文化設施和旅遊等設施、交通網絡、交通樞紐和大型停車場。啓德地下城將連接到「西九地下城」等維港兩岸其他地下城，並與鄰近交通站和地下設施連結，發揮地下城疏導交通、節約能源等好處。地下城與地面街道、交通匯合點連通，與地面大量綠化的啓德公園互動，下大雨時市民可從公園移步到地下城。此外，我們亦建議啓德公園對開之水面發展作海上公園，這樣，「一地多用」的「啓德三結合模式」(地面公園、地下城及海上公園)將帶動整個東、中、北、東南九龍內陸進入可持續發展及重整的新階段；而進一步應用於維港兩岸其他填海區域，還可建設「水陸公園群」和多處可持續發展的地下城。

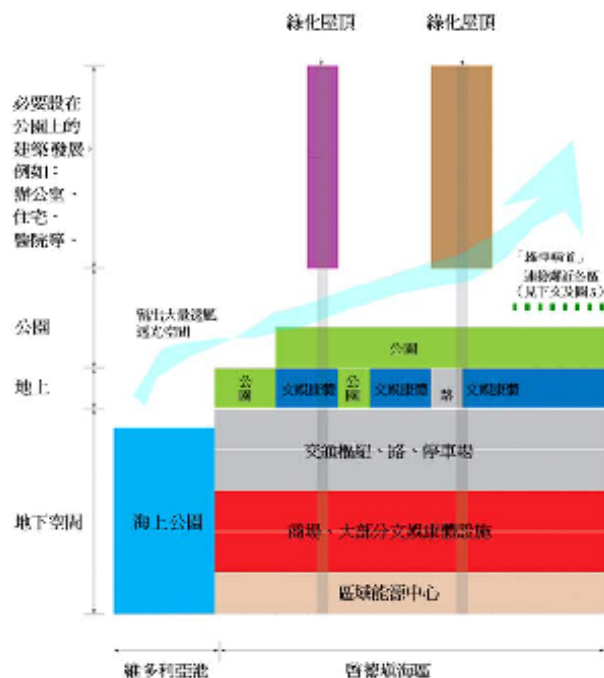


圖2 「一地多用」原則 - 可持續及多用途發展填海用地及地下城之立體建設模式

**建議基建都市學設計原則三：綠徑系統** (香港大學「香江永綠」第一期研究展覽 2009-10)

私人汽車運輸已經被證實為浪費地球資源。「綠徑系統」將固有的運輸模式打破，建造無障礙 (barrier free) 暢通無阻的「綠徑暢道」集體運輸系統，包括行人天橋、樓梯、自動電梯、升降機、隧道、單車徑、電動行人輸送帶、電動巴士徑和輕鐵。上文建議的



「水陸公園群」可以「綠徑系統」(圖 3) 相連, 同時與郊野公園連接, 讓市民可以安全地、快捷地和舒暢地穿梭於都市和郊野公園間, 遠離汽車廢氣和噪音的污染。

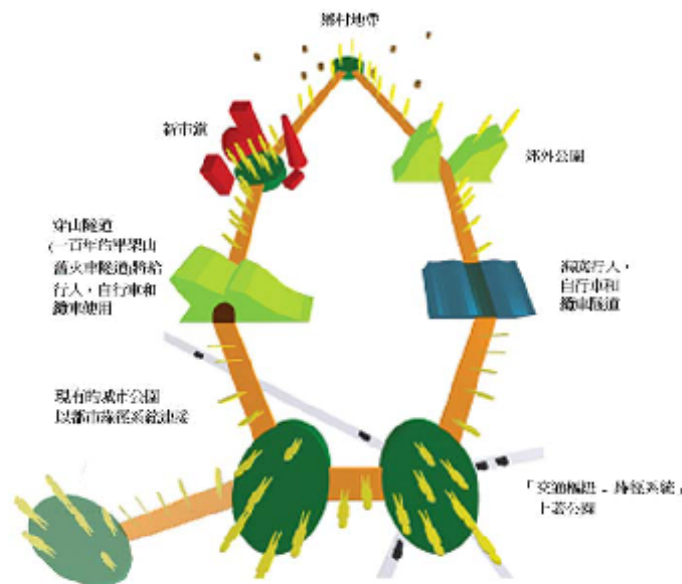


圖 3 「綠徑系統」集體無污染運輸系統將市區內的公園與郊野公園連接

四通八達的「綠徑系統」將社區設施、學校、及樓宇平臺等連接；大部分綠徑均設有上蓋, 有一些甚至設計成管道狀, 讓行人在下雨天時無需打傘, 全程遠離噪音及各類污染。資訊網絡及雨水收集系統的管道, 亦可隨著綠徑發展而建做, 最終貫通整個香港。「綠徑系統」和陸上公園遍設低能量高輸送率光纖, 有線無線輸送互連互贏, 使低能量保健康資訊系統, 造福在「綠徑系統」和陸上公園內的手機和電腦使用者。

#### 啓德發展的建議 (圖 4)

啓德發展區的首要任務是支援東、中、中南、北九龍內陸區(包括九龍城區、土瓜灣區、碼頭圍區、彩虹區、牛頭角區、觀塘區)的重建。(香港大學「香江永綠」第二期研究展覽 2010-01)

以上區域因為以往受限於飛行高度限制, 在上世紀五、六十年代建成的樓宇大多是低層建築, 現正等待陸續重建, 所以各區人口必不斷增長。估計以上各區人口在未來 30 年可能增加 40 到 50 萬, 各區又不能減少區內公園用地以增加學校和社區設施。我們因此建

讓把鄰近各區所需的政府機構、學校、社區設施集中放置在約一至二公里內的啓德公園及地下城區，並且設計「綠徑系統」讓市民從以上各區安全舒適地到達東九龍「啓德公園」，享用公園區內大量的學校、政府機構、文娛康體設施，使之成為富有香港特色的城市設計和規劃方案（圖4）。

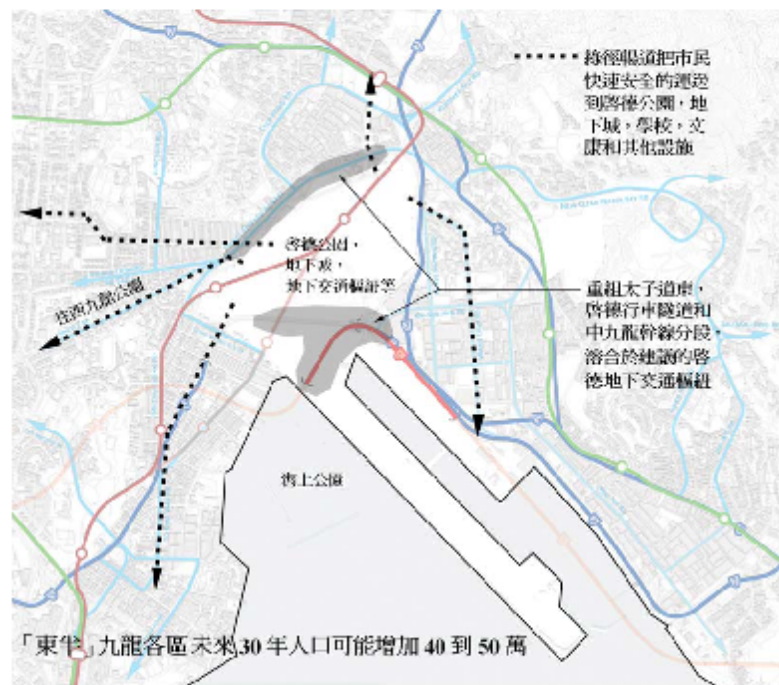


圖4 啓德填海區發展的建議：「一地多用」的「啓德三結合模式」：地面公園、地下城及海上公園的可持續發展模式，以支援「東半」九龍各區的可持續發展及重組重建

啓德填海區可考慮以「一地多用」原則發展，地面為啓德公園，地下設三至四層啓德地下城商場、地下交通網絡及大型停車場。地面以上的發展可建設適量高架式建築物(如香港滙豐銀行總行大廈的高架設計)和低層建築如學校、圖書館、文娛康體設施，醫院等，使區內保持大量自然通風和透光空間。

交通方面，興建中的4公里長的「中九龍幹線」將把啓德公園和西九龍公園接通，並連接觀塘繞道通往東區海底隧道直達港島東面之鯪魚涌區。我們建議重組太子道東、「啓德行車隧道」、觀塘繞道、興建中的「中九龍幹線」和鄰近道路，融合於建議的啓德地下交通樞紐網絡，使啓德區和鄰近各區緊密和諧連接，使鄰近地區的交通來往更加省時節能，減少噪音和污染。地下交通樞紐網絡並接駁地鐵站及區內電動交通系統，並預留地鐵將來延伸到跑道末端「油輪碼頭站」，配合超過二百米闊跑道將來作地下城發展。

啓德地下城並設多處大型停車場，共可泊車近萬輛，使大部分經啓德的私人車輛泊於啓德地下停車場，然後使用方便的電動公共交通工具，快捷到達其他地方，又經「中九龍幹線」快捷到達西九高鐵站，文化區和公園。

康體文娛設施方面，我們建議啓德公園和地下城建設一些奧運標準的運動設施，供市民平日使用，更和香港將來舉辦亞運、奧運等大型體育活動計劃和應，包括一個符合奧運標準、全天候、可容萬多觀眾的體育館，還有奧運溜冰場、高臺跳水池、游泳池、地下城有環保教育意義的飄雪樂園及冰屋、地上設架空高爾夫球練習場、攀爬運動館、多個大小室內室外體育康樂及其他設施。

地下城底層可設雨水收集儲備設施、廢水處理循環再用設施。海水可被善用(如作區域冷氣系統冷卻用和熱泵熱水系統高效率加熱用)，支援啓德區和鄰近區域在重組重建時得到最好的水源運用和能源效益。

此外，啓德區宜支援香港傳統產業和「六大產業」發展，例如建設適量高架式甲級寫字樓和酒店，以支援香港經濟發展所需。除非是爲了支援鄰近區域重建，在啓德區不宜考慮興建住宅樓宇。

我們應小心保存尚餘的啓德填海區作長遠地下城和可持續發展之用。

我們期盼以上建議「一地多用」的「啓德三結合模式」(地面公園、地下城及海上公園)能帶動啓德及維港兩岸的填海區域的可持續發展模式 - 以「水陸公園群」與「綠徑系統」環抱現在及將來的設施，達到一個無污染 (以行人使用爲主，以單車、電動輸送爲副的交通配套)、與周圍環境、大自然和諧融合的新維港。維港內填海區的多處地下城互相連通，又連接陸上各處公園及其他設施，讓香港達到又綠化、經濟效益又高、人民生活又美好的目標。當香港人口再增多，土地將極之缺乏，連結的地下城和陸上、地下各類設施實爲香港的無價寶。故曰：

「啓德地下城連陸上寶，  
香港又綠又金民生好。」

我們期盼將來維港內多個共一千七百多公頃的水上及陸上公園，碧綠一片，加上「綠徑系統」和港島的「香港特區廣場」(容後另文作討論)，形成以維港爲中心的「香港中央水陸公園區」，成爲珍奇宏觀的香港特別行政區的城市標誌。

鳴謝：本研究專項《香江永綠，百善永續》研究項目爲香港大學Initiative on Clean Energy & Environment「清潔能源與環境研究中心」  
[ <http://icee.hku.hk/index/index.html> ] 其中一項研究項目，承蒙香港大學發展基金資助。

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「**香江永綠**」 「**百善永續**」

**Thank You 謝謝**

