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H 02532

Your Ref :
Our Ref : (CV/2013/08)/M45/200/(H02532)

30 August 2016

By Hand

Environmental Impact Assessment Ordinance Register Office
Environmental Protection Department
27/F, Southorn Centre,
130 Hennessy Road,
Wanchai, Hong Kong

Attn.: Mr. Charles Pang

Dear Sirs,

Contract No. CV/2013/08
Liantang / Heung Yuen Wai Boundary Control Point
Site Formation and Infrastructure Works – Contract 6

Environmental Permit No. EP-404/2011/C
Condition 2.14 – Archaeological Surveys
Submission of Archaeological Survey Report

With reference to Condition 2.12 of the Environmental Permit (EP) No. EP-404/2011/C for the captioned Project titled "Liantang / Heung Yuen Wai Boundary Control Point and Associated Works", on behalf of the Permit Holder, Civil Engineering and Development Department (CEDD), I would like to submit three hard copies of the Archaeological Survey Report covering the works areas in Contract 6 of the Project, certified by the ET Leader and verified by the IEC, for your approval.

The Report had been commented by AMO. No further comment was given by AMO via email dated 8 August 2016. The Contractor has submitted sufficient copies of the Report to AMO separately.

Should you have any queries, please contact our Resident Engineer Mr. Perry Yam at tel. no. 2171 3350.

Yours faithfully,

Simon Leung
Chief Resident Engineer
AECOM Asia Co. Ltd.

Encl.

c.c.	AMO	- Attn: Mr. C. H. Fung	- w/o encl.
	CEDD/BCP	- Attn: Mr. Steve Lo	- 1 hard copy
	AECOM	- Attn: Mr. Francis Leong / Mr. Pat Lam	- with CD only
	SMEC(IEC)	- Attn: Mr. Antony Wong	- with CD only
	AUES(ET)	- Attn: Mr. T. W. Tam	- with CD only
	CCKJV	- Attn: Mr. Vincent Chan	- w/o encl.
	R05/900		- w/o encl.

SL/GW/PY/kmps

YAM Man Tung, Perry

From: Kitty Liu <Kitty.Liu@erm.com>
Sent: Monday, August 08, 2016 1:55 PM
To: vincent-wong@continental-engineering.com
Cc: YAM Man Tung, Perry; Daniel Wong; Peggy Wong
Subject: Fw: Contract No. CV/2013/08-Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works - Contract 6_Archaeological Survey Report

Dear Vincent,

Forwarded AMO's confirmation on the acceptance of archaeological survey report. We will prepare the required hard copies and soft copies.

Best regards,
Kitty

From: CH FUNG <chfung@lcsd.gov.hk>
Sent: Monday, August 8, 2016 10:04 AM
To: Kitty Liu
Cc: CC LUK; Peggy Wong; Ray MK MA
Subject: RE: Contract No. CV/2013/08-Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works - Contract 6_Archaeological Survey Report

Dear Kitty,

Thank you for your update on the archaeological survey report. Please note that AMO has no further comment on the revised report. Grateful if you could submit 5 hard copies and two soft copies of the report to this Office for our record and upload onto the web page for public access. Thank you.

Best regards,

C.H. Fung
Assistant Curator I (Archaeological Preservation) 3
Antiquities and Monuments Office
Leisure and Cultural Services Department
Tel.: 2721 1039

From: Kitty Liu <Kitty.Liu@erm.com>
To: CH FUNG <chfung@lcsd.gov.hk>
Cc: Peggy Wong <Peggy.Wong@erm.com>, Ray MK MA <rmkma@lcsd.gov.hk>, CC LUK <ccluk@lcsd.gov.hk>
Date: 08/06/2016 17:40
Subject: RE: Contract No. CV/2013/08-Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works - Contract 6_Archaeological Survey Report

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Some files have been sent to you via the **YouSendIt** File Delivery Service.
Download the file - 0307494 Liantang 6 Survey Report_20160608.pdf; 0307494 Track change pages.pdf; 0307494_RTCs_Arch Survey Report.pdf
Your files will expire after 7 days.

Dear Mr Fung,

Environmental Resources Management

16/F
Berkshire House
25 Westlands Road
Quarry Bay
Hong Kong

Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
http://www.erm.com

23 August 2016

AMO
Room 400A,
Hong Kong Archaeological Archives,
4/F, 17 Bowring Street,
Kwun Chung Complex,
Jordan, Kowloon

(Attn.: Ms C.H. Fung, ACI (Archaeological Preservation) 3)

Our Ref.: 0307494 Letter to AMO_20160823.docx

Dear Mr Fung,

Contract No. CV/2013/08
Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 6
Archaeological Survey Report

Please find five hard copies of the final *Archaeological Survey Report* and two CDs for your retention.

Should you have any question, please feel free to contact me.

Yours sincerely
For ERM-Hong Kong, Limited

Kitty Liu
Consultant
Direct Tel: 22713131
E-mail: kitty.liu@erm.com

Registered Office
ERM-Hong Kong, Ltd
16/F Berkshire House
25 Westlands Road
Quarry Bay
Hong Kong

Offices worldwide

AUES 安順聯合環境服務及顧問
Action-United Environmental Services & Consulting

Our Ref: TCS00694/13/300/L0576

AECOM
8/f Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Shatin, Hong Kong

Attn: Mr. Simon Leung

25 August 2016
By E-mail

Dear Sir,

Re: Agreement No. CE 45/2008 (CE)
Liantang/ Heung Yuen Wai Boundary Control Point and Associated Works
Archaeological Survey Report

With reference to the Archaeological Survey Report submitted to us on 22 August 2016, please note that we have no adverse comments on this submission. We herewith certify the captioned report in accordance with *Condition 2.14* of Environmental Permit (EP) No. EP-404/2011/C.

Should you have any question or require further information, please feel free to contact the undersigned at Tel: 2959-6059 or Fax: 2959-6079 or E-mail: twtam@fordbusiness.com.

Yours sincerely,
For and on Behalf of
Action-United Environmental Services & Consulting

T. W. Tam
Environmental Team Leader
TW/nh

cc	SMEC (IEC)	Mr. Antony Wong	By e-mail
	CCK-JV (C6 Contractor)	Mr. Vincent Chan	Fax:2108 9595

香港新界葵涌大連排道35-41號金基工業大廈20樓A室
Unit A, 20/F, Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, New Territories, Hong Kong
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Local People. Global Experience.

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www.smec.com

29 August 2016

Our ref: 7076192/L20873/AB/AW/MC/rw

AECOM
8/F, Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Shatin, N.T.

By Email & Post

Attention: Mr Simon LEUNG

Dear Sirs

Agreement No. CE 45/2008 (CE)
Liantang/Heung Yuen Wai Boundary Control Point and Associated Works
Independent Environmental Checker – Investigation
Archaeological Survey Report – Contract No. CV/2013/08 (Contract 6)

Reference is made to the Archaeological Survey Report (ERM's ref: 0307494) dated 8 June 2016 provided to us by hand on 26 August 2016 certified by the ET Leader (ET's ref.: TCS00694/13/300/L0576 dated 25 August 2016). Please be noted that we have no adverse comments on the captioned submission. We herewith verify the Archaeological Survey Report of Contract 6 (CV/2013/08) of the captioned Project in accordance with Condition 2.14 of Environmental Permit No. EP-404/2011/C.

Thank you for your attention and please do not hesitate to contact the undersigned on tel. 3995 8120 or by email to antony.wong@smec.com; or our Mr Man CHEUNG on tel. 3995 8132 or by email to man.cheung@smec.com.

Yours faithfully
for and on behalf of
SMEC Asia Limited

Antony WONG
Independent Environmental Checker

cc	CEDD/BCP	-	Mr Desmond LAM	by fax: 3547 1659
	AECOM	-	Mr Pat LAM / Mr Perry YAM	by email
	CCKJV	-	Mr Vincent CHAN	by email
	AUES	-	Mr TW TAM	by email

REPORT

CRBC-CEC-KADEN Joint Venture

Contract No. CV/2013/08 - Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 6

Archaeological Survey Report

June 2016

Environmental Resources Management
16/F Berkshire House
25 Westlands Road
Quarry Bay
Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
http://www.erm.com

REPORT

CRBC-CEC-KADEN Joint Venture

Contract No. CV/2013/08 - Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 6:

Archaeological Survey Report

June 2016

Reference 0307494

For and on behalf of ERM-Hong Kong, Limited	
Approved by:	Frank Wan
Signed:	
Position:	Partner
Date:	8 June 2016

CONTENTS

ANNEXES

摘要

中國路橋-大陸工程-基利聯營體 (承建商)受土木工程拓展署委託，承建「蓮塘/香園圍口岸與相關工程」合約編號 CV/2013/08 (合約六)範圍內的工程。

根據獲批准的環境影響評估報告(登記冊編號: AEIAR-161/2011)、環境許可證(編號: EP-404/2011/C)、環境評審報告 (2011年11月)的建議、以及合約六範圍內最新劃定的考古調查區域，考古調查於2015年9月16日至23日開展。

在五個考古調查區域(即A至E區)中一共發掘了10個探方(TP1-TP10) 及8個探孔(AH1-AH8)。文物收集/出土自A區的TP1、B區的TP2、C區的TP4、D區的TP5及E區的TP9。TP2亦出土灰坑H1。全部的文物皆為20世紀初的村落日常器具碎片。H1亦應為20世紀初的垃圾坑。全部探方及探孔均未見文化層。

總括來說，B、D及E區的考古重要性非常低；A及C區沒考古重要性。由於調查區域的考古潛力為非常低至無，不需進行進一步的考古工作。

SUMMARY

CRBC-CEC-KADEN Joint Venture has been commissioned by the Civil Engineering and Development Department to carry out works of the "Liantang/Heung Yuen Wai Boundary Control Point and Associated Works" under Contract No. CV/2013/08 (Contract 6).

Based on the requirements of the approved *Environmental Impact Assessment Report* (Register No.: AEIAR-161/2011) and the *Environmental Permit* (EP No: EP-404/2011/C), the recommendations of the *Environmental Review Report* (November 2011) and the latest information of the Archaeological Survey Areas covered by Contract 6, an archaeological survey was conducted from 16 to 23 September 2015.

A total of 10 test pits (TP1-TP10) and 8 auger holes (AH1-AH8) were conducted in five areas (i.e. areas A to E). Artefacts were collected/unearthed from TP1 in Area A, TP2 in Area B, TP4 in Area C, TP5 in Area D and TP9 in Area E. A pit H1 was revealed in TP2. All artefacts revealed were shards of village wares dated to the early 20th Century. H1 should also be a garbage pit dated to the early 20th Century. No cultural layer was revealed in all test pits and auger holes conducted.

To conclude, Areas B, D and E are considered to be with very low archaeological significance. Areas A and C are considered to be with nil archaeological significance. Given the very low and nil archaeological potential of the areas surveyed, no further archaeological action is considered necessary.

1 INTRODUCTION

1.1 PROJECT BACKGROUND

In September 2008, the Government of the HKSAR and the Shenzhen Municipal People's Government jointly announced the implementation of a new Boundary Control Point (BCP) at Liantang/Heung Yuen Wai in the north-eastern New Territories to serve the cross-boundary goods vehicles and passengers travelling between Hong Kong (HK) and Shenzhen (SZ) East.

An Environmental Impact Assessment (EIA) study for the Liantang/Heung Yuen Wai Boundary Control Point and Associated Works (the Project) was conducted in accordance with EIA Study Brief No. ESB-199/2008. The EIA Report (Register No.: AEIAR-161/2011) was approved on 24 March 2011 under the *Environmental Impact Assessment Ordinance* (EIAO) (hereafter referred to as the approved EIA Report) and an Environmental Permit (EP) was granted on 24 March 2011 and has been varied subsequently and the current EP (EP No: EP-404/2011/C) was issued in March 2015 for the construction and operation of the Project.

During the design and construction stages of the Project, the project scope (as detailed in Section 2.4.3 of the approved EIA Report) and the preferred alignment (as shown in Appendix 2.4 of the approved EIA Report) remain unchanged, but the works area boundaries and several road links have been slightly revised in some areas. As a result of the proposed minor changes to the works area boundaries, an environmental review has been conducted and an *Environmental Review Report* (ERR) was prepared in November 2011.

The construction of the Project has been divided into a series of Works Contracts and Contract No. CV/2013/08 (hereinafter referred to as "Contract 6") covers construction of a 4.6km long dual two-lane trunk road (with about 0.6km at grade roads, 3.3km viaducts and a 0.7km tunnel) connecting the Sha Tau Kok Road Interchange to the BCP, and the associated environmental mitigation measures, landscaping, drainage/sewerage, waterworks and utilities works. The Contract 6 works commenced in June 2015 and will take about 40 months to complete. CRBC-CEC-KADEN Joint Venture (the Contractor) has been commissioned by the Civil Engineering and Development Department (CEDD) to carry out Contract 6 works.

Since part of the archaeological mitigation measures required in the approved EIA Report for the Project falls within the scope of Contract 6, ERM-Hong Kong, Limited (ERM) has been commissioned by the Contractor to implement relevant archaeological mitigation measures.

In accordance with Section 11.2.2 of the approved Environmental Monitoring & Audit (EM&A) Manual of the Project, an *Archaeological Action Plan* (AAP) following the *Guidelines for Cultural Heritage Impact Assessment* should be submitted to the Antiquities and Monuments Office (AMO) for agreement prior to implementation of the archaeological mitigation measures.

Based on the requirements of the approved EIA Report and the EP, the recommendations of the ERR and the latest information of the Archaeological Survey Areas covered by Contract 6, the *AAP* describes the methodology of the archaeological survey in relevant parts of the Project under Contract 6 and provide a contingency plan to address possible arrangements if significant archaeological findings are unearthed during the archaeological survey for agreement with AMO.

A *Licence to Excavate and Search for Antiquities* was granted to Dr Liu Wensuo (licence no. 397) to undertake the archaeological survey and the site code was assigned as "NHYW2015". The archaeological survey was conducted from 16 to 23 September 2015. This *Archaeological Survey Report* (hereafter referred to as *Report*) presents the findings of the archaeological survey conducted under Contract 6.

1.2 *TEAM MEMBERS*

The individuals participated in the archaeological survey include:

Ms Peggy Wong	Project Manager
Dr Liu Wensuo	Licenced Archaeologist
Dr Jin Zhiwei	Qualified Archaeologist
Ms Kitty Liu	Assistant Archaeologist
Mr Alan Chan	Archaeological Assistant
Mr Chan Ping Fai	Archaeological Assistant

The post-archaeological fieldworks finds processing and interpretation of data retrieved were led by Dr Liu Wensuo, who was supported by Ms Peggy Wong, Ms Kitty Liu and Mr Raymond Ng. Photography of the artefacts recovered was undertaken by Ms Tracy Wong.

Authors of this *Report* include Ms Kitty Liu and Ms Peggy Wong, and the *Report* is reviewed by Dr Liu Wensuo.

1.3 *STRUCTURE OF THE REPORT*

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

Section 2 describes the construction works for Contract 6;

Section 3 presents the baseline condition of the areas requiring archaeological survey;

Section 4 presents the archaeological findings;

Section 5 presents the conclusions; and

Section 6 presents the bibliography.

The following annexes are also included:

Annex A *Illustrations of the Construction Works*

Annex B *Land Survey Records*

Annex C *Detailed Records of Test Pits and Auger Holes*

Annex D *Records of General Artefacts Unearthed*

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According to the requirements stated in the approved EIA Report and the EP, and the recommendations of the ERR, there are five areas requiring archaeological survey (referred to as Archaeological Survey Areas) covered by Contract 6. The five Archaeological Survey Areas are coded as Areas A to E for easy reference (see *Figure 2.1*). Aerial photo showing the five Archaeological Survey Areas is provided in *Figure 2.2*. Overall layout of the construction work areas is presented in *Figure 2.3*. A summary of the construction works to be carried out in each Archaeological Survey Area is presented in *Table 2.1*.

Table 2.1 ***Archaeological Survey Areas and the Construction Works to be Carried Out Within These Areas***

Area	Construction Works Related	Sections of the Project
A	Sha Tau Kok Road Interchange, a bridge and associated facilities	Sha Tau Kok Road Section (Between North and South Tunnel)
B	South Portal of Cheung Shan Tunnel and associated facilities	Sha Tau Kok Road Section (Between North and South Tunnel)
C	A bridge and associated facilities	Section between Ping Yeung and Wo Keng Shan (禾徑山)
D	Ping Yeung Interchange, 4 bridges and associated facilities	Section between Ping Yeung and Wo Keng Shan
E	A bridge and associated facilities	Section between Lin Ma Hang and Frontier Closed Area Boundary

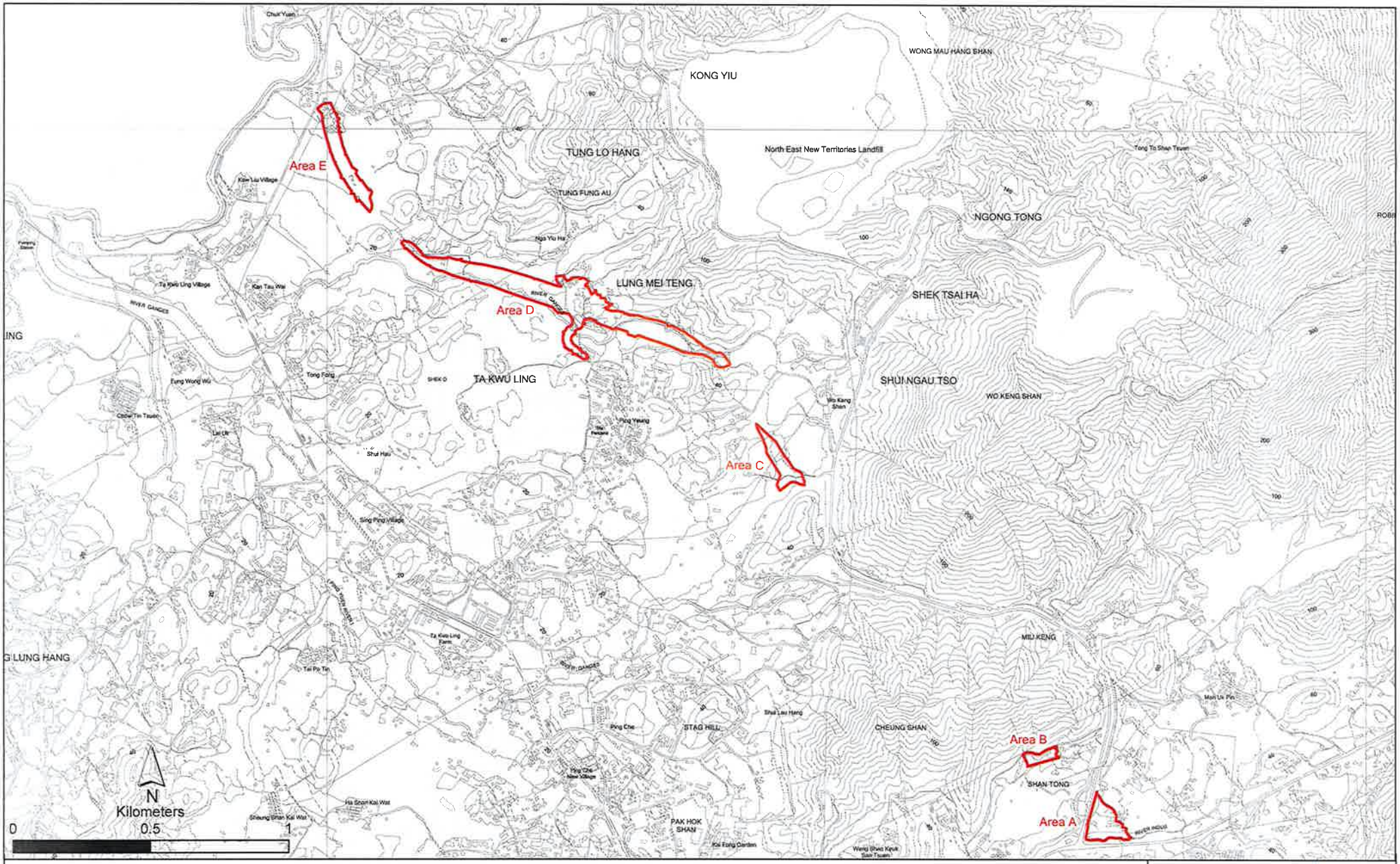

Figure 2.1

Archaeological Survey Areas

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Date: 27/8/2015

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Figure 2.2

Aerial Photo in 2012 Showing Archaeological Survey Areas

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Date: 24/3/2016

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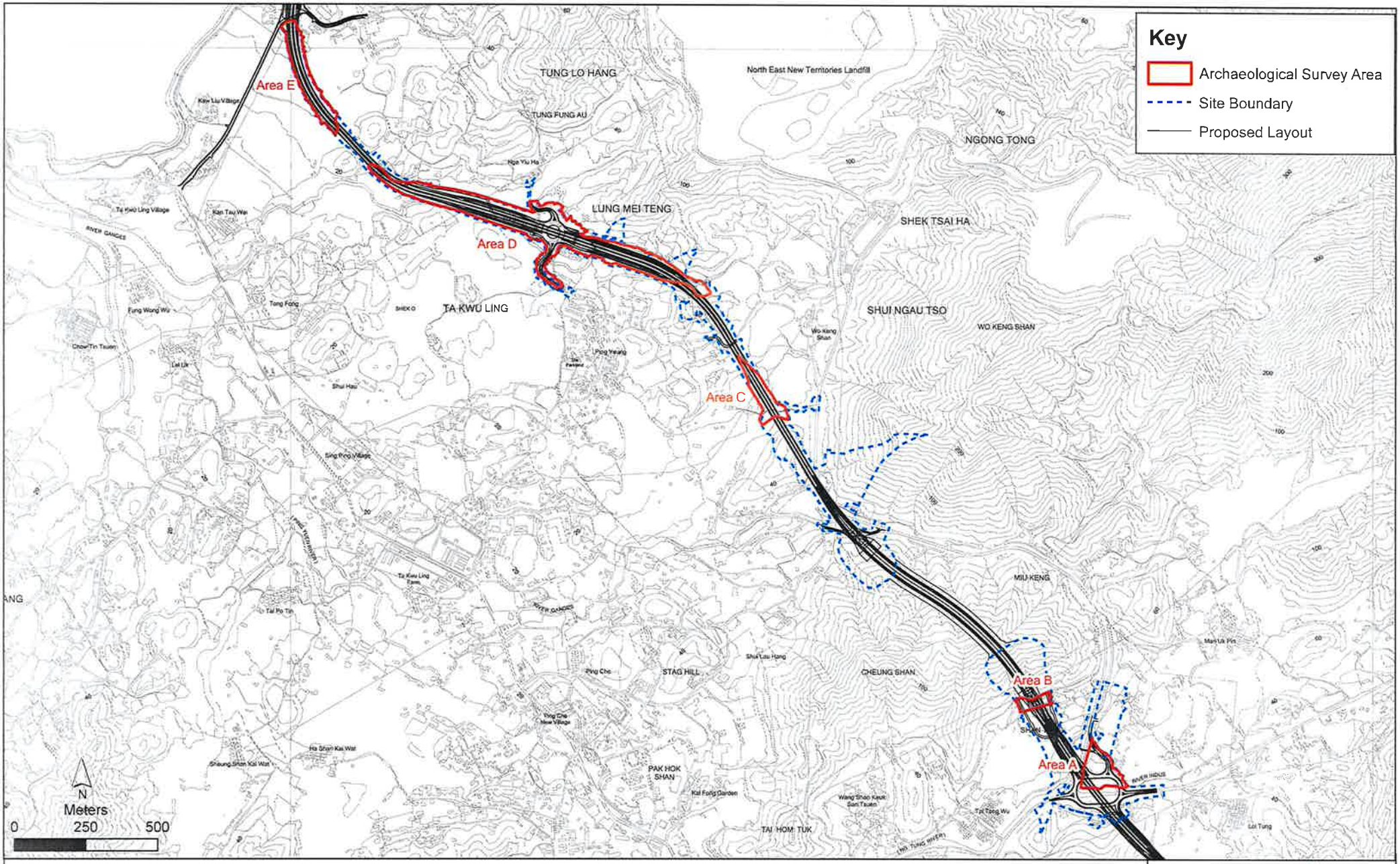

Figure 2.3

Overall Layout of Construction Works

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Date: 28/8/2015

Environmental Resources Management

ERM

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3 METHODOLOGY

The archaeological survey included the following tasks:

3.1 TASK 1 – FIELD SURVEY

The archaeological survey was led by Dr Liu Wensuo, a licenced archaeologist and the fieldworks comprised the following tasks.

Task 1a: Field Scan

Field scan was undertaken at accessible area of Archaeological Survey Areas. Archaeological materials identified was recorded and mapped on 1:1,000 scale maps, collected during the field scanning, and form part of the archive.

Task 1b: Excavation (Auger Survey and Test Pitting)

The numbers of auger holes and test pits undertaken as recommended in the *AAP* are presented in *Section 4*. The test pits were excavated by hand under the supervision and direction of the archaeologists. The excavation of the test pits were terminated when reaching the sterile layer or the effects of groundwater prevent further excavation despite the use of appropriate or practical dewatering measures; and whenever it is consider unsafe to excavate further. The data collected assisted in verifying the archaeological potential of the construction work areas within the five Archaeological Survey Areas. If artefacts or archaeological features were identified, the AMO would be notified immediately. If more auger holes or test pits would be required, on site discussion would have been arranged to agree on further actions required with the AMO, the Contractor and CEDD. Daily field works records were prepared which included the following information:

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

The archaeological team recorded the field archives during the course of the field works. The field archives were handled with reference to the *Guidelines for Handling of Archaeological Finds and Archives* (as at 28 November 2011).

The geographic coordinates and the levels of excavated test pits were surveyed and certified by a land surveyor provided by the Contractor.

Task 1c: Handling of Artefacts and Features Discovered and Archives Processing and Recording

All unearthed archaeological remains were collected, recorded, dated and sorted, and representative archaeological remains were photographed and/or drawn. All photographs taken were provided in .jpg format. The artefacts and archives were handled in accordance with AMO's *Guidelines for Handling of Archaeological Finds and Archives* (as at 28 November 2011).

According to Section 10 of the *AM Ordinance*, the archaeological relics ownership vests with the Hong Kong SAR Government. Upon submission the final *Archaeological Survey Report*, the finds, artefacts and archives arising from the archaeological survey will be handed over to AMO in accordance with the conditions of the licence under the *AM Ordinance*.

3.2 TASK 2 – CONTINGENCY PLAN

In case significant archaeological deposits are identified, site visit and discussion among the licenced archaeologist, the Contractor, CEDD and AMO for the way forward would have been held if it is deemed necessary.

3.3 TASK 3 – REPORTING

The findings of the field survey and impact assessment were presented in this *Archaeological Survey Report* which was prepared in accordance with the requirements of the *Guidelines for Archaeological Reports* (as at April 2011). The CEDD's and AMO's comments on the draft *Archaeological Survey Report* would be responded and incorporated into the final *Archaeological Survey Report* within 2 weeks upon comments received. Five hard copies and two electronic copies of the final *Archaeological Survey Report* would be submitted to the AMO.

3.4 FIELD DIARY, RECORDING FORMS AND FIELD ARCHIVE

Each *in situ* artefact or feature recorded can provide information for the sequential cultural layer establishment. The recording forms and archives, including all identified artefacts, eco facts and structural remains were treated and packaged in accordance with the *Guidelines for Handling of Archaeological Finds and Archives* (as at November 2011) published by AMO. ERM established a set of recording forms which are compliant with AMO's standard.

Visual Recording

The general site plan and section will be drawn in 1:50 or 1:100. The plan and sections of each archaeological survey pit were drawn and were presented in 1:20 or 1:50 scale. The plan, section and lateral views of each feature were also drawn in 1:10 or 1:20 scale. The selection of scale was based on the importance; complexity and amount of details needed to be illustrated of the relevant subject(s).

Photographic records of site environment; work progress of different test pits; the sections or soil profiles of the test pits excavated; recording and retrieval of special finds and features; and other important work were taken using digital camera. Each photograph taken was saved in .jpg format.

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4 BASELINE INFORMATION OF THE ARCHAEOLOGIAL SURVEY AREAS

4.1 TOPOGRAPHY AND GEOLOGY

The Archaeological Survey Areas are located in the Ping Che area (i.e. Areas A to C) and Ta Kwu Ling area (i.e. Areas D and E). The geology of the five Archaeological Survey Areas is shown in *Figure 4.1* (1).

Table 4.1 ***Topography and Geology of Archaeological Survey Areas***

Area	Topography	Superficial Geology
A	Located at the east side of the junction of Sha Tau Kok Road and Wo Keng Shan Road. Ng Tung River (梧桐河) is flowing east to west at the southern part of Area A. Village houses and temporary structures are concentrated at the eastern part of Area A. The area west of these village houses and north of Wo Keng Shan Road Garden (禾徑山路花園) remained as agricultural land.	Qa, Qpa, Qpd
B	Located at foothill area south of Wo Keng Shan, which is named Shan Tong. A number of temporary structures are located northeast of Area B. A pond is located at the west of Area B and its central part was over with concrete.	Qpd
C	Located southwest of Wo Keng Shan. A hill is located south of Area C. Most of the Area C area is abandoned agricultural land. Several houses and associated courtyard/open storage area/ carpark were located in the centre portion of this area.	Qpa and Qpd
D	Located south of Lung Mei Teng and north of Ping Yeung village, the works area extended along the River Ganges and mainly passes through abandoned agricultural land.	Qa, Qpa, Qpd
E	Located near Lin Ma Hang Road, southwest of Chuk Yuen village and northeast of Kau Liu village, most of Area E is abandoned agricultural land.	Qa and Qpa

Note:

(a) alluvium (Qa), terraced alluvium (Qpa), debris flow deposit (Qpd)

The Ta Kwu Ling area is bounded by the ridges of Robin's Nest (Hung Fa Leng 紅花嶺) in the east including Wong Mau Hang Shan (黃茅坑山), and Cham Shan (杉山), Wa Shan (華山) and Tsung Shan (松山) in the southwest. The ground elevation of Ta Kwu Ling generally varies from +10mPD to +18mPD. Along the foot of Robin's Nest, adjacent to the lowland area of Ta Kwu Ling, there lie the Pak Fu Shan (白虎山), Wo Keng Shan (禾徑山) and Cheung Shan (長山). The region to the south of Tsung Yuen Ha (松園下) is generally hilly up to some elevation from +30mPD to +40mPD. Slopes on the hillsides in the area are moderately steep.

(1) Established from ERM in-house GIS database and geological maps purchased from Lands Department in 2006.

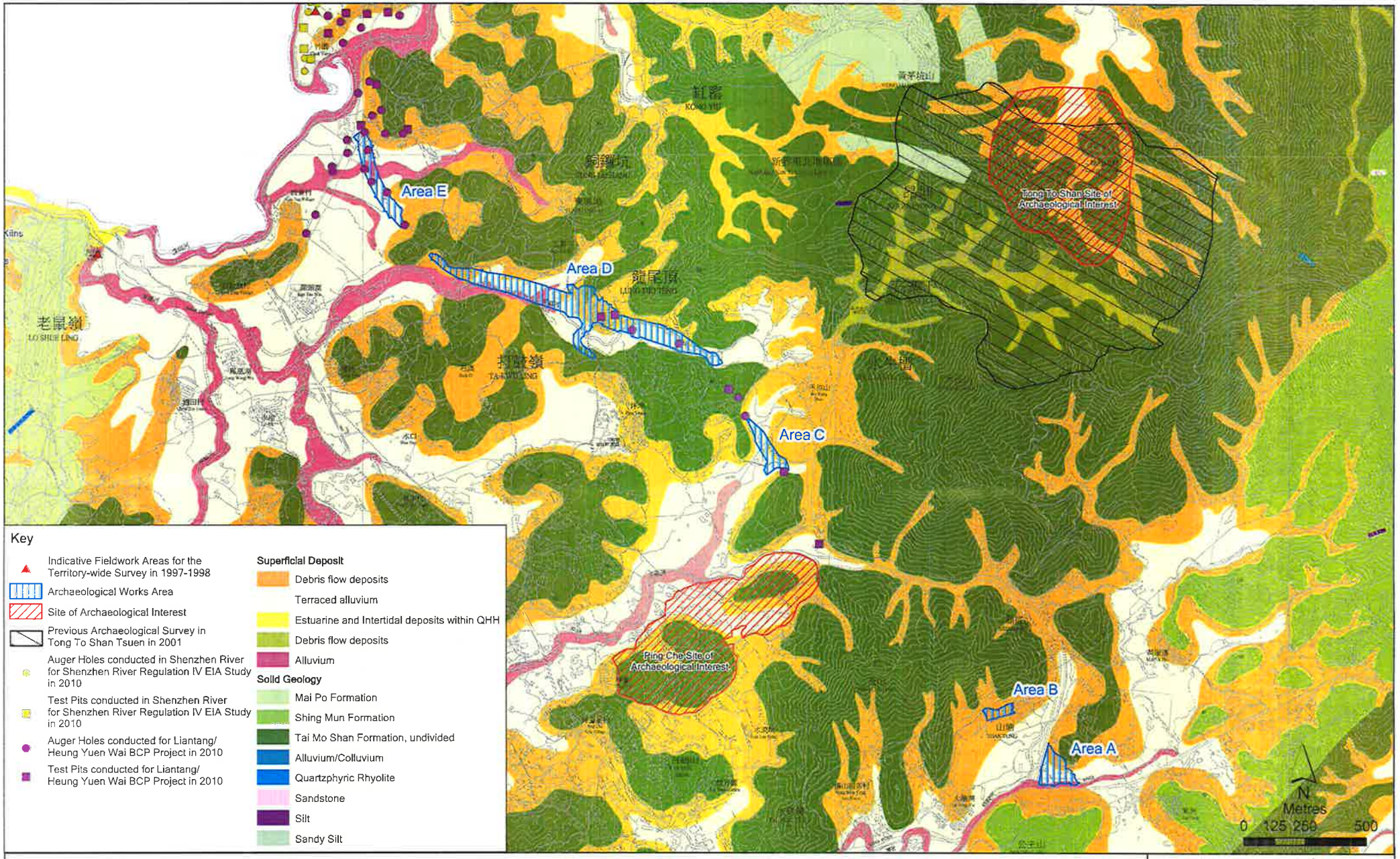

Figure 4.1

Previous Archaeological Investigation Locations

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Date: 6/7/2015

Environmental Resources Management

ERM

To the south of Ta Kwu Ling is Ping Che, which is located between the foothill of the Sheung Shui Wa Shan/ Cham Sham and Cheung Shan/Pak Hok Shan. The area includes the San Wai Barracks (新圍軍營) and the zone of San Wai Tai Ling Firing Range (新圍／大嶺練靶場). The ground elevations range between +10mPD and +18mPD. Further to the west are the town centres of Sheung Shui and Fanling in the North District. Wo Hop Shek Public Cemetery is at the south of Fanling town.

River Ganges (平原河) originated from streams at Wu Keng Shan. Tributaries passes villages such as Tai Po Tin (大埔田), Ta Kwu Ling (打鼓嶺), Tong Fong (塘坊) and Kan Tau Wai (簡頭圍). Tributaries finally converged to Shenzhen River.

4.2 *HISTORICAL BACKGROUND*

The northern New Territories of Hong Kong area was incorporated into the imperial China when the Qin (秦) Dynasty conquered the Baiyue (百越) tribes in 214 BC. Since then Hong Kong became the territory of imperial China until 1898 when the area was leased to the Britain.

According to the oral history and local genealogical records, a major wave of immigrants from the inner part of China migrated to the northern New Territories during the southern Song (宋) Dynasty (AD1127 – 1279) when the Mongols invaded China. Although it is claimed that the five major clans of Pang (彭), Liu (廖) , Hau (侯) , Man (文) and Tang (鄧) were the first settlers in the northern New Territories during the Song Dynasty, it was also recorded that other clan groups should have established their villages in the area during the same or an even earlier period [1].

After the Manchurian established Qing (清) Dynasty in the mid-17th century, the Evacuation Order (遷界令) was promulgated by the Qing government from 1661 to 1669 in which coastal population was ordered to move 50 *li* (*里*) [2] inland. Coastal communities were uprooted including the northern New Territories. Clan groups were allowed to return after 1669 yet the population of the area was greatly reduced. The Qing government then encouraged the Hakka (客家) people from Jiangxi, Guangdong and Fujian to move in, resulting a sharp increase of Hakka population in the area, for example Chuk Yuen (竹園) village and Ping Yeung are both Hakka village located near to the Works Area[3].

The original Chuk Yuen village was a cluster of houses bounded by the meandering Shenzhen River in the west and the south, some 200m to the southwest of the existing village. According to the village representative, Mr Yiu who is the 13th generation of the Yiu clan, the village was established

(1) 北區區議會（1994）《*北區風物志*》。

(2) A Chinese measurement of distance. One *li* (里) is equal to 0.31 miles.

(3) Planning Department 2007 *Survey on Features with Cultural Heritage Value in the Sha Tau Kok, Ta Kwu Ling and Ma Tso Lung Areas*. Hong Kong: ERM-Hong Kong, Ltd.

about 300 years ago by Hakka residents of the Yaus (邱) and Yius (姚) originated from Dangshui (淡水) of Guangdong. However, the village was not recorded in any historical documents (1) (2). Another village located nearby, Kaw Liu village (較寮村), has a rather short history. According to Mr Yiu, the village was found by the Mainland Chinese, in particular from the village of Lou Fang (羅芳村) across the border, in the late 1950s to early 1960s.

Ping Yeung has a history dated to late Ming dynasty. Three members of the 9th generation, who are Tung-kwok (棟國), Sit-wan (陟雲) and Sit-kin (陟乾), moved from Wuhua (五華) to Ping Yeung. Tung-kwok was the first to settle in the village. Three ancestral halls were built in the village by descendent of the three branches. (3)

4.3 *ARCHAEOLOGICAL BACKGROUND*

The desktop study identified no Site of Archaeological Interest listed by the AMO within the Archaeological Survey Areas (4). The nearest Site of Archaeological Interest is Ping Che, which is about 41m away. Nevertheless, some archaeological investigations have been conducted within or adjacent to the Archaeological Survey Areas and the key findings are summarised in *Table 4.2*. Locations of auger holes and test pits previously conducted are presented in *Figure 4.1*.

(1) *新安縣誌* (清) 1688 & 1819

(2) Volonteri, Simeon 1866, Map of San-On District (Kwangtung Province)

(3) Details of the ancestral could refer to "Historic Building Appraisal" of Grade 2 buildings No. 398 Sit Kin Ancestral Hall and No. 1145 Chan Ancestral Hall (Sit Wan Tso); and nil grade building No. 1418 Chan Ancestral Hall.

(4) Antiquities and Monuments Office, *List of Sites of Archaeological Interest in Hong Kong*, November 2012

Table 4.2 *Key Findings of Previous Archaeological Projects*

Investigation (Year)	Description
Archaeological Investigation for Liantang/Heung Yuen Wai Boundary Control Point and Associated Works Environmental Impact Assessment (2010) (1)	For section between Ping Yeung and Wo Keng Shan, 4 out of 9 proposed test pits and 6 out of 11 proposed auger holes have not been conducted due to accessibility. The findings of TP0505 are selected as the representative sample to determine the archaeological potential of the area. No cultural remain was identified in all the test pits, except in Strata 1 to 4 of TP0505. Strata 1 to 4 of TP0505 are cultural layers formed recently (probably not earlier than Qing dynasty). The archaeological potential of river terrace near TP0505 is considered to be low. Results of TP0601, TP0603, TP0604, AH0601, AH0602 and AH0603 indicated that the hillside area should have nil archaeological potential. Test pits and auger holes falls within Areas A to E are summarized below: (a) Areas A and B: No test pit or auger hole was conducted. (b) Area C: 1 test pit (TP0603) was conducted. (c) Area D: A total of 2 test pits (TP0503, TP0505) and 2 auger holes (AH0502, AH0503) were conducted at the eastern part of Area D. (d) Area E: 5 auger holes (AH0312 to AH0316) were conducted.
Contract No. CV/2013/03 - Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 5 (2013 and 2014) (2)	The archaeological work area was divided into three sections (Sections T1 to T3). Archaeological surveys were conducted at Section T1 and Section T3 and archaeological watching brief was conducted at Section T2. No cultural layer was identified in any of the Sections and only TP1, TP2 in Section T3 and TP3 in Section T1 yield four pieces of artefacts which were considered to be secondary deposit and have very low archaeological significance. For potential cultural layers identified at terrace area in the archaeological survey conducted in 2010 for the EIA study, corresponding layers were identified in all Sections. However, these layers were confirmed to be top soil layer or alluvium layers without artefacts. Therefore they are with very low archaeological significance.
Contract No. CV/2012/08 - Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 2 (2014) (3)	An archaeological survey was conducted at Sha Tau Kok Road Section and Lau Shui Heung Tunnel Section; and an archaeological watching brief was conducted at Fanling Section. Fieldwork was completed in June 2014. No significant archaeological remain was discovered. As the final report is under preparation so the locations of the archaeological work is not available for incorporation in this report.

(1) Civil Engineering and Development Department. 2010. *Liantang / Heung Yuen Wai Boundary Control Point and Associated Works EIA report.*

(2) Civil Engineering and Development Department. 2014. *Contract No. CV/2013/03 - Liantang/Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure Works – Contract 5 Archaeological Survey and Archaeological Watching Brief Report*

(3) "Progress of Archaeological Licences Issued (Progress as t 15 May 2015)," Annex C in Antiquities Advisory Board Meeting Board Paper AAB/6/2015-16.

5 ARCHAEOLOGICAL FINDINGS

5.1 FIELDWORK SCHEDULE

Field scanning was conducted during 16 to 23 September 2015 within the archaeological survey areas where accessible prior to test pits and auger holes were conducted. Based on the observation during field scanning, test pits and auger hole locations were finalized on site, which the adjustment are discussed in *Section 5.2*.

A total of 10 test pits (1.5m x 1.5m, depth 1-1.2m) and 8 auger holes (depth 1.5-2m) were conducted during 16 to 23 September 2015. Detailed schedule is shown in *Table 5.1*. Locations of test pits and auger holes conducted are presented in *Figures 5.1* to *5.5*. Coordinates of the locations of test pits and auger holes are presented in *Annex B*.

AMO has conducted field inspection on 17 and 23 September 2015.

Table 5.1 ***Number of Test Pits and Auger Holes Conducted***

Area	Test Pit No.	Auger Hole No.
A	TP1	AH1
B	TP2	-
C	TP3, TP4	AH2, AH3
D	TP5 to TP8	AH4 to AH8
E	TP9, TP10	-

5.2 ADJUSTMENT ON TEST PIT AND AUGER HOLE LOCATIONS

Some test pit locations (i.e. TP2, TP3, TP4, TP8, TP9 and TP10) and auger hole locations (i.e. AH2, AH3, AH5 and AH6) were refined with the reasons presented in *Table 5.2*.

Table 5.2 ***Justification on Changing Locations***

Area	Test Pit / Auger Hole No.	Justification
A	AH1	Original location of AH1 was on concreted surface. Therefore it was moved west to the paddy field.
B	TP2	Original location of TP2 was filled with a pile of rock at the time of investigation. Therefore it was moved further south to the undisturbed area.
C	TP3	Original location of TP3 was a steep slope without archaeological potential. Therefore it was moved westward.

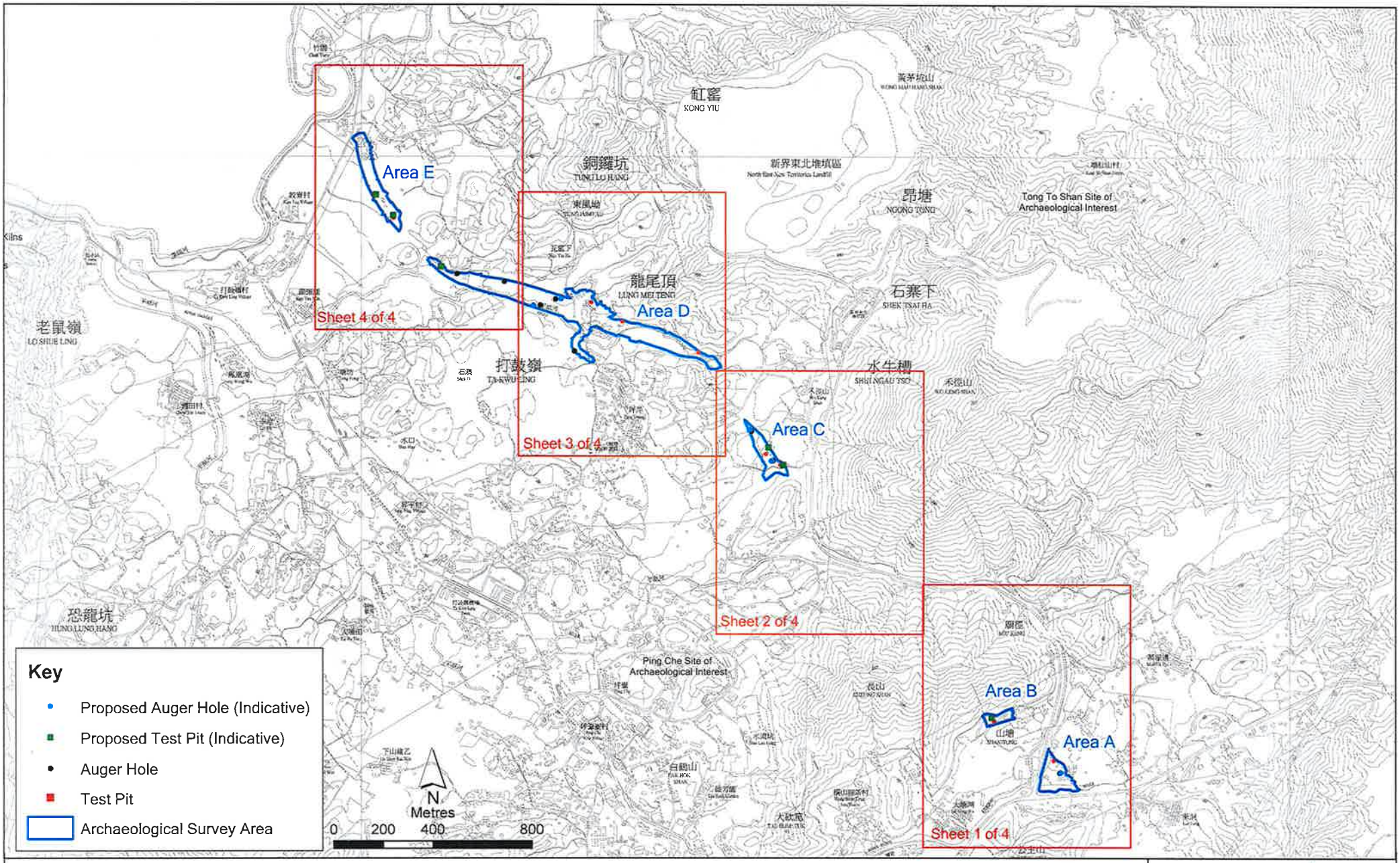

Figure 5.1

Test Pit and Auger Hole Location
(Key Plan)

File: T:\GIS\CONTRACT\0307494\Mxd\0307494_Location_of_TPAH_keyplan_Combine.mxd
Date: 14/10/2015

Environmental Resources Management

ERM

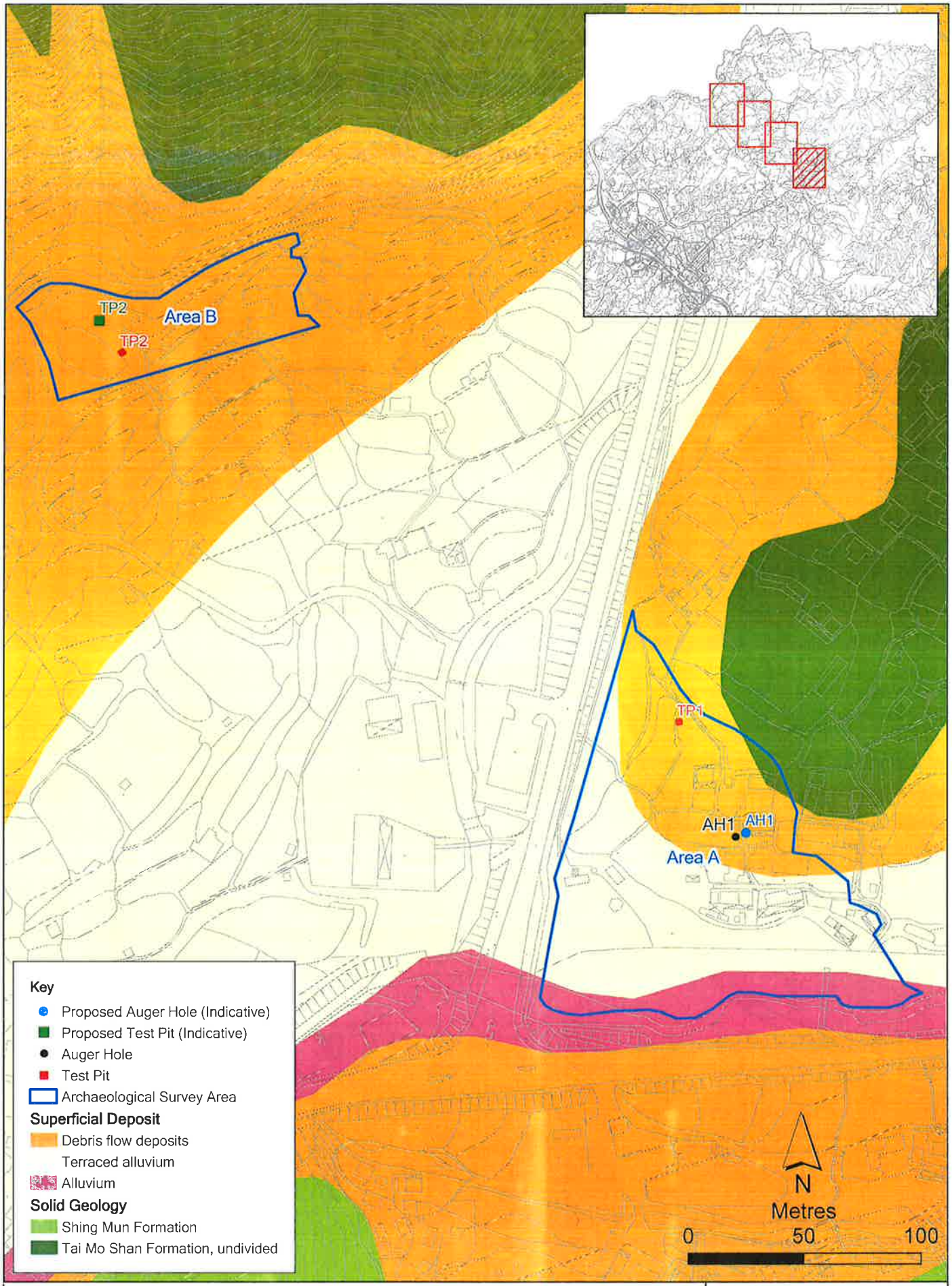

Figure 5.2

Test Pit and Auger Hole Location
(Sheet 1 of 4)

File: T:\GIS\CONTRACT\0307494\Mxd\0307494_Location_of_TPAH_1_Combine.mxd
Date: 14/10/2015

Environmental Resources Management

ERM

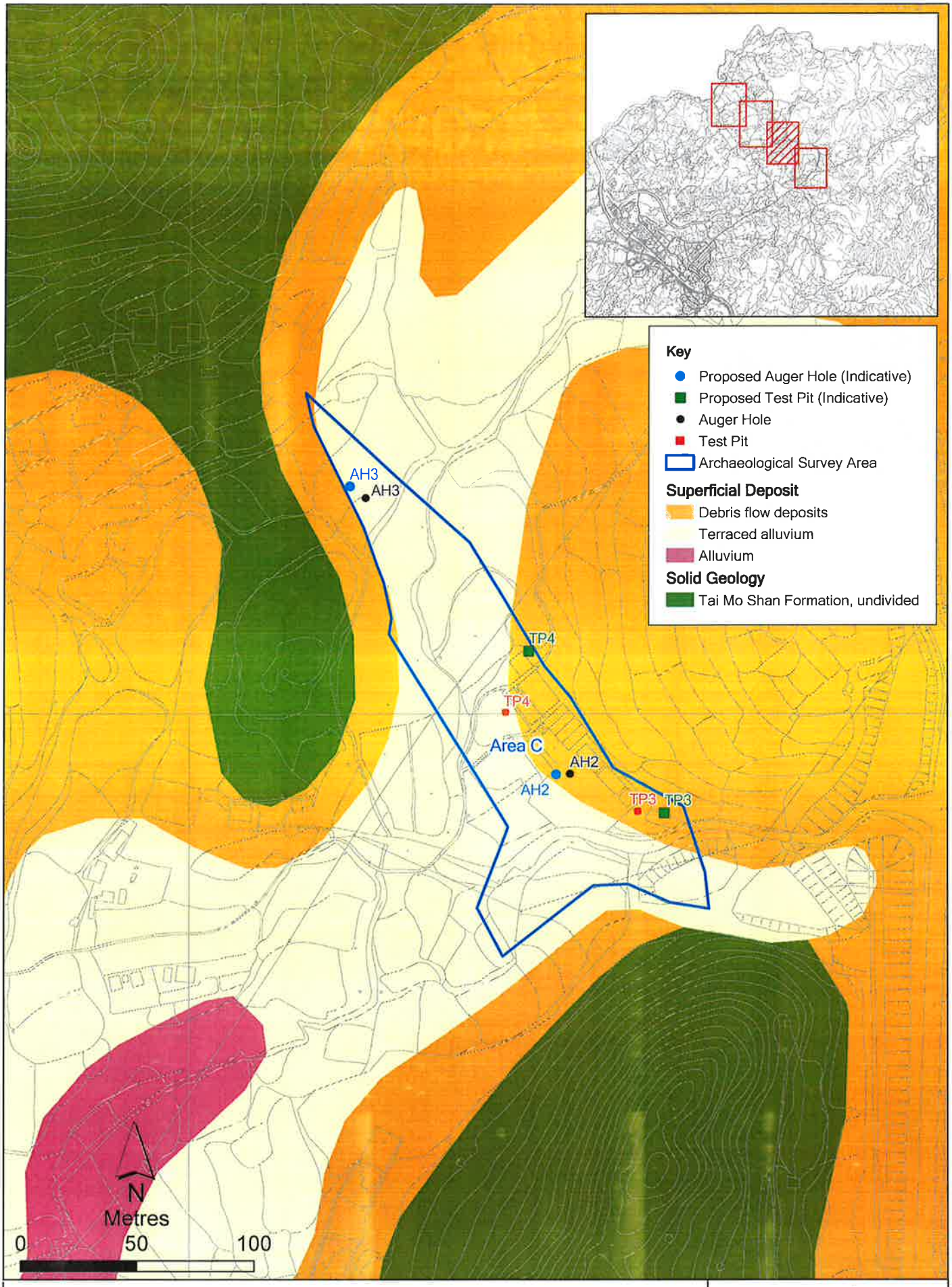

Figure 5.3

Test Pit and Auger Hole Location
(Sheet 2 of 4)

File: T:\GIS\CONTRACT\0307494\Mxd\0307494_Location_of_TPAH_2_Combine.mxd
Date: 14/10/2015

Environmental Resources Management

ERM

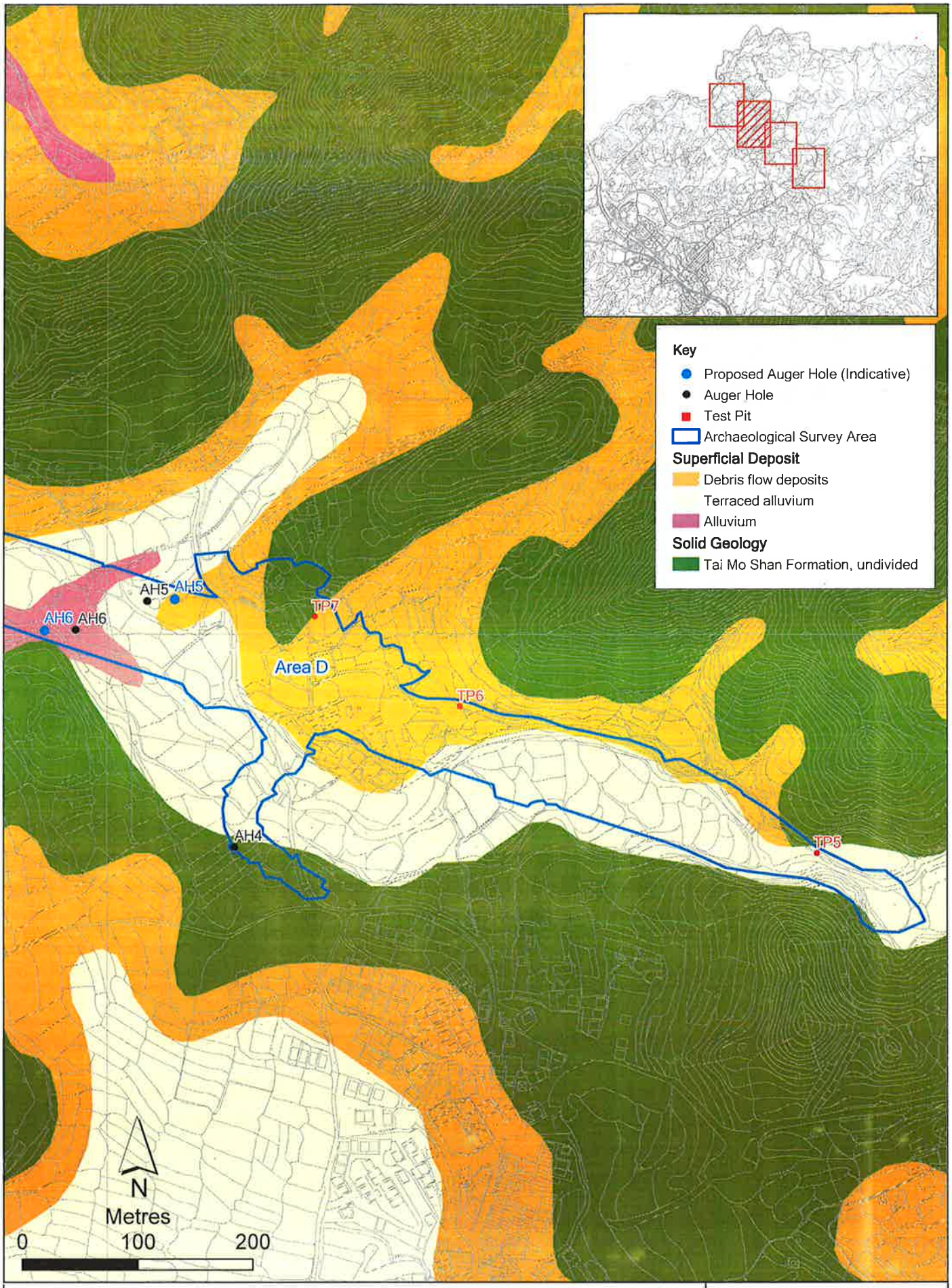

Figure 5.4

Test Pit and Auger Hole Location
(Sheet 3 of 4)

File: T:\GIS\CONTRACT\0307494\Mxd\0307494_Location_of_TPAH_3_Combine.mxd
Date: 14/10/2015

Environmental Resources Management

ERM

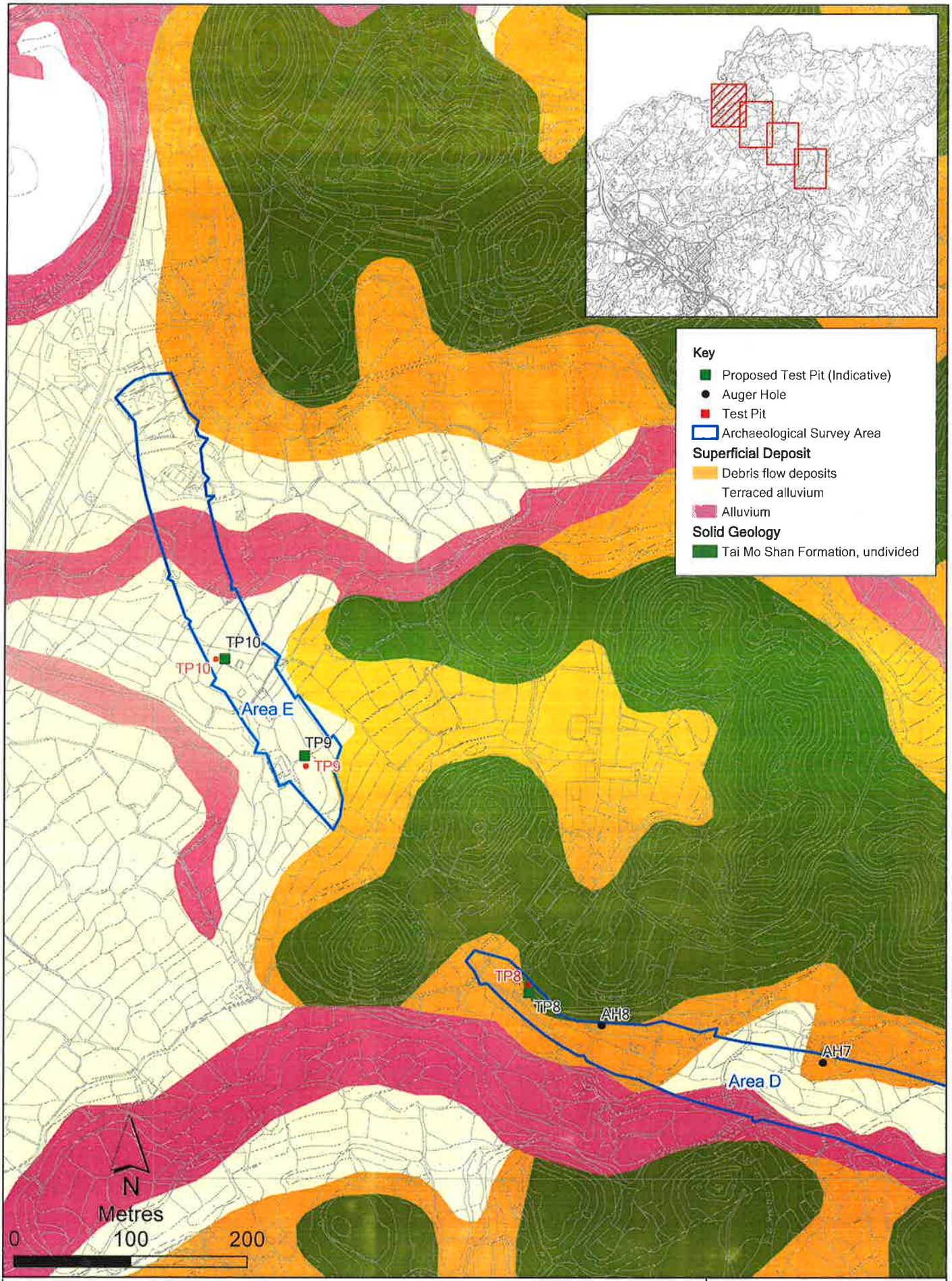

Figure 5.5

Test Pit and Auger Hole Location
(Sheet 4 of 4)

File: T:\GIS\CONTRACT\0307494\Mxd\0307494_Location_of_TPAH_4_Combine.mxd
Date: 14/10/2015

Environmental Resources Management

ERM

Area	Test Pit / Auger Hole No.	Justification
	TP4	Original location of TP4 was chosen as foot hill areas are generally considered to be with higher archaeological potential. However, that location was close to a wall of a building and next to a big tree. Therefore it was moved to the courtyard in front of the building. Although location of TP4 was shifted from Qpd to Qpa, the stratigraphy condition of Qpd could be referenced from field data obtained from TP3 and AH2. Therefore the result of TP4 provides information on stratigraphy condition of Qpa.
	AH2	Original location of AH2 was on concreted surface. Therefore it was moved west to the courtyard.
	AH3	Original location of AH3 was on wet land. Therefore it was moved eastward.
D	AH5	Original location of AH5 was disturbed by a modern road. Therefore it was moved to nearby undisturbed area.
	AH6	Original location of AH6 was inaccessible due to the presence of river. Therefore it was moved eastward to the field.
	TP8	Original location of TP8 was on fill materials. The paddy fields south of TP8 was waterlogged, therefore TP8 is slightly moved across the road to the foot hill, which comparatively should have higher archaeological potential.
E	TP9	Original location of TP9 was located under a tree and in very close vicinity to a stream. Therefore it was slightly moved to the paddy field on its south.
	TP10	Original location of TP10 was next to (<1m) abandoned water pipes and other underground utilities (UU). Therefore it was moved northwest to the paddy field to keep a safety distance with the UU.

5.3 *FIELD SCANNING RESULT*

Field scan was conducted within the archaeological survey areas but limited to accessible area. Artefacts collected from surface are summarized in *Table 5.4* in *Section 5.6*.

5.4 *STRATIGRAPHY*

Detailed stratigraphy information of each test pit and auger hole is presented in *Annex C* and summarized in *Table 5.3*

5.4.1 *Area A*

TP1 and AH1 are located at abandoned cultivation land and on debris flow deposits. Their stratigraphy is similar. For example, L2 of TP1 is yellowish silty layer with orange spots while L2 of AH1 is yellowish brown sandy soil, with coarse sand and rust spots. L3 of both TP1 and AH1 are yellowish sandy soil. L4 of both TP1 and AH1 are yellowish silty soil. L7 of TP1 is grey sand while L7 of AH1 is greyish white sand.

5.4.2 *Area B*

TP2 is next to a pond. Below L1, L2 is a thick fill layer likely filled when constructing the pond.

L3 which is dark brown sandy soil, a bit silty, contains small amount of tile shards, was once a surface with past activities. A pit H1 is found under L3 and cut into L4 and L5. It contains blue and white porcelain shards and pottery shards dated to early 20th Century.

L5 is a yellowish brown silty soil layer and it is the sterile layer.

5.4.3 *Area C*

TP3 and TP4 are close to existing buildings. Beneath the top soil, L2 of both TP3 and TP4 are both yellowish brown sandy soil with large amount of yellow and red lumps, loose and hard. These layers should be regarded as the fill soil for site flattening for building construction.

L3 to L7 of TP3 and L3 to L6 of TP4 are sterile layers but their soil characteristics are different. L3 of TP3 is yellowish brown at the upper part and gradually turns brown at the bottom. It is a sandy soil layer, firm and soft. L5 is yellowish brown sandy soil with large amount of red spots and fine sand, firm. L6 is grey sandy soil with fine sand, firm. L7 is brown silty soil, firm and hard. However, L3 and L4 of TP4 are dark grey sandy soil and black silty soil. L5 and L6 of TP4 are greyish white silty soil and yellow sandy soil.

TP3 and TP4 are located on debris flow deposits but AH2 and AH3 are located on terraced alluvium. Strata revealed in AH2 and AH3 are different from TP3 and TP4. AH2 is located on higher ground, which its strata are sandy. L2 to L5 of AH2 are grey sand, brown sand, light brown sand, and dark brown sand respectively. AH3 is located at lower ground and further north in the abandoned cultivation land. The soil is more fertile than AH2 that its L2 is dark grey sandy soil contains lots of humus. L3 to L5 of AH3 are light grey sandy soil, grey sandy soil and black silty soil respectively.

5.4.4 *Area D*

TP5 is on terraced alluvium and AH6 is on alluvium. TP6 to TP8, AH4, AH5, AH7 and AH8 are on debris flow deposits. Five strata were identified in TP5; three in TP6; five in TP7 and two in TP8. Four strata were identified in each auger hole (i.e. AH4 to AH8).

Sterile layers were found immediately beneath L1 of TP5 to TP8. TP5 and TP7 are located at the bottom of valley which the water table was reached at 1m bgl at TP5 and 95cm bgl at TP7. L2 to L5 of TP5 are sandy layers which are likely the sediments of river beds. Although L2 and L3 of TP7 are silty, bottom strata L4 and L5 of TP7 are also sandy. L4 and L5 of TP7 should also be regarded as the sediments of river beds. TP6 is located on a higher ground under trees. L2 and L3 are yellow sandy soil and yellow sandy soil

with red spots, which L3 is similar to the typical sterile layer of the area. TP8 is located on a foothill area. Deteriorated rock was revealed just beneath L1.

Sterile layers were also found immediately beneath L1 of AH4 to AH8. Some similarity of the strata between the auger holes are worth to note. For example, L3 of AH5 and L2 of AH7 are are greyish brown silty soil with red spots. L4 of AH5 and AH6 are greyish brown sand.

In addition, deteriorated rocks were reached in AH7 and AH8. Greyish brown sandy layer which should be the river bed was also revealed as L4 of AH6.

5.4.5 Area E

TP9 and TP10 are both located on abandoned cultivation land and on terraced alluvium. A total of eight strata were identified in TP9 and three strata were identified at TP10.

Their topsoil layers are both grey sandy soil, loose and with roots of vegetation. However, the strata beneath layer 1 at TP9 and TP10 are different.

All the layers beneath Layer 1 of TP9 are sandy and hard. L2 is a yellowish brown sandy soil layer, firm and hard. L3 is a greyish brown sandy layer, firm and hard. L4 is yellowish brown sandy soil with red lumps, firm and hard. L5 to L8 are dark grey, grey, white and yellow sand respectively. L4 to L8 are sterile layers. L5 to L8 are likely to be sandy sediment on the river bed. L5 to L8 are revealed by augering as water table was reached at 90cm bgl while excavating L4.

L2 of TP10 is dark grey sandy soil layer, which is loose and fertile. It is thick and indicates the presence of a layer of dense vegetation in the past. L3 is sterile and is a yellowish sandy layer with greyish white and large amount of red spots, firm and hard. It is a typical sterile layer of the area with reference to archaeological findings obtained from archaeological work under Liantang 5 and EIA study.

Grey inclusion is found on the top of L4 of TP9 which was regarded as potential indication of past human activities during archaeological investigation conducted in 2010.

Table 5.3 Summary of Stratigraphy Information of Test Pit and Auger Hole Conducted

Layer Descriptions	Zone A		Zone B	Zone C				Zone D									Zone E	
(Dating)	TP1	AH1	TP2	TP3	TP4	AH2	AH3	TP5	TP6	TP7	TP8	AH4	AH5	AH6	AH7	AH8	TP9	TP10
Yellowish brown sand, road side fill layer (Modern)							L1											
Dark grey sandy soil (Modern)							L2 with lots of humus	L1 with sub-layers	L1 contains lots of humus		L1 with rubbles	L1 with lots of grass root						
Reddish brown silty soil (Modern)			L1										L1					
Yellowish silty soil (fill layer) (Modern)			L2															
Reddish brown sand (Early 20th Century)	L1																	
Greyish brown sandy soil (Early 20th Century)		L1		L1	L1	L1										L1		
Grey sandy soil (Early 20th Century)										L1							L1 with roots of vegetation	L1 with roots of vegetation
Yellowish brown sandy soil (Early 20th Century)																	L2	

Layer Descriptions (Dating)	Zone A		Zone B	Zone C				Zone D									Zone E	
	TP1	AH1	TP2	TP3	TP4	AH2	AH3	TP5	TP6	TP7	TP8	AH4	AH5	AH6	AH7	AH8	TP9	TP10
Dark brown sandy soil, a bit silty, contains small amount of tile shards (Early 20th Century)			L3 pit H1 under L3															
Dark grey sandy soil (Earlier than early 20th Century)																		L2 with lots of humus
Yellowish brown sandy soil, with large amount of yellow and red lumps, loose and hard, contains large amount of stones , fill layer (Earlier than early 20th Century)				L2	L2													
Yellowish brown sandy soil with coarse sand and rust spots (Earlier than early 20th Century)		L2																
Yellowish brown silty soil (Earlier than early 20th Century)			L4															

Layer Descriptions (Dating)	Zone A		Zone B	Zone C				Zone D									Zone E	
	TP1	AH1	TP2	TP3	TP4	AH2	AH3	TP5	TP6	TP7	TP8	AH4	AH5	AH6	AH7	AH8	TP9	TP10
Grey sand (Earlier than early 20th Century)						L2												
Brown sand (Earlier than early 20th Century)						L3												
Light brown sand, contains stone (Earlier than early 20th Century)						L4												
Greyish brown silty soil (Unknown)															L1			
Dark brown sandy soil (Unknown)														L1 (cultivation land)				
Light grey sandy soil (Unknown)							L3											
Grey sandy soil with reddish brown lumps (Unknown)							L4											
Sterile Layers																		

Layer Descriptions (Dating)	Zone A		Zone B	Zone C				Zone D									Zone E	
	TP1	AH1	TP2	TP3	TP4	AH2	AH3	TP5	TP6	TP7	TP8	AH4	AH5	AH6	AH7	AH8	TP9	TP10
Upper part is yellowish brown and gradually turns brown at the bottom, sandy soil, firm and soft, contains small amount of stones				L3														
Brownish grey sandy soil, firm and hard, pure. It has large amount of rusted iron spots.								L2										
Greyish brown sand, firm and hard																	L3	
Yellowish silty layer with orange spots	L2																	
Yellowish sandy soil, loose	L3	L3 with coarse sand						L3 with small amount of stones										
Yellowish silty soil		L4	L5															
Yellowish sandy soil, firm and hard				L4 (AH)														
Yellowish sandy soil, loose and pure									L2			L2				L2		
Yellowish sand		L5																

Layer Descriptions (Dating)	Zone A		Zone B	Zone C				Zone D									Zone E	
	TP1	AH1	TP2	TP3	TP4	AH2	AH3	TP5	TP6	TP7	TP8	AH4	AH5	AH6	AH7	AH8	TP9	TP10
Yellowish silty soil	L4	L6																
Yellow sand, with greyish white and large amount of red spots, firm and hard																		L3
Yellowish sandy soil with red spots									L3									
Yellowish brown sandy soil with red lumps																	L4	
Yellowish brown sandy soil with large amount of red spots and fine sand				L5 (AH)														
Yellow sandy soil with small amount of grey fine and soft sand. It has large amount of dark brown spots.								L4										
Bright yellow sand, loose and soft												L3						
Bright yellow sand with larger grains, loose and soft												L4						
Bright yellow sandy soil																L3		
Bright yellow sand with large amount of red lumps, hard and firm, contains small amount of stones												L5						

Layer Descriptions (Dating)	Zone A		Zone B	Zone C				Zone D									Zone E	
	TP1	AH1	TP2	TP3	TP4	AH2	AH3	TP5	TP6	TP7	TP8	AH4	AH5	AH6	AH7	AH8	TP9	TP10
Brown sand														L2				
Brown silty soil with red spots													L2	L3				
Greyish brown silty soil with red spots ,very silty										L2			L3		L2			
Greyish brown sand													L4	L4				
Dark grey sandy soil					L3													
Dark grey sand										L3							L5 (AH)	
Black silty soil					L4 (AH)		L5											
Greyish white silty soil					L5 (AH)					L4 with yellowish sand					L3			
Greyish white sand	L5 (AH)	L7								L5 (AH)								
Yellowish sand	L6 (AH)																	
Yellow sandy soil					L6 (AH)													
Grey sand	L7 (AH)							L5									L6 (AH)	
Grey sandy soil				L6 (AH)														

Layer Descriptions (Dating)	Zone A		Zone B	Zone C				Zone D									Zone E	
	TP1	AH1	TP2	TP3	TP4	AH2	AH3	TP5	TP6	TP7	TP8	AH4	AH5	AH6	AH7	AH8	TP9	TP10
Brown silty soil				L7 (AH)														
Dark brown sand						L5												
White sand																	L7 (AH)	
Yellow sand																	L8 (AH)	
Greyish white sandy soil with deteriorated rock															L4			
Deteriorated rock											L2					L4		

5.5 *FEATURE*

A feature H1 is found in TP2 of Area B. It is a garbage pit containing three pieces of blue and white porcelain shards and 13 pieces of pottery shards, which the artefacts are village wares that have very low archaeological significance. H1 should be dated to early 20th Century based on the dating of the artefacts revealed.

5.6 *ARTEFACTS*

Artefacts were collected on the ground surface of TP1 and near TP5 during field scanning; they were also unearthed from TP1, TP2, TP4 and TP9. Photos are provided in *Annex D* and all artefacts collected are summarized in *Table 5.4.*

Table 5.4 *Artefacts Collected and Unearthed*

Area	Test Pit No/ Location	Surface Collection /Feature/ Layer	GF No.	Description	Number (piece)
A	On top of TP1	SC	1	Foot shard of blue and white porcelain dish dated to early 20th Century	1
		SC	2	Tile shards dated to early 20th Century	4
		SC	3	Brownish glazed pottery shard dated to early 20th Century	1
		1	1	*Douqing* glazed (豆青釉) porcelain shard dated to early 20th Century	1
		1	2	Tile shards dated to early 20th Century	10
		1	3	Pottery jar shards dated to early 20th Century	3
B	TP2	H1	1	Rim shards of blue and white porcelain bowl dated to early 20th Century	3
		H1	2	Brownish glazed pottery jar shards dated to early 20th Century	3
		H1	3	Rim shards of brownish glazed pottery basin and vat dated to early 20th Century	3
		H1	4	Bottom shard of brownish glazed pottery jar dated to early 20th Century	1
		H1	5	Brownish glazed pottery shards dated to early 20th Century	6
C	TP4	1	1	Blue and white porcelain shard and underglazed *wucai* (釉下五彩) porcelain shards dated to early 20th Century	3
		1	2	Brownish glazed pottery shards dated to early 20th Century	2
D	Near TP5	SC	1	Rim shard of blue and white porcelain bowl dated to early 20th Century and modern white porcelain shard	2
E	TP9	1	1	Brownish glazed pottery shards dated to early 20th Century	3
		2	1	Tile shard dated to early 20th Century	1

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6 CONCLUSION AND RECOMMENDATION

Based on the findings from this archaeological survey and the previous findings of *Archaeological Investigation for Liantang / Heung Yuen Wai Boundary Control Point and Associated Works Environmental Impact Assessment* (2010) [1], the archaeological significance of Areas A to E is discussed below:

(a) Areas A and B:

No test pit or auger hole was conducted at Areas A and B in 2010.

During this archeological survey, pottery and ceramic shards dated to early 20th Century were collected at the surface and Layer 1 of TP1 but no cultural layer was revealed inside TP1. In addition, no artefect was revealed in AH1. Therefore Area A is considered to have nil archaeological significance.

A pit (H1) was revealed in TP2 of Area B, and small pieces of blue and white porcelain shards and pottery shards were found. These artefacts are village wares and H1 should be a garbage pit which can be dated to the early 20th Century. Therefore Area B is considered to be with very low archaeological significance.

(b) Area C:

One test pit (TP0603) was conducted in this area but no cultural remain was identified in 2010.

During this archeological survey, porcelain shards and pottery shards dated to the early 20th Century were identified in Layer 1 of TP4. However, no cultural layer and no artefact were revealed in earlier layers of TP4, as well as in TP3, AH2 and AH3. Therefore Area C is considered to be with nil archaeological significance.

(c) Area D:

A total of two test pits (TP0503, TP0505) and two auger holes (AH0502, AH0503) were conducted in this area in 2010. No cultural remain was identified in TP0503 but in-situ late Qing Dynasty cultural layers were identified in TP0505.

Ceramics shards including village wares shards, general tile fragments and blue-and-white porcelain shards were revealed, but a more precise dating of the artefacts was not possible due to the lack of diagnostic feature identified on artefacts. As the types of artefacts revealed were commonly found in Hong Kong; amount of artefacts revealed was small; and dating of the cultural layers were not early, the findings of TP0505

(1) Civil Engineering and Development Department. 2010. *Liantang / Heung Yuen Wai Boundary Control Point and Associated Works EIA report.*

are considered to be with low archaeological significance.

Based on the survey data of TP0505, an area with low archaeological potential with an indicative boundary had been identified. Further archaeological survey was required at other areas within Area D.

During this archeological survey, TP5 to TP8 and AH4 to AH8 were conducted at Area D. TP6 and TP7 were close to TP0505 and TP6 falls within the area with low archaeological potential defined by survey data of TP0505. However no cultural layer and artefacts was identified in all test pits and auger holes. Therefore, the area is considered to be with very low archaeological significance taking account the findings of TP0505.

(d) Area E:

Five auger holes (AH0312 to AH0316) were conducted in 2010. Brown sandy soil layers with grey inclusion were found at AH0313, AH0314, AH0315 and AH0316, which the grey inclusion was regarded as potential indication of past human activities.

Layers with grey inclusion were also identified in TP9 (L4) and TP10 (L2). With reference to test pits findings of Liantang Contract 5, the grey inclusions are confirmed to be the rotten root of weeds of the low laying river bank area or remains of abandoned agricultural land of the early 20th Century. As the layers of brown sandy soil with grey inclusion are concluded to be with very low archaeological significance for test pits findings of Liantang Contract 5, similar layers identified in TP9 and TP10 are also considered to be with very low archaeological significance.

In summary, Areas B, D and E are considered to be with very low archaeological significance. Areas A and C are considered to be with nil archaeological significance. Given the very low and nil archaeological potential of the areas surveyed, no further archaeological action is considered necessary.

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Chinese

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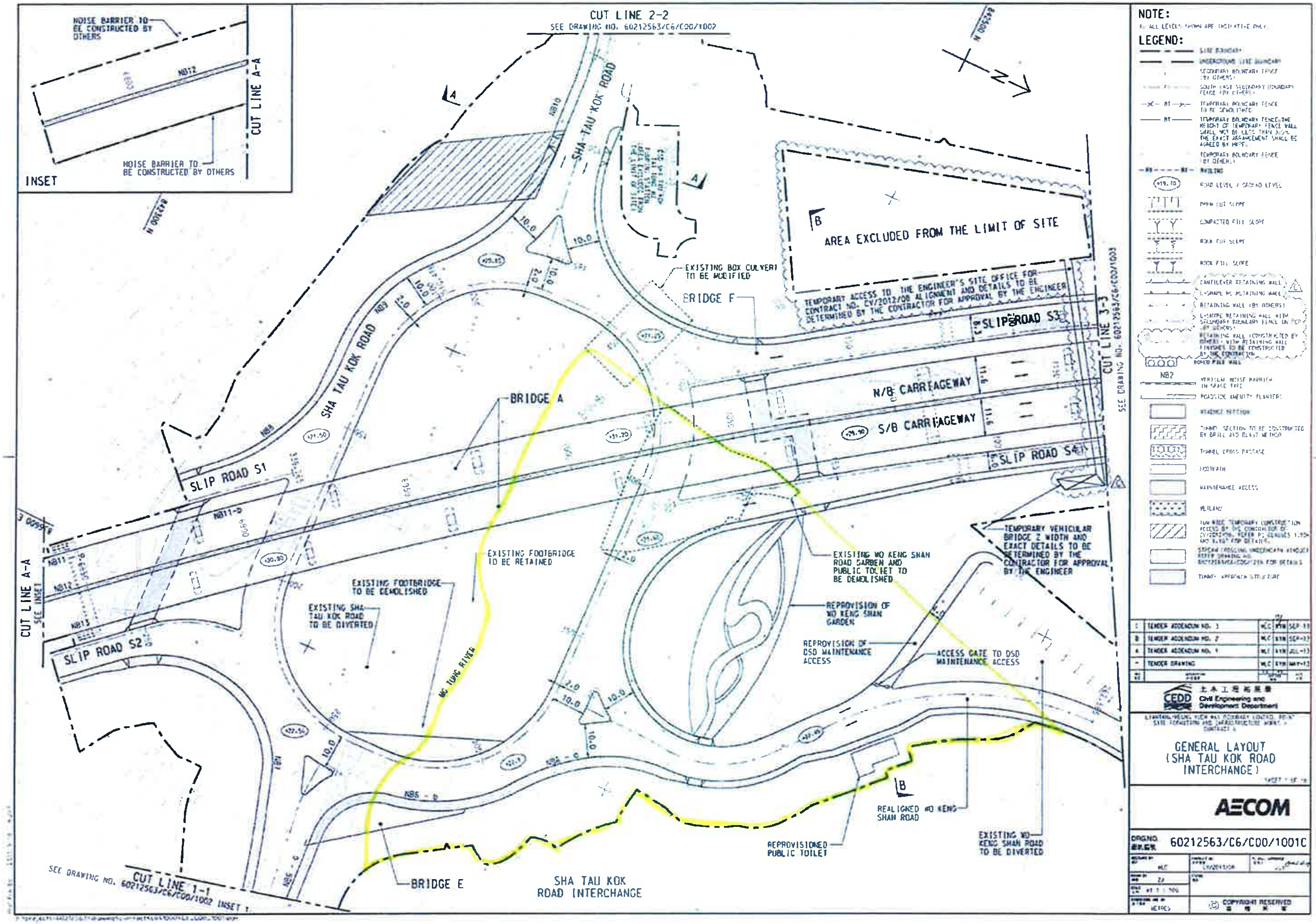
新安縣誌 (清) 1688 & 1819

Annex A

Illustrations of the Construction Works

Annex A1

General Layout



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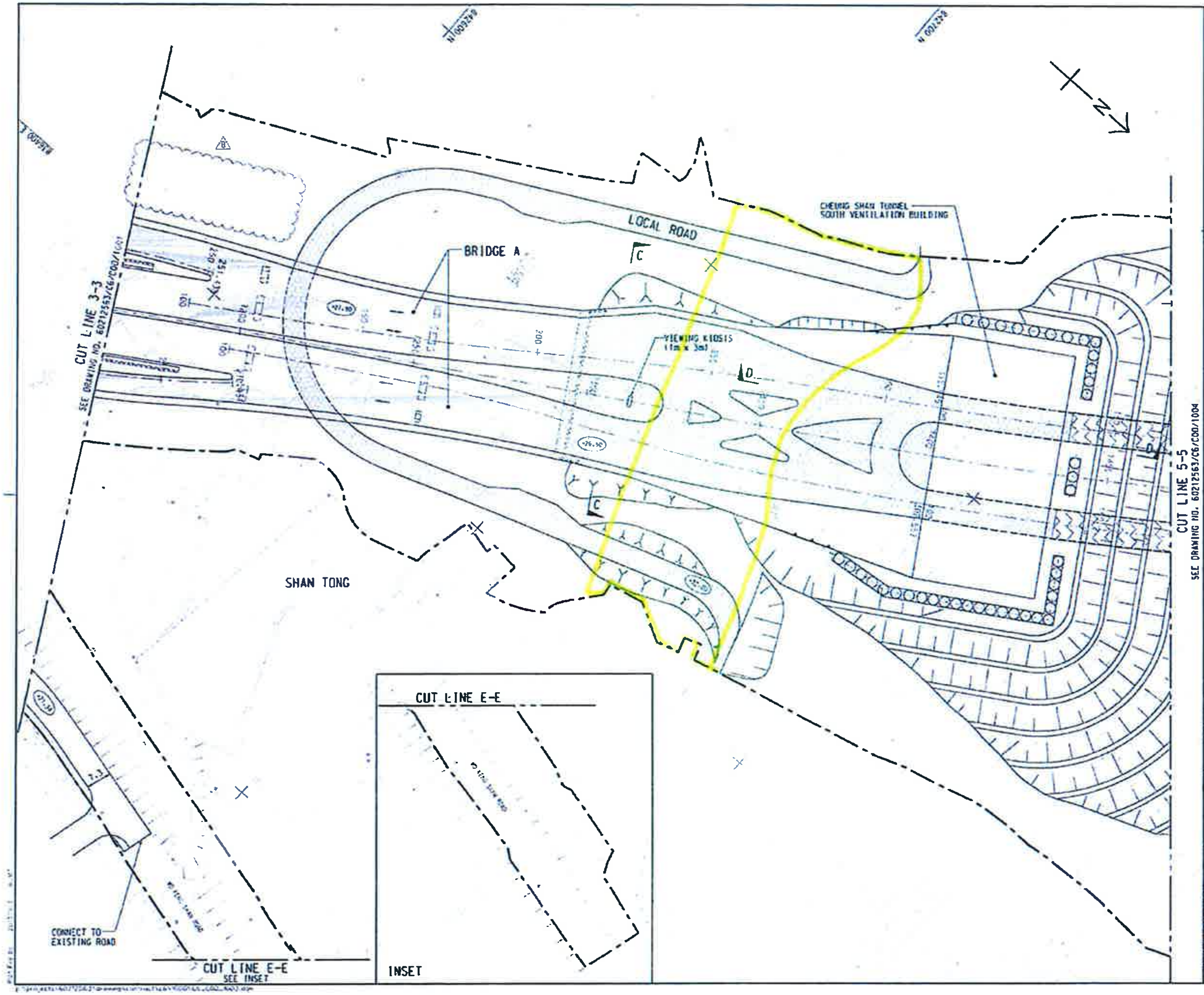
LEGEND:
INSET
NOISE BARRIER TO BE CONSTRUCTED BY OTHERS
CUT LINE A-A
CUT LINE 2-2
SEE DRAWING NO. 60212563/C6/C00/1002
SHA TAU KOK ROAD
AREA EXCLUDED FROM THE LIMIT OF SITE
EXISTING BOX CULVERT TO BE MODIFIED
BRIDGE F
TEMPORARY ACCESS TO THE ENGINEER'S SITE OFFICE FOR CONTRACT NO. CV/2012/08 ALIGNMENT AND DETAILS TO BE DETERMINED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER
SLIP ROAD S3
N/B CARRIAGEWAY
S/B CARRIAGEWAY
SLIP ROAD S4
CUT LINE 3-3
SEE DRAWING NO. 60212563/C6/C00/1003
SLIP ROAD S1
SLIP ROAD S2
BRIDGE A
EXISTING FOOTBRIDGE TO BE RETAINED
EXISTING FOOTBRIDGE TO BE DEMOLISHED
EXISTING SHA TAU KOK ROAD TO BE DIVERTED
EXISTING WO KENG SHAN ROAD GARDEN AND PUBLIC TOILET TO BE DEMOLISHED
REPROVISION OF WO KENG SHAN GARDEN
REPROVISION OF DSD MAINTENANCE ACCESS
ACCESS GATE TO DSD MAINTENANCE ACCESS
TEMPORARY VEHICULAR BRIDGE Z WIDTH AND EXACT DETAILS TO BE DETERMINED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER
NG TUNG RIVER
REALIGNED WO KENG SHAN ROAD
REPROVISIONED PUBLIC TOILET
EXISTING WO KENG SHAN ROAD TO BE DIVERTED
BRIDGE E
SHA TAU KOK ROAD INTERCHANGE
CUT LINE 1-1
SEE DRAWING NO. 60212563/C6/C00/1002 INSET 1
TENDER ADDENDUM NO. 3
TENDER ADDENDUM NO. 2
TENDER ADDENDUM NO. 1
TENDER DRAWING
土木工程拓展署
CEDD Civil Engineering and Development Department
GENERAL LAYOUT (SHA TAU KOK ROAD INTERCHANGE)
AECOM
60212563/C6/C00/1001C
COPYRIGHT RESERVED



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-	TENDER DRAWING	KLC	KYN	MAY-13

土木工程拓展署
Civil Engineering and Development Department

LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

GENERAL LAYOUT

SHEET 3 OF 19

AECOM

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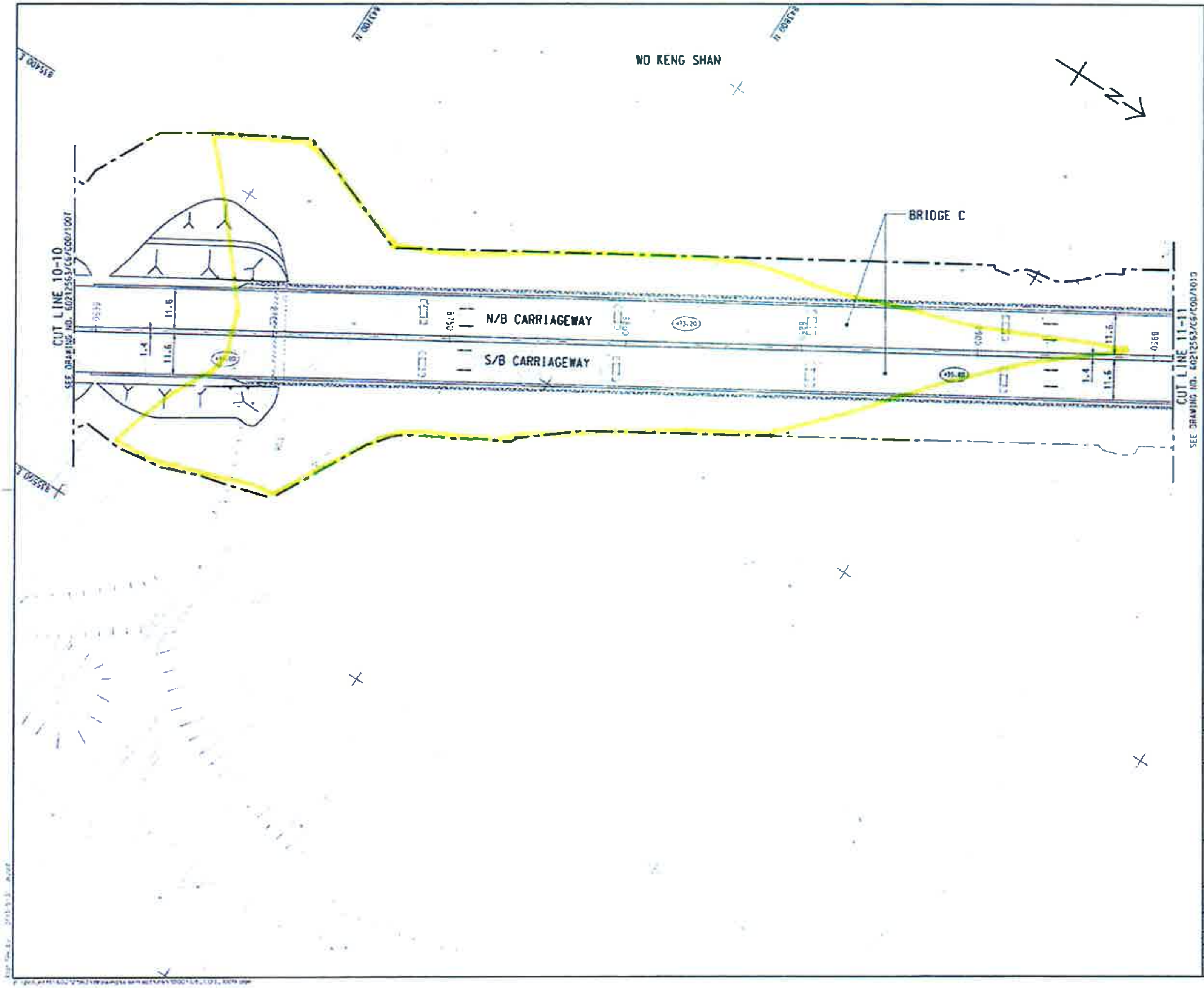

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土木工程拓展署
Civil Engineering and Development Department

LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

GENERAL LAYOUT

SHEET 9 OF 16

AECOM

DRG.NO. 60212563/C6/C00/1009

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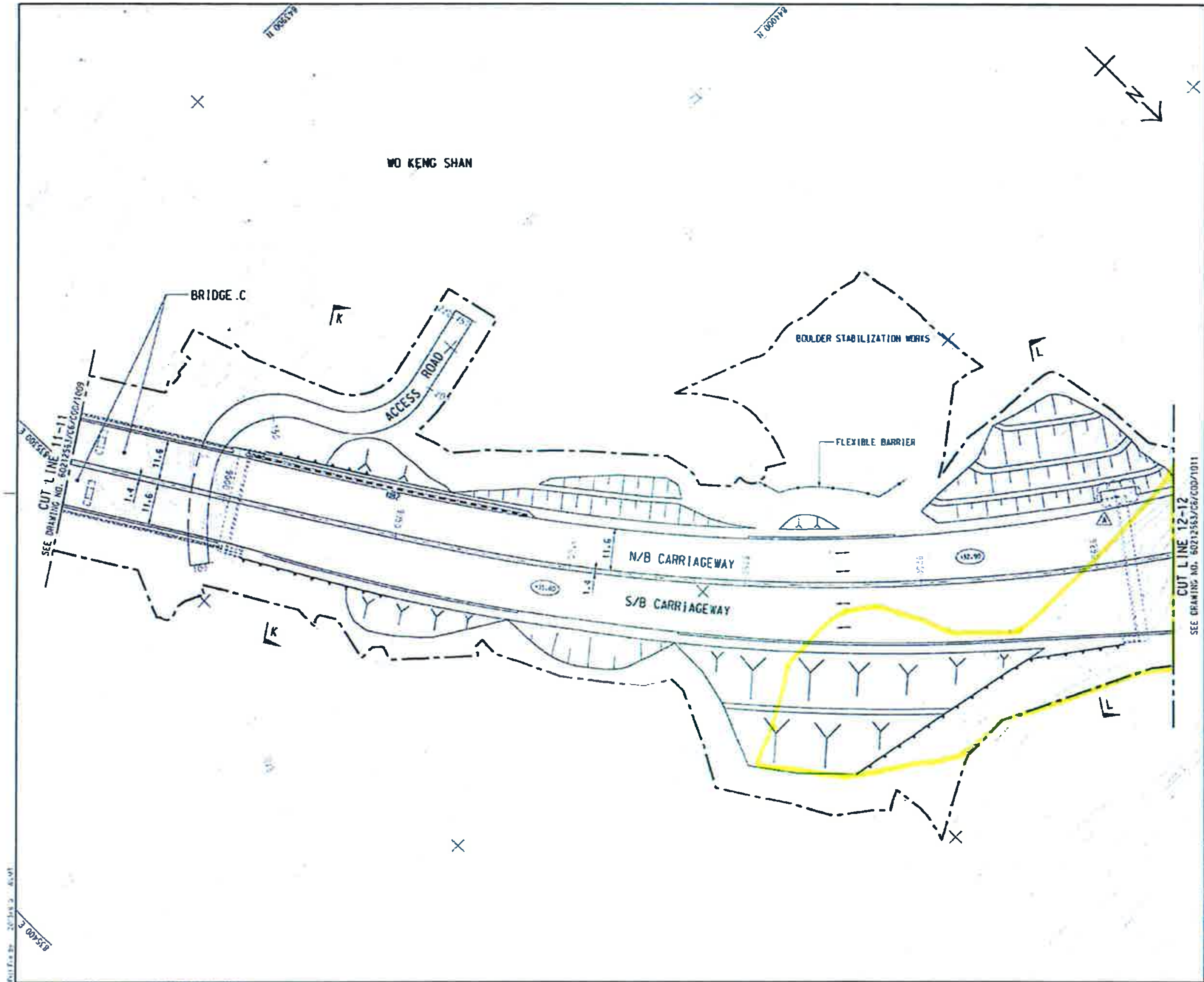

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GENERAL LAYOUT

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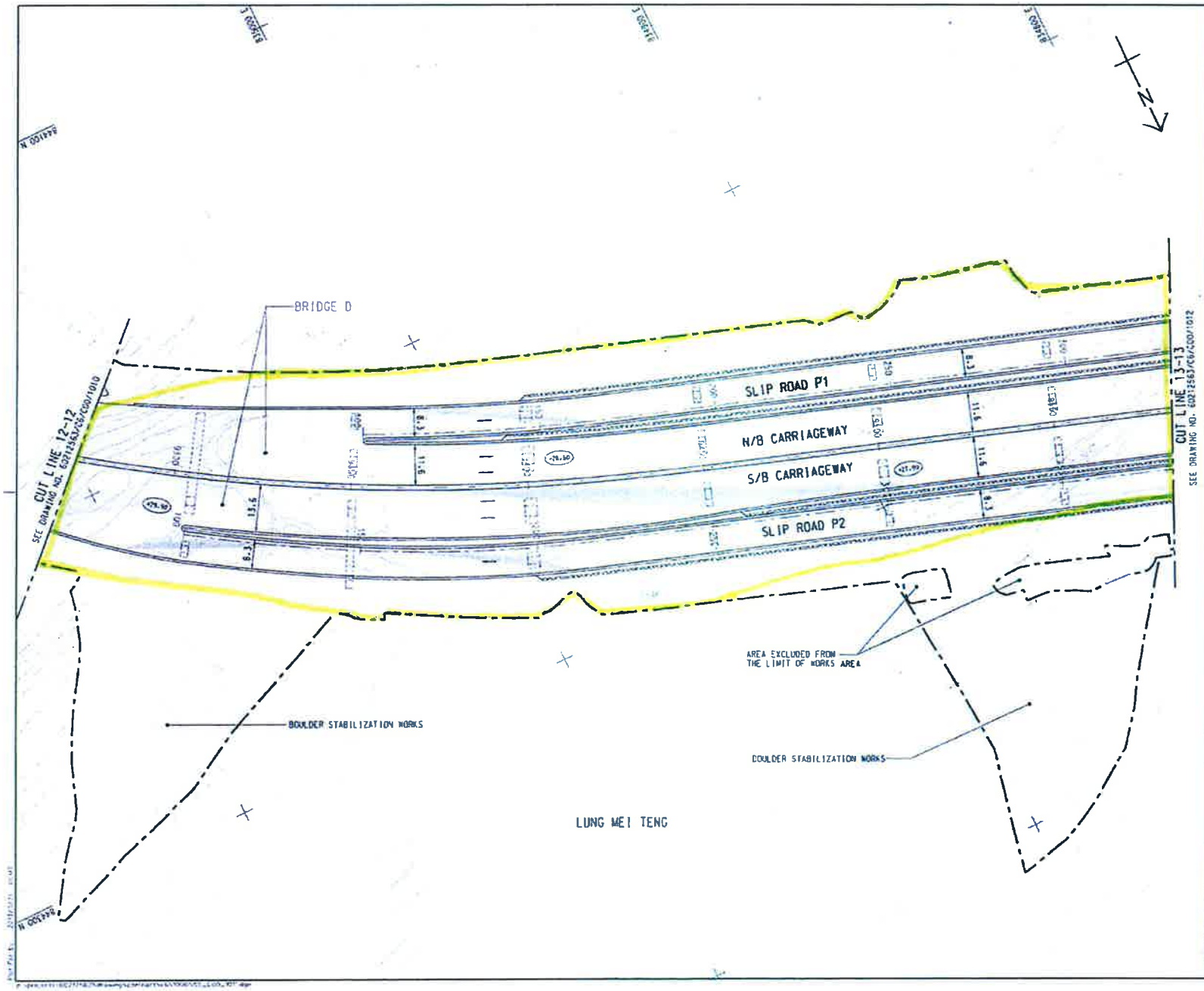

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GENERAL LAYOUT

SHEET 11 OF 16

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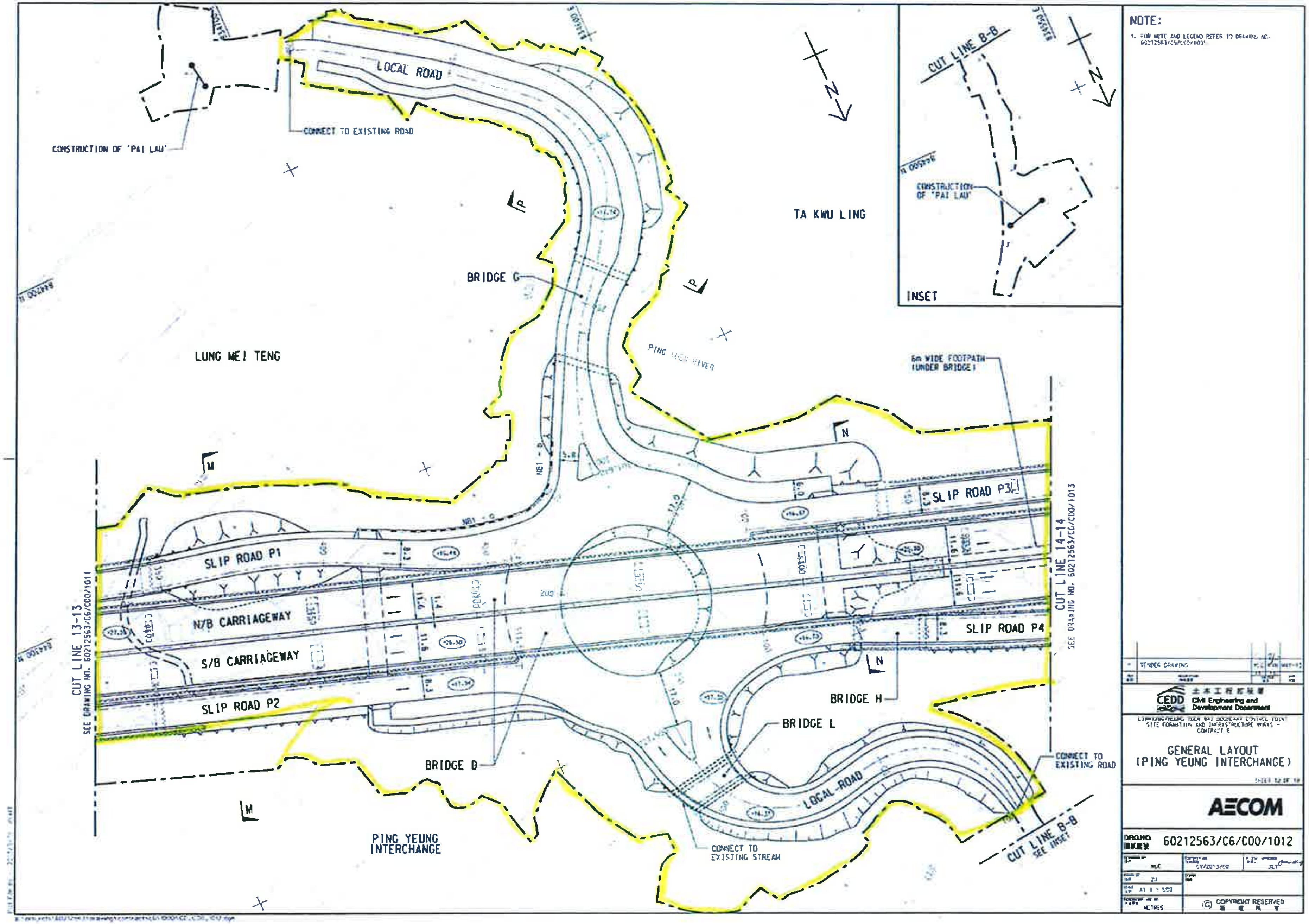

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LOCAL ROAD
CONNECT TO EXISTING ROAD
CONSTRUCTION OF 'PAI LAU'
TA KWU LING
BRIDGE G
LUNG MEI TENG
PING YUEN RIVER
6m WIDE FOOTPATH (UNDER BRIDGE)
INSET
CUT LINE 8-8
SLIP ROAD P1
SLIP ROAD P2
SLIP ROAD P3
SLIP ROAD P4
N/B CARRIAGEWAY
S/B CARRIAGEWAY
CUT LINE 13-13
SEE DRAWING NO. 60212563/C6/C00/1011
CUT LINE 14-14
SEE DRAWING NO. 60212563/C6/C00/1013
BRIDGE H
BRIDGE L
BRIDGE D
CONNECT TO EXISTING ROAD
CONNECT TO EXISTING STREAM
CUT LINE 8-8 SEE INSET
PING YEUNG INTERCHANGE
TENDER DRAWING
土木工程拓展署
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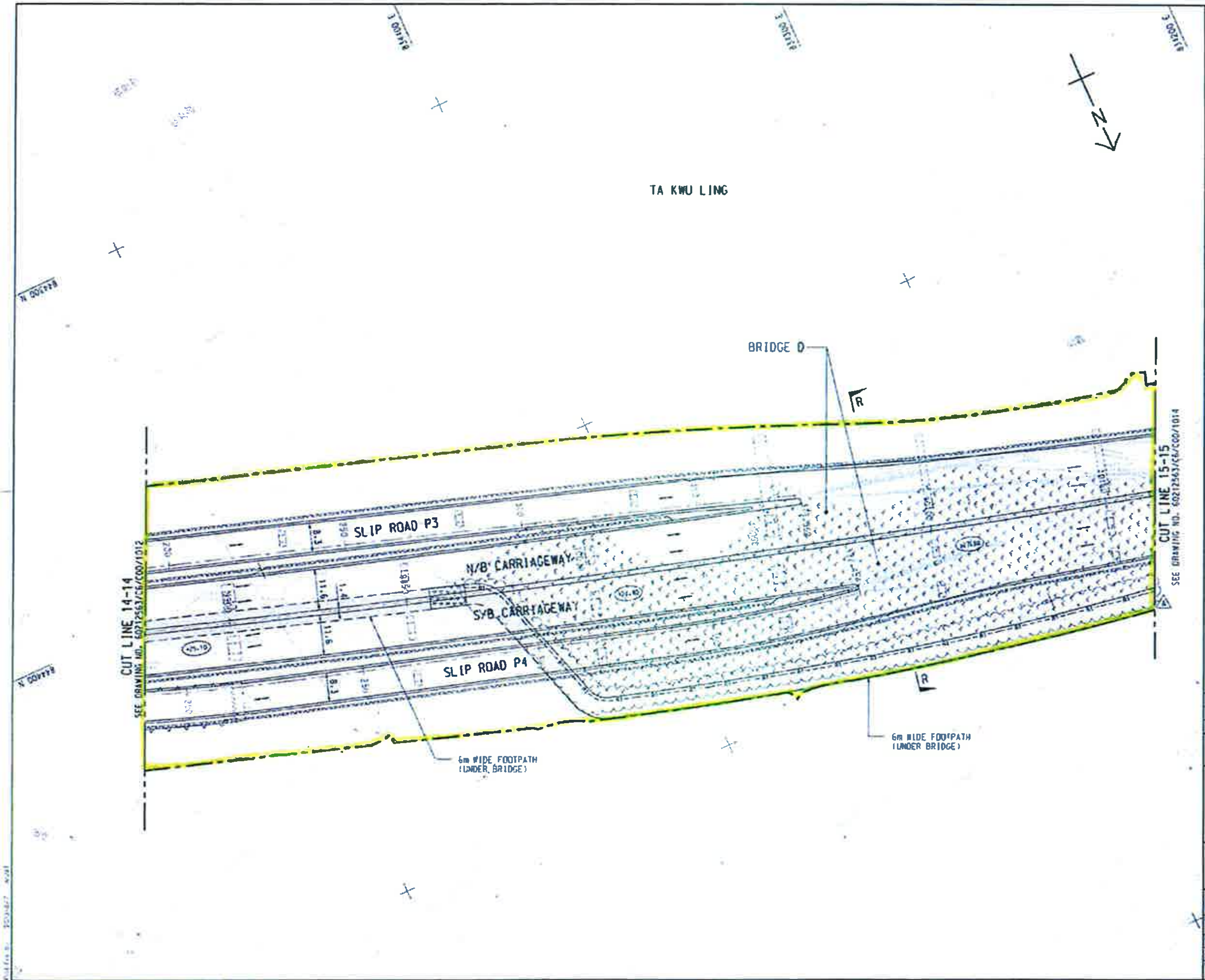

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LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

GENERAL LAYOUT

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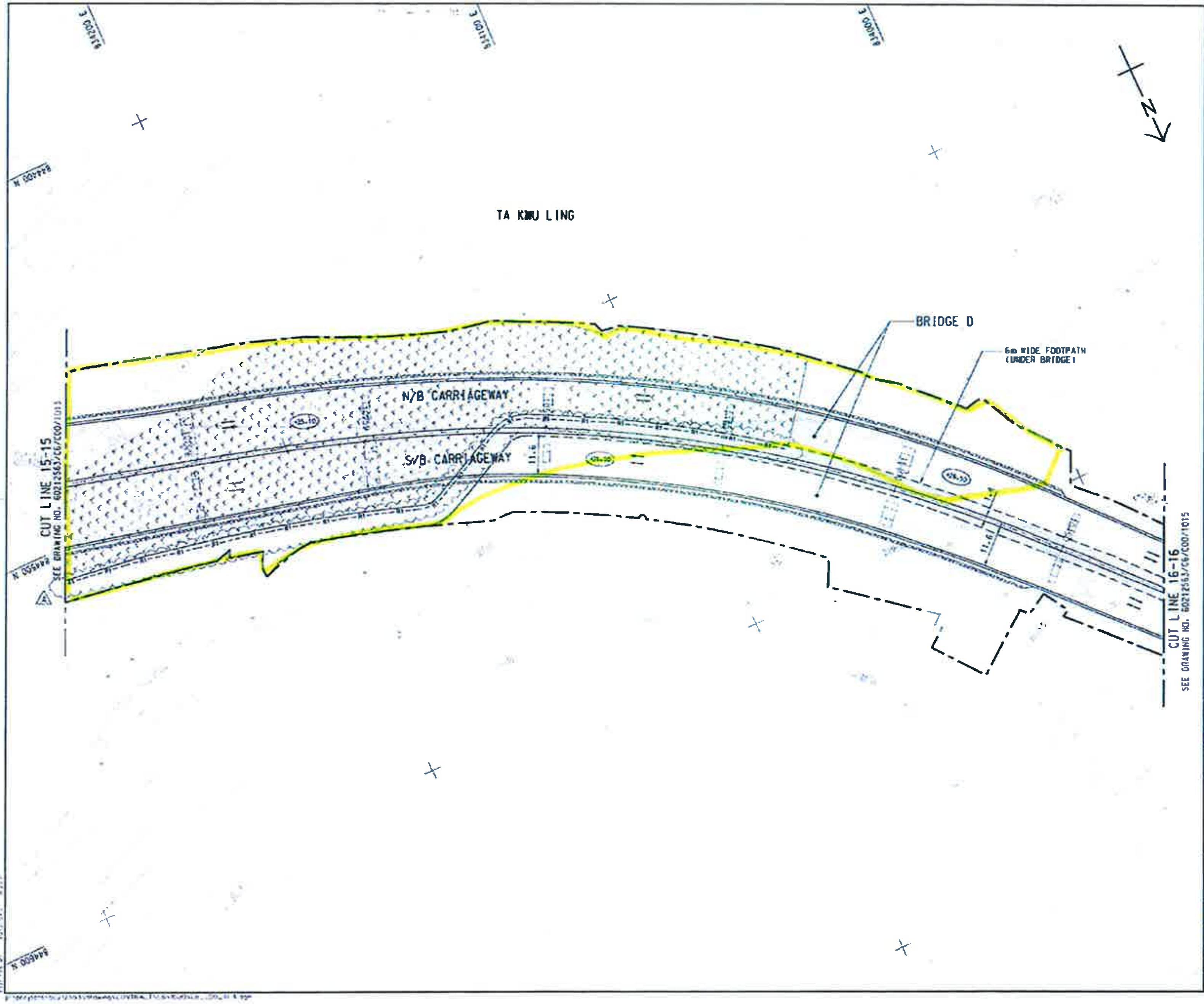

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LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 5

GENERAL LAYOUT

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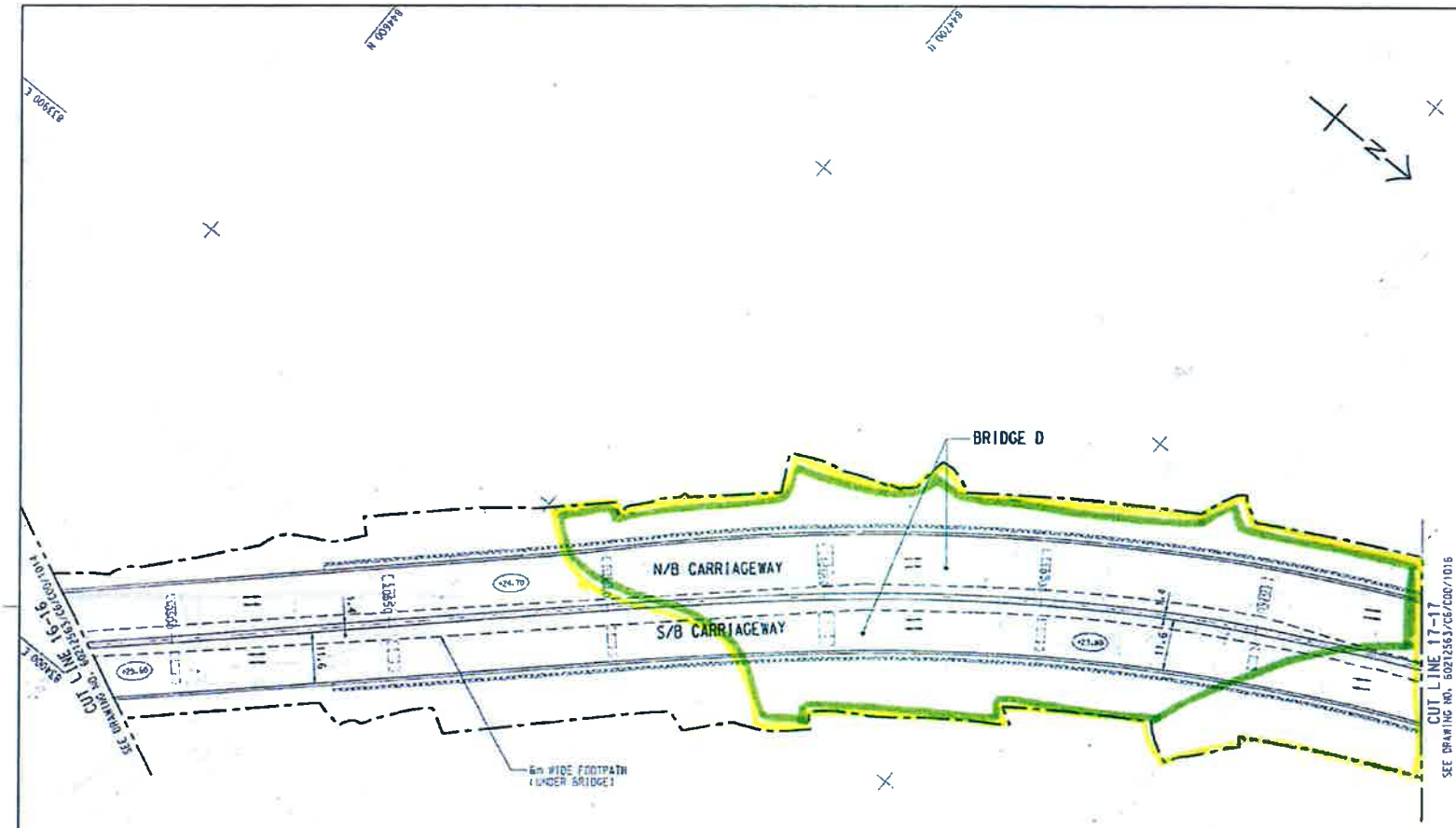

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Intensive Investigation Area

TENDER DRAWING

CEDD 土木工程拓展署 Civil Engineering and Development Department

KWANTONG VIEW AND BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

GENERAL LAYOUT

SHEET 15 OF 16

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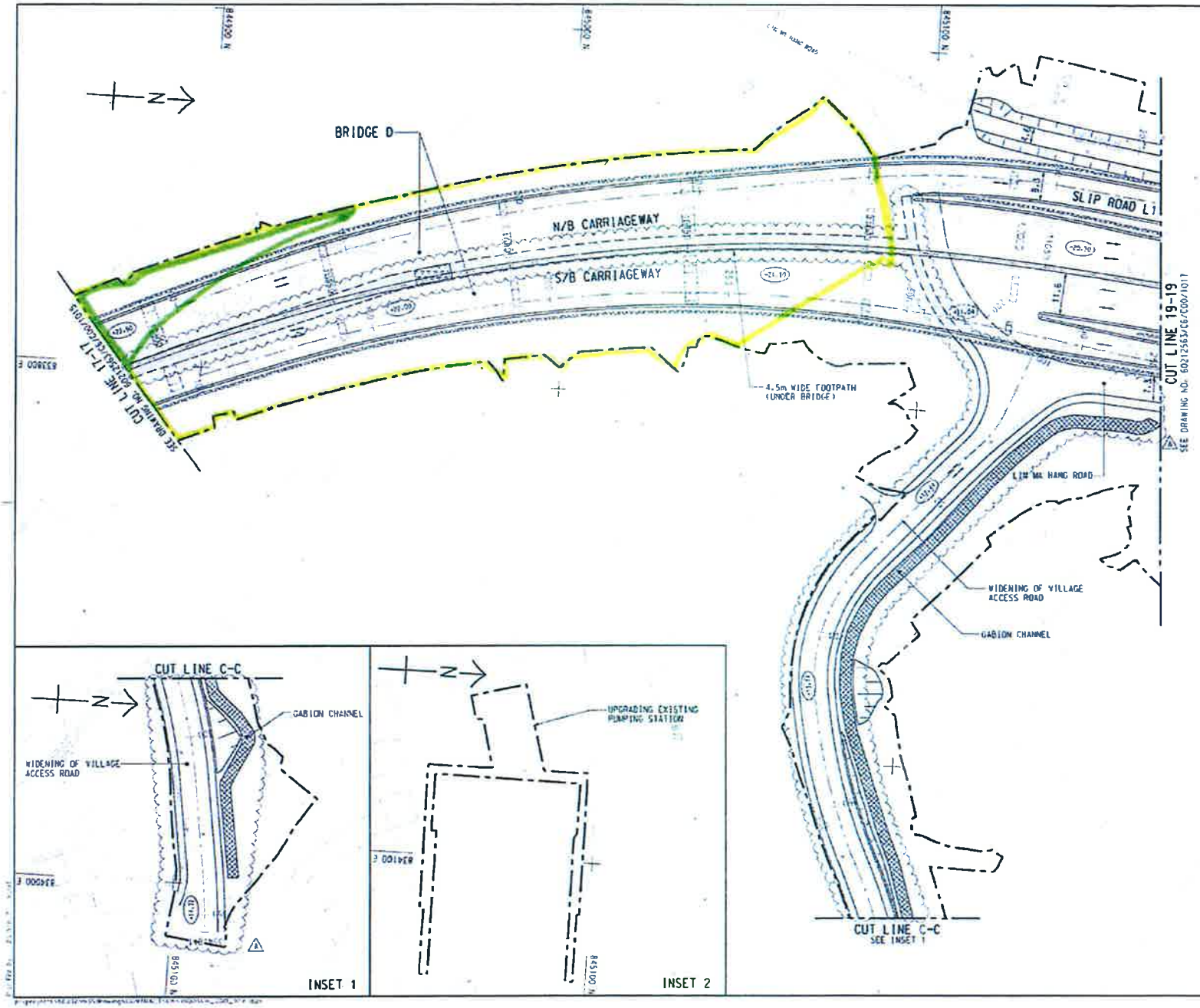

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CEDD 土木工程拓展署 Civil Engineering and Development Department

LYANTMAK/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS – CONTRACT 6

GENERAL LAYOUT

SHEET 16 OF 58

AECOM

ORIG NO. 60212563/C6/C00/1016A

METRES

Annex A2

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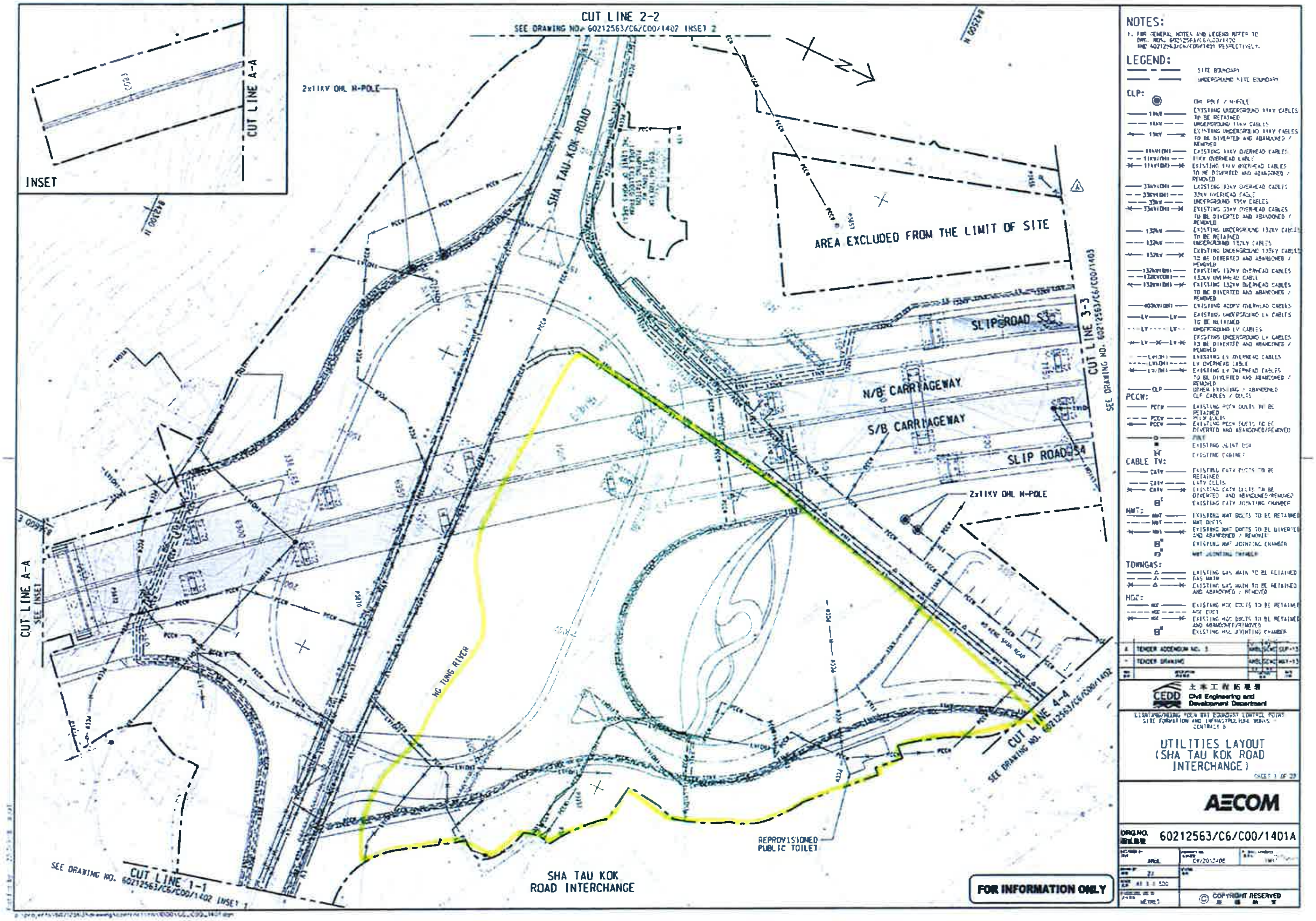
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S/B CARRIAGEWAY
SLIP ROAD S4
CUT LINE 3-3
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NG TUNG RIVER
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SEE INSET
CUT LINE 4-4
SEE DRAWING NO. 60212563/C6/C00/1402
REPROVISIONED PUBLIC TOILET
SEE DRAWING NO. 60212563/C6/C00/1402 INSET 1
CUT LINE 1-1
SHA TAU KOK ROAD INTERCHANGE
FOR INFORMATION ONLY
NOTES:
LEGEND:
CLP:
PCCW:
CABLE TV:
NWT:
TOWNGAS:
HGC:
TENDER ADDENDUM NO. 3
TENDER DRAWING
土木工程拓展署
Civil Engineering and Development Department
CEDD
UTILITIES LAYOUT
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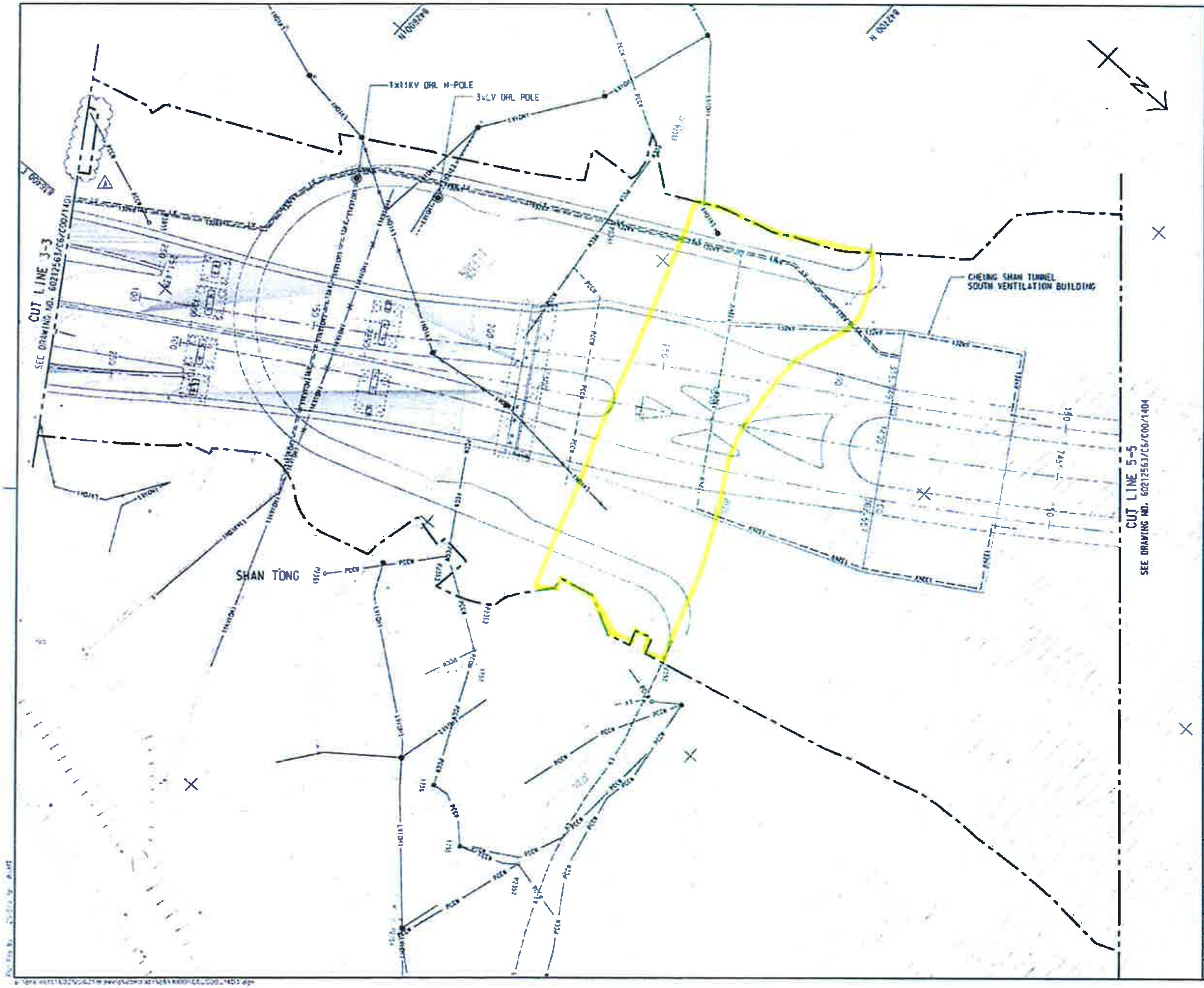

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FOR INFORMATION ONLY

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LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

UTILITIES LAYOUT

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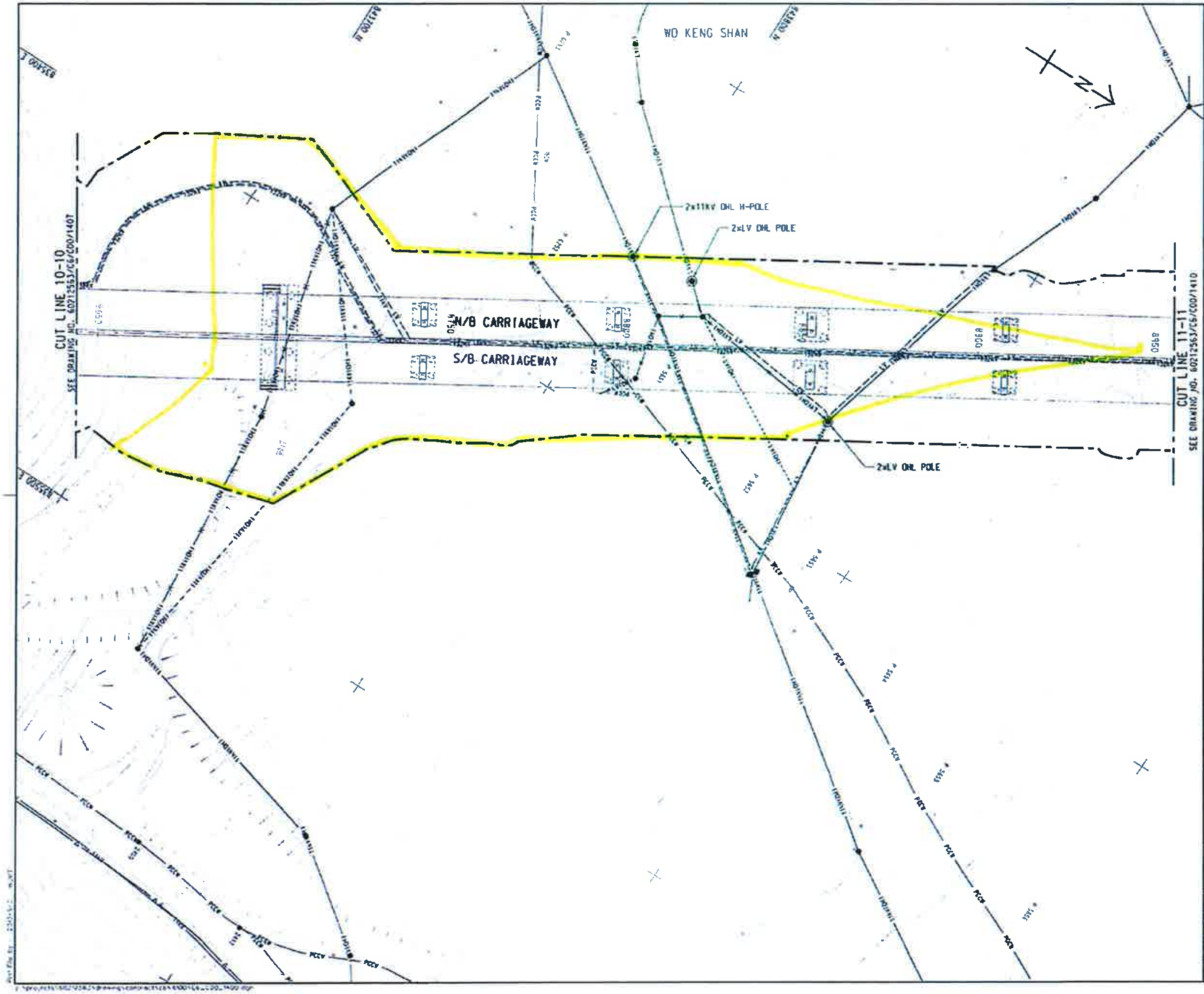

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FOR INFORMATION ONLY

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LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

UTILITIES LAYOUT

SHEET 9 OF 22

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CV/2013/08

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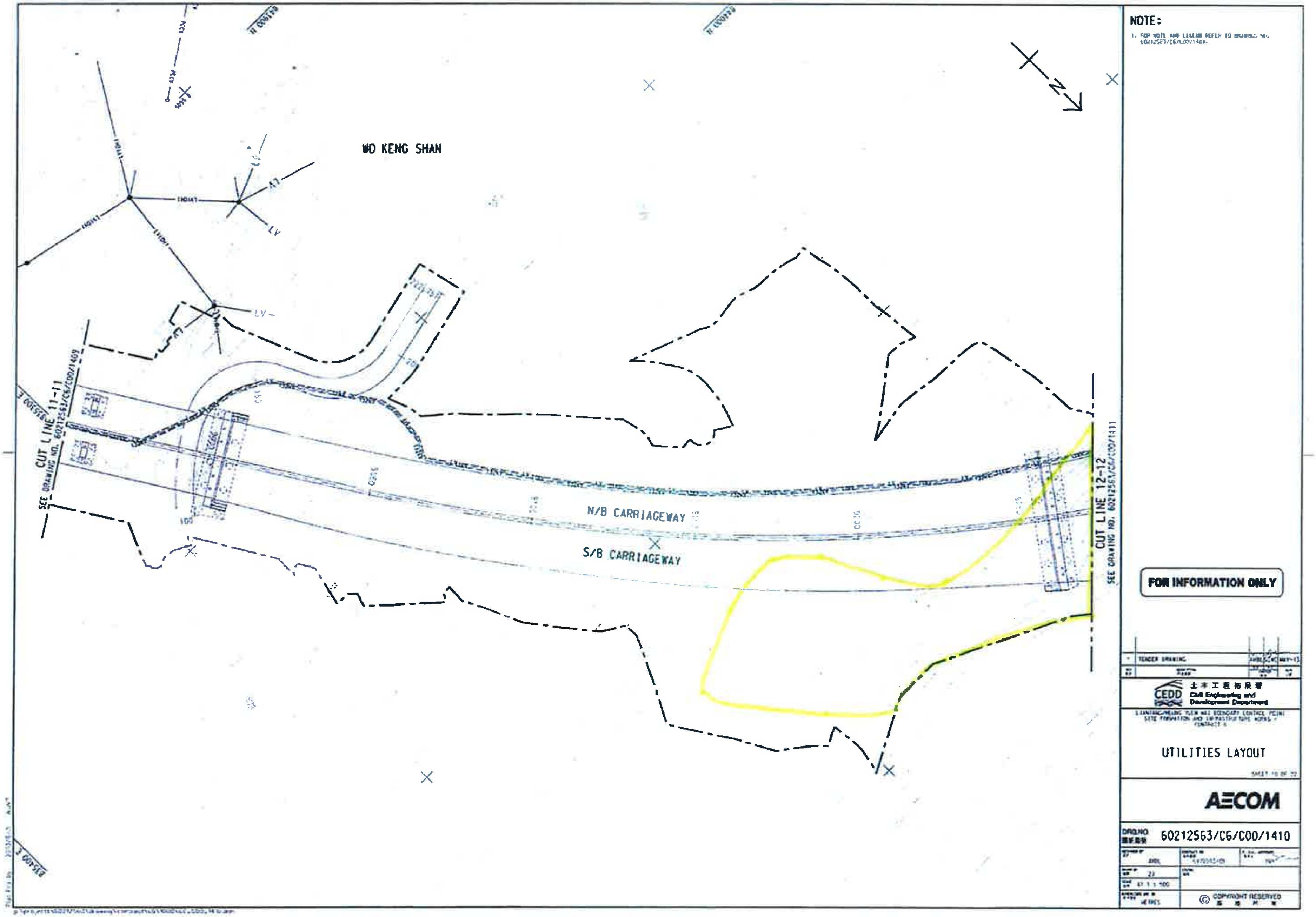
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LV
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S/B CARRIAGEWAY
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CUT LINE 12-12
FOR INFORMATION ONLY
TENDER DRAWING
土木工程拓展署
Civil Engineering and Development Department
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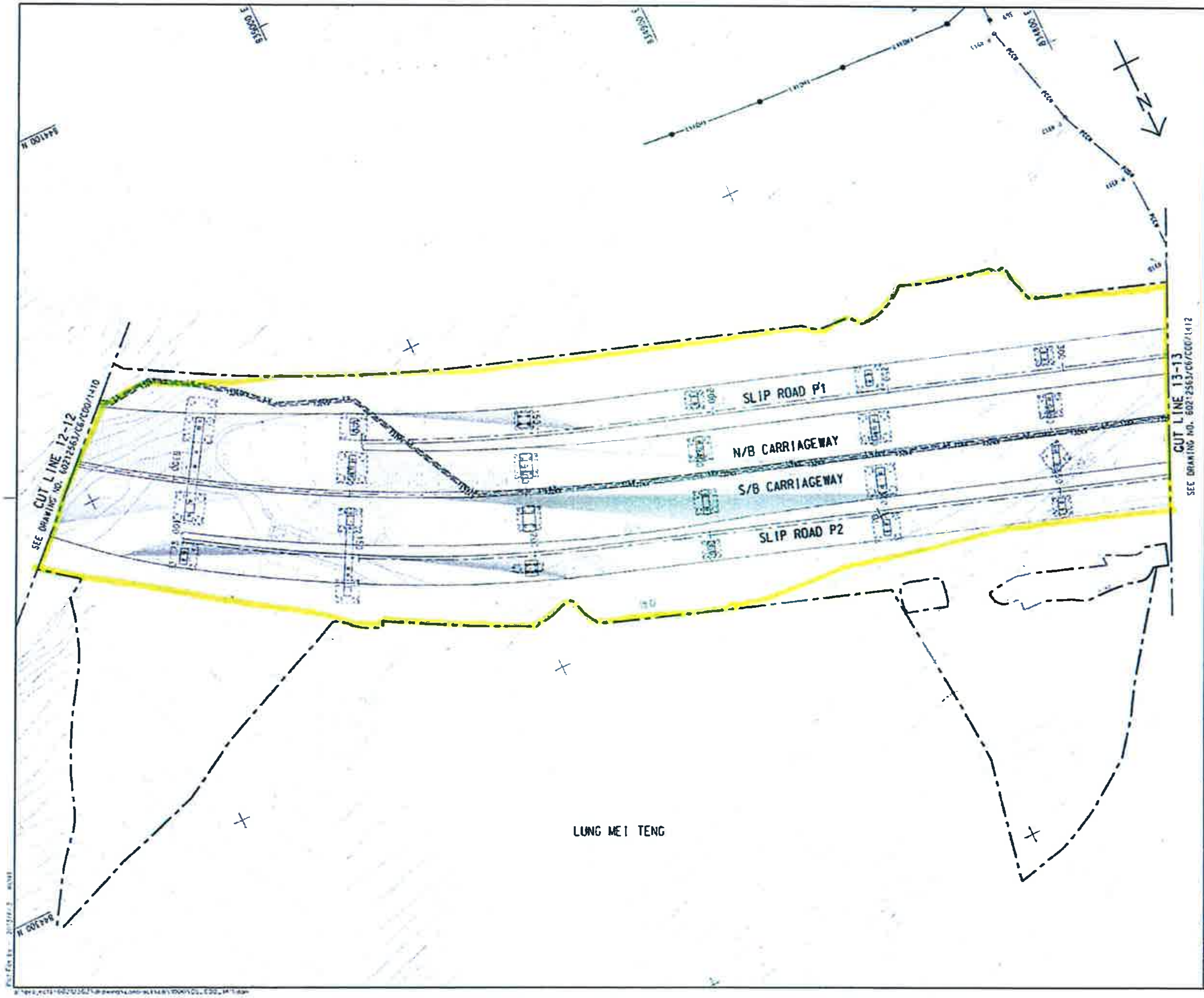

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FOR INFORMATION ONLY

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Civil Engineering and Development Department

LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

UTILITIES LAYOUT

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CV/2013/08

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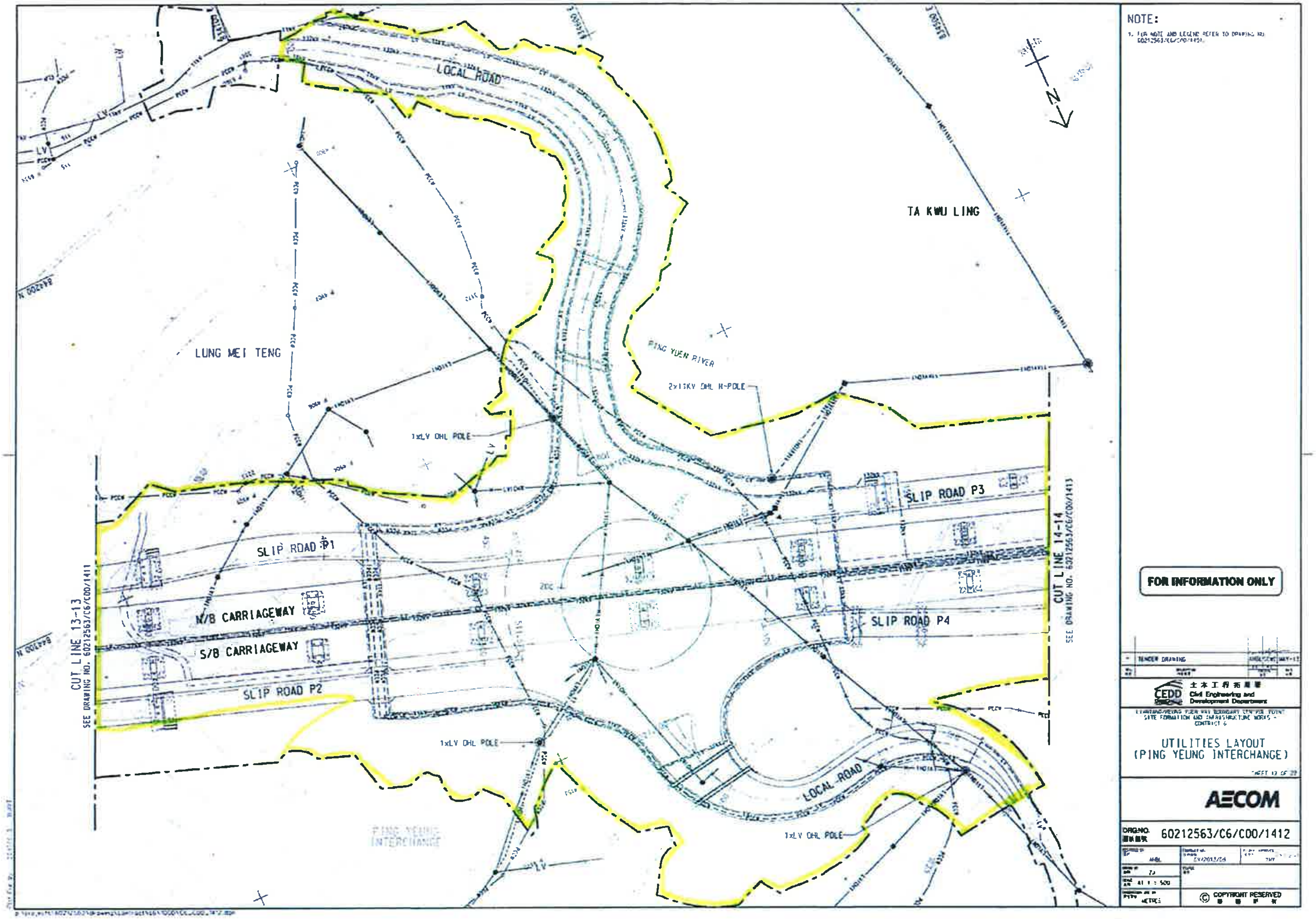
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LUNG MEI TENG
PING YUEN RIVER
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1xLV OHL POLE
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SLIP ROAD P2
SLIP ROAD P3
SLIP ROAD P4
N/B CARRIAGEWAY
S/B CARRIAGEWAY
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PING YEUNG INTERCHANGE
FOR INFORMATION ONLY
TENDER DRAWING
土木工程拓展署
CEDD
Civil Engineering and Development Department
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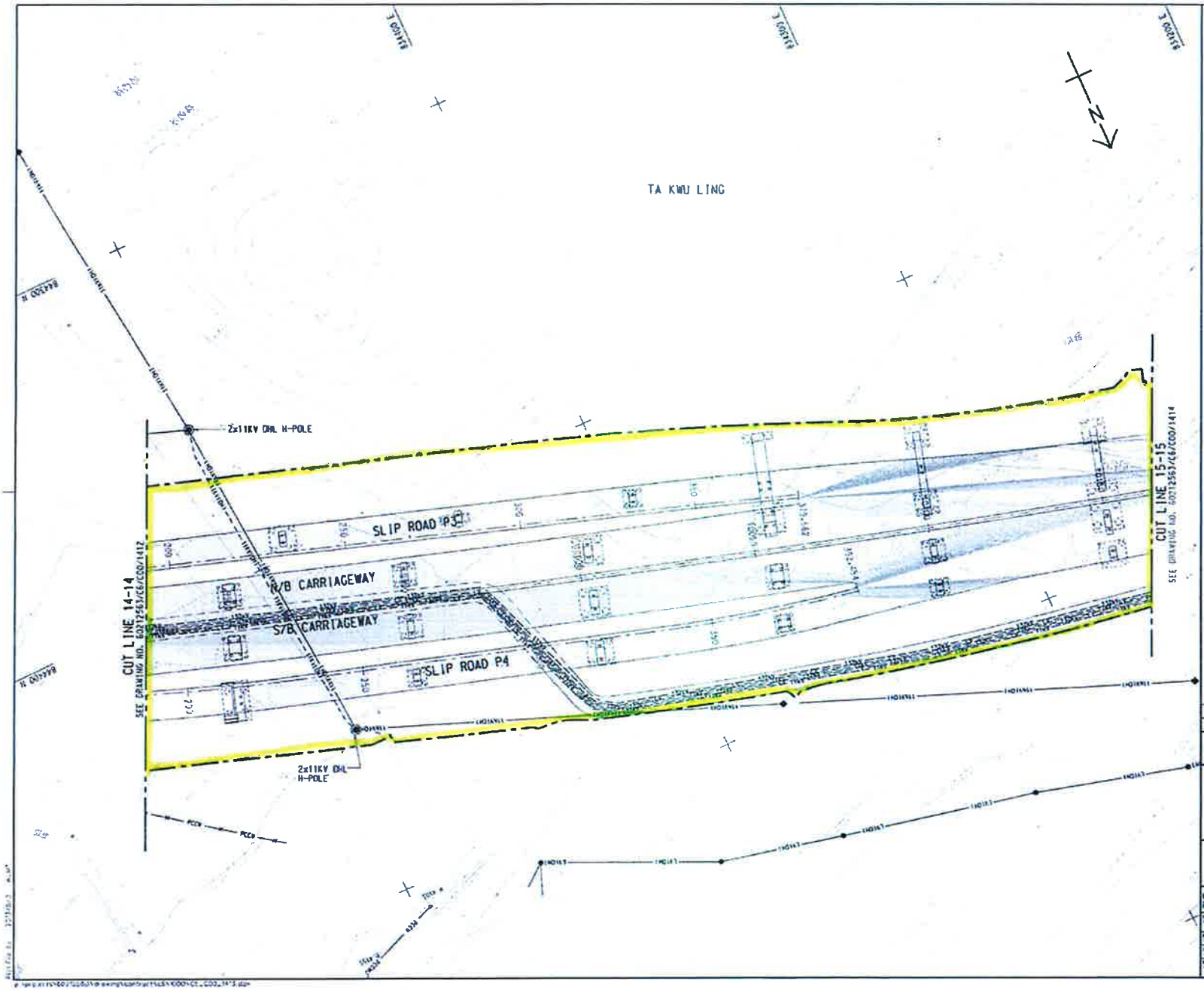

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FOR INFORMATION ONLY

-	TENDER DRAWING	

CEDD 土木工程拓展署 Civil Engineering and Development Department

LEHMAN-HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

UTILITIES LAYOUT

SHEET 13 OF 22

AECOM

DRG.NO. 60212563/C6/C00/1413

EJ		
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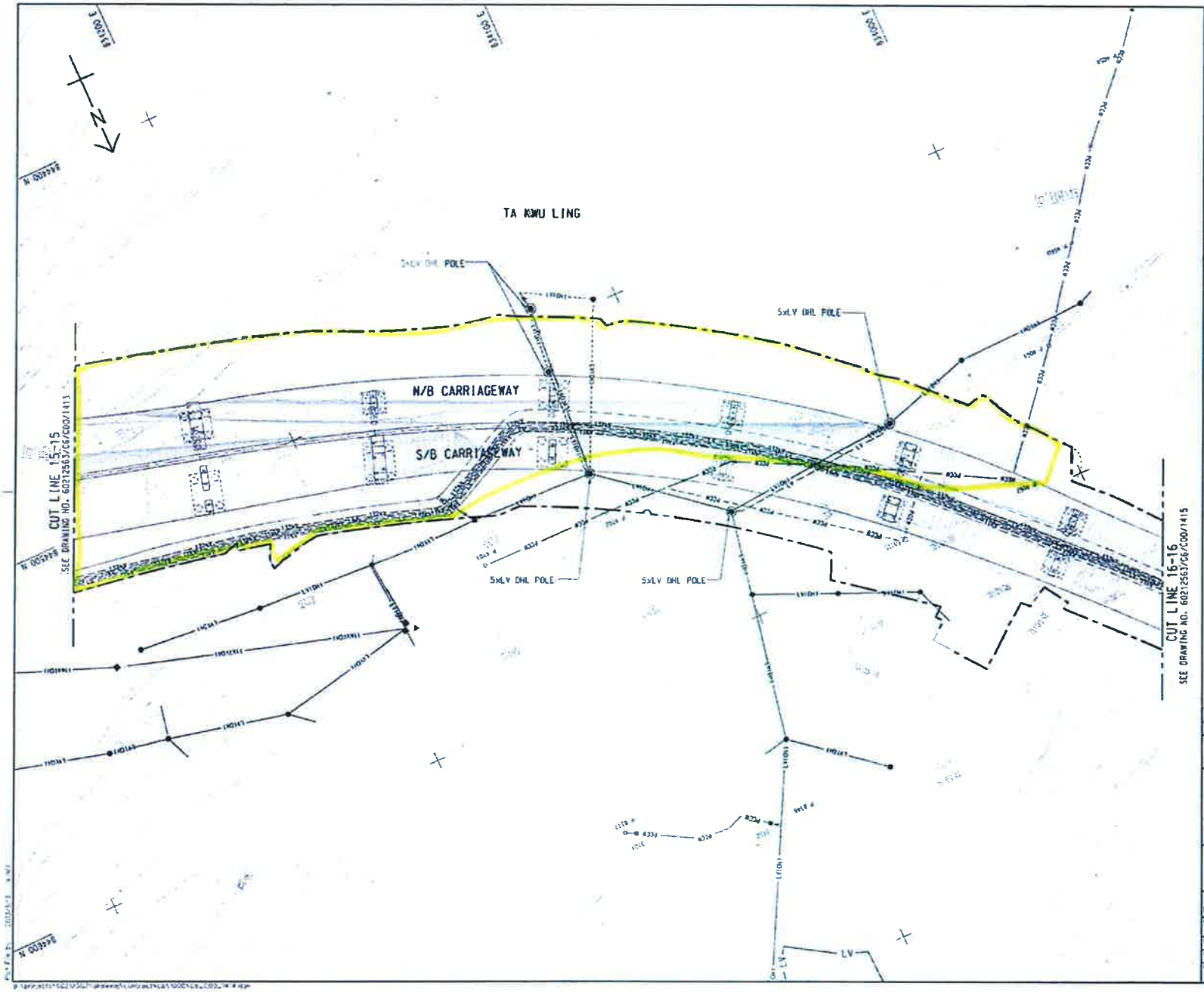
METRES	© COPYRIGHT RESERVED	



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FOR INFORMATION ONLY

*	TENDER DRAWING

CEDD 土木工程拓展署 Civil Engineering and Development Department

LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS – CONTRACT 6

UTILITIES LAYOUT

SHEET 14 OF 27

AECOM

DRG.NO. 60212563/C6/C00/1414

DESIGNED BY	AMBL
DRAWN BY	ZJ
SCALE	AT L : 500
UNITS	METRES
AGREEMENT NO.	CV/2011/08

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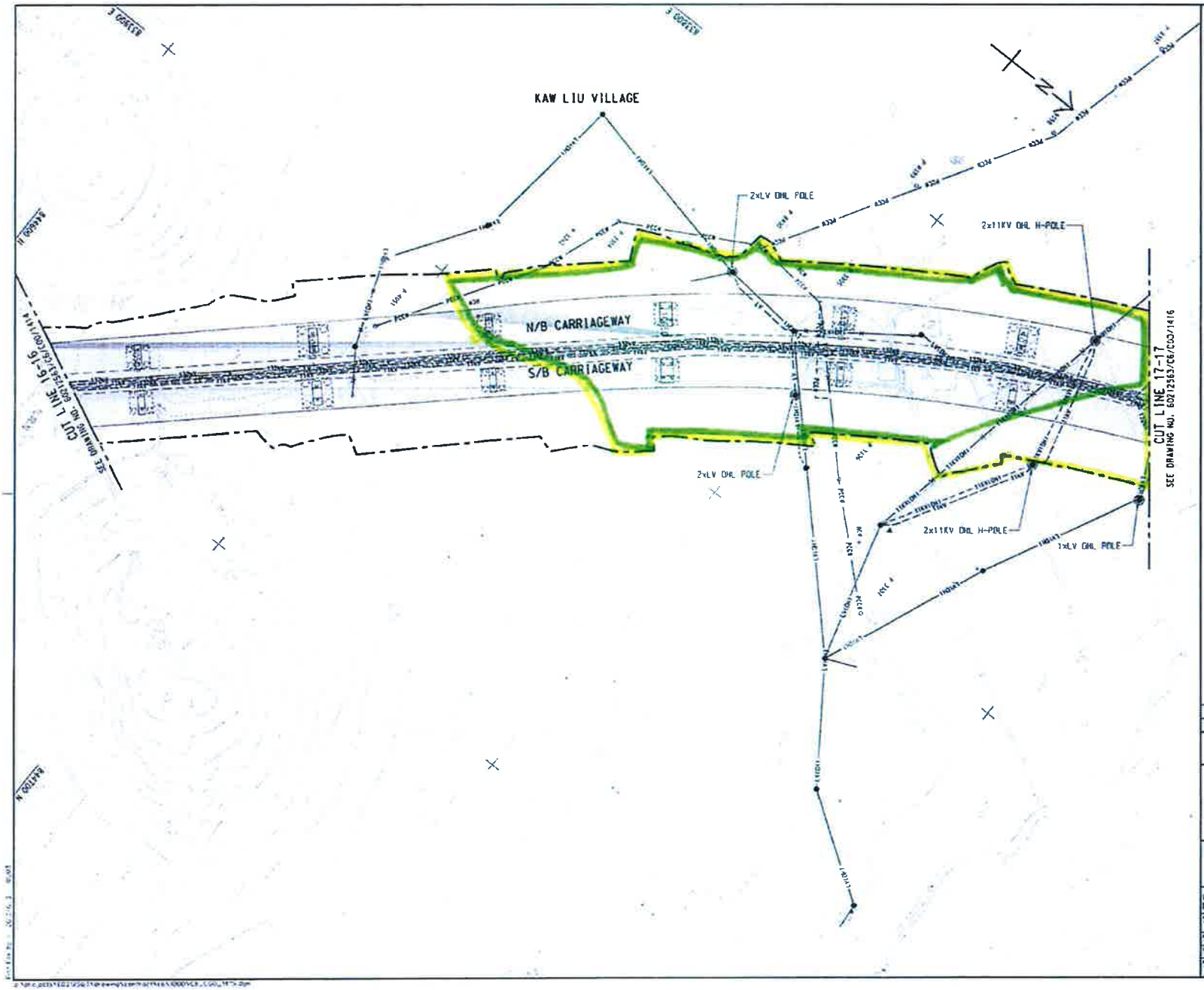

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Intensive Investigation Area.

FOR INFORMATION ONLY

-	TENDER DRAWING	

CEDD 土木工程拓展署 Civil Engineering and Development Department

SHATIN/CHEUNG SHA WAN BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS - CONTRACT 6

UTILITIES LAYOUT

AECOM

ORG.NO. 60212563/C6/C00/1415

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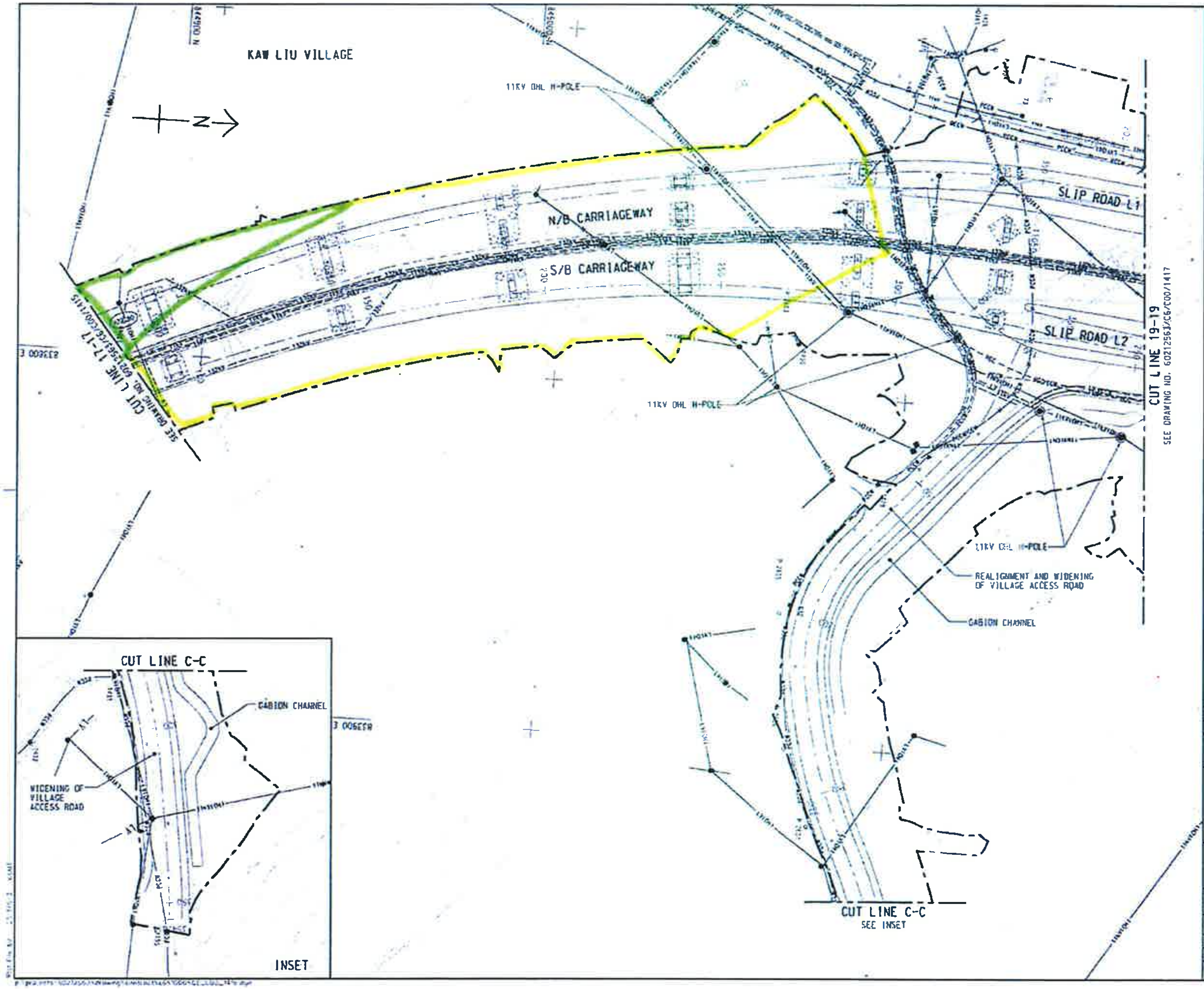

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FOR INFORMATION ONLY

TENDER DRAWING

土木工程拓展署
Civil Engineering and Development Department

UTILITIES LAYOUT

AECOM

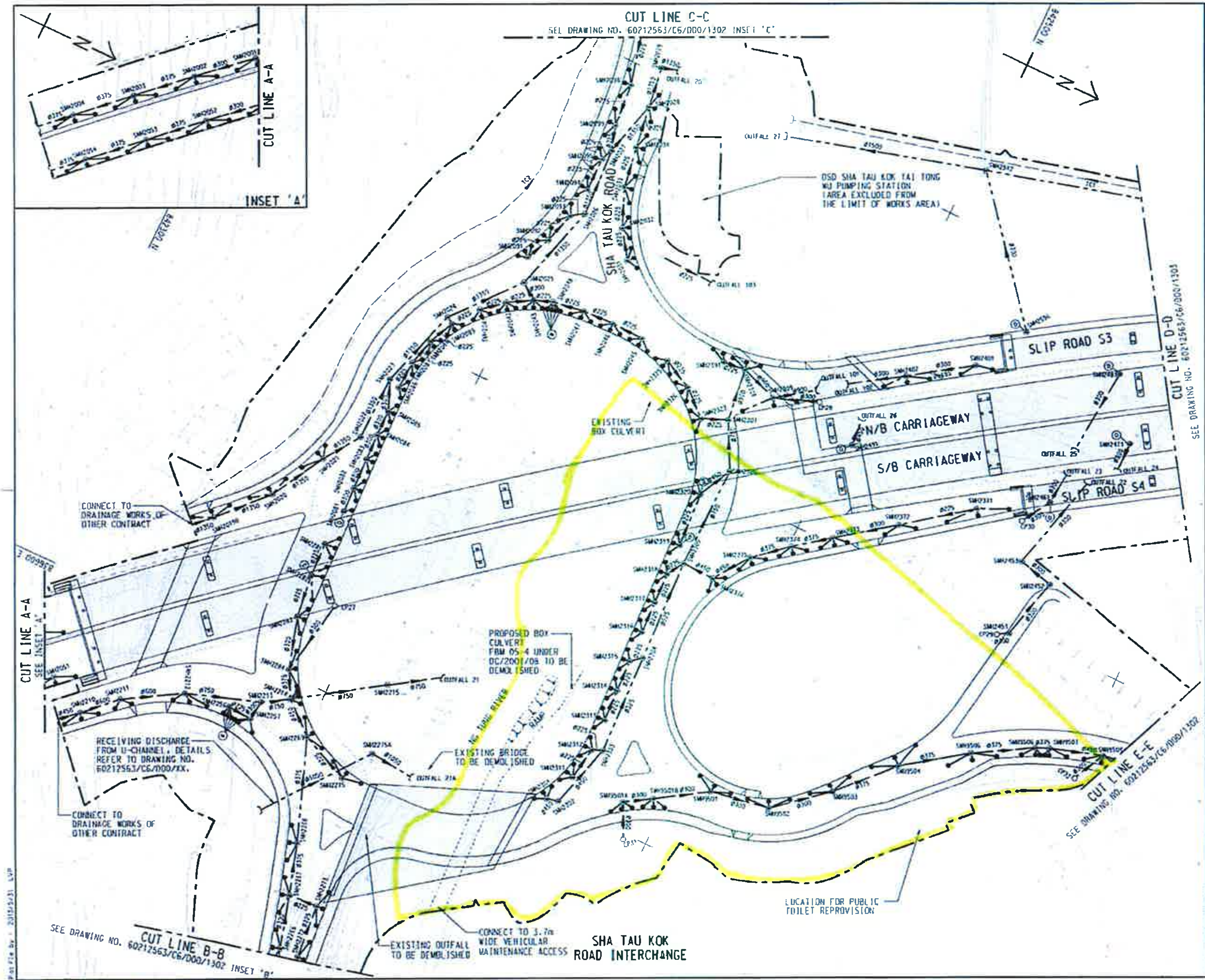
DRG.NO. 60212563/C6/C00/1416

SCALE 1 : 500

METRES

Annex A3

Drainage Layout



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3. FOR MANHOLE SCHEDULE, REFER TO DRAWING NOS. 60212563/C6/D00/1351 TO 1357.
4. FOR DETAILS OF TEMPORARY PLUG, REFER TO DRAWING NO. 60212563/C6/D00/1360.

LEGEND:

- SITE BOUNDARY
- UNDERGROUND SITE BOUNDARY
- EXTENT OF MTR PROTECTION ZONE
- 375mm DIA. CONCRETE DRAIN PIPE
- TEMPORARY PLUG FOR FUTURE PIPE CONNECTION
- STORMWATER MANHOLE
- EXISTING MANHOLE TO BE RECONSTRUCTED
- GULLY WITH OVERFLOW WEIR
- MANHOLE CONNECTING FROM CATCHPIT WITH DOWNPIPE CONNECTION
- CATCHPIT WITH DOWNPIPE CONNECTION
- ROAD GULLY
- CATCHPIT RECEIVING RUNOFF FROM SLOPES/RETAINING WALL
- CATCHPIT
- TYPE 1 TRAPEZOIDAL CHANNEL
- U CHANNEL WITH HEAVY DUTY COVER
- INLET / OUTLET
- RAINWATER TERMINAL MANHOLE
- STORM DRAIN TO BE CONSTRUCTED BY OTHERS
- MANHOLE TO BE CONSTRUCTED BY OTHERS
- ROAD GULLY TO BE CONSTRUCTED BY OTHERS
- GULLY WITH OVERFLOW WEIR TO BE CONSTRUCTED BY OTHERS
- EXISTING MANHOLE / CATCHPIT AND DRAIN PIPE TO BE DEMOLISHED
- EXISTING STORMWATER DRAIN
- CHANNEL (BY OTHERS)
- DRAIN PIPE / BOX CULVERT (BY OTHERS)
- CATCHPIT (BY OTHERS)
- GABION CHANNEL (BY OTHERS)
- EXISTING BOX CULVERT
- EXISTING STORMWATER MANHOLE
- EXISTING CATCHPIT
- EXISTING CROSS ROAD DRAIN TO BE RECONSTRUCTED. (REFER TO NOTE 12 ON DRAWING NO. 60212563/C6/D00/1360)
- RISING MAIN
- RETAINING WALL
- NOISE BARRIER IN SPECIFIC HEIGHT
- ROADSIDE AMENITY PLANTING

TENDER DRAWING

土木工程拓展署
CEDD Civil Engineering and Development Department

LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS CONTRACT 6

DRAINAGE LAYOUT

SHEET 1 OF 22

AECOM

DRG.NO. 60212563/C6/D00/1301

CV/2013/08

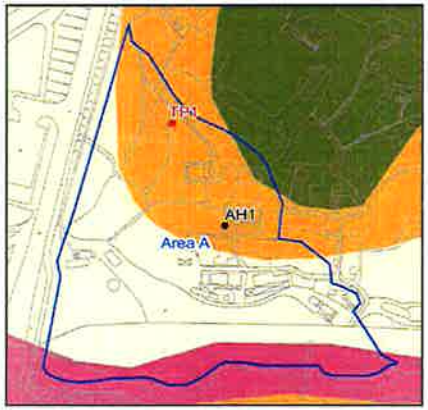
SCALE A1 1 : 500

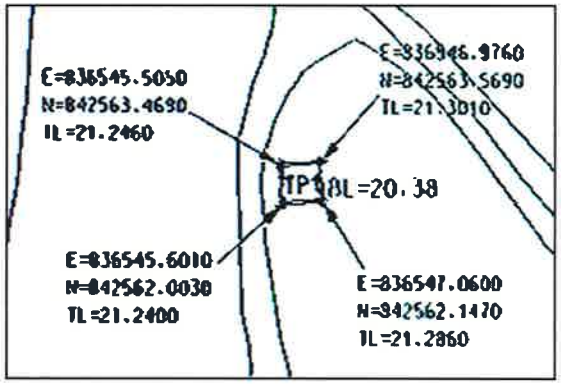
METRES

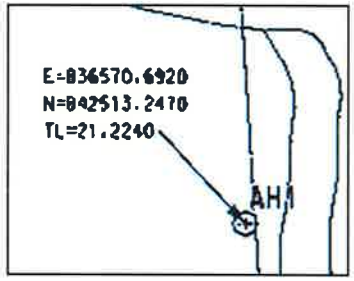
Annex B

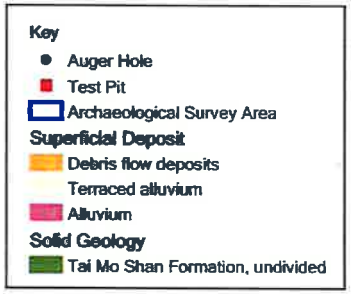
Land Survey Record

Key Plan

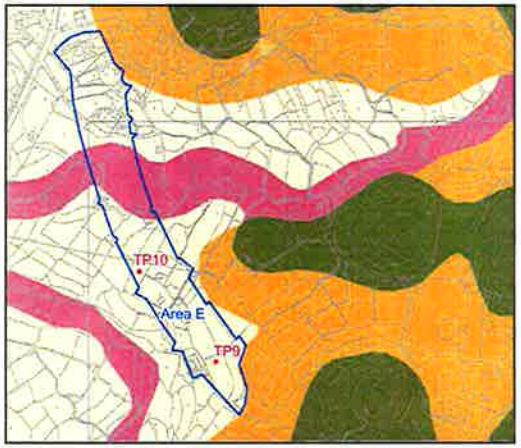


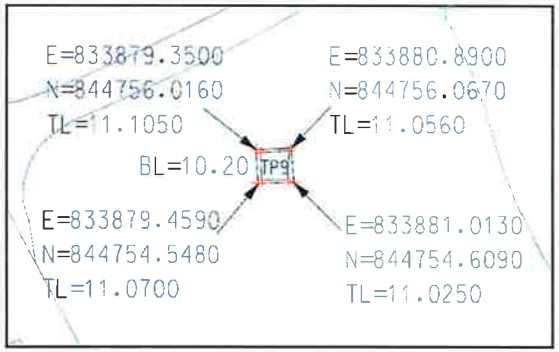






Key Plan





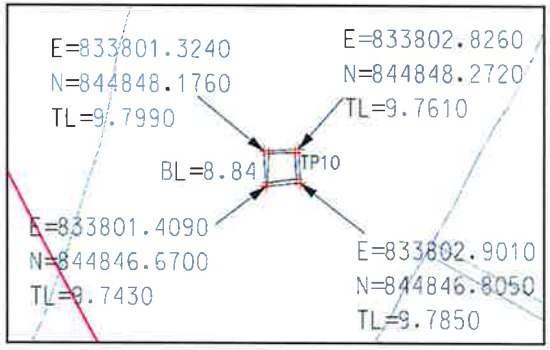


Figure B1

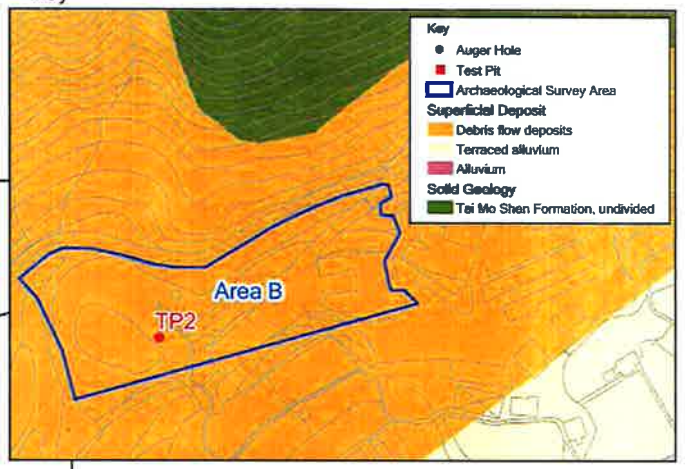
Coordinates of Test Pit and Auger Hole Conducted at Area A and Area E

DATE: 02/10/2015

Environmental Resources Management

ERM

Key Plan



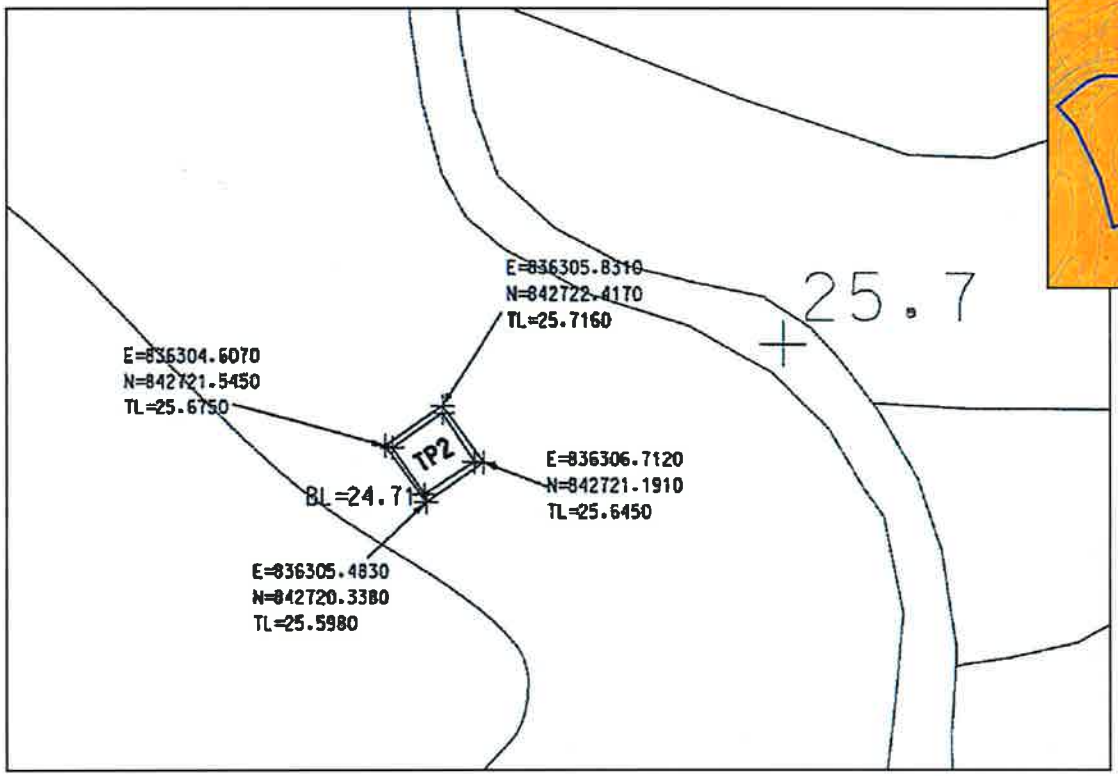


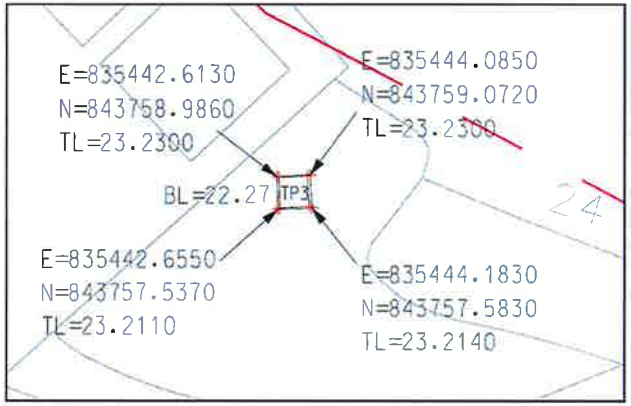
Figure B2

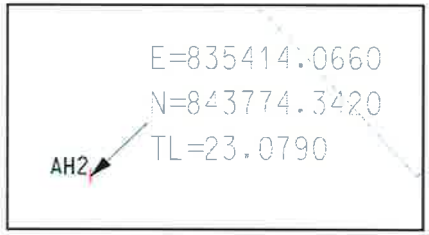
Coordinates of Test Pit Conducted at Area B

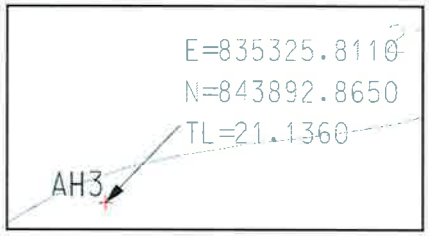
DATE: 02/10/2015

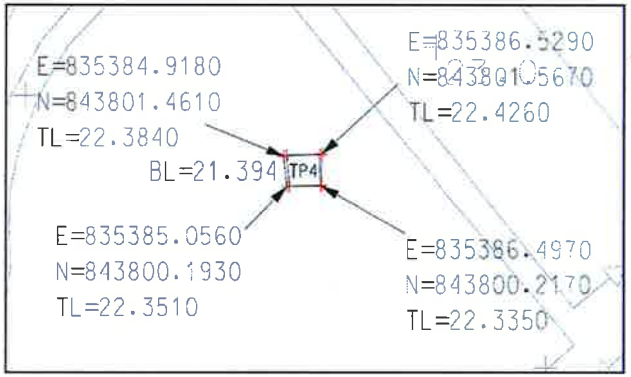
Environmental Resources Management

ERM









Key Plan

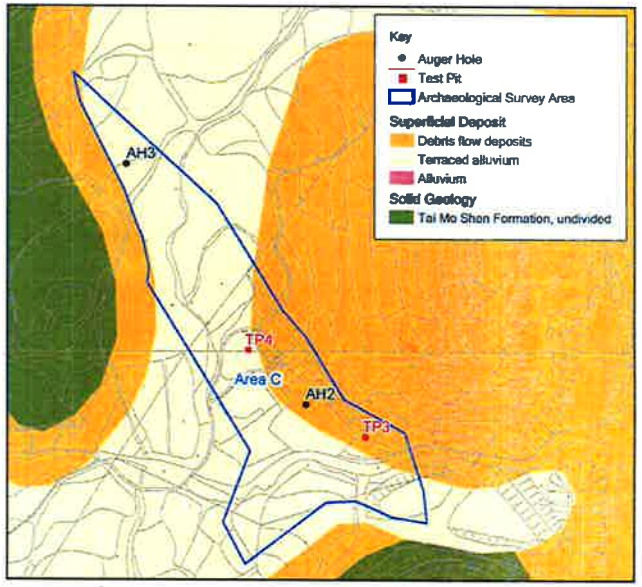


Figure B3

Coordinates of Test Pits and Auger Holes Conducted at Area C

DATE: 02/10/2015

Environmental Resources Management

ERM

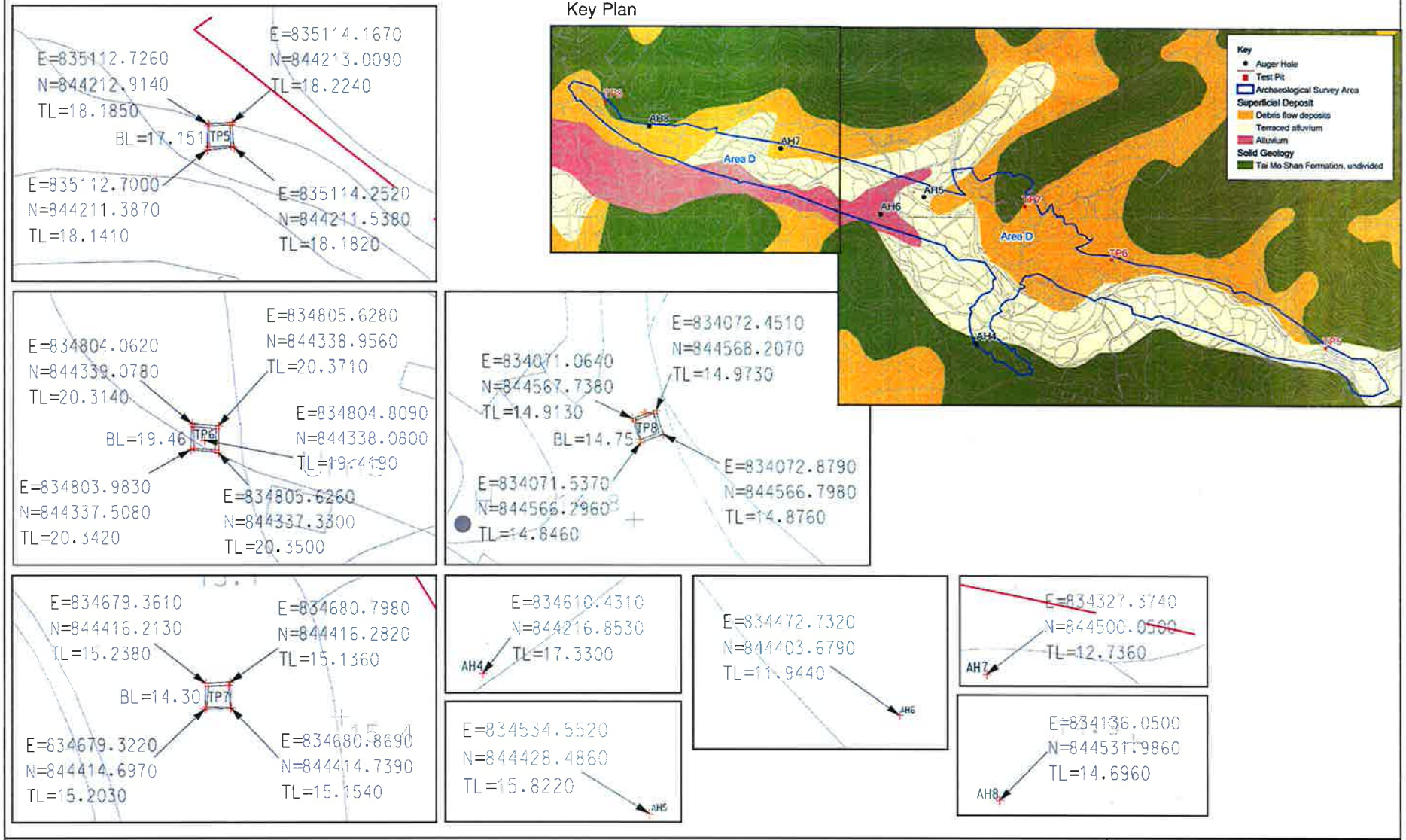


Figure B4

Coordinates of Test Pits and Auger Holes Conducted at Area D

DATE: 02/10/2015

Environmental Resources Management

ERM

Annex C

Detailed Records of Test Pits and Auger Holes

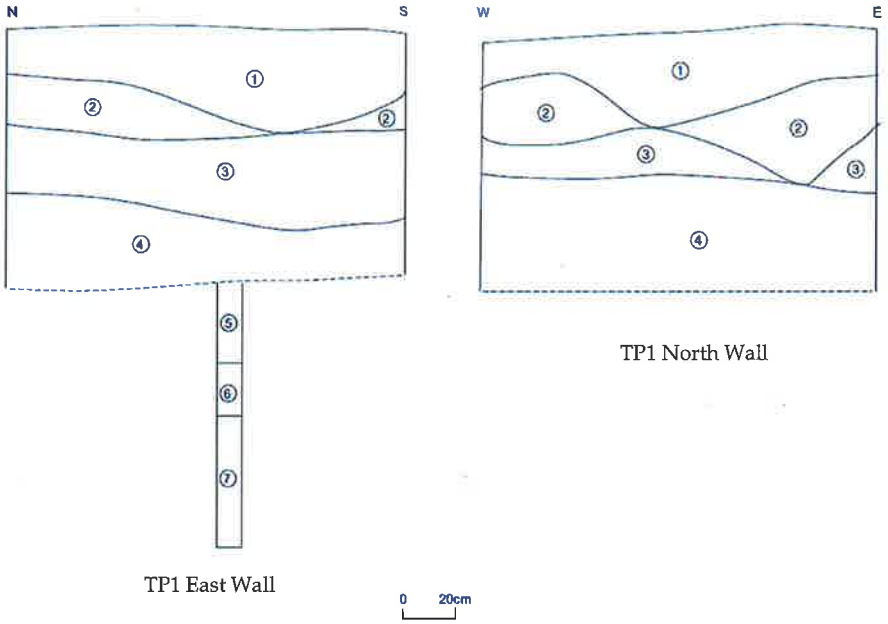
1 *TEST PIT*

Site Code	NHYW2015		Test Pit No.	TP1
Test Pit SE corner Coordinate (E,N)	836547.060	842562.147	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	21.29

Stratigraphy (Reference to East Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Reddish brown sand, loose	14 pieces of tile shards, pottery shards and ceramic shards	Early 20th Century	0	21-38
2	Yellowish silty layer with orange spots (sterile layer)	N/A	N/A	21-38	0-20
3	Yellowish sandy soil, loose (sterile layer)	N/A	N/A	38-44	24-36
4	Yellowish silty soil (sterile layer)	N/A	N/A	63-77	19-36
5 (auger hole)	Greyish white sand, with find sand (sterile layer)	N/A	N/A	100	30
6 (auger hole)	Yellowish sand (sterile layer)	N/A	N/A	130	20
7 (auger hole)	Grey sand (sterile layer)	N/A	N/A	150	>50

Drawing



East Wall and North Wall

Photographic Record

Environment of TP1 (view from northwest to southeast)

North wall of TP1

East wall of TP1

Zoom in view of auger result in TP1

Site Code	NHYW2015		Test Pit No.	TP2
Test Pit SE corner Coordinate (E,N)	836306.712	842721.191	Test Pit Measurement (LxW) (m)	1.5x1.5 (Orientation N45^{0}W)
Digging Method	Hand digging		Ground Level (mPD)	25.645

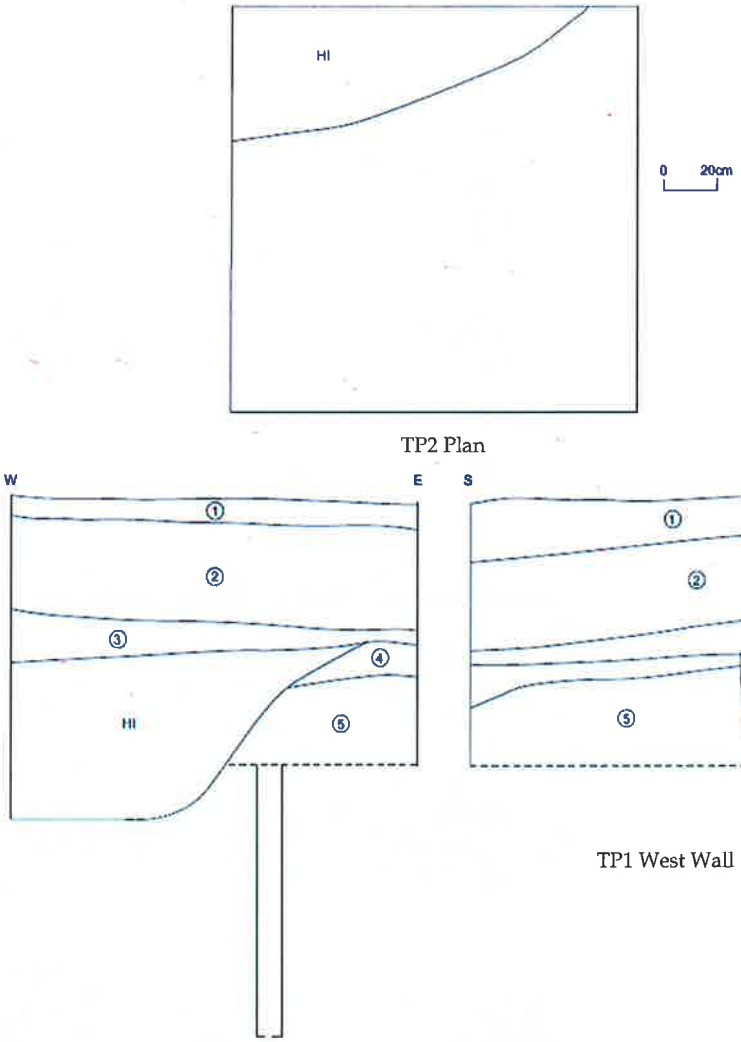
Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Topsoil, reddish brown silty soil	None	Modern(1)	0	8-10
2	Yellow silty soil with small amount of fine sand	Small amount of plastic bags	Modern	8-10	46
3	Dark brown sandy soil, a bit silty	Feature H1 is founded under layer 3 and cut into layers 4 and 5. Three porcelain shards and 13 pottery shards were found inside H1	Early 20th Century	46	5-19
4	Yellowish brown silty soil	None	Earlier than early 20th Century(2)	51	12
5	Yellow silty soil (sterile layer)	N/A	N/A	63-70	>154

(1) Dating of Layer 1 is regarded as modern with respect to dating of Layer 2, which Layer 2 is regarded as modern due to the observation of plastic bags.

(2) Dating of Layer 4 is regarded as earlier than early 20th century with respect to dating of Layer 3 of TP2.

Drawing



TP2 Plan (showing H1), North Wall and West Wall

Photographic Record

Environment of TP2 (view from northeast to southwest)

North wall of TP2

West wall of TP2

Zoom in view of auger result in TP2

Site Code	NHYW2015		Test Pit No.	TP3
Test Pit SE corner Coordinate (E,N)	835444.183	843757.583	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	23.214

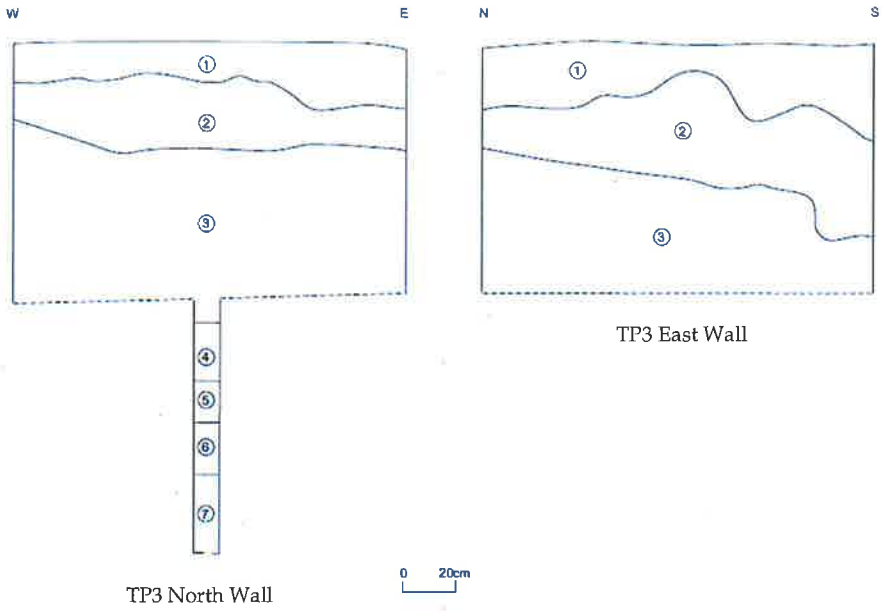
Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Greyish brown sandy soil, with lots of stones, loose and hard	None	Early 20th Century(3)	0	12-26
2	Yellowish brown sandy soil, with large amount of yellow and red lumps, loose and hard, contains large amount of stones	None	Earlier than early 20th Century(4)	12-26	13-29
3	Upper part is yellowish brown and gradually turns brown at the bottom, sandy soil, firm and soft, contains small amount of stones (sterile layer)	N/A	N/A	29-42	56-70
4 (auger hole)	Yellowish sandy soil, firm and hard (sterile layer)	N/A	N/A	106	24
5 (auger hole)	Yellowish brown sandy soil with large amount of red spots and fine sand, firm (sterile layer)	N/A	N/A	130	16
6 (auger hole)	Grey sandy soil with fine sand, firm (sterile layer)	N/A	N/A	146	20
7 (auger hole)	Brown silty soil, firm and hard (sterile layer)	N/A	N/A	166	>30

(3) Dating of Layer 1 of TP3 is regarded as early 20th century with regard to dating of Layer 1 of TP4.

(4) Dating of Layer 2 of TP3 is regarded as earlier than early 20th century with regard to dating of Layer 2 of TP4.

Drawing



North Wall and East Wall

Photographic Record

Overall view of TP3 (view from east to west)

North wall of TP3

East wall of TP3

Zoom in view of auger result in TP3

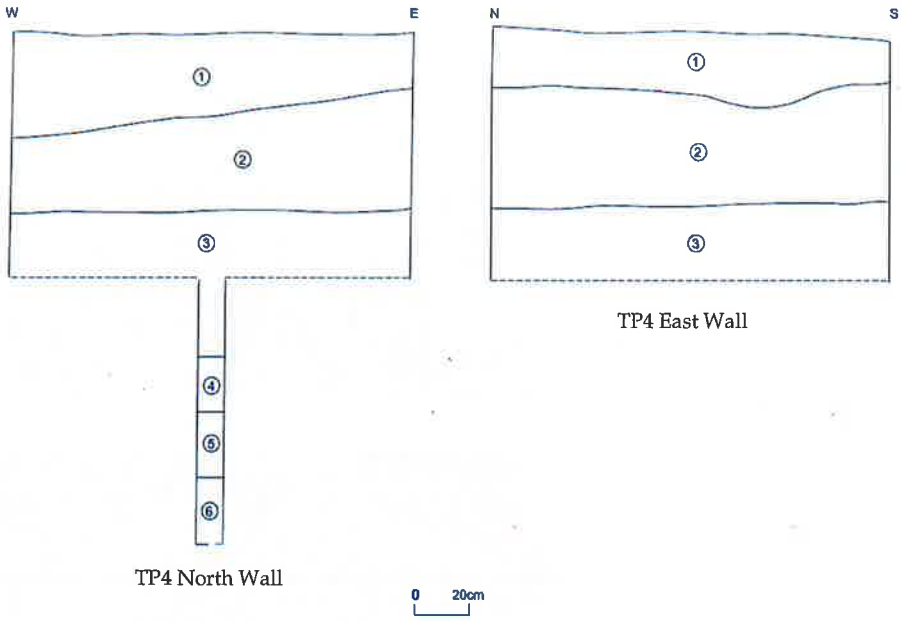
Site Code	NHYW2015		Test Pit No.	TP4
Test Pit SE corner Coordinate (E,N)	835386.497	843800.217	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	22.335

Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Greyish brown sandy soil, loose and hard,	Contains large amount of rubbles, three pieces of porcelain shards, two pieces of pottery shards and rubbish.	Early 20th Century	0	20-40
2	Yellowish brown sandy soil, firm and hard, contains red and yellow lumps and rubbles	None	Earlier than early 20th Century(5)	20-40	28-44
3	Dark grey sandy soil, firm (sterile layer)	N/A	N/A	66-68	24-56
4 (Auger Hole)	Black silty soil, firm and soft (sterile layer)	N/A	N/A	130	20
5 (Auger Hole)	Greyish white silty soil, firm and soft (sterile layer)	N/A	N/A	150	25
6 (Auger Hole)	Yellow sandy soil, firm an soft (sterile layer)	N/A	N/A	175	>25

(5) Dating of Layer 2 of TP4 is regarded as earlier than early 20th century with regard to dating of Layer 1 of TP4.

Drawing



North Wall and East Wall

Photographic Record

Overall view of TP4 (view from south to north)

North wall of TP4

East wall of TP4

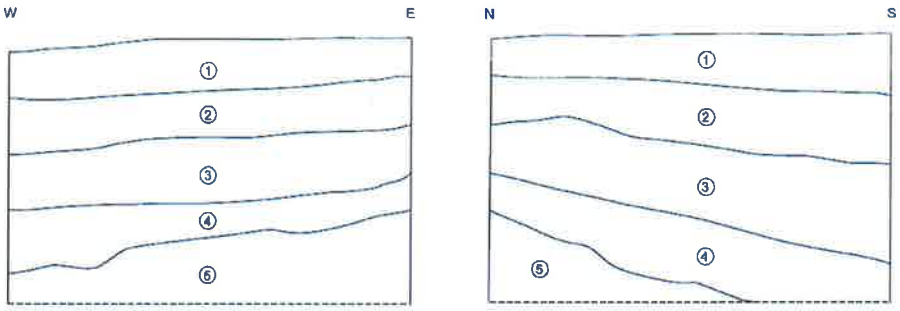
Zoom in view of auger result in TP4

Site Code	NHYW2015		Test Pit No.	TP5
Test Pit SE corner Coordinate (E,N)	835114.252	844211.538	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	18.182

Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Topsoil. The upper sub-layer is dark grey sandy soil, contains large amount of humus (smelly) and with modern rubbish (i.e. plastics). The lower sub-layer is yellow sandy soil as fill soil, not distributed evenly. Both sublayers are loose.	Modern rubbish (i.e. plastics)	Modern	0	14-20
2	Brownish grey sandy soil, firm and hard, pure. It has large amount of rusted iron spots. (sterile layer)	N/A	N/A	14-20	18-21
3	Yellow sandy, loose and soft, contains small amount of stones. (sterile layer)	N/A	N/A	34-38	19-24
4	Yellow sandy soil with small amount of grey sand (fine and soft), very loose and soft. It has large amount of dark brown spots. (sterile layer)	N/A	N/A	51-60	12-24
5	Grey sand, loose and soft, pure (sterile layer, river bed sediment)	N/A	N/A	65-85 (water table was reached at 100)	>34

Drawing



TP5 North Wall

TP5 East Wall

0 20cm

North Wall and East Wall

Photographic Record

Overall view of TP5 (view from north to south)

North wall of TP5

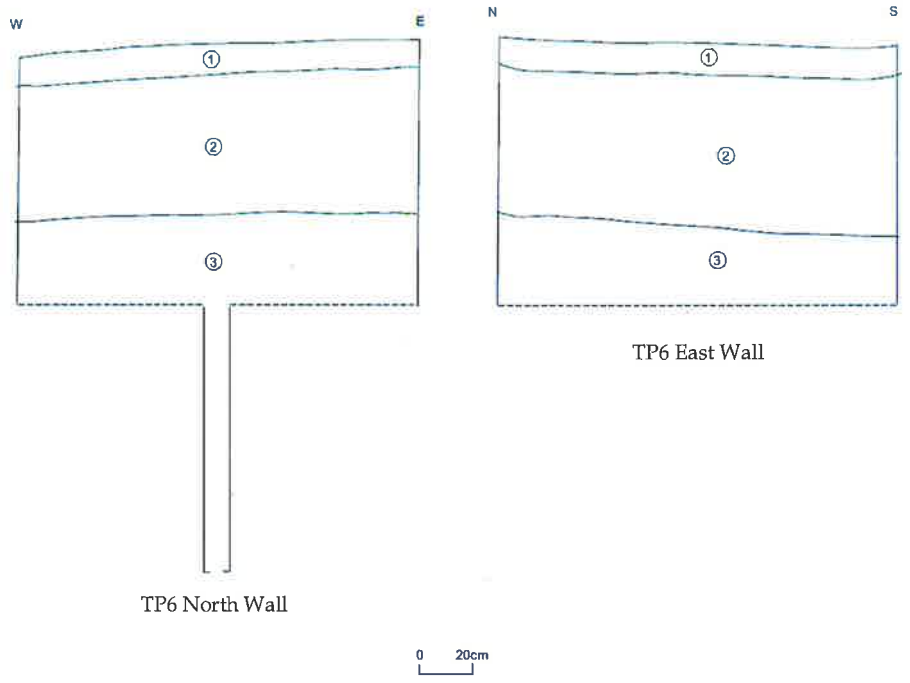
East wall of TP5

Site Code	NHYW2015		Test Pit No.	TP6
Test Pit SE corner Coordinate (E,N)	834805.626	844337.330	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	20.35

Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Dark grey topsoil, loose, contains lots of humus	None	Modern(6)	0	10-12
2	Yellow sandy soil, loose, pure (sterile layer)	N/A	N/A	10-12	52-55
3	Yellow sandy soil with red spots, loose, pure (sterile layer)	N/A	N/A	63-65	>134

Drawing



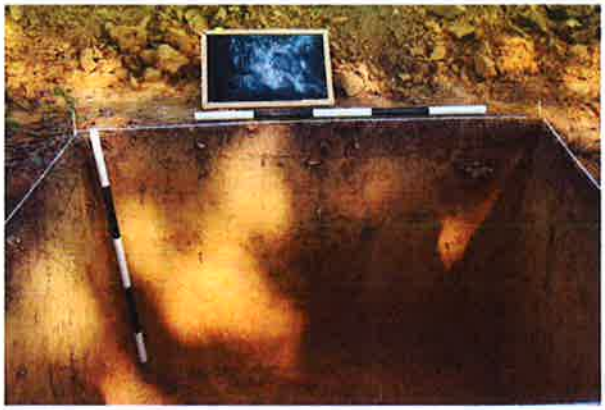
North Wall and East Wall

(6) Dating of Layer 1 of TP6 is regarded as modern with regard to dating of Layer 1 of TP5.

Photographic Record

Overall view of TP6 (view from west to east)

North wall of TP6



East wall of TP6

Zoom in view of auger result in TP6

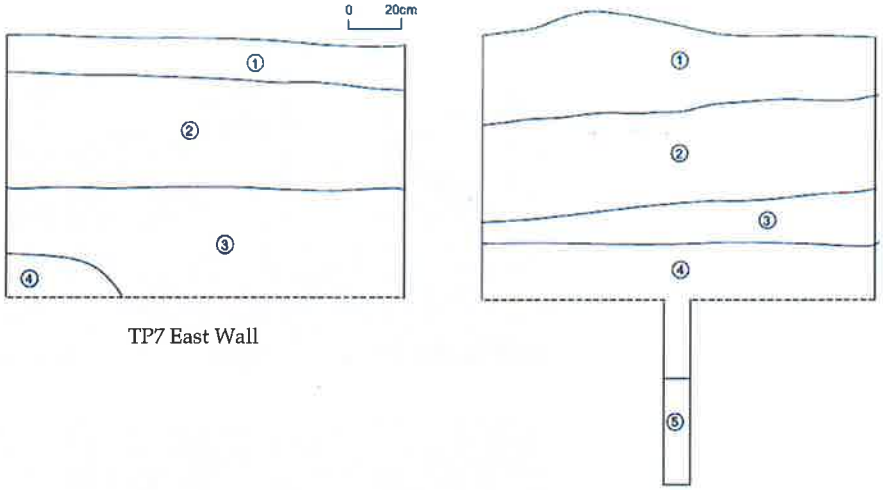
Site Code	NHYW2015		Test Pit No.	TP7
Test Pit SE corner Coordinate (E,N)	834680.869	844414.739	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	15.154

Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Grey sandy soil, loose	None	Early 20th Century(7)	0	23-39
2	Greyish brown silty soil with red spots, firm (sterile layer)	N/A	N/A	23-39	36
3	Dark grey silty soil, loose (sterile layer)	N/A	N/A	58-76	8-20
4	Greyish white silty soil with yellowish sand (sterile layer)	N/A	N/A	78-88 (water table was reached at 95)	21-51
5 (auger hole)	Greyish white sand (sterile layer)	N/A	N/A	134	>40

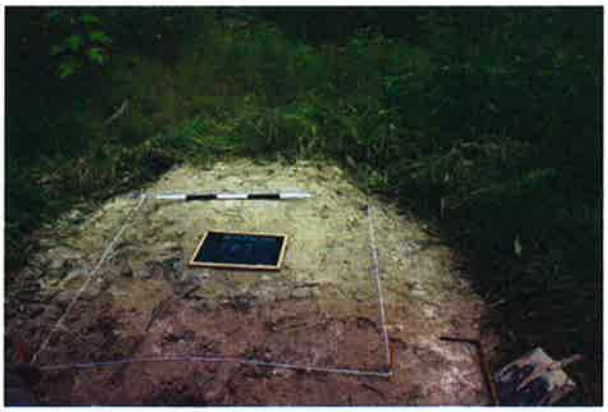
(7) Dating of Layer 1 of TP7 is regarded as early 20th century with regard to dating of Layer 1 of TP9.

Drawing



East Wall and North Wall

Photographic Record



Environment of TP7 (view from south to north)

North wall of TP7

East wall of TP7

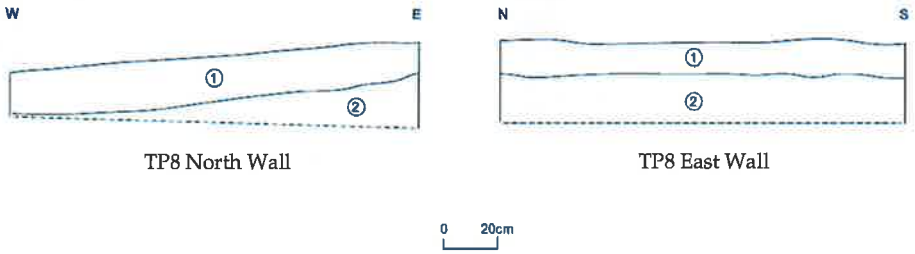
Zoom in view of auger result in TP7

Site Code	NHYW2015		Test Pit No.	TP8
Test Pit SE corner Coordinate (E,N)	834072.879	844566.788	Test Pit Measurement (LxW) (m)	1.5x1.5 (Orientation N10°W)
Digging Method	Hand digging		Ground Level (mPD)	14.876

Stratigraphy (Reference to East Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Dark grey topsoil with rubbles	None	Modern(8)	0	12
2	Deteriorated rock (sterile layer)	N/A	N/A	12	17-18

Drawing



TP8 North Wall

TP8 East Wall

North Wall and East Wall

Photographic Record

Environment of TP6 (view from south to north)

(8) Dating of Layer 1 of TP8 is regarded as modern with regard to dating of Layer 1 of TP5.

North wall of TP8

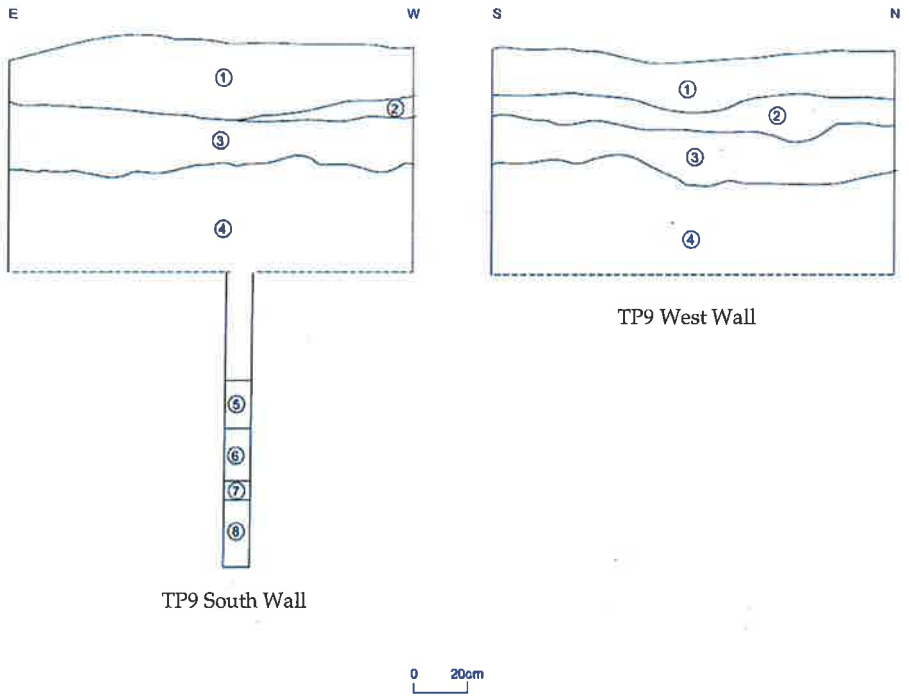
East wall of TP8

Site Code	NHYW2015		Test Pit No.	TP9
Test Pit SE corner Coordinate (E,N)	833881.013	844754.609	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	11.025

Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Grey sandy soil with roots of vegetation	Three small pieces of pottery shards	Early 20th Century	0	16-29
2	Yellowish brown sandy soil layer, firm and hard	One piece of grey tile shard	Early 20th Century	16-29	0-8
3	Greyish brown sand, firm and hard (sterile layer)	N/A	N/A	16-26	14-25
4	Yellowish brown sandy soil with red lumps, firm and hard (reach water table at 90cm bgl). Grey inclusion is found on the top of layer 4 (partly). (sterile layer)	N/A	N/A	42-52 (water table was reached at 90)	36-80
5 (auger hole)	Dark grey sand, very loose and soft (sterile layer)	N/A	N/A	130	18
6 (auger hole)	Grey sand, loose and hard (sterile layer)	N/A	N/A	148	20
7 (auger hole)	White sand, loose and soft (sterile layer)	N/A	N/A	168	7
8 (auger hole)	Yellow sand, loose and soft (sterile layer)	N/A	N/A	177	>25

Drawing



South Wall and West Wall

Photographic Record

Environment of TP9 (view from east to west)

South wall of TP9

West wall of TP9

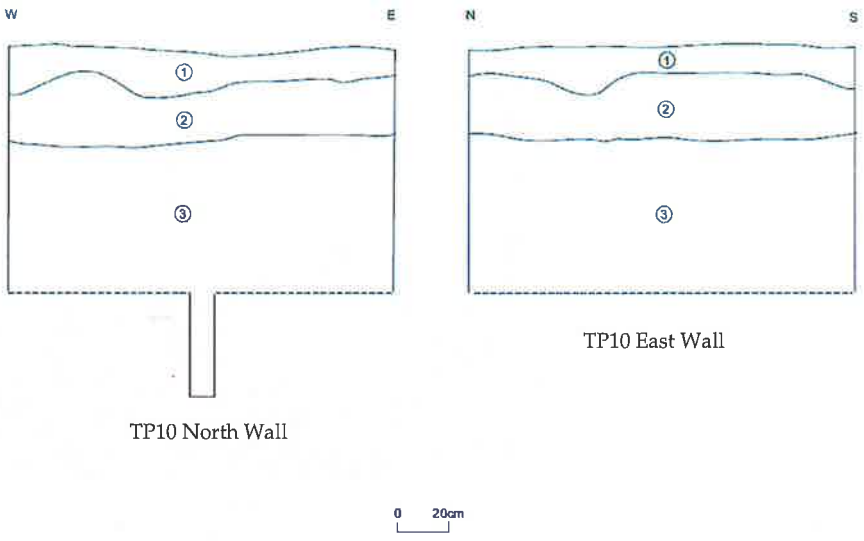
Zoom in view of auger result in TP9

Site Code	NHYW2015		Test Pit No.	TP10
Test Pit SE corner Coordinate (E,N)	833802.901	844846.805	Test Pit Measurement (LxW) (m)	1.5x1.5
Digging Method	Hand digging		Ground Level (mPD)	9.785

Stratigraphy (Reference to North Wall)

Layer	Description	Cultural Remains	Archaeological Dating	Depth from Ground Level (cm)	Thickness (cm)
1	Grey sandy soil, loose, with roots of vegetation	None	Early 20th Century(9)	0	10-19
2	Dark grey sandy soil, loose, fertile	None	Earlier than early 20th Century(10)	10-19	18-30
3	Yellow sand, with greyish white and large amount of red spots, firm and hard (sterile layer)	N/A	N/A	31-40	>100

Drawing



North Wall and East Wall

(9) Dating of Layer 1 of TP10 is regarded as early 20th century with regard to dating of Layer 1 of TP9.

(10) Dating of Layer 2 of TP10 is regarded as earlier than early 20th century with regard to dating of Layer 1 of TP10.

Photographic Record

Environment of TP10 (view from east to west)

North wall of TP10

East wall of TP10

Zoom in view of auger result in TP10

2 *AUGER HOLES*

Auger Hole No.	Strata	Depth (cm)	Thickness (cm)	Description
AH1	1	0	12	Greyish brown sandy soil, loose
	2	12	28	Yellowish brown sandy soil, with coarse sand and rust spots
	3	40	10	Yellowish sandy soil, with coarse sand
	4	50	45	Yellowish silty soil
	5	95	5	Yellowish sand
	6	100	80	Yellowish silty soil
	7	180	>10	Greyish white sand with fine sand
				*Reached the maximum depth of auger
				Photo
				
AH2	1	0	25	Greyish brown sandy soil, loose and soft, contains small amount of concrete lumps and roots of vegetation
	2	25	10	Grey sand, firm and soft
	3	35	25	Brown sand, firm and hard
	4	60	23	Light brown sand, firm and hard, contains stone
	5	83	>87	Dark brown sand, a bit firm and a bit soft
				*Reached the maximum depth of auger
				Photo
				

Auger Hole No.	Strata	Depth (cm)	Thickness (cm)	Description
AH3	1	0	30	Yellowish brown sand, loose (road side fill layer)
	2	30	20	Dark grey sandy soil (fine sand), loose and soft, contains lots of humus
	3	50	20	Light grey sandy soil (fine sand), firm and soft
	4	70	30	Grey sandy soil (find sand), firm and a bit hard, contains reddish brown lumps
	5	100	>100	Black silty soil, firm and soft
				*Reached the maximum depth of auger
				Photo
				
AH4	1	0	22	Dark grey sandy soil, very loose and very soft, contains large amount of grass root.
	2	22	32	Yellow sandy soil, loose and soft, pure
	3	54	23	Bright yellow sand, loose and soft
	4	77	31	Bright yellow sand (with larger grains), loose and soft
	5	108	>42	Bright yellow sand with large amount of red lumps, hard and firm, contains small amount of stones
				*Reached the maximum depth of auger
				Photo
				

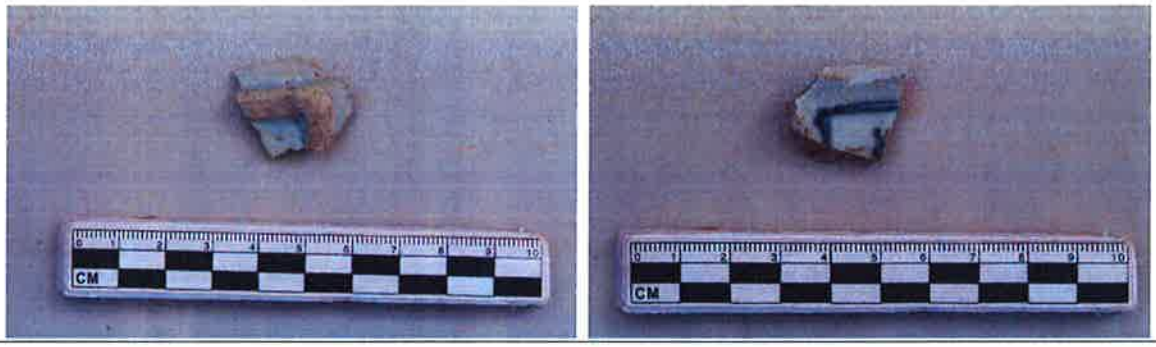
Auger Hole No.	Strata	Depth (cm)	Thickness (cm)	Description
AH5	1	0	35	Reddish brown silty soil
	2	35	85	Brown silty soil with red spots
	3	120	55	Greyish brown silty soil with red spots (very silty)
	4	175	>25	Greyish brown sand
				*Reached the maximum depth of auger
				Photo
				
AH6	1	0	20	Dark brown sandy soil (cultivation land)
	2	20	25	Brown sandy, fine
	3	45	35	Brown silty soil with red spots
	4	80	>90	Greyish brown sand, fine (river bed)
				*Reached the maximum depth of auger
				Photo
				
AH7	1	0	50	Greyish brown silty soil
	2	50	20	Greyish brown silty soil with red spots
	3	70	90	Greyish white silty soil
	4	160	>40	Greyish white sandy soil with deteriorated rock
				*Reached the maximum depth of auger
				Photo
				

Auger Hole No.	Strata	Depth (cm)	Thickness (cm)	Description
				
AH8	1	0	30	Greyish brown sandy soil
	2	30	50	Yellow sandy soil
	3	80	80	Bright yellow sandy soil
	4	160	>40	Deteriorate rocks
				*Reached the maximum depth of auger
				Photo
				

Annex D

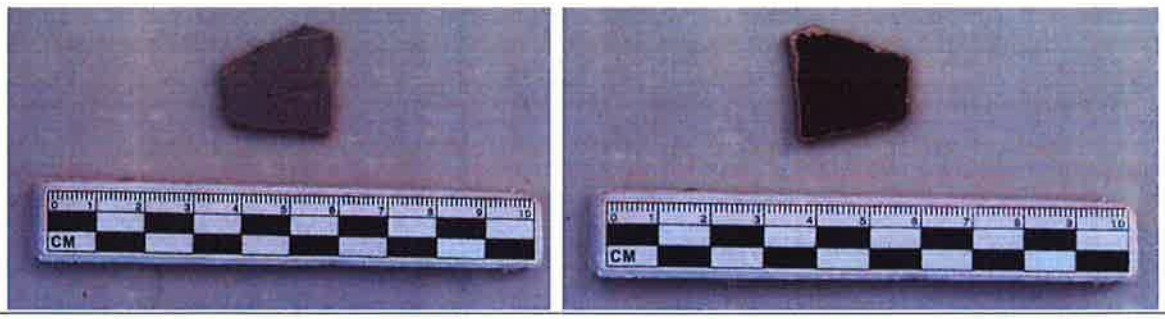
Records of General Artefacts Unearthed

General Finds from Surface Collection in Area A



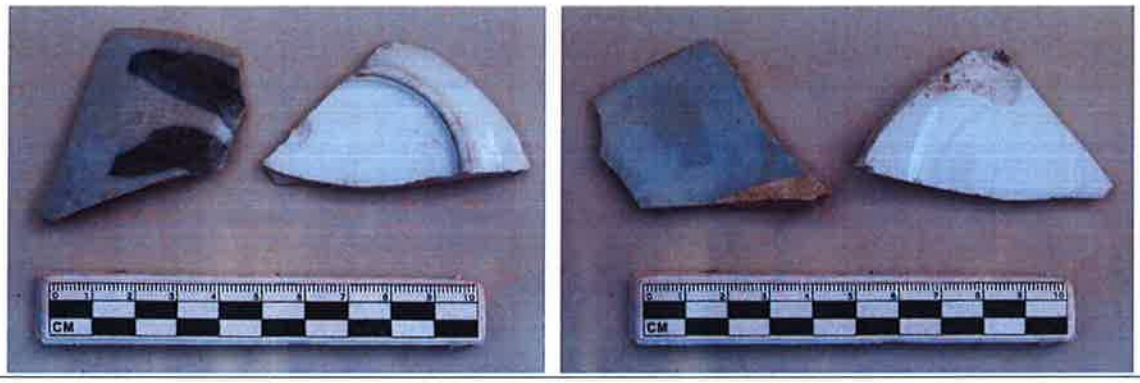
Foot Shard of Blue and White Porcelain Dish Dated to Early 20th Century Collected on the Surface of TP1
[NHYW2015 Area A SC GF1]

Tile Shards Dated to Early 20th Century Collected on the Surface of TP1
[NHYW2015 Area A SC GF2]



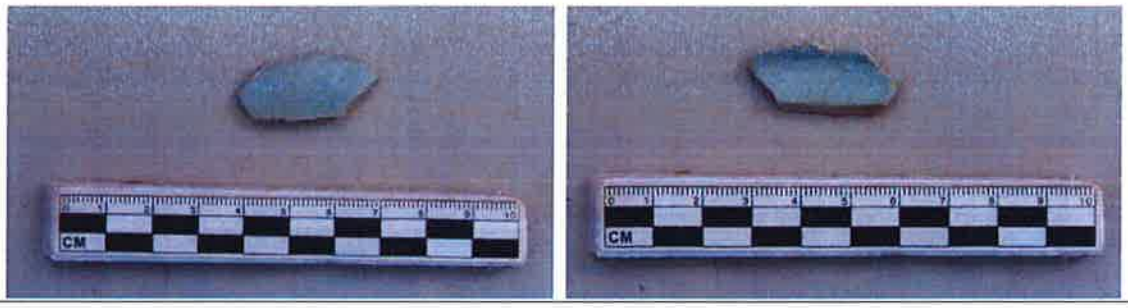
Brownish Glazed Pottery Shard Dated to Early 20th Century Collected on the Surface of TP1
[NHYW2015 Area A SC GF3]

General Finds from Surface Collection in Area D



Rim Shard of Blue and White Porcelain Bowl Dated to Early 20th Century (Left) and Modern White Porcelain Shard (Right) Collected on the Surface in Vicinity to TP5
[NHYW2015 Area D SC GF1]

General Finds of TP1



Douqing Glazed (豆青釉) Porcelain Shard Dated to Early 20th Century Found in Layer 1 of TP1
[NHYW2015 Area A TP1 L1 GF1]

Tile Shards Dated to Early 20th Century Found in Layer 1 of TP1
[NHYW2015 Area A TP1 L1 GF2]

Pottery Jar Shards Dated to Early 20th Century Found in Layer 1 of TP1
[NHYW2015 Area A TP1 L1 GF3]

General Finds of TP2

Rim Shards of Blue and White Porcelain Bowl Dated to Early 20th Century Found in H1 of TP2
[NHYW2015 Area B TP2 H1 GF1]

Brownish Glazed Pottery Jar Shards Dated to Early 20th Century Found in H1 of TP2
[NHYW2015 Area B TP2 H1 GF2]

General Finds of TP2

Rim Shards of Brownish Glazed Pottery Basin and Vat Dated to Early 20th Century Found in H1 of TP2 [NHYW2015 Area B TP2 H1 GF3]

Bottom shard of Brownish Glazed Pottery Jar Dated to Early 20th Century Found in H1 of TP2 [NHYW2015 Area B TP2 H1 GF4]

General Finds of TP2

Brownish Glazed Pottery Shards Dated to Early 20th Century Found in H1 of TP2
[NHYW2015 Area B TP2 H1 GF5]

General Finds of TP4

Blue and White Porcelain Shard (Left most piece) and Underglazed Wucai (釉下五彩) Porcelain Shards Dated to Early 20th Century Found in Layer 1 of TP4
[NHYW2015 Area C TP4 L1 GF1]

Brownish Glazed Pottery Shards Dated to Early 20th Century Found in Layer 1 of TP4
[NHYW2015 Area C TP4 L1 GF2]

General Finds of TP9

Brownish Glazed Pottery Shards Dated to Early 20th Century Found in Layer 1 of TP9
[NHYW2015 Area E TP9 L1 GF1]

Tile Shard Dated to Early 20th Century Found in Layer 2 of TP9
[NHYW2015 Area E TP9 L2 GF1]