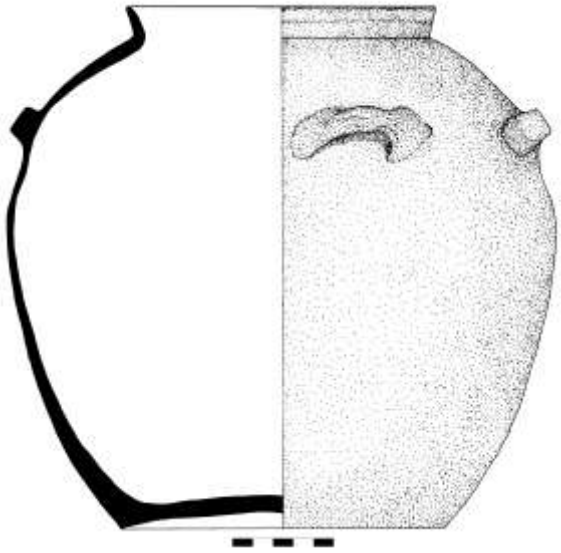
Archaeological Investigation at San Tau, Lantau Island

(Oct.-Dec. 2011)



Final Report

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On behalf of the
Hong Kong Archaeological Society

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Abbreviations & Usage

AMO	Antiquities and Monuments Office
AN	Association Number
c.	Circa (approximately)
C	Century. As in C19th (19^{th} century)
CHIA	Cultural Heritage Impact Assessment
DIA	Diameter
E	East or easting (when used with map coordinates)
EFS	East facing section
EVE	Estimated Vessel Equivalent
E-W	East-west
GPR	Ground Penetrating Radar
HKAS	Hong Kong Archaeological Society
KL-TS	Kau Liu-Tin Sam
LN	Late Neolithic
l.o.e.	Limit of excavation
m	Metres
mPD	Metres above Principal Datum.
N	North or northing (when used with map coordinates)
NB	Nota bene (Latin for: take special note)
NE	North-east
NFS	North facing section
N-S	North-south
NW	North-west
PP	Provincial porcelain. Generic term for historical period porcelain (as opposed to village ware – see VW). In Hong Kong typically blue & white, Qing in date, & made at Wun Yiu, Tai Po.
SE	South-east
SFS	South facing section
SW	South-west
STSAI	San Tau Site of Archaeological Interest
3-D	Three-dimensional (as in coordinates: easting, northing & elevation)
TL	Tile. Mostly roof-tile.
UD	Undiagnostic
VW	Village ware. Generic term for historical period utilitarian cooking and storage pottery (as opposed to porcelain – see PP). Difficult to date closely and some could be anywhere between Song and Qing in date.
WFS	West facing section

Non-Technical Summary

The Hong Kong Archaeological Society commissioned Dr Mick Atha, with a licence issued by the Government of Hong Kong SAR, to direct their annual research project in November-December 2011. A backbeach site at Kau Liu-Tin Sam (KL-TS), which is within the San Tau Site of Archaeological Interest (Figures 1 & 2), was selected for further investigation. The site is unusual for Hong Kong in that it has produced Tang dynasty burials but no evidence of kiln remains or prehistoric activity – it therefore had the potential to be a locally unique Tang dynasty inhumation cemetery. However, given the limited data available, a survey-cum-excavation methodology was devised that included the first successful application of ground penetrating radar (GPR) on a rural archaeological site in Hong Kong. As many as 16 potential graves were located, seven of which were fully excavated and six proved to be of middle-late Tang dynasty date.

中文摘要

香港考古學會委託范昅澔博士主持該會 2011 年度之考古研究項目，並持有由香港特區政府所發有關之牌照。田野工作在 11 月至 12 月期間進行。是次調查選取位於磩頭具考古研究價值地點範圍之內 (圖 1 及 2)的較寮/田心後沙灘作進一步研究 。此研究地點的獨特之處在於它存在有唐代墓葬的同時，卻沒有發現一般在香港考古遺址內常見的古窯或史前活動的證據——因此，它有可能是本地目前發現的唯一一處唐代土葬形式的墓地。有鑑於現存資料的不足，故此在研究方法上特別採取調查暨發掘之方式，並包括首次成功地在香港非市區考古遺址中應用的探地雷達勘察。是次研究發現了 16 處疑似墓葬；已確認的墓葬中 7 座已完成發掘 ， 6 座確信為唐代中期至後期。

PART 1: INTRODUCTION

1. Introduction

The San Tau Site of Archaeological Interest (STSAI – AMO Ref: AM96-0772) is located at the western side of Tung Chung Bay on the north coast of Lantau Island, and facing Chek Lap Kok Airport (Figures 1 & 2). The STSAI was in general considered to be an excellent choice for the HKAS field project because the Tung Chung area, including the original island of Chek Lap Kok and the adjacent coastline of North Lantau, has previously produced significant and important archaeological remains of prehistoric, earlier and later historical periods (e.g. Meacham 1993; Drewett 1995). More specifically, although the STSAI had seen relatively little fieldwork (CUHK 1991; Mott Connell 1997; AMO 1998), there were clear indications that the backbeach area north of Kau Liu-Tin Sam may contain a Six Dynasties-Tang burial ground.

A general study area, measuring 50m N-S by 100m E-W (SW corner coordinates: 809725E, 816850N), was identified in the project proposal, within which a three phase investigation methodology was proposed comprising ground penetrating radar (GPR) survey, test-pitting and extended excavation. In practice, a combination of dense undergrowth and the presence of villagers' fruit trees restricted the detailed study to an area 25m N-S by 35m E-W, focused on the area of known archaeological potential identified by previous fieldwork.

The GPR survey revealed a number of anomalies suggestive of archaeological remains. Subsequent testing of such anomalies in two areas at the eastern end of the site identified 16 potential burials, seven of which were fully excavated – with six proven to be mid-late Tang dynasty in date. The first

season of the project thus achieved its main goals by successfully field testing GPR in Hong Kong backbeach site conditions, thereby demonstrating the usefulness of the technique in such settings and also confirming the existence and probable extent of a major Tang dynasty burial ground that at present is unique in the territory.

2. Aims

The fieldwork proposal set out a detailed project design constructed around six main research aims for the 2011 investigation, namely:

- To field test GPR as a preliminary site evaluation technique in Hong Kong archaeology;
- To establish the fuller extent of the Tang-Song deposits;
- To establish the presence or absence of prehistoric deposits within the study area, and their spatial relationship, if any, with overlying Tang-Song deposits;
- To more fully define the character of Tang dynasty activity and assess the degree of continuity or change exhibited between it and the overlying Song horizon;
- To maximise information retrieval, especially from sealed contexts (such as graves) through the use of appropriate recovery methods (i.e. dry sieving and/or flotation);
- To reveal something of the environmental context for each of the main periods through suitable sampling methodologies.

3. Background

3.1 Geology, Topography, Drainage & Land Use

The vast majority of the STSAI is located on an extensive alluvial fan at the mouth of a short, steep-sided valley fed by a large stream (Figure 2). The alluvium gives way to a mixture of sandy backbeach deposits in the north and east of the Site, while estuarine mud and sand are found on the coastline in between (Figure 3). The presence of the northern area of backbeach deposits testifies to the fact that, prior to the construction of the airport, the coastline was much more exposed to wave action and there was formerly a fine sandy beach (Mr Ho pers. comm.). The southern and western margins of the site are marked by solid geology in the form of fine to medium grained granite with occasional basalt and quartz intrusions. At the interface between the solid geology of the surrounding hills and the alluvium there is a broad band of slope debris (GEO 1994).

In terms of topography, the STSAI is bounded to the north and east by the modern coastline and to the west and south by steep hillsides. The alluvium recorded in the eastern half of the site is low-lying at between 2.2-5mPD, while the backbeach area north of Tin Sam lies at c.5-6mPD and then rises to the south and south-west, reaching c.12mPD in Kau Liu, which lies at the foot of the mountain protected by its fung shui woodland. The 1:1000 mapping records the location of former agricultural fields across almost the entire STSAI and, not surprisingly therefore, evidence of agricultural terracing was noted during previous investigations of the backbeach area. During the excavation an elderly visitor from the village explained how the natural slope of the hillside and backbeach had been cut back and the material redeposited to create a flat area for agriculture. During the excavation, such activity was evidenced in the truncated profile of early historical deposits and mixture of ancient and more modern material found in the upper strata. Plates 1-3 inclusive show the general condition of the site when first visited in August 2011 (see Figure 4 for plate viewpoints).

3.2 History

San Tau occupies a prominent position on the coast of Lantau looking north over Chek Lap Kok towards the Pearl River Estuary beyond and east towards Tung Chung across the bay of the same name. The history of San Tau is thus perhaps best considered within the broader historical context of Tung Chung and its environs.

In the context of early maritime trade with China up the Pearl River Estuary to Canton, Tung Chung lies in a highly strategic location close to the mouth of the estuary and opposite the Tang dynasty fort and war junk base at Tuen Mun. Tung Chung Wan also provided a sheltered anchorage in most prevailing storm conditions for the war junks and trading vessels coming from the east through Victoria Harbour, Tsuen Wan and Kap Shui Mun Channels, and from the west up the north-west coast of Lantau (Mott Connell 1998). A coastal-marine focus of activity in the area is therefore indicated from the earliest historical times.

Historical records mention an official of the Imperial Salt Monopoly being responsible for the supply of salt from Deep Bay and Lantau and salt-working was probably important from the fifth century onwards (Mott Connell 1998). The first historical mention of Lantau itself dates to A.D. 411 in the late Eastern Jin and describes how following the death of Yangtze Delta pirate Lo Ts'un his followers settled in Lantau and the Ladrones. Not until the Southern Song dynasty was Lantau mentioned again and, interestingly, the population was then recorded as comprising Yao, Tan and Liao people rather than Han Chinese. The local population was pressed into salt making and, following multiple revolts against the Imperial authorities, seems to have been largely wiped out in A.D.1200 by Government forces sent from Kowloon. It is thought that Lantau was repopulated with rice farming tenants and salt workers brought in by the Imperial authorities. The Song dynasty ends with the famous tale of the Boy Emperors within which Lantau is recorded as their temporary abode during 1277-78. Although no archaeological evidence has been found for the imperial presence on Lantau, the deity of Tung Chung Temple, Prince-Marquis Yeung, is thought to refer to the last Song Emperor's uncle Yeung Leung-chit (Mott Connell 1998).

Tung Chung during the Ming dynasty has been associated with historical references to the Portuguese occupation of Tuen Mun Bay or 'Tuen Mun Island' – the latter being assumed to be Lantau (Mott Connell 1998). However no physical evidence for the Portuguese presence has yet been found. Following the retreat of the Portuguese to Macau, the Tuen Mun-Lantau coastal area was subjected to repeated pirate attack between 1533 and 1648. Such activity eventually ceased with the coming of the Manchu and the Qing dynasty, but then only due to the terrible privations caused by the Coastal Evacuation of 1662-68. The general lack of Ming dynasty archaeology from Tung Chung and its environs may reflect the depopulating effect of piracy, especially later in the period; however, mid-late Ming Sha Lo Wan was nevertheless famous for its incense (Mott Connell 1998).

Today San Tau, including the smaller settlements of Tin Sam, Kau Liu, Chau Ka and Tse Ka, is a multi-clan village peopled by the Ho, Chau, Cheng, Wong, Tse, and Chan clans (Mott Connell 1998). The Tse, Cheng, Chau and Ho clans all trace their ancestry back the time of the Coastal Evacuation or the one or two generations thereafter (i.e. c.1675-1750). The Qing dynasty and more recent history of San Tau is dominated by communities focused mainly on subsistence farming, but that was seemingly not the case in the centuries before when more diverse survival strategies were called for.

3.3 Existing Archaeological Information

Although the maximum extent of the STSAI is very large (c.750m SW-NE by c.700m NW-SE), known archaeological deposits are localised and in need of further definition. The present study area

to the north of KL-TS has been the subject of three previous archaeological field investigations as detailed below. NB: In the absence of coordinates for previous excavations, their locations were plotted on Figure 4 based on maps provided in the project reports held at the Heritage Discovery Centre. The proposed methodology was thus designed to accommodate any uncertainty over the precise locations of previous interventions.

3.3.1 North Lantau Survey (CUHK 1991)

During the North Lantau Survey, five test pits (coded TG1-5) were excavated on the Tin Sam backbeach (CUHK 1991) but only Qing dynasty finds were produced and the area was interpreted as recent sand dune. Although no archaeological potential was identified, the approximate locations of the five test pits (blue squares) are shown in Figure 4 for comparison with later findings.

3.3.2 Tung Chung & Tai Ho Comprehensive Feasibility Study (Mott Connell 1998)

A CHIA project in 1997 conducted 13 tests north of Tin Sam comprising ten 0.3m diameter hand-dug 'small diameter probes' (SDP) coded TS1-10 (green stars), of which two were then expanded into test squares (green squares): TS2 became TS-A (1.5 x 1.5m) and TS-B (1.0 x 2.5m) was opened beside TS8. A third test square TS-C (1.5 x 1.5m) was excavated a few metres to the south of TS-B as it was thought that the main prehistoric focus might lie in that direction.

In the western area, SDP numbers TS1 and TS2 revealed Tang and Song layers with pottery, while TS3 produced just one Tang dynasty sherd (Figure 4). Test square TS-A, which was subsequently opened up around TS2, confirmed the presence of a Song cultural layer and a much richer Tang deposit with frequent pottery sherds and a cluster of 62 coins. The latter was interpreted as possible evidence for a Tang dynasty cemetery. Perhaps most notable, given the good evidence for Tang dynasty activity, was the complete absence of kiln debris in the area.

Approximately 60m to the east of TS-A, SDP TS7 produced two small sherds of Neolithic pottery while TS8, although producing no finds, contained sandy strata thought likely to be productive in a wider exposure. A 1.0 by 2.5m test square (TS-B) opened up adjacent to TS8 produced a number of fresh sherds of late Neolithic/Bronze Age pottery in a sloping, sandy backbeach-type stratum. A further test square (TS-C), excavated a few metres south of TS-B, and at a slightly higher elevation, revealed a 1m thick layer of redeposited soil with Qing to modern finds – clearly the result of agricultural terracing, sealing a late Neolithic/Bronze Age deposit with more abundant finds than TS-B. Based on the contrasting finds frequencies between TS-B and TS-C, the excavator suggested that the main prehistoric deposit area was probably even further to the south and upslope from TS-C.

3.3.3 Second Territory Wide Survey 1997-8 (Report: AMO 1998)

As part of the 2nd TWS, the Guangzhou Institute of Archaeology and Cultural Relics (AMO 1998) excavated a 2 x 3m test pit (red square) in the area of earlier historical deposits identified that same year in the project discussed above. Once again a Song layer was identified sealing Tang dynasty deposits – although here of a much more significant nature, comprising as they did of two early Tang burials, which were laid out parallel to one another and orientated north-south (Figure 4). As is common in Hong Kong's acidic soils, no skeletal material survived; however, the position of grave goods and personal ornaments, in particular a hairpin, should have indicated the head position of one of the interred individuals, although this detail is not included in the very brief summary report.

3.4 Discussion

Within the KL-TS backbeach zone, the contrast between the positive findings of both of the 1997 fieldwork projects and the lack of archaeology found by CUHK in 1991 is puzzling. However, in

order to establish a meaningful research methodology for the project, the patterning of both positive and negative findings had to be taken into consideration.

When considered together (Figure 4), the patterning of negative findings from the Mott Connell and CUHK projects seemed to suggest several things: firstly that the eastern limit of the earlier historical deposits lay west of TS4 and TG1; secondly, that the prehistoric deposit area – predicted to extend upslope from TS-C (Mott Connell 1998), appears not to do so if the findings of TG2 and TG5 (CUHK 1991) are reliable. Moreover, the negative results from TS6, TS9 and TS10 (Mott Connell 1998) and TG3 and TG4 (CUHK 1991) gave few clues as to the fuller extent of prehistoric deposits in the eastern half of the study area – although TS6, 9 and 10 were very small interventions at just 0.3m diameter.

In terms of the positive findings – the known archaeological resource, the western early historical focus appeared richer and arguably more significant in terms of Hong Kong archaeology than the eastern, less defined focus of late Neolithic to Bronze period activity. Indeed, the identification of early Tang burials was a rare finding in Hong Kong and burials of early historical date have only very occasionally occurred and then in ones and twos (e.g. Sham Wan: Meacham 1978; Hai Dei Wan: Meacham 2009). If the two burials and cache of Tang coins previously identified could be shown to be part of larger cemetery then it would add important new data on local funerary traditions in that period.

The present project's research methodology was therefore designed to identify, define and provide a fuller understanding of the extent and character of early historical funerary activity within the western backbeach site.

4. Methodology

4.1 Introduction

This section of the report provides an overview of the methodologies used to address the project aims as set out in Section 2. It begins by explaining the rationale behind and characteristics of the field investigation methodology (4.2), moves on to give an overview of the methods used in on-site recording and sampling (4.3), then discusses the approach to post-excavation processing and analysis (4.4), and is rounded off with an overview of the approach used in the presentation and discussion of results (4.5).

4.2 Three Stage Field Investigation

As discussed in the project proposal, although the findings of previous fieldwork were undoubtedly promising, the limited nature of such investigations potentially left many questions unanswered regarding the true date, character and extent of the archaeological site. It was therefore considered desirable to employ an investigation methodology that would generate additional baseline data that could then be used to guide the positioning of test pits, whose findings would then decide the location and extent of expanded excavations. A three-stage survey-cum-excavation methodology was therefore devised comprising:

- Stage 1: ground penetrating radar (GPR) survey;
- Stage 2: excavation of a series of 2x2m test pits;
- Stage 3: expanded excavation in one or more locations in order to provide a better opportunity to understand horizontal stratigraphy and aid in the identification of cut features, in particular graves.

4.3 On-Site Excavation, Recording & Sampling

4.3.1 Excavation

All excavation work on site was done by hand and mostly using trowels. The more humic, moister character of soils in TP2 and TP4 meant that sections could be cut vertically, whereas in the loose, dry sand of TP1, which lay closer to the coast in the heart of the sandy backbeach, sloping trench sections were required. The site had no evidence of modern utilities disturbance, but local villagers advised that recent agricultural activity had included cutting back and levelling the sloping surface of the lower hillside and backbeach to create a flat area for cultivation. As a consequence, significant truncation of earlier historical (Tang-Song) deposits was noted during the excavation.

4.3.2 Recording

Recording was carried out in line with AMO guidelines (see Appendix 3) and internationally accepted standards of archaeological practice. The basic unit of analysis used on site was the context – each of which was allocated a unique number prefixed with the TP number (e.g. 101, 201, 301 & 401). Multiple contexts were then grouped together under feature numbers, which were allocated to pits and graves – respectively prefixed 'P' and 'G' for convenient identification.

Feature and finds locations were recorded on site and are discussed below in relation to the alpha-numeric coded 5m grid squares (e.g. H15) and the original test pits and their extension areas (see Figures 5 & 6). Thus for the extended Test Pit 1 (TP1-EX) the following area codes apply: TP1 (refers to the original 2x2m test pit), TP1-NEX (the northern 1.5x2m extension), TP1-SEX (the southern 1.5x2m extension) and TP1-EEX (the eastern 2x2m extension). For the extended Test Pit 2 (TP2-EX) the following area codes are used: TP2 (the original 2x2m test pit); TP2-WEX (the western 1x2m extension); TP2-NEX (the northern 1x4m extension), TP2-EEX (the eastern 1.5x2m extension), TP2-SEX (the southern 1x4m extension). Test Pit 4 (TP4) was opened up as a 2x3m area and not extended beyond that footprint.

General finds were bagged by context number (see tabulation in Section 22), while special finds were allocated a unique number (SF001-123), photographed *in situ* and then 3-D recorded relative to the site grid (see tabulation in Section 21).

All on-site photography was done using digital SLRs and photographs were allocated unique numbers, which were then also cross-referenced to the camera-generated image numbering sequence. Plans and sections were hand-drawn on waterproof drawing film and each view was allocated a unique combination of drawing number and sheet number.

4.3.3 Sampling

In additional to hand collection of finds during general trowelling, an additional three-tier sampling strategy was used: general cultural layers were dry sieved 20% by volume (using 0.5cm mesh), the fills of sealed contexts such as pits and graves were also dry sieved but here 100% was checked, while a portion of the fill of each sealed context was bulk sampled for testing using the bucket flotation method. Any finds recovered through dry sieving were bagged against the relevant context number, while finds recovered from wet sieving of flot residues were bagged against their unique environmental sample number (ES01-31) and context number. Full details of the 31 environmental samples are tabulated in Section 12.

4.4 Post-Excavation Processing & Analysis

4.4.1 Processing

The excavation, in particular the graves, yielded a rich assemblage of finds including: iron knives, swords and nails; non-ferrous coins, belt fittings and hairpins; and ceramic vessels comprising cups, bowls, basins and jars. The ceramics were washed and marked with the help of Society volunteers, while cleaning of the metalwork was carried out by a local conservator. The bucket flotation processing of soil samples from sealed contexts was carried out during the excavation close to the site.

4.4.2 Analysis & Assessment

All finds were cleaned, identified and categorised, counted, weighed and then tabulated (see Sections 20 & 21). The general and special finds ceramics were also marked, and then together with the metalwork and other objects, were photographed.

4.5 Presentation and Discussion of Results

4.5.1 Sequence of discussions

The presentation of results begins in Part 2 with a description of the site grid (5.2) followed by a discussion of the GPR survey findings (5.3). Then in Part 3, for the main excavation area – hereafter Area 'A' (TP1, 2 & 4), the discussion commences with a general description of the location, size, depth, reduced levels (mPD) and development of final trench layout (6.1). The excavation results are then presented as follows: first the stratigraphic units are discussed in the chronological order of their deposition (i.e. from the earliest/lowest excavated stratum to the latest/uppermost – contexts, when first mentioned, are shown in bold type for clarity). Where appropriate, such units will be grouped for collective discussion in terms of features (graves and pits) and broad phases of site development (6.2), which are then dated and interpreted in light of the finds data. The site stratigraphic sequence is graphically depicted in the Harris Matrix (Section 18). Part 3 is rounded off with a discussion section comprising: a comparative analysis of the archaeological findings in relation to the GPR survey results (7.2), then a discussion of patterns of funerary behaviour (7.3), and finally a tentative interpretation of the people buried at San Tau and the wider context of the cemetery (7.4).

NB: Given that TP3 was abandoned with little more than the topsoil removed, the main report text will focus on Area 'A' and discussion of the results from TP3 will be restricted to brief summary in Appendix 1.

4.5.2 Deposit descriptions

Alphanumeric codes and deposit colour descriptions are taken from the Munsell system of soil colour charts (Gretagmacbeth 2000). Cultural layers within the backbeach sand accumulation and can be assumed to extend horizontally beyond the limit of excavation (l.o.e.) in all directions unless stated otherwise. In terms of compaction, the vast majority of deposits are either the 'pure' sands of the backbeach sequence or cultural deposits developed from such material. All layers can thus be assumed to be loose in character unless stated otherwise. Deposit thicknesses used are maximum values, but where variation in thickness has archaeological significance, for example, in terms of sloping deposits or where localised spreads diminish in thickness towards their outer edges, further elaboration will be provided. Furthermore, if layers extend vertically beyond the l.o.e., this will also be clearly indicated in the text. Any absolute heights or levels mentioned are expressed in metres above Principal Datum (mPD).

4.5.3 Finds categorisation & dating

All finds were categorised in terms of their material, the object type and, if possible, their date (see finds Key in Section 20). The three main categories of finds evidence used in dating the site were pottery, copper alloy belt fittings and coins – the latter being the least precise due to their often long periods in circulation. When finds assemblages are listed and discussed, any material not ascribed to a date or specific period can be assumed to be undiagnostic for date (UD), but probably Qing in origin – for example, village ware, provincial porcelain (mostly Wun Yiu) or roof-tile. All pottery, whether diagnostic for date or not, was allocated to one of ten fabric categories (see Section 9.2 for details) and, where possible, was identified to period, region and even sometimes to particular kilns. A fuller discussion of the main identifiable types is provided against the various ceramic special finds in Section 9.3.

4.5.4 Reporting

This text has been prepared in accordance with the relevant AMO guidelines (see Appendix 6) and, in addition to this present report, a further version will be included in the next volume of the *Journal of the Hong Kong Archaeological Society.*

PART 2: SURFACE SURVEY STUDIES

5. Site Grid, Field Scan & GPR Surveys

5.1 Introduction

Following scrub clearance, the survey stage of the project first involved the establishment of a 5m site grid with its origin in the south-west corner of the 50x100m study area (Figure 5). With the site grid established, the GPR survey could then proceed and, while doing so, a thorough scan for surface artefacts could be conducted. In fact there was a complete absence of artefactual material on the surface of what was known to be a relatively rich site, which was quite surprising; however, a layer of up to 0.1m of decayed leaf litter had seemingly accumulated over the former topsoil in the decades since cultivation on the back beach had ceased. Later, when such recent material was scraped back, the topsoil produced a mixed assemblage of Qing-Modern and earlier pottery. Given the absence of surface finds, there was therefore no need to include a section covering the field scan.

The discussion below thus follows the chronological order of the survey work, beginning in 5.2 with some further details of the topographical survey and site grid, followed in 5.3 by a discussion of the implementation and results of the GPR survey.

5.2 Site Grid

Before on-site data gathering could begin in earnest it was first necessary to clear all vegetation and establish a site grid within which all survey and excavation work could then occur. By taking reference to benchmarks on the perimeter of Chek Lap Kok Airport it was possible to set up a network of survey control points around the backbeach. Such control points were then used to establish a site grid within which 5m squares were allocated using an alpha-numeric system with an origin in the SW corner of the 50x100m study area (coordinates: 809725E; 816850N). Within the cleared area, which measured 35m E-W by 20m N-S, a network of grid pegs were set out ready for the GPR survey team (Figure 5).

5.3 GPR Survey

5.3.1 General Introduction to the Technique

Ground penetrating radar (GPR) is one of several near-surface geophysical techniques commonly used in archaeological site assessment. During a survey the GPR antenna emits very high frequency (VHF) electromagnetic (EM) pulses into the ground and when discontinuities (e.g. contrasting soil layers, features or finds clusters) are encountered some pulses are reflected back to a receiving antenna while others continue down to be reflected by lower features. By measuring the time taken for reflections to return it is possible to "estimate the depth of the targets along a vertical section" (Gaffney & Gater 2003). Moreover, when GPR data are gathered within a survey grid using regularly-spaced traverses in two perpendicular directions it is then possible to create a 3-D computer model of buried archaeological remains, which can then be viewed as 'time slices' at different depth ranges. It is GPR's ability to 'see' the features of a buried archaeological site not just as a single plan but rather as a series of plan views changing with depth, which has seen it emerge as one of the "major growth areas for research in archaeological geophysics in the last 25 years" (Gaffney & Gater 2003). Given such wider archaeological interest, it seemed timely and logical to test the technique under Hong Kong site conditions and, moreover, within a research rather than commercial context.

5.3.2 GPR Survey Implementation

The equipment used for the survey was an American-made GSSI SIR-20 GPR unit with a 400MHz antenna connected to a Leica GX1230 global positioning system (GPS). The survey was conducted over a total of nineteen 5m grids (Figure 5 blue outline), giving a total area coverage of 95m^2. In order to gather data of a suitably high density and resolution, a 1m survey interval was used and the site was traversed in both the N-S and E-W directions. During the survey GPR data and GPS 3-D positional data were continuously logged to computer – thus guaranteeing both spatial accuracy and precise modelling of sub-surface anomalies, both of which are essential for the interpretation of results in terms of archaeological features. In the interests of maintaining consistent positional accuracy across the entire surveyed area, only grids without significant tree cover were surveyed – thus ensuring good satellite coverage for the GPS.

5.3.3 GPR Results

When processed, the GPR data revealed a number of discrete anomalies scattered across the surveyed area. Although contrasting results were visible in each of the horizontal 'slices' (e.g. 0-0.33m; 0.33-0.77m; 0.77-1.21m etc), the plot of results in the 0.33-1.21m depth range provides an excellent summary and shows a series of very promising sub-circular to sub-rectangular anomalies between 1-3m in length. For convenience, the position of excavations in Area 'A' (TP1, 2 & 4) and TP3 are both highlighted with black boundaries in Figure 7; within which the blue to green colours in the GPR data reflect the site background of sandy backbeach deposits and were therefore judged to be of relatively low archaeological potential, while the red and black responses record the position of sub-surface features with relatively high conductivity and "reflection intensity" compared to the sandy background. Increasing archaeological potential is suggested moving from green, through yellow, red and then to black (although the large area of black to the south west is most likely geological in origin, relating to debris flow deposits at the base of the hill slope in that area – note their curving fan-shaped front edge).

In contrast to the wide area of strong reflections created by the underlying geology, the discrete and localised anomalies in the data are in the main suggestive of archaeological remains. The scale shown down the right-hand side of Figure 7, ranging between 0.00 and 0.25 is in arbitrary units relating to the intensity of reflections contained in the data. In other words, if one increases the maximum value to 0.50, then that would effectively emphasise only the strongest responses (the

black areas in Figure 7) at the expense of loss-of-detail within the less strong spectrum. Conversely, if one lowers the maximum value to perhaps 0.15, there will then be a loss of contrast and individual anomalies will be less well defined against the much 'busier' background. Based on trial and error, 0.25 was determined to be the best compromise, providing as it does both clear definition of discrete anomalies and a good overview of less intense anomalies which, nonetheless, may well reflect archaeological remains. As will be discussed in Section 7.4, the excavation showed that anomalies in the entire 'green to black' range of response intensity were in fact archaeological features. Moreover, even some areas with no apparent contrast with the surrounding backbeach deposits (i.e. blue colours) problematically appeared to fall within archaeological features. The challenge in 7.4 thus lies in explaining why different areas containing archaeological features (e.g. Tang dynasty graves and pits) produced responses ranging from the very intense (red to black) to those with little or no contrast with the site background – with many others falling in the 'moderate' range (yellow to green) in between.

PART 3: THE EXCAVATED SEQUENCES

6. Site development, dating & interpretation

6.1 Introduction

The GPR results provided a number of archaeological targets across the entire surveyed area of the backbeach and it was decided to commence test pit excavation at the eastern end of the site and work steadily westward. Initially, therefore, two 2x2m test pits (TP1 and TP2) were positioned over prominent GPR anomalies at the eastern end of the survey area, while a third 2x2m test pit (TP3) was later added over another discrete anomaly somewhat further to the west (see Figure 5 pink squares).

Based on the rich and complex findings in TP1 and TP2, both trenches were extended to reveal wider areas in the hope of identifying in plan the outlines of graves suggested by clusters of grave goods found following removal of apparently homogenous layers. Eventually the area between TP1 and TP2, which was labelled TP4, was excavated down to the base of Qing-modern agricultural disturbance in order to link the stratigraphy across the main excavation areas, thereby creating an elongated trench – hereafter Area 'A' (see Figure 5 green outline, and trench map in Figure). NB: As mentioned in the methodology, due to the challenging nature of the archaeology in Area 'A', it was decided to concentrate effort there, record and close down TP3 with little more than the topsoil removed and leave it for future investigation (see summary of TP3 results in Appendix 1).

Area 'A' was eventually 6.75m E-W by 13m N-S in overall extent. In the southern (4x4.5m) and central (2x3m) parts of the trench it was possible to excavate to the full rectangular footprint using vertical sections, whereas to the north the dry, loose sand in the middle of the backbeach required the use of sloping sections, which somewhat reduced the T-shaped 4x6m trench to a base-of-excavation footprint of 3.5x5.25m in that area. In terms of levels, the site surface sloped gently downhill towards the sea from c.5.20mPD at the south end of the trench to c.4.92mPD at the north. In the northern and southern parts of Area 'A' sondages were excavated into the apparently sterile backbeach deposits – producing base-of-excavation levels of 3.73mPD and 4.00mPD respectively.

With a wider area of exposure, and with very careful trowel cleaning and great attention to textural and colour variation, it was eventually possible to identify with some confidence the presence of nine graves, two 'probable' examples, plus five other 'possible' examples only partially visible in section and/or plan. Of the nine relatively clear graves, a total of six Tang dynasty graves (G1-G4, G6 & G7)

and one later, apparently Qing, example (G5) were fully excavated and recorded during the fieldwork.

The following discussion of results in Area 'A' should be read in conjunction with overall plan Figure 8, sections, plans and finds drawings Figures 9-56, Plates 4-55, the Harris Matrix (Section 18), and supporting survey and finds data, which are tabulated in Sections 19 to 21.

6.2 Backbeach deposits

The lowest excavated stratum on site was a 0.30m thick (at l.o.e.) yellowish brown coarse sand layer (**107**, **203**) which, although not excavated in TP4, appeared to extend across the site and beyond the l.o.e. in all directions. In order to test for the presence of underlying prehistoric deposits, two small sondages – measuring c.1x1.5m in plan, were excavated in the northern and southern areas. The sondages revealed that layer 107=203 continued well beyond the general base-of-excavation to a maximum thickness of 0.6m at the l.o.e. in both areas. Several large, rounded to sub-angular boulders, measuring between 0.12x0.20m and 0.35x0.45m in plan, were noted during the excavation of the northern sondage.

Despite previous findings of prehistoric deposits to the east and the recovery of a few prehistoric pottery sherds from early historical contexts, no prehistoric material was recovered from layers 107 or 203 and all but the upper few centimetres were sterile. In fact the upper 0.05-0.10m of layer 203 and layer 107, in particular, produced a large number of finds of Tang dynasty ceramics and metalwork (see finds breakdown in Sections 20 & 21). However, the completely sterile nature of the layers below such surface finds accumulations, added to the proximity of graves covering almost the entire excavated area, suggests that the finds are most likely intrusions from above. It is thus argued that most, if not all, of such finds had originally been placed in the base of graves but had, over the centuries, migrated a few centimetres downwards from the grave fill into the underlying stratum. Therefore, despite their recovery from and recording against contexts 107 and 203, such grave goods are discussed below in relation to their supposed 'parent' grave.

6.3 Phase 1: Pre-cemetery cultural horizon (probably Jin-Tang)

In TP1-EX, layer 107 was overlain by a 0.44m thick layer of dark yellowish brown silty, gravelly sand (**102b**=**404**). Although not excavated in TP4, the layer seemingly extended all the way to the southern trench baulk where it measured just 0.16m in thickness. The difference in depth from south to north seems to have resulted from the layer's formation over the natural slope of the backbeach, which was then more-or-less horizontally truncated by later historical activity (see below). In TP2-EX a series of numbers were allocated to the layer, which was mainly due to the area's physical division by a number of cut features, but also to provide some spatial control of general finds: TP2-WEX (**202d**), TP2-EEX (**206**) and in TP2-SEX (**216**) – no number was used in TP2-NEX as the area was entirely occupied by graves.

One of the real challenges of this site, especially in TP1-EX, surrounded attempts to differentiate between the cuts and fills of features (graves and pits) and the pre-cemetery horizon into which they must have been cut. This was particularly problematic within the confines of the original 2x2m test pits, which in both cases contained multiple intercutting features extending beyond the confines of the baulks. Indeed, only within the wider areas of the extended trenches did the true level of complexity become clear. Moreover, it was only with such larger areas open, and with repeated careful trowel cleaning and spraying, that the subtle textural and, occasionally, colour differences allowed features to be defined in plan. Another consequence of such difficulties was that, in the original 2x2m TP1, 102b had been excavated as part of a deeper layer (**102**), which was subsequently

divided into a somewhat paler later historical upper stratum (**102a**) and slightly darker earlier historical lower stratum (102b).

One frustrating consequence in TP1 was that many Tang dynasty finds were originally recorded against layer102, before it was recognised that, firstly, there were in fact two layers of different date present and, secondly, none of the brown glazed village ware and blue-and-white porcelain extended into layer 102b, which produced only pre-Tang to Northern Song material. Thankfully, the use of 3-D recording for special finds, most of which are unquestionably grave goods of one sort or another, provides a means of reallocating such artefacts to their correct context – in many instances 102b. Where such reallocation has occurred, brackets will be used to show the difference between finds allocated to context during the excavation (i.e. 102a and 102b), and those special finds reallocated based on their 3-D coordinates in post-excavation (i.e. 102(a) and 102(b)).

The diagnostic finds from this pre-cemetery horizon in TP1-EX are Pre-Tang (probably Jin) to Tang dynasty in date with no obviously later material present. In TP2-EX the pre-Tang material is absent apart from the pre-early Tang jar found in Grave G7 (SF108.1) but the diagnostic component is once again dominated by ceramics dating to the mid-late Tang dynasty.

6.4 Phase 2: Tang dynasty cemetery

6.4.1 Introduction

The above cultural layer was cut by a series of graves grouped within Phase 2 which, for a variety of reasons, was divided into three sub-phases: 2a, 2b and 2c (see plan in Figure 8). As discussed in Section 7, there was a consistent mid-late Tang dating for the grave goods; however, the creation of three sub-phases for the cemetery is based upon observed stratigraphic relationships between graves of different orientation. Broadly speaking, graves were laid out using three main orientations: east to west (E-W), north to south (N-S), and north-west to south-east (NW-SE). Graves of shared orientation generally respected one another, while the only securely defined E-W grave on site (G6) was cut by one orientated N-S (G2) and another (G3) parallel with the latter was then cut by a NW-SE orientated grave (G7). Additional, less clear, examples of the latter relationships were also demonstrated in other locations across the site and are described in the following sections and in an overall synthesis of the evidence in Section 7.3.1's discussion of grave orientation and phasing.

NB: Given that these stratigraphic relationships between E-W, N-S and NW-SE orientated graves were only demonstrated in the few locations where graves clearly intercut one another, the placement of *all* graves within one of the three sub-phases obviously assumes that such orientations changed consistently through time and all graves within each orientational 'tradition' are more-or-less contemporary. These are big assumptions based on this first season's findings but they help set up a reasonably good working hypothesis that can be tested during further analysis of the present data sets as well as in future field research. The unexcavated features identified in plan in TP4 will, in particular, require further investigation before the tentative phasing offered here can be more firmly applied.

6.4.2 Phase 2a: E-W orientated graves

Grave G6

The only well-defined grave of this orientation was **Grave 6** (**G6**), which was located in the NE corner of the southern rectangular area. Although not quite fully defined in plan within the trench, the grave measured 1.15m wide by 2.75m long, which must have been close to its full extent (Figure 16). The surviving cut (**225**) was shallow at just 0.42m deep, with a near-vertical face to the south,

rounded profile to the west, and a flat base (c.4.45mPD). The single fill consisted of dark yellowish brown (10YR 4/4) slightly silty sand (**218**). The grave, like all other Tang dynasty examples in the south, had been significantly truncated by later historical activity, and must have been considerably deeper when first dug. In fact, the evidence provided by grave goods suggests that the level of truncation may have been even more severe than first appreciated. When the 'fill' was removed the finds were left 'floating' on soil pedestals (Figure 17) – thus suggesting that graves in the southern area were overcut by perhaps 0.05-0.15m, which is perhaps a more acceptable argument for the phenomenon, rather than some sort of peculiar burial practice where grave goods were inserted with the grave partially back-filled. The overcutting is understandable (and forgivable) given the apparent degree of organic fill 'wash-down' into the underlying backbeach layer (203) – see further discussion of post-depositional factors in Appendix 5.

When fully defined Grave G6 produced a very interesting and illuminating collection of mid-late Tang grave goods (Plate 4) – it also provided a good example of the strange mortuary phenomenon evidenced at KL-TS of pots within graves being either placed under rocks or, in some instances such as G6, apparently being intentionally smashed using large boulders. At the eastern end of G6 a large, rounded boulder was found on top of several sherds of a large pinkish-purple slipped basin (SF084 – Figure 18 & Plate 5). The finding of a well-preserved silver hairpin (SF095 – Figure 19 & Plate 6) at the western end of G6 confirms that the smashed pot was by the feet of the deceased, while a collection of three copper alloy *kwa* and one strap-end in the middle of the grave (SF087 – Figure 20, 088, 096 & 116 – Plate 7) should record the belt position. In addition, a copper alloy belt buckle (SF121 – Figure 21 & Plate 8) was found in the SFS at the western end of the grave, while a further *kwa* was recovered by wet sieving of flot residues from soil inside one of two small bowls (SF086 – Figure 22 & Plate 9), which was found next to the other belt fittings. The other small bowl (SF089 – Figure 23 & Plate 10) was located beyond the hairpin at the western end of the grave. Thus, despite not being able to fully define the cut in plan, the arrangement of finds in G6 was highly revealing as to the position and orientation of the deceased. The belt/strap fittings suggest a date in the mid-Tang dynasty and the pottery broadly agrees – having a suggested date range spanning the mid-late Tang dynasty.

Grave G11 (probable)

Another possibly E-W orientated, but poorly defined, grave (**G11**) was located in the south-west corner of TP2-SEX, diagonally opposite G6 (Figure 2). Due to a combination of disturbance by later features – most notably grave G5, and locally intense root penetration, it proved impossible to define the grave's cut in plan. The suspected grave was filled with brown (10YR 4/3) to yellowish brown (10YR 4/6) slightly silty sand (**220**), from which a large stone was protruding. Following further removal of 220, the large angular stone was found to be on top of a smashed storage jar (Figure 24 & Plate 11), the sherds of which were trapped under the rock and scattered for some distance around. The dark grey slipped, lugged stoneware storage jar (SF117 – Figure 25 & Plate 12) was of a typical south Guangdong type and is mid-late Tang in date. Such smashed pots seem to be a feature of graves at KL-TS and, as demonstrated in G6, were probably positioned at one end of the cut. A valuable clue as to the extent and orientation of the grave was offered by the patterning of grey slipped sherds, which were scattered across the western half of the SEX area as far as Grave G2, within which several refittable sherds had become redeposited.

Beyond the sherds of the grey slipped jar itself there were few artefacts in the general area, although four probable Tang coins (SF046 & SF052) were found in two locations nearby. Grave G11 therefore remains a tentative feature, but one that correlates with the pot-smashing evidence from other E-W grave G6. Moreover, the incorporation within grave G2 of refitting grey slipped sherds clearly originating in G11, suggests that G2 was not only later than G6, but G11 also.

Grave G15 (possible)

A further potential 'grave' (**G15**), of possible E-W orientation, was noted at the base of the south facing section in the NW corner of Area 'A' (Figure 26). Here a 0.14m thick (at l.o.e.) band of dark brown slightly silty, gravelly sand (**113**) was visible extending 1.6m E-W by 0.23m south into the base of the trench.

No finds were directly attributable to this context; however, a mid-late Tang dynasty bowl (SF035.1 – Figure 27) was found directly above 113 in context 102b and may be related. Also a D-shaped *kwa* (SF071 – Figure 28) was recovered from the Qing topsoil (**102(a)**) directly above the feature, while three lead alloy or silver trapezoidal possible belt decorations (SF076, SF094.1 & 094.2 – Figures 29-30 & Plates 13-15 inclusive) were found in adjoining spread (**115**) to the south. The latter context and its finds may in fact be part of G1, which overlapped 115 on its south side – either grave may therefore be related (hence both are mentioned in the Special Finds Catalogue entries for SF076 and SF094.

6.4.3 Phase 2b: N-S orientated graves

The N-S category of graves contained three defined and excavated examples (**G2, G3 and G4**), two partially defined 'probable' examples (**G8 & G10**), plus three possible graves (**G12, G13 & G16**).

Grave G2

Of the three excavated examples, **Grave G2's** cut was seemingly the most clearly defined in plan (Figure 31), although part of its fill and cut were unfortunately removed unrecognised during excavation of the original 2x2m TP2. Only when clusters of grave goods were encountered was the presence of G2, and G3 to the NW, first recognised. Following extension of TP2 to the north (NEX), east (EEX) and south (SEX), it was possible to define the remainder of G2's cut in plan and to recognise that G2 was in fact later than E-W grave G6, whose southern side it truncated. The cut of G2 (**204**) was rectangular in plan and measured 1.10m wide by 2.40m long. In profile the truncated cut measured just 0.24m deep with sloping sides, which were steeper to the south, while the base sloped gently from north (4.58mPD) to south (4.50mPD) across the grave's length. A single 0.24m deep fill was noted consisting of dark brown (10YR 3/3) slightly silty sand (**202b**).

With the cut emptied a rich assemblage of grave goods was noted, all of which were perched on plinths of varying height (Figure 32 & Plate 16) – again suggesting some degree of overcutting during excavation. The grave was unusually well-furnished with iron weapons: to the south was a rapier-like stabbing weapon (SF021.2 – Plate 17) with three small iron knives (SF021.1, 072 & 073.1 – Plate 18), associated scabbard fragments (SF074), and a harpoon head (SF073.2); while down the east side of the grave lay a large knife (SF65.1 – Plate 19), a short sword (SF065.2 – Plate 20) and an adze-head (SF065.3 – Plate 21) all in close association. A pair of *Kaiyuan Tongbao* Tang coins (SF048 – Figure 33) was found near the latter cluster. In the south-west corner of the grave was a further group of grave goods comprising: a cluster of prehistoric sherds (SF022 – Plate 22) on top of a stoneware lug handle (SF027), a stack of 14 *Kaiyuan Tongbao* Tang coins (SF063), a complete mid-late Tang green crackle glazed bowl (SF064 – Figure 34 & Plate 23), and a number of grey slipped pottery sherds (SF061) that were refittable with the jar in G11. A scatter of three D-shaped *kwa* (SF011, 031 & 044 – Figure 28 & Plate 24) were found across the northern half of the grave. At the northern end of the cut was a pair of silver trapezoidal objects (SF068.1 & 2 – Figure 35 & Plates 25 & 26) which, like those from context 115 above, may be belt decorations. In addition, an inverted bowl (SF069.2 – Figure 36) and nail (SF067) were found to the north-west apparently just outside of the cut. The coins and, in particular, the pottery provide a mid-late Tang dynasty date for the grave.

The bowl sherds and nail to the north-west were troubling from the moment the grave cut was defined as they looked like they should go with G2 but never quite matched the layout. Similarly problematic is the shared orientation of the long iron blades and adze – SF21.1 to the south and SF65.1, 65.2 and 65.3 to the east, all of which point NW-SE *diagonally* across the N-S grave. The shared orientation argues against their disturbance and the three items to the east, in particular, looked to be *in situ*. So how might one interpret the evidence? Well, either the body was laid out diagonally NW-SE within a N-S grave cut, or the excavated cut is not an accurate reflection of the original feature, which was in reality aligned NW-SE. The former option seems unlikely but is nonetheless possible; whereas the latter is perhaps more likely given that the western side of the cut was removed unseen in the original 2x2m TP2, while the middle part of the eastern side was disturbed by a later pit (P6). However, the degree of care and attention paid to textural and colour differences when defining the cut, albeit somewhat tentatively, need to be stressed; nevertheless, question marks remain over this grave's true outline and orientation.

Grave G3

Positioned c.0.75m to the west of G2, parallel (to its excavated cut) and slightly to the north, the cut of **Grave G3** was only partially defined in plan due to disturbance from two other graves – one also Tang dynasty in date and cutting across from the NW (G7 – see below), and the other much later and cutting into it from the south (G5 – see also below). As a result it was impossible to define G3's cut in plan during excavation of the original 2x2m test pit (TP2) as most of it had already gone – (Figure 49). The surviving northern end of the cut measured just 0.75m wide by 0.95m long by 0.20m deep (**205**). The grave had a single 0.20m deep fill of dark brown (10YR 3/3) slightly silty sand (**202c**).

When intercutting grave G7 was excavated it appeared likely that most of the artefacts originally ascribed to G3 (102c) were more likely to have been within the cut of the later feature (i.e. either placed in G7 or redeposited in G7 when disturbed from G3). Either way, all the materials gathered against 202c can confidently be placed in the mid-late Tang dynasty and are discussed against G7 below.

Grave G4

The southern end of **Grave G4** was positioned some 5.25m due north of G3 in TP1-EX. As a result of significant bioturbation and post-Tang agricultural activity it had proved impossible to define G4's cut in plan until the very base of the grave was reached. At that level the 0.05m thick layer of dark greyish brown (10YR 4/2) silty, clayey sand of the grave's basal fill (**108**), and that of nearby NW-SE grave G1, stood out against the yellowish brown sand of underlying backbeach layer 107 (Figure 8 & 37; Plate 27). The 'cut' (**109**), therefore, was identifiable only in plan and measured c.1.00m wide by 2.05m long. Above the level of 108 any fill existing was indistinguishable from layer 102b.

Here a final word on the status of finds from layer 102b is perhaps appropriate: it will be noted that for graves located in TP1-EX such as G4 (and G1, G9, G10, G15 and G16), special finds recorded against context 102b or 102(b) may, for example, be stated to be "possibly from G4". Such connections are based on the fact that some graves, namely G9 and G10, were identified in section cutting from the top of 102b. Therefore, for graves with no visible cut through 102b (i.e. G1 & G4 and possible graves G15 & G16), if the 3-D coordinates of special finds in layer '102b' place them directly above the grave – it then seems reasonable to highlight a possible connection.

The N-S orientated dark organic spread (108) actually produced just two sherds of Tang-type pottery and it was only with extension of the trench to the north and south that the true nature of Grave G4 was revealed. In contrast, the extension revealed a rich assemblage of grave goods overlapping the

northern edge 108 and spreading north over layer 107, comprising approximately 140 Tang coins (SF058 & 059) of *Kaiyuan Tongbao* type (Xu 1991) – Figure 33 & Plate 28, an iron harpoon (SF092 – Plate 29), J-shaped fishhook (SF58.28) and nail (SF070), a U-shaped (probably silver) hairpin (SF081 – Figure 38 & Plate 29a), and a late Tang spouted pottery vessel (SF057.1 – Figure 39 & Plate 30 associated with a crackled glazed bowl (SF075 – Figure 40 & Plate 31). Several sherds of a red-slipped round-bottomed basin with net pattern below and undecorated shoulder and everted flaring rim were also recovered around the northern end of G4 (SF018, 082 & 090 – Figure 41 & Plate 32) – this item is pre-Tang and probably Jin in date. To the south of 108 a pair of small crude cups of mid-late Tang date were found – SF080 (Figure 42 apparently *in situ*, while SF026 (Figure 43 & Plate 33) was found nearby when the section was cut back. Associated with SF080 was another stack of around 20 *Kaiyuan Tongbao* coins (SF056). The hairpin is identical to the example from G6 and here suggests that the original orientation of the deceased was with their head to the north.

In addition to the finds clearly associated with G4, was a pottery vessel falling within the above mentioned category of finds in context 102b. This was a mid-late Tang bowl (SF020 – Figure 44 & Plate 34), which was found broken under two stones in the WFS of TP1 (Plate 35). No cut was visible and the pot was removed before G4 was later identified immediately to the east – the suspicion is that it may have been placed on ledge beside the grave or in the western edge of the cut. This find seems to be one of two examples of bowls broken under stones in TP1-EX – the other is described below against Grave G10.

The coins and pottery again point to a date falling somewhere within the mid-late Tang dynasty. However, the red-slipped, net impressed jar is of an earlier type and was either a long-kept 'heirloom' or an object disturbed from pre-existing deposits when G4 was cut.

Grave G8 (probable)

Lying parallel with and 0.65m east of G2, most of **Grave G8**'s footprint lay underneath the west facing baulk (Figure 14), while the portion of the cut (**229**) visible in plan measured just a 0.37m wide by 2.55m long. The upper 0.20m (at l.o.e.) of the dark yellowish brown (10YR 4/4) fill (**227**) was visible in the west facing section but the full depth will only be determined upon excavation.

Although only visible in section, G8 contained two crucial pieces of grave goods evidence: a stack of 12 *Kaiyuan Tongbao* Tang coins (SF110) and a broken but apparently complete flat-bottomed small bowl of typical mid-late Tang type (SF111) – Plate 35a. The coins were loose and were therefore lifted, whereas the pot was well embedded in the base of section and was consequently left *in situ*. The position of the bowl and coins suggest that the portion of G8 visible in section (i.e. 0.20m depth) is more-or-less the surviving depth of the grave – although it may extend somewhat deeper.

Grave G10 (probable)

Grave G10 was identified in the west facing section 0.30m to the east, slightly to the north and parallel with G4 (Figure 11). In section the supposed fill took the form of an elongated oval-shaped area of dark brown slightly silty sand (**102c**), which measured 0.35m deep by 1.45m long. Too little of the feature was visible to determine its shape or full extent and no cut number was therefore allocated.

A bowl (SF030 – Figure 45 & Plate 37) was found broken under a stone during section sloping work close to what was thought to be the western edge of G10 (Plate 38). The bowl is tentatively associated with G10 while, as mentioned above, another example (SF020 – AN14) was similarly positioned close to the western edge of parallel grave G4.

The finds recovered from 102c during section cleaning comprised single refitting sherds from G4's spouted jar (AN2) and red-slipped Jin jar (AN13), a *Kaiyuan Tongbao* coin (SF129).

Graves G12, G13 & G16 (possible)

The three potential N-S graves in Phase 2b were noted only in partial plan: **G12** and **G13** – both located in the central 2x3m (TP4) area, were respectively allocated fills **406=407** and **408** (Figure 8), while under the western baulk in the NW corner of Area 'A', **G16**'s fill was numbered **114** (Figures 8, 9 & 26).

No diagnostic finds were recovered from any of the three 'possibles', although two *kwa* – one D-shaped (SF071 – Figure 28) the other rectangular (SF028 – Figure 46), and an elongated D-shaped strap end (SF113) were recovered from deposits directly overlying G16 and may be associated.

6.4.4 Phase 2c: NW-SE orientated graves

Grave G1

Like G4, adjoining NW-SE orientated Grave G1 was only recognised following the removal of layer 102b. At that level the 0.05m thick layer of dark greyish brown (10YR 4/2) silty, clayey sand of the grave's basal fill (**110**), and that of nearby N-S grave G4, stood out against the yellowish brown sand of underlying backbeach layer 107 (Figures 8 & 47). The sub-rectangular 'cut' (**111**) was therefore only visible in plan and measured c.1.10m wide by 2.20m long. Above the level of 110 any fill present was indistinguishable from layer 102b. Although the southern ends of G1 and G4 overlapped it was unclear which might be stratigraphically later.

Towards the NW end of the grave near the northern edge of spread 110 was a large basin (SF018.1 – Figure 48 & Plate 39) closely associated with a well-preserved iron axe-head (SF017 – Plate 40). A number of copper alloy belt fittings were recovered from G1 comprising: two rectangular *kwa* (SF006 – Figure 46 & Plate 41 & SF097) – the latter being possibly from G15, a D-shaped *kwa* (SF037) and two D-shaped bottom plates (SF007 & 008), a D-shaped strap end (SF019 – Figure 20), and a buckle ring fragment (SF016). Three lead alloy or silver trapezoidal objects (SF076, SF094.1 & 094.2 – Figures 29-30 & Plates 13-15) were found between G1 and G15, could be from either grave and are therefore mentioned against both. Lastly, there were three types of iron objects recovered: two nails (SF004 & 029 – Plate 42), a supposed scabbard fragment (SF015) and a collection of blade fragments (SF126) recovered by wet sieving of flotation residues from underneath the large basin.

Grave G7

Grave G7 was only recognised towards the end of the excavation when attempts were being made to define the limits of Grave G3 in plan. Such efforts actually revealed that N-S aligned G3 had in fact been very badly truncated by a NW-SE orientated grave (G7), with a 0.38m deep cut (**233**) with rounded sides and flat bottom. In plan the cut measured c.0.7m wide at its intersection with G3 by c.1.45m long and had a single fill of brown (10YR 4/3) slightly silty sand (**223**). Grave G7 and G3 had both been truncated to the south by Qing grave G5 (cut 208).

The arrangement of grave goods in plan (Figure 49 & Plate 43) suggests that most are within the cut of G7, not G3 – although many were collected against G3's fill (202c) before the true situation was fully appreciated. Here again, when the supposed fill was removed, the grave goods were left 'floating some distance above the 'cut', which once more suggests some degree of overcutting (Figure 50). The grave assemblage comprised the following items: a complete mid-late Tang bowl (SF014 – Figure 51 & Plate 44), a shattered mid-late Tang six-lugged storage jar (SF025.3 – Figure

52 & Plate 45), the side profile of an early Tang (or earlier) jar (SF108.1 – Figure 53 & Plate 46), and an iron knife (SF109 – Plate 47). In addition, a number of loose crackle glazed bowl sherds were found, which may have originated in either G3 or G7. There was a noteworthy absence of belt fittings or coins either within G7/G3 or in their immediate environs. Jar SF025.3 was associated with two angular stones that might have been used to smash the vessel in similar fashion to those in G6 and G11, although in G7 the severity of later disturbance had perhaps moved the stone(s) and jar relative to one another. Once again the pottery suggests a date spanning the mid-late Tang dynasty, while the pre-early Tang jar was probably disturbed from an earlier context or could have been a very old vessel when deposited within G7.

Grave G9 (probable)

This feature was one of the most significant results of the TP4 area, which was excavated to link up the stratigraphy between TP1-EX and TP2-EX. When TP4 was excavated down to the surface of the supposed Tang horizon, a number of features were noted in plan (see Figure 8). Prominent within that number was the corner of a grave-like feature identified in the NW corner of TP4, which clearly extended north into TP1-SEX. This realisation prompted a more careful examination of the north and east facing sections in TP1-SEX, which eventually confirmed that a truncated grave could be traced right through into the north facing section of TP1 (Figure 9). There the sloping sided, flat-bottomed U-shaped cut (**119**) was recorded as being 0.40m deep, while at the surface of 102b=404 it measured around 1.2m wide. Remarkably, the overall length in plan could be estimated at almost 3m. The single fill was recorded as dark brown (10YR 3/3) silty, gravelly sand (**118**).

As the feature was not excavated, the few finds recovered came from material disturbed during section straightening and cleaning and comprised a copper alloy belt buckle (SF010) and a stoneware jar base of suspected Tang date (SF115 – Plate 48). In addition, an inverted crackle glazed bowl was revealed in section during cleaning but, being well-embedded and apparently complete, it was not lifted – its location is marked "P" for pot on Figure 12's view of TP1-SEX EFS.

Grave 14 (possible)

As shown in Figure 8's as excavated plan, G14 was allocated to a feature first identified in plan in the NE corner of TP4, which appeared to be laid out parallel to NW-SE grave G9. When viewed in the NFS TP1-SEX, the round-bottomed U-shaped cut (**415**) measured 0.28m deep by c.0.40m wide – although its width was significantly truncated in section by a later pit (P9). The visible extent in plan took the form of a rounded trapezium measuring c.0.95m wide by c.1.60m long. The single fill was recorded as very dark greyish brown (10YR 3/2) slightly silty, gravelly sand (**410**). The only diagnostic pottery within the four sherds retrieved from the context was identified as Song-Ming stoneware but all were found on the surface of the feature and are therefore not completely reliable. However, the presence of Song-Ming pottery provides a further hint of activity of that period on site.

6.4.5 Other features in Phase 2

Pit P5

This pit had been truncated to an unknown degree when Qing grave G5 was inserted beside it. The surviving portion of the feature was an asymmetrical D-shape in plan measuring 0.45m by 0.85m (Figure 8). The single fill was identified as brown (10YR 4/3) slightly silty/clayey sand (**224**), which filled a shallow, sloping sided cut (**226**) with a sloping base giving a depth varying from 0.07m to the north side and 0.13m to the south.

A single large rim and body sherd of a coarse basin (SF100 – Figure 54 & Plate 49) dated the feature to the Tang dynasty and could be refitted with several other large sherds (SF101) found nearby in

context 223 (G7). The presence of the entire rim and side profile of the vessel in P5 and scatter of broken refitting sherds in G7 might reflect the disturbance of the former by the latter (i.e. G7 was later); however, it is perhaps more likely that such fragmentation occurred later when grave G5 truncated *both* features.

The identification of P5 as pit, rather than a grave or linear gulley, is based on the fact that no trace of its dark fill could be seen to the east of Grave G5, although context definition was generally poor in that area due to later disturbance.

Pit P4

This pit was positioned under the NFS in TP2-SEX and was cutting into the pre-cemetery horizon. However, it produced no datable artefacts and is therefore tentatively placed in Phase 2, although it could be any date spanning the Tang to Ming dynasties. Pit P4 was D-shaped in plan and measured 0.37m N-S by 0.88m E-W (Figure 8), while its fills comprised a black (10YR 2/1) very silty sand upper fill (**119a**) with much charcoal and a dark brown lower fill (**119b**). The cut (**222**) was steep to the west and rounded to the east and south, while the bottom was fairly level but undulating.

Although P4 is identified as a pit, it disappears under the NFS of TP2-SEX and could therefore be the northern end of a grave feature or gulley extending an unknown distance to the south.

6.4.5 Phase 3: Late Tang-Song activity

Pit P6

This pit was intercutting with Grave G2 and, although their stratigraphic relationship was difficult to define, was thought to be later – an idea backed up by the finds. The surviving part of the feature was D-shaped in plan and measured 0.72m E-W by 1.02m N-S (Figure 8) – but its full extent could not be determined. The single fill consisted of a brown (10YR 4/3) slightly silty, gravelly sand (**228**), which when excavated revealed a sloping sided cut (**230**) with a slightly rounded bottom (N-S) that sloped gradually downhill from east to west.

The few sherds of pottery recovered comprised several small sherds of Tang crackle glazed bowl and the high foot-ringed base of a late Tang-Northern Song bowl (SF102 – Figure 55 & Plate 50).

Pits P8 & P9

Pits P8 and P9 were both located in TP4 and were cutting into the top of larger features tentatively identified as graves (Figure 8). Pit 9 had been partially removed in TP1-SEX and extended to the east beyond the l.o.e.; however, the visible portion measured 0.45m N-S by 0.80m E-W. The single fill was visible in the NFS TP1-SEX (Figure 12 left-hand side) where it was recorded as a dark yellowish brown (10YR 4/4) silty, very gravelly sand (**411**). In section the 0.38m deep cut (**414**) had a steep-sided and round-bottomed profile. The single stoneware sherd recovered from the surface of P9 was undiagnostic for date. Pit P8 was only visible in plan where it was recorded as sub-oval feature with a long axis aligned NW-SE, measuring 0.46m by 0.75m. The fill consisted of brown (10YR4/3) very gravelly, silty sand (**409**) and the only sherd found during surface cleaning again proved to be undiagnostic for date, but nonetheless similar to other Song-Ming stonewares found nearby and probably not Ming-Qing in date.

A missing Song horizon?

The excavator of the 1997 impact assessment project (Mott Connell 1998) mentioned finding a thin layer of Song material overlying the Tang dynasty horizon. Probably due to more intense modern disturbance at the eastern end of the backbeach, such evidence was not clearly identified in Area ‘A’.

However, some Song and Song-Ming material was noted in the top of features in TP4, a couple of Northern Song sherds were found as recorded above, while occasional finds of those dates occurred in the mixed assemblages recovered from Qing-modern agricultural soils. Interestingly, despite the limited work completed in TP3, the small assemblage of pottery recovered in that area, which just happens to be close to the Mott Connell excavation, includes a significant component of Song-Ming material (see Appendix 1). Therefore further research in areas to the west of Area 'A' should provide a deeper understanding of the character and extent of the Song-Ming deposit and its relationship with underlying Tang funerary activity.

6.4.6 Phase 4: Qing dynasty agriculture and burial

Agricultural layer

Sealing the various graves and pits of Phase 2 was a 0.30m thick layer of dark greyish brown (10YR 4/2) very slightly clayey/silty, very gravelly sand (**202a=402-3)**. The layer gradually thinned and became less gravelly and sandier to the north (**101b=403**), eventually lensing out approximately 2m south of the northern l.o.e. (as seen in WFS TP1-EX: Figure 11).

No general finds were bagged against 101b as it was indistinguishable during excavation from the overlying modern topsoil (**101**). However, it was possible to differentiate such layers in TP2 and TP4 where the finds recovered comprised a mixed assemblage of B&W porcelain, brown glazed village ware as well Tang green crackle glazed and grey-slipped stoneware sherds refittable with the G11 pot (SF117-AN6) from context 220, into which G5 also cut (see below). A significant indication of the degree of Qing-modern disturbance is provided by the numbers of Tang pottery sherds from 202a that could be refitted with broken vessels recovered from the truncated fills of Tang dynasty graves and pits in Phase 2. Such refittable and related sherds are recorded in Table 7 (Special Finds) and Table 8 (General Finds) using 'association numbers' (AN) – of which there were 20 allocated in post-excavation).

The excavation of post-Tang strata in TP4 (401, 402 & 403) was invaluable in demonstrating that the apparent contrasts in the general character of strata in TP1 and TP2 were in fact the result of a gradual change from the base-of-hillside to the south to the middle of the sandy backbeach 10m to the north.

Grave G5

Although unidentified and partially removed within the original 2x2m TP2, **Grave G5** was subsequently noticed in the NFS cutting from the surface of layer 202a (Figure 8 & Plate 51). Following extension to the west and south, the remainder of the elongated oval cut (**208**) was then identified in plan in the surface of Qing horizon 202a. The grave's long axis was orientated roughly NW-SE and measured 2.30m long by c.0.70m wide. The rounded cut had steeper sides and was deeper to the south (c.0.38m deep) and the base then sloped uphill to be around 0.20m deep at the northern end. The single fill consisted of brown (10YR 4/3) slightly silty sand (**207**).

On excavation, the homogenous fill of G5 produced a small, mixed pottery assemblage comprising some Qing but mostly Tang sherds including as crackle glazed bowl kiln waster with three fused rims (SF042 – Plate 51a), plus an interesting collection of iron objects at its southern end including a knife with possible sheath fragments (SF041 – Plate 52), a rapier (SF045 – Plate 53), and a harpoon (SF043 - Plate 54). Given that G5 was clearly cut from the surface of 202a, it must surely be a feature of broadly Qing dynasty date. However, it also cuts across three Tang dynasty graves (G3, G7 & G11) and a pit (P5) and contains several sherds refittable with pots found in both G11 and P5. There is thus good reason to be cautious in labelling the collection of, supposedly, *in situ* iron objects

as part of G5's assemblage of grave goods – they could in fact belong in G11. Moreover, the character of the ironwork assemblage – including a small knife, harpoon and rapier, has much in common with the cluster found nearby at the south end of Tang dynasty grave G2 (which see). Further testing and analysis of the material should hopefully provide the answer.

6.4.7 Phase 5: Modern agricultural disturbance

A thin topsoil layer (**101**=**201=401**) extended across the entire excavation area and had a number of modern features cut into its surface, the majority of which appeared to be planting pits (Pits P1-P3). The larger examples, such as P3, contained degraded black plastic and were cut right down into the surface of the truncated Tang horizon. The topsoil produced the kind of mixed assemblage one would expect on a site with extensive agricultural disturbance of buried archaeological remains: Qing-modern tile, village ware and provincial porcelain; some Song-Ming material and a significant component of Tang date confirming the depth to which some modern activity had reached. The most notable (and beautiful) Tang dynasty find from the topsoil was a bronze hairpin with a stupa-like floral head with probable Buddhist connotations (Figure 56 & Plates 36 & 55).

7. Discussion

7.1 Introduction

The following discussion begins with an examination of the results of the GPR survey, which are compared and contrasted with the excavated remains, with a view to formulating some initial ideas about the relationships between geophysical response intensity and shape relative to archaeological finds and features (7.2). The ultimate aim is therefore to identify repeating patterns in the GPR and archaeological data that can then be used as predictive tool in future. Then there is a review of the patterns of funerary behaviour exhibited on site (7.3), which first examines changes to grave orientation in terms of dating and phasing (7.3.1) and then explores the peculiar pot-smashing ritual in relation to other patterns of structured deposition within graves (7.3.2). The discussion moves on to offer some tentative interpretations of the sex, status and identity of the people buried in the five/six excavated Tang graves and the wider social context of the cemetery (7.4). NB: A discussion of site formation processes can be found in Appendix 5.

7.2 Excavation versus GPR results (Figure 57)

Further research using different settings in the GPR software should allow even greater insights into the relationships between archaeological finds and features and GPR responses. The Kau Liu-Tin Sam site has more-or-less ideal conditions for GPR survey, with a relatively dry, clay-free sequence of backbeach deposits, into which the archaeological remains were then inserted. As Lai and Poon (in prep.) have recently discussed, two key mechanisms determining the effectiveness of GPR in identifying localised features in homogenous media (such as reinforcing rods in concrete structures or iron swords in sand) are the water absorption characteristics of the parent material and the relative conductivity of the features in question.

The archaeological remains in the KL-TS backbeach seemingly provide a very strong contrast when metallic grave goods are present – hence the very strong reflections in the environs of grave G1 to the north (iron axe-head plus several iron objects and copper alloy *kwa*) and G2 to the south (iron objects: three long knives, adze-head, harpoon-head, small knives and several nails; copper alloy: coins and several *kwa*). The cluster of 140+coins and associated iron objects at the north-western end of G4 produced a slightly less dramatic response in the GPR data, but nevertheless at the red end of the range.

However, GPR is far more than a glorified metal-detector, and most of the area excavated produced responses that are most likely a reflection of more subtle contrasts between the fill of archaeological features and the surrounding backbeach deposits. Therefore, if one looks beyond the eye-catching yellow, red and black responses within the GPR plot, there are some very interesting patterns within the green to yellow, and even the blue, range of responses that find some correlation in the excavated remains.

If the full potential of this project's findings are to be realised, there must be a much greater investment of time and energy in the analysis and interpretation of the GPR data relative to the archaeological findings. Unfortunately there is simply no time to complete such work at this juncture.

7.3 Patterns of funerary behaviour

7.3.1 Grave orientation & phasing

The Tang dynasty cemetery at Kau Liu-Tin Sam has a range of grave orientations that can be grouped as E-W, N-S and NW-SE – see Table X below. It should be emphasised at this juncture that, based on the artefactual evidence, all of the Tang graves so far identified by detailed excavation can be placed in the same broad phase spanning the middle to later part of the dynasty – a period of perhaps 150 years (or 5 to 6 generations). There is in fact some consistency in the relationship between orientation and stratigraphic sub-phase such that the only E-W orientated grave (G6) is cut by G2 – one of several orientated N-S (see also G3 & G4 amongst others), while grave G3 is cut by NW-SE grave G7. If we compare the evidence from excavated graves with that from others only visible in plan and/or section, the change in orientation from E-W, to N-S and later NW-SE seems consistent across Area 'A'. Also it noteworthy that adjacent N-S orientated grave groups in the south (G2, G3 and G8) and north (G4 and G10) respect each other, as does the NW-SE orientated grave group in the centre-north (G1, G9 and G14).

Different grave orientations are usually taken to indicate burials of different phase, while groups having the same orientation might reasonably be interpreted as more-or-less contemporary and related through their use of a common funerary tradition. One striking aspect of the site's funerary tradition is the presence of stones in graves, in particular stones apparently placed or in some cases dropped on top of pottery grave goods.

7.3.2 The San Tau 'pot killing ritual'

Perhaps the most remarkable feature of the KL-TS Tang dynasty cemetery was the evidence for an apparent pot smashing or 'killing' ritual associated with four of the graves on site. A clear earlier example of such behaviour was provided in the 1997 CHIA report, which recorded finding a Tang dynasty jar smashed under a large rock associated 62 coins (Mott Connell 1998).

Two different classes of pottery vessel were found in various states of breakage under stones: tablewares (bowls - G4 & G10) and storage/kitchenwares (basins & jars - G6 & G11 respectively). It is interesting to note that the bowls were associated with two parallel, N-S orientated graves in TP1-EX to the north, while the basin and jar were found in two E-W orientated graves in TP2-EX to the south.

Fascinatingly, the two broken bowls in TP1-EX are also located in more-or-less the same relative position along the western side of N-S orientated parallel graves G4 and G10 (although the latter grave remains a fairly tentative identification). Both bowls also survived as large fragments comprising their base and part of the wall, associated with loose rim sherds. Both may also have

been placed on ledges beside the graves or within the western side of the cuts – unfortunately this cannot be resolved as neither cut was identified until the base of graves was reached.

The positioning and condition of the basin in G6 and storage jar in G11 were quite different to that of the bowls in TP1-EX. The basin in G6 was located at the eastern end of the grave and, judging by the other grave goods found, was by the feet of the deceased. Unfortunately due to severe localised disturbance, G11 was very poorly defined in plan; however, it can be argued that the pattern of grey slipped sherds – scattered across the southern end of TP2-SEX when the large rock was dropped on the jar (Figure 17), provides some indication of the location and extent of the grave cut (i.e. E-W). An important point to make at this stage is that it would seem unlikely, although not impossible, that such violent pot smashing activity could have occurred with the body already laid out in the grave. Coffins may have been used, and some nails were recovered in most graves; however, if a coffin was already in G11 when pot SF117 was smashed, then that would have dramatically limited the scattering of sherds, which did not occur. Certainly, the distance travelled by some of the sherds of SF117 suggests that the jar was broken with some force.

On balance then, it is proposed that the pots in G6 and G11 were probably smashed before the body was placed in the grave, perhaps in some form of propitiatory ritual that transferred the pot from the land of the living to that of the dead – when smashed the pots were also 'dead' and ready for use in the 'next world'.

Beyond the evidence produced from the KL-TS site, our research to date has turned up no examples of similar mortuary behaviour from other early historical sites in Hong Kong. However, two sites do record a clear association between burials, pottery grave goods and large stones: at Pui O the excavator recorded finding two or three Six Dynasties burials – one of which included a *kuan* jar "placed alongside a flat upright stone" (Meacham 1984); while at Sham Wan a pair of *kuan* jars with bowl covers were found buried below a large stone. So here we have two earlier historical burial contexts associated with large stones, but the details are crucially different. At Pui O the jar was positioned *beside* the stone, while at Sham Wan the two jars were found "10cm. below" (Meacham 1978) the underside of the stone. Thus both sites evidence intentional *placement* of stones relative to pots, perhaps as markers or with some protective function – maybe sealing the burial deposit at Sham Wan. Pui O and Sham Wan are thus clearly *not* examples of the destructive activity seen at KL-TS.

Perhaps casting the net wider and looking for similar evidence within reports of earlier historical sites around the Pearl River Estuary or Guangdong-Guangxi coast may produce behavioural parallels. Ultimately, an answer may only emerge following publication of the site in one of the major regional journals. It would be very surprising indeed if KL-TS were the only Tang dynasty cemetery in China evidencing such a 'pot killing ritual'.

7.4 Other interpretative considerations

7.4.1 Introduction

When faced with a complete absence of human remains one faces certain challenges and has to overcome a number of dangerous assumptions when attempting to identify the sex of interred individuals. Despite such reservations, there are some distinctive patterns in the finds assemblages from different graves that should therefore provide some clues in the latter regard, as well as in terms of status and identity. A tentative effort is therefore made to assess the likely sex, status and identity of the persons buried in graves G1, G2, G3/7, G4 & G6 – as discussed above, G5 is much later, may contain some earlier metalwork, and is therefore excluded from the assessment. This section is

openly speculative and is based on initial background research only. Ideas are presented to provoke debate and comment – they are therefore by no means the only possible interpretations.

7.4.2 Sex, social status and identity

Although several features of grave assemblages are common to multiple graves at KL-TS, such as the inclusion of storage-cooking and serving-eating vessels, coins, belt fittings, and iron blades, the reality is that every grave is in fact quite distinct and some very significant differences exist.

Grave G1 is intriguing for its unusually large basin associated with a very modern-looking axe-head. Both items are unique within the excavated graves and particularly distinctive when viewed together. Does the presence of an axe-head and no hairpin mean that G1 is the grave of a man – perhaps so? The person was buried with a good collection of copper alloy belt fittings, but no coins and only the fragments of perhaps one small knife. This grave is thus difficult to read and has conflicting evidence for status and identity, although a male seems perhaps more likely than a female and a civilian rather than soldier.

Whilst acknowledging the dangers of gender bias in archaeological interpretation, the unusually rich weapons assemblage in G2 does perhaps suggest that here we have the grave of an adult male and a soldier at that. The range of blades is remarkable and strikingly different to any of the other excavated graves, comprising as it does a general purpose short sword, a large single-edged knife, a long rapier-like edge-less stabbing weapon and several smaller personal knives. Added to those there are further iron objects in the form of an adze and a harpoon point – perhaps indicating a maritime connection for our soldier. This weapons group in particular, and the iron blade assemblage as a whole, requires the attention of a Chinese weapons specialist before a fuller understanding and interpretation can be made.

Grave G3/G7 was significantly truncated by later features but, in the better-preserved northern end, contained no hairpin or belt fittings, a single knife and a fairly typical collection of pottery vessels comprising a storage jar, and perhaps two bowls. It is therefore very difficult to say whether the person was male or female but, based on the fragmentary evidence, they would tentatively appear to be a civilian of relatively lower status than say the persons in G1, 2, 4 or 6.

Grave G4 is, on the face of it, the richest grave thus far excavated. It has far more coins than any other grave, was provisioned with a fine spouted jar with crackle glazed cover and a pair of small cups. The impression of relative wealth is rounded off with a silver hairpin. Somewhat strange though is the absence of copper alloy belt fittings in this grave. If coins were a genuine measure of wealth, then this is the grave of a relatively wealthy individual but one not influenced by the northern fashion for decorated straps and belts. However, to confuse matters somewhat, this is also a person who was buried with an iron harpoon-point and a J-shaped fishhook. There is thus a clear connection to the sea and good indications of wealth and, presumably, some status in life. We therefore have a relatively wealthy civilian perhaps connected to maritime trade. But is it the grave of a male or female?

Grave G6 is perhaps the most informative regarding the stature of the individual interred therein. The presence of the silver hairpin to the west – with its two prongs pointing diagonally downwards, is surely *in situ* and marks the deceased's head position. The closely associated strap-end and four *kwa* across the centre of the grave clearly indicate the person's midriff, while the basin under a large stone provides a physical limit for the feet. Based on the space thus defined, the person could have been no more than 1.6m tall. Although hairpins in early historical China are far from being a definitively female item, the lack of iron objects – especially blades, may indicate that this is the

grave of a civilian and possibly a female. There is some apparent contradiction perhaps in the presence of a silver hairpin and a lack of coins; however, the belt fittings are of good quality and, aside from other measures, provide some indication of status above the ordinary.

7.4.3 Contextualising the cemetery

The KL-TS cemetery as defined by the graves so far excavated has some common threads such as the use of pottery sourced almost exclusively in Guangdong. Pottery is a utilitarian, bulky commodity and, as such, it is not surprising that the people using the cemetery would have acquired types made within the region. In contrast, the belt fittings are generally of a good quality and were probably not manufactured locally but instead either came south through trade or travelled south on the clothing of people buried in the cemetery. The excavated graves are all dated to mid-late Tang (a period of say 150 years) but we have three distinct alignments in different phases. Based on the wide variety of grave goods assemblages, the people buried at KL-TS seem to be quite a diverse group with significant differences in social status and identity – and we probably have both sexes represented but it is difficult to prove.

Why bowls were smashed in some graves, basins and jars in others, while no intentional destruction of grave goods apparently occurred in other graves such as G2 is unclear. Similarly the lack of respect for graves of different orientations and absence of non-funerary activity on site are both significant. One explanation might relate to the use of the cemetery not by a resident local population but by various different groups with quite distinct traditions. The cemetery is actually in a very pivotal location, being close to important maritime trade routes focused on the Pearl River Estuary leading to the major Tang dynasty trading centre at Guangzhou. The site is also opposite the military base at Tuen Mun, in a location historically associated with Government-controlled salt production, and immediately west of the safe anchorage of Tung Chung Bay.

The site may thus have been set aside for the use of seafarers, soldiers and travellers passing through the area by boat. Several distinct groups of people from diverse walks of life, and each with their own traditions, but ultimately united in death and laid to rest overlooking the trade route that brought them south in the first place.

PART 4: SPECIAL FINDS CATALOGUE

This part of the report provides a detailed catalogue of all special finds identified and recovered during the excavation broken down by category as follows: coins, ceramics, non-ferrous metal objects, ferrous metal objects & stone. In addition to the information presented here, a full tabulation of all items discussed below is presented in special find number order in the table in section 20.

Each item is listed with its special find number (SF001-130) followed by its site location in the following form: TP1-NEX, Grid H15, Context 107 – meaning the find was made in the northern extension (NEX) of Test Pit 1, within site grid square H15 and it came from context 107. In the catalogue entries features are abbreviated as follows: graves (G1 to G16) and pits (P1 to P10). Clear terminology is also used to distinguish between artefacts that were found *inside features* (e.g. "within G1"), *probably from particular features* (e.g. "probably from G1"), or *in general proximity* to them (e.g. "possibly from G1"). Where "items" are mentioned, this refers to item numbers in the Special Finds Catalogue.

NB: a full list of abbreviations is provided in the front of the report for convenient reference.

8. Coins

8.1 Introduction

With the exception of the 1961 Hong Kong ten cents coin found in the topsoil in TP2, all coins from this project are likely to be *Kaiyuan Tongbao* (開元通寶) types dated to the Tang dynasty (Figure 33). Most of these Tang coins came as stacks, suggesting their burial on a string or maybe in a small pouch or bag, and many of them were associated with identified burials.

The *Kaiyuan Tongbao* coins were minted in various sizes, thicknesses, weights and different styles of moulded inscriptions. The moulded characters are all in regular script. Each coin is circular in shape with a square perforation in the centre. The size ranges between 2.40cm and 2.60cm in diameter and the general weight is either 3g or 4g.

According to previous research, phasing of *Kaiyuan Tongbao* coins (i.e. identification of types of different minting date) can be achieved through the study of size, weight, thickness, copper alloy composition, existence of any crescent pinch mark, and the artistic styles of inscriptions (Xu 1991). Having said that, almost the entire San Tau collection of Tang coins show signs of severe encrustation with iron corrosion products and copper sulphate patination, especially those buried in association with iron objects. It is therefore not possible at this pre-conservation stage to separate individual coins from the stacks or to undertake a proper study of the stylistic difference of inscriptions. In addition, laboratory testing of alloy composition is also recommended.

It should be noted that such Tang dynasty *Kaiyuan Tongbao* coins were used over a prolonged period starting from the early Tang and extending throughout later periods. They therefore need to be used in combination with other evidence, such as ceramics and stratigraphy, to establish the sequence and dating of features on site.

8.2 Coins recovered from stratified contexts

1. SF046, TP2-SEX, Grid F15, Context 207, within G5

Kaiyuan Tongbao (?). No inscriptions visible at this stage. However, the form suggests Tang coin; signs of minor copper sulphate patination and mineralisation noted.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm. Tang?

2. SF048, TP2-EEX, Grid G16, Context 202b, within G2 (Figure 33)

One stack of 2 *Kaiyuan Tongbao.* Two coins stacked together with reverse facing each other. Obverse of first coin: with moulded inscriptions '開元通寶' – second character '元': the second stroke tilted slightly to the left, signs of copper sulphate patination noted; Obverse of second coin: faint trace of same moulded inscriptions with severe mineralisation.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm, thickness: 0.15cm (both coins are of the same size). Tang

3. SF051, TP2-WEX, Grid F15, Context 202d, Probably from P5

One stack of 2 *Kaiyuan Tongbao.* One side with moulded inscriptions '開元通寶' – '元': second stroke slightly tilted left.
Outer diameter: 2.45-2.50cm; width of square perforation in the centre: 0.70cm. Tang

4. SF052, TP2-WEX, Grid F15, Context 220, Within probable grave G11

One stack of 3 *Kaiyuan Tongbao* (?). No inscriptions visible at this stage but their forms suggest Tang coins; partially covered with iron corrosion.

Outer diameter: 2.50cm, width of square perforation in the centre: 0.60cm (same size for all 3 coins). Tang?

5. SF056.1, TP1-SEX, Grid I15, Context 107, Within G4 (S end), found next to item 6 and item 7
One stack of approximately 16 *Kaiyuan Tongbao* (?). No inscriptions or crescent pinch mark noted. Various sizes present but all with severe mineralisation and copper sulphate patination.
Outer diameter: 2.40-2.50cm, width of square perforation in the centre: 0.70cm, width of outer rim: 0.20cm, thickness: 0.10-0.15cm. Tang

6. SF056.2, TP1-SEX, Grid I15, Context 107, Within G4 (S end), found next to item 5 and item 7
One stack of 2 *Kaiyuan Tongbao* (?). No inscriptions or crescent pinch marks visible. Severe mineralisation and copper sulphate patination noted.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm, width of outer rim: 0.20cm, thickness: 0.10cm. Tang

7. SF056.3, TP1-SEX, Grid I15, Context 107, Within G4 (S end), found next to items 5 & 6
One *Kaiyuan Tongbao* (?). No inscriptions or crescent pinch marks visible. Severe mineralisation and copper sulphate patination. Size is smaller than that of items 5 and 6.
Outer diameter: 2.45cm, width of square perforation in the centre: 0.60cm, width of outer rim: 0.20cm, thickness: 0.10cm. Tang

8. SF058.1, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects (Figure 33)
Originally 1 stack of approximately 20 *Kaiyuan Tongbao* when unearthed, 2 came loose later. There are 4 exposed surfaces with 3 showing moulded inscriptions '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted neither left or right; no crescent pinch mark is noted on the only available reverse surface. These coins came in various sizes. Their position on ground suggested that the stack was originally tied together, possibly with a string; Signs of severe mineralisation and copper sulphate patination noted.
Outer diameter: 2.40-2.60cm width of square perforation in the centre: 0.60-0.70cm, width of outer rim: 0.15-0.20cm, thickness: 0.20cm. Tang

9. SF058.2, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects
One *Kaiyuan Tongbao.* Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted slightly to the left; Reverse: no crescent pinch mark noted. It shows signs of mineralisation and copper sulphate patination and one tiny part of the top right rim is missing
Outer diameter: 2.50cm, width of square perforation (irregular) in the centre: 0.65cm, width of outer rim: 0.20cm, thickness: 0.10cm. Tang

10. SF058.3, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects
One *Kaiyuan Tongbao.* Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted slightly to the left; Reverse: no crescent pinch mark visible; Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm (relatively neat), width of outer rim: 0.20cm, thickness: 0.10cm, weight: 3g. Tang

11. SF058.4, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao.* Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively long and the second stroke tilted slightly to the left; Reverse: no crescent pinch mark visible; Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.40cm, width of square perforation in the centre: 0.70cm (irregular), width of outer rim: 0.15cm, thickness: 0.10cm, weight: 3g. Tang

12. SF058.5, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects (Figure 33)

One *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted to to the left; '寶': the 2 lines inside '貝' are detached; Reverse: no crescent pinch mark visible; Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.65cm (relatively neat), width of outer rim: 0.15cm, thickness: 0.15cm, weight: 4g. Tang

13. SF058.6, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted slightly to the left; rest of the inscriptions are blurred; Reverse: a pinch mark (a 0.8cm long straight line) is located to the lower left of the square perforation; Signs of mineralisation and copper sulphate patination noted and the upper right corner of the coin is missing.
Outer diameter: 2.40cm, width of square perforation in the centre: 0.65cm, width of outer rim: 0.15cm, thickness: 0.20cm, weight: 3g. Tang

14. SF058.7, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted slightly to the left; rest of the inscriptions are blurred; Reverse: no crescent pinch mark is visible; Signs of mineralisation and copper sulphate patination noted and there is a crack on the lower left part of the coin.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.75cm, width of outer rim: 0.15cm, thickness: 0.10cm, weight: 3g. Tang

15. SF058.8, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao (?).* No inscriptions or crescent pinch marks are visible at this stage due to severe mineralisation and copper sulphate patination, but the form suggests this is a Tang coin.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.65cm, width of outer rim: 0.15cm, thickness: 0.15cm, weight: 3g. Tang

16. SF058.9, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of 3 *Kaiyuan Tongbao* (?). Obverse: no inscriptions visible at this stage due to severe signs of mineralisation and copper sulphate patination; Reverse: no crescent pinch marks visible. Form suggests Tang coins.

Outer diameter: 2.40cm, width of square perforation in the centre: 0.65cm (relatively neat), width of outer rim: 0.15cm, thickness: 0.15cm. Tang

17. SF058.10, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao*. Moulded inscriptions of '開 X 通寶' on obverse – the second character '元' is missing, and the rest of the inscriptions are blurred; Reverse: no crescent pinch mark is visible; Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.60cm, width of square perforation in the centre: 0.70cm (irregular), width of outer rim: 0.20cm, thickness: 0.15cm, weight: 4g. Tang

18. SF058.11, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of approximately 6 *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short; Reverse: not visible at this stage, all stacked together; Severe mineralisation and copper sulphate patination noted.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm, width of outer rim: 0.15cm, thickness: 0.15cm. Tang

19. SF058.12, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively long and the second stroke tilted slightly to the right; '寶': the second visible line inside '貝' is not detached; Reverse: no crescent pinch mark is visible; Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.60cm, width of square perforation in the centre: 0.70cm (relatively neat), width of outer rim: 0.20cm, thickness: 0.15cm, weight: 4g. Tang

20. SF058.13, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted slightly to the left; '寶': the 2 lines inside '貝' are detached; Reverse: no crescent pinch mark is visible; Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm (relatively neat), width of outer rim: 0.20cm, thickness: 0.15cm, weight: 4g. Tang

21. SF058.14, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao (?)*. No inscriptions or crescent pinch marks are visible at this stage due to severe mineralisation and copper sulphate patination, but the form suggests this is a Tang coin.
Outer diameter: 2.45cm, width of square perforation in the centre: 0.70cm, width of outer rim: 0.20cm, thickness: 0.15cm, weight: 3g. Tang

22. SF058.15, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of 5 *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted slightly to the left; rest of the inscriptions are blurred;

Reverse: not visible at this stage, all stacked together. Severe mineralisation and copper sulphate patination noted.
Outer diameter: 2.40-2.50cm, width of square perforation in the centre: 0.70cm, width of outer rim: 0.15cm, thickness: 0.10-0.15cm. Tang

23. SF058.16, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of 2 *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively long and the second stroke tilted slightly to the right; '寶': the 2 lines inside '貝' are not detached; Reverse: no crescent pinch mark is visible at this stage due to severe mineralisation and copper sulphate patination. The 2 coins are of different sizes.
First coin: outer diameter: 2.5cm, width of square perforation in the centre: 0.60cm, width of outer rim: 0.15cm, thickness: 0.20cm; Second coin: outer diameter: 2.6cm, width of square perforation in the centre: 0.75cm, width of outer rim: 0.15cm, thickness: 0.2cm. Tang

24. SF058.17, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of approximately 9 *Kaiyuan Tongbao (?)*. No inscriptions or crescent pinch marks are visible at this stage due to severe mineralisation and copper sulphate patination. Although the perforations in the centre were covered with corrosion, the overall form suggests a Tang date. Only half of one of the end coins survived.
Outer diameter: 2.50cm, width of outer rim: 0.15cm, thickness: 0.10-0.15cm. Tang

25. SF058.18, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of approximately 7 *Kaiyuan Tongbao (?)*. Obverse: moulded inscriptions are blurred; Reverse: no crescent pinch mark is visible. Severe mineralisation and copper sulphate patination noted. Only 1/3 of the top coin survived. Form suggests Tang coins.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm, width of outer rim: 0.15cm and 0.20cm, thickness: 0.15cm. Tang

26. SF058.19, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao*. Moulded inscriptions of '開元通寶' on obverse – '元' : first stroke is relatively short and the second stroke tilted slightly to the left; '寶': the 2 lines inside '貝' are detached; Reverse: no crescent pinch mark is visible; Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.65cm (relatively neat), width of outer rim: 0.15cm, thickness: 0.15cm, weight: 4g. Tang

27. SF058.20, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One *Kaiyuan Tongbao (?)*. Only reverse sides visible at this stage: no crescent pinch mark noticed. Severe mineralisation and copper sulphate patination. Form suggests Tang coin.
Outer diameter: 2.45cm, width of square perforation in the centre: 0.70cm (relatively neat), width of outer rim: 0.20cm, thickness: 0.15cm, weight: 4g. Tang

28. SF058.21, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of 21 *Kaiyuan Tongbao (?).* Obverse: none visible at this stage, all stacked together; Reverse: no crescent pinch mark is visible at this stage due to severe mineralisation and copper sulphate patination. Form suggests Tang coins.
Outer diameter: 2.40cm and 2.45cm, width of square perforation in the centre: 0.65cm and 0.70cm (relatively neat), width of outer rim: 0.20cm, thickness: 0.10-0.15cm. Tang

29. SF058.22, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of approximately 9 *Kaiyuan Tongbao (?).* Only reverse sides are visible at this stage: no crescent pinch mark is noticed. Severe mineralisation and copper sulphate patination noted. Form suggests Tang coins.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm, width of outer rim: 0.15cm, thickness: 0.10-0.15cm. Tang

30. SF058.23, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

Originally 1 stack of 2 *Kaiyuan Tongbao*. The 2 coins came separate during processing. First coin: Moulded inscriptions of '開元通寶' on obverse – '寶': the 2 lines inside '貝' are detached; Reverse: no crescent pinch mark is noticed, lower left corner of the coin is missing; Second coin: inscriptions are blurred on obverse; Reverse: no crescent mark is noticed; Both coins show signs of mineralisation and copper sulphate patination.
First coin: outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm (relatively neat), width of outer rim: 0.15cm, thickness: 0.15cm, weight: 4g.
Second coin: outer diameter: 2.50cm, width of square perforation in the centre: 0.60cm, width of outer rim: 0.20cm, thickness: 0.15cm, weight: 3g. Tang

31. SF058.24, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of approximately 15 *Kaiyuan Tongbao (?).* No measurement available due to severe mineralisation and copper sulphate patination but the form (circular outside with square perforation in the centre) suggests Tang coins.
Overall thickness: 2.3cm. Tang

32. SF058.25, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of 10 *Kaiyuan Tongbao (?).* Only reverse sides are visible at this stage: no crescent pinch mark is noticed. Severe mineralisation and copper sulphate patination is noted. Form (circular outside with square perforation in the centre) suggests Tang coins.
Outer diameter: 2.40cm, width of square perforation in the centre: 0.65cm and 0.70cm (relatively neat), width of outer rim: 0.10-0.15cm, thickness: 0.15cm. Tang

33. SF058.26, TP1-EEX, Grid H15, Context 107, Within G4 (NW end), found among several iron objects

One stack of approximately 6 *Kaiyuan Tongbao*. Only obverse sides are visible at this stage: moulded inscriptions of '開元通寶' are identified but blurred. Signs of mineralisation and copper sulphate patination noted.
Outer diameter: 2.40cm and 2.50cm, measurement of square perforation in the centre is not available (covered in corrosion), width of outer rim: 0.15cm, thickness: 0.20cm. Tang

34. SF059, TP1, Grid H15, Context 107, Within G4 (NW end)

One stack of approximately 20 *Kaiyuan Tongbao(?)*. The entire stack is currently covered in corrosion and no measurement can be made.
Overall weight: 63g. Tang

35. SF063, TP2, Grid G15, Context 202b, Within G2
Originally 1 stack of 14 *Kaiyuan Tongbao (?)*. Two came separate during processing. Position on ground suggested that the stack was originally tied together, possibly with a string. No inscriptions or crescent pinch marks visible due to severe mineralisation and copper sulphate patination.
Outer diameter: 2.4-2.5cm, width of square perforation in the centre: 0.7cm, width of outer rim: 0.2cm, thickness: 0.15-0.20cm. Tang

36. SF092, TP1-SEX, Grid H15, Context 107, Probably from G4
One coin attached to a V-shaped iron harpoon fragment. The coin is entirely covered in corrosion.
Outer diameter: 2.7cm. Tang

37. SF110, TP2-EEX, Grid G16, Context 227, Within G8
One stack of approximately 12 *Kaiyuan Tongbao (?)*. No inscriptions or crescent pinch marks visible due to severe mineralisation and copper sulphate patination. Form suggests Tang coins.
Outer diameter: 2.5cm, width of square perforation in the centre: 0.7cm. Tang

38. SF130, TP1-EEX,Grid H15, Context 102c, Within G10
One *Kaiyuan Tongbao (?)*. No inscriptions or crescent pinch marks visible at this stage due to severe mineralisation and copper sulphate patination. Form suggests Tang coins.
Outer diameter: 2.5cm, width of square perforation in the centre: 0.6cm, width of outer rim: 0.2cm, thickness: 0.15cm, weight: 3g. Tang

Coins recovered from general finds:

39. TP2-EEX, Grid G16, Context 201
One 1961 Hong Kong ten cents coin. Well preserved.
Outer diameter: 2.05cm, thickness: 0.20cm, weight: 5g. 1961

8.3 Coin recovered from unstratified location

40. SF129, Unstratified, recovered from spoil heap
One stack of 3 *Kaiyuan Tongbao (?)*. No inscriptions or crescent pinch marks visible at this stage due to severe mineralisation and copper sulphate patination. Form suggests Tang coins.
Outer diameter: 2.45cm, width of square perforation in the centre: 0.60cm, width of outer rim: 0.20cm, thickness: 0.15-0.20cm. Tang?

8.4 Coins recovered from dry sieving

41. SF099, TP2-WEX, Grid F15, Context 220, from probable grave G11
One *Kaiyuan Tongbao (?)*. No inscriptions or crescent pinch marks visible at this stage due to severe mineralisation and copper sulphate patination. Form (circular outside with square perforation in the centre) suggests Tang coins.
Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm, weight: 4g. Tang

42. SF125, TP1-SEX, Grid H15, Context 107, Probably from G4
One *Kaiyuan Tongbao (?)*. No inscriptions or crescent pinch marks visible at this stage due to severe mineralisation and copper sulphate patination. Form (circular outside with square perforation in the centre) suggests Tang coins.

Outer diameter: 2.50cm, width of square perforation in the centre: 0.70cm, weight: 3g. Tang

8.5 Coins recovered from wet sieving

43. SF128.1, TP2-WEX, Grid G15, Context 202c or 223, wet sieving of ES031, Within G3 or G7
Originally 1 stack of 6 *Kaiyuan Tongbao*. One came separate during processing: moulded inscriptions of '開元通寶' on obverse – '寶': the 2 lines inside '貝' are detached; Reverse: no crescent pinch mark is visible; Only reverse sides of the stack is visible at this stage: no marks visible; Signs of mineralisation and copper sulphate patination noted.
Individual coin: outer diameter: 2.50cm, width of square perforation in the centre: 0.60cm, width of outer rim: 0.20cm, thickness: 0.15cm, weight: 3g.
Stack of coins: outer diameter: 2.40cm, width of square perforation in the centre: 0.6cm, width of outer rim: 0.20cm. Tang

9. Ceramics

9.1 Introduction

The vast majority of ceramics recovered as special finds were either clearly within cut features (graves or pits), closely associated with them, or were unusual enough to warrant 3-D recording and further analysis. Where the rim is present, the diameter is given together with the proportion of the vessel present in terms of 'percentage rim EVE', which is a method of using the rim as proxy measure of the "estimated vessel equivalents (EVE)" – in other words how much of each pot survives. In some instances there will also be an association number listed (e.g. AN14) – this provides a means of gathering together sherds from the same pottery vessel that may have been recovered from different contexts and/or grid squares. It therefore also provides a useful method of assessing the degree of disturbance on site.

This section continues with an overview of the main fabric types encountered on site (9.2) followed by the special finds ceramics catalogue itself (9.3).

9.2 Fabric types

The ceramics recovered as special finds during the excavation can be sub-divided into a number of categories based on general fabric types. These can be broken down as follows:

HCW: Historic Coarseware – all coarse tempered thick-walled fabrics, usually with hackly fractures and poorly sorted inclusions, often only moderately fired but some higher fired examples exist, can be plain, slipped or glazed, usually large jars and basins. Typical Tang types are large basins with rough 'gooseflesh' finish and purple-pink fabric and slip.

HFF: Historic Fine Fabric – a range of chalky fabrics, moderately fired, wheel-made, typically used for jar and basin forms, Tang examples often with red slip over pink-orange body.

HSF: Historic Sandy Fabric – a range of sandy fabrics, moderate to high fired, usually wheel-made, jar and basin forms, Tang examples often with fine sandy body under grey slip.

HSW: Historic Stoneware – a range of hard, high fired fabrics, hand-made and wheel-made, typically used for jar forms but also open forms such as basins, can be slipped, glazed or plain in finish, common from Tang to Qing. Tang examples typically with a grey to beige or brown fabric and a dark grey slip – occasionally burnished. Some Tang examples are green glazed. Later types more likely to be brown glazed – becoming glossier moving into Qing.

PCF: Prehistoric Coarse Fabric – all coarse types of prehistoric fabric, typically low-moderately fired, used for jars, bowls and basins, sometimes plain but often with impressed or incised decoration.

POC: Porcelain or Proto-Porcelain Celadon – fine white, cream or grey fabric with few fine inclusions, lustrous pale to olive green glaze, sometimes with incised, carved or moulded decoration, shallow dish, bowl or cup forms. Characteristic of the Song-Yuan period, but some earlier examples are possible and there is continuity into the Ming dynasty.

POK: Proto-porcelain Crackle Glazed – a fine textured fabric with few or well-sorted inclusions, moderately fired, wheel-made, light green to darker brownish green glaze with distinctive crazed appearance, characteristic of Tang dynasty but some into Song.

POP: Provincial Porcelain – fine white, grey or cream fabric, high fired, glassy glaze typically over blue & white or polychrome painted decorations – sometime plain white, classic local type being Wun Yiu, generally later historical in date (Ming-Qing).

POQ: Porcelain or Proto-Porcelain Qingbai - fine white, cream or grey fabric with few fine inclusions, lustrous and translucent pale blue to white glaze, sometimes with incised, carved or moulded decoration, shallow dish, bowl or cup forms. Characteristic of the Song-Yuan period, but some earlier examples are possible and there is continuity into the Ming dynasty.

POU: Proto-porcelain Unclassified – similar fabric to POK but not crackle glazed

9.3 Ceramics catalogue

44. SF014, TP2, Grid G15, Context 202c or 223, Within G3 or G7 (Figure 51)
Bowl (HFF), funerary object; H 5-5.9cm; upright slightly flaring rim, small round lip; flat base c.0.5-0.8cm H (i.e. uneven bowl); a hole at the bottom surface of base; roughly made, very degraded band of glaze around the rim – inside and out, feint throwing marks visible on both sides; cutting off marks visible on base; Guangdong ware; upright when found, associated with broken pot sherds and a stone underneath (SF025)
DIA 14, Rim EVE 100%. Mid-Late Tang

45. SF018.1, TP1, Grid H15, Context 107, Within G1 (Figure 48)
Basin (HFF), funerary object, almost completely reconstructed (under AN20) from sherds comprising: 8 rims (413g) & 1 base (921g) & 2 body (32g), small round lip, flat base; trace of very degraded brownish green glaze on both sides; Guangdong ware
DIA26, Rim EVE 74.5%. Mid-Late Tang

46. SF018.2, TP1, Grid H15, Context 107, Within G1 (Figure 41)
Jar (HSW), 2 body sherds, substantially reconstructed with sherds from adjacent contexts (under AN13), red slipped on both sides; impressed net design on exterior surface, similar to Jin pot mentioned in Lam 1985, p.131, which also had net-impressed round-bottomed lower body and plain shoulder & rim. Pre-Tang – probably Jin.

47. SF018.3, TP1, Grid H15, Context 107, Within G1
Bowl (POK), 1 rim sherd, green crackle glazed on both sides; upright rim, small round lip
DIA14, Rim EVE 10%. Mid-Late Tang

48. SF018.4, TP1, Grid H15, Context 107, Within G1
Bowl (POU), 1 rim, upright rim, small round lip; trace of much degraded brownish green glaze on interior. Refits with nearby bowl base and rim SF035.1 (G15) under AN19.
DIA13, Rim EVE 13%. Tang

49. SF018.5, TP1, Grid H15, Context 107, Within G1
Bowl (POU), 1 rim, upright rim, small round lip; trace of degraded green glaze on interior surface & around lip; incised line below rim on interior surface.
DIA12, Rim EVE 10%. Tang

49a. SF018.6, TP1, Grid H15, Context 107, Within G1
Bowl (POU), 1 body. Refits with nearby bowl base and rim SF035.1 (G15) under AN19.
Tang

49b. SF018.7, TP1, Grid H15, Context 107, Within G1
Bowl (HFF), body, not part of basin SF018.1. Tang?

50. SF020, TP1, Grid H15, Context 102b, Probably from G4 (Figure 44)
Bowl (POU), situated underneath 2 large boulders in WFS of original 2x2 pit; 5 joiners comprised of 3 rims/base (232g) & 1 body (6g); partially reconstructed with sherd from adjacent context (under AN14), very degraded green glaze on upper parts of both sides; upright rim with small round lip; flat-bottomed wedge-shaped foot-ring (H c.1cm, DIA c.6.3cm); throwing marks & finger print for smoothing surface noted; fabric relatively soft; Guangdong ware
DIA14, Rim EVE 36%, Mid-Late Tang

51. SF022.1 = SF066, TP2, Grid 15, Context 202b, Within G2
Jar (PCF), 13 body sherds (2 joiners) & 2 rims; body sherds brown with reddish tint, some with impressed zigzag motif, uneven wall, roughly made;
1st rim – too worn to measure; brown with reddish tint, small rounded & gently pointed lip, single groove on the interior, everted, roughly made, uneven wall, trace of impressed cord or zigzag decoration on exterior body;
2nd rim brown with reddish tint, small rounded & gently pointed lip, single groove on interior rim surface, everted, rough surface, plain
DIA10, Rim EVE 14.5%, LN2

52. SF022.2 = SF066, TP2, Grid G15, Context 202b, Within G2
Jar? (PCF), 3 joiners (2 rims & 1 body, see below); fabric as per SF022, too worn & small to measure; everted, LN2?

53. SF025.1, TP2, Grid G15, Context 202c or 223, Within G3 or G7
Bowl (POK), 1 rim (13g) & 1 body (17g) – joiners; green glossy crackle glazed on both sides; upright rim, small square lip, Mid-Late Tang
54. SF025.2, TP2, Grid G15, Context 202c, Within G3 or G7
Bowl? (POK), 1 upright rim, green crackle glazed on both sides; Shui Che Kiln, Mei Xian, Guangdong province (梅縣水車窯)
DIA22, Rim EVE 6.5%, Mid-Late Tang

55. SF025.3, TP2, Grid G15, Context 202c, Within G7 (or G3) (Figure 52)
Jar (HSW), 3 rims & 16 body sherds – one with horizontal lug (L c.4.5cm, W c.1.7cm) another with lug scar, brown glazed (degraded) or slipped on both sides; rough surface, upright everted rim, small

T-shaped lip, refitted with SF108.2 and sherds from adjacent contexts under AN15. Jar would have had a total of six more-or-less equally spaced horizontal lugs around the upper shoulder. Guangdong.
DIA20, Rim EVE 21%, Mid-Late Tang

56. SF026, TP1-EEX, Grid H15, Context 107, Probably from G4 (Figure 43)
Cup (HFF), recovered from NFS near south end of G4, very top part of 107 during sloping work; funerary object; small cup, with trace of degraded glaze on the upper part of the cup on both sides; upright, small round lip, flat base (0.6cm H) with cutting off marks, strong herbal smell during removal of soil inside cup for flotation (ES03); overall H c.3.8cm; Guangdong ware; one of a pair associated with G4? Such cups are sometimes placed as a pair inside a large jar for rice or wine & specially made for burial (Lam pers. comm.);
DIA8, Rim EVE 100%, Mid-Late Tang

57. SF027, TP2, Grid G15, Context 202b, Within G2
Jar (HSW), lugged body sherd found underneath prehistoric pot sherds SF022; dark grey slip on both sides, almost shiny surface; thin wall, horizontal lug L c.3cm, W c.1.3cm; part of a widely scattered and largely refitted pot (AN6) originating in Co.220 (possible Grave G11) but with other sherds gathered under SF No. 061 & 117, S. Guangdong, Mid-Late Tang

58. SF030.1, TP1, Grid H15, Context 102, Probably from G10 (Figure 45)
Bowl (POU), 1 base found near WFS of 3x4m trench; probably from Changsha kiln based on style of glaze (glaze not applied in the middle of the bowl but rather in a strip around rim); height of foot-ring c.0.7cm; base of foot-ring stepped, Late Tang (C9-10)

59. SF030.2, TP1, Grid H15, Context 102, Probably from G10 or G4
Bowl (POK), 1 upright rim, green crackle glazed on both sides; small round lip,
DIA16, Rim EVE 6.5%, Mid-Late Tang

60. SF035.1, TP1, Grid H15, Context 102b, Probably from G15 (Figure 27)
Bowl (POU), substantially reconstructed (under AN19) from sherds recovered from SFS baulk (close to SF035.2); 3 joiners: 1 rim(29g) & 1 body (32g) & 1 base (157g), & 1 loose rim (7.5g) possibly of the same bowl; no glaze visible; upright rim, small round lip, round body, uneven wedge-shaped flat-bottomed foot-ring (H c.0.7-1cm; DIA c.5.8cm) with cutting off marks; Guangdong ware
DIA13, Rim EVE 25.5%, Mid-Late Tang

61. SF035.2, TP1, Grid H15, Context 102b, Probably from G15
Jar (HSW), 2 body sherds, from SFS baulk near SF035.1; much degraded greyish glaze (or slip?); thick wall (c.0.8cm); throwing marks visible, Mid-Late Tang

62. SF042, TP2-SEX, Grid F15, Context 207, Within G5
Bowl (POK), rim of kiln waster comprised of 3 rim sherds stacked and fused together; green crackle glazed on both sides; stacking scar noted on interior
DIA11, Rim EVE 24.5%, Late Tang

63. SF054, TP1-NEX, Grid I15, Context 102
Bowl (POC), 1 base with pale bluish green glaze on both sides (except lower part exterior towards foot-ring); high foot-ring (H c.1.6cm, W c.5.7cm); Guangdong or Fujian ware, Song

64. SF057.1, TP1-NEX, EEX, Grids I15 & H15, Context 107, Within G4 (Figure 39)
Jar (HSW), wine jar substantially reconstructed under AN2 (base missing), comprised of 6 rims (519g) & 18 bodies (501g); upright slightly T-shaped rim, round body, with spout and four horizontal lugs; very degraded bluish glaze on both sides, line for positioning of lugs & spout visible on exterior; throwing marks; Guangdong ware - compressed form with small spout similar to those found in Belitung shipwreck (Krahl *et al.* 2010, p.225); bluish 'oil on water' glaze suggests Shiwan ware.
DIA8, Rim EVE 65%, Late Tang

65. SF057.2, TP1-NEX, EEX, Grids I15, H15, Context 107, Within G4
Jar (HFF), 1 body sherd found with the bluish glazed pot SF57.1; red slipped on both sides – refitted with other plain and net pattern red slipped sherds from nearby contexts to make round-bottomed jar under AN13. Pre-Tang, probably Jin.

66. SF057.3, TP1-NEX, EEX, Grids I15, H15, Context 107, Within G4
Bowl (POK), 1 body sherd found with the bluish glazed pot SF57.1; green crackle glaze on interior surface, with stacking scar, Tang

67. SF061, TP2, Grid F15, Context 202b, Within G2
Jar (HSW), 6 joiners comprised of 2 rims (140g) & 4 body (201g); grey slip on both sides, smooth & nearly shiny surface; sharply everted rim, small tapering lip, thin wall (thickness c.0.4cm), small horizontal lug; reconstructed with sherds found in SF Nos. 027 and 117 plus various contexts across southern end of TP2 under AN6; S. Guangdong ware
DIA15, Rim EVE 31%, Mid-Late Tang

68. SF064, TP2, Grid G15, Context 202b, Within G2 (Figure 34)
Bowl (POK), green crackle glazed (interior + upper part of exterior); 4 unglazed staking marks on interior surface; overall H c.3.5-4cm; upright, slightly flaring rim, small round lip; small flat base (c.0.3cm H) with cutting off marks; feint throwing marks visible on exterior; Guangdong ware; not common to have bowls of such small size; could be a cover or tea bowl
DIA12, Rim EVE 100%, Mid-Late Tang

69. SF069.1, TP2, Grid G15, Context 202b, Within G2
Bowl (POK), upright rim sherd of a large bowl, small rounded square rim, green crackle glazed on both sides; Shui Che Kiln, Mei Xian, Guangdong province (梅縣水車窯)
DIA16, Rim EVE 12%, Mid-Late Tang

70. SF069.2, TP2, Grid G15, Context 202b, Within G2 (Figure 36)
Bowl (POK), 2 joiners: 1 base (126g) & 1 body (14g); green crackle glaze on interior surface; stacking marks on interior surface; flat foot-ring with uneven height (H c.0.4-0.5cm; DIA 5.7cm); Shui Che Kiln, Mei Xian, Guangdong province (梅縣水車窯)
Mid-Late Tang

71. SF069.3, TP2, Grid G15, Context 202b, Within G2
Bowl (POU), rim sherd, too small to measure; upright, small round lip, under-fired, tiny trace of degraded greyish glaze in one corner, Tang

72. SF075, TP1-NEX, Grid I15, Context 107, Within G4 (Figure 40)
Bowl (POK), underneath wine jar SF057.1 and probably cover for it, 6 joiners; upright rim, small round lip, green crackle glazed on interior & uppermost rim part of exterior; flat base (H c.0.5cm),

with stacking marks on interior surface; Guangdong ware; similar to those found in Belitung (Krahl *et al.* 2010, p.225)
DIA16, Rim EVE 30.5%, Mid-Late Tang

73. SF080, TP1-SEX, Grid H15, Context 107, Within G4 (Figure 42)
Cup (HFF), funerary object; upright slightly flaring rim, small round lip, flat base (c.0.6cm H), slightly flaring, with cutting off marks; slipped on both sides (except exterior lower part), roughly made; Guangdong ware; made for burial; possibly used with another small cup placed inside a large jar, for rice or wine (Lam pers. comm..); overall height c.3.5cm
DIA8.2, Rim EVE 100%, Late Tang

74. SF082, TP1-NEX, Grid I15, Context 107, Probably from G4 (Figure 41)
Jar (HFF), 1 rim and 1 body sherd of red slipped pottery; everted, small round slightly stepped rim, gently grooved interior rim surface, do not join; refitted with SF090 and other sherds from nearby contexts under AN13 to reconstruct a round-bottomed jar with net pattern on lower half and plain shoulder and rim. Similar to the Jin pot in Lam 1985, p.131.
DIA20, Rim EVE 9%, Pre-Tang

75. SF084, TP2-NEX, Grid G16, Context 218, Within G6 (Figure 18)
Basin (HSW), 2 rim sherds, purplish red glaze on both sides, very rough surface; large basin with upright rim; T-shaped lip with firing spur mark on top of rim; throwing marks noted on both sides, refitted with other sherds from context nearby under AN10.
DIA30, Rim EVE 27%, Tang

76. SF086, TP2-NEX, Grid G16, Context 218, Within G6 (Figure 22)
Bowl, (POU), 2 joiners comprised of 1 rim (55g) & 1 base (135.5g); upright bowl with slightly flaring mouth, small pointed lip; very degraded glaze visible on interior; under-fired with greyish glaze & softer fabric (instead of high-fired green glazed); flat foot-ring, slightly flaring (H c.0.8cm, DIA c.6cm)
DIA14, Rim EVE 25.5%, Late Tang

77. SF089, TP2-NEX, Grid G15, Context 218, Within G6 (Figure 23)
Bowl (POU), base with brown glazed interior; flat foot-ring (H c.1cm, DIA c.4.7cm), slightly flaring; obvious throwing marks seen on interior surface; cutting off marks visible on base of foot-ring; Guangdong or Changsha ware (more likely Guangdong ware), Mid-Late Tang

78. SF090.1, TP1-NEX, Grid I15, Context 107, Possibly from G4 (Figure 41)
Jar (HSW), 1 body sherd of red slipped pottery with impressed net design on exterior, refitted with SF082 and other sherds from nearby contexts under AN13 to reconstruct a round-bottomed jar with net pattern on lower half and plain shoulder and rim. Similar to the Jin pot in Lam 1985, p.131. Pre-Tang

79. SF090.2, TP1-NEX, Grid I15, Context 107, Possibly from G4
Jar (HFF), 2 joining body sherds with red slip on both sides, refitted with SF082 and other sherds from nearby contexts under AN13 to reconstruct a round-bottomed jar with net pattern on lower half and plain shoulder and rim. Similar to the Jin pot in Lam 1985, p.131. Pre-Tang

80. SF100, TP2-WEX, Grid G15, Context 224, Within P5 (Figure 54)
Basin (HSW), 1 large rim-body sherd, joins with SF101 under AN16; purplish red glazed on both sides; rough surface; everted/flaring rim, round stepped lip, thick wall (max. c.1.7cm); Guangdong ware
DIA33, Rim EVE 19%, Tang

81. SF101, TP2-WEX, Grid G15, Context 223, Within G7 (Figure 54)
Basin (HSW), 3 body sherds, join with SF100 under AN16; 4 joiners; purplish red glaze on both sides; rough surface; thick wall, Guangdong ware. Tang

82. SF102, TP2-EEX, Grid G16, Context 228, Within P6 (Figure 55)
Bowl (POK), 1 base sherd, much degraded greyish glaze (slip?) on interior, rough texture; high foot-ring (H c.1.4cm, DIA c.5.7cm); found inverted. Late Tang-N. Song

83. SF108.1, TP2-NEX, Grid G15, Context 223, Within G7 (Figure 53)
Jar (HSW), 2 joiners comprised of rim (523g) & body (225g) making up most of side profile; very degraded pale greyish brown glaze (slip?) on both sides; traces of 3 horizontal lugs noted on surface and complete pot would probably have had six in total; line incised on shoulder for positioning of lugs (using pin) & throwing marks visible; Guangdong ware
DIA18, Rim EVE 22%. Early Tang or slightly earlier

84. SF108.2 = SF053, TP2-NEX, Grid G15, Context 223, Within G7
Jar (HSW), 2 body sherds, greyish glaze (slip?) on both sides, rough surface. Refitted with SF025.3 and sherds from adjacent contexts under AN15, Tang

85. SF115, TP1, Grid H15, Context 118, Within G9
Jar? (HSW), 2 joining sherds making a concave base (DIA c.12cm), a strip of dripping brown glaze on exterior surface, very high-fired. Undiagnostic for date but G9 included a green crackle glazed bowl (not lifted) of typical Tang type in EFS TP1-SEX, plus a copper alloy *kwa* of typical mid-late Tang date (SF010).

86. SF117, TP2-SEX, Grid F15, Context 220, Within probable grave G11 (Figure 25)
Jar (HSW), 1 rim sherd, 5 base sherds and 8 body sherds, grey slip on both sides (smooth & shiny surface); at least 5 joiners, all from same pot; small pointed lip, sharply everted rim; almost a right-angle between base and wall; relatively thin wall for a large jar; most of vessel eventually refitted from sherds recovered against SF Nos.027 and 061 plus several other contexts under AN6. Jar had a total of six more-or-less equally spaced horizontal lugs around the upper shoulder. South Guangdong ware.
DIA 15, Rim EVE 24%, Mid-Late Tang

87. SF119.1, TP1-NEX, Grid I15, Context 102b, Possibly related to G10
Basin HSW, 2 base sherds found in WFS (shown in drawing D43); large basin (or jar?) base fragments with green glossy glaze on interior & both glossy & dripping glaze on both sides – higher quality ware; thick wall (c.1.3cm) with hackly fracture; flat base, almost right-angle between base and wall; refitted with other sherds from nearby contexts under AN12. Either Guangdong or Changsha ware, Late Tang

88. SF119.2, TP1-NEX, Grid I15, Context 102b, Possibly related to G10
Jar (HSW), 1 body sherd with pale green crackle glazed on both sides, a fragment of a large jar with thick wall (c.1cm). Tang

89. SF119.3, TP1-NEX, Grid I15, Context 102b, Possibly related to G10
Jar (HSW), 1 body sherd, brown glazed on both sides, relatively thick wall (0.8cm). Tang

90. SF120, TP1-NEX, Grid I15, Context 102b, Possibly from G4
Bowl (POK), 2 joining base sherds from EFS; green crackle glazed on interior surface; flat foot-ring (H c.0.6cm, DIA c.5cm); Guangdong ware. Mid-Late Tang

91. SF122, TP2-NEX, Grid G15, Context 218, Within G6
Jar (HSW), 1 body sherd from SFS of NEX; grey slipped on both sides, very high-fired, shiny & smooth burnished surface, c.0.7cm thick wall, throwing marks noticed. S. Guangdong, Mid-Late Tang

From wet sieving:

92. SF124, TP2-SEX, EEX, Grid, Context 202b
HSW, BO, recovered from wet sieving of ES011 - Bag 2 of 3; tiny fragment of pottery with small net design; no glaze. Pre-Tang

93. SF127, TP1, Grid H15, Context 102
Bowl (HFF), 1 rim sherd, recovered from wet sieving of ES02 inside SF018 basin and refits with latter under AN20; too small to measure; upright, small round lip, traces of green glaze on both sides; throwing marks visible on exterior surface. Tang

10. Non-Ferrous Metal Objects

10.1 Introduction

Beyond the coins, the assemblage of non-ferrous metal finds consisted of items manufactured from three metal types: copper alloy – probably bronze (10.2), lead (10.3), and precious metal – probably silver (10.4). The majority of these objects were found in stratified contexts, although a few were recovered from dry or wet sieving.

The objects mainly comprised personal ornaments such as hairpins and various parts of belt fittings, such as belt buckles, belt strap-ends, or belt decorations known as *kwa* (銙) – all of which are of Sun Ji's (1987) Type II and dated to the middle Tang dynasty. The purpose of the lead or lead alloy objects found is at this stage unknown; however, they may be another category of decorative object for straps or belts similar to the aforementioned *kwa*. Further research on this latter class of objects is therefore required.

All the non-ferrous metal objects date from the Tang dynasty – a finding in agreement with other datable objects recovered from the site.

Both U-shaped hairpins were associated with graves and their positions in the ground provide a useful indication of the head positions of the interred individuals. Unlike the commonly found U-shaped hairpins, the single hairpin with stupa-shaped head is a rare piece dated to Six Dynasties-Tang. Its stupa/lotus design could have Buddhist connotations.

According to previous research, leather belts were an essential component of Tang fashion, especially among males (Sun 1987). However, according to wall paintings found in some Tang dynasty tombs (e.g. Tomb of Princess Yongtai), belts were not restricted to males (Zhou 2002). One

should, however, acknowledge that princesses had access to activities very different from those available to most other women of lesser rank – the most pertinent example being horse riding, which may have occasioned the use of trousers and tunics requiring belts. The use of belts with suspended sashes was a Tang dynasty fashion influenced by northern nomads, who originated the design as a means of attaching tools and ornaments to themselves and their horses (So 2004). By the mid-late Tang suspension sashes had gone out of use, but the *kwa* nevertheless continued to be used as leather belt decorations (Sun 1987). The social status and ranking of individuals can be revealed through the use of materials and number of *kwa* they wore. In the Tang dynasty, commoners or officials without rank would use bronze or iron belt fittings (Wang 1986).

Based on the existing published materials, similar belt fittings were usually found in the northern or central parts of mainland China, such as Jiangsu, Hubei and Xian. The few bronze belt fittings found at KL-TS in 1997 and those discovered from this current excavation are rare objects in Tang sites this far south. In general the strap-ends, *kwa* and belt buckles found at KL-TS are very well made, which suggests that they are the work of a skilled artisan and probably not a local craftsperson. This may mean that the pieces were brought in by people travelling from and/or trading with areas further to the north. Whether such individuals were connected to maritime trade, military service guarding such trade routes or other state-run businesses, such as salt production, is not known and further research is therefore required.

When considered with other objects found on site, the evidence provided by the KL-TS non-ferrous metal objects suggests that the backbeach was a Tang dynasty burial ground used by civilians and/or military personnel, probably non-locals, with a status somewhat higher than the level of the ordinary commoner.

10.2 Copper Alloy Objects

10.2.1 Introduction

The copper alloy objects found during the excavation fall into five sub-groups as follows: belt strap-ends, belt buckles, decorative *kwa*, hairpins and a miscellaneous group. The belt strap-ends come in two types: elongated D-shaped and D-shaped – both types are illustrated (Figure 27). The belt buckles comprised three more-or-less complete examples – each of different design and all are illustrated (Figure 28), plus a broken ring fragment and more fragmentary buckle. The decorative *kwa* were of two different designs – these being rectangular and D-shaped, and there were also two different sizes within each category – all four combinations of shape and size are illustrated (Figures 29 & 35). The single pin copper alloy hairpin recovered from the TP1 topsoil is also illustrated (Figure 36). The small and undiagnostic miscellaneous items are described but not illustrated.

All the recorded copper alloy objects show signs of copper sulphate patination, which gave a greenish appearance. Surface mineralisation – most likely corrosion products for nearby iron objects, was also observed on several objects. In order to understand their alloy compositions, lab testing of the objects is recommended. As well, most of these objects are fairly fragile and immediate conservation is also strongly recommended.

10.2.2 Belt strap-ends

94. SF019, TP1, Grid H15, Context 101 (Figure 20)
Belt strap-end, D-shaped with hollow design to hold leather. Comprising two plates - both skilfully pierced and fastened together using four to five rivets, with tapering side walls to create a neat sealed end when assembled. The plaques are well-executed with crisp bevelled edges and smooth surfaces. Similar to the Mid Tang Type II belt strap-end found in Pinglu: Sun 1986, fig. 11, no.18.

Length: 2.50cm, width: 2.40cm, thickness: 0.50cm. Mid Tang

95. SF087, TP2-NEX, Grid G16, Context 218, Within G6 (Figure 20)
Belt strap-end, elongated D-shaped with hollow design to hold leather. Although no assembly mark is visible on the side walls, the construction method is likely to be the same as item no. 94: comprising two plates - both skilfully pierced and fastened together using three rivets (only one survived), with tapering side walls to create a neat sealed end when assembled. The plaques are well-executed with crisp bevelled edges and smooth surfaces. Similar to the Mid Tang Type II belt strap-end found in Pinglu: Sun 1986, fig. 11, no.18.
Length: 3.00cm, width: 2.40cm, thickness: 0.50cm. Mid Tang

96. SF113, TP1, Grid H15, Context 102a (EFS baulk), Possibly from G16
Belt strap-end, elongated D-shaped with hollow design to hold leather. Although no assembly mark is visible on the side walls, the construction method is likely to be the same as item no. 94: comprising two plates - both skilfully pierced and fastened together using one rivet, with tapering side walls to create a neat sealed end when assembled. The plaques are well-executed with crisp bevelled edges and smooth surfaces. A corner of the bottom plate is missing. Similar to the Mid Tang Type II belt strap-end found in Pinglu: Sun 1986, fig. 11, no.18.
Length: 3.10cm, width: 2.30cm, thickness: 0.50cm. Mid Tang

10.2.3 Belt buckles

97. SF001, TP1, Grid H15, Context 101(Figure 21)
Belt buckle consisting of two plates and a prong. Comprising two elongated D-shaped plates of similar thickness, bevelled edge on obverse, pierced by three rivets and a hollow design to hold leather. The boss of the prong is hollow, likely to allow a pin to go through for fastening the prong to the plates. The prong is originally rotatable but is currently jammed by corrosion. The ring is missing. Similar to the Mid Tang Type II belt buckle found in Chaoyang Tang tomb: Sun 1986, fig. 11, no.21; Tang dynasty Type VIB elongated D-shaped buckle from Pinglu: Wang 1986, fig. 4, no. 5.
Length: 4.70cm, width: 2.40cm, thickness: 0.60cm. Mid Tang

98. SF010, TP1, Grid H15, Context 118 (NFS baulk), Within G9.
Two plates of a belt buckle. Elongated D-shaped with hollow design to hold leather. Bottom plate secured using two rivets. All edges are bevelled. The prong and the ring are missing. The fragments are in poor condition with copper sulphate patination. Similar to the Mid Tang Type II belt buckle found in Chaoyang Tang tomb: Sun 1986, fig. 11, no.21; Tang dynasty Type VIB elongated D-shaped buckle from Pinglu: Wang 1986, fig. 4, no. 5.
Length: 3.00cm, width: 2.40cm, thickness: 0.40cm. Mid Tang

99. SF016, TP1, Grid H15, Context 102(b), Within G1
Half of a wedge-sectioned belt buckle ring attached with cylindrical boss. Form of surviving ring is similar to the Mid Tang Type II belt buckle found in Chaoyang Tang tomb: Sun 1986, fig. 11, no.21.
Surviving height: 2.00cm, width (including hinge): 1.60cm. Mid Tang

100. SF121, TP2-NEX, Grid G16, Context 218, Within G6 (Figure 21)
Belt buckle consisting of two refitted oval-shaped ring parts, a prong and two rectangular-shaped plates. Constructed from two plates of similar thickness and pierced by four rivets (only one survived) and a hollow design to hold leather. All surfaces are smooth, edge on obverse is bevelled. The bosses of the prong and the ring are likely to be hollow for allowing a pin to fasten the various parts to the plates. The prong and the ring are originally rotatable but are currently jammed by

corrosion. A corner of the assembled plates is missing. This piece appears to have a higher lead content, possibly leaded bronze. The form of the ring and the prong is similar to the Mid Tang Type II belt buckle found in Pinglu but with a rectangular plate: Sun 1986, fig. 11, no.15; Tang dynasty Type VIB rectangular-shaped buckle from Xian: Wang 1986, fig. 4, no. 3.
Length: 4.80cm, width: 2.40cm (plate), 3.1cm (ring), thickness: 0.55cm. Mid Tang

101. SF123, TP2-NEX, Grid F16, Context 216 (Figure 21)
Belt buckle consisting of a prong, an oval-shaped ring and two elongated D-shaped plates. Constructed from two plates of similar thickness and pierced by two rivets and a hollow design to hold leather. All surfaces are smooth with bevelled edge. The bosses of the prong and the ring are likely to be hollow for an (iron?) pin to fasten the various parts to the plates. The prong and the ring are originally rotatable but are currently jammed by corrosion. Similar to the Mid Tang Type II belt buckle found in Pinglu: Sun 1986, fig. 11, no.15; Type VIB: Wang 1986, fig. 4, no. 5.
Length: 6.00cm, width: 3.00cm (plate), 4.00cm (ring), thickness: 0.60cm. Mid Tang

Recovered from wet sieving:

102. SF128.3, TP2-WEX, Grid G15, Context 202C, from sample ES031, Within G3-G7
Fragment of a wedge-sectioned buckle ring. In very poor condition.
Surviving Length: 1.60cm, thickness: 0.40cm. Tang

10.2.4 Rectangular-shaped *kwa*

103. SF006, TP1, Grid H15, Context 102(b), Within G1(Figure 46)
Rectangular-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using four rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. Scraping marks were noted on the surface of the rear plate, possibly as results during sheet production. One corner of the bottom plate is missing; Similar to the Mid Tang Type II rectangular-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 23.
Length: 2.10cm (plate), 0.65cm (perforation), width: 1.30cm (plate), 0.40cm (perforation), thickness: 0.50cm. Mid Tang

104. SF028, TP1, Grid H15, Context 102(b), Possibly from G15 or G16 (Figure 46)
Rectangular-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using four rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. Bottom plate is refitted with three fragments; Similar to the Mid Tang Type II rectangular-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 23.
Length: 2.70cm (plate), 1.81cm (perforation), width: 2.40cm (plate), 0.70cm (perforation), thickness: 0.50cm. Mid Tang

105. SF088, TP2-NEX, Grid G16, Context 218, Within G6
Rectangular-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using four rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. Bottom plate is refitted with three fragments; The item is in very poor condition. Similar to the Mid Tang Type II rectangular-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 23.
Length: 2.35cm (plate), 1.70cm (perforation), width: 2.00cm (plate), 0.60cm (perforation), thickness: 0.40cm. Mid Tang

106. SF097, TP1, Grid H15, Context 115, Probably from G1 (or G4)
Rectangular-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using four rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. Similar to the Mid Tang Type II rectangular-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 23.
Length: 2.50cm (plate), 1.80cm (perforation), width: 2.20cm (plate), 0.70cm (perforation), thickness: 0.45cm. Mid Tang

10.2.5 D-shaped *kwa*

107. SF003, TP1, Grid H15, Context 101
Top plaque of a D-shaped *kwa* with a small rectangular perforation. The surviving top plaque is pierced with two rivets (originally three). One fourth of the plaque is missing. In poor condition. Similar to the Mid Tang Type II D-shaped bronze kwa found in Jiazhuang Tang tomb: Sun 1986, fig. 11, no. 20.
Surviving length: 2.40cm (plate), 1.20cm (perforation), width: 1.60cm (plate), 0.60cm (perforation), thickness: 0.45cm. Mid Tang

108. SF007, TP1, Grid H15, Context 102(B), Within G1
Bottom plate fragment of a D-shaped *kwa* with a small rectangular perforation, joins with item no. 109 (SF008). Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Surviving length: 1.30cm (plate), 0.80cm (perforation), width: 1.20cm (plate), 0.50cm (perforation), thickness: 0.09cm. Mid Tang

109. SF008, TP1, Grid H15, Context 102(b), Within G1
Bottom plate fragment of a D-shaped *kwa* with a small rectangular perforation, joins with item no. 108 (SF007). Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Surviving length: 1.30cm (plate), 0.70cm (perforation), width: 1.40cm (plate), 0.40cm (perforation), thickness: 0.05cm. Mid Tang

110. SF011, TP2, Grid G15, Context 202b, Within G2
D-shaped *kwa* with a small irregular rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using three rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. In poor condition. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.40cm (plate), 1.85cm (perforation), width: 1.50cm (plate), 0.45cm (perforation), thickness: 0.50cm. Mid Tang

111. SF031, TP2, Grid G15, Context 203, Within G2 (Figure 28)
D-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using three rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.40cm (plate), 1.40cm (perforation), width: 1.40cm (plate), 0.45cm (perforation), thickness: 0.40cm. Mid Tang

112. SF033, TP1, Grid H15, Context 102(a)
Top plaque of a D-shaped *kwa* with a rectangular perforation. The surviving plaque is cast and pierced with three rivets. In poor condition. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.40cm (plate), 1.60cm (perforation), width: 1.70cm (plate), 0.55cm (perforation), thickness: 0.50cm. Mid Tang

113. SF034, TP1, Grid H15, Context 102(b), Possible from G15
Top plaque of a D-shaped *kwa* with a rectangular perforation. The surviving plaque is cast and pierced with three rivets. In poor condition. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.40cm (plate), 1.55cm (perforation), width: 1.65cm (plate), 0.60cm (perforation), thickness: 0.50cm. Mid Tang

114. SF037, TP1, Grid H15, Context 107, Probably from G1 or G4
D-shaped *kwa* with a rectangular perforation, the top plaque is intact, half of the bottom plate is missing and refitted with three fragments. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using three rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. In poor condition. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.40cm (plate), 1.55cm (perforation), width: 1.70cm (plate), 0.60cm (perforation), thickness: 0.55cm. Mid Tang

115. SF044, TP2, Grid G15, Context 202b, Within G2
D-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using three rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. In poor condition. One edge is missing. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.35cm (plate), 1.45cm (perforation), width: 1.50cm (plate), 0.45cm (perforation), thickness: 0.50cm. Mid Tang

116. SF071, TP1, Grid H15, Context 102(a) (SFS baulk), Possibly from G15 or G16 (Figure 28)
D-shaped *kwa* with a rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using three rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.50cm (plate), 1.65cm (perforation), width: 1.70cm (plate), 0.60cm (perforation), thickness: 0.45cm. Mid Tang

117. SF096, TP2-NEX, Grid G16, Context 218, Within G6
D-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using three rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. In very poor condition, bottom plate is refitted with several fragments. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Length: 2.00cm (plate), 1.90cm (perforation), width: 1.40cm (plate), 0.50cm (perforation), thickness: 0.50cm. Mid Tang

118. SF116, TP2-NEX, Grid G16, Context 218, Within G6
D-shaped *kwa* with a rectangular perforation, refitted with several fragments. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using two rivets (originally three). The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. In extremely poor condition, was relatively intact on ground but dismantled once lifted. Similar to the Mid Tang Type II D-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 20.
Surviving length (refitted): 2.00cm (plate), width: 1.70cm (plate), 0.50cm (perforation), thickness: 0.50cm. Mid Tang

Rectangular-shaped *kwa* recovered from wet sieving:

119. TP2-NEX, Grid G16, Context 218, Within G6, recovered from wet sieving of ES022
Rectangular-shaped *kwa* with a small rectangular perforation. Comprising a top plaque and bottom plate - both skilfully pierced and fastened together using four rivets. The top plaque is cast whereas the smaller bottom plate is probably sheet. The plaque is well-executed with crisp bevelled edges and smooth surfaces. In poor condition, edges on two sides are missing. Similar to the Mid Tang Type II rectangular-shaped bronze *kwa* found in Chaoyang: Sun 1986, fig. 11, no. 23.
Length: 2.20cm (plate), 1.60cm (perforation), width: 1.90cm (plate), 0.60cm (perforation), thickness: 0.50cm. Mid Tang

10.2.6 Hairpins

120. SF002, TP1, Grid H15, Context 101 (Figure 56)
Cylindrical-sectioned single hairpin (簪) with a conical head. The conical head comprised of four concentric rings and the bottom ring was deliberately notched along the edge, which in plan creates the form of a flower (lotus?). The conical head may mimic the form of a stupa, which is a powerful symbol of Buddhist. The hairpin is slightly bent towards the pointed end.
Length: 11.70cm, thickness: 0.10-0.50cm. Six Dynasties to Tang.
The hairpin is slightly bent towards the pointed end. Form suggests a date later than Tang, possibly Song.
Length: 11.70cm, thickness: 0.10-0.50cm. Song?

10.2.7 Other cast copper alloy objects

121. SF083, TP1-NEX, Grid I15, Context 107, Within G4
Rectangular shaped object with a small groove in the middle of one surface.
Surviving length: 1.30cm, width 0.70cm, thickness: 0.50cm. Tang?

122. SF091, TP1-NEX, Grid I15, Context 107, Probably from G4
A trapezoid-sectioned fragment with an incised line on one surface. X-Ray fluorescence (XRF) testing is recommended to check tin content: if c.20%, the piece may be a small fragment of a high tin bronze mirror (Paul Harrison pers. comm.).
Surviving length: 0.80cm. Tang?

123. TP2-NEX, Grid G15, Context 218, Within G6
An elongated rectangular-sectioned fragment with a small protruding knob on one surface.
Surviving length: 1.90cm, width: 0.80cm, height (including the knob): 0.80cm. Tang?

10.3 Lead Objects

10.3.1 Introduction

The site produced a single lead object made from sheet (10.3.2), which is described below.

10.3.2 Folded lead sheet

124. SF009, TP2, Grid G15, from dry sieving (interface between Contexts 201 & 202) (Figure 35)
Solid round-ended strip of lead, folded, object of unknown type. Light grey/whitish appearance with almost a 'whitewashed' texture.
Length of the pre-folded lead strap: c. 5.2cm, width: 3.1cm. Date unknown.

10.4 Silver or lead-silver alloy objects

There were seven silver or lead-silver alloy objects associated with burials found during the excavation comprising: two almost identical hairpins, one wedge-shaped object and four trapezoidal objects. Rapid oxidisation following exposure to the air was noted during the excavation of the hairpins, such that both appeared light silvery grey when first unearthed and then very quickly changed into a dull, dark purplish grey colour. All five of the wedge-trapezoidal decorative objects are relatively heavy when compared with other non-ferrous artefacts and were initially thought to be made from a lead alloy. Laboratory testing to determine the composition of these objects is recommended.

10.4.1 Cast objects

125. SF068.1, TP2, Grid G15, Context 202b, Within G2 (Figure 35)
Wedge-shaped object of unknown type, possibly some kind of decorative feature such as a stud or a panel of a belt fitting (?). Chamfered edge and a smooth triangular face. Plain uneven back with irregular edge and a rough surface. Silvery grey appearance with signs of greenish patination observed at the rear. Found with Item 126.
Length: 2cm, width 1.8cm, thickness 0.8cm. Tang?

126. SF068.2, TP2, Grid G15, Context 202b, Within G2 (Figure 35)
Trapezoid-shaped object of unknown type, possibly some kind of decorative feature such as a stud or a panel of a belt fitting (?). Chamfered edge and a semi-smooth trapezoid face. Relatively flat and plain back with irregular edge and rough surface. Greenish patination appearance on both sides. Found with item 125.
Length: 2cm, width 1.5cm, thickness 0.8cm. Tang?

127. SF076, TP1, Grid H15, Context 107, Probably from G1 or G15 (Figure 29)
Irregular trapezoid-shaped object of unknown type with one smooth curving edge, possibly some kind of decorative feature such as a stud or a panel of a belt fitting (?); Chamfered edge and a smooth face. Flat, plain and rough back with two untrimmed edge. Shiny dark silvery grey metallic colour; possibly silver, lab testing of its alloy composition is recommended.
Length: 1.9cm, width 1.3cm, thickness 0.4cm. Tang?

128. SF094.1, TP1, Grid H15, Context 115Probably from G1 (or G15) (Figure 29)
Trapezoid-shaped object of unknown type, possibly some kind of decorative feature such as a stud or a panel of a belt fitting (?); Chamfered edge and a smooth face. Trapezoid sectioned. Flat, plain back with smooth surface and relatively trimmed edge. A dull dark grey colour with a tinge of metallic.
Length: 1.9cm, width 1.3cm, thickness 0.6cm. Tang?

129. SF094.2, TP1, Grid H15, Context 115, Probably from G1 (or G15) (Figure 30)
Trapezoid-shaped object of unknown type, possibly some kind of decorative feature or part of a belt fitting (?). Chamfered edge with a protruding square knob and a scar of possibly another similar knob next to it. Reverse is very slightly curved and with a fairly smooth surface, but the edge is untrimmed and rough. Dull dark grey colour with a tinge of copper-like metallic 'dusting' on surface.
Length: 2.2cm, width: 3.1cm, thickness: 0.5cm (1.1cm with knob). Tang?

10.4.2 Hairpins

130. SF081, TP1, NEX, Grid I15, Context 107, Within G4 (N end) (Figure 38)
U-shaped hairpin (釵), incomplete, lower half of one of the legs was broken – apparently a fresh break caused during excavation with the tip lost on site (Paul Harrison pers. comm.). It has a rounded rectangular top with chamfered edge on both ends. Silvery grey colour when first unearthed and oxidised into a purplish grey colour within a short period. Similar to the Tang silver hairpin excavated in 1974 from Chituling, Shixing: Lam *(ed.)* 1985, no. 73; Tang silver hairpin from Langxi, Anhui: Song 1992, fig. 5, no.8
Length: 7.80cm, width 1.70-1.90cm. Tang

131. SF095, TP2, NEX, Grid G16, Context 218, Within G6 (W end) (Figure 19)
U-shaped hairpin (釵), intact, both legs are of the same length. A rounded rectangular top with chamfered edge on both ends. Silvery grey colour when first unearthed and oxidised into a dark purplish grey colour within a short period. Similar to the Tang silver hairpin excavated in 1974 from Chituling, Shixing: Lam *(ed.)* 1985, no. 73; Tang silver hairpin from Langxi, Anhui: Song 1992, fig. 5, no.8
Length: 8.00cm, width 1.50-1.80cm. Tang

11. Ferrous metal objects (by Paul Harrison)

11.1 Introduction

Thirty four special finds were identified as 'iron' during the San Tau excavation, which comprised 45 objects as follows: 14 nails, 13 blades, 5 rods, 3 harpoons, 3 sheets, 2 pins, 1 axe-head, 1 spike, 1 hook, 1 adze, 1 artefact of unidentifiable type, and nine very small and apparently unworked fragments of iron corrosion. The pieces responded positively to the magnet test and therefore appear to be magnetite (Fe3O4). If iron objects completely corrode away they may produce many magnetite flakes like this and the clusters of such material recovered from site may record the positions of collapsed artefacts. However, magnetite is one of a series iron corrosion products and the pieces do not display the full *variety* of corrosion products that is typical. Ideally, therefore, the latter group should be shown to a geologist to ensure that they are not iron ore.

NB: This report is written prior to the artefacts being conserved or X-rayed, so the iron artefacts are hidden below the sand-rich crust of corrosion products, and this assessment is therefore subject to review once such work has been completed.

11.2 Catalogue of ferrous metal objects

132. SF004, TP2, Grid G15, Context 201, Possibly from G1
Nail, mushroom headed, 5cm long

133. SF005, TP2, Grid G15, Context 201
Nail, with small slightly bulging head, L-shaped right angle bend, shaft length c.9cm, head 0.4 cm wide

134. SF015, TP1, Grid H15, Context 102B, Within G1
Sheet fragment, probable wood pseudomorph on inside – possibly part of a scabbard, size 2.8x2x0.2cm

135. SF017, TP1, Grid H15, Context 102B, Within G1
Axe-head, complete, length 15.5cm, blade 6.5cm wide and foot 5cm wide, maybe a little more wear at one corner of blade than the other, hafting hole measures 4.5cm x 1.5cm and is positioned 3cm from foot. The axe appears well made and is in good condition. Object could be metallurgically sampled.

136. SF021.1, TP2, Grid G15, Context 202b, Within G2
A magnetite flake from rapier SF21.2? Plus small iron strip – possible knife broken at both ends? Size of blade fragment 6 cm long x 1.8 cm across.

137. SF21.2, TP2, Grid G15, Context 202b, Within G2
Rapier of possibly an iron bar. No tang, sizes 31.2 cm long x 2cm across, angles into a point at the final 4cm or could be to make a whittle tang. The iron is in very good condition and as such could be metallurgically sampled.

138. SF029, TP1, Grid H15, Context 107, Within G1
Nail, with two bends – in the tip and middle of the shaft, very little rust, 4cm long with circular head 0.8cm in diameter.

139. SF032.1, TP1, Grid H15, Context 107, Within G4
Thin strip, possible scale tang knife, old breaks to tang and blade, 6.2cm long by 1.5cm wide (1.5cm of length is the stump of the tang and its shoulder. NB: Associated with Cat. Nos. 138 & 139

140. SF032.2, TP1, Grid H15, Context 107, Within G4
Pin or nail, L-shaped, 4.8cm long by 0.8cm diameter, with a new break. NB: Associated with Cat. Nos. 137 & 139

141. SF032.3, TP1, Grid H15, Context 107, Within G4
Tiny flake, 2x0.6x0.3cm. NB: Associated with Cat. Nos. 137 & 138

142. SF36.1, TP1, Grid H15, Context 107, Within G4
Iron sheet – square, measuring 1x1x0.2cm

143. SF36.2, TP1, Grid H15, Context 107, Within G4
Iron bar of unknown function, broken at both ends, measuring 5.5x1.1cm

144. SF36.3, TP1, Grid H15, Context 107, Within G4
Iron rod of unknown function, measures 9x1.5x1.5cm

145. SF36.4, TP1, Grid H15, Context 107, Within G4
Possibly part of a knife – at the supposed tang it is T-shaped, measures 4x2cm

146. SF038, TP2, Grid G15, Context 207, Within G5
Possible nail, size 4 x 1.5 x 1.5cm

147. SF039, TP2, Grid G15, Context 207, Within G5
Iron disc, roughly circular – a nail head? No fracture visible, 3cm in diameter 2-3mm thick,

148. SF040, TP2, Grid G16, Context 202a
Nail shaft, size 2 x 0.7 x 0.7cm.

149. SF041.1, TP2, Grid F15, Context 207, Within G5
Iron knife totally corroded, scale tang relatively complete? The tip was lost in antiquity, the back bows in and the blade is triangular. Tang is 3.5 cm long and blade is 7.5 cm long x 1.8cm across at the widest point, where it has broken.

150. SF041.2, TP2, Grid F15, Context 207, Within G5
Scabbard or sheath/handle fitting – two joining halves found *in situ* around SF041.1, there are pseudomorphs inside but the material could not be determined and would require the use of a scanning electron microscope SEM. Size 2 x 2.5cm, internal diameter being 2cm.

151. SF043, TP2, Grid F15, Context 207, Within G5
Harpoon, barb only on one side, 18.5 cm long, there is an old break or loss at the mouth of the harpoon perhaps suggesting burial of an old harpoon.

152. SF045, TP2, Grid F15, Context 207, Within G5
Knife, rapier-like 18cm long x 1.7cm wide, before cleaning it does not seem to have an edge, making it a stabbing weapon.

153. SF047, TP2, Grid F16, Context 216
U-shaped nail or staple, 1cm thick, the reach of the staple is 2.1cm and the shaft is 1.5cm long, much metal is on display, rest of object has decayed.

154. SF049, TP2, Grid G16, Context 217, Within G6?
Nail shaft 4.5cm x 0.4 x 0.4 cm.

155. SF050, TP2, Grid F15, Context 202b, Within G2
Nail shaft, size 2.8 x 0.8 x 0.8cm

156. SF58.27, TP1-EEX, Grid H15, Context 107, Within G4
Plain iron bar, size 17 x 1.2 x 0.4cm, purpose unknown.

157. SF058.28, TP1-EEX, Grid H15, Context 107, Within G4
J-shaped fish hook, head broken off at excavation 2.7cm long x 2.3cm across.

158. SF058.29, TP1-EEX, Grid H15, Context 107, Within G4
Nail shaft, hollow from corrosion, head was broken off at excavation 4cm x 0.5cm.

159. SF58.30, TP1-EEX, Grid H15, Context 107, Within G4
Sheet or blade fragment, possibly diamond-shaped at one end, size 7 cm long x 1.4cm thick x 2.7cm across at the diamond.

160. SF058.31, TP1-EEX, Grid H15, Context 107, Within G4
Spike, tapers to a fine point – hammered from a sheet, size 7.8cm long x 2.2cm maximum diameter.

161. SF060, TP2-SEX, Grid F15, Context 202b, Within G2
Bar or possible nail, size 7.5cm x 0.4cm x 0.6cm.

162. SF065.1, TP2-EEX, Grid G15, Context 202b, Within G2
Knife, 35cm long, blade 3cm wide, 27.5 cm of blade, the rest is a scale tang, the blade is broken at the tip and at the tang - perhaps suggesting burial of an old knife.

163. SF065.2, TP2-EEX, Grid G15, Context 202b, Within G2
Short sword, 32.5 long, of which 29cm is blade, the blade is 3cm across, at 6.5cm from the tip the sides angle to become a V and a surviving point, the back of the blade is slightly curved, scimitar-like. The short scale tang is broken.

164. SF065.3, TP2-EEX, Grid G15, Context 202b, Within G2
Adze, 18 cm long – being 10 cm of blade and 8cm of folded socket, the shaft is 3cm across by 2.2cm. The adze is 4.5cm wide and the blade is more worn on one corner than the other.

165. SF067, TP2 (2x2), Grid G15, 202b, Within G2
Nail, flattened profile measuring in plan 6.5cm x 0.3-2cm wide, thickness tapers from 0.2 to 1cm

166. SF070, TP1-EEX, Grid H15, Context 107, Within G4
Nail, fully corroded and broken recently, size 7.5cm x 0.4cm x 0.8cm, also possible nail head 3.5cm wide, but no shaft stump, broken in antiquity?

167. SF072, TP2-SEX/EEX, Grid F-G16, Context 202b, Within G2
Knife, weight suggests solid iron core so could be metallurgically sampled, shortened scale tang probably broken (3cm long), blade 12.5 cm long x 2.2cm at widest point, tapers to a tip which does not survive, there is an angle in the blade probably from wear (length of work portion 7.3cm).

168. SF073.1, TP2-EEX/SEX, F-G16, Context 202b, Within G2
Knife, scale tang completely corroded, corrosion has made the blade a hollow triangle when viewed in cross section, broken into five pieces, 19cm long – being 16cm of blade and 3cm of tang, the back is very straight and the tip is lost, 2.5cm at the widest point.

169. SF073.2, TP2-EEX/SEX, F-G16, Context 202b, Within G2
Harpoon, 8.5cm long, 1 barb 4 cm long, shaft 1.8cm across at the widest point.

170. SF074, TP2-EEX/SEX, F-G16, Context 202b, Within G2
Six pieces of iron, five have become/are totally magnetite (Fe_3O_4), strange appearance suggests they might be ore pieces? None has any shape or dimension greater than 1cm. Sixth piece is C-shaped in cross section and broken in antiquity – possibly a fragment of scabbard, 0.2cm thick.

171. SF077, TP1-NEX, Grid I15, Context 107, Within G4
Unidentifiable artefact, nicely rounded edge on the longer side (possibly part of a circle), other edges have old breaks, size 4cm x 3cm x 0.4cm.

172. SF078, TP1-NEX, Grid I15, Context 107, Within G4
Magnetite sheet, possible ore, no good edge, size 2.2cm x 1.2cm x 0.2 cm.

173. SF079, TP1-NEX, Grid I15, Context 107, Within G4
Magnetite sheet, possible ore, no good edge, size 2cm x 0.7cm x 0.2cm

174. SF092, TP1-SEX, Grid H15, Context 107, Within G4
Harpoon, small area missing at the shaft entrance, shaft 1.1cm diameter, length of object 9.5cm, single barb 4 cm long by 2cm wide.

175. SF098, TP1-SEX, Grid H15, Context 107, Within G4
Knife blade tip? Triangle 2.5 x 0.8cm in size.

176. SF103, TP4, Grid G15, Context 402
Nail shaft, measures 3.8cm x 0.8cm.

177. SF104, TP2-SEX, Grid G16, Context 216
Piece of magnetite, possibly ore? Size 2.5cm x 1.5cm x 0.3cm.

178. SF105, TP2-SEX, Grid G16, Context 216
Piece of magnetite, possibly ore? Size 1.5cm x 1.5cm x 0.3cm.

179. SF106, TP4, Grid G15, Context 403 (dry sieving)
Nail shaft, bent, size 4cm x 0.7cm.

180. SF107, TP4, Grid H15, Context 402
Corrosion fragments (possibly a completely broken down object).

181. SF109, TP2-WEX, Grid G15, Context 223, Within G7
Knife, broken at the tang, straight back, blade very worn in middle of blade perhaps through use or excessive grinding, the edge is parallel to the back apart from at the tip where the edge curves up, the blade is 16.8cm long and 2cm across.

Summary

The buried blades here are all incomplete and may reflect the disposal within the grave context of worn-out and broken artefacts, although some damage could have occurred as a result of post-depositional factors. Similarly, the other artefacts seem to be the burial of old worn out artefacts rather than new pristine things. The nails probably came from an artefact that has deteriorated and may relate in some instances to the former presence of wooden coffins in some burials.

The conditions of the site are ideal for corrosion, being free-draining, tropical and near the sea – chlorine is an excellent destroyer of iron. The excellent state of preservation of many artefacts is therefore somewhat surprising. No vivianite was seen – this is an iron phosphate with a distinctive blue colour, which can form under certain conditions if the iron is close to a phosphorous-rich human body.

Many of the blades are sufficiently well preserved to permit metallurgical samples to be taken from them. This would reveal much about the smithing technology employed, how and if steel was attached to the iron, as well as the hardness of any steel present. Laboratory testing could also identify whether quenching technology was used and help determine if, for example, the iron was phosphoritic as phosphorous, like carbon, can harden iron.

Pseudomorphs are fossils of an organic material that was buried with the metal, the metal rusts and the salt impregnates the organic matter, taking its impression. The pseudomorphs from this site were fairly degraded but if examined under a scanning electron microscope (SEM) an expert may be able to tell the type of wood used. It is also possible to have pseudomorphs of textile and leather but these do not appear to be represented in this assemblage.

Finally, the descriptions above include reference to 'scale' tang knives, which are knives using a flat type of tang where the handle is attached to either side. In contrast, a whittle tang is a tapering spike that is driven into the wood, ivory or horn to create a handle. All knife blades in the current assemblage are of the scale tang type.

Table 1: Knives – summary of features

SF No.	Tang	Tip	Complete ?	Tang length (cm)	Surviving blade length	Width	Edge	Back
32.1	scale	no	No	1.5 incomplete	5.0 Hypothetically 12 from angles	1.7	straight	Straight,
36.4 ?	scale	no	No		Whole length 4	2		
41.1	scale	no	No	3.5	7.5, hypothetically 9.5	1.8	straight	Straight
45	?	yes	?	?	18.0	1.7	Angle tip	Angle tip
21.1	?	?	No	?	6.3	1.8	straight	Straight
21.2	?	yes	No	no	31.2	2.0	Up at tip	Down at tip
65.1	scale	absent	No	7.5	27.5	3	Straight	Straight
65.2	scale	tip	Probably not	3.5	29	6.5	Straight, up at tip	Curved, down at tip
72	scale	absent?	No	3	15.5	2.2	Comes up	Comes down
73.1	scale	absent	No	3	16	2.5	Comes up	Straight
98	?	possible	no		2.5	0.8		
109	scale	yes	no	?	16.8	2	Comes up, heavily worn	Comes down a little

PART 5: ENVIRONMENTAL REMAINS

12. Palaeobotanical Remains

Preliminary Result: The Macrobotanical Remains of Kau Liu-Tin Sam, San Tau, North Lantau (by Jasminda Ceron, Archaeological Studies Program, University of the Philippines)

12.1 Introduction

Presented in this report is the primary result of the analysed macrobotanical remains from the 2011 excavation at Kau Liu-Tin Sam, San Tau, North Lantau.

The objectives of this analysis are:

a. to identify the macro-plant remains;
b. to determine the probable significance of the plant assemblage in correlation to cultural burial practices in the past; and
c. to assess the viability of further macrobotanical study.

12.2 Materials and methods

All the macrobotanical samples were sent to the Plant and Sediment Laboratory in the Archaeological Studies Program, University of the Philippines (UP-ASP) for analyses. The sent materials comprised 32 bags that had been floated and 4 bags of sediment that needed to undergo flotation. The floated samples were still in cloth mesh and sealed in plastic bags, while the sediment samples were in re-sealable plastic, transparent bags, and each had proper labels inside.

The use of a flotation tank borrowed from the Antiquities and Monuments Office was initiated earlier by the director. However, before the fieldwork commenced the use of the manual-bucket technique (for the 34 samples sent) was assessed and preferred based primarily on the simplicity of the technique. The probability of having a relatively small number of samples to be collected was also a consideration, as was the logistics of taking a heavy flotation tank to and from the site.

At the laboratory, the 4 unprocessed bags of sediment from inside pots (ES 03, 13, 28 & 32) were dealt with first also using the bucket flotation method. The sediment volumes were between 0.25–0.5 litres and the bucket volume was about 6 litres. The sediment (for each context) was poured in a bucket with 3 litres of water. While mixing the sediment by hand, no clumps of soil were observed since the texture was fine to medium grain sediment. The water used came from the faucet at the laboratory.

During the first wash (and after mixing the sediment), the water was slowly poured onto the sieve with a fine nylon mesh lining, around 0.25-0.5 millimetre square, in order to extract the light fraction materials. The sediment was washed 4-6 times until there were no light fraction materials left floating. The fine nylon mesh (of similar size to that used for flotation on site) with its botanical remains was then properly secured using a string and a tape. Each sample was labelled and hung to dry – the heavy fraction materials were then wet sieved.

For the 34 floated bags of samples processed earlier at the site, each was sorted in the ASP Plant and Sediment Laboratory under the low-power microscope, NIKON SMT 745T model, with 0.60X to 50X magnification. Some of the samples were sorted right away after removing them from the cloth

and transferring onto a Petri dish. Other light fraction materials were sifted using a test sieve with 2 mm, 1 mm, and 500 micrometres (µm) apertures. The procedure of sorting flotation samples is the 'removal of archaeological botanical remains from twigs, rootlets, and other contemporary materials' (Pearsall 2000: 100). Botanical and non-botanical materials were thus sorted and then identified and counted. After the sorting and identification, the seed remains were assessed to determine whether they were transformed (charred, desiccated or mineralised) or not. Transformed materials would indicate anthropogenic and natural factors. The sorted samples were stored in small containers and labelled. Some samples were photographed using a similar microscope to that above attached to a Nikon P500 digital camera.

The macrobotanical remains were compared to the ASP seed reference collection, and other literature including the works of Paz (2001), Carlos (2010), Ceron (*n.d.*), LaFrankie (2010), Burkill (1966), Noda *et al.* (1984), and Galinato *et al.* (1999) for reference.

Since there are wide varieties of genus and species of plants and the material reference is insufficient, the identification of archaeological plant remains is not definite. Therefore, the researcher adopted the system of graduated confidence for seed determination (Paz 2001) (see Tables 2 and 3).

Table 2. Scale of confidence for botanical determination (after Paz 2001)

Scale	Description	Example
non-prefixed	A binomial determination may be made without any prefixes whenever there are clear photographic reference(s) of the seed, and/or an illustration reference(s) of the seed, or both. With photographic references, and illustrations at hand, the existence of a reference collection is still important, but not essential to non-prefix identification. The exact fit of the taxonomic features, the geographic distribution, and the species citation in the local flora are firm prerequisites for a non-prefixed determination.	*Dioscorea alata*
prob.	What are required for the determination 'prob.', are the pre-requisites of flora citation, geographic area compatibility and an agreement with the taxonomic details. The existence of either an image or illustration is necessary, as well as a specimen in a reference collection. It differs however, from the 'non-prefixed' determination in that only one out of three - image, illustration and reference collection exist, and the references sometimes do not give an exact or good fit.	prob. *Dioscorea alata* *Dioscorea* prob. *Alata*
cf.	In this category, all six categories may or may not exist. The archaeological material resembles an image/illustration/reference sample or a previous identification of an archaeobotanist, but there is no exact morphological fit. Three out of the five other categories fit the archaeological material but the researcher has doubts about the exact fit of these categories with the material.	cf. *Dioscorea alata* *Dioscorea* cf. *Alata*
	This is the lowest level of confidence when trying to determine a binomial identification of the archaeological material. It indicates that the material has a chance of being the species proposed but the	elim.

***elim*.**	determination was derived without any images, illustrations or reference collection sample. It is based on the taxonomic description of a plant and its fit with its geographic range. It is listed with other species of the same genus in a flora or reference botanical work on the region studied, elimination of the other species was done and the archaeobotanist decides on a likely candidate from the remaining species based on the fit it has with other existing information.	*Dioscorea alata* *Dioscorea* elim. *Alata*
suffix 'type'	This is applied when the level of confidence is very low. It means that the shape of the specimen fits the geographic distribution, some of the morphological characters of a plant, and that it may also be in the relevant flora. It is used only at the family and genus level of determination.	*Celtis* sp. type
form shape description	None of the six listed types of information exists, but the archaeological specimen is distinctly a seed, a nut fragment or any other plant part. The material may then be described by its general shape i.e. spheroid, angular/triangular, oblong, etc. A number is attached based on its position chronologically with other seeds looked at and determined. Sometimes, under this categorization, a very tentative identification is added, mostly at the family level. This is to facilitate future researchers, with a better stock of references, to check the given hunch.	Roundish Spheroid Flattish Angular

Table 3. Determination system for seed remains (after Paz 2001: 71)

	No prefix	**Prob.**	**cf.**	**elim.**	**Suffix 'type'**	**Form/Shape description**
Reference collection	Y/?	Y/?	?	X	X	X
Image	Y/?	Y/?	?	X	X	X
Illustration	Y/?	Y/?	?	X	X	X
Floral citation	Y	Y	Y	Y	Y/?	X
Taxonomic details	Y	Y	Y	Y	Y/?	X
Geographic area	Y	Y	Y	Y	Y	X
Y= good match ?= questionable match X= not present						

12.3 Results

A total of 32 floated samples (two with three bags each and two with two bags) were analysed from 11 contexts. The sample volumes ranged from 1-15 litres. One out of 32 environmental samples did not have any botanical remains, while sample number ES 28 only had insect fragments and insect dung. Six samples (ES02, 03, 13, 17, 21, and 32) have non-botanical proxies and few fragments of charred wood. Whereas 24 samples (ES01, 04-12, 14-16, 18-20, 22, 24-27 & 29-31) have both botanical (seeds, seed coat, florets, and charred wood) and non-botanical remains. Most of the

determined botanical remains are untransformed whereas the *Ageratum conyzoides* L., and fragments of wood are all identified as transformed (charred).

The level of confidence for plant determination is from "family" to the "species" level. Most seeds determined are *Ageratum conyzoides* L. prob. *Bidens pilosa* L., both of family Asteraceae; *Cyperus* cf. *compressus* L. of family Cyperaceae (weed); *Phyllanthus amarus* Schum. & Thonn. of family Euphorbiaceae; *Oxalis corniculata* L. of family Oxalideae; different types of Poaceae (grass) such as *Paspalum dilatatum* Poir.; prob. *Portulaca oleraceae* of family Portulacaceae; cf. *Solanaceae* of family Solanum; *Boehmeria* cf. *platanifolia* of family Urticaceae; and cf. Verbanaceae (see Appendix 2). Some seeds are described based on their physical attributes since some did not match the illustration and other references. Descriptions given are Ellipsoid, Elongated, Flattish, Roundish, and Spheroid (see Appendix 3). Within the non-botanical remains mollusca, insect dung, insect fragments and a small earthenware sherd were identified.

Table 4. Record of botanical and non-botanical proxies

Sample No.	Trench	Grid	Context	Volume (litres)	No. of bags	Botanical	Non-Botanical
ES 01	TP1	H15	7	5	1	1 floret; 4 Poaceae	insect fragments
ES 02	TP1	H15	2	1	1	6 charred wood (~1-4mm²)	
ES 03	TP1	H15	2	1	1	1 charred wood (~1mm²)	
ES 04	TP2 WEX	G15	N-end 207 WEX	5	1	2 Flattish; 1 Ellipsoid; 1 Asteraceae; 1 Poaceae; 2 charred wood (~3-4mm²)	insect fragment; insect dung
ES 05	TP2 SEX	F15	S-end 207	5	1	1 *Oxalis corniculata*; 3 seed coat; 5 Poacaeae; 6 charred wood (~1-4 mm²); 1 Flattish; 1 *Phyllanthus amarus* Schum. & Thonn.; 1 Roundish black	insect dung
ES 06	TP2 EEX	G16	202B	5	1	3 cf. Verbanaceae; 7 charred wood (~3-6 mm²); 2 Poaceae; 2 Ateraceae; 1 Flattish; 1 *Cyperus* cf. *compressus* L.; *Phyllanthus amarus* Schum. & Thonn.; 3 Elongated	insect fragment; insect dung
ES 07	TP2 SEX-EEX	G15, F15, G16	202 B	5	1	6 *Phyllanthus amarus* Schum. & Thonn.; 1 cf. Amaranthaceae; 5 Poaceae; 6 charred wood (~1-5 mm²); 1 *Boehmeria* cf. *Platanifolia*; 11 Asteraceae 2 Flattish; 2 Elongated	earthenware sherd; insect fragment; insect dung
ES 08	TP2 EEX NEX	G16, G15	202 B	5	1	cf. *Verbenaceae*	insect dung
ES 09	TP1 EEX	H15	FILL OF G4 108	5	1	*Oxalis corniculata* L. *Portulaca oleraceae* L.; *Ageratum conyzoides* L. charred wood	insect dung

ES 10	TP1 (2x2M)	H15	110	5	1	27 charred wood; 10 seed coat; 1 Roundish; 31 cf. *Bidens pilosa* L. ; 12 Ellipsoid; 1 *Portulaca oleracea* L. (UnT); 12 Poaceae; 2 Flattish; 1 *Boehmeria* cf. longispica; 26 *Paspalum dilatatum* Poir.	insect fragment
ES 11	TP2 SEX-EEX	G16, F16	202B	15	3	cf Euphorbiacea; florets; prob. *Portulaca oleraceae* L.; 3 seed coat; 16 charred wood (~1-5mm²); stems with thorns; leaves; 2 Ellipsoid; 1 Roundish; 1 small roundish black; *Paspalum dilatatum* Poir.; ; 4 pro. Verbanaceae; 1 spheroid	insect fragment; insect dung
ES 12	TP2 ORIGINAL TP2	G15	202B	5	1	40 florets; 5 UnT prob. *Ageratum conyzoides* L.; 13 Poaceae; 6 charred wood; 1 cf. Solanaceae	insect fragment; mollusca
ES 13	TP1 SEX	H15	7	1	1	1 charred wood (>~1mm²)	
ES 14	TP2 NEX	G16	218	5	1	Prob. Typhaceae; flattish	
ES 15	TP2 NEX	G16, G15	218	5	1	cf Solanaceae; UnT prob. *Ageratum conyzoides* L.;	
ES 16	TP2-NEX	G15	218	5	1	11 charred wood; 2 spheroid; 4 *Ageratum conyzoides* L.; prob. *Vernonia cinerea* L.; 3 flattish	insect dung; insect fragments
ES 17	TP2 WEX	G15	224	5	1	charred wood	insect parts; insect dung
ES 18	TP2 WEX	G15	224			seed; charred wood (~1-3mm²); Poaceae; 8 *Oxalis corniculata*; 1 prob. *Portulaca oleraceae* L.	insect fragment
ES 19	TP2 NEX	G15	218	5	1	2 *Boehmeria* cf. p*latanifolia*; 3 charred wood (~2-3mm²); 1 seed coat	insect fragment
ES 20	TP2 EEX	G16	228	10	2	14 charred wood (~2-6mm²); floret; 1 cf. *Verbanaceae*	insect fragment; insect dung
ES 21	TP2 NEX	G16	218	2	1	8 charred wood (~1-10 mm²)	insect dung

ES 22	TP2 NEX	G16	218	2	1	1 *Bidens pilosa* L.; 2 Flattish; 8 charred wood (~2-5 mm²); floret	insect fragment; insect dung
ES 23	TP2 NEX	G15	218	2	1	7 charred wood (~2-5 mm²)	
ES 24	TP2 NEX	G15	218	2	1	14 charred wood (~2-6mm²); 1 Poaceae; 1 spheroid black; 1 Asteraceae	insect fragment
ES 25	TP2 NEX	G15	202 E	5	1	1 *Bidens pilosa* L.; 1 seed coat; 1 Poaceae	insect fragment
ES 26	TP2 NEX	G15	202 C	5	1	8 charred wood (~2-5 mm²); 1 flattish	insect fragment
ES 27	TP2 NEX	G15	202 C	5	1	3 Asteraceae; 5 charred wood (~1-6mm²); 1 small roundish black; 2 roundish (orangey in colour); 1 Ellipsoid; 1 prob. *Portulaca oleracea* L.; 1 Elongated	insect fragment
ES 28	TP2	G15	202 C	1	1	None	insect fragment; insect dung
ES 29	TP2 NEX	G15	202 C	2	1	16 charred wood (~1-6mm²) 2 Asteraceae	insect fragment; insect dung
ES 30	TP2 WEX	G15	202 C	5	1	10 charred wood (~1-5mm²); 1 Poaceae; 1 Flattish	insect fragment; insect dung
ES 31	TP2 WEX	G15	202 C	15	3	1 Asteraceae; 1 Verbanaceae; 2 Poaceae; 16 charred wood (~2-6mm²); 1 prob. *Verbanaceae; floret*	insect fragment; insect dung
ES 32	TP2 (2x2)	G15	202 B	1	1	4 charred wood (2-5 mm²)	insect fragment

12.4 Concluding remarks

The macrobotanical assemblage recovered from the materials examined from Kau Liu-Tin Sam, San Tau, North Lantau reveals that most of the remains identified are modern and therefore intrusions. Most likely, the samples were contaminated during processing. No evidence for ancient macro-plant remains that might have been utilised for ritual purposes were identified. The number and size of charred wood fragments are too small to assess their significance in relation to cultural activity in the past. However, wood identification might be useful in determining the probable utilisation and preference of particular wood species available in the area.

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PART 5: CONCLUSIONS & RECOMMENDATIONS

13. Conclusions

13.1 Introduction

The project set out to address a number of research objectives and these have in large part been successfully achieved and are discussed below.

13.2 Testing GPR in Hong Kong backbeach site conditions

The GPR survey showed that the technique is effective when used on backbeach sites that have good contrasts between the sandy background and archaeological deposits. Exactly which elements of the archaeological resource were being detected by the GPR has still to be definitively established but it seems clear that the general patterning of archaeological remains is detectable as lower intensity responses, while burials with significant metalwork grave goods provide a very striking signature in the data plot. The initial comparative analysis of archaeological and geophysical data discussed above identified good correlations between anomaly type, shape and intensity and the positions of cut features and metallic grave goods. Such relationships can be used as a predictive tool in the analysis and interpretation of GPR responses across the remainder of the surveyed area, which can then be tested in future research. Many questions remain, for example surrounding the lack of response of some suspected grave features partially identified in plan and section, which offered little contrast with the surrounding backbeach material. Suggestions for future GPR research and application at KL-TS are provided below under 'Recommendations'.

13.3 Establishing the fuller extent & character of Tang-Song deposits

Based on the GPR survey and excavation results, it seems likely that the Tang dynasty cemetery extends across the entire length and width of the surveyed area – and into adjoining areas to the south, east and west. In contrast, the previously identified well-defined Song horizon seems to be absent at the eastern end of the site, although some Song-Ming pottery was recovered there, while TP3 has good evidence for better preservation of Song-Ming deposits (see Appendix 1). The present geophysical survey and excavation have also more fully defined the character of Tang dynasty funerary activity and revealed some interesting features of the burial tradition, in particular, the inclusion of pots smashed under stones within several graves. There are also clear indications of multiple phases of Tang dynasty burials using a number of different orientations, with the eight fairly clearly identified burials having a majority (four) laid out N-S (G2, G3, G4 & G8), followed by three NW-SE (G1, G7 & G9), and one E-W (G6). The only reasonably clear evidence for intercutting is provided by G7 cutting into G3 and G2 cutting into G6, but the grave goods from all graves seem of similar date.

The character and diversity of the grave assemblages seems to indicate the use of the cemetery by groups of different social status and identity and, in particular, there are suggestion of both military and civilian use and a general status somewhat above that of the ordinary commoner. Ongoing research on the existing data, augmented by fieldwork, should further clarify the nature and significance of this unique and important site.

The previous identification of the two graves discovered in 1997 as "early Tang" (AMO 1998) is not reflected in the present findings where the pottery and bronze buckles, strap ends and *kwa* seem to suggest a main focus of activity in the mid-late Tang dynasty, not earlier. Moreover, the present

pottery and bronze belt fittings appear to be more-or-less identical to those shown in the 1998 report so the early dating suggested previously perhaps requires review.

13.4 In search of prehistoric KL-TS

The lack of prehistoric remains previously reported on the KL-TS backbeach was further confirmed by the present project; however, the pre-Tang backbeach deposits (107) and (203) were only tested in two small sondages in TP1-EEX and TP2-NEX respectively. Small quantities of prehistoric pottery, mostly of apparent late Neolithic date, were found intentionally incorporated in Tang grave G2, but the remaining occasional sherds were found as residual material. It is possible that a deeply-buried prehistoric horizon remains to be found underlying the Tang cemetery; however, the main focus of this project was the earlier historical funerary activity, and further attempts to 'find prehistoric KL-TS' will have to wait until later seasons of fieldwork.

13.5 Environmental sampling and information retrieval

Information retrieval was maximised throughout the excavations by the use of 0.5cm dry sieving (20% of general cultural layers, 100% of sealed contexts), which yielded a good crop of artefacts that would otherwise have been missed. I addition, a total of 32 flotation samples were taken from graves and pits as well as the fills of several pottery grave goods. The flotation testing proved inconclusive as far as botanical remains were concerned – the vast majority of those recovered are thought to be relatively modern seeds somehow incorporated into ancient samples. That said, the wet sieving of the flot residues yielded some important finds such as copper alloy *kwa* found in the soil inside a pottery vessel in G6.

13.6 Final comments

In overview the site is confirmed to be a Tang dynasty cemetery of significant extent and with multiple phases of use. The burial ground appears to have been used by military and civilian and by people of some wealth with access to good quality ceramics, belt fittings and ornaments, and iron weapons. At present, therefore, it seems highly unlikely that the KL-TS backbeach cemetery served local indigenous needs but, rather, was a burial ground with maritime connections used by soldiers, travellers and traders passing through or stationed locally – but with cultural connections to the north.

14. Recommendations

14.1 Further analysis of the 2011 material

14.1.1 Pottery

As a cemetery site with many pottery grave goods, KL-TS offers an excellent opportunity to carry out a more thorough stylistic and scientific analysis of the material found on site. Time prevents such work at present but data already gathered, such as the percentage rim EVE (estimated vessel equivalent) of each pottery vessel with surviving rim sherds, will permit more scientific and statistically supportable quantification and analysis of the ceramic material in future. Moreover, although virtually all of the pottery is of Guangdong manufacture, more detailed study should allow a greater proportion of the material to be ascribed to particular kilns or production areas – thus maybe revealing some insights into local trade patterns. Several of the smaller pottery bowls and cups produced a very aromatic 'herbal' smell when the soil was removed for flotation. There thus might be some profit in carrying out residue analysis on some of the pottery grave goods.

14.1.2 Coins

The Tang coins are all notionally of *Kaiyuan Tongbao* type but most are in a condition that at present prevents proper identification and analysis. Many of the coins seem to have attracted corrosion products from nearby iron objects and may in fact have positively contributed to the relatively good level of preservation of many larger iron objects. Thorough cleaning, conservation and study are needed before these coins can make their fuller contribution to the cemetery's story.

14.1.3 Copper alloy and lead-silver objects

When shown to a local specialist and scholar, the copper alloy and lead-silver objects were described as an important and rare collection in the context of Hong Kong and Guangdong archaeology. The quality of the copper alloy strap-ends, buckles and *kwa* is considered to be too good to be of local manufacture and they are probably imports from the north, either as trade goods or brought south on the clothing of individuals buried at KL-TS. It is strongly recommended that the entire collection of non-ferrous objects be tested using XRF (X-Ray fluorescence) to confirm the alloy compositions and to definitively establish whether the groupings apparent to the naked eye are reflected chemically in the objects. Further research into Chinese site assemblages would hopefully provide further comparanda – thereby facilitating a more balanced appreciation of the objects in their wider socio-historical context.

14.1.4 Ironwork

More detailed study of the iron objects, their metallurgy, form and mode of construction, functional and technological attributes should help clarify whether there are meaningful sub-groupings within the material. Such sub-groupings might, for example, reflect technological change through time or could be indicators of groups of different status, gender or roles in society. It is strongly suggested that the entire assemblage of identifiable objects (e.g. blades, adze, axe, harpoon, bars and spikes) should be conserved, X-Rayed and compositionally assessed without undue delay. Such additional research might also be able to address more specific questions, for example, concerning the date of the metalwork assemblage found in G5. Given the regional significance of the site, it is hoped that a Mainland Chinese iron weapons specialist, such as the eminent scholar Yang Hung, might take an interest in studying the material.

14.1.5 Spatial analysis of archaeological remains and GPR responses

Although some basic analysis of the relationships between the archaeological remains and GPR responses has been attempted above, there is much more that could be done given more time. For instance, the investment of more time in experimentation with the settings of the GPR analytical software should allow identification of more subtle detail in the results, which could ultimately be of great interpretative value. In addition to the general comparison of excavated features and GPR anomalies, it would be particularly interesting to plot the 3-D locations of all metal finds – including the many copper alloy belt fittings, coins and smaller iron objects to see how they are reflected in the GPR data at different depths. Such comparative analyses are a long-term research interest for the writer, and his co-researchers, and work will therefore continue on the data beyond the submission of this report and the associated archives.

14.2 Suggested directions for future research at San Tau

14.2.1 GPR

The existing GPR survey provides a baseline geophysical data set for the site, which can then form the basis for future geophysical and more intrusive forms of archaeological research. The general effectiveness of the GPR, when used at a 1m survey interval in N-S and E-W directions, has been proven; however, further testing and experimentation is needed. It would arguably be worthwhile

carrying out a further, more intensive, GPR survey at KL-TS over a smaller area, within which higher data densities could be gathered using a 0.5m, or even 0.25m, survey interval in both directions. Such an intensity of readings is probably impractical in general commercial archaeological application but is justifiable in a research context. Moreover, the data thus generated should be of a sufficiently high resolution to permit a much clearer definition of sub-surface remains – even down to individual artefacts or artefact clusters, which can then be tested using well-targeted excavation. Added to that, such an approach also has the potential to generate a greater understanding of the relationships between GPR responses and archaeological remains – that can then be used as a predictive tool in future GPR work on sites with similar conditions.

14.2.2 Excavation

Some important lessons were learned in this first campaign of fieldwork on the KL-TS cemetery. Firstly, the concept of starting small and expanding into wider area excavation is poorly suited to the site conditions and archaeological resource in question. To elaborate, three main factors argue against such an approach: 1) the nature and depth of disturbance evidenced on site tends to have blurred context boundaries, 2) the size of the graves involved means that they inevitably extend horizontally beyond the l.o.e. of small test pits in one or more directions, and 3) the degree of intercutting of Tang-Song features further hinders comprehension in plan. On reflection, if more trust had been placed in the GPR results, particularly with respect to the good size correlations between geophysical anomalies and features in the ground, then 2x2m test pits would not have been used at all. However, the uncertainty attached to GPR's performance led to a mindset of 'test small first and then expand' which, with the benefit of hindsight, was the wrong choice – we live and learn. The excavation provided an opportunity for 'ground truthing' of the GPR results, which now gives us great confidence in the technique's results and removes the need to start small in future excavations. That said, the complexity and richness of the remains offer an effective check to over-confidence with respect to trench size, and an initial excavation based on a 3x3m or, perhaps better still, 4x4m area would seem about right. What one also has to consider in the context of the Society's subvention project is the need for sufficient area to accommodate larger numbers of relatively inexperienced volunteers at weekends, without the site then becoming too unwieldy for the smaller, more professional archaeological teams, working during the week. This is no easy task when the archaeology is rich and complex, and therefore difficult to excavate, define and interpret – but the site therefore provides a fascinating challenge.

In terms of future areas to explore, it would seem sensible to work westward from TP2-TP4 on the rearward half of the backbeach. Thereby avoiding the complication provided by very dry, loose and unstable sediments as encountered in TP1 and continuing the exploration of what appears in the GPR data (and in the TP3 and Mott Connell excavations) to be an interesting and productive area of the site. The presence of Song-Ming material in TP3 and the Mott Connell trench would also provide an opportunity to gain a better understanding of Tang-Ming site development.

PART 6: REFERENCES

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PART 7: SUPPORTING ILLUSTRATIONS

16. Figures

Figure 1: Location of San Tau Site of Archaeological Interest

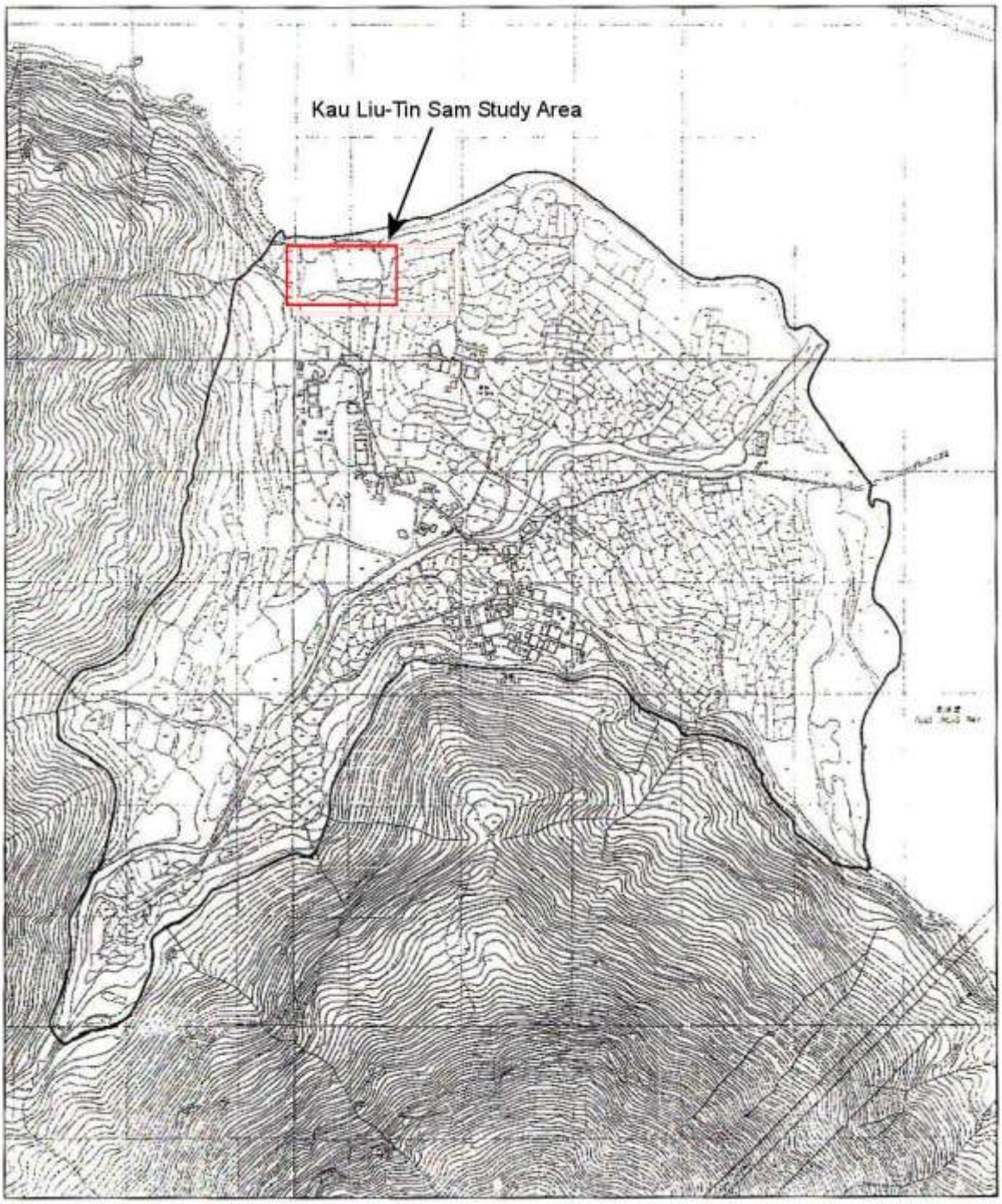


Figure 2: San Tau Site of Archaeological Interest (black outline) with Kau Liu-Tin Sam study area (red outline)

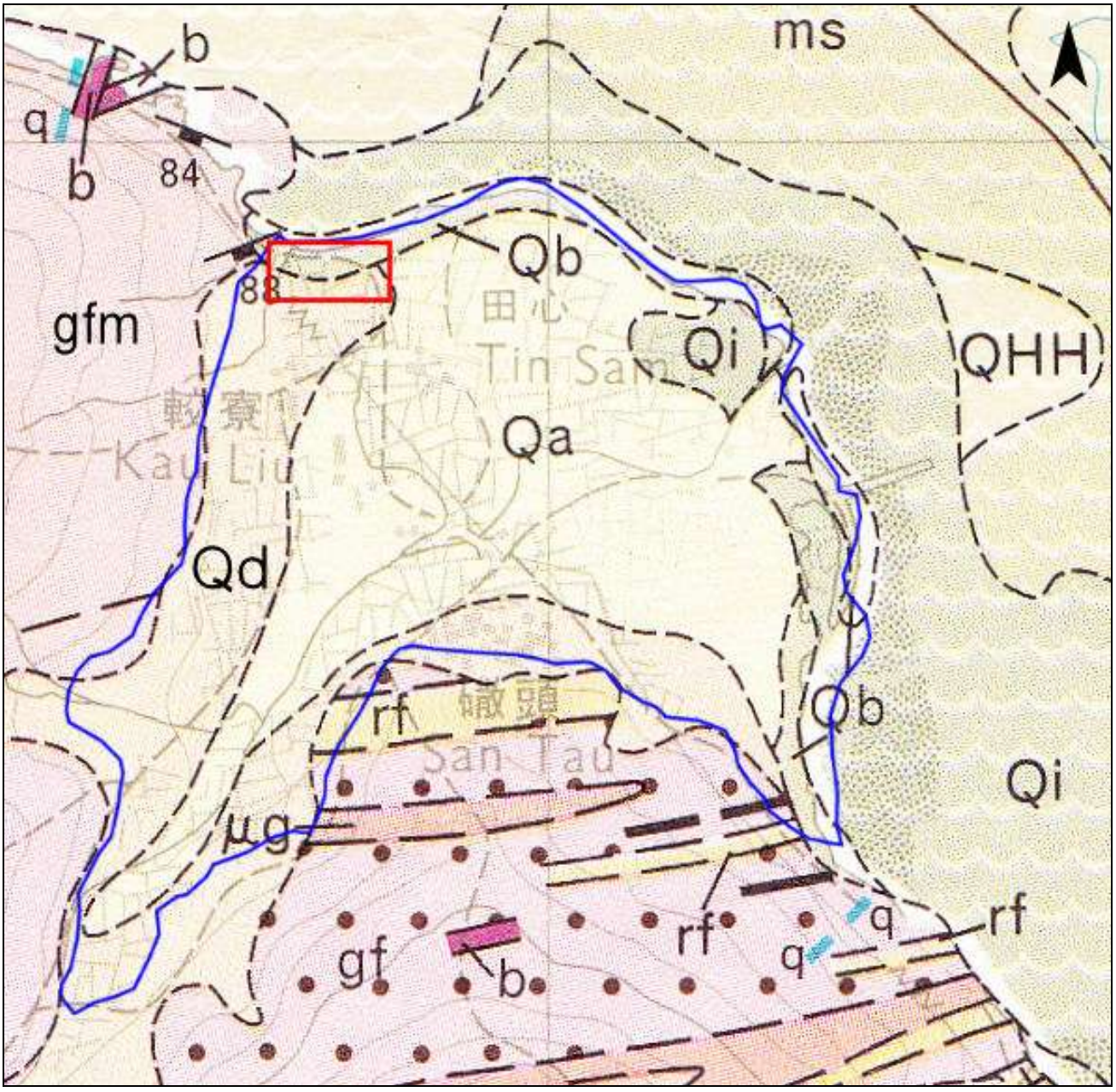


Figure 3: Study area geology with San Tau Site of Archaeological Interest (blue outline) and Kau Liu-Tin Sam study area in red. Study area geology comprises: Qb = beach deposits including backbeach, Qd = slope debris, Qa = alluvium. For scale, study area is 50 x 100m in size; north as indicated. GEO (1994); © Hong Kong SAR Government

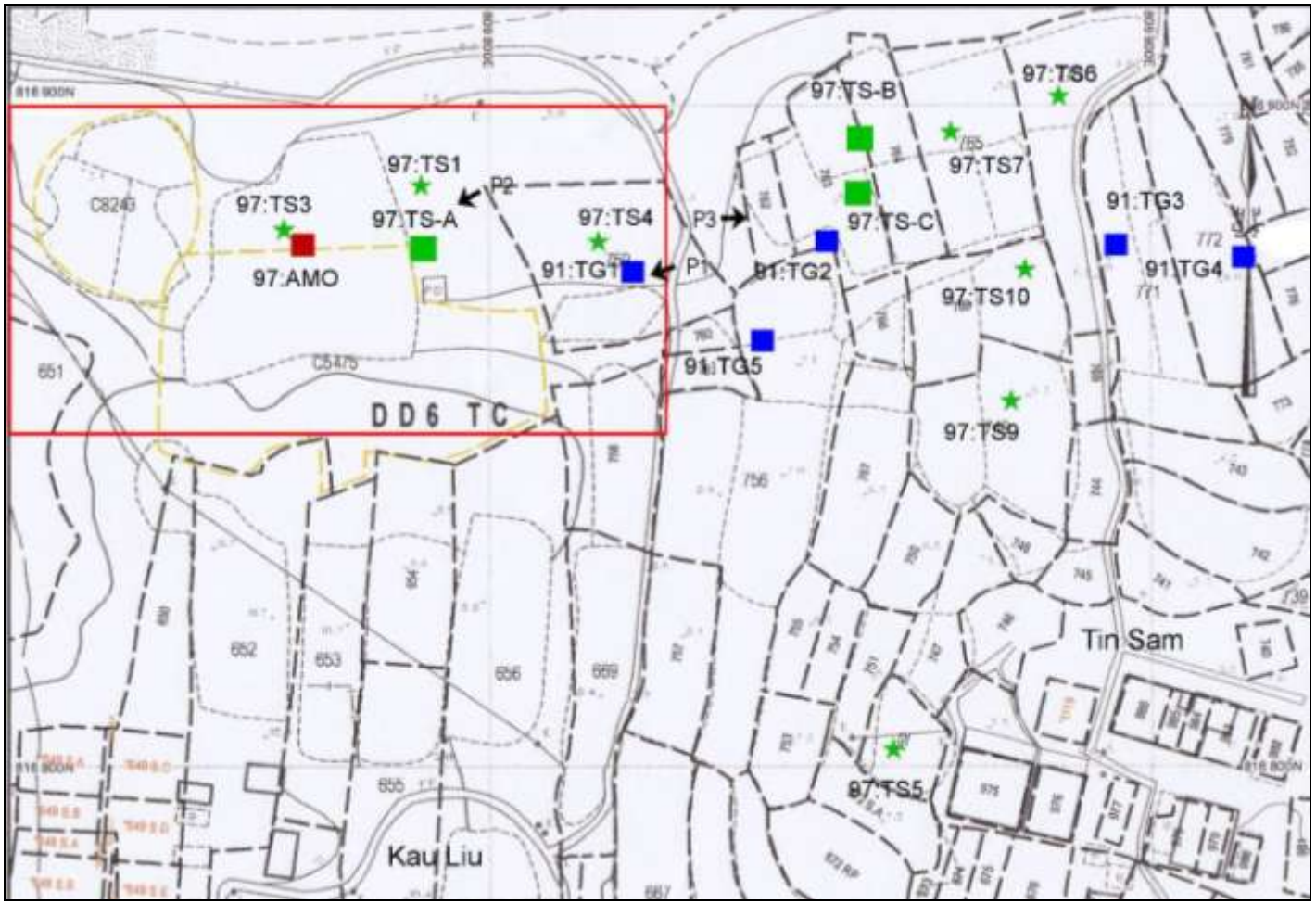


Figure 4: 1:1000 map showing study area boundary & locations of previous interventions. Key: squares = test pits; stars = small diameter probes; P1 to P3 = Plate locations; colour codes: blue = CUHK (1991), green = Mott Connell (1997), red = AMO 2nd TWS (1997-8). Land ownership: private lots (thick black dashed outline) & Government Land (labelled "DD6 TC" with thick yellowish brown dashed outline). For scale Study Area is 50 x 100m in size, north as indicated. Lands Department (2011); © Hong Kong SAR Government

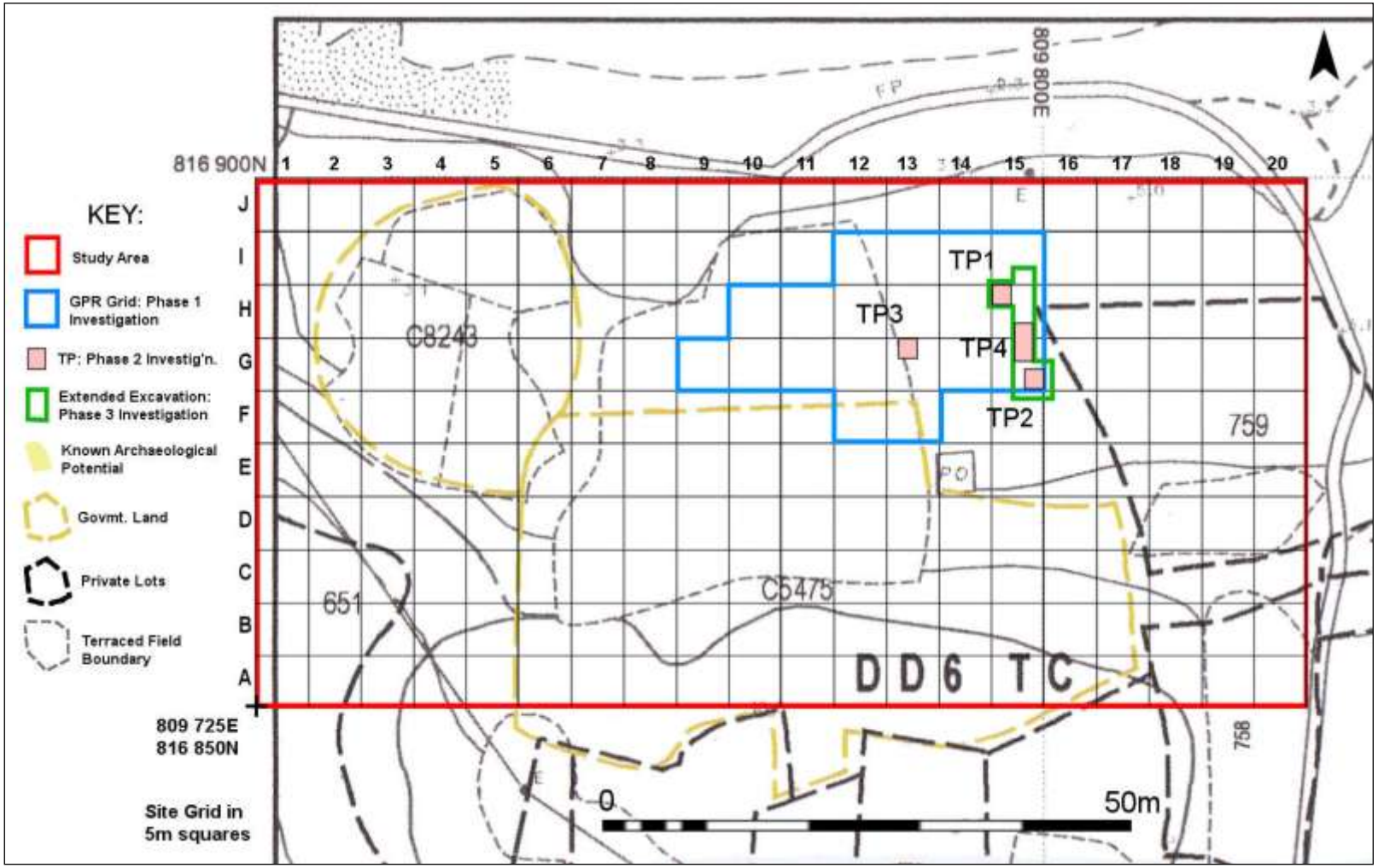


Figure 5: 1:1000 map showing study area (red outline) overlain with 5m grid for reference. Stage 1 GPR survey grids outlined in blue. Stage 2 test pits shown in pink, and extended excavation area outlined in green. Scale as shown. North as indicated. Map data: Lands Department (2011);

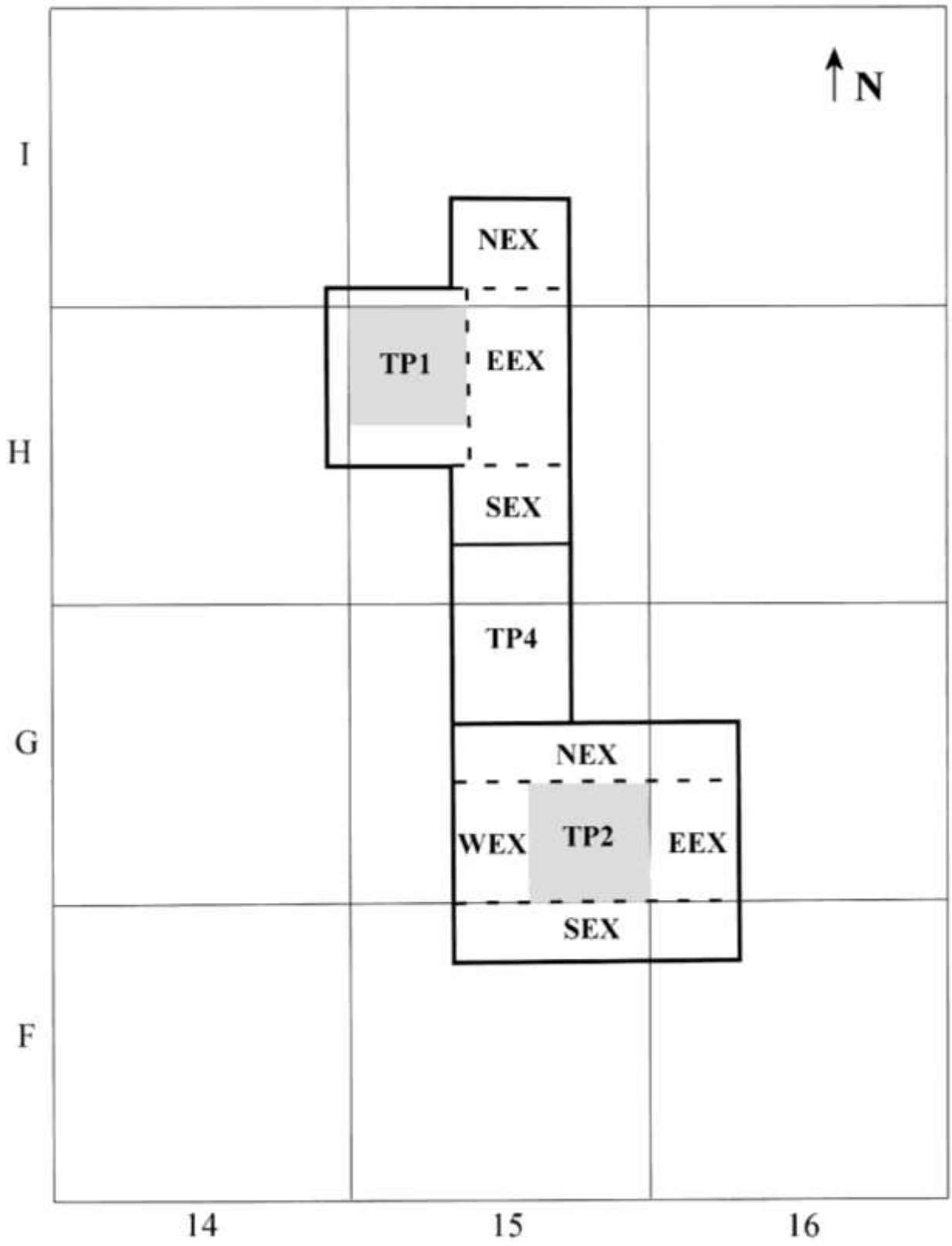


Figure 6 Area ‘A’ trench map showing TPs, extensions & 5m grid squares

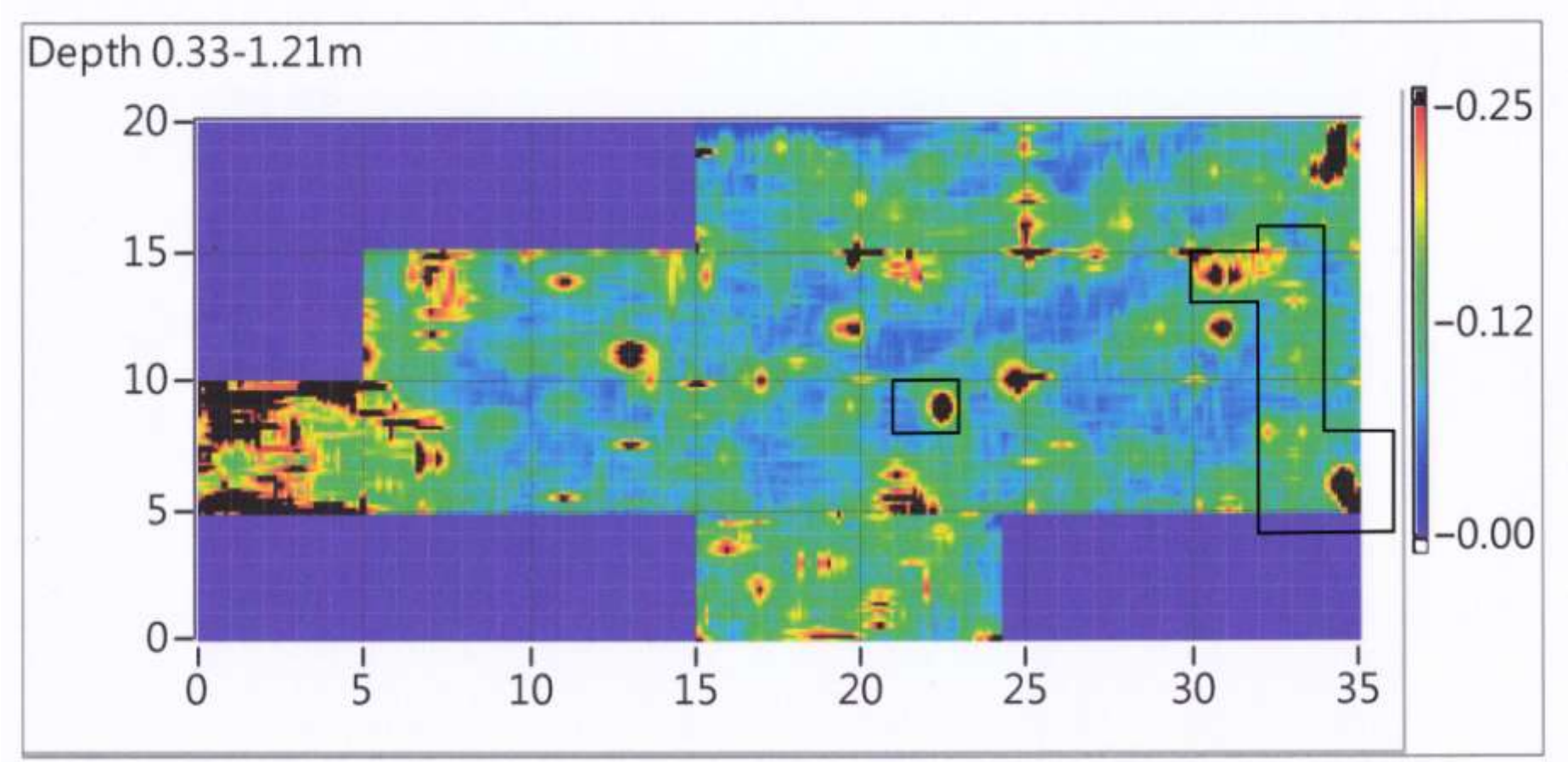


Figure 7: GPR results for general depth range covering 0.33 to 1.21m below surface. Blue colours low archaeological potential, yellows, reds and black show areas with archaeological potential, although large area of black to south west is most likely debris flow deposits at the base of the hill slope in that area. Scales are in metres – the grids are 5m squares but the data have been 'stretched' in the E-W direction for clarity.
(GPR data kindly provided by Dr Wallace Lai).

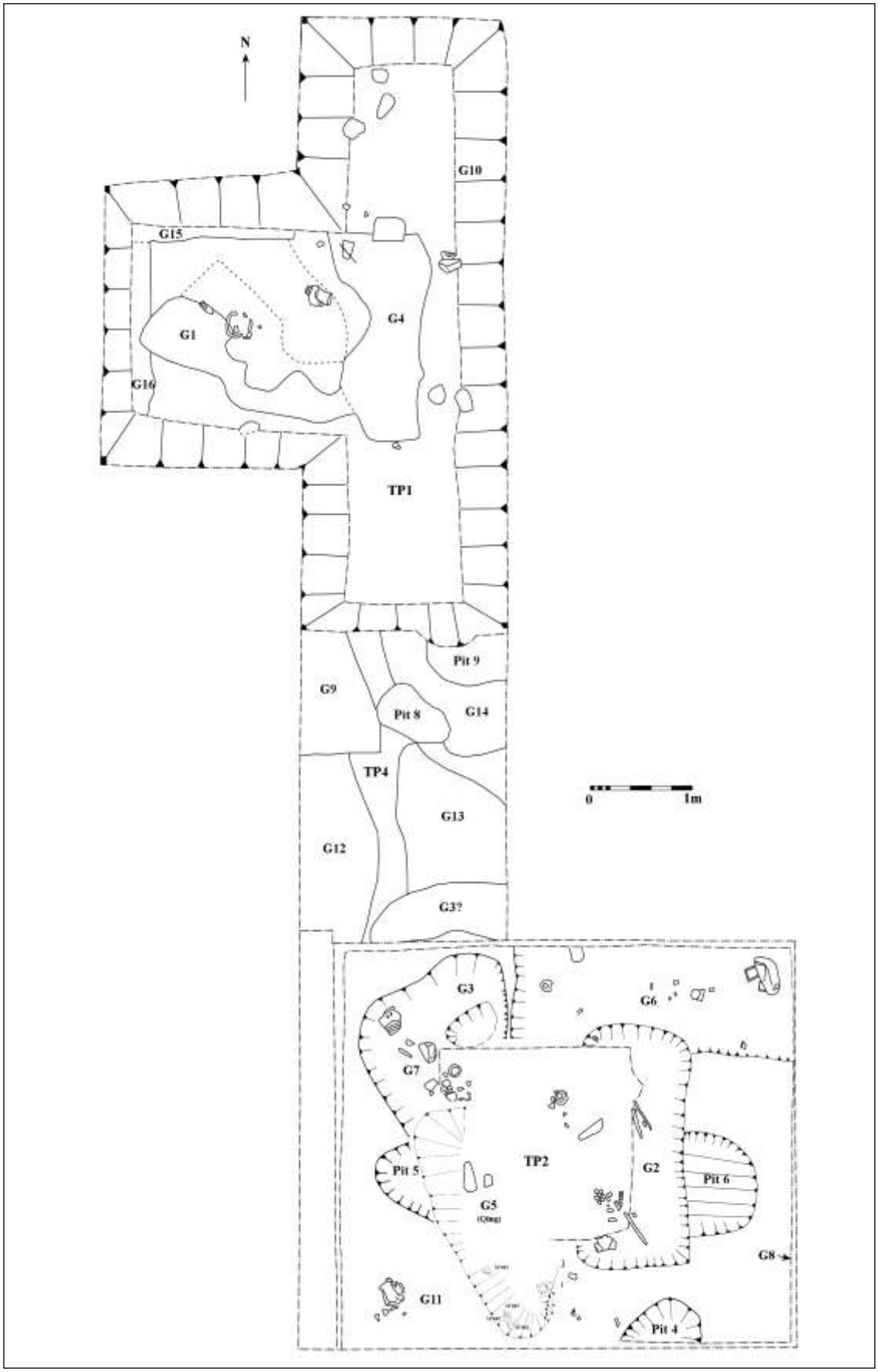


Figure 8: Overall plan of features of Tang dynasty date (plus Qing Grave G5)

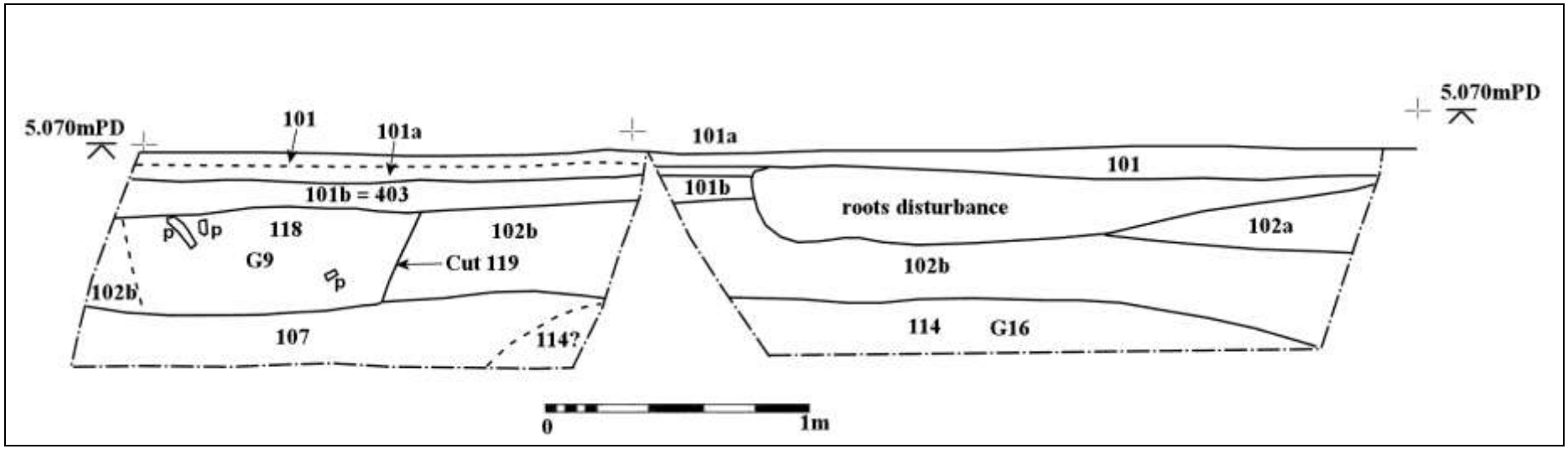


Figure 9: TP1(2x2) NFS (to left) and EFS (to right)

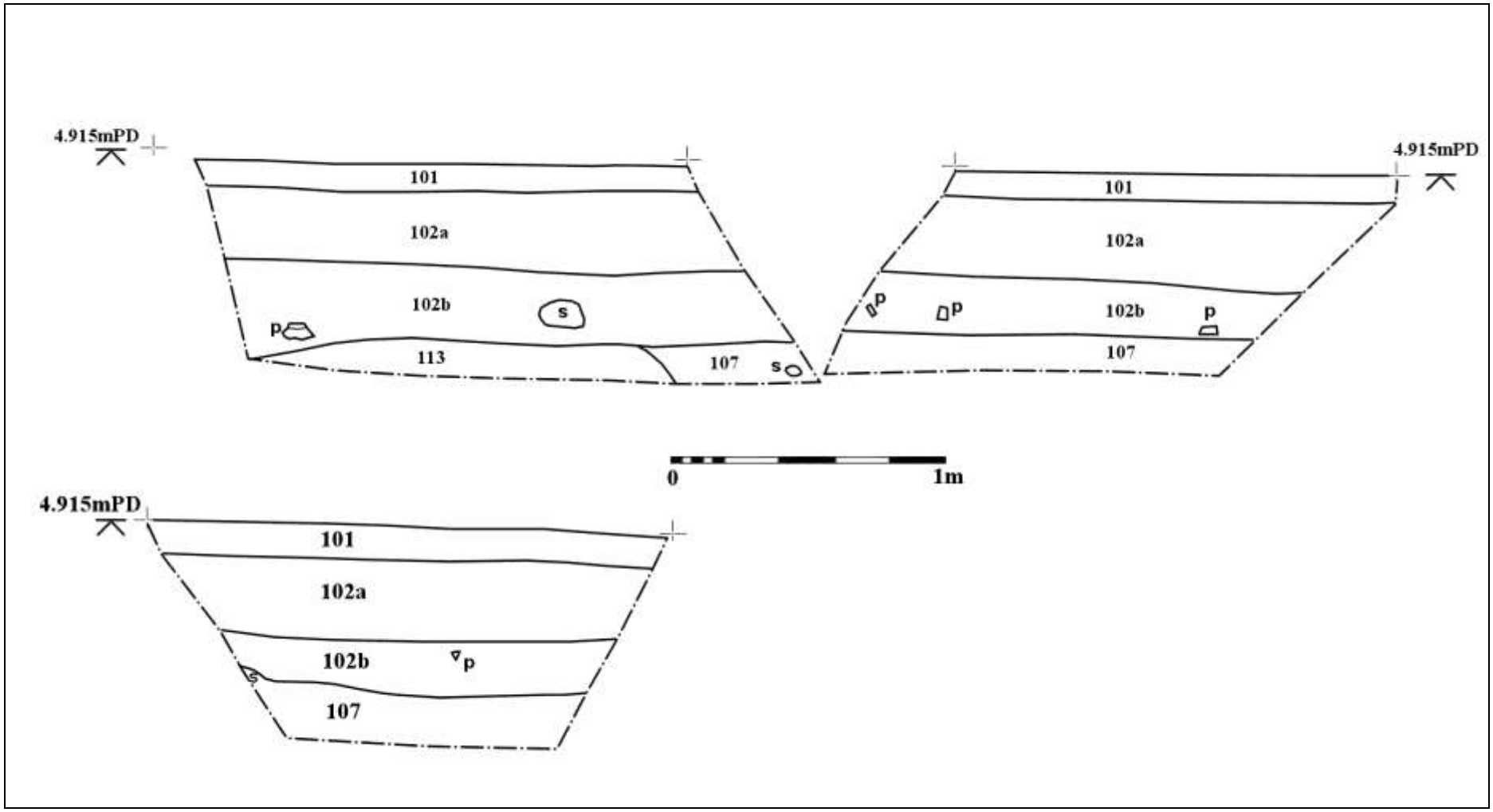


Figure 10: TP1(2x2) SFS (top left); TP1-NEX EFS (top right) & SFS (above left)

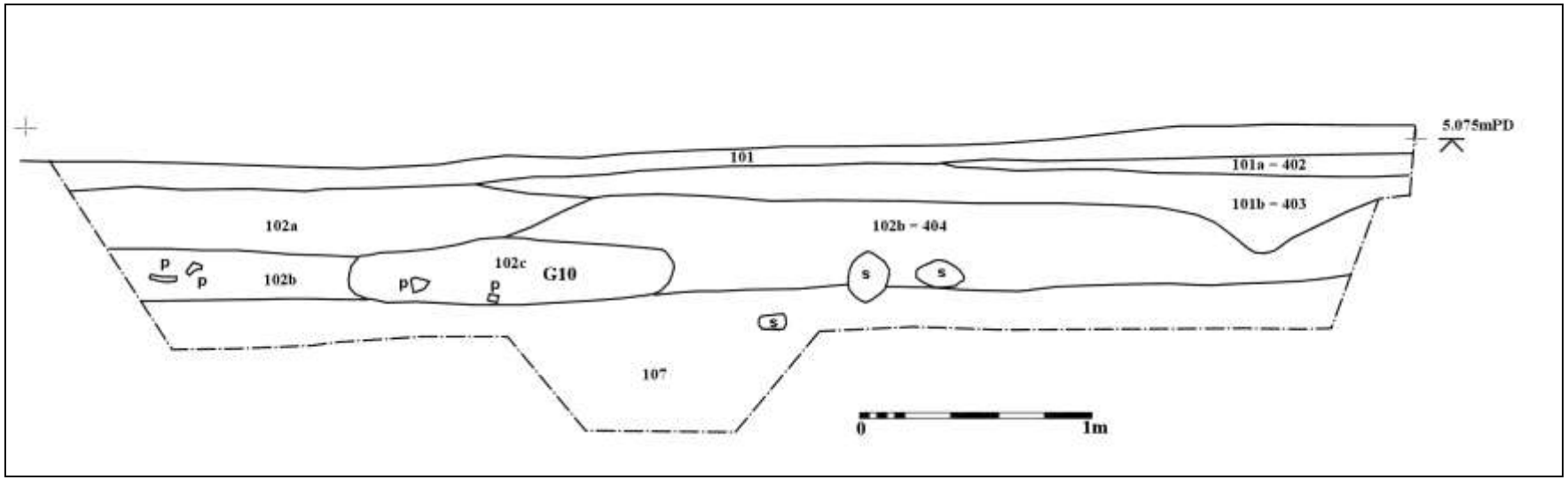


Figure 11: TP1-NEX, EEX & SEX WFS

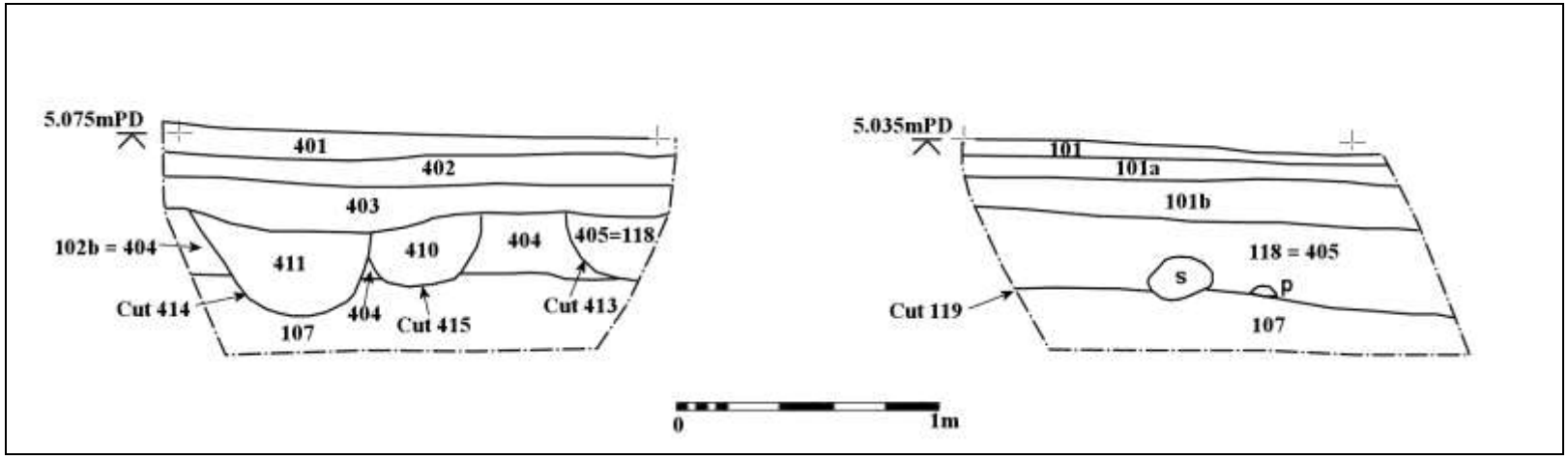


Figure 12: TP1-SEX NFS (left) showing features in TP4; TP-SEX EFS (right) showing Grave G8 (118) in section

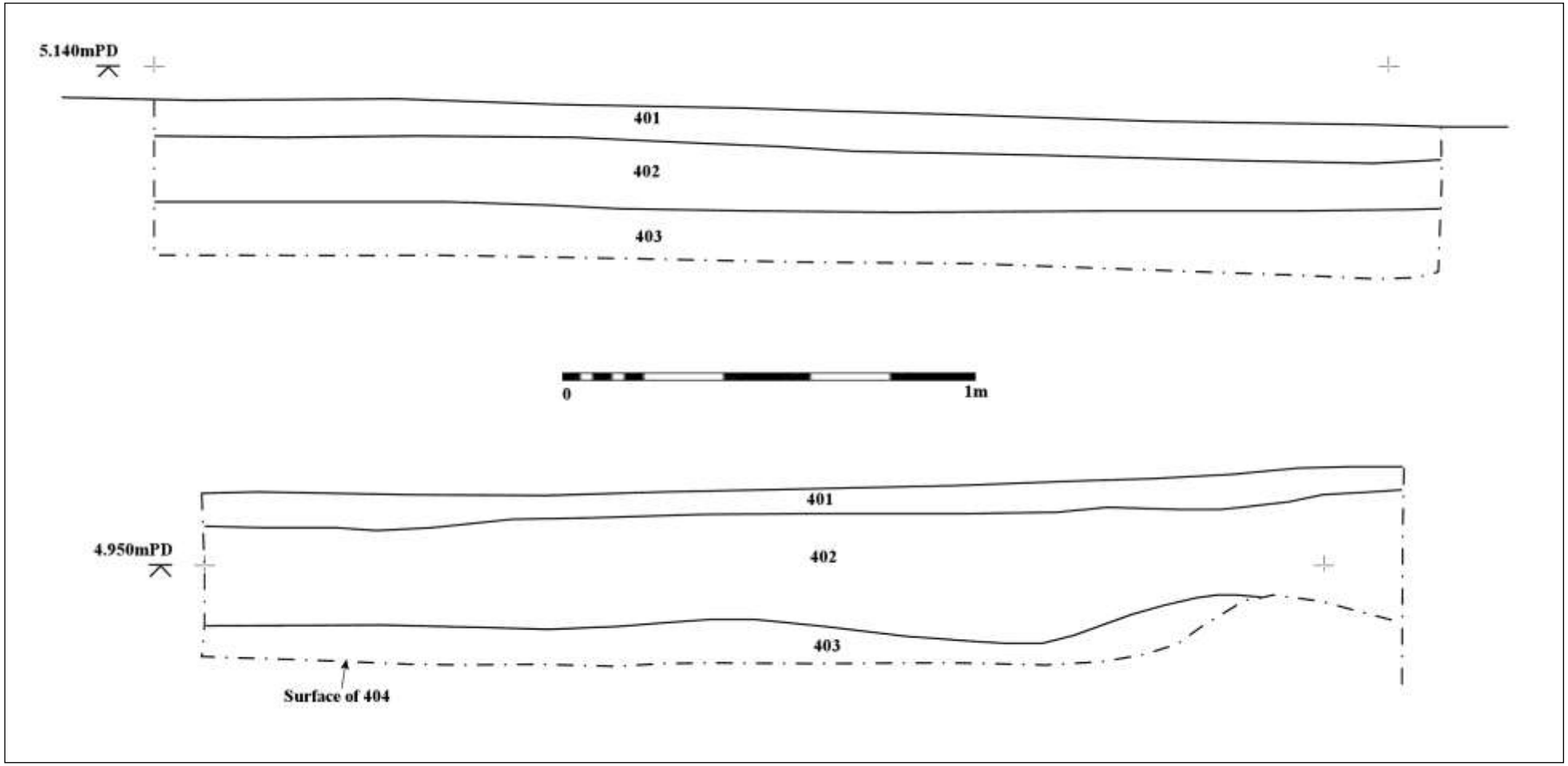


Figure 13: TP4 WFS (top) and EFS (bottom)

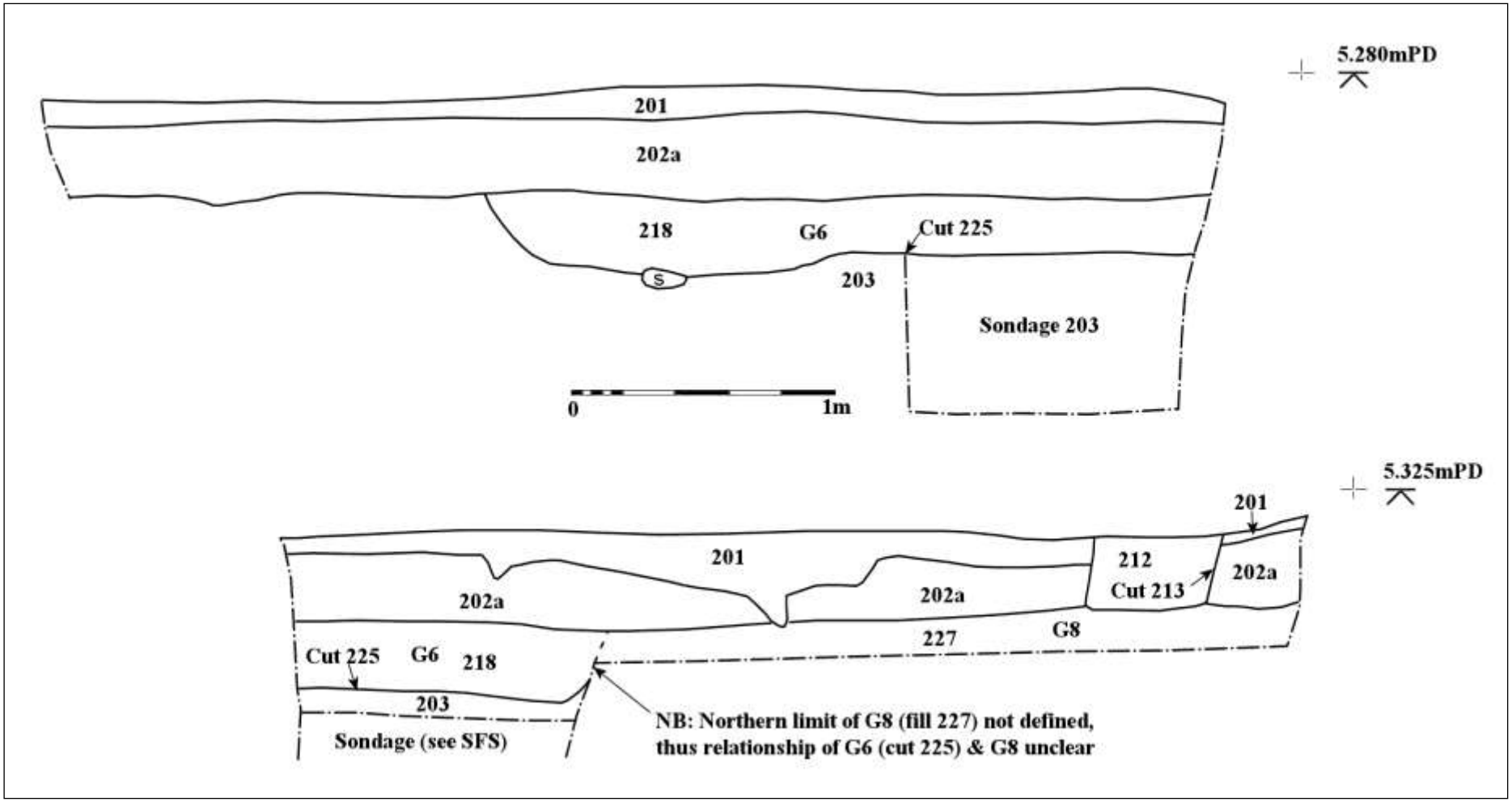


Figure 14: TP2-NEX SFS (top) & TP2-EEX WFS (bottom)

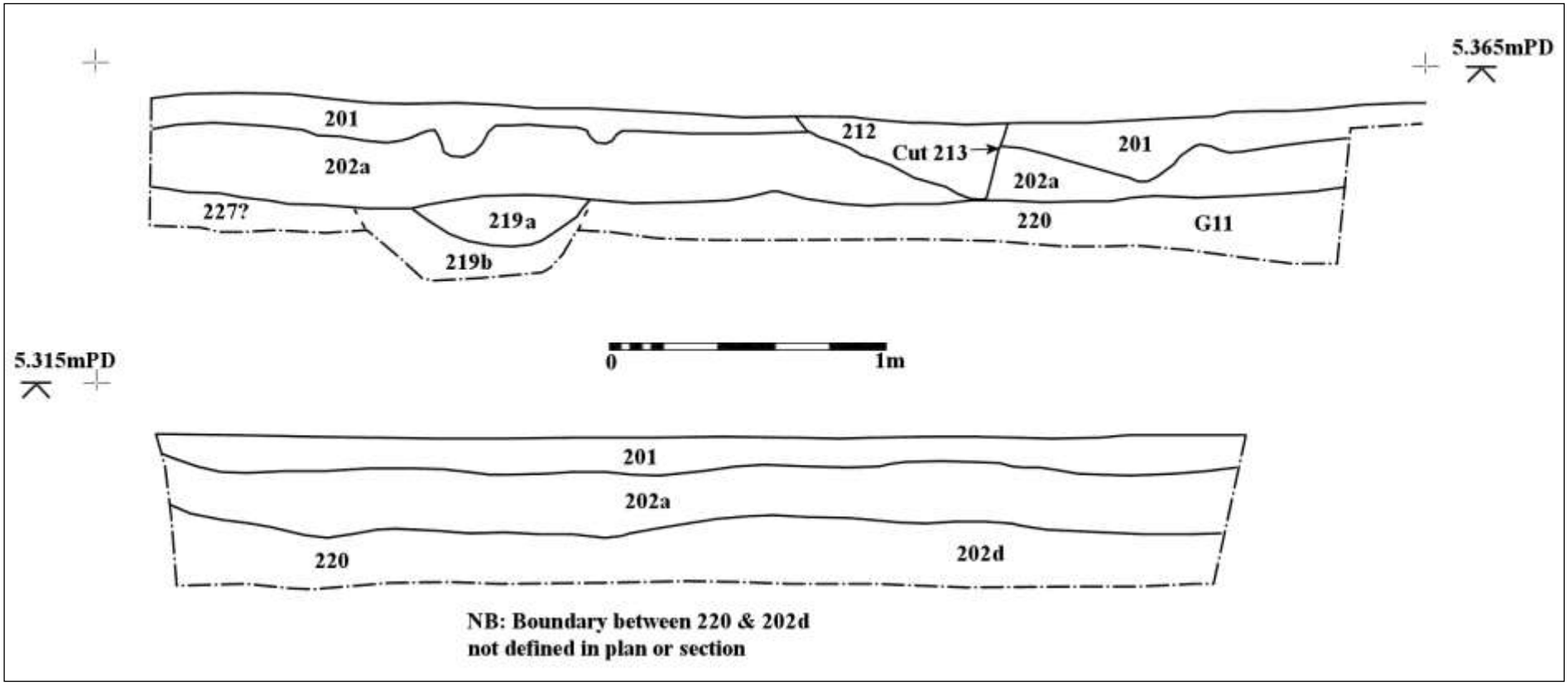


Figure 15: TP2-SEX NFS (top) & TP2-WEX EFS (bottom)

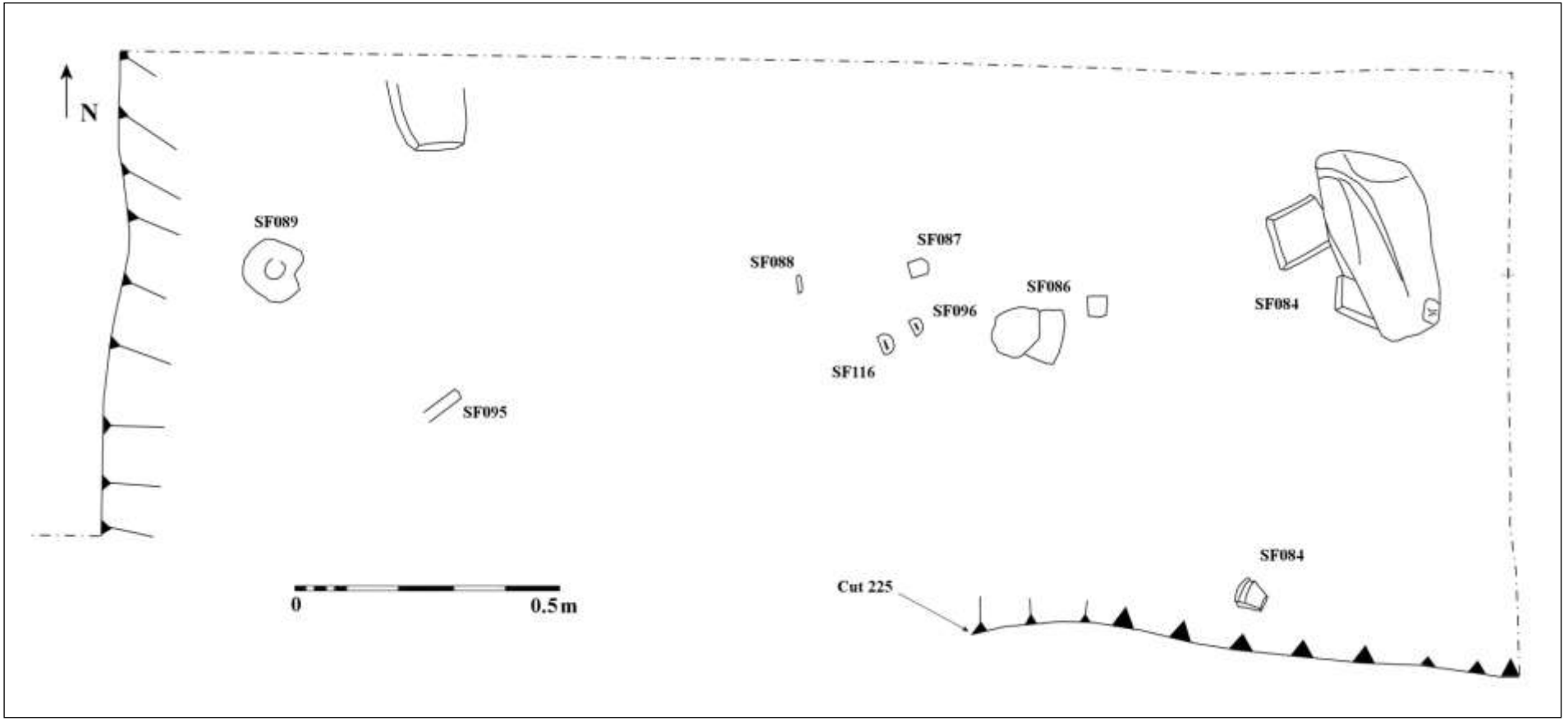


Figure 16: TP2-NEX Plan of G6 (as excavated)

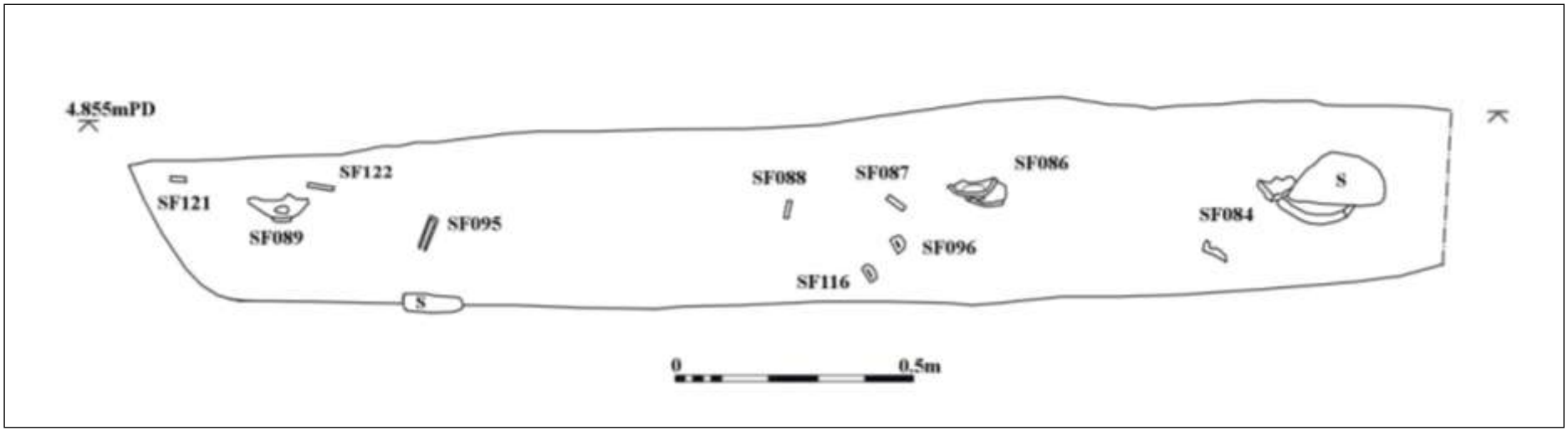


Figure 17: TP2-NEX Profile of G6 showing relative positions of grave goods – looking north

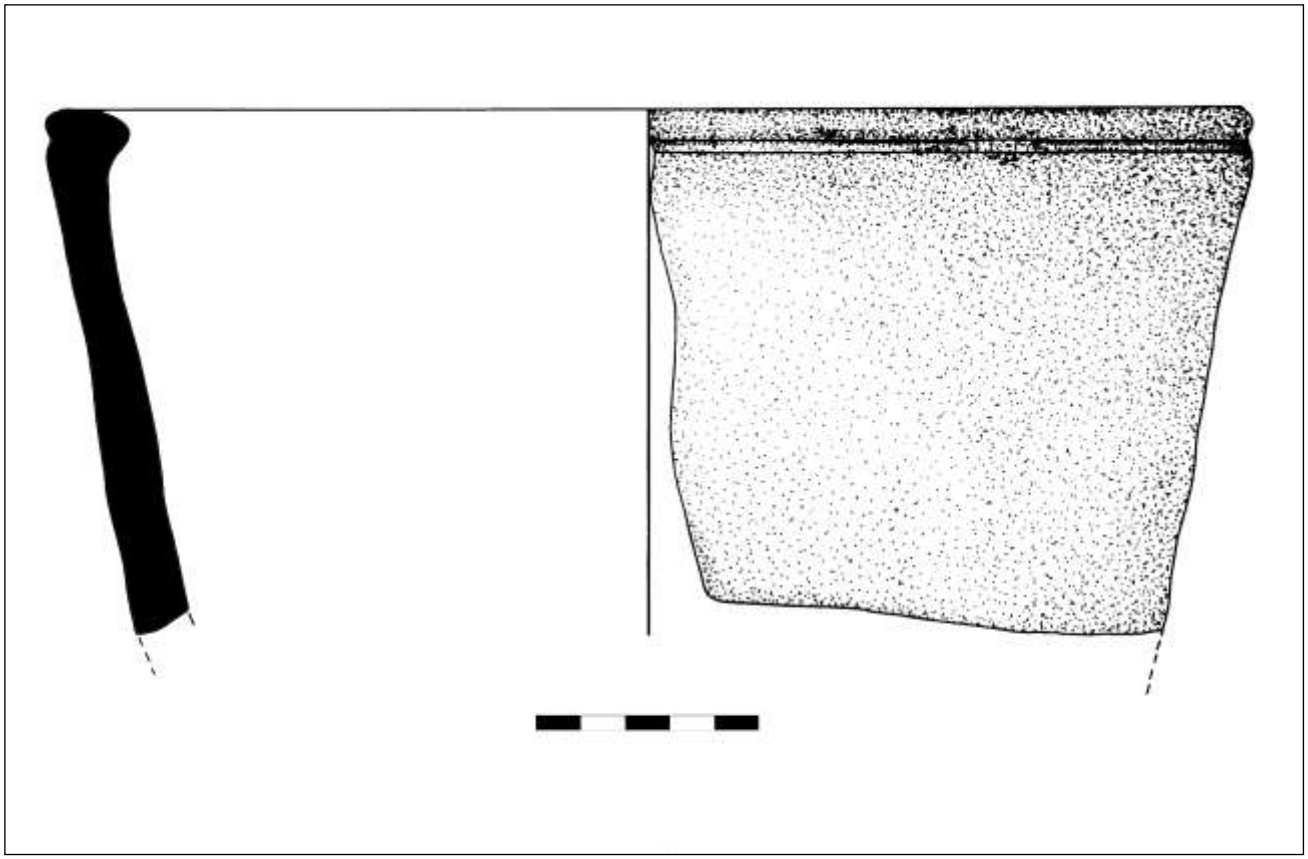


Figure 18: AN10 (SF084) Large pinkish-purple slipped coarse basin from Grave G6

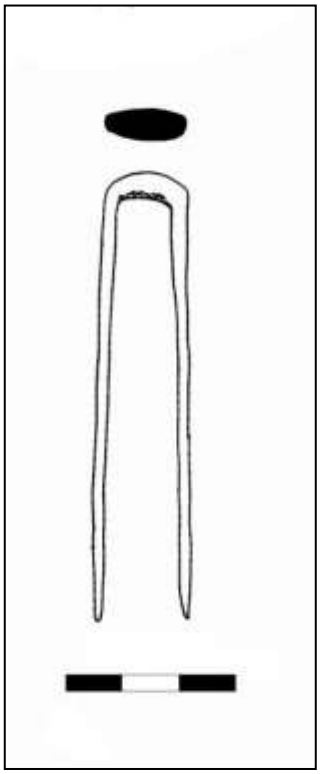


Figure 19: SF095 silver hairpin from Grave G6 (cm scale)

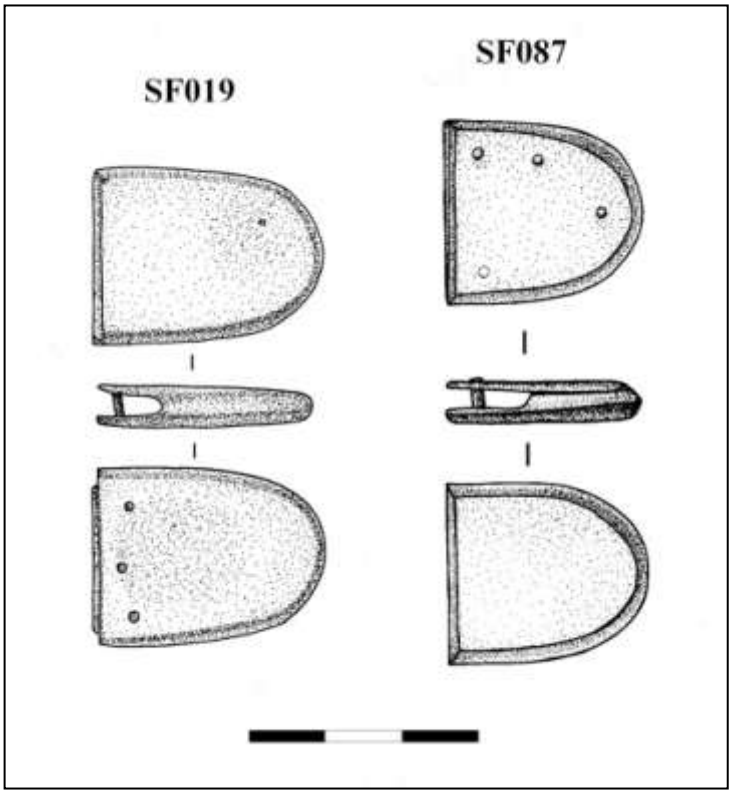


Figure 20: Copper alloy belt strap-ends (SF087 from Grave G6) (cm scale)

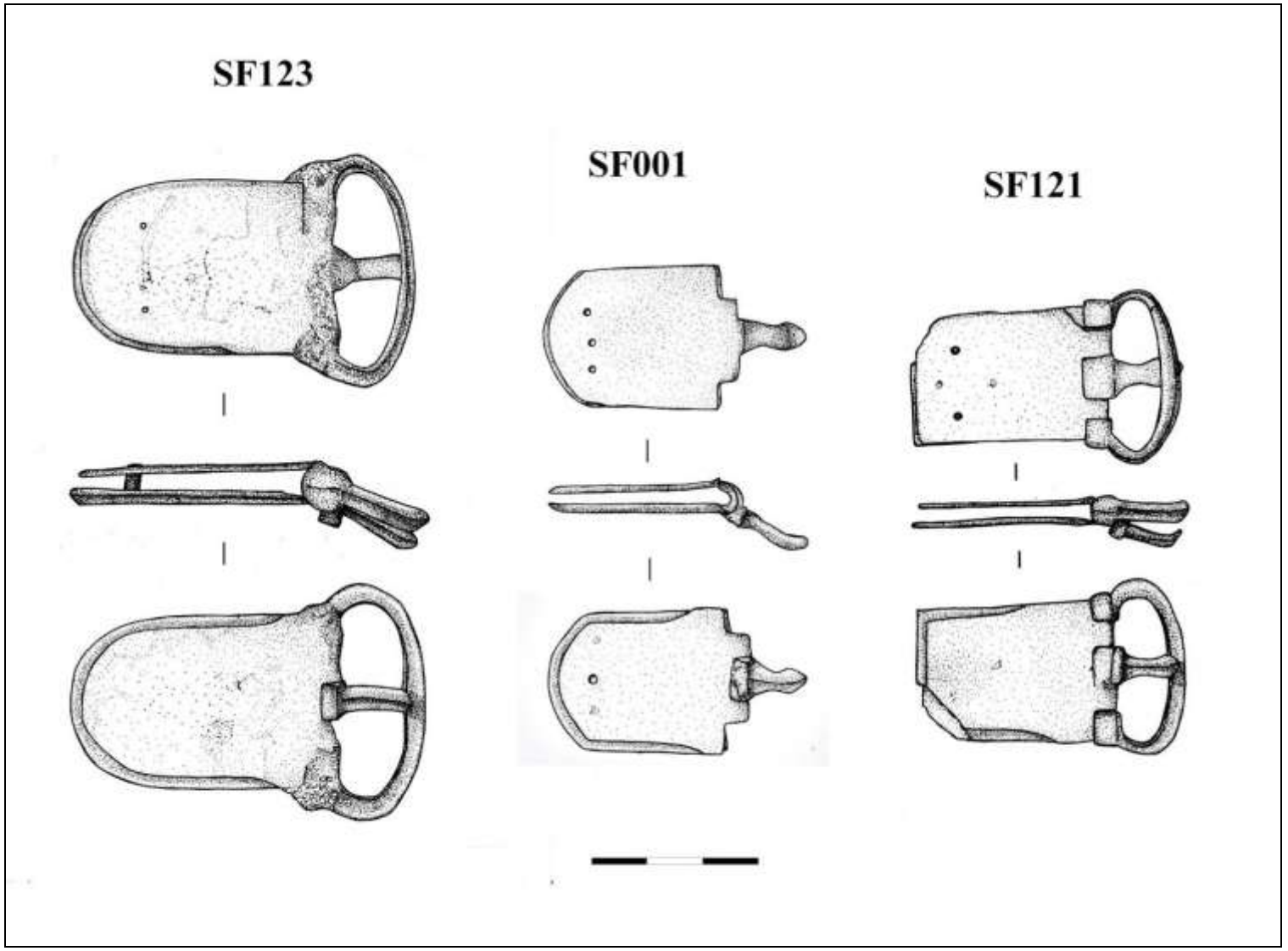


Figure 21: Copper alloy belt buckles SF123 (from pre-cemetery layer), SF001 (from topsoil) & SF121(from Grave G6) (cm scale)

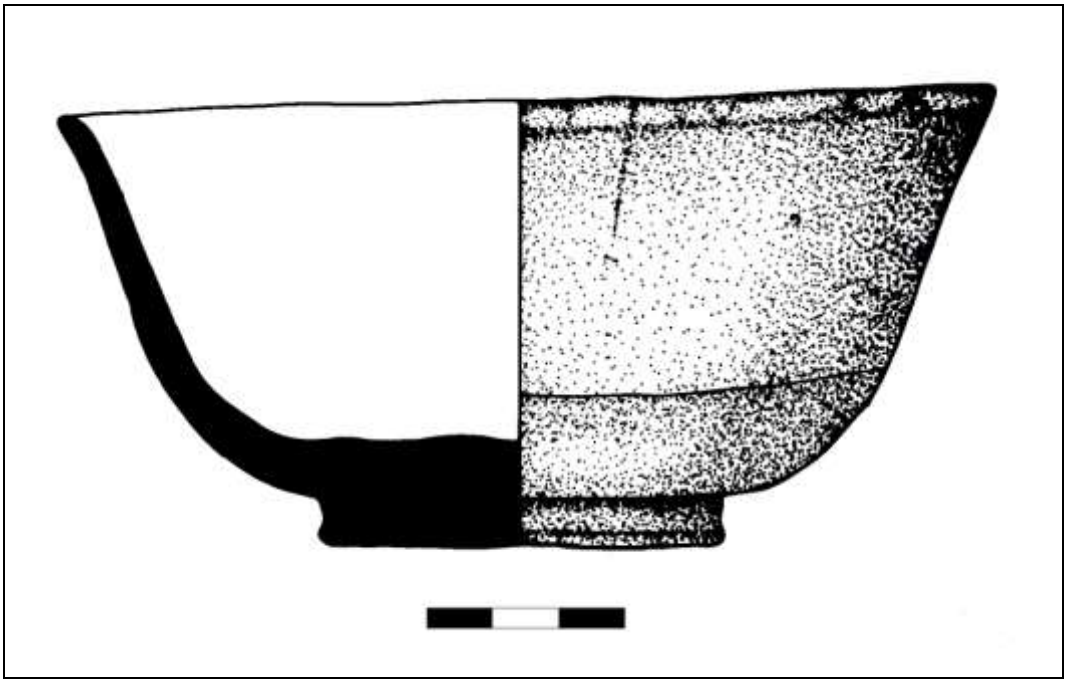


Figure 22: SF086 Mid-late Tang dynasty bowl within Grave G6 (cm scale)

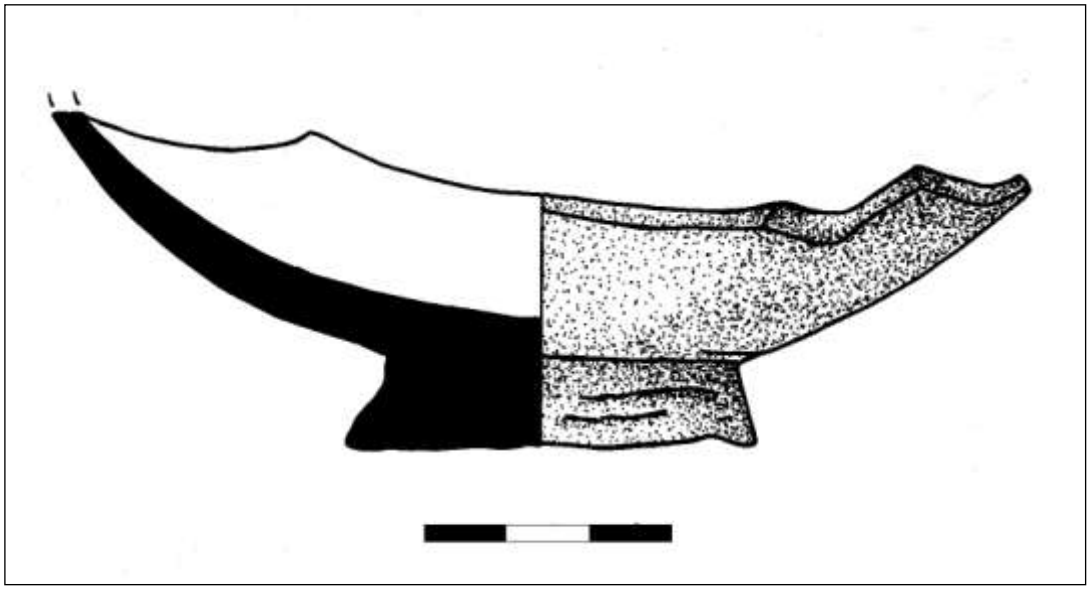


Figure 23: SF089 Mid-late Tang dynasty bowl within Grave G6 (cm scale)

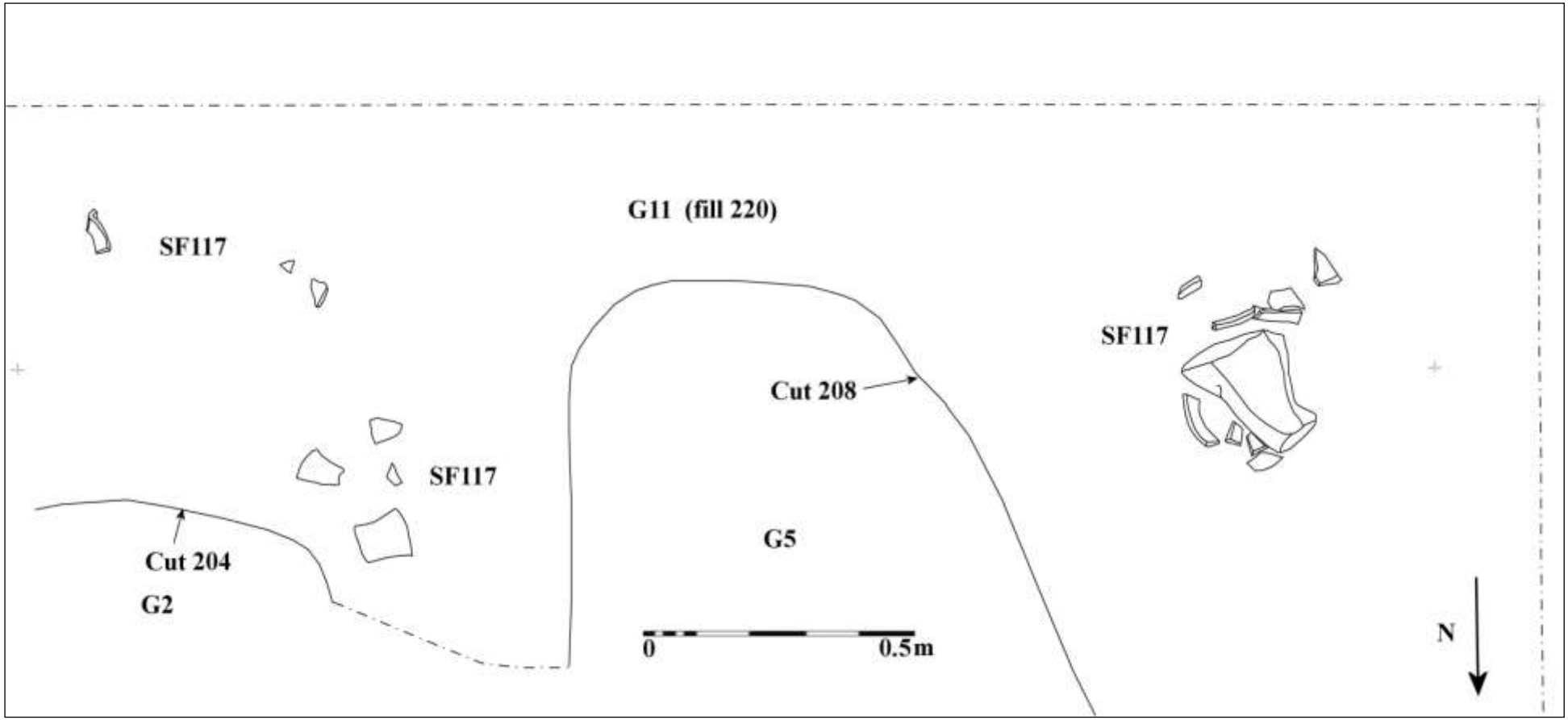


Figure 24: TP2-SEX Part excavated plan of Grave G11 – showing original position of SF117 jar under rock and scatter of sherds to the east

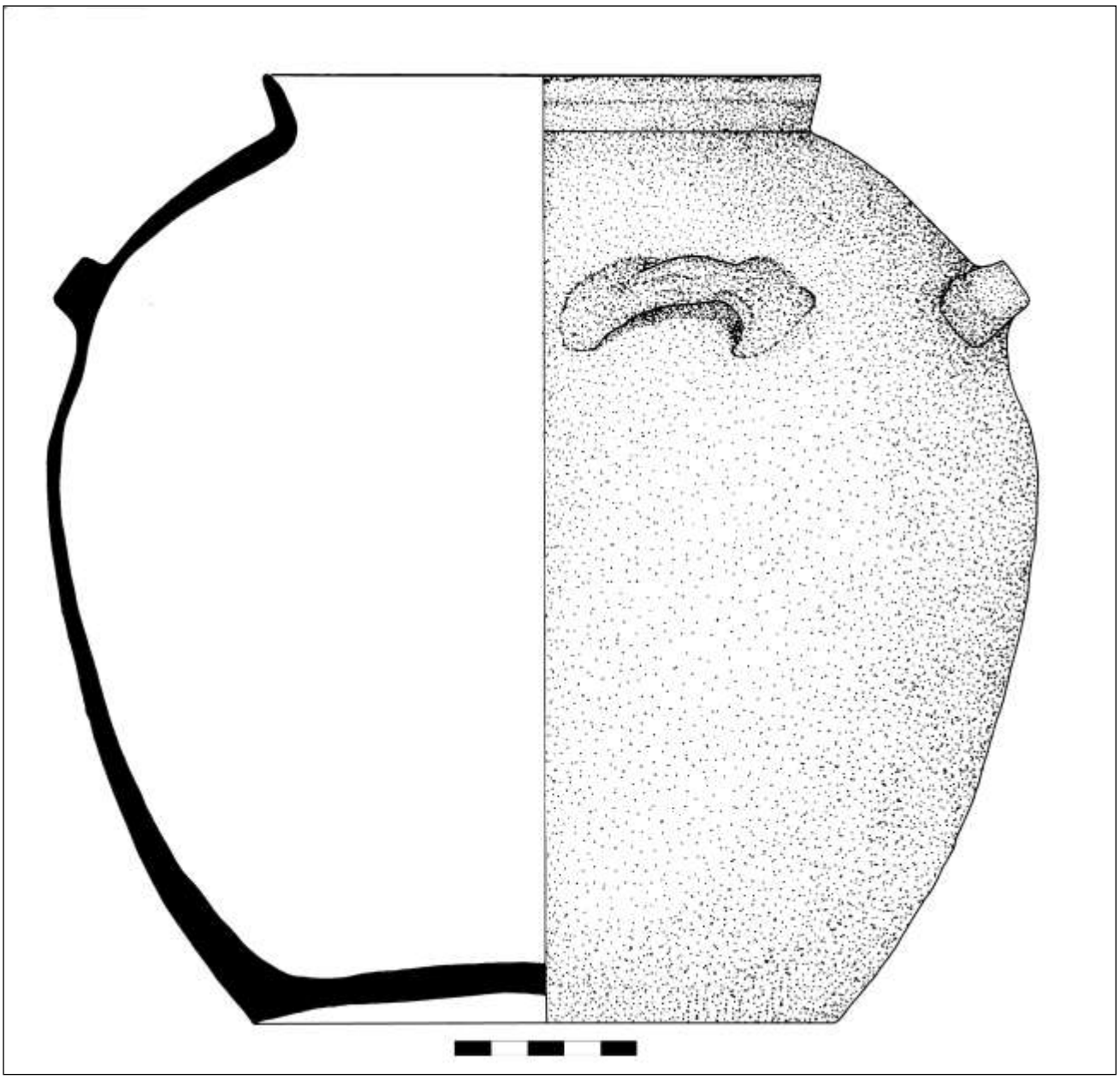


Figure 25: AN6 (SF027, 061 & 117) six-lugged dark grey-slipped storage jar from Grave G11 – south Guangdong type, dating to mid-late Tang dynasty (cm scale)

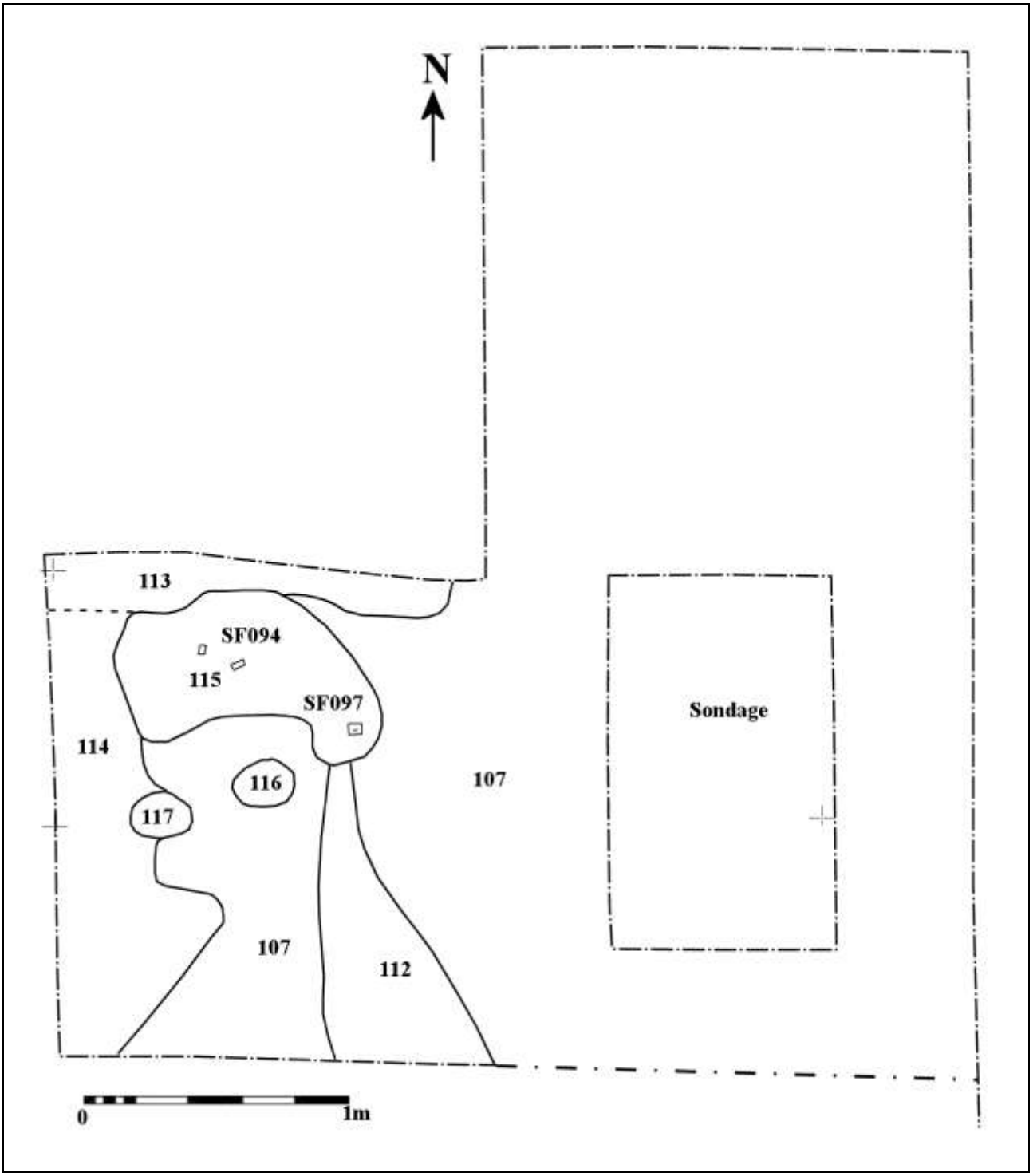


Figure 26: TP1-EX Plan of 113 (‘Grave’ G15) and 114 (‘Grave’ G16)

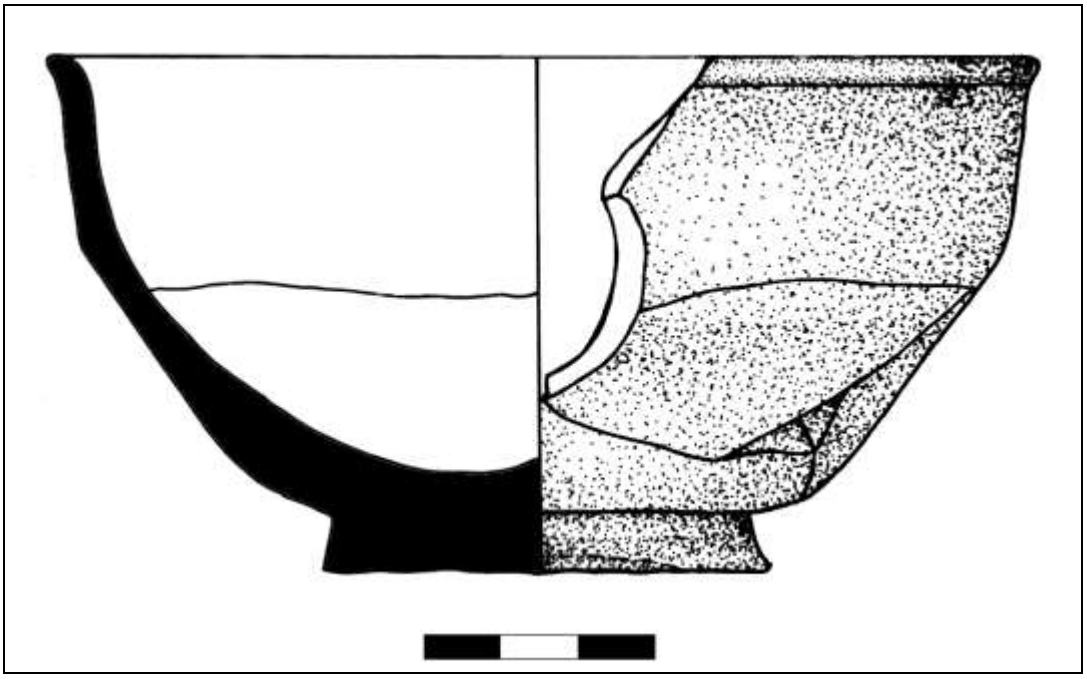


Figure 27: AN19 (SF018.4, 018.6 & 035.1) mid-late Tang dynasty bowl, probably from Grave G15 (cm scale)

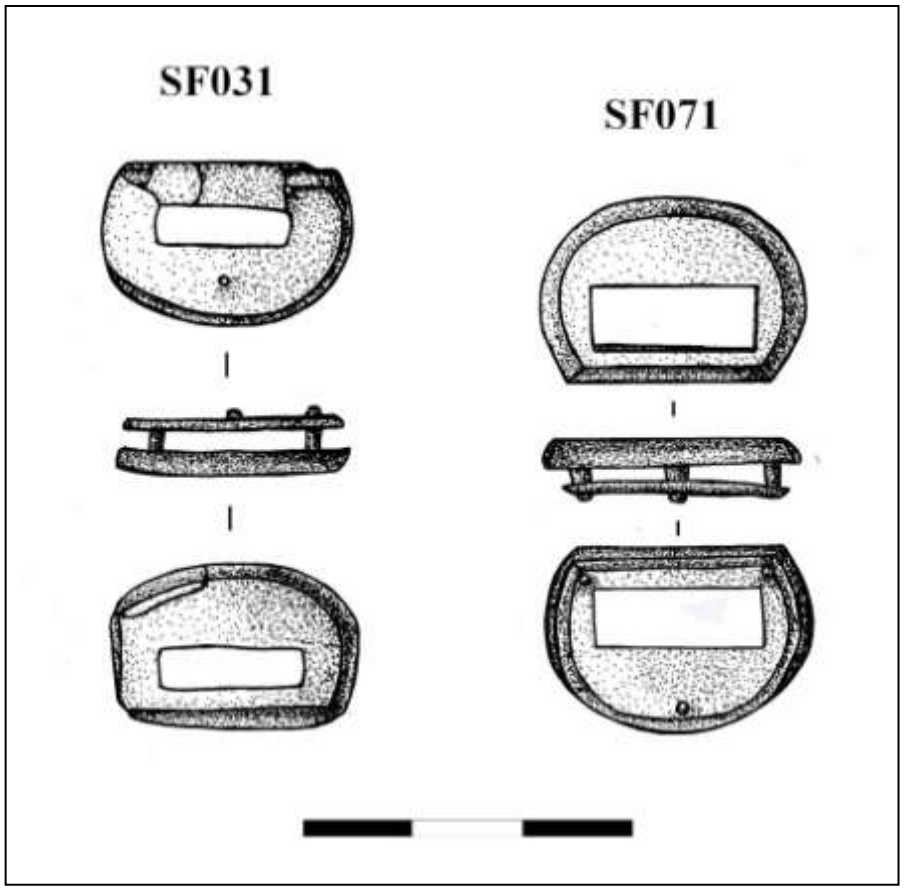


Figure 28: D-shaped *kwa* SF031 (from Grave G2) & SF071 (possibly from Grave G15 or G16) (cm scale)

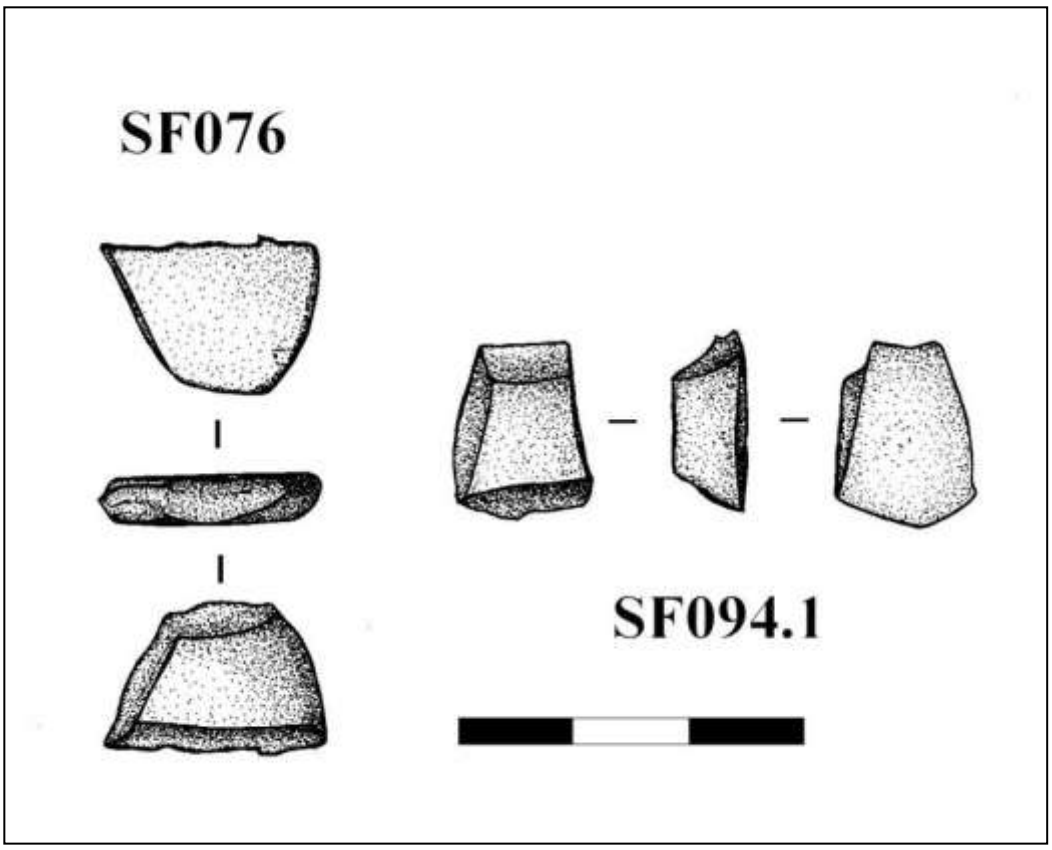


Figure 29: Lead alloy or silver objects SF076 & SF094.1 (both probably from G1 or G15) (cm scale)

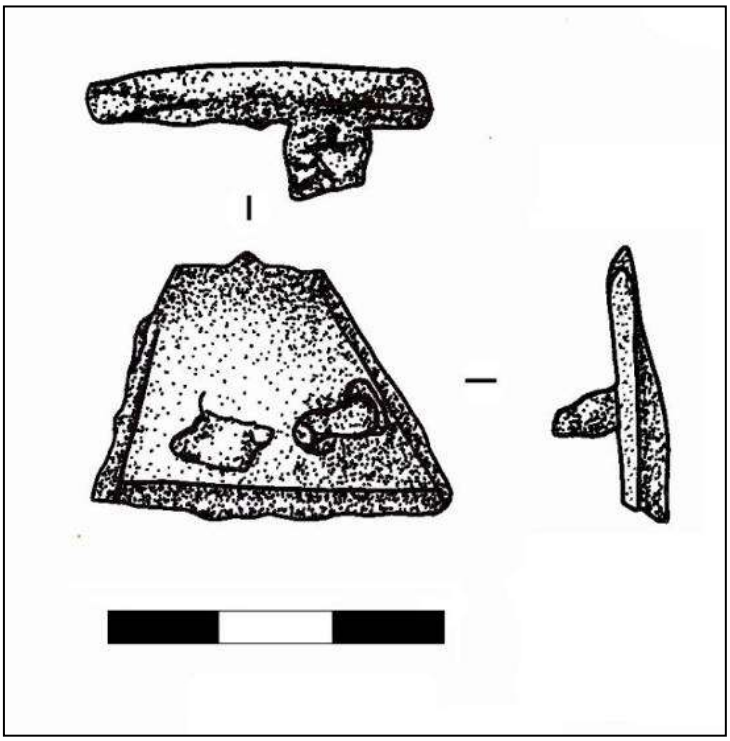


Figure 30: Lead alloy or silver object SF94.2 (probably from G1 or G15) (cm scale)

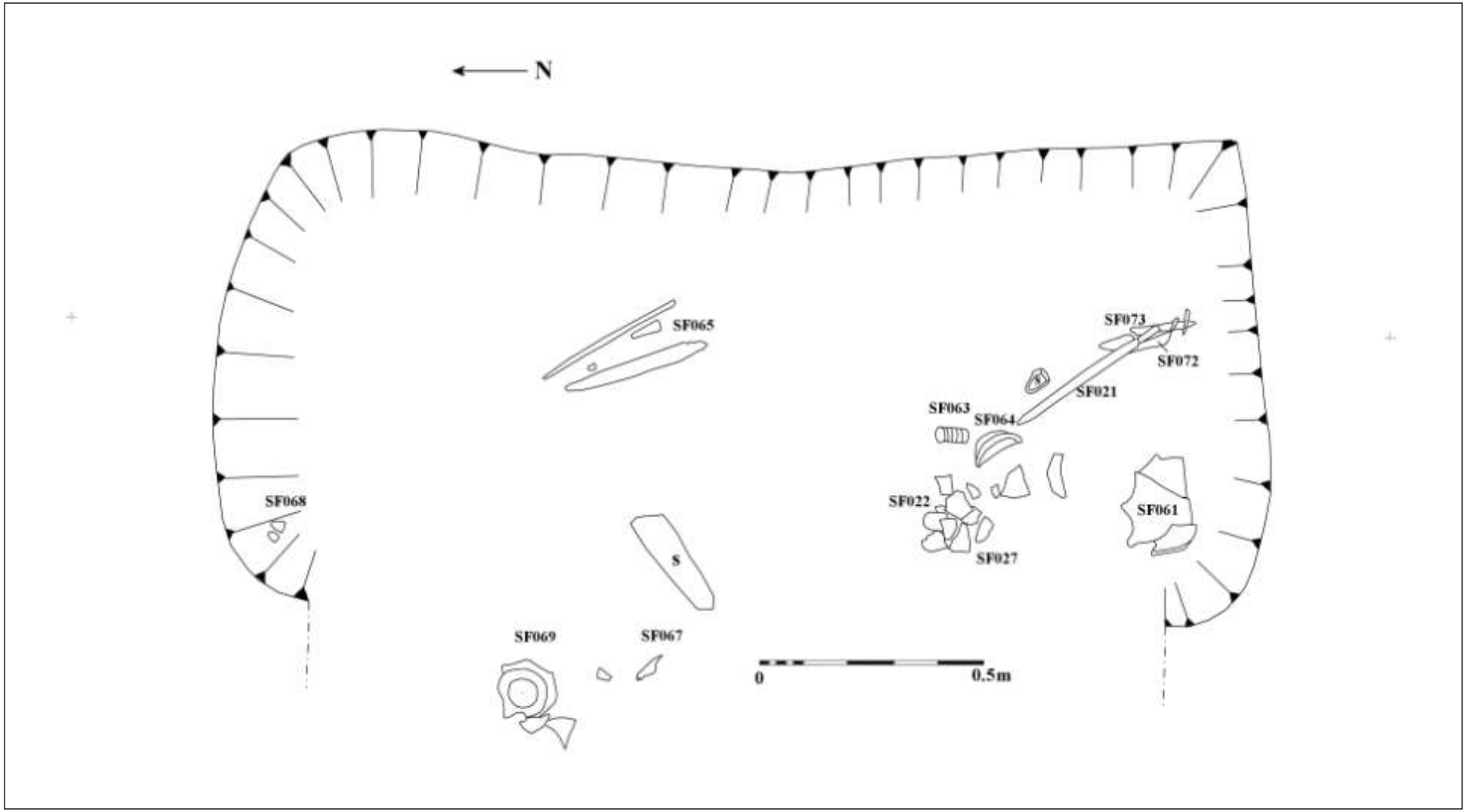


Figure 31: TP2-EX Plan of Grave G2

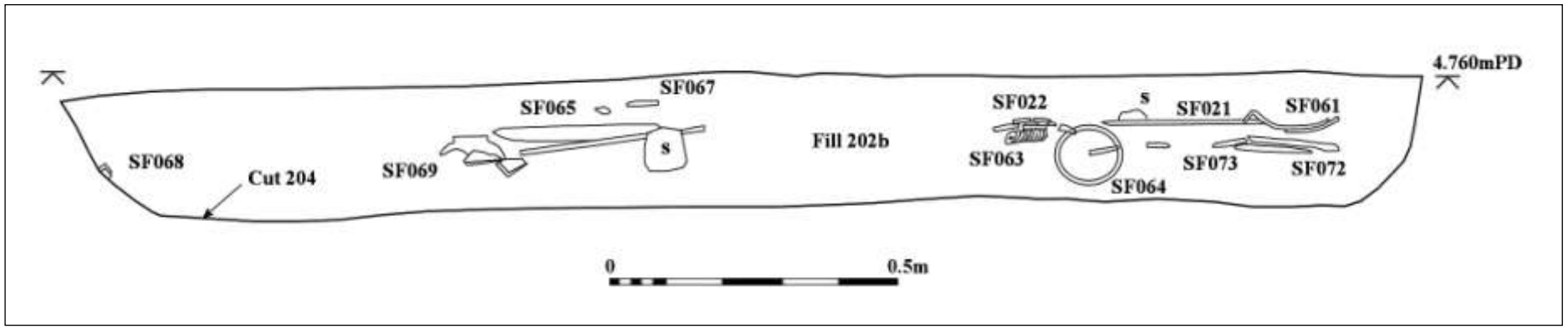


Figure 32: TP2-EX Profile of Grave G2 showing relative positions of grave goods – looking east

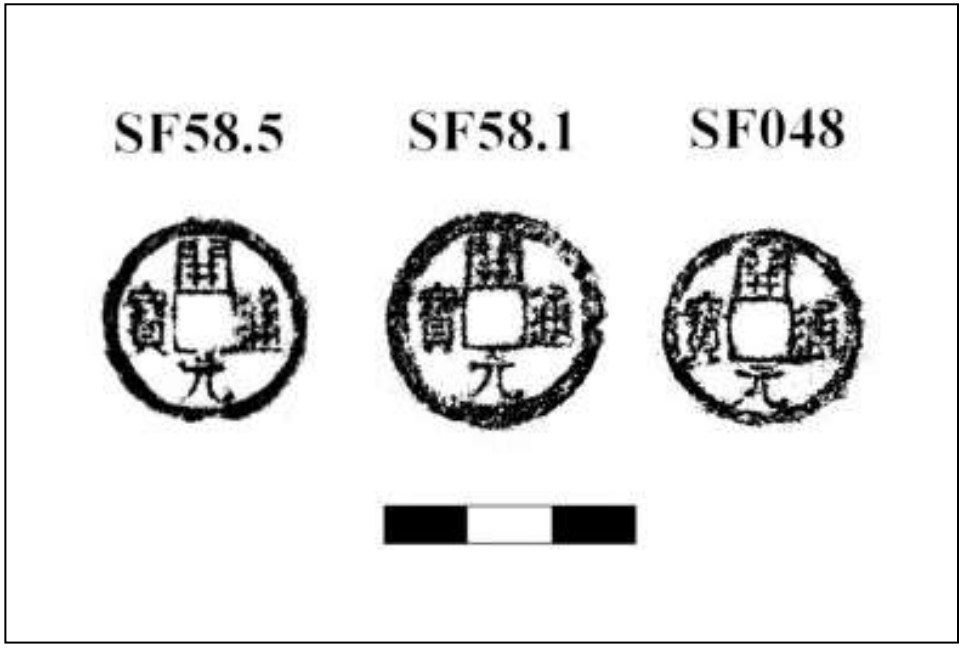


Figure 33: Rubbings of Tang coins SF58.5 (Grave G4), SF58.1 (Grave G4) & SF048 (Grave G2)

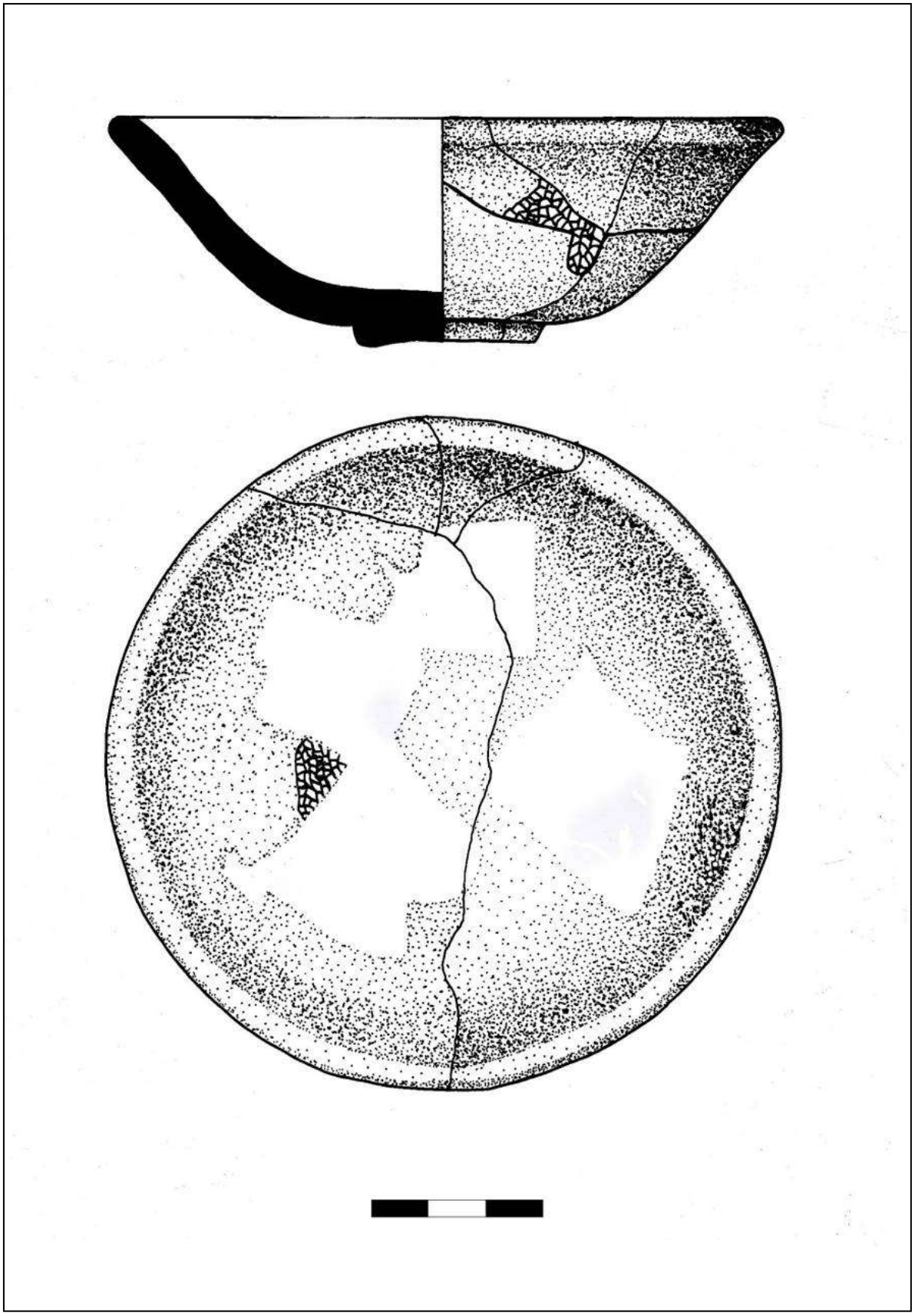


Figure 34: SF064 mid-late Tang crackle glazed bowl found within Grave G2 (cm scale)

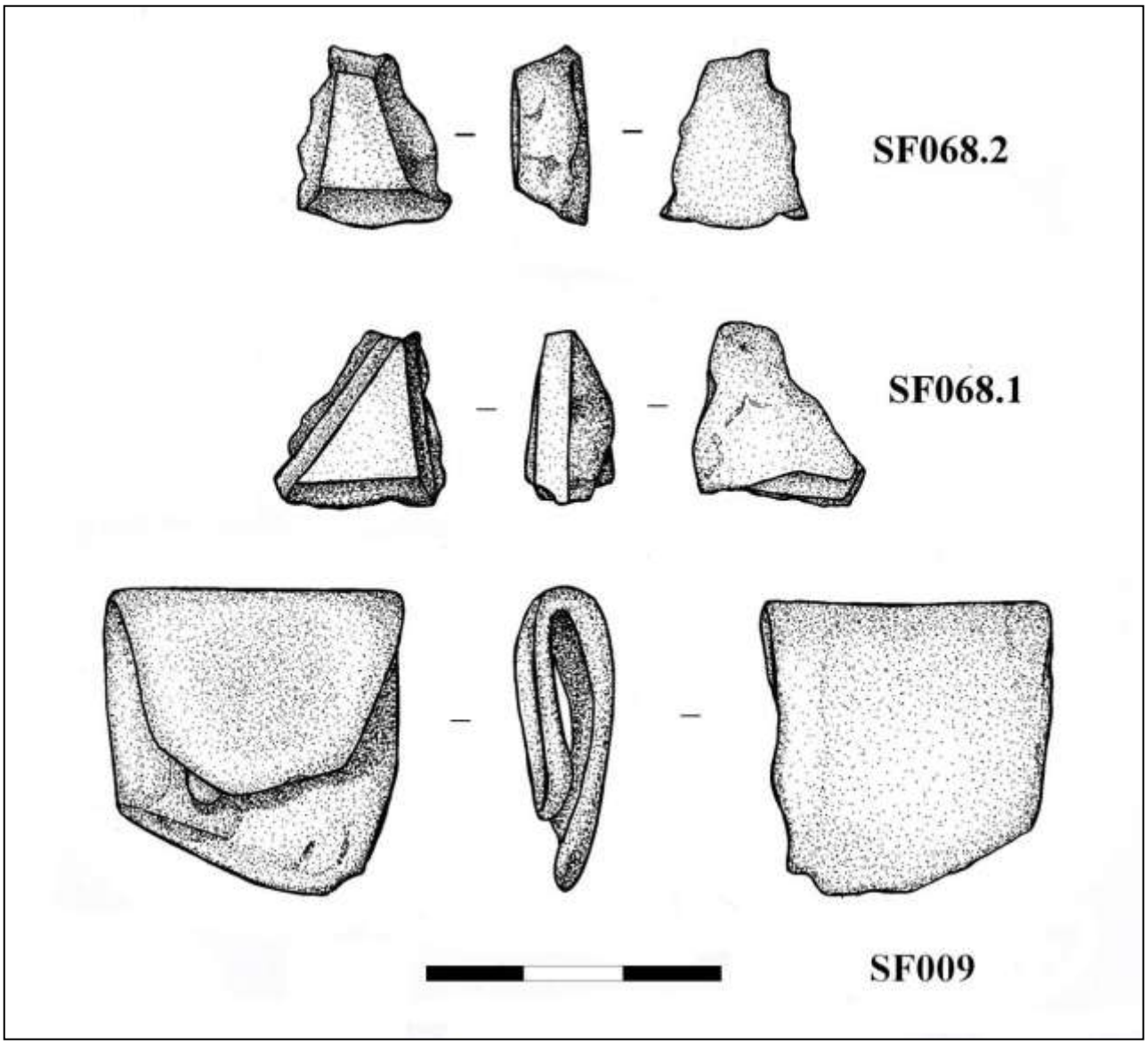


Figure 35: Lead alloy or silver objects SF068.2 & SF068.1 (both from Grave G2) & folded lead sheet SF009 (cm scale)

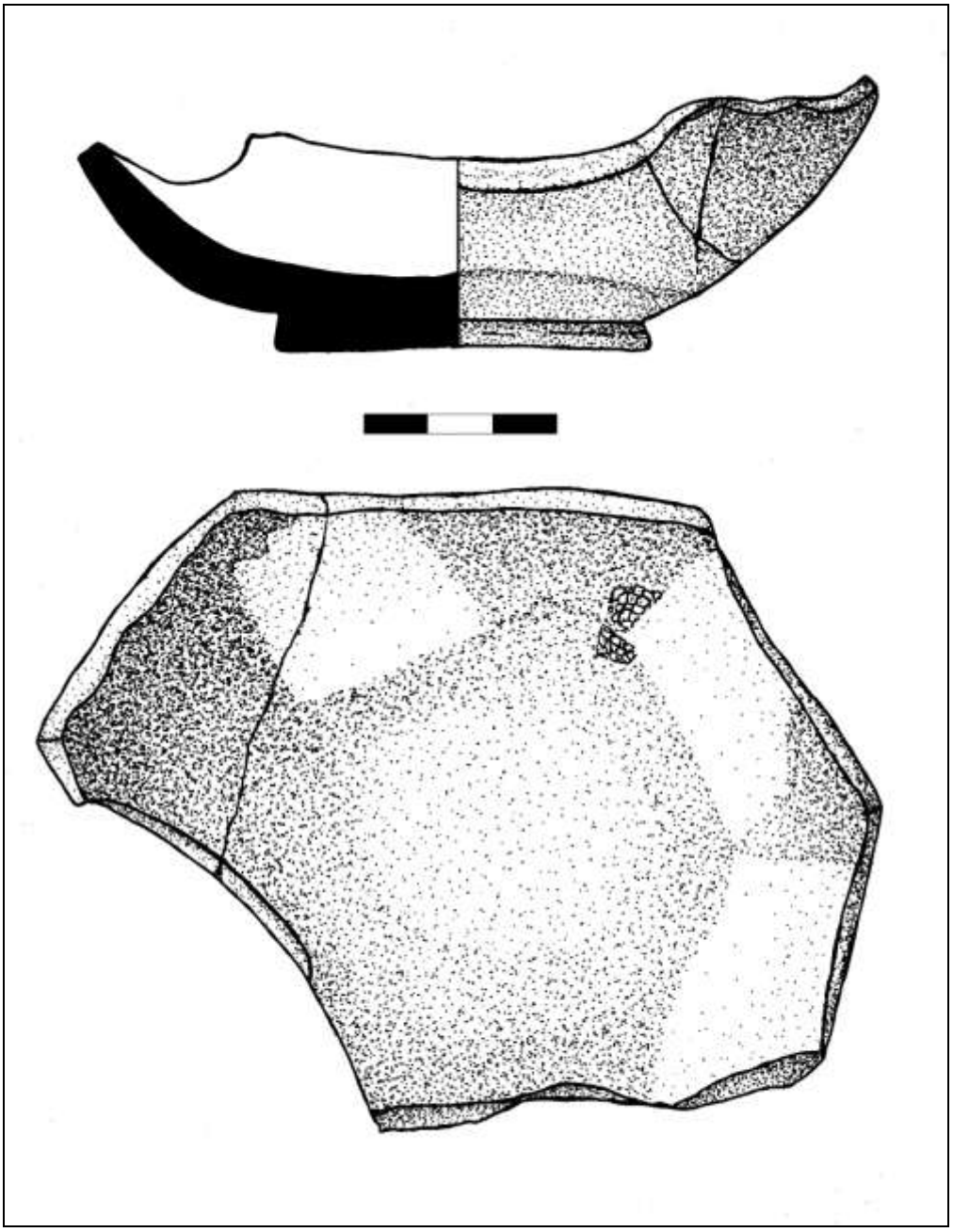


Figure 36: SF069.2 mid-late Tang crackle glazed bowl found within Grave G2 (cm scale)

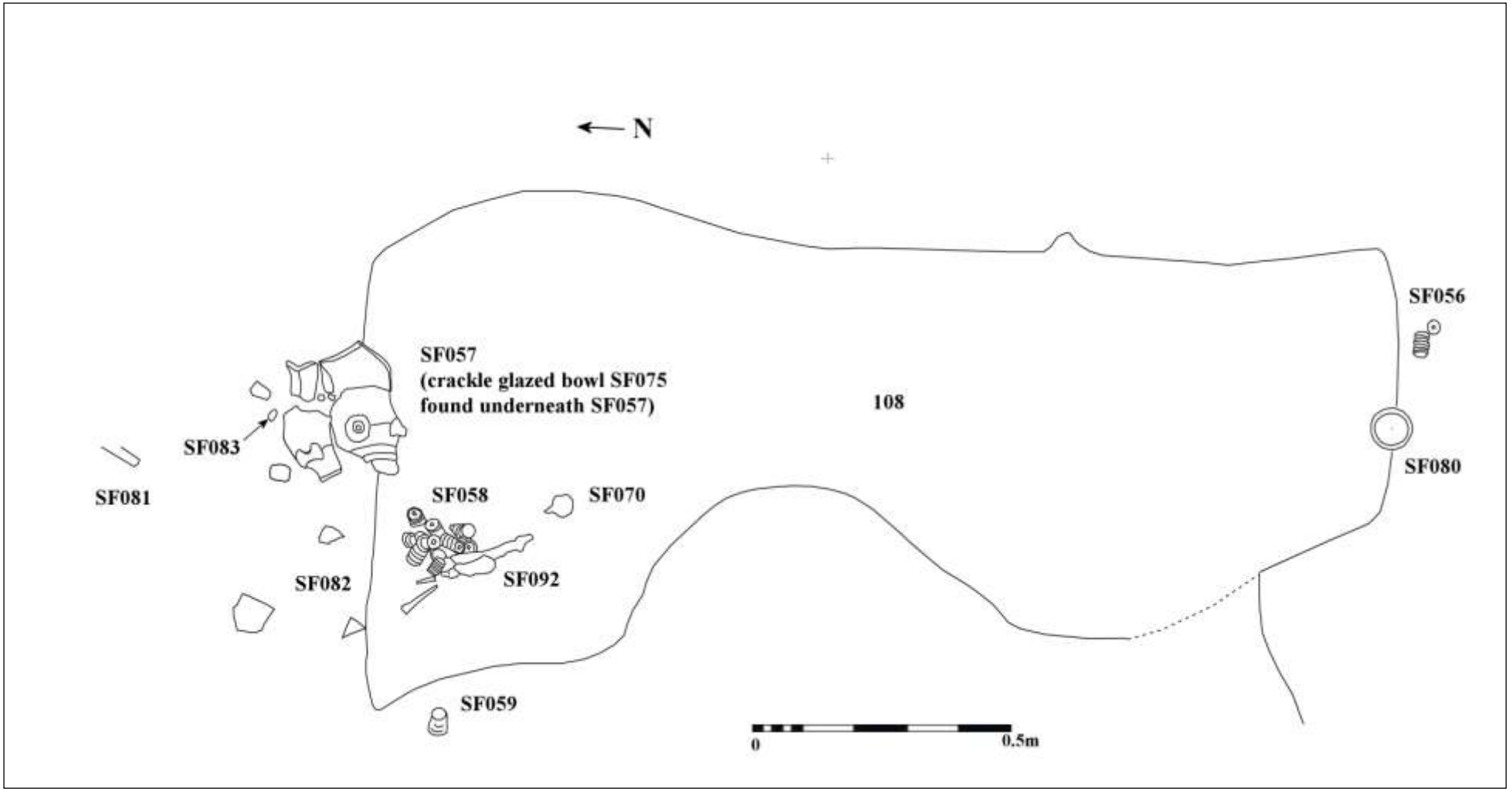


Figure 37: TP1-EX Plan of Grave G4

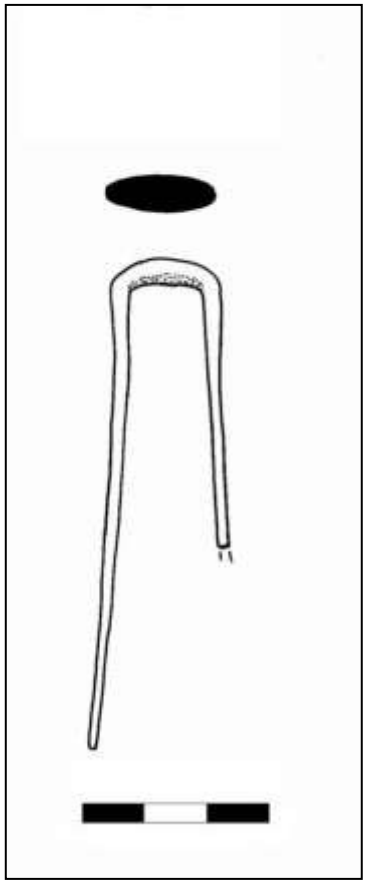


Figure 38: SF081 silver hairpin found within Grave G4 (cm scale)

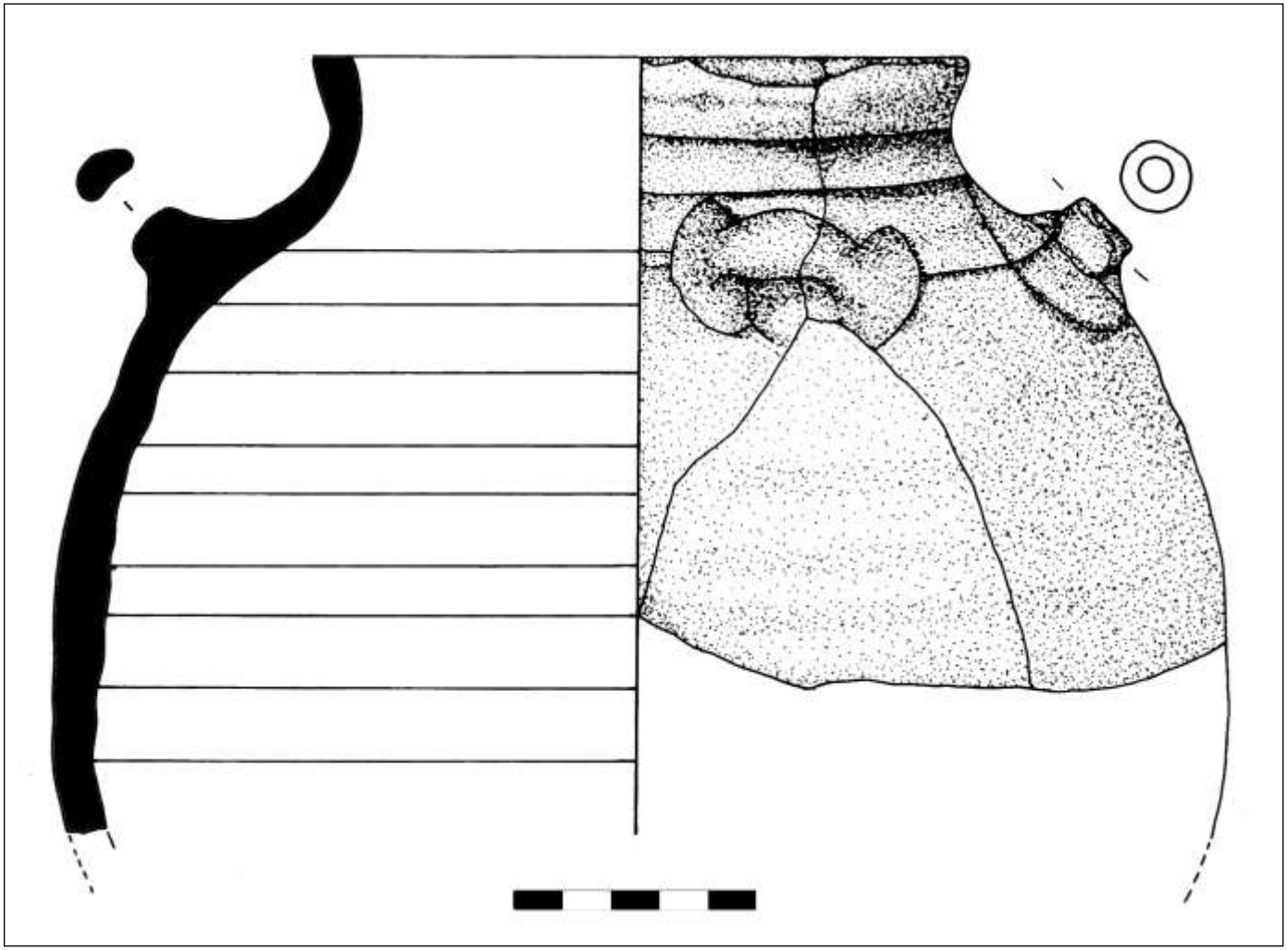


Figure 39: AN2 (SF057.1) spouted jar found within Grave G4 (cm scale)

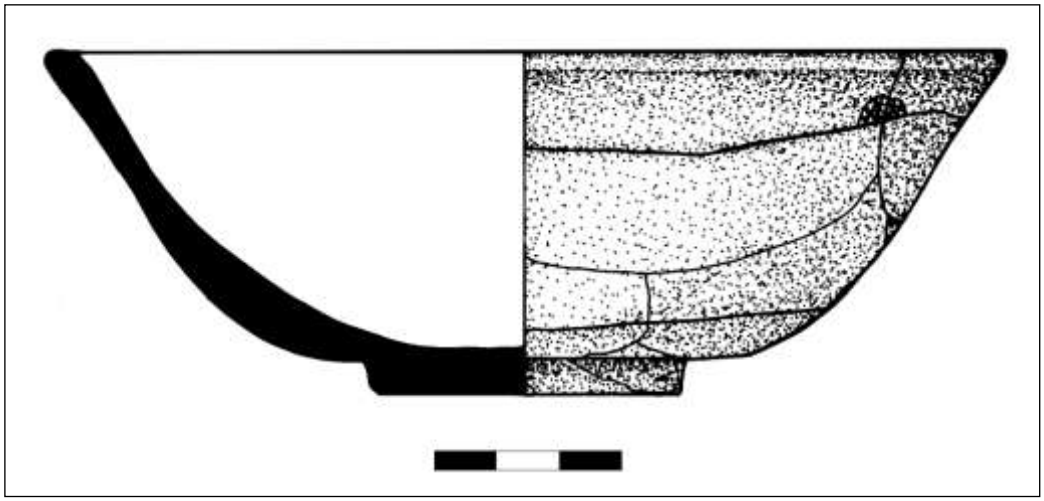


Figure 40: SF075 mid-late Tang crackle glazed bowl found under SF057.1 in Grave G4 (cm scale)

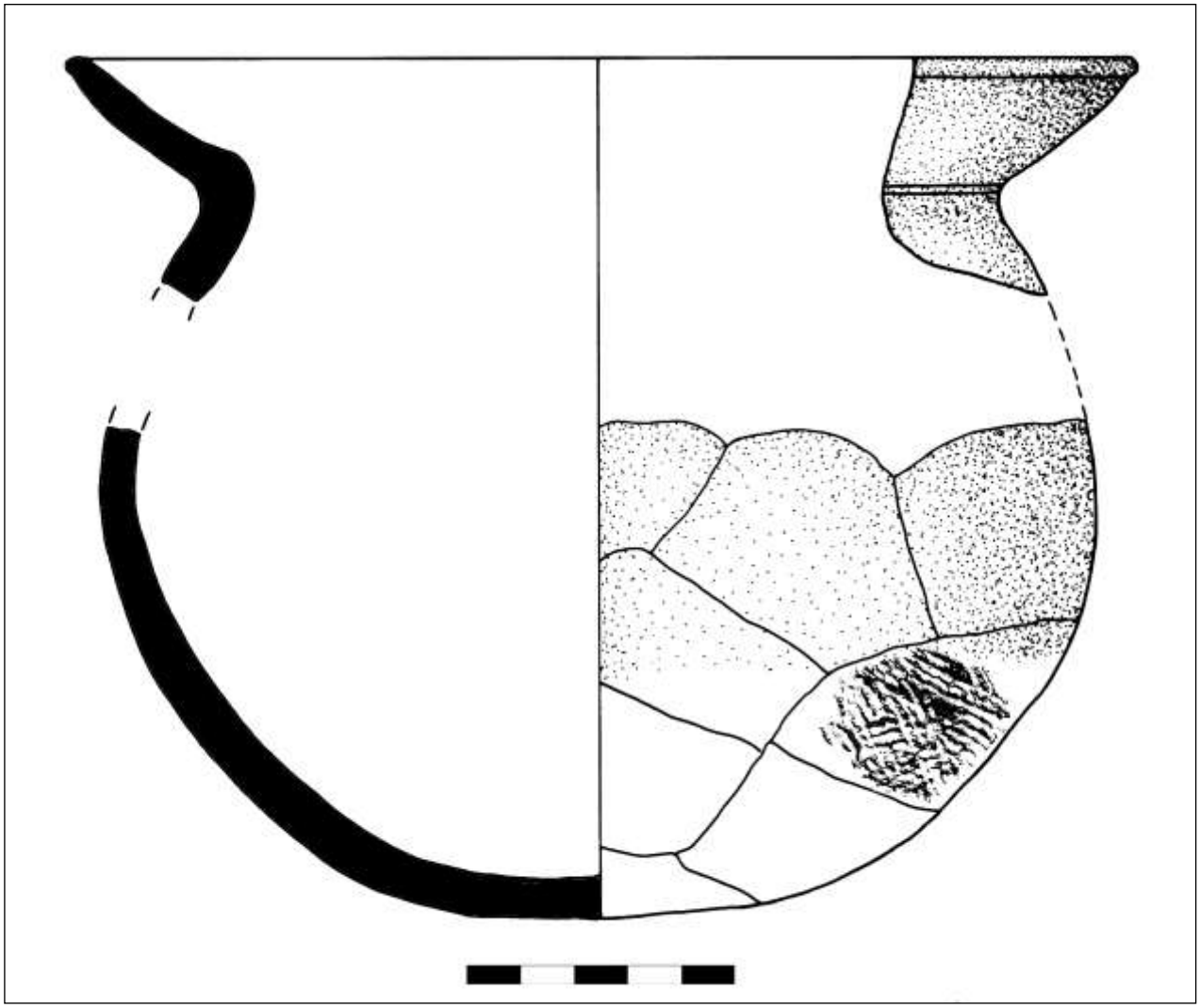


Figure 41: AN13 (SF018.2, 057.2, 082, 090.1 & 090.2) Jin-Tang red-slipped, 'basket-patterned' jar found scattered across TP1-EX but mostly near Grave G4 (cm scale)

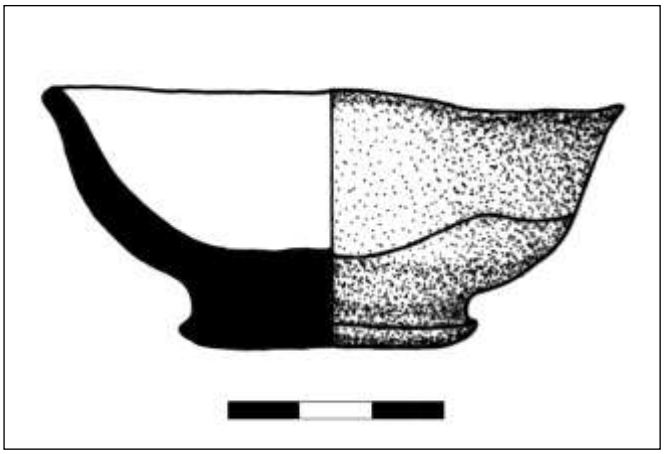


Figure 42: SF080 mid-late Tang cup
found at southern end Grave G4 (cm scale)

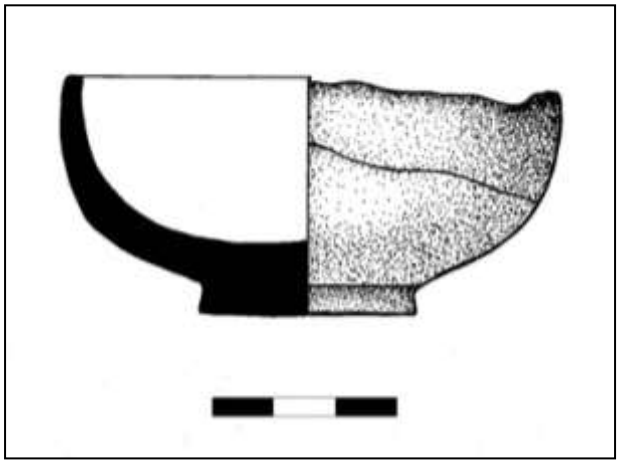


Figure 43: SF026 mid-late Tang cup
found at southern end of Grave G4 (cm scale)

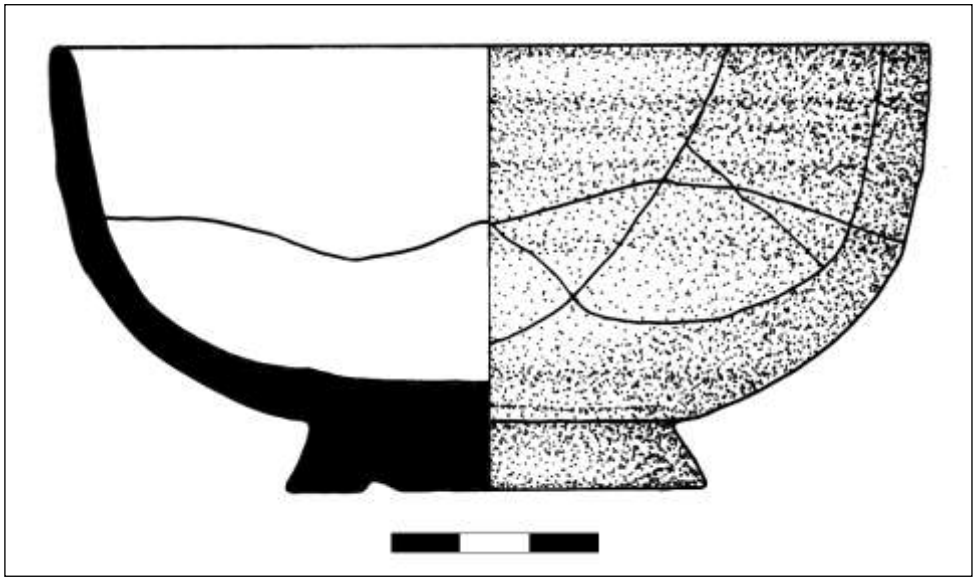


Figure 44: AN14 (SF020) mid-late Tang bowl found under stones to west of Grave G4 (cm scale)

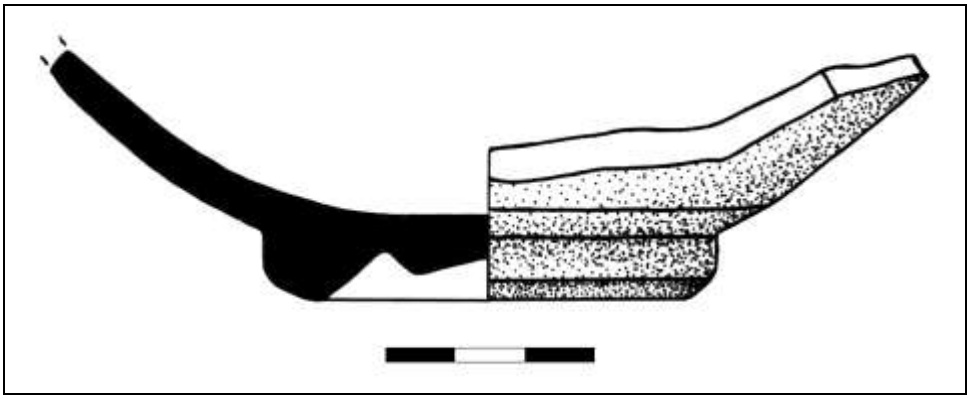


Figure 45: SF030 late Tang bowl found under a rock at western side of Grave G10 (cm scale)

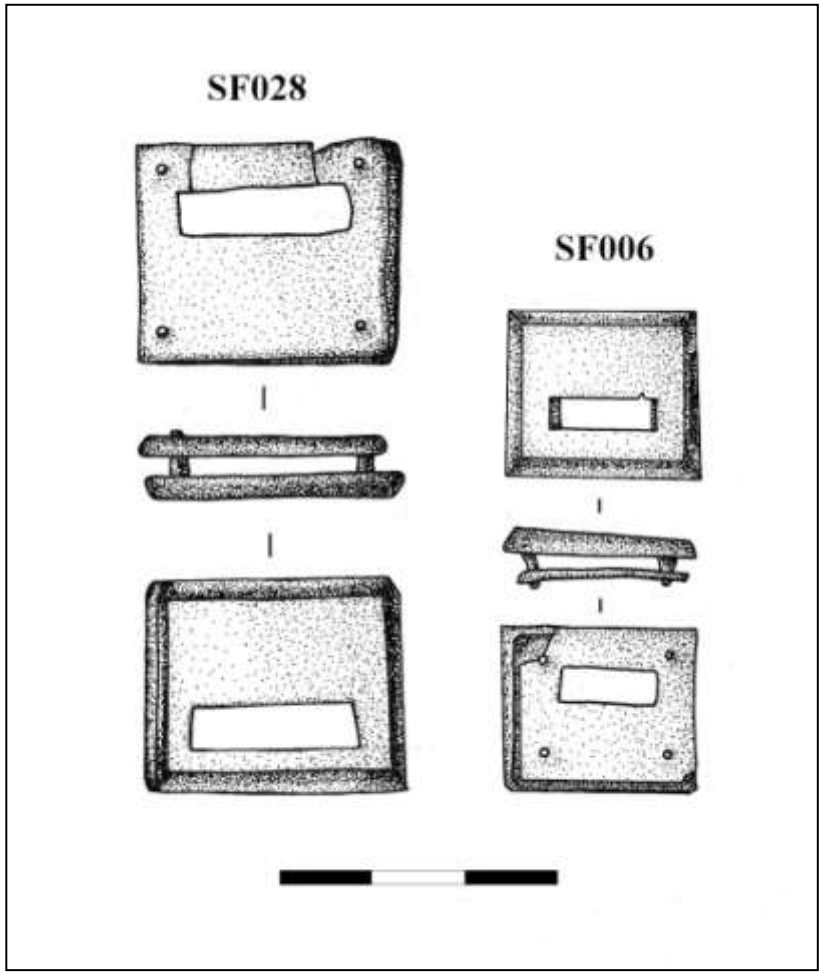


Figure 46: Copper alloy rectangular *kwa* SF028 (Grave G15 or G16) & SF006 (Grave G1) (cm scale)

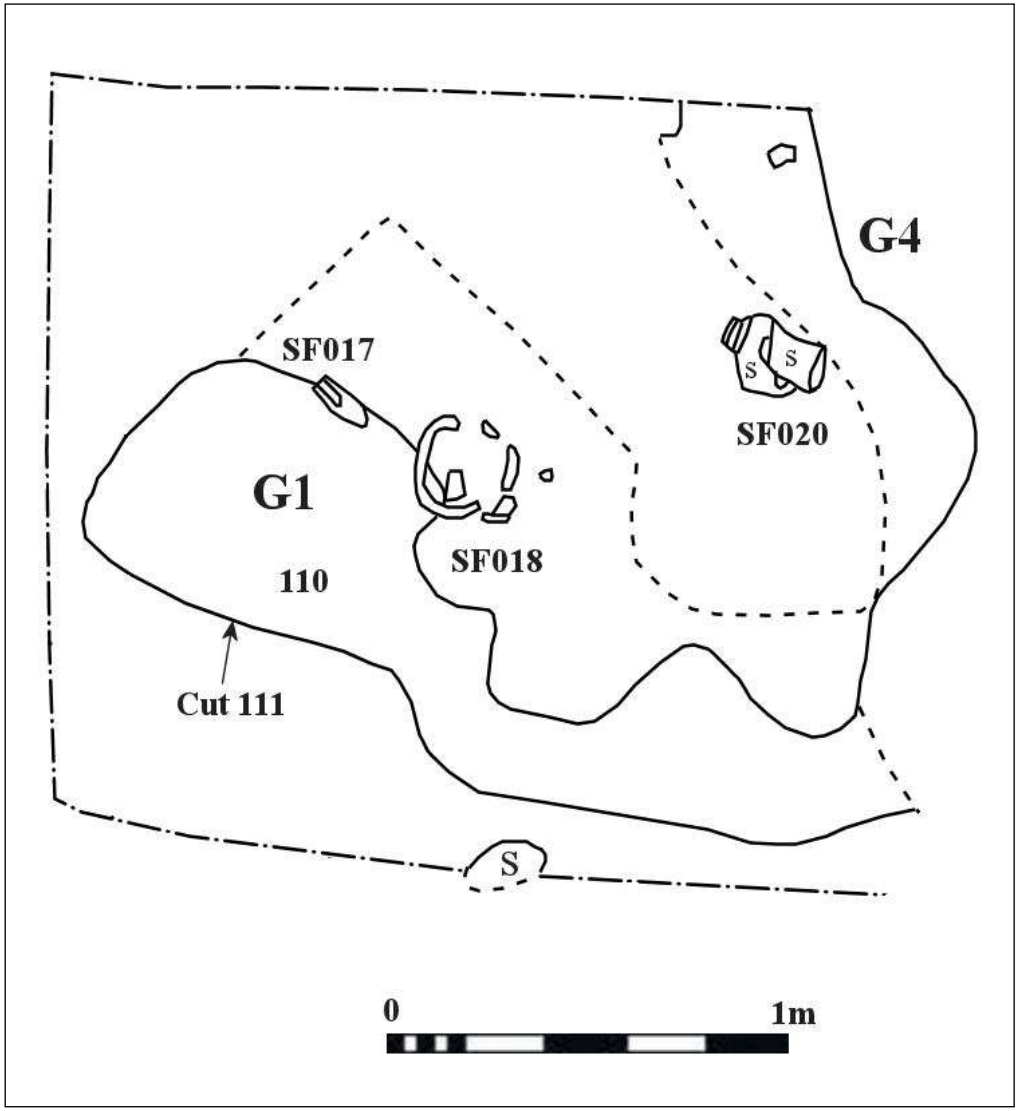


Figure 47: TP1-EX Plan of Grave G1

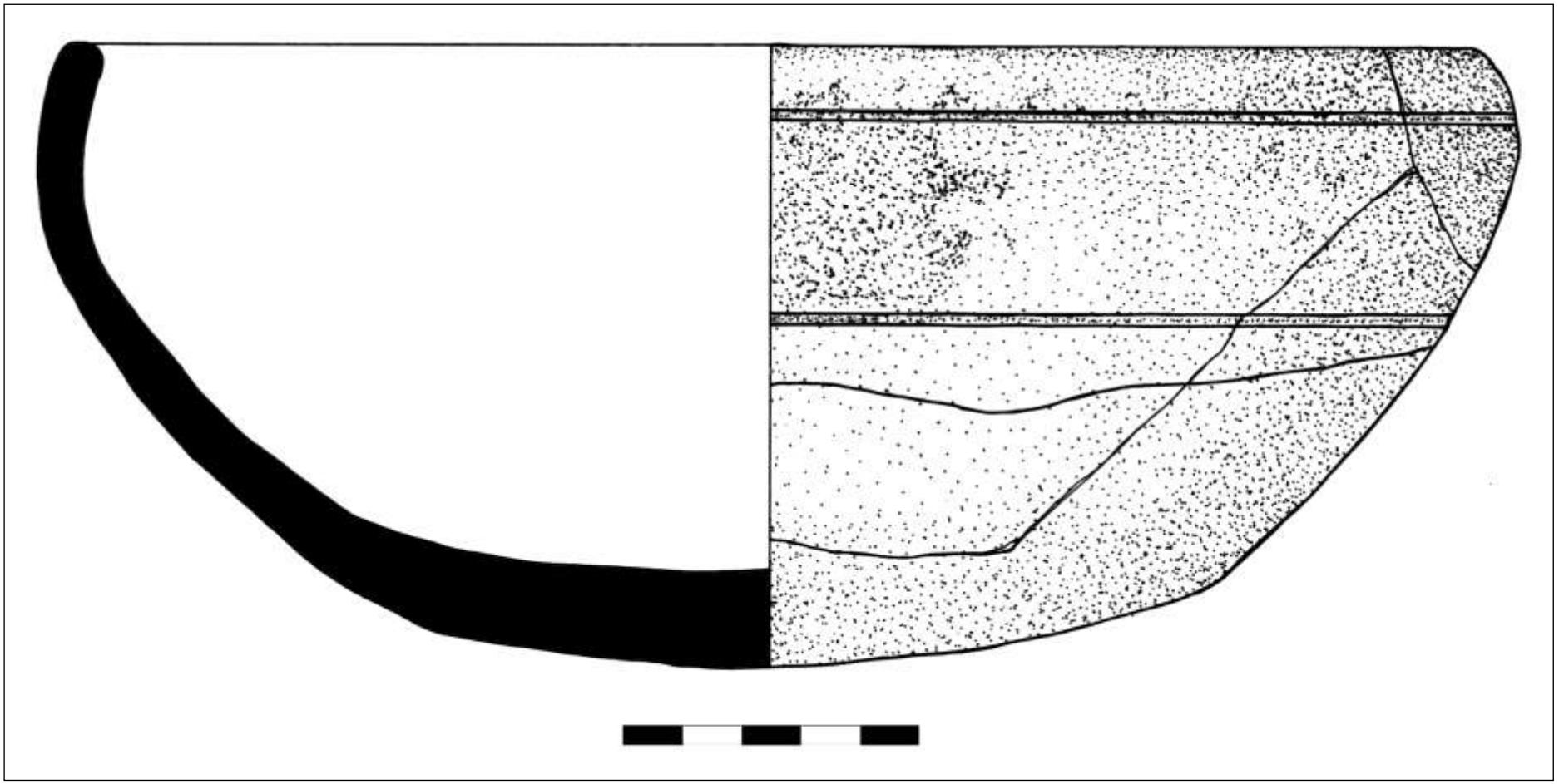


Figure 48: AN20 (SF018.1 & 127) mid-late Tang basin found within Grave G1 (cm scale)

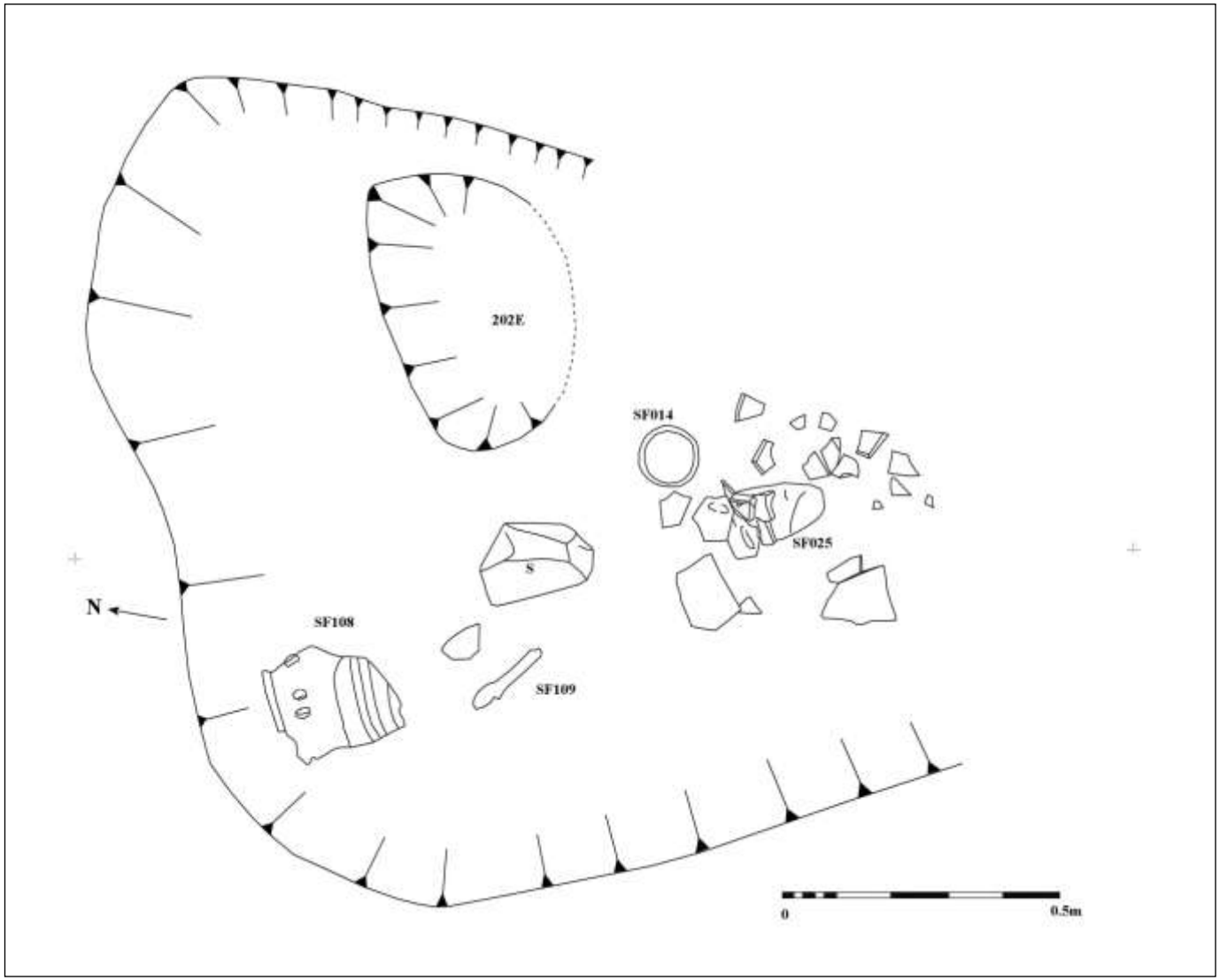


Figure 49: TP2-EX Plan of intercutting graves G3 & G7 – (top G3: N-S orientation & bottom G7: NW-SE orientation)

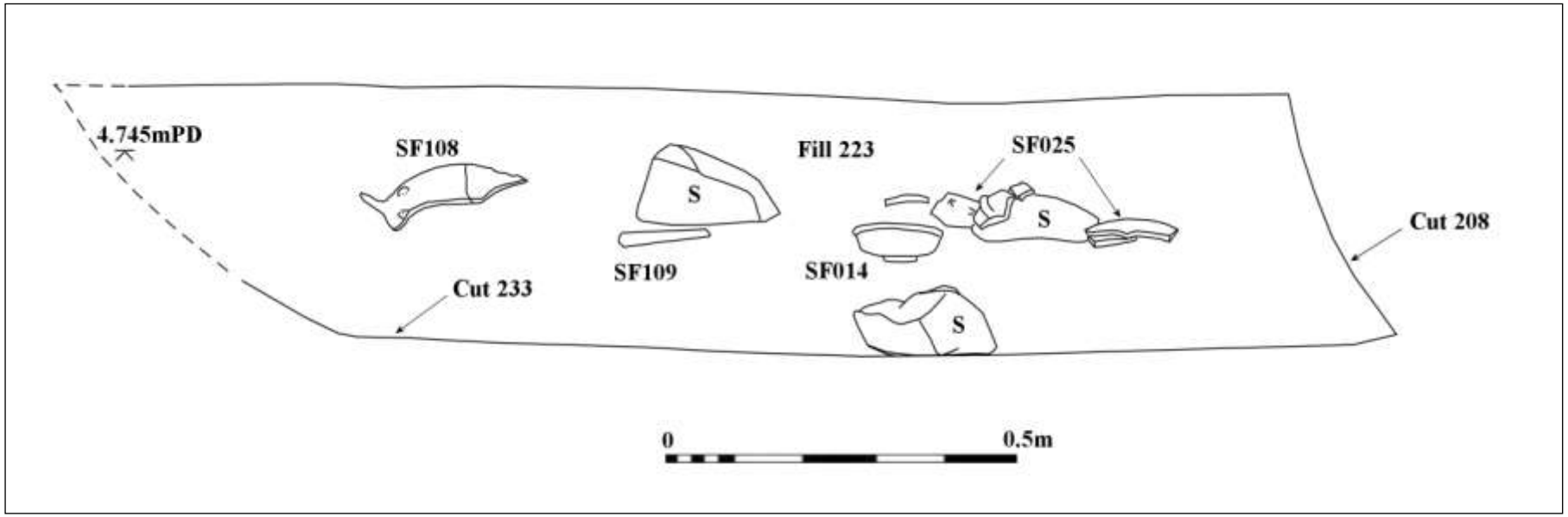


Figure 50: TP2-EX Profile of Grave G7 showing relative position of grave goods – looking north-east

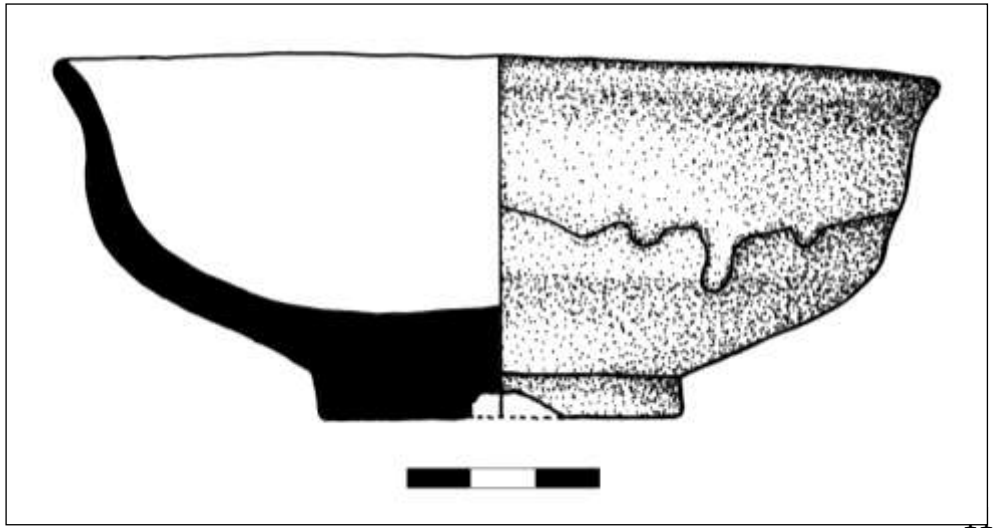


Figure 51: SF014 mid-late Tang bowl in Grave G7 (cm scale)

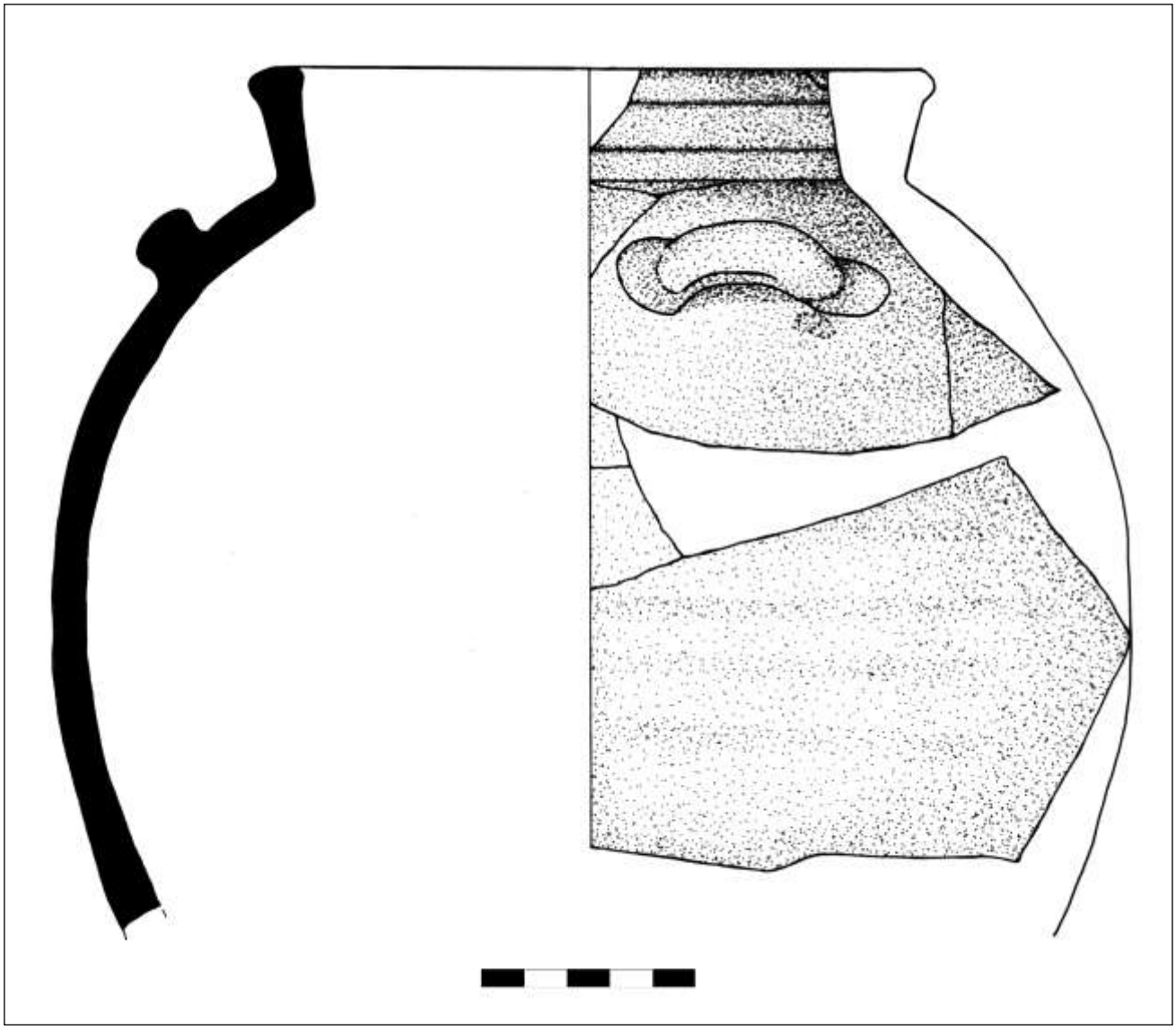


Figure 52: AN15 (SF025.3 & 108.2) mid-late Tang six-lugged storage jar found in Grave G7-G3 (cm scale)

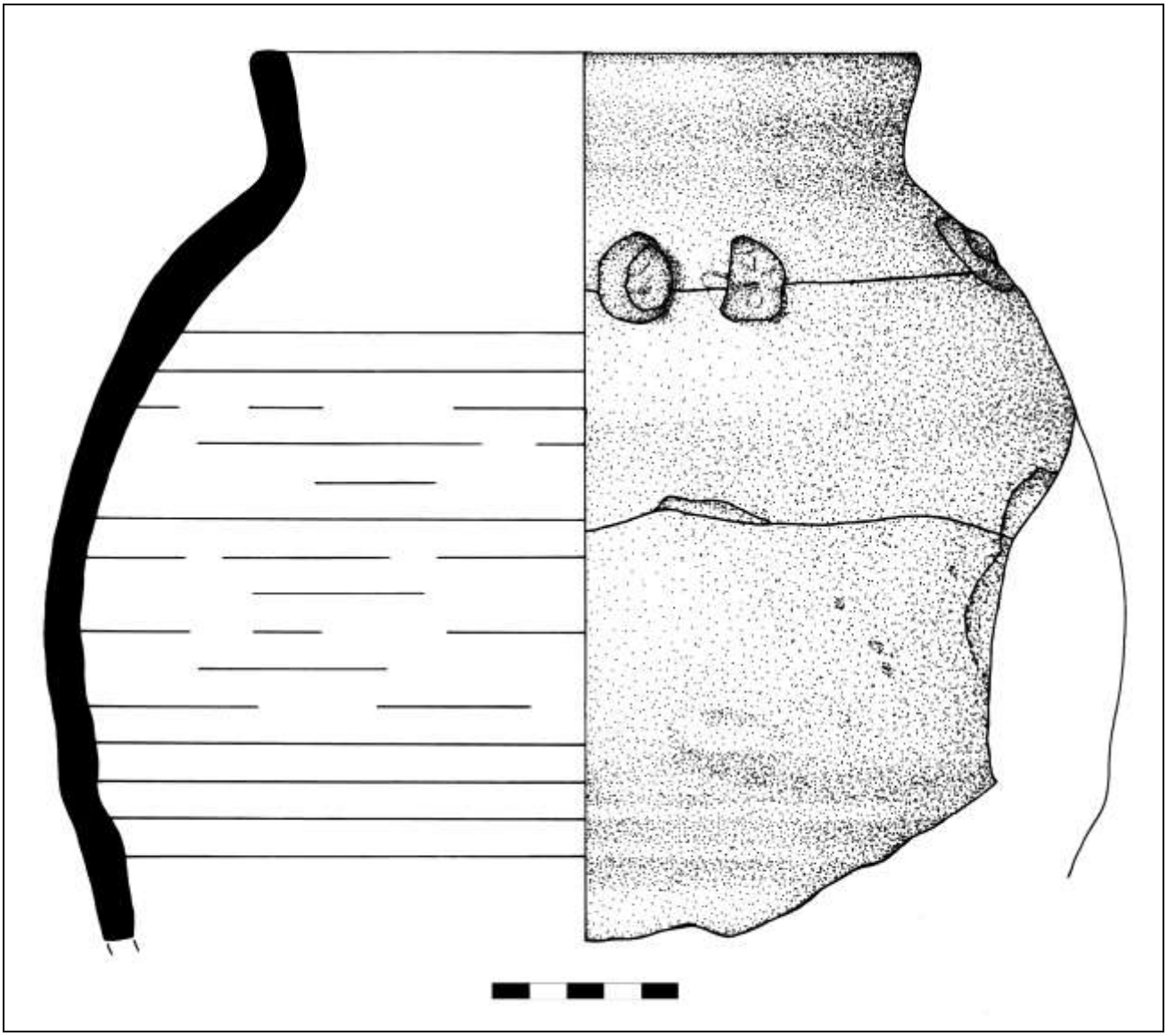


Figure 53: SF108.1 pre-early Tang six-lugged storage jar found in Grave G7/G3 (cm scale)

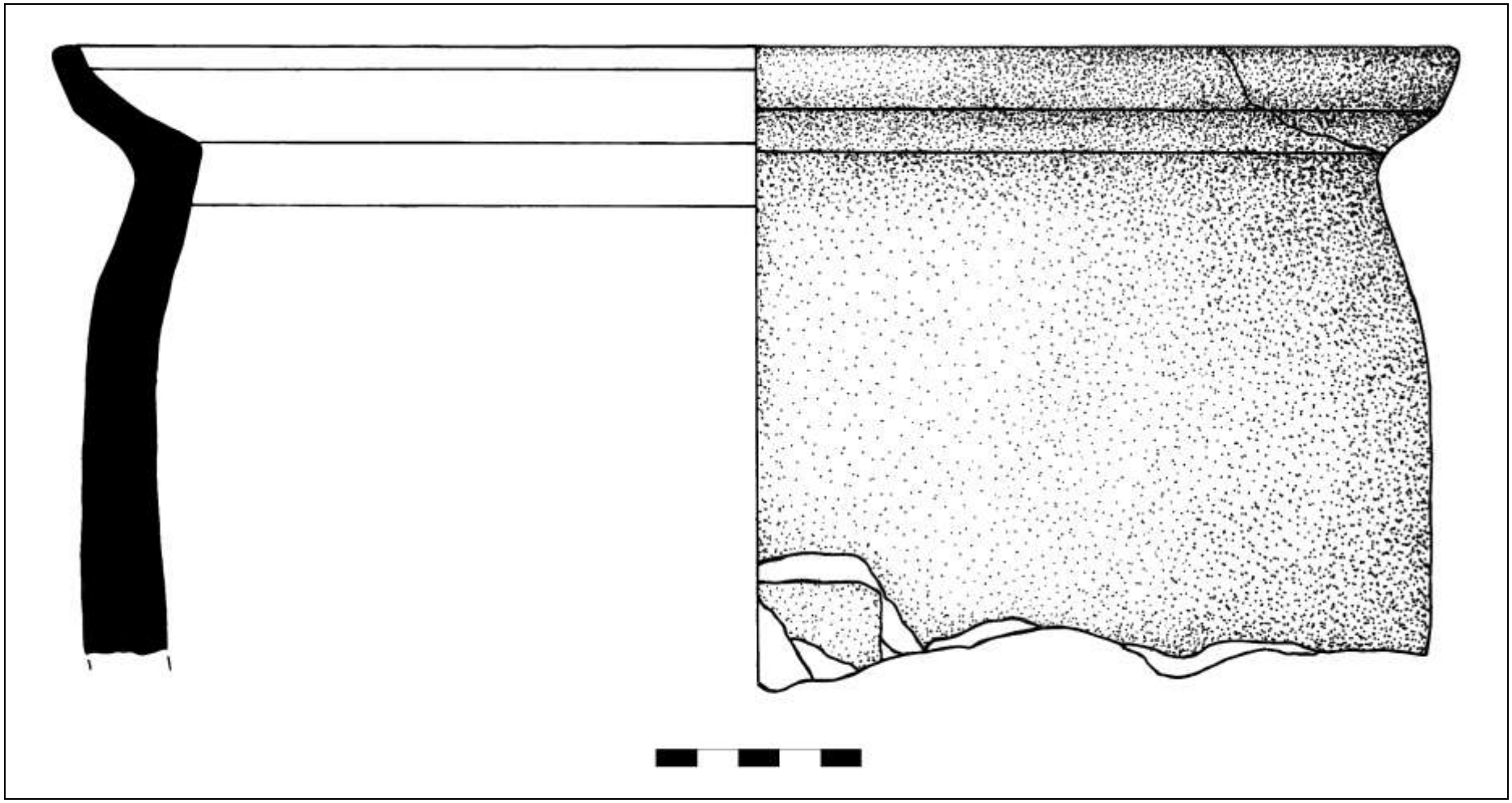


Figure 54: AN16 (SF100 & 101) Tang dynasty pinkish-purple slipped coarse basin found in Pit P5 (cm scale)

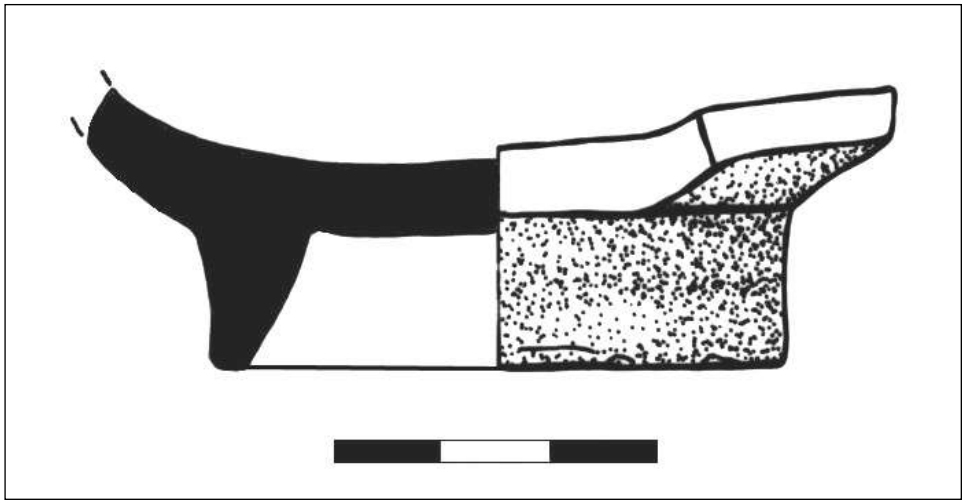


Figure 55: SF102 late Tang-Northern Song bowl found in Pit P6 (cm scale)

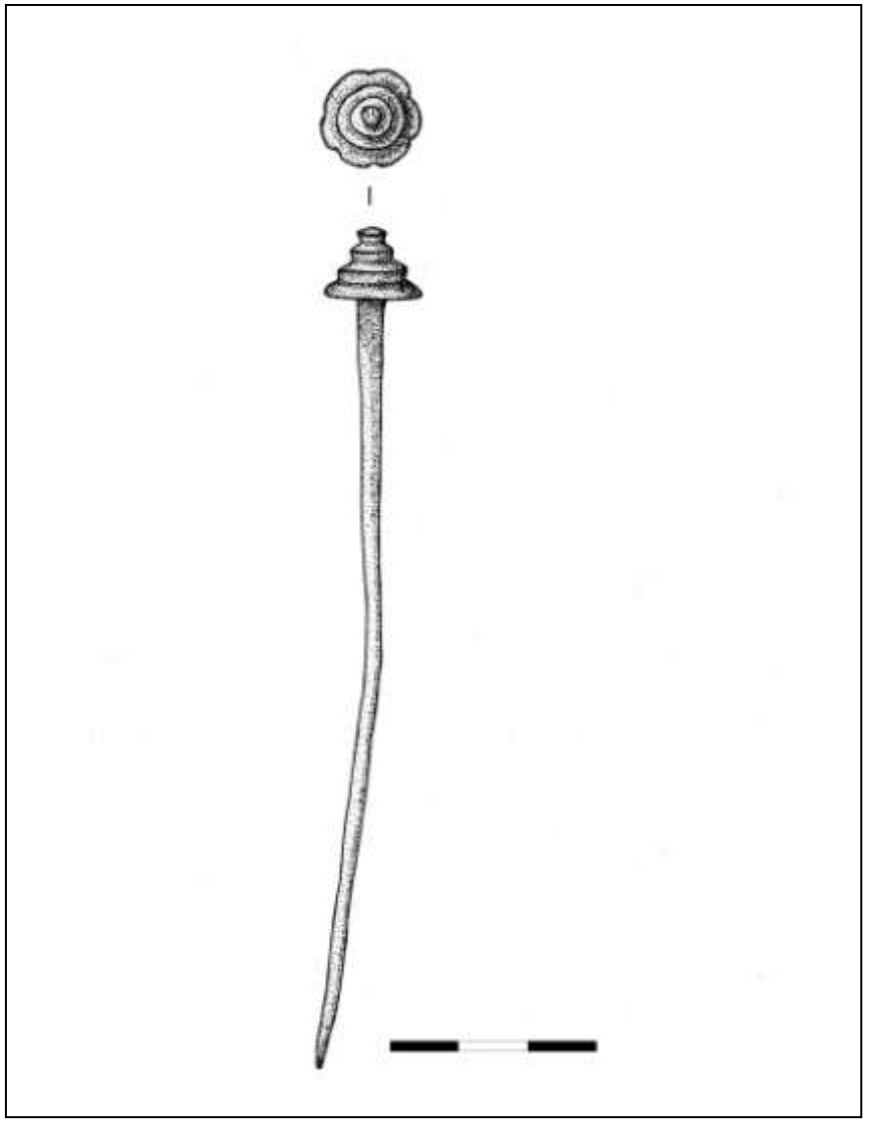


Figure 56: SF002 Tang dynasty copper alloy hairpin (cm scale)

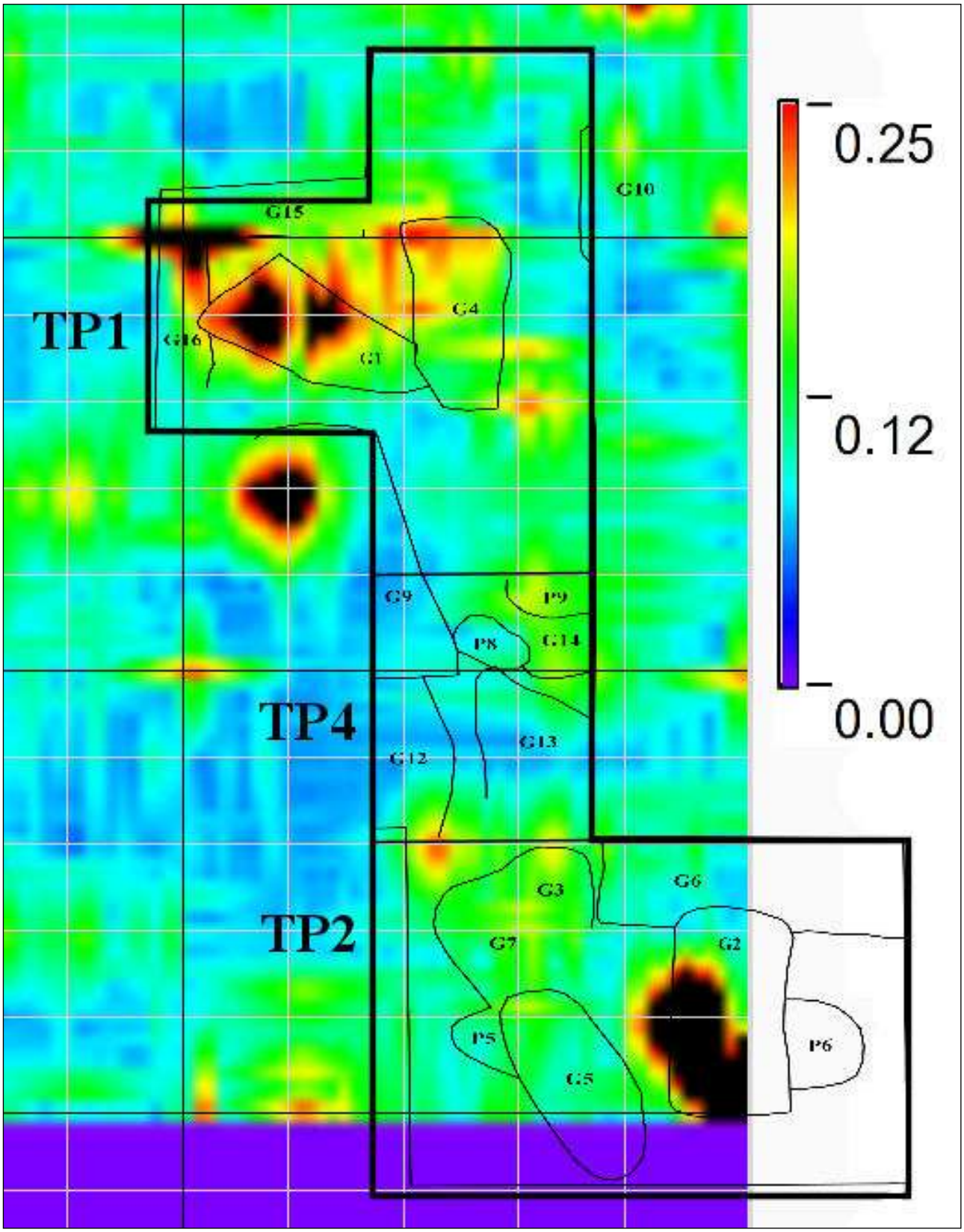


Figure 57: Plot showing as-excavated features superimposed over GPR results. Grid squares 1m.

17. Plates

Plate 1: Agricultural terracing – view looking WSW from footpath (viewpoint see Figure 5)

Plate 2: Western part of study area – view looking south-west (viewpoint see Figure 5)

Plate 3: Eastern part of study area – view looking east from top of bank beside footpath (viewpoint see Figure 5)

Plate 4: TP2-NEX Grave G6 (scales 2m & 0.5m)

Plate 5: TP2-NEX G6 Tang basin SF084

Plate 6: TP2-NEX G6 Hairpin SF095 (cm scale)

Plate 7: TP2-NEX G6 mid-Tang D-shaped strap-end SF087

Plate 8: TP2-NEX G6 mid-Tang belt buckle SF121

Plate 9: TP2-NEX G6 Mid-late Tang bowl SF086

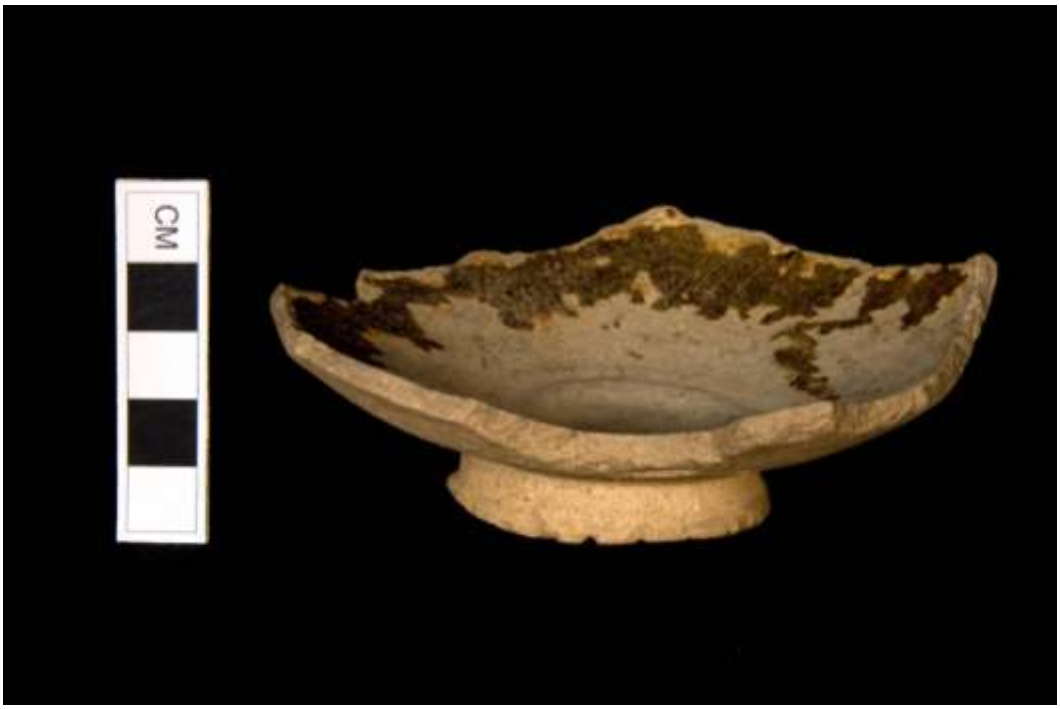


Plate 10: TP2-NEX G6 Mid-late Tang crackle glazed bowl SF089

Plate 11: TP2-SEX Grave G11stone on mid-late Tang jar SF117 (scales 2m & 0.5m)

Plate 12: TP2-SEX G11 Mid-late Tang grey-slipped lugged storage jar (SF117; AN6)

Plate 13: TP1-EX Tang lead/silver alloy object (SF076) – associated with either G1 or G15

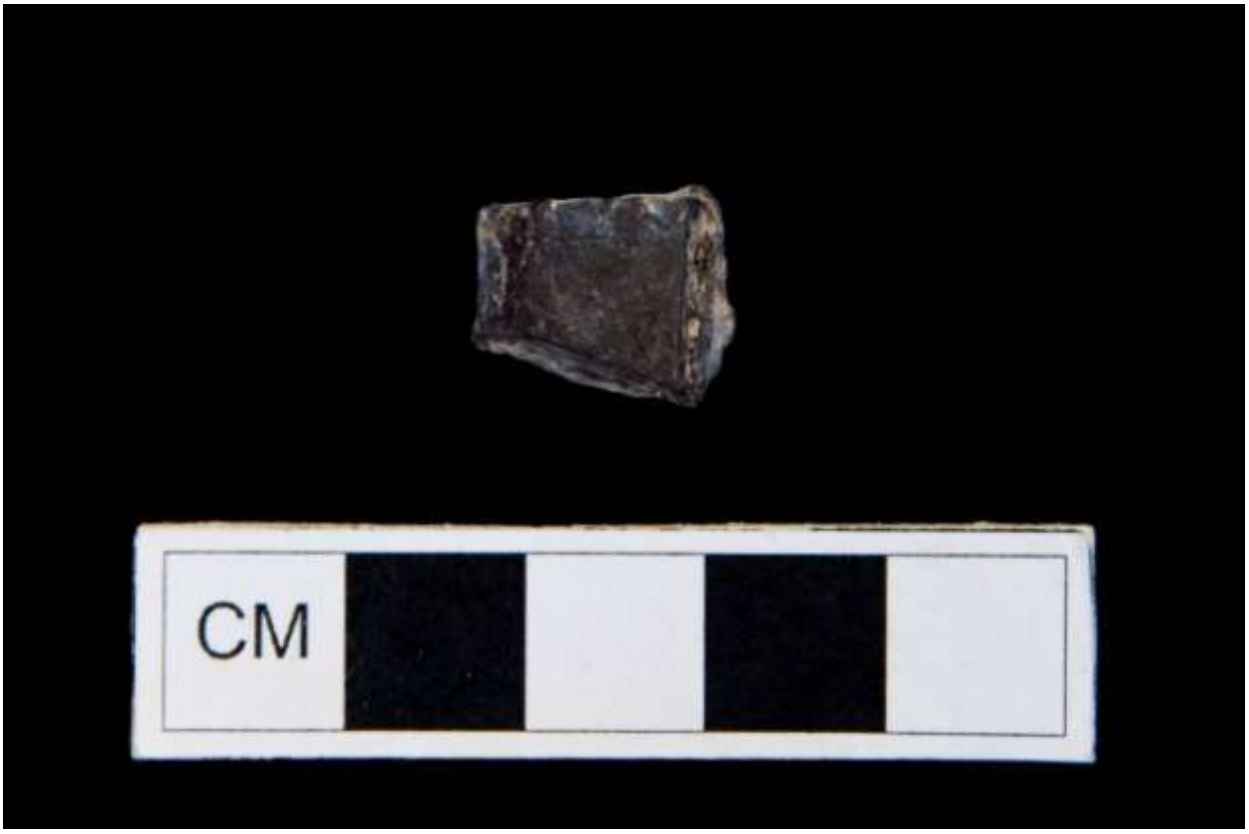


Plate 14: TP1 Tang lead/silver alloy object (SF094.1) – associated with either G1 or G15

Plate 15: TP1-EX Lead alloy object (SF094.2) – associated with either G1 or G15

Plate 16: TP2-EX Grave G2 (fill 202b) showing arrangement of grave goods – storyboard standing on fill of E-W orientated Grave G6, which was cut by G2 (scale 2m)

Plate 17: TP2-EEX & SEX G2
Tang rapier-like stabbing weapon (SF021.2)

Plate 18: TP2-EEX & SEX G2
Tang iron knife (SF073.1)

Plate 19: TP2-EEX G2 Tang large iron knife (SF065.1)

Plate 20: TP2-EEX G2 Tang iron short sword (SF065.2)

Plate 21: TP2-EEX G2 Tang iron adze-head (SF065.3)

Plate 22: TP2-EX G2 prehistoric sherds (SF022)

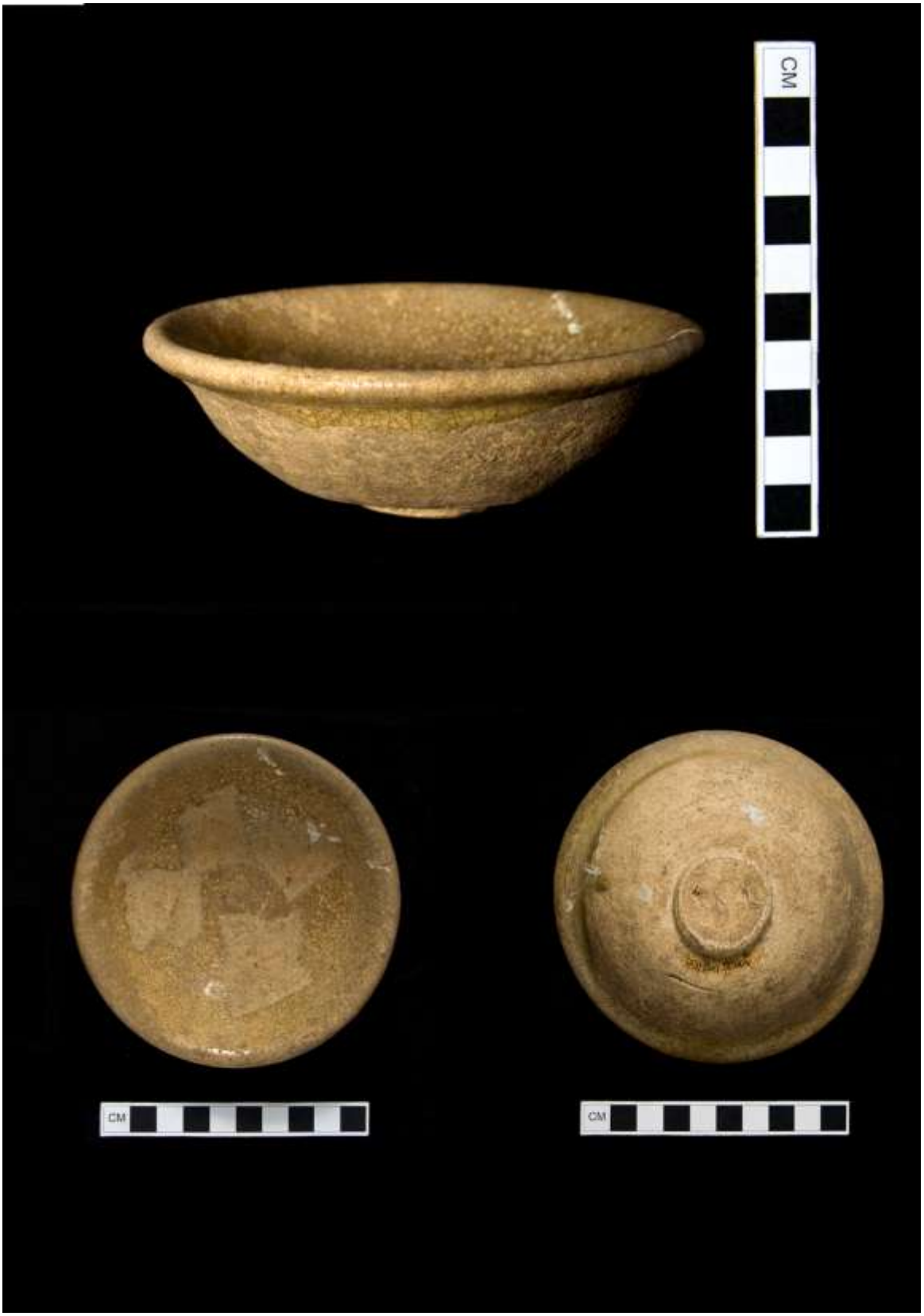


Plate 23: TP2-EX G2 mid-late Tang bowl (SF064)

Plate 24: TP2-EX G2 mid-late Tang D-shaped *kwa* (SF031)

Plate 25: TP2-EX G2 mid-late Tang silver or lead alloy object (SF068.1)

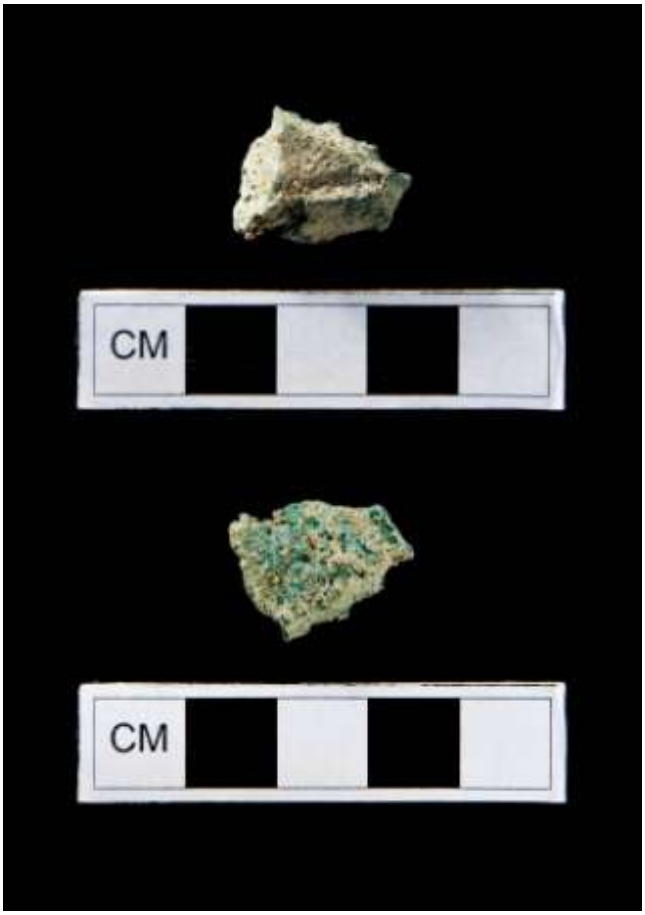


Plate 26: TP2-EX G2
Tang copper alloy object (SF068.2)

Plate 27: TP1-EX – NW-SE Grave G1 (foreground), N-S Grave G4 (background) (scales both 1m)

Plate 28: TP1-EX, cluster of grave goods at N end of Grave G4: including 140 + coins (SF058 & 059), iron harpoon (SF092) & spouted pottery vessel (SF057). (cm scale)

Plate 29: TP1-EX - NW-SE G4 Tang iron harpoon (attached to copper alloy coin)

Plate 30: TP1-EX G4 late Tang spouted vessel SF057

Plate 31: TP1-NEX G4 mid-late Tang crackle glazed bowl (SF075) – found under SF057

Plate 32: TP1-EX G4 pre-Tang (probably Jin) red slipped round-bottomed basin with ‘basketwork’ pattern base and undecorated belly, shoulder and rim (SF018, 082 & 090 – AN6)

Plate 33: TP1-EX G4 mid-late Tang cup SF026

Plate 34: TP1-EX G4
Mid-late Tang bowl SF020, AN14

Plate 35: TP1-EX Mid-late Tang dynasty bowl (SF020) as found in Co.102b – probably associated with Grave G4

Plate 35a: TP2-EEX Inverted mid-late Tang dynasty bowl (SF111) and stack of *Kaiyuan Tongbao* coins (SF110) identified at base of WFS in suspected Grave G8 (cm scale)

Plate 36: TP1-(2x2) Tang dynasty bronze hairpin (SF002)

Plate 37: TP2 G10 Mid-late Tang dynasty bowl (SF030)

Plate 38: TP1-EEX G10 Mid-late Tang bowl SF030 as found (cm scale)

Plate 39: TP1-(2x2) G1 mid-late Tang dynasty basin (SF018)

(above) Plate 40: TP1-(2x2) G1
Tang dynasty iron axe-head (SF017)

(left) Plate 41: TP1-(2x2) G1 mid-late Tang dynasty rectangular-shaped *kwa* (SF006)

Plate 42: TP1-EX G1 Tang dynasty small iron nail (SF029)

Plate 43: TP2-EX G7 in plan (scale 1m)

Plate 44: TP2-(2x2) G7 a complete mid-late Tang dynasty bowl (SF014)

Plate 45: TP2-EX G7 mid-late Tang dynasty six-lugged storage jar (SF025.3 & SF108.2)

Plate 46: TP2-WEX G7 early Tang or earlier six-lugged storage jar (SF108.1)

Plate 47: TP2-WEX G7 Tang dynasty iron knife blade (SF109)

Plate 48: TP1 & TP4 G9 stoneware jar base – probably Tang (SF115)

Plate 49: TP2-WEX Pit P5 Tang dynasty basin (SF100)

Plate 50: TP2-EEX Pit P6
late Tang – Northern Song bowl (SF102)

Plate 51: TP2-EX Grave G5 in plan (scale 1m)

Plate 51a: TP2-EX G5 Tang crackle glazed bowl kiln waster (SF042)

Plate 52: TP2-EX G5
Tang dynasty iron knife (SF041)

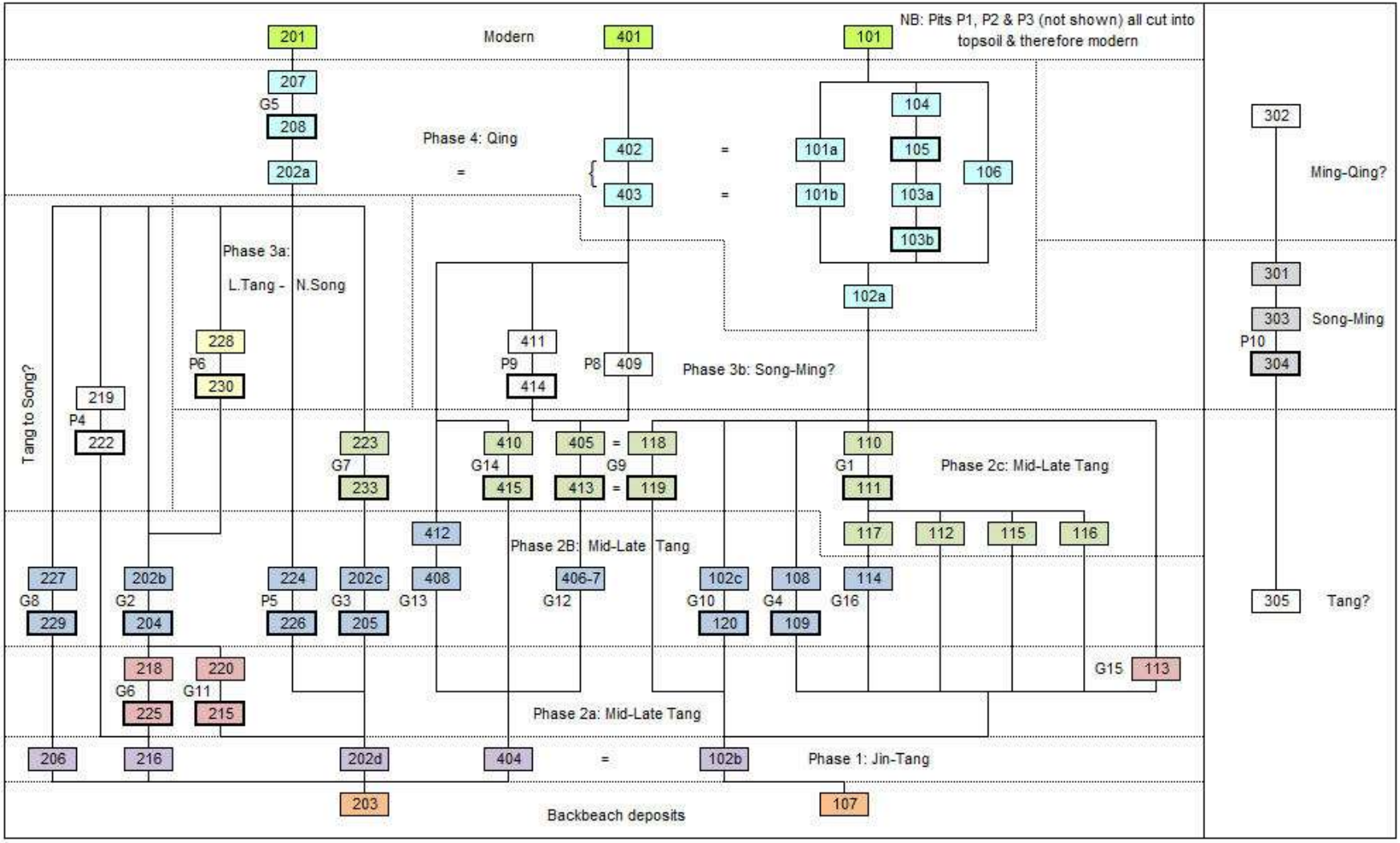
Plate 53: TP2 G5
Tang dynasty iron rapier (SF041)

Plate 54: TP2 G5
Tang dynasty iron harpoon (SF043)

Plate 55: TP1(2x2) Tang dynasty bronze hairpin from topsoil (101) (cm scale)

PART 8: SUPPORTING DATA

18. Harris Matrix



19. Table 5: Area ‘A’ coordinates & levels (see Figure 6 for locations of Points A-J)

Point	Surface coordinates		Levels (mPD)	
	Easting	Northing	Surface	Bottom
A	809796.64	816878.93	5.15	4.60
B	809796.67	816887.58	4.94	4.21
C	809794.71	816887.64	4.91	4.11
D	809794.76	816890.37	4.84	4.07
E	809796.62	816890.46	4.84	4.14
F	809796.67	816892.01	4.87	4.09
G	809798.66	816891.95	4.85	4.09
H	809798.68	816882.99	5.11	4.51
I	809801.52	816882.92	5.12	4.50
J	809801.43	816878.96	5.22	4.70
Surveyors established a temporary bench mark (TBM) numbered 3110F at coordinates 809788.71E; 816874.11N with a height of 5.57mPD				

20. Special finds

20.1 Introduction

The special finds are presented in table form below, while full textual descriptions can be found in the Special Finds Catalogue in Part 4. A key to finds codes used is provided in 20.2 and then the table follows in 20.3.

20.2 Table 6: Key to finds codes used

CATEGORY	MATERIAL	TYPE	FORM	SURFACE TREATMENT
CBM	Ceramic building material	TL = tile BR = brick		
FCL	Unclassified fired clay	OB = object		
MET = metal	CUA = copper alloy	CO = coin HP = hairpin BF = belt fitting	 DO = double-hairpin 釵 SI = single-hairpin 簪 BU = buckle SE = strap-end DE = decoration *(kwa)*	
	IRO = iron	KN = knife DA = dagger OB = object AX = axe NL = nail HN = harpoon HO = hook AD = adze RA = rapier	BE = blade SC - scabbard HE = head	
	SIL = silver	HP = hairpin	DO = double-hairpin SI = single-hairpin	
	LEA = lead	OB = object		
	ALU=aluminium	OB = object		
POT = pottery	HSF = historic sandy fabric HSW = historic stone ware (唐)	BA = base RI = rim	BL = bowl CU = cup	GL = glazed SL = slipped

	POC = (proto)porcelain (celadon) POQ = porcelain/proto porcelain (Qingbai) POK = proto porcelain (crackle glaze) POU = proto porcelain (unclassified) PCF = prehistoric coarse fabric HCW = historic coarse ware POP = provincial porcelain HFF = historic fine fabric	BO = body HA = handle VL = vessel SP = spout LI = Lid	BS = basin JR = jar	
STO = stone	QUA = quartz NON = non-identifiable FLI = flint	FK = flake TO = Tool OR = Ornament	TS = textile smoother SR = slit ring	CH = chipped PO = polished
GLA = glass PUM = pumice BON = bone SLA = slag				

20.3 Table 7: Special Finds

SF No.	Test Pit	Area	Grid	Cont.	AN No.	Cat.	Matl.	Type	Form	DIA	EVE	Surf. Treat.	Count	Wt (g)	Date/ Phase	Level (mPD)	Coordinates	ID & Feature
001	TP1	2x2	H15	101		MET	CUA	BF	BU				1	14	Mid Tang	4.715	809795.17E; 816889.80N	Belt buckle
002	TP1	2x2	H15	101		MET	CUA	HP	SH				1	11	Song?	4.785	809796.64E; 816888.78N	Hairpin – single leg
003	TP1	2x2	H15	101		MET	CUA	BF	DE				1	1	Mid Tang	4.765	809796.62E; 816889.35N	D-shaped *kwa*
004	TP1	2x2	H15	102(B)		MET	IRO	OB					1	41	Tang?	4.530	809795.88E; 816889.64N	**Possibly G1**; Nail, mushroom-headed
005	TP2	2x2	G15	201		MET	IRO	NL					1	4	UD	5.150	809798.70E; 816880.96N	Nail

006	TP1	2x2	H15	102(B)		MET	CUA	BF	DE				1	2	Mid Tang	4.520	809795.83E; 816888.94N	**Within G1;** rectangular *kwa*
007	TP1	2x2	H15	102(B)		MET	CUA	BF	DE				1	0.2	Mid Tang	4.515	809795.84E; 816888.72N	**Within G1**; D-shaped *kwa*, bottom plate fragment
008	TP1	2x2	H15	102(B)		MET	CUA	BF	DE				1	0.2	Mid Tang	4.510	809795.87E; 816888.69N	**Within G1**; D-shaped kwa, bottom plate fragment
009	TP2	2x2	G15	201 (DRY)		MET	LEA	OB					1	31	Tang?	NA	(Estimated) 809798.90E; 816881.10N	Folded lead strip, round-ended
010	TP1	2x2	H15	101 (118)		MET	CUA	BF	BU				2	7	Mid Tang	4.850	809796.16E; 816887.98N	**Within G9**; Belt buckle, 2 joining plates with elongated D-shape
011	TP2	2x2	G15	202B		MET	CUA	BF	DE				1	3	Mid Tang	4.600	809798.95E; 816880.73N	**Within G2**; D-shaped *kwa*
012= 064	See record for SF064																	
013= 069	See record for SF069																	
014	TP2	2x2	G15	202C or 223		POT	HFF	VL	BL	14	100	GL	1	320	M-L Tang	4.610	809798.27E; 816881.64N	**Within G3 or G7**; Bowl
015	TP1	2x2	H15	102(B)		MET	IRO	OB					1	5	Tang?	4.395	809796.57E; 816888.79N	**Within G1**, Scabbard fragments?
016	TP1	2x2	H15	102(B)		MET	CUA	BF	BU				1	2	Mid Tang	4.395	809796.48E; 816888.46N	**Within G1**; Belt buckle ring, half of a wedge-sectioned example
017	TP1	2x2	H15	102(B)		MET	IRO	AX	HE				1	863	Tang	4.305	809795.71E; 816889.16N	**Within G1**; Axe-head
018.1	TP1	2x2	H15	107	AN 20	POT	HFF	VL	BS	26	74.5	GL	1	1392	M-L Tang	4.355	809796.05E; 816889.00N	**Within G1**; Basin

018.2	TP1	2x2	H15	107	AN 13	POT	HSW	BO	JR			SL	2	73	pre-Tang	4.305	809796.05E; 816889.00N	**Within G1;** Jar
018.3	TP1	2x2	H15	107		POT	POK	RI	BL	14	10	GL	1	12	M-L Tang	4.305	809796.05E; 816889.00N	**Within G1**; Bowl
018.4	TP1	2x2	H15	107	AN 19	POT	POU	RI	BL	13	13	GL	1	15	M-L Tang	4.305	809796.05E; 816889.00N	**Within G1;** Bowl
018.5	TP1	2x2	H15	107		POT	POU	RI	BL	12	10	GL	1	4	Tang	4.305	809796.05E; 816889.00N	**Within G1**; Bowl
018.6	TP1	2x2	H15	107	AN 19	POT	POU	BO				GL	1	5	M-L Tang	4.355	809796.05E; 816889.00N	**Within G1**; refits with bowl SF035.1 (AN19)
018.7	TP1	2x2	H15	107		POT	HFF	BO				GL	1	37	Tang?	4.355	809796.05E; 816889.00N	**Within G1**; not part of basin
019	TP1	2x2	H15	102(B)		MET	CUA	BF	SE				1	10	Mid Tang	4.415	809796.55E; 816889.33N	**Probably G1 or G4**, D-shaped strap-end
020	TP1	2x2	H15	102(B)	AN 14	POT	POU	VL	BL	14	36	GL	1	238	M-L Tang	4.455	809796.92E; 816889.34N	**Probably G4**; Bowl
021.1 = 062	TP2	EEX, SEX	G15	202B		MET	IRO	KN	BL				2	18	Tang	4.695	809799.90E; 816880.19N	**Within G2;** Knife?
021.2 = 062	TP2	EEX, SEX	G15	202B		MET	IRO	RA					1	145	Tang	4.695	809799.90E; 816880.19N	**Within G2**; Rapier
022.1 = 066	TP2	2x2	G15	202B		POT	PCF	BO	JR			IM	13	170	LN2	4.695	809799.57E; 816880.50N	**Within G2**; Jar
022.1 = 066	TP2	2x2	G15	202B		POT	PCF	RI		NA	NA	IM	1	34	LN2		809799.57E; 816880.50N	**Within G2**; Jar
022.1 = 066	TP2	2x2	G15	202B		POT	PCF	RI		10	14.5		1	14	LN2		809799.57E; 816880.50N	**Within G2**; Jar
022.2 = 066	TP2	2x2	G15	202B		POT	PCF	RI	JR	NA	NA	IM	2	26	LN2	4.695	809799.57E; 816880.50N	**Within G2**; Jar

022.2 = 066	TP2	2x2	G15	202B		POT	PCF	BO				IM	1	5	LN2		809799.57E; 816880.50N	
023= 061	See record for SF061																	
024= 067	See record for SF067																	
025.1	TP2	2x2	G15	202C		POT	POK	RI	BL			GL	1	13	M-L Tang	4.640	809798.40E; 816881.45N	**Within G3 or G7**; Bowl
025.1	TP2	2x2	G15	202C		POT	POK	BO	BL			GL	1	17	M-L Tang	4.640	809798.40E; 816881.45N	**Within G3 or G7**; Bowl
025.2	TP2	2x2	G15	202C		POT	POK	RI	BL?	22	6.5	GL	1	14	Late Tang	4.640	809798.40E; 816881.45N	**Within G3 or G7**; Bowl
025.3	TP2	2x2	G15	202C	AN 15	POT	HSW	RI	JR	20	21	GL	3	77	M-L Tang	4.640	809798.40E; 816881.45N	**Within G3 or G7**; Jar
025.3	TP2	2x2	G15	202C	AN 15	POT	HSW	BO	JR			GL	16	863	M-L Tang	4.640	809798.40E; 816881.45N	**Within G3 or G7**, Jar lug - possibly same pot as above
026	TP1	EEX	H15	107		POT	HFF	VL	CU	8	100	GL	1	94	M-L Tang	4.450	809797.00-809797.50E; 816888.30N	**Probably G4**; Cup
027	TP2	2x2	G15	202B	AN 6	POT	HSW	BO	JR			SL	1	10	Tang	4.694	809799.50E; 816880.41N	**Within G2**; Jar handle
028	TP1	3x4	H15	102(B)		MET	CUA	BF	DE				1	8	Mid Tang	4.510	809795.04E; 816890.08N	**Possibly G15 or G16**, rectangular *kwa*
029	TP1	3x4	H15	107		MET	IRO	NL					1	2	Tang	4.290	809795.17E; 816889.20N	**Within G1**; Nail
030.1	TP1	2x2	H15	102[B)		POT	POU	BA	BL			GL	1	76	Late Tang (C9-10)	4.510	809798.07E; 816889.59N	**Probably from G10**; Bowl
030.2	TP1	2x2	H15	102(B)		POT	POK	RI	BL	16	6.5	GL	1	6	M-L Tang	4.510	809798.07E; 816889.59N	**Probably G10 or G4**; Bowl
031	TP2	2x2	G15	203		MET	CUA	BF	DE				1	3	Mid Tang	4.540	809798.86E; 816881.60N	**Within G2**; D-shaped *kwa*

032.1	TP1	3x4	H15	107		MET	IRO	KN	BL				1	14	Tang	4.305	809796.70E; 816889.25N	**Within G4**; Knife?
032.2	TP1	3x4	H15	107		MET	IRO	NL					1	3	Tang	4.305	809796.70E; 816889.25N	**Within G4**; Pin or nail
032.3	TP1	3x4	H15	107		MET	IRO	OB					1	1	Tang	4.305	809796.70E; 816889.25N	**Within G4**; Flakes
033	TP1	3x4	H15	102(A)		MET	CUA	BF	DE				1	2	Mid Tang	4.540	809795.03E; 816890.15N	D-shaped *kwa* (top plate)
034	TP1	2x2	H15	102(B)		MET	CUA	BF	DE				1	2	Mid Tang	4.530	809795.95E; 816890.17N	**Possibly G15**, D-shaped *kwa* (top plate)
035.1	TP1	2x2	H15	102B	AN 19	POT	POU	VL	BL	13	25.5		1	226	M-L Tang	4.430	809795.25E; 816890.05N	**Possibly from G15**; Bowl
035.2	TP1	2x2	H15	102B		POT	HSW	BO	JR				2	121	M-L Tang	4.430	809795.25E; 816890.05N	**Possibly from G15**; Jar
036.1	TP1	3x4	H15	107		MET	IRO	OB					1	1	Tang	4.335	809796.75E; 816889.19N	**Within G4**; Sheet – function unknown
036.2	TP1	3x4	H15	107		MET	IRO	KN	BL?				1	10	Tang	4.335	809796.75E; 816889.19N	**Within G4**; Bar - function unknown
036.3	TP1	3x4	H15	107		MET	IRO	KN?					1	57	Tang	4.335	809796.75E; 816889.19N	**Within G4**; Rod – function unknown
036.4	TP1	3x4	H15	107		MET	IRO	OB					1	8	Tang	4.335	809796.75E; 816889.19N	**Within G4**, Knife parts?
037	TP1	2x2	H15	107		MET	CUA	BF	DE				1	2	Mid Tang	4.340	809796.10E; 816889.50N	**Probably G1 or G4**, D-shaped *kwa*
038	TP2	WEX	G15	207		MET	IRO	OB					1	11	?	4.990	809797.84E; 816880.10N	**Within G5**; Nail?
039	TP2	WEX	G15	207		MET	IRO	OB					1	10	?	5.005	809798.05E; 816881.18N	**Within G5**; Disc – function unknown
040	TP2	NEX	G16	202A		MET	IRO	OB					1	6	?	5.010	809801.38E; 816882.31N	Nail shaft

041.1	TP2	SEX	F15	207		MET	IRO	KN	BL				2	21.5	?	4.630	809798.25E; 816879.58N	**Within G5**; Knife
041.2	TP2	SEX	F15	207		MET	IRO	KN	SC				2	9	?	4.630	809798.25E; 816879.58N	**Within G5**, Scabbard sheath or handle
042	TP2	SEX	F15	207		POT	POK	RI	BL	11	24.5	GL	1	29	Late Tang	4.665	809798.15E; 816879.99N	**Within G5**; Bowl - kiln waster comprised of 3 rim sherds stacked together;
043	TP2	SEX	F15	207		MET	IRO	HN					1	14	?	4.635	809798.25E; 816879.50N	**Within G5**, Harpoon
044	TP2	NEX	G15	202B		MET	CUA	BF	DE				1	2.5	Mid Tang	4.830	809798.80E; 816881.98N	**Within G2**; D-shaped *kwa*
045	TP2	SEX	F15	207		MET	IRO	RA					1	81	?	4.635	809798.20E; 816879.50N	**Within G5**; Rapier
046	TP2	SEX	F15	214= 220		MET	CUA	CO					1	2.5	Tang	4.845	809797.88E; 816897.28cm	**Possibly G11**; Coins *Kaiyuan Tongbao*
047	TP2	SEX	F16	216		MET	IRO	OB					1	7	Tang?	4.850	809799.88E; 816879.54N	**Possibly from G2**; Staple?
048	TP2	EEX	G16	202B		MET	CUA	CO					1 stack of 2	5	Tang	4.772	809800.20E; 816880.72N	**Within G2**; Coins *Kaiyuan Tongbao*
049	TP2	NEX	G16	217		MET	IRO	NL					1	5		4.890	809800.91E; 816882.87N	**Possibly G6**; Nail shaft
050	TP2	SEX	F15	202B		MET	IRO	NL					1	4	Tang?	4.850	809799.40E; 816879.84N	**Within G2**; Nail shaft
051	TP2	WEX	F15	202D		MET	CUA	CO					1 stack of 2	7	Tang	4.724	809797.67E; 816880.67N	**Probably P5**; Coins *Kaiyuan Tongbao*
052	TP2	WEX	F15	220		MET	CUA	CO					1 stack of 3	8.5	Tang	4.755	809797.82E; 816880.29N	**Possibly G11**; Coins *Kaiyuan Tongbao*
053= 108	See record for SF108																	

054	TP1	NEX	I15	102(A)		POT	POC	BA	BL			GL	1	125	Song	4.645	809797.30E; 816891.16N	Bowl
055	TP1	NEX	I15	102(B)		STO	UD	OB					1	139	UD	4.475	809797.00E; 816891.45N	Pebble: possibly textile smoother or polisher of some sort?
056.1	TP1	SEX	I15	107		MET	CUA	CO					c.16	58	Tang	4.425	809797.57E; 816887.43N	**Within G4**; Coins *Kaiyuan Tongbao*
056.2	TP1	SEX	I15	107		MET	CUA	CO					2	6.5	Tang	4.425	809797.57E; 816887.43N	**Within G4**; Coins *Kaiyuan Tongbao*
056.3	TP1	SEX	I15	107		MET	CUA	CO					1	3	Tang	4.425	809797.57E; 816887.43N	**Within G4**; Coins *Kaiyuan Tongbao*
057.1	TP1	NEX, EEX	I15, H15	107	AN 2	POT	HSW	VL	JR	8	47.5	GL	24	565	Late Tang	4.390	809797.45E; 816889.97N	**Within G4**; Wine jar?
57.2	TP1	NEX, EEX	I15, H15	107	AN 13	POT	HFF	BO	JR			SL	1	9	Pre-Tang	4.390	809797.45E; 816889.97N	**Within G4**; Jar
57.3	TP1	NEX, EEX	I15, H15	107		POT	POK	BO	BL			GL	1	16	Tang	4.390	809797.45E; 816889.97N	**Within G4**; Bowl
058.1	TP1	EEX	H15	107		MET	CUA	CO					1 stack of c.20	74	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
058.2	TP1	EEX	H15	107		MET	CUA	CO					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.3	TP1	EEX	H15	107		MET	CUA	CO					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.4	TP1	EEX	H15	107		MET	CUA	CO					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*

58.5	TP1	EEX	H15	107		MET	CUA	CO					1	4	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.6	TP1	EEX	H15	107		MET	CUA	CO					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.7	TP1	EEX	H15	107		MET	CUA	CO					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.8	TP1	EEX	H15	107		MET	CUA	CO					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.9	TP1	EEX	H15	107		MET	CUA	CO					1 stack of 3	11	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.10	TP1	EEX	H15	107		MET	CUA	CO					1	4	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.11	TP1	EEX	H15	107		MET	CUA	CO					1 stack of c.6	21	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.12	TP1	EEX	H15	107		MET	CUA	CO					1	4	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.13	TP1	EEX	H15	107		MET	CUA	CO					1	4	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.14	TP1	EEX	H15	107		MET	CUA	CO					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.15	TP1	EEX	H15	107		MET	CUA	CO					1 stack of 5	19	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.16	TP1	EEX	H15	107		MET	CUA	CO					1 stack of 2	9	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.17	TP1	EEX	H15	107		MET	CUA	CO					1 stack of c.9	24	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.18	TP1	EEX	H15	107		MET	CUA	CO					1 stack of c.7	23	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.19	TP1	EEX	H15	107		MET	CUA	CO					1	4	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*

58.20	TP1	EEX	H15	107		MET	CUA	CO					1	4	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coin *Kaiyuan Tongbao*
58.21	TP1	EEX	H15	107		MET	CUA	CO					1 stack of 21	77.5	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.22	TP1	EEX	H15	107		MET	CUA	CO					1 stack of c.9	33	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.23	TP1	EEX	H15	107		MET	CUA	CO					2	7	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.24	TP1	EEX	H15	107		MET	CUA	CO					1 stack of c.15	46	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.25	TP1	EEX	H15	107		MET	CUA	CO					1 stack of 10	36	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.26	TP1	EEX	H15	107		MET	CUA	CO					1 stack of c.6	23	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Coins *Kaiyuan Tongbao*
58.27	TP1	EEX	H15	107		MET	IRO	KN?					1	107	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Bar
58.28	TP1	EEX	H15	107		MET	IRO	HO					1	4	Tang	4.340	809796.88E; 816889.76N	**Within G4**; J-shaped fish-hook
58.29	TP1	EEX	H15	107		MET	IRO	OB					1	3	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Nail shaft
58.30	TP1	EEX	H15	107		MET	IRO	KN?					1	20	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Sheet or blade fragment
58.31	TP1	EEX	H15	107		MET	IRO	NL?					1	14	Tang	4.340	809796.88E; 816889.76N	**Within G4**; Spike
059	TP1	2x2	H15	107		MET	CUA	CO					1 stack of c.20	63	Tang	4.305	809796.73E; 816889.70N	**Within G4;** Coins *Kaiyuan Tongbao*
060	TP2	SEX	F15	202B		MET	IRO	KN?					1	14	Tang?	4.720	809799.46E; 816879.88 N	**Within G2**, Bar or nail

061 =023	TP2	2x2	F15	202B	AN 6	POT	HSW	VL	JR	15	31		6	341	M-L Tang	4.700	809799.60E; 816880.00N	**Within G2**, Jar
062 =021	See record for SF021																	
063	TP2	2x2	G15	202B		MET	CUA	CO					1 stack of 14	52	Tang	4.645	809799.77E; 816880.50N	**Within G2**; Coins *Kaiyuan Tongbao*
064 = 012	TP2	2x2	G15	202B		POT	POK	VL	BL	12	100	GL	1	162	M-L Tang	4.655	809799.74E; 816880.31N	**Within G2**; Bowl
065.1	TP2	EEX	G15	202B		MET	IRO	KN					1	382	Tang	4.640	809799.97E; 816881.27N	**Within G2**; Large Knife
065.2	TP2	EEX	G15	202B		MET	IRO	DA					1	337	Tang	4.625	809799.91E; 816881.20N	**Within G2**; Short Sword
065.3	TP2	EEX	G15	202B		MET	IRO	AD					1	306	Tang	4.630	809799.99E; 816881.19N	**Within G2**; Adze
066 =022	See record for SF022																	
067.1 = 024	TP2	2x2	G15	202B		MET	IRO	NL					1	11	Tang	4.685	809799.25E; 816881.25N	**Within G2**; Nail
067.2 = 024	TP2	2x2	G15	202B		MET	IRO	NL?					4	5	Tang?	4.685	809799.25E; 816881.25N	**Within G2**; Nail
068.1	TP2	2x2	G15	202B		MET	SIL?	OB					1	13	Tang	4.585	809799.53E; 816882.03N	**Within G2**; Wedge-shaped, decoration?
068.2	TP2	2x2	G15	202B		MET	SIL?	OB					1	7	Tang	4.585	809799.53E; 816882.03N	**Within G2**; Trapezoid decoration?
069.1	TP2	2x2	G15	202B		POT	POK	RI	BL	16	12	GL	1	25	M-L Tang		809799.20E; 816881.44N	**Within G2**; Bowl
069.2	TP2	2x2	G15	202B		POT	POK	BA	BL			GL	2	140	M-L Tang		809799.20E; 816881.44N	**Within G2**; Bowl
069.3	TP2	2x2	G15	202B		POT	POU	RI	BL	NA	NA	GL	1	2.5	Tang		809799.20E; 816881.44N	**Within G2**; Bowl

070	TP1	EEX	H15	107		MET	IRO	HO					4	37	Tang	4.330	809797.31E; 816889.52N	**Within G4**, Nails
071	TP1	2x2	H15	102(A)		MET	CUA	BF	DE				1	4	Mid Tang	4.610	809795.04E; 816890.12N	**Possibly G15 or G16**, D-shaped *kwa*
072	TP2	SEX, EEX	F16, G16	202B		MET	IRO	KN					1	96	Tang	4.630	809800.00E; 816879.98N	**Within G2**; Knife
073.1	TP2	EEX, SEX	F16, G16	202B		MET	IRO	KN					1	62	Tang	4.630	809800.00E; 816880.07N	**Within G2**; Knife
073.2	TP2	EEX, SEX	F16, G16	202B		MET	IRO	HN					1	21	Tang	4.630	809799.98E; 816880.07N	**Within G2**; Harpoon
074	TP2	SEX, EEX	F16, G16	202B		MET	IRO	OB					6	11	Tang?	4.680	809800.00E; 816879.80N	**Within G2**, Scabbard frags.?
075	TP1	NEX	I15	107		POT	POK	V	BL	16	30.5	GL	6	95	M-L Tang	4.360	809797.57E; 816890.05N	**Within G4**, Bowl
076	TP1	2x2	H15	107		MET	SIL?	OB					1	6	Tang	4.220	809795.68E; 816889.77N	**Probably G1 or G15**, Trapezoid decoration?
077	TP1	NEX	I15	107		MET	IRO	OB					1	14	Tang	4.325	809797.90E; 816889.93N	**Within G4**, Unidentifiable
078	TP1	NEX	I15	107		MET	IRO	OB					1	0.3	Tang	4.320	809797.52E; 816889.77N	**Within G4**, Magnetite sheet
079	TP1	2x2	H15	107		MET	IRO	OB					1	1	Tang	4.280	809796.71E; 816889.20N	**Within G4**, Magnetite sheet
080	TP1	SEX	H15	107		POT	HFF	VL	CU	8.2	100		1	95	Late Tang	4.430	809797.48E; 816887.88N	**Within G4**, Cup
081	TP1	NEX	I15	107		MET	SIL	HP	DO				1	5	Tang	4.310	809797.40E; 816890.19N	**Within G4**, U-shaped hairpin,
082	TP1	NEX	I15	107	AN 13	POT	HFF	RI	JR	20	9	SL	1	26.5	Pre-Tang	4.305	809797.75E; 816890.70N	**Possibly G4**, Jar
082	TP1	NEX	I15	107	AN 13	POT	HFF	BO	JR				1	22	Pre-Tang	4.305	809797.75E; 816890.70N	see above, not joiners

083	TP1	NEX	I15	107		MET	CUA	OB					1	2	Tang	4.310	809797.48E; 816890.09N	**Within G4**, Rectangular decoration?
084	TP2	NEX	G16	218	AN 10	POT	HSW	RI	BS	30	27		2	547	Tang	4.645	809801.04E; 816882.67N	**Within G6**; Basin
085	Cancelled																	Cancelled
086	TP2	NEX	G16	218		POT	POU	VL	BL	14	25.5	GL	1	190.5	Late Tang	4.665	809800.46E; 816882.40N	**Within G6**, Bowl
087	TP2	NEX	G16	218		MET	CUA	BF	SE				1	9	Mid Tang	4.625	809800.24E; 816882.49N	**Within G6**; Elongated D-strap-end
088	TP2	NEX	G16	218		MET	CUA	BF	DE				1	4	Mid Tang	4.625	819800.05E; 816882.46N	**Within G6**; Rectangular *kwa*
089	TP2	NEX	G15	218		POT	POU	BA	BL				1	138	M-L Tang	4.655	809799.04E; 816882.46N	**Within G6;** Bowl
090.1	TP1	NEX	I15	107	AN 13	POT	HFF	BO	JR			SL	1	29	pre-Tang	4.275	809797.35E; 816890.27N	**Possibly G4**; Jar
090.2	TP1	NEX	I15	107	AN 13	POT	HFF	BO	JR			SL	2		pre-Tang	4.285	809797.21E; 816890.24N	**Possibly G4; J**ar
091	TP1	NEX	I15	107		MET	CUA	OB					1	1	Tang	4.275	809797.40E; 816890.25N	**Probably G4;**, Trapezoid decoration?
092	TP1	SEX	H15	107		MET	IRO & CUA	CO & OB					1coin & 1 Fe Ob	18.5	Tang	4.335	809797.97E; 816887.76N	**Probably G4**; *Kaiyuan Tongbao* coin fused to harpoon
093	TP1	NEX	I15	107		HFF							1	0.3		4.245	809797.40E; 816890.04N	**Within G4**; pottery frag.
094.1	TP1	2x2	H15	115		MET	SIL?	OB					1	6	Tang?	4.240	809795.61E; 816889.39N	**Probably G1 (or G15)**; Trapezoid decoration?
094.2	TP1	2x2	H15	115		MET	SIL?	OB					1	21	Tang?	4.240	809795.75E; 816889.65N	**Probably G1 (or G15)**; Trapezoid decoration?

095	TP2	NEX	G16	218		MET	SIL	HP	DO				1	5	Tang	4.595	809799.37E; 812882.25N	**Within G6;** U-shaped hairpin
096	TP2	NEX	G16	218		MET	CUA	BF	DE				1	3	Mid Tang	4.575	809800.30E; 816882.40N	**Within G6**; D-shaped *kwa*
097	TP1	2x2	H15	115		MET	CUA	BF	DE				1	6	Mid Tang	4.185	809796.18E; 816889.36N	**Probably G1 (or G15)**; Rectangular *kwa*
098	TP1	SEX	H15	107		MET	IRO	OB					1	1	Tang	4.295	809798.18E; 816887.49N	**Probably G4**; Blade tip?
099	TP2	WEX	F15	220 (DRY)		MET	CUA	CO					1	4	Tang	NA	NA	**Possibly G11;** *Kaiyuan Tongbao*
100	TP2	WEX	G15	224	AN 16	POT	HSW	RI	BS	33	19	GL	1	833	Tang	4.625	809797.55E; 816880.70N	**Within P5**; Basin
101	TP2	WEX	G15	223	AN 16	POT	HSW	BO	BS			GL	3	506	Tang	4.715	809797.90E; 816881.60N	**Within G7**; Basin
102	TP2	EEX	G16	228		POT	POK	BA	BL			GL	1	84	Late Tang - N. Song	4.755	809800.98E; 816880.78N	**Within P6;** Bowl
103	TP4		G15	402		MET	IRO	NL					1	5		Record Missing		Nail
104	TP2	SEX	G16	216		MET	IRO	OB					1	4		4.735	809801.40E; 816879.17N	Corrosion flake
105	TP2	SEX	G16	216		MET	IRO	OB					1	1		4.745	809800.93E; 816897.18N	Corrosion flake
106	TP4		G15	403 (DRY)		MET	IRO	NL					1	7		4.865	NA	Nail
107	TP4		H15	402		MET	IRO	CP					10	15		4.840	809769.77E; 816885.47N	Fragments of iron corrosion
108.1 = 053	TP2	NEX	G15	223		POT	HSW	VL	JR	18	22	GL	2	748	Early Tang or slightly earlier	4.695	809797.59E; 816882.15N	**Within G7**; Jar
108.2 = 053	TP2	NEX	G15	223		POT	HSW	BO	JR			GL	2	43	Tang	4.695	809797.59E; 816882.15N	**Within G7**; Jar

109	TP2	WEX	G15	223		MET	IRO	KN					1	92	Tang	4.590	809797.66E; 816881.82N	**Within G7**; Knife
110	TP2	EEX	G16	227		MET	CUA	CO					1 stack of c.12	36	Tang	4.660	809800.97E; 816880.32N	**Within G8**; *Kaiyuan Tongbao*
111	TP2	EEX	G16	227		POT			BL						Tang	4.630	809800.94E; 816880.55N	**Within G8**; Bowl – not lifted
112	TP1	NEX	I15	107		BON							2	7	Tang?	4.285	809798.12E; 816891.39N	Possibly bone?
113	TP1	2x2	H15	102A		MET	CUA	BF	SE				1	14	Mid Tang	4.500	809794.83E; 816889.69N	**Possibly G16**; Elongated-D strap-end
114	TP1	2x2	H15	102B		POT										4.385	809794.85E; 816889.68N	From EFS; not lifted.
115	TP1	2x2	H15	118		POT	HSW	BA	JR?			GL	2	279	Tang?	4.680	809796.53E; 816887.65N	**Within G9**; Jar?
116	TP2	NEX	G16	218		MET	CUA	BF	DE				1	0.3	Mid Tang	4.500	809799.79E; 816882.38N	**Within G6**; D-shaped *kwa*
117	TP2	SEX	F15	220	AN 6	POT	HSW	RI	JR	15	24	SL	1	73	M-L Tang	4.615	809797.55E; 816879.53N	**Within G11? J**ar
117	TP2	SEX	F15	220	AN 6	POT	HSW	BA	JR				5	383	M-L Tang	4.615	809797.55E; 816879.53N	**Within G11? J**ar
117	TP2	SEX	F15	220	AN 6	POT	HSW	BO	JR				8	186	M-L Tang	4.615	809797.55E; 816879.53N	**Within G11? J**ar
118	TP2	NEX	G16	218 (WET ES22)		MET	CUA	BF	DE				1	4	Mid Tang			**Within G6**; Rectangular k*wa*
119.1	TP1	NEX	I15	102B	AN 12	POT	HSW	BA	BS			GL	2	208	Late Tang	4.460	809798.40E; 816891.45N	**Possibly G10;** Basin
119.2	TP1	NEX	I15	102B		POT	HSW	BO	JR			GL	1	9	Tang	4.460	809798.40E; 816891.45N	**Possibly G10**; Jar
119.3	TP1	NEX	I15	102B		POT	HSW	BO	JR			GL	1	4	Tang	4.460	809798.40E; 816891.45N	**Possibly G10**; Jar

120	TP1	NEX	I15	102B		POT	POK	BA	BL			GL	2	43	M-L Tang	4.400	809796.90E; 816890.23N	**Possibly G4**; Bowl
121	TP2	NEX	G16	218		MET	CUA	BF	BU				3	14	Mid Tang	4.605	809798.76E; 816882.96N	**Within G6**; Belt buckle
122	TP2	NEX	G15	218		POT	HSW	BO	JR			SL	1	53	M-L Tang	4.600	809799.06W; 816882.97N	**Within G6**; Jar
123	TP2	SEX	F16	216		MET	CUA	BF	BU				1	38	Mid Tang	4.690	809801.10E; 816880.05N	**Possibly G8?** Belt buckle
124	TP2	SEX, EEX	G15-16 & F15-16	202B (WET)		POT	HSW	BO					1	c.0.4	pre-Tang		Approx. Locn. 809800.00E; 816880.00N	**Within G2**; Pottery from ES011 (B 2 of 3)
125	TP1	SEX	H15	107 (DRY)		MET	CUA	CO					1	3	Tang	4.425	Approx. Locn. 809797.57E; 816887.43N	**Within G4**; Coin from near SF056; *Kaiyuan Tongbao*
126	TP1	2x2	H15	107 (WET)		MET	IRO	KN	BE				5	6	Tang		Approx. Locn. 809796.05E; 816889.00N	**Within G1**; Blade frag.? From ES001 (under SF018 basin)
127	TP1	2x2	H15	102 (WET)	AN 20	POT	HFF	RI	BL?	NA	NA	GL	1	5.5	Tang		Approx. Locn. 809796.05E; 816889.00N	**Within G1**; Bowl frag. From ES02 (inside SF018 basin);
128.1	TP2	WEX	G15	202C or 223? (WET)		MET	CUA	CO					1 stack of 6	19	Tang		Approx. Locn. 809798.40E; 816881.45N	**Within G3/G7**; Coins *Kaiyuan Tongbao*, from ES031 Bag 2 of 3 (under grave goods in G3/G7)
128.2	TP2	WEX	G15	202C (WET)		MET	IRO	OB					2	c.0.3	Tang		Approx. Locn. 809798.40E; 816881.45N	**Within G3/G7**; Iron frags. from ES031 Bag 3 of 3
128.3	TP2	WEX	G15	202C (WET)		MET	CUA?	OB					1	1	Tang		Approx. Locn. 809798.40E; 816881.45N	**Within G3/G7**; Belt buckle ring fragment? From ES31 Bag 1 of 3;
129						MET	CUA	CO					1 stack of 3	15	Tang		Not known - unstratified	Coins *Kaiyuan Tongbao* Recovered from spoil heap during

																		backfilling
130	TP1	EEX	H15	102C		MET	CUA	CO					1	4	Tang		Approx. Locn. 809798.40E; 816890.00N	**Within G10**, Coin *Kaiyuan Tongbao*

21. Table 8: General Finds

Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	101	MET	IRO	OB					2	5		
	TP1	H15	2x2	101	PUM							2	5		
	TP1	H15	2x2	101	POT	HSW	BO				GL	18	33	Song-Modern	mostly thin-walled, 11 fragments glazed on one side, 5 on both sides
	TP1	H15	2x2	101	POT	HSW	RI	JR	12	5	GL	1	20		Bag placed inside B-003; dark brown glaze; glazed on exterior and rim; flat-tipped narrow lip, short vertical rim getting thicken towards neck on the exterior, wide but shallow incised neck line, broken handle close to neck. Light grey fabric.
	TP1	H15	2x2	101	POT	HSW	RI		NA	NA	GL	1	1		Bag placed inside B-003; too small to measure rim diameter; dark brown glaze; glazed in interior; flat narrow lip, flared rim, long neck.
	TP1	H15	2x2	101	POT	HSW	HA				GL	1	1		Bag placed inside B-003; dark brown glaze; glazed on exterior.
	TP1	H15	2x2	101	POT	HSW	BO						50		Non-glazed; 3 rice grinder sherds; 1 thick wall
	TP1	H15	2x2	101	POT	HSW	RI	BS	19	8		1	14		Bag placed inside B-004; Non-glazed; flat wide lip, folded rim, rim thicker than wall; thin-walled, vertical incision on interior. Surface colour light grey, fabric colour light creamy yellow.
	TP1	H15	2x2	101	POT	HSW	RI	BS	22	5		1	8		Bag placed inside B-004; Non-glazed; flat wide lip, folded rim, rim thicker than wall; thin-walled, vertical incision on interior. Surface colour light greyish pink, fabric colour light grey.
	TP1	H15	2x2	101	POT	POC	BO				GL	1	1		Light brownish green crackle glaze on interior.
	TP1	H15	2x2	101	POT	POC	BA				GL	2	4		Light brownish green crackle glaze on interior.
AN1	TP1	H15	2x2	101	POT	POU	VL	BL	13	7	GL	11	75		9 joiners; bowl; height 2.9cm; round lip, flared rim, shallow wall gradually joining the base, has short foot ring (2.5mm in height), incised line on exterior near foot-ring; cutting-off marks on base; yellowish green crackle glaze applied on internal rim and wall. Fabric colour light yellowish pink. Also see B-013a and B-034a.

							RI	BL	13	7	GL	5	12		
							BO	BL			GL	4	15		
							BA	BL	5	100		2	48		
AN14	TP1	H15	2x2	101	POT	POK	RI	BL	13	17	GL	1	42	M-L Tang	round lip, wall vertical towards lip, round belly; brownish green crackled glaze applied on both internal and external area closed to the rim. Same as SF020.
	TP1	H15	2x2	101	POT	POU	RI	BL	12	10	GL	1	1		Bag placed inside B-005; ; round lip; steep wall; thin light green crackled glaze applied on lip and interior; a circle of incision applied on interior right under rim.
	TP1	H15	2x2	101	POT	HFF	Bo				GL	1	7	Tang	Glazed at interior
	TP1	H15	2x2	101	POT	HFF	Bo				GL	1	20		Thick wall (0.6-0.7cm); brownish green glaze traces on interior; two circles of incision on exterior.
	TP1	H15	2x2	101	POT	HFF	RI	BL	16	12	SL	2	22	Tang	2 joiners; round lip, steep wall; greyish red slip applied on external rim area and internal wall.
	TP1	H15	2x2	101	POT	HFF	RI	BL	15	7	SL	2	7	Tang	2 joiners; round lip, steep wall; greyish red slip applied on both external and internal walls.
	TP1	H15	2x2	101	POT	HFF	RI	BL	15	4	SL	1	2	Tang	round lip; red slip on external rim and interior.
	TP1	H15	2x2	101	POT	POP	RI	NA	NA	NA	GL	1	2	Ming-Qing	too small to measure rim diameter; lip : round towards exterior, sharp twist edge towards interior ; lip unglazed; blue on exterior, transparent light green glaze with crackles on interior.
	TP1	H15	2x2	101	POT	POP	BA	CU	2.2	50	GL	1	4	Ming-Qing	shallow foot-ring (0.4cm in height);fully glazed apart from coarse foot-ring; blue on exterior; white fabric, occasional sand.
	TP1	H15	2x2	101	CBM		TL					4	25		
	TP1	H15	SEX	101	CBM		TL					3	32		2 flat fragments, 1 curved shape with 2 remaining sides.
	TP1	H15	SEX	101	GLA							3	2	Modern	
	TP1	H15	SEX	101	MET	ALU	OB					2	7	Modern	
	TP1	H15	SEX	101	POT	HSW	BO				GL	13	36		brown to dark brown glaze
	TP1	H15	SEX	101	POT	HSW	BO					3	2		non-glazed.
	TP1	H15	SEX	101	POT	HSW	BA	BL	17	5	GL	1	7		height 2.6cm; lip: outer lip round inner lip sharp edge; shallow and steep wall; short but wide foot ring; dark brown glaze fully applied the vessel
	TP1	H15	SEX	101	POT	HSW	BA	JR	9.5	20	GL	4	60		4 joiners; gradual belly, flat external base; brown glaze applied on internal wall
	TP1	H15	SEX	101	POT	HSW	BA		12	8	GL	1	6		flat external base; pale greyish green glaze on internal wall
	TP1	H15	SEX	101	POT	HSW	BA		12	8	GL	1	9		flat external base; pale greyish green glaze on internal wall
	TP1	H15	SEX	101	POT	POC	BO					2	15		pale green glaze on both external and internal walls

AN1	TP1	H15	SEX	101	POT	POU	RI	BL	13	8	GL	1	4		Same type as B-005a; , round lip, flared rim, gradual wall; yellowish green crackle glaze applied on internal rim and wall. Fabric colour light yellowish pink.
	TP1	H15	SEX	101	POT	PCF	BO					2	4	Prehist	small fragments; 1 with orangey red surface
	TP1	H15	SEX	101	POT	HFF	BO				SL	1	3		dark brownish red slip or under-fired glaze on the internal wall
	TP1	H15	SEX	101	POT	POP	BO				GL	1	1	Ming to Qing	B&W; vivid blue glaze on translucent pale bluish white glaze; white porcelain fabric
	TP1	H15	SEX	101	POT	POP	BA		NA	NA	GL	1	4	Qing	B&W; dull greyish green on pale greenish white glaze, broken flat base sherd, diameter not measurable.
	TP1	H15	SEX	101	POT	POP	RI	BL	13	10	GL	2	5	Ming to Qing	2 joiners; B&W; rough surface; open-form; flat and narrow lip, slightly flared rim, blue painting on exterior, one circle of blue on internal rim close to lip; no glaze on rim
	TP1	H15	EEX	101	POT	HSW	BO				GL	1	2		dark brown glaze on interior
	TP1	H15	EEX	101	POT	HSW	BO	BS				1	8		sherd of rice grinder
	TP1	H15	EEX	101	POT	POP	RI	BL	NA	NA	GL	1	1	Qing	Possibly B&W; greyish white glaze on both interior and exterior, no glaze on lip
	TP1	I15	NEX	101	POT	HSF	BO	BS				1	4		sherd of rice grinder
	TP1	I15	NEX	101	POT	HSW	BO				GL	4	23		Village Ware; brown to dark brown glaze; 1 sherd with decayed glaze on exterior.
	TP1	I15	NEX	101	POT	HSW	BO				SL	1	12		grey slip applied on interior and exterior.
	TP1	I15	NEX	101	POT	HSW	BO	BS				1	16		sherd of rice grinder
	TP1	I15	NEX	101	POT	HSW	RI		NA	NA	SL	1	7		too small to measure diameter; round lip; rim thicker than wall; light brown slip
	TP1	I15	NEX	101	POT	POK	RI	BL	16	4	GL	1	5	M-L Tang	open-form; round lip; slightly flared rim; light green crackle glaze fully applied. Guangdong kiln.
	TP1	I15	NEX	101	POT	POQ	BO				GL	1	4		pale greyish green glaze on both interior and exterior
	TP1	I15	NEX	101	POT	POU	BO				GL	3	10		3 with light greyish white glaze on both exterior and interior
	TP1	I15	NEX	101	POT	HFF	BO				SL	1	11		grey slip
AN13	TP1	I15	NEX	101	POT	HFF	RI		22	7	SL	1	20	Pre-Tang	round lip; incised circles applied at internal rim near neck and external rim near lip; red slip; orangey pink chalky fabric; same as SF082, SF 090.1, SF090.2 and SF018.2.
	TP1	I15	NEX	101	CBM		TL					2	6		Dry sieving
	TP1	I15	NEX	101	GLA							1	1		Dry sieving
	TP1	I15	NEX	101	POT	HSW	BO				GL	2	2		Dry sieving; brown glaze
	TP1	I15	NEX	101	POT	HSW	BO					1	2		Dry sieving; sherd of rice grinder
	TP1	I15	NEX	101	POT	HSW	BO					1	1		Dry sieving; non-glazed

	TP1	I15	NEX	101	POT	HSW	BO				SL	4	17		Dry sieving; brown slip or under-fired glaze
	TP1	I15	NEX	101	POT	HSW	BO				GL	1	1		Dry sieving; light grey glaze
	TP1	I15	NEX	101	POT	HFF	BO					2	2		Dry sieving; non-glazed; fabric colour cream
	TP1	I15	NEX	101	POT	HFF	RI		16	5	GL	1	4		Dry sieving; round lip; rotten glaze
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	EEX	101C	POT	HFF	BO					1	30		Non-glazed
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	102	PUM								491		
	TP1	H15	2x2	102	PUM								9		Dry sieving; soil around SF018
	TP1	H15	2x2	102	BON							1	<1		
	TP1	H15	2x2	102	MET	IRO	OB					1	4		
	TP1	H15	2x2	102	POT	HSW	BO				GL	1	7		under-fired brown glaze on exterior; incision on both interior and exterior.
	TP1	H15	2x2	102	POT	HSW	BO				GL	2	12		2 joiners; brown glaze on exterior; two fabric colours: outer dark grey, inner light creamy yellow
	TP1	H15	2x2	102	POT	HSW	RI		NA	NA	SL	1	2		thin wall (0.3cm); round lip; brownish grey slip on interior.
AN2	TP1	H15	2x2	102	POT	HSW	BO					4	39	L Tang	crackle dark brown glaze on both interior and exterior. Can be refitted with 1 sherd in B- 040a, Guangdong Shiwan Kiln.
	TP1	H15	2x2	102	POT	POC	BO				GL	1	17	Song	crackle greyish green glaze on both interior.
AN1	TP1	H15	2x2	102	POT	POU	RI		13	5	GL	1	5		Open-form; round lip, flared rim; yellowish green glaze applied on internal wall. Fabric colour light yellowish pink. Can be joined to fragments in B-005a and B-013a.
	TP1	H15	2x2	102	POT	POK	RI		NA	NA	GL	1	5		Open-form; round lip; yellowish green glaze with large crackles applied on rim.
AN4	TP1	H15	2x2	102	POT	POK	HA				GL	1	11	Tang?	Handle attached to thick wall (thickness 1.1cm); crackle light greyish green glaze applied on both interior and exterior. Can be refitted with B-043.
	TP1	H15	2x2	102	POT	POK	BO				GL	4	26	M-L Tang	2 joiners; light yellowish green crackle glaze applied on both exterior and interior. Guangdong kiln.
	TP1	H15	2x2	102	POT	POU	RI	BL	24	5	GL	1	10		Open-form; round lip; vertical wall; under-fired or low quality glaze applied on both interior and exterior. A circle of incision applied on exterior neat rim. Fabric colour pinkish yellow.
	TP1	H15	2x2	102	POT	POU	RI		NA	NA	GL	1	2		too small to measure diameter; interior chipped off; grey slip or green-fired glaze on exterior; 3 circles of incision on exterior; fabric colour pink

	TP1	H15	2x2	102	POT	POU	BO				GL	1	4		greyish yellow glaze on interior; dot motif on exterior.
AN13	TP1	H15	2x2	102	POT	HFF	BO				SL	1	54	Pre-Tang	Thick wall (0.6-1.1cm); Red slip on both interior and exterior; impressed mat pattern on exterior. Fabric colour light orangey pink, occasional coarse quartz grain. Can be refitted with B-059 and SF090.1. same as SF082, SF 090.1, SF090.2 and SF018.2. Reference : *Archaeological Finds from the Jin to the Tang Periods in Guangdong* (1985), page 131. No.19
AN13	TP1	H15	2x2	102	POT	HFF	BO				SL	1	3	Pre-Tang	Red slip on both interior and exterior; incised circle on exterior; Fabric colour light orangey pink, occasional coarse quartz grain.
	TP1	H15	2x2	102	POT	HFF	BO				SL	1	22		Thick wall(0.9cm); Greenish grey slip on exterior; two incision observed on exterior. Fabric colour light creamy yellow.
	TP1	H15	2x2	102	POT	HFF	BO				SL	3	14		1 sherd with flange. Greenish grey slip on exterior. Fabric colour light creamy yellow.
	TP1	H15	2x2	102	POT	HFF	BO					1	12		non-glaze or slip; Fabric colour light creamy yellow.
	TP1	H15	2x2	102	POT	HFF	RI	JR	10.5	16	SL	1	22		Restricted form; round and thick lip, vertical neck gradually joining shoulder; thickness of wall 0.8cm. Fabric colour light creamy yellow.
	TP1	H15	SEX	102	MET	IRO	OB					2	8		
	TP1	H15	SEX	102	MET	IRO	NL					1	8		L5.6cm x DIA.1.1cm
	TP1	H15	SEX	102	POT	HFF	BO					3	13		non-glaze or slip
	TP1	H15	SEX	102	POT	HFF	BA	JR	13	25		3	213		3 joiners; thick wall (1.1-2cm); internal wall gradually joining internal bas; flat external base
AN12	TP1	H15	SEX	102	POT	HSW	BO	JR			GL	7	175	L Tang	2 joiners; thick wall (0.8-1.1cm); green crackle glaze applied on both interior and exterior; from same pot as B-038a and B-058
AN12	TP1	H15	SEX	102	POT	HSW	BA	JR	15	10	GL	1	92	L Tang	thick wall (1.3-1.7cm); internal wall gradually joining internal base, flat external base; green crackle glaze evenly applied on interior, glaze drops on exterior; from same pot as B-038 and B-058. same pot as SF119.1. Guangdong or Changsha kiln.
AN12	TP1	H15	SEX	102	POT	HSW	BA	JR	NA	NA	GL	1	34	L Tang	thick wall (1.1-1.7cm);internal wall gradually joining internal base, flat external base; green crackle glaze evenly applied on interior, glaze drops on exterior; from same pot as B-038. same pot as SF119.1.
	TP1	H15	SEX	102	POT	HSW	VL	JR			SL	9	274		9 joiners; flat base; light greyish brown slip applied on interior; circles of incision applied on external wall; fabric colour yellowish grey.
							BO	JR			SL	4	24		
							BA	JR	17	26	SL	5	250		
	TP1	H15	SEX	102	POT	HSW	BO				GL	11	77		mostly with brown glaze; some with greenish brown glaze.

AN2	TP1	H15	SEX	102	POT	HSW	HA	JR			GL	3	45	L Tang	3 joiners; comprised of lug and body sherd; dark brown, with violet patches, glaze applied on both interior and exterior. Related to SF057; Guangdong Shiwan Kiln.
	TP1	H15	SEX	102	POT	HSW	HA				GL	2	29		possibly handle or lug; dark brown glaze applied on surface left.
	TP1	H15	SEX	102	POT	HSW	RI		14	6	GL	1	4		Open-form; round lip, thin wall; brownish green glaze applied on rim and internal wall.
	TP1	H15	SEX	102	POT	HSW	BO					4	21		2 joiners; 1 sherd of rice grinder
	TP1	H15	SEX	102	POT	POC	RI		19	5	GL	1	4		Open-form; pointed lip; uneven greyish blue glaze
	TP1	H15	SEX	102	POT	POC	BO				GL	1	7	Song	greyish green glaze applied on both interior and exterior.
	TP1	H15	SEX	102	POT	HFF	BO				SL	4	30		with light greyish green slip or invertified glaze, fabric colour light creamy yellow.
AN13	TP1	H15	SEX	102	POT	HFF	BO				SL	3	18	Pre-Tang	3 with red slip on both interior and exterior, fabric colour orangey yellow; same as SF082, SF 090.1, SF090.2 and SF018.2.
AN4	TP1	H15	SEX	102	POT	POK	BO				GL	5	69	Tang?	light yellowish green crackle glaze applied on both interior and exterior; one sherd with handle mark. Can be re-fitted with B-034b.
	TP1	H15	SEX	102	POT	POK	RI		NA	NA	GL	1	3		open-form; round lip, light yellowish green glaze
	TP1	H15	SEX	102	CBM							1	25		light greyish yellow fabric; string cutting mark and textile imprint left on surface.
	TP1	I15	NEX	102	MET	IRO	OB					1	2		
	TP1	I15	NEX	102	POT	HSW	BO					1	1		non-glaze
	TP1	I15	NEX	102	POT	HFF	BO				SL	1	2		red slip on both exterior and interior.
	TP1	H15	EEX	102	PUM								98		
	TP1	H15	EEX	102	POT	HSW	BO				GL	1	27	Song to Ming	Olive brown glaze applied on exterior; incision applied on exterior.
	TP1	H15	EEX	102	POT	HSW	BO				GL	1	5		dark brown glaze on both interior and exterior.
AN13	TP1	H15	EEX	102	POT	HFF	BO				SL	1	20	Pre-Tang	Thick wall (0.8-1.2cm); red slip on both interior and exterior, impressed mat pattern on exterior; fabric colour orangey pink.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	102A	POT	HFF	BO				SL	1	1		light brown slip applied on the interior; fabric colour light greyish yellow.
	TP1	I15	NEX	102A	POT	HFF	BO					1	4		non-glazed or slipped; fabric colour greyish pink
	TP1	I15	NEX	102A	POT	HFF	RI		NA	NA	GL	1	5		decayed glaze applied on both interior and exterior.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments

	TP1	H15	2x2	102B	PUM								16		
	TP1	H15	2x2	102B	POT	HFF	BO				GL	2	11		with decayed glaze
	TP1	H15	2x2	102B	POT	POK	RI		NA	NA	GL	1	4	Tang	too small to measure DIA; open-form; round lip, pale green crackle glaze applied on rim and both interior and exterior.
	TP1	H15	2x2	102B	POT	POK	BO				GL	1	2	Tang	pale green crackle glaze applied on both interior and exterior
	TP1	H15	2x2	102B	POT	POU	RI		NA	NA	SL	1	3		Open-form; round lip, brown slip applied on exterior.
	TP1	I15	NEX	102B	PUM								1		
AN12	TP1	I15	NEX	102B	POT	HSW	BA		NA	NA	GL	1	18	L Tang	thick wall (0.9cm); green crackle glaze applied on internal base; from same pot of B-038 and B-038a. same pot as SF119.1. Guangdong or Changsha kiln.
AN13	TP1	I15	NEX	102B	POT	HFF	BO				SL	1	24	Pre-Tang	red slip applied on both interior and exterior, impressed mat pattern applied on exterior; fabric colour orangey yellow; similar with B-042. Can be refitted with B-035 and SF090.1
AN13	TP1	I15	NEX	102B	POT	HFF	BO				SL	2	21	Pre-Tang	with red slip; fabric colour orangey yellow.
	TP1	I15	NEX	102B	POT	HFF	BO				GL	1	5		with decayed glaze; fabric colour light creamy yellow
	TP1	I15	NEX	102B	POT	POU	RI		13	10	SL	1	10		round lip, vertical wall, brown slip applied on interior; fabric colour light yellowish white.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
AN2	TP1	H15	EEX	102C	POT	HSW	BO	JR			GL	1	118	L Tang	Thick wall (0.5-0.8cm); potting marks on interior; dark brown, with violet patches, glaze applied on both exterior and interior. Same as SF057; Guangdong Shiwan Kiln.
AN13	TP1	H15	EEX	102C	POT	HFF	BO				SL	1	6	Pre-Tang	Red slip applied on both interior and exterior; similar with B-042; same as SF018.2, SF090.1, SF090.2 and SF-082.
	TP1	H15	EEX	102C	POT	POU	RI	BL	NA	NA	GL	1	15	Tang?	round lip, slightly flared rim, gradual wall; decayed glaze on both internal and external rim to wall; light brown slip was applied at external and internal base below the glazed area.
	TP1	H15	EEX	102C	MET	CUA	CO					1	3	Tang?	Complete shape, with hole in the centre; iron and sand encrustation on surface.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	103	POT	HFF	BO					1	3		fabric colour light creamy yellow.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	107	SLA							1	4		slag?
	TP1	H15	2x2	107	PUM								2		

AN13	TP1	H15	2x2	107	POT	HFF	BO				SL		24	Pre-Tang	Red slip applied on both interior and exterior, impressed mat pattern on exterior. Fabric colour orangey pink. similar to fragments in B-035, B-050, and B-059. same as SF018.2, SF090.1, SF090.2 and SF-082.
AN4	TP1	H15	2x2	107 SON	POT	POU	HA		NA	NA	GL	1	2	Tang?	W1.6cm; pale green crackle glaze applied on surface.
	TP1	I15	NEX	107	PUM								18		
	TP1	I15	NEX	107	MET	IRO	OB					1	1		
	TP1	I15	NEX	107	POT	HSW	BO				GL	1	4	L Tang	Dark brown, with violet patches, glaze applied on both interior and exterior. Same as SF057; Guangdong Shiwan Kiln.
	TP1	I15	NEX	107	POT	HSW	HA				GL	1	3	L Tang	broken handle sherd; dark brown glaze applied on surface. Same as SF057; Guangdong Shiwan Kiln.
AN13	TP1	I15	NEX	107	POT	HFF	BO				SL	2	43	Pre-Tang	1 sherd with light orangey pink slip on interior has impressed net pattern on the exterior, fabric colour light creamy yellow; the other sherd with red slip on both interior and exterior, and also has impressed mat pattern on exterior, fabric colour light orangey pink; similar to B-035, B-050, and B-059 and B-068. same as SF018.2, SF090.1, SF090.2 and SF-082.
AN13	TP1	I15	NEX	107	POT	HFF	BO				SL	2	14	Pre-Tang	red slip on both exterior and interior. same as SF018.2, SF090.1, SF090.2 and SF-082.
	TP1	I15	NEX	107	POT	POK	RI		15	5	GL	1	6		open-form; round lip; pale green crackle glaze applied on rim and both interior and exterior; fabric colour light creamy yellow.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	108	POT	HSW	BO				SL	1	4		dark grey slip applied on interior
	TP1	H15	2x2	108	POT	POC	RI	BL	14	8	GL	1	7		round lip, light green crackle glaze applied on rim and both interior and exterior.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	118	MET	IRO	OB					1	2		sand encrustation
AN13	TP1	H15	2x2	118	POT	HFF	BO				SL	1	19	Pre-Tang	thick wall (0.8-1.2cm); red slip on exterior, impressed mat pattern on exterior; fabric colour orangey pink. Same as SF018.2, SF090.1, SF090.2 and SF-082.
	TP1	H15	2x2	118	POT	POK	BO				GL	1	4		pale green glaze on exterior.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP1	H15	2x2	US	PUM								12		
	TP1	H15	2x2	US	POT	HSW	RI	JR	16	5	SL	1	5		flat and wide rim (W: 0.9cm); vertical wall, brown slip applied

															on interior.
AN3	TP1	H15	2x2	US	POT	HSW	BA	JR	11	8	GL	2	11	Qing-EM	2 joiners; belly gradually joining the internal base, flat external base; brown glaze applied on interior.
	TP1	H15	2x2	US	PUM								21		from dry sieving
	TP1	H15	2x2	US	MET	IRO	OB					5	15		sand encrustation
	TP1	H15	2x2	US	POT	HSW	BO				GL	7	15		brown to dark brown glaze; 1 sherd with decayed green glaze on exterior.
	TP1	H15	2x2	US	POT	HSW	BO				SL	5	21		2 joiners; brown slip
	TP1	H15	2x2	US	POT	HSW	BO					3	12		non-glaze; 1 rice grinder sherd
AN3	TP1	H15	2x2	US	POT	HSW	BA				GL	4	11	Qing-EM	2 joiners; brown glaze in internal base, charcoal residue at external base
AN13	TP1	H15	2x2	US	POT	HFF	BO				SL	2	36	Pre-Tang	red slip on both interior and exterior; impressed mat pattern on exterior, fabric colour orangey pink. similar to B-035, B-050, and B-059, B-068 and B-073. same as SF018.2, SF090.1, SF090.2 and SF-082.
	TP1	H15	2x2	US	POT	HFF	BO				SL	1	4		light red slip on exterior, fabric colour light creamy yellow.
	TP1	H15	2x2	US	POT	HFF	BO				GL	2	5		decayed glaze on surface; fabric colour light creamy yellow.
	TP1	H15	2x2	US	POT	POP	BO				GL	1	1		B&W or celadon, too small to tell. Pale bluish white glaze
	TP1	H15	2x2	US	POT	POK	BO				GL	1	3		brownish green crackle glaze applied on the interior and exterior.
	TP1	H15	2x2	US	POT	POU	BA		6	18	GL	1	15		comprised of base and foot ring; light yellowish white glaze with hint of blue transparent glaze applied on external base to foot ring, no glaze on external base, a thick circle along the internal base left unglazed.
	TP1	NA	NA	US	STO	NON	OR	SR	3.8	25	PO	1	1		broken slit ring; slit cut by string saw; inner diameter 3cm; cross section oval; fabric colour dark grey, surface treatment polished.
	TP1	NA	NA	US	POT	HSW	RI	BL	15	9	GL	1	8		round lip with a smoothly pointed tip; brown glaze applied on rim and internal wall.
	TP1	NA	NA	US	POT	HSW	RI		23	5	GL	1	7		open-form; round lip; brown glaze applied on rim and external and internal wall.
	TP1	NA	NA	US	POT	HSW	BO				GL	1	3		brownish green crackle glaze applied on the exterior.
	TP1	NA	NA	US	POT	POU	BO				GL	1	5		with decayed glaze; fabric colour yellowish pink.
	TP1	NA	NA	US	POT	POU	RI		15	10	GL	1	7		round to pointed lip; with decayed glaze; fabric colour yellowish pink.
	TP1	NA	NA	US	POT	POU	BA		5	30	SL	1	18		inner side of the foot ring was trimmed to form a conical space with a suspended core left; outer side of the foot-ring trimmed vertical; thin layer of brownish red slip or under-fired glaze applied on the internal base; fabric colour light creamy yellow.

Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G16	EEX	200A	POT	POU	BO				GL	2	4		1 pale bluish green crackle glaze on light grey fabric; 1light brown glaze on creamy yellow fabric.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G15	2x2	201	CBM							2	6		
	TP2	G15	2x2	201	STO	NON	FK				CH	1	2		possibly flint
	TP2	G15	2x2	201	POT	HSW	BO				GL	7	9		brown glaze, mostly on interior, 1 sherd on both interior and exterior.
	TP2	G15	2x2	201	POT	HSW	BO				SL	2	18		1 sherd with grey slip on both interior and exterior; 1 sherd with brown slip on interior.
	TP2	G15	2x2	201	POT	HSW	BO					2	2		non-glaze or slip;
	TP2	G15	2x2	201	POT	HSW	BO					1	1		a strip of motif with finger print on it
	TP2	G15	2x2	201	POT	HFF	BO					2	5		creamy yellow fabric
	TP2	G15	2x2	201	POT	POP	BO				GL	3	7		1 sherd with dull blue flower pattern on exterior, background glaze colour appear to be light creamy yellow; 2 other small fragments.
	TP2	G15	2x2	201	POT	POP	RI		NA	NA	GL	2	2		too small to measure diameter; non-glazed.
	TP2	G15	2x2	201	POT	POU	RI		NA	NA		1	1		too small to measure diameter; dull blue painting on exterior; 1 sherd with crackle glaze 2 without. Wun Yiu type.
	TP2	G15	NEX	201	CBM							1	7		
	TP2	G15	NEX	201	POT	HSW	BO				GL	3	6		dark brown glaze on interior
	TP2	G15	NEX	201	POT	HSW	BO					4	11		non-glaze
	TP2	G15	NEX	201	POT	HSW	LI		10	14		1	6		non-glaze; flat and wide rim (1.1cm in width); thin wall (0.2 - 0.25 cm in thickness); angle changed sharply from rim to wall; lip was chipped off; fabric colour light grey.
	TP2	G15	NEX	201	POT	HSW	LI		NA	NA		1	2		possibly rim sherd; light grey fabric.
	TP2	G15	NEX	201	POT	HSW	RI		NA	NA	GL	1	4		too small to measure diameter; plate or dish like; short foot ring (0.2cm in height); dark brown glaze on interior and exterior and foot ring.
	TP2	G16	NEX	201	POT	POP	BO				GL	3	2		1 sherd with dark brownish green painting on exterior, the background glaze appear to be light grey .
	TP2	F15	SEX	201	POT	HSW	BO				GL	8	33		brown to dark brown glaze
	TP2	F15	SEX	201	POT	HSW	BA		NA	NA	GL	1	2		too small to measure diameter; flat base, brown glaze on interior.
	TP2	F15	SEX	201	POT	HSW	BO				SL	1	6		rice grinder sherd; grey slip on interior.

	TP2	F15	SEX	201	POT	HSW	BO					1	6		non-glazed.
	TP2	F15	SEX	201	POT	PCF	BO					1	8		light orangey pink surface colour, coarse fabric.
	TP2	F16	SEX	201	CBM							2	11		1 light orangey red fabric; 1 creamy yellow fabric.
	TP2	F16	SEX	201	POT	HSW	BO				GL	2	17		1 sherd with brown glaze on both interior and exterior; 1 sherd with decayed glaze on interior.
	TP2	F16	SEX	201	POT	HSW	BO				SL	1	19		with grey slip on interior.
	TP2	G16	EEX	201	CBM							1	2		creamy fabric
	TP2	G16	EEX	201	MET	BRO	CO					1	4		overall diameter: 2.05cm; Hong Kong Ten Cents 1961 香港一毫; Queen Elizabeth the Second; found at the bottom of Context 201.
	TP2	G16	EEX	201	POT	HSW	BO				GL	8	17		brown to dark brown glaze
	TP2	G16	EEX	201	POT	POP	BO				GL	1	1		possibly B&W; transparent pale green glaze on both interior and exterior; fabric colour white.
	TP2	G16	EEX	201	POT	POP	BA		NA	NA	GL	1	8		too small to measure diameter; thick base (1cm in thickness); pale bluish white glaze on white fabric.
	TP2	G15	WEX	201	CBM							3	8		2 light orangey pink fabric. 1 creamy yellow fabric.
	TP2	G15	WEX	201	PUM								2		
	TP2	G15	WEX	201	MET	IRO	OB					1	3		
	TP2	G15	WEX	201	POT	HSW	BO				GL	3	11		Brown glaze on both interior and exterior.
	TP2	G15	WEX	201	POT	HFF	BO				SL	1	5		light orangey red slip; creamy fabric colour.
	TP2	G15	WEX	201	POT	POP	BO				GL	1	3	Qing	1 B&W sherd, dark green painting on exterior, background glaze colour greyish green. The other sherd is with a hole, thick pale bluish green glaze on white porcelain fabric.
	TP2	G15	WEX	201	POT	POP	RI		12	8	GL	1	4	Ming-Qing	open-form; round lip, slightly flared rim, thin wall (0.25cm); one circle of blue colour on each internal and external rim, a line of long vertical dots along external rim; transparent pale green background glaze on white fabric.
	TP2	G15	WEX	201	POT	POK	BO				GL	1	1	Tang	pale green crackle glaze on creamy fabric. similar sherds also found in B-152, B-155, B-155a, B-145 and B-187.
	TP2	G16	EEX	201	CBM							1	4		Dry sieving- creamy yellow fabric
	TP2	G16	EEX	201	POT	HSW	BA				GL	1	2		Dry sieving- Brown to dark brown glaze
	TP2	G16	EEX	201	POT	HSW	BO				GL	1	1		Dry sieving- Brown to dark brown glaze
	TP2	G16	EEX	201	POT	HSW	RI		NA	NA	GL	1	1		Dry sieving- narrow flat lip, brown glaze on both interior and exterior.
	TP2	G16	EEX	201	POT	HSW	BA		9	9	GL	1	4		Dry sieving- flat base; reddish brown glaze on interior.
	TP2	F15	SEX	201	POT	HSW	RI		14.8	16		1	26		Dry sieving- wide flat rim (1.1cm), with a groove in the middle; vertical wall; non-glazed;

	TP2	G15	WEX	201	POT	HSW	BO				GL	3	3		Dry sieving- brown glaze.
	TP2	G15	WEX	201	POT	HFF	BA		NA	NA	SL	1	4		Dry sieving- diameter cannot be measured; with red slip on interior
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G15	2x2	202A	CBM							1	12		1 creamy pink fabric.
	TP2	G15	2x2	202A	PUM								8		
	TP2	G15	2x2	202A	POT	HSW	BO				GL	3	30		brown glaze on both interior and exterior.
AN6	TP2	G15	2x2	202A	POT	HSW	BO				SL	3	65	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior. 1 sherd with lug, can be refitted with body sherd in AN6 bag in B-154. Also see B-163, B-166 and B-195. Part of the broken pot found in Context 220.
	TP2	G15	2x2	202A	POT	HSW	BO				SL	3	16		1 sherd with light brown slip on interior;1 sherd with brownish grey slip on the interior; 1 sherd with red slip on the interior
	TP2	G15	2x2	202A	POT	HSW	BO					1	1		rice grinder sherd
	TP2	G15	2x2	202A	POT	HSW	RI	BL	NA	NA	GL	1	2		too small to measure diameter. round lip, brownish green glaze applied on rim and both interior and exterior
	TP2	G15	2x2	202A	POT	HSW	RI	BS	NA	NA	SL	1	7		rice grinder rim sherd; flat wide lip (0.95cm), vertical wall; grey slip on exterior.
	TP2	G15	2x2	202A	POT	HSW	BA		NA	NA		1	11		not measurable, thick base?
AN16	TP2	G15	2x2	202A	POT	HCW	BO	JR			SL	1	20	Tang	Guangdong. neck and upper shoulder; thick wall(1-1.55cm); greyish purple slip on both interior and exterior. Joins jar body sherds SF101 in Context 223
AN16	TP2	G15	2x2	202A	POT	HCW	RI	JR	41	5	SL	1	28	Tang	Guangdong. flared rim of a jar; round lip, thick wall (1cm); with greyish purple slip covering the surface. Joins jar SF100 in Context 224.
AN10	TP2	G15	2x2	202A	POT	HCW	RI	BA	NA	NA	SL	1	26	Tang	too small to measure diameter. Flat wide lip (1.85cm), thick wall (1cm), steep sides; greyish purple slip applied all over its surface. Joins to SF084 in Context 218. Can be refitted with rim sherd in AN10 in B-228a.
AN5	TP2	G15	2x2	202A	POT	HFF	BO	BL			GL	4	26	Tang	2 joiners; with decayed crackle glaze; creamy yellow fabric. Possibly all from a same bowl as B-127a.
AN5	TP2	G15	2x2	202A	POT	HFF	RI	BL	16	10	GL	3	13	Tang	2 joiners; with decayed crackle glaze; creamy yellow fabric. Possibly all from a same bowl as B-127.
	TP2	G15	2x2	202A	POT	POK	RI	BL	15	16	GL	8	51	Tang	5 joiners; open-form; round lip, flared rim; pale brownish green crackle glaze applied on external rim and interior. Possibly all from a same bowl.
	TP2	G15	NEX	202A	CBM							2	10		creamy pink fabric
	TP2	G15	NEX	202A	MET	IRO	OB					1	4		sand encrustation

	TP2	G15	NEX	202A	POT	HSW	BO				GL	9	36		brown glaze
	TP2	G15	NEX	202A	POT	HSW	BO				SL	1	12		grey slip on interior
	TP2	G15	NEX	202A	POT	HSW	BO					1	15		non-glaze
	TP2	G15	NEX	202A	POT	HSW	BA		18.2	6	GL	1	27		internal belly wall gradually joining internal base; external belly joins the external base with corners, one sharp, the other less sharp; dark brown glaze on interior.
	TP2	G15	NEX	202A	POT	POP	RI		NA	NA	GL	1	3	Ming-Qing	B&W; possibly plate; too small to measure diameter; open-form; thin wall (0.3cm); blue paint on both interior and exterior, transparent pale bluish white background glaze.
	TP2	G15	NEX	202A	POT	POP	BO				GL	1	1	Ming-Qing	B&W; blue painting on exterior.
	TP2	G15	NEX	202A	POT	POU	BO				GL	1	2		under-fired glaze on creamy white fabric
	TP2	G16	NEX	202A	CBM							2	10		1 creamy yellow fabric; 1 light orangey yellow fabric.
	TP2	G16	NEX	202A	POT	HSW	BO				GL	1	1		dark brown glaze on both interior and exterior.
	TP2	F15	SEX	202A	POT	HSW	BO				GL	5	10		light brown to dark brown glaze.
	TP2	F15	SEX	202A	POT	HSW	BO				SL	1	4		sherd of rice grinder.
	TP2	F15	SEX	202A	POT	HSW	RI		NA	NA	GL	1	2		too small to measure diameter; open-form; round lip; brownish green glaze on rim
	TP2	F15	SEX	202A	POT	HSW	BA		NA	NA	GL	1	3		too small to measure diameter; brown glaze on internal base and external wall
	TP2	F15	SEX	202A	POT	HSW	LI		NA	NA	GL	1	13		too broken to measure diameter; flared lid ring; dark brown glaze on exterior; possibly has been retouched along the base of the lid.
	TP2	F15	SEX	202A	POT	POP	RI	BL	11	12	GL	1	2	Ming-Qing	2 joiners; open-form; round narrow lip, thin wall (0.25cm); blue paint on exterior.
	TP2	F15	SEX	202A	POT	POP	BO	BL			GL	1	2	Ming-Qing	can be refitted with the rim sherd.
	TP2	F16	SEX	202A	POT	HSW	BO				GL	1	4		sherd near neck, dark brown glaze on exterior.
	TP2	F16	SEX	202A	POT	HSW	BA				GL	1	2		pale green glaze on interior
	TP2	F16	SEX	202A	POT	POP	RI		NA	NA	GL	1	1	Ming-Qing	too small to measure diameter; round narrow lip; blue paint on exterior.
	TP2	F16	SEX	202A	POT	POU	BO				GL	1	4		under-fired or decayed glaze on creamy white fabric
	TP2	F16	SEX	202A	POT	POU	BO					1	2		non-glaze
	TP2	F16	SEX	202A	POT	POU	RI	BL	NA	NA	GL	1	2		round lip, flared rim; yellowish green crackle glaze applied on internal rim and wall. Fabric colour light yellowish pink. similar to B-005a, B-013a and B-034a.
	TP2	G16	EEX	202A	CBM							1	3		with net imprint; creamy yellow fabric

	TP2	G16	EEX	202A	CBM							4	24		1 creamy white fabric; 1 light grey fabric; 1 orange fabric; 1 hire-fired, creamy yellow fabric with orange surface.
	TP2	G16	EEX	202A	POT	HSW	BO				GL	5	14		dark grey, reddish brown glaze
	TP2	G16	EEX	202A	POT	HSW	BO					3	15		non-glaze
	TP2	G16	EEX	202A	POT	HSW	RI	JR	6	12	GL	1	7		short vertical rim, round shoulder; dark brown glaze
	TP2	G16	EEX	202A	POT	HSW	RI		10	10		1	4		flat wide rim (1cm wide); light grey fabric.
	TP2	G16	EEX	202A	POT	HSW	BA		NA	NA	GL	2	4		diameter not measurable; pale green glaze on interior.
	TP2	G16	EEX	202A	POT	HCW	BO					1	2		
	TP2	G16	EEX	202A	POT	POP	BO				GL	2	1	Ming-Qing	blue paint on exterior.
	TP2	G16	EEX	202A	POT	POK	BO				GL	1	1	Tang	pale green crackle glaze on interior. similar sherds also found in B-152, B-155, B-117, B-155a and B-187.
	TP2	G16	EEX	202A	POT	POU	BO				GL	2	3		under-fired glaze on interior.
	TP2	G15	WEX	202A	MET	IRO	OB					1	4		sand encrustation
	TP2	G15	WEX	202A	POT	HSW	BO				GL	4	4		brown glaze on interior
	TP2	G15	WEX	202A	POT	HSW	BA		NA	NA	GL	1	3		diameter not measurable; pale green glaze on interior
	TP2	G15	WEX	202A	POT	PCF	BO					1	4		net or mat pattern on exterior.
	TP2	G15	WEX	202A	POT	HFF	BO					1	7		sand encrustation on interior; creamy yellow fabric
	TP2	G15	WEX	202A	POT	HFF	RI		NA	NA		1	2		too small to measure diameter; creamy yellow fabric
	TP2	G15	WEX	202A	POT	POP	RI		15	5	GL	1	1	Qing	green paint against light greyish green glaze; paint on exterior; light grey fabric.
	TP2	G15	WEX	202A	POT	POP	BA		NA	NA	GL	1	1	Qing	diameter not measurable; vivid blue against pale bluish white glaze; blue paint on interior.
	TP2	G15	WEX	202A	POT	POK	RI	BL	NA	NA	GL	1	3	Tang	round lip, pale green crackle glaze on creamy yellow fabric
	TP2	G15	2x2	202A	PUM								3		Dry sieving
	TP2	G15	2x2	202A	POT	HSW	BO	BL			GL	2	4	Tang	Dry sieving- greenish brown crackle glaze on both interior and part of exterior.
AN15	TP2	G15	2x2	202A	POT	HSW	BO	JR			GL	2	30	M-L Tang	Dry sieving- Guangdong. 1 neck sherd; under-fired dark glaze on both interior and exterior. 1 body sherd under-fired dark glaze on interior.
AN6	TP2	G15	2x2	202A	POT	HSW	BO	JR			SL	1	34	M-L Tang	S. Guangdong. Dry sieving- dark grey slip applied on both interior and exterior; similar to pot found in Context 220; can be refitted with lug sherd in AN6 bag in B-125 and body sherd in B-154. also see B-163, B-166, B-167 and B-195.
	TP2	G15	2x2	202A	POT	HSW	RI	BL	15	7	GL	1	7	Tang	Dry sieving- round lip, curve wall; greenish brown crackle glaze on lip, external rim and the interior.
	TP2	G15	2x2	202A	POT	HSW	HA	JR			GL	1	3	Tang	Dry sieving- greenish brown crackle glaze on exterior

AN8	TP2	G15	2x2	202A	POT	POK	BO	BL			GL	4	27	Tang	Dry sieving- pale green crackle glaze ; 1 sherd can be refitted with 2 joiners in B-187. similar sherds also found in B-152, B-155a, B-117, B-145 and B-187.
	TP2	G15	2x2	202A	POT	POK	RI	BL	16	10	GL	3	21	Tang	Dry sieving- round lip, flared rim; pale green crackle glaze on lip, external rim and interior; creamy yellow fabric. similar sherds also found in B-152, B-155, B-117, B-145 and B-187.
	TP2	G15	2x2	202A	POT	POK	BO	BL			GL	1	3	Tang	Dry sieving- pale bluish green crackle glaze on both interior and exterior (AN with 172, 176 & 179b).
	TP2	G15	2x2	202A	POT	HFF	BA		NA	NA	GL	2	13		Dry sieving- sherds near base, diameter not measurable; traces of glaze observed on surface, fabric is softer and chalkier than POK type; creamy yellow fabric.
	TP2	G16	NEX	202A	POT	HSW	BO				GL	4	17		Dry sieving- dark brown to black glaze
	TP2	G16	NEX	202A	POT	HSW	RI		NA	NA	GL	1	7		Dry sieving- too small to measure diam.; flat wide rim (1.8cm wide); dark brown glaze on rim.
	TP2	G16	NEX	202A	POT	HFF	BO					1	2		Dry sieving- creamy yellow fabric
	TP2	G16	NEX	202A	POT	POU	RI		14	5		1	2		Dry sieving- round lip, slightly flared rim; creamy yellow fabric
	TP2	F16	SEX	202A	POT	POU	BO				GL	1	2		Dry sieving- under-fired or decayed glaze on creamy yellow fabric
	TP2	F15	SEX	202A	MET	IRO	OB					1	1		
	TP2	F15	SEX	202A	POT	HSW	BO				GL	1	1		brown glaze on interior; creamy yellow fabric
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
AN6	TP2	G15	2x2	202B	POT	HSW	BO	JR			SL	2	81	M-L Tang	S. Guangdong. dark grey slip applied on both interior and exterior; similar to pot found in Context 220; also see lug sherd in AN6 bag in B-125 B-154, B-166, B-167, and B-195.
	TP2	G15	NEX	202B	POT	CBM						1	34		with textile imprint; creamy yellow fabric
	TP2	G15	NEX	202B	POT	CBM						1	4		creamy yellow fabric
	TP2	F15	SEX	202B	MET	IRO	OB					8	6		iron fragments found in the south end of Grave No.2
AN6	TP2	F15	SEX	202B	POT	HSW	BO				SL	1	2	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior. similar to sherds in B-125, B-154, B-163, B-167 and B-195. similar to the broken pot found in Context 220.
AN6	TP2	F16	SEX	202B	POT	HSW	BO				SL	2	4	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior, but exterior of 1 sherd was chipped off. similar to sherds in B-125, B-154, B-163, , B-166 and B-195.
	TP2	F16	SEX	202B	POT	PCF	BO					1	3	LN	very shattered
	TP2	F16	SEX	202B	POT	POU	RI	BL	NA	NA	GL	1	2		too small to measure diameter; open-form; pointed lip; decayed glaze on rim and interior.

	TP2	G16	EEX	202B	FCL		OB					1	108		possibly fired clay used to support kiln prop; one side with a negative prop shape groove, opposite to this side is a flat surface, the rest sides have irregular surface. Very coarse fabric, containing quartz sand and iron oxidised gravels.
	TP2	G16	EEX	202B	POT	PCF	BO					1	29		a sherd near neck; under the neck there is a thick groove forming a circle along the neck bottom on the exterior, which was shaped after the impressed geometric pattern below it; the impressed geometric pattern is formed by groups of repeated triangles with one group clearly breaks through other groups, suggesting the pattern was impressed onto the pot by employing carved stamp.
	TP2	G16	EEX	202B	POT	PCF	BO					3	13		very shattered
AN7	TP2	G16	EEX	202B	POT	POK	BO				GL	2	14	Tang	pale bluish green crackle glaze on both interior and exterior (AN with 155b, 176 & 179b).
	TP2	G15	WEX	202B	POT	HSW	BA		NA	NA	SL	1	26		diameter not measurable; dark slip on interior.
	TP2	G16	EEX	202B	MET	IRO	OB					1	12		Dry sieving- sand encrustation
	TP2	G16	EEX	202B	STO	NON	FK					1	1		Dry sieving
AN7	TP2	G16	EEX	202B	POT	POK	BO				GL	1	11	Tang	Dry sieving- pale bluish green crackle glaze on both interior and exterior (AN with 155b, 172 & 179b).
	TP2	F15	SEX	202B	PUM								4		Dry sieving
	TP2	F15	SEX	202B	POT	HCW	BO					1	3		Dry sieving - exterior appears to be orangey yellow
	TP2	F15	SEX	202B	POT	POK	BO				GL	1	2	Tang	Dry sieving - green crackle glaze on both interior and exterior.
AN7	TP2	F15	SEX	202B	POT	POK	BO				GL	1	6	Tang	Dry sieving - pale bluish green crackle glaze on both interior and exterior (AN with 155b, 172 & 176).
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G15	NEX	202C	PUM								7		
	TP2	G15	NEX	202C	POT	HSW	BO	JR			GL	2	47		thick wall (1 sherd 0.6-0.8cm; 1 sherd 1.15cm); lug mark on exterior of thicker sherd; decayed on under-fired glaze applied (or slip?)
AN15	TP2	G15	NEX	202C	POT	HSW	BO				GL	2	15		traces of dark grey slip on outside degraded glaze on inside
	TP2	G15	NEX	202C	POT	HSW	BO				SL	1	9		thick wall (0.85cm); traces of dark grey slip on both interior and exterior.
	TP2	G15	NEX	202C	POT	HSW	HA				GL	1	5		brown glaze on surface.
	TP2	G15	NEX	202C	POT	HFF	BO					1	4		creamy yellow fabric
	TP2	G15	NEX	202C	POT	POP	RI		NA	NA	GL	1	1	Ming-Qing	B&W; too small to measure diameter; lip with corners, blue painting on exterior

	TP2	G15	NEX	202C	POT	POK	BO				GL	1	27	Tang	brownish green crackle glaze on both interior and exterior; fabric colour light grey
	TP2	G15	WEX	202C	PUM								1		
	TP2	G15	WEX	202C	MET	IRO	OB					5	4		fragments.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G15	2x2	203	POT	HSW	BO				GL	1	1		dark brown glaze on exterior; brown glaze on interior.
	TP2	G15	2x2	203	POT	HSW	BO				SL	1	5		dark grey or black slip on both interior and exterior.
AN8	TP2	G15	2x2	203	POT	POK	RI	BL	17	10	GL	2	21	Tang	2 joiners--1 rim sherd and 1 body sherd; round lip, flared rim; pale green crackle glaze on lip, external rim and interior; creamy yellow fabric; can be joined with a body sherd in B-155 of Context 202A and rim sherd in B-201 of Context 207. similar sherds also found in B-152, B-155, B-117, B-145 and B-155a.
AN9	TP2	G15	2x2	203	POT	POK	RI	BL	18	16	GL	2	24	Tang	2 joiners; round lip, flared rim; pale green crackle glaze on lip, external rim and interior; creamy yellow fabric. Can be refitted with sherd in AN9 in B-197a of Context 207.
AN9	TP2	G15	2x2	203	POT	POK	RI	BL	NA	NA	GL	1	7	Tang	too small to measure diameter; round lip, flared rim; pale green crackle glaze on lip, external rim and interior; creamy yellow fabric. Can be refitted with AN9 in B-197a.
	TP2	G15	2x2	203	POT	POU	RI	BL	NA	NA		1	2		too small to measure diameter; round lip; decayed or green-fired glaze on lip and rim.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G16	EEX	206	PUM								3		
	TP2	G16	EEX	206	POT	HSW	BO				GL	2	15		brown glaze, 1 sherd on both interior and exterior, the other sherd on interior and 1 drop on exterior.
	TP2	G16	EEX	206	POT	PCF	BO					2	6	LN	1 sherd made by coiling.
	TP2	G16	EEX	206	POT	PCF	BO					1	3	LN	impressed strokes on exterior.
	TP2	G16	EEX	206	POT	POK	RI		NA	NA	GL	1	4	Tang	too small to measure diameter; wide lip (0.8cm), rim thicker than wall; green crackle glaze applied on interior and exterior.
	TP2	G16	EEX	206	POT	POU	BO				GL	4	13		decayed glaze on exterior; creamy white fabric.
	TP2	G16	EEX	206	POT	POU	RI				GL	1	2		pointed lip; decayed glaze on exterior; creamy white fabric.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G16	2x2	207	CBM							2	12		1 orange fabric; 1 creamy yellow fabric.

AN6	TP2	F15	SEX	207	POT	HSW	BO				SL	5	98	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior. Also see sherds in B-125, B-154, B-163 and B-166. Joins with the broken pot found in Context 220.
	TP2	F15	SEX	207	POT	PCF	BO					1	3	LN	impressed pattern on exterior.
	TP2	F15	SEX	207	POT	PCF	BO				SL	1	1		creamy white slip on exterior and creamy orange slip on interior
	TP2	F15	SEX	207	POT	POK	BO				GL	3	24	Tang	pale green crackle glaze on both external rim and interior
AN9	TP2	F15	SEX	207	POT	POK	RI	BL	16	8	GL	2	21	Tang	2 joiners; round lip, flared rim; pale green crackle glaze on lip, external rim and interior; creamy yellow fabric. Can be refitted with sherd in AN9 in B-187 of Context 203.
	TP2	F15	SEX	207	POT	POK	RI	BL	12	7	GL	1	7	Tang	round lip, flared rim; pale green crackle glaze on lip, external rim and interior
	TP2	G15	WEX	207	PUM								6		
	TP2	G15	WEX	207	POT	HSW	BO				GL	2	4		brown glaze on interior
	TP2	G15	WEX	207	POT	HSW	RI	BA	NA	NA		1	12	Qing?	too small to measure diameter; rim sherd of rice grinder
	TP2	G15	WEX	207	POT	HSW	RI	JR	13	5	GL	1	2		narrow pointed lip; vertical rim; brown glaze on interior.
AN16	TP2	G15	WEX	207	POT	HCW	BO				GL	2	34	Tang	thick wall (1.8-2.2cm); greyish purple on both interior and exterior; 1 sherd was chipped off. 1 sherd joins SF100
AN8	TP2	G15	WEX	207	POT	POK	RI	BL	NA	NA	GL	1	2	Tang	round lip, flared rim; pale green crackle glaze on lip, external rim and interior; creamy yellow fabric. Can be refitted with AN8 in B-187.
	TP2	G15		207	POT	HFF	HA					1	2		Dry sieving - creamy orangey pink fabric.
	TP2	F15	SEX	207	PUM								1		Dry sieving
	TP2	F15	SEX	207	MET	IRO	OB					3	2		Dry sieving
AN6	TP2	F15	SEX	207	POT	HSW	BO				SL	2	12	M-L Tang	Dry sieving - S. Guangdong. dark grey slip on both interior and exterior. similar to sherds in B-125, B-154, B-163, B-166, B-167 and B-195. From the broken pot found in Context 220.
	TP2	F15	SEX	207	POT	HSW	BO				SL	1	1		Dry sieving - reddish brown slip on interior.
	TP2	F15	SEX	207	POT	PCF	BO				SL	1	3		Dry sieving - creamy orangey yellow slip or surface on exterior.
	TP2	F15	SEX	207	POT	HFF	BO	BL				1	7		Dry sieving - creamy yellow fabric
	TP2	F15	SEX	207	POT	HFF	RI	BL	20	7		1	6		Dry sieving - creamy yellow fabric
	TP2	F15	SEX	207	POT	CBM						1	1		Dry sieving - creamy yellow fabric
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	F15	SEX	210	POT	HSW	BO	BA				1	1	Qing?	sherd of rice grinder
AN9	TP2	F15	SEX	210	POT	POK	RI	BL	NA	NA	GL	1	5		too small to measure diameter; round lip, flared rim; pale green crackle glaze on external rim and interior. Possibly from same bowl as AN9 in B-187 and B-197a.

Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	F15	SEX	212	POT	HSW	BO				GL	1	2		dark brown glaze on interior
	TP2	F15	SEX	212	POT	HSW	RI		NA	NA		1	3		flat lip
	TP2	F16	SEX	212	POT	POP	RI		NA	NA	GL	1	2		possibly B&W; too small to measure diameter; narrow cornered lip; light greyish green glaze on interior and exterior and lip.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	F16	SEX	216	PUM								4		
AN6	TP2	F16	SEX	216	POT	HSW	BO				SL	1	7	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior. Also see sherds in B-125, B-154, B-163 and B-166, B-195. similar to the broken pot found in Context 220.
	TP2	F16	SEX	216	POT	PCF	BO				SL	1	7		reddish orange slip or oxidized surface on both exterior and interior.
	TP2	F16	SEX	216	POT	HFF	BO					1	9		non-glaze; light creamy orange fabric.
	TP2	F16	SEX	216	POT	POK	HA				GL	1	3	Tang	pale green crackle glaze on surface.
	TP2	F16	SEX	216	POT	POK	RI		15	6	GL	1	4	Tang	round lip, slightly flared rim; traces of glaze on interior; creamy yellow fabric.
	TP2	F16	SEX	216	POT	POU	RI		14	6	GL	1	7		thin wall (0.35cm); narrow pointed lip, decayed glaze on white fabric. Can be joined with a body sherd.
	TP2	F16	SEX	216	POT	POU	RI		14	5	GL	1	3		thin wall (0.35cm); narrow pointed lip, decayed glaze on white fabric.
	TP2	F16	SEX	216	POT	POU	BO				GL	3	7		decayed glaze on white fabric
	TP2	F16	SEX	216	POT	HSW	BO				GL	1	2		dark brown glaze on exterior; brown glaze on interior.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G15	NEX	218	MET	CUA	OB					1	4		1.45 x 0.7 x 0.5 cm; 4 complete sides, two flat and the rest bearing casting marks; made by bivalve moulds.
	TP2	G15	NEX	218	MET	IRO	OB					2	1		sand encrustation; 2 fragments of 1 object.
	TP2	G15	NEX	218	PUM								1		
	TP2	G15	NEX	218	POT	POK	BO				GL	2	4	Tang	pale green crackle glaze
AN18	TP2	G15	NEX	218	POT	POK	RI	BL	16	10	GL	1	20	Tang	round lip, slightly flared rim; yellowish green crackle glaze applied on lip, external rim and interior; orangey yellow fabric. Joins rim in Bag 227
	TP2	G15	NEX	218	POT	POK	RI		NA	NA	GL	1	4	Tang	too small to measure diameter; flat lip with round corners, steep (nearly vertical) wall; pale bluish green glaze on lip and both interior and exterior.
	TP2	G15	NEX	218	POT	POU	HA				GL	1	4		decayed glaze on surface; creamy yellow fabric.

	TP2	G16	NEX	218	POT	CBM						1	1		creamy yellow fabric
	TP2	G16	NEX	218	POT	HSW	RI	JR	9	8	GL	1	6		round lip, very short or no neck, dark brown glaze on exterior and interior.
AN18	TP2	G16	NEX	218	POT	POK	RI	BL	NA	NA	GL	1	14	Tang	tip of lip broken, not measurable; open-form; slightly flared rim; green crackle glaze applied on lip, external rim and interior. Joins rim in Bag 223a
AN10	TP2	G16	NEX	218	POT	HCW	BO	BA			SL	5	93	Tang	4 joiners; greyish purple slip on both interior and exterior. Refits with basin SF084.
AN10	TP2	G16	NEX	218	POT	HCW	RI	BA	35	8	SL	2	70	Tang	2 joiners; open-form; flat wide lip (1.7cm) with round corners, a circle of incision along external rim, greyish purple slip on lip, both interior and exterior. Refits with basin SF084. Can be refitted with rim sherd in AN10 in B-126.
	TP2		NEX	218	POT	HSW						1	1		dry sieving - non-glaze, light grey fabric
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	F16	SEX	219	PUM								14		
	TP2	F16	SEX	219	MET	IRO	OB					1	4		
	TP2	F16	SEX	219	POT	HSW	BO				GL	1	2		brown glaze on exterior.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G15	WEX	202D	PUM								8		
AN6	TP2	G15	WEX	202D	POT	HSW	BO				SL	4	7	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior. similar to the broken pot found in Context 220.
	TP2	G15	WEX	202D	POT	HSW	BO				GL	2	15		1 sherd with decayed glaze on interior; 1 sherd with brown glaze on both interior and exterior.
	TP2	G15	WEX	202D	POT	HSW	BO	JR			GL	1	36		shoulder sherd; with decayed glaze on both interior and exterior.
AN6	TP2	G15	WEX	202D	POT	HSW	BA		NA	NA	SL	2	114	M-L Tang	S. Guangdong. dark grey slip on exterior. similar to the broken pot found in Context 220.
	TP2	G15	WEX	202D	POT	HSW	HA				GL	1	1		thin brown glaze on exterior
AN6	TP2	G15	WEX	202D	POT	HSW	BA		17	14	SL	1	76	M-L Tang	S. Guangdong. dark grey slip on exterior. similar to the broken pot found in Context 220.
AN16	TP2	G15	WEX	202D	POT	HCW	BO				SL	1	41	Tang	Guangdong. thick wall (1.75cm); greyish purple slip on both interior and exterior. Joins jar SF100 from Context 224
AN11	TP2	G15	WEX	202D	POT	POK	BO	BL			GL	1	2	Tang	pale green crackle glaze on part of the interior and exterior; can be refitted with rim sherd in B-236a and rim sherd in B-241a.
	TP2	G15	WEX	202D	POT	POK	BO	BL			GL	1	2	Tang	

	TP2	G15	WEX	202D	POT	POK	RI	BL	NA	NA	GL	1	3	Tang	too small to measure diameter; open-form; nearly vertical wall, brownish green crackle glaze on both interior and exterior.
	TP2	G15	WEX	202D	POT	POK	RI	BL	NA	NA	GL	1	2	Tang	round lip; slightly flared rim; pale yellowish white glaze applied on exterior and interior.
AN11	TP2	G15	WEX	202D	POT	POK	RI	BL	16	8	GL	3	14	Tang	3 joiners; open-form; round lip, flared rim, gradual wall; pale green crackle glaze on lip, external and internal rim. Can be refitted with a body sherd in B-236.
	TP2	G15	WEX	202D	POT	POK	RI	BL	17	12.5	GL	1	18	Tang	open-form; round lip, flared rim; pale green crackle glaze on lip, exterior and interior.
	TP2	G15	WEX	202D	CBM							1	5		creamy pink fabric
	TP2	G15	WEX	202D	MET	IRO	OB					1	2		sand encrustation.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	F15	SEX	220	MET	IRO	OB					1	10		
AN15	TP2	F15	SEX	220	POT	HSW	BO				GL	1	14	M-L Tang	Guangdong. decayed dark grey glaze on interior.
AN6	TP2	F15	SEX	220	POT	HSW	BO				SL	7	92	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior. similar to the broken pot found in Context 220.
AN15	TP2	F15	SEX	220	POT	HSW	HA				GL	1	4	M-L Tang	Guangdong. decayed brown glaze on surface.
AN6	TP2	F15	SEX	220	POT	HSW	BA				SL	1	16	M-L Tang	S. Guangdong. dark grey slip on both interior and exterior. similar to the broken pot found in Context 220.
	TP2	F15	SEX	220	POT	PCF	BO					1	6	LN	very shattered; impressed pattern on exterior, too blur to tell the pattern.
	TP2	F15	SEX	220	POT	HFF	HA				GL	1	4		light brownish orange decayed glaze on pink fabric.
	TP2	F15	SEX	220	POT	POK	BO				GL	1	5	Tang	pale bluish green crackle glaze on both interior and exterior.
	TP2	F15	SEX	220	POT	POK	BO				GL	1	7	Tang	pale green crackle glaze on both interior and exterior.
	TP2	F15	SEX	220	POT	POK	BO				GL	1	2	Tang	brownish green glaze on both interior and exterior
	TP2	F15	SEX	220	POT	POK	RI	BL	NA	NA	GL	1	11	Tang	too small to measure diameter; round lip, sloping wall; pale green crackle glaze on lip, external rim and interior; incised line inside rim; light yellowish white fabric.
AN11	TP2	F15	SEX	220	POT	POK	RI	BL	17	8	GL	1	7	Tang	round lip; flared rim; pale bluish green crackle glaze on lip, external rim and interior; creamy white fabric. Can be refitted with 1 rim sherd in B-236a.
	TP2	F15	SEX	220	OBM	MOR						6	22		fragments of mortar.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments

	TP2	G15	NEX	223	POT	HSW	BO	JR			GL	2	48		1 sherd with brown glaze on both interior and exterior; 1 sherd with under-fired glaze both interior and exterior.
	TP2	G15	NEX	223	POT	POK	BO				GL	1	1	Tang	green crackle glaze on both interior and exterior.
	TP2	G15	NEX	223	POT	POU	RI		17	5		1	3		open-form; round lip, slightly flared rim; creamy yellow fabric.
	TP2	G15	WEX	223	POT	HSW	BO				SL	1	1		light yellowish brown slip on both interior and exterior.
	TP2	G15	WEX	223	POT	CBM						1	1		creamy fabric.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G16	EEX	227	POT	POK	BO				GL	1	10	Tang	pale bluish green crackle glaze on both interior and exterior.
	TP2	G16	EEX	227	POT	POU	BO				GL	3	10		decayed glaze on both interior and exterior.
	TP2	G16	EEX	227	POT	POU	RI		NA	NA	GL	1	3		too small to measure diameter; narrow pointed lip, upright tapering rim
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G16	EEX	228	PUM								13		
	TP2	G16	EEX	228	POT	PCF	BO					1	10		shattered edge.
	TP2	G16	EEX	228	POT	POK	BO				GL	1	5	Tang	pale bluish green crackle glaze on both interior and exterior.
	TP2	G16	EEX	228	POT	POK	BO				GL	1	4	Tang	brownish green crackle glaze on interior and part of the exterior.
	TP2	G16	EEX	228	POT	POK	RI		NA	NA	GL	1	2	Tang	too small to measure diameter; narrow pointed lip, upright tapering rim
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	G15	WEX	224	POT	HSW	BO	JR			GL	2	24		brown glaze on both interior and exterior.
	TP2	G15	WEX	224	POT	HSW	RI	JR	NA	NA	GL	1	7		rim to neck; brown glaze on both interior and exterior.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP2	F15	NA	US	POT	POP	RI		NA	NA	GL	1	2		Dry sieving - B&W; too small to measure dia.; round lip; blue paint on external wall.
	TP2	F15	NA	US	POT	POP	RI		NA	NA	GL	1	1		Dry sieving - B&W; too small to measure dia.; round lip, flared rim; blue paint on lip and external wall.
AN6	TP2	G15	NA	US	POT	HSW	BO	JR			SL	1	4	M-L Tang	Dry sieving - S. Guangdong. dark grey slip on both interior and exterior.
	TP2	G15	NA	US	POT	POK	BO				GL	1	2	Tang	pale green crackle glaze on both interior and exterior.
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments

	TP3	G14		301	POT	POQ	RI		14	13	GL	1	19	Yuan	Small square lip, smooth pale green glaze on both side (except top part of interior rim)
	TP3	G14		301	POT	POQ	BO				GL	1	5	Yuan	Smooth pale green glaze on both side
	TP3	G14		301	POT	POP	BO				GL	1	3	C19th	B&W
	TP3	G14		301	POT	CBM		TL				2	14	UD	pink
	TP3	G14		301	POT	POK	BO				GL	1	2	L.Tang	Degraded green crackle glaze on the interior
	TP3	G14		301	POT	POK	BA				GL	1	15	L.Tang	Degraded green crackle glaze on the interior surface; similar to SF030 Late Tang C9-10 Cheung Sha ware (stepped base)
	TP3	G14		301	POT	HSW	BO				GL	16	138	Ming-earlier	Including 2 joiners; all except the 2 rice grinders (4g) are brown or greyish brown glazed, either glazed on both side or just on 1 side;
	TP3	G14		301	POT	HSW	BA				GL	1	10	Ming-C19th	Flat base, nearly right angle; very smooth brown glaze on interior surface
	TP3	G13		302	POT	HSF	BO					1	26	UD	Light greenish brown colour with impressed fine net motifs on surface
	TP3	G13		302	POT	HSW	RI		NA	NA	GL	1	2	Song-Ming	Small round lip, brown glaze on interior & around exterior rim
	TP3	G13		302	POT	HSW	RI		NA	NA	GL	1	5	Song-Ming	Small round lip, brown glaze on interior & around exterior rim
	TP3	G13		302	POT	HSW	BO				GL	7	44	UD/Song-Ming?	Brown or greyish brown glaze; either on both side or on interior surface
	TP3	G13		303	POT	HSW	BO				GL	3	32	UD	2 joiners, brown glazed
	TP3	G13		303	POT	HSW	LU				GL	1	6	UD	Brown glazed lug
	TP3	G13		303	POT	HSW	BO				SL	1	6	UD	Grey slip on the interior surface
	TP3	G13		303	POT	POK	BO				GL	1	9	Tang	Yellowish green crackle glaze on both side
	TP3	G13		303	POT	HSW	RI	BL	15	8.5	GL	1	17	Song	Upright rim, small round lip; brown glaze on both side (upper part only)
	TP3	G13		303	POT	HSW	RI	BL	15	8	GL	1	9	Song	Upright rim, small round lip; brown glaze on interior & around exterior rim; same pot as below? Not joiners
	TP3	G13		303	POT	HSW	RI	BL	15	12.5	GL	1	7	Song	Upright rim, small round lip, brown glaze on interior & around exterior rim; same pot as above? Not joiners
	general	surf			POT	POP	RI	DI	25	9	GL	1	43	L.Ming-Qing	B&W, Wun Yiu; small round lip, upright rim
	general	surf			POT	PCF	BO					1	5	LN	Reddish brown;
Ass. No.	Trench	Grid	Area	Cont.	Cat.	Matl.	Type	Form	DIA (cm)	% EVE	Surf. Treat.	Count	Wt (g)	Date	Comments
	TP4	F12	NA	Surf.	POT	POK	RI	JR	13	15	GL	1	43	Song?	Slightly everted rim, small square lip; degraded green crackle glaze on both sides; signs of a horizontal lug below rim

	TP4	F12	NA	Surf.	POT	HSW	BO				SL	1	18	UD	Purplish grey slip on both side; black nodular inclusions, very high-fired
	TP4	H15	NA	401	CBM		TL					2	4	UD	small fragments of pink tiles
	TP4	H15	NA	401	POT	POP	BO				GL	2	1	Qing-modern	Both B&W; 1 piece of possibly Wun Yiu
	TP4	H15	NA	401	POT	POP	RI		NA	NA	GL	1	0.2	Modern	Bright green/white; polychrome
	TP4	H15	NA	401	POT	HSW	BO				GL	1	1	UD	green glaze on one side; very small fragments
	TP4	H15	NA	401	POT	HSW	BO					2	2	UD	very small fragments without glaze
	TP4	H15	NA	401	POT	PCF	BO					1	7	N	Reddish brown, fine cords
	TP4	G15	NA	401	POT	HSW	BO				GL	1	2	UD	degraded green glaze on one side
	TP4	G15	NA	401	POT	POC	BO					1	16	UD	creamy colour, proto porcelain
	TP4	G15 H15	NA	401 (dry)	POT	HSW	BO				SL	2	9	UD	2 joiners; grey slip on interior surface
	TP4	G15 H15	NA	401 (dry)	POT	HSW	BO				GL	3	12	UD	All glazed on both sides; 2 brown glazed, 1 yellowish brown glazed, all small fragments
	TP4	H15	NA	402	CBM		TL					1	14	UD	pink tile
	TP4	H15	NA	402	POT	HSW	BO				GL	8	16	UD	7 brown glazed (one on both side); 1 yellowish brown glazed (interior)
	TP4	G15	NA	402	POT	PCF	BO					2	7	N	Trace of feint cord motifs; grey & greyish brown
	TP4	G15	NA	402	CBM		TL					2	26	UD	1 pink, 1 orange
	TP4	G15	NA	402	POT	HFF	BO					1	32	Han?	olive colour, with fine impressed net motif on interior, possibly Han
	TP4	G15	NA	402	STO	FLI	FK					1	0.2	UD	Very small wedge-shaped flake of flint, transparent/grey, imported
	TP4	G15	NA	402	POT	HSW	BO				GL	10	26	UD	Brown or yellowish brown glazed (on one side); 3 without glaze
	TP4	G15	NA	402	POT	HSW	BA				GL	1	81	UD	Flat base, c.70 degrees; brown glaze on both side; thick wall
	TP4	G15	NA	402	POT	HSW	RI		NA	NA	SL	1	4	UD	Trace of feint cord motifs; grey & greyish brown
	TP4	G15	NA	402 (dry)	POT	POP	RI		NA	NA	GL	1	0.1	Modern	Polychrome, bright green/white, very small rim fragment
	TP4	G15	NA	402 (dry)	POT	HSW	BO				GL	1	1	UD	Brown glaze on both side
	TP4	G15	NA	402 (dry)	GLA							1	0.3	Modern	transparent, small glass fragment
	TP4	H15	NA	403	POT	HSW	BO				GL	3	56	UD	Brown glazed, 1 side
	TP4	H15	NA	403	POT	HSF	RI		NA	NA	GL	1	2	UD	Upright rim, small round lip, brown glaze on both side, too small to measure
	TP4	G15	NA	403	CBM		TL					1	1	UD	pink tile fragment

	TP4	G15	NA	403	POT	POU	RI		NA	NA	GL	1	1	L Tang-Song	Small round lip, very degraded yellowish brown glaze on both side, too small to measure
	TP4	H15	NA	404	POT	HSW	BO				SL	2	25	UD	Grey slip on interior surface, throwing marks visible on interior
	TP4	H15 G15	NA	404	POT	HSF	RI		NA	NA	GL	1	7	UD	Greyish brown glaze on the inside & around exterior rim; small round lip
	TP4	H15 G15	NA	404	POT	POU	BO				GL	1	1	L Tang-Song	Very degraded yellowish brown glaze on both side
	TP4	H15 G15	NA	404	POT	HSW	BO				SL	2	23	UD	Grey slip (one on both side)
AN17	TP4	H15 G15	NA	404	POT	HSW	BO				SL	1	19	UD	Grey slip one on side NB: change AN No. to AN17
	TP4	G15	NA	406	POT	HSW	BO				SL	1	11	UD	Grey slip on interior surface
	TP4	H15	NA	409	POT	HSW	BO				SL	3	49	UD	Grey slip on interior surface, throwing marks visible
	TP4	H15	NA	410	POT	HSW	BO				GL	3	77	UD	Including 2 joiners: brown glaze on the outside & strip of glaze on the inside; the other sherd has brown glaze partially on the outside & throwing marks visible on the inside
AN17	TP4	H15	NA	410	POT	HSW	BO				SL	1	18	UD	Grey slip on interior surface & throwing marks. NB: change AN No. to AN17
	TP4	H15	NA	411	POT	HSW	BO				GL	1	15	UD	Brown glaze on exterior surface & strip of glaze on the side; including part of a lug, horizontal, based on throwing marks

APPENDICES

Appendix 1: Summary of results from TP3

Test Pit 3 was opened up as a 2x2m excavation over a discrete sub-oval anomaly in the GPR data (Figure 7). In addition to fulfilling a desire to test several areas at once, TP3 also provided an extra work area to accommodate the larger numbers of volunteers working on site at weekends. However, once the richness and complexity of findings in TP1 and TP2 was recognised, it was quickly decided to clean up, record and close down TP3 and leave it for later investigation. In light of what was subsequently found in the other two areas, that was a good decision.

The limited amount of excavation work that did occur in TP3 nevertheless produced some useful and interesting results. A total of five contexts were identified and the sequence of site development in TP3, in common with the main discussion of Area 'A', is dealt with in chronological order (i.e. moving from the earliest to the most recent activity evidenced) – see plan and section in Figure A1 and Plate A1.

The earliest deposit was a 0.18m thick (at l.o.e.) layer of brown (10YR 4/3) slightly gravelly sand (**305**), which extended beyond the trench edges in all directions. Cutting into the surface of 305 and extending under the SFS was a sub-oval feature measuring c.0.85m E-W by 1.2m N-S (at l.o.e.). This pit or gully (**P10**) was filled with very dark brown (10YR 2/2) very slightly gravelly, slightly silty sand (**303**) which, when emptied, revealed a 0.12m deep gently rounded cut (**304**). Sealing the surface of 303 was a trench-wide layer of dark olive brown (2.5Y 3/3) sand (**301**), which tapered from c.0.23m thick to the east down to just 0.10m thick to the west – where it was overlain by a spread of 'topsoil' (**302**).

Layer 305 produced no finds in the small volume excavated, whereas fill 303 yielded a small but interesting assemblage of Song-Ming stoneware and single sherd of Tang green crackle glazed pottery. Sealing 303, layer 301 produced a somewhat mixed assemblage spanning the late Tang to Ming period with occasional sherds likely to be 19th-century intrusions. Finally, the 'topsoil' (302) produced another useful assemblage of stoneware this time of broadly Song-Ming date, but no more recent material.

Although limited in scale and depth, TP3 appears to record very little Qing to modern disturbance, which is very surprising compared with Area 'A', but finds clear agreement with the impact assessment excavations of 1997 where a shallow Song deposit was encountered (Mott Connell 1998). The lack of a modern-Qing cultivation horizon may reflect the recent removal of surface deposits and their redeposition elsewhere on the backbeach for purposes of site levelling – activity that is known to have happened in living memory.

It is thus probable that a much better understanding of the full sequence of historical deposits and their inter-relationships at KL-TS will be possible with an expansion of investigations westward from Area 'A' to include TP3.

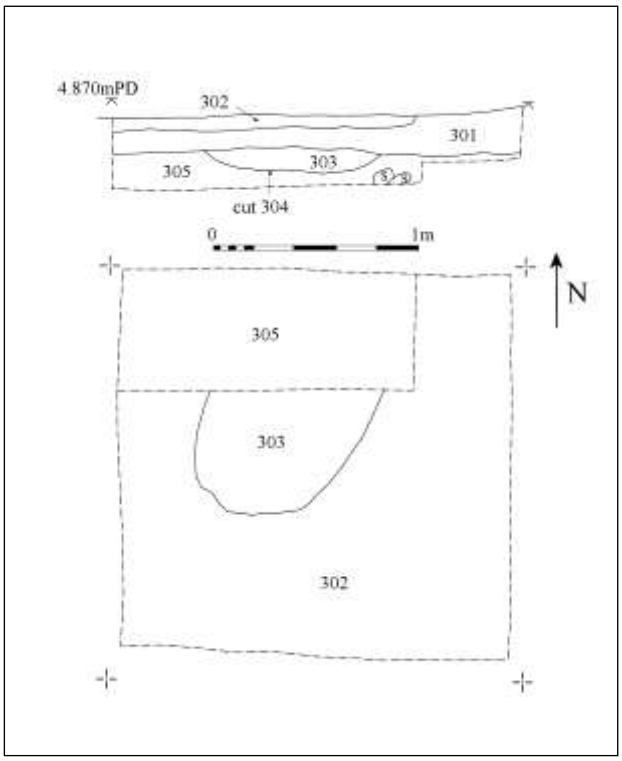


Figure A1: Plan & SFS TP3

Plate A1: Overview of TP3

Appendix 2: Images of Botanical Remains (all scales in mm)

ASTERACEAE

Ageratum conyzoides L. (charred)
Contexts 108, 202B, 218

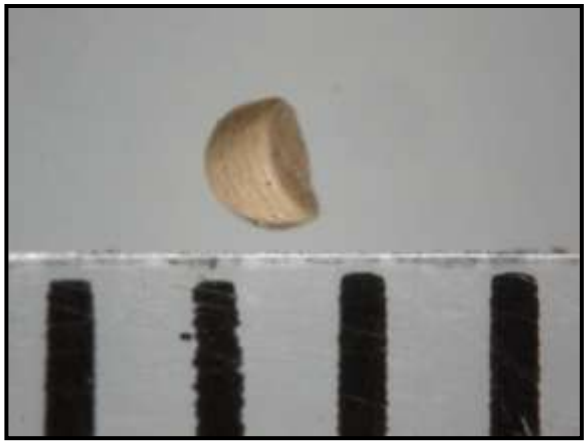
***Biden pilosa* L.**
Contexts 110, 218, 202E

Context 110

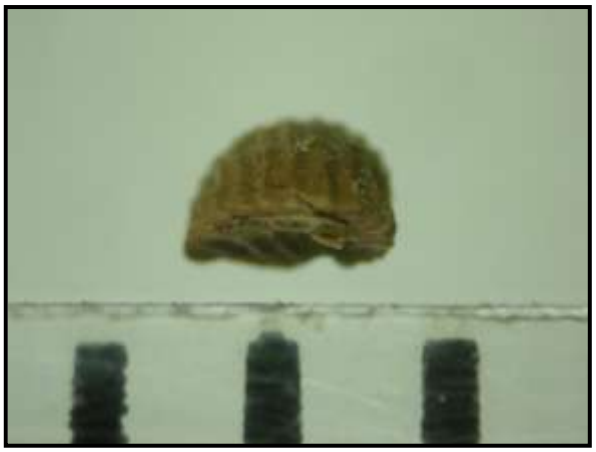
CYPERACEAE

Cyperus cf. *compressus* L.
Context 202B

EUPHORBIACEAE



Phyllantus amarus Schum & Thonn. (untransformed)
Contexts 202B, 207,



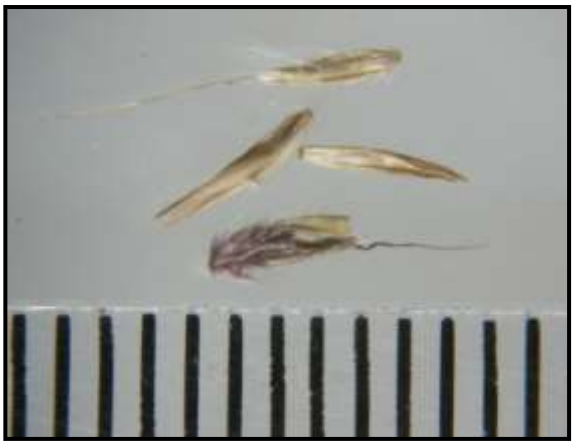
Phyllantus urinaria L. (untransformed)
Context 202B

OXALIDACEAE

Oxalis corniculata L. (untransformed)
Contexts 108, 207, 224

POACEAE

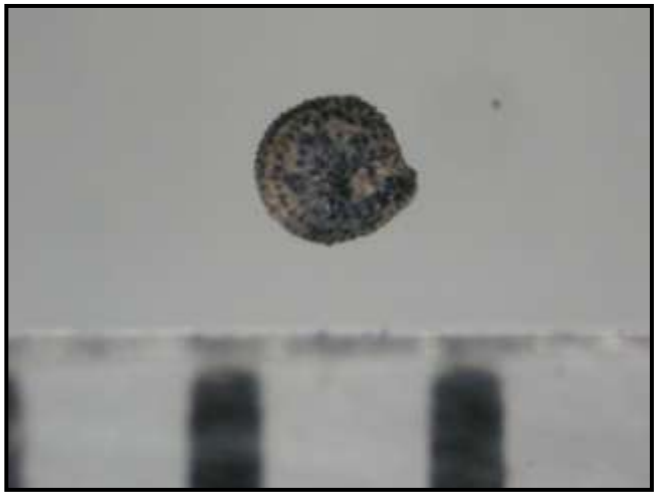
Context 218



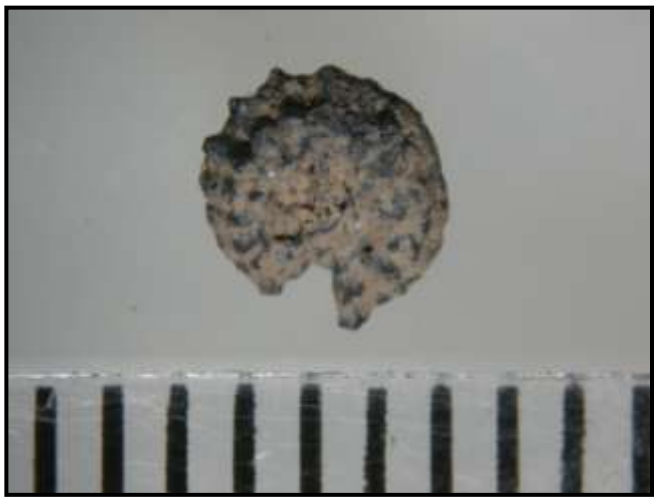
Contexts 108, 202 B, 207, 224,

Paspalum dilatatum Poir.
Contexts 110, 202B

PORTULACACEAE



Portulaca oleraceae L.
Context 108



cf. Oxalidaceae
Context 202B

SOLANACEAE

cf. *Solanum*
Context 218

cf. *Solanum*
Context 224

URTICACEAE

Boehmeria cf. *Longispica*
Contexts 202C, 218

Boehmeria cf. *Platanifolia*
Contexts 202B, 218

cf. VERBANACEAE

cf. *Lantana*
Context 218, 202B, 202C, 228,

FRUIT

Context 110

FLATTISH

Context 218

THIN-SHELL SEED COAT

Context 110

SPHEROID

Context 202C

ELLIPSOID

Contexts 110, 202B, 218

ROUNDISH

Contexts 202B, 218

Contexts 202B

Context 202B

CHARRED WOOD

Contexts 102, 107, 108, 110, 202B, 202C, 207, 218, 224, 228,

APPENDIX 3: Non-Botanical plates (all scales in mm)

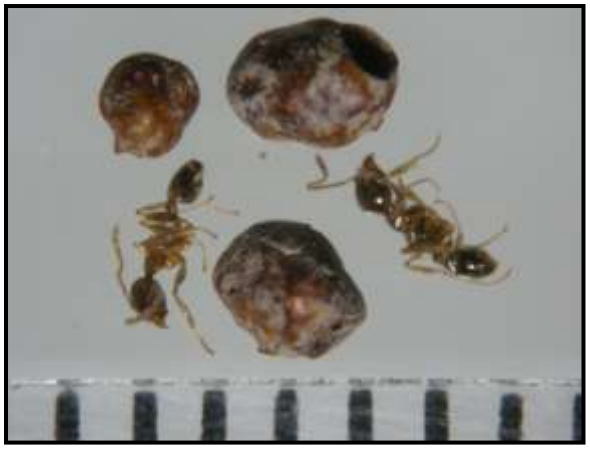
EARTHENWARE SHERD

Context 202B

INSECT DUNG

Contexts 108, 110, 202B, 202C, 207, 218, 224,

INSECT FRAGMENTS



Contexts 102, 207, 110, 202B, 202C, 202E, 207, 218, 224,

METAL FRAGMENT

Context 110

MOLLUSCA

Context 202B

Appendix 4: Ground penetrating radar overview

By Wallace Lai

Ground penetrating radar (GPR) (Figures A4.1 & A4.2) is one of several near-surface geophysical techniques. It emits high-frequency and wide-band electromagnetic (EM) pulses into the subsurface and receives the reflected pulses when changes of dielectric properties across interfaces exist. The emitted and received pulses are recorded, amplified and registered as amplitude and polarity's plot against two-way travel time (TTT), or known as waveform (A-scan). The nominal frequency of GPR antenna typically ranges from 10 to 3000 MHz. In archaeological study, the nominal frequency ranges are normally from 100 to 500MHz. Selection of frequency depends on the depth and depth resolution required for a specific investigation. For higher frequency antenna, it provides better resolution but limited detection depth range, and vice versa for low frequency antenna.

With a designed grid of multiple traverses running in orthogonal directions (such as an example in Figure A4.3), these waveforms are aligned in computer software to provide an energy distribution in a format of section view (B-scan radargram, Figure A4.4) and slice view at user-selected depth (C-scan, Figure A4.5). High energy portion may indicate presence of anomaly embedded in the ground, which may indicate presence of archaeological features. Low energy portion represents a natural decay of EM wave due to a relatively homogeneous subsurface profile that results in little archaeological value. By recognizing areas with high and low energy, the technique helps to pinpoint locations which may be of higher archaeological value, when compared with the general site background. An evaluation stage GPR survey can thus save time and effort by providing likely 'targets' for subsequent investigation by more traditional invasive survey.

Figure A4.1 Ground penetrating radar mounted in a cart

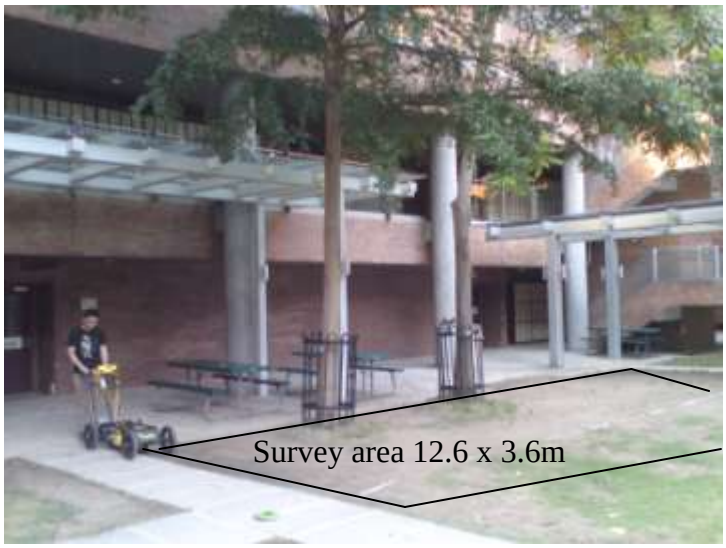


Figure A4.2 Survey area

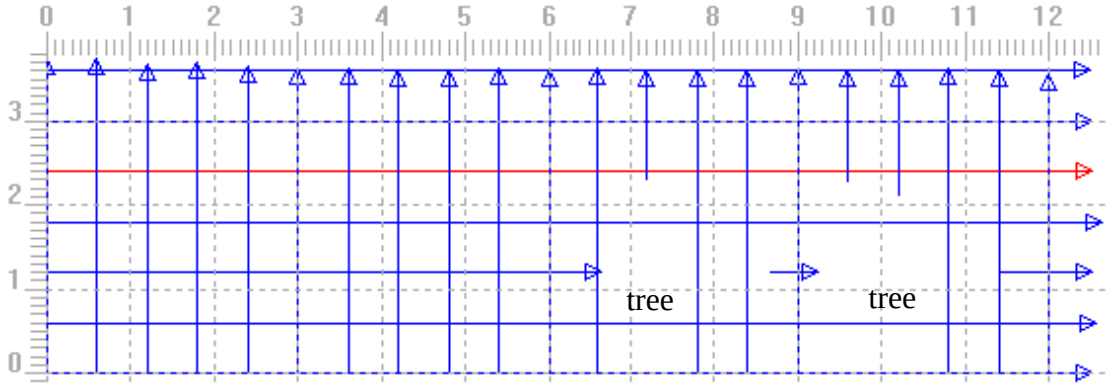


Figure A4.3 A survey area (12.6 x 3.6m) with orthogonal grid arrangement

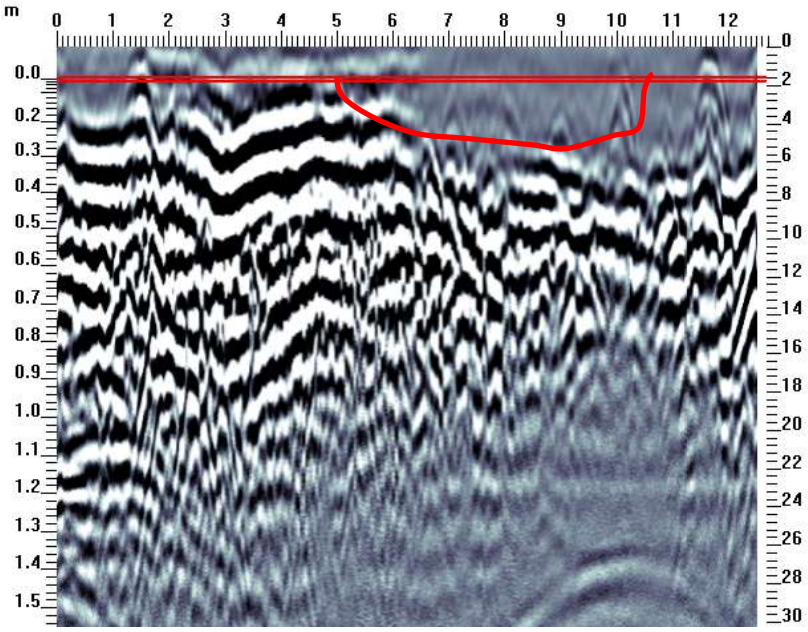


Figure A4.4 B-scan radargram

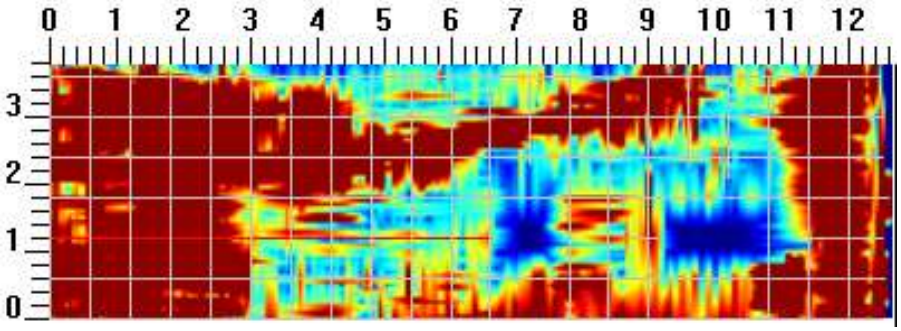


Figure A4.5 C-scan slice view

Appendix 5: Site formation processes

A5.1 Cultural factors

Local informant testimony suggested that the flat upper surface of the backbeach had until quite recent decades sloped gradually south to north from the base of the hillside to the rear of the modern beach. The excavated sequence reflected such large-scale truncation in that the main Jin-Tang cultural horizon (layers 102b=206=404) and the Tang graves cut into (G1-4, G6-9) it were reduced in thickness to c.0.25m at the southern end of Area 'A' and c.0.35m in the north. It is surely reasonable to assume that such graves would originally have been at least 0.75-1m+ in depth. However, the presence of a buried Qing dynasty horizon (202a), into which a grave (G5) of the same general phase had been cut, indicates that towards the south of the excavations much of the (presumably) agricultural truncation of Tang horizons had actually already occurred in the pre-modern period. There was clearly a great deal of Qing disturbance across the excavated area; However, the presence of complete and near-complete pottery vessels and blades with shared alignments (especially in G2) suggests that such items were *in situ* grave goods, which had more-or-less survived the deepest Qing activity. As far modern disturbance is

concerned, it took two main forms: large-scale terracing and more localised planting pit and ridge-and-furrow activity.

A5.2 Natural processes

In addition to such human factors, the downward displacement of archaeological materials into underlying deposits is also a common archaeological phenomenon in the loose sandy soils of backbeach sites. Therefore the finds recovered from the upper portion of backbeach layer 107/203 should probably be viewed as intrusive elements in what was otherwise a sterile context. The main non-human factors behind such movement at San Tau were root penetration, which caused locally significant levels of disturbance, and the less dramatic but more widespread impact of burrowing insects, in particular termites. The entire site was seemingly alive with such insects, which were actively reworking sediments throughout the excavation. In addition, the down-washing effect of monsoon rains had also played its part and, with the benefit of hindsight, was particularly evident in the south of Area 'A'. Here graves G2, 3, 5, 6 and 7 had almost certainly been over-dug due to washed-down organic fill penetrating beyond the grave cut into layer 203 underneath and therefore blurring the context boundary. An alternative explanation would see goods being placed in the grave when it was already partially backfilled, which does seem rather implausible. The 'wash-down effect' seems the more plausible, and therefore preferable, explanation for grave goods finishing up perched on 'plinths' of soil when the fill was removed. Further weight to the latter argument is provided in Some contrast in the nature of sediments and/or post-depositional processes between the north and south of Area 'A' meant that, although such washing-down did occur from the Tang horizon into layer 107 below, in graves G1 and G4 the base of grave cut was clearly defined by a thin, dark grey clay-rich spread (110 and 108). Interestingly, such clear definition of grave base in G1 and G4 can be contrasted with the near-invisibility of fills for these interments within Tang cultural layer 102b, through which they are presumed to have been cut. Here a combination of lack of colour/texture contrast between inside and outside the graves, localised bioturbation effects, and later historical human activity are probably to blame.