



中國路橋工程有限責任公司
CHINA ROAD AND BRIDGE CORPORATION

CEDD CONTRACT No. ST/2008/02

Ma On Shan Development - Roads, Drainage and Sewerage Works at White Head and Lok Wo Sha Phase 1

*Archaeological Survey and Action Plan for the Project Area of
Roads D1(N) and Road D1 (W)*

*(also named, by AMO, as Proposal for Undertaking the Archaeological Survey
Cum Rescue Excavation)*

Specialist Sub-contractor:
Environmental Resources Management

SUBMITTED BY:

CHINA ROAD AND BRIDGE CORPORATION

Unit 1805-10, 18/F., K. Wah Centre,
191 Java Road,
North Point,
Hong Kong

Telephone: (852)-2283 1688

Facsimile: (852)-22831689

E-mail: crbchk@crbc.com.hk

Website: www.crbc.com

China Road and Bridge Corporation

Contract No. ST/2008/02
Ma On Shan Development - Roads,
Drainage and Sewerage Works at
Whitehead and Lok Wo Sha Phase 1:
*Proposal for Undertaking the
Archaeological Survey Cum Rescue
Excavation*

July 2009

Environmental Resources Management

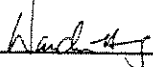
21/F Lincoln House
979 King's Road
Taikoo Place
Island East, Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
<http://www.erm.com>

REPORT

China Road and Bridge Corporation

Contract No. ST/2008/02
Ma On Shan Development - Roads,
Drainage and Sewerage Works at
Whitehead and Lok Wo Sha Phase
*1: Proposal for Undertaking the
Archaeological Survey Cum Rescue
Excavation*

July 2009

For and on behalf of ERM-Hong Kong, Limited	
Approved by:	Frank Wan
Signed:	
Position:	Partner
Date:	30 July 2009

This report has been prepared by ERM-Hong Kong, Limited with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

INTRODUCTION

In accordance with the requirements of *Section 40.03 of the Particular Specification (PS) of Ma On Shan Development – Roads, Drainage and Sewerage Works at Whitehead and Lok Wo Sha Phase 1, Contract No. ST/2008/02 (the Contract)*, a proposal for undertaking the archaeological survey cum rescue excavation is prepared and submitted herewith to the Engineer and the Antiquities and Monuments Office of the Leisure and Cultural Services Department for agreement. The Contractor for the Contract (i.e. China Road and Bridge Corporation) has commissioned ERM-Hong Kong, Limited (ERM) as the specialist sub-contractor to carry out the archaeological works. On behalf of the Contractor, ERM will submit an application to obtain a licence to excavate and search for antiquities under the *Antiquities and Monuments Ordinance* for this Contract.

1.1 BACKGROUND OF THE SUBJECT SITE

It is known that two archaeological investigations were conducted at the subject site in Wu Kai Sha, Sha Tin, between 2006 and 2008. The first archaeological investigation was conducted by Archaeological Assessments Limited in October 2006 ⁽¹⁾, whereas the second one was conducted by the Hong Kong Institute of Archaeology in December 2008 for *Ma On Shan Development – Engineering Works at Whitehead and Lok Wo Sha Phase 1 – Design and Construction under Agreement No. CE34/2006(CE)*. The latter survey revealed that there is a cultural deposit dating to the Ming dynasty in the subject site. Further to these previous investigations, the current archaeological works are proposed to preserve archaeological data and remains at the subject site by record before commencement of the proposed road works. Location of the proposed archaeological works area is shown in *Figure 1*.

1.2 OBJECTIVES OF THE ARCHAEOLOGICAL SURVEY CUM RESCUE EXCAVATION

In accordance with *Clause 3.1 under Part C (Permit Conditions) of the Environmental Permit No. EP-332/2009 for the Feasibility Study for Housing Development at Whitehead & Lee On in Ma On Shan, Sha Tin*, an archaeological survey for the project area of road D1(W) according to the recommendations of the EIA report is required to be submitted to the Director of Environmental Protection for approval before commencement of construction of that part of the Project. The recommended area requiring archaeological field evaluation is illustrated in *Figure 2*. Between the approval of EIA report and issuance of Environmental Permit, two archaeological investigations were conducted to evaluate the archaeological potential of the subject site and assess the impact. The archaeological investigations conducted in 2006 and 2008 revealed that there is a cultural deposits in the subject site. In view of the presence of

(1) The report is not available for review.

archaeological remains and adverse impact from the proposed construction works, a survey cum rescue excavation is required to preserve the remains and data by record.

1.3

METHODOLOGY FOR THE ARCHAEOLOGICAL SURVEY CUM RESCUE EXCAVATION

The archaeological works will include the following tasks.

Task 1 - Field Survey

The location of the archaeological survey cum rescue excavation is shown in *Figure 1*.

The archaeological investigation will be led by Dr Jin Zhiwei who will also act as the Site Agent and competent supervisor in charge of the archaeological works. The methodology for the archaeological works is described below which complies with the requirements *Sections 40.06 to 40.09* of the *PS*.

Task 1a : Setting out of the Works Area

The land surveyor of the Contractor will set out the location of the archaeological works area in accordance with *Figure 1*. The based point and reference line will be clearly defined and certified by the land surveyor and will be presented in a 1:1000 scale map in the *Archaeological Report*.

Task 1b : Excavation

The archaeological works will be excavated manually with standard grids (about 5m x 5m) from east to west direction in an orderly manner under the supervision and direction of the licensed archaeologist. Subject to the distribution of archaeological remains, the excavation will be continued and extended. Upon discovery of any artefacts and archaeological features, the Engineer or his representative will be notified immediately. Due care will be exercised to prevent any damages to the artefacts and archaeological features found in the excavated area.

Daily field works records will be prepared which will include the following information:

- A schedule detailing the field works completed during each day;
- A report on the resources and equipment deployed on site;
- A report on artefacts and archaeological features discovered and the method of treatment and conservation; and
- Weather conditions.

The archaeological team will record the field archives during the course of the field works. All field achieves will be included in the annex of the *Archaeological Report*. The field archive will be undertaken in accordance with

the requirements of *Section 40.07 of the PS* and will make reference to AMO's *Guidelines for Handling of Archaeological Finds and Archives*.

There are a number of existing trees within the archaeological works area which need to be preserved or transplanted. Due care will be exercised to protect and not to disturb these existing trees, in particular the roots of the existing trees.

The levels of the excavated area will be surveyed and certified a land surveyor.

The excavated materials will be properly stockpiled on-site wherever possible. If this is not possible, the materials will be disposed of to proper disposal sites agreed by the Engineer. The excavated area will be fenced off and protected from being disturbed until the approval of the *Final Archaeological Report* by the Engineer or AMO.

Task 1c : Relics and Archives Processing and Recording

All unearthed archaeological remains will be collected, recorded, dated and sorted, and representative archaeological remains will be photographed and drawn. All photographs to be taken will be in colour with the date, time, crew identification contained and a minimum of 4 Mega pixels in resolution in JPEG format. The relics and field records will be processed and analysed in accordance with *Section 40.12 of the PS* as well as the *Guidelines for Handling of Archaeological Finds and Archives (as at Oct 2006)* established by the AMO.

According to *Section 10 of Antiquities and Monuments Ordinance (1)*, the archaeological relics ownership vest in the Hong Kong SAR Government. Upon submission of the final *Archaeological Report* to the Engineer, the finds, artefacts and archives arising from the Contract will be handled over to AMO in accordance with the conditions of the licence under the *Antiquities and Monuments Ordinance* or as instructed by the Engineer.

Task 2 - Reporting

The objectives, methodology and key findings of the field investigation will be presented in the *Archaeological Report*. Six copies of the draft *Archaeological Report* will be submitted to the Engineer and AMO for comment within 14 days upon completion of the field investigation works and conservation of the artefacts and archaeological features (if applicable). The format of the report will make reference to the requirements of AMO's *Guidelines for Archaeological Report*. Upon resolution of AMO's comments, the report will be finalised. Six copies of the final *Archaeological Report* will be submitted to the Engineer.

(1) Under Section 10 (1) of the *Antiquities and Monuments Ordinance*, the ownership of every relic discovered in Hong Kong after the commencement of this Ordinance shall vest in the Government from the moment of discovery.

1.4

RESOURCES AND EQUIPMENT

The archaeological investigation will be led by a qualified archaeologist, Dr Jin Zhiwei, who will obtain the *Licence to Excavate and Search for Antiquities* under the *Antiquities and Monuments Ordinance*. A copy of Dr Jin's CV is provided in *Annex A*. He will be supported by ERM's in-house cultural heritage specialist, Miss Audrey Tam, a team of labourers (up to about 10 people) and ERM's graph team. The location of the archaeological works and the volume of soil excavated will be surveyed by a land surveyor.

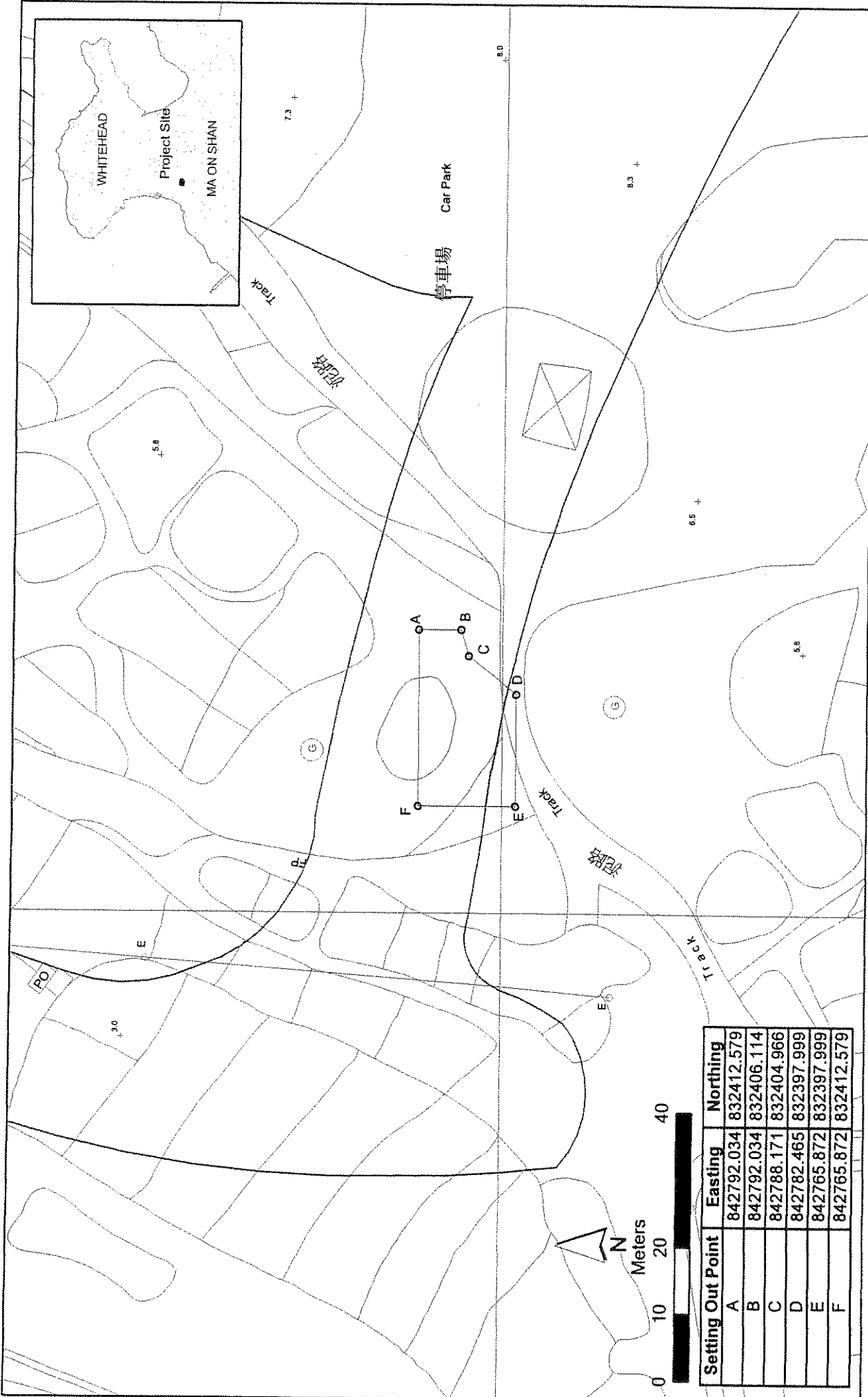
The excavation will be carried out by hand digging method. Standard hand tools for archaeological works will be used for the excavation works.

1.5

PROGRAMME OF THE ARCHAEOLOGICAL FIELD WORKS

It is anticipated that the archaeological works will commence in early to mid September 2009. The works will take about 2 months to complete.

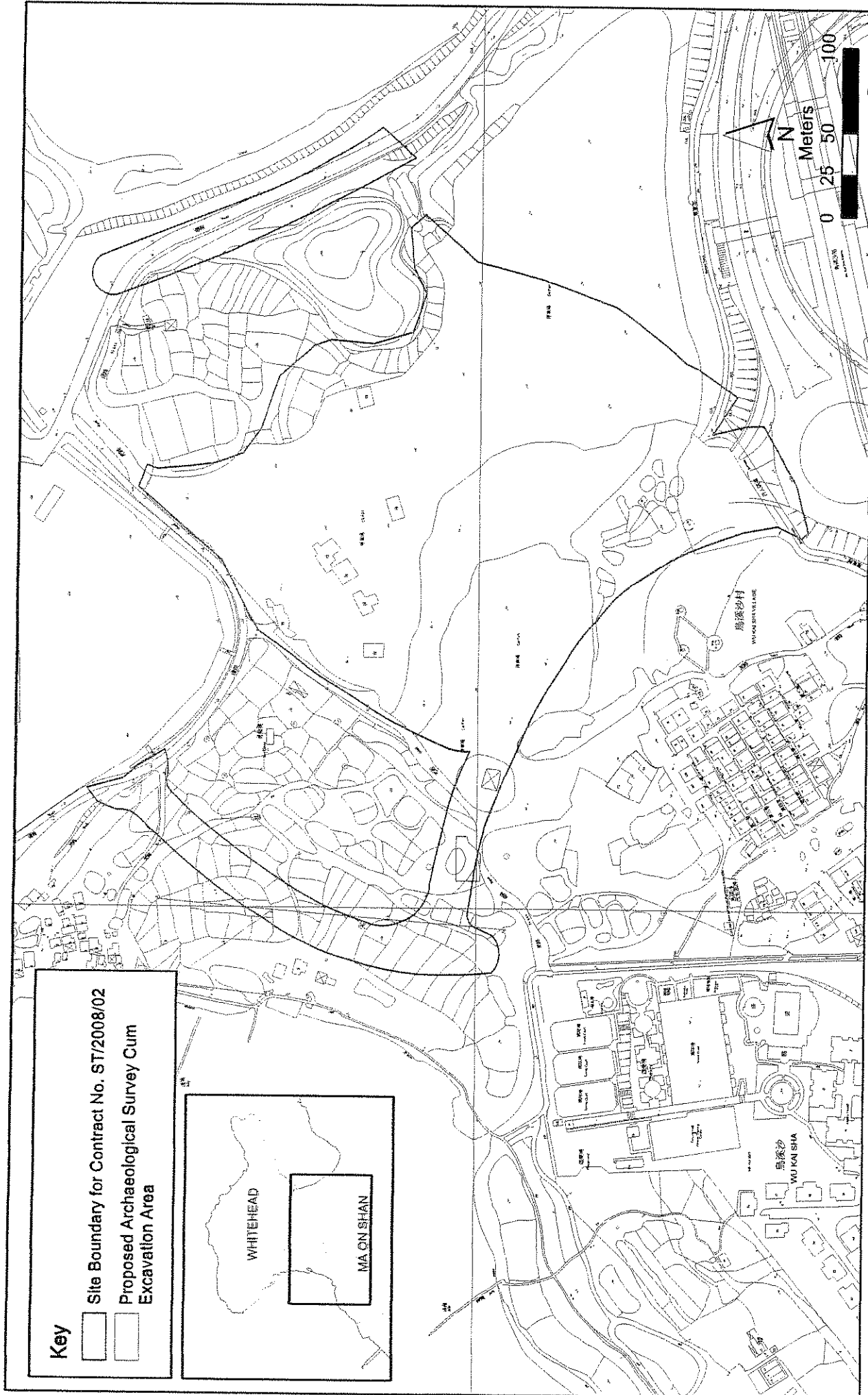
The Contractor will notify the Engineer at least 48 hours before the commencement of the field works so that arrangement can be made by the Engineer or representatives of AMO to inspect the works.





Setting Out Point	Easting	Northing
A	842792.034	832412.579
B	842792.034	832406.114
C	842788.171	832404.966
D	842782.465	832397.999
E	842765.872	832397.999
F	842765.872	832412.579

Figure 1

Area of Archaeological Survey Cum Rescue Excavation



Key

-  Site Boundary for Contract No. ST/2008/02
-  Proposed Archaeological Survey Cum Excavation Area

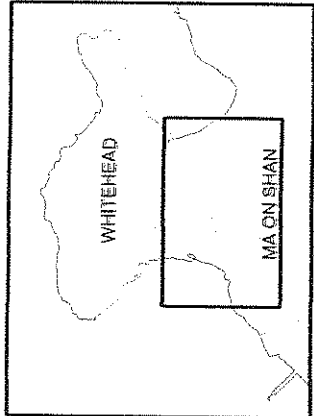


Figure 2
Proposed Archaeological Survey Cum Excavation Area
(Ma On Shan Development - Roads, Drainage and Sewerage Works at Whitehead and Lok Wo Sha Phase I)

Fig. 0103003 recommended area.mxd
Date: 05/08/2009

Annex A

CV of Dr Jin Zhiwei

Dr Jin Zhiwei (金志偉)

Cultural Heritage Specialist

Dr Jin is an associated archaeologist with ERM and has over 18 years archaeology investigation and excavation experience in Hong Kong and in Mainland China.

Apart from field archaeology experience, Dr Jin acts as the Lecturer of the Sun Yat-sen University to provide lecture on Archaeology in the Anthropology Department.

Dr Jin was involved as field archaeologist to participate in the Territory Wide Archaeological Survey in Hong Kong between 1997 and 1998 covering the Tuen Mun and Tsuen Wan areas for the Antiquities and Monuments Office. He was also invited as field archaeologist to assist in the rescue excavation for the Neolithic archaeological site at Sai Kung Ho Chung where fruitful archaeological deposits were unearthed.

In addition, Dr Jin had also assisted AMO to conduct finds processing work for artefacts discovered from So Kwu Wat archaeological site in Tuen Mun.

With Dr Jin's involvement in AMO's archaeological projects, he is very familiar with the archaeological field practice, standards and requirements in Hong Kong.

In 2001, Dr Jin obtained the qualification as the archaeological excavation team leader under the State Administration of Cultural Heritage in China and had led a number of archaeological excavations in China.

Dr Jin is also a qualified archaeologist to apply for a licence *To Excavate and Search for Antiquities* under the *Antiquities and Monuments Ordinance* in Hong Kong and has recently obtained the Licence to conduct an archaeological survey at Cheung Sha on Lantau Island for an archaeological impact assessment.

Fields of Competence

- Archaeological Investigation
- Archaeological Rescue Excavation
- Archaeological Impact Assessment
- Social Impact Assessment
- Anthropological Survey

Education

- PhD in Anthropology, Sun Yat-sen University, China, 2007
- MA in Archaeology, Peking University, China, 1996
- BA in Archaeology, Peking University, 1992

Qualification

- Certificate of Archaeological Excavation Team Leader, State Administration of Cultural Heritage, China, 2001 to present
- Lecturer, Sun Yat-sen University, China, 1998 to present

Languages

- Chinese
- English

Working Experience

- Tutor of Archaeology Department of Peking University, China, 1992 to 1993
- Lecturer, Archaeology Section of the Anthropology of the Sun Yat-sen University, China, 1996 to present

Key Projects

Dr Jin has conducted numerous archaeological surveys and excavations projects in Hong Kong and in China. Key project Dr Jin led or participated include:

Hong Kong Projects:

- Archaeological Investigation for Planning and Engineering Study of Private Housing Development at Cheung Sha, Lantau – feasibility Study, for CEDD via Scott Wilson, 2008
- North East New Territories New Development Areas Planning and Development Studies, for PlanD and CEDD via ARUP, 2008 - on-going.
- Tuen Mun District Archaeological Investigation as part of the Territory Wide Archaeological Survey, for AMO, 1997-1998.
- Archaeological Excavation at Ho Chung Archaeological Site in Sai Kung, for AMO, 2001
- Finds Processing of Archaeological Discovery from So Kwu Wat archaeological site in Tuen Mun, for AMO, 2005

Prior to obtaining the certificate of Archaeological Excavation Team Leader from the State Administration of Cultural Heritage, Dr Jin was heavily involved to assist the excavation team leader in leading two archaeological excavation projects, comprising:

- Archaeological Excavation and Reporting of Ba Li Jiang archaeological site in Tang Zhou City of Henan Province (河南省鄧州市八里崗遺址) in 1992. The excavation was led by Assistant Professor Zhang Jiangkai (張江凱). Dr Jin acted as the tutor to supervise undergraduates from Peking University to conduct the excavation;
- Archaeological Excavation and Reporting of Wang clan village archaeological site in Bei Hai Village, Lu Shun Kou District in Dalian City of Liaoning Province (遼寧省大連市旅順口區北海鄉王家村遺址) in 1994. The excavation was led by Curator Mr Xin (辛) from the Archaeological Institution of Liaoning Province (遼寧省考古研究所). Dr Jin was the field director to lead the archaeological excavation.

As the qualified archaeological excavation team leader, Dr Jin has led a number of archaeological excavations in China as listed below.

- Archaeological Excavation and Reporting for the Shao Peng Zui archaeological site in Zhong County of Chongqing City (重慶市忠縣哨棚嘴遺址) in 2002.
- Archaeological Excavation of a Grave Yard at Shi Xia Zi in Zhong County of Chongqing City (重慶市忠縣石匣子墓群) in 2007.
- Archaeological Excavation and Reporting of Men Huo archaeological site in Xi Chuan County in Henan Province (河南省淅川縣門夥遺址) in 2007.

Archaeological Excavation or Investigation participated by Dr Jin:

- Archaeological Excavation for the Qu Chuan archaeological site in Qu Wo County in Shanxi Province (山西省曲沃縣天馬一曲村遺址) in 1990
- Archaeological Investigation and Reporting for Bei San City in Dalian City of Liaoning Province (遼寧省大連市北三市) in 1995.
- Archaeological Excavation and Reporting of Niu Lan Cave archaeological site in Yun Ling Town, Ying De City of Guangdong Province (廣東省英德市雲嶺鎮牛欄洞遺址) in 1996 and 1997.
- Archaeological Excavation at Guangxiao Temple in Guangzhou City in Guangdong (廣州市光孝寺) in 1999 and 2000.
- Archaeological Excavation at Heng Ling Mountain Grave Yard in Bo Luo County in Guangdong Province (廣東省博羅縣橫嶺山墓群) in 2000.
- Archaeological Investigation at the Gu Jie Yang and Rong Jiang area in Guangdong (廣東“古揭陽及榕江流域考古調查和試掘”) in 2003 and 2004.

Other projects

- Social Impact Assessment for the Gan Yue Highway project in Jiangxi Province (江西省贛粵高速公路) for World Bank;
- Social Impact Assessment for the the Tong Tang Highway project in An Hui Province (安徽省銅湯高速公路) for World Bank.
- Social Impact Assessment for the modernisation of agricultural industry in Zhong Shang Rao district in Jiangxi Province (江西省農業現代化專案) for World Bank.
- Social Impact Assessment at the middle Hailongjiang Province (黑龍江省) due to the Promotion of Agricultural Technology for World Bank.

- Social Impact Assessment for the Agricultural Technology Promotion Project for World Bank.
- Christian Study at the Shangzha Town in Jiexi County in Guangdong Province (廣東省揭西縣上砂鎮);
- Social Assessment for the Environmental Protection Project at Da Li Zhou in Yunnan Province (雲南省大理州) for World Bank.

Publications

"Region Rule and Behavioural Choice (宗教規範與行為選擇)" in *Qing Hai Race Study (青海民族研究)*, February 2006

"The Existing Catholic Church Investigation in Shang Shan (上山天主教會現狀調查)" in *Qing Hai Race Study (青海民族研究)*, April 2006

"Views on Internet Museum (對網上博物館的一點看法)" (co-author) in *China Museum (中國博物館)*, March 2004

"Summary Report of Archaeological Investigation at the Niu Lan Cave archaeological site in Yun Ling Town, Ying De City of Guangdong Province (英德雲嶺牛欄洞遺址試掘簡報)" (co-author) in *Jiangnan Archaeology (江漢考古)*, January 1998.

"Ancient Cultural Remains and Archaeological Investigation for Gou Liao Chung in Ying De City of Guangdong Province (廣東英德沙口狗了沖古文化遺存與試掘)" (co-author) in *Jiangnan Archaeology (江漢考古)*, January 1998.

"Summary Report on the Neolithic Cultural Site at North Dalian (大連北部新石器文化遺址調查簡報)" (co-author) in *Academic Journal of Liaohai Relics (遼海文物學刊)*, January 1997.