



中環及灣仔繞道和東區走廊連接路

隧道大樓的外觀設計

Central-Wan Chai Bypass and
Island Eastern Corridor Link
Exterior Design of Tunnel Buildings

港島區海濱發展專責小組 - 會議一
1st Meeting of Task Force on the
Harbourfront Developments on
Hong Kong Island

2010年9月16日
16 September 2010





簡報內容

The Presentation

- 工程項目介紹
- Introduction on the Project

- 隧道大樓外觀設計及相關事宜
- Exterior Design of Tunnel Buildings and Related Matters
 - 東西通風大樓 / East Ventilation Building
 - 東面排風口 / East Vent Shaft
 - 行政大樓 / Administration Building
 - 中通風大樓 / Middle Ventilation Building
 - 西面通風大樓 / West Ventilation Building



項目概覽

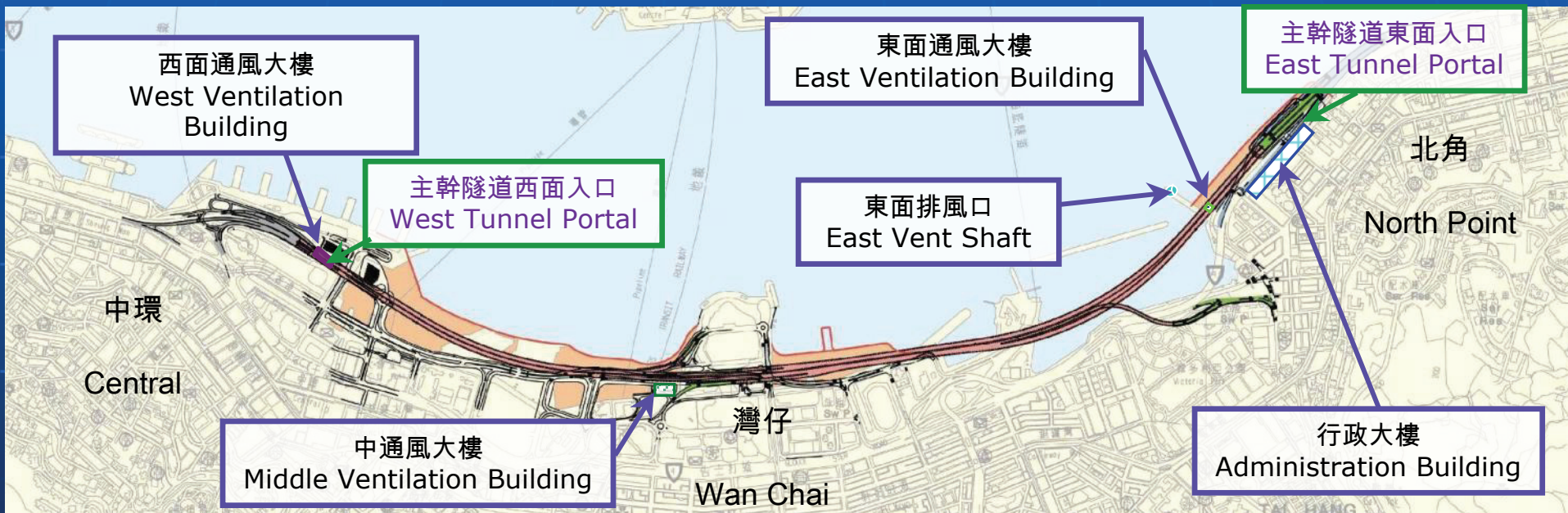
Project Overview





隧道大樓之分佈圖

Tunnel Buildings Location Plan





項目進度

Project Status

環境影響評估報告提交日期: 2001 & 2007

EIA Report Submission Date:

環境影響評估報告批准日期: 08/2001 & 12/2008

EIA Report Approval Date:

道路方案之憲報日期: 07/2007

Gazette of Road Scheme:

道路方案之授權日期: 05/2009

Authorization of Road Scheme:

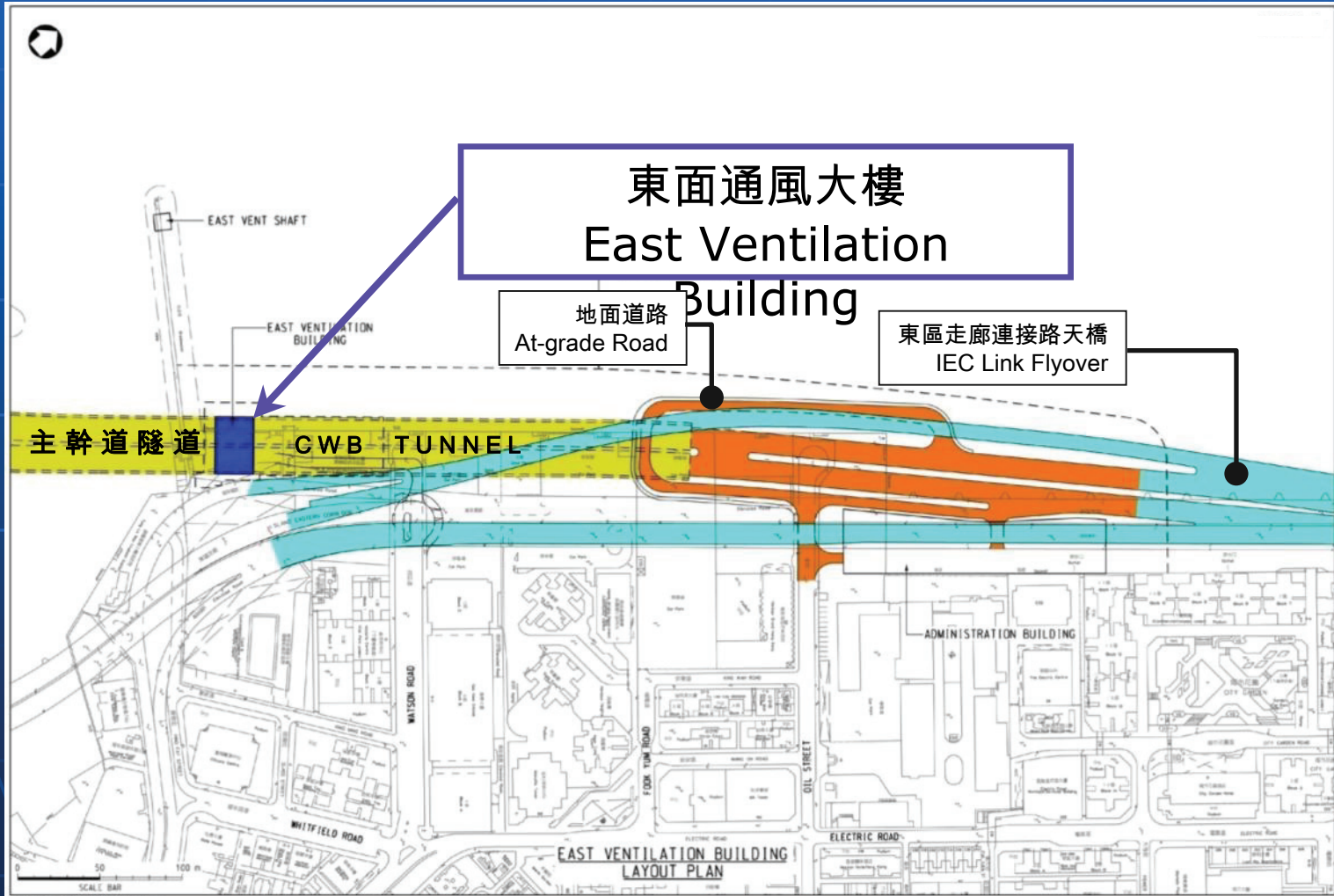
工程已於2009年底開始施工

Construction works already commenced in end 2009



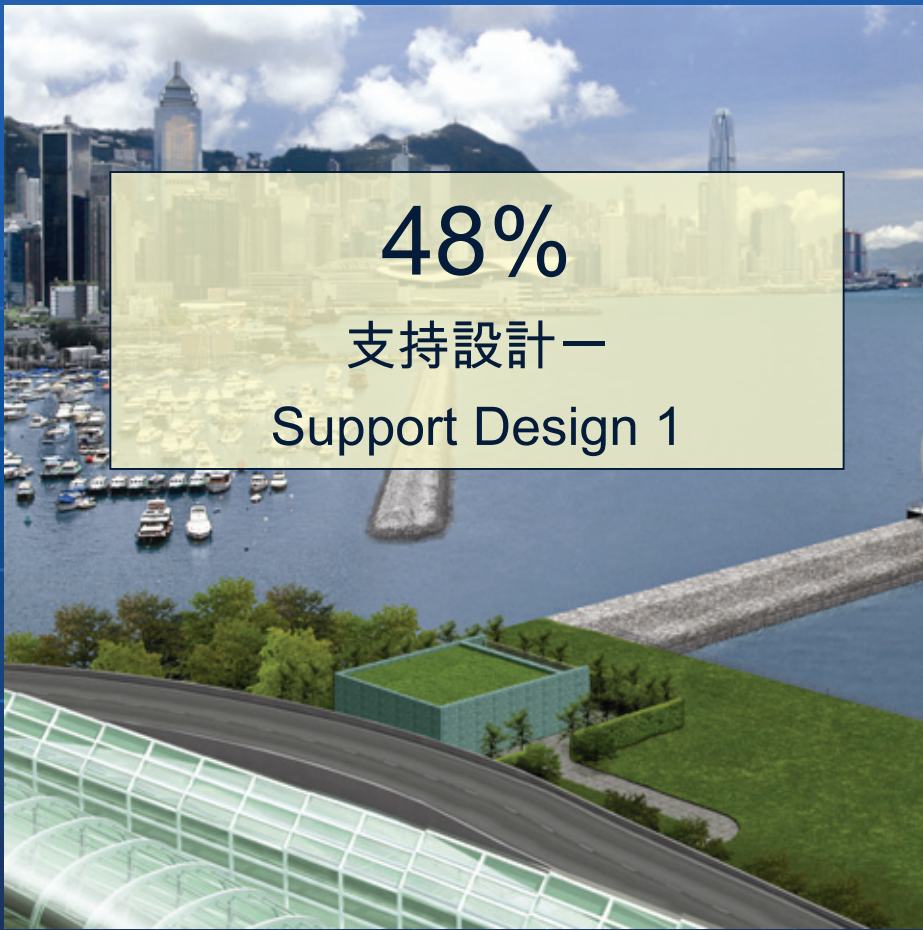
東面通風大樓的外觀設計

Exterior Designs – East Ventilation Building



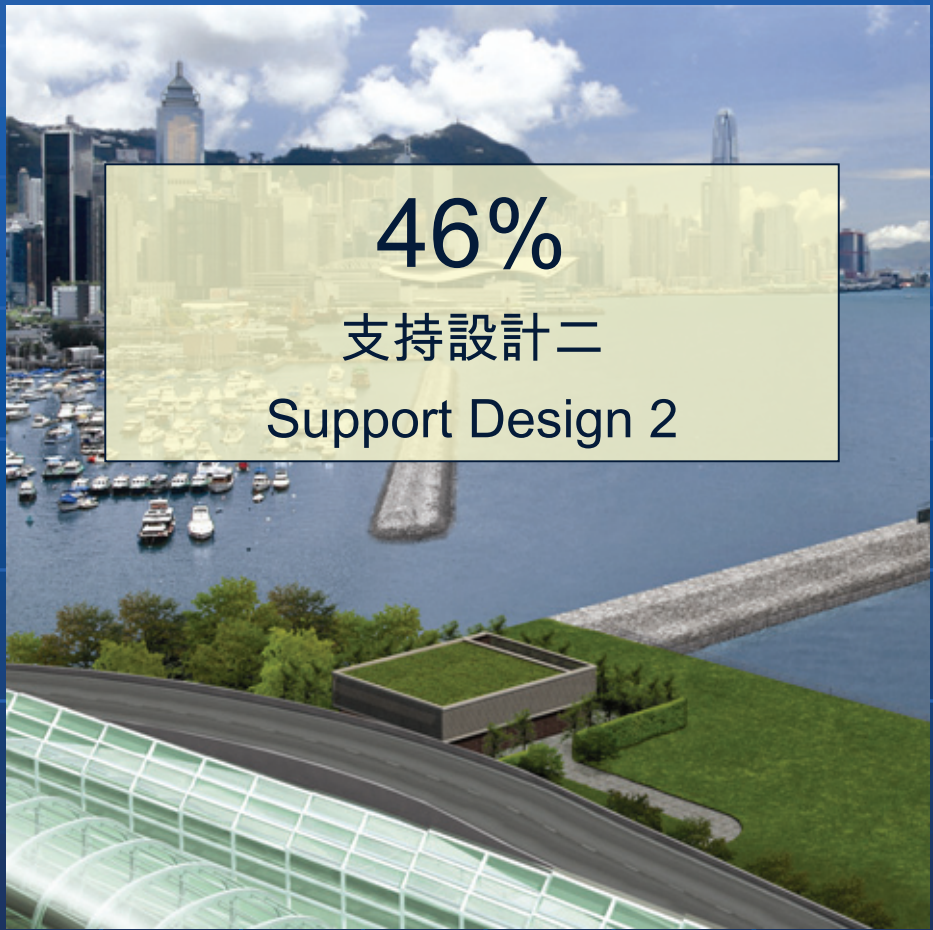


東面通風大樓 East Ventilation Building



48%
支持設計一
Support Design 1

外觀設計 1
Exterior Design 1
『自然綠化』主題
“Natural Greening”



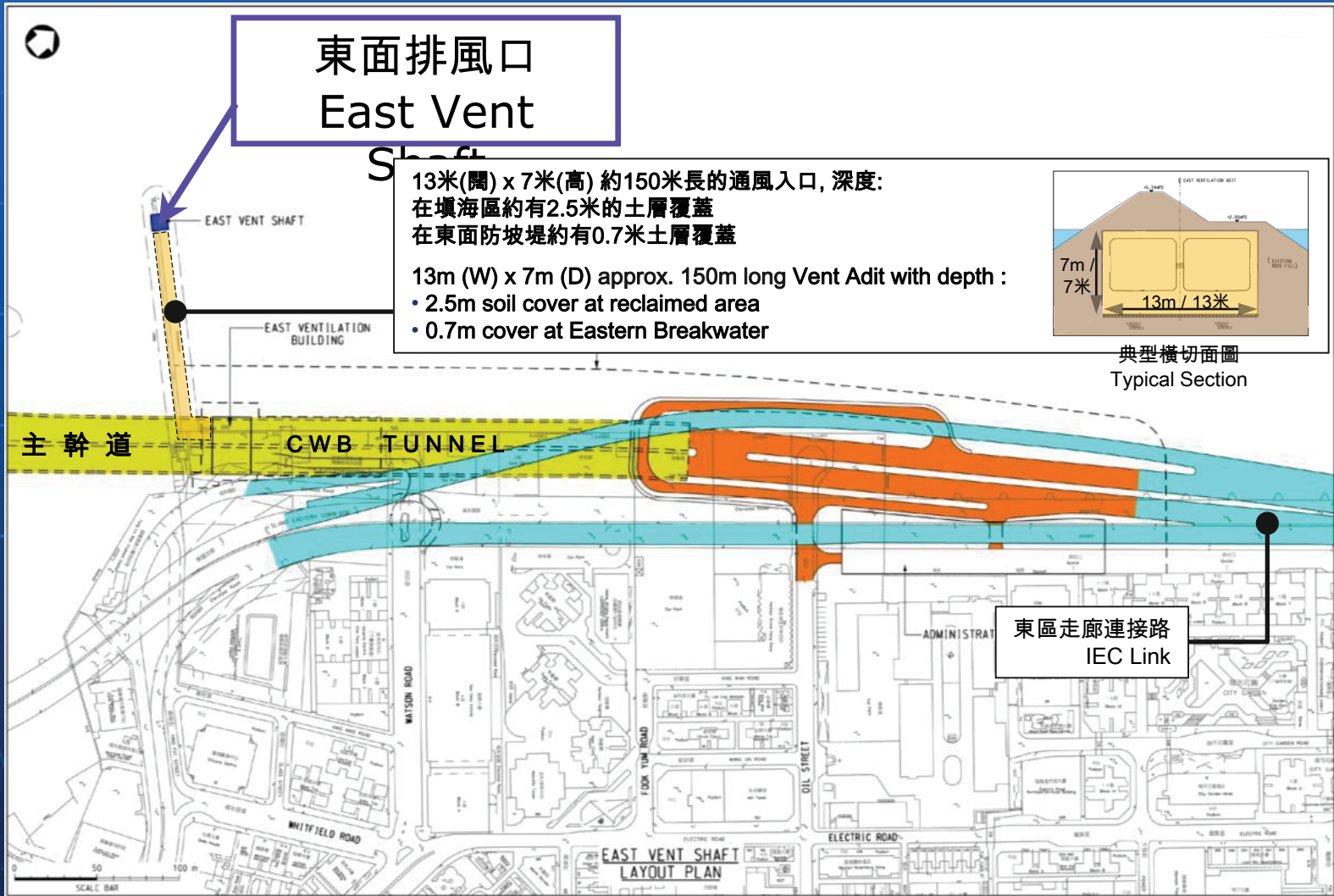
46%
支持設計二
Support Design 2

外觀設計 2
Exterior Design 2
『環保木條屏風』主題
“Wood Screen”



東面排風口的外觀設計

Exterior Designs – East Vent Shaft



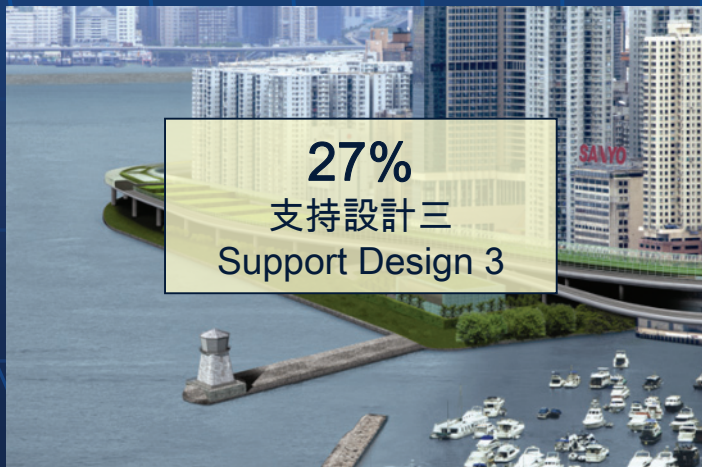


東面排風口 East Vent Shaft



外觀設計 1
Exterior Design Option 1
『圓柱雕塑』主題
“Layered Cylinder”

外觀設計 2
Exterior Design Option 2
『搖曳中的風帆』主題
“Flowing Sails”

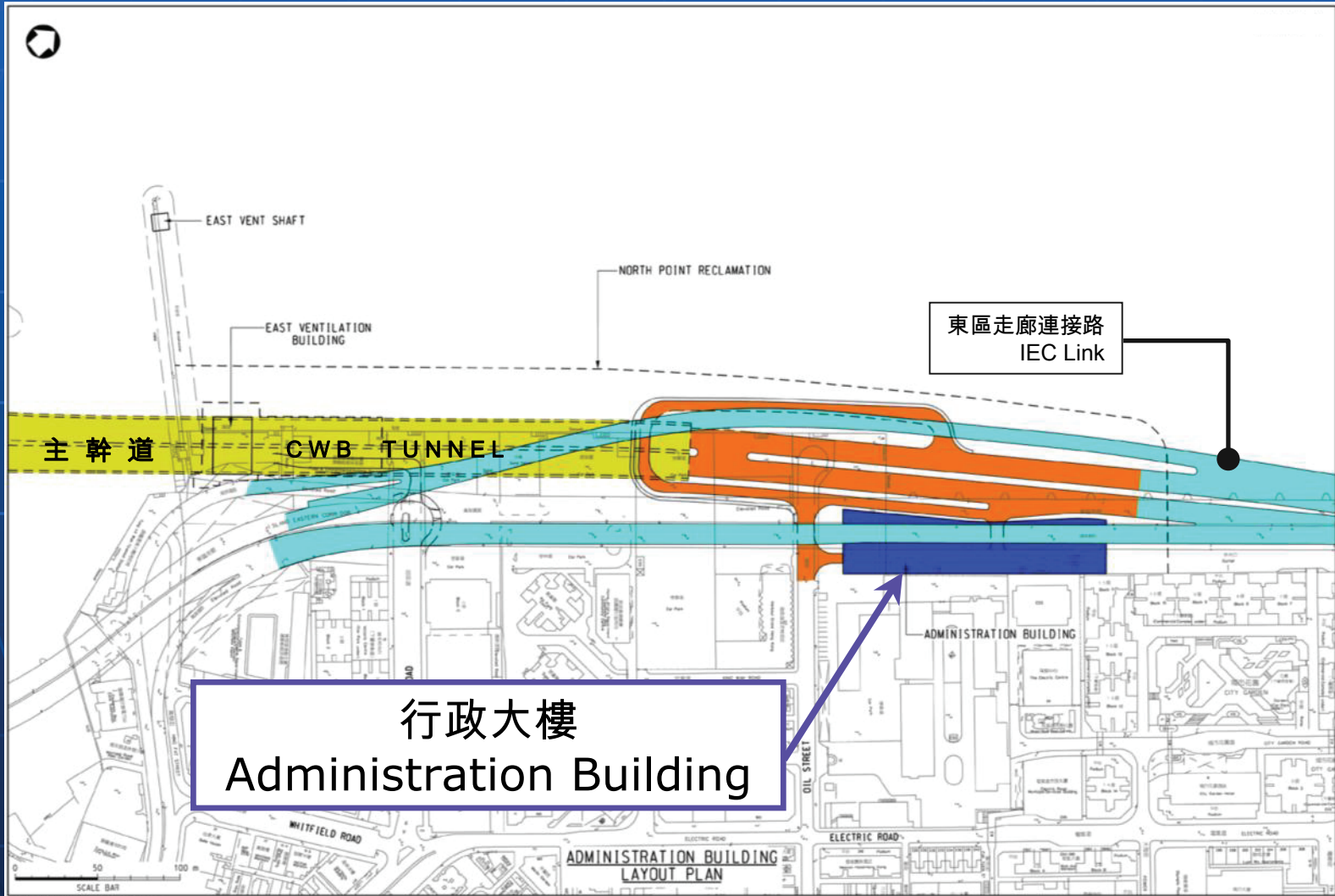


外觀設計 3
Exterior Design Option 3
『燈塔』主題
“Light Tower”



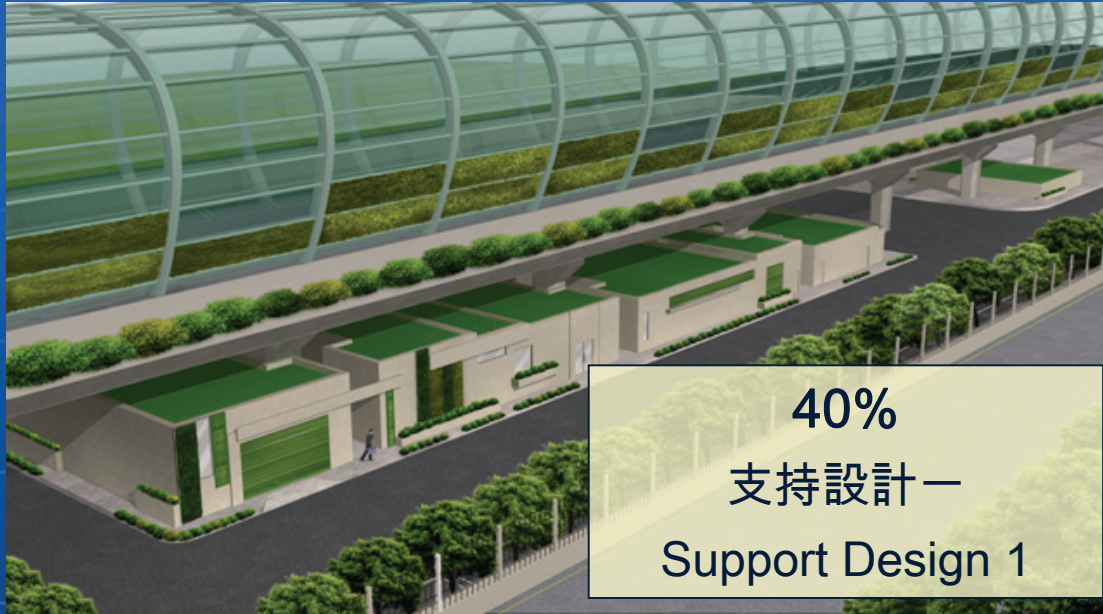
行政大樓的外觀設計

Exterior Designs – Administration Building





行政大樓的外觀設計 Administration Building



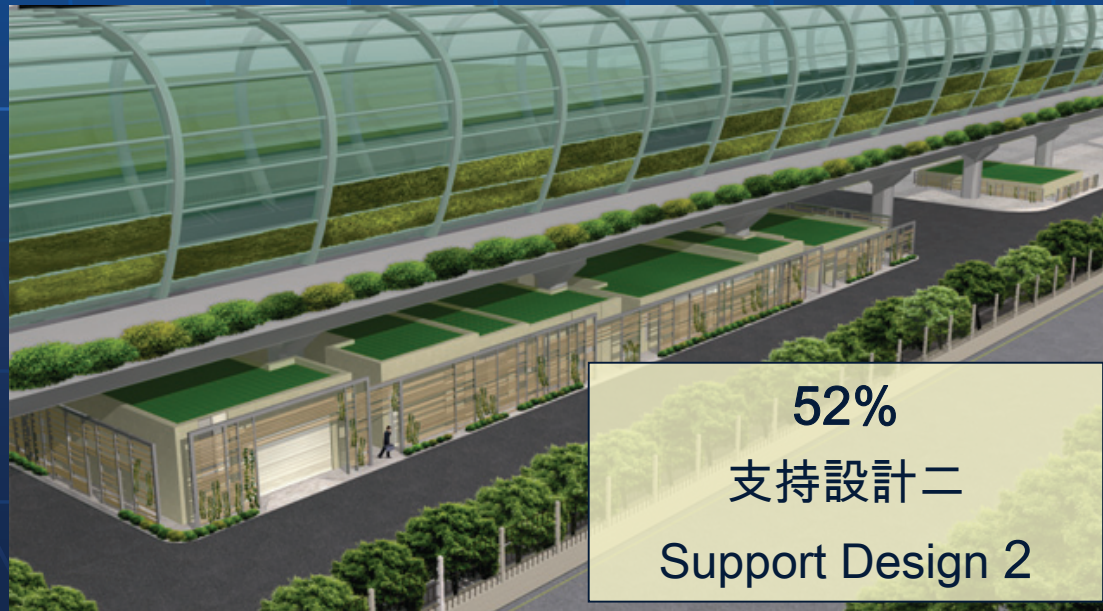
40%
支持設計一
Support Design 1

外觀設計 1

Exterior Design Option 1

『幾何立體』主題

“3-D Geometry”



52%
支持設計二
Support Design 2

外觀設計 2

Exterior Design Option 2

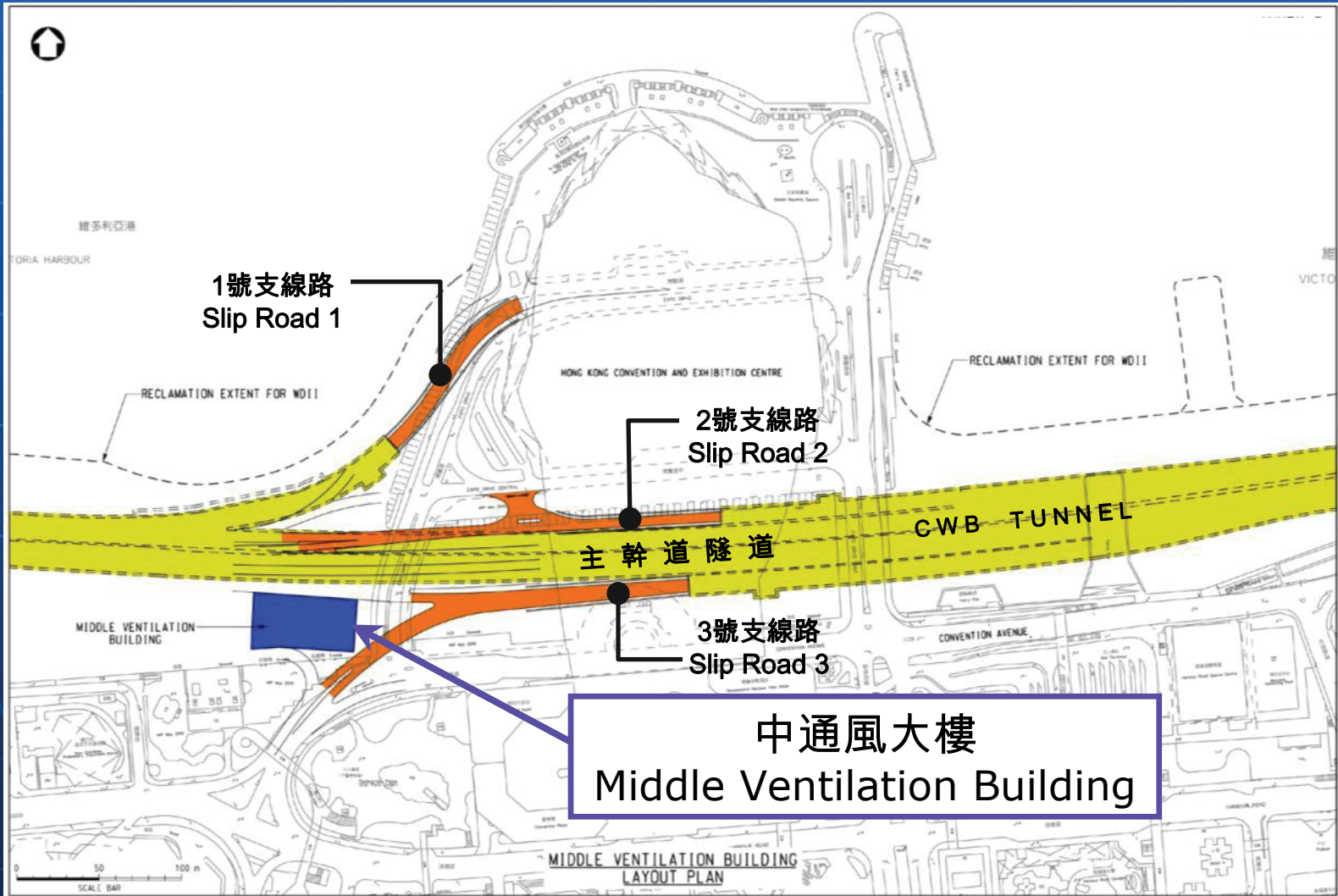
『屏簾』主題

“Louvered Screen”



中通風大樓的外觀設計

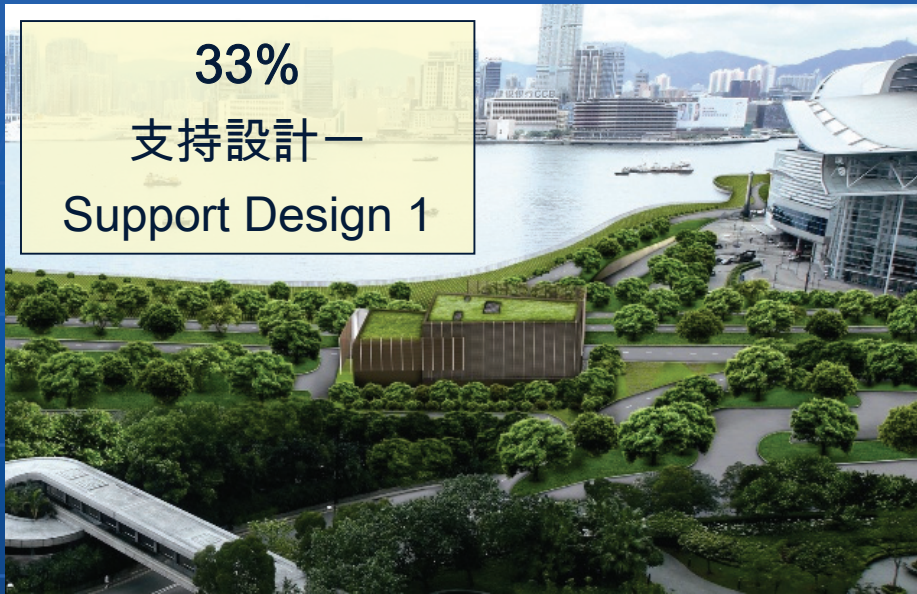
Exterior Designs – Middle Ventilation Building





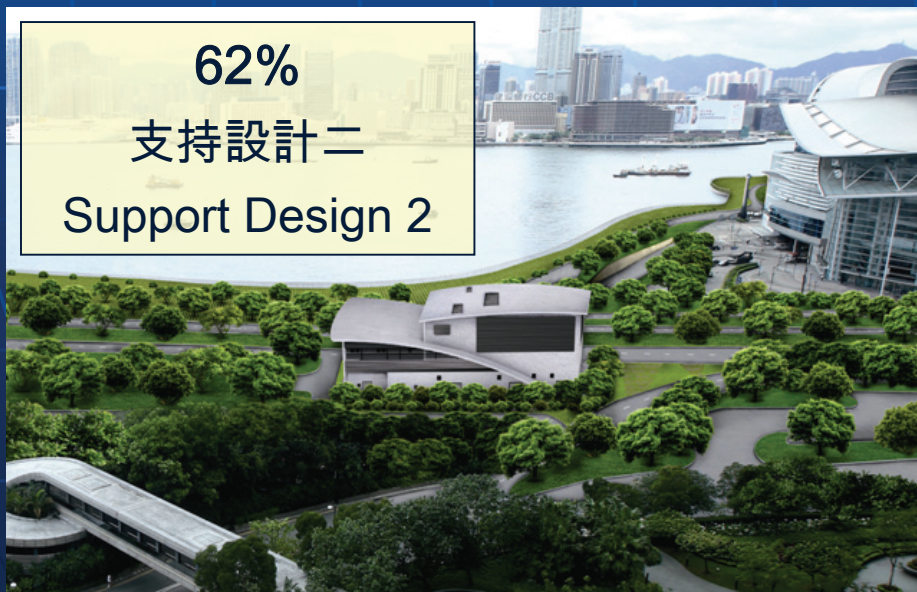
中通風大樓

Middle Ventilation Building



外觀設計 1 Exterior Design 1

『屏風及簾幕』主題
“Juxtaposition of Layers”



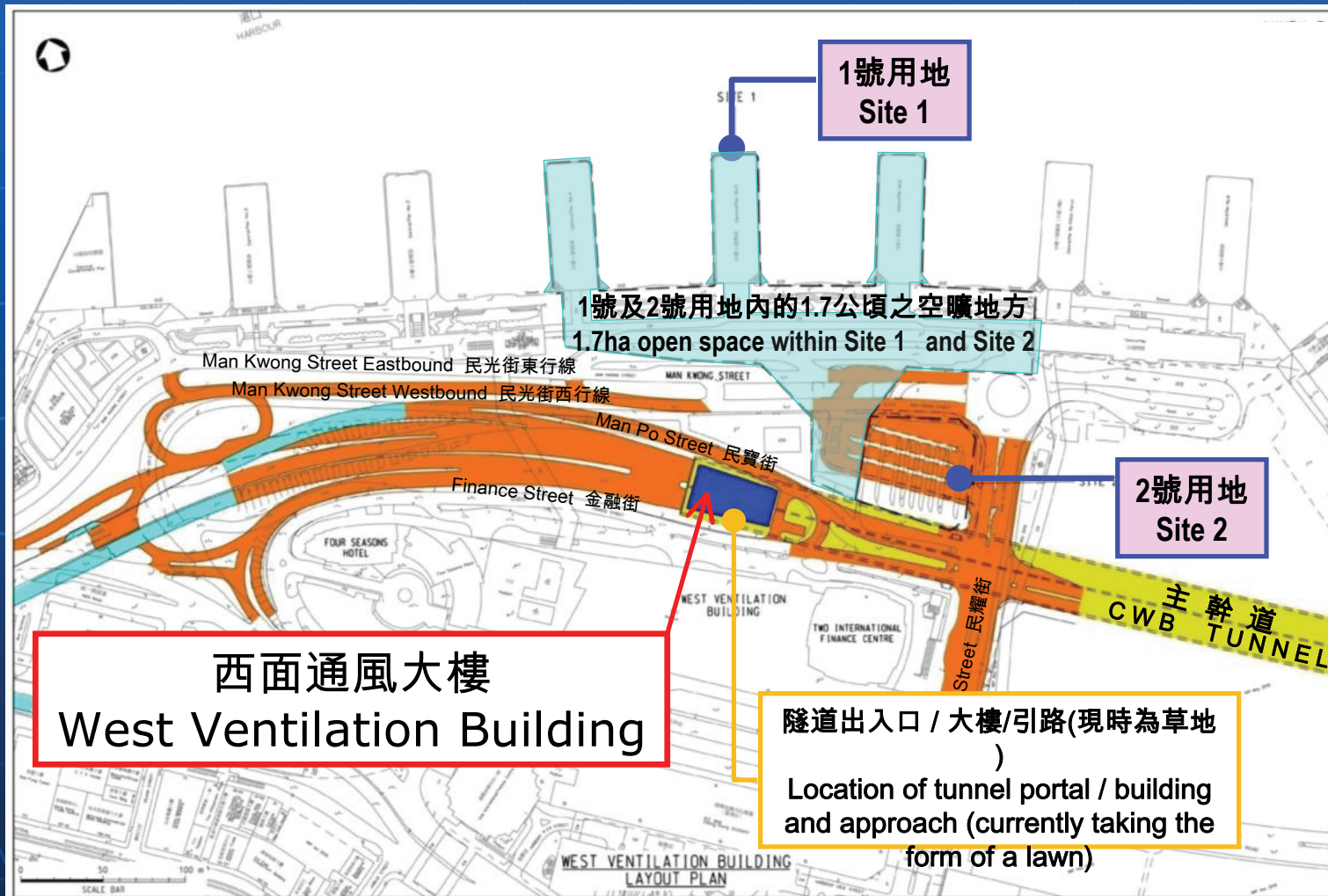
外觀設計 2 Exterior Design 2

『流線屋頂』主題
“Waves”



西面通風大樓的外觀設計

Exterior Designs – West Ventilation Building





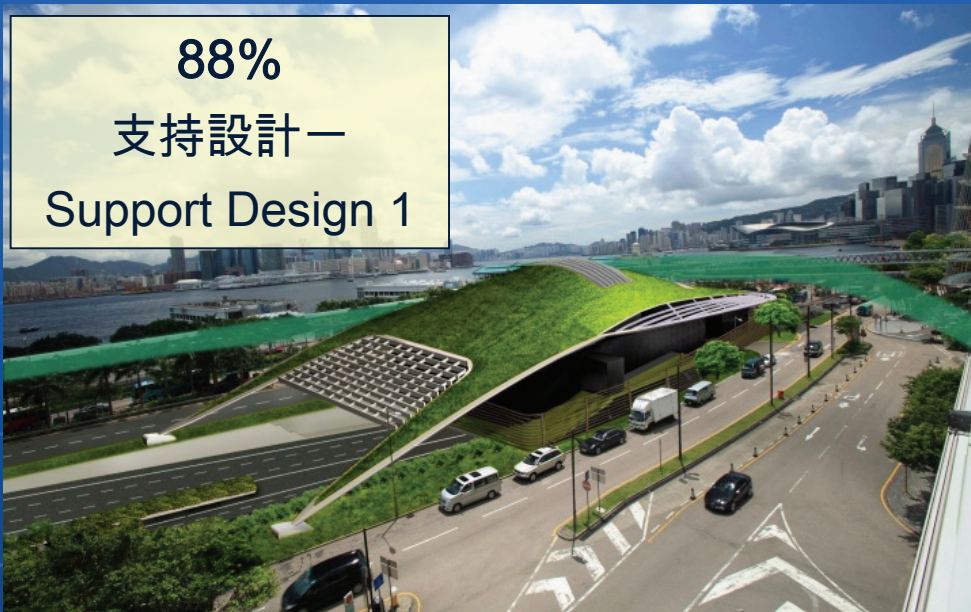
西面通風大樓

West Ventilation Building

88%

支持設計一

Support Design 1



外觀設計 1 - 『流線型屋頂草坪』主題

Exterior Design 1 - “Streamlined Green Roof”

最高點 = +25mPD

Maximum level at highest point = +25mPD

東面和西面分別降低至 +12mPD 和 +8mPD

Taper down to +12mPD at east and +8mPD at west

天台的闊度 = 41米

Width of Roof = 41m

9%

支持設計二

Support Design 2



外觀設計 2

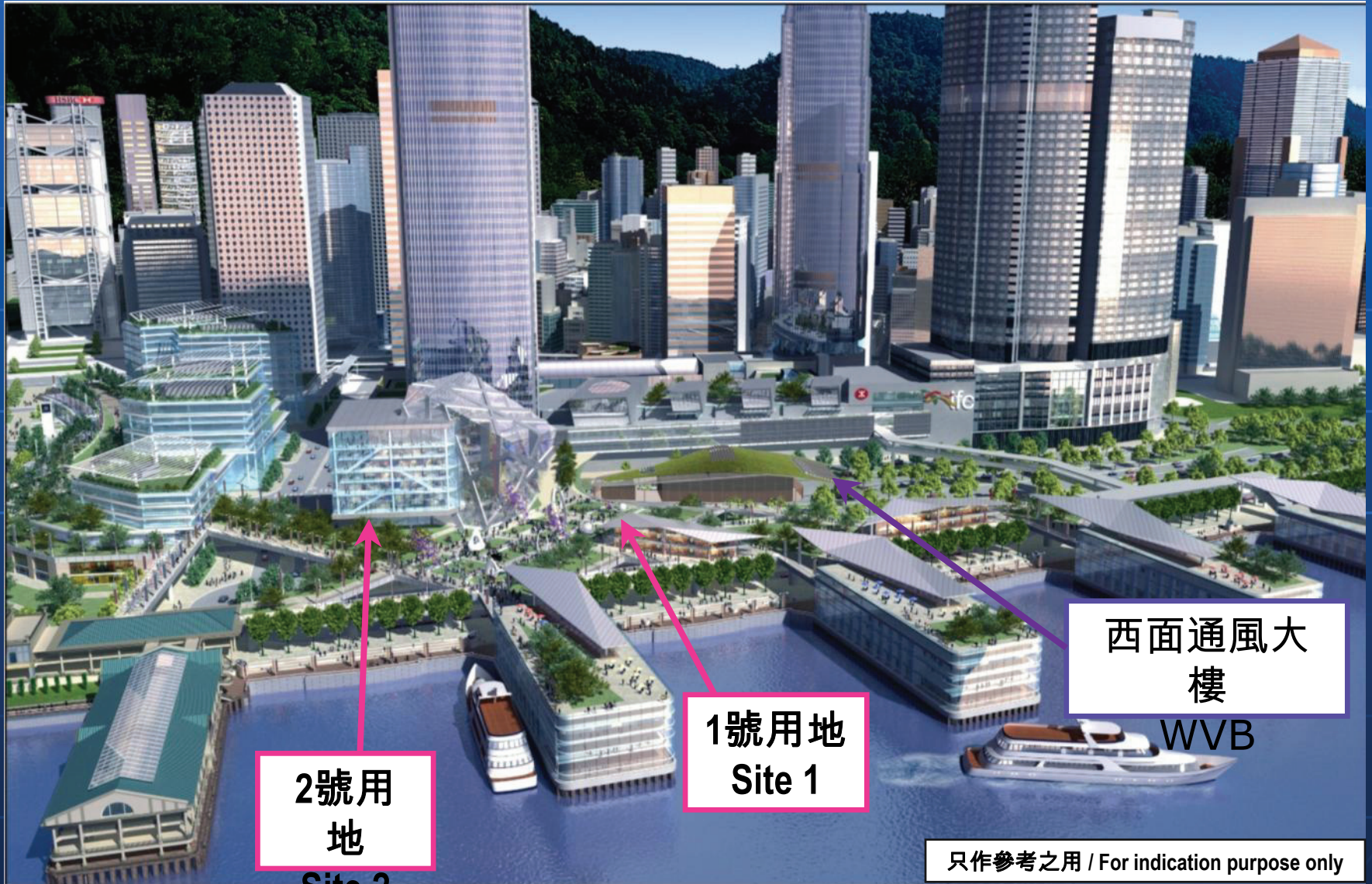
Exterior Design 2

『不規則立體及抽象蝕刻』主題

“The Play of Illusion”



西面通風大樓已融入新中環海濱的設計 WVB in Harmony with New Central Harbourfront



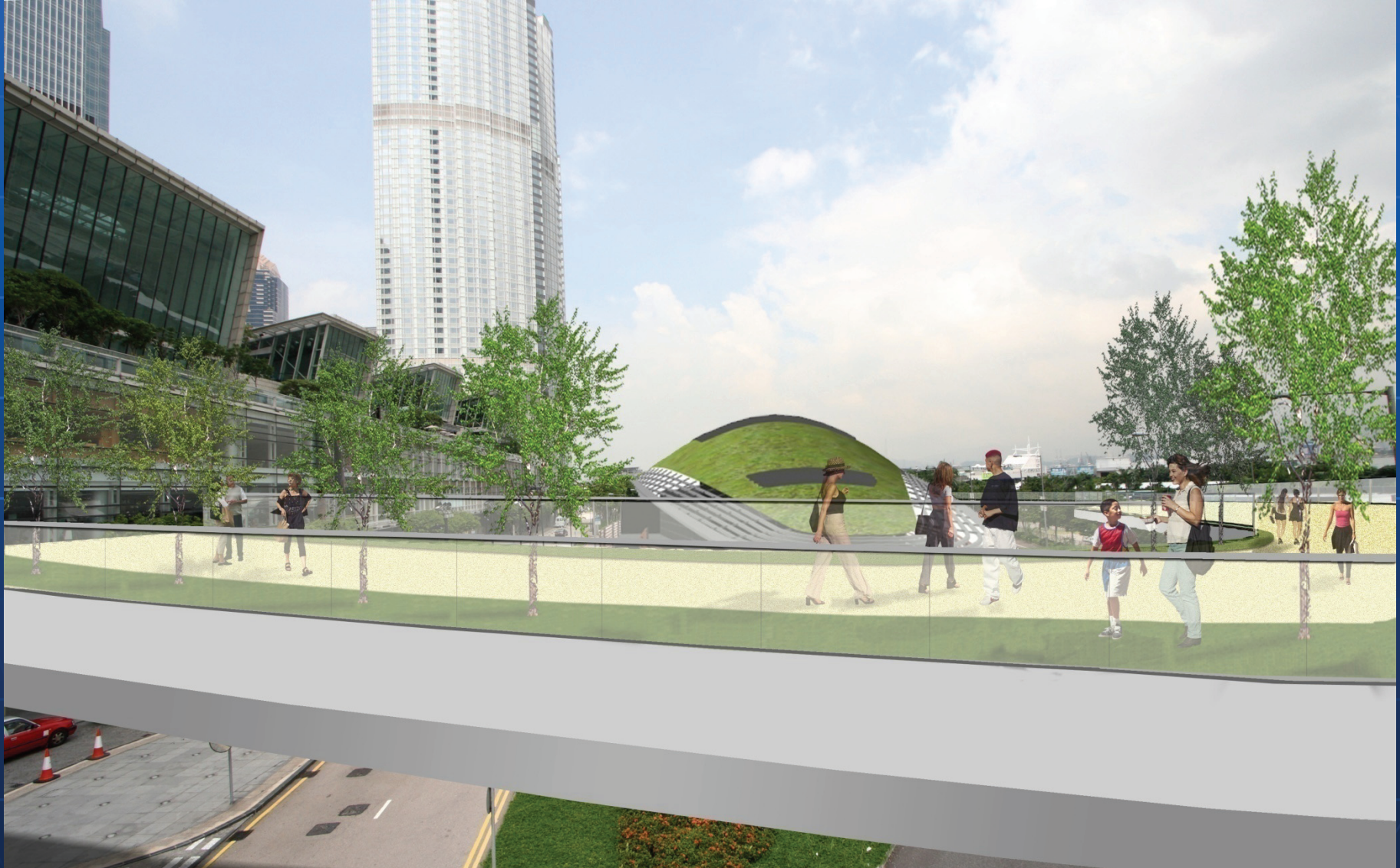
2號用地
Site 2

1號用地
Site 1

西面通風大樓
WVB



園景平台的景觀 View from Landscaped Deck

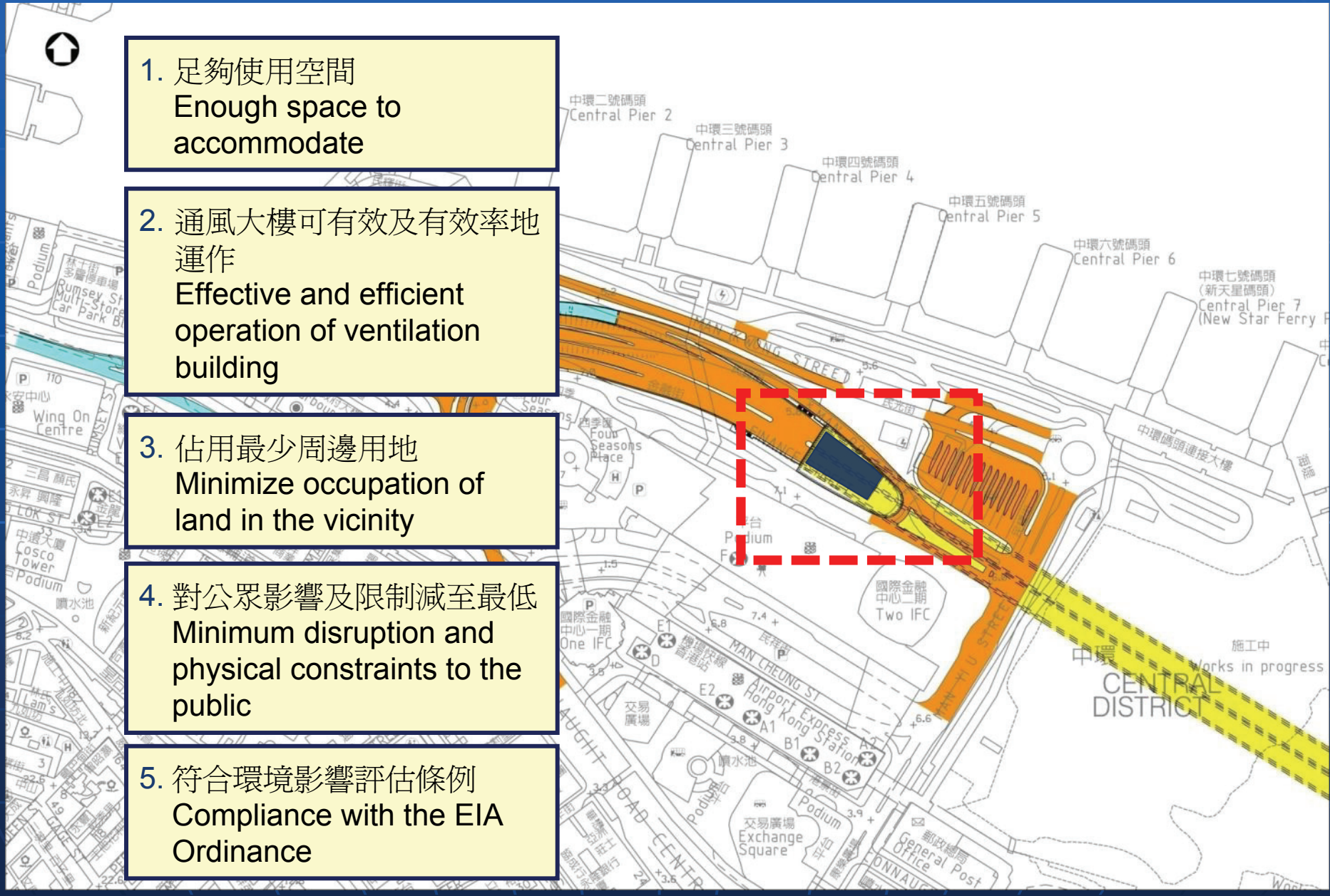




西面通風大樓的位置

Current Location of WVB

1. 足夠使用空間
Enough space to accommodate
2. 通風大樓可有效及有效率地運作
Effective and efficient operation of ventilation building
3. 佔用最少周邊用地
Minimize occupation of land in the vicinity
4. 對公眾影響及限制減至最低
Minimum disruption and physical constraints to the public
5. 符合環境影響評估條例
Compliance with the EIA Ordinance

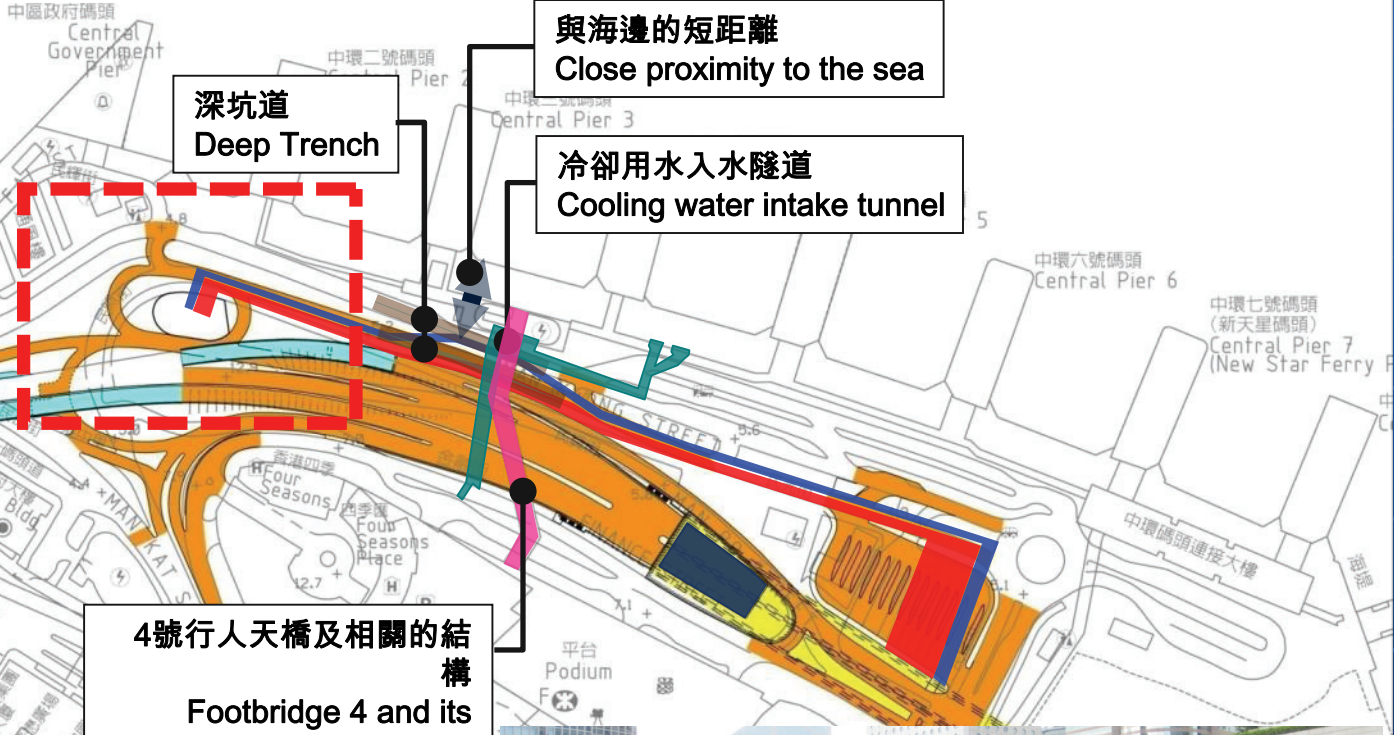
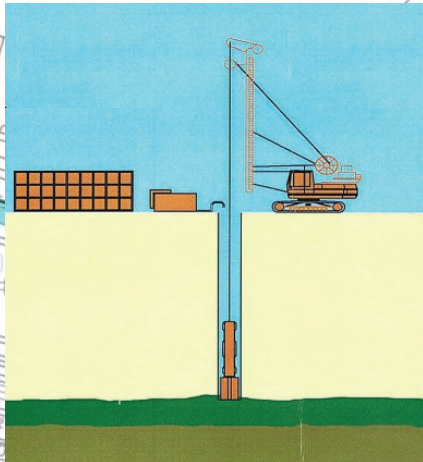




西面通風大樓替代位置技術上不可行

Alternative Location of WVB Technically Not Feasible

1. 高施工風險
High Construction Risks



與海邊的短距離
Close proximity to the sea

冷卻用水入水隧道
Cooling water intake tunnel

4號行人天橋及相關的結構
Footbridge 4 and its associated structures

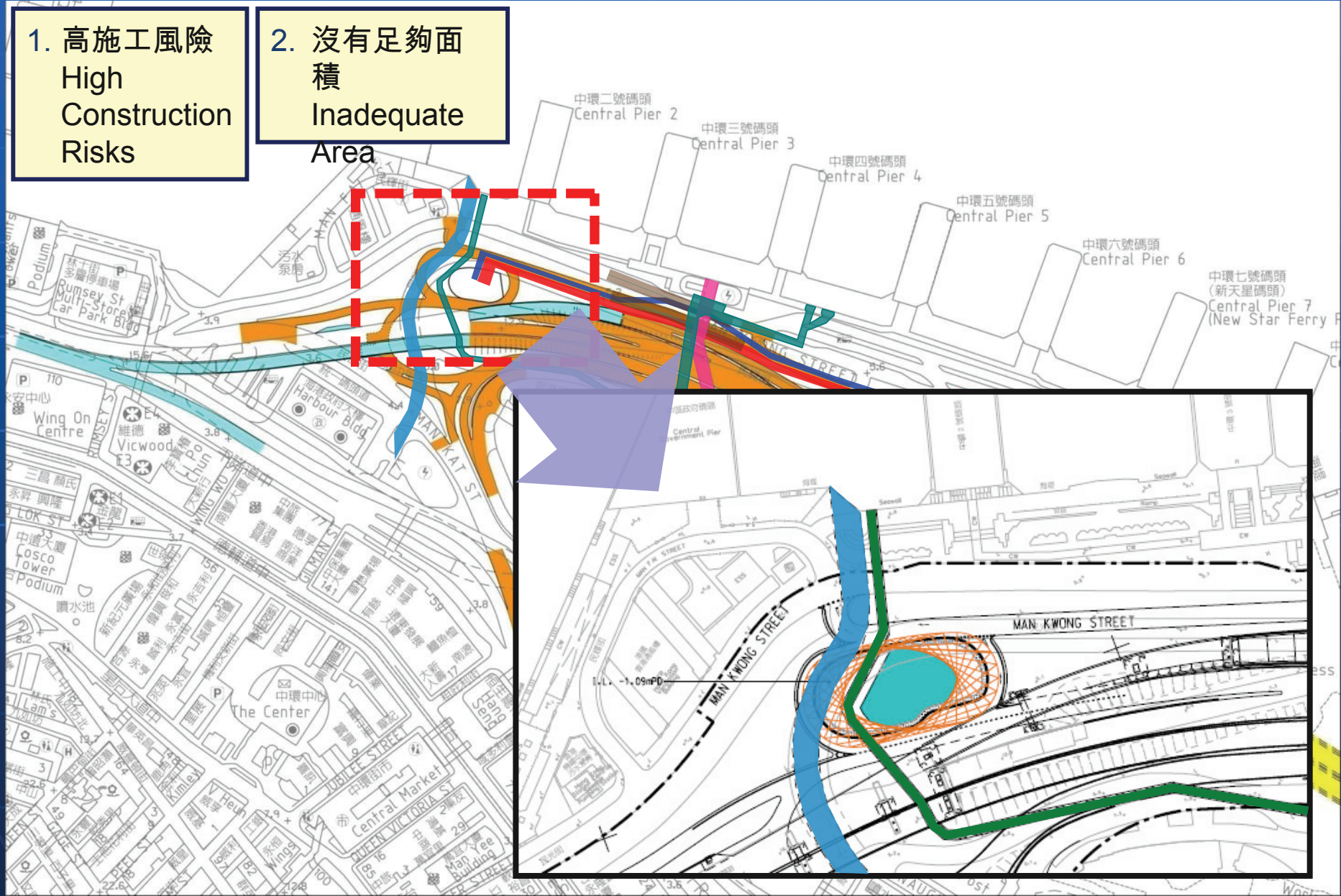




西面通風大樓替代位置技術上不可行

Alternative Location of WVB Technically Not Feasible

- 1. 高施工風險
High Construction Risks
- 2. 沒有足夠面積
Inadequate Area





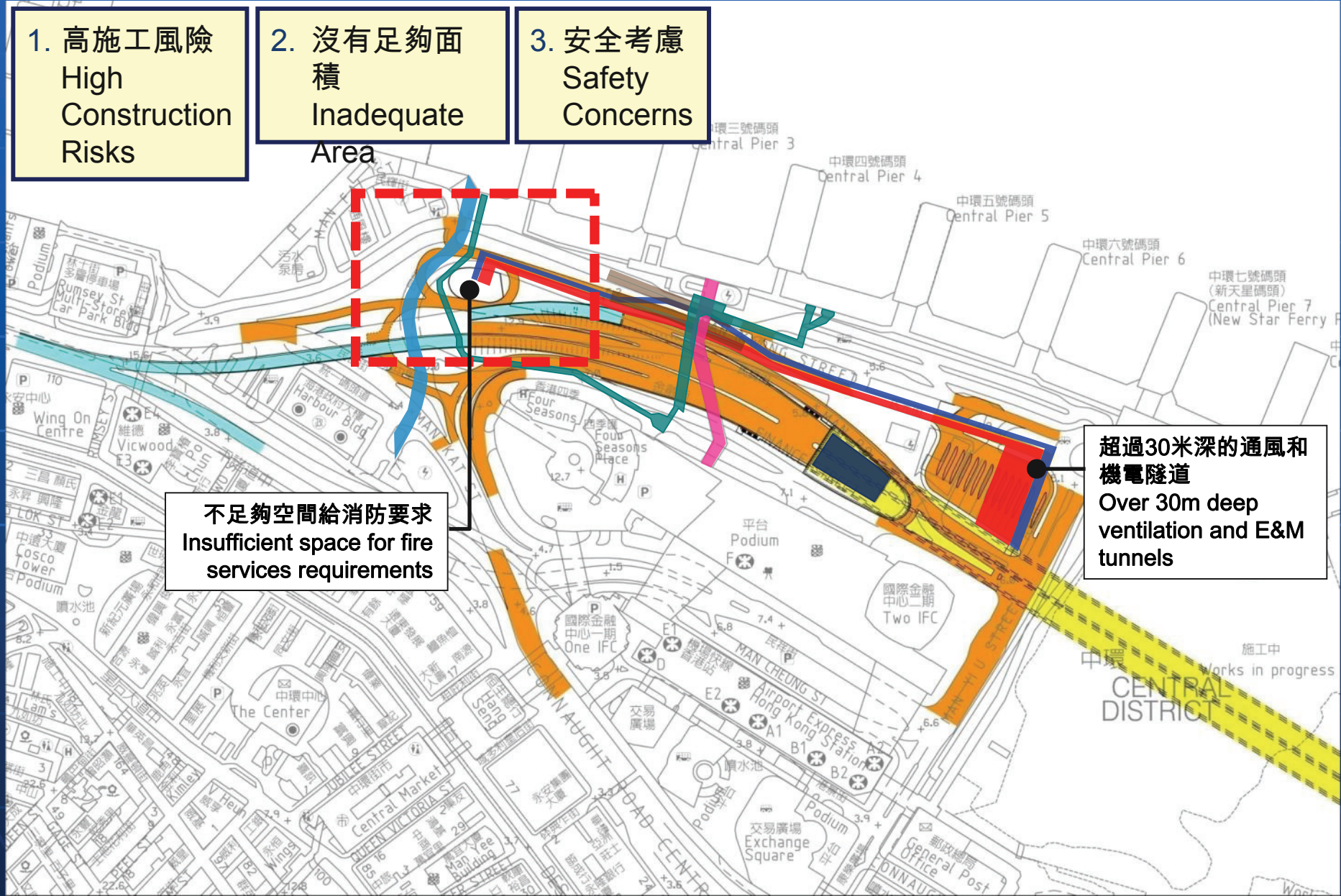
西面通風大樓替代位置技術上不可行

Alternative Location of WVB Technically Not Feasible

1. 高施工風險
High Construction Risks

2. 沒有足夠面積
Inadequate Area

3. 安全考慮
Safety Concerns



不足夠空間給消防要求
Insufficient space for fire services requirements

超過30米深的通風和機電隧道
Over 30m deep ventilation and E&M tunnels

中環 CENTRAL DISTRICT
Works in progress



西面通風大樓替代位置技術上不可行

AECOM

Alternative Location of WVB Technically Not Feasible

1. 高施工風險
High Construction Risks

2. 沒有足夠面積
Inadequate Area

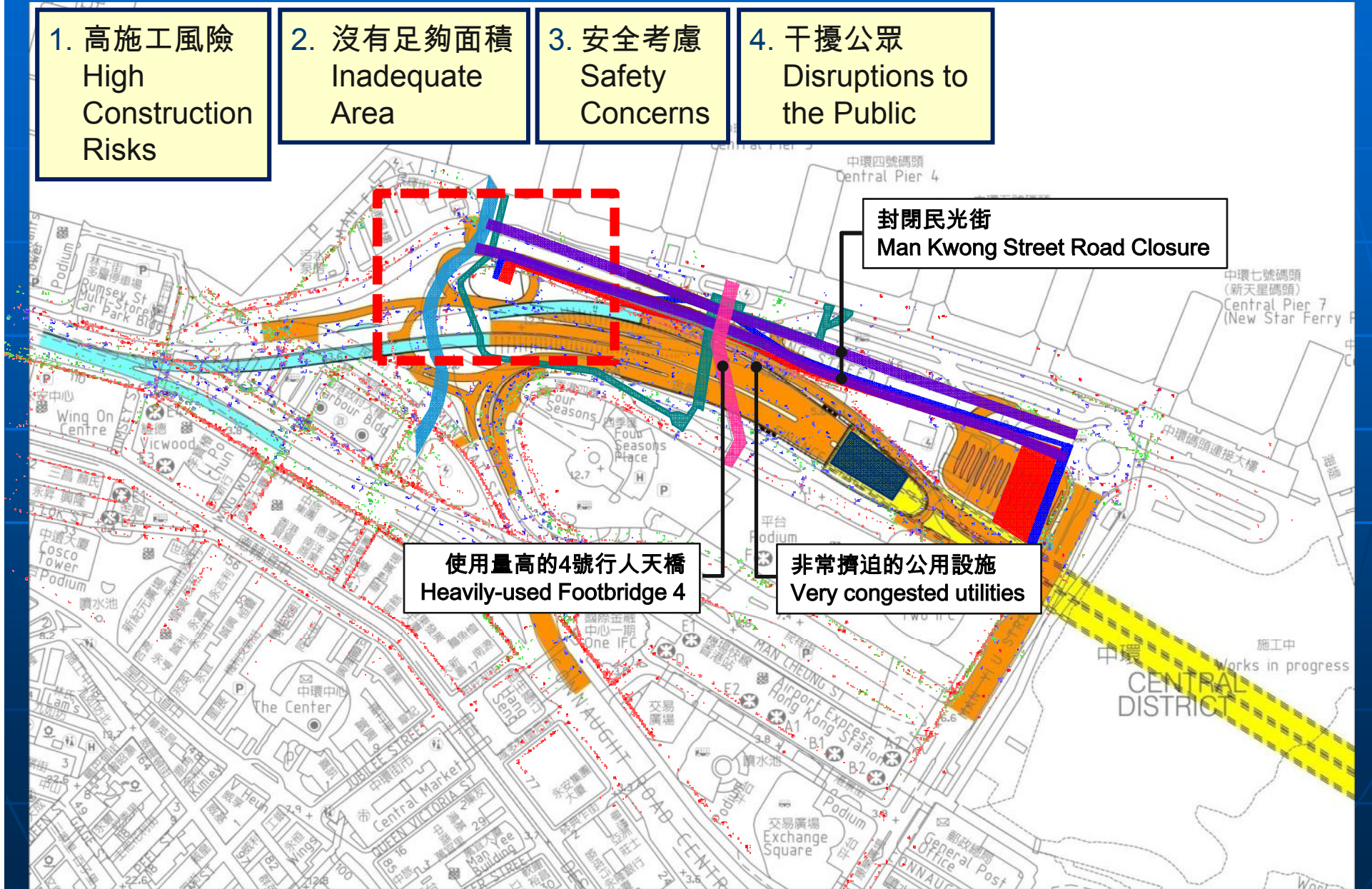
3. 安全考慮
Safety Concerns

4. 干擾公眾
Disruptions to the Public

封閉民光街
Man Kwong Street Road Closure

使用量高的4號行人天橋
Heavily-used Footbridge 4

非常擠迫的公用設施
Very congested utilities





西面通風大樓替代位置技術上不可行

AECOM

Alternative Location of WVB Technically Not Feasible

1. 高施工風險
High Construction Risks

2. 沒有足夠面積
Inadequate Area

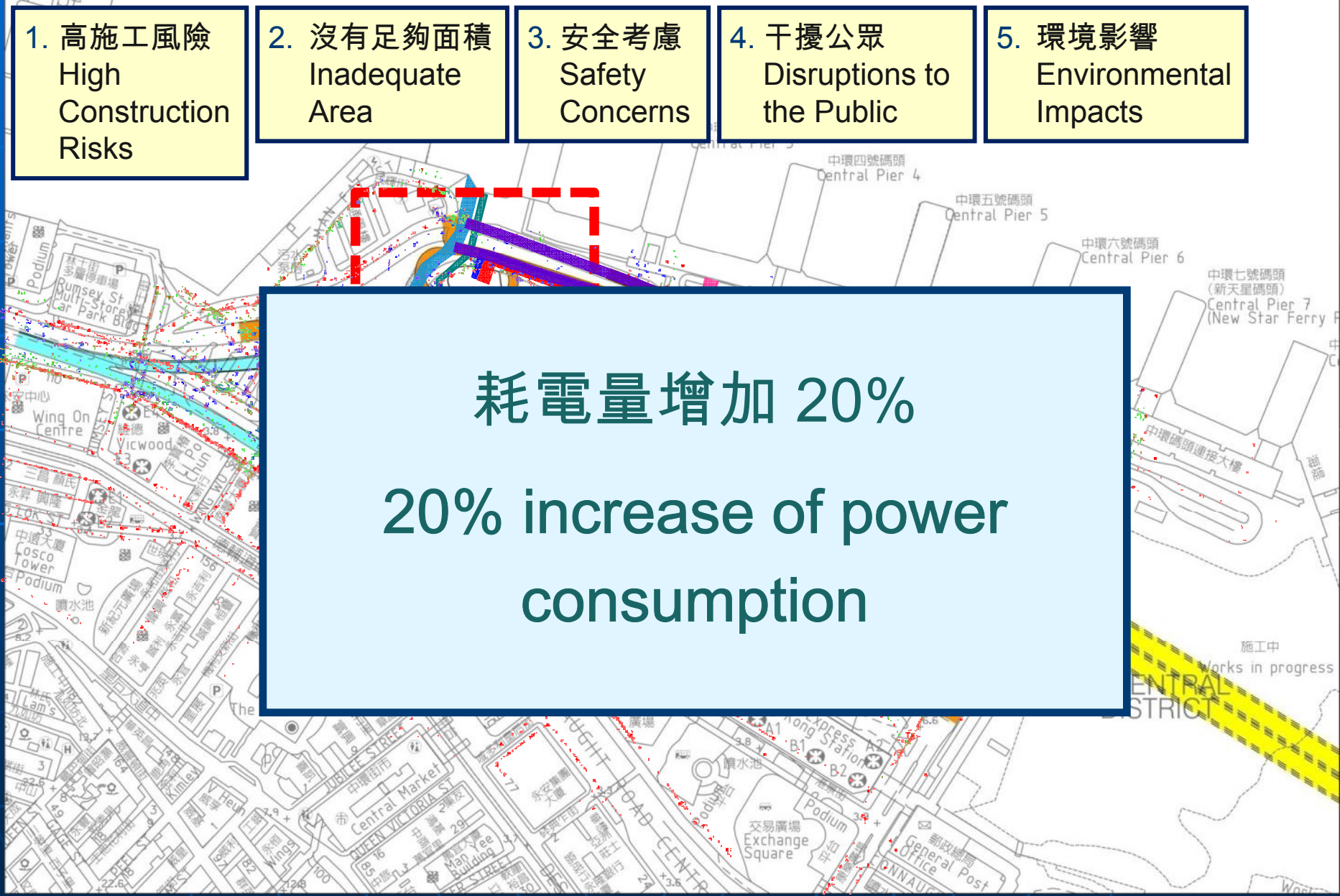
3. 安全考慮
Safety Concerns

4. 干擾公眾
Disruptions to the Public

5. 環境影響
Environmental Impacts

耗電量增加 20%

20% increase of power consumption





西面通風大樓替代位置技術上不可行

AECOM

Alternative Location of WVB Technically Not Feasible

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High Construction Risks

2. 沒有足夠面積
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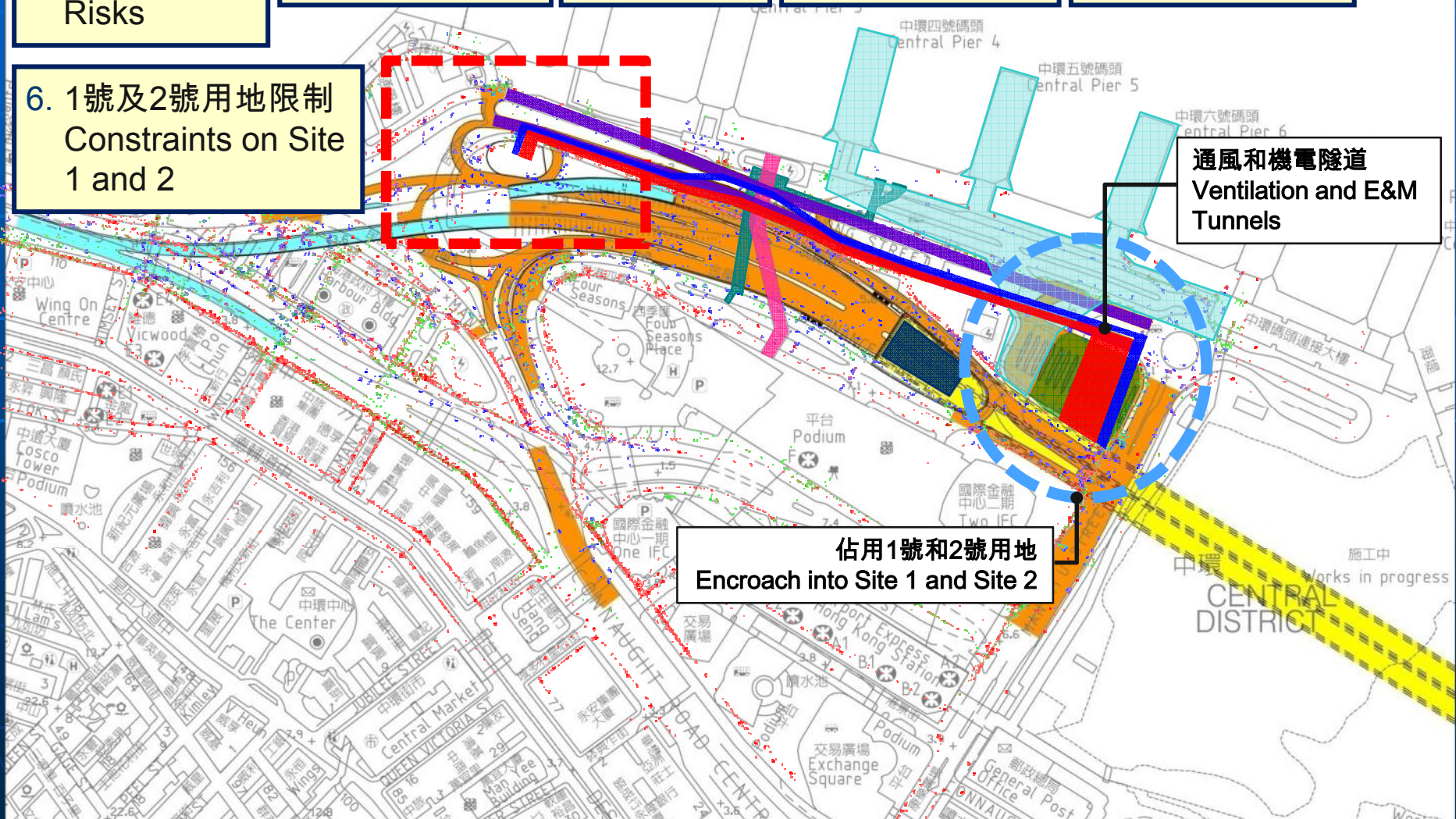
4. 干擾公眾
Disruptions to the Public

5. 環境影響
Environmental Impacts

6. 1號及2號用地限制
Constraints on Site 1 and 2

通風和機電隧道
Ventilation and E&M Tunnels

佔用1號和2號用地
Encroach into Site 1 and Site 2





完

The End