



# Post Excavation Assessment Report of Land at Amherst Hill, Chatham, Kent



Report for Persimmon Homes Ltd

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**SWAT. ARCHAEOLOGY**

Swale and Thames Archaeological Survey Company  
School Farm Oast, Graveney Road  
Faversham, Kent  
ME13 8UP

Tel; 01795 532548 or 07885 700 112

[www.swatarchaeology.co.uk](http://www.swatarchaeology.co.uk)

## Contents

|  |           |
|--|-----------|
| <i>List of Figures</i> .....                   | <i>ii</i> |
| <i>List of Plates</i> .....                    | <i>ii</i> |
| 1. SUMMARY.....                                | 3         |
| 2. INTRODUCTION.....                           | 4         |
| 2.1 Planning Background .....                  | 5         |
| 3. ARCHAEOLOGICAL BACKGROUND .....             | 6         |
| 3.1 Introduction .....                         | 6         |
| 3.2 Archaeological Potential of the Site ..... | 6         |
| 4. AIMS AND OBJECTIVES.....                    | 10        |
| 5. METHODOLOGY .....                           | 13        |
| 6. MONITORING .....                            | 16        |
| 7. REVIEW OF THE ARCHAEOLOGICAL FIELDWORK..... | 16        |
| 8. ARCHAEOLOGICAL SUMMARY .....                | 17        |
| 9. ARCHAEOLOGICAL NARRATIVE .....              | 27        |
| 9.1 Ceramic Assemblage .....                   | 28        |
| 9.2 Small Finds .....                          | 29        |
| 9.3 Environmental Evidence .....               | 30        |
| 10. DISCUSSION.....                            | 36        |
| 11. CONCLUSION.....                            | 37        |
| 12. METHODOLOGY FOR FURTHER WORK.....          | 39        |
| 13. ACKNOWLEDGEMENTS.....                      | 40        |
| 14. REFERENCES.....                            | 40        |
| 15. HER SUMMARY FORM.....                      | 42        |

### **List of Figures**

|              |  |
|--------------|--|
| Fig.1        | Area of Archaeological Investigation                       |
| Fig.2        | Overview of Site   |
| Fig.3        | Area 1   |
| Fig.4, 5     | Area 2   |
| Figs. 6-9    | Areas 3  |
| Figs. 10-11  | Areas 4  |
| Figs. 12-16  | Selective sections   |
| Fig. 18      | Site Plan  |
| Figs. 19 -23 | Officers' Stables and Grooms' Quarters                     |
| Figs. 24-32  | Mess hall and Officers' Quarters                           |
| Fig. 33      | Site location in relationship to Dockyard and Fort Amherst |

### **List of Appendices**

|             |                                      |
|-------------|--------------------------------------|
| Appendix 1. | Catalogue of Bivouacs and Booths     |
| Appendix 2. | Stables Building Narrative           |
| Appendix 3. | Mess House Building Narrative        |
| Appendix 4. | Small Finds                          |
| Appendix 5. | Pottery                              |
| Appendix 6. | Environmental and Animal Bones       |
| Appendix 7. | Maps                                 |
| Appendix 8. | Officers' Stables and Quarters plans |

# Post Excavation Assessment Report of Land at Amherst Hill, Chatham, Kent

**NGR: TQ 76021 68430**

## **1 SUMMARY**

*Swale & Thames Survey Company (SWAT) have been commissioned to carry out an archaeological excavation of land at Amherst Hill, Chatham, Kent centred at TQ 76021 68430.*

*Archaeological work started on site on 29<sup>th</sup> April 2013 with the stripping of tarmac and sub base strata on the area of the Badminton Courts (Area 1. Fig.3). The strip exposed the 18<sup>th</sup> century blocks of houses used as the Officers' Quarters, in addition some post 18<sup>th</sup> century archaeology was revealed behind the houses.*

*Work started on 6<sup>th</sup> May stripping the main site of topsoil and overburden ( Figs.4-12). Work continued on the Officers' Quarters in the Badminton Court area and the front basements of the buildings were exposed and recorded.*

*By 17<sup>th</sup> May work had finished on stripping the main site of topsoil and overburden. Numerous features were revealed only one of which seem to date earlier than the 18<sup>th</sup> century.*

*The air raid shelters were demolished under archaeological supervision and had finished by Friday 14<sup>th</sup> June when work started excavating and recording the additional excavations of the Officers' Quarters (Area 1. Fig 3) requested by KCC. Work progressed in recording the exposed tunnels and basements of the Mess House and Officers' Quarters. This work was completed and signed off on 26<sup>th</sup> June.*

*The archaeological investigation resulted in the comprehensive planning of the excavated 18<sup>th</sup> century basements of the Mess House as shown on the 1795 plan (TNA MP1/203) and part of No. 1. The Officers' Quarters.*

*The Officers' stable and coach house, grooms' quarters and boundary wall as shown on the 1864 plan (TNA MPH 1/356) was also planned in detail.*

*Of particular interest was the revealing of 19 bivouac shelters under the historic allotment area which were more akin to Anglo-Saxon 'grubenhau' but dating from the 18<sup>th</sup> century.*



## **2 INTRODUCTION**

### ***SUMMARY***

#### **INTRODUCTION**

Swale & Thames Survey Company (SWAT) was commissioned by Persimmon Homes Ltd to carry out an archaeological excavation at the above site following the results of an archaeological evaluation by Canterbury Archaeological Trust (Found 2006). The present excavation by SWAT Archaeology was carried out in accordance with a Written Scheme of Investigation (Hawkins 2011), and approved by the Archaeological Heritage Officer, Kent County Council (KCC) in consultation with Peter Kendall of English Heritage. It should be noted that English Heritage is a Statutory Consultee for the site as it is located within a Conservation Area and the setting of a Scheduled Monument. The work on site was carried out from the 29<sup>th</sup> April to 26<sup>th</sup> June 2013.

The archaeological excavation and building recording forms the second phase of mitigation associated with the site at Amherst Hill, the initial work being the evaluation by Canterbury Archaeological Trust (CAT) in 2006, the geophysical survey by GSB Prospection Ltd (2005), and the CAT report on the air raid shelters (Seary 2006). The third phase being a watching brief on the demolition of the covered air raid shelters with the report included within this report. The watching brief continued to September 2<sup>nd</sup> 2013.

#### **SITE DESCRIPTION AND TOPOGRAPHY**

The site occupies an area of open ground formerly occupied by the Royal School of Military Engineering lying south of Amherst Hill Road, west of Maxwell Road, east of Kitchener Barracks and north of Amherst Redoubt in Chatham (Fig. 1). The site is of open ground recently cleared of vegetation generally sloping from c.55maOD in the east to c.40maOD to the west above Ordnance Datum and overlooks the River Medway and Rochester.

The Geological Survey of Great Britain records the natural subsoil as Upper Chalk across the majority of the site except the far eastern margins where the chalk is shown as being overlain by Thanet Beds (Geological Survey of Great Britain (England and Wales) 1:50,000 scale, sheet 272).

## **2.1 PLANNING BACKGROUND**

Planning consent (MC/12/1400) for the erection of 34 dwellings (including nine affordable homes); provision of open space; creation of new vehicular access via Amherst Hill; provision of access roads; footpaths; landscaping and associated infrastructure was approved by Medway Council in March 2013. Planning Conditions 17, 19, 21, 22 deal with archaeology, building recording, and historical signage all of which fall within the remit of SWAT Archaeology.

The 2006 archaeological evaluation carried out by CAT revealed the presence of possibly prehistoric and early Romano-British features at the northern end of the site. As a result of the discovery of these archaeological remains associated with the 19<sup>th</sup> century barracks and the construction of the Chatham Lines fortifications, further mitigation in the form of an Archaeological Excavation was required in the area of archaeological activity before development could commence.

The Council requested that an archaeological investigation (Condition 17) be undertaken to an approved Archaeological Written Scheme of Investigation for an Archaeological Excavation, Post Excavation and Publication in order to satisfy the conditional requirements of the planning permission (MC/12/1400).

The Archaeological Written Scheme of Investigation (WSI) produced by CgMs Consulting (Hawkins 2011) is a comprehensive document which resulted from discussions and correspondence with Peter Kendall of English Heritage, and Ben Found of Kent County Council during January, February, and August 2011.

The WSI includes a specification and method statement for the proposed archaeological investigations and subsequent off-site processing, analysis and publication. In essence SWAT Archaeology has within eight months from completion of the investigation to undertake an assessment of the site records and produce a MAP2 post-excavation assessment report, copies of which will be provided for Medway Council, English Heritage, Kent County Council, and the developer.

The WSI relates to proposals for the residential development of the northern half of the site. The southern half of the site will be established as public open space and any archaeological

remains within it can be preserved in situ. Additional archaeological work may be needed in response to the proposed landscaping works and repairs to the Commandant's Wall.

### **3. ARCHAEOLOGICAL and HISTORICAL BACKGROUND**

#### **3.1 Introduction**

An Archaeological Desk-based Assessment was carried out by Wessex Archaeology (2003) followed by a geophysical survey by GSB Prospection Ltd in late 2005. These studies did not find any evidence for any pre-Roman activity within the vicinity of the site. However, there is a low but persistent indication of Prehistoric activity on the Chatham Lines (Hawkins 2011: 3). In addition, the HER records note that a Prehistoric gold bracelet was found in the vicinity of the site in 1872 (TQ 76 NE 17).

Foundations of three Romano-British buildings were found during the cutting of a ditch at Amherst Redoubt in 1779 (TQ 76 NE 7). The remains of three rooms with large quantities of painted wall plaster and broken tile, Roman pottery, including Samian, fragments of glass and four Roman coins were retrieved by J. Douglas (Douglas 1793: 138-40).

A number of Roman inhumation graves are reported as being opened by workmen approximately 500m to the south of the site near 'The Brook', which forms part of the A2 (Payne 1898: 14-21).

Anglo-Saxon finds in the vicinity of the site include the site of an Anglo Saxon Barrow cemetery situated on the western slope of the steep hill facing the Roman town of Rochester. The barrows were first disturbed in 1756 when the Chatham Lines were first thrown up and were excavated from 1779 onwards. The barrows were described by Douglas as containing inhumations with the head facing north and a rich assemblage of grave goods. Finds included swords, shield umbos, spearheads, square-headed and saucer brooches, pendants, buckles, beads, pottery and glassware (TQ 76 NE 8).

The Times newspaper in November 1950 records the discovery by the Royal Engineers of ten human burials at Kitchener Barracks (Hawkins 2011: 4).

#### **3.2 Archaeological Potential of the Site**

In 2006 the Canterbury Archaeological Trust undertook an archaeological field evaluation within the area of Amherst Hill (TQ 76 NE 432). Twenty trenches encapsulating 731 sq m

were machine excavated under continuous archaeological supervision representing a 4.21% sample of the total site. The natural geological surface was encountered within the majority of the trenches, trenches 17 and 18 being the exceptions. A natural Head deposit was seen in the trenches to the eastern, upslope area of the study site (trenches 4, 5, 8, 10, 11 and 13). To the north east of the site the Head deposit consisted of an orange-brown to yellow brown silt clay; whereas in trenches 10 and 13 the Head deposit comprised a brown orange to grey blue clay sand representing the Thanet Beds.

The Head deposit was seen to overlie natural chalk in all trenches. Where no Head deposit was present natural chalk formed the uppermost natural geological surface. The geological surface was not seen within trenches 17 and 18 due to the present of intact overlying archaeological deposits. An inhumation burial was located in the south west corner of the site within evaluation trench 16. This burial was aligned north south with the head at the southern end of the grave cut. Only partial excavation was undertaken to confirm the depth below ground surface, character, significance and condition of the buried remains. The alignment of the grave would suggest a non-Christian burial. The presence of more than one Anglo Saxon cemeteries in the vicinity of Fort Amherst would indicate that the most likely date for the burial is Anglo Saxon (Found 2006).

However, a number of Roman burials are also known in the vicinity and another date for the burial cannot be ruled out. Whilst only a single burial was uncovered as part of the evaluation the possibility that the burial forms part of a larger cemetery group or is one of a number of outliers belonging to the Fort Amherst cemetery group should not be dismissed. Antiquarian investigation is likely to have been directed towards the barrow mounds and may have ignored other unmounded burials (Found 2006).

Very few other features attributable to pre-military occupation of the site were uncovered as part of the archaeological field evaluation. A number of the pit cut features found across the evaluation area may have pre-military origins, although none are likely to date from before the post medieval period. The most likely feature to be of a pre-military date is the small pit or post hole cut at the northern end of Trench 3.

A number of features dating to the military occupation of the site (i.e. post 1755) were found across the evaluation area. A brick boundary wall constructed in 1757 to enclose the area of the Chatham Infantry Barracks falls partly within the site. An upstanding section of this wall (forming part of the eastern boundary) was located against the western edge of the

site. Further partly demolished portions of this wall were found to survive below ground. Additional sections of the eastern boundary wall were exposed in trenches 1 and 18 and part of the southern boundary for the barracks enclosure was found in trench 17.

Re-fortification and expansion during the American war (1779-83) created a much larger fortification that became known as Fort Amherst. This reached its present form in the Napoleonic period after 1803 and the fort then became a citadel to act as a place of retreat in the last resort and as such was designed to be defensible on all sides. Map evidence (from 1804 to 1813) shows that a glacis was intended to be built around the complex known as the Belvedere Battery and would have been located in the south west corner of the site. Dumped deposits located in Trench 12 may show evidence for the construction of the glacis. There is evidence for extensive modification of the natural slope of the hillside to the northern end of the site in the vicinity of Trenches 2, 3 and 7. Trench 2 revealed clear archaeological evidence for a terrace cutting into the hillside at the eastern end of the trench. Trenches 3 and 7 show clear evidence for the extensive dumping of redeposited material being placed in the area above the terracing thus exaggerating the slope here and levelling the area above (Hawkins 2011).

There are no fixed gun emplacements on the northern rampart of Fort Amherst which would have directed fire along this ridge. Field artillery and musket fire from a fire step could however have been used. Whilst it should not be ruled out that these landscaping described above was undertaken to create clear fields of fire along the terrace, the more likely explanation for this substantial sculpting of the hillside is that it was conducted in connection with the construction of the original Chatham Infantry Barracks. It is known that the area within the Chatham Lines was used for the extraction of clay and chalk for lime used in the construction of earthworks and structures associated with the Lines and this may represent the remains of such a disturbance. A possible continuation of this terrace can be seen on the northern side of Amherst Hill Road to the east of the former Officer's Mess (now a children's day nursery).

As well as the remains of the 1757 barracks wall Trench 1 contained a number of later walls apparently to the exterior of the barracks enclosure wall and representing the remains of a structure built against it. Evidence from the 1864 barracks map (MAP 3-5) suggests that these walls relate to the officers' stables and coach house which appears on a pasted on overlay to the original map. This building is clearly shown on the first edition Ordnance

Survey map of 1866 (MAP 6) and therefore presumably was constructed sometime between 1864 and 1879.

Map evidence shows that the land to the west of the Chatham Infantry Barracks was utilised for barracks gardens, which lay to either side of an access road (now Amherst Hill Road) leading to a gate into the barracks. Whilst the area to the north of Amherst Hill Road has been subsequently developed the land to the south (forming the site) seems to have remained open ground to the present day. The 1864 barracks plan (MAP 3-5) shows two distinct areas of gardens within the site; the southern area is shown to have a formal layout of paths and trees with a walled garden created within the south east corner of the barracks separated from the other areas by the 1757 barracks boundary wall. To the north and east of the site the garden is shown as a large open space most likely used for the grazing of animals and as vegetable gardens (Found 2006).

The disturbance and area of concrete seen in Trench 13 is most likely to be derived from two houses which are shown to have been situated in the south east corner of the site on a military plan of the area dated 1955. They do not appear to have been in existence in 1948 when an aerial photograph was taken of the site by the RAF. The buildings appear to have been comprehensively demolished and no evidence for their existence could be seen on the ground. The large cut feature containing demolition material and asbestos sheeting seen in Trench 10 may have been associated with the demolition of these buildings

A 1795 depiction of the barracks can be contrasted with a map of the Chatham Infantry Barracks dated 1864 (MAP 3). The 1864 plan shows the impact of the barracks reform agenda by which all British barracks were modernised in the light of a Royal Commission report and the outrage of the public in the post Crimean period at the ill health (and deaths) of soldiers in barracks. At Chatham the 18th century barrack blocks were raised in height by one storey and many new buildings were shoe horned onto the site. The 1864 plan shows some of the latter additions including stables for officers' horses. The garden use of land is known from 1806 and probably occurred earlier. Manuring of the garden plots with night soil from the barracks may have introduced military and civilian material onto the site. The existence of a more formal garden associated with the commanding officers house is known from at least as early as 1813. Publicly available early Ordnance Survey mapping shows poor detail for the site due to security constraints but one of the military's own version dated 1879 shows close correlation with the 1864 plan. The north eastern area of the site

remained open ground, to the south and east gardens were established and a network of paths lay down. Formal gardens were established in the south east of the study site to the rear of the house of the commanding officer of the barracks.

The far north-west corner of the study site would have fallen inside the boundaries of the 1757 barracks. Later developments and upgrading of the barracks led to the construction of officers stables in this part of the study site.

The study site was utilised during WWII for the provision of air raid shelters, with a number of these being located to the northern end of the site. A programme of building recording was undertaken and a report issued (Seary 2006).

This will be supplemented by the monitoring of the demolition of the air raid shelters, which is to follow this phase of investigation and will be subject to additional work.

More substantial deep air raid shelters and tunnels are known as existing in the area but these are thought to be those forming part of Fort Amherst or under the parade ground of the barracks, rather than extending into the study site (Wessex Archaeology 2003: 43).

There are connections to the underground works of Fort Amherst including a deep shaft to a well but these are thought to lie outside of the development area. An aerial photograph of the site taken by the RAF in 1948 (AP1) shows not only the semi-subterranean air raid shelters but an above ground hut in to the centre south of the site. Allotment style 'strip' gardens appear to cover the southern and eastern areas of the site and probably relate to the cultivation of vegetables in support of the war effort.

It is possible that the basketball court area of the site will contain the basements of former buildings backfilled with demolition rubble. These may include the Mess House for officers and possibly one end of the row of officers' houses (MAP 2-3). Any such basements will require full emptying of such demolition residues and complete recording and investigation as part of the archaeological investigation (Hawkins: 2011).

#### **4. AIMS AND OBJECTIVES**

The principle aim of the excavation, as set out in the Written Scheme of Investigation (Hawkins 2011) was to ensure the preservation by record of all buried archaeological remains located within the impact areas of the proposed development and any other proposed excavations (including schemes of drainage and other services) arising from the proposed development. In accordance with

NPPF (2013) which replaces PPG 16 it should be noted that, "...the Government's objectives for planning for the historic environment are:

- to deliver sustainable development by ensuring that policies and decisions concerning the historic environment:
  - recognise that heritage assets are a non-renewable resource
  - take account of the wider social, cultural, economic and environmental benefits of heritage conservation; and
  - recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained in the long term.
- to contribute to our knowledge and understanding of our past by ensuring that opportunities are taken to capture evidence from the historic environment and to make this publicly available, particularly where a heritage asset is to be lost."

The site specific Written Scheme of Investigation (Hawkins 2011) sets out clearly that the objective of the archaeological excavation is to identify, excavate, record, and analyse any significant archaeological remains that will be disturbed by the proposed development. The specific research aims are:

- The excavations are likely to facilitate an understanding of the topography and environment during the Prehistoric and Roman periods. This information in conjunction with evidence from nearby sites will help refine the existing topographic and environmental models for this part of the Medway Valley.
- What is the environmental background to the site in the late Prehistoric and Roman periods: Is there evidence for change over time.
- What environmental and/or climatic factors influenced the development of the Medway Valley in the post-Roman era

#### **Prehistoric**

- The nature and presence of Prehistoric activity at the site is considered uncertain, the background finds of Prehistoric material suggest that Prehistoric remains could be encountered on the site.



## **Roman**

- Roman finds are well documented in the immediate vicinity of the site and a possible Roman burial is recorded immediately south of the proposed development area. What evidence for Roman activity and occupation is present on the study site?

## **Anglo Saxon and Early Medieval**

- Anglo Saxon burials are well documented in the immediate vicinity of the site and a possible Anglo Saxon burial is recorded immediately south of the proposed development area. What evidence for Anglo Saxon occupation and activity is present on the study site?

## **Late Medieval and Early Post Medieval**

- The site is believed to have lain in pasture land in the late Medieval and early Post Medieval period. Any evidence, either archaeological features or archaeo-environmental evidence that could characterise occupation or activity prior to the mid eighteenth century would be highly significant.

## **Post Medieval Military Activity 1**

- It is apparent that one of the first military activities on the study site may have been terracing activities either to obtain material for use in the defensive lines to the south or east or for the 1757 barracks, or possibly with the intention of the formation of building platforms. It will be critical therefore to date the terracing and identify any evidence for former structures (of all types) located upon them.

## **Post Medieval Military Activity 2**

- During the eighteenth and early nineteenth century the bulk of the area of the study site appears to have been maintained in a 'cleared' condition as a field of fire to the rear (north) of Fort Amherst. Evidence for land management may be identifiable together with, on the west, the 1757 boundary wall line of the barracks (part of the upstanding wall of which lies to the south west of the proposed development area) within the basketball court area evidence for barrack buildings (Officers Quarters) could conceivably survive.

## **Post Medieval Military Activity 3**

- There is currently no physical evidence (as identified in the 2006 evaluation) for remains of the glacis within the area proposed for development. The possibility of

encountering further remains of the glacial in the proposed development area is therefore remote, but should not be discounted.

**Post Medieval Military Activity 4:**

- Evidence for military encampments may be represented whether these be from the three main periods of invasion threat or the sanitary experiments of the late 19<sup>th</sup> century. For example evidence for field kitchens (some were apparently dug into Saxon barrows!) and other negative features such as latrines and rubbish pits.

**Post Medieval Military Activity 5: The Victorian Buildings and Gardens**

- By the mid nineteenth century, Fort Amherst and the Chatham Lines were obsolete and were utilised for practice assaults, sapping and tunnelling. By this date the area to the south of the proposed development area had been laid out as pleasure gardens serving the barracks while the area of the development (which would have been heavily terraced) could conceivably have been utilised as a paddock serving the stable and coach house which lay within the north west of the site and was built 1864-1874. The plan form of the stable block should be recoverable.

**Post Medieval Military Activity 6**

- The proposed development site contains a number of extant World War II air raid shelters. These have been subject to a programme of historic building recording. This should be reviewed to ensure all historic aspects of the shelters have been fully recorded. It is suggested that the air raid shelters are not demolished prior to the archaeological excavation which should be progressed around them. This is to avoid disturbance to surrounding archaeology. It is anticipated that the study site may contain evidence for further 20th century air raid shelters, allotments and rubbish pits (Hawkins 2011).

**METHODOLOGY**

The archaeological investigation of the site was undertaken in two phases in the four areas of the site (Areas 1-4. Fig. 2). Phase One consisted of the mechanical removal of topsoil and other recent deposits across the Area of Archaeological Interest to the top of the archaeological horizon revealed in the evaluation, followed by the cleaning and planning of all exposed archaeological features. The results of this clearance were assessed in relation

to the development proposals and research aims, and a strategy was devised for the archaeological excavation of the exposed archaeological remains.

Phase Two was comprised of the implementation of the excavation strategy, with respect to the aims and objectives mentioned above. Included in this strategy was the implementation of a programme of environmental soil sampling of suitable deposits especially where human remains and/or occupation or industrial deposits may be encountered. In addition, if significant structural archaeological features and/or cremation groups of limited size were identified which extended beyond the impact areas of the proposed development, sufficient additional areas would be subject to archaeological excavation to ensure that a satisfactory archaeological record was compiled. Alternatively, proposals for preservation *in situ* were suggested for significant buried archaeological remains if encountered.

The methodologies adopted and implemented in Phase Two included as a minimum, the following:

- a) Structural remains and other areas of specific activity such as domestic and industrial buildings and structures, hearths, kilns and ovens would be comprehensively excavated to record sufficient contexts to establish the relative and absolute chronology of the remains.
- b) Sufficient soil sampling would be undertaken to acquire artefactual, economic and palaeo-environmental data should suitable deposits be encountered.
- c) All features, deposits and structures would be excavated stratigraphically and by phase in accordance with normal practice.
- d) Inhumations and cremations would be totally excavated. The objectives would be to obtain data on the full extent, character and status of the burial context, both in terms of individual graves and burial groups. Excavation would be undertaken to recognized standards to maximize the recovery of data of social significance which may include the bulk sampling of grave fills. A detailed brief for the excavation and recording of burials would be prepared as part of the assessment for the sampling excavation strategy by a qualified specialist.
- e) Notwithstanding previous requirements a comprehensive soil sampling programme for bulk screening, environmental archaeological analysis, and soil micromorphology would be undertaken where suitable deposits were identified and from which the maximum level of data could be retrieved.

- f) If required, a detailed brief for the excavation and recording of soil samples would be prepared as part of the assessment for the sampling excavation strategy by qualified environmental archaeologist and soil-science specialists. This would include methods statements detailing the objectives and procedures implemented.
- g) Generally, bulk soil samples and sub-samples would be taken from the unexcavated fills of all features for bulk screening, environmental archaeological analysis and soil micromorphology. In addition, further soil samples would be taken where required in the form of monolith samples. The stratigraphic position of such samples would be fully recorded.
- h) In particular bulk soil samples would be taken if significant quantities of animal bone, iron slag, daub or carbon were present in deposits. The animal bone will act as an indicator for the presence of smaller animal, fish and bird bones; the slag, daub and carbon will act as an indicator for hammer scale. Soil samples would also be taken for general biological analysis if a deposit appeared to contain snails or mineralized material such as cress. In all instances soil samples would be taken in accordance with the guidelines supplied and following advice taken from either a qualified environmental archaeologist or a soil-science specialist.
- i) Samples taken for general biological analysis would be sufficient to enable sub-samples to be processed during the course of the excavations. Information thus obtained would be communicated to field staff at the earliest possible time to assist in the successful completion of the excavation objectives. If the initial sample produces high quality results further portions of the associated deposit would be excavated and more samples taken.
- j) Excavation in all cases would be undertaken by hand. Hand recovery of cultural material would be augmented by wet or dry screening of 100-200 litre control samples through 10mm mesh. On site screening would not preclude the taking of other bulk soil samples for off-site screening.
- k) If necessary, water within excavation areas would be pumped to a settlement tank to remove solids and then to a suitable disposal point following consultations with the appropriate Statutory Authority.
- l) Artefacts recovered during the course of the excavations would be immediately cleaned and marked with relevant site and context references, provisionally identified and dated. Finds processing would thus be undertaken concurrently with the excavations to ensure that the rapid identification and spot dating of artefacts was achieved. This information

would be communicated to field staff at the earliest possible time to assist in the successful completion of the excavation objectives. If required, finds would be conserved during the course of the excavations. This processing, conservation, identification and dating of artefacts would be fully recorded and form part of the site archive.

m) If required, a site grid would be established across the areas subject to machine clearance. Nevertheless, the areas subject to archaeological investigation would be accurately surveyed and tied into up to date Ordnance Survey plans. All field surveying would be preceded by a study to clarify the site specific surveying methodology, determine lines of sight and locate appropriate up to date survey points.

n) All investigation areas would be set-out in advance within the Ordnance Survey (OS) National Grid Reference (NGR) system, using GPS. Area co-ordinates would be digitally uploaded to minimise re-keying errors. The archaeological investigations would be digitally surveyed using survey standard GPS, and will include heights above OS datum. The electronic survey record would be periodically downloaded and retained within the site archive, with co-ordinate and/or datum information transposed onto the appropriate paper archives (Hawkins 2011).

## **6. MONITORING**

Curatorial monitoring was carried out during the course of the excavation by Ben Found Heritage Officer KCC at which time methodologies and preliminary results were discussed.

## **7. REVIEW OF ARCHAEOLOGICAL FIELDWORK**

### **7.1 Stratigraphical Deposit Model (SDM)**

A stratigraphic sequence was recognised across the site comprising topsoil (1001) which covered a series of soils (1002) that overlay subsoil (1004). The subsoil covered Head Deposits (009) of yellow-brown silt-clay over the solid geology of Head Chalk (1003). Topsoil consisted of a friable mid grey brown sandy silty clay which covered a series of deposited garden soils likely to be associated with the gardens attached to the Kitchener Barracks, and which continued in use to the Second World War. The subsoil was comprised of friable, marled mid brown grey sandy silty clay which in areas sealed a deposit of root-disturbed chalk containing fragments of brick and flint. An area of terracing on the east side of the site

ran across the site north to south and was cut into the natural chalk and formed a level terrace about four metres wide. Deposits of orange-brown silt-clays in thin laminations and banded with chalk granules were banked over the terrace cut indicating the terrace silted up naturally and was not backfilled.

## **7.2 Archaeological Summary**

The archaeological summary will initially focus on the specific research aims as itemised in the WSI (Hawkins 2011).

7.1 The archaeological excavation carried out in April to June 2013 confirmed the presence of the demolished remains of the 1757 boundary wall of the original Chatham Infantry Barracks running north to south on the western edge of the site (**Post Medieval Military Activity 1**).

7.2 To the west of the adjacent modern road the current archaeological investigation revealed the 18<sup>th</sup> century Mess House and part of the Officers' Quarters (**Post Medieval Military Activity 2**).

7.3 Adjacent were the demolished remains of the officers' stable and coach house, grooms' quarters including a contemporary access road constructed out of granite setts and gravel (**Post Medieval Military Activity 6**).

7.4 On the south side of the Mess House a substantial tunnel or cellar was revealed which seemed to lead in the direction of the Commandant's House.

7.5 The archaeological investigation resulted in the comprehensive planning of the excavated 18<sup>th</sup> century basements of the Mess House as shown on the 1795 Plan (TNA MP1/203) and part of the building known as No.1. Officers' Quarters (**Post Medieval Military Activity 2**).

7.6 The Officers' stable and coach house, grooms' quarters and boundary wall as shown on

the 1864 plan (TNA MPH 1/356) were also planned in detail (**Post Medieval Military Activity 5**).

7.7 Of particular interest was the revealing of 19 bivouac shelters under the historic allotment area which were more akin to Anglo-Saxon 'grubenhau' but dating from the 18<sup>th</sup> century. In addition a number of other features dating to the military occupation of the site were found including terraces cut into the chalk, and possible rubbish pits (**Post Medieval Military Activity 4**).

7.8 Also of note is pit [1114] in Area 4 (Fig. 10) which contained in its fill (1113) prehistoric pottery which may be residual and dating between c. 600-200BC (**Prehistoric**).

### **7.9 AREA 1 (Figure 3) Former Officers. Quarters**

An area of 850 sqm was stripped of the tarmac (004) and the underlying 'type 1' gravels (006) that formed the Basketball Court. This exposed the naturally occurring chalk bedrock (003) along the rear of the former Officers' Quarters and the demolished remains of No. 1 Officers' Quarters and the Mess House built in the mid 18<sup>th</sup> century. The building recording exercise has shown that extensive alterations to the 1757 built Officers' Quarters and Mess House and shown on the plan from 1795 (MAP 1 & 2) were carried out in 1849 as attested from the date on drain covers (MH 22). In addition bricks dated to after 1875 were retrieved from the demolition fill and in repair to walls suggest the 1861 Royal Commission recommendations of essential improvements were carried out and included remodelling of fireplaces, new drainage and major internal alterations and improvements. For a comprehensive description of these buildings see Appendix 3.

Cutting the chalk were several features. Amongst these were four, equally spaced pits, only two of which were excavated: [008] and [010]. They have been interpreted as 'soak-aways'. These were circular in shape and were roughly the same dimension (Dia: 1.50m x D: 0.42m). Each was filled with orange-yellow sandy gravel.

A large (L: +5.00m x W: +3.00m x D: 0.97m), roughly oval shaped pit [012] contained four layers of backfill (013), (014), (015) and (016). Its function was unknown.

Situated on top of the natural chalk were traces of two 'Coal Heaps' (021) and (022).

Pottery retrieved from context (013) was mostly small sherds but did include one large earthenware sherd, and a number of clay pipe bowls, tin-glazed earthenware, London stoneware tankard fragments. Staffordshire white stoneware, and part of an 'onion' bottle all of which can be dated c.1750-1800. The assemblage represents an undisturbed discard deposit.

#### **7.10 AREA 2. (Figure 4) Officers' stable and coach house, grooms' quarters and boundary wall.**

A substantial path or road constructed out of stone setts and gravel approximately 26 x 13cm and 220cm wide were bounded on east side by a brick wall 31cm wide, which is adjacent to the gravel track running north to south (AP3, ST3-5).

The main building wall was 35cm wide, built of yellow stock bricks, set in hard lime mortar. Set on three courses of brick foundation with an offset out of 6cm. A small trough was located on east side but outside of the building with an internal size of 75 x 75cm. The centre trough (internal size 180 x 108cm) was in-filled with modern burnt rubbish but with one rung exposed, suggesting access to the west sewage drains which were exposed adjacent to the building. Originally the central trough was built of red brick but altered with yellow stock bricks, which seem to have been made to hold a manhole cover.

The Grooms' quarters' had a large red brick-built hearth and fireplace 109 x 109cm with a hearth of stone, with no remaining floor surfaces. The adjacent latrines, floored in large slabs of stone, two toilets with modern brown glazed sanitary ware piping, and one urinal with sloping (to the urinal) stone floor. The 1757 boundary wall on the east side had been faced with cut down yellow stock bricks and then faced with brown glazed bricks. The toilets had wooden partitions and doors 90cm wide.

Some 26 sherds of pottery were retrieved from the lower levels of the demolition rubble (501) which included a Wealden type earthenware lid seated storage jar (c. 1700/1725-1775AD). London stoneware tankard with iron slip and cobalt decoration (c. 1700/1750-1800AD). Other pottery sherds include Pearl Ware c.1780-1800AD and Staffordshire white earthenware c.1825-1875.

For a full report on the pottery, clay pipes, glass and building ceramics see Appendix 5 and for a comprehensive description of the building see Appendix 2.



### **7.11 AREA 3 (Figures 5-8)**

An area 2400 sqm was stripped of the topsoil (1001) and the underlying subsoil's (1002 - 1005). The topsoil consisted of homogenous organic materials (especially degraded horse manure). The subsoil's comprised of various layers of colluviums – in this instance, a mix of silty brick earths mixed with small abraded chalk pieces. These colluvial layers contained varying concentrations of CBM.

The topsoil varied in depth according to its location on the escarpment and it covered several modern, very late archaeological features (air raid shelters and 'shed'). The topsoil is a relatively recent import arriving sometime after the cessation of the possible military 'Summer Encampment' and after the appearance of the Stables.

Pottery sherds retrieved from the topsoil range from Staffordshire type stoneware c.1725-1780AD to flower pot sherds manufactured by Sankey & Son, Bulwell, Nottingham c.1855-1900AD.

Truncating the topsoil were a series of post holes, forming a field division, which can be seen on the 1879 OS map (see examples – [1039], [1054], [1056] and [1063]) and a series of rectangular, machine cut slots (see examples [1047] and [1059]). These machine cut slots are most likely to be geo-test pits.

The 'Shed', again featuring on the 1879 OS map (MAP 11) comprised of a single structure divided in to two compartments. Both featured brick floors (1079) and (1083) set on the flat base of the construction cut [1075]. This construction cut was cut slightly in to the north-west facing slope, forming a small terrace. The southern compartment contained brick floor [1079]. The floor was separated from a brick built drainage gully (1078) by a beam slot [1084]. This beam slot and gully formed the southern gable-end.

Access to this compartment was via a metalled path (1071) and across a single stone slab that spanned the gully.

Pottery retrieved from the matrix of the path is Staffs/Derby Yellow Ware, with a white internal slip and moulded external decoration c.1825/1858-1900AD.

Separating the compartments was an internal brick wall (1081). The northern compartment was accessed via a stone slab pathway (1082) that ran parallel with the dividing wall and a beam slot (1085). The brick floor (1083) in this compartment was severely truncated after the demolition of the shed and this truncation removed any evidence of the north gable.

Subsoil (1004) sealed the earliest archaeological features, these being a series of 'dugouts' and other features related to a possible military 'Summer Encampment' dating from the mid-late 18<sup>th</sup> century.

There were 19 positively identified features relating to this possible military 'Summer Encampment'. These features consist of cuts of various shapes and sizes in the natural chalk, over which a tent may have been erected.

Most have 'hearths' constructed from re-used bricks or a mixture of brick and flint nodules. These are set within outward extensions to the main cut of the feature. Some also display signs of the existence of a chimney. The distribution and description of these 'dugouts' including dating evidence is itemised more fully in Appendix 1.

They are all located on the south-west facing slope, in front of terracing. This terracing, first observed during the CAT archaeological evaluation in 2006, runs the length of the site in a north – south direction.

There are other features [1010], [1024], [1045], [1052], cut into the natural chalk that also share the same backfill as those within the 'dugouts' and though probably contemporary, their function is unknown.

Feature [1010] was a large rectangular shaped cut (L: 4.01m x W: 3.22m x D: 0.57m) that contained two layers of backfill (1152) and (1153). This feature, possibly a military 'dugout' was truncated by a large, irregular shaped pit. This pit contained a sequence of layers of dumped material (1153), (1151), (1150), (1011) and (1012). Its base was rectangular in shape and flat. Pottery retrieved from this feature included Staffordshire stoneware dated to c.1750-1800AD or slightly earlier.

Feature [1024] was a large rectangular shaped cut (L: +3.00m x W: 1.71m x D: 2.00m) that contained three layers of backfill (1021), (1022) and (1023). This may have been a cess pit. However, the extremely 'clean' nature of the fills suggests that it is a naturally occurring feature within the chalk.

Feature [1045] was an irregular shaped cut (L: 3.02m x W: 2.20m x D: 0.45m) that contained two layers of backfill (1043) and (1044). It is possible that this feature is related to the possible military 'Summer Camp'.

Feature [1052] was a roughly rectangular shaped cut (L: 2.60m x W: 1.80m x D: 0.59m) that contained two layers of backfill (1050) and (1051). This may have been a cess pit. However,

the extremely 'clean' nature of the fills suggests that it is a naturally occurring feature within the chalk.

### **7.12 AREA 4 (Figures 9, 10, 11)**

An area 1400sqm was stripped of the topsoil (1001) and subsoil's (1002) and (1003). The topsoil consisted of homogenous organic materials. The subsoil's comprised of various layers of colluviums – in this instance, a mix of silty brick earths mixed with small abraded chalk pieces. These colluvial layers contained varying concentrations of CBM.

The topsoil varied in depth according to its location on the escarpment and it covered several modern, very late archaeological features (five air raid shelters and a path). The air raid shelters comprised of a single vaulted structures with an entrance-exit at each end, and had been comprehensively recorded (Seary 2006). Each shelter was covered with topsoil. The mid-late 20<sup>th</sup> century concreted metalled pathway (1178) was situated within the topsoil within the extreme south-east corner of the excavation.

Truncating the topsoil was a series of post holes and pits [1100], [1165], [1167], [1171] and [1175], which may have formed field divisions. The subsoil, which being situated at the very top of the escarpment, was substantially thinner than observed elsewhere. Its removal revealed a changing pattern in the underlying natural. The natural chalk was encountered over two thirds of the area. The remaining third, located at the south-east end of the excavation, comprised of very clean brick earth containing a mix of small flint nodule outcrops interspersed with pockets of clays, and greensand. This has been interpreted as the fill of a glacial sink hole within the chalk bedrock.

On removal of the subsoil (1002) a small number of ephemeral archaeological features were observed. These comprised of Post Holes [1098], [1169], and [1177]. Pits [1096], [1114] (with flint tempered body sherds dating to c.1550-50BC), [1113], and [1139], [1148], [1155], [1157], [1163], [1173].

However, it is possible that features [1139], [1148], [1155] and [1173] are naturally occurring glacial features.

Feature [1139] was an irregular shaped cut (L: 2.26m x W: 2.20m x D: 1.03m) that contained three layers of backfill (1138), (1140) and (1141). This may have been a cess pit. However, the extremely 'clean' nature of the fills suggests that it is a naturally occurring feature within the chalk.

Feature [1146] was an irregular shaped cut (L: 1.84m x W: 2.14m x D: 0.76m) that contained two layers of backfill (1147) and (1149). This may have been a cess pit. Pottery retrieved were 15 sherds dating from the 18<sup>th</sup> to 19<sup>th</sup> century.

Feature [1155] was an oval shaped cut (L: 1.30m x W: 1.10m x D: 0.98m) that contained a single fill (1154). This may have been a cess pit. Pottery retrieved from this context included NE England black iron-glazed red earthenware dating c.1800-1850AD.

Feature [1161] was an irregular shaped cut (L: 3.80m x W: 3.60m x D: 2.40m) that contained three layers of backfill (1158), (1159) and (1160). This may have been a cess pit. However, the extremely 'clean' nature of the fills suggests that it is a naturally occurring feature within the chalk.

Pit [1157] required special attention. This was an irregular shaped, shallow feature (L: 2.06m x W: 1.20m x D: 0.29m). The fill (1156) comprised entirely of burnt flint. There was a complete absence of charcoal. This suggests that the flint was heated elsewhere and imported. The function of this feature is unknown and no pottery was retrieved.

### **7.13 Summary**

Some of the specific research aims as highlighted in the Written Scheme of Investigation (Hawkins 2011) have been achieved. In other areas the archaeological data was not there to address the specific research aims, but in others areas of investigation there have been surprises which were not fully covered in the 2011 WSI, and an updated project design has been implemented (Page 38).

On **Topography and Environment** (WSI 3.2) no archaeological data was retrieved which can 'facilitate an understanding of the topography and environment during the Prehistoric and Roman periods'.

For **Prehistory** (WSI 3.2) the WSI states that 'background finds of Prehistoric material could be encountered on site'.

A Lower Palaeolithic stone axe (SF. 1) was retrieved from the topsoil whilst a total of six flint-tempered bodysherds – three from *Subsoil 1002* and three from *Context 1113* represent this broad period between c.600-200 BC. There is no further potential in this small assemblage to address the Prehistory research aims.

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The **Roman** period (WSI 3.2) is not represented in the archaeological data so the answer to the question posed in the WSI 'What evidence for Roman activity and occupation is present on the study site?' is none.

For the **Anglo Saxon and Medieval** periods (WSI 3.2) 'the evidence for Anglo Saxon occupation and activity on the study site is limited to a single object, a fragment of an Anglo Saxon Long Brooch or a Medieval Purse Bar (SF. 68) found in the topsoil. There is no further potential in this small assemblage to address the Anglo Saxon and Medieval research aims.

The **Late Medieval and Early Post Medieval** periods (WSI 3.2) 'any evidence, either archaeological features or archaeoenvironmental evidence that could characterise occupation or activity prior to the mid eighteenth century would be highly significant'. No evidence or features of these periods has been found on the study site.

**Post Medieval Military Activity 1.** The WSI (Hawkins 2011) states that 'it is apparent that one of the first military activities on the study site may have been terracing activities....it will be critical therefore to date the terracing and to identify any evidence for former structures (of all types) located upon them'.

No evidence for building platforms or former structures was found on the terraced feature and no dating evidence for the terrace was forthcoming.

**Post Medieval Military Activity 2.** The 1757 boundary wall was identified and recorded and within the basketball court area (Area 1) the demolished Officers' Quarters were excavated and recorded (Appendix 3). The building recording identified a number of phases of build of which additional post-excavation work could be required.

**Post Medieval Military Activity 3.** The WSI (Hawkins 2011) indicates that there is no evidence for the remains of the glacis within the area proposed for development and no evidence was found in the current archaeological investigations.

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**Post Medieval Military Activity 4.** The WSI (Hawkins 2011) states that ‘evidence for military encampments may be represented’. Some of the most important evidence retrieved from the study site was the 19 bivouacs excavated. The lack of formality of plan and the variation in sizes suggest these were unofficial structures were tolerated by the Army. All of the structures had been cut into the chalk and some had hearths made out of reused brick whilst others had steps down and bench seating. No post holes were apparent and the fill of these structures were remarkably clean with only a few small finds being retrieved. These include a musket ball dated c.1722-1860 from Building No. 01, a button, iron nails and a thin disc of non ferrous metal from Building No. 3. A square shaped military buckle from Building No. 4.

A collection of pottery sherds from Buildings No’s. 01, 02, 7, 9, 11, 12, 13, 15, 17 and 18 date the bivouac structures to the 18<sup>th</sup> century with two in the 19<sup>th</sup> century.

Additional post-excavation research is required for these remarkable buildings.

**Post Medieval Military Activity 5: The Victorian buildings and Gardens.** The WSI (Hawkins 2011) states, ‘the plan form of the stable block should be recoverable’, and indeed it was and although truncated by later works the original build and subsequent phases were recorded (Appendix 2).

**Post Medieval Military Activity 6.** The WSI states that the proposed development site contains a number of extant World War II air raid shelters which have been subject to a programme of historic building recording (Seary 2006) but this should be reviewed to ensure all historic aspects of the shelters have been fully recorded. Work on this was done and is recorded in Appendix 2.

## **8. ARCHAEOLOGICAL FINDS**

This chapter summarises the results of various specialist assessments including pottery, small finds, and environmental evidence.

### **8.1 Ceramic Assemblage**

A total of 157 pottery sherds weighing 4kgs 211 grams were recovered from the excavation at Amherst Hill. A full assessment of the ceramic assemblage is provided in Appendix 5.

Nigel MacPherson Grant, the pottery specialist has commented on the potential of the ceramic assemblage:

*'There is very little in the Amherst assemblage that is newsworthy and warranting publication in its own right. One or two reasonable finds and context groups - with nice large fragments but nothing out of this world'.*

The pottery specialist advises that a slim line ceramic review, based on a slightly modified and upgraded version of the original assessment report which would refer to the few sherds of interest - the rather unusual Staffordshire stoneware tea-pot and the chicken feeder and the few nice Staffordshire plate fragments with moulded border designs - and the Later Creamware plate pieces – however the forms are standard and are adequately dealt with in already published literature. These items are not of sufficient interest to be drawn and can be recorded with photography (**Post Medieval Military Activity 4**). The building ceramics are of little interest but additional work is to be done on the clay pipe collection.

## 8.2 Small Finds

More than 100 small finds were recovered from the excavation at Amherst Hill. Most of these objects represent the military history and activities on the site, especially from the Napoleonic and late Victorian periods. Notable small finds include the large assemblage of military buttons, which demonstrate the influx of a variety of military units in the area from the late 18<sup>th</sup> – the late 19<sup>th</sup> centuries. The remainder of this finds assemblage reflects the different uses of the development site, which is to be expected from a site in use from c.1750 up to the present day. Most of the finds were retrieved by metal detecting and most of the finds were retrieved from the topsoil. Additional work is certainly needed on dating the regimental buttons which will give an insight into what regiments and/or soldiers were stationed at Amherst (**Post Medieval Activity 4**). A full assessment is provided in Appendix 4.

## 8.3 Environmental Evidence

Soil samples were taken from 16 contexts and eight samples were processed which produced very limited results (Appendix 6). The fill of cess pit [1024] was processed (see below) [1052] is not a cess pit and samples to be processed includes the fill from [1010].

The samples were not very archaeobotanically productive and produced botanical and faunal

evidence reflecting disturbed, aerobic preservation conditions and chalky soil.

No features were identified that could have been late Medieval or early Post Medieval pasture land (**Late Medieval and Early Post Medieval research design**). In addition samples were taken and processed from the fill of the bivouacs (1142), (1142) and cess pits (1023, 1149, 1140, 1154, 1160, 1159) with poor results (**Post Medieval Military Activity 4 research design**).

The samples processed also contained abundant root/rhizome fragments and moderate quantities of terrestrial snails. These items indicate that stratigraphic movement by bioturbation is likely so these seeds in all samples have been interpreted as intrusive and probably modern.

Identifiable charred plant remains were scarce. Well-preserved grains of free-threshing type wheat, *Triticum aestivum* were found in sample 2, tent base pit [1137] fuel deposit (1142). This fill also contained occasional roundwood charcoal fragments in the flots and uncharred tooth and three iron nail fragments in the residue. Identifiable charcoal was also present in low numbers in sample 1 (cesspit [1024]).

No other floral remains were present other than microscopic charcoal flecks and very unclear possibly distorted fragments of charred grain tissue in samples 1 and 5.

A small collection of faunal remains were recovered and include cattle and pig bone but due to the small size and mixed chronological origin of the material further study is not recommended.

A full assessment of the environmental results can be found in Appendix 6.

## **9. ARCHAEOLOGICAL NARRATIVE**

The purpose of the archaeological narrative is to join together the evidential material into a chronological sequence that illustrates the specific activity from each phase of activity.

### **9.1 Overview**

Archaeological investigations at Amherst Hill in June and July of 2013 confirmed the presence of archaeology from the Later Bronze Age (c.1550-50BC) to the Post-Medieval and later in a relatively small area on a hill overlooking the River Medway in Kent. The features



consisted of sub circular and oblong pits, short linear segments and scattered, unrelated post holes that were concentrated in two areas. The site was heavily impacted upon by recent ground works including the removal of semi mature trees, as evident on the 2007 Google Earth image. The archaeological evaluation that preceded the excavation revealed 18<sup>th</sup> century features and an undated inhumation.

29 features contained no diagnostic artefacts. Some of these were part of field boundary complexes and therefore could be placed in a stratigraphic framework, but the discrete features were lacking in information that would allow interpretation beyond form and content.

Due to the relatively small area encompassed in this excavation, the severe truncation of features by modern military structures and their random placement across the site, interpretation of the individual features and the site as a whole is limited. A north-south boundary is evident from the post-medieval period, with a scarp or terrace cutting across the site, but the remaining pits and post holes are elusive as to their usage and placement including the remarkable series of bivouacs or booths which may be: *'Shelters built without official approval but doubtless tolerated by the barrack authorities, by soldiers engaged in gardening on Amherst Hill both as a recreation and as a means of supplementing their diet'* (Peter Kendall: pers corres May 2014).

## 9.2 Archaeological Phasing at Amherst Hill

Analysis of the pottery and small finds assemblage (Appendices 4, 5) from the features has identified four phases of archaeological activity at Amherst Hill. In addition building recording has identified at least another five phases of development. The chronology and building recording of the Stables and Grooms' Quarters and the Officers' Quarters are fully covered in Appendices 2 & 3 and are not repeated here.

### **Phase 1 Later Prehistoric – c.1550-50 BC**

A total of 6 flint-tempered bodysherds – three residual from *Subsoil 1002* and three from a pit (*CRN 1113*) located on the upper slope of the site represent this broad period. The sherds from *1002* are moderate-sized, those from *1113* small and scrappy. All are fairly worn but there are elements from both contexts whose condition suggests that all are residual – particularly those from *1002*.

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Dating is difficult since the range of manufacturing attributes recovered could allow placement anywhere between c.1500-50 BC. However, the combination of flint-tempering characteristics, wall thickness and firing trends present is more frequently recorded from Late Bronze Age and later assemblages. Here, there is a slight preference for placing these elements into the Early-Mid and Mid Iron Ages – between **c.600-200 BC** but unlikely later. No other features or finds were recovered from this period.

## **Phase 2 Early Medieval – c.1175-1250 AD**

No Late Iron Age and Roman pottery was recovered from the site and the first obvious post-prehistoric activity is represented by a single fragment of Anglo-Saxon Long Brooch or a Medieval Purse Bar retrieved by metal detecting in the topsoil of Area 2.

In addition a small slightly worn shell-tempered body sherd dated to c.1175-1250 AD was retrieved from *Context 1116*.

*Context 1116* is the fill of the sunken **Building No. 19**, one of the bivouacs cut into the lower north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1116) of colluvium (the subsoil). Other pottery, glass and building ceramics retrieved from (1116) include one post medieval Spanish Seville-type olive jar (c.1575-1650/1675 AD emphasis probably). One post-medieval Surrey-Hampshire Border Ware (pipkin, light green-glaze, c.1575/1600-1650 AD). One post-medieval Kentish red earthenware (dish, 1625-1675/1700 AD). Four post-medieval clay pipes (3 stems, 1 foot, medium bore, c.1660-1680 AD – no maker's mark). One post-medieval English tin-glazed earthenware (no glaze, smooth even fairly hard fabric, c.1675-1750 AD range probably). One post-medieval German/London stoneware (c.1675-1750/1775 AD). One post-medieval Kentish red earthenware (c.1675/1700-1750 AD emphasis). Seven post-medieval clay pipes (all stems, small bore, c.1680-1710 AD). One post-medieval London stoneware (tankard, c.1700-1800/1825 AD emphasis). One late post-medieval Notts/Derby stoneware (buff with iron slip, coppery lusted glaze, c.1750-1850 AD probable range). One fragment post-medieval window glass – small, chipped, heavily scratched and flat. One fragment post-medieval ridge-tile – moderate-sized, only slightly worn, hard-fired pink marly Wealden-type fabric, c.18<sup>th</sup> century AD.

Given the range of dates from the artefacts retrieved from bivouac **Building No. 19**, but with the majority dating to the early 18<sup>th</sup> century the feature is likely to date c. 1800-1850 AD and not **Early Medieval**.

### **Phase 3 Post-Medieval and later – c.1550 AD-plus**

This is the main assemblage component for pottery and small finds and contains some interesting elements. Although the dating attached to the relevant contexts is appended in a dating summary in Appendix 5– some of the material deserves more detailed comment. Overall, this period component sub-divides into two main groups, Post-Medieval pottery - with nothing obviously pre-dating **1550/1575 AD** - and Late Post-Medieval material datable from c.1750 AD onwards.

For the first, Post-Medieval group, the majority of the material is residual in later late 18th or 19th century-plus contexts. However three contexts, *1018*, *1067* and *1093*, all have contemporary undisturbed assemblages containing large or fairly large same-vessel elements whose condition and likely use-range suggests discard between approximately **c.1700-1750 AD**.

*Context 1018* is the fill of the bivouac **Building No. 01**. 14 sherds of pottery found dating from c.1700-1750 AD. A musket ball (SF 64) also found in the fill is dated to c.1722-1860 AD.

*Context 1067* is the fill of the bivouac **Building No. 9** in which five sherds of pottery dating c. 1700-1750 AD were retrieved.

*Context 1093* is bivouac **Building No. 13** where five pottery sherds dating c.1700-1750 AD were retrieved out of the fill. It is of importance that the ceramic assemblage from these three bivouacs can be dated within 50 years and all seem to be contemporary.

Features dating from c.1750-1800 AD include Contexts 013, 1011, 1012, 1041, 1101, 1107, and 1110.

Behind the Officers' Quarters a large, roughly oval shaped pit [012] contained four layers of backfill (013), (014), (015) and (016).

Pottery retrieved from context (013) was mostly small sherds but did include one large earthenware sherd, and a number of clay pipe bowls, tin-glazed earthenware, London stoneware tankard fragments. Staffordshire white stoneware, and part of an 'onion' bottle all of which can be dated c.1750-1800. The assemblage represents a rare (for this site) undisturbed discard deposit (rubbish pit).

Feature [1010] in Area 2 was a large rectangular shaped cut that contained two layers of backfill (1152) and (1153). This feature, possibly a military 'dugout' was truncated by a large, irregular shaped pit. This pit contained a sequence of layers of dumped material (1153), (1151), (1150), (1011) and (1012).

Context (1011) contained a residual c.16<sup>th</sup>-17<sup>th</sup> century ridge tile and three Cream ware plate fragments-large with two conjoining elements with a likely date of c.1750-1800 AD or slightly later. Context (1012) from the same feature contained an additional five pottery sherds of Staffordshire white stoneware, one polychrome on glaze painted tea-pot which fragments conjoined to form a complete profile with a date of c.1725-1750/1780 AD. Three clay pipes fragments from the same context probably date c.1680-1770 AD.

Bivouac **Building No. 02** was cut into the north-west facing slope. This was a square-shaped feature, with a flat base, that contained a single uniform fill (1041). There was no 'hearth' or other features. Six pottery sherds, some conjoined, found in the fill date from c.1750-1800 AD, whilst three clay pipe fragments are dated to c.1680-1820 AD.

Bivouac **Building No. 11** was into the lower north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1101). A rectangular-shaped cut, 0.60m in length and 0.40m wide, extended outwards from the north corner. This extension was lined with unfrogged, red bricks, placed on edge and bonded with a fine grey-white sandy mortar, containing fine flecks of charcoal and chalk. This brick structure was a 'hearth' (1102). Situated on the floor of the main feature, within a purpose cut 'alcove', near the east corner, was a single stone. This may have been a post pad. Six sherds were retrieved from the fill (CRN 1101), one Kentish red earthenware (c.1650-1750 AD range probably) and five PM-LPM Staffordshire-type white stoneware (bowl, 1

scallop-edged plate, chevron & escutcheoned dot and diaper pattern, c.1725-1780 AD; same vessel)

Some of the plate sherds conjoin. The earthenware fragment is from a small unglazed tub-form and is chipped and has moderate edge-wear. The Staffordshire plate and bowl fragments are entirely unchipped and fresh – and should be from an undisturbed contemporary discard deposit. The date-range allows for late acquisition and a period of use before discard. The likely date of **Building No. 11** is c.1750-1800 AD or slightly later

Bivouac **Building No. 15** was cut into the north-west facing slope. This was a roughly rectangular-shaped feature, with a flat base, that contained a single uniform fill (1107).

A rectangular-shaped and stepped cut, 0.58.m in length and 0.54m wide, extended outwards from the north-east corner. The function of this feature was that of an entrance as it comprised of two steps, cut into the natural chalk. Each step was capped with three red, unfroged bricks. There was no 'hearth'.

A small find, as yet undated (SF: 70 (1107) of a rectangular-shaped buckle, with iron bar and pin, and eight sherds of Post Medieval Surrey-Hampshire Border Ware (green-glazed), c.1575/1600-1650 AD. One Post-Medieval Kentish red earthenware c.1625/1650-1700 AD. One post Medieval Kentish reduced-surface red earthenware (Wealden-type), c.1650-1700/1725 AD), and one Post Medieval Kentish reduced-surface buff-orange earthenware Wealden-type, c.1650-1700/1725 AD. One Post Medieval Surrey-Hampshire Border Ware (plate, apple-green glaze, c.1625/1650-1700 AD) and three Post Medieval Kentish red earthenware sherds c.1675/1700-1750 AD plus two fragments ridge-tile, one small, one moderate-sized, fairly fresh angular fracture edges, orange-red fairly sandy fabric – MC16-C17 AD and one fragment roof-tile – moderate-sized, chipped and slightly worn, pink-red marly Wealden-type fabric, MC16-C17 AD, The two earliest elements are small and more worn than the mid-17th century-plus fragments. These, despite being small are basically fairly fresh and should all be from a contemporary discard deposit or horizon.

Likely date of **Building No. 15** is c.1750-1800 AD or slightly earlier.

**BUILDING No. 18** was cut into the upper north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1110) of colluvium (the subsoil). This featured two additional cuts. The first, which was semi-circular shaped,

extended out from the south-east corner. This measured 0.60m by 0.38m. The function was unknown. The second cut extended outwards from the north-east corner and measured 0.85m by 0.67m. This housed a red, unfrosted brick 'hearth' (1111). This 'hearth' featured two opposing walls of brick, two courses high. Between them lay a bed of bricks, laid flat to form the base of the 'hearth'.

The fill of the sunken building produced eight sherds. Two Post Medieval Kentish red earthenware (c.1625-1675/1700 AD). One Post Medieval Kentish reduced-surface earthenware (c.1625-1675/1700 AD) two Post Medieval Kentish red earthenware (c.1675/1700-1750 AD) and three Post Medieval English tin-glazed earthenware (blue-tinted, c.1675/1700-1750 AD). In addition a fragment of Post Medieval vessel glass (weight : 3gms) – small, dark glass, covered in lustrous decay patina – broadly C17 AD. One fragment Post Medieval ridge-tile (weight: 40gms) – moderate-sized, chipped and worn, cream-buff marly Wealden-type fabric (c. 17<sup>th</sup> century AD). Both the glass and roof tile are heavily worn and chipped, and are residual in-context. However, despite glaze-loss, the sherd breaks of the soft fabricated tin-glazed earthenwares are barely worn and the degree of residuality not necessarily severe.

The likely date for **Building No. 18** is c.1750-1800 AD - possibly slightly later.

Other features that can be closely dated by the ceramics and small finds include:

**c.1775-1825 AD** – Context 1034

**c.1800-1850 AD** – Contexts 1116 (possibly), 1154

**c.1850-1875 AD** – Context 1064 (probably)

**c.1850-1900 AD** – Contexts 1000, 1071, 1185

**c.1875-1900 AD** – Context 501

#### **Context 1034.**

Bivouac **Building No. 7** was cut into the north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1034) of colluvium (the subsoil). This featured two additional rectangular-shaped cuts. The first extended out from the north corner. This measured 0.80m by 0.50m. Its function is unknown. The second extended outwards from the south-east corner and measured 0.90m by 0.40m. The inner half of this extension was lined with unfrosted, red bricks, three courses high, bonded with

a fine sandy lime mortar. This brick structure was a 'hearth' [1090]. The outer-most half of this extension formed the base of a chimney flue. The pottery retrieved from (1034) includes three sherds of Post Medieval Surrey/Hampshire Border Ware (c. 1600/1650-1700 AD). Kentish red earthenware (c.1675/1700-1750 AD) and Staffordshire type thin walled cup in white stoneware (c.1725-1780 AD). In addition one fragment of Post Medieval glass was retrieved dating from c.17<sup>th</sup> century AD). The stoneware fragment is too slender to survive in a re-deposited or heavily disturbed environment and the dating applied to this corpus of pottery sherds is **c.1775-1825 AD**.

**Context: 1154.**

One of the few cess pits that can be dated by one Post Medieval Midlands/NE.England black iron-glazed red earthenware (c.1775-1850/1900 AD). This moderate-sized jar base sherd, slightly chipped with slight edge-wear need not be seriously residual. Quality of the glaze suggests a relatively early product dating from **c.1800-1850AD**.

**Context: 1064**

**Bivouac Building No. 12** was cut into the lower north-west facing slope. This was a roughly rectangular-shaped feature, with a flat base, that contained a single uniform fill (1064) of colluvium (the subsoil). A square-shaped cut, 0.53m in length and 0.46m wide, extended outwards from the west corner. This extension was lined with unfrogged, red bricks, three courses high, bonded with a coarse sandy lime mortar. This brick structure was a 'hearth' [1092].

Pottery and artefacts retrieved from the fill of this building include one Post Medieval clay pipe (c.1640-1710), one sherd of Post Medieval Kentish red earthenware (c.1675/1700-1750 AD), one Late Post Medieval Creamware teapot (c.1740-1780) and one sherd of Wedgewood style 'Black Basalt' glazed ware (c.1830-1900AD). The likely date of the feature from the clay pipe and pottery evidence is **c.1850-1875 AD**.

**Contexts 1000, 1071, 1185**

Context 1000 is the subsoil whilst Context 1071 is the metalled path of the Large Building No. 21. Pottery found in the matrix of the metalled path (1071) is Staffs/Derby ware dated to about c.1850-1900AD.

Context 1185 is the backfill of the brick built sewage tunnel adjacent to the Stables and Grooms' Quarters. Regimental badges include:

SF:80 (1185) A3. Copper alloy. "31" (31st Huntingdonshire Regt. up to 1881)

SF:81 (1185) A3. Copper alloy. "21" within wreath, surmounted by crown.

SF:82 (1185) A3. Copper alloy. "59" above, crown. (2nd Nottinghamshire Regt. 1782-1881)

SF:83 (1185) A3. Copper alloy. "INDIA 14 WATERLOO" Tiger. (14th Buckinghamshire Regt. 1809-1876).

Pottery sherds include 19 sherds dated to c.1850-1900 AD.

### **Context 501.**

Some 26 sherds of pottery were retrieved from the lower levels of the demolition rubble of the stables (501) which included a Wealden type earthenware lid seated storage jar (c. 1700/1725-1775AD). London stoneware tankard with iron slip and cobalt decoration (c. 1700/1750-1800AD). Other pottery sherds include flower pots, architectural ironwork and Pearl Ware c.1780-1800AD and Staffordshire white earthenware c.1825-1875. For a full report see Appendix 5.

Small finds from the demolition rubble of the stables include:

SF:86 (501) A2. Lead. "62" (Wiltshire Regt. 1758-1782)

SF:99 (501) A2. Lead. "3" within beaded border. (3<sup>rd</sup> East Kent Regt. 'The Buffs' 1782-1881)

SF:101 (501) A2. Copper alloy. x2 Royal Artillery buttons. c.1790-1840

SF:103 (501) A2. Copper alloy. "30" (30<sup>th</sup> Cambridgeshire Regt. 1782-1881)

SF:145 (501) A2. Unidentified buttons x10.

SF:2 (501) A2. Octagonal-shaped cufflink. Engraved 'tall masted ship' decoration.

SF:125 (501) A2. Assorted architectural metal.

SF:119 (501) A2. x2 Musket balls

A few small-fairly small sized pottery elements, but most are moderate or large-sized – particularly the complete flower-pot profile and chimney-pot fragments. Earlier, seventeenth-early eighteenth century elements tend to be more chipped and worn than



mid or later nineteenth century material – but even one or two of these are fairly chipped suggesting a degree of post-fracture disturbance. The flower-pot profile is totally unworn and should represent the period of discard which, considering the generally large size and condition of most elements is unlikely to post-date WWI.

Likely date: **c.1875-1900 AD** or slightly later

## 10. DISCUSSION

The archaeological investigation at Amherst Hill has resulted in the comprehensive recording of the mid 18<sup>th</sup> century Officers' Quarters and Mess Hall and the adjacent Grooms' Quarters and Stables. Valuable data has been captured, both on the implementation of the 1861 Royal Commission recommendations (Appendix 3), but also how the buildings evolved after their establishment in the mid 18<sup>th</sup> century (Appendices 3 & 4).

The discovery of the bivouacs or booths is of high importance, and with the additional work recommended on the small finds found in the vicinity of the 'camp' will shed more light on soldiers daily lives from that period. In addition the background whisper of prehistoric activity in the vicinity of Amherst Hill has been reinforced by the retrieval of six flint-tempered body sherds dating from c.1550-50Bc and two prehistoric hand axes itemised in the Small Finds Catalogue (Appendix 4) which will require further work.

Of particular importance is the dating in the report by pottery sherds, clay pipes and small finds of ten of the 19 bivouac buildings which range in date 1700-1875 AD.

|                 |              |
|-----------------|--------------|
| Building No. 01 | 1700-1750 AD |
| Building No. 02 | 1750-1800 AD |
| Building No. 07 | 1775-1825 AD |
| Building No. 09 | 1700-1750 AD |
| Building No. 11 | 1750-1800 AD |
| Building No. 12 | 1850-1875 AD |
| Building No. 13 | 1700-1750 AD |
| Building No. 15 | 1750-1800 AD |
| Building No. 17 | 1800-1850 AD |
| Building No. 18 | 1750-1800 AD |

The research design questions as asked for in the Written Scheme of Investigation for an Archaeological Excavation (Hawkins 2011) have been addressed (7.13 Summary- Pages 24-26) and the building recording on both the Stables and Grooms' Quarters (Appendix 2) and the Officers' Quarters (Appendix 3) have utilised the extensive collection of historic mapping and aerial photographs made available by Peter Kendall of which the writer extends his thanks.

## **10.2 STATEMENT OF POTENTIAL**

The data gathered from the archaeological investigation, the building recording and the documentary research have enabled an initial evaluation and assessment of the data collected in the field by summarising its character and potential in this report. Each of the specialist reports contains recommendations for additional work, and can form when implemented the basis for the Final Report.

## **11. CONCLUSION**

This archaeological excavation has been carried out in accordance with a Written Scheme of Investigation produced by CgMS (Hawkins 2011) in agreement with the Heritage Officer, Kent County Council.

Archaeological remains present in the development area have been assessed and reported, enabling preservation of archaeological deposits by record, and therefore, the aims and objectives laid out in the Written Scheme of Investigation have been successfully met.

### **11.1 Quantification of Site Archive**

The site archive comprised the following elements:

Context register including: Context Register Sheets (180), Photo Register Sheets (72), Drawing Register Sheets (29), Environmental Register Sheets (21), Small Finds Register Sheet (51), Skeleton Register Sheet (0), and Context Sheets (904).

Drawings: 63 A3 perm trace drawing sheets comprising feature plans and Associated sections and area plans of the buildings and features.

Photographs: 395 Digital images and also correspondence.

Small finds: 102, Pottery, building ceramics, clay pipes, glassware. 5 boxes.

Environmental samples: 16 samples of soil and 18 bone samples.

## **12. PROPOSALS FOR FURTHER WORK (Updated Project Design)**

A final report to be published as a printed monograph A4 (print on demand) will be prepared following the format outlined below.

Information supplied by the various specialists will be included within the report, and appropriate plans and maps will illustrate the text.

### 12.2 Publication and Archiving Proposals

On completion of the project the landowner may consider as to where any artefacts may be suitably deposited. Further details, including information on the appropriate storage media and the procedures for the transfer of ownership of artefacts are contained in English Heritage publications. On completion of the project, arrangements will be made by Persimmon Homes Ltd for the transfer, subject to the landowners consent, of the documentary, photographic and material archive to the Medway Museums and ensure that the appropriate level of resources for cataloguing, boxing and long term storage are available.

### 12.3 Publication Synopsis

It is proposed that the findings are published as an A4 printed (on demand) full colour monograph.

### 12.4 Publication summary.

Of some importance are the finding of bivouacs or booths of which the report will endeavour to publish fully with photographs, plans and sections. In addition the archaeological investigation and recording of the Mess House and No. 1 Officers' quarters built in 1757 will enable a comprehensive analysis of the alterations of these buildings to comply with the 1861 Royal Commission. Also the sequence of build and use for the Officers' stables and Grooms' quarters and full analysis of the military small finds will allow a comprehensive picture of military occupation of Amherst Hill from the mid 18<sup>th</sup> to 20<sup>th</sup> centuries to be undertaken. The report will present the results of this archaeological work in relation to other archaeological investigations undertaken in the area.

12.5 The structure and content of the report are itemised below:

**1. Introduction**

- I. Study Area (Maps and text)
- II. Geology, Topography and Communications (Maps and text)
- III. Archaeological Background (maps, charts and text)
- IV. Historical Background (Maps and text)
- V. Project Background (Maps, tables, charts and text)
- VI. Chronological Framework (Tables and text)
- VII. Artefact Distribution maps
- VIII. Structure of report (Text and chart)
- IX. The Archive

**2. Phase 1. Later Prehistoric**

- I. Introduction (Text and map)
- II. Discussion (Text)

**3. Phase 2. Early Medieval**

- I. Introduction (Text and map)
- II. Discussion (Text)

**4. Phase 3 Post-Medieval**

- I. Introduction (Text and map)
- II. Bivouacs or Booths (Text, plans, photographs)
- III. Mess Hall and No. 1 Officers' Quarters (Text, plans, photographs)
- IV. Officers' Stables and Grooms' Quarters (Text, plans, photographs)
- V. Discussion (Text)

**5. Specialist Reports**

- I. Introduction (Text and tables)
- II. Pottery and clay pipes (Text, drawings and tables)
- III. Small finds (Text, drawings and photographs)
- IV. Animal Bone (Text and tables)

V. Ceramic building materials (Text and photographs)

VI. Environmental (Text and tables)

VII. Documentary evidence (Text, maps and photographs)

## **6. Conclusions**

I. Introduction (Text)

II. Structures and Buildings

III. Archaeological Phases

IV. Future Research and Final Thoughts

## **7. Bibliography**

12.6 The report will include appropriate maps, plans, photographs and illustrations. It is proposed the paper will follow the synopsis set out in this report resulting in a paper of c.15000 words, 50 photographs, 25 tables and 75 drawings. Upon completion a copy of the paper will be sent to KCC for comment prior to publication. The full report will be prepared for print on demand with an initial run of fifty copies to be distributed to interested parties and libraries.

12.7 Timetable for further assessment, analysis and publication:

- Additional work on the bivouac data (10 days). This will include additional digitising of sections, artefact distribution plots and a more comprehensive archaeological narrative.
- Additional work on the small finds (20 days). The additional text will be generated by the specialist as part of the production of the illustrated catalogue.
- Additional work on the ceramics (20 days). Additional text and tables will be generated by the specialist as part of the production of the drawings and photography.
- Additional work on the ceramic building recording (10 days). Additional text and analysis on the ceramic building samples.

- Additional work on the environmental samples (four days). The breakdown of the outstanding tasks are itemised by the specialists in the various reports (Appendices 1-6)
- Editorial writing and management (40 days) which will include the following tasks:
  - Project management
  - Research and comparanda
  - Integration of previous works (CAT valuation and building recording)
  - Preparation of publication report text to include Abstract and Introduction (Chapter 1). Excavation results (Chapters 2-4). Editing of Specialist Reports (Chapter 5). Conclusions (Chapter 6). Bibliography.
  - In addition the production of maps, tables, photographs and illustrations. Copyright permissions, Report compilation, editing and proof reading, internal refereeing and quality control, revisions and submission of Publication Report to external referees.
  - Revisions, preparation and deposition of archive to a nominated museum and publication printing.

12.8 All the above tasks to be undertaken concurrently with the editorial work starting at the same time but with an additional 20 days of editorial work after the last specialist report is received. Where the above states (10 days) that is a one (specialist) person for ten days. There is no correct or incorrect sequence for the above tasks apart from the editorial/management task which has overarching management control. There is no inter-relatedness or interdependence of tasks, no time critical elements, and the length of time allocated to each task is itemised above. The personnel (or organisation) allocated to each task are itemised in the individual specialist reports. It is expected that the publishing programme will be 12 months in duration.

12.9 SWAT Archaeology monitors progress on such projects with Microsoft Project software and a chart will be prepared once funding and a timetable from each of the individual specialists have been received. KCC monitoring points can be on each of the seven chapters at draft stage.

### **13. ACKNOWLEDGEMENTS**

SWAT would like to thank Persimmon Group Ltd for commissioning this project. Thanks are also extended to Peter Kendall, Principal Inspector of Ancient Monuments, Kent, East and West Sussex and Surrey, and Ben Found, Archaeological Heritage Officer, Kent County Council for their advice and assistance.

James Madden and Simon Holmes supervised the fieldwork, assisted in the field by Marcus Headifen., Pawel and Bartek Cichy and Dan Quinlain. Illustrations were produced by Jonny Madden for *Digitise This*. The project was managed and report written by Dr Paul Wilkinson MCifA.

Paul Wilkinson PhD., MCifA

29/06/2015

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**15. HER Summary Form**

|   |                         |
|---|-------------------------|
| <b>Site Name</b> Amherst Hill, Chatham, Kent  |                         |
| <b>SWAT Site Code:</b> FAC/EX/13  |                         |
| <b>Site Address:</b><br>As above  |                         |
| <b>Summary:</b><br><i>Swale &amp; Thames Survey Company (SWAT) carried out an archaeological excavation at Amherst Hill, Chatham, Kent. A planning application for the construction of 34 new dwellings along with associated car parking and access at the above site was submitted to Medway Council whereby Kent County Council (KCC) requested that an Archaeological Excavation be undertaken after the initial evaluation in order to determine the possible impact of the development on any archaeological remains. The work was carried out in accordance with the requirements set out within a Written Scheme of Investigation (CgMS 2011) and in discussion with the Archaeological Officer KCC. The Archaeological Excavation took place in an area identified during the evaluation as having significant archaeological remains.</i> |                         |
| <b>District/Unitary:</b> Medway   | <b>Parish:</b>          |
| <b>Period(s):</b><br><i>Tentative: Prehistoric to Post-Medieval</i>   |                         |
| <b>NGR (centre of site : 8 figures):</b><br><b>(NB if large or linear site give multiple NGRs):</b> TR 18722 67933  |                         |
| <b>Type of archaeological work (delete)</b><br><i>Excavation</i>  |                         |
| <b>Date of Recording:</b> June 2013   |                         |
| <b>Unit undertaking recording:</b> Swale & Thames Survey Company (SWAT)   |                         |
| <b>Geology:</b> Head Chalk  |                         |
| <b>Title and author of accompanying report:</b><br><i>Wilkinson, P. An Archaeological Excavation of Land at Amherst Hill, Chatham,, Kent,</i>   |                         |
| <b>Summary of fieldwork results (begin with earliest period first, add NGRs where appropriate)</b><br><i>The excavation revealed the demolished remains of 18<sup>th</sup> century barracks, stables and grooms' quarters. In addition the remains of bivouacs were excavated. Features found date from the Bronze Age to Post-Medieval.</i>  |                         |
| <b>(cont. on attached sheet)</b>  |                         |
| <b>Location of archive/finds:</b> SWAT  |                         |
| <b>Contact at Unit:</b> Paul Wilkinson  | <b>Date:</b> 30/04/2014 |

## Appendix 1. Catalogue of Bivouacs or Booths

The Shorter Oxford Dictionary suggests the first use of the word bivouacs is in 1706, and is derived from French. Its meaning is: 'To remain, *esp*, during the night, in the open air without tents, etc'.

Peter Kendall writes in his book 'The Royal Engineers at Chatham 1750-2012: *'Concentrations of troops were a draw to those wishing to sell them alcohol, food or other comforts. At military camps, booths were set up on their periphery so that those soldiers with money could spend their time eating, drinking, gambling and whoring. Sutling was a permitted activity by which troops could purchase provisions and alcohol from recognised individuals, some of whom could be soldiers' wives. For 1762 the notebook of one officer refers to a number of booths built in the rear of the camp of the Cornish and Dorset regiments at Chatham by persons not entitled to erect them and who have 'occasioned very great disorder by admitting common strumpets and other irregular persons. A grievance prejudicial both to the service in general and to the health of the men has thus arisen.'*12 The booths were taken down and their occupants turned out of the camp' (Kendall P. 2012: 27).

The painting (below) shows the Rifle Brigade camping at Fort Amherst. Note the type of tent being used will not sit easily over the features excavated at Amherst.



Figure 1. Rifle Brigade at camp

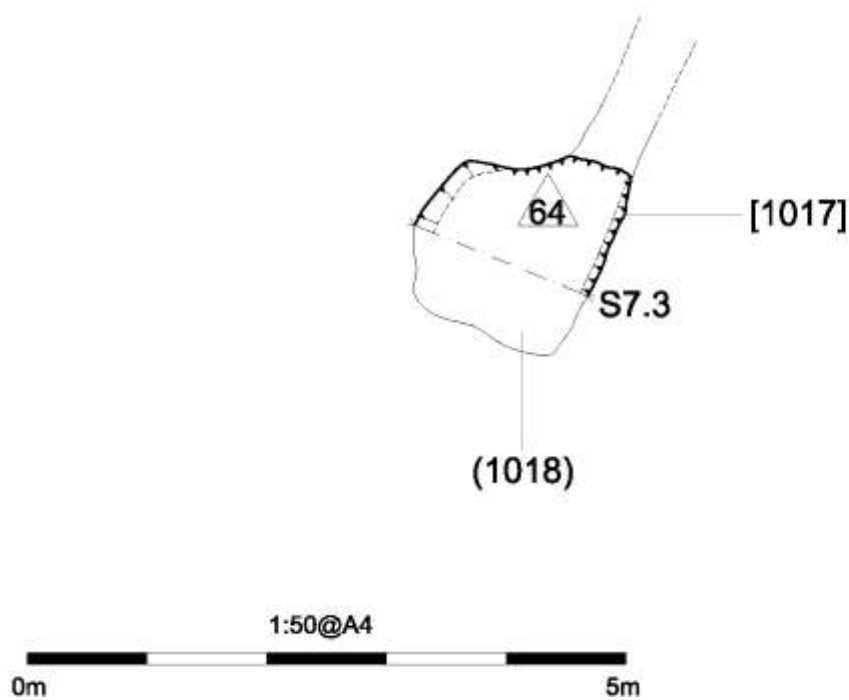
**BUILDING No. 01**

Context No. [1017]. Length: 1.30m. Width: 1.35m. Depth: 0.18m

Description

Cut into the north-west facing slope. This was a square-shaped feature, with a flat base, that contained a single, uniform fill (1018) of colluvium (the subsoil). There was no 'hearth' or other features.

Discussion: One small find- SF 64 (1018) Musket ball 0.71" (18mm) c.1722-1860 retrieved from the chalk floor at base of (1018). 14 pottery sherds date this building to c.1700-1750AD.



**BUILDING No. 02**

Context No. [1042]. Length:1.72m. Width: 1.62m. Depth: 0.18m

Description

Cut into the north-west facing slope. This was a square-shaped feature, with a flat base, that contained a single uniform fill (1041) of colluvium (the subsoil).

A rectangular-shaped cut, 0.60m in length and 0.47m wide, extended outwards from the west corner (1040). The natural chalk around the edge of this feature showed signs of burning and is thought to have been a 'hearth'.

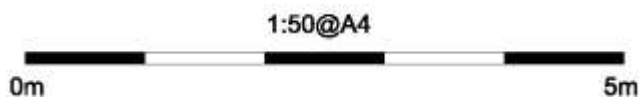
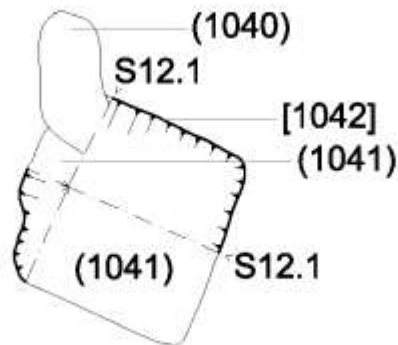
Discussion

Context: 1041 - 6 sherds (weight : 78gms)

2 PM Kentish earthenware (marly buff fabric, ? Wealden-type, c.1675-1725/1750 AD; same vessel, possibly burnt)

4 PM Kentish earthenware (pink fabric, ? Wealden-type, iron streaked glaze, c.1675-1725/1750 AD; 3 same vessel)

The pottery sherds date this building to c.1750-1800 AD.



**BUILDING No. 03**

Context No. [1007]. Length: 4.40m. Width: 2.00m. Depth: 0.62m

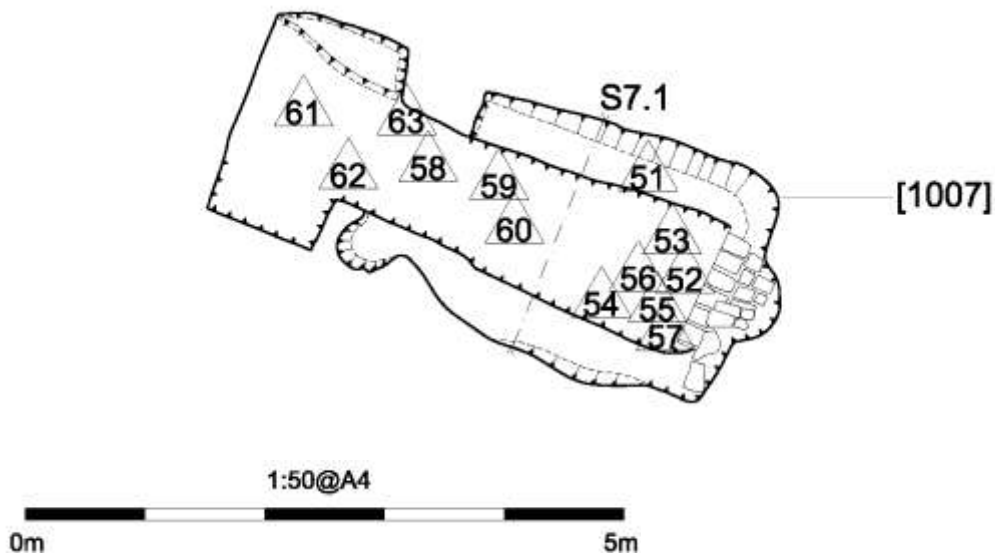
Description

Cut into the north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained an upper fill (1008) of colluvium (the subsoil) contaminated with CBM. This context sealed a primary fill (1009) of 'cleaner' colluvium. This context was confined to an internal, smaller T-shaped cut. This internal cut created a 'bench' along the length of this feature, on both sides and also formed a 'shelf' at the extreme south-east corner. This 'shelf' was capped by an arrangement of flat flint nodules. At the east end of the feature an arrangement of bricks (bonded with a creamy white mortar) formed the base of a 'hearth' that extended into a small 'apse-shaped' cut. This was the base of a chimney flue. The bricks used in the construction of the 'hearth' were red, and unfroged, and dated to the mid 18<sup>th</sup> century.

Discussion

Brick details: L: 0.21m W: 0.10m T: 0.06m (mid 18<sup>th</sup> century). Small finds, [51] is a button, [52-62] are iron nails, and [63] is thin disc of non ferrous metal.

See Plates 1, 2.



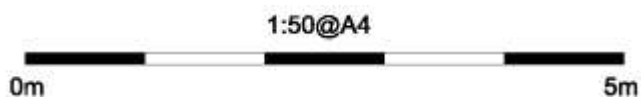
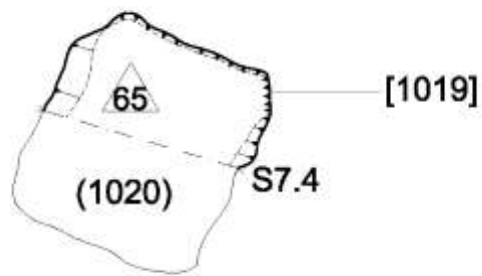
**BUILDING No. 04**

Context No. [1019]. Length: 1.85m. Width: 1.80m. Depth: 0.18m

Cut into the north-west facing slope. This was a square-shaped feature, with a flat base, that contained a single uniform fill (1020) of colluvium (the subsoil). There was no 'hearth' or other features.

Discussion

Small find [65] is a square shaped military buckle.



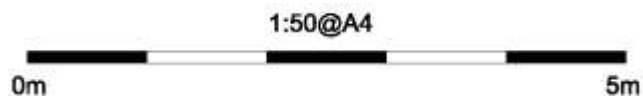
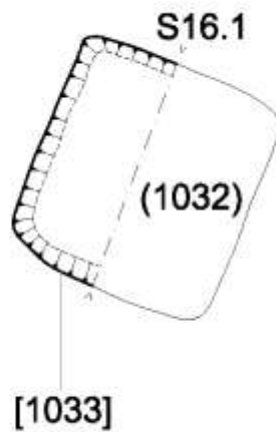
**BUILDING No. 05**

Context No. [1033]. Length: 1.83m. Width: 1.30m. Depth: 0.31m

**Description**

Cut into the lower north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1032) of colluvium (the subsoil). A rectangular-shaped cut, 0.84m in length and 0.30m wide, extended outwards from the south corner. The natural chalk around the edge of this feature showed signs of burning and is thought to have been a 'hearth'.

Discussion: See Plate 3.



**BUILDING No. 06**

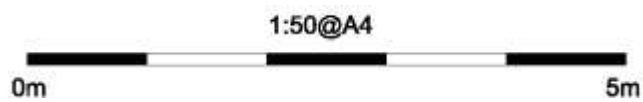
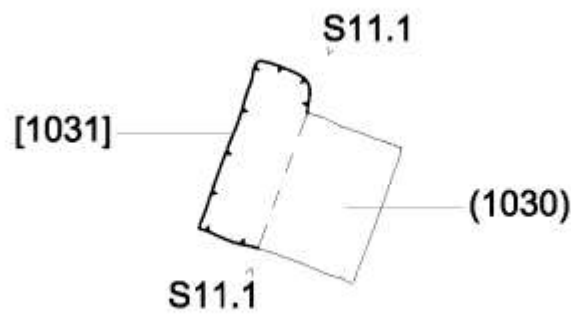
Context No. [1031]. Length: 1.20m. Width: 1.17m. Depth: 0.12m

**Description**

Cut into the north-west facing slope. This was a square-shaped feature, with a flat base, that contained a single uniform fill (1030) of colluvium (the subsoil). A rectangular-shaped cut, 0.45m in length and 0.28m wide, extended outwards from the north corner. There was no evidence of burning. The function was unknown.

**Discussion**

None.





**BUILDING No. 07**

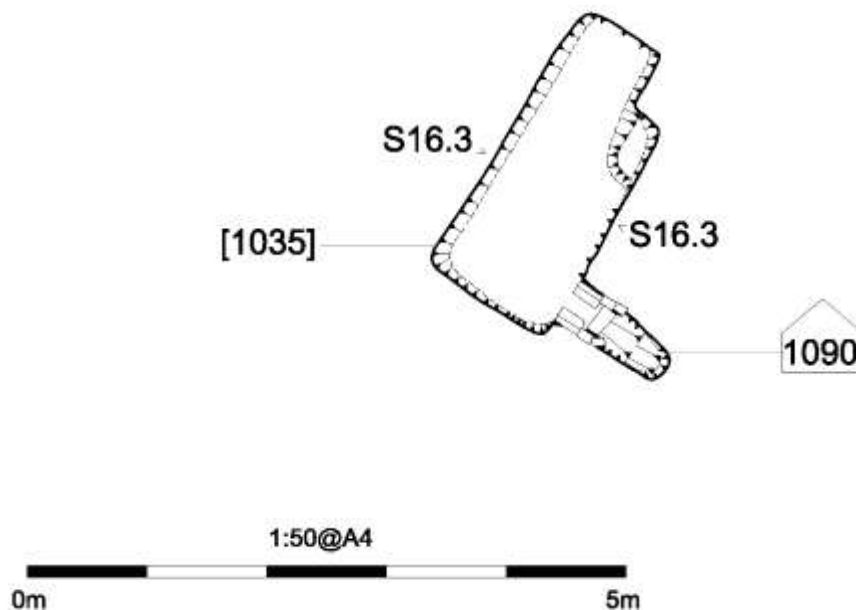
Context No. [1035]. Length: 1.82m. Width: 1.10m. Depth: 0.20m

**Description**

Cut into the north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1034) of colluvium (the subsoil). This featured two additional rectangular-shaped cuts. The first extended out from the north corner. This measured 0.80m by 0.50m. Its function is unknown. The second extended outwards from the south-east corner and measured 0.90m by 0.40m. The inner half of this extension was lined with unfrogged, red bricks, three courses high, bonded with a fine sandy lime mortar. This brick structure was a 'hearth' [1090]. The outer-most half of this extension formed the base of a chimney flue.

Discussion: Brick details: L: 0.22m W: 0.10m T: 0.06m. See Plates 4, 5.

Pottery sherds date this building to c.1775-1825 AD.



**BUILDING No. 08**

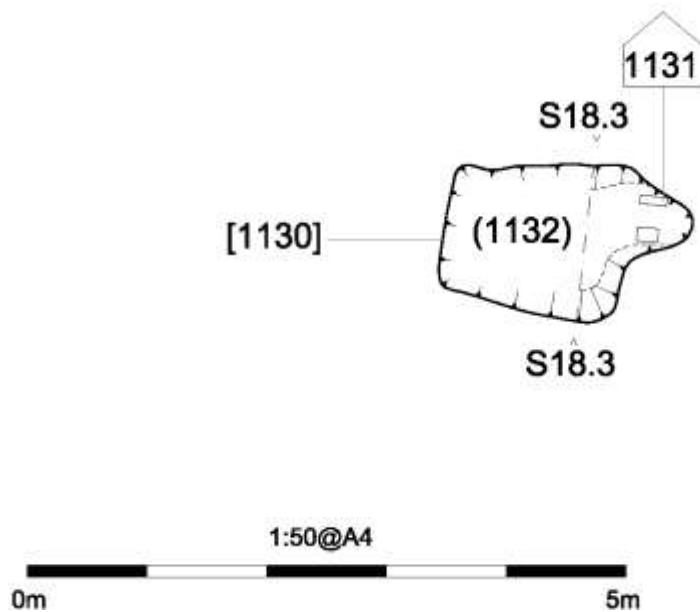
Context No. [1130]. Length: 1.30m. Width: 1.20m. Depth: 0.21m

**Description**

Cut into the north-west facing slope. This was an oblong-shaped feature, with a flat base, that contained a single uniform fill (1132) of colluvium (the subsoil). A semi circular-shaped cut, 0.50m in length and 0.45m wide, extended outwards from the east corner. This extension contained two unfrogged, red bricks, placed opposite each other. This brick structure was a 'hearth' (1131). The rear of this extension formed the base of a chimney flue.

**Discussion**

Brick details: L: 0.21m W: 0.10m T: 0.06m



**BUILDING No. 09**

Context No. [1068] Length: 2.90m Width: 2.30m Depth: 0.34m

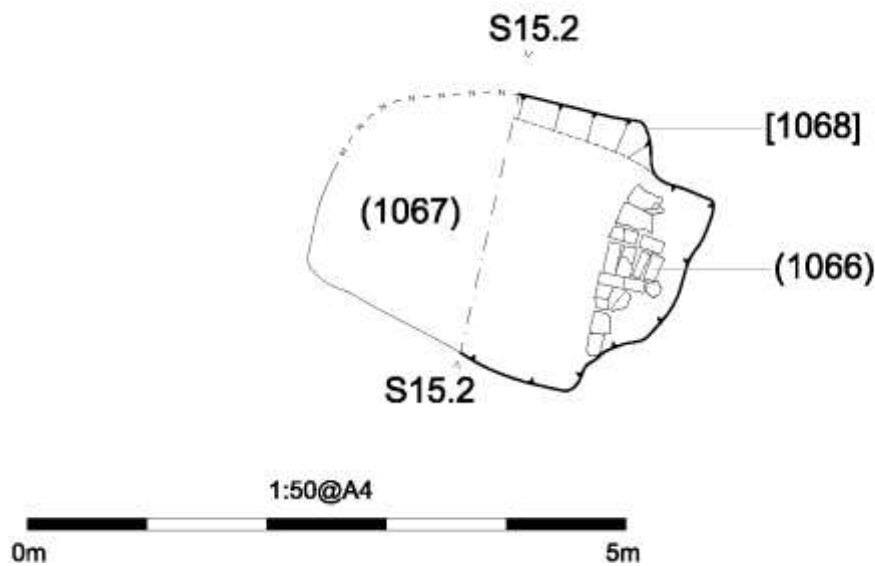
**Description**

Cut into the north-west facing slope. This was an irregular-shaped feature, with a flat base, that contained a single uniform fill (1067) of colluvium (the subsoil). The east end of this feature featured an irregular-shaped extension that housed a substantial brick and flint nodule structure (1066). This structure comprised of a central red, unfrosted brick 'hearth', flanked by a flint nodule 'shelf'. The 'hearth' featured two opposing walls of brick, three courses high. Between them lay a bed of bricks, laid flat to form the base of the 'hearth'. The bricks were bonded by a white, fine sand mortar. The flint nodules were bonded by a light brown clay. The outer-most half of this extension probably formed the base of a chimney flue.

**Discussion**

Brick details: L: 0.22m W: 0.10m T: 0.06m. See Plates 9, 10.

Pottery sherds date this building to c.1700-1750 AD.



**BUILDING No. 10**

Context No. [1037] Length: 2.00m Width: 1.10m Depth: 0.20m

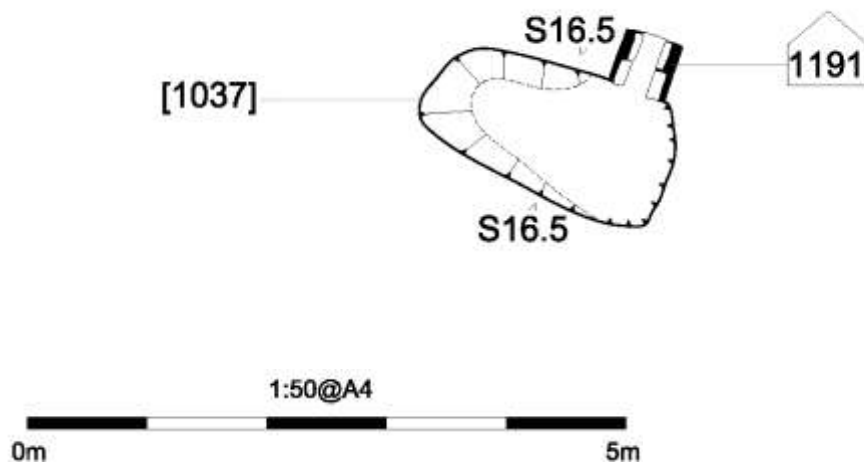
**Description**

Cut into the lower north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1036) of colluvium (the subsoil). A rectangular-shaped cut, 0.50m in length and 0.38m wide, extended outwards from the north-east corner. This extension lined with an opposing layer of unfrogged, red bricks, two courses high, bonded with 'clunch'. This brick structure was a 'hearth' [1191]. Situated on the floor of the main feature, within the south corner, was a single upturned flagstone (L: 0.46m x W: 0.35). This may have been a seat.

**Discussion**

The Flagstone is very similar to those used to form the original basement floor of the Officers' Quarters.

Brick details: L: 0.23m W: 0.10m T: 0.06m. See Plate 6.



**BUILDING No. 11**

Context No. [1103] Length: 2.20m Width: 1.06m Depth: 0.20m

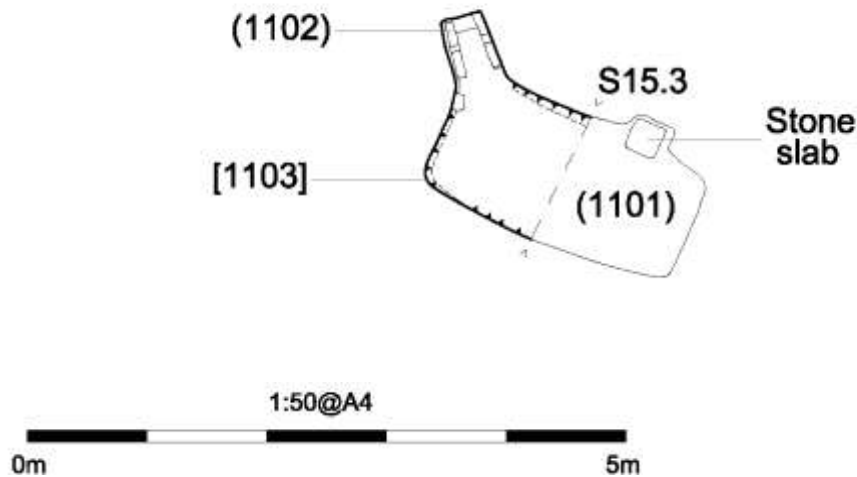
**Description**

Cut into the lower north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1101) of colluvium (the subsoil). A rectangular-shaped cut, 0.60m in length and 0.40m wide, extended outwards from the north corner. This extension was lined with unfrogged, red bricks, placed on edge and bonded with a fine grey-white sandy mortar, containing fine flecks of charcoal and chalk. This brick structure was a 'hearth' (1102). Situated on the floor of the main feature, within a purpose cut 'alcove', near the east corner, was a single stone (L: 0.30m x W: 0.25). This may have been a post pad.

**Discussion**

Brick details: L: 0.22m W: 0.10m T: 0.06m. See Plates 11, 12

Pottery sherds date this building to c.1750-1800 AD.



**BUILDING No. 12**

Context No. [1065] Length: 2.20m Width: 1.60m Depth: 0.22m

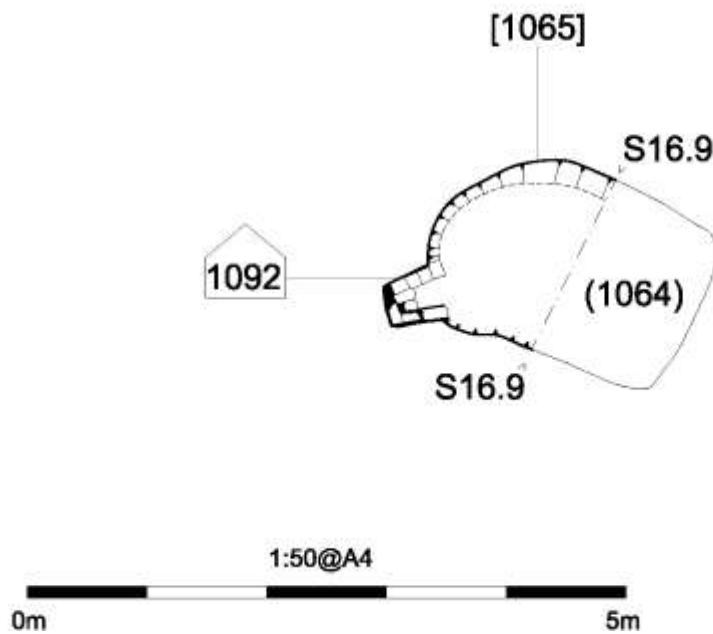
Description.

Cut into the lower north-west facing slope. This was a roughly rectangular-shaped feature, with a flat base, that contained a single uniform fill (1064) of colluvium (the subsoil). A square-shaped cut, 0.53m in length and 0.46m wide, extended outwards from the west corner. This extension was lined with unfrogged, red bricks, three courses high, bonded with a coarse sandy lime mortar. This brick structure was a 'hearth' [1092].

Discussion

Brick details: L: 0.22m W: 0.10m T: 0.06m. See Plates 7, 8.

Pottery sherds date this building to c.1850-1875 AD.



**BUILDING No. 13**

Context No. [1094] Length: 2.24m Width: 1.50m Depth: 0.18m

**Description**

Cut into the upper north-west facing slope. This was a roughly rectangular-shaped feature, with a flat base, that contained a single uniform fill (1093) of colluvium (the subsoil). A rectangular-shaped cut, 0.70m in length and 0.70m wide, extended outwards from the south corner. This extension was lined with a mixture of red, unfrogged bricks and flint nodules. This structure was a 'hearth' [+1144]. Within the centre of this structure was a substantial deposit of charcoal (1143).

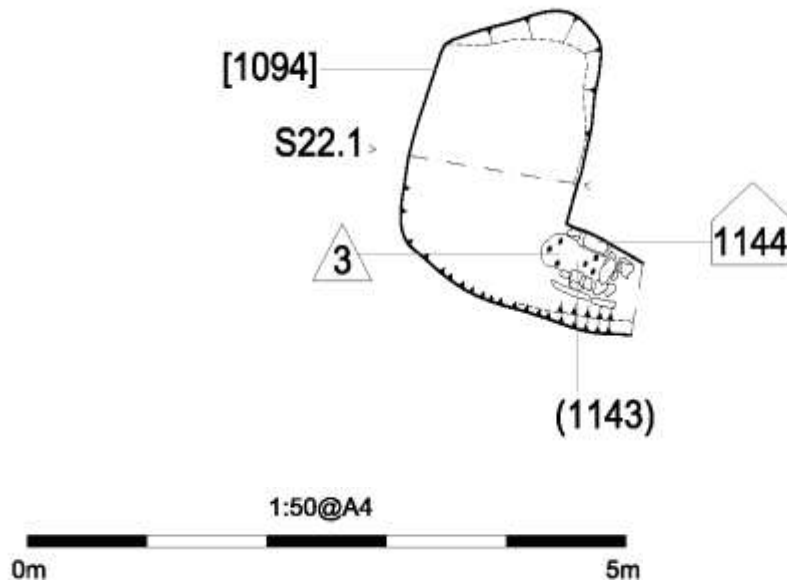
Five pottery sherds were recovered from (1093).

2 Post-medieval English tin-glazed earthenware (blue-painted, 1 x Hispano-Moresque-style, c.1600/1650-1700 AD)

3 Post-medieval Kentish red earthenware (c.1650-1700/1725 AD. Emphasis; all from the same pot).

*Comment:* The two conjoining earthenware sherds are moderate-sized and only slightly damaged.

Likely date: c.1700-1750 AD - or slightly later.



**BUILDING No. 14**

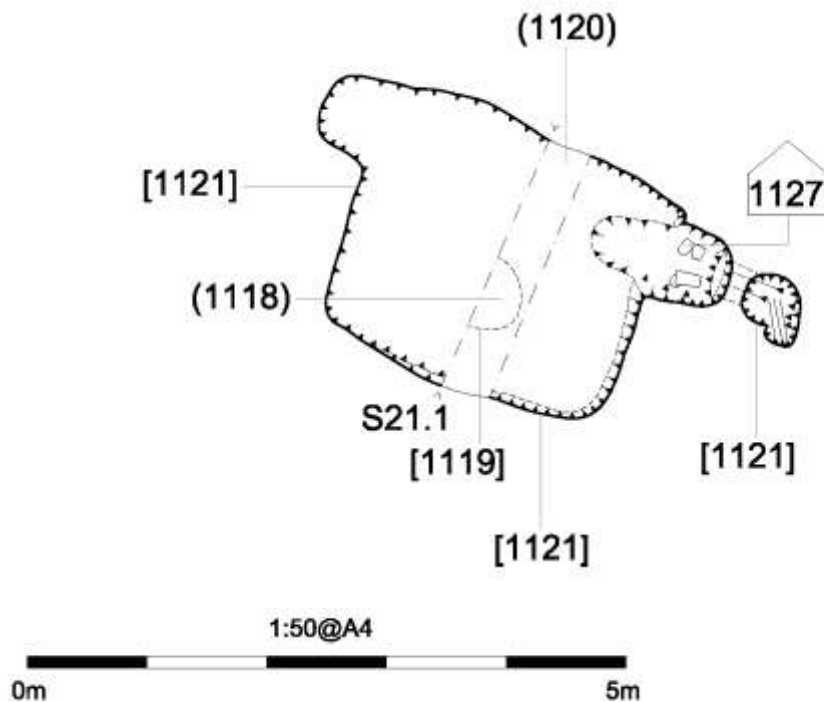
Context No. [1121] Length: 3.81m Width: 2.20m Depth: 0.31m

**Description**

Cut into the upper north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1120) of colluvium (the subsoil). A rectangular-shaped cut, 0.70m in length and 0.50m wide, extended outwards from the north-west corner. Its function was unknown. Situated in the opposite, north-east corner, was a second rectangular-shaped extension. This measured 0.66m x 0.56m and it contained an ephemeral red, unfrogged brick and flint nodule structure. This structure was a 'hearth' (1127). Extending 0.68m beyond the rear edge of this extension was an intact chimney flue and base, cut into the natural chalk.

**Discussion**

Brick details: L: 0.22m W: 0.10m T: 0.06m





**BUILDING No. 15**

Context No. [1108] Length: 4.30m Width: 2.70m Depth: 0.70m

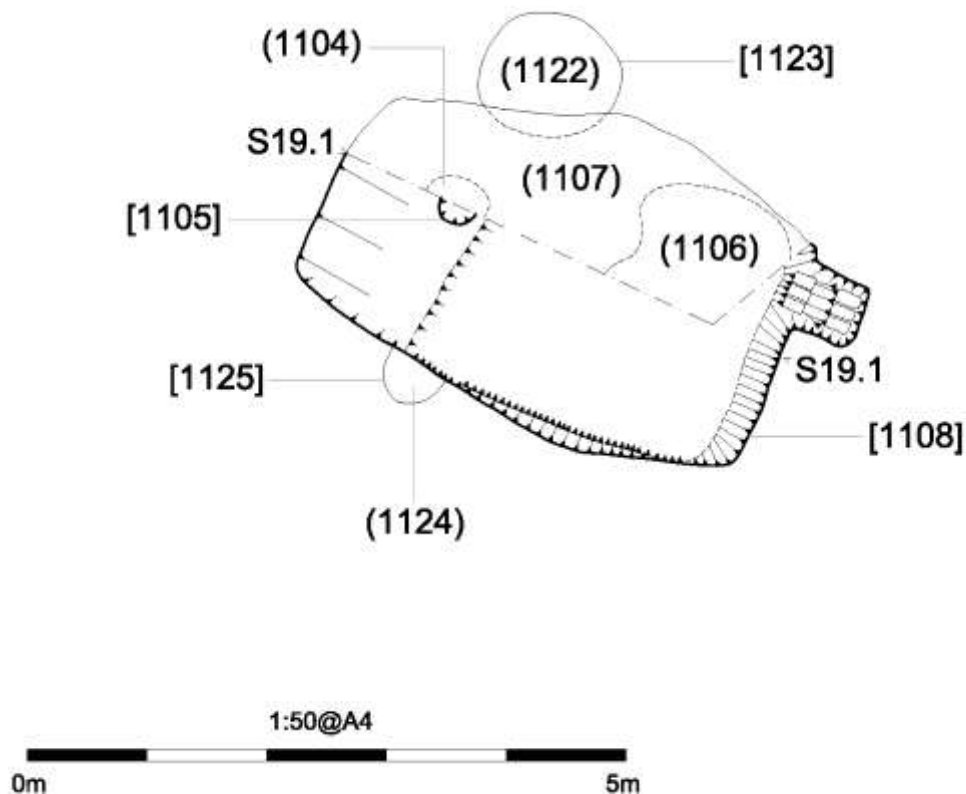
**Description**

Cut into the north-west facing slope. This was a roughly rectangular-shaped feature, with a flat base, that contained a single uniform fill (1107) of colluvium (the subsoil). A rectangular-shaped and stepped cut, 0.58m in length and 0.54m wide, extended outwards from the north-east corner. The function of this feature was that of an entrance as it comprised of two steps, cut into the natural chalk. Each step was capped with three red, unfrogged bricks. There was no 'hearth'.

**Discussion**

Brick details: L: 0.22m W: 0.10m T: 0.06m

Pottery sherds date this building to c.1750-1800 AD.



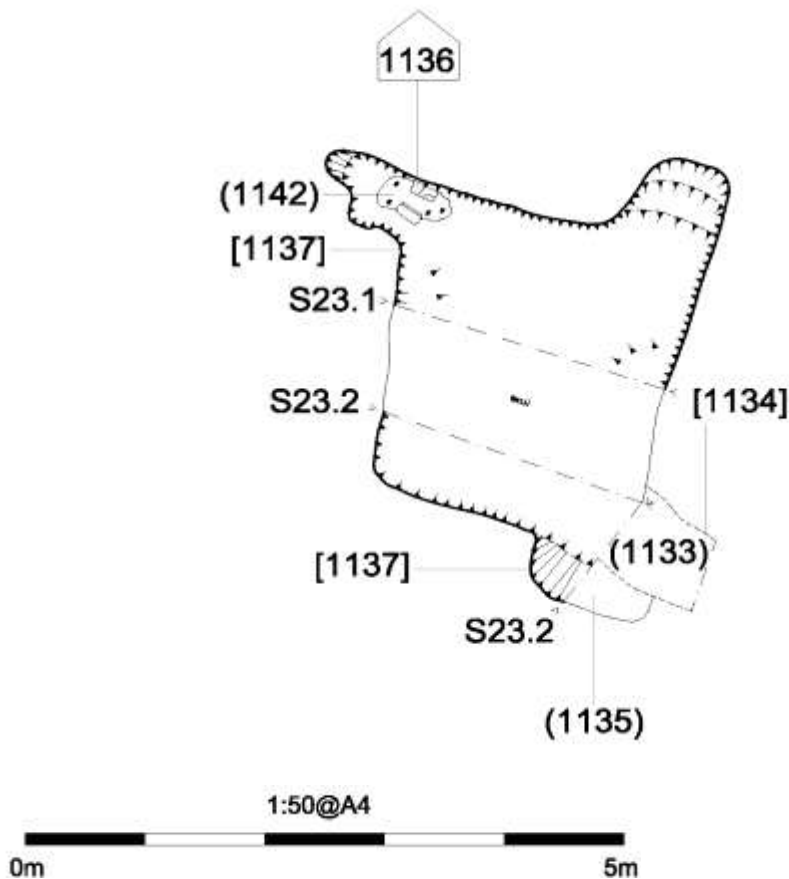
**BUILDING No. 16**

Context No. [1137] Length: 2.60m Width: 2.35m Depth: 0.35m

Description

Cut into the lower north-west facing slope. This was a roughly rectangular-shaped feature, with a flat base, that contained a single uniform fill (1135) of colluvium (the subsoil). This featured two additional cuts. The first, which was rectangular-shaped, extended out from the north-east corner. This measured 0.86m by 0.78m. The base of this extension slopes in towards the main cut and may have functioned as an entrance. The second cut extended outwards from the north-west corner and measured 0.94m by 0.65m. Sat within the inner half of this extension was a pair of unfrosted, red bricks within a deposit of charcoal (1142). This brick structure was a 'hearth' (1136). The outer-most half of this extension formed the base of a chimney flue. The south-east corner of this feature was truncated by post holes [1134] and [1137].

Discussion: Brick details: L: 0.22m W: 0.10m T: 0.06m



**BUILDING No. 17**

Context No. [1117] Length: 3.40m Width: 2.10m Depth: 0.23m

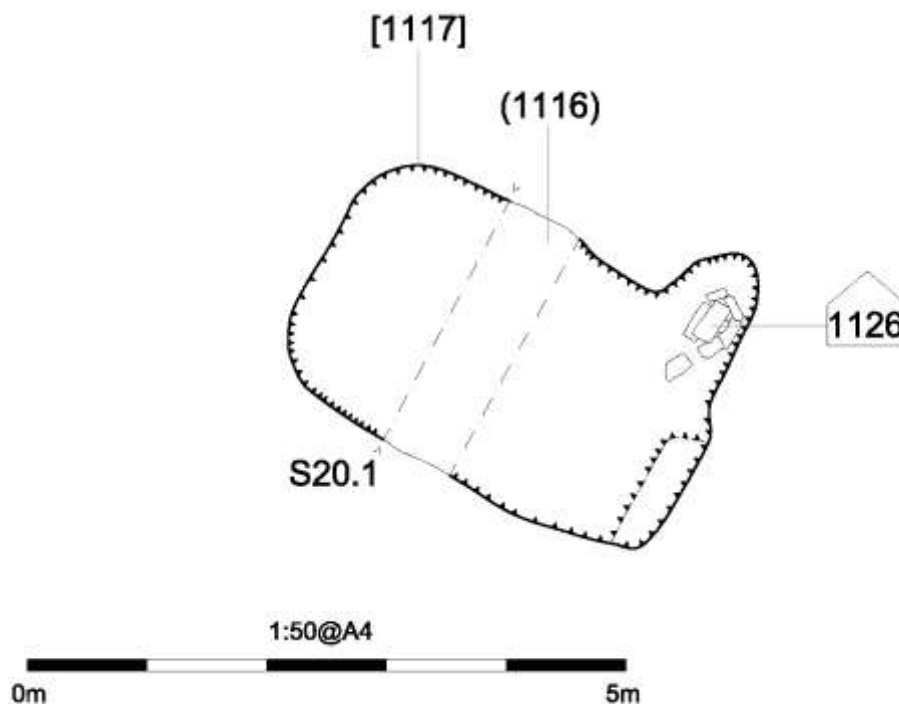
**Description**

Cut into the lower north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1116) of colluvium (the subsoil). A semi-circular shaped cut, 0.70m in length and 0.65m wide, extended outwards from the north-east corner. This extension was lined with a mixture of red, unfrosted bricks and flint nodules. This structure was a 'hearth' (1126). A narrow 'step', 1m long and 0.30m wide, was situated within the south-east corner. This may represent the location of the entrance into the feature.

**Discussion**

Brick details: L: 0.22m W: 0.10m T: 0.06m

Pottery sherds date this building to c.1800-1850 AD.



**BUILDING No. 18**

Context No. [1112] Length: 3.00m Width: 2.06m Depth: 0.35m

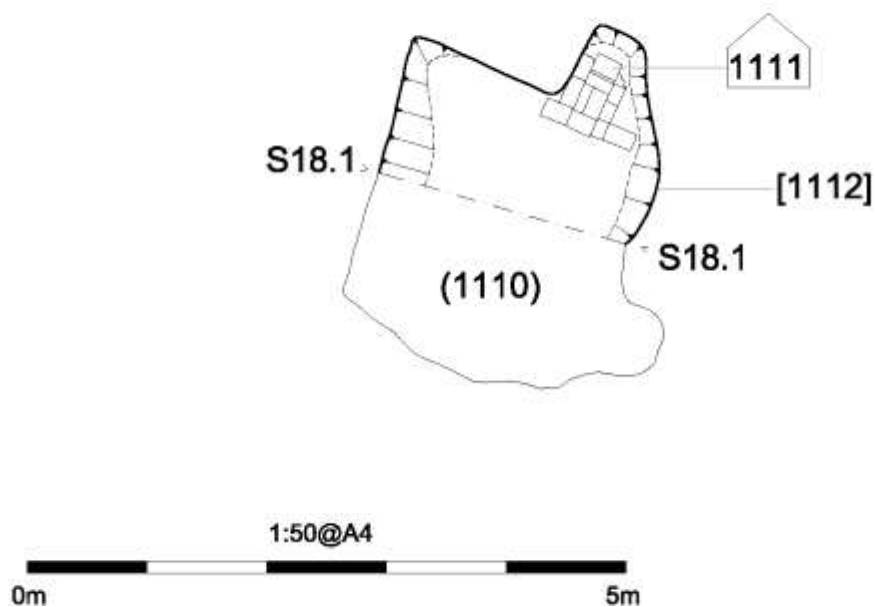
Description

Cut into the upper north-west facing slope. This was a rectangular-shaped feature, with a flat base, that contained a single uniform fill (1110) of colluvium (the subsoil). This featured two additional cuts. The first, which was semi-circular shaped, extended out from the south-east corner. This measured 0.60m by 0.38m. The function was unknown. The second cut extended outwards from the north-east corner and measured 0.85m by 0.67m. This housed a red, unfrosted brick 'hearth' (1111). This 'hearth' featured two opposing walls of brick, two courses high. Between them lay a bed of bricks, laid flat to form the base of the 'hearth'.

Discussion

Brick details: L: 0.22m W: 0.10m T: 0.06m. See Plate 13.

Pottery sherds date this building to c.1750-1800 AD.



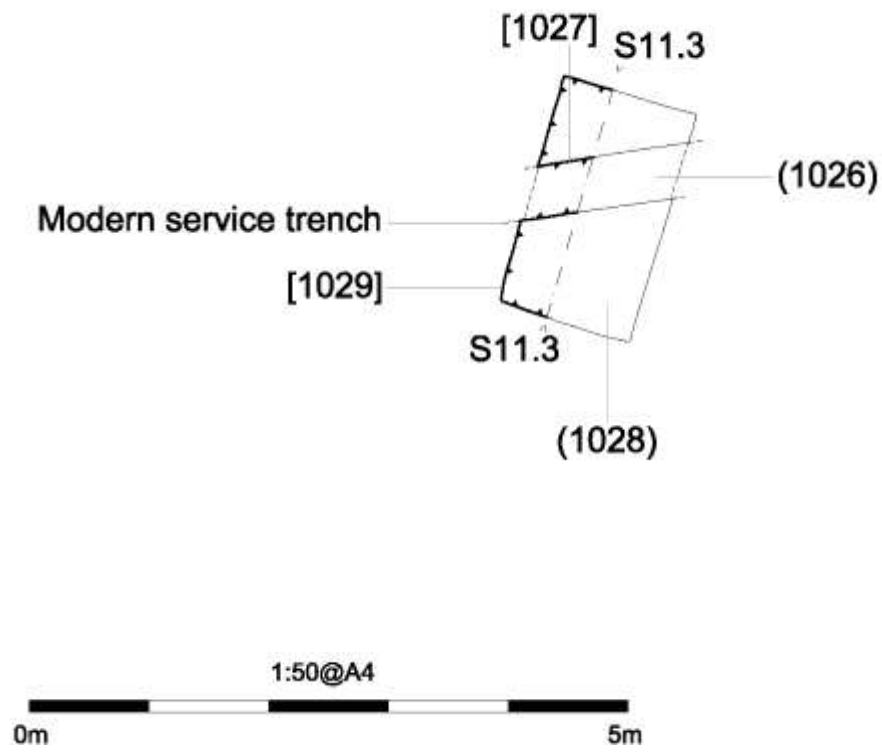
**BUILDING No. 19**

Context No. [1029] Length: 1.90m Width: 1.10m Depth: 0.03m

**Description**

Cut into the north-west facing slope. This was a very shallow rectangular-shaped feature, with a flat base, that contained a single, uniform fill (1028) of colluvium (the subsoil). There was no 'hearth' or other features.

Discussion: Truncated by World War 2 telephone cable trench [1027].



### **Large Building 21 [1075]**

The 'Shed' comprised of a single structure divided in to two compartments. Both featured unfrosted brick floors (1079) and (1083) set on the flat base of the construction cut [1075].

This construction cut was cut slightly in to the north-west facing slope, forming a small terrace.

The southern compartment contained a brick floor [1079]. The floor was separated from a brick built drainage gully (1078) by a beam slot [1084].

This beam slot and gully formed the southern gable-end. Access to this compartment was via a metalled path (1071) and across a single stone slab that spanned the gully. Separating the compartments was an internal brick wall (1081).

The northern compartment was accessed via a stone slab pathway (1082) that ran parallel with the dividing wall and a beam slot (1085).

The brick floor (1083) in this compartment was severely truncated after the demolition of the shed and this truncation removed any evidence of the north gable.

#### Discussion:

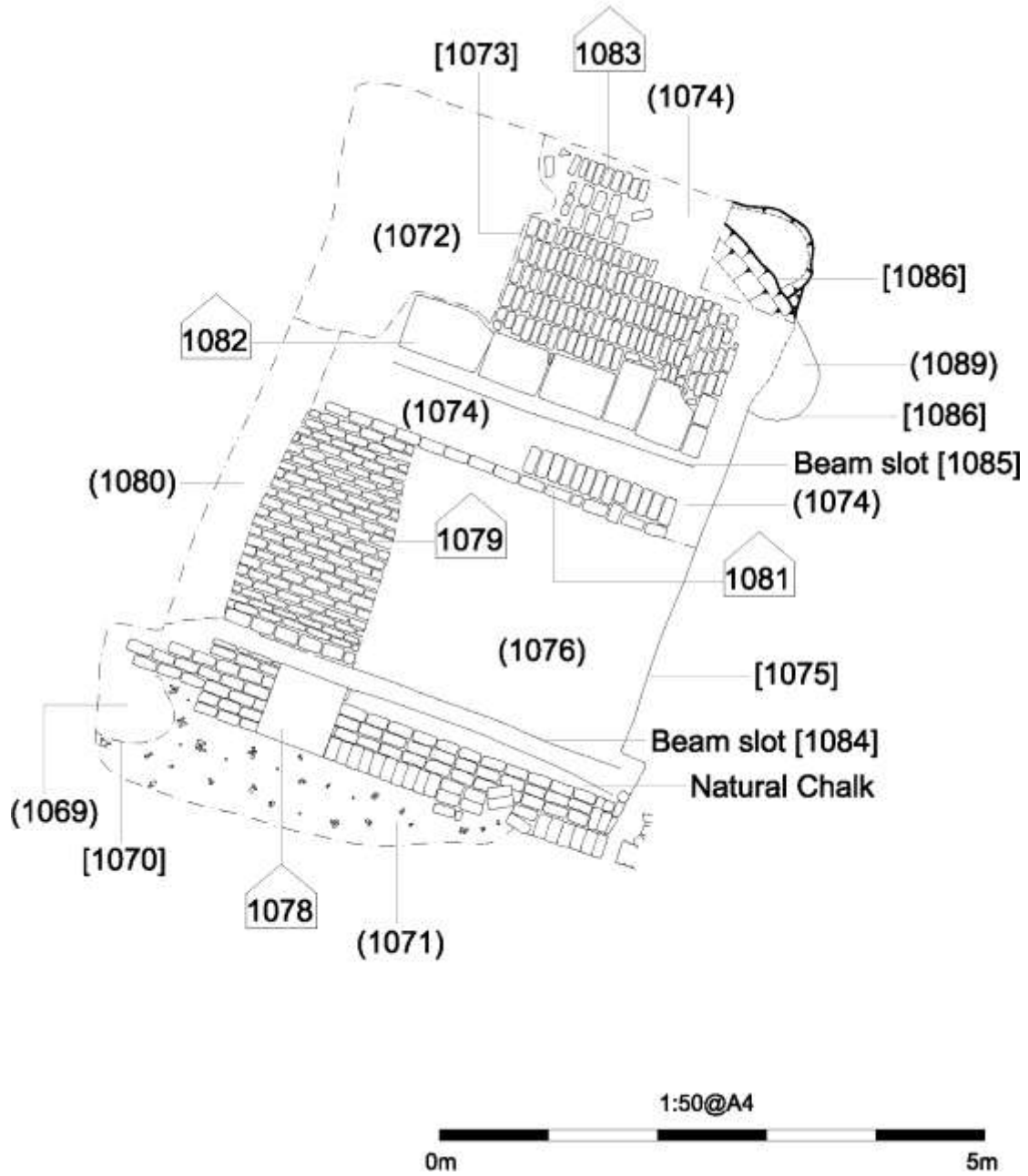
The 'shed' is shown on the 1872 map (Maps 8, 9), and the 1879 map (Maps 10, 11), but not on the 1932 map (Map 12). However, a new 'shed' slightly uphill can be identified on the 1948 aerial photograph (AP 1, 2), and on the 1955 map (Map 13).

Copious amounts of coal dust covered large areas of the demolished building.

On the 1872 map pipes called 'ventilation pipes' which on archaeological investigation turned out to be brown salt-glazed ceramic pipes may suggest a kitchen use for the 'shed'.

Pottery found in the matrix of the metalled path (1071) is Staffs/Derby ware dated to about c.1850-1900AD (Appendix 5).

See Plates 14-17.



## Plates



Plate 1. Building No. 03 [1007] looking south-east. Horizontal scale is 1m in 10cm bars



Plate 2. Building No. 03 [1007] detail of hearth





Plate 3. Building No. 05 [1033] looking south-east. Horizontal scale is 1m in 10cm bars



Plate 4. Building No. 07 [1035] looking north-east. Hearth is shown on the south-east side. Horizontal scale is 1m in 10cm bars



Plate 5. Building No. 07 [1035] looking south-east. Hearth is shown on the south-east side. Horizontal scale is 50cm in 10cm bars



Plate 6. Building No. 10 [1037] looking north-northwest. Hearth is shown on the north-east side. Horizontal scale is 1m in 10cm bars





Plate 7. Building No. 12 [1065] looking south-east. Horizontal scale is 1m in 10cm bars



Plate 8. Building No. 12 [1065] looking north. Hearth is shown on the west side.  
Display board is 25cm in length



Plate 9. Building No. 09 [1068] looking west. Hearth is on the east side. Horizontal scale is 1m in 10cm bars



Plate 10. Building No. 09 [1068] looking south-east. Hearth detail is shown. Horizontal scale is 1m in 10cm bars





Plate 11. Building No. 12 [1103] looking south-east. Part of the hearth is shown on the north side. Horizontal scale is 1m in 10cm bars



Plate 12. Building No. 12 [1103] looking north. Hearth is shown on the north side. Scale is 50cm in 10cm bars



Plate 13. Building No. 18 [1112] looking south. Hearth is shown on the north side. Horizontal scale is 1m in 10cm bars



Plate 14. Large Building No. 21 [1075] looking east. Scales are in 10cm bars





Plate 15. Large Building No. 21 [1075] looking east. Detail of drain. Scales are in 10cm



Plate 16. Large Building No. 21 [1075] looking east. Detail of brick floor.



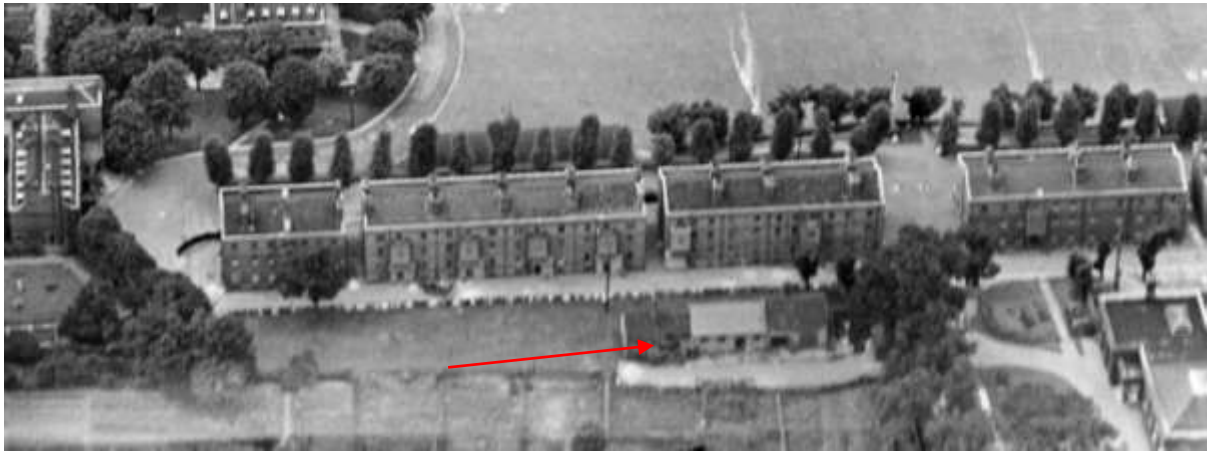
Plate 17. Large Building No. 21 [1075] looking north. Scales are in 10cm bars



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## Appendix 2: Officers' Stables and Grooms' Quarters

The 1936 aerial photograph (below) and detail, shows the layout of the Officers' Stables and Grooms' Quarters. The now demolished Mess House and Officers' Quarters can be seen above the stables whilst in front of the demolished stables (east) the access road can be seen. Further details of this set of buildings can be viewed in Appendix 7 (Maps), and in particular the 1864 plan (Maps 3, 4, 5). The 1866 plan (Map 6). The 1872 plan (Maps 8, 9). The 1879 map (Map 11), also the OS map of 1932 (Map 12), and the OS map of 1955.



ST1. The 1936 aerial photograph (looking west)



ST2. Detail of the 1936 aerial photograph (looking west)

### **Officers' stable and coach house, grooms' quarters and boundary wall.**

Area 1 is located in the north-east area of the Officers' Stables and Grooms' Quarters (Fig. 21). The main feature shown in aerial photographs (ST2) is a roadway stone setts of blue grey hard sandstone approx 26 x 13cm and 22cm wide bounded on the west side by the yellow brick wall of Room 2 (ST3, 4).

Two parallel surfaces of red brick laid as headers and built into the stone setts and contemporary are of the same type as the red brick used in the 1757 boundary wall which suggests the construction of this paved way is contemporary with the 1757 boundary wall. This paved way stayed in use till the mid 20<sup>th</sup> century and has been repaired with modern tarmac (ST 5).

### **Room 2. Figure 21 and Plan 46.1**

Room 2 is bounded on the east side by the 1757 barrack wall which bisects the area of investigation and runs in a north-south direction. The wall (K3) is thought to represent the barracks boundary wall which partly enclosed the original 1757 Chatham Infantry Barracks (now the site of Kitchener Barracks). The wall was built within a construction cut [0273] and built of un-frogged red to orange stock bricks of about 22cm x 11cm x 7cm in size (ST12 & 13). The wall survived to a height of 13 courses in Flemish pattern and bonded with an off-white sandy mortar containing small rounded flint inclusions.

To the east of the 1757 boundary wall and retained by it were layers of cultivation soils (0268, 0269, and 0270). Cutting through these cultivation soils were the construction cuts for a rectangular wall (C3) which survived to a height of seven courses. The wall was constructed on a layer of compacted pebbles (F3), with a cast concrete foundation (G3). A wider offset yellow stock brick footing (B3) bonded with a yellow sandy mortar and layered as rows of headers which underlay the wall itself (C3). The wall was built of yellow frogged stock bricks laid with alternating rows of stretchers and rows of headers with a quarter overlap.

Two investigation trenches were excavated in the north-east and south-east areas of Room 2. The subsoil under the cultivation soils consisted of soft, clay silt of medium brown colour with occasional well rounded flint pebbles and nodules of chalk (D3) which was overlaid by the remains of a floor surface of mortar mixed with gravel and with a smooth upper surface (A3). This floor surface only survived as fragments adhering to the wall (C3 and Plan 46.1). Pottery sherds from the lower levels of Rooms 2-6 included Pearl Ware c.1780-1800AD and Staffordshire white earthenware c.1825-1875.

### **Room 3. Figure 21 and Plan 45.1**

Small rectangular structure (H1), located outside of building adjacent to wall C3, internal size 75 x 75cm. Central rectangular structure (E1) inside Room 3 has an internal size of 180 x 108cm in-filled with modern burnt rubbish but with four generator fitting revealed (ST 6, 7).

The centre rectangular structure possibly a generator nest (E1) was two bricks in thickness and built with straight joints which preclude it being a load-bearing structure. Internally it was faced with a hard mortar render.

### **Area 4. Figure 21 and Plan 41**

This area of investigation was located to the west of the 1757 boundary wall and is dominated by a brick built sewage channel probably built at the same time as the adjacent 1757 boundary wall. Indeed on the 1795 map (Map 2 Appendix 7) there are drawn a number of 'Bog Houses' which have been revealed by this investigation

(Plan 45.1 A1) and the mapping of 1864 (Map 4 Appendix 7) shows additional latrines, again revealed by the present investigation (Plan 45.1 B1).

The sewer is built of un-frogged red to orange stock bricks of about 22cm x 11cm x 7cm in size and of the same type as used in the build of the 1757 boundary wall ( ST 10, 12, 15). Parts of the structure have been rebuilt in yellow frogged bricks (ST 15) and may suggest overhaul and upgrading of the sewage system following the hygiene improvements to the barracks in 1857. A well built in un-frogged red to orange stock bricks was found to the east of the sewage channel (Fig. 21 & Plan 45.1).

#### **Rooms 5 & 6. Figure 21 and Plans 44.1 and 45.1**

Two rooms located on the east side of the 1757 boundary wall. Only the walls built of yellow stock bricks have survived in a build similar to Rooms 2 & 3 (ST9).

#### **Room 7. Figure 21 and Plan 44.1**

Thought to be the grooms' quarters and with walls constructed of red un-frogged bricks with the wall in places repaired or rebuilt with yellow frogged bricks (O). Large red brick-built, hearth and fireplace 109 x 109cm located in the centre of the east wall. The hearth is of stone, there are no remaining floor surfaces (ST 11).

Outside on the east side a large pit filled with crushed chalk was investigated (U) but its purpose and date is unclear. Some 26 sherds of pottery were retrieved from the lower levels of the demolition rubble (501) from Room 7, and included a Wealden type earthenware lid seated storage jar (c. 1700/1725-1775AD), London stoneware tankard with iron slip and cobalt decoration (c. 1700/1750-1800AD).

#### **Latrines 8. Figure 21 and Plan 41.1**

Latrines, floored in large slabs of stone, two toilets with modern brown glazed sanitary ware piping and one urinal with sloping (to the urinal) stone floor (ST 13). 1757 boundary wall on the east side had been faced with cut down yellow stock bricks (ST 13) and then faced with brown glazed bricks. Toilets had wooden partitions and doors 90cm wide.

#### **Air Raid Shelter2 Area 9. Figure 21 and Plan 41.1**

A comprehensive description of the air raid shelters on Amherst Hill was undertaken by Peter Seary from Canterbury Archaeological Trust in February 2006. Part of the summary says:

*The shelters are constructed almost entirely of brownish-grey poured concrete, containing fine flint gravel, covered with a mound of earth. The shelters comprise partially subterranean, round-vaulted chambers, aligned north-south, about five metres long, two metres high, and with a maximum width of a little over two metres. The bases of the walls batter out markedly with a concave profile – the floor being less than two metres wide. (Seary 2006).*

Shelter 2 was located in Area 9 (Fig. 21) just to the west of the 1757 boundary wall (ST 16, 17) and had truncated latrines of a similar build of latrines situated in Area 8 (Fig. 21). The features truncated include latrine floor slabs (D2), pottery salt-glazed drainage pipes (R2), sewage channels (B2), and yellow stock brick walls (G2).



ST3. Area 1. View of cobbled access road (looking south, 50cm scale)





ST4. Area 1. View of cobbled access road (looking south, 50cm scale)



ST5. View of modern tarmac on cobbled south area of access road (looking north, 50cm scale)





ST6. View of Room 3 and generator nest, and beyond Room 2 (looking north)



ST7. View of Room 2 & 3 (looking south, 1m scale)





ST8. View of generator nest (looking north-west, 50cm scale)



ST9. View of Room 6 (looking north-east, 1m scale)





ST10. View of the barracks' boundary wall and sewer conduit (looking south)



ST11. View of fireplace in Room 7 (looking east, 50cm scale)





ST12. Area 4. View of brick sewer and 1757 boundary wall on the left (looking south)





ST13. Area 8. View of latrines (looking east, 1m scale)



ST14. Area 8, View of manhole (looking east)





ST15. Area 4, View of manhole (looking north-west: scale 10cm bars)



ST16. Area 9. View of air raid shelter (looking north, 1m scale)



ST17. Area 9. View of air raid shelter (looking south, 1m scale)



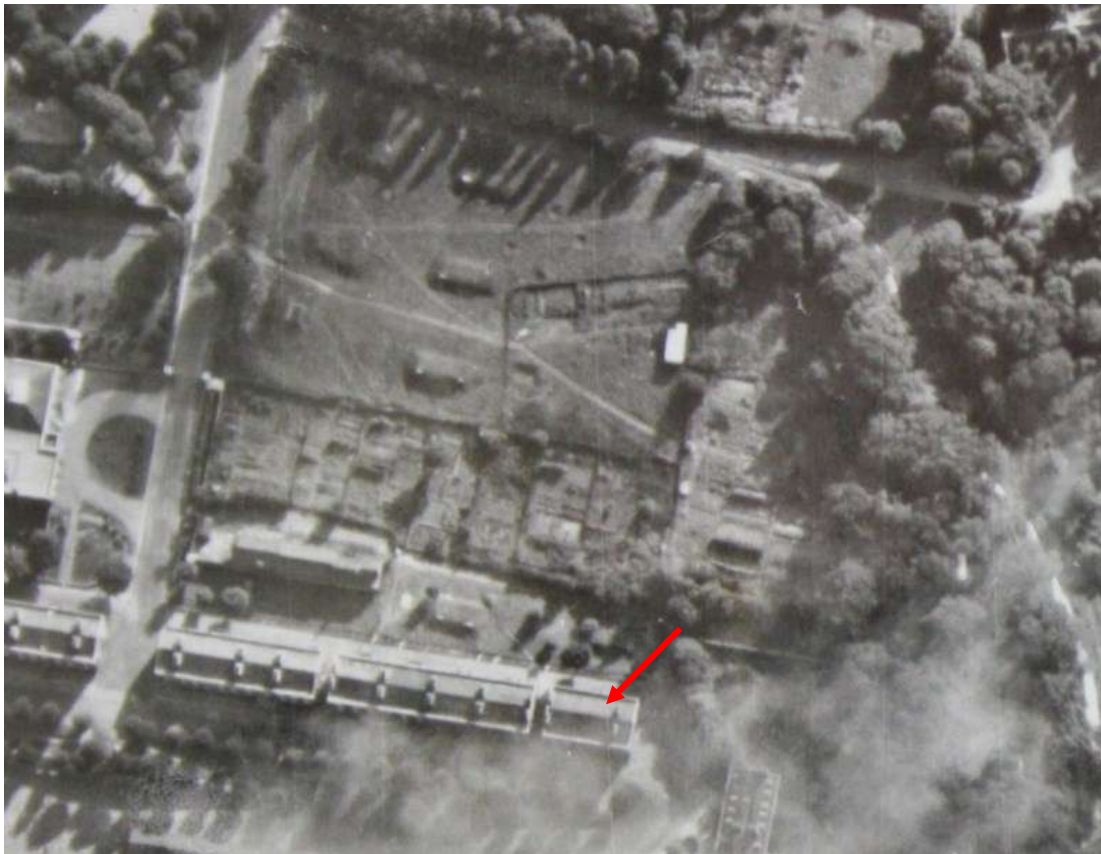
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### Appendix 3. Building recording of the Mess House and No. 1 Officers' Quarters

*The 1861 Royal Commission recommended a number of essential improvements to barracks. The most important being the reduction of the total number of men to be accommodated in the barracks, the construction of new ventilation shafts and the fitting of the Galton Grate, an open fireplace designed to provide both heat and ventilation.*

*This was achieved at Chatham by the rebuilding of the original soldiers houses dating from 1757 by adding an entire new storey to those closest to the parade ground. The officers' blocks, now demolished, but the subject of this (below ground) building recording exercise were also provided with an additional top floor as shown in the photograph below.*

*The building recording exercise has shown that extensive alterations to the 1757 built Officers' Quarters and Mess House as shown in detail on the 1795 plan (Map 1 & 2) were carried out and included new fireplaces, new drainage and major internal alterations and improvements.*



1948 aerial photograph showing the added top storey of the Officers' Quarters and Mess House

#### Mess House building narrative (Figure 19)

**Corridor 1** situated on the south side of the Mess House contained steps (MH3) down to two tunnels, one in the east direction and presumably to the Commandants house to the south. The tunnels were brick-built with a barrel-vaulted roof, again constructed of brick painted blue (MH1). Width of tunnels is about 1m. Adjacent to the Mess House the vaulting had been demolished. The tunnel structure (Figures 10-15), although of the same brick and mortar construction, were not part of the Mess House build, and the later construction butted

up to the Mess House on the north wall (MH2). A substantial timber doorway frame 13cm had been chiselled out of the existing battered basement wall (Corridor 6) on the west wall and situated at the top of the steps leading to the tunnels (MH3); that there was a door is attested by the surviving cabin hook positioned to keep the door in the open position.

**Room 2 (Figure 2).** The north/west room paved with brick (on edge) 6 x 22cm set in lime mortar seam about 7mm thick (MH4). Depressions in floor stained with coal dust suggest this room was used at some stage to store coal. There are the remains of the impression of skirting 20cm on all four walls. Walls are built of red brick 21.5x6cm set in lime mortar – seams about 15mm thick. The walls are screeded in concrete and finished in a light blue colour.

On average 22 courses of brick survive (MH5) with a wall thickness of 56cm. The wall is built of red brick and set in English Bond where the bricks are arranged in alternate courses of headers and stretchers. It was standard practise that brickwork would rise four courses to the foot.

The centre of the header in one course falls in the centre of a stretcher in the course above and below it. This particular building has walls of a multiple whole brick in thickness, headers on the face of the wall have headers on the inside in the same course.

Note the skirting recess indicating the plaster was applied after second fixing of joinery details (MH5). Fragments of the blue painted plaster finish can still be seen.

Coal dust staining of the floor brickwork can be seen in (MH4) as well as repairs to the brick surface.

At the bottom of the picture (MH4) can be seen the brick opening for the window. Note there is no internal recess to set the window in which may suggest the building was built before the London Building Act of 1774 which included the stipulation that doors and windows should be recessed at least four inches from the front of the building.

One window and one door are situated in this room. The window faces west onto Corridor (6), outer opening of window 91.5cm, and inner opening 114.5cm. No apparent window ledge. This window is part of the original build with a probable timber cill. Brick opening for internal doorway is 103cm wide. Architrave is 75mm wide. Door framing was fastened to 4"x2" horizontal studs which were built into door surround brickwork. Door would have been presumably located on internal wall of room as flagstone floor joins brick floor here. There are no later repairs to wall but the brick floor has been altered or repaired by a slot 58cm (wide) by 228cm (long).

**Room 4 (Figure 2).** Room 4 is adjacent to Room 2 on the north side. It has a flagged stone floor, which is level with brick floor of Room 2, but steps down to Room 7, which is a corridor, also flagged. Step down is 15.5cm. See plan (Fig. 2) for configuration and layout of flagged floor (MH7). There is a chimney structure situated on the west wall, some 124cm internal, which has been rebuilt with an internal facing of yellow stock bricks laid on edge (MH 8) faced with concrete render painted black (MH 7).

The concrete render has formed a small shelf 6cm wide and 70cm above the floor surface (MH10). On the front of the chimney structure are the remains of two ferrous fittings 162cm apart and 109cm above the flagstone floor. In front of the chimney structure are two rectangular stone flags 89x34cm, suggesting a stone hearth may have been part of the original build. On the south side of the chimney structure a small shelf seems to be part of the original 18<sup>th</sup> century build, but the later render suggests that some type of cupboard may have been later built here (MH8). A later doorway has been inserted in to the east wall – it is not shown on the 18<sup>th</sup> century plan (Map 2 Appendix 7).

The doorway is about 122cm wide the vertical faces are finished with rendered concrete with no joinery casing, apart from the turn of the skirting. This doorway leads to Room 5 (MH11), which was only partially excavated. The skirting is the same height as in Room 2, as is the bond of brick. The original 18<sup>th</sup> century doorway on the north side is also of the same build as the doorway in Room 2.

**Room 5 (Figure 2).** Located east of Room 4, and has a flagstone floor level with Room 4 but drops down (as Room 4) to the flagged floor of Room 7. Internal decoration is the same as Room 4 and the doorway on the east side leading to Room 7 is the same construct as other doorways located in Room 4 (MH11).

**Room 7 (Figure 2).** Is a corridor running east/west and allows access to Rooms 2, 3, 4, 5, 8, 9 (MH12). The original 18<sup>th</sup> century build is of a flagged floor but a later alteration was to lay concrete fillets at the base of the east and west walls, which then had a 4"x2" joist lain over with no doubt a wooden floor boarding nailed to these joists. This alteration then gave a level floor surface throughout the Mess House. Wall decoration in Room 7 was again blue paint as found in Rooms 2, 3, 4, 5.

**Room 8 (Figure 3).** North of the corridor (Room 7) had in the original 18<sup>th</sup> century build a flagged floor (MH13) comprising flagstone about 10cm thick, smooth surface on uppermost surface with rough finish on underside. Flagstones were laid on the natural chalk and levelled with a mixture of sand and clay. Concrete fillets were later laid east/west. 7 x 2.5cm at 102 – 113cm centres. Evidence of wooden joists (4"x2") laid on top of the concrete fillets can be seen in Room 9. Although three windows are shown in the 18<sup>th</sup> century plans (Map 2 Appendix 7), only one window is now apparent, obviously from a later rebuild. This measures 112cm width on the external opening and 131cm on the internal opening, faced with a concrete screed. The window sat on a 124 x 10 concrete window ledge. To the east of the window (MH16) an internal shelf 111 x 45cm had been recessed into the west wall at a later date and like the window set in place with a fine concrete screed/render, painted blue (MH14).

The chimney structure situated midway on the east wall has been rebuilt/alterd at least twice. In the original build of the 18<sup>th</sup> century the structure would have been open to the large, arched iron chimney breast linked with no doubt a coal-fired range. The fireplace opening had been 'bricked up' with yellow stock bricks layed in concrete, not lime mortar (MH15).

An even later alteration was a rectangular slot on the right side of this work later also 'bricked up'. With the rebuild of the floor, the hearth was re-laid as a concrete slab (87 x 103cm). To the west (left) of the chimney structure two ferrous T-bar brackets (MH14) 133cm above the flagstone floor had been inserted into the wall during construction and probably held a substantial shelf. To the right (east) of the fireplace a hearth built of slotted iron grid with ash space under and a brick 'shelf' above was part of the original 18<sup>th</sup> century build and survives in remarkable condition (MH15). The east wall of Room 8 did not exist in the 18<sup>th</sup> century build and was later built onto the original flagstones after the timber floor had been laid. It is likely that a cut for the wall was made through the floorboards and concrete laid as a rough foundation to the level of the floorboards and a yellow stock brick laid with cement leaving a doorway rendered in concrete (MH18).

However, on the Room 8 side a recess was left for vertical door joinery.

**Room 9 (Figure 3).** Located south of Room 8, and was only partially excavated (MH12) but revealed a part-flagstone floor, and where the flagstones ended a rough screed of cement/pebbles had been laid. Decoration was the same blue, and the doorway to the corridor (Room 7) was badly damaged in the demolition of the building.

**Corridor 6 (Figure 3).** Is an outside basement corridor running north/south and situated on the west side of the Mess House (MH29). The corridor is about 93cm wide at the base and 1.02m at 1.40m height. All the rooms exposed in the Mess House are below ground level at about 1.60m below the rear courtyard or terrace. The west wall of the corridor had been built with an outward (west) camber and constructed by cutting a foundation trench in the natural chalk and building the wall with English bonding with 18 courses surviving to a height of 1.40m and a thickness of 35cm (MH30). At intervals (plan) brick buttresses were shown to be part of this build and measured 44 x 60cm and were situated on the west side of the wall.

Once this wall was built the builders' trench was backfilled with tamped chalk. The floor of this outside corridor was paved with stone flags laid on the natural chalk with a packing of sand and pea gravel.

On the west side of the outside corridor and under the flagstones was a substantial drain built of brick with a barrel-vaulted roof, with access through cast iron drain covers, one of which is situated in Corridor 6. The date impressed in the cast iron is 1849 (MH22). The interior dimensions of the drain are 30 x 30cm.

In Corridor 6 there are two cast iron down pipes surviving in situ which are attached to the exterior of the west wall, and connected to the drain below the level of the flagstone floor surface.

**Corridor 10 (Figure 3)** is situated outside the west wall of the Mess House on the north side (MH29). Construction details are the same as Corridor 6. The drain continues to a dated cast iron drain cover 'Patent No. 4 1849'. At the north end of the corridor in the alcove this formed were the evidence of an outside toilet with door and door frame. The toilet was probably connected to the drain but exits through the north wall of Corridor 10 above the level of the flagstones.

On the outside of the west wall of the Mess House a later concrete gully led to the drain cover dated 1849 (MH21). In the original 18<sup>th</sup> century build there were three window openings, shown in Map 2 Appendix 7. The centre window had been rebuilt, larger and with a concrete window cill some 63cm above the flagstones (MH17).

The exterior opening was 1.12m. The original window to the west has been bricked up with yellow stock bricks and one stamped S D which denotes the brick was made by Smeed Dean.

In 1875 George Smeed formed Smeed Dean and Co. with his son in law George Hambrook Dean, and by 1880 they were producing almost 50 million bricks a year.

On the inside west wall of Room 8 the original window aperture had been turned into a shelf topped with slate (MH14).

The exterior window area on the south end had been destroyed by demolition. Cut into the exterior brickwork of the Mess House in Corridor 10 were three ventilation holes covered by a cast iron fretwork cover, cemented in to the original 18<sup>th</sup> century brickwork, size 17 x 17cm.

#### **No 1 Officers' Quarters. Corridor 14**

Situated to the exterior of No. 1 Officers Quarters the same build and alignment as corridors 10 and 6 but the southern end of the Officers Quarters block (MH15), which contained No.1 – No. 4 houses (Map 2 Appendix 7). Situated in the corridor is an outside drain adjacent to the exterior of the west wall. Draining into this is a lead pipe, which passes through the west wall to be underneath a sink (no longer in situ) supported on later-built plinth of yellow stock bricks. The cast iron fretwork cover to the drain is of the same style dated 1849, which suggests the addition of a sink in Room 11 happened in the same refurbishment of the building c. 1849.

On the original 18<sup>th</sup> century plans there are two window openings and one doorway. The window opening to the south has been enlarged in width but not in depth. The original brick window ledge had been retained. There has been extensive repair to the exterior of the west wall of Room 11, it seems the brick surface has been much damaged by damp. There are no such repairs on the interior walls of Room 11, apart from the rebuild of the fireplace structure (MH23).

The window to the north had the original size of width of 93cm and the brick cill 1.06m above the exterior flagstone floor. This exterior passageway had been divided in two, probably at the time of the 18<sup>th</sup> century build, by a wall 34cm wide (MH29).

The doorway showing on the original plan of 1795 (Map 2) is 134cm wide, with a door width of about 1m (MH23) leading from the passageway (14) to corridor (13).

**Corridor 13** allows access to rooms on either side, north and south. At the far end of corridor 13 (east end) is the marks of a timber staircase leading up to ground level (MH27). The staircase measured 1.06m in width. The corridor is surfaced with flagstones of the same level as the outside passageway (MH26).



**Room 11 (Figure 7)**, situated in the south west corner of No. 1 Officers Quarters, has a fireplace built into the south wall (MH23). The original build is of red brick and rebuilt with yellow stock bricks enclosing a metal water heater of unknown type (MH24).

On the left side of the fireplace a metal cistern, originally cased in wood, is still in situ connected underneath to a lead pipe leading to the fireplace (MH25).

The fireplace, as well as having later work done to build in the water heater, is faced on both piers by yellow stock bricks. In the southwest corner of Room 11 a yellow stock brick pier (47 x12cm) has been built into the corner of the room.

The wall decoration above suggests a sink, possibly of white clay porcelain about 17cm high, was in situ here. This hypothesis is confirmed by the remains of a lead pipe under the postulated sink leading through the exterior wall to an outside drain situated in the flagstone floor of passage 14.

There is no obvious alteration to the flagstone floor to suggest that a timber floor had been laid here as in Rooms 7, 8 and 9.

**Room 12.** Only part of Room 12 has been exposed through excavation (MH23). The room has a flagstone floor on the same level as Rooms 11 and 13, with a fireplace in the south wall, but with no later repairs or additions in yellow stock brick.

#### **Additional work required**

10 days additional work which will include a comprehensive list of mid 19<sup>th</sup> century alterations to the original build and an updated report. Site plans have now been digitised.



MH1. Corridor 1 (looking north-east. 1m scale)



MH2. Corridor 1 (looking west, 1m scale).



MH3. Corridor 1 steps (looking north)



MH4. Room 2: (looking east, 1m scale).





MH5. Room 2: (looking south. 1m scale).



MH6. View of Room 2, 4 & 5 (looking north-west)





MH7. View of Room 2 & 4 (looking south-east. 1m scale)



MH8. View of Room 4 (looking south. 50cm scale)



MH9. View of Room 4 window detail (looking west. 50cm scale)



MH10 View of Room 4 (looking south-west. 50cm scale)





MH11. View of Room 5 (looking south)



MH12. View of Room 7 looking in to 8 & 9 with corridor 10 beyond (looking n/w)





MH13. View of Room 8 (looking north-east)



MH14. View of blocked up window and slate shelf in Room 8 (looking north. 50cm scale)





MH15. View of fireplace in Room 8 (looking north)



MH16. View of blocked up window in Room 8 (looking north-east)



MH17. View of later window cill in Room 8 (looking north-east)



MH18. View of later brick room divide in Room 8 (looking north-east)





MH19. View of Corridor 10 (looking south)



MH20. View of drain detail in Corridor 10. 50cm scale



MH21. View of brick drain in Corridor 10





MH22. Detail of drain in Corridor 10. 10cm scale bars



MH23. View of Rooms 11, 12, 13 (looking south-east)



MH24. View of Room 11 (looking south-east)



MH25. View of later stove in Room 11 (looking south. 50cm scale)





MH26. View of Corridor 13 (looking east)



MH27. View of staircase in Corridor 13



MH28. View of Corridor 15. 50cm scale





MH29. General view of site (looking south)



MH30. General view of site (looking east)

## **Appendix 4: The Small Finds Assessment.**

### **Summary**

The majority of this assemblage of small finds represents the military phases of Fort Amherst. There are however two exceptions; the Lower Palaeolithic Hand Axe (SF:1) and (SF:68), which may be a fragment of Anglo-Saxon Long Brooch or a Medieval Purse Bar. Though there is an archaeological presence of these periods in the locality, the re-deposition of these objects in the topsoil implies that they have originated from a later period. 20 days additional work on the small finds may be required for publication.

### **Description**

More than 100 small finds were recovered from the excavation at Fort Amherst. Most of these objects represent the military history and activities on the site, especially from the Napoleonic and late Victorian periods. Notable small finds include the large assemblage of military buttons, which demonstrate the influx of a variety of military units in the area from the late 18<sup>th</sup> – the late 19<sup>th</sup> centuries. The remainder of this finds assemblage reflects the different uses of the development site, which is to be expected from a site in use from c.1750 up to the present day. Please note most of the small finds were recovered by metal detecting out of the topsoil and have limited dating potential. However, an illustrated corpus of the regimental buttons will be extremely useful for the history of the military presence on the site (10 days), and specialist cleaning an additional 10 days.

### **Catalogue**

#### **Coins**

George II. 1751. Halfpenny SF:77 (1000) A4  
George II. Halfpenny SF:78 (1000) A4  
George III. 1806. Halfpenny (Soho Mint, Birmingham) SF:74 (1000) A1  
George III. 1773. Halfpenny (Tower Mint, 1<sup>st</sup> issue) SF:75 (1000) A4  
George III. 1775. Farthing (Tower Mint, 1<sup>st</sup> issue) SF:79 (1000) A4  
George III. 1775. Halfpenny (Tower Mint, 1<sup>st</sup> issue) SF:102 (1000) A3  
George III? Halfpenny SF:48 (1000) A4  
Victoria. 1845-45. East India Co. Half Cent SF:73 (1000) A3  
Victoria. 1861. Farthing SF:76 (1000) A4  
Victoria. 1861. Farthing SF:36 (1000) A3  
George V. 1919. Halfpenny SF:47 (1000) A3  
George V. 1921. Halfpenny SF:98 (1000) A3  
George V. 1925. Farthing SF:105 (1000) A1  
Elizabeth II. 1953. Halfpenny SF:100 (1000) A3

### Tokens

Lead. 17<sup>th</sup> – 18<sup>th</sup> Century. SF:3 (1000) A3

Lead. 17<sup>th</sup> – 18<sup>th</sup> Century. SF:6 (1000) A3

### Military Buttons

SF:11 (1000) A3 Copper alloy. General service button

SF:80 (1185) A3. Copper alloy. "31" (31<sup>st</sup> Huntingdonshire Regt. up to 1881)

SF:81 (1185) A3. Copper alloy. "21" within wreath, surmounted by crown.

SF:82 (1185) A3. Copper alloy. "59" above, crown. (2<sup>nd</sup> Nottinghamshire Regt. 1782-1881)

SF:83 (1185) A3. Copper alloy. "INDIA 14 WATERLOO" Tiger. (14<sup>th</sup> Buckinghamshire Regt. 1809-1876)

SF:84 (1000) A3. Copper alloy. x39 Royal Artillery buttons. c.1790-1840

SF:85 (1000) A3. Copper alloy. "13" (1<sup>st</sup> Somersetshire Regt.)

SF:86 (501) A2. Lead. "62" (Wiltshire Regt. 1758-1782)

SF:87 (1000) A4. Copper alloy. x14 Royal Artillery buttons. c.1790-1840

SF:88 (1000) A4. Copper alloy. "36" (Herefordshire Regt. 1782-1881)

SF:89 (1000) A4. Copper alloy. "Louth Land"

SF:90 (1000) A4. Copper alloy. x3 Irish Artillery

SF:91 (1000) A4. Copper alloy. "Military Prison". Crown.

SF:92 (1000) A4. Copper alloy. General service button

SF:93 (1000) A3. Copper alloy. x2 General service buttons – 'Player Bros. Bath'

SF:97 (1000) A3. Lead. "32" (32<sup>nd</sup> Cornwall Light Infantry 1858-1881)

SF:99 (501) A2. Lead. "3" within beaded border. (3<sup>rd</sup> East Kent Regt. 'The Buffs' 1782-1881)

SF:101 (501) A2. Copper alloy. x2 Royal Artillery buttons. c.1790-1840

SF:103 (501) A2. Copper alloy. "30" (30<sup>th</sup> Cambridgeshire Regt. 1782-1881)

SF:104 (1000) A4. Gilt Copper alloy. "39" (39<sup>th</sup> East Middlesex or Dorsetshire Regt. 1782-1807)

SF:106 (1000) A3. Lead. "22" (22<sup>nd</sup> Cheshire Regt. 1782-1881)

SF:107 (1000) A3. Lead. "22" (22<sup>nd</sup> Cheshire Regt. 1782-1881)

SF:135 (1000) A3.

SF:136 (1000) A4. Assorted unidentified buttons x 65.

SF:137 (1000) A3.

SF:138 (1000) A3.

SF:139 (1185) A3. x2 unidentified buttons.

SF:140 (1000) A3.

SF:141 (1000) A3. Piece of button.

SF:142 (1000) A3.

SF:143 (1000) A3.

SF:144 (1000) A3.



SF:145 (501) A2. Unidentified buttons x10.

SF:146 (1000) A3. Topsoil. Unidentified buttons.

SF:147 (1000) A4.

SF:148 (501) A2.

### **Objects of Silver**

SF:15 (1000) A2 Decorative hinged lid of a sugar shaker.

SF:63 (1008) A2. Unidentifiable, very thin disc.

### **Objects of Copper Alloy**

SF:2 (501) A2. Octagonal-shaped cufflink. Engraved 'tall masted ship' decoration.

SF:4 (1000) A2 9mm pistol cartridge.

SF:5 (1000) A2 Rifle cartridge (pre 303).

SF:8 (1000) A2 Square-shaped buckle with roller and pin.

SF:9 (1000) A3 Square-shaped buckle with roller and pin.

SF:10 (1000) A3 Rectangular-shaped buckle. Incomplete.

SF:12 (1000) A3 Button. Incomplete.

SF:13 (1000) A3 Button. Incomplete.

SF:35 (1000) A3 D-shaped buckle.

SF:37 (1000) A3 Miscellaneous Object. Modern.

SF:38 (1000) A3 Miscellaneous Object. Modern.

SF:39 (1000) A3 Miscellaneous Object. Modern.

SF:40 (1000) A3 Miscellaneous Object. Modern.

SF:41 (1000) A3 Miscellaneous Object. Modern.

SF:42 (1000) A3 Miscellaneous Object. Modern.

SF:43 (1000) A3 Miscellaneous Object. Modern.

SF:44 (1000) A3 Miscellaneous Object. Modern.

SF:45 (1000) A3 Miscellaneous Object. Modern.

SF:46 (1000) A3 Rifle cartridge. Martini-Henri, rolled brass foil. c.1875

SF:49 (1000) A3. Button, tinned copper alloy.

SF:65 (1020) A3. Square-shaped buckle. Incomplete.

SF:67 (1012) A3 Button. Incomplete.

SF:68 (1000) A3. Incomplete object. Triangular stem with decorative finial.

SF:69 (1000) A3. Padlock with engraved floral decoration.

SF:70 (1107) A3 Rectangular-shaped buckle, with iron bar and pin.

SF:71 (1116) A3 Rectangular-shaped, double looped buckle with iron pin (missing).

SF:94 (1000) A3. Military 'Collar Dog' – lion rampant.

SF:95 (1000) A3. Copper alloy. Shoulder Pip.

SF:96 (1000) A3. x2 Thimbles  
SF:108 (1000) A3. x5 Buttons  
SF:109 (1069) A3 Decorative floral mount.  
SF:124 (1000) A3. Assorted buckles.  
SF:125 (501) A2. Assorted metal.  
SF:126 (1000) A4. Assorted metal objects.  
SF:127 (1000) A3. Fob watch key.  
SF:128 (1000) A4. x2 Thimbles.  
SF:129 (1185) A4. x2 Cartridge tops.  
SF:130 (1000) A4. Cuff links.  
SF:131 (1000) A3. Cuff link.  
SF:132 (1000) A3. Metal tag.  
SF:133 U/S MD A3. Assorted metal.

**Objects of Lead**

SF:7 (1000) A3 Spoon handle.  
SF:14 (1000) A3 Button. Incomplete.  
SF:16 (1000) A3 Miscellaneous Object.  
SF:17 (1000) A3 Miscellaneous Object.  
SF:18 (1000) A3 Miscellaneous Object.  
SF:19 (1000) A3 Miscellaneous Object.  
SF:20 (1000) A3 Miscellaneous Object.  
SF:21 (1000) A3 Miscellaneous Object.  
SF:22 (1000) A3 Miscellaneous Object.  
SF:23 (1000) A3 Miscellaneous Object.  
SF:24 (1000) A3 Miscellaneous Object.  
SF:25 (1000) A3 Miscellaneous Object.  
SF:26 (1000) A3 Miscellaneous Object.  
SF:27 (1000) A3 Miscellaneous Object.  
SF:28 (1000) A3 Miscellaneous Object.  
SF:29 (1000) A3 Miscellaneous Object.  
SF:30 (1000) A3 Miscellaneous Object.  
SF:31 (1000) A3 Miscellaneous Object.  
SF:32 (1000) A3 Wheel. Cast, with spokes forming decorative, heart-shaped openings. Child's toy?  
SF:33 (1000) A3 Fishing weight with nylon line.  
SF:34 (1000) A3 Spoon bowl.  
SF:51 (1008) A2. Button.  
SF:64 (1018) A2. Musket ball. 0.71" (18mm) c.1722-1860.

SF:66 (1012) A3 Miscellaneous object.  
SF:110 (1000) A3. Button with iron loop (missing).  
SF:111 (1000) A3. x21 Musket balls (Carbine/Pistol).  
SF:112 (1000) A4. x37 Musket balls. 0.71" (18mm) c.1722-1860.  
SF:113 (1000) A3. x3 Musket balls (Carbine/Pistol).  
SF:114 (1000) A3. Musket ball.  
SF:115 (1000) A4. Musket ball (Carbine/Pistol).  
SF:119 (501) A2. x2 Musket balls  
SF:120 (1000) A4. Miscellaneous objects.  
SF:121 (1000) A3. Toy soldier.  
SF:122 U/S A2. Miscellaneous objects.  
SF:123 U/S A3. Miscellaneous objects.

#### **Objects of Iron**

SF:52 (1009) A2. Nail.  
SF:53 (1009) A2. Nail.  
SF:54 (1009) A2. Nail.  
SF:55 (1009) A2. Nail.  
SF:56 (1009) A2. Nail.  
SF:57 (1009) A2. Miscellaneous object.  
SF:58 (1009) A2. Nail.  
SF:59 (1009) A2. Nail.  
SF:60 (1009) A2. Nail.  
SF:61 (1009) A2. Nail. Incomplete.  
SF:62 (1009) A2. Nail.  
SF:116 (1000) A? Nail.  
SF:117 (1000) A4. Nails.  
SF:118 (1000) A3. Miscellaneous objects  
SF:134 (1000) A3. Pocket knife?

#### **Objects of Bone**

SF:72 (1093) A3 Lice Comb.

#### **Objects of Shell**

SF:50 (1000) A2. Button. 'Mother of Pearl'. Incomplete.

#### **Objects of Stone**

SF:1 (1000) A4. Hand Axe. Flint. Lower Palaeolithic. L: 87mm W: 47mm T: 24mm.

## APPENDIX 5

### ***THE DATING AND ASSESSMENT OF THE CERAMIC ASSEMBLAGE FROM :*** **FORT AMHERST EXCAVATION 2013 (FAC-EX-13)**

#### **ASSESSMENT**

A modest-sized multi-period pottery assemblage consisting of 338 sherds weighing 4kgs.968gms were the recovered during this evaluation. In terms of the period range and ceramically determinable land-use implications, the assemblage sub-divides into three main period groups – Later Prehistoric, Early Medieval and Post-Medieval and later.

#### *Later Prehistoric – c.1550-50 BC*

A total of 6 flint-tempered bodysherds – three from *Subsoil 1002* and three from *Context 1113* represent this broad period. The sherds from *1002* are moderate-sized, those from *1113* small and scrappy. All are fairly worn but there are elements from both contexts whose condition suggests that none are seriously residual in-context – particularly those from *1002*. This indicates recovery from a relatively undisturbed Later Prehistoric horizon. Any finer definition is difficult since the range of manufacturing attributes recovered could allow placement anywhere between c.1500-50 BC. However, the combination of flint-tempering characteristics, wall thickness and firing trends present is more frequently recorded from Late Bronze Age and later assemblages. Here, there is a slight preference for placing these elements into the Early-Mid and Mid Iron Ages – between **c.600-200 BC** but unlikely later.

#### *Early Medieval – c.1175-1250 AD*

As recovered, there is no Late Iron Age and Roman pottery and the first obvious post-prehistoric activity is slimly represented by a single small but only slightly worn shell-tempered bodysherd was recorded, residual in the nineteenth century *Context 1116*. It is near-flat and from the body wall or base of a thin-walled North or West Kent shell-tempered vessel. The shell is marine, and not from fossil-bearing beds, indicating that the vessel was

made somewhere in the north Kent coastal or estuarine zone. Its degree of fairly profuse shell-temper and wall-thickness indicates production between **c.1175-1250 AD**, possibly slightly earlier. Although residual, its fairly good condition in *Context 1116* suggests only a minimal degree of post-loss disturbance – again suggesting, on the basis of recovered material, derivation from a relatively little-disturbed later twelfth-earlier thirteenth century horizon.

*Post-Medieval and later – c.1550 AD-plus*

This is the main assemblage component and contains some interesting elements. Although the dating attached to the relevant contexts is appended below in a dating summary – some of the material deserves more detailed comment. Overall, this period component subdivides into two main groups, Post-Medieval pottery - with nothing obviously pre-dating **1550/1575 AD** - and Late Post-Medieval material datable from c.1750 AD onwards. For the first, Post-Medieval group, the majority of the material is residual in later late eighteenth or nineteenth century-plus contexts. However three contexts, *1018*, *1067* and possibly *1093*, all have contemporary undisturbed assemblages containing large or fairly large same-vessel elements whose condition and likely use-range suggests discard between approximately c.1700-1750 AD. Overall, visually, the assemblage is dominated by kitchen and pantry red earthenwares but includes a fragment from a Spanish Seville-type olive-oil jar together with a useful sprinkle of Surrey-Hampshire Border Ware and English tin-glazed tablewares. Most of the Surrey-Hampshire Border Ware dish, plate or pipkin fragments are green-glazed. However, one rather worn and small plate fragment is yellow-glazed. This, several of the more radically worn redware sherds and, possibly, the Spanish olive-oil jar, are more likely to be of later sixteenth or earlier seventeenth century date. Other than these few, the majority of the Post-Medieval pottery is datable to between **c.1650-1750 AD**. Elements of specifically mid or second half seventeenth century date include a tantalizing fragment from a well potted tin-glazed earthenware with blue-painted 'Hispano-Moresque'-style decoration, a cluster of possibly Wealden-type pink-red earthenware sherds from a small jar with 2 opposing horizontal handles and a few claypipe bowls. The remainder is very definitely of earlier eighteenth century date – and includes a few worn fragments from plain blue-tinted tin-glazed earthenware bowls and dishes, a worn fragment from a hefty deep sub-rectangular opposingly loop-handled baking dish and the fresh unworn part-profile of a



neat little earthenware mug with glossy subtly iron-streaked glaze in a small contemporary discard group from *Context 1018*.

Next come context-assemblages datable to the earlier part of the Late Post-Medieval – **c.1750-1825 AD**. These include *Contexts 1009, 1011, 1012, 1034* and *1101* – all of which produced large fresh or only slightly chipped single or conjoining sherds from undisturbed contemporary discard groups. These produced large fragments from an early richly-toned Creamware plate with feather-edged border, similar fragments from a Staffordshire white stoneware scallop-edged plate with chevron and escutcheoned dot and diaper moulded border designs and, from *1034*, fresh pieces from a tea-bowl and cup – the latter very delicately potted and thin-walled. Another context, *1012*, contained further large Staffordshire white stoneware fragments, one from another plate with scalloped edge and wide barley-seed moulded border and – more unusually – the complete profile of a neatly-potted round-bodied tea-pot with on-glaze hand-painted floral design. The design of flowers and leaves was first outlined in flowing black lines and then infilled with paint - pale green leaves and pale blue, purple and yellow-petalled flowers. The paint was fairly thickly applied, its matt unglazed finish subtly ‘proud’ – both visually and beneath finger-tips - of the shiny salt-glazed white tea-pot body. This attractively natural and rustic-looking product must have been admired – as it stood on the table, at tea-time, in the late afternoon sun. Other more mundane contemporary elements include one or two fragments from London stoneware tankards and flagons – including one with an unusual trace of cobalt painted decoration – and also a single small fragment from a fairly late Chinese porcelain vase or tub decorated with rustic scenery painted in underglaze blue.

Other contemporary elements, but mostly residual in later nineteenth-century contexts, are a small fragment from a once attractive Creamware tea-pot with streaky merged brown and cream ‘Whieldon’-type colour-glazing of c.1740-1780 AD date, a fragment from a Nottingham-Derby brown iron-glazed stoneware bowl, simple plain-bordered Later Creamware plates (including, anachronistically, a very large fragment from *Context 1164*) and a few fragments of pale blue transfer-printed Pearl Ware plates. *Much* more unusual is a large, rather battered Kentish red earthenware utilitarian element – a ‘chicken-feeder’. It is basically unglazed but several iron glaze splashes do not look ‘late’. In addition, the top

edges of its three circular compartments are fairly battered – the chipping old and pre-dating more recent and heavier, but **not** twenty-first century, damage. This suggests that, despite its recovery from a context dated to the second half of the nineteenth century, its manufacturing date could be relatively early, *perhaps* during the later eighteenth century. Such items are fairly rare – this analyst has seen only one other example, a probable pale buff Wealden later sixteenth or more probably seventeenth century example from Canterbury. However, they do occur elsewhere and although the label ‘chicken-feeders’ is uncertainly applied a number of Surrey-Hampshire Border Ware examples are held in the London Museum (Pearce 1992, 44 and Fig.46, No.449).

The remaining mid-late nineteenth century portion of the assemblage is much more typical of many Victorian and Modern-period deposits – fragments of mid-nineteenth century table and bedroom wares - pale blue, standard deeper blue, black or green transfer-printed plates, basins or ewers, a few fragments of the latter type just plain white with mould-decorated rims, few pieces of pantry and kitchen Staffordshire/Derby Yellow Ware and James Keiller, Dundee, marmalade pot and a few of the ubiquitous English stoneware blacking bottles and vitreous-glazed jars and tubs. Of the five contexts producing such material two, *Contexts 501* and *1145*, are of late nineteenth century or later date. *Context 1145* contained a small and battered fragment of Later Staffordshire blue colour-bodied earthenware, which has a production start-date no earlier than c.1875 or 1900 AD, whilst *501* produced a large fresh complete-profile of a redware flower-pot type made by Sankey and Son of Bulwell, Nottinghamshire. The commencement-date for this firm’s activity is c.1855 AD onwards and, in this example, neither the fabric type nor name-stamp font style do not look Modern, ie c.1900 AD-plus – so that this element is almost certainly a later nineteenth century product.

#### *Note on the claypipes*

Approximately 140 claypipe elements were recovered, mostly consisting of a rather mundane set of predominantly stem fragments, some bowl and foot pieces and only 2-3 complete bowls. Many were apparently unused – or only on a few occasions at most. Lacking diagnostic bowl or foot types, allocation could only be fairly broadly based on stem bore-hole sizes. Overall – only one stem fragment had a large bore indicating an early date,

between c.1580-1640 AD – and accords well with the low ceramic quantities datable to between c.1550-1650 AD. The remainder are fairly evenly divided between those that are solely of Post-Medieval date – c.1640-1710 AD (59 fragments) and those more broadly datable to the Post-Medieval to Late Post-Medieval periods – 1680-1820 AD (75 fragments). Only 4 pieces could be confidently dated later than c.1850 AD. Other than a small quantity of maker's marks (not summarized here) – the only relatively unusual elements were a c.1660-1680 AD bowl from *Context 1008* with a star stamped on the internal floor of the bowl and a late c.1850 AD-plus pipe with excessively narrow bore from *Context 1185* with a thin re-curved spur foot.

*Dating summary for Post-Medieval and later contexts*

**c.1700-1750 AD** – Contexts 1018, 1067, 1093, 1120 (claypipes only), 1135

**c.1750-1800 AD** – Contexts 013, 1008 (claypipes only), 1011, 1012, 1041, 1101, 1107, 1110

**c.1775-1825 AD** – Context 1034

**c.1800-1825 AD** – Context 1009

**c.1800-1850 AD** – Contexts 1116 (possibly), 1154

**c.1850-1875 AD** – Context 1064 (probably)

**c.1850-1900 AD** – Contexts 1000, 1071, 1185

**c.1875-1900 AD** – Context 501

**c.1900 AD-plus** - Context 1145

Context 1135 can only be broadly datable to C18 AD or later, Context 1020 very broadly to between c.1700-1850 AD (claypipes only), Context 1113 to between c.1775-1850 AD probably and Context 1121 more specifically to the LC18 or C19 AD

***Recommendations***

- 1.** Both the Staffordshire white stoneware painted tea-pot from *Context 1012* and the 'chicken-feeder' from *Context 1000* should be reserved for both photographic and drawn illustration. 10 days on additional cataloguing and drawing of the clay pipes.
- 2.** Should this assemblage proceed to final publication – the clay pipe maker's marks would benefit from a more detailed review. The additional work will take 10 days.

### ***Bibliography***

#### **Pearce 1992 :**

Pearce, J., *Border Wares*, Post-Medieval Pottery in London, 1500-1700 Volume 1, Museum of London 1992

### **APPENDIX**

#### ***Primary quantification : 338 sherds (weight : 4kgs.968gms)***

#### ***Period codes employed :***

|     |                      |
|-----|----------------------|
| LP  | = Later Prehistoric  |
| LBA | = Late Bronze Age    |
| MIA | = Mid Iron Age       |
| EM  | = Early Medieval     |
| PM  | = Post-Medieval      |
| LPM | = Late Post-Medieval |
| MOD | = Modern             |

#### ***Context dating :***

**Context : Area 1 UN** – 5 sherds (weight : 12gms)

4 PM-LPM claypipes (4 stems, 1 bowl foot, spurred, narrow bore, c.1770-1820 AD, ‘\*’ maker’s mark on either side of spur. One stem fragment has incomplete stamps, either of stem,

‘C .CR....’ and ‘LONDON’ both cartouched within beaded borders ending – at both ends – in a beaded trailing crossed strands

**Likely date : Residual from early-mid C19 AD contexts**

**Context: 013** – 11 sherds (weight : 258gms)

1 PM claypipe (bowl, medium bore, marked ‘WF’, c.1660-1680 AD)

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- 1 PM claypipe (stem, medium bore, c.1660-1710 AD range)
- 2 PM English tin-glazed earthenware (c.1675/1700-1750 AD emphasis; **same vessel**)
- 2 PM Kentish red earthenware (2-handled oblong stewing/baking dish, c.1675/1700-1750 AD emphasis; **same vessel**)
- 1 PM London stoneware (tankard, c.1675/1700-1775 AD)
- 1 PM-LPM claypipe (bowl, medium bore, unmarked, c.1700-1770 AD)
- 2 PM-LPM Staffordshire white stoneware (c.1725-1775/1780 AD emphasis; **same vessel**)

**and :**

- 1 fragment PM bottle glass (weight : 42gms) – moderate-sized, black glass, deeply concave base, ‘onion’ bottle, c.1675-1750 AD range
- 1 fragment LM-PM roof-tile (weight : 34gms) – moderate-sized flake, Wealden-type buff sandy fabric, mortar adhering on most surfaces, re-used – LC15-MC 16 AD range probably.
- 1 fragment PM ? ridge-tile (weight : 99gms) – fairly large, chipped, only slightly worn, pale orange slightly sandy fabric with mica flakes – later C16-C17 AD probably
- 3 fragments PM roof-tile (weight : 67gms) – fairly small, chipped but fresh, marly Wealden-type - later C16-C17 AD

*Comment* : Mostly small>fairly small sherds but including one large earthenware element. Latter slightly chipped and the tin-glazed earthenware elements losing their glaze – otherwise most elements, including the later tile reasonably fresh. Other than the claypipe bowls, the date ranges of most elements are concentrated within the early-mid C17 AD and, based on this aspect and their generally good condition, should represent an undisturbed discard deposit.

**Likely date : c.1750-1800 AD**

**Context: 501 Area 2** - 31 sherds (weight : 1219gms)

- 1 PM claypipe (bowl foot, medium bore, c.1660-1680 AD)
- 1 PM claypipe (thick stem, narrow bore, c.1680-1710 AD)
- 2 PM-LPM claypipes (stems, medium bore, c.1680-1820 AD range probably)
- 1 PM-LPM claypipe (stem, narrow bore, c.1700-1910 AD range)
- 1 PM-LPM Wealden-type earthenware (lid-seated storage-jar, thumb-tipped under-rim cordon, iron-flecked glaze, c.1700/1725-1775 AD emphasis probably)
- 1 PM-LPM London stoneware (tankard with iron slip and cobalt decoration, c.1700/1750-



1800 AD emphasis probably)

1 PM-LPM Notts/Derby stoneware (flagon base, buff with iron slip, c.1700/1750-1800 AD probable emphasis)

2 LPM Later Creamware (1 blue sponged, 1 blue transfer-printed, c.1775/1800-1825 AD emphasis probably)

5 LPM Pearl Ware (pale blue transfer-printed, c.1780/1800-1825 AD; **3 same tea-plate**)

3 LPM white earthenware (plain, c.1800-1900 AD range)

1 LPM red earthenware –flower-pot type (pot stand dish, c.1825-1875/1900 AD emphasis)

1 LPM Staffs/Derby Yellow Ware (band of multiple white lines, c.1825-1875/1900 AD emphasis probably)

3 LPM Staffs-type white earthenware (blue transfer printing, 2 designs, c.1825/1850-1875 AD; **2 same plate**)

1 LPM Staffs-type white earthenware (plate, black transfer-printing, c.1825/1850-1875 AD)

1 LPM Staffs-type white earthenware (ewer, green transfer-printing, c.1825/1850-1875 AD)

2 LPM Staffs-type white earthenware (moulded rim, basin, ‘blue-run’ transfer-printing, c.1825/1850-1875 AD; **same vessel**)

1 LPM white earthenware (marmalade pot, James Keiller, Dundee, c.1850/1875-1900 AD probable emphasis)

2 LPM>MOD red earthenware – flower-pot type (Sankey & Son, Bulwell, Nottingham, c.1855-1900 AD, unlikely later)

**and :**

1 fragment chimney-pot (weight : 472gms) – large rim and upper body element, red earthenware, used (internally sooted), mortar adhering to fracture edges, re-used, c.1850-1900 AD probably.

*Comment :* A few small-fairly small sized elements, but most are moderate or large-sized – particularly the complete flower-pot profile and chimney-pot fragments. Earlier, seventeenth-early eighteenth century elements tend to be more chipped and worn than mid or later nineteenth century material – but even one or two of these are fairly chipped suggesting a degree of post-fracture disturbance. The flower-pot profile is totally unworn and should represent the period of discard which, considering the generally large size and condition of most elements is unlikely to post-date WWI.

**Likely date : c.1875-1900 AD or slightly later**

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**Context: 1001** - 9 sherds (weight : 699gms)

1 PM-LPM Staffordshire –type white stoneware (c.1725-1780 AD)

1 LPM Creamware (c.1740-1780 AD)

1 LPM Kentish red earthenware (chicken-feeder, c.1750-1800/1850 AD emphasis probably)

1 LPM Later Creamware (c.1775-1825 AD)

1 LPM Pearl Ware (blue transfer-printing, c.1780-1825 AD)

2 LPM Staffs-type white earthenware (1 pale blue transfer, 1 shell-edged, moulded, black transfer, polychrome painted, c.1825/1850-1875 AD)

2 LPM white earthenware (c.1850-1875/1900 AD emphasis probably)

*Comment* : The C17 AD finewares are represented by small elements, some chipped, the latest elements larger and near-fresh. The near-complete chicken-feeder is a large element which has a good shiny quality iron flecked glaze suggesting a production date within the second half of the seventeenth century – although it could be later. It has had a long use-life and carries worn, pre-Modern chipping along the top of its concentric rings. Assuming that this assemblage derives from an excavated context – rather than surface collection - the fresh condition of the large polychrome-painted plate sherd suggests that it, and the chicken-feeder, were discarded at the same time.

**Likely date : c.1850-1900 AD**

**Context: 1002, subsoil** - 3 sherds (weight : 38gms)

3 LP flint-tempered ware (slight preference for LBA>MIA, c.1550/1150-200 BC probable emphasis)

*Comment* : All bodysherds, all fairly small, 2 heavily worn overall, one moderately worn. No good reason to see these elements as culturally different.

**Likely date : Residual in a Later Prehistoric horizon**

**Context : 1008** – 57 sherds (weight : 141gms)

1 PM claypipe (stem, large bore, c.1580-1640 AD range)

20 PM claypipes (18 stems, 1 mouth, 1 bowl foot, medium bore, c.1660-1680 AD, maker's mark 'EJ' and unusual '\*' mark on bowl base internally)

36 PM>LPM claypipes (33 stems, 2 mouths, 1 footed bowl, c.1680-1770 AD range, maker's

mark 'WD')

*Comment* : Purely claypipe dump assemblage, small-medium-sized fragments – older elements slightly more worn, latest mostly near-fresh but includes 2 burnt fragments and 4 same-pipe fragments are iron-stained and have mortar adhering. Dating accounts for latter aspect.

**Likely date : c.1750-1800 AD - perhaps slightly earlier**

**Context : 1009** – 19 sherds (weight : 277gms)

1 PM Kentish earthenware (pink fabric, ? Wealden-type, iron streaked glaze, c.1675-1725/1750 AD)

1 PM Kentish red earthenware (c.1675/1700-1750 AD emphasis)

1 PM London stoneware (German Frechen-style iron-mottled, c.1675/1700-1750 AD emphasis)

2 PM-LPM English tin-glazed earthenware (c.1700/1725-1775 AD; **same vessel**)

13 PM-LPM Staffs-type white stoneware (parts 2 vessels inc.one tankard, c.1725-1780 AD; **12 same vessel**)

1 LPM Kentish red earthenware (iron-streaked glaze, c.1775/1800-1850 AD emphasis)

*Comment* : The first entry is small and slightly chipped – and residual in-context. The tin-glazed same-vessel jar fragments are moderate-sized and have total glaze-loss. However their fabric is thin and hard and sherd edges near-fresh - so are both a late product and are not seriously residual. The same-vessel Staffordshire white stoneware tankard fragments include a few small but mostly large, sometimes conjoining elements. Any chipping is likely to stem from original fracture and discard times – and this vessel definitely stems from a contemporary discard deposit. Dating includes the possibility of late acquisition and a period of use for this item.

**Likely date : c.1800-1825 AD or probably slightly earlier**

**Context: 1011** - 3 sherds (weight : 132gms)

3 LPM Creamware (plate, feather-edged, c.1740-1780 AD; **same vessel**)

**and :**

1 fragment PM ridge-tile (weight : 24gms) – moderate-sized, moderately sandy orange-red fabric, lip, upper surface worn, severely flaked, interior fairly fresh – LC16-C17 AD probably

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*Comment* : The ridge-tile fragment is residual in-context. The Creamware plate fragments are moderate-sized and large with 2 conjoining elements. They are only slightly chipped – quite probably at original breakage-time – and should be derived from an undisturbed contemporary discard deposit. Dating allows for late acquisition and a period of usage.

**Likely date : c.1750-1800 AD or slightly later**

**Context: 1012** - 8 sherds (weight : 121gms)

3 PM-LPM claypipes (stems, narrow bore, c.1680-1770 AD range probably)

5 PM-LPM Staffordshire white stoneware (1 plate, seed pattern, 1 tea-pot, polychrome on-glaze painted, c.1725-1750/1780 AD **probable** emphasis)

*Comment* : Moderate to fairly large-sized sherds, most of the tea-pot fragments conjoining to form a complete profile. Apart from minor ‘at-time-of-breakage’ damage, sherds are fresh – and should come from an undisturbed contemporary discard deposit. Dating allows for fairly late acquisition and a degree of curation for the painted tea-pot, prior to final discard.

**Likely date : c.1750-1800 AD - or slightly earlier**

**Context: 1018** - 14 sherds (weight : 413gms)

7 PM Kentish red earthenware (internally-glazed jar, c.1625/1650-1700 AD; **same vessel**)

7 PM Kentish red earthenware (cup, iron streak-glazed, c.1675-1725/1750 AD; **same vessel**)

*Comment* : Fairly small-fairly large-sized sherds, all chipped but not otherwise worn. The cup fragments form a complete profile. Derived from an undisturbed contemporary discard deposit. The dating applied allows for the good condition of the earlier kitchenware jar.

**Likely date : c.1700-1750 AD probably**

**Context : 1020** – 13 sherds (weight : 30gms)

13 PM-LPM claypipes (stems, medium bore, c.1680-1820 AD range probably; one spur with damaged maker’s mark – ‘- , I or J’)

*Comment* : Small-moderate-sized fragments, most fairly fresh, one burnt.

**Likely date : If not residual – between c.1700-1850 AD probably**

**Context: 1034** - 3 sherds (weight : 14gms)

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1 PM Surrey-Hampshire Border Ware (c.1600/1650-1700 AD probable emphasis)

1 PM Kentish red earthenware (c.1675/1700-1750 AD emphasis)

1 PM-LPM Staffordshire-type white stoneware (thin-walled cup, c.1725-1780 AD)

**and :**

1 fragment PM vessel glass (weight : >1gm) – small, dark brown, medium-diameter vessel – C17 AD probably

*Comment :* Earliest elements are small and slightly chipped, the stoneware cup fragment too slender to survive for long in a frequently re-deposited or heavily disturbed environment. The dating applied takes into account its latest acquisition-date and a period of usage.

**Likely date : c.1775-1825 AD probably**

**Context: 1041** - 9 sherds (weight : 91gms)

2 PM Kentish earthenware (marly buff fabric, ? Wealden-type, c.1675-1725/1750 AD; **same vessel, possibly burnt**)

4 PM Kentish earthenware (pink fabric, ? Wealden-type, iron streaked glaze, c.1675-1725/1750 AD; **3 same vessel**)

3 PM-LPM claypipes (stems, narrow bore, c.1680-1820 AD range probably)

*Comment :* Small-moderate-sized sherds – all chipped, with partial glaze flaking and loss from the edges of moulded features post-discard. Both vessels form part of an original same-time discard deposit but were allowed to weather before final seal. Should be residual in-context.

**Likely date : c.1750-1800 AD probably - but could be later**

**Context: 1064** - 4 sherds (weight : 25gms)

1 PM claypipe (stem, medium bore, c.1640-1710 AD)

1 PM Kentish red earthenware (c.1675/1700-1750 AD emphasis)

1 LPM Creamware (tea-pot, 'Whieldon'-type colour-glazed, c.1740-1780 AD)

1 LPM Wedgwood-style 'Black Basaltes' ware (glazed, c.1830-1900/2000 AD emphasis)

*Comment :* The earliest entry is moderate-sized, chipped and scarred but not seriously worn. The two later pieces are small but not obviously damaged or worn as sherd elements. The applied dating allows for the survival of the 'Whieldon' tea-pot as a cared-for item.

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**Likely date : c.1850-1875 AD - probably**

**Context: 1067** - 5 sherds (weight : 99gms)

5 PM pink-red ? Wealden-type earthenware (2-handled (horizontal) jar, c.1625-1675/1700 AD; **same vessel**)

*Comment* : Conjoining moderate-sized sherds, slightly chipped with a lustrous decayed glaze internally, little worn and from an undisturbed contemporary discard deposit.

**Likely date : c.1700-1750 AD or slightly earlier**

**Context: 1071** - 1 sherd (weight : 18gms)

1 LPM Staffs/Derby Yellow Ware (white internal slip, moulded external decoration, c.1825/1850-1900 AD)

*Comment* : Moderate-sized sherd, slightly chipped – need not be seriously residual

**Likely date : c.1850-1900 AD or slightly later probably**

**Context: 1093** - 13 sherds (weight : 58gms)

4 PM claypipes (stems, medium-large bore, c.1640-1680 AD range)

2 PM English tin-glazed earthenware (blue-painted, 1 x Hispano-Moresque-style, c.1600/1650-1700 AD emphasis)

3 PM Kentish red earthenware (c.1650-1700/1725 AD emphasis; **2 same vessel**)

4 PM claypipes (1 spur junction, 3 stems, thin bore, c.1680-1710/1770 AD emphasis probably)

**and :**

1 fragment LM-PM brick (weight : 21gms) – 1 small, worn and sub-rounded, soft orange-brown, chalk-flecked, LC16-MC17 AD

1 fragment PM brick (weight : 86gms) – moderate-sized, angular fracture surfaces, one part-face remnant, dark red-brown marly fabric – MC16-C17 AD

1 fragment PM roof-tile (weight : 21gms) – fairly small, flaked and fairly worn, marly pink Wealden-type, MC16-C17 AD

*Comment* : The early worn brick fragment is definitely residual in context – as may, to a lesser degree be the remaining building elements. The tin-glazed fragments are small and chipped and may also be slightly residual compared to the 2 conjoining earthenware sherds.



The latter are moderate-sized and only slightly damaged.

**Likely date : c.1700-1750 AD - or slightly later**

**Context: 1101** - 6 sherds (weight : 187gms)

1 PM Kentish red earthenware (c.1650-1750 AD range probably)

5 PM-LPM Staffordshire-type white stoneware (bowl, 1 scallop-edged plate, chevron & escutcheoned dot and diaper pattern, c.1725-1780 AD; **same vessel**)

*Comment* : Five moderate-sized sherds and one large. Some of the plate sherds conjoin. The earthenware fragment is from a small unglazed tub-form and is chipped and has moderate edge-wear – and should be residual in-context. The Staffordshire plate and bowl fragments are entirely unchipped and fresh – and should be from an undisturbed contemporary discard deposit. The date-range allows for late acquisition and a period of use before discard.

**Likely date : c.1750-1800 AD or slightly later**

**Context: 1107** - 21 sherds (weight : 87gms)

1 PM Surrey-Hampshire Border Ware (green-glazed, c.1575/1600-1650 AD emphasis probably)

1 PM Kentish red earthenware (c.1625/1650-1700 AD emphasis)

1 PM Surrey-Hampshire Border Ware (plate, apple-green glaze, c.1625/1650-1700 AD emphasis)

1 PM Kentish reduced-surface red earthenware (marly, ? Wealden-type, c.1650-1700/1725 AD probable emphasis)

1 PM Kentish reduced-surface buff-orange earthenware (marly, ? Wealden-type, c.1650-1700/1725 AD probable emphasis)

11 PM claypipes (stems, medium bore, c.1660-1710 AD)

3 PM Kentish red earthenware (1 x mug, c.1675/1700-1750 AD)

2 PM>LPM claypipes (stems, thin bore, c.1680-1820 AD range)

**and :**

2 fragments ridge-tile (weight : 43gms) – 1 small, 1 moderate-sized, fairly fresh angular fracture edges, orange-red fairly sandy fabric – MC16-C17 AD

1 fragment roof-tile (weight : 26gms) – moderate-sized, chipped and slightly worn, pink-red

marly Wealden-type fabric, MC16-C17 AD

*Comment* : Two earliest elements are small and more worn than the mid-seventeenth century-plus fragments. These, despite being small are basically fairly fresh and should all be from a contemporary discard deposit or horizon.

**Likely date : c.1750-1800 AD or slightly earlier**

**Context: 1110** - 19 sherds (weight : 186gms)

2 PM Kentish red earthenware (c.1625-1675/1700 AD emphasis)

1 PM Kentish reduced-surface earthenware (c.1625-1675/1700 AD)

1 PM claypipe (stem, medium bore, c.1660-1710 AD)

2 PM Kentish red earthenware (c.1675/1700-1750 AD)

3 PM English tin-glazed earthenware (blue-tinted, c.1675/1700-1750 AD)

10 PM>LPM claypipes (9 stems, 1 foot, small bore, c.1680-1770 AD range, makers mark 'IH' n foot)

**and :**

1 fragment PM vessel glass (weight : 3gms) – small, dark glass, covered in lustrous decay patina – broadly C17 AD probably

1 fragment PM ridge-tile (weight : 40gms) – moderate-sized, chipped and worn, cream-buff marly Wealden-type fabric – MC16-C17 AD

*Comment* : Both the latest-dated ware types are heavily worn and chipped – and are residual in-context. However, despite glaze-loss, the sherd breaks of the soft-fabriced tin-glazed earthenwares are barely worn and the degree of residuality not necessarily severe.

**Likely date : c.1750-1800 AD - possibly slightly later**

**Context: 1113** - 6 sherds (weight : 9gms)

3 LP flint-tempered ware (slight preference for LBA>MIA, c.1550/1150-200 BC emphasis probably; **2 same vessel**)

1 PM claypipe (stem, medium bore, c.1640-1710 AD range)

2 PM-LPM claypipes (stems, narrow bore, c.1680-1820 AD range probably)

**and :**

1 fragment LP daub (weight : 4gms) – small, sub-rounded

1 fragment PM brick/tile (weight : 4gms) – small, worn but angular fracture edges – MC16-

C17 AD probably

*Comment* : The sherds are small. One has fairly heavy unifacial wear, otherwise, as with the 2 small conjoining elements, is only moderately worn and, in-context, is unlikely either to be severely residual or – if latter – has not travelled far/received any serious damage during re-deposition. If claypipes not intrusive – these date the context

**Likely date : Broadly later C17-MC 19 AD**

**Context: 1116** - 20 sherds (weight : 210gms)

1 EM-M North Kent shell-tempered ware (c.1175-1250 AD range)

1 PM Spanish Seville-type olive jar (c.1575-1650/1675 AD emphasis probably)

1 PM Surrey-Hampshire Border Ware (pipkin, light green-glaze, c.1575/1600-1650 AD)

1 PM Kentish red earthenware (dish, 1625-1675/1700 AD emphasis)

4 PM clay pipes (3 stems, 1 foot, medium bore, c.1660-1680 AD – no maker's mark)

1 PM English tin-glazed earthenware (no glaze, smooth even fairly hard fabric, c.1675-1750 AD range probably)

1 PM German/London stoneware (c.1675-1750/1775 AD)

1 PM Kentish red earthenware (c.1675/1700-1750 AD emphasis)

7 PM claypipes (all stems, small bore, c.1680-1710 AD)

1 PM-LPM London stoneware (tankard, c.1700-1800/1825 AD emphasis)

1 LPM Notts/Derby stoneware (buff with iron slip, coppery lusted glaze, c.1750-1850 AD probable range)

**and :**

1 fragment PM window glass (weight : 2gms) – small, chipped, heavily patina-ed, flat – C17 AD probably

1 fragment PM ridge-tile (weight : 46gms) – moderate-sized, only slightly worn, hard-fired pink marly Wealden-type fabric – C17-earlier C18 AD probably

*Comment* : Small-fairly large elements – larger elements tend to be the earliest, but are mostly more worn or chipped.

**Likely date : Slightly uncertain – but probably c.1800-1850 AD**

**Context : 1120** – 7 sherds (weight : 17gms)

1 PM claypipe (stem, fairly large bore, c.1640-1680 AD)

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2 PM claypipes (stems, medium bore, c.1660-1710 AD)

4 PM>LPM claypipes (stems, thin bore, c.1660-1820 AD range)

*Comment* : Claypipes only, small-medium-sized fragments – single earliest element slightly more worn than remainder, which are all near-fresh. Dating based on this aspect.

**Likely date : c.1700-1750 AD or slightly later probably**

**Context: 1121** - 1 sherd (weight : 4gms)

1 PM Surrey-Hampshire Border Ware (bowl, yellow internal glaze, c.1550/1600-1700 AD emphasis)

*Comment* : Small bodysherd, chipped and worn.

**Likely date : Residual – probably in a later C18-C19 AD context**

**Context : 1132** – 1 sherd (weight : 4gms)

1 PM claypipe (stem, medium bore, c.1640-1710 AD range)

*Comment* : Claypipe fragment fairly large, stained and slightly chipped

**Likely date : Probably residual in a later C18-C19 AD context**

**Context: 1135** - 11 sherd (weight : 48gms)

1 PM Kentish red earthenware (c.1575-1625/1650 AD)

11 PM claypipes (9 stems, 1 bowl fragment, 1 complete bowl, plain foot, under-rim incised lines, medium bore, c.1680-1710 AD)

2 PM claypipes (stems, thin bore, c.1680-1710 AD probably)

*Comment* : Small chipped and worn jar base sherd, very drab matt brown glaze. The complete claypipe bowl and associated stems are all near-fresh – and unlikely to be seriously residual.

**Likely date : c.1700-1750 AD probably**

**Context: 1145** - 19 sherds (weight : 374gms)

1 PM Kentish red earthenware (c.1625-1675/1700 AD emphasis)

1 PM claypipe (stem, medium bore, c.1640-1710 AD)

1 PM-LPM Chinese porcelain (underglaze blue painting, c.1725/1750-1800 AD emphasis probably)

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- 3 LPM claypipes (narrow bore, 2 x moulded lips c.1770-1910 AD range)
- 1 LPM Pearl Ware (pale blue transfer-printing, c.1780-1825 AD)
- 1 LPM S.Yorks/Midlands redware (white internal slip, c.1775-1900/1925 AD emphasis)
- 1 LPM English stoneware (iron-slip, c.1800-1850/1875 AD emphasis)
- 4 LPM Staffs-type white earthenware (3 blue, 1 brown transfer-printed, c.1825/1850-1875 AD for most)
- 2 LPM English vitreous-glazed stoneware (c.1800/1850-1940 AD probable emphasis)
- 1 LPM red earthenware (flower-pot type, c.1825-1875 AD range probably)
- 1 LPM white earthenware (c.1850-1900 AD or later)
- 1 LPM-MOD Later Staffs.colour-bodied earthenware (blue, c.1875/1900-1940 AD range)

*Comment* : Mostly fairly small-fairly large-sized, earliest elements more worn than latest. The late stonewares and flower-pot are in reasonably unworn condition. The Later Staffordshire colour-bodied fragment is unlikely to be intrusive.

**Likely date : c.1900 AD-plus**

**Context: 1154** - 1 sherd (weight : 54gms)

- 1 LPM Midlands/NE.England black iron-glazed red earthenware (c.1775-1850/1900 AD emphasis)

*Comment* : Moderate-sized jar base sherd, slightly chipped with slight edge-wear. Need not be seriously residual. Quality of the glaze suggests a relatively early product.

**Likely date : Possibly c.1800-1850 AD**

**Context: 1185** - 18 sherds (weight : 142gms)

- 1 PM claypipe (stem, medium bore, c.1660-1710 AD)
- 1 LPM Creamware (c.1740-1780 AD)
- 1 LPM English porcelain (blue transfer-printing, c.1740-1800/1825 AD emphasis probably)
- 4 LPM claypipes (2 stem, 1 bowl, spurred foot, narrow bore, c.1770-1820 AD, moulded curvilinear rib decoration on bowl body, moulded leaf-friezes either side of mould join (front and back) with 'O' maker's mark on either side of spur)
- 1 LPM claypipe (bowl, thin bore, **broadly** c.1770-1820 AD or slightly later) moulded curvilinear decoration of hollow volutes above band raised ribs both sides of bowl above a moulded leaf spray on remnant stub foot)

1 LPM Later Creamware (c.1775-1825 AD)

2 LPM Modern English stoneware (blacking bottles, c.1800-1850/1900 AD emphasis)

2 LPM white earthenware (1 moulded, 1 plain, c.1800/1825-1900 AD emphasis)

2 LPM Staffs-type white earthenware (black transfer-printing, c.1825/1850-1875 AD)

1 LPM white earthenware (maroon-red machine-painted highlighting, c.1875-1900 AD-plus probably)

1 LPM-MOD claypipe (bowl, extra narrow bore, curved spur foot, rounded short body, c.1850-1910 AD *probably*; multi-unit stamp – **indecipherable line above round-ended cartouche containing 'J.R.' above 'MAKER'**)

1 LPM>MOD Later Staffs colour-bodied earthenware (cream-buff, blue colour-banding, copper lustred, c.1875/1900-?1940 AD)

**and :**

1 fragment galvanized wire (weight : 1gm) – 4mm thick, existing length 3.2 cms.

*Comment :* The Creamware fragment is small and highly battered and definitely residual in-context. The Later Creamware sherd is a very large (half-plate) element is also chipped but not as severely. Its condition and size are in keeping with the presence of the smaller stoneware and white earthenware fragments of approximately mid-nineteenth century date but is somewhat anachronistic compared with the presence of the latest ceramic elements (including the late-style but used claypipe) and the wire. The latter *may* be intrusive.

**Likely date : Slightly uncertain – c.1850-1900 AD - or later**

The pottery analysis has addressed the specific research aims of **Prehistoric, Anglo Saxon and Early Medieval, Late Medieval and Early Post Medieval, Post Medieval Military Activity 1, 2, 4 and 5 (Hawkins 2011: 15-16)**. Additional work on selected samples of interesting pot and including photographs will take an extra three days.

**Analyst :** N.Macpherson-Grant 28.10.2013 (up-dated -11.2014)

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## APPENDIX 6. AMHERST HILL, CHATHAM, KENT (FAC-EX-13): ARCHAEOBOTANICAL ASSESSMENT

by Lisa Gray MSc MA AlFA

### 1. Introduction

This report assesses the significance and potential of plant macrofossils in eight environmental samples (see table 1) out of 16 taken during excavations of land at Amherst Hill, Chatham, Kent by SWAT Archaeology in 2013. Samples not processed are from contexts 1157, 1153, 1150, 1012, 1043, 1044, 1050, 1051, and 1114. An archaeological field evaluation was carried out at this site in 2006 by Canterbury Archaeological Trust and no environmental samples were taken during this excavation that found a Roman or Anglo-Saxon inhumation burial and features associated with the 18<sup>th</sup> century Fort Amherst barracks and gardens (Ben Found 2006, 2).

The samples presented for assessment came from the 2013 excavation were from pits. Only one sample has been dated at the time of writing (Grant 2013).

Table 1: Sample Details

| Sample | Context | Sample Size (L) | Flot size (ml) | Provisional Interpretation              | Provisional Date |
|--------|---------|-----------------|----------------|---|------------------|
| 1      | 1023    | 22              | 200            | Cess pit [1024]                         | undated          |
| 2      | 1142    | 2               | 200            | Tent Base Pit (deposit of fuel) [1137]  | undated          |
| 3      | 1143    | 1               | 10             | Dug Out [1094] ([1044] on context sheet | undated          |
| 4      | 1149    | 76              | 800            | Cess Pit [1148]                         | undated          |
| 5      | 1140    | 60              | 500            | Cess Pit [1139]                         | undated          |
| 6      | 1154    | 66              | 200            | Cess Pit [1155]                         | c1800-185AD      |
| 7      | 1160    | 56              | 800            | Large Cess Pit -lower fill 1161[1161]   | undated          |
| 8      | 1159    | 72              | 400            | Large Cess Pit – upper fill [1161]      | undated          |

### 2. Methodology

Sampling was carried out by SWAT and processing was carried out by author using a Siraf type recycling flotation tank, based at the SWAT offices in Faversham, Kent. A 1mm mesh to collect the residue and a 250 micron mesh to collect the flot. No sub-sampling was under

taken and each sample was completely processed.

The flots were dried and examined by the author using a binocular stereo-microscope with magnifications of between 10 and 40 times. The coarse fraction 'residues' were also scanned at this time and the abundance, diversity and quality of preservation of the plant macrofossils were recorded.

### 3. Results

The samples were not very archaeobotanically productive and produced botanical and faunal evidence reflecting disturbed, aerobic preservation conditions and chalky soil. All flots, apart from sample 7, contained abundant uncharred rootlet fragments. Samples 4 and 6 contained low numbers of uncharred seeds of *Rubus fruticosus*, *Chenopodium album* and *Mercurialis perennis*. These samples also contained abundant root/rhizome fragments and moderate quantities of terrestrial snails. These items indicate that stratigraphic movement by bioturbation is likely so these seeds have been interpreted as intrusive and probably modern. These aerobic,alkaline conditions favour the preservation of charred and mineral-replaced plant macrofossils ( English Heritage 2011,6). Only charred plant macrofossils were found in these samples.

Identifiable charred plant remains were scarce. Well-preserved grains of free-threshing type wheat, *Triticum aestivum* were found in sample 2, tent base pit [ 1137] fuel deposit (1142). This fill also contained occasional roundwood charcoal fragments in the flot and uncharred tooth and three iron nail fragments in the residue. Identifiable charcoal was also present in low numbers in sample 1 (cesspit [1024]).

No other floral remains were present other than microscopic charcoal flecks and very unclear possibly distorted fragments of charred grain tissue in samples 1 and 5.

Fragments of clinker and coal were found in the flots of samples 1,2,3,5,7 and 8. Three iron nails were found in the residue of sample 3. Terrestrial mollusca were present, in low to moderate quantities and low diversity in the flots of samples 1,2,4,5,6,7 and 8.

**Table2: Plant Remains in the Samples**

| Sample | charred |   |   |       |   |   |       |   |   |      |   |   |       |   |   | mineralised |   |   |        |   |   |       |   |   | waterlogged |   |   |        |   |   |       |   |   | Significant taxa |   |                              |  |   |   |   |   |   |  |
|--------|---------|---|---|-------|---|---|-------|---|---|------|---|---|-------|---|---|-------------|---|---|--------|---|---|-------|---|---|-------------|---|---|--------|---|---|-------|---|---|------------------|---|------------------------------|--|---|---|---|---|---|--|
|        | grains  |   |   | chaff |   |   | seeds |   |   | wood |   |   | other |   |   | seeds       |   |   | grains |   |   | other |   |   | seeds       |   |   | grains |   |   | other |   |   |                  |   |                              |  |   |   |   |   |   |  |
|        | a       | d | p | a     | d | p | a     | d | p | a    | d | p | a     | d | p | a           | d | p | a      | d | p | a     | d | p | a           | d | p | a      | d | p | a     | d | p | a                | d | p                            | a  | d | p | a | d | p |  |
| 1      | -       | - | - | -     | - | - | -     | - | - | -    | - | - | 1     | 1 | 1 | 1           | 1 | 1 | -      | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | -                | - | -                            | Possibly very degraded grain                           |   |   |   |   |   |  |
| 2      | -       | - | - | 1     | 1 | 3 | -     | - | - | -    | - | - | 3     | 1 | 3 | -           | - | - | -      | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | 1                | 1 | 3                            | <i>Triticum aestivum</i> grains, identifiable charcoal |   |   |   |   |   |  |
| 3      | -       | - | - | -     | - | - | -     | - | - | -    | - | - | 2     | 1 | 3 | -           | - | - | -      | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | -                | - | -                            | Identifiable charcoal                                  |   |   |   |   |   |  |
| 4      | -       | - | - | -     | - | - | -     | - | - | -    | - | - | 1     | 1 | 1 | -           | - | - | -      | - | - | -     | - | - | -           | - | 1 | 1      | 3 | - | -     | - | - | -                | - | -                            | uncharred(modern?) seeds                               |   |   |   |   |   |  |
| 5      | -       | - | - | -     | - | - | -     | - | - | -    | - | - | -     | - | 1 | 1           | 1 | - | -      | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | -                | - | Possibly very degraded grain |  |   |   |   |   |   |  |
| 6      | -       | - | - | -     | - | - | -     | - | - | -    | - | - | 1     | 1 | 1 | -           | - | - | -      | - | - | -     | - | - | -           | - | 1 | 1      | 3 | - | -     | - | - | -                | - | -                            | Uncharred (modern?) seeds                              |   |   |   |   |   |  |
| 7      | -       | - | - | -     | - | - | -     | - | - | -    | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | -                | - | -                            | Nothing other than rootlets                            |   |   |   |   |   |  |
| 8      | -       | - | - | -     | - | - | -     | - | - | -    | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | -           | - | - | -      | - | - | -     | - | - | -                | - | -                            | Nothing other than rootlets                            |   |   |   |   |   |  |

Key: a = abundance [1=occasional1-10,2=moderate 11-100 and 3= abundant>100; d = diversity[1=low1-4 taxa types, 2=moderate5-10,3= high; p = preservation [1 = poor (family level only), 2= moderate (genus), 3= good (species identification possible)

#### 4. Discussion

The following objectives relevant to archaeobotanical remains were written in the WSI (Hawkins 2011, 14)

- **What is the environmental background to the site in the late Prehistoric and Roman periods: Is there evidence of change over time?**
- **What environmental and/or climatic factors influenced the development of the Medway Valley in the post-Roman era.**

At the time of writing none of the samples have been dated to these periods and the poor preservation of plant macrofossils and evidence of bioturbation means that it is unlikely that these assemblages have anything to add to knowledge about the environment at any stage of occupation at the site.

Only one sample contained identifiable non-wood plant remains and these grains were not accompanied by chaff so identification will have to be made on grains alone. There was no difference in the botanical contents of the upper and lower fills of cesspit [1161].

The low number of charred grains and charcoal in these samples have the potential to be identified and used for radiocarbon dating. The significance of the grains is based on how securely they can be dated.

## 5. Recommendations

The flots will be kept in the author's archive until requested back by SWAT. The residues are currently archived at SWAT Archaeology.

Full identification and counts of the plant remains in sample 2 and if the charcoal in samples 2 and 3 will be useful to add to the environmental record of this area. However, this will only be of value if they can be securely assigned to dated deposits.

Time estimates of further analysis if carried out by the author:

Identification and writing of report and tables for plant macrofossils in sample 2 – ½

Identification and writing of report and tables for charcoal fragments in sample 2 and 3 – 1 day.

Processing the remainder of the samples- 2 days.

TOTAL – 4 days

## 6. Acknowledgements

Thanks are due to Dr Paul Wilkinson (SWAT Archaeology) for provision of background information.

## 7. References

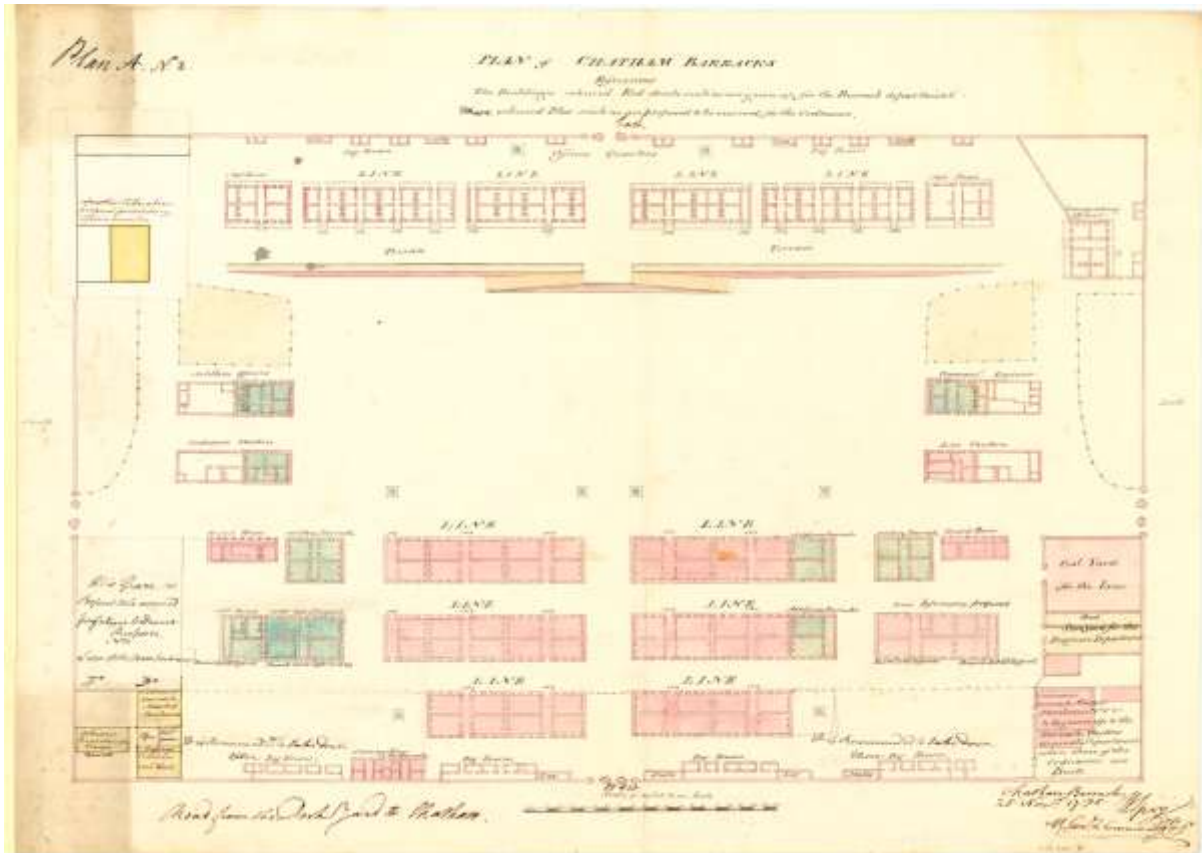
MacPherson-Grant, 2013. *The Dating and Assessment of the Ceramic Assemblage from Fort Amherst Excavation 2013 (FAC-EX-13)*. Undated Archive Report for Kent Archaeological Field School

English Heritage 2011. *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)* English Heritage

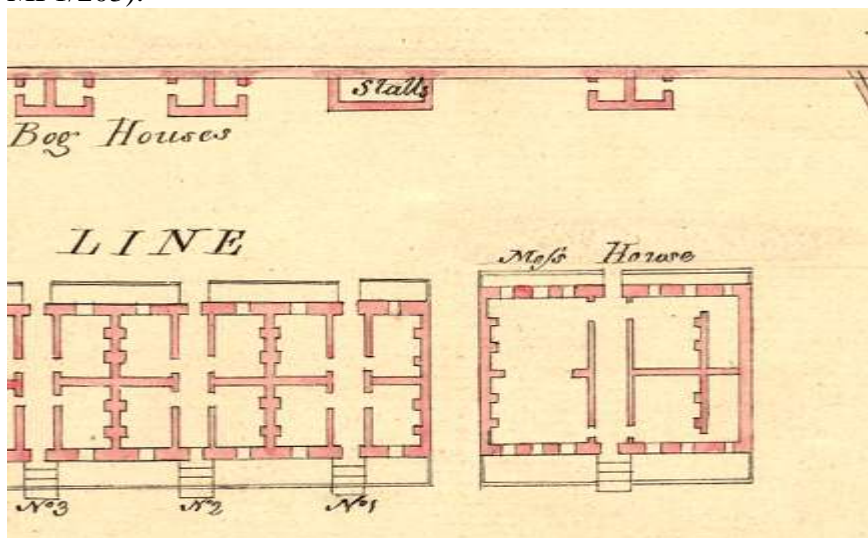
Found, B 2006. *Amherst Hill, Chatham, Kent: Archaeological Evaluation Report*. Unpublished Archive Report for for Canterbury Archaeological Trust, 2321.

Hawkins, D 2011. *Written Scheme of Investigation for An Archaeological Excavation, Post Excavation and Publication Exercise. Land at Amherst Hill, Chatham, Kent*. Unpublished Archive Report for CGMS Consulting.

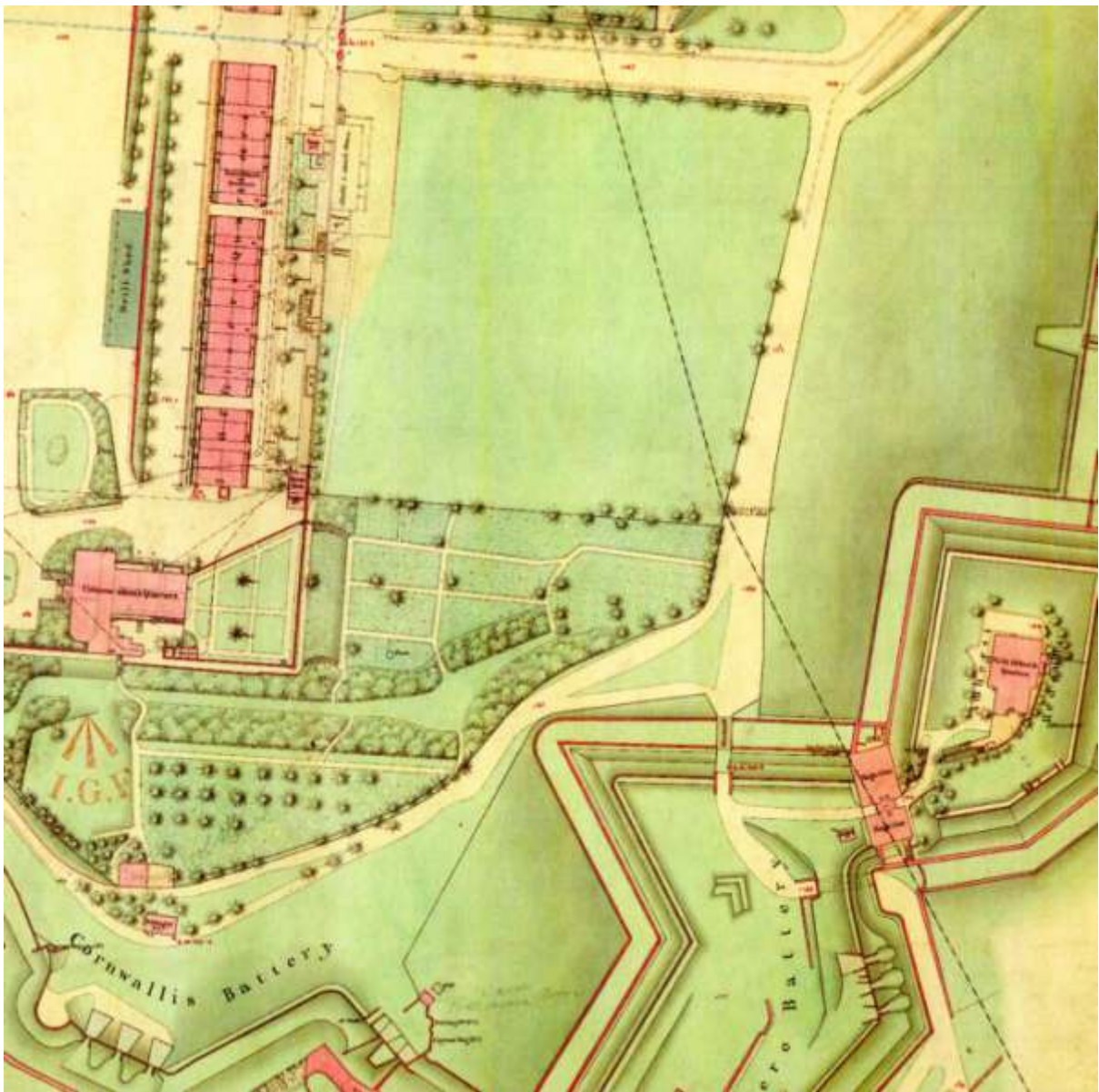
Appendix 7: Maps, plans and aerial photographs



**Map 1.** Chatham Infantry Barracks as depicted in 1795 with the green coloured buildings for the Ordnance Board troops, and the buildings coloured pink for the infantry regiments (TNA MP1/203).

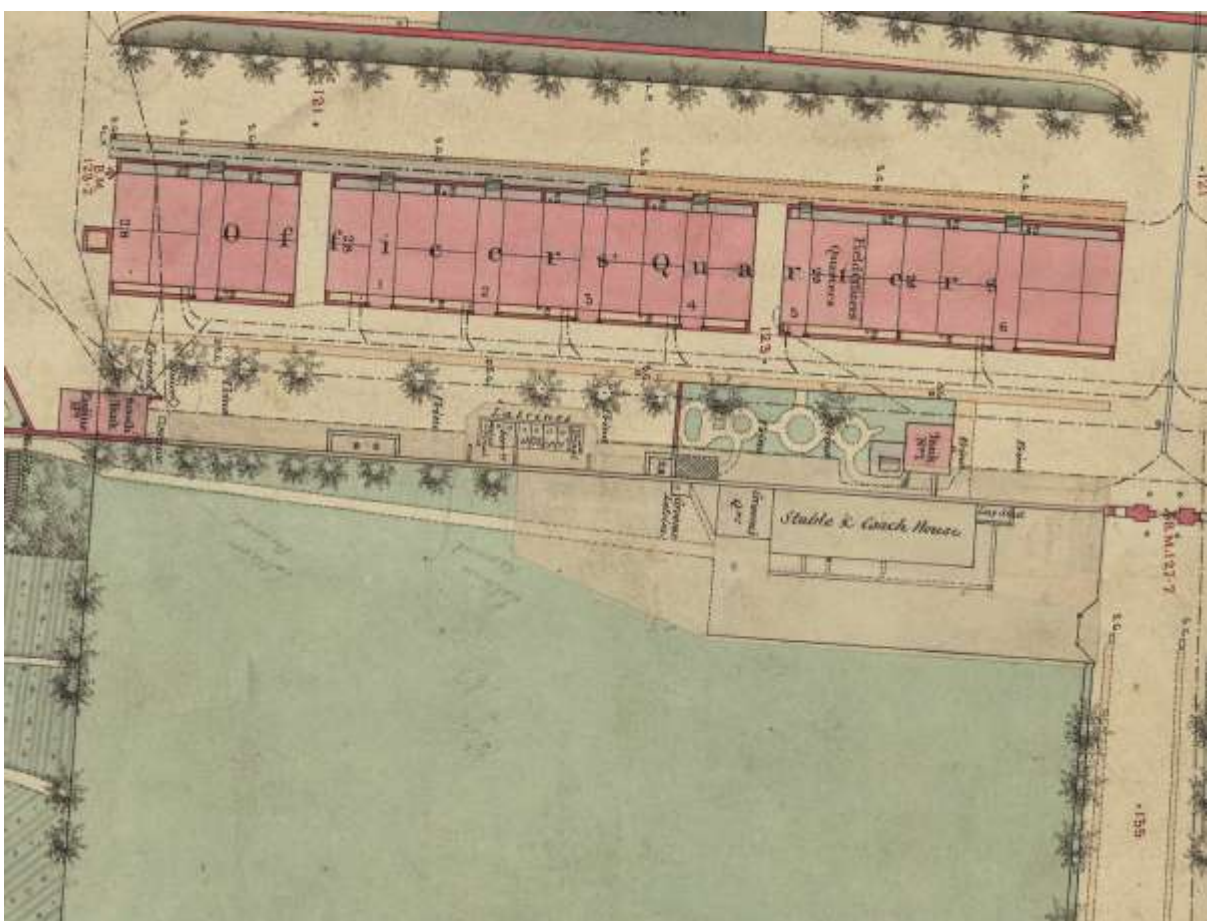


**Map 2.** Detail of 1795 map showing the recently excavated and recorded Mess House and No. 1. Officers' Quarters.

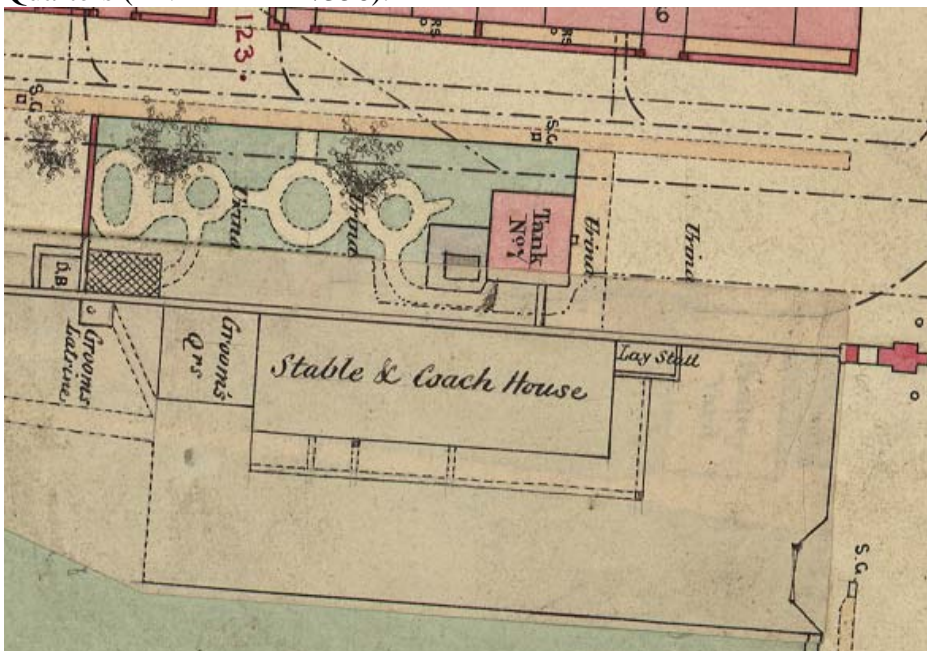


**Map 3.** The 1864 plan of the Chatham infantry barracks (TNA MPH1/356).





**Map 4.** Detail of the 1864 plan of the Chatham infantry barracks showing the Officers Quarters (TNA MPH1/356).



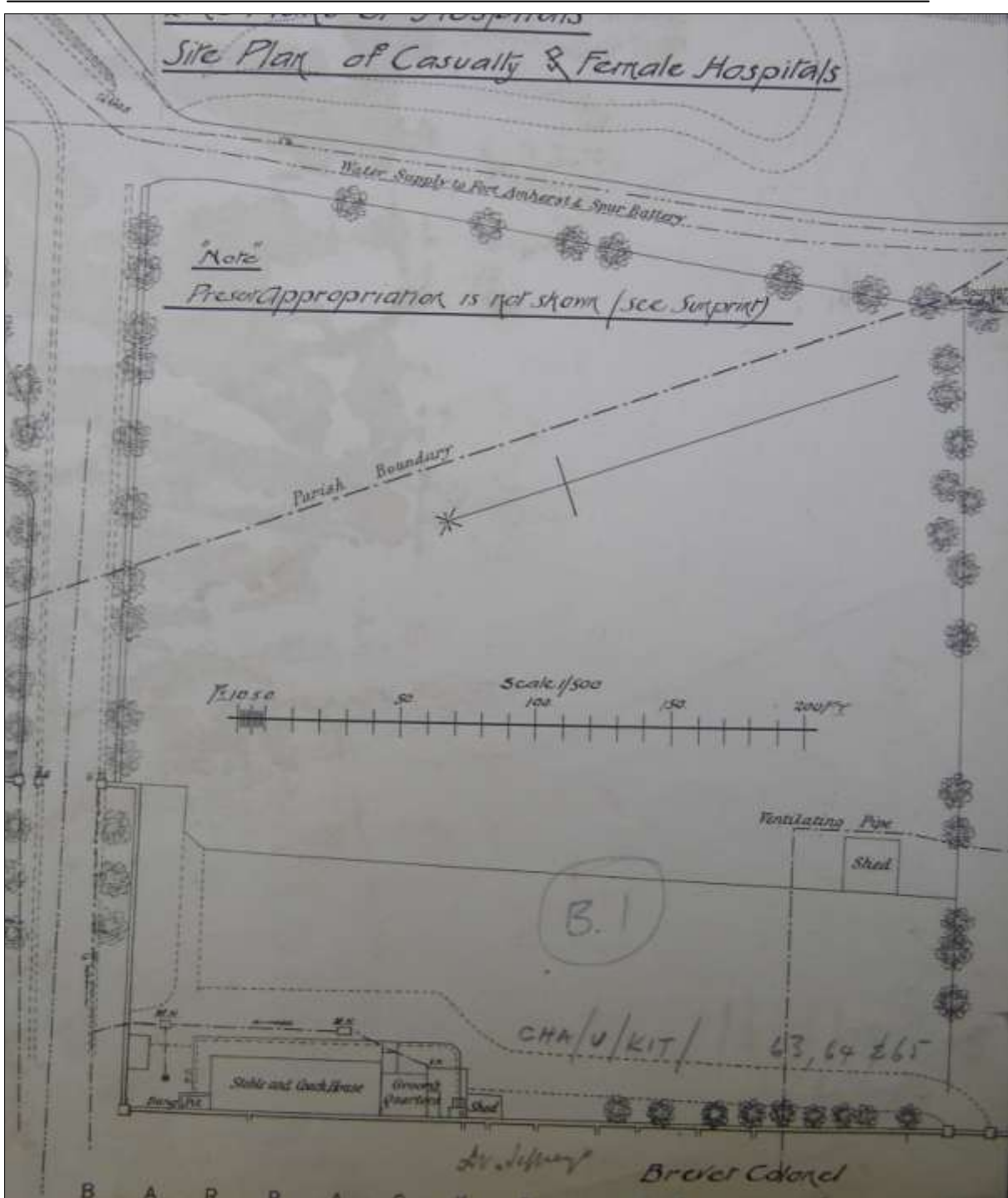
**Map 5.** Detail of the 1864 plan of the Chatham infantry barracks showing the Stables and Coach House (TNA MPH1/356).



**Map 6.** The OS 1866 map showing the area of development.

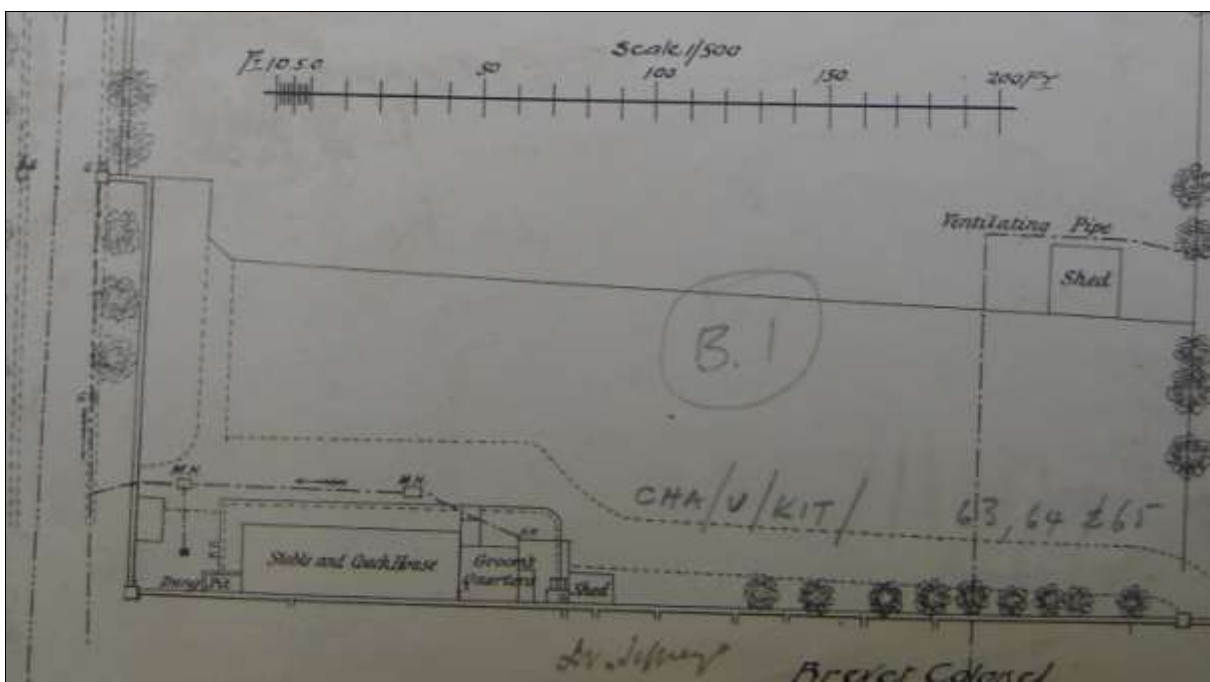


**Map 7.** The OS 1866 map shows in some detail the Commandant's Quarters, gardens and Officers' Quarters.

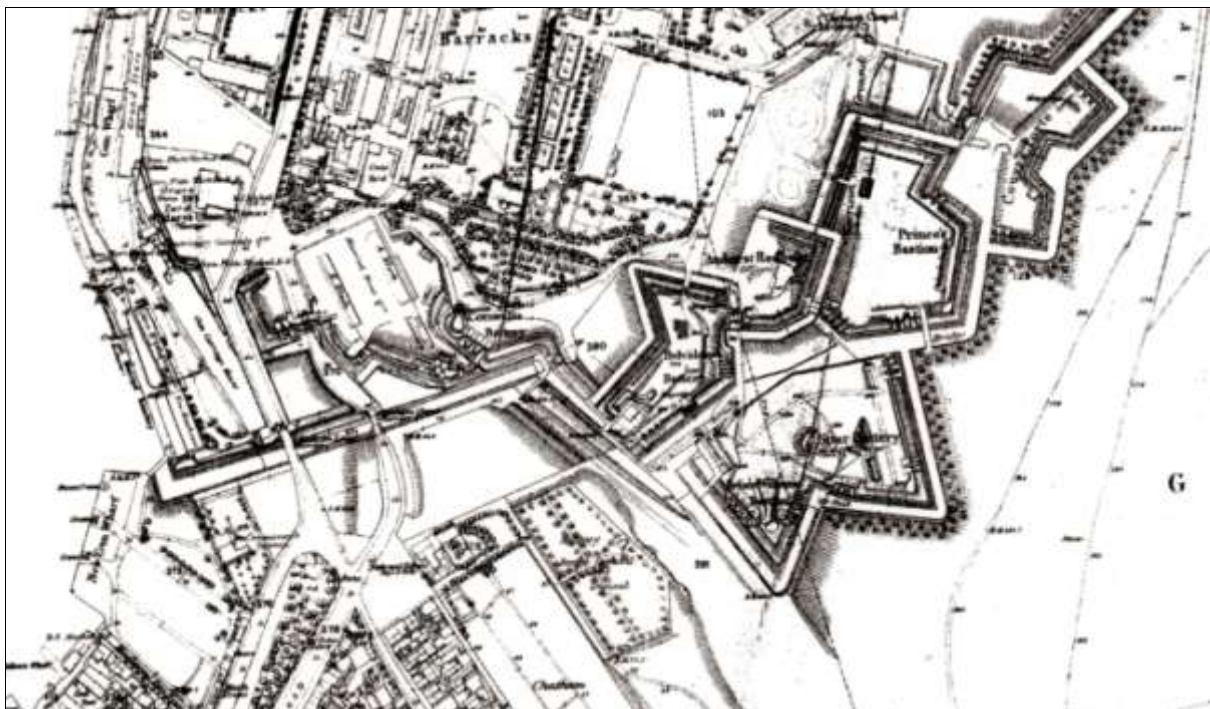


Map 8. Map of 1872 showing details of the Stables and Grooms' Quarters, and the 'Shed'.

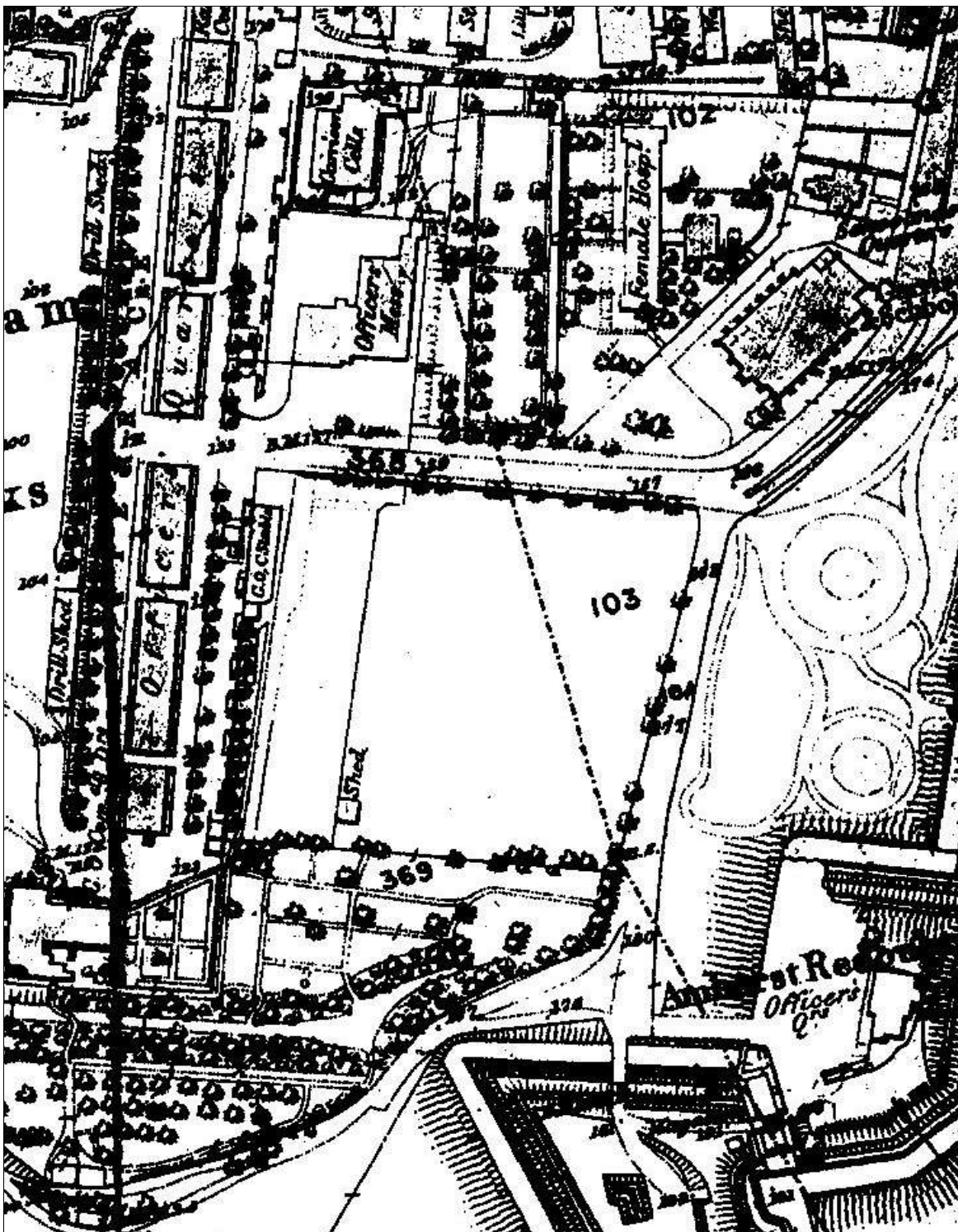




**Map 9.** Detail of Map 8 (1872) showing, the 'Shed' and the gravel road running on the east side of the stables.

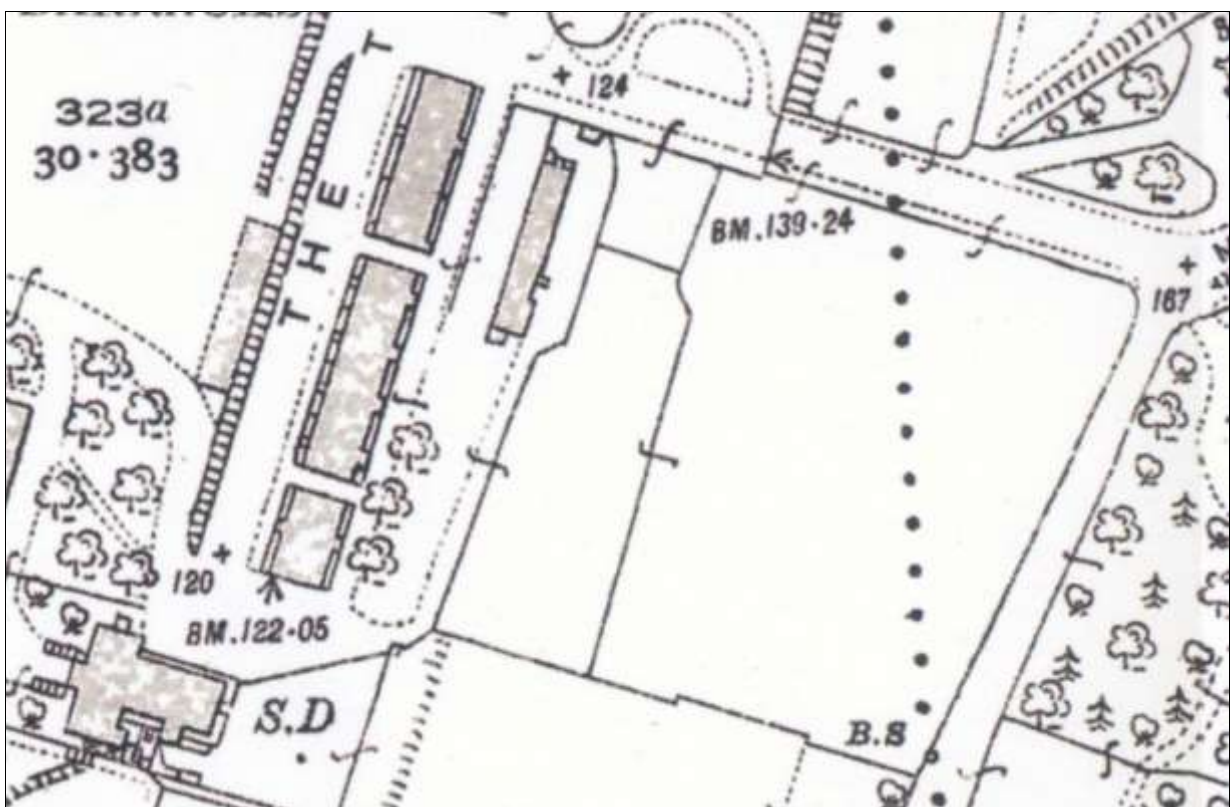


**Map 10.** OS map of 1879.



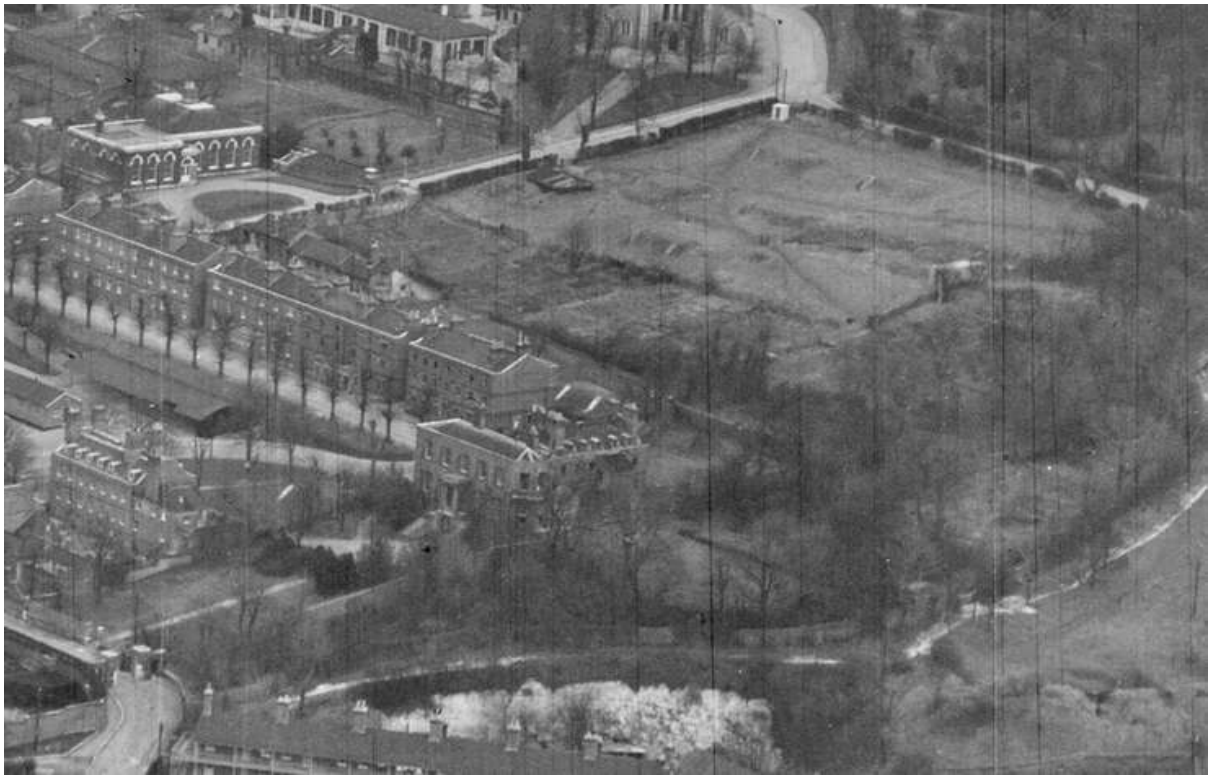
Map 11. Detail of Map 10 (1879) showing the area of investigation.





**Map 12.** OS map of 1932 (above) shows the Offices' Coach House and Grooms' Quarters.  
**Map 13.** OS map of 1955 (below) shows areas of market gardening.





**AP1.** Taken in 1948 (above) EH TQ7568/304/02/1948), and **AP2** (below) also taken in 1948.







**AP 3** taken in 1936 shows the Mess House and adjacent Officers' Quarters. In front of these buildings the Officers' Stables can be seen including the gravel road revealed in the excavations. In front are market garden plots.



**AP 4** Google Earth, taken on 7/9/2013. Eye elevation 44m. It shows the ongoing archaeological investigation by SWAT Archaeology.



168400

168400

575900

576000

576100

576200

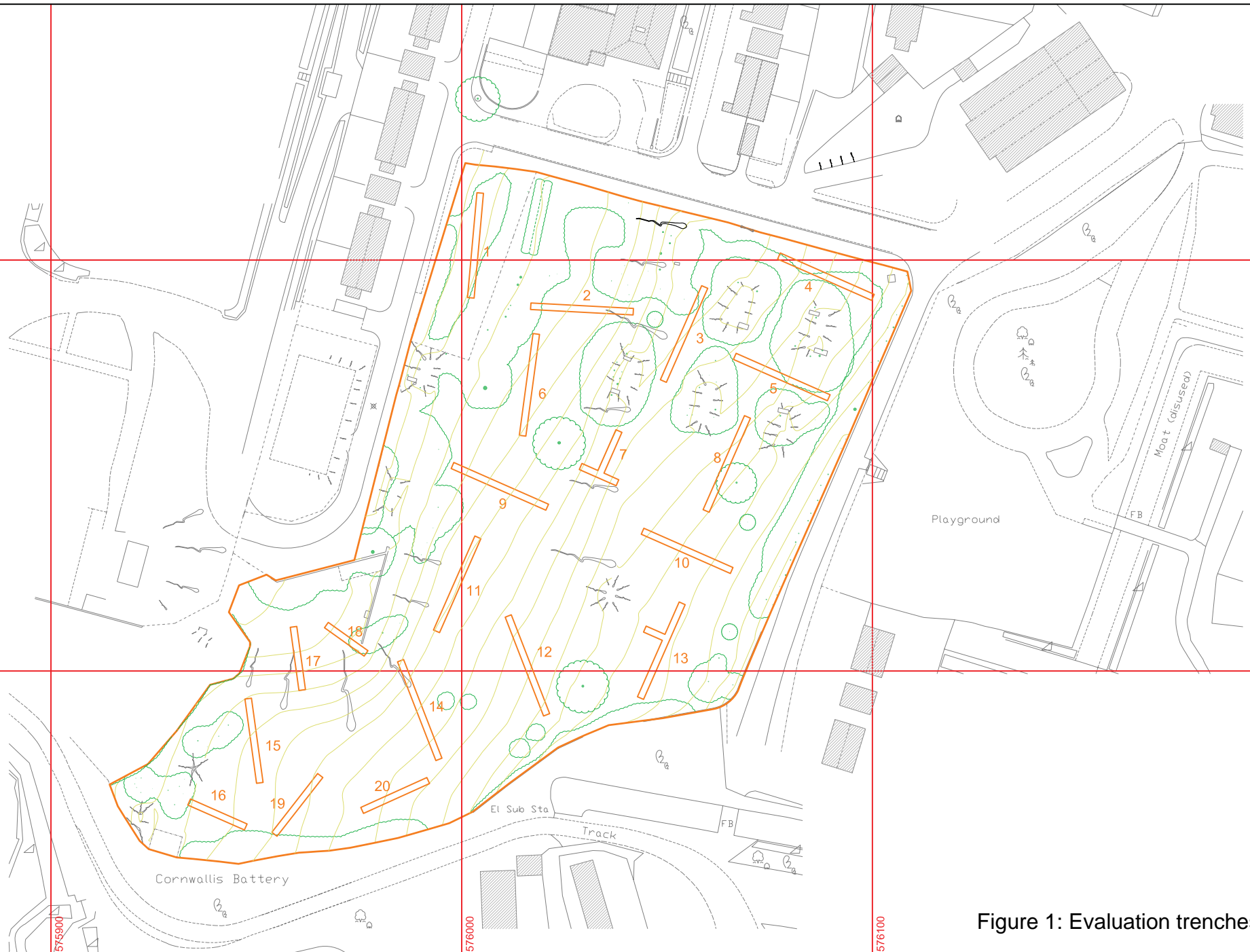


Figure 1: Evaluation trenches

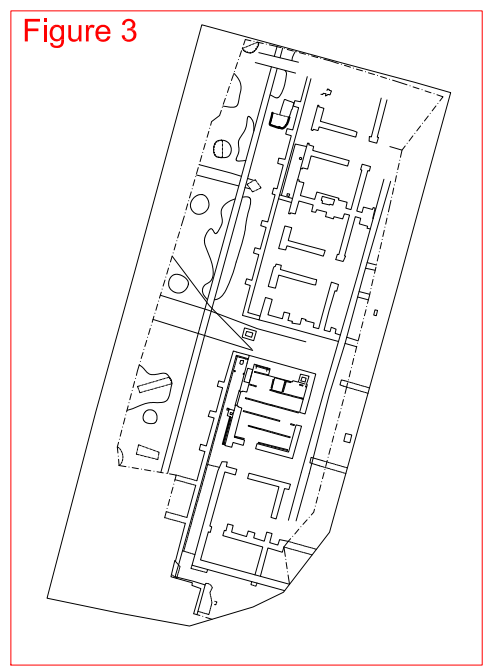


Figure 3

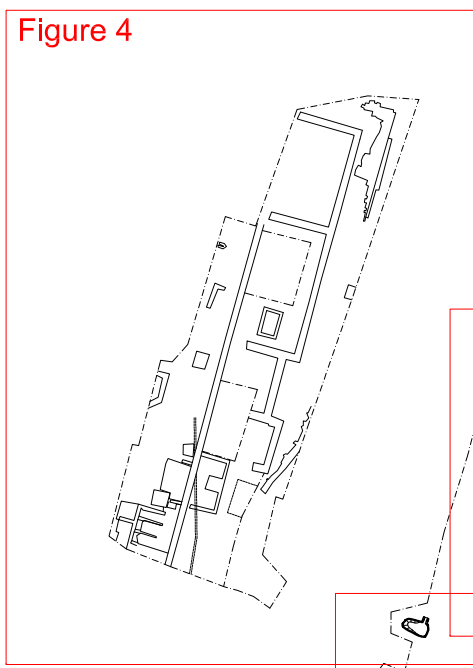


Figure 4

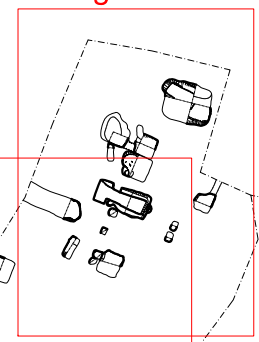


Figure 8

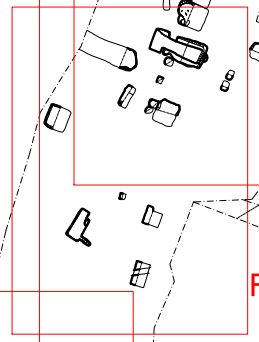


Figure 7

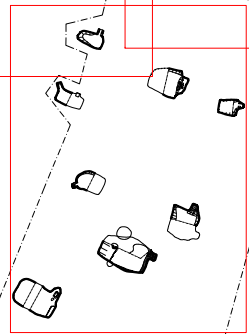


Figure 6

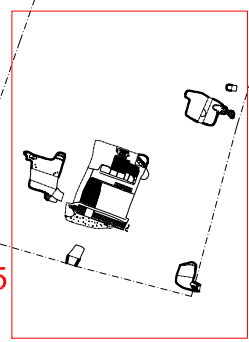


Figure 5

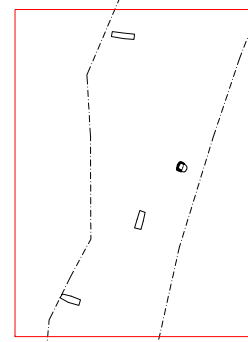


Figure 10

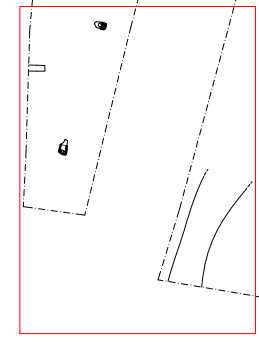


Figure 9

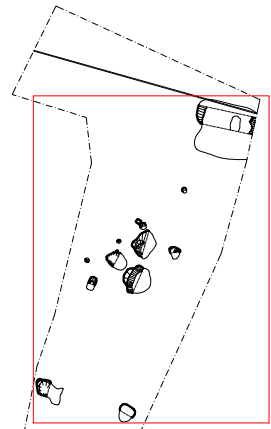
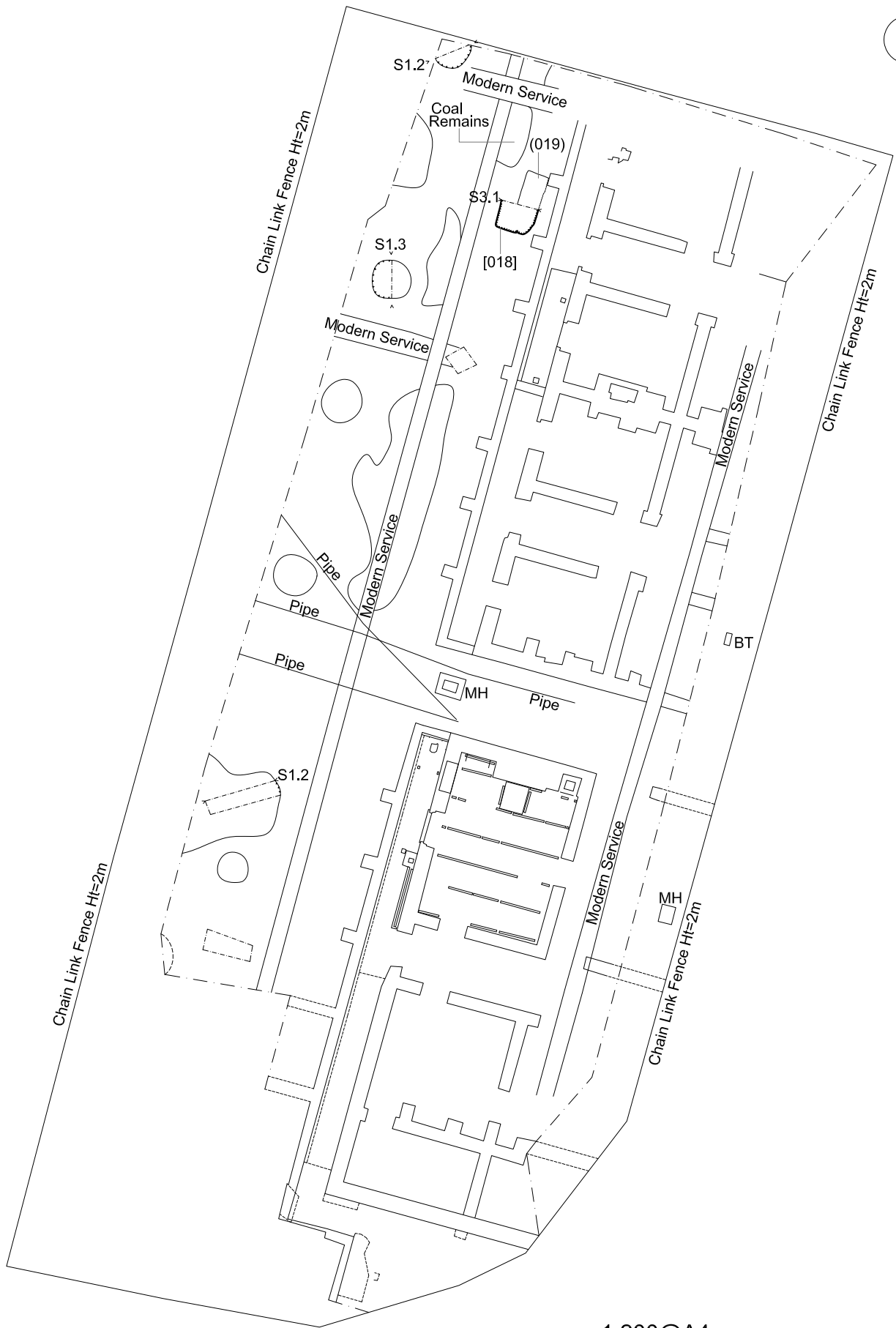
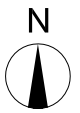


Figure 11

Figure 2: Overview of site

1:600@A4





1:200@A4

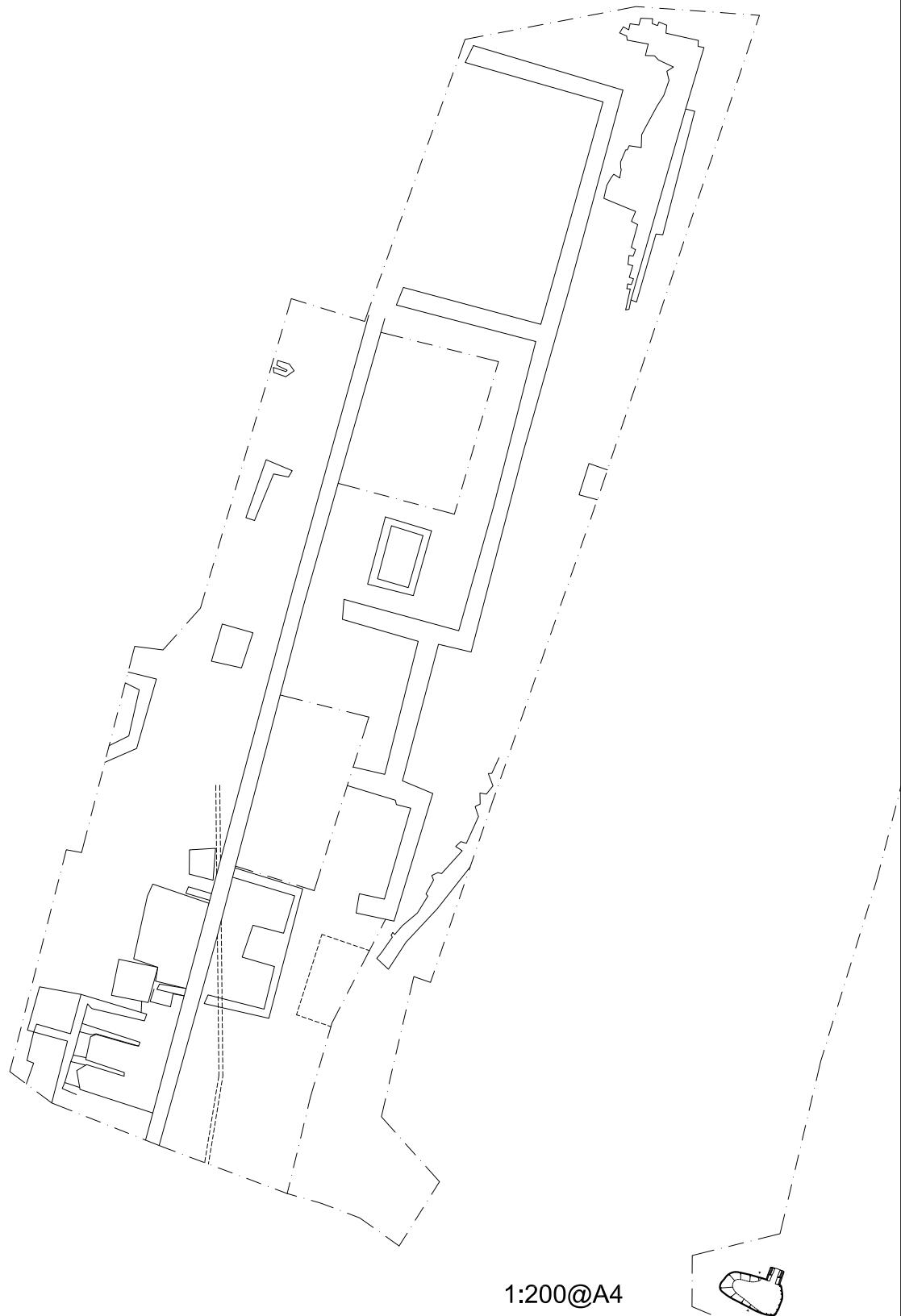
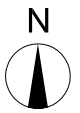


Figure 3: Barracks Area

0m

20m





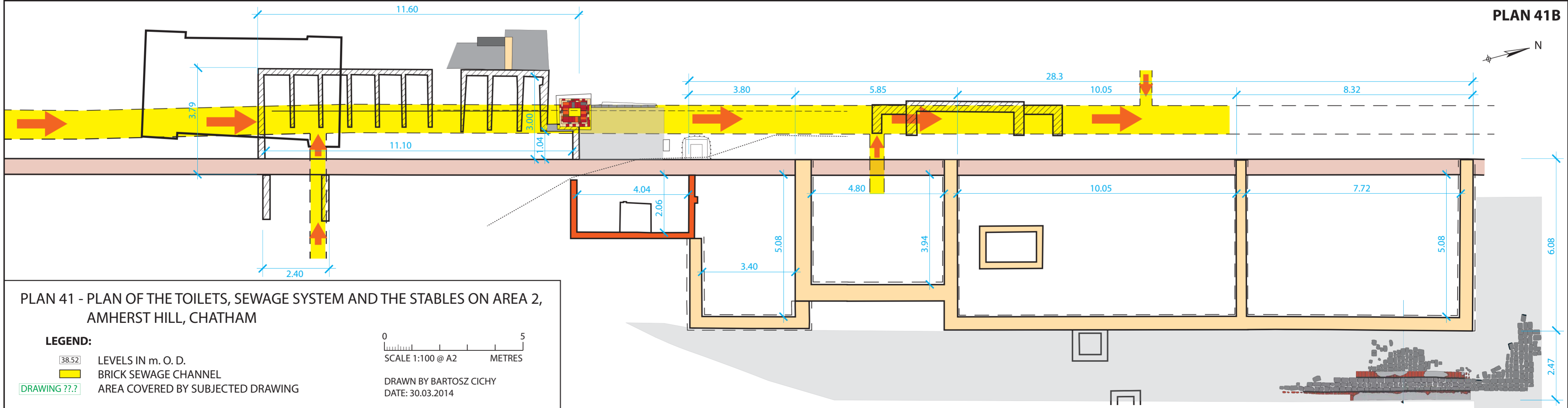
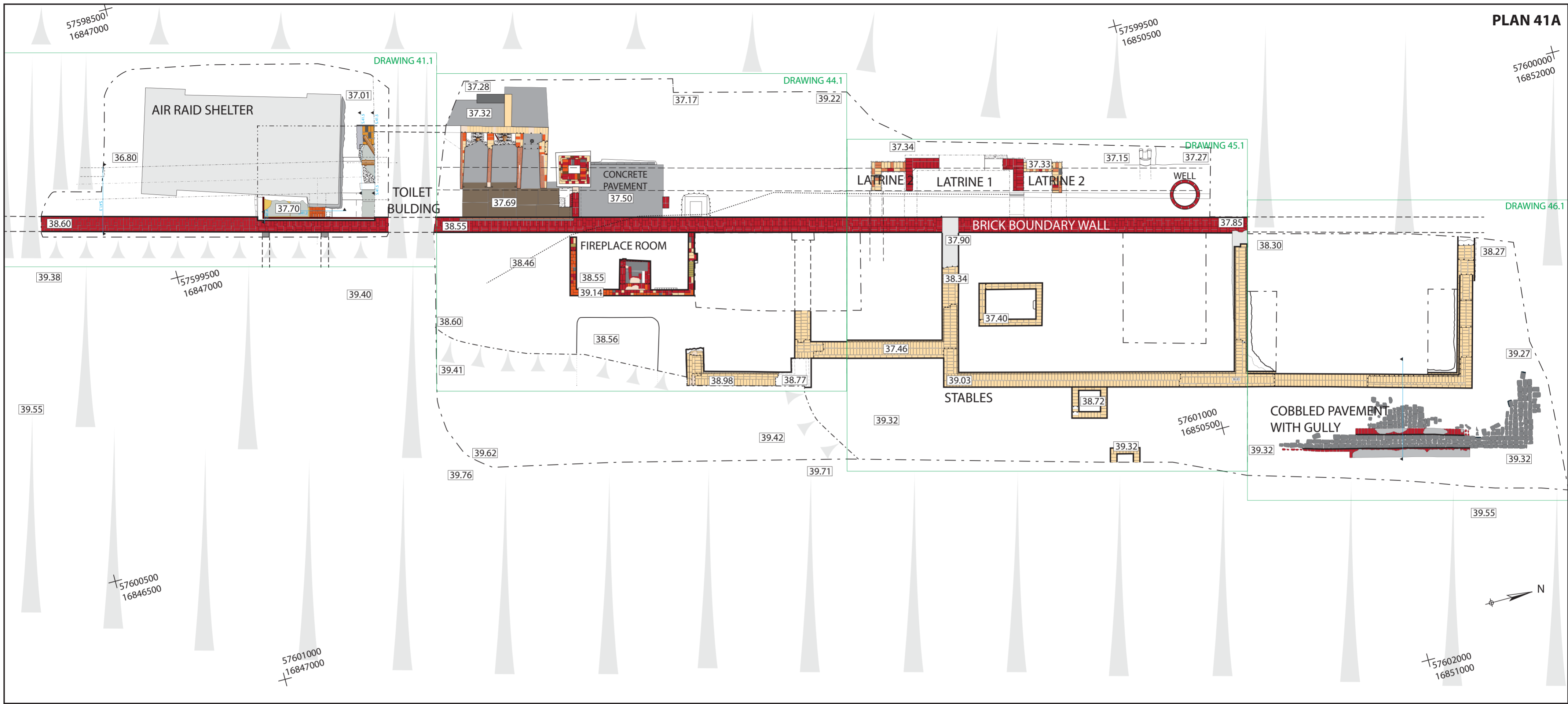
1:200@A4



0m

20m

Figure 4: Stables Area



PLAN 41 - PLAN OF THE TOILETS, SEWAGE SYSTEM AND THE STABLES ON AREA 2, AMHERST HILL, CHATHAM

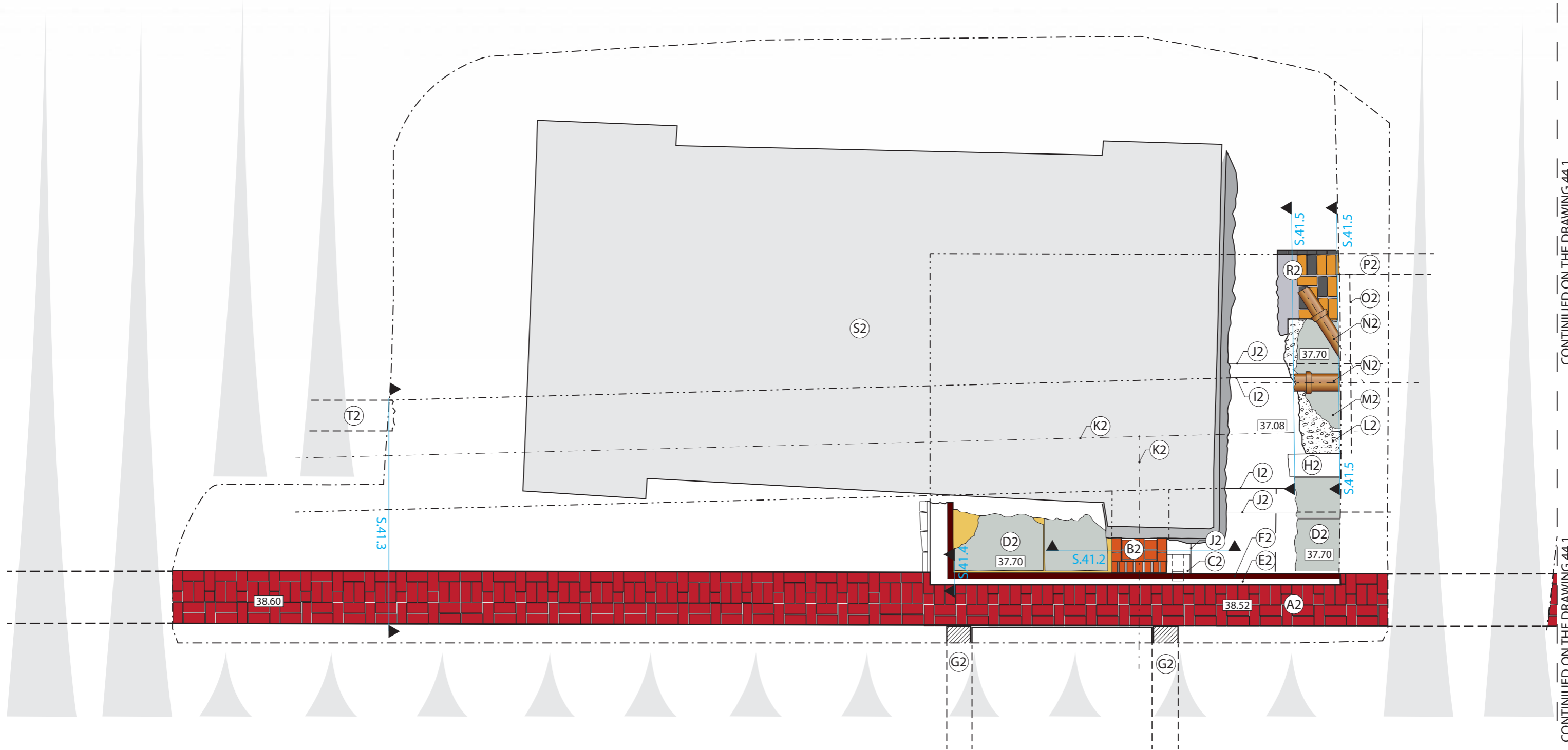
**LEGEND:**

- 38.52 LEVELS IN m. O. D.
- BRICK SEWAGE CHANNEL
- DRAWING ??? AREA COVERED BY SUBJECTED DRAWING

0 5  
SCALE 1:100 @ A2 METRES

DRAWN BY BARTOSZ CICHY  
DATE: 30.03.2014

Figure 4a: Plan of the building remains in stables area.



CONTINUED ON THE DRAWING 44.1

CONTINUED ON THE DRAWING 44.1

- A2 - RED BRICK BOUNDARY WALL
- B2 - SEWAGE CHANNEL
- C2 - SHAFT 0.1m X 0.1m
- D2 - SANDSTONE - SAND BEDDED
- E2 - MIXED REUSED BRICKS
- F2 - BRICKS; BROWN GLAZE ON SIDE
- G2 - BRICK WALL COVERED BY TOPSOIL
- H2 - WALL
- I2 - EDGE OF THE BRICK SEWAGE CHANNEL
- J2 - EDGE OF THE SEWAGE CONSTRUCTION TRENCH
- K2 - SEWAGE CHANNEL AXIS
- L2 - HARDCORE
- M2 - CONCRETE
- N2 - CERAMIC PIPE
- O2 - BASE OF THE DEMOLISHED WALL RUNS ALONGSIDE OF THE TRENCH WALL
- P2 - WALL COVERED BY SOIL

**LEGEND:**

- 38.52 LEVELS
- - - - - TRUNCATED FEATURE EDGE
- - - - - TRENCH BOUNDARY

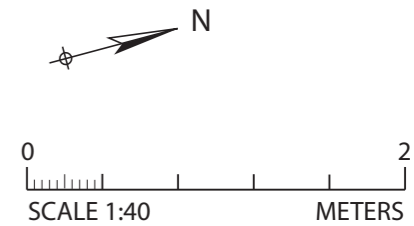
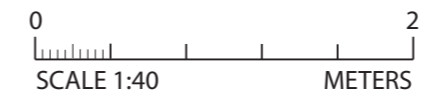


Figure 4b: PLAN 41.1 - PLAN OF THE STRUCTURES AROUND SHELTER 2 ON AREA 2

CONTINUED ON THE DRAWING 41.1

CONTINUED ON THE DRAWING 41.1

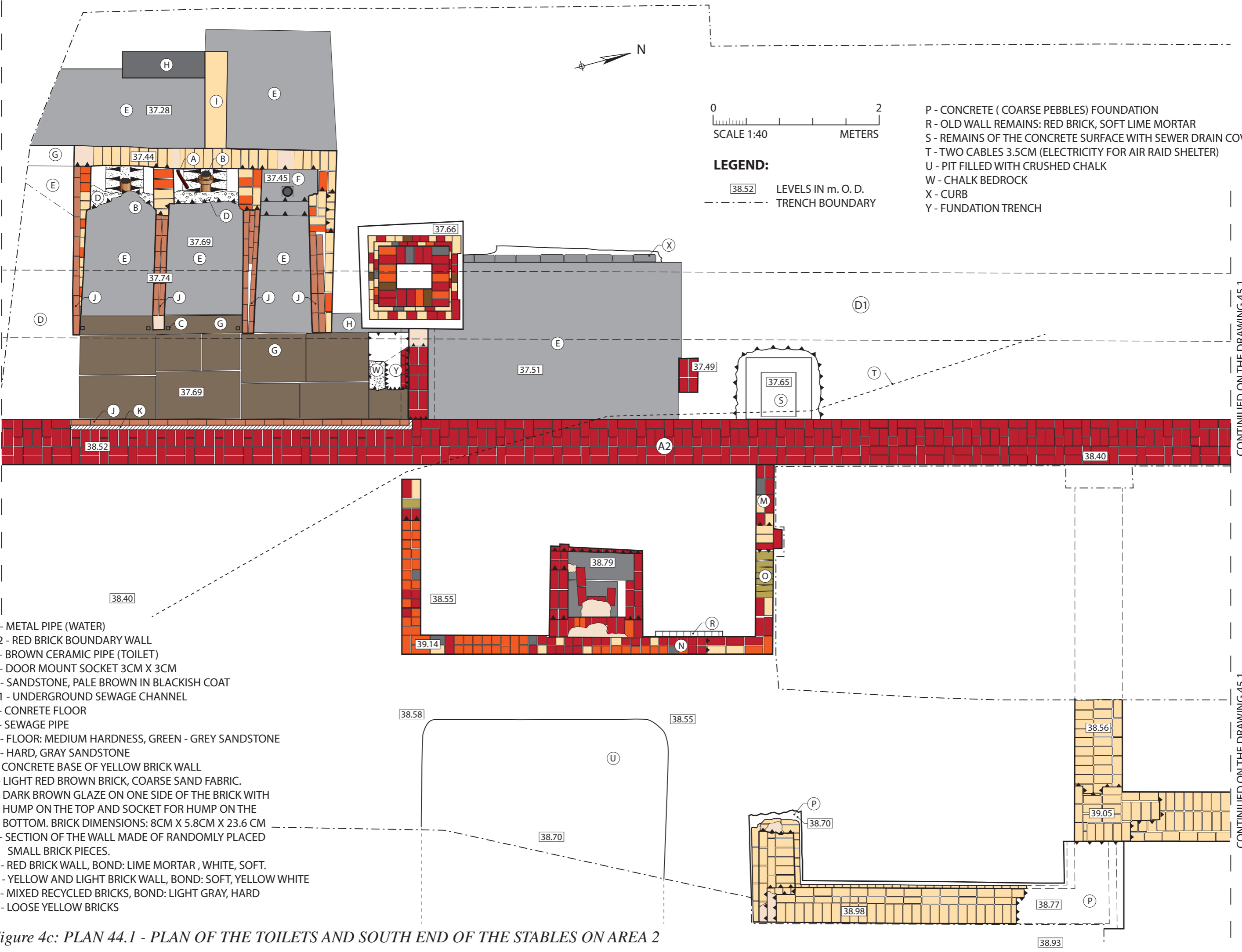
- A - METAL PIPE (WATER)
- A2 - RED BRICK BOUNDARY WALL
- B - BROWN CERAMIC PIPE (TOILET)
- C - DOOR MOUNT SOCKET 3CM X 3CM
- D - SANDSTONE, PALE BROWN IN BLACKISH COAT
- D1 - UNDERGROUND SEWAGE CHANNEL
- E - CONCRETE FLOOR
- F - SEWAGE PIPE
- G - FLOOR: MEDIUM HARDNESS, GREEN - GREY SANDSTONE
- H - HARD, GRAY SANDSTONE
- I - CONCRETE BASE OF YELLOW BRICK WALL
- J - LIGHT RED BROWN BRICK, COARSE SAND FABRIC.  
DARK BROWN GLAZE ON ONE SIDE OF THE BRICK WITH  
HUMP ON THE TOP AND SOCKET FOR HUMP ON THE  
BOTTOM. BRICK DIMENSIONS: 8CM X 5.8CM X 23.6 CM
- K - SECTION OF THE WALL MADE OF RANDOMLY PLACED  
SMALL BRICK PIECES.
- L - RED BRICK WALL, BOND: LIME MORTAR, WHITE, SOFT.
- M - YELLOW AND LIGHT BRICK WALL, BOND: SOFT, YELLOW WHITE
- N - MIXED RECYCLED BRICKS, BOND: LIGHT GRAY, HARD
- O - LOOSE YELLOW BRICKS



**LEGEND:**

- 38.52 LEVELS IN m. O. D.
- - - - - TRENCH BOUNDARY

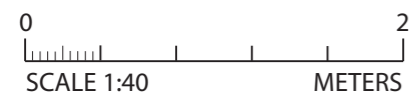
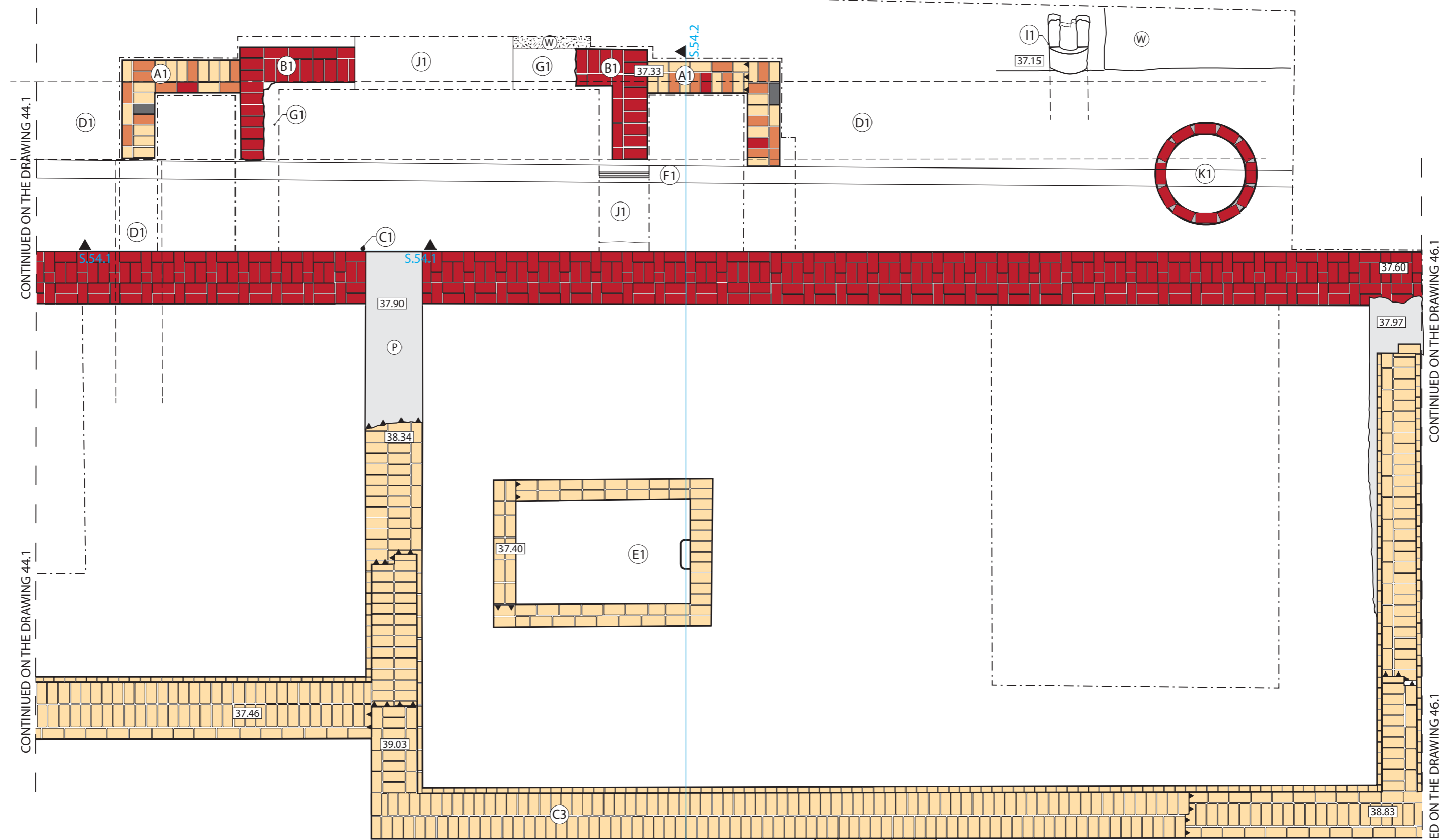
- P - CONCRETE ( COARSE PEBBLES) FOUNDATION
- R - OLD WALL REMAINS: RED BRICK, SOFT LIME MORTAR
- S - REMAINS OF THE CONCRETE SURFACE WITH SEWER DRAIN COVER
- T - TWO CABLES 3.5CM (ELECTRICITY FOR AIR RAID SHELTER)
- U - PIT FILLED WITH CRUSHED CHALK
- W - CHALK BEDROCK
- X - CURB
- Y - FOUNDATION TRENCH



CONTINUED ON THE DRAWING 45.1

CONTINUED ON THE DRAWING 45.1

Figure 4c: PLAN 44.1 - PLAN OF THE TOILETS AND SOUTH END OF THE STABLES ON AREA 2

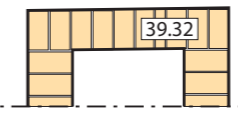


**LEGEND:**  
38.52 LEVELS IN m. O. D.  
 - - - - - TRENCH BOUNDARY

- A1 - WALL; VARIOUS COLOUR BRICKS, MAINLY YELLOW AND PALE RED BOND: GREY - WHITE, SOFT, FINE GRAIN.
- B1 - WALL ABOVE SEWAGE CHANNEL; RED BRICKS; BOND: YELLOW - WHITE SOFT, FINE GRAIN.
- C1 - STEEL PIPE 35MM.
- C3 - WALL: YELLOW AND OCC. PALE RED BRICKS, BOND: YELLOW WHITE, HARD, CRUNCHY.
- D1 - SEWAGE CHANNEL.
- E1 - SHAFT WITH STEEL LADDER/STEP; REMAINS OF BURNT PETROL ENGINE.
- F1 - TWO ELECTRIC CABBLES IN SHALLOW TRENCH.

- G1 - HARDCORE.
- H1 - FLOOR/ BASE OF THE SHAFT.
- I1 - SEWAGE CHANNEL RUNNING DOWN AT 25 DEGREE ANGLE IN EAST DIRECTION.
- J1 - BLACK LOAM, HIGH ORGANIC CONTENT.
- W - CHALK BEDROCK
- K1 - WELL

Figure 4d: PLAN 45.1 - PLAN OF THE TOILETS AND MIDDLE SECTION OF THE STABLES ON AREA 2



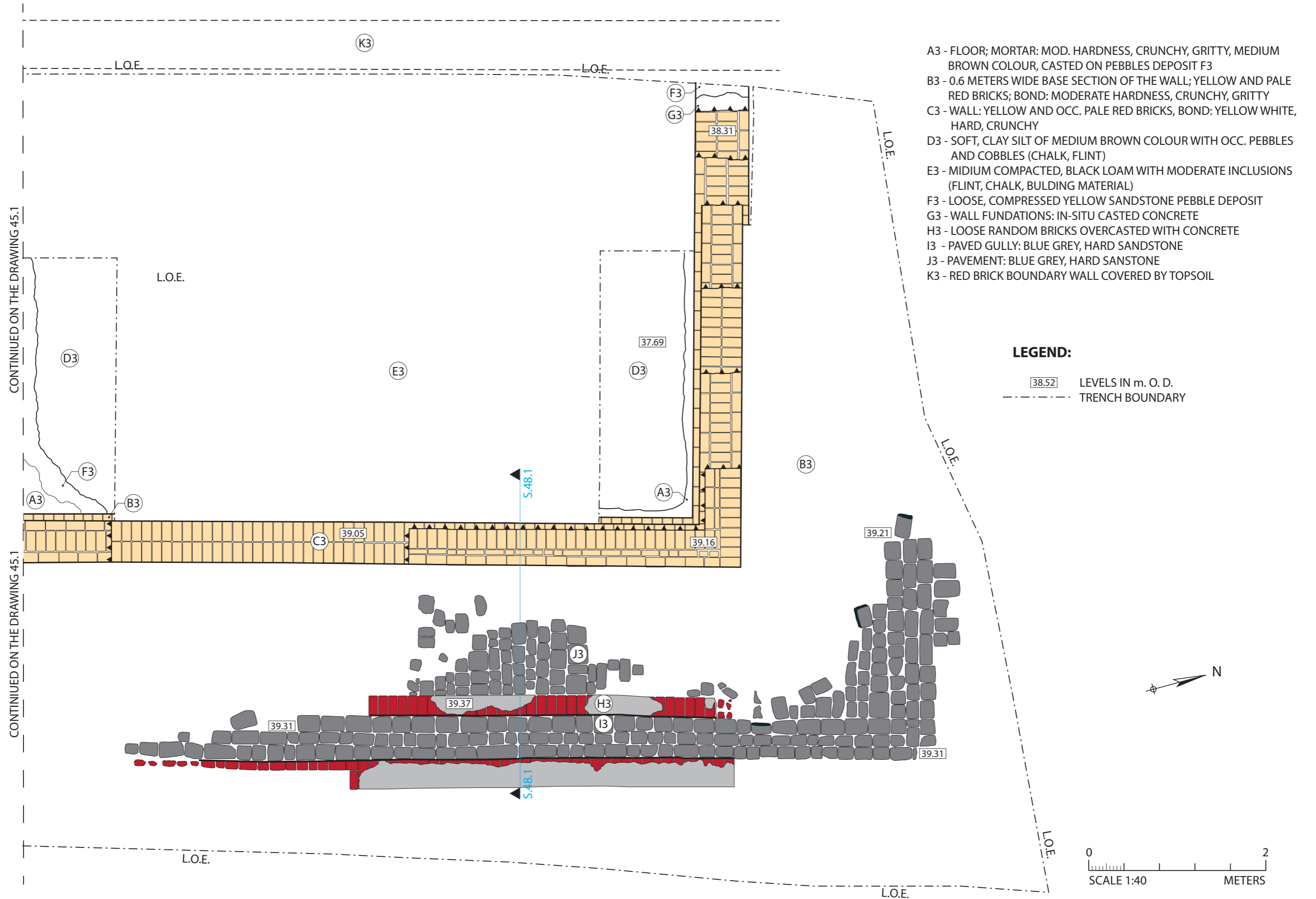


Figure 4e: PLAN 46.1 - PLAN OF THE NORTHERN END OF THE STABLES ON AREA 2



DRAWING 41.3

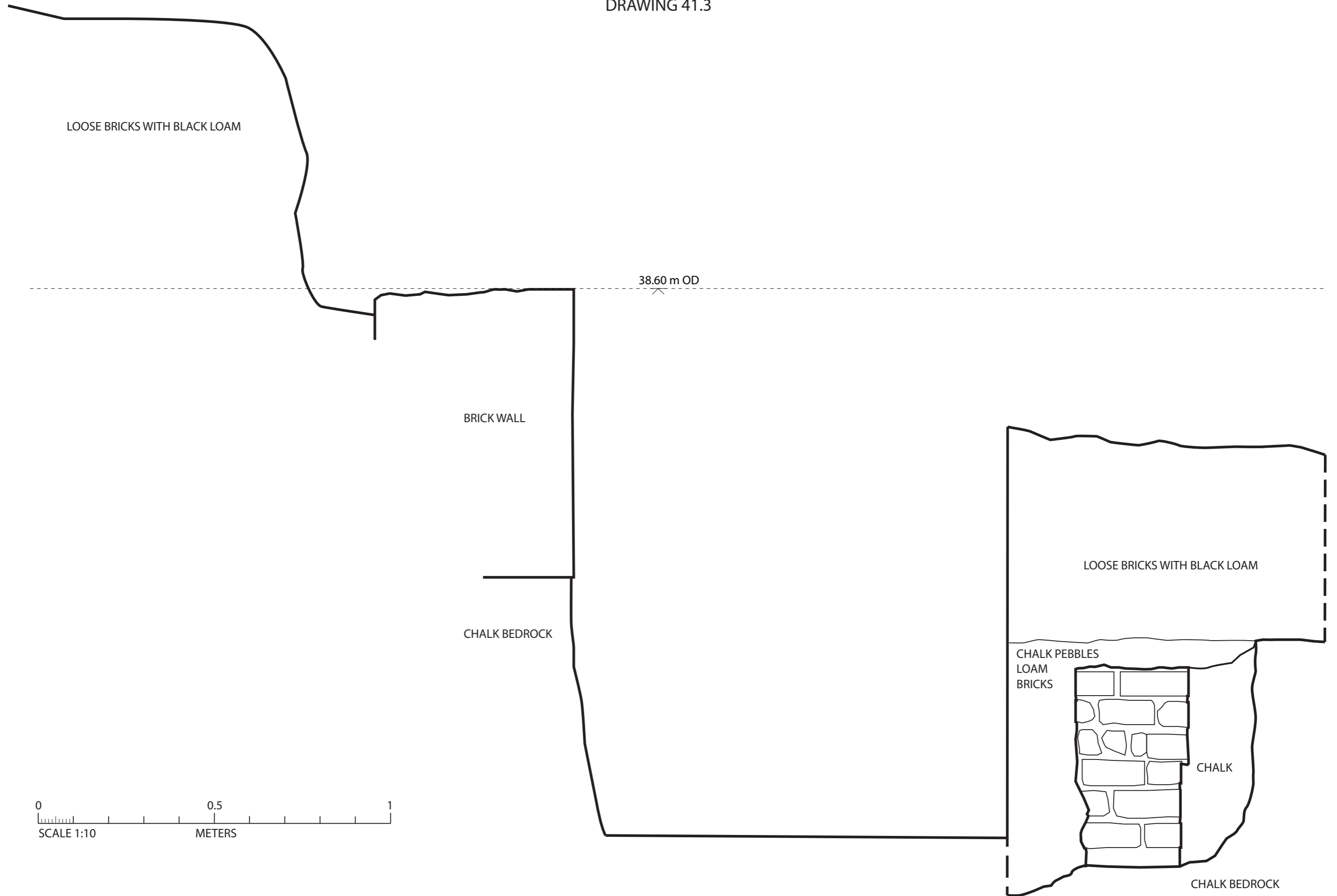
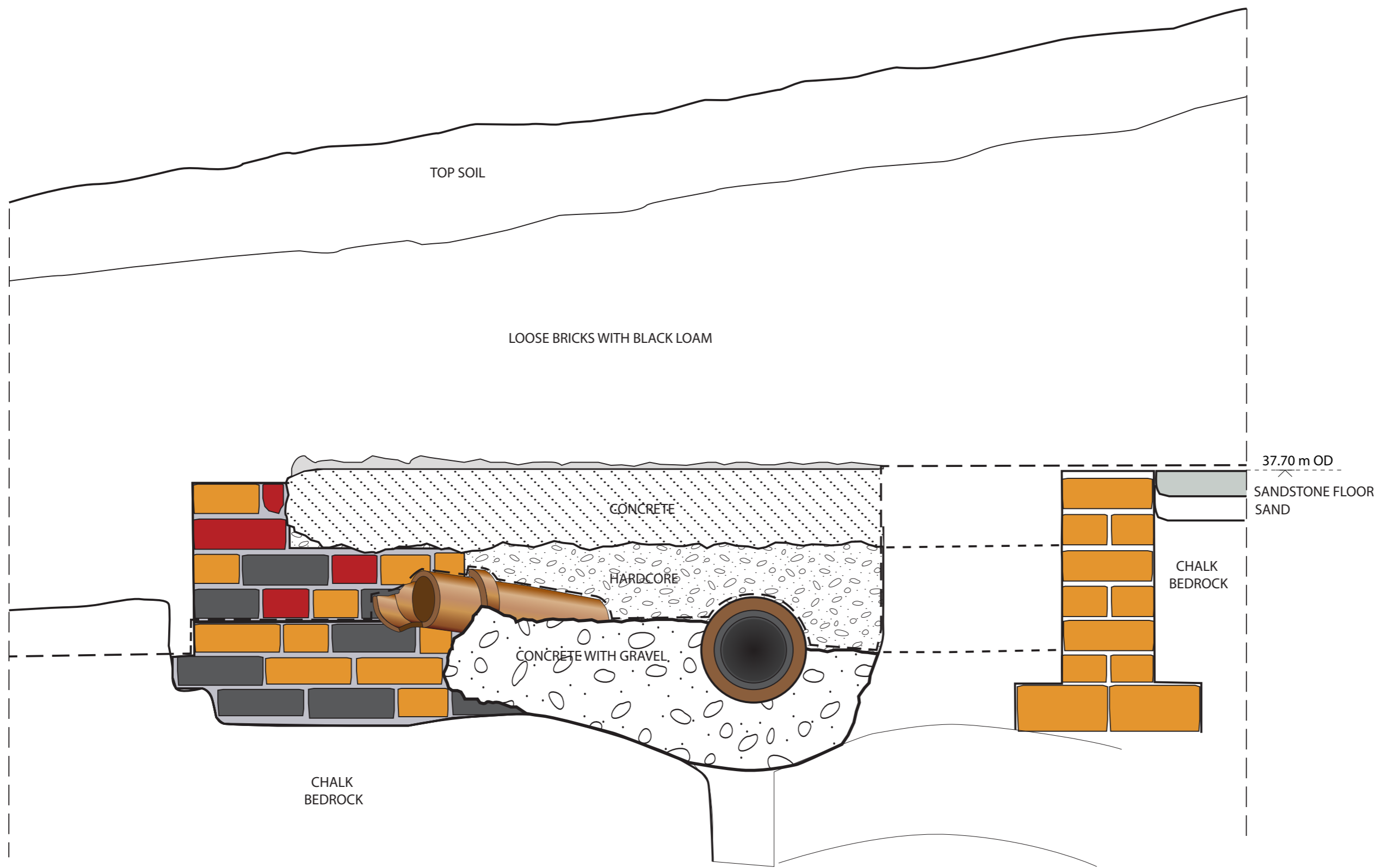


Figure 4f: North facing section of shelter demolition trench showing sewage channel remains and boundary wall.



DRAWING 41.5

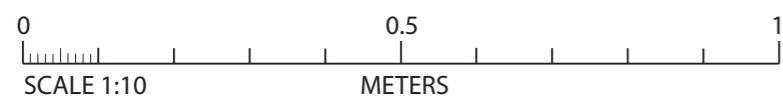
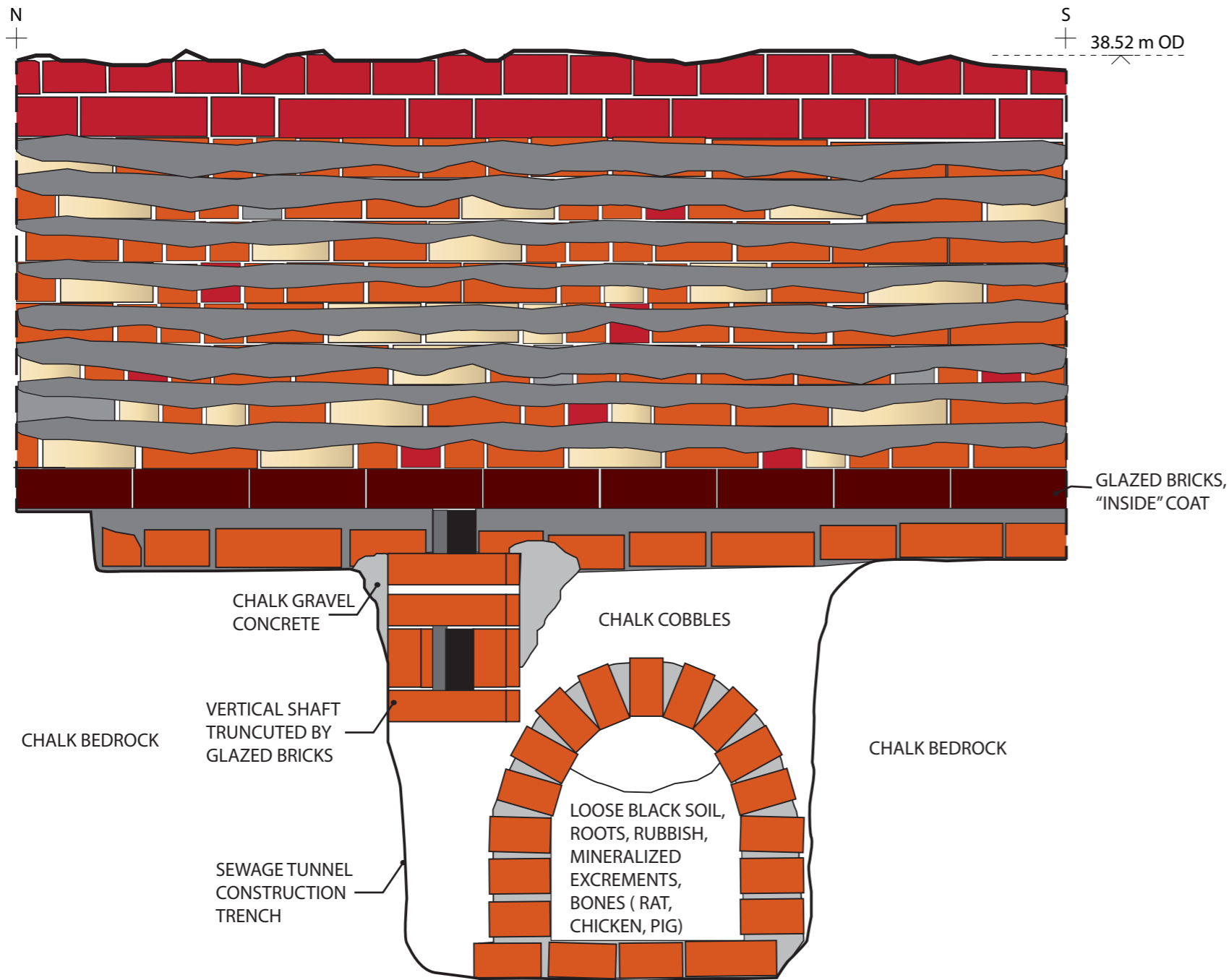
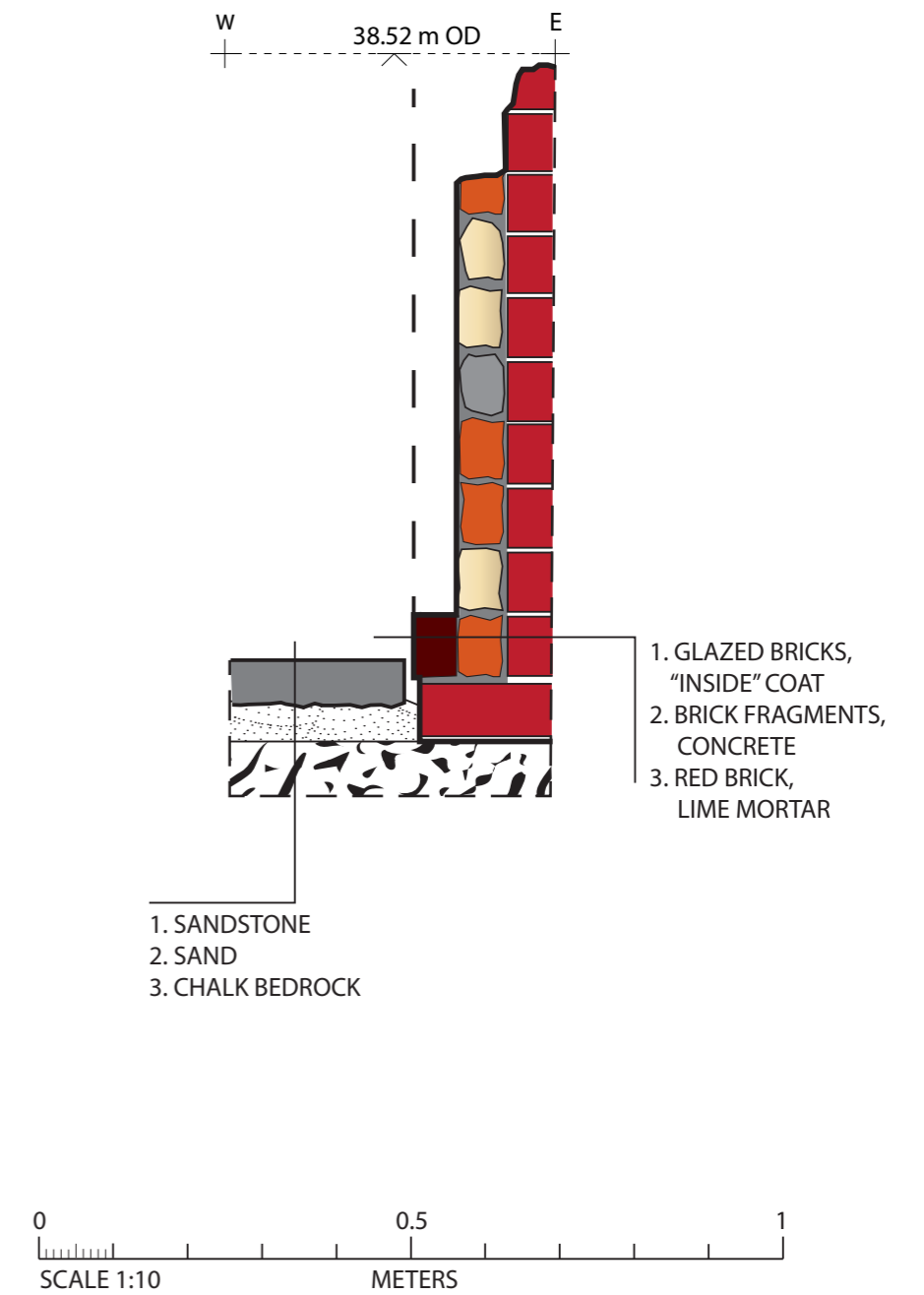


Figure 4g: South facing section of the shelter demolition trench showing remains of the toilet building.

DRAWING 41.2



DRAWING 41.4



SECTION OF THE E-W ALIGNED SEWAGE TUNNEL, SLOPING DOWN IN WEST DIRECTION AT 10 DEGREE ANGLE. VERTICAL SHAFT, DEMOLISHED WHEN TOILETS WERE BUILT ( BRICK WIDE SECTION OF RED BRICK WALL WAS REMOVED, AND REBUILT WITH BRICK FRAGMENTS WITH CONCRETE AND COATED WITH BROWN GLAZED BRICKS. ELEVATION OF THE RED BRICK BOUANDRY WALL COATED WITH, MOSTLY ROBBED OUT, BROWN GLAZED BRICKS.

Figure 4h: West facing Section 41.2 and South facing Section 41.4 exposed in shelter demolition trench

Drawing 54.1

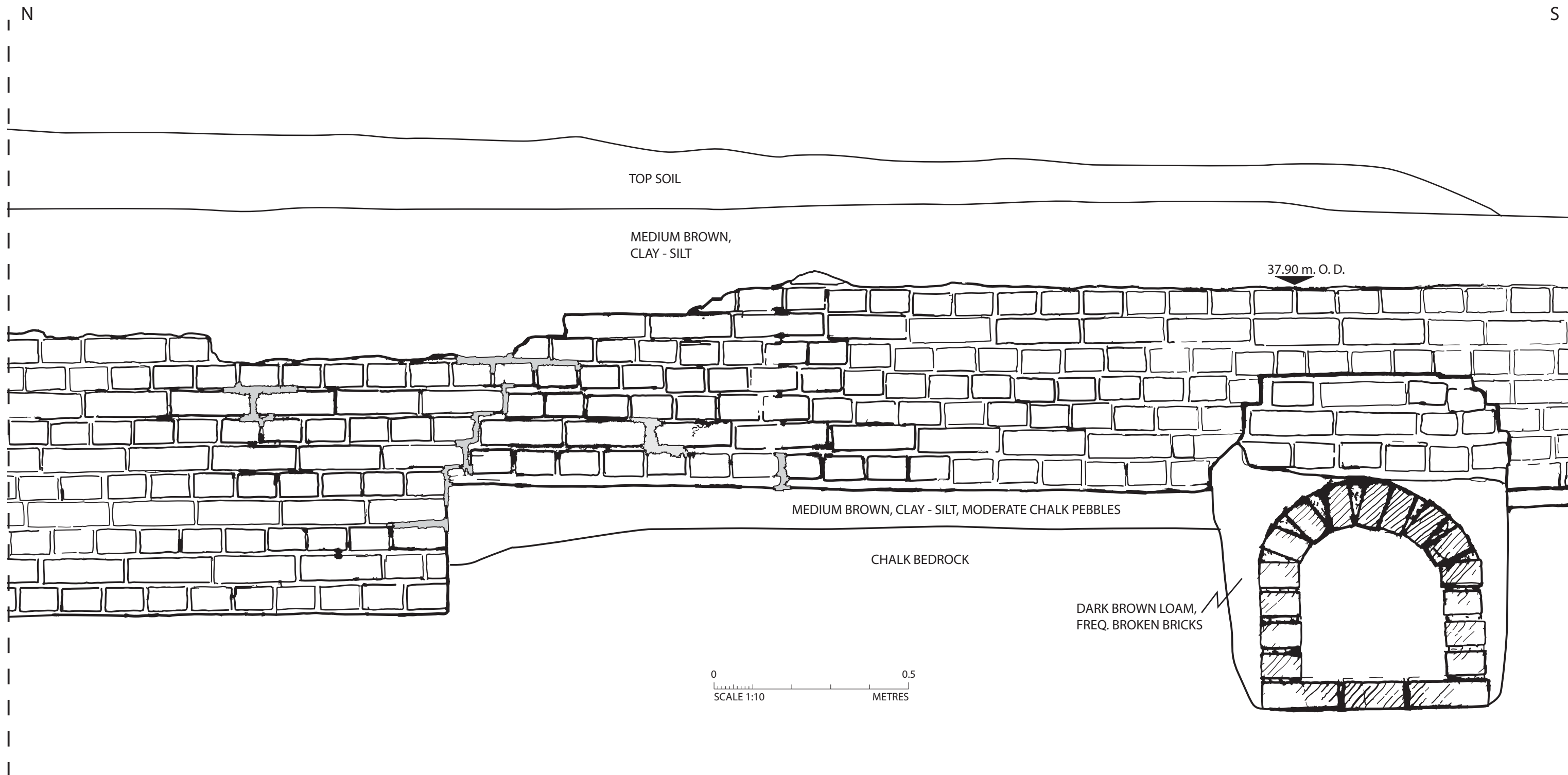


Figure 4i: Elevation of the boundary wall and section of the E - W aligned sewage tunnel.

Section 54.2

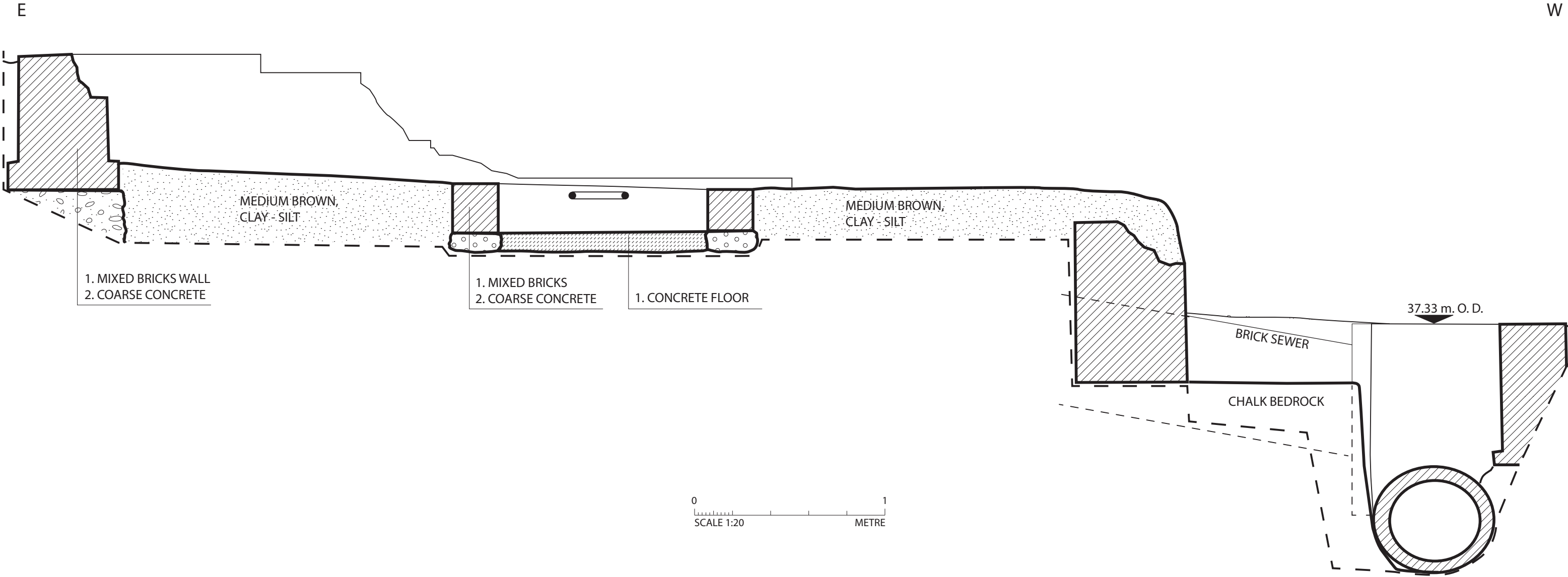


Figure 4j: Section throughout stables, boundary wall and sewer.

W

E

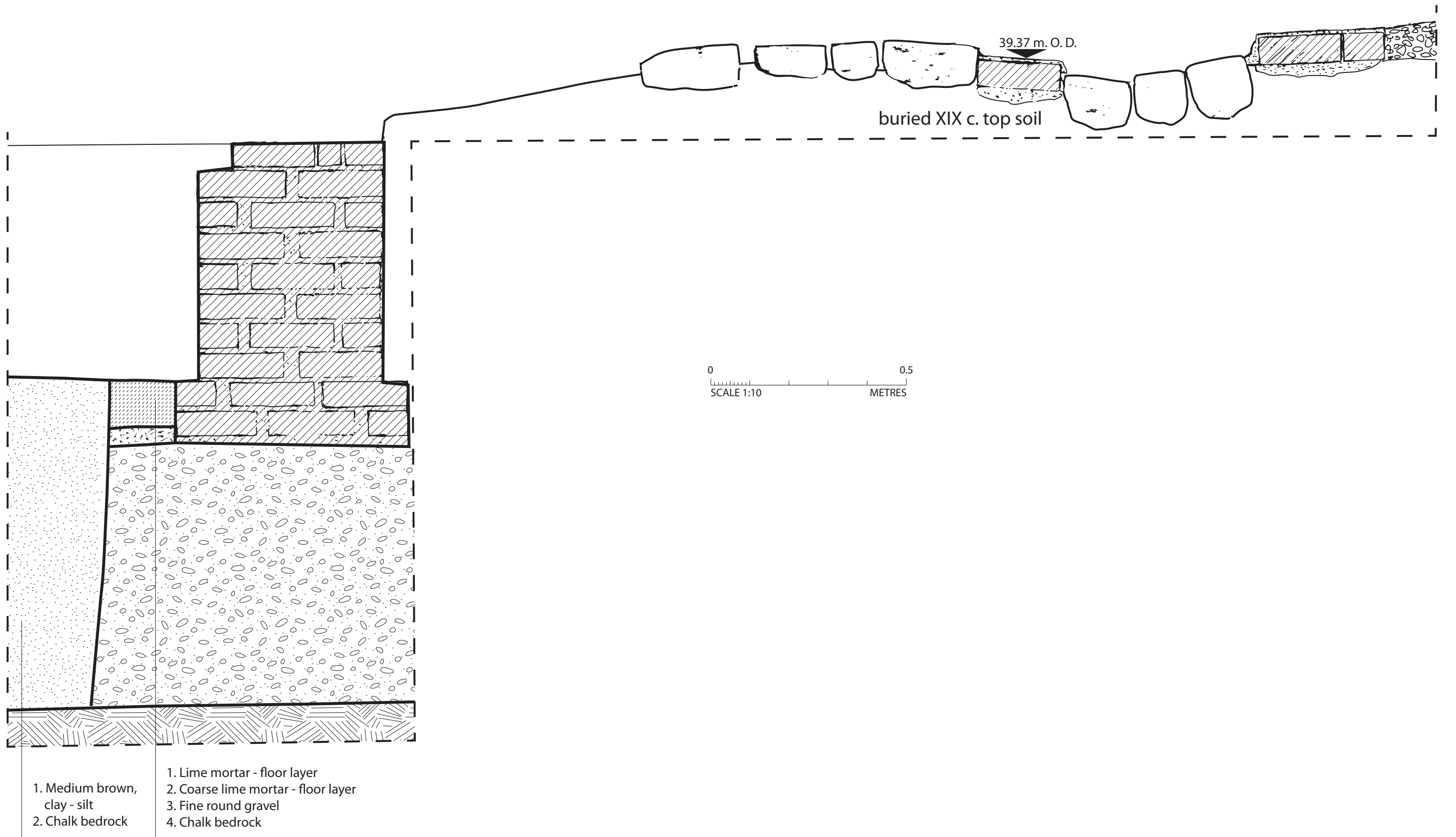
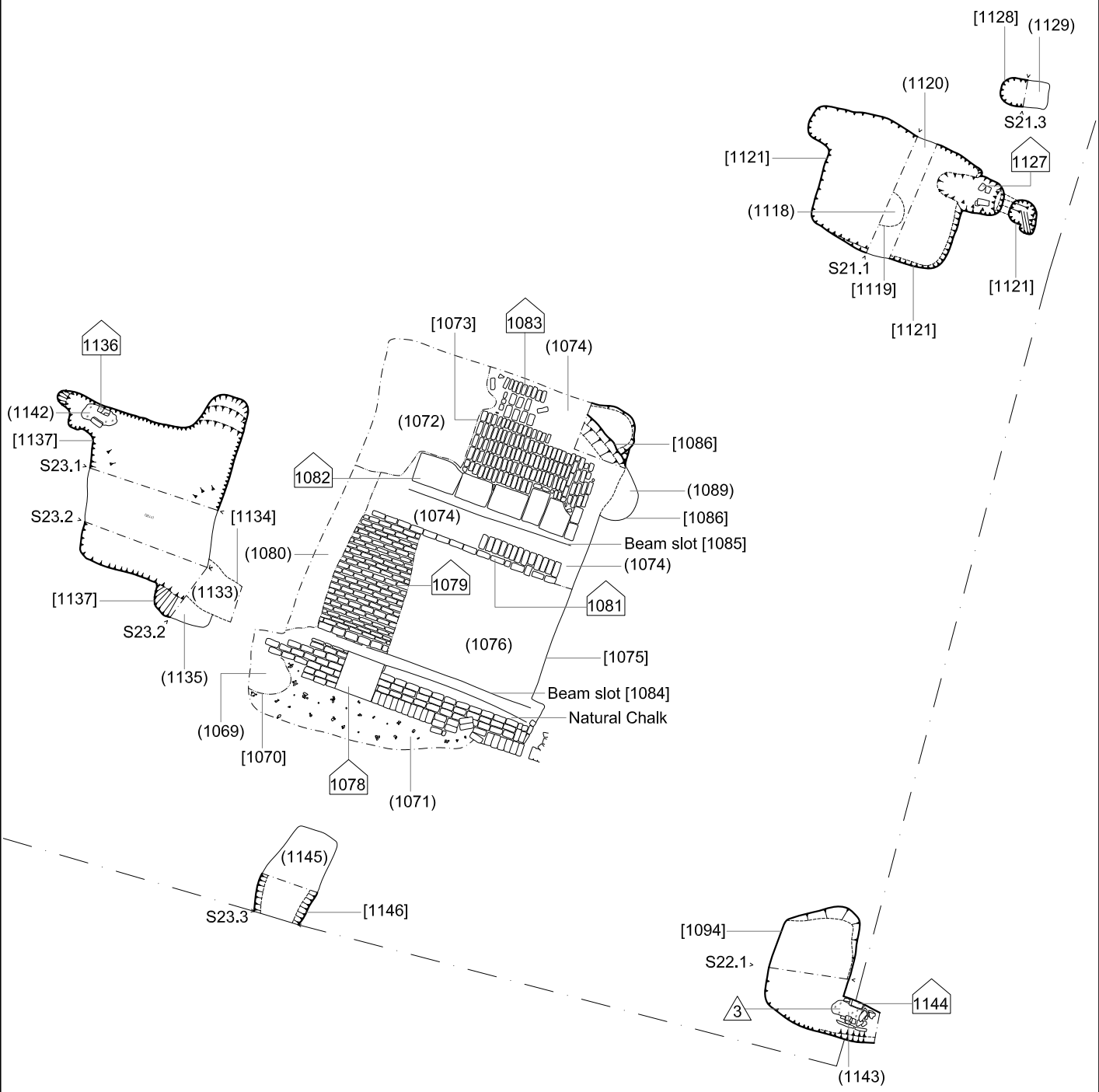
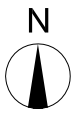


Figure 4k: Section of the cobbled pavement and stables wall.





1:100@A4



Figure 5: Plans

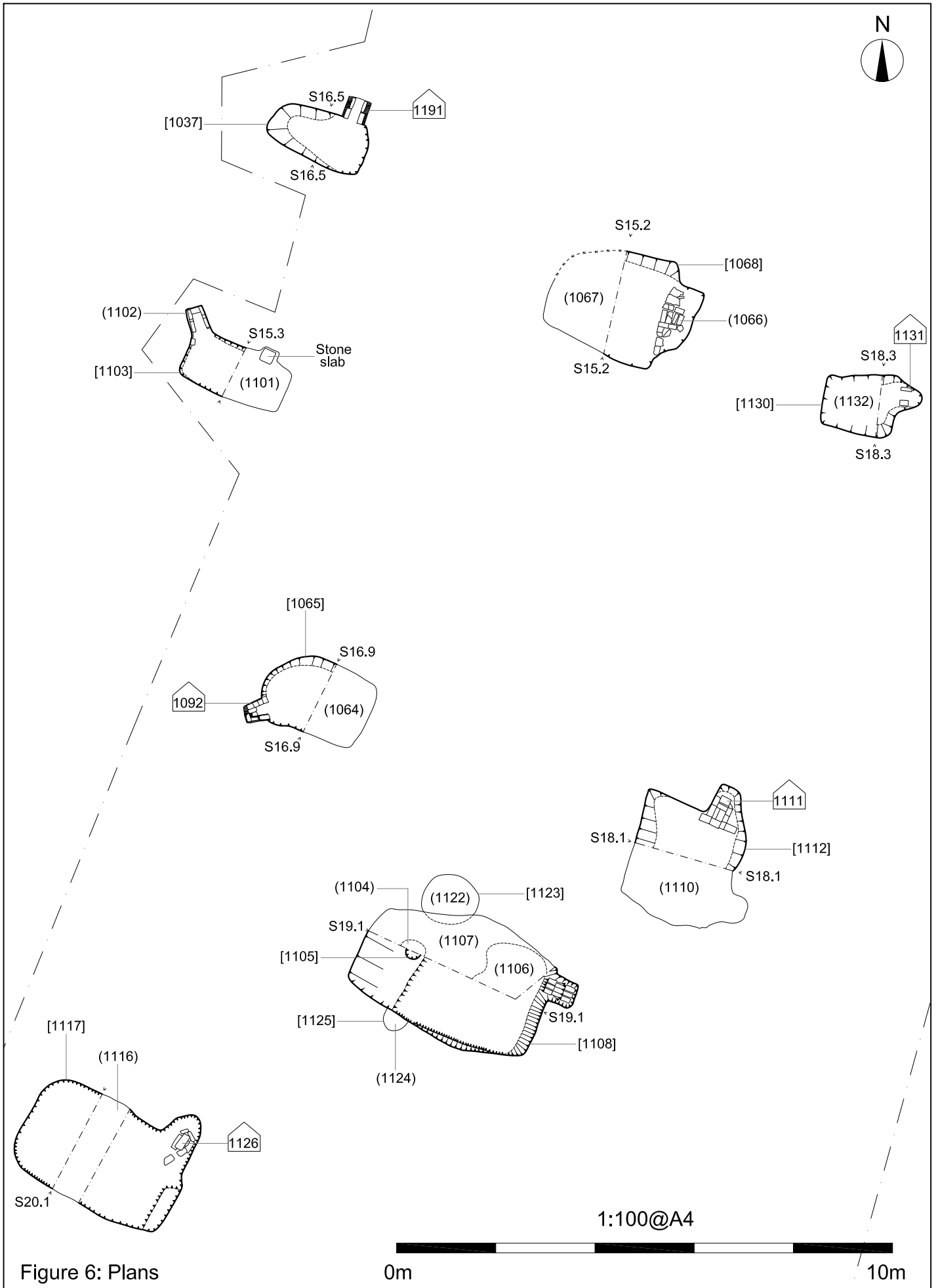
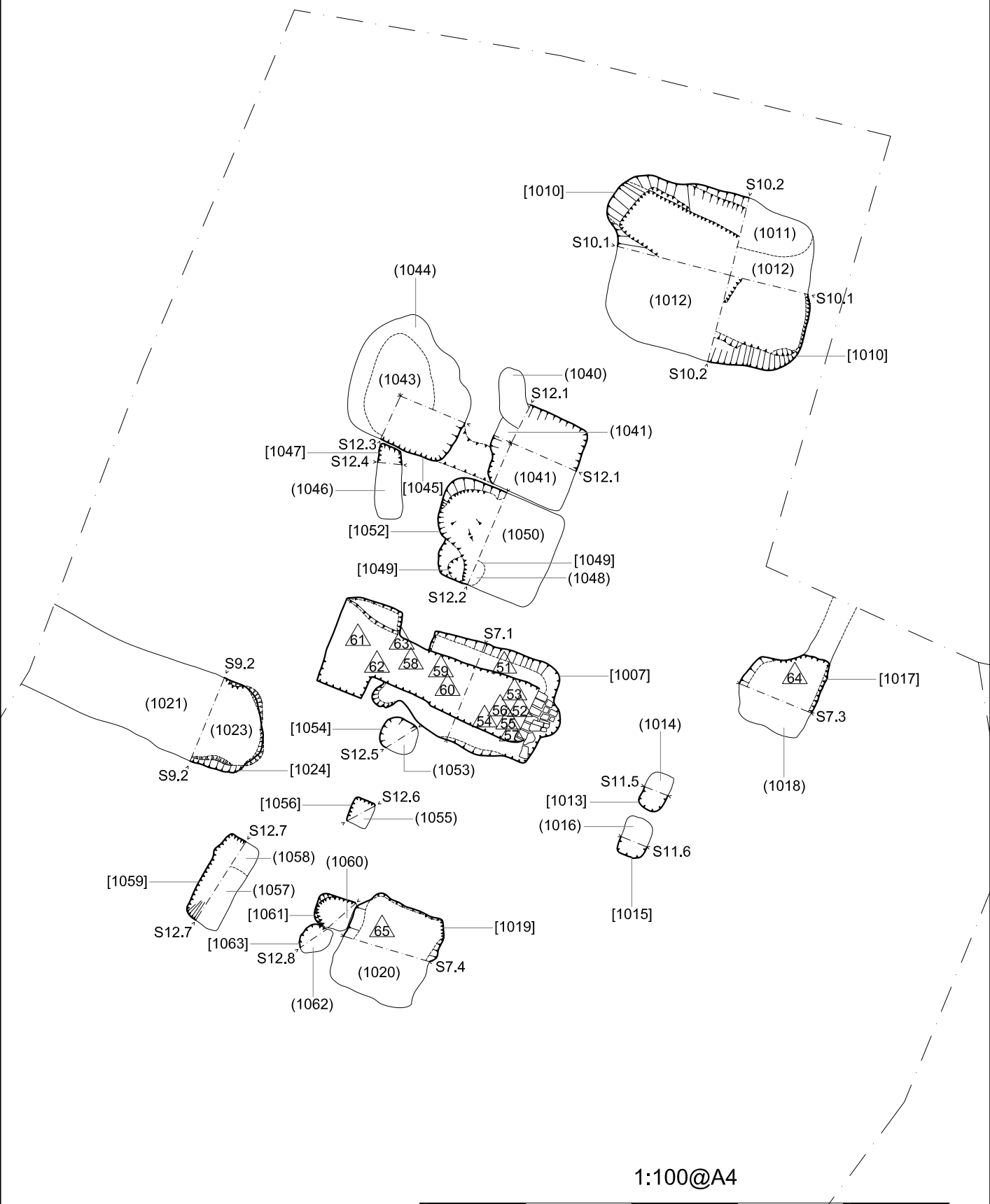
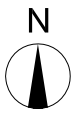


Figure 6: Plans





1:100@A4



Figure 8: Plans

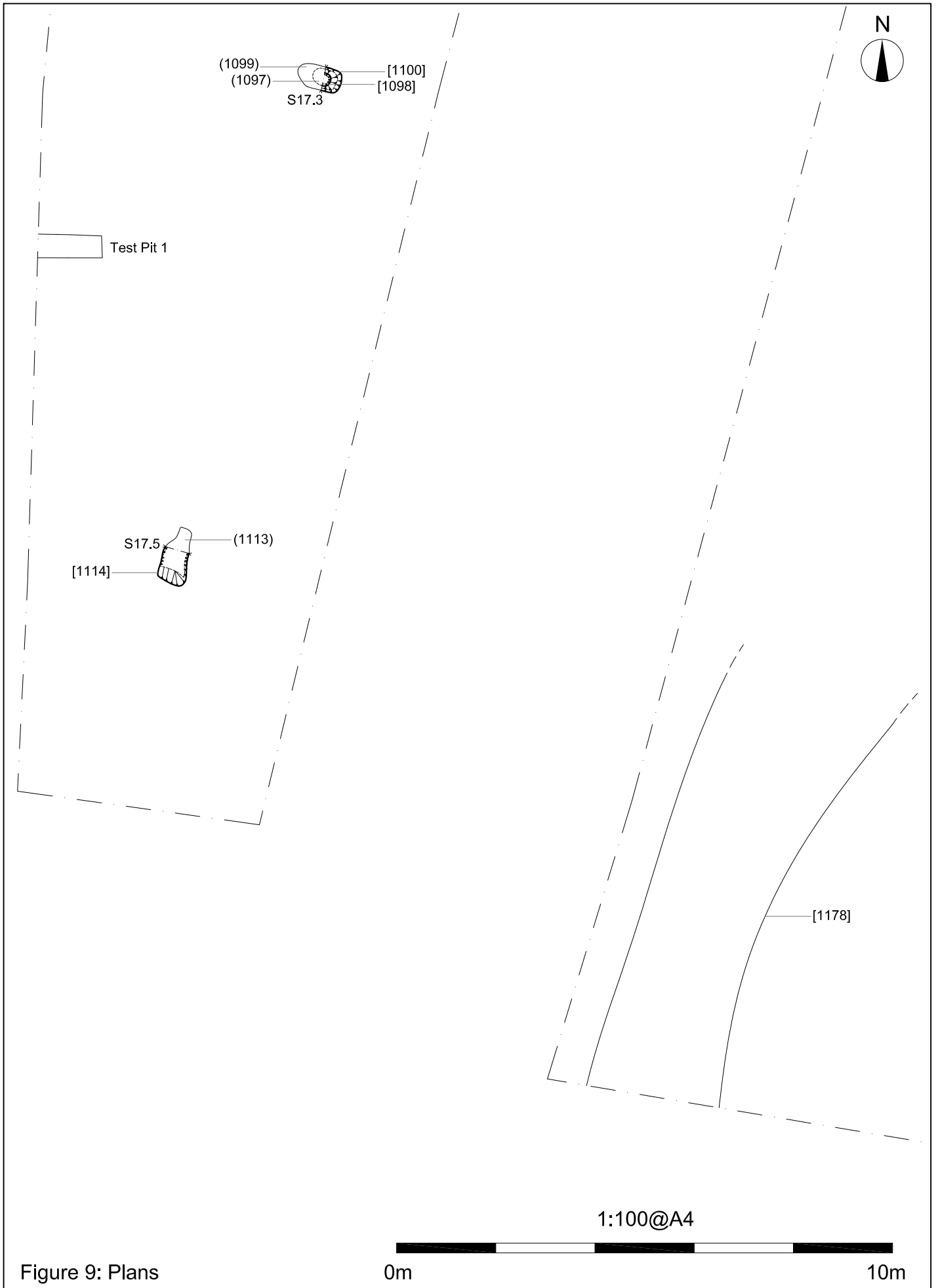


Figure 9: Plans

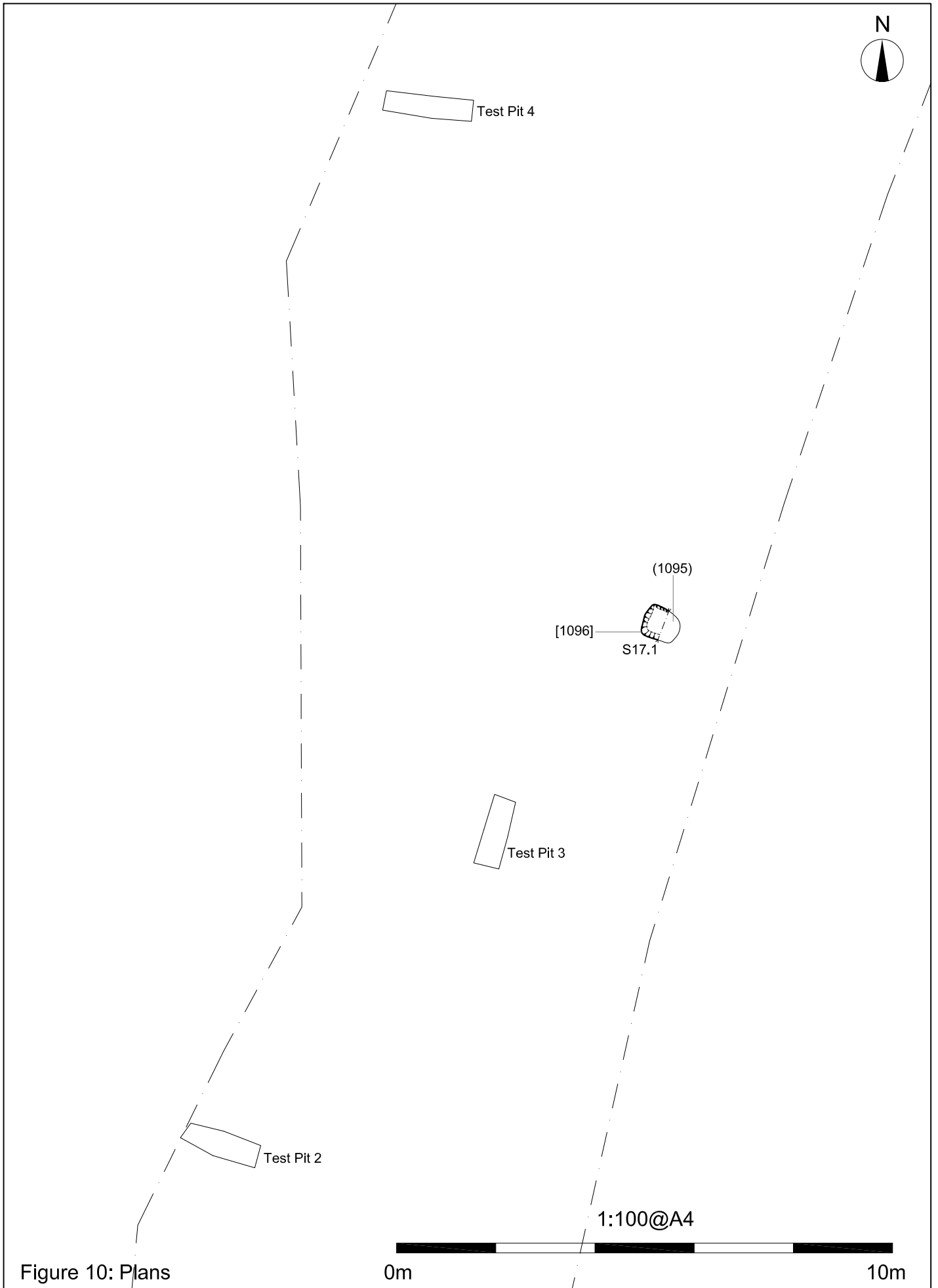


Figure 10: Plans

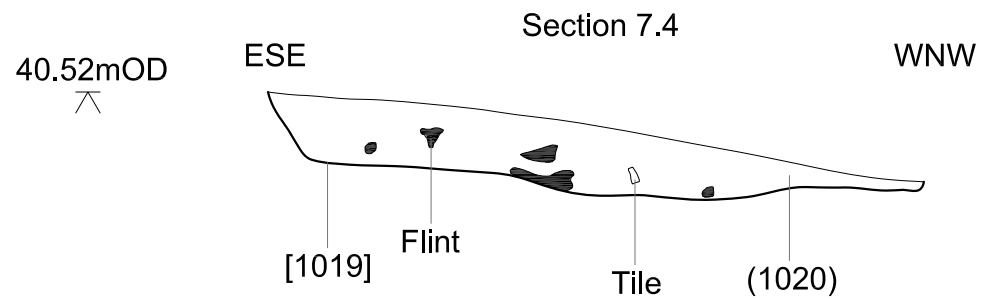
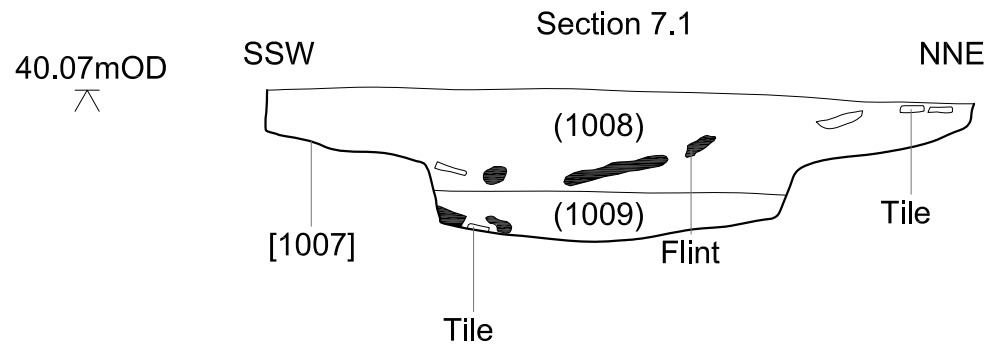
0m

1:100@A4

10m



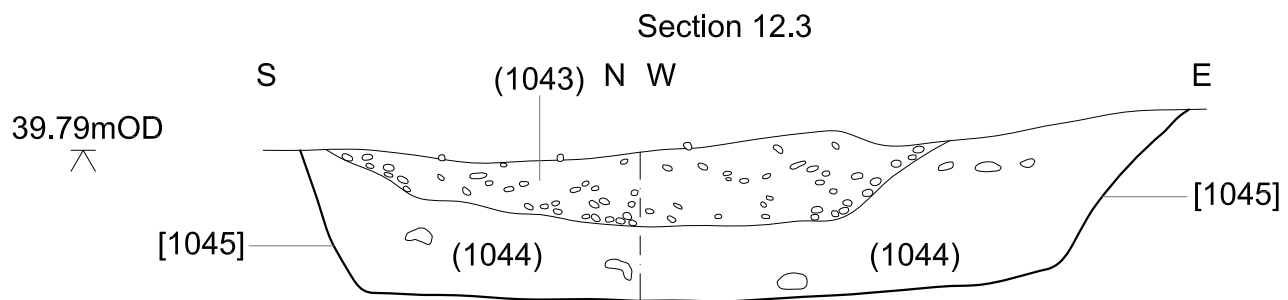
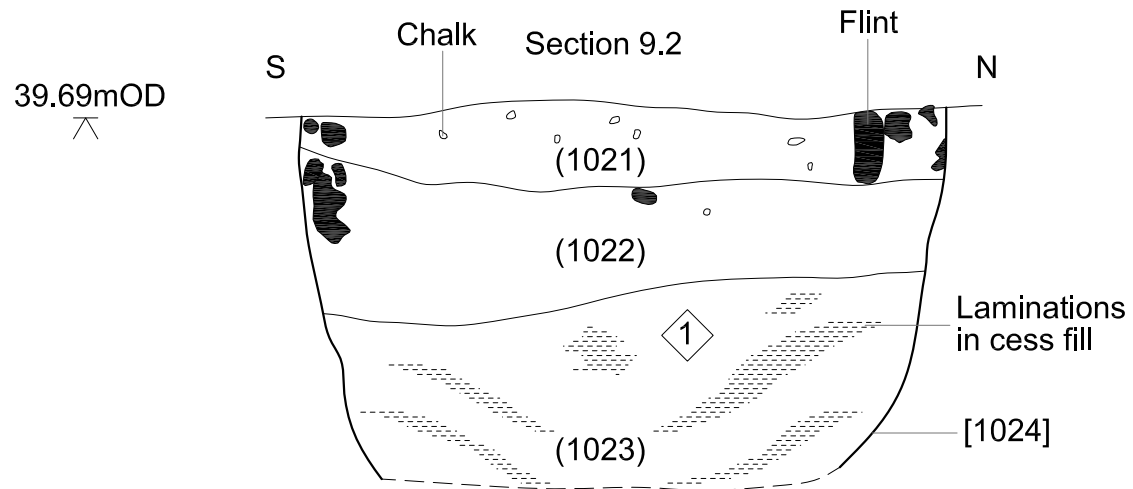




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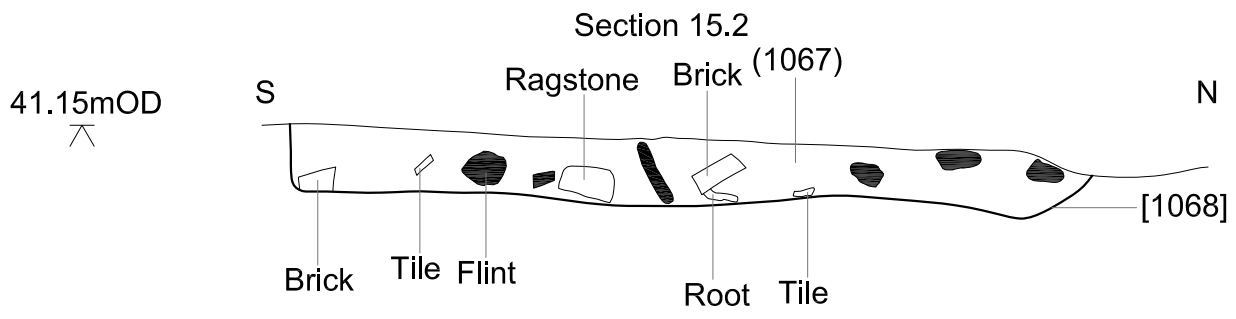
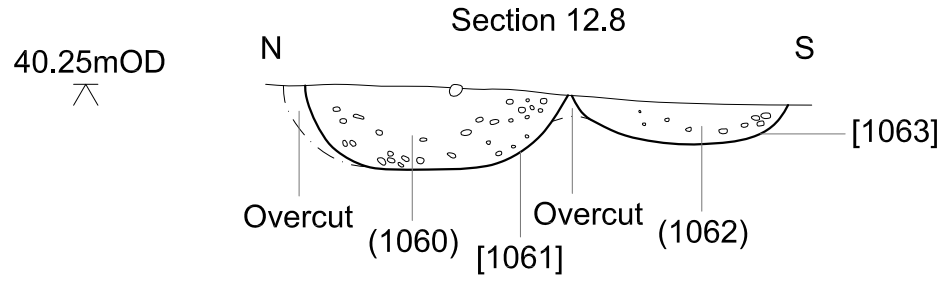
Figure 12: Sections



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Figure 13: Sections



1:20@A4



Figure 14: Sections

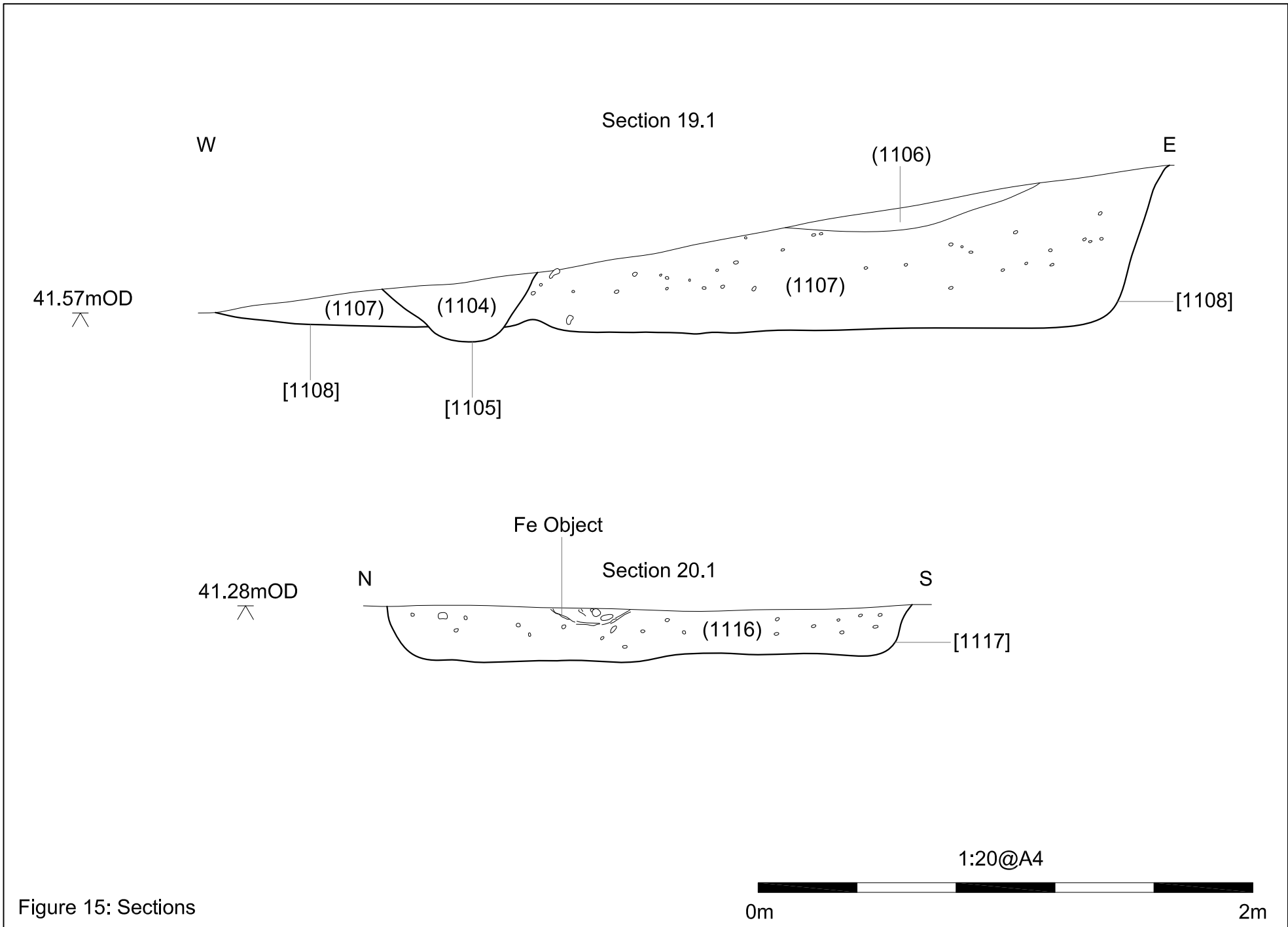
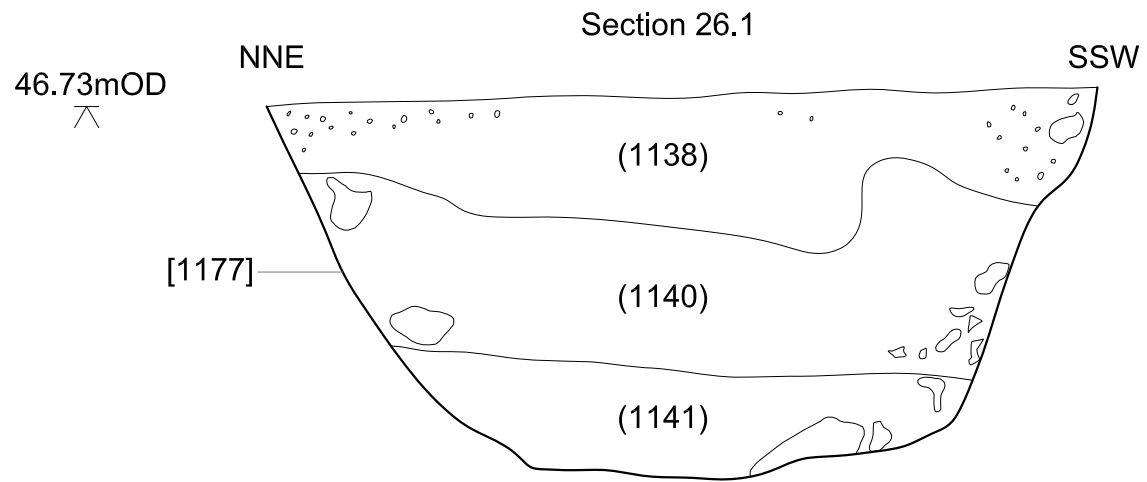
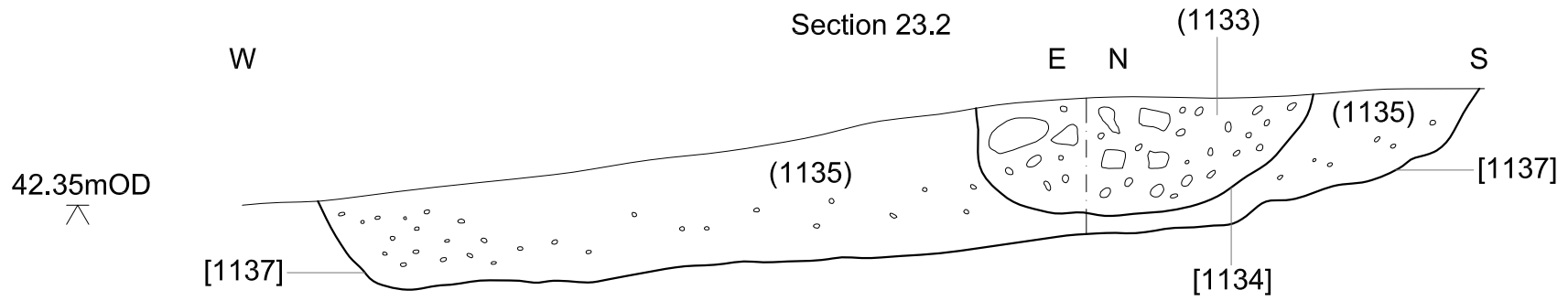


Figure 15: Sections



1:20@A4



Figure 16: Sections



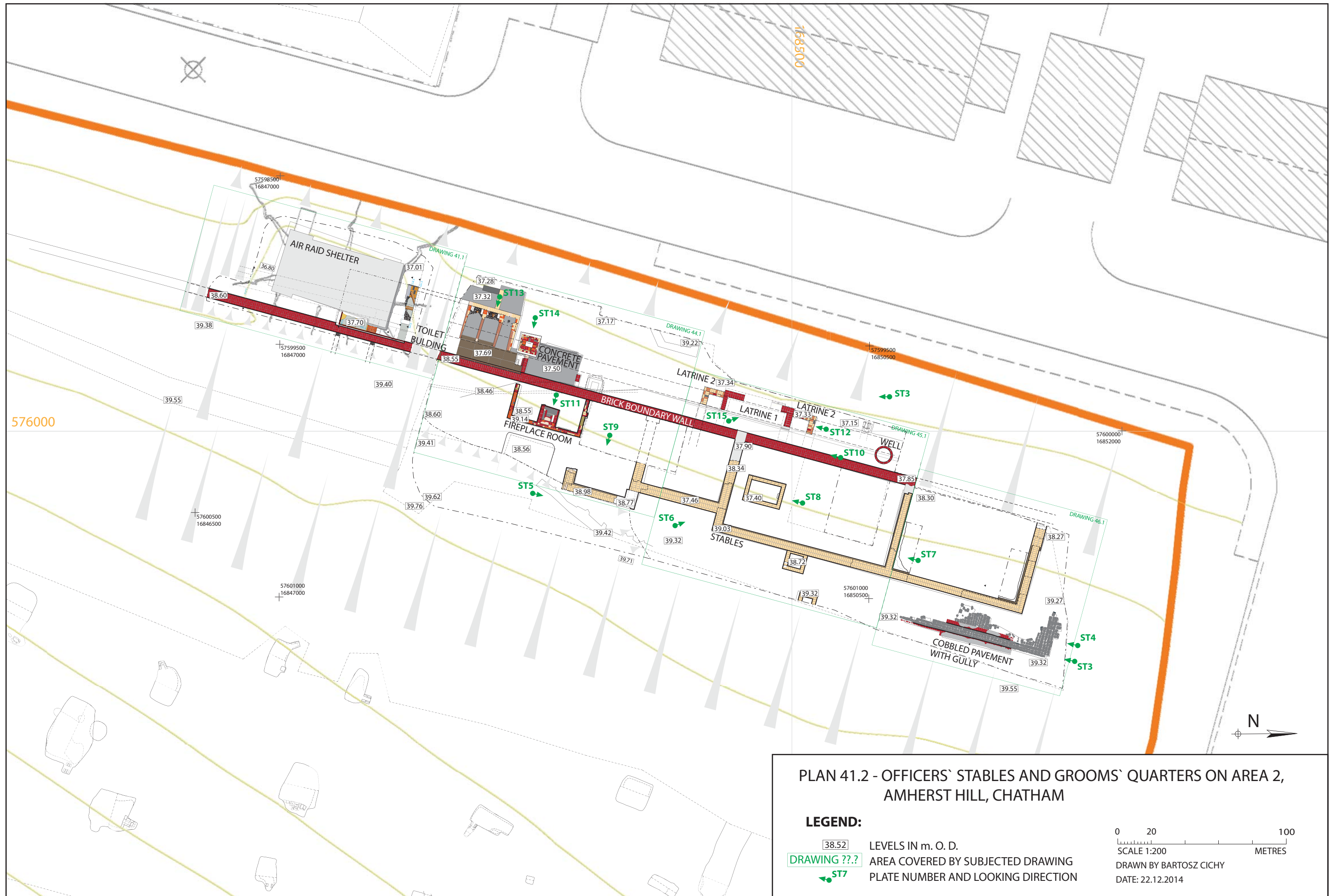


Figure 17: Plan of Officers' stables with plates location