CB(1)293/14-15(01)

沙田至中環線土瓜灣站的考古發現及其初步保育和詮釋方案的建議

Archaeological Features Discovered at To Kwa Wan Station of the Shatin to Central Link and their proposed Preliminary Conservation & Interpretation Plans

25 November 2014

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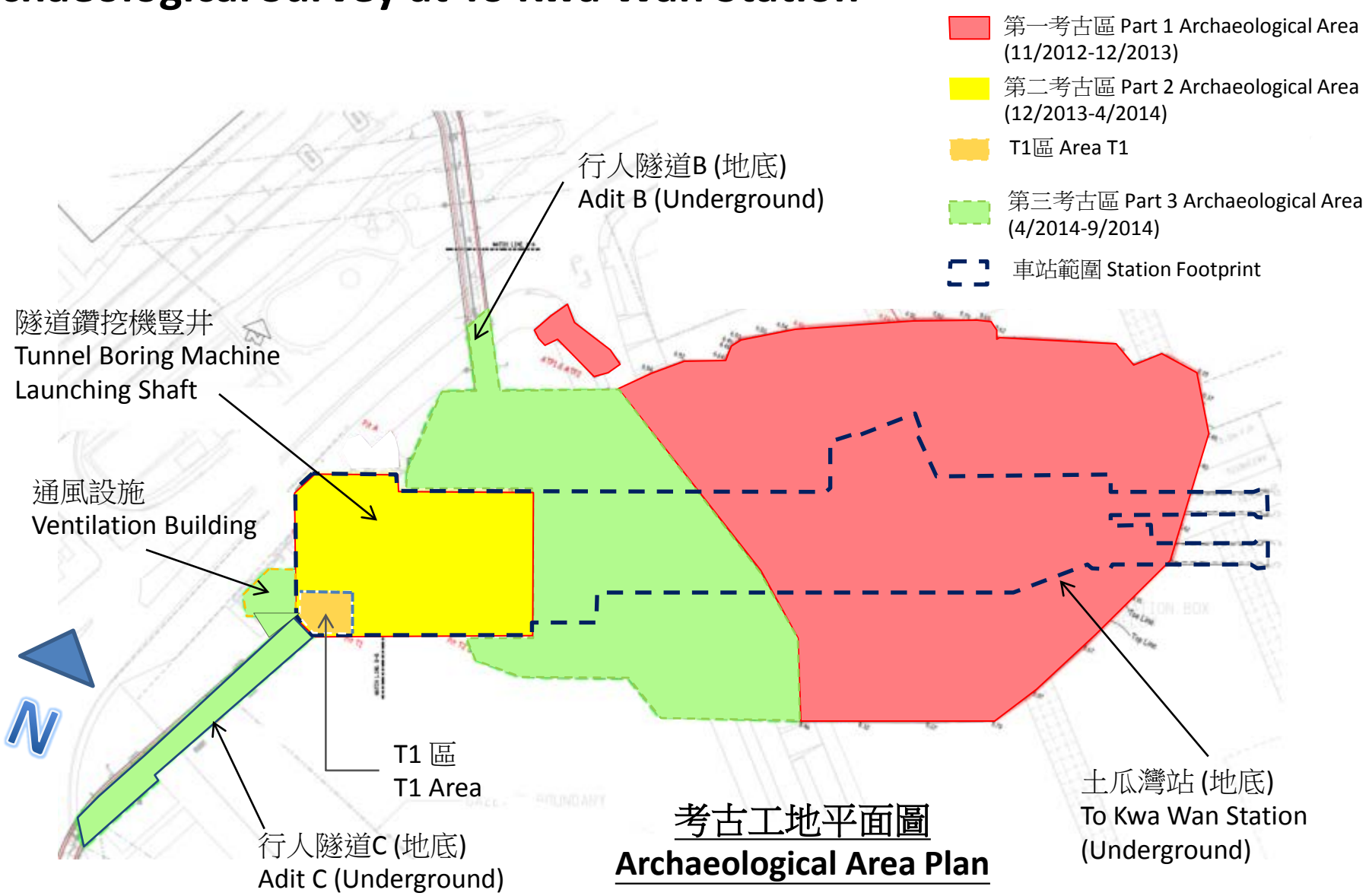
考古調查內容 **BRIEF ACCOUNT OF ARCHAEOLOGICAL SURVEY**

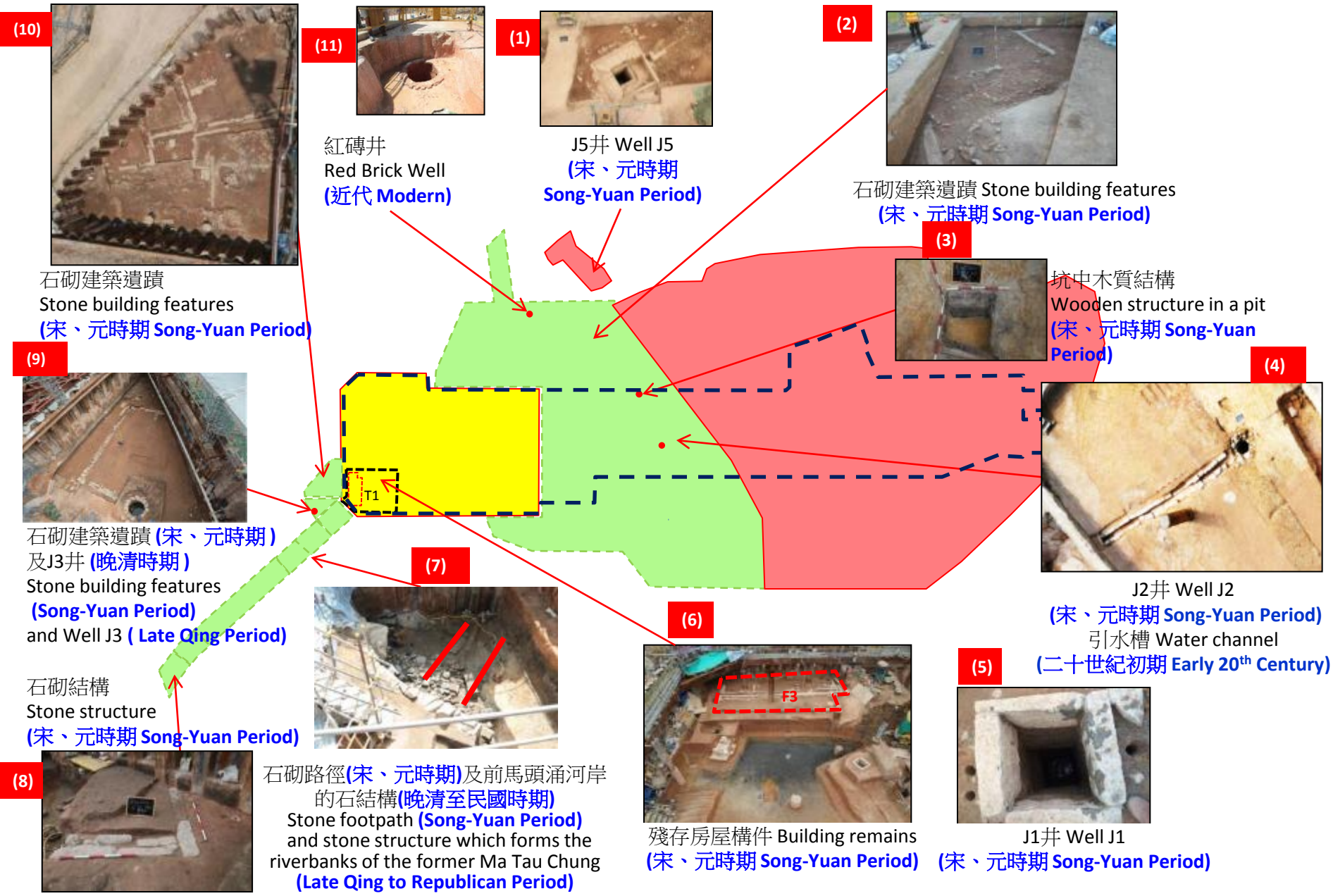
土瓜灣站考古調查
Archaeological Survey at To Kwa Wan Station



考古工地平面圖
Archaeological Area Plan

第二部分 **Part 2:**
考古文物發現 **ARCHAEOLOGICAL FEATURES DISCOVERED**

出土考古文物
Archaeological Features Unearthed



(10) 石砌建築遺蹟
Stone building features
(宋、元時期 Song-Yuan Period)

(11) 紅磚井
Red Brick Well
(近代 Modern)

(1) J5井 Well J5
(宋、元時期
Song-Yuan Period)

(2) 石砌建築遺蹟 Stone building features
(宋、元時期 Song-Yuan Period)

(3) 坑中木質結構
Wooden structure in a pit
(宋、元時期 Song-Yuan Period)

(4) J2井 Well J2
(宋、元時期 Song-Yuan Period)
引水槽 Water channel
(二十世紀初期 Early 20th Century)

(5) J1井 Well J1
(宋、元時期 Song-Yuan Period)

(6) 殘存房屋構件 Building remains
(宋、元時期 Song-Yuan Period)

(7) 石砌路徑(宋、元時期)及前馬頭涌河岸的石結構(晚清至民國時期)
Stone footpath (Song-Yuan Period) and stone structure which forms the riverbanks of the former Ma Tau Chung
(Late Qing to Republican Period)

(8) 石砌結構
Stone structure
(宋、元時期 Song-Yuan Period)

(9) 石砌建築遺蹟 (宋、元時期)
及J3井 (晚清時期)
Stone building features
(Song-Yuan Period)
and Well J3 (Late Qing Period)

第三部分**Part 3:**
考古文物的保育建議方案
PROPOSED CONSERVATION PLAN FOR ARCHAEOLOGICAL FEATURES DISCOVERED

考古文物保育方案

Conservation Options for Archaeological Features Discovered

7個建議原址保留的遺蹟	
1	J5井
2	石砌建築遺蹟
5	J1井
6	殘存房屋構件
7	石砌路徑及前馬頭涌河岸的石結構
9	石砌建築遺蹟和J3井
10	石砌建築遺蹟

(10)

石砌建築遺蹟
Stone building features
(原址保留 Preserve in-situ)

(11)

紅磚井
Red Brick Well
(記錄方式保存
Preserve by record)

(1)

J5井 Well J5
(原址保留
Preserve in-situ)

(2)

石砌建築遺蹟 Stone building features
(原址保留 Preserve in-situ)

(3)

坑中木質結構
Wooden structure in a pit
(已移走作保育處理 Retrieved off site for conservation treatment)

(9)

石砌建築遺蹟及J3井
Stone building features and Well J3
(原址保留 Preserve in-situ)

(4)

J2井和引水槽
Well J2 and water channel
(四個保育方案
4 Conservation options)

T1

(7)

石砌路徑及前馬頭涌河岸的石結構
Stone footpath and stone structure which forms the riverbanks of the former Ma Tau Chung
(原址保留 Preserve in-situ)

(6)

殘存房屋構件 Building remains
(原址保留 Preserve in-situ)

(5)

J1井 Well J1
(原址保留 Preserve in-situ)

石砌結構
Stone structure
(兩個保育方案
2 Conservation options)

(8)

土瓜灣站的考古發現和保育方案

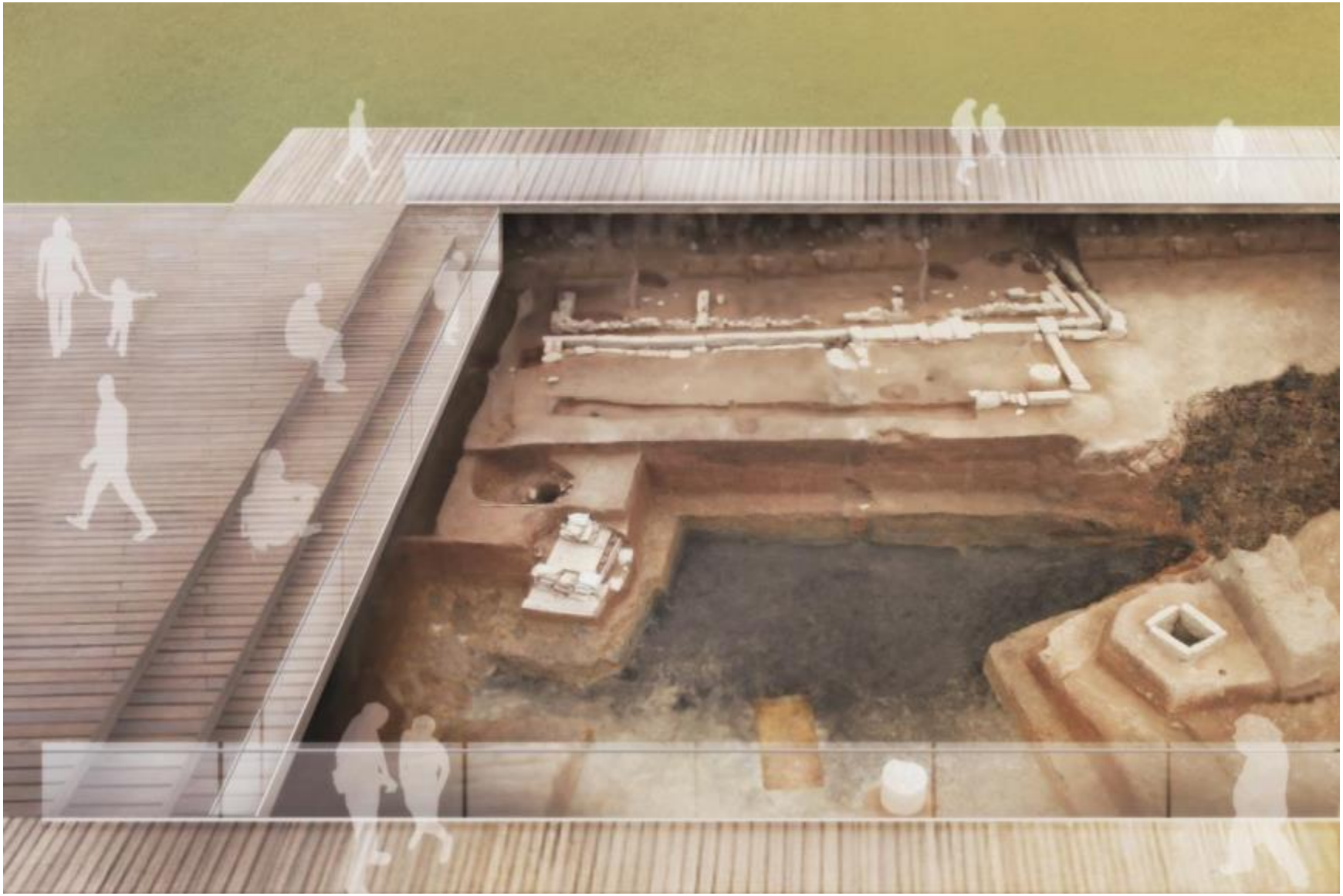
	考古發現	位置	時期	保育方案
1	J5井	第一考古工地	宋、元時期	原址保留
2	石砌建築遺蹟	第三考古工地A區	宋、元時期	原址保留
3	坑中木質結構	第三考古工地A區	宋、元時期	已移走作保育處理
4	J2井和引水槽	第三考古工地A區	宋、元時期(井)和二十世紀初期(引水槽)	四個保育方案(有待確定)
5	J1井	第二考古工地T1區	宋、元時期	原址保留
6	殘存房屋構件	第二考古工地T1區	宋、元時期	原址保留
7	石砌路徑及前馬頭涌河岸的石結構	第三考古工地C區北端	宋、元時期 (石砌路徑)及晚清至民國時期(石結構)	原址保留
8	石砌結構	第三考古工地C區南端	宋、元時期	兩個保育方案(有待確定)
9	石砌建築遺蹟和J3井	第三考古工地D區	宋、元時期(石砌建築遺蹟)及晚清時期(J3井)	原址保留
10	石砌建築遺蹟	第三考古工地B區和C區北端	宋、元時期	原址保留
11	紅磚井	第三考古工地A區	近代	記錄方式保存

Archaeological Discoveries at To Kwa Wan Station and Conservation Options

	Archaeological Discoveries	Location	Period	Conservation Options
1	Well J5	Part 1 Archaeological Area	Song-Yuan	**Preserve in-situ**
2	Stone building features	Part 3 Archaeological Area, Zone A	Song-Yuan	**Preserve in-situ**
3	Wooden structure in a pit	Part 3 Archaeological Area, Zone A	Song-Yuan	**Retrieved off site for conservation treatment**
4	Well J2 and water channel	Part 3 Archaeological Area, Zone A	Song-Yuan (Well) and Early 20th Century (water channel)	**4 Conservation options (pending decision)**
5	Well J1	Part 2 Archaeological Area, T1 Area	Song-Yuan	**Preserve in-situ**
6	Building remains	Archaeological Area, T1 Area	Song-Yuan	**Preserve in-situ**
7	Stone footpath and stone structure which forms the riverbanks of the former Ma Tau Chung	Part 3 Archaeological Area, northern end of Zone C	Song-Yuan (stone footpath) and late Qing to Republican (stone structure)	**Preserve in-situ**
8	Stone structure	Part 3 Archaeological Area, southern end of Zone C	Song-Yuan	**2 Conservation options (pending decision)**
9	Stone building features and Well J3	Part 3 Archaeological Area, Zone D	Song-Yuan (Stone building features) and Late Qing (Well J3)	**Preserve in-situ**
10	Stone building features	Part 3 Archaeological Area, Zone B, and northern end of Zone C	Song-Yuan	**Preserve in-situ**
11	Red brick well	Part 3 Archaeological Area, Zone A	Modern	**Preserve by record**

第四部分 **Part 4:**
擬建宋皇臺公園及土瓜灣站內考古遺蹟及文物的詮釋方案
INTERPRETATION PLAN OF ARCHAEOLOGICAL FEATURES DISCOVERED IN THE FUTURE SUNG WONG TOI PARK AND SOME RELICS UNEARTHED IN TO KWA WAN STATION

T1 區的詮釋構想圖
Artist Impression on Interpretation of T1 Area



T1 區地層將原址保留
Soil strata at T1 Area to be preserved

出土文物
Relics discovered on site

土瓜灣站大堂內展示櫃的構想圖

Artist Impression on Display Cabinets in Concourse of the To Kwa Wan Station

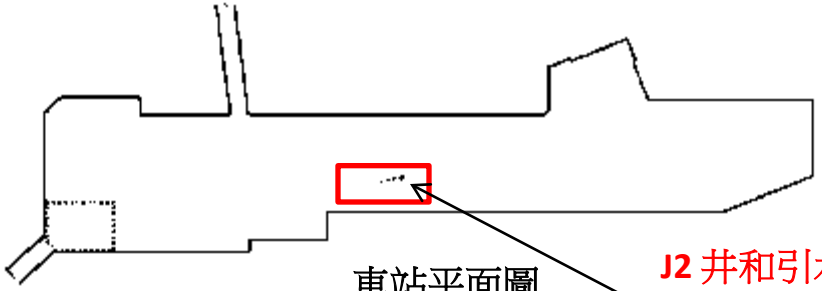
第五部分**Part 5:**

J2井 / 行人隧道 C / T1 區 的保育方案及相關車站工程改動

CONSERVATION OPTIONS FOR WELL J2 / ADIT C / T1 AREA AND ASSOCIATED MODIFICATION OF STATION WORKS

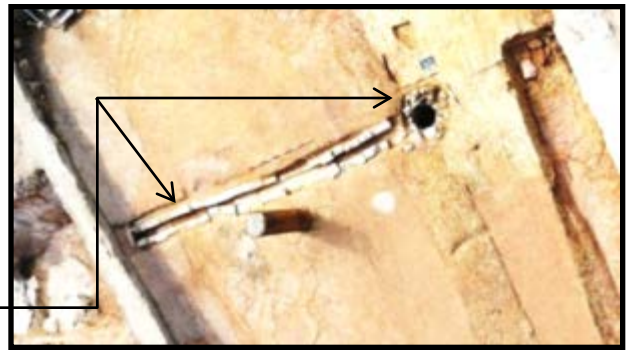
J2井
WELL J2

J2 井和引水槽
Well J2 and Water Channel

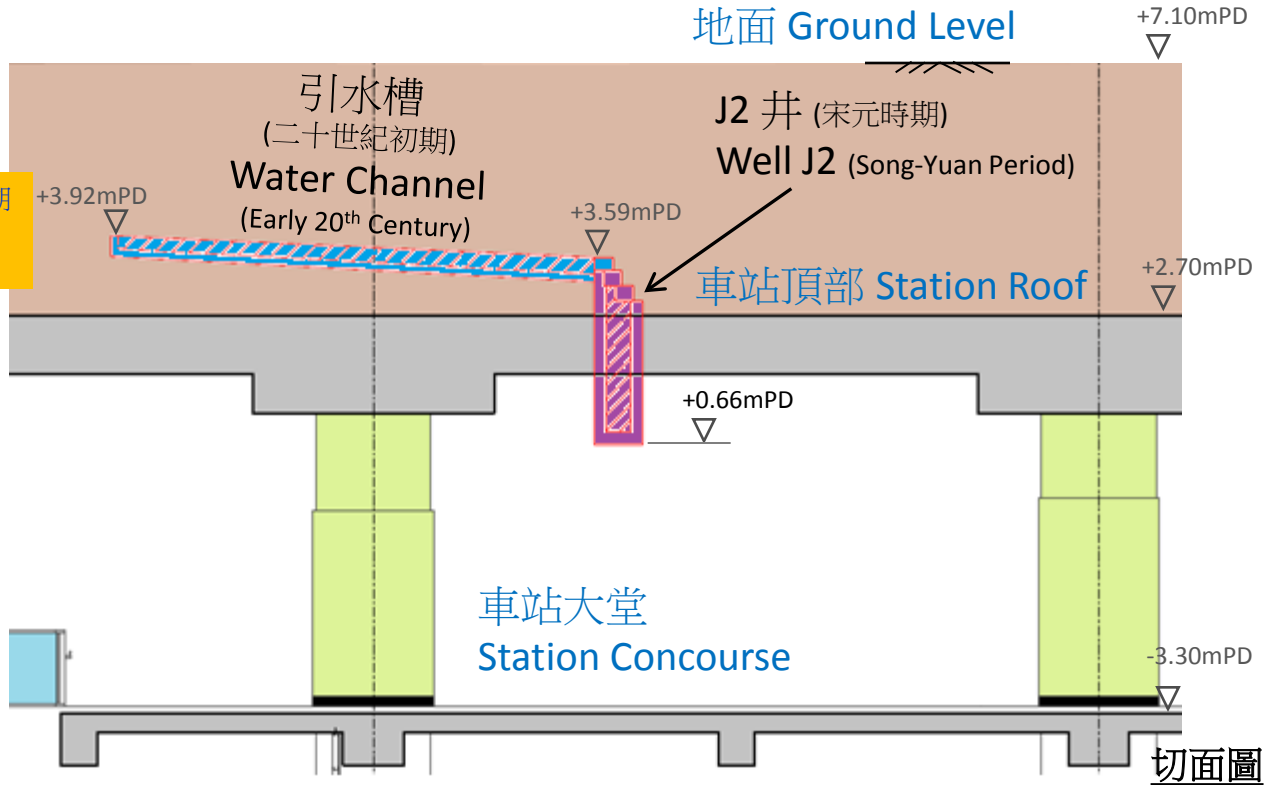


車站平面圖
Station Plan

J2 井和引水槽
Well J2 and
Water Channel



引水槽
Water Channel



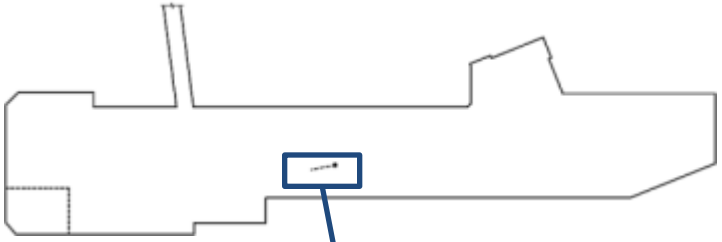
切面圖
Section

- 四個保育方案建議 Four conservation options being considered

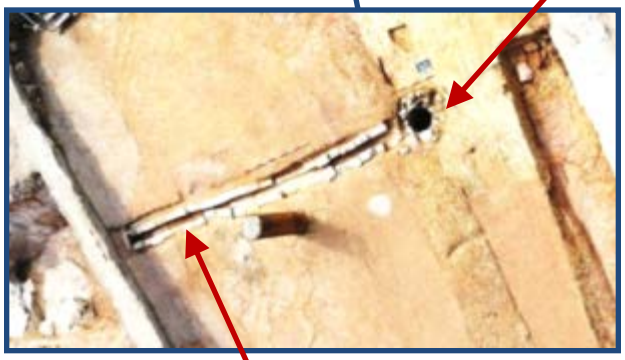
J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel

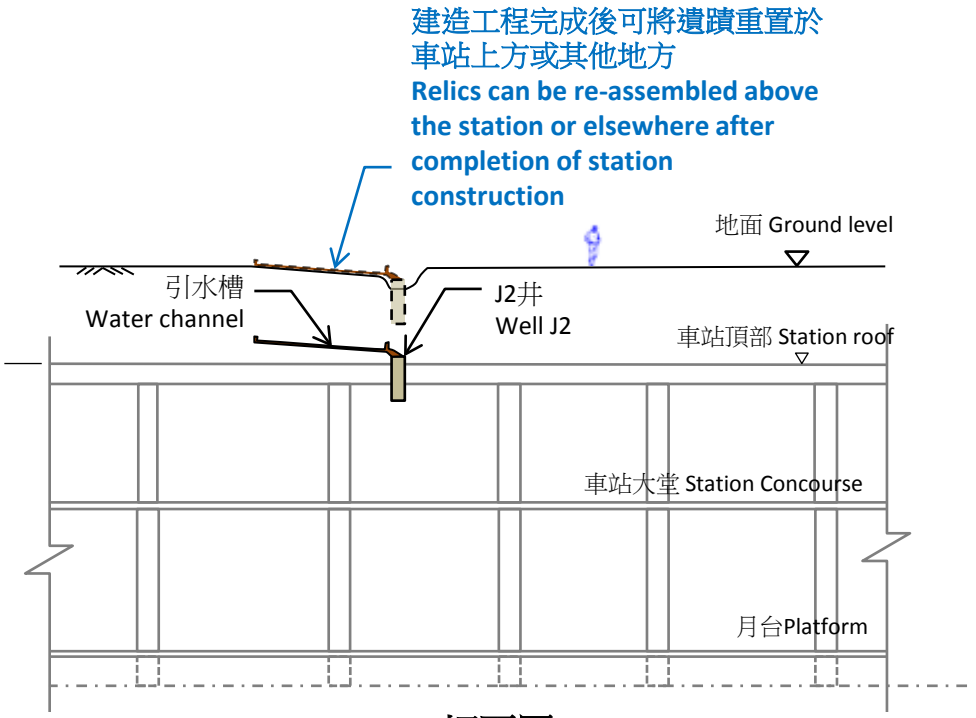
建議方案一 Option 1

J2 井 Well J2	引水槽 Water channel
記錄後以人手拆遷 Remove by hand after recording	記錄後以人手拆遷 Remove by hand after recording



車站平面圖
Station Plan





切面圖
Section

J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel

建議方案一 Option 1

文物保育角度
Heritage Viewpoint

- J2井及引水槽完整性受影響
- 展示和詮釋安排較靈活，增加教育果效
- Integrity of Well J2 and water channel would be impaired
- Interpretation and display would be flexible to enhance educational value

工程風險
Construction risk

- 重置後可能與原本狀況有輕微分別
- Possible slight difference to the original condition after re-assembly

對車站設計的影響
Impact on station design

- 除因應T1區保育方案及大堂展示櫃的改動外並無額外修改
- No additional change to the modification due to T1 Area conservation scheme and display cabinets in concourse

Mainland Example for Reference
內地參考例子

古埃及拉美西斯二世神廟
Temples of Ramses II of Ancient Egypt

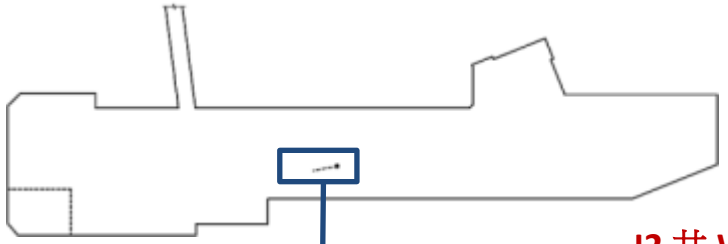
重慶張飛廟
Zhang Fei Miao, Chongqing

Source of photos: http://m.memphistours.co.uk/Egypt/Egypt-Travel-Guide/Egypt-Nile-Valley/wiki/Abu-Simbel
http://whgyj.blog.163.com/blog/static/112923802008112645586555/

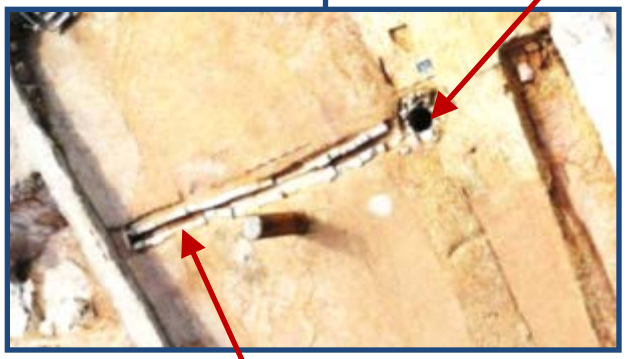
J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel

建議方案二 Option 2

J2 井 Well J2	引水槽 Water channel
以巨型結構盛載搬遷 Relocated by massive structure	記錄後以人手拆遷 Remove by hand after recording

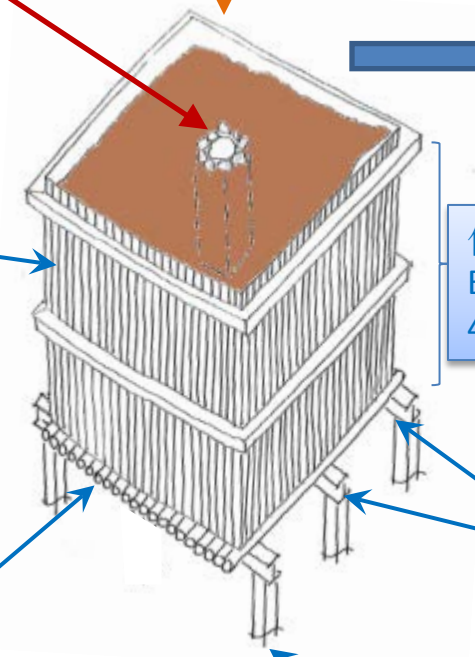


車站平面圖
Station Plan



J2 井 Well J2

引水槽 Water Channel



5. 以大型機械運走整個結構
Remove the structure by heavy machinery

1. 鋼板樁牆
Sheet Pile Wall

估計重量: 約三百至四百噸
Estimated weight: 300 to 400 tonnes

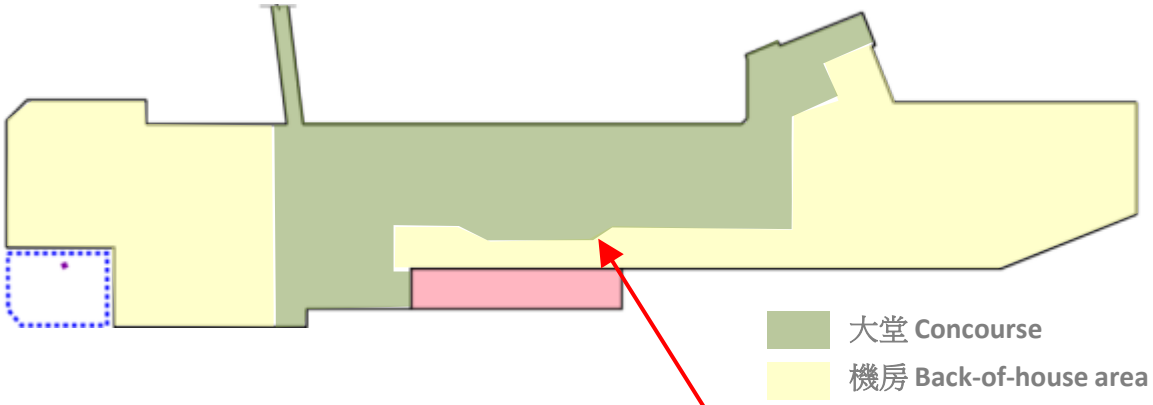
3. 橫向鋼管樁
Horizontal Pipe Pile

4. 以地底挖掘方法安裝鋼樑
Steel I-beam installed by mining method

2. 臨時工字樁
Temporary socket H-Pile

J2井巨型保護結構
Massive Protection Structure for Well J2

J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel



建議方案二 Option 2

文物保育角度
Heritage Viewpoint

- J2井較完整地保存
- 引水槽文物價值較低，故採用不同保育方法
- Well J2 would be kept intact
- Water channel is of lower heritage value thus a different conservation approach is applied

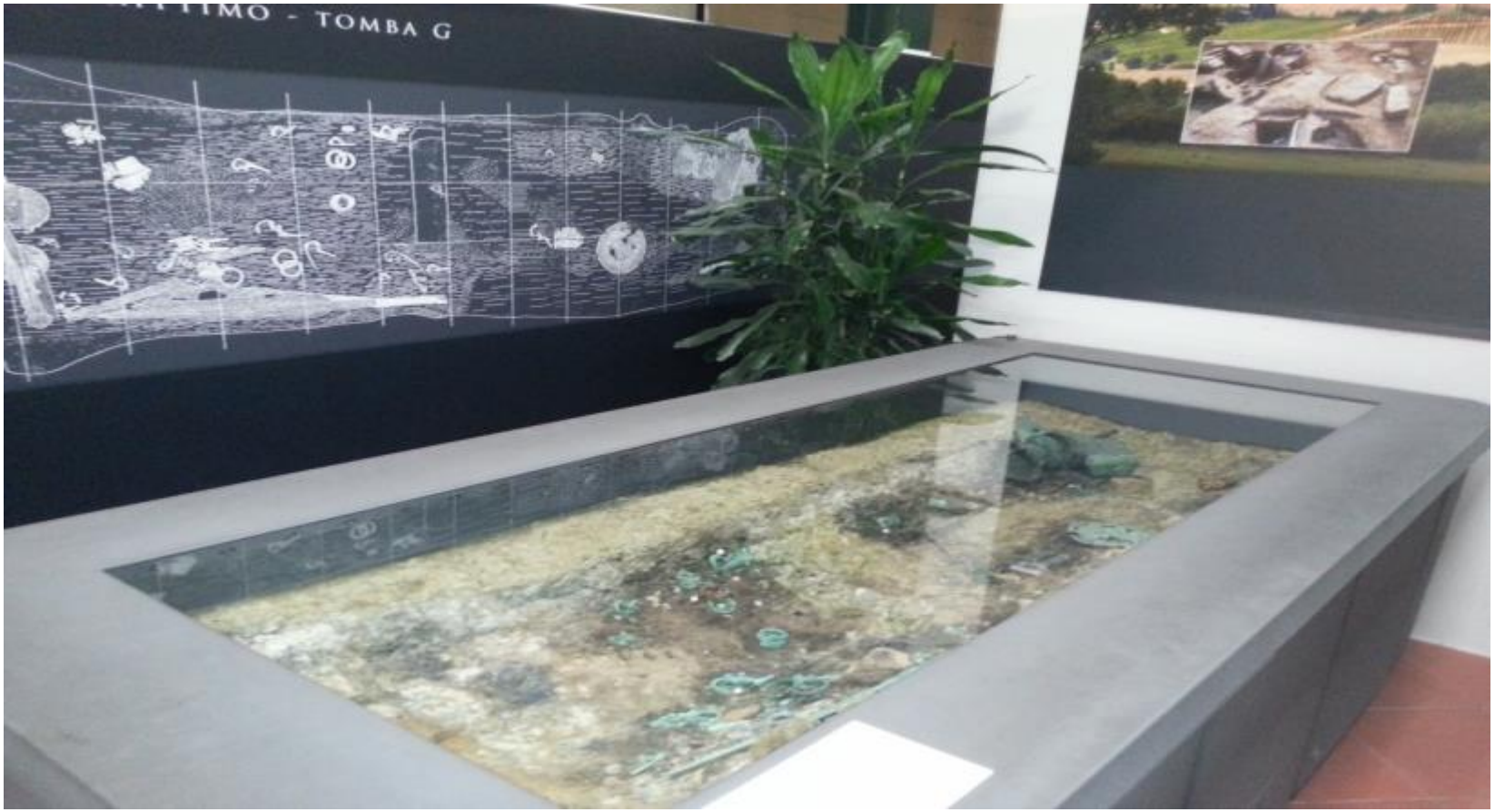
工程風險
Construction risk

- 打樁工程有可能遇上孤石層，產生的震動可能影響井的結構
- 搬運巨型結構的過程可能影響井的結構
- Piling works through corestone layers may cause vibration that affects the well structure
- Well may deform during relocation of the massive structure

對車站設計的影響
Impact on station design

- 除因應T1區保育方案及大堂展示櫃的改動外並無額外修改
- No additional change to the modification due to T1 Area conservation scheme and display cabinets in concourse

Overseas Examples for Reference
海外參考例子



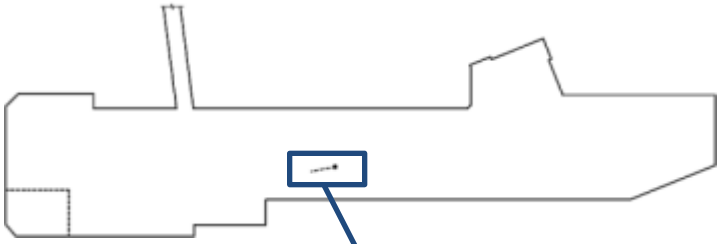
意大利南塔斯卡尼區墓葬
Old tomb of South Tuscany, Italy

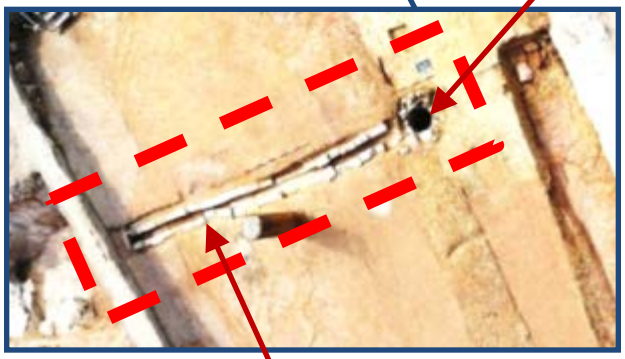
J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel

建議方案三 Option 3

J2 井 Well J2	引水槽 Water channel
以巨型結構圍存 Retained by massive structure	以巨型結構圍存 Retained by massive structure

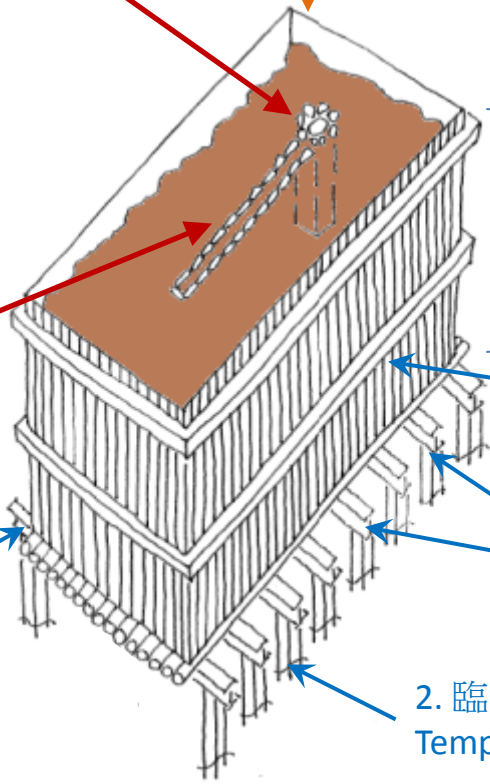
車站平面圖
Station Plan





J2 井 Well J2

引水槽 Water Channel



估計重量: 約八百至一千噸
Estimated weight: 800 to 1,000 tonnes

1. 鋼板樁牆
Sheet Pile Wall

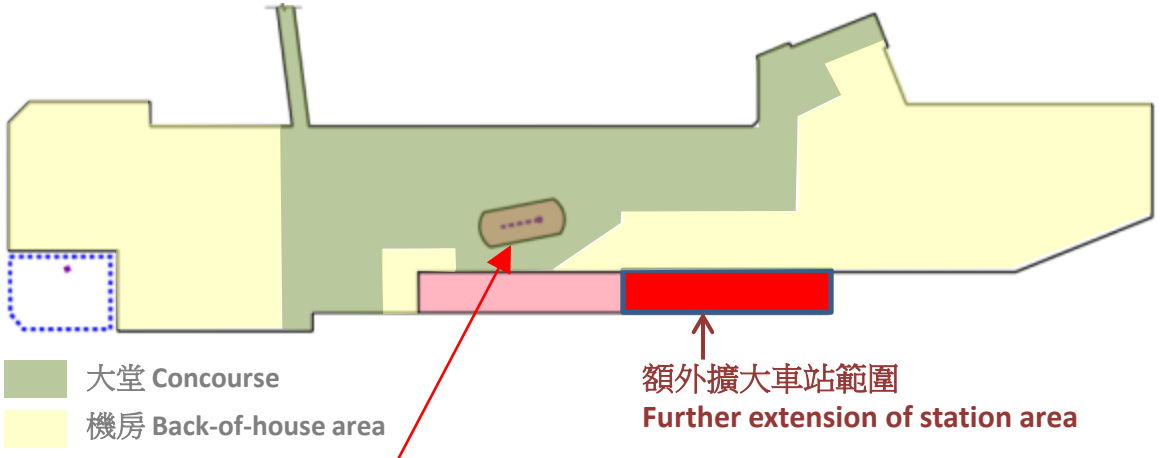
以地底挖掘方法安裝鋼樑
4. Steel I-beam installed by mining method

3. 橫向鋼管樁
Horizontal Pipe Pile

2. 臨時工字樁
Temporary socket H-Pile

J2井及引水槽巨型保護結構
Massive Protection Structure for Well J2 and Water Channel

J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel



建議方案三 Option 3

文物保育角度
Heritage Viewpoint

- 完整保存J2井及引水槽
- 因其位處將來地面以下，展示和詮釋較為困難
- Integrity of Well J2 and water channel retained
- As they are located at a level lower than the future ground level, display and interpretation would be difficult

對車站設計的影響
Impact on station design

- 車站範圍須進一步擴大，而且須修改設計以承托巨型結構
- Station area needs to be further enlarged, and the design has to be revised for supporting the massive structure.

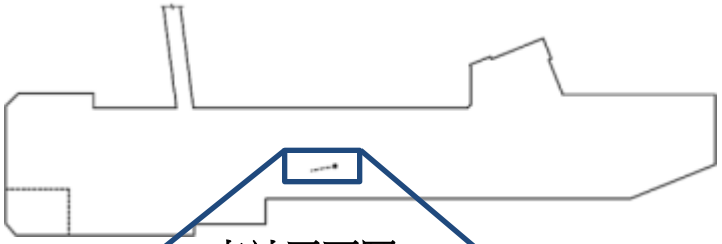
工程風險
Construction risk

- 打樁工程有可能遇上孤石層，產生的震動可能影響井的結構
- Piling works through corestone layers may cause vibration that affects the well structure

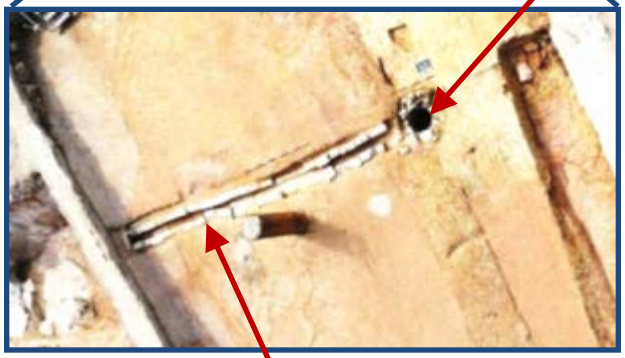
J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel

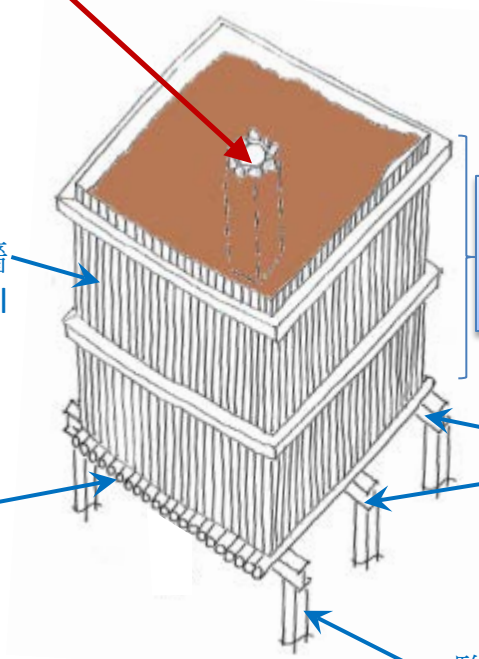
建議方案四 Option 4

J2 井 Well J2	引水槽 Water channel
以巨型結構圍存 Retained by massive structure	記錄後以人手拆遷 Remove by hand after recording



車站平面圖
Station Plan





J2井巨型保護結構
Massive Protection Structure for Well J2

J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel

建議方案四 Option 4

文物保育角度
Heritage Viewpoint

- 完整保存J2井
- 引水槽文物價值較低，故採用不同保育方法
- 因其位處將來地面以下，展示和詮釋較為困難
- Integrity of Well J2 retained
- Water channel is of lower heritage value thus a different conservation approach is applied
- As they are located at a level lower than the future ground level, display and interpretation would be difficult

工程風險
Construction risk

- 打樁工程有可能遇上孤石層，產生的震動可能影響井的結構
- Piling works through corestone layers may cause vibration that affects the well structure

對車站設計的影響
Impact on station design

- 車站範圍須進一步擴大， 但比方案三的範圍較少，而且須修改設計以承托巨型結構
- Station area needs to be further enlarged, but the enlargement required is smaller than Option 3. Also, the design has to be revised for supporting the massive structure.

J2 井和引水槽的保育方案
Conservation Options for Well J2 and Water Channel

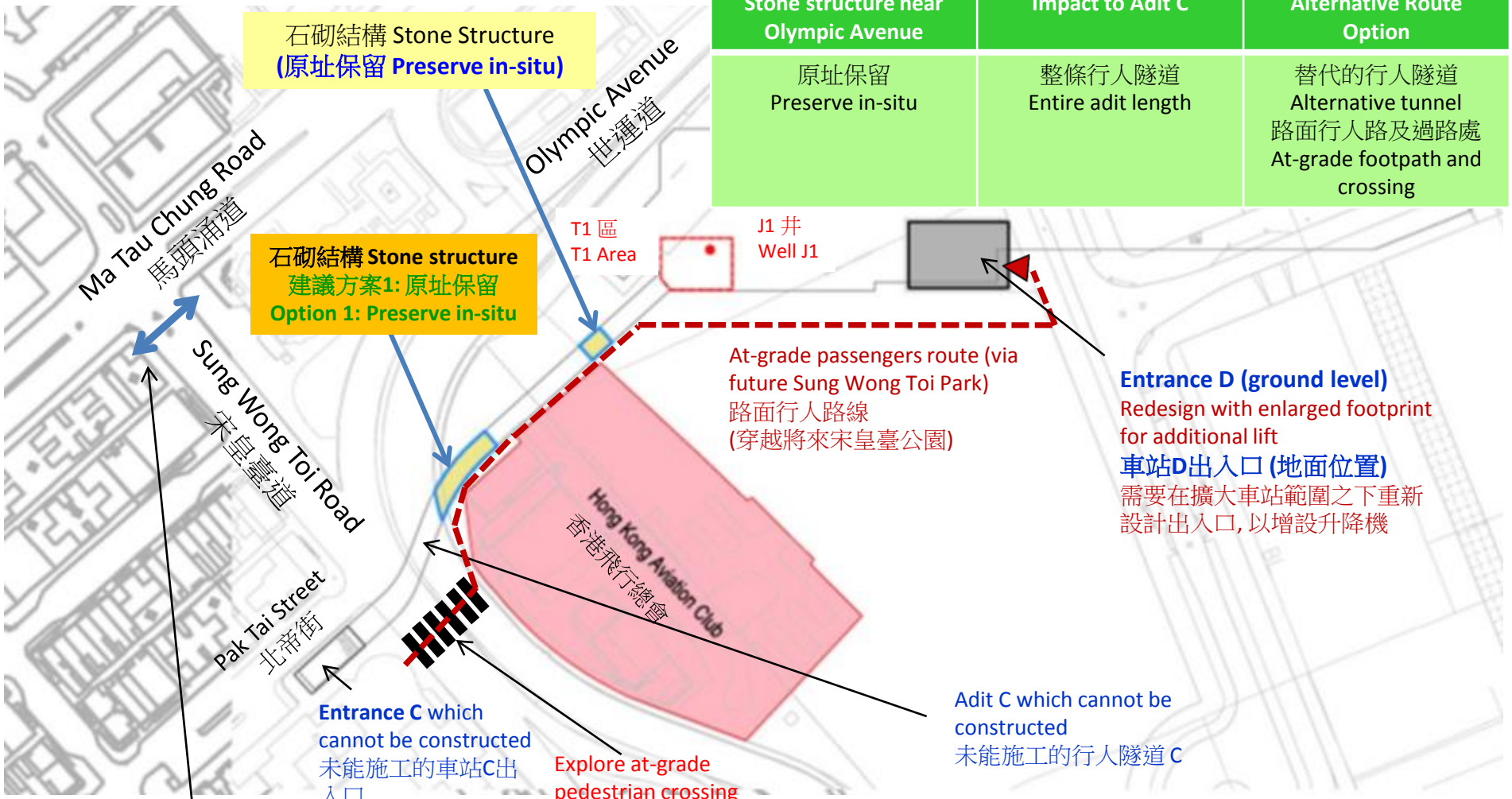
方案 Option	工程風險 Construction risk	對車站設計的影響 Impact to station design	文物保育角度 Heritage Viewpoint
1	• 重置後可能與原本狀況整體上有輕微分別 • Possible slight difference to the original condition generally after re-assembly	• 除因應T1區保育方案及大堂展示櫃的改動外並無額外修改 • No additional change to the modification due to T1 Area conservation scheme and display cabinets in concourse	• J2井及引水槽完整性受影響 • 展示和詮釋安排較靈活，增加教育果效 • Integrity of Well J2 and water channel would be impaired • Interpretation and display would be flexible to enhance educational value
2	• 打樁工程有可能遇上孤石層，產生的震動可能影響井的結構 • 為避開孤石亦可能需要另覓打樁位置，因而涉及額外施工時間及開支 • 搬運巨型結構的過程可能影響井的結構 • Piling works through corestone layers may cause vibration that affects the well structure • Find another piling location to avoid conflict with corestone layers may incur additional time and cost • Well may deform during relocation of the massive structure	• 除因應T1區保育方案及大堂展示櫃的改動外並無額外修改 • No additional change to the modification due to T1 Area conservation scheme and display cabinets in concourse	• J2井較完整地保存 • 引水槽文物價值較低，故採用不同保育方法 • Well J2 would be kept intact • Water channel is of lower heritage value thus a different conservation approach is applied
3	• 打樁工程有可能遇上孤石層，產生的震動可能影響井的結構 • 為避開孤石亦可能需要另覓打樁位置，因而涉及額外施工時間及開支 • Piling works through corestone layers may cause vibration that affects the well structure • Find another piling location to avoid conflict with corestone layers may incur additional time and cost	• 車站範圍須進一步擴大，而且須修改設計以承托巨型結構 • Station area needs to be further enlarged, and the design has to be revised for supporting the massive structure.	• 完整保存J2井及引水槽 • 因其位處將來路面以下，展示和詮釋較為困難 • Integrity of Well J2 and water channel retained • As they are located at a level lower than the future ground level, display and interpretation would be difficult
4	• 打樁工程有可能遇上孤石層，產生的震動可能影響井的結構 • 為避開孤石亦可能需要另覓打樁位置，因而涉及額外施工時間及開支 • Piling works through corestone layers may cause vibration that affects the well structure • Find another piling location to avoid conflict with corestone layers may incur additional time and cost	• 車站範圍須進一步擴大，但比方案三的範圍較少，而且須修改設計承托巨型結構 • Station area needs to be further enlarged, but the enlargement required is smaller than Option 3. Also, the design has to be revised for supporting the massive structure.	• 完整保存J2井 • 引水槽文物價值較低，故採用不同保育方法 • 因其位處將來地面以下，展示和詮釋較為困難 • Integrity of Well J2 retained • Water channel is of lower heritage value thus a different conservation approach is applied • As they are located at a level lower than the future ground level, display and interpretation would be difficult

位於行人隧道 C的遺蹟
RELICS AT ADIT C

位於行人隧道 C 遺蹟的保育方案
Conservation Options for relics at Adit C

建議方案一 Option 1

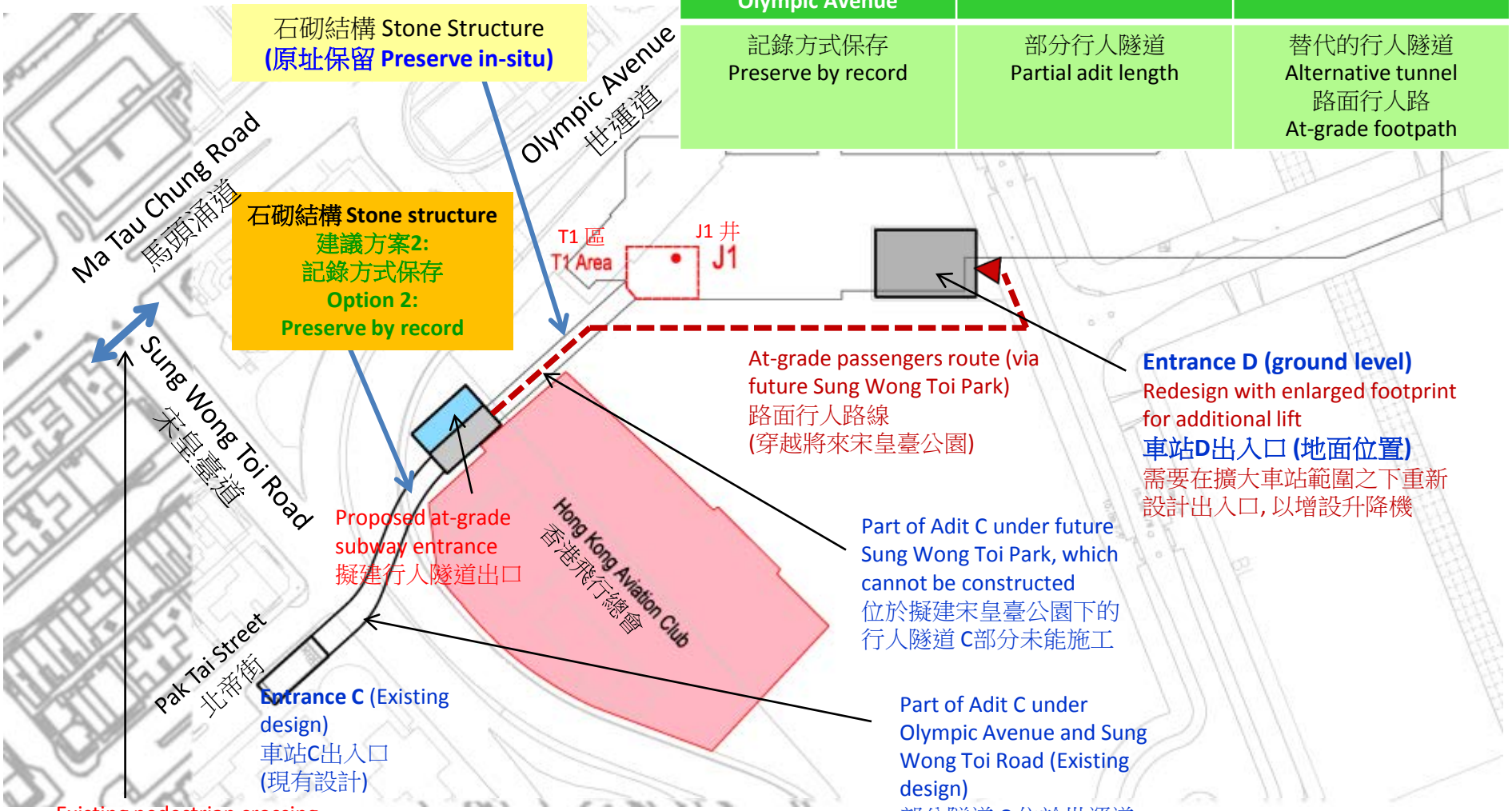
近世運道的石砌結構 Stone structure near Olympic Avenue	對行人隧道C影響 Impact to Adit C	替代路線建議 Alternative Route Option
原址保留 Preserve in-situ	整條行人隧道 Entire adit length	替代的行人隧道 Alternative tunnel 路面行人路及過路處 At-grade footpath and crossing



位於行人隧道 C 遺蹟的保育
Conservation Options for relics at Adit C

建議方案2 Option 2

近世運道的石砌結構 Stone structure near Olympic Avenue	對行人隧道C影響 Impact to Adit C	替代路線建議 Alternative Route Option
記錄方式保存 Preserve by record	部分行人隧道 Partial adit length	替代的行人隧道 Alternative tunnel 路面行人路 At-grade footpath



位於行人隧道 C 區南端遺蹟的保育方案
Conservation options for relics at southern portion of Adit C

方案 Option	近世運道的石砌結構 Stone structure near Olympic Avenue	對行人隧道C影響 Impact to Adit C	替代路線建議 Alternative Route Option	文物保育角度 Heritage Viewpoint
1	原址保留 Preserve in-situ	• 整條行人隧道受影響，須適時研究替代路線 • 對北帝街附近的居民帶來較大的不便 • Entire adit will be affected, need to study an alternative route at a suitable time • Inconvenience to the residents living near Pak Tai Street	• 探討替代的行人隧道路線 • 使用於馬頭涌道原有的路面行人過路處 • 探討於宋皇臺道適當位置加設過路處，及路面行人路至車站出入口 • Explore an alternative tunnel alignment • Use the existing at-grade crossing at Ma Tau Chung Road • Explore at-grade crossing at suitable location of Sung Wong Toi Road together with at-grade footpath to station entrance	• 完整性不受影響 • Integrity would not be impaired
2	記錄方式保存 Preserve by record	• 部分行人隧道受影響，須適時為該部分研究替代路線 • 能減低對北帝街附近的居民的不便 • Part of adit will be affected, need to study an alternative route for this section at a suitable time • Inconvenience to the residents living near Pak Tai Street can be minimised	• 為部分的行人隧道，探討替代的行人隧道路線 • 以路面行人路接駁至車站出入口 • Explore an alternative alignment for part of the adit • Use at-grade footpath for connecting to station entrance	• 完整性會受到影響 • Integrity would be impaired

T1 區
T1 AREA

T1區及鄰近範圍的保育方案
Conservation Scheme for T1 Area and the vicinity

已修改的豎井設計
Launching shaft arrangement modified

修改通風設施佈局
Ventilation facility layout revised

鋼板樁保護牆
Sheet pile wall

石砌建築遺蹟 Stone building features
(原址保留 Preserve in-situ)

殘存房屋構件 Building remains
(原址保留 Preserve in-situ)

J1井 Well J1
(原址保留 Preserve in-situ)

車站平面圖
Station Plan

大堂 Concourse

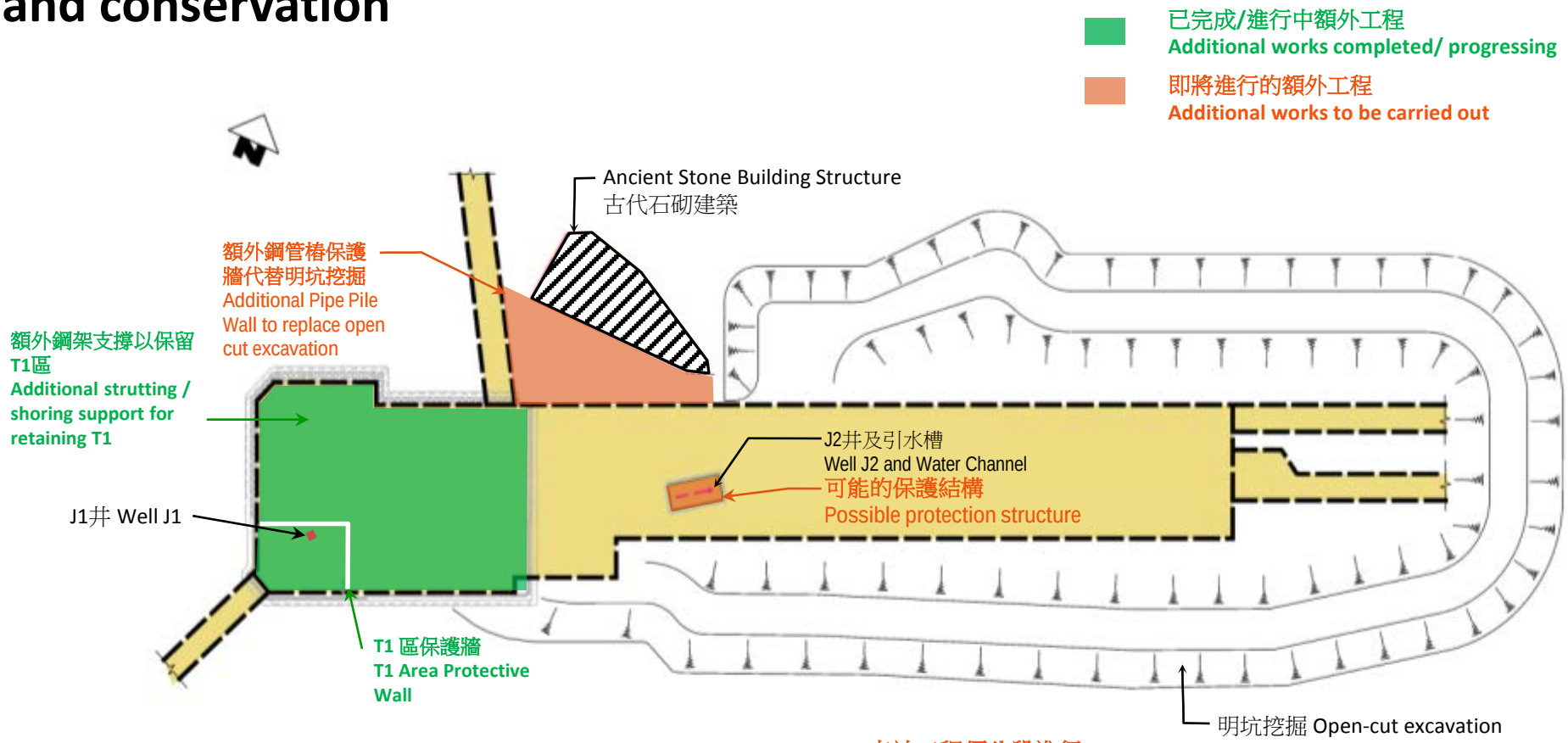
車站大堂展示櫃
Display Cabinets in Station Concourse

擴大車站範圍，容納原本位於T1區的機房及展示櫃位置
Extension of station area to accommodate plant rooms originally planned in T1 Area and display cabinets

整體工程影響
OVERALL IMPACT ON THE WORKS

修改建造方法以配合考古及保育工作

Modification of construction method to facilitate archaeological works and conservation



- 擴大考古隊伍以配合新增考古調查工作
- Expanded archaeologist team for extended survey work
- 因考古工作導致部分機械及人手未能正常運作
- Labour, plant and equipment cannot be normally deployed due to the archaeological works

車站工程須分段進行
Construction will be divided into phases

- 部分工序須重複進行
- Some procedures need to be carried out
- 額外監察及支撐工程
- Additional monitoring/ strut and shoring
- 額外鋼管保護牆以配合明坑挖掘
- Additional temporary pipe pile walls to allow open cut excavation

因配合考古工作而引致的工程滯後和額外開支 (按港鐵公司評估)

項	因應考古工作範圍的擴大，沙中線工程需要作出調整	沙中線「大圍至紅磡段」工程的滯後	沙中線工程額外開支@
1	**為配合由2013年12月至2014年9月底期間的擴大考古工作，沙中線工程無可避免作出調整** • 擴大考古工作範圍和時間，因而陸續有更多的考古發現 • 為減少影響考古工作，暫停部分隧道鑽挖機豎井和車站的建造工程 • 保護T1區遺蹟而建造臨時保護牆 • 更改豎井的臨時支撐架設計及調整豎井的建造工序	最少11 個月	約31 億元
2	**因應現時所建議的保育方案(即未包括J2井和引水槽及行人隧道C南端的石砌結構)，沙中線工程需要作出的調整** • 修改於T1區和附近的通風設施及機房的設計，以便原址保留該處遺蹟 • 建造額外的鋼管樁，以保護牆保護車站外北面的宋、元時期的石砌建築遺蹟，以便原址保留 • 增設文物展示櫃於車站大堂內，以便展示部分出土文物等	會延誤土瓜灣站的工期，但不致於為沙中線再帶來額外的滯後	另約10 億元
3	**因應J2井和引水槽的四個保育方案，沙中線工程需作出的調整)#**		
	方案一：	不會引致進一步額外的滯後	另約1千萬元
	方案二：	再起碼4 個月的額外滯後	另約8億元
	方案三：		另約13億元
	方案四：		另約12億元
	以上第一至第三項對工程的累積影響#：	• 最少11 個月(方案一) • 最少15 個月(方案二至四)	• 約41 億元(方案一) • 約49至54 億元(方案二至四)
4	**行人隧道C南端石砌結構的保育方案** 因行人隧道的替代路線，需待日後確定，所以現階段未能評估所需的相應工程改動	只會影響行人隧道C的建造，而不會影響土瓜灣站的完工日期	現階段未能評估

@沒有包括日後為展示遺蹟所需的工程費用。

#若保育方案未能在本年12月初落實，估計每遲1個月作決定，額外開支亦會增加約2億5仟萬元，亦會對工程帶來相應的滯後。

Delay and Additional Cost caused by the Archaeological Works (Assessment of MTRCL)

Item	Adjustments made to the SCL because of the expansion of the extent of archaeological work	Delay to works of the Tai Wai to Hung Hom section of SCL	Additional cost to SCL works@
1	**Adjustments to the SCL works for facilitating the expanded archaeological work between Dec 2013 and end-Sep 2014** • Expand the extent and period of archaeological work to unearth more archaeological features • Suspend part of the works of the TBM launching shaft and the station to minimise impact on archaeological work • Protect T1 Area by building temporary protection wall • Modify the design of temporary support and the construction sequence for launching shaft	At least 11 months	About $3.1 billion
2	**Adjustments to the SCL works for adopting the current proposed options of preserving remnants in-situ (not including Well J2 and the water channel, and the stone structure at the southern end of Adit C)** • Modify the design of the ventilation facilities and plant room at and near T1 Area, for preserving remnants in-situ • Erect additional steel pipe pile protection walls to protect the stone building features dated Song-Yuan period outside the northern side of the station for preserving the features in-situ • Place display cabinets at the station concourse to showcase part of the relics unearthed	Delay to construction period of To Kwa Wan Station but no further additional delay to the SCL	About $1 billion more
3	**Adjustments to the SCL works for adopting 4 conservation options for Well J2 and the water channel#**		
	Option 1：	No further additional delay	About $10 million more
	Option 2：	At least 4 months more	About $0.8 billion more
	Option 3：		About $1.3 billion more
	Option 4：		About $1.2 billion more
	Cumulative impact on the works from Items 1 to 3 above#:：	• At least 11 months more (Option 1) • At least 15 months (Options 2 to 4)	• About $4.1 billion (Option 1) • About $4.9 to 5.4 billion (Options 2 to 4)
4	**Conservation options for the stone structure at the southern end of Adit C** As the alternative tunnel alignment is yet to be confirmed, assessments on the corresponding adjustment on works cannot be made at this stage	Affect only the construction of Adit C and no impact on the completion date of To Kwa Wan Station	Assessments cannot be made at this stage

@It does not include the cost required for future display of relics.

#If the conservation option could not be finalized by early December 2014, it is estimated that the construction cost will be increased by about $250 million for every month delay in making the decision. The works will be affected with the corresponding delay.

- 完 -

- End -