

**ANTIQUITIES ADVISORY BOARD**

**Minutes of the Special Meeting**  
**on Thursday, 20 November 2014 at 10:05 a.m.**  
**in Conference Room, Hong Kong Heritage Discovery Centre**  
**Kowloon Park, Haiphong Road, Tsim Sha Tsui, Kowloon**

Present: Mr Andrew Lam Siu-lo, JP (Chairman)  
Mr Chan Ka-kui, BBS, JP  
Prof Chung Po-yin  
Prof Ho Pui-yin  
Mr Tim Ko Tim-keung  
Ms Lilian Law Suk-kwan, JP  
Mr Kenny Lin Ching-pui  
Ms Janet Pau Heng-ting  
Ms Yvonne Shing Mo-han, JP  
Prof Billy So Kee-long  
Dr Joseph Ting Sun-pao  
Ms Ava Tse Suk-ying, SBS  
Sr Wong Bay

Mr Asa Lee (Secretary)  
Senior Executive Officer (Antiquities and Monuments)  
Leisure and Cultural Services Department

Absent with Apologies:

Mr Stephen Chan Chit-kwai, BBS, JP  
Prof Rebecca Chiu Lai-har, JP  
Prof Ho Puay-peng, JP  
Mr Tony Lam Chung-wai  
Mr Philip Liao Yi-kang  
Prof Tracey Lu Lie-dan  
Mr Joseph Luc Ngai  
Dr Winnie Tang Shuk-ming, JP  
Ms Karen Tang Shuk-tak

Mr Conrad Wong Tin-cheung, BBS, JP

In Attendance:

Development Bureau

Mr Eric Ma  
Under Secretary for Development

Mr Albert Lam  
Deputy Secretary (Works)1

Miss Vivian Ko  
Commissioner for Heritage

Mr Ricky Wong  
Chief Assistant Secretary (Works) 2

Mr Allen Fung  
Political Assistant to Secretary for Development

Mr Ben Lo  
Assistant Secretary (Heritage Conservation) 2

Mr Eddie Wong  
Chief Executive Officer (Heritage Conservation)1

Ms Flora Loh  
Chief Information Officer

Leisure and Cultural Services Department

Ms Cynthia Liu  
Deputy Director (Culture)

Dr Louis Ng  
Assistant Director (Heritage and Museums)

Ms Fione Lo  
Executive Secretary (Antiquities and Monuments)

Ms Veta Wong  
Principal Information Officer (Cultural Services)

Mrs Ada Yau  
Curator (Archaeology)

Mr Ray Ma  
Assistant Curator I (Archaeological Preservation)2

Transport and Housing Bureau

Mr Raymond Cheng  
Principal Assistant Secretary for Transport and Housing  
(Transport)7

Highways Department

Mr Yeung Kong-sang  
Chief Engineer / Railway Development 1-3

Mr Stephen Wong  
Senior Engineer / Shatin to Central Link 2

MTRCL Representatives and Contractor

Mr Clement Ngai  
Chief Design Management (SCL)

Mr Peter Ip  
Construction Manager (Civil)

Mr Kelvin Wu  
Senior Liaison Engineer

Dr Liu Wensuo  
Licence Holder

Mr Raymond Ng  
Experience Archaeologist

### **Opening Remarks**

The Chairman welcomed Members and representatives from government bureaux and departments, in particular, Mr Eric Ma, Under Secretary for Development to the meeting.

**Item 1    Archaeological features discovered at the works site of the To Kwa Wan Station of the Shatin to Central Link and their proposed preliminary conservation & interpretation plans  
(Board Minutes AAB/45/2013-14)**

2.        The Chairman invited representatives from the Highways Department, Leisure and Cultural Services Department and MTR Corporation Limited (MTRCL) to brief Members on the proposed preliminary conservation and interpretation plans for the archaeological features discovered at the works site of To Kwa Wan Station of the Shatin to Central Link (SCL).

3.        Ms Fione Lo reported that fieldwork for the archaeological watching brief (AWB) at the works site of the To Kwa Wan Station of the SCL was substantially completed at the end of September 2014, while site cartographic and photographic records were compiled in October 2014. Members would be briefed at this meeting with a comprehensive account on the background information about the archaeological survey, the archaeological features discovered and their respective proposed conservation options. Members' comments would be sought for the proposed conservation options, including conservation options for Well J2 and its associated water channel, and the stone structures at the southern end of Adit C.

4.        Mr Yeung Kong-sang explained that To Kwa Wan Station was one of the works items under Contract 1109 of SCL comprising To Kwa Wan Station, Ma Tau Wai Station and the 1.6 km bored tunnel from To Kwa Wan Station to Ho Man Tin Station.

5. Ms Fione Lo supplemented that the SCL project, implemented by the MTRCL, was a designated project under the Environmental Impact Assessment Ordinance (EIAO). An archaeological survey-cum-excavation at the former Sacred Hill (North) Area was recommended in the approved Environmental Impact Assessment report. Dr. Liu Wensuo, an archaeologist engaged by MTRCL's Contractor of the To Kwa Wan Station of the SCL, was granted a licence by the Antiquities Authority in October 2012 to carry out the above mentioned archaeological works (the area covered by the licence was named as 'Part 1 Archaeological Area'). Related archaeological survey-cum-excavation was completed in December 2013. In September 2013, while MTRCL were constructing the launching shaft for the tunnel boring machines, over 500 coins mainly dated to the Song dynasty were found. The discovery was immediately reported to the Antiquities and Monuments Office (AMO) by the MTRCL. The AMO therefore requested the archaeological team to conduct an AWB at the launching shaft area (LSA) (named as 'Part 2 Archaeological Area') in December 2013. The AWB in Part 2 Archaeological Area was completed in April 2014. In response to the important discovery at Part 2 Archaeological Area, the area for AWB was further expanded in April 2014 (named as 'Part 3 Archaeological Area') to cover all MTRCL's remaining works areas, and the fieldwork in Part 3 Archaeological Area was substantially completed in September 2014.

6. Ms Fione Lo briefed Members on the key archaeological features unearthed from different archaeological areas at the works site of the To Kwa Wan Station, which included wells dated to Song-Yuan Period, stone building features, stone structures, stone footpath, building remains, a modern red brick well, a water channel and a wooden structure in a pit. Their respective conservation approaches were also introduced to seek Members' views, in particular the conversation options for Well J2 and the water channel, as well as the stone structures at the southern end of Adit C.

7. Ms Fione Lo pointed out that Well J2 was located within the footprint of the proposed station concourse, while the stone structures at the southern end of Adit C were within the proposed underground pedestrian link connecting from Pak Tai Street to the proposed To Kwa Wan Station. In order to strike a balance between heritage conservation and station re-design, there were four proposed conservation options for Well J2 and the water channel, and two conservation options for the stone structures at the southern end of Adit C.

8. Mr Yeung Kong-sang explained to Members the modifications of station construction works associated with the conservation options for the archaeological features at T1 Area, Well J2 and the stone structures at the southern end of Adit C. For the protection of the T1 Area within the Part 2 Archaeological Area and its vicinity, Mr Yeung Kong-sang mentioned that apart from the temporary sheet piling, the configuration of the launching shaft was modified and the ventilation facility layout would be revised. For the sake of heritage conservation, the station area would be extended to accommodate the plant rooms relocated from their original locations at the T1 Area. The design of the station concourse would also be adjusted to allow installation of display cabinets for some selected archaeological features unearthed.

9. Mr Yeung Kong-sang showed Members a section plan indicating the relative locations of Well J2, the water channel, the station roof and the station concourse. He then explained in detail each of the four proposed conservation options for Well J2 and the water channel including the pros and cons from various perspectives, including construction risks, impacts on the station design, as well as the heritage conservation issues related to each conservation option.

10. Mr Yeung Kong-sang went on to explain the two conservation options for the stone structures unearthed at the southern portion of Adit C and their respective impacts on the construction of Adit C, alternative route options, as well as the heritage conservation issues related to the proposed conservation options.

11. Mr Yeung Kong-sang reported that additional works had already been carried out for retaining the archaeological features unearthed at the T1 Area, including provision of additional strutting, shoring support and protective wall. The configuration of the launching shaft was also modified. The additional archaeological survey and modifications of design and construction method had affected the works progress and construction cost. To facilitate the implementation of conservation options, station re-design would be required and additional piling works would be needed to separate the stone building structure from the station construction. Modification on construction methods would also be required for protecting Well J2.

12. Mr Yeung Kong-sang summarised that most of the archaeological discoveries were proposed to be preserved in-situ, except for Well J2 and the stone structures at the southern end of Adit C which had different conservation options

to be considered; the wooden structure in a pit which had been retrieved off site for conservation treatment and the red brick well which would be preserved by record.

13. Mr Yeung Kong-sang briefed Members on the works delay in the construction works of the Tai Wai to Hung Hom Section of the SCL, and the additional cost generated from additional archaeological and construction works in each of the following aspects:

- (i) the additional archaeological works;
- (ii) the adjustment of SCL works for adopting the conservation options for preserving remnants in-situ (excluding Well J2, the water channel and the stone structures at the southern end of Adit C);
- (iii) the adoption of one of the conservation options for Well J2 and the water channel; and
- (iv) the additional cost of the conservation options for the stone structures at the southern end of Adit C that could not be assessed at this stage.

14. Mr Yeung Kong-sang told Members that if a decision on the conservation options could not be made by early December 2014, there would be additional construction cost of around \$250 million incurred for each month's delay, and the works progress would also be impeded correspondingly.

15. Ms Fione Lo revealed that most of the archaeological features discovered, including Well J1 and Well J5, would be preserved in-situ and displayed in the future Sung Wong Toi Park under the management of Leisure and Cultural Services Department. After showing an artistic impression of the interpretation of the T1 Area, she further pointed out that the cross-section of the soil strata at the T1 Area would be displayed with detailed interpretation for public education purpose. Besides, the archaeologists would choose suitable relics discovered for display in the concourse of To Kwa Wan Station. The AAB and the relevant District Council would be consulted in future regarding the interpretation plan of the archaeological discoveries.

16. In response to the Chairman's enquiry, Ms Fione Lo said that while the vicinity of current archaeological excavation areas had potential for further

archaeological discoveries, the extent and scope of further archaeological works would need to be decided when the project for the development of the Sung Wong Toi Park was implemented. As the park project would be a government capital works project, the project proponent would be required to submit to AMO a Heritage Impact Assessment report under the existing mechanism. AMO would consider whether an archeological excavation of the site would be required upon receipt of the project scope. Ms Fione Lo also clarified that part of Well J2 was truncated by a section of a water channel which was dated from the late Qing Dynasty to the early Republican period. With the AAB's earlier endorsement, Well J2 had been partly dissected in order to study its association with the water channel. The well could be reassembled in future, based on photographic and video records. Separately, Mr Yeung Kong-sang confirmed that the 11-month works delay and additional construction cost estimated at about \$3.1 billion had already been incurred arising from the additional archaeological works and discoveries. Mr Raymond Cheng supplemented that additional construction cost of about \$1 billion would be incurred for station redesign if the proposed conservation options for in-situ preservation of the archaeological remnants (not including Well J2 and the water channel, and the stone structures at the southern end of Adit C) were adopted. They would only lengthen the construction period of the To Kwa Wan Station but would not cause further additional delay to the SCL project. If conservation option 1 was adopted for Well J2, it would not cause further additional delay to the SCL project and the additional cost would be about \$10 million.

17. Mr Tim Ko opined that the water channel connected to Well J2 might be constructed in late Qing Dynasty for diverting water from the Sacred Hill to the well. The water channel, being the possible remnants of the Sacred Hill, showed the provision of public utilities to the rural society before urbanisation. Preserving the water channel in-situ could be a good opportunity to demonstrate Hong Kong as a civilised city which treasured her past and her history.

18. In reply to the enquiry by Mr Kenny Lin as to whether there was a preference from the archaeological viewpoint regarding the conservation option for Well J2, Dr Liu Wensuo said that Well J2 was probably constructed in the Song-Yuan period, but was then adaptively re-used in-between late Qing Dynasty to the Republican Period for diverting water from the Sacred Hill to Well J2. Since each of the four conservation options for Well J2 and the water channel had its own pros and cons, he therefore had no particular preference.



19. As for the enquiry made by Ms Lilian Law and Mr Kenny Lin on the additional construction cost, Mr Yeung Kong-sang explained that the incurred cost was only a rough estimate by MTRCL. A more accurate estimation would be worked out later, based on the detailed station redesign and adjusted construction method in accordance with the finalised conservation options. The estimation would be closely scrutinised by the Government's consultant. He added that SCL was a government-funded project and explained in detail the additional cost of \$3.1 billion which was generated from the additional archaeological works. Mr Raymond Cheng supplemented that SCL comprised different types of inter-related works projects, any delay in the works programme would lead to potential claims from the affected contractors. An accurate estimation could only be made when all claims were made known to them.

20. In response to the question of Ms Lilian Law regarding the user flow volume at the entrance connecting to Adit C, Mr Yeung Kong-sang estimated that, during morning peak hours, there would be about 4,000 passengers per hour gaining access to the To Kwa Wan Station from Pak Tai Street via Adit C.

21. Mr Chan Ka-kui enquired about the possibility of works delay of SCL if conservation option 3 was chosen for Well J2, in view that this conservation option would involve complicated structural works which would probably take more than 4 months to complete. Mr Peter Ip clarified that the additional works for building the station alone would take at least 4 months more to complete, and the corresponding delay caused to the overall SCL project would also be at least 4 months more. He added that this was an estimation based on the geological information available and the construction difficulties encountered. Mr Raymond Cheng supplemented that there was a construction risk if the piles had to be forced through isolated boulders, which might result in additional construction time and cost.

22. In response to the Chairman's enquiry about the method of construction works and the potential risk involved in conservation options 2 to 4, Mr Peter Ip explained that the works involved in these three conservation options were more complicated than the sheet piling works carried out at the T1 Area. He elaborated the works procedures involved, including the installation of sheet pile, temporary socket H-pile, horizontal pipe pile and steel I-beam. He pointed out that underpinning works was common in Hong Kong, which was usually applied to stable structures instead of historic structures.

23. Prof Ho Pui-yin opined that conservation options 3 and 4 were cost ineffective, as relocating Well J2 and the water channel below the ground level would make future display and interpretation of the archaeological discoveries difficult. Besides, it was worthwhile to preserve the water channel for public education about the pre-war social life in Hong Kong. Dr Louis Ng supplemented that AMO's comments principally took into account the historic and heritage value of Well J2. It was noted that the upper part of Well J2 was partially damaged in the early 20<sup>th</sup> century and therefore it was of relatively lower heritage value when compared to Well J1 and Well J5 which would be preserved in-situ. Other conservation options, such as dismantling and reassembling, were therefore proposed for Members' consideration apart from preservation in-situ.

24. In response to Ms Lilian Law's enquiry, Mr Raymond Cheng explained that conservation options 2 to 4 involved large-scale underground piling works for supporting Well J2, while conservation option 1 only involved 3D laser recording and manual relocation of the dismantled Well J2. Thus the construction cost of conservation option 1 was much lower than that of conservation options 2 to 4.

25. Ms Lilian Law and the Chairman raised concerns over the quality of reassembling skills in Hong Kong. Dr Liu Wensuo opined that the heritage value of Well J2 was relatively lower than the other two wells as it was partially damaged and no connecting remnants were unearthed in its surroundings. He, therefore, preferred dismantling Well J2 with proper recording and reassembling it in a nearby location. While noting that the reassembling of Well J2 without alteration was impossible, Dr Liu was confident that the structure and shape of Well J2 could be well preserved. The location and shape of each stone of Well J2 would be properly recorded for future reassembling.

26. Regarding Ms Ava Tse's query about conservation option 1 for the stone structures at the southern end of Adit C, Mr Raymond Cheng elaborated that surrounding areas of Adit C would be used as the temporary site for the LSA works. Not until the completion of the LSA works in the second half of 2017 that the archaeological fieldwork could be carried out. An alternative alignment of the pedestrian link could be further explored thereafter. Alternatively, for conservation option 2, if the stone structures could be preserved by record, part of the subway crossing Sung Wong Toi Road could be constructed to connect the at-grade passenger route connecting future Sung Wong Toi Park.

27. As gathered from the MTRCL, the Chairman understood that conservation option 2 only allowed the construction of a subway at Adit C to facilitate residents crossing Sung Wong Toi Road from Pak Tai Street. Mr Raymond Cheng confirmed and echoed that the feasibility of identifying an alternative alignment for connecting Adit C to the station concourse/entrance was still uncertain, depending on whether there would be archaeological features unearthed in the surrounding areas in future.

28. Regarding Mr Kenny Lin and Ms Ava Tse's suggestion of building a footbridge across Sung Wong Toi Road, Mr Raymond Cheng explained that archaeological survey would be required before building the footbridge foundation so as to prevent possible damage to the archaeological features underneath. Also, it was not feasible to conduct the archaeological survey earlier as it would further delay the LSA and SCL works. Mr Yeung Kong-sang supplemented that it might be feasible to build a footbridge than a subway, provided that an appropriate location could be identified for building it.

29. Ms Yvonne Shing pointed out that as far as she understood, the figures provided by MTRCL were the best estimation based on the available information. Members could make a decision based on the estimation and trust in Government's integrity in vetting the estimation. In this case, AAB should consider all factors when making a decision, such as cost, time, archaeological and historic value, public convenience, as well as the SCL works programme. Giving the above, she would prefer conservation option 1 for Well J2 and the water channel, and conservation option 2 for the stone structures at the southern end of Adit C.

30. Ms Lilian Law suggested reviewing the design of Entrances C and D when all the archaeological works in the surrounding areas was completed, so that a more comprehensive and cost-effective planning on the design could be achieved.

31. Mr Raymond Cheng clarified that enlargement of Entrance D was required to cater for the passengers diverted from Entrance C. Regarding conservation option 2 for the stone structures at the southern end of Adit C, the original plan was to build a subway from Entrance C to the station concourse. If a temporary subway crossing Sung Wong Toi Road could be built, it could be extended to full length to connect the station concourse underground after

completion of the archaeological works. The temporary at-grade passengers route on the ground would only become a permanent arrangement if a full length subway could not be built because of further discovery of archaeological features along the route. The Chairman would like MTRCL to clarify that the construction of either a subway or a temporary footbridge crossing Sung Wong Toi Road would not affect the feasibility of building an underground pedestrian link to and from Pak Tai Street to the To Kwa Wan Station; however, it would be subject to the discovery of any archaeological features along the proposed pedestrian link. Mr Raymond Cheng confirmed that the Chairman's understanding was correct.

32. Prof Billy So echoed the view of Ms Yvonne Shing in general. He stressed the importance of public education in heritage conservation through a comprehensive interpretation of the archaeological findings unearthed.

33. Ms Janet Pau emphasised that AAB should make a recommendation from the heritage conservation perspective and it would be more appropriate for the Government to consider the conservation options taking into account all relevant factors. In general, she would prefer the conservation approach to dismantle and reassemble Well J2 based on Dr Liu Wensuo's professional advice.

34. Mr Tim Ko echoed the view of Ms Janet Pau and opined that the water channel also had very high heritage value. He also enquired if funding was already set aside for the archaeological research as requested by the Environmental Impact Assessment report at the beginning of the SCL works, it should be careful in defining the cost as "additional" when referring to the expenses incurred for the additional archaeological works.

35. Sr Wong Bay noted that most of the archaeological features unearthed would be preserved in-situ, except the red brick well, Well J2 and the stone structures at the southern end of Adit C. There were many different ways of preserving archaeological discoveries, in which the best conservation principle was minimal disturbance. He opined that conservation options 2 to 4 for Well J2 and the water channel involved very complicated underpinning works with high risks. He therefore considered conservation option 1 for well J2 and its associated water channel more practical and easier to manage. He added that the adoption of 3D technology to scan Well J2 prior to dismantling could also enhance the quality of reassembling the ancient well later on.

36. Mr Raymond Cheng elaborated that the archaeological works conducted in the Part 1 Archaeological Area had been included in the works schedule and project cost of SCL. Additional construction cost and time were incurred when the archaeological works were extended to other works areas of the To Kwa Wan Station upon discovery of archaeological features in those areas.

37. In response to the Chairman's enquiry, Mr Peter Ip replied that the distance between Well J1 and J5 was around 120 meters.

38. Dr Louis Ng said that further study would be conducted to ascertain the correlation among the archaeological features and the way to present the associations of all these features, inter alia Well J2, with the social life in Song-Yuan period. There would be opportunities to discuss and decide the interpretation plans for the archaeological relics and remnants in future after considering Members' advice.

39. The Chairman emphasised that as future archaeological works might still be carried out, the overall conservation and interpretation plans discussed today would be subject to future modifications.

40. Mr Tim Ko expressed that it was a valuable opportunity to present the history of Hong Kong by interpreting the archaeological features unearthed in different ways. Prof Chung Po-yin echoed Mr. Tim Ko's view and suggested that a comprehensive interpretation plan would be beneficial for both education and heritage tourism purposes.

41. In response to the Chairman's enquiry, Mr Raymond Ng elaborated that consolidation of findings was in progress and the draft final report in respect of the archaeological discoveries unearthed in Part 1 Archaeological Area would be available by late December 2014. Regarding the reports for Part 2 and Part 3 Archaeological Areas, they would be available around the first quarter of 2015. In summary, there were around 800 to 1,000 boxes of general and special finds in Part 1 Archaeological Area, and it would take a long time to prepare a preliminary report on the analysis of the ceramic sherds discovered. As for Part 2 and Part 3 Archaeological Areas, the consolidation work was yet to be started and around 200 to 400 boxes of finds were found in these Areas.

**Item 2 Any Other Business**

42. There being no other business, the meeting was adjourned at 12:42 p.m.

Antiquities and Monuments Office  
Leisure and Cultural Services Department  
March 2015

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