

Pollard-CNCEC Joint Venture

Contract No. 11/WSD/11
Replacement and Rehabilitation of
Water Mains Stage 4 Phase 2:
Archaeological Watching Brief Report

September 2014

Environmental Resources Management

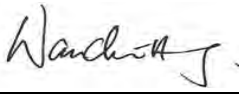

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Water Mains Stage 4 Phase 2:
Archaeological Watching Brief Report

September 2014

Reference 0193744

For and on behalf of ERM-Hong Kong, Limited	
Approved by:	<u>Frank Wan/ Guo Lixin</u>
Signed:	 
Position:	<u>Partner/ Licence Holder</u>
Date:	<u>September 2014</u>

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摘要

水務署委託普立-中化聯營(承建商)進行更換及修復水管工程第4階段第2期 - 荃灣及葵青水管工程 (合約編號11/WSD/11)(合約)，香港環境資源管理顧問有限公司則受承建商所委託，按合約要求在工程開展至馬灣古代稅關遺址及馬灣刻石兩個香港具考古研究價值的地點的範圍內時進行考古監察。

在古物古蹟辦事處審批考古監察計劃書，並由古物事務監督批核相關牌照予合資格考古學家後，考古監察於2013年8月26日至28日以及9月3日進行，其中可見所有監察地點均被過去幾十年間為鋪設現代設施而進行的挖掘工程所擾亂，所有屬本合約的水管均被置於現代填土中。由於沒有發現任何文化遺物，本工程並無帶來任何考古影響。

SUMMARY

Pollard-CNCEC Joint Venture (the Contractor) has been commissioned by the Water Supplies Department to carry out the *Replacement and Rehabilitation of Water Mains Stage 4 Phase 2* under *Contract No. 11/WSD/11* (the Contract). ERM-Hong Kong, Limited has been commissioned by the Contractor to carry out the Archaeological Watching Brief (AWB) during the construction phase, when the excavation works were carried out within the boundaries of the Sites of Archaeological Interest of Ma Wan Old Customs Stations and Ma Wan Rock Inscription in accordance with the Contract requirements.

After the AWB proposal has been agreed with the Antiquities and Monument Office (AMO) and relevant licence has been obtained by the qualified archaeologist, the AWB was carried out on 26 to 28 August 2013 and 3 September 2013. The findings of the AWB show that the monitored trenches had been highly disturbed by previous excavations for the laying of the existing utilities in the last few decades. It is confirmed that all the proposed water mains to be constructed under this Works Contract will be laid in the modern fill soil layer. No remain of archaeological interest are identified in the potential impact area and hence the proposed works will not have archaeological impact.

1.1 PROJECT BACKGROUND

Pollard-CNCEC Joint Venture (the Contractor) has been commissioned by the Water Supplies Department (WSD) to carry out the *Replacement and Rehabilitation of Water Mains Stage 4 Phase 2* (the Project) under Contract No. 11/WSD/11 (the Contract).

According to the approved Final Archaeological Survey Proposal of the Project, an Archaeological Watching Brief (AWB) should be carried out when the excavation works are undertaken within the boundaries of archaeological sites (now known as Sites of Archaeological Interest) – Ma Wan Old Customs Stations and Ma Wan Rock Inscription. Areas requiring AWB are shown in Figures 88g and 88h of the Final Archaeological Survey Proposal but the proposed works alignment has been updated and presented in *Figure 1.1* as “new alignments to be constructed”.

ERM-Hong Kong, Limited (ERM) has been commissioned by the Contractor to carry out the AWB during the construction phase as required in Clause 31.01(1) of Section 31 of the Particular Specification (PS). An *Archaeological Watching Brief Proposal (AWB Proposal)* which details the scope of the monitoring has been prepared and submitted to the Antiquities and Monuments Office (AMO) for agreement. The agreed AWB Proposal was used to support the application of a *Licence to Excavate and Search for Antiquities* under the *Antiquities and Monuments Ordinance* (Cap 53) (the licence) before the commencement of the AWB. The licence was granted to Dr Guo Lixin on 10 June 2013 and the AWB was conducted on 26 to 28 August and 3 September 2013.

This *AWB Report* presents the findings of the AWB.

1.2 ARCHAEOLOGICAL TEAM MEMBERS

The individuals participated in the AWB were as follows:

Ms Peggy Wong Project Manager

Dr Guo Lixin Licenced Archaeologist

In addition to the above team members, 4 labourers were employed by the Contractor for the Project works, who also assisted the archaeologist in conducting necessary works for the AWB. Field recording and post-AWB processing of field records were led by Dr Guo Lixin and carried out by Ms Peggy Wong and Ms Kitty Liu. Maps and drawings were produced by Ms Kitty Liu, and GIS and graphic teams of ERM.

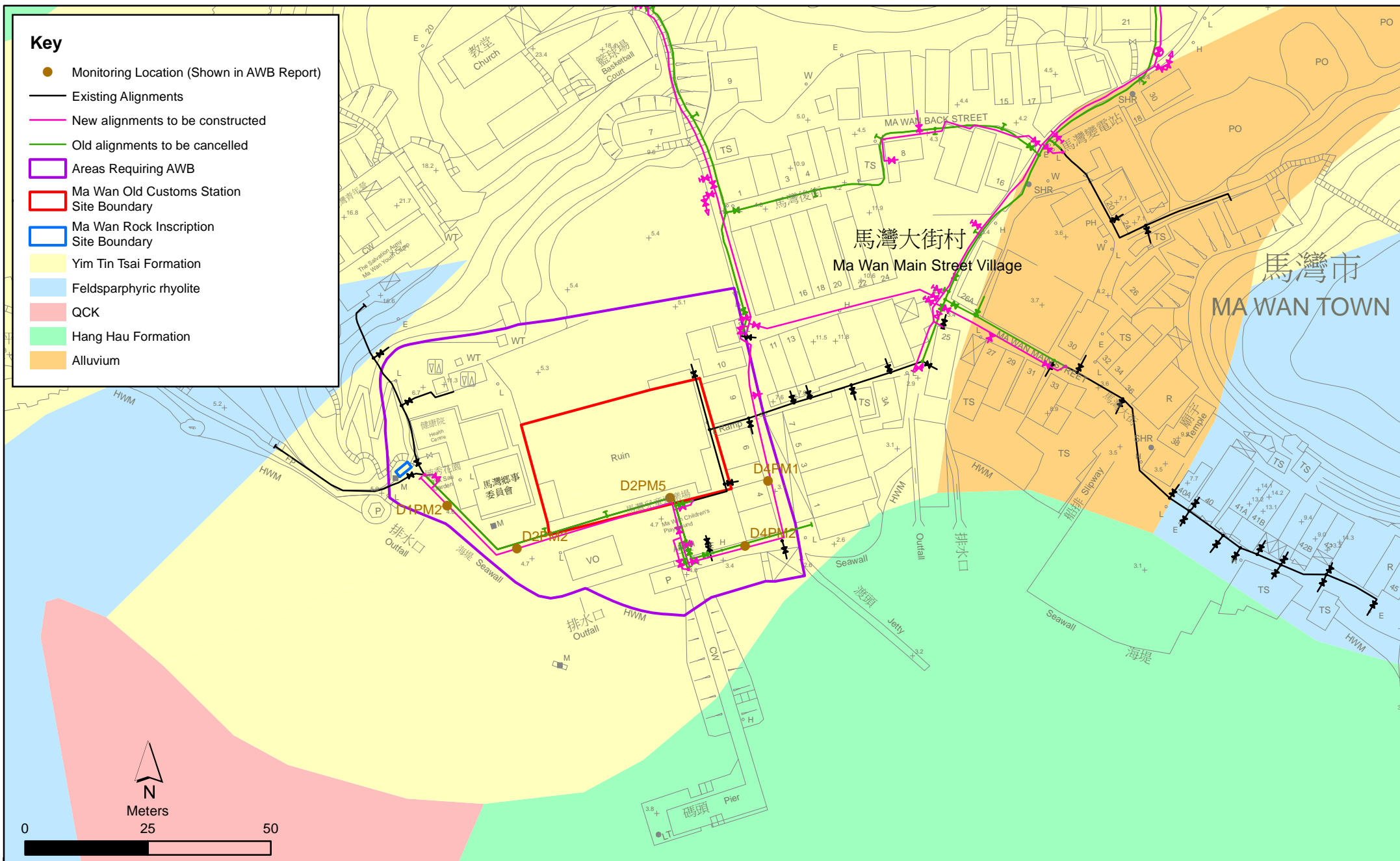
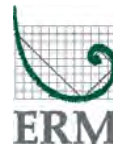


Figure 1.1

Areas requiring AWB

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Authors of this *Report* include: Dr Guo Lixin, Ms Peggy Wong and Ms Kitty Liu.

1.3

STRUCTURE OF THE REPORT

Following this introductory section, the remainder of the *AWB Report* comprises the following sections:

- Section 2* presents the objectives, scope and methodology;
- Section 3* presents the typological, geological, archaeological and historical background;
- Section 4* presents the findings of the AWB;
- Section 5* presents the conclusion; and
- Section 6* presents the bibliography.

This *Report* is supported by the following Annexes:

- Annex A* presents the findings of the AWB at each monitoring location; and
- Annex B* presents the photographic records of the AWB.

2.1 OBJECTIVES

The objectives of this AWB are to ensure any identified archaeological resources (if any) within the excavation areas are adequately recorded and recovered, and appropriate measures are taken on site to minimise the impact on the archaeological remains within the excavation areas and to minimise delays to the construction programme.

2.2 SCOPE

In accordance with the approved *AWB Proposal*, the AWB shall be carried out when the excavation works are carried out within the boundaries of Sites of Archaeological Interest of the Ma Wan Old Customs Stations and Ma Wan Rock Inscription. The areas requiring AWB are shown in *Figure 1.1*. The excavation works involved generally include the excavation of a trench with a dimension of about 0.5m wide and 1.0m deep along for the proposed water main alignments (see *Figure 1.1*).

In addition, a buffer zone (minimum of 2m or as large as site restrictions allow) should be set up at Ma Wan Rock Inscription Site of Archaeological Interest and no ground works should be allowed within this buffer zone during the construction phase.

In case of discovery of antiquities / archaeological deposits in the course of the excavation works for the AWB, AMO should be informed and the archaeologist should recommend and agree with AMO the appropriate mitigation measures which may include review of the water main alignments or depth of the excavation in the affected areas.

2.3 METHODOLOGY**2.3.1 Pre-AWB Tasks**

An *AWB Proposal* including the latest Project site area and alignments, a review to refine the scope of the AWB, proposed monitoring frequency and other necessary information (such as the objectives, methodologies, resources and equipment deployed on site and the programme of field works) has been prepared and agreed with the Engineer and AMO prior to applying for a *Licence*. The licence was granted to Dr Guo Lixin on 10 June 2013.

2.3.2 Buffer Zone Erection

As a mitigation measure to protect the Ma Wan Rock Inscription, a buffer zone (minimum of 2m or as large as site condition allows) was set up by the Contractor and no construction works were allowed within the buffer zone. A warning signage was also established within the buffer zone to alert the

workers and the general public of the Ma Wan Rock Inscription during the works. The warning sign will be placed during the period of the construction works.

2.3.3 *Archaeological Watching Brief Field Monitoring*

The archaeologist has taken a full coverage approach to monitor the excavation works within the Sites of Archaeological Interest of the Ma Wan Old Customs Stations and Ma Wan Rock Inscription. Monitoring was not required when the construction works are related to laying of water main, non-excavation works and backfilling of the trenches.

2.3.4 *Reporting*

Upon completion of the AWB, this *AW B Brief Report* is prepared to present the findings of the AWB in accordance with the requirements of the AMO's *Guidelines for Archaeological Reports* and submitted to the Engineer and AMO for comment.

Upon acceptance of the final *AWB Report*, the report will be provided to AMO for keeping in the Reference Library of the Hong Kong Heritage Discovery Centre and a soft copy (.pdf format) of the report will be provided to AMO for upload to the AMO's website for public inspection.

Field records were prepared following the recording system presented in the agreed *AWB Proposal*.

3.1 *TYPOLOGICAL AND GEOLOGICAL BACKGROUND*

3.1.1 *Typological Background*

According to the Hong Kong geographic data published by the Hong Kong Lands Department, Ma Wan has an area of 0.97 square kilometres with about 1.5 km long and 1.3 km wide⁽¹⁾. Its highest point is Tai Leng Tau (69 mPD) in the southeast of the island. Much of the area is traditionally agricultural land, though now largely abandoned, with fish farming predominating on Ma Wan.

The area requiring AWB is located on flat seashore area at the west of Ma Wan. The area faces the Kap Shui Mun Channel which separates Ma Wan from the Tsing Chau Tsai Peninsula of Lantau Island.

3.1.2 *Geological Background*

Even though superficial deposits can be found extensively offshore in surrounding regions, the area at the Kap Shui Mun Channel and around Ma Wan comprises one of the largest expanses of exposed rock at the seabed in Hong Kong territorial waters. Because of the strong currents, non-deposition occurs and very little superficial sediments in this area are found⁽²⁾.

North Lantau Island and Ma Wan are situated in a complex zone of intrusions on the boundary between two contrasting structural domains. The rocks are composed dominantly of Mesozoic granites and volcanics which are intruded by a strongly ENE-WSW oriented porphyritic rhyolite dyke swarm. The volcanic rocks of the North-East Lantau Island and Ma Wan are intruded by granite, granodiorite, porphyritic rhyolite and mafic dykes⁽³⁾. The area requiring AWB is located solely on Yim Tin Tsai Formation (*see Figure 1.1*)⁽⁴⁾.

3.2 *ARCHAEOLOGICAL BACKGROUND*

A number of previous archaeological studies were conducted in Ma Wan. In 1981 and 1983 - 85, surface examinations of Tung Wan (東灣) and Tung Wan Tsai (東灣仔) of Ma Wan were conducted by the AMO and by Peacock and Nixon, respectively. Red clay kiln debris dated to Tang dynasty was found at Tung Wan Tsai⁽⁵⁾. Undisturbed deposits of historic and prehistoric remains were found in 1993⁽⁶⁾. Excavation conducted in 1994 by Dr Rogers

(1) Survey & Mapping Office, "Hong Kong Geographic Data 2013", Lands Department, February 2013

(2) R.J. Sewell and J.C.W. James (1995), Chapter 7 of "Geology of North Lantau Island and Ma Wan (1995)"

(3) R.J. Sewell and J.C.W. James (1995), Chapters 2 and 3 of "Geology of North Lantau Island and Ma Wan (1995)"

(4) *ibid*

(5) Peacock, B.A.V. and T.J.P. Nixon, 1988, "The Hong Kong Archaeological Survey: Subsurface Investigation Reports", AMO occasional Paper, 1, Hong Kong

(6) Bard, S., 1993. "Report on Historical and Archaeological Survey of Ma Wan Island, Jan./Mar. 1993". (Unpublished).

in the area where numerous small assemblages of ceramics, bronze, worked shell and faunal and molluscan remains were found suggested that the site can be dated back from the Early to Late Bronze Age (1500 – 500 BC) to the second century AD ⁽¹⁾. Another excavation at Tung Wan in 1997 was conducted by the AMO and the Institute of Archaeology of the Chinese Academy of Social Sciences. Twenty burials with associated grave goods comprising pottery and stone artefacts dated from the Middle and Late Neolithic to early Bronze Age were discovered in a sandbar, indicating early human activities on the island. This excavation was awarded “Ten Most Significant New Archaeological Discoveries in China in 1997” of the year ⁽²⁾.

3.3

HISTORICAL BACKGROUND

The inhabitation of Ma Wan according to the historical record can be traced back to 250 years ago by the Hakka (客家) clan of Chan (陳) at Tin Liu village (田寮村) of Ma Wan. Originated from Jiang Xi (江西), the Chan clan moved to Ma Wan from the island of Tsing Yi (青衣) between 1695 and 1743. Ma Wan town, located at the western part of the island, was originally established by the Tanka (蛋家) boat-dwelling. However, the developments in the last 150 years have made the town inhabited by people from all over the regions.

During the survey conducted by the Royal Auxiliary of Lantau and Ma Wan in 1794, the residents of the island were all fishermen. A customs station was established on Ma Wan by the Chinese Imperial Maritime Customs in 1870. The custom station went under to the administration of Kowloon Customs after it was established in 1887. Two inscribed stones dated 1897 were established at the north-west of the island. One stone was inscribed “The Kowloon Customs” (九龍關) and the other one was inscribed “Kowloon Customs leased seven feet of land in twenty third year of Guangxu (1897)” (光緒二十三年九龍關借地七英尺). The custom station stopped its operation after the New Territories was leased to Britain in 1899 ⁽³⁾. In the census conducted of that year, the population of the Ma Wan island was recorded as 400. The major occupations of the inhabitants were fishing, farming and animal husbandry.

- (1) Rogers, P.R. et al. 1995. “Tung Wan Tsai: A Bronze Age and Han Period Coastal site. Hong Kong: AMO Occasional Paper No.3”.
- (2) AMO & Home Affairs Bureau, 1998, “Archaeological discoveries from Tung Wan Tsai North, Ma Wan : one of the ten most important new archaeological discoveries in China, 1997”
- (3) 蕭國健, 沈思. 1996. 《失落的歷史》. 衛奕信文物信託贊助。

4.1

BUFFER ZONE ERECTION

A fence off buffer zone was set up at the Ma Wan Rock Inscription Site of Archaeological Interest as shown in *Figure 4.1* where no ground works will be allowed. A warning signage was also established to alert the workers and the general public of the Ma Wan Rock Inscription during the works.



Figure 4.1 Fenced Off Buffer Zone during construction works and a Warning Signage was Placed at the Ma Wan Rock Inscription.

4.2

FINDINGS OF THE AWB

The AWB was carried out on 26 to 28 August and 3 September 2013.

Full coverage monitoring was conducted during the excavation of trenches for the water main alignments. A total of approximately 135m long trench of the works alignments were monitored.

The excavation trenches monitored are with the size of approximately 0.5m wide (except in area where other underground utilities were identified and the width was extended up to 0.9m). The excavation depth ranges from 0.4m to 1m subject to site conduction.

The findings of the AWB show that the trenches monitored have been highly disturbed by the previous excavation works for the installation of the existing utilities in the last few decades. No remains of archaeological interest have been identified within the AWB area. As the excavation for the trench under this Contract will be carried out within the disturbed fill soil layer(s), no archaeological impact will be anticipated due to the excavation works within the AWB area.

Typical soil profiles at the five locations monitored are illustrated in *Figure 1.1*. Detailed information of each location is presented in *Annex A* and the key findings are summarised below.

The NW-SE running alignment along location D1PM2 mainly requires shallow excavation (about 0.4m below existing ground level) where the water main will be placed in the fill soil layer.

The E-W running alignment along locations D2PM2 and D2PM5 and the S-N running alignment south of D2PM5 show the same stratigraphy with layers of fill soil.

The E-W and N-S running alignments along locations D4PM2 and D4PM1, respectively, are located at the level over 1m lower than D2PM2, D2PM5 and D1PM2. Again, the water mains will be placed in the fill soil layer.

In summary, as all the water mains will be placed in the fill soil layer which had been highly disturbed by previous excavation works. No remains of archaeological interest are identified in the AWB area.

As the part of the excavation works for the laying of the water mains under the Contract falls within the Ma Wan Old Customs Stations and Ma Wan Rock Inscription Sites of Archaeological Interest, an Archaeological Watching Brief (AWB) has been carried out prior to the commencement of the construction of the water mains. The trenches for the laying of the water mains within these two Sites of Archaeological Interest were fully monitored in the AWB.

The AWB shows that the trenches monitored have been highly disturbed by previous excavation works for laying of the existing utilities in the last few decades. No remains of archaeological interest were identified in the AWB. As all the water mains will be placed in the fill soil layer which have been highly disturbed, the proposed excavation works for the laying of the water mains will not have archaeological impact.

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AMO file: AM96-0687 馬灣古代稅關遺址

AMO file: AM01-1639 馬灣石刻

AMO & Home Affairs Bureau, 1998, "Archaeological discoveries from Tung Wan Tsai North, Ma Wan : one of the ten most important new archaeological discoveries in China, 1997".

Bard, S., 1993. "Report on Historical and Archaeological Survey of Ma Wan Island, Jan./Mar. 1993". (Unpublished).

Black & Veatch Hong Kong Limited (B&V). 2011. *Agreement No. CE 10/2008 Replacement and Rehabilitation of Water Mains Stage 4 Mains in New Territories – Investigation, Design and Construction: Archaeological Survey Proposal (Final)*. B&V ref code: 2833/B&V/0028 Issue I. Unpublished, Water Supplies Department, the Government of the Hong Kong Special Administrative Region (HKSAR).

Black & Veatch Hong Kong Limited (B&V). 2011. *Agreement No. CE 10/2008 Replacement and Rehabilitation of Water Mains Stage 4 Mains in New Territories – Investigation, Design and Construction: Heritage Impact Assessment Report (Final)*. B&V ref code: 2833/B&V/0032 Issue I. Unpublished, Water Supplies Department, the Government of the Hong Kong Special Administrative Region (HKSAR).

Peacock, B.A.V. and Nixon, T.J.P. 1988, "The Hong Kong Archaeological Survey: Subsurface Investigation Reports", AMO occasional Paper, 1, Hong Kong.

Rogers, P.R. et al. 1995. "Tung Wan Tsai: A Bronze Age and Han Period Coastal site. Hong Kong: AMO Occasional Paper No.3".


Sewell R.J. and James J.C.W.. 1995. *Geology of North Lantau Island and Ma Wan*. [information online] available from:
http://www.cedd.gov.hk/eng/publications/sheet/sheet_g4.htm

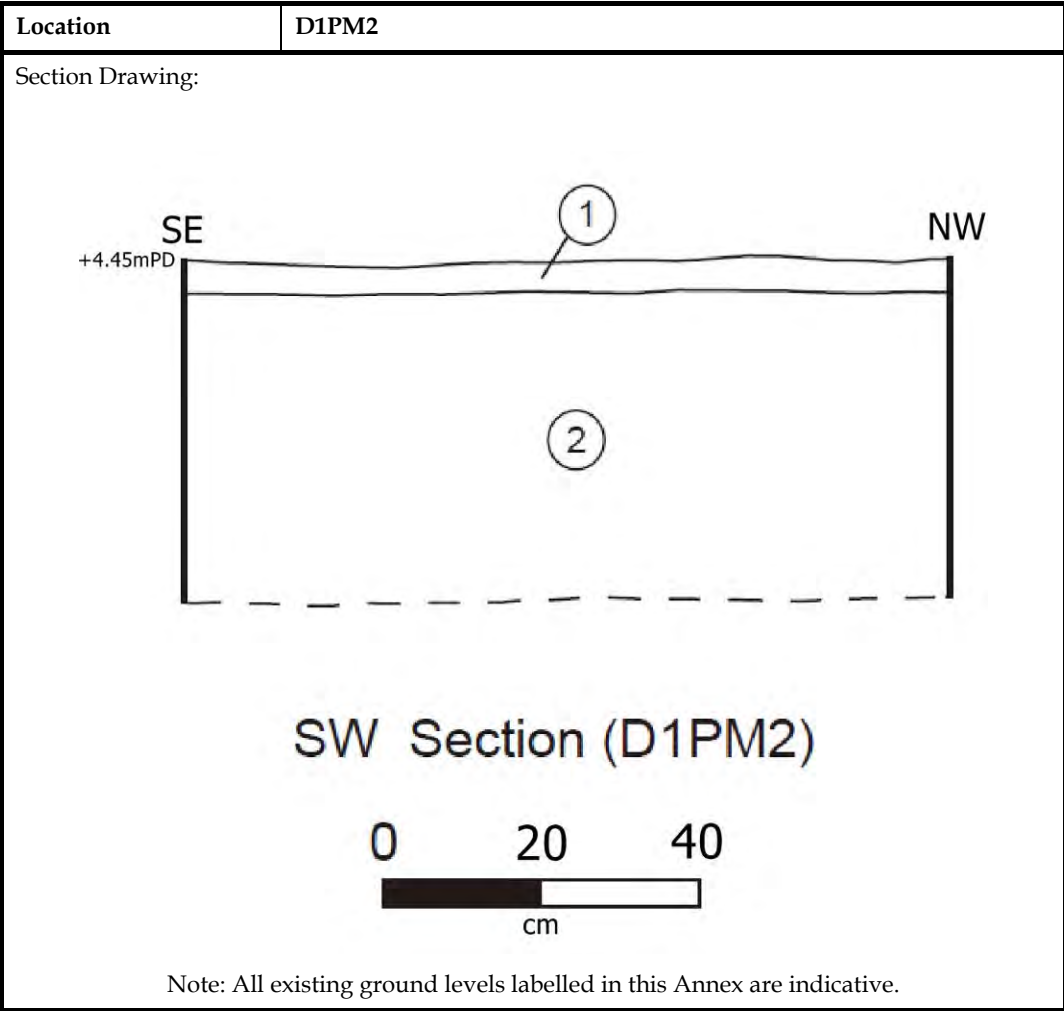
Survey & Mapping Office, Lands Department. 2013. "Hong Kong Geographic Data 2013." [information online] available from:
http://www.landsd.gov.hk/mapping/en/publications/hk_geographic_data_sheet.pdf


蕭國健, 沈思. 1996. 《失落的歷史》. 衛奕信文物信託贊助。

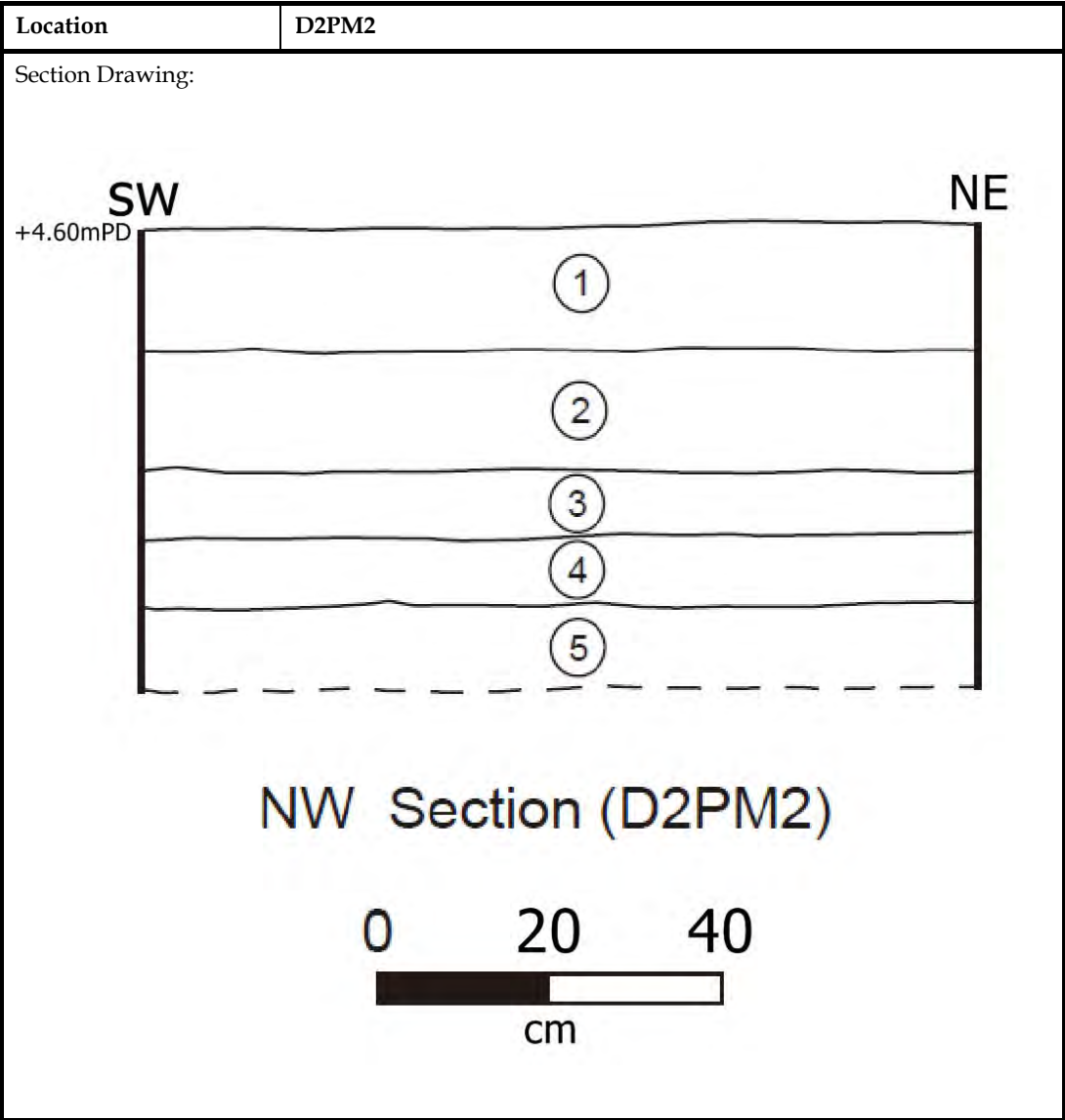
Annex A


Field records of Archaeological Watching Brief

Location	D1PM2				
Monitoring Date	26 Aug 2013	Reference Figure No.	1.1		
Excavation Method:					
Open trench excavation construction method. Mechanical excavation together with manual labours excavation subject to site condition was adopted for soil excavation from ground level to the required level (approximately 0.40m below existing ground level (bgl)).					
Findings and discovery:					
No archaeological remain had been identified.					
Stratigraphy:					
Layer	Description	Cultural Remains	Dating and Interpretation	Approximate Depth from Existing Ground Level (m)*	Thickness (m)
1	Concrete, surface soil	None	Modern	0-0.05	0.05
2	Yellow sandy soil	None	Modern	0.05 -0.40	0.4
* Depth is measured from the ground level to the surface of each layer					
Section View:					

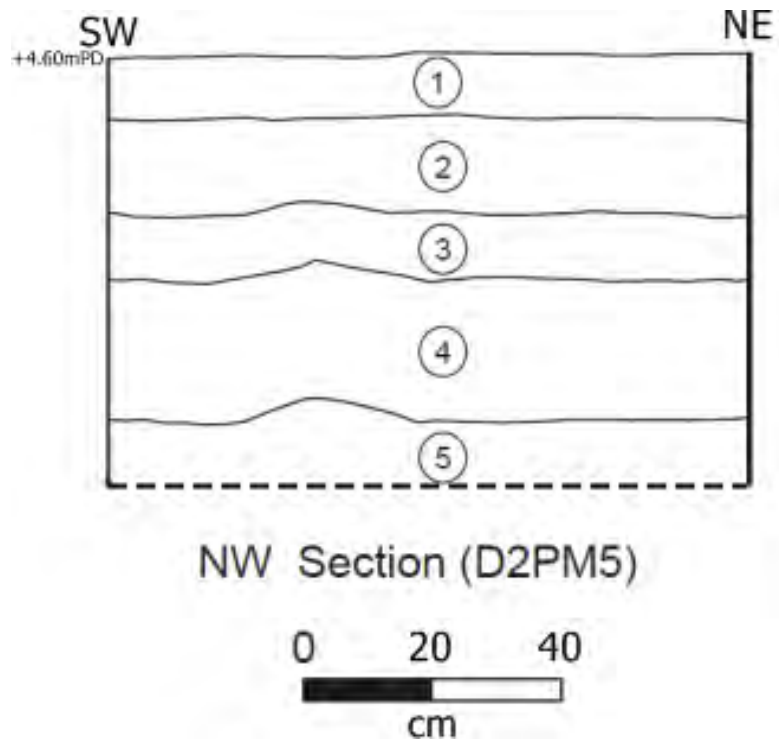



Location	D2PM2				
Monitoring Date	27 Aug 2013	Reference Figure No.	1.1		
Excavation Method:					
Open trench excavation construction method. Mechanical excavation together with manual labours excavation subject to site condition was adopted for soil excavation from existing ground level to the required level (approximately 0.56m bgl).					
Findings and discovery:					
No archaeological remain had been identified.					
Stratigraphy:					
Layer	Description	Cultural Remains	Dating and Interpretation	Approximate Depth from Existing Ground Level (m)*	Thickness (m)
1	Concrete, surface soil	None	Modern	0-0.15	0.15
2	Greyish red fill soil	None	Modern	0.15-0.3	0.15
3	Greyish yellow fill soil	None	Modern	0.30-0.38-	0.08
4	Reddish Sandy fill soil	None	Modern	0.38-0.46	0.10
5	Yellow sandy soil	None	Modern	0.46 -0.56	0.08
* Depth is measured from the ground level to the surface of each layer					
Section View:					
					
NW Section of D2PM2					



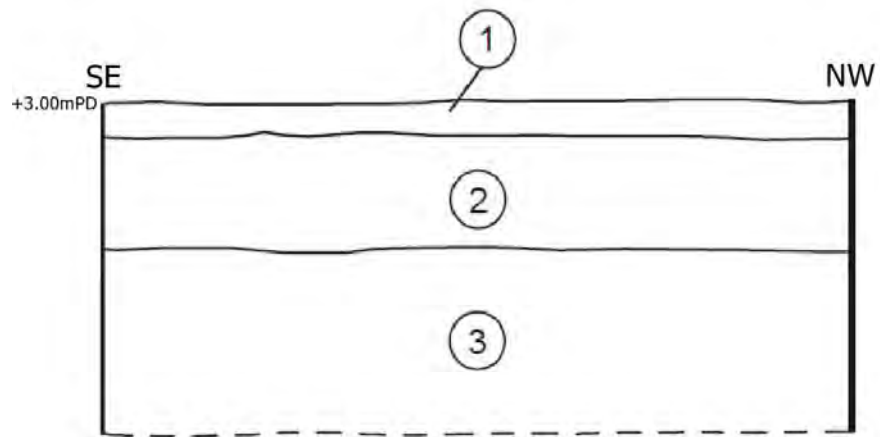
Location	D2PM5				
Monitoring Date	27 Aug 2013	Reference Figure No.	1.1		
Excavation Method:					
Open trench excavation construction method. Mechanical excavation together with manual labours excavation subject to site condition was adopted for soil excavation from the existing ground level to the required level (approximately 0.57m bgl).					
Findings and discovery:					
No archaeological remain had been identified.					
Stratigraphy:					
Layer	Description	Cultural Remains	Dating and Interpretation	Approximate Depth from Existing Ground Level (m)*	Thickness (m)
1	Concrete, surface soil	None	Modern	0-0.10	0.10
2	Yellow brown soil fill soil	None	Modern	0.10-0.25	0.15
3	Yellow fill soil	None	Modern	0.25-0.35	0.10
4	Greyish white sandy soil	None	Modern	0.35-0.57	0.22
5	Yellow sandy soil	None	Modern	0.57	
* Depth is measured from the ground level to the surface of each layer					
Section View:					
					
NW Section of D2PM5					

Section Drawing:



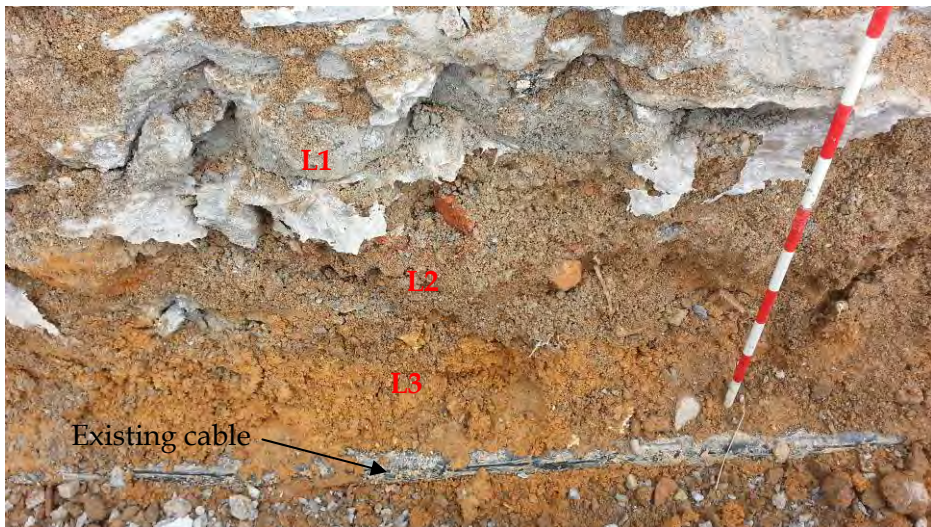
Location		D4PM1			
Monitoring Date		3 Sep 2013	Reference Figure No.	1.1	
Excavation Method:					
Open trench excavation construction method. Mechanical excavation together with manual labours excavation subject to site condition was adopted for soil excavation from the existing ground level to the required level (approximately 0.45m bgl).					
Findings and discovery:					
No archaeological remain had been identified.					
Stratigraphy:					
Layer	Description	Cultural Remains	Dating and Interpretation	Approximate Depth from Existing Ground Level (m)*	Thickness (m)
1	Concrete, surface soil	None	Modern	0-0.05	0.05
2	Yellow brown fill soil	None	Modern	0.05-0.20	0.15
3	Yellow fill soil	None	Modern	0.20-0.45	0.25
* Depth is measured from the ground level to the surface of each layer					
Section View:					
<div><div>Existing Utility</div></div>					
SW Section of D4PM1					

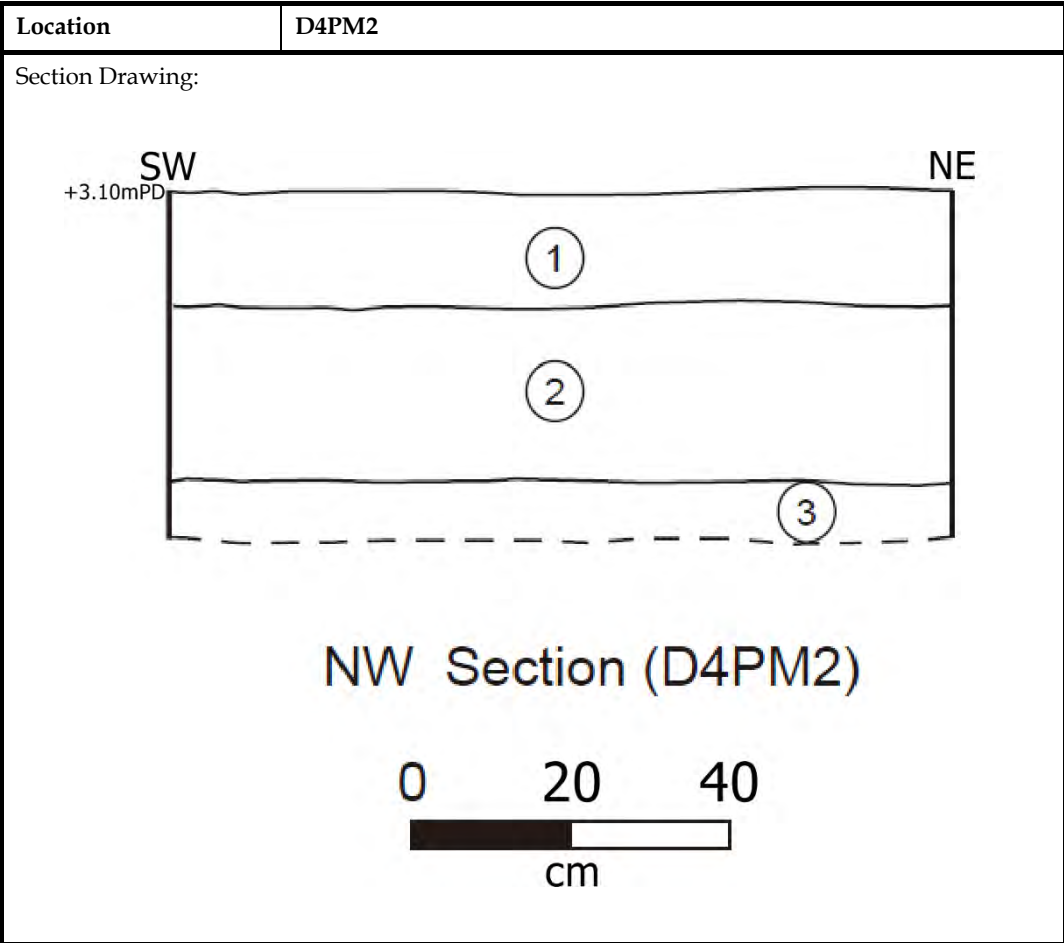
Section Drawing:



SW Section (D4PM1)



Location	D4PM2				
Monitoring Date	3 Sep 2013	Reference Figure No.	1.1		
Excavation Method:					
Open trench excavation construction method. Mechanical excavation together with manual labours excavation subject to site condition was adopted for soil excavation from the existing ground level to the required level (approximately 0.45m bgl).					
Findings and discovery:					
No archaeological remain had been identified.					
Stratigraphy:					
Layer	Description	Cultural Remains	Dating and Interpretation	Approximate Depth from Existing Ground Level (m)*	Thickness (m)
1	Concrete, surface soil	None	Modern	0-0.15	0.15
2	Yellow brown fill soil	None	Modern	0.15-0.38	0.23
3	Yellow fill soil	None	Modern	0.38-0.45	0.07
* Depth is measured from the ground level to the surface of each layer					
Section View:					
					
NW Section of D4PM2					



Annex B

Photographic Records of the Archaeological Watching Brief



Photo B1 General view around D1PM2 (View to West)



Photo B2 Top view of D1PM2



Photo B3 SW Section of D1PM2



Photo B4 General View around D2PM2 (View from East to West)



Photo B5 Section of D2PM2 (View from SE to NW)



Photo B6 Section of D2PM5 (View from SE to NW)



Photo B7 General View from D2PM5 to South



Photo B8 General View of the area around D4PM2 (View from West to East)



Photo B9 Northwest Section of D4PM2. Existing cables at the bottom of the trench and the water main is laid on top of the cables.



Photo B10 General View around D4PM1. (View from North to South)



Photo B11 SW Section of D4PM1