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01	Damien Boden Alison Hicks	Project Officer Senior Project Manager	13 August 2016

With contributions by Enid Allison and Simon Pratt

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Canterbury Archaeological Trust Limited
92a Broad Street · Canterbury · Kent · CT1 2LU
Tel +44 (0)1227 462062 · Fax +44 (0)1227 784724 · email: admin@canterburytrust.co.uk
www.canterburytrust.co.uk



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ABSTRACT

Between 20 June and 04 August 2016, Canterbury Archaeological Trust undertook an archaeological evaluation and watching brief upon geotechnical investigation within the North Holmes Road campus of Canterbury Christ Church University. The work was commissioned and funded by the university following proposals to develop the site for the creation of a new Arts Building. The work comprised the cutting of seven trenches within the proposed development area and the maintenance of a watching brief during the sinking of three boreholes.

The trenches were cut within 'Blue' car park, situated in the north-western corner of the university campus. Trench 1, aligned NNE–SSW, was 10m long, c 1.6m wide and up to 2m deep. Trench 2, aligned perpendicular to Trench 1, was 10m long, 1.60m wide and up to 2.14m deep. Trench 3, aligned WNW–ESE, was 10.80m long, c 1.60m wide and up to c 1.70m deep. Trench 4, aligned NNE–SSW, was 10m long, c 1.60m wide and up to c 1.50m deep. Trench 5, aligned north–south, was c 10m long, 1.60m wide and up to 1.65m deep. Trench 6, aligned north-west to south-east, was c 10m long, 1.60m wide and up to 1.60m deep. Trench 7, aligned north-east to south-west, was up to 43m long, 2.3m wide and 0.90m deep.

Archaeological remains were revealed in each of the trenches. Roman activity within the vicinity is suggested by pottery and tile fragments, albeit largely derived from later contexts. A Roman water conduit, thought to run across the south-east corner of the proposed development area (PDA) was not revealed but may lie at greater depth than exposed.

Early remains in Trench 4, comprising a sequence of topsoil, yard remnant and occupation deposits, could potentially be of Anglo-Saxon date. Mid Anglo-Saxon remains are extensive across the campus, forming a large craftworking site associated with the monastery of St Augustine. An overlying soil was possibly of eleventh- to twelfth-century date.

Four features in Trench 5 comprising two pits and two linear features could have been of thirteenth-century date. Perhaps of similar date was a linear feature in Trench 6, possibly a north–south aligned abbey boundary ditch.

An abbey boundary wall was erected in 1320 and a continuous length of its western side was identified in Trenches 3, 6 and 7. The wall lay c 0.40m below current ground surface and had evidently been truncated in the 1950s or 1960s. The wall had been modified, perhaps in the nineteenth century. To the east of the boundary wall lay a succession of soils in Trenches 2, 3, 4 and 6. Cutting the soils in Trench 2, which had possibly infilled and capped a quarry pit, was a series of small ovens or hearths of medieval date. It is unknown whether they were abbey features or represented occupation post-dating the Dissolution. Soil horizons were also identified to the west of the abbey wall, in Trenches 1 and 5.

Flanking the western side of the abbey wall was a flint metalled surface, identified in Trenches 3 and 6, probably forming a path or trackway as shown on the Ordnance Survey map of 1874, but possibly of earlier origin. A well was also identified. Overlying the Trench 6 metalling was a series of external soils. Further soils, of probable twentieth-century date, were identified across the PDA.

The evaluation work has demonstrated that archaeological remains survive within the proposed development area which are likely to be impacted by future development work.

The geotechnical investigations involved the cutting of three boreholes (BH1–3) after the evaluation trenches had been backfilled. They were sunk through Trenches 1, 5 and 6 to a depth of c 25m below ground level. Geological and archaeological deposits were revealed. The results of the geotechnical augering indicate that the late Pleistocene/early Holocene deposits underlying the PDA are more complex than indicated by the British Geological Survey and that there is the potential, albeit very low, for important artefactual or palaeoenvironmental material to survive within the PDA.

1. INTRODUCTION

- 1.1 Between 20 June and 04 August 2016, Canterbury Archaeological Trust undertook an archaeological evaluation and watching brief upon geotechnical site investigation (SI) within the North Holmes Road campus of Canterbury Christ Church University (CCCU). The work was commissioned and funded by the university following proposals to develop the site for the creation of a new Arts Building. The archaeological works comprised the cutting of seven evaluation trenches and the maintenance of a watching brief during the sinking of three rotary-percussion boreholes.
- 1.2 The archaeological evaluation formed part of pre-planning works associated with proposed development of the north-west corner of the university campus. Development of the site is to comprise the construction of a new Media, Art, Design and Music building. The archaeological works were designed to inform the scope of any further archaeological mitigation which might be required prior to development.

2. LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The proposed development area (PDA) (centred at NGR 615470 158019) lies east of the city of Canterbury, in an area of car parking (termed 'Blue' by the university) located in the north-west corner of the North Holmes Road campus of Canterbury Christ Church University (Fig. 1; Plates 1 and 2). The car park lies on roughly level ground sitting at a height of approximately 12.2–12.9m OD and is covered by tarmac.
- 2.2 The northern side of the car park is bounded by a length of medieval wall associated with the abbey. In this area, the wall is set back slightly from the southern side of North Holmes Road. The western side of 'Blue' car park is formed by the rear garden boundaries of properties lying on the southern side of Havelock Street.
- 2.3 A roadway borders the eastern side of 'Blue' car park, leading from Gate 1 beside North Holmes Road to Maxwell Davies Building to the south-west. It is used by emergency and maintenance vehicles. Ramsey Building lies to the east of the roadway.
- 2.4 Johnson Building lies to the south of 'Blue' car park, bounded from it by a wildlife area and pond. The eastern side of the wildlife garden is flanked by a standing length of medieval/post-medieval wall.
- 2.5 Bedrock geology within the PDA is shown as Thanet Formation - Sand, Silt and Clay, overlain by superficial deposits of Head - Clay & Silt (Brickearth) (Geological Survey of Great Britain (England and Wales), Canterbury Sheet 289).

3. PLANNING BACKGROUND AND NATURE OF DEVELOPMENT

- 3.1 The archaeological evaluation and geotechnical SI formed part of predetermination works associated with proposed redevelopment of the north-west corner of the university campus. Development of the site is to comprise the construction of a new Media, Art, Design and Music building. The building is to comprise a maximum of three storeys and is likely to include a basement. Although the proposed location of the building is known, the exact design has not yet been finalised.

- 3.2 The PDA lies within the Scheduled Ancient Monument of St Augustine's Abbey (SAM Listing no 1016844) and forms part of the UNESCO World Heritage Site encompassing Christ Church Priory (Canterbury Cathedral), St Augustine's Abbey and St Martin's Church. It lies within the Canterbury Area of Archaeological Importance designated under section 35 of the Ancient Monument and Areas Act 1979 (revised 1983). Canterbury Archaeological Trust has been appointed by the Secretary of State as the Investigating Authority for the Canterbury Area of Archaeological Importance
4. AIMS OF THE ARCHAEOLOGICAL WORK
- 4.1 The aim of the evaluation work, as specified in the Written Scheme of Investigation submitted to Historic England, was to determine whether any significant archaeological remains survive within the PDA and, if present, assess their character and extent. It was envisaged that assessment of the results will provide guidance on what mitigation measures would be appropriate during subsequent phases of work.
- 4.2 The evaluation was thus to ascertain the extent, depth below ground surface, depth of deposit, character, significance and condition of any archaeological remains on site.
- 4.3 The archaeological watching brief maintained during geotechnical borehole site investigation, and recording of the consequent cores, examined and recorded lower depths of stratigraphy, including geological strata, not revealed during evaluation work. It was envisaged that the work would contribute to archaeological and geological knowledge of the area, and enable the creation of deposit models for the PDA. The watching and recording brief examined the extent, depth below ground surface, depth of material, character, significance and condition of deposits encountered below the base of the evaluation trenches.
5. METHODOLOGY
- 5.1 All archaeological work was undertaken according to the Written Scheme of Investigation (WSI) prepared by Canterbury Archaeological Trust in May 2016 and submitted to Historic England, and to an addendum to the WSI compiled 13 July 2016 to allow for additional works. It was carried out in accordance with the accepted professional standards set out in the Chartered Institute for Archaeologists *Standard and guidance for archaeological evaluation* (2014). Canterbury Archaeological Trust is a Registered Organisation with the Chartered Institute for Archaeologists and conforms to their by-laws, standards and policy statements.
- 5.2 The work was monitored by Paul Roberts, Inspector of Ancient Monuments for Kent, Sussex and Surrey, Historic England.
- 5.3 The evaluation comprised the cutting of seven trenches within the PDA (Trenches 1–7, Figs 1 and 2). Trenches 1–6 were initially opened by a mechanical excavator fitted with a flat-bladed bucket, working under constant archaeological supervision. Machining removed the surface and the overlying modern overburden. Where practicable, the lower levels were investigated by hand and recorded by archaeologists from Canterbury Archaeological Trust. In some trenches, the depth of overburden was too great to allow safe access to the base of the trench. In these instances (Trench 5 and parts of Trenches 2 and 4), remains were recorded from the top of the trench and the lower levels then

backfilled to a safe working depth (1.2m) to allow recording of the upper levels in section.

- 5.4 All the trenches were cut through the tarmac surface of 'Blue' car park. Trenches 1–6 were each approximately 10m long by 1.6m wide.
- 5.5 Trench 1 was located in the north-western corner of the PDA, aligned approximately NNE–SSW. It was 10m long, *c* 1.6m wide and up to 2m deep at its northern end within a narrow, *c* 0.50m wide, slot cut centrally to the trench.
- 5.6 Trench 2 was located in the north-eastern corner of the PDA, aligned perpendicular to and to the east of Trench 1. It was 10m long, 1.60m wide and cut to a maximum depth of 2.14m at its western end.
- 5.7 Trench 3 was aligned roughly WNW–ESE and located roughly centrally within the PDA, some 15m south of Trench 1. It was 10.80m long, *c* 1.60m wide and cut to a maximum depth of *c* 1.70m at its western end.
- 5.8 Trench 4 was aligned roughly NNE–SSW and located on the eastern side of the PDA, to the south of and perpendicular to Trench 2. It was 10m long, *c* 1.60m wide and cut to a maximum depth of *c* 1.50m at its northern end.
- 5.9 Trench 5 was aligned roughly north–south and was located in the south-western corner of the PDA. The trench was *c* 10m long, 1.60m wide and cut to a maximum depth of 1.65m at its southern end.
- 5.10 Trench 6 was aligned roughly north-west to south-east and was located towards the south-eastern corner of the PDA, *c* 7m to the south-east of Trench 5. It was *c* 10m long, 1.60m wide and cut to a maximum depth of 1.60m at its southern end.
- 5.11 Following excavation of Trenches 1–6, additional works involved exposure of an abbey boundary wall which had been observed crossing Trenches 3 and 6. Trench 7, aligned approximately north-east to south-west, with a total length of *c* 43m and a width up to 2.3m, uncovered the full length of the wall using a machine fitted with a flat-bladed ditching bucket. The wall surface in Trench 7 was then cleaned by hand by archaeologists from Canterbury Archaeological Trust and limited areas of sample excavation, up to 0.90m deep, were undertaken to understand the nature of the remains uncovered.
- 5.12 The geotechnical SI was conducted after Trenches 1–7 had been backfilled and the tarmac surface reinstated. The three boreholes were cut through Trenches 1, 5 and 6 (Figs 2, 13 and 15, BH1–BH3), and their intended centre-points surveyed in (by CAT) using survey-quality GPS. At each position the reinstated tarmacadam was broken out and a narrow starter pit manually cut to 1.0–1.2m below ground level (BGL). A tracked hydraulic rotary percussion rig was then used to continue each borehole down to approximately 25m BGL, using a 120mm nominal diameter flight auger in 1m lengths. In parallel with this, cone penetration (CPT) and, occasionally, standard penetration (SPT) tests were conducted, generally at 1m intervals, within the boreholes. The arisings from the starter pits and the flight auger were logged archaeologically down until 'solid' (actually of a putty-like consistency) chalk was encountered. As there were no arisings from the CPT, these were not logged archaeologically but SPT

results were included where these gave more detailed information than the flight augering at the same level. Stratigraphic units identified within each borehole were numbered uniserially, starting at 10000 to avoid clashing with numbers assigned in the evaluation trenches. The field logs were transcribed into a standard CAT borehole data file and each context colour-coded by probable function (levelling, floor, old-ground surface *etc*). The data were then used to draft pseudo-sections of each borehole. These were incorporated into a diagram showing their interrelationship and to which tentative interpretative groups, ‘phases’ (actually representing degrees of archaeological potential) and other annotation were added manually (Figs 14–15). The data were also used to generate formatted logs (Appendix 1), a brief description of each group was prepared (Appendix 2) and a general overview written (Section 11).

- 5.13 Archaeological recording of the cut trenches was undertaken using Canterbury Archaeological Trust *pro forma* context recording sheets. Measured plan and section drawings were compiled and a photographic record was maintained using digital format. The complete archive relating to the excavation is currently held by Canterbury Archaeological Trust at 92a Broad Street, Canterbury, CT1 2LU.

6. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 6.1 The PDA lies within the Scheduled Ancient Monument of St Augustine’s Abbey (SAM listing no 1016844) and the Canterbury Area of Archaeological Importance designated under section 35 of the Ancient Monument and Areas Act 1979 (revised 1983). It also forms part of the UNESCO World Heritage Site encompassing Christ Church Priory (Canterbury Cathedral), St Augustine’s Abbey and St Martin’s Church.
- 6.2 An archaeological desk-based assessment of the PDA has been compiled (Twyman 2016). A summary of the archaeological and historical background is presented below. Further details are available within the report.

Prehistoric (c 500,000BP – AD 43)

- 6.3 Prehistoric remains are reported within a 500m radius of the PDA.
- 6.4 A single hammer-struck flake dated to the Lower Palaeolithic is recorded from an excavation undertaken in 1997 at the former Sessions House, approximately 300m south-east of the PDA (Hicks 2015, 15). The artefact was found in a Roman-period well. The same site yielded a tanged point of probable Upper Palaeolithic date, the freshness of the artefact indicating that it was found close to the site of its original production (*ibid*).
- 6.5 Residual Mesolithic flintwork has been identified from an excavation site within the North Holmes Road campus, lying approximately 40m south-east of the PDA (Hicks 2015, 15). The assemblage collected suggests that this area was used for the final working of flint implements.
- 6.6 The Sessions House site yielded flintwork of Neolithic date, as has a site within the campus approximately 100m south-east of the PDA, and another immediately to the east (Hicks 2015, 15). Neolithic pottery was recovered from sites immediately to the

south and east of the PDA. In addition, a polished flint axe, of Neolithic date, was found in the vicinity of North Holmes Road (MKE4523).

- 6.7 Evidence for Bronze Age settlement activity has been found on two sites within the campus immediately adjacent to the PDA, to the east and to the south (Hicks 2015, 15–16). Pits, a post-hole and a section of ditch were recorded yielding material of Bronze Age date, whilst a further twenty-two features may have been of similar date based on their stratigraphic position. Residual Bronze Age pottery has been recovered from an early topsoil horizon within the campus, approximately 70m east of the PDA, and residual flint flakes of late Bronze Age date from another campus site (*ibid*).
- 6.8 Iron Age occupation activity is known from within Canterbury but the evidence recorded so far suggests that the area now occupied by the North Holmes Road campus may have formed part of a wide expanse of open land during this period (Hicks 2015, 110). Sherds of pottery of Iron Age date have been recovered from across the campus, predominantly from the area east of the PDA, though the pieces found were generally abraded and residual in nature, probably deriving from field marling (Lyne 2015, 191).

Romano-British (c AD 43 – 450)

- 6.9 Romano-British remains are reported within 500m of the PDA.
- 6.10 The PDA lies to the east of the Roman town of Canterbury, the settlement then known as *Durovernum Cantiacorum*. It is located approximately 300m north of the Roman road which led east towards *Rutupiae*, modern Richborough, and approximately 200m east of the line of the Roman town wall. The pottery evidence from excavations within the campus suggests a hiatus in land cultivation in this area between the time of the Roman conquest and c AD 80.
- 6.11 Lengths of a Roman water conduit, constructed of mortared brick and tile, have been exposed to the south and east of the PDA (Hicks 2015, 22–23). The line of the structure is projected to cross the south-eastern portion of the PDA. The feature was encountered at a depth of between 11.35m OD and 11.54m OD where it was observed on the adjacent excavation site to the east.
- 6.12 Archaeological investigations at the Sessions House site revealed the presence of a Roman cremation cemetery (TR 15 NE 1566). A total of nine definite burials were excavated, with a further two possible also recorded. The cemetery is thought to have spanned the period c AD 43–130, possibly remaining in use until c AD 150. A scattering of other burials, both cremation and inhumation, are recorded to the south and south-west of the PDA, within a 500m radius, although these lie closer to the line of the Roman road to Richborough and to another road which may have joined it, leading from Queningate. No evidence for Romano-British burial activity has been identified on the sites adjacent to the PDA; the PDA, positioned further from the Roman roads, may have lain outside the limit deemed suitable for burial, land in closer proximity to the major routeways being favoured instead.
- 6.13 Residual Roman material has been recovered from a site approximately 110m south of the PDA and from another approximately 70m to the south-east (Hicks 2011, 4, 7). A watching brief maintained during the university Dark Fibre Scheme also revealed a

scattering of Roman material from across the campus area, but the nature and quantity suggest there was no direct Roman period settlement in the vicinity of the PDA (Hicks 2012, 28).

Anglo-Saxon (c 450 –1066)

- 6.14 Anglo-Saxon remains are reported within a 500m radius of the PDA.
- 6.15 The Roman abandonment of Canterbury in the early fifth century AD led to a brief break in settlement activity within the town. It is likely that land to the north-east of the walled town, including the area now occupied by the PDA, remained largely open and unoccupied throughout the fifth and most of the sixth century. Evidence from pottery suggests a low level of activity within the area at this time (Hicks 2015, 115).
- 6.16 The monastery of St Peter and St Paul was founded c 598 on land granted for the purpose by King Ethelbert. The monastery, now known as St Augustine's, sits on a parcel of land located between the town and St Martin's Church and lies approximately 150m south of the PDA. There is no evidence to suggest that the monastic building ranges extended north into the area now occupied by the university during the Anglo-Saxon period, although it is likely that this land was held by the monastery from early in its history, even though no boundary features have as yet been identified to define its true extent (Hicks 2015, 116).
- 6.17 Numerous features dated to the mid Anglo-Saxon period (c AD 750–850) have been identified across the western side of the university campus, on sites immediately to the south and east of the PDA (Hicks 2015, 27–38). These include post-holes, gullies, ditches and pits containing a mix of both domestic and metalworking material. There is potential for some of the linear features recorded on adjacent archaeological sites to extend into the PDA. The evidence suggests that the campus ground formed part of a large craftworking site, probably associated with the monastery. Ironworking debris has been recovered from many of the Anglo-Saxon features and deposits, together with remnants suggesting the working of bone, antler and copper alloy (*ibid*).

Medieval (c 1066 – 1540)

- 6.18 Medieval remains are reported within a 500m radius of the PDA.
- 6.19 During the early medieval period, the PDA formed part of the precincts of St Augustine's Abbey (Hicks 2011, 5–7; Hicks 2015, 42–62). The outer court of the abbey lay to the north of the abbey church, in ground largely covered today by the university campus. A boundary ditch demarcated its extent, revealed by excavation work to the east of the PDA (Hicks 2015; Wilson 2013). Service features and outbuildings are known to have stood close to the PDA. Approximately 20m to the east, kilns and a metallised trackway were found during excavation in 1995. A timber barn was subsequently constructed nearby, the remains of which were revealed at the same site. Other known features on the western side of the university campus include interior boundary ditches, gullies, pits, post-holes, a furnace and a casting pit.
- 6.20 From the thirteenth century, ranges of service buildings began to be erected within the outer court, those identified so far lying to the south of the PDA. The closest of the

known structures comprises a brewhouse-bakehouse range lying *c* 60m distant, the western gable end of which stands today. The building remains were represented by walls and wall foundations, sequences of floor and occupation deposits and a variety of internal features. A unique stepped sunken feature, of fifteenth-/sixteenth-century date, was attached to the northern side of the brewhouse-bakehouse range, perhaps associated with the production of beer. Further service buildings could lie within the area of the PDA.

- 6.21 The archaeological watching brief undertaken on the university Dark Fibre Scheme in 2012 exposed a fragment of the northern monastic precinct boundary wall lying just beyond the north-eastern tip of the PDA, beside campus Gate 1. The scope of investigation possible within the watching brief was limited, and it was not possible to determine a date of construction for the section of wall exposed. However, substantial remains of chalk and flint fabric, bonded with light brown sandy mortar, were shown to survive extending to a depth of at least 0.61m and with a width of 0.9m (Hicks 2012, 29). The Ordnance Survey map dated 1874 shows a boundary wall line crossing north-east to south-west through the central area of the PDA, possibly an original abbey wall.
- 6.22 The Dark Fibre Scheme watching brief also revealed a stone pad which had been formed from a re-used Caen stone fragment, set within a deliberate cut (Hicks 2012, 15). It lay immediately adjacent to the north-eastern limit of the PDA. Again, the limited area exposed during the watching brief makes interpretation of the feature difficult, but it seems to have been located within an area of open ground, possibly lying within the outer grounds of the abbey. A spread of flints nearby, possibly representing levelling or patching, also indicates activity in the area, potentially contemporary with occupation of the abbey (Hicks 2012, 29).

Post-medieval (c 1540 – 1900)

- 6.23 Post-medieval remains are reported within a 500m radius of the PDA.
- 6.24 St Augustine's Abbey was officially surrendered to the crown on 30 July 1538. In October, work began on conversion of the abbot's lodgings to form a Royal Palace and the construction of new lodgings for Henry's future queen, Anne of Cleves, who was to arrive in December. The buildings of the outer court were largely abandoned and were gradually demolished over the following decades, except for a few buildings which appear to have been re-used, including parts of the brewhouse-bakehouse range (Hicks 2015, 156).
- 6.25 Away from the retained buildings, the former outer court became broadly open ground covered by soils (Hicks 2011, 6). A number of pits of post-medieval date have been identified, cutting the campus area, two containing articulated cattle remains, and there is evidence that the boundary ditch to the north of the site was recut before eventually falling out of use and being infilled (Hicks 2015, 156–158). Evidence for post-medieval infilling and levelling of the boundary ditch was also recorded at the Boiler House site, to the east of the PDA, where the ditch was capped by material containing pottery of a sixteenth- or seventeenth-century date (Wilson 2013, 10).
- 6.26 The abbey and its grounds passed through a succession of private hands during the post-medieval and early modern periods (Sparks 2015, 161–166). Much of the campus

ground was probably used as pasture and, to the east, as orchards and hop ground, although there is evidence for the continuing use of a malting kiln, whilst a timber outbuilding lay to the south of the PDA, and a number of pits were cut (Hicks 2015, 156–158).

Modern (c 1900 – 2000)

- 6.27 Modern remains are reported within the PDA.
- 6.28 By the time of the 1907 Ordnance Survey map, further buildings had been constructed on the east side of the north-east to south-west aligned boundary wall lying within the PDA. The buildings and the boundary still appear to have been in existence at the time of production of the 1945 Ordnance Survey map. It is unknown at what date the wall was finally levelled, but this perhaps happened sometime after 1946, when the land behind Havelock Street was sold. In 1960, eight acres of the former abbey land was purchased for the development of a new teacher training college. The sale was completed by 1962 and development of the site started later the same year.

7. EVALUATION RESULTS

Trench 1

(Fig 3, Plate 3)

- 7.1 The earliest deposit encountered in Trench 1 was observed to the north, within a narrow slot excavated along the line of the trench, and consisted of a ‘dirty’ flint pebble gravel (105) in excess of 0.50m thick and extending below the base of the trench¹. A large fragment of Roman ceramic building material (CBM) was recovered from the surface of this deposit. The deposit was loosely compacted. It may have been a natural deposit, the Roman CBM deriving from an overlying layer and becoming impressed into the surface, or perhaps the fill of a quarry. Similar gravel was identified in BH3 (G10056), probably but not certainly containing at least two abraded tile fragments (see 11.4 below); if tile did derive from this material, it was evidently not natural.
- 7.2 Deposit (105) was overlain by a c 0.20–0.30m thick layer of a light to mid yellowish, greyish brown, friable, clayey silt (104) which contained frequent, small, rounded and sub-angular flint pebbles, occasional larger flint pebbles and nodule fragments, and charcoal flecking. The deposit was largely visible in section within the narrow slot excavated at the base of the trench, and in plan towards the southern end of the slot. A single sherd of thirteenth-century shell-tempered pottery was recovered from the deposit. The material might have represented a buried topsoil horizon.
- 7.3 Deposit (104) was overlain at its southern end by a remnant of possible wall foundation (106), or demolition material, which consisted of large flint pebbles and nodule fragments. The flints were observed within the narrow slot excavated at the base of the trench.
- 7.4 Deposit (106) and the northern extent of deposit (104) were overlain by a substantial deposit of a mid to dark greyish brown, friable, clayey loam (103) which contained

¹ Heights OD of features and deposits mentioned in the text are recorded on the relevant plan and section drawings.

frequent, small and medium rounded and sub-angular flint pebbles, occasional larger flint pebbles and nodule fragments, chalk, mortar, charcoal, coal, medieval/post-medieval tile, animal bone, clay tobacco pipe fragments and pieces of fourteenth- to fifteenth-century pottery. The deposit formed a fairly even and level layer *c* 0.60–0.70m thick, observed in plan covering the southern and central extent of the trench, although appeared cut away at its northern end. It perhaps formed an old topsoil horizon.

- 7.5 At its northern end of the trench, deposit (103) was cut by the southern side of a possible pit or other feature [107]. The feature was *c* 0.60m deep, with gradually sloping sides, and extended beyond the northern end of the trench. It contained a single fill of a dark greyish brown, friable, silty clay (102) with inclusions of occasional, small to medium, rounded and sub-angular flint fragments/pebbles, mortar, chalk and coal fragments. Deposit (102) also formed a *c* 0.20m thick layer extending beyond the bounds of the cut, overlying deposit (103) and running across the full extent of the trench.
- 7.6 The upper levels of Trench 1 comprised modern horizons. Deposit (102) was overlain by a levelling/bedding deposit, *c* 0.25–0.40m thick, of light greyish brown, fairly compacted, silty clay (101) which contained crushed brick and concrete rubble, flint pebbles, tile and mortar fragments. Deposit (101) was overlain by a geotextile fabric and a *c* 0.30m thick layer of crushed ‘Type 1’ aggregate which formed the bedding for the tarmac car park surface (100).

Trench 2

(Fig 4, Plate 4)

- 7.7 Probable natural ground was encountered at a depth of *c* 1.60m within a machine cut sondage at the western end of Trench 2, consisting of light yellowish, greenish grey, firm silty clay (227).
- 7.8 Deposit (227) was cut by the southern side of a large pit or perhaps quarry [228]. Feature [228] was only observed at the base of the sondage, and in the lower levels of the southern section edge, although a feature in excess of 2.2m deep, with a side angling down moderately from south to north and extending beyond the western and northern limits of the trench, can be suggested. Its lower (observed) fill consisted of dark greyish brown, firm, silty clay (226) which contained occasional, small, rounded and sub-angular flint pebbles and fragments of burnt daub and charcoal, overlain by a *c* 0.40m thick deposit of a dark grey, sandy silt (216) which contained frequent, small to medium sized, rounded and sub-angular flint pebbles and occasional charcoal fragments and flecking. Deposit (216) was overlain by a *c* 0.20m thick deposit of a light yellowish grey, soft, friable, silty clay (215) which contained occasional, small, rounded flint pebbles, charcoal and chalk fragments. Deposit (215) was in turn overlain by a *c* 0.40m thick deposit of yellowish grey, silty clay (214), similar to deposit (215) but containing less inclusions. Deposits (214), (215), (216) and (226) could all have been backfills lying within a quarry pit.
- 7.9 The eastern side of deposit (214) was overlain by a *c* 0.20m thick layer of light to mid greyish brown, friable, silty clay (213) containing occasional, small rounded and sub-angular flint pebbles and small fragments/flecks of chalk and charcoal, which extended throughout the eastern extent of the trench. Deposit (213) could have formed an upper fill to possible quarry pit [228], or perhaps an overlying soil.

- 7.10 At the eastern end of trench, deposit (213) was cut or overlain by three possible oven structures (219), [222] and [208]. The earliest of these, (219), consisted of a roughly sub-circular patch of burnt clay, *c* 1m long and 0.50m wide. The deposit was observed in plan but not excavated, so its depth remains unknown. The clay deposit was cut on its western side by a sub-circular feature [222] which was *c* 0.80m across and contained two deposits of burnt clay, a central area of greyish brown scorched clay (220) and an outer surround of mottled orange, yellow and reddish brown clay (221). The feature was not excavated, so the depths and relationships of the clay are not known, though it seems likely that (220) lies within an inner sunken area of (221). A third possible oven or perhaps ?hearth lay against the southern edge of the trench. It consisted of a sub-circular, concave-profiled cut [208], *c* 0.60m wide, which contained a burnt clay and ?mortar lining and an inner fill of dark brown silt clay flecked with charcoal (207).
- 7.11 Deposit (213) was cut on its south-eastern side by a small, sub-circular and concave-profiled pit [206]. The pit lay on the southern side of the trench and was *c* 0.80m across, 0.30m deep and contained a fill of a dark greyish brown, loose, sandy clay (205) with inclusions of peg-tile and mortar.
- 7.12 Feature [222] was cut on its western side by a small, irregular pit [210]. The feature was *c* 0.75m long and 0.25m deep, with a dished profile, and contained a fill of dark greyish brown, loose, sandy clay (209) with inclusions of large rounded and sub-angular flint pebbles and nodule fragments, peg-tile, mortar, coal fragments and pieces of thirteenth- to fourteenth-century pottery. The northern end of feature [210] was cut by a large, shallow, sub-circular pit [225] which extended beyond the northern limit of the trench. The feature was in excess of 2m across, just 0.25m deep and contained two fills. The lower fill consisted of mid greyish brown silty clay (224), overlain by a dump of large, rounded, angular and sub-angular flint pebbles and nodule fragments, peg-tile and mortar fragments (223) containing pieces of animal bone, slate, Roman and medieval/post-medieval tile and pottery of thirteenth- to fourteenth-century date.
- 7.13 Features [206], [208], [210] and [225] were overlain by a *c* 0.20–0.25m thick layer of a dark brown, firm, silty clay (202) containing small to large, rounded and sub-angular flint fragments, peg-tile, mortar, chalk and coal fragments/flecks. Deposit (202) extended across the full length of the trench except where it was cut by later features. At its western end, deposit (202) was cut by a large pit [212]. The feature was only recognised in the north-facing section of the trench although a feature in excess of 2m across and *c* 0.50m deep was recorded. It contained a single fill of dark greyish brown, loose silty clay (211) with inclusions of frequent peg-tile, flint pebbles/nodule fragments, mortar, chalk, coal and animal bone. At the eastern end of the trench, deposit (202) was cut by a second pit [204], only partially exposed, although a sub-rectangular feature *c* 1.2m wide and 0.45m was recorded. The feature contained a single fill of dark greyish brown firm silty clay (203) containing much flint, peg-tile, mortar, chalk and charcoal/coal fragments. Cutting feature [204] to the north was a small pit [218], observed in plan but not excavated, sub-ovoid in plan and containing a fill of dark greyish brown silty clay (217) containing chalk and flint.
- 7.14 Features [212] and [218] were overlain by a *c* 0.15–0.25m thick deposit of dark greyish brown, firm silty clay (201) which contained much flint, peg-tile, mortar, ash, charcoal and coal and was very similar to the fills of both [204] and [212].

- 7.15 Deposit (201) was subsequently overlain by a geotextile material, crushed ‘Type 1’ aggregate and the tarmac car park surface (200).

Trench 3

(Fig 5, Plates 5–9)

- 7.16 Natural subsoil was not encountered in Trench 3. The earliest deposit at the eastern end of the trench consisted of light to mid, yellowish, greyish brown silty clay (305) which contained occasional, small, rounded and sub-angular flints and charcoal fragments, visible in plan within the base of a narrow slot cut along the centre of the trench. The deposit was in excess of 0.30m thick and extended beyond the base and western end of the trench. Deposit (305) was overlain on its western side by a similar deposit of silty clay (304), also visible in plan within the narrow excavated slot, which was *c* 0.40m thick and sloped down towards the west. Deposits (305) and (304) could have been developed/cultivated soils or, apparently dropping down towards the west, may have lain within an underlying cut.
- 7.17 Towards the eastern end of the trench, deposit (304) was cut by a construction trench [310] containing the chalk block foundation (307) for a roughly north–south aligned wall (309). The chalk block foundation (307) projected 0.32m from the wall face and was 0.26m thick. The wall superstructure (309) was *c* 1m wide, 1.05m tall and constructed of large chalk blocks and flint nodule fragments bonded with a hard, light orangey brown, sandy mortar and faced on both sides with large knapped flints. The construction trench [310] was backfilled with a mixture of light to mid yellowish brown, loose, silty clay, mortar and chalk fragments (308) which was sealed by a thin layer of orangey brown mortar and chalk fragments (306) probably derived from the construction and pointing of the wall’s flint facing.
- 7.18 Deposit (306) was overlain by a thick deposit of light to mid, greyish, yellowish brown, friable silty clay (303) containing fragments of Roman tile, animal bone and thirteenth-century pottery, which abutted the east facing face of wall (309) to a depth/height of *c* 0.80m. The purpose/nature of deposit (303), sitting beside an apparent hollow beside the wall, is uncertain.
- 7.19 Deposit (303) was overlain by a *c* 0.20–0.35m thick and fairly level layer of light, greyish, yellowish brown silty clay (302) containing frequent, small, rounded and sub-angular flint pebbles, mortar, chalk and charcoal fragments. The deposit may have formed a topsoil horizon.
- 7.20 Deposit (302) was overlain by a *c* 0.10–0.25m thick modern bedding deposit of fairly compacted chalk, brick, flint and mortar rubble (301) which partially overlay the eastern side of wall (309) and continued beyond the eastern end of the trench.
- 7.21 At the western end of the trench, west of wall (309), the earliest deposit, observed partially in plan in a deeper cutting, consisted of light to mid yellowish, greyish brown, mottled, silty clay (320) which was very similar to deposits (304) and (305) encountered at the eastern end of the trench. It may have been a developed/cultivated soil horizon.
- 7.22 Deposit (320) was cut by two possible pits. The features were observed in the base of the trench but were not investigated/sample excavated. Pit [318] was a sub-circular

- feature, *c* 1.6m long, *c* 1m wide and filled with mid, greyish, yellowish brown, firm silty clay (317) containing occasional, small to medium, rounded and sub-angular flint pebbles and charcoal fragments. A second sub-circular pit [322] lay in the north-western corner of the trench, in excess of 1.1m by 0.50m in plan and containing a mid, greyish, yellowish brown, firm silty clay fill (321), very similar to (317), the fill of pit [318].
- 7.23 Immediately to the east of pit [318], deposit (320) was overlain by a rough flint pebble metalling (319) which was *c* 0.20m thick, *c* 3.30m wide and abutted the west face of wall (309). The deposit, seen in plan within the base of a narrow excavated slot, was similar to metalling (619) in Trench 6. Several narrow, shallow and silt filled features, probable wheel-ruts, running parallel with the wall were seen in the surface of the metalling, suggesting that it formed the surface of a path or trackway.
- 7.24 Pits [318] and [322] and the western ‘tail’ of metalling (319) were overlain by a *c* 0.20m thick deposit of mid greyish brown, loose, friable, clayey silt (314) which contained frequent, small to medium, rounded and sub-angular flint, medieval/post-medieval tile, oyster shell, animal bone and charcoal fragments, and pieces of thirteenth-century pottery. The deposit could have accumulated as occupation material.
- 7.25 Deposit (314) was overlain by a *c* 0.40–0.50m thick layer of a light greyish brown, firm, silty clay (313) which contained frequent, small to medium, angular and sub-angular flints, Roman tile, medieval/post-medieval brick and peg-tile, mortar, charcoal, animal bone which included an almost complete dog humerus, oyster shell, a single struck flint and nineteenth-century pottery. The deposit probably formed a topsoil horizon. On the northern side of the trench, deposit (313) was cut by the construction cut [316] for a circular, brick-lined well (315). The well was *c* 1m wide, 6.10m deep, constructed with a domed, corbelled head and sealed with a large sandstone slab. Soil backfilling the well construction cut (also numbered 315) contained two sherds of Roman pottery, fragments of tobacco pipe, medieval/post-medieval tile and mammal bone representing the remains of at least seven rabbits. An iron pipe extending the full depth of the well may have serviced a water feature/fountain shown some 4m to the north on the 1874 Ordnance Survey map.
- 7.26 The well was overlain by a *c* 0.30–0.40m thick layer of mid to dark greyish brown, loose, friable, gritty, clayey ‘loam’ (312) which contained frequent, small to medium, rounded and sub-angular flints, chalk, mortar, glass, brick, coal and charcoal fragments. It extended from the western end of the trench and abutted the west face of wall (309). The deposit was probably a cultivated/developed topsoil.
- 7.27 Deposit (312) was overlain by a *c* 0.30m thick and fairly level layer of mid to dark greyish brown, loose, gritty, clayey silt (311) containing frequent, chalk, flint, brick and mortar rubble, metal objects, coal, ash and charcoal, very similar to layer (301) and probably forming modern bedding. The deposit abutted the western face of wall (309).
- 7.28 Deposits (301) and (311) were overlain by a woven geotextile material, crushed ‘type 1’ aggregate and the tarmac car park surface (300).

Trench 4

(Fig 6, Plates 10 and 11)

- 7.29 Natural subsoil was not encountered during machine evaluation although two augered bore-holes, Auger 2 at the northern end of the trench and Auger 3 at its southern end, encountered a very light yellowish brown or off-white, silty clay and flint gravel ((427) and (428)) lying at a depth of *c* 2.40–2.50m (*c* 9m OD) which could have been natural.
- 7.30 Within Auger 2 at the northern end of the trench, deposit (427) was overlain by a *c* 0.15m thick deposit of light greyish, yellowish brown, moist, soft silty clay (423). Deposit (423) was overlain by a *c* 0.40m thick deposit of mid to dark greyish brown, firm, silty clay (422) containing occasional, small, rounded flint pebbles and charcoal fragments. Deposit (422) was overlain by a *c* 0.09–0.14m thick deposit of gravel (421), in turn overlain by a *c* 0.13m thick deposit of a light to mid greyish, slightly yellowish brown, firm, plastic, silty clay (420) containing occasional, small, rounded flint fragments and charcoal flecking.
- 7.31 Within Auger 3 at the southern end of the trench, deposit (428) was overlain by a *c* 0.11m thick deposit of small to medium sized, flint gravel (431), overlain by a *c* 0.16m thick deposit of very light, greyish, yellowish brown to off-white, soft, slightly silty clay (425), very similar to deposit (427) encountered at the base of Auger 2. Deposit (425) was overlain by a *c* 0.07–0.10m thick layer of flint gravel (430). Deposit (430) was overlain by *c* 0.20m thick deposit of light to mid, yellowish, greyish brown, soft, damp, silty clay (424). Deposit (424) was in turn overlain by a *c* 0.40m thick deposit of light to mid yellowish brown, firm, silty clay (416) containing occasional, small rounded flint fragments and charcoal flecking. Deposit (416) was partially exposed within a narrow slot cut through the base of the trench.
- 7.32 Within the narrow slot, deposit (416) was overlain by a *c* 0.05m thick layer of light yellowish, greyish brown, silty clay (414) which contained small, rounded flint fragments. Deposit (414) was overlain by rough flint gravel metalling (413), overlain by a *c* 0.10m thick deposit of mid to dark greyish brown, soft, friable, silty clay (411) which contained frequent, degraded oyster shell fragments, animal bone, charcoal, daub, Roman tile and fragments of iron metalworking waste (slag). Deposit (411) was sampled for environmental remains (<1>), and recovered were tiny fragments of brick/tile, burnt flint, slag and hammerscale, pottery sherds (indeterminate), mammal fragments, bird and fish bone, oyster shell, charcoal, charred cereal grains including wheat and barley, and mineralised millipedes. Deposit (411) was overlain by a *c* 0.05–0.20m thick deposit of light to mid, greyish, yellowish brown, firm silty clay (412/415): the deposit was numbered (412) towards the northern end of the slot and (415) to the south, but the deposits were equivalent. It was similar to deposit (411) although contained less charcoal and oyster shell fragments. It did, however, contain fragments of daub and animal bone. The area numbered (412) was sampled (<2>) and contained small pieces of brick, CBM, burnt flint, pottery sherds (indeterminate), slag and hammerscale, bird, fish and mammal bone, charcoal and charred cereal grain including elderberry. The area numbered (415) was also sampled (<3>) and contained small fragments of daub, burnt flint, slag and hammerscale, mammal and fish bone, charred and charred cereal grain

- 7.33 The lower deposits in the trench, including those revealed in Auger 2 and Auger 3, appeared to form a succession of early topsoil, flint metalling and occupation deposits.
- 7.34 Deposit (420), the uppermost of the deposits encountered in Auger 2 at the northern end of the trench, together with the northern side of deposit (412/415), were overlain by a sequence of deposits which probably represented developed/cultivated soils. The earliest was a *c* 0.25m layer of light to mid, mottled, greyish brown, yellowish brown, firm silty clay (407/429) which contained occasional, small and medium, rounded and sub-angular flints, charcoal, burnt daub fragments and iron slag. Deposit (407/429) was overlain by a substantial deposit of mid to dark, slightly yellowish, greyish brown, silty clay (406) which contained occasional, small to medium, rounded and sub-angular flint pebbles and nodule fragments, pieces of slag and sherds of eleventh- to twelfth-century pottery. The deposit was *c* 0.40m thick and present across the trench. Deposit (406) was overlain by a very similar although slightly lighter deposit of silty clay (405), containing a sherd of medieval pottery, which was between 0.30m and 0.50m thick and also extended throughout the trench. Deposit (405) was overlain at the northern end of the trench by a *c* 0.20–0.25m thick deposit of light to mid yellowish, greyish brown, mottled, silty, sandy clay (404) from which a single sherd of medieval pottery was recovered. Deposit (404) was overlain by a *c* 0.10m thick deposit of light yellowish brown, slightly sandy, silty clay (403) which contained occasional, small, rounded flint pebbles and charcoal fragments. The southern side of deposits (403) and (404) were overlain by a *c* 0.20m thick layer of mid to dark greyish brown, firm, silty clay (410) which contained occasional, small to large, rounded and sub-angular flint pebbles and nodule fragments, occasional, small brick and tile fragments, chalk and oyster shell. Deposit (410) was overlain by a similar deposit of greyish brown silty clay (409) although this contained common mortar, charcoal and coal fragments. The deposit was *c* 0.15–0.20m thick and extended across most of the trench. At its northern end, deposit (409) was overlain by a *c* 0.30m thick deposit of mid to dark greyish brown, gritty, silty clayey gravel (401) and towards its southern end it was overlain/cut by the brick foundations (408) for a row of garages which once stood upon the site.
- 7.35 Deposit (401) and foundations (408) were overlain by a woven geotextile material, crushed ‘type 1’ aggregate and the tarmac car park surface (400).

Trench 5

(Fig 7, Plate 12)

- 7.36 The earliest deposit encountered within Trench 5 consisted of a mottled, light to mid, yellowish brown, silty clay (528) which was in excess of 0.05m thick and covered the entire base of the trench except where it was cut by later features. The depth of the deposit from the ground surface, at *c* 1.6m below, meant that it could not be hand investigated, though it might have represented an early topsoil. It was however sampled (<4>), and recovered were small fragments of CBM, burnt flint, pot sherds (indeterminate), mammal bone, mussel shell, charcoal and charred plant remains.
- 7.37 Deposit (528) was cut by four probable features: two pits [521] and [527] and two linear features [523] and [525]. The depth at which they lay meant that they could not be hand investigated, but they were observed in plan. Pit [527] lay in the north-western corner of the trench and consisted of a sub-circular cut *c* 0.60m wide filled by mid yellowish brown, firm silty clay (526). Pit [521], partially visible at the southern end of

the trench, was a larger, probably sub-circular feature, *c* 1.5m in diameter, containing a single fill (520) which was very similar to deposit (526), the fill of feature [527]. Linear feature [523] was *c* 0.75m wide, crossed the base of the trench on a roughly east–west alignment and contained a mid greyish, yellowish brown, silty clay fill (522) from which a piece of thirteenth-century pottery and a fragment of Roman tile were recovered from the surface. A sample (<5>) of fill (522) was taken and found to contain small fragments of CBM, burnt flint, pot sherds (indeterminate), slag/metalworking waste, mammal bone, charcoal, charred plant remains and terrestrial snails. Linear feature [525] lay to the north of feature [523] and crossed the trench on a roughly WSW–ENE alignment. This was also *c* 0.75m wide and was filled by a carbon-rich, dark yellowish grey, silty clay (524) which contained occasional, small to medium, rounded and sub-angular flints pebbles and tile fragments.

- 7.38 Features [521], [523], 525] and [527] were sealed by a *c* 0.45–0.50m thick, level deposit of very dark greyish brown, friable, silty clay loam (516) which contained occasional, small and medium, rounded and sub-angular flint fragments, small, abraded chalk fragments, charcoal, oyster shell and tile fragments. The deposit may have been a cultivated/developed soil. Perhaps cutting the soil deposit was a possible pit containing a dense collection of broken nineteenth-century pottery (discarded); although no pit was observed during machining, it seems likely that the pottery was confined within a feature, since the remainder of the deposit was relatively clean of inclusions.
- 7.39 At the southern end of the trench, deposit (516) was overlain by a dump of light to mid yellowish brown, sandy mortar (519) which contained frequent, small to large chalk fragments, medium to large, sub-rounded and angular flint pebbles and nodule fragments, concrete and frogged brick fragments. The deposit is thought to have been wall demolition debris, perhaps largely derived from the abbey wall which is known to have stood to the east of Trench 5, combined with modern debris.
- 7.40 Deposit (519) was overlain by a succession of relatively modern (nineteenth-/twentieth-century) levelling/dump deposits, described in Table 1, below.

Context number:	Description:	Max. thickness (m)
(515)	Mid greyish brown, gritty loam with frequent, small rounded flint pebbles and occasional, larger flint nodule fragments, occasional, small, chalk/mortar fragments, clinker, coal and charcoal.	0.24
(514)	Mid greyish brown, gritty loam with frequent, small, rounded and sub-angular flint pebbles and chalk fragments.	0.12
(513)	Dark grey, friable, gritty loam with occasional, small rounded flint, chalk, brick and mortar fragments.	0.40
(512)	Dark grey, friable, gritty loam with frequent, small, chalk and yellowish brown mortar fragments, occasional, large sub-angular and angular flint nodule fragments and occasional, large peg-tile fragments.	<i>c</i> 0.10
(511)	Mid greyish brown, friable, gritty loam with frequent, small to medium, chalk and mortar fragments, occasional, medium and large flint fragments, brick, tile, window glass, charcoal and coal fragments.	<i>c</i> 0.45
(510)	Dark grey, gritty loam with occasional, small and medium chalk fragments, occasional, medium to large, rounded and sub-angular	0.35

	flint fragments, rare, large, angular and sub-angular flint, brick, peg-tile, mortar and charcoal fragments.	
(509)	Mid greyish brown, friable, gritty loam with occasional, small to large rounded, sub-angular and angular flint fragments, occasional, small to medium chalk fragments, brick, peg-tile, mortar and charcoal fragments.	0.27
(518)	Dark grey, silty, gritty, firm, compacted, loam with small patches/lenses of light to mid, yellowish brown, silty clay, occasional, small to medium and rare, large, rounded to sub-angular flint, chalk, mortar and charcoal fragments.	c 0.15
(507)	Dark greyish brown, friable, gritty loam with frequent, small and medium, rounded flint pebbles and fragments, brick, tile, window glass and mortar fragments.	c 0.10
(508)	Dark grey, silty, gritty loam with lenses of light yellowish brown sand, occasional, small to medium chalk fragments, mortar and charcoal fragments.	c 0.13
(506)	Light to mid yellowish brown, sandy mortar with frequent, small to large chalk fragments, medium to large, sub-rounded and angular flint pebbles and nodule fragments, concrete, stone and brick fragments. Very similar to deposit (519).	0.32
[505]	Shallow pipe trench. Cuts deposit (506).	0.12
(504)	Dark grey, loose, gritty loam and iron water pipe. Fill of [505]	0.12
(517)	Small, rounded flint pebbles, loosely bonded with concrete.	0.13
(503)	Mid greyish brown, compacted, silty, clayey loam with occasional, small to medium, rounded and sub-angular flint fragments, occasional, small chalk fragments, brick, peg-tile and mortar fragments.	c 0.40
(502)	Crushed and compacted yellow brick and mortar fragments.	c 0.15

Table 1: Upper deposits in Trench 5

- 7.41 The latest of these deposits, (502) was overlain by a woven geotextile material, crushed 'type 1' aggregate (501) and the tarmac car park surface (500).

Trench 6

(Fig 8, Plates 13 and 14)

- 7.42 The earliest deposit encountered lay at the south-eastern end of Trench 6, observed within the confines of a narrow slot cut down the centre of the trench, and consisted of light greyish brown, firm, silty clay (610) which contained frequent, small to medium, rounded and sub-angular flint pebbles, oyster shell fragments and charcoal flecking. The deposit was in excess of 0.35m thick and extended below the base of the trench. Deposit (610) was overlain by a c 0.15m thick layer of light to mid, slightly greyish, yellowish brown, firm, silty clay (609) which contained rare, small, rounded flint pebbles and rare, charcoal flecking. Deposits (609) and (610) are difficult to interpret given the confined nature in which they were investigated, though they could have formed old topsoil deposits.
- 7.43 Deposit (609) was cut on its north-western side by a possible linear feature [621], perhaps a ditch, which was in excess of 3.4m wide and 0.65m deep, and contained two fills. The lower fill (as observed) consisted of dark greyish brown, firm, silty clay (608) which contained occasional, small, rounded and sub-angular flints, charcoal fragments and a piece of Roman tile. The upper fill (607) overlay the western side of (608) and

consisted of light to mid, yellowish, slightly orangey brown, firm, charcoal flecked, silty clay.

- 7.44 Towards the west, fill (607) was cut by the construction trench [613] for wall (618). The trench was *c* 1.5m wide, 0.75m deep and contained a chalk block wall foundation (620) which was *c* 0.40m deep and projected 0.20m from the wall face. Sitting upon the wall foundation was wall superstructure (618), *c* 1m wide, 1.25m high and constructed of large, roughly squared chalk blocks and occasional flint nodule fragments bonded with a hard, light orangey brown, sandy mortar and faced on both sides with large knapped flints. Backfilling the gap between the east face of wall (618) and the construction trench cut was a deposit of light yellowish brown, chalk and mortar flecked, silty clay (612) from which a piece of daub and a piece of fourteenth- to fifteenth-century pottery were recovered. Overlying deposit (612) was a *c* 0.05–0.10m thick, compacted layer of orangey brown, sandy mortar and chalk fragments (611) probably derived from the construction/pointing of the east facing elevation of wall (618).
- 7.45 The eastern edge of deposit (611), the upper surfaces of feature fills (607) and (608) and deposit (609) were all overlain by a *c* 0.20–0.50m thick layer of dark greyish brown, firm, silty clay (606) which contained occasional, small to large, rounded and sub-angular flints, oyster shell, animal bone, mortar, chalk and charcoal fragments. The deposit was probably an old topsoil horizon. The western edge of deposit (606) was overlain by a *c* 0.70m thick deposit of light yellowish brown, soft, friable, clayey silt (605) which contained occasional, small, rounded flint pebbles, small abraded chalk fragments, animal bone, a piece of Roman tile and a piece of probable thirteenth-century tile, and abutted the eastern face of wall (618)
- 7.46 At the western end of the trench, the west face of wall (618) was abutted by a layer of rough flint metalling (619), observed within the base of a narrow slot excavated down the centre of the trench. The metalling appeared to be the same as that seen in Trench 3 (319) and perhaps formed a path or trackway running beside the wall. The surface was at least *c* 0.20m thick and consisted of small to large, rounded and sub-angular flint pebbles set in a gritty, rather loose, silty clay matrix. Metalling (619) was overlain by a *c* 0.15m thick deposit of mid to dark, greyish brown, friable silty, gritty clay (617), probably an occupation deposit which formed during use of the metalling.
- 7.47 Deposit (617) was overlain by a *c* 0.20–0.25m thick layer of a dark brown, firm, silty clay (616), in turn overlain by a similar although loose deposit of silty clay (615), *c* 0.25m thick, containing frequent, small to medium, rounded and sub-angular flints, brick, mortar and tile fragments, window and bottle glass, metal cooking ware including enamel oven pans, coal, clinker and charcoal, suggestive of a date of deposition in the 1950s or 1960s. Deposits (616) and (617) abutted the west face of wall (618) and continued beyond the western end of the trench.
- 7.48 Deposit (615) was overlain by a substantial, *c* 0.60–0.70m thick deposit of chalk, flint and orangey brown mortar demolition material (614), almost certainly derived from the truncation of adjacent wall (618). Demolition deposit (614) and the western side of wall (618) were overlain by a thin, *c* 0.10m thick layer of dark greyish brown, firm silty clay (602) which contained frequent, small, rounded flint pebbles, brick, tile, chalk and glass fragments. On the eastern side of wall (618), deposits (605) and (606) were overlain by a very similar if not the same deposit (601) which was *c* 0.40–0.50m thick and abutted

the eastern face of the wall. Towards the eastern end of the trench, deposit (604) was cut by a redundant service trench (603)/[604].

- 7.49 The service trench and deposits (602) and (601) were overlain by a woven geotextile material, crushed 'type 1' aggregate (501) and the tarmac car park surface (600).

Trench 7a–d

(Figs 9 and 10, Plates 15–21)

- 7.50 A continuous length of wall, with later adaptations, was revealed in Trench 7a–d. The original medieval wall (700) was *c* 1m wide and consisted of a predominantly chalk block and occasional large flint nodule core bonded with light to mid, yellowish, orangey brown, hard, sandy mortar with a knapped flint and pebble facing.
- 7.51 In Trench 7a, a continuous length of wall (700) was revealed extending between Trenches 3 and 6. There was no evidence for repair or modification of the wall in this length of the trench.
- 7.52 Visible in Trench 7b was a rebuild/repair of the north-west face of wall (700). The rebuild/repair (701) consisted of large, rounded, sub-angular and angular flint pebbles and nodule fragments bonded with a light yellowish brown, sift, friable, sandy mortar.
- 7.53 Visible in Trench 7c was a rebuild/repair of the north-west face of wall (700). The rebuild/repair (702) consisted of large, rounded, sub-angular and angular flint pebbles and nodule fragments, shallow frogged, red house bricks and chalk fragments bonded with light yellowish brown, soft, friable, sandy mortar.
- 7.54 Visible in Trench 7d was a rebuild/repair of the north-west face of wall (700). The rebuild/repair (703) consisted of large, rounded, sub-angular and angular flint pebbles and nodule fragments, chalk fragments and a single, large block of worked limestone bonded with off-white, hard, sandy mortar.
- 7.55 At the southern end of Trench 7d, the original medieval wall angled towards the north-east. Excavation in two slots along its eastern face suggests that the original wall was demolished and its flint facing robbed away on its eastern side to a depth of *c* 0.75m below the modern car park surface. A later wall (704) was constructed along the same line as wall (700). This was *c* 0.45–0.50m wide and constructed of large chalk blocks, flint nodule fragments and pebbles bonded with off-white, hard, sandy mortar very similar to that used in (703).
- 7.56 A small patch of possible metalling (705) lay on the western side of wall (704). It may have formed part of the gravel metallings seen in Trench 3 (319) and in Trench 6 (619).

8. FINDS

8.1 Table 2, below, presents the hand-recovered finds recovered during evaluation work.

Trench	Context	Material	Dating	Description	Quantity	Weight (g)
1	103	Pottery	14th-15th Century		2	61
1	103	Tobacco pipe		stem fragments	3	7
1	103	Tile	Medieval/Post-medieval		15	587
1	103	Animal bone			1	18
1	104	Pottery	13th Century	rim fragment	1	
1	105	Tile	Roman		1	300
2	203	Tile	Medieval/Post-medieval		6	781
2	209	Pottery	13th-14th Century		1	19
2	223	Pottery	13th-14th Century		16	480
2	223	Tile	Roman		2	971
2	223	Tile	Medieval/Post-medieval		23	2193
2	223	Animal bone			4	167
2	223	Slate			1	51
3	303	Pottery	13th Century		7	41
3	303	Tile	Roman		4	450
3	303	Animal bone			6	77
3	313	Pottery	19th Century		17	211
3	313	Tile	Roman		2	769
3	313	Tile	Medieval/Post-medieval		19	358
3	313	Brick	Medieval/Post-medieval		1	45
3	313	Oyster shell			1	36
3	313	Animal bone			6	92
3	313	Flint - worked			1	11
3	313	Mortar			1	1
3	314	Pottery	13th Century		5	78
3	314	Tile	Medieval/Post-medieval		2	155
3	314	Animal bone			3	64
3	315	Pottery	Roman		2	87
3	315	Tobacco pipe		stem fragments	2	6
3	315	Tile	Medieval/Post-medieval	x2 frags.	2	53
3	315	Animal bone		minimum of 7 rabbits	182	167
4	404	Pottery	Post- Roman		1	9
4	405	Pottery	Post- Roman		1	15
4	406	Pottery	11th-12th Century		2	25
4	406	Slag			10	455
4	411	Tile	Roman		1	9
4	411	Daub			1	21
4	411	Animal bone			2	17

4	411	Slag			1	14
4	415	Daub			1	8
4	415	Animal bone			10	141
4	415	Stone			1	40
5	522	Pottery	13th Century		1	10
5	522	Tile	Roman		1	1513
6	605	Tile	13th Century?		6	62
6	605	Tile	Roman	x1 large fragment with opus signinum adhering	3	1611
6	605	Animal bone			3	52
6	608	Tile	Roman		2	140
6	612	Pottery	14th-15th Century		1	10
6	612	Daub			1	21
6	612	Animal bone			2	13

Table 2: The hand-recovered finds

8.2 A summary of the finds recovered by hand excavation is as follows:

Pottery (Roman)	1 fragments	(87g)
Pottery (Medieval/Post-medieval)	55 fragments	(959g)
Tile (Roman)	16 fragments	(5763g)
Tile (Medieval/Post-medieval)	73 fragments	(4189g)
Brick	1 fragments	(45g)
Daub	3 fragments	(50g)
Tobacco pipe	5 fragments	(13g)
Slag	11 fragments	(469g)
Worked flint	1 fragments	(11g)
Mortar	1 fragments	(1g)
Slate	1 fragments	(31g)
Stone	1 fragments	(40g)
Animal bone	219 fragments	(808g)
Oyster shell	1 fragments	(36g)

8.3 Roman pottery was recovered from one context in Trench 3, though it was residual as it derived from a brick-lined well (315). It may have come from an underlying Roman horizon cut by the well.

8.4 Roman tile came from nine contexts, in Trenches 1, 2, 3, 4, 5 and 6. The material from Trenches 2, 3 and 5 was clearly residual, that from Trench 4 deposit (411) perhaps residual and deriving from an Anglo-Saxon horizon, whilst that from Trench 6 was evidently residual from deposit (605) and probably residual from deposit (608). That from Trench 1 is of uncertain origin, since it derived from the surface of deposit (105), possibly natural or possibly infill. Although the quantities of tile recovered by evaluation were relatively small, comprising just 15 fragments in total, the material suggests that Roman activity was present within the vicinity of the PDA.

8.5 Medieval/post-medieval pottery came from 11 contexts, deriving from all trenches except that cut to expose the abbey wall (Trench 7). The material spanned the eleventh

to fifteenth centuries, as well as including some nineteenth-century material. In Trench 1, thirteenth-century pottery was recovered from deposit (104) and fourteenth- to fifteenth-century pottery from overlying deposit (103), although tobacco pipe stem fragments and coal also derived from (103). Thirteenth- to fourteenth-century pottery came from two features in Trench 2 (fill (223) in feature [225] and fill (209) in feature [210]). Thirteenth-century pottery was recovered from deposits (303) and (314) in Trench 3 and nineteenth-century pottery from deposit (313) in the same trench. Trench 4 contained two deposits with medieval pottery, eleventh- to twelfth-century material from (406) and indeterminate medieval material from overlying deposit (405) and from deposit (404). Slag was also recovered from deposit (406). Trench 5 contained a single feature with thirteenth-century pottery (fill (522) of feature [523]). Most significantly perhaps, in Trench 6, the backfill (612) of wall construction trench [613] contained pottery of fourteenth- to fifteenth-century date.

- 8.6 Small quantities of medieval/post-medieval tile were retrieved from Trenches 1, 2, 3 and 6.
- 8.7 Slag fragments were recovered from two contexts in Trench 4, deposits (406) and (411).
- 8.8 Tobacco pipe fragments were recovered from Trench 1 (deposit (103)) and Trench 3 (well (315)). Material from the outer edges of the well (315) in Trench 3 contained numerous small rodent bones.
- 9. THE ANIMAL AND PLANT REMAINS FROM SAMPLES
By Enid Allison

Introduction

- 9.1 Limited numbers of bones and marine mollusc shells were recovered by hand-collection from deposits revealed during the evaluation. Five bulk samples were also taken from deposits revealed in Trenches 4 and 5 for recovery of animal and plant remains (BS/GBA samples *sensu* Dobney *et al* 1992). This report provides a brief summary of the remains recovered and their state of preservation. The potential of some remains to provide dietary and economic data is also indicated.

Methods

Treatment of hand-collected bone and shell

- 9.2 The bone assemblage has been washed and air-dried. The marine mollusc shell has been air-dried but remains unwashed.

Bulk sample processing

- 9.3 The samples were relatively small with volumes of 5 – 8 litres. Each was soaked overnight in water containing washing soda (sodium carbonate) before carrying out wet-sieving with flotation using standard techniques for recovery of biological and cultural material. Flots were produced onto 0.3mm mesh, and the residues washed onto nested 2mm and 1mm meshes. All fractions were air-dried. The coarse fractions of the dried residues (>2mm) were sorted in their entirety for biological remains and artefacts. The >1mm fractions were checked for hammer scale with a magnet but were not systematically examined. The sample flots were scanned briefly using a low-power stereoscopic microscope (x10) and a basic record made of the contents.

Storage of recovered materials

- 9.4 The hand-collected bones and shell, remains extracted from the coarse sample residues (>2mm), the fine residues (>1mm), and the sample flots are all stored in appropriately labelled plastic bags in cardboard museum boxes.

Results

- 9.5 The various categories of plant and animal remains recovered both by hand-collection and from bulk samples are described briefly below.
- 9.6 All of the samples produced a very similar range of material resulting from human activity in the area. A summary of the remains recovered, including artefacts and other cultural material, is shown in Table 3. Abundances have been estimated semi-quantitatively on a four-point scale (+ occasional, ++ low frequency, +++ frequent, ++++ abundant). Identifications should be regarded as provisional.

Context	Sample	Description	Sample volume (litres)	Weight >2mm residue (kg)	Contents >2mm heavy residue	Flot (ml)	Contents sample flot
411	<1>	Deposit	5	0.63	Brick/tile fragments (x2) 19g; small CBM fragments ++; burnt flint 7g; pot sherds (x3) 8g; slag and hammer scale 42g; mammal fragments (trace burnt) 101g; domestic fowl bones (x2); trace indeterminate bird bone; bones of small and medium fish (17idb) ++; oyster fragments 7g; [5g hammer scale etc from >1mm fraction]	150	Charcoal +++; charred cereal grains including wheat and barley +++; mineralised millipedes +
412	<2>	Deposit overlying 411	6	1	Brick fragments 44g; small fragments CBM ++; burnt flint 5g ++; pot sherds (x3) 25g; ?corroded Fe fragments/objects (x2) 15g; slag and hammer scale 88g; mammal fragments 30g; trace indeterminate bird; fish (1idb) +; [5g hammer scale etc from >1mm fraction]	70	Charcoal ++; charred cereal grain ++; other charred seeds +; uncharred seeds including elderberry ++; small fragments indeterminate mammal (some burnt) +++; sediment concretions +++
415	<3>	Deposit overlying 411	8	0.5	Sediment concretions +++; small fragments daub/heat-affected clay ++; small fragments burnt flint +; slag and hammer scale 44g; mammal fragments (mainly indet frags, 1 worn tooth) 9g; fish (~1idb) +; charcoal + [6g hammer scale etc from >1mm fraction]	60	Charcoal +++; charred cereal grains (some are wheat) +++
522	<5>	Fill of linear feature [523]	5	0.3	Small fragments CBM ++; small fragments burnt flint ++; pot sherds 7g; slag /metalworking waste 24g; indeterminate mammal fragments (some burnt) 5g; fish (4idb) +; charcoal ++ [3g hammer scale etc from >1mm fraction]	125	Charcoal +++; charred wheat grains +; other charred seeds ++; uncharred seeds including elderberry and blackberry/raspberry ++; trace indeterminate terrestrial snails
528	<4>	Deposit cut by pits and linear features	6	0.4	Small fragments CBM ++; small fragments burnt flint ++; pot sherds (x3) 5g; slag and hammer scale 15g; small indeterminate mammal fragments (some burnt) 2g; fish (5idb) +; trace mussel shell [4g hammer scale etc from >1mm fraction]	40	Charcoal ++; charred cereal grain ++; other charred seeds +; uncharred seeds including elderberry ++; small fragments indeterminate mammal (some burnt) +++

Table 3: Remains recovered from the bulk samples

Plant remains and charcoal

9.7 Charred plant remains other than charcoal were recovered in the flots from all five samples and chiefly consist of cereal grains. Smaller charred seeds are present in three flots. Preservation is moderate to poor: fragmentation is high, many cereal grains or fragments are vacuolated, and the majority of the material is encrusted to a greater or lesser degree with sediment. Charred cereal grains are particularly abundant in deposit 411 (sample <1>) from Trench 4; wheat (*Triticum*) grains are frequent and barley (*Hordeum*) also present. Charred weed seeds are relatively common in the fill of linear feature [523] (context 522, sample <5>).

9.8 Uncharred seeds including elderberry (*Sambucus*) and blackberry/raspberry (*Rubus*) are present in low frequencies in three flots. Seeds of both taxa are relatively resistant to decay, often surviving in sediments where conditions are unfavourable for the preservation of other uncharred plant remains.

- 9.9 All five samples produced small to moderate amounts of charcoal. The taphonomic processes involved in the distribution of charcoal across archaeological sites usually preclude useful analysis unless it can be demonstrated that primary burning is represented. There were no indications that this was the case in any of the sampled deposits.

Vertebrates

- 9.10 A total of 219 mammal bones and fragments with a total weight of 808g was retrieved from 10 contexts by hand-collection during excavation. The bone is generally well-preserved. Fine longitudinal cracks were noted in a few large elements, presumably due to drying after excavation.
- 9.11 A further 147g of mammal bone was recovered from the bulk samples. Most of this is highly fragmented and not closely identifiable, but remains from context 411 (sample <1>) are generally in a more complete state. Small numbers or traces of burnt bone were recorded from three samples.
- 9.12 Remains of a minimum of seven rabbits from a probably post-medieval soil backfilling the well construction cut (315) account for the majority of the hand-collected assemblage (182 bones/fragments). No definite knife marks were observed that might provide evidence of butchery or skinning. Tibiae of two individuals showed both transverse proximal epiphyseal fusion lines and short vertical fusion lines in the proximal joint surface, two individuals showed only the vertical fusion line, and a further two showed a degree of porosity on the proximal joint surface, strongly suggesting that all may have been around the same age at time of death. All other limb bones recovered were fully fused. The proximal tibia appears to be the last element to become fully fused in rabbits. Fusion data compiled by Jones (2005) indicates that in wild rabbits the proximal tibia is partially fused between 9 and 10 months old and fully fused at around 10 months (references summarised by Jones 2005). Five lumbar vertebrae, probably from two individuals, were recovered, and all were unfused both anteriorly and posteriorly indicating animals in their first year (Kolb 1994). The close age range of at least six of the rabbits may suggest breeding in captivity to produce meat and/or fur with the animals being killed when they had reached adult size but while still tender. A random selection of the local wild rabbit population might be expected to consist of a wider age range. This group of bones requires further investigation by a mammal bone specialist.
- 9.13 Identifiable bones/fragments and teeth from other deposits are of the main domesticates (cattle, sheep/goat and pig) and dog. The remaining fragments can be categorised as large (cattle/horse size) and medium (sheep/goat/pig size) mammal. A medium-sized dog is represented by an almost complete humerus (context 313), the unfused distal epiphysis indicating an individual under 6–8 months of age (Schmid 1972, 75).
- 9.14 Bird and fish bones were recovered only from samples. Identifiable bird remains are of skeletally mature domestic fowl (context 411, sample <1>). Small numbers of bones of small- to medium-sized fish were recovered from all five samples. Most samples produced 1–5 identifiable fish bones but one (context 411, sample <1>) produced around 17 identifiable elements, including several mackerel (*Scomber scombrus*) vertebrae and occasional bones of very tiny fish.

Marine mollusc shell

- 9.15 A number of deposits were noted as containing oyster shell during excavation but only a single right oyster valve was recovered by hand-collection. Fragments of oyster shell were recorded from one sample (context 411, sample <1>) and traces of mussel shell from another (context 528, sample <4>).

Terrestrial snails

- 9.16 A few fragments of indeterminate snail shell were recorded from one sample from the fill of linear feature [523] (context 522, sample <5>).

Conclusions

- 9.17 The evaluation has established that moderately to poorly preserved but good-sized assemblages of charred plant remains are present in deposits on the site. Despite their state of preservation, these remains have a medium to good potential for producing data on diet, local agriculture, and domestic or agricultural activities taking place in the vicinity. Any future excavations may reveal deposits containing a wider range of plant remains and/or better preserved material. Selected charred plant remains can potentially be used for radiocarbon dating particular deposits if appropriate.
- 9.18 The bone recovered from the site was generally well preserved (albeit mainly fragmentary in the case of the bulk samples). If further archaeological work is carried out in the area it is likely that substantially-sized assemblages will be recovered that will potentially provide data on diet, provisioning, and animal husbandry relating to the phases of activity represented by the archaeology. The assemblage of rabbit bones from the well is potentially of interest if it can be dated to a known period of activity on the site.
- 9.19 The samples collected during this evaluation were all under 10 litres in volume. In any further archaeological investigations it is recommended that samples of 20–40 litres or more are collected from well-stratified contexts depending on the nature and size of the deposit. Adequate sampling is essential for the recovery of plant remains and fish bones and to enhance recovery of marine mollusc shell and bird and small mammal remains.

Acknowledgement

- 9.20 Bulk sample processing was by Alex Vokes.

10. SITE ARCHIVE

- 10.1 The project archive, comprising site records and recovered cultural material, is presently held in the offices of Canterbury Archaeological Trust (92a Broad Street, Canterbury, Kent CT1 2LU). All site context record sheets and drawings have been scanned and the digital images stored in the relevant project folders, under the project code EV CCCU-AB16. Finds information has been entered onto the Integrated Archaeological Database (IADB), a secure password protected online resource available at <http://www.iadb.co.uk/cat>.
- 10.2 The project archive conforms to the *Guidelines for the preparation of excavation archives for long term storage* (UKIC 1990), *Standards in the museum care of archaeological collections* (Museums and Galleries Commission 1992) and the *Selection, retention and dispersal of archaeological collections: guidelines for use in*

England, Wales and Northern Ireland (The Society of Museum Archaeologists 1993). No special storage or conservation issues have been identified.

- 10.3 Deposition of the final archive, which will be fully catalogued and stored in standard archival materials, will be arranged in consultation with Canterbury Museums.

11. SUMMARY OF RESULTS

The borehole watching brief

- 11.1 The earliest deposit encountered was the uppermost surviving intact Cretaceous Chalk (Phase A, G10060), which was identified around 7.0m OD in BH1, dipping very gently westward. This is archaeologically sterile although its upper surface will have been sculpted by late Pleistocene processes, perhaps continuing into the early Holocene. Contrary to the maps of the British Geological Survey (BGS), which indicate Paleogene (Tertiary) Thanet Beds overlying the Chalk here, the same or earlier processes appear to have removed all local Palaeogene deposits.
- 11.2 Overlying the chalk instead was 0.5–1.6m of chalk clasts supported in a clay silt matrix (Phase B1, G10011), interrupted by at least one lens of mixed clays without chalk. Overall these deposits may represent either material resembling coombe deposits (*cf* Preece and Bridgland 1998, 20, 23) and carried in from upslope by solifluction *etc* or else *in situ* cryoturbated chalk. It will have formed, in either case, in very cold periglacial conditions during the late Pleistocene probably, given its elevation, during the early formation of the Stour's First River Terrace (see below). It may be a continuation of similar deposits recently noted 300–400m to the south-east, beneath the former HMP Canterbury (Pratt and Mackintosh 2016, 2.2, Phase B1). Though probably archaeologically sterile, it may contain palaeoenvironmental evidence and is of geoarchaeological interest in itself.
- 11.3 In BH1 and BH2 the coombe-like material was overlain by 1.3–2.2m of what appeared to be head gravels, with some sands (G10010) but in BH3 it was sealed instead by 1.4m of brickearth (G10058), containing sufficient gravel to suggest head material. This may have overlapped G10010 in BH1 but the relationship is not certain. Gravel-free brickearths up to about 10.5m OD in BH1 may have been loessic (windblown) in origin rather than the head material anticipated by the BGS (Fig. 11). In BH3, G10058 was overlain by 0.3m of compact, clean clayey sandy gravel (G10057) which resembled head material (though might have been an artificial surface, see below). With the possible exception of G10057 all these deposits, assigned here to Phase B2, are probably of late Quaternary to early Holocene in date. A digital terrain model (DTM) of north-eastern Canterbury (Fig 12) suggests that a little to the south of the current PDA a (now dried up or subterranean) spring ran north-west towards the Great Stour. At Canterbury, the base of the lowest of the Stour's Second Terrace deposits usually lies at around 10m OD (Smart *et al* 1975, 246; Holmes 1981, 76; Pratt 2014, 3.1) but no fluvial sandy gravels have been identified on the current site, nor at the prison (through or past which runs the springline), even though boreholes at both straddle that elevation. Therefore, the side valley presumably post-dates the Second Terrace and may be contemporary with the (chronologically later) First Terrace, perhaps formed during its initial down-cutting phase: a secure date for this is yet to be established but it seems likely to belong to the early to mid Devensian or Woolstonian glacial stages dated, very approximately, to 25,000–400,000 years ago. Phase B2 deposits are more (though still

not very) likely than those of Phase B1 to contain artefactual or palaeoenvironmental evidence and are also of geoarchaeological interest.

- 11.4 In BH3, as noted above, it is possible that G10057 represented a man-made metalling rather than a natural deposit. It was overlain by 0.97m of looser, loamy gravel (G10056), probably but not certainly containing at least two abraded tile fragments (perhaps Roman box-flue tile but more probably medieval or post-medieval peg-tile) and with a far higher proportion of medium-sized flints than other gravels on the site. Similar gravel had been identified in the deepest part of Trench 1 (deposit (105)), over which BH3 was set, where it yielded a fragment of Roman tile. The loamy matrix, poor compaction, apparent sorting and tile fragments all suggest dumped gravel, perhaps unused graded material from a gravel quarry. In BH2, head gravels G10010 were overlain by 1.0m of clean, pale greyish brown loamy clay (G10025). Though this may have been stained natural loessic(?) brickearth, equivalent to G10006, the colouration suggested a colluvial deposit, perhaps developing in an artificial hollow (such perhaps as a disused quarry) at a time of little or no human activity in the vicinity. G10025 and G10056 have both been assigned, tentatively, to Phase C1 (of probable archaeological potential). No comparable deposits were observed in BH 1 but it is not clear whether this is because it lay outside of a localised hollow or simply because it was upslope of the other boreholes. Digital terrain models of the immediate (Fig. 13) and wider environs (Fig. 12) suggest considerable and multiple phases of terracing. Though some of this may be due solely to modern construction activity, spot heights on early Ordnance Survey maps indicate that much of the terracing predates urban development and must represent earlier quarrying. At any one time individual quarries may have targeted only gravel, brickearth or sand (derived from the Palaeogene Thanet Sands overlying the Chalk and carried into the Stour's main valley along its side valleys) but their production may have overlapped or changed over time as removal of later deposits exposed different materials. Here, for example, it is possible that G10025 and G10056 (and perhaps G10057) lie in a hollow formed by quarrying of brickearth G10006 or of a greater depth of head gravel G10057, whilst dumped gravels G10056 might derive from the latter activity or from the exploitation of head or fluvial gravels elsewhere.
- 11.5 Overlying the latest Phase B2 or C1 deposits in all boreholes were about 0.4–0.9m of probably banded loams (Phase C2, G10004), relatively free of inclusions, which probably represent cultivated soils but might include some pit or ditch fills or even the lowest evaluation trench infills. Certain evaluation trench infills and resurfacing (Phase D, G10002) completed the stratigraphic sequence in the boreholes.

The archaeological evaluation

- 11.6 Roman activity within the vicinity of the PDA is suggested by pottery and tile fragments, albeit mostly derived from later contexts. A Roman water conduit is thought to cross the south-eastern side of the PDA (Hicks 2015, 22–23), but may have lain too deep to have been revealed by the evaluation work. Residual Roman material has been recovered from previous sites approximately 110m south and 70m east of the PDA (Hicks 2011, 4, 7), though the evidence provides little indication of direct Roman period settlement within the north-western area of the university campus.
- 11.7 Early remains in Trench 4 could potentially be of Anglo-Saxon date. Mid Anglo-Saxon remains are extensive across the campus, forming a large craftworking site associated with the monastery (Hicks 2015). In Trench 4, a lower sequence of silty clays and

metallings, observed within auger positions and within an excavated slot, could have represented early topsoil, yard remnant and occupation deposits. One of the metalling deposits (413) was revealed in plan lying at a height of 9.90m OD, 1.40m below current ground surface. Although no dating evidence was available to confirm the hypothesis of the remains being Anglo-Saxon in date, other than the recovery of Roman tile which could have been residual, the remains were overlain by a soil containing slag and daub (407/429) which appears similar to late Anglo-Saxon soil horizons, sealing mid Anglo-Saxon occupation deposits and features, revealed by previous work within the university campus (Hicks 2015, 38).

- 11.8 Overlying deposit (407/429) was a soil horizon (406) containing eleventh- to twelfth-century pottery, the surface of which lay at a height of *c* 10.30m OD, 1m below current ground surface. During the early medieval period the grounds of the university campus formed part of the outer precincts of St Augustine's Abbey. What soil (406) represented is uncertain, but parts of the precincts would have been cultivated, and others would have been pressed into service for a range of outer buildings; the precinct area close to the PDA is known to have contained industrial features and a barn (Hicks 2015, 42). The presence of a soil, of possible eleventh- to twelfth-century date, suggests that these medieval horizons lie intact within the PDA.
- 11.9 Features in Trench 5 ([521], [523], [525], [527]), comprising two pits and two linear features cutting lower soil (528), could potentially all have been of medieval date, thirteenth-century pottery deriving from feature [523]. The top of the features lay at a height of *c* 10.80m OD, 1.55m below current ground level. By the thirteenth century, the outer precinct ground of the abbey was well established and demarcated by a boundary ditch. Feature [621], cutting the eastern end of Trench 6, could potentially have represented this abbey ditch. The top of the cut, aligned north–south, lay at a height of 11.47m OD, 1.05m below current ground level. The feature was over 3.4m wide and 0.65m deep, and therefore formed a substantial feature, similar to lengths identified as boundary features revealed by previous excavation work to the east of the PDA (Hicks 2015; Wilson 2013).
- 11.10 A wall was subsequently erected to bound the outer precincts of the abbey, documentary sources indicating that it was constructed in 1320 by Abbot Ralph Bourne (Hicks 2015, 154). The continuous length of wall revealed in Trenches 3 (309), 6 (618) and 7 (700), lying just *c* 0.40m below the current ground surface, at *c* 11.90–12.43m OD, evidently formed a western part of the boundary, continued further south by a length of wall standing today to the east of Johnson building. The wall revealed by evaluation stood to a height of 1.65m, running in a north-north-east/south-south-west direction along its southern length, before turning north-eastwards at its northern end and presumably originally meeting a northern length of wall lying beside the current North Holmes Road. Pottery recovered from the wall construction trench backfill (605) in Trench 6 was dated to the fourteenth to fifteenth century, confirming the suggested documentary date.
- 11.11 To the east of the abbey boundary wall there lay a succession of soils in Trenches 2, 3, 4 and 6, those in the western end of Trench 2 perhaps infilling and subsequently overlying a large feature, possibly a quarry [228] in excess of 2.2m deep, of unknown date. Cutting the soils in Trench 2 was a series of small ovens or hearths (219), [222] and [208], the surfaces of which lay at a height of *c* 12.15m OD, 0.60m below current ground surface. These could potentially have been features associated with the abbey,

perhaps sited within an outer area of the precincts; industrial features, including a lime kiln, have been uncovered during excavation work to the east of the PDA (Hicks 2015, 53–57). However, no dating material was recovered from the features revealed by evaluation, and it is possible that they are instead associated with post-Dissolution occupation of the site. Features cutting the industrial features in Trench 2, some containing fragments of coal, indicate that late post-medieval/early modern activity was occurring within the vicinity. Although a few buildings remained in use to the south of the PDA, much of the former outer court of the abbey became largely open ground after the Dissolution. A few pits were cut, as identified during previous archaeological work in the campus (Hicks 2015, 104–107) but the land was largely covered by orchards and hop fields.

- 11.12 To the west of the abbey wall, archaeological horizons in Trenches 1 and 5 are difficult to interpret. In Trench 1, it is possible that a large quarry removed the original levels above gravel (105) (if the deposit was natural), or the gravel itself could have been quarry infill (see 11.4 above). The deposits overlying the gravel, however, do not appear to represent quarry fill, but rather horizontal soil layers (102–105), one of the lower (104) containing thirteenth-century pottery but the upper ((102), (103)) fragments of coal. In Trench 5, the features cutting lower soil (518) were overlain by a depth of dark soil (516) which could have formed by cultivation. It seems probable that the ground to the west of the abbey wall was open and largely unoccupied, perhaps forming agricultural ground and, later, the rear ground of properties fronting Havelock Street to the west. The difference in nature, and in levels, of the remains to east and west of the abbey wall probably reflect differing land use inside and outside the abbey precincts.
- 11.13 Flanking the western side of the abbey wall, in this probable open ground, was a flint metalled surface, identified in Trench 3 (319) and Trench 6 (619), lying at heights of *c* 11.15m OD (1.20m below ground) and 10.78m OD (1.55m below ground) respectively. It probably formed a path or trackway, as shown on the Ordnance Survey map of 1874, though perhaps in existence from an earlier date.
- 11.14 Also shown on the OS map is a fountain, positioned in the north-west corner of the PDA, perhaps serviced by the well (315) identified in Trench 3. By the time of the 1874 map, a length of the abbey boundary wall to the north had been reduced in width, the facing having been stripped away and a narrower wall (704) constructed along its line. The wall had evidently undergone other repairs further south (701–703).
- 11.15 Overlying the metalling in Trench 6 was a series of soils (615–617) indicating abandonment of the route, perhaps in the twentieth century. Further soils, of probable twentieth-century date, were identified across the PDA. The upper soil in Trench 6 was cut by a pit, evidently infilled in the 1950s or 1960s. Overlying the pit was wall rubble (614) which clearly derived from truncation of the abbey wall, probably undertaken in the 1950s or 1960s.
- 11.16 The upper horizons of the trenches largely comprised modern deposits associated with the formation of the tarmac car park surface, although a redundant service trench and the foundations of a twentieth-century brick garage were also identified.

12. CONFIDENCE ASSESSMENT

- 12.1 The archaeological evaluation was conducted under good weather conditions.

- 12.2 Archaeological remains were identified in all the trenches and an extensive sequence of occupation was noted. It was not, however, possible to investigate deposits and features at depth due to health and safety considerations. Natural ground was not observed in plan in any of the trenches, and therefore the nature of the lowest levels of stratigraphy remains unknown, including any possible evidence of prehistoric occupation as previously seen within the vicinity of the PDA.
- 12.3 The evaluation is, however, considered to have satisfactorily determined the presence/absence of archaeological remains within the areas of the trenches cut.
- 12.4 The watching brief on the SI was conducted under mostly, but not always, favourable conditions (much of BH2 being augered in the rain). The principal sampling technique, uncased flight augering, though superior to cable-percussion bulk sampling, generally recovered fairly disturbed samples and the pertinence of inclusions could not always be guaranteed. Due to a tendency for soils to 'spin-up' (rise up the flight), the reliability of most BGL depths (and thus OD levels) should be taken as $\pm 0.20\text{m}$. The number of augered positions is very low and so the sample can give only an overall picture of the likely range of geoarchaeological deposits underlying the site. The resultant deposit model is very rudimentary having, at most, only three points upon any interface between interpretative groups
- 12.5 The current report should not be used for the identification of contamination, nor as evidence for its absence: the geotechnical report on the SI (by Site Analytical, in prep) should be consulted instead.
13. CONCLUSIONS AND IMPACT ASSESSMENT
- 13.1 The archaeological evaluation comprised the machine cutting of seven trenches across the PDA. Trenches 1–6 were cut either to the top of significant archaeology or to the maximum depth which could be achieved within health and safety limits. Trench 7 was cut to reveal the alignment of a wall exposed in Trenches 3 and 6. The remains revealed in each trench were cleaned and recorded, and limited hand sampling of features and deposits occurred.
- 13.2 The geotechnical investigations involved the cutting of three boreholes (BH1–3), sunk through Trenches 1, 5 and 6 to a depth of c 25m below ground level. Geological and archaeological deposits were revealed.
- 13.3 Roman activity within the vicinity of the PDA was suggested by finds of Roman pottery and tile recovered from the evaluation trenches. In addition, the line of a Roman water conduit is thought to pass through the south-eastern part of the PDA.
- 13.4 Possible Anglo-Saxon remains associated with the monastery and medieval remains lying within the outer court of the abbey were identified, including a continuous length of abbey boundary wall surviving to a height of 1.65m and lying just c 0.40m below the current ground surface. Post-medieval and early modern remains were also revealed. The difference in nature and levels of the remains east and west of the abbey boundary wall, constructed in the fourteenth century and probably standing into the twentieth, might reflect differing land use within and without the abbey precincts.

- 13.5 The evaluation work has demonstrated that archaeological remains survive within the PDA. In places, the remains are at shallow depth. Those on the eastern side of the abbey wall, in particular, survive only c 0.50m below present ground surface and a full sequence of occupation through to the post-medieval period may exist above natural ground.
- 13.6 No prehistoric remains were encountered, as have been revealed at other sites within the campus, but there was little opportunity to investigate the lower levels of stratigraphy due to the depth of overlying deposits. The results of the geotechnical augering do, however, indicate that the late Pleistocene/early Holocene deposits underlying the PDA are more complex than indicated by the BGS and that there is the potential, albeit very low, for important artefactual or palaeoenvironmental material to survive within the PDA.
- 13.7 The results of the evaluation indicate that proposed development of the PDA is likely to impact upon the archaeological resource which lies within the footprint of a Scheduled Ancient Monument. The results of the watching brief suggest that specialist geoarchaeological input and, perhaps, optically stimulated luminescence (OSL) dating of deposits be considered should the development impact, over a significant area, below about 10m OD.

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APPENDIX 1: INDIVIDUAL BOREHOLE LOGS

A1.1 Conventions

In the following logs, depths (below contemporary ground level) and elevations (above Ordnance Datum) are given in metres. F120 refers to 100mm diameter flight auger sampling, SPT to standard penetration testing. Deposits which were broken- or dug-out manually are indicated appropriately. Soil descriptions use the following frequency and size codes for inclusions: V = Very, R = Rare, C = Common, A = Abundant, S = Small (<10 mm in each dimension), M = Medium, L = Large (>100 mm in any dimension). Unless indicated otherwise, flints are subangular to subrounded.

A1.2 BH1 (NGR 615468.254E 157997.043N)

Depth (m)	Elevation (m OD)	Con- text	(Group) Description & interpretation	Sample type
0.00-0.08	12.50-12.42	10000	(G10002) Tarmacadam. Modern surface.	Broken
0.08-0.35	12.42-12.15	10001	(G10002) Compact crushed stone. Modern levelling.	Broken
0.35-1.00	12.15-11.50	10002	(G10002) Mixed loams. Evaluation infill.	Dug
1.00-1.20	11.50-11.30	10003	(G10002) Mixed loams with geotextile at base. Evaluation infill.	F120
1.20-1.80	11.30-10.70	10004	(G10004) Fairly loose brownish grey fine loam (poor recovery), RSM flint. ?Cultivated old ground ?surface/fill.	
1.80-2.00	10.70-10.50	10005	(G10004) Fairly loose greyish brown fine loam, RS flint. ?Cultivated old ground ?surface/fill.	
2.00-2.70	10.50-9.80	10006	(G10006) Fairly compact yellow brown slightly silty loamy clay. ?Loessic brickearth.	
2.70-3.50	9.80-9.00	10007	(G10006) Fairly compact yellow slightly sandy loamy clay. ?Loessic brickearth.	
3.50-3.70	9.00-8.80	10008	(G10058) Fairly compact yellow brown slightly sandy loamy clay, RM subangular flint. ?Head brickearth.	
3.70-4.00	8.80-8.50	10009	(G10010) Fairly compact yellow brown gravelly clayey sand, CSRM subangular to subrounded flint, RM Tertiary pebble. ?Head gravelly sand.	
4.00-5.00	8.50-7.50	10010	(G10010) Compact fairly pale yellowish brown slightly sandy clayey gravel, ASRM subangular to subrounded flint. ?Head gravel.	
5.00-5.50	7.50-7.00	10011	(G10011) Fairly compact very pale grey clay silt, ASRM chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	
5.50+	7.00>	10012	(G10060) Fairly compact chalk. <i>In situ</i> chalk.	F120

A1.3 BH2 (NGR 615453.176E 158016.151N)

Depth (m)	Elevation (m OD)	Con- text	(Group) Description & interpretation	Sample type
0.00-0.08	12.34-12.26	10020	(G10002) Tarmacadam. Modern surface.	Broken Broken
0.08-0.30	12.26-12.04	10021	(G10002) Compact crushed stone. Modern levelling.	Dug
0.30-1.00	12.04-11.34	10022	(G10002) Mixed loams etc. Evaluation infill.	
1.00-1.10	11.34-11.24	10023	(G10004) Fairly compact brownish grey clayey loam, RSM flint, RSM chalk, RS mortar, RS tile. Evaluation infill or ?cultivated old ground ?surface/fill.	 Dug
1.10-1.40	11.24-10.94	10024	(G10004) Fairly compact brownish grey clayey loam, RSM flint. Evaluation infill or ?cultivated old ground ?surface/fill.	F120
1.40-2.40	10.94-9.94	10025	(G10025) Fairly compact pale greyish brown loamy clay. ?Colluvium.	
2.40-3.00	9.94-9.34	10026	(G10010) Compact pale grey slightly silty clayey gravel, RSCM subangular to subrounded flint. Head gravel.	
3.00-4.00	9.34-8.34	10027	(G10010) Compact orange brown slightly sandy clayey gravel, CM subangular flint. Head gravel.	
4.00-4.60	8.34-7.74	10030	(G10010) Compact orange brown sandy clayey gravel, ASCM flint. Head gravel.	
4.60-4.70	7.74-7.64	10031	(G10011) Fairly compact orange brown sandy clay, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	
4.70-5.00	7.64-7.34	10032	(G10011) Fairly compact off-white clay silt, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	 F120
5.00-5.20	7.34-7.14	10033	(G10011) Fairly compact off-white clay silt, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	SPT
5.20-5.24	7.14-7.10	10034	(G10011) Fairly compact loamy clay with pale grey silty clay mottle. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	
5.24-5.45	7.10-6.89	10035	(G10011) Fairly compact off-white clay silt, AS chalk, RM subangular flint. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	 SPT
5.45-6.00	6.89-6.34	10040	(G10011) Fairly compact off-white clay silt, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	F120
6.00+	6.34>	10041	(G10060) Putty chalk. <i>In situ</i> chalk.	 F120

A1.4 BH3 (NGR 615475.571E 158037.806N)

Depth (m)	Elevation (m OD)	Con- text	(Group) Description & interpretation	Sample type
0.00-0.09	12.49-12.40	10050	(G10002) Tarmacadam. Modern surface.	Broken Broken
0.09-0.19	12.40-12.30	10051	(G10002) Very compact grey brown gravelly loam. Modern bedding.	Dug
0.19-0.35	12.30-12.14	10052	(G10002) Very compact crushed stone. Modern bedding/levelling.	
0.35-0.85	12.14-11.64	10053	(G10002) Compact mixed loams. Evaluation infill.	
0.85-1.00	11.64-11.49	10054	(G10004) Fairly compact grey brown slightly clayey loam, RSM flint, RS mortar, RSM peg-tile, RSM oyster. Evaluation infill or ?cultivated old ground ?surface.	 Dug
1.00-1.73	11.49-10.76	10055	(G10004) Fairly compact grey brown slightly clayey loam, RSM flint, RS mortar, RSM peg-tile, RS oyster. Evaluation infill or ?cultivated old ground ?surface.	F120
1.73-2.70	10.76-9.79	10056	(G10056) Fairly compact loamy sandy gravel, RSAM flint, RM ?intrusive ?peg-tile. ?Weathered/disturbed ?head or redeposited ?sorted gravel.	
2.70-3.00	9.79-9.49	10057	(G10057) Compact orange brown slightly clayey sandy gravel, CSM flint. ?Head gravel.	
3.00-4.40	9.49-8.09	10058	(G10058) Fairly compact orange brown slightly sandy loamy clay, RSM subangular flint. ?Head brickearth.	
4.40-6.00	8.09-6.49	10059	(G10011) Fairly compact very pale yellow clay silt, ASRM chalk, RM subangular flint. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.	
6.00+	6.49>	10060	(G10060) Fairly compact white putty chalk. <i>In situ</i> chalk.	 F120

APPENDIX 2: GROUP DESCRIPTIONS

A2.1 Conventions

Individual context details are omitted from Phase A and Phase D deposits. Soil descriptions use the following frequency and size codes for inclusions: V = Very, R = Rare, C = Common, A = Abundant, S = Small (<10 mm in each dimension), M = Medium, L = Large (>100 mm in any dimension). Unless indicated otherwise, flints are subangular to subrounded.

A2.2 Group G10002

Phase D

Mixed loams *etc* with frequent inclusions of various types, overlain by crushed stone (and by additional, very compact loam in BH3) sealed by recent tarmacadam.

Infill and reinstatement over recent archaeological evaluation trenches.

Boreholes: BH1, BH2, BH3

Contexts: 10000, 10001, 10002, 10003, 10020, 10021, 10022, 10050, 10051, 10052, 10053

A2.3 Group G10004

Phase C2

?Banded loams with relatively few inclusions.

Probably intact ?cultivated loams but may include some recent evaluation trench infill.

Boreholes: BH1, BH2, BH3

Contexts: 10004, 10005, 10023, 10024, 10054, 10055

Details:

Position	Con	Description & initial interpretation
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BH1	10004	Fairly loose brownish grey fine loam (poor recovery), RSM flint. ?Cultivated old ground ?surface/fill.
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BH1	10005	Fairly loose greyish brown fine loam, RS flint. ?Cultivated old ground ?surface/fill.
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BH2	10023	Fairly compact brownish grey clayey loam, RSM flint, RSM chalk, RS mortar, RS tile. Evaluation infill or ?cultivated old ground ?surface/fill.
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BH2	10024	Fairly compact brownish grey clayey loam, RSM flint. Evaluation infill or ?cultivated old ground ?surface/fill.
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BH3	10054	Fairly compact grey brown slightly clayey loam, RSM flint, RS mortar, RSM peg-tile, RSM oyster. Evaluation infill or ?cultivated old ground ?surface.
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BH3	10055	Fairly compact grey brown slightly clayey loam, RSM flint, RS mortar, RSM peg-tile, RS oyster. Evaluation infill or ?cultivated old ground ?surface.
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A2.4 Group G10006

Phase B2

Fairly compact yellow to yellow brown loamy clays in BH1.

The lack of inclusions suggests loessic rather than head brickearth.

Borehole: BH1

Contexts: 10006, 10007

Details:

Position	Con	Description & initial interpretation
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BH1	10006	Fairly compact yellow brown slightly silty loamy clay. ?Loessic brickearth.
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BH1	10007	Fairly compact yellow slightly sandy loamy clay. ?Loessic brickearth.
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A2.5 Group G10010

Phase B2

Generally compact, more or less sandy clayey gravels (or gravelly clayey sand) in BH1 and BH2.

The significant clay portion of the matrix suggests a head rather than fluvial origin. May be equivalent to G10057 in BH3 but, if so, context 10008 cannot form part of G10058 and is more probably part of ?loessic brickearth G10006 with an admixture of material from G10010.

Boreholes: BH1, BH2

Contexts: 10009, 10010, 10026, 10027, 10030

Details:

Position	Con	Description & initial interpretation
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BH1	10009	Fairly compact yellow brown gravelly clayey sand, CSRM subangular to subrounded flint, RM Tertiary pebble. ?Head gravelly sand.
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BH1	10010	Compact fairly pale yellowish brown slightly sandy clayey gravel, ASRM subangular to subrounded flint. ?Head gravel.
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BH2	10026	Compact pale grey slightly silty clayey gravel, RSCM subangular to subrounded flint. Head gravel.
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BH2	10027	Compact orange brown slightly sandy clayey gravel, CM subangular flint. Head gravel.
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BH2	10030	Compact orange brown sandy clayey gravel, ASCM flint. Head gravel.
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A2.6 Group G10011

Phase B1

Generally off-white but soemtimes darker clay silts with abundunt small (and, rarely, medium) chalk clasts but including at least one 0.04m thick layer (10034 in BH 2) of material lacking any stone.

Either ?head/coombe deposit carried in from upslope by solifluction *etc* or *in situ* cryoturbated chalk. Formed, in either case, in very cold periglacial conditions.

Boreholes: BH1, BH2, BH3

Contexts: 10011, 10031, 10032, 10033, 10034, 10035, 10040, 10059

Details:

Position	Con	Description & initial interpretation
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BH1	10011	Fairly compact very pale grey clay silt, ASRM chalk. ?Head/coombe deposit
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		or <i>in situ</i> cryoturbated chalk.
BH2	10031	Fairly compact orange brown sandy clay, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.
BH2	10032	Fairly compact off-white clay silt, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.
BH2	10033	Fairly compact off-white clay silt, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.
BH2	10034	Fairly compact loamy clay with pale grey silty clay mottle. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.
BH2	10035	Fairly compact off-white clay silt, AS chalk, RM subangular flint. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.
BH2	10040	Fairly compact off-white clay silt, AS chalk. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.
BH3	10059	Fairly compact very pale yellow clay silt, ASRM chalk, RM subangular flint. ?Head/coombe deposit or <i>in situ</i> cryoturbated chalk.

A2.7 Group G10025

Phase C1

Fairly compact pale greyish brown loamy clay identified only in BH2.

Possibly weathered or otherwise stained natural ?loessic brickearth but more probably, given its colour, a colluvial deposit, perhaps forming in an artificial hollow.

Borehole: BH2

Context: 10025

Details:

Position	Con	Description & initial interpretation
BH2	10025	Fairly compact pale greyish brown loamy clay. ?Colluvium.

A2.8 Group G10056

Phase C1

Fairly compact orangey brown loamy sandy gravel comprising mostly medium-sized subangular to subrounded flints., identified only in BH3. At least two ?abraded ?peg-tile fragments appeared to belong to this layer but may have been intrusive.

The colour and the preponderance of medium flints suggests either weathered/disturbed ?head or artificially redeposited (and, probably, sorted) gravel: the latter might also explain the relatively poor compaction when compared to most head gravels.

Borehole: BH3

Context: 10056

Details:

Position	Con	Description & initial interpretation
BH3	10056	Fairly compact loamy sandy gravel, RSAM flint, RM ?intrusive ?peg-tile. ?Weathered/disturbed ?head or redeposited ?sorted gravel.

A2.9 Group G10057

Phase B2

Compact orange brown slightly clayey sandy gravel beneath ?head/redeposited gravel G10056 and over ?head brickearth G10058 in BH3.

When compared to G10056, the paler, more orangey colour, poorer sorting ,greater compaction and lack of even suspect artificial inclusions would, by themselves, suggest natural ?head gravel. However, its stratigraphic position might call this into question and it may instead be an artificial dump or metalling, perhaps a working surface associated with G10056.

Borehole: BH3

Context: 10057

Details:

Position	Con	Description & initial interpretation
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BH3	10057	Compact orange brown slightly clayey sandy gravel, CSM flint. ?Head gravel.
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A2.10 Group G10058

Phase B2

Fairly compact loamy clays with rare medium or small to medium subangular flints. Yellow brown and slightly silty in BH1, orange brown and slightly sandy in BH3.

The presence of the flints is more suggestive of head brickearth than loessic. Although in BH1 they may represent contamination of a loessic deposit from the underlying ?head gravels G10010, in BH3 G10058 overlay chalky ?combe material G10011 directly and the flints appeared to be firmly embedded in and well distributed throughout the deposit.

Boreholes: BH1, BH3

Contexts: 10008, 10058

Details:

Position	Con	Description & initial interpretation
----------	-----	--------------------------------------

BH1	10008	Fairly compact yellow brown slightly sandy loamy clay, RM subangular flint. ?Head brickearth.
-----	-------	-----------------------------------------------------------------------------------------------

BH3	10058	Fairly compact orange brown slightly sandy loamy clay, RSM subangular flint. ?Head brickearth.
-----	-------	------------------------------------------------------------------------------------------------

A2.11 Group G10060

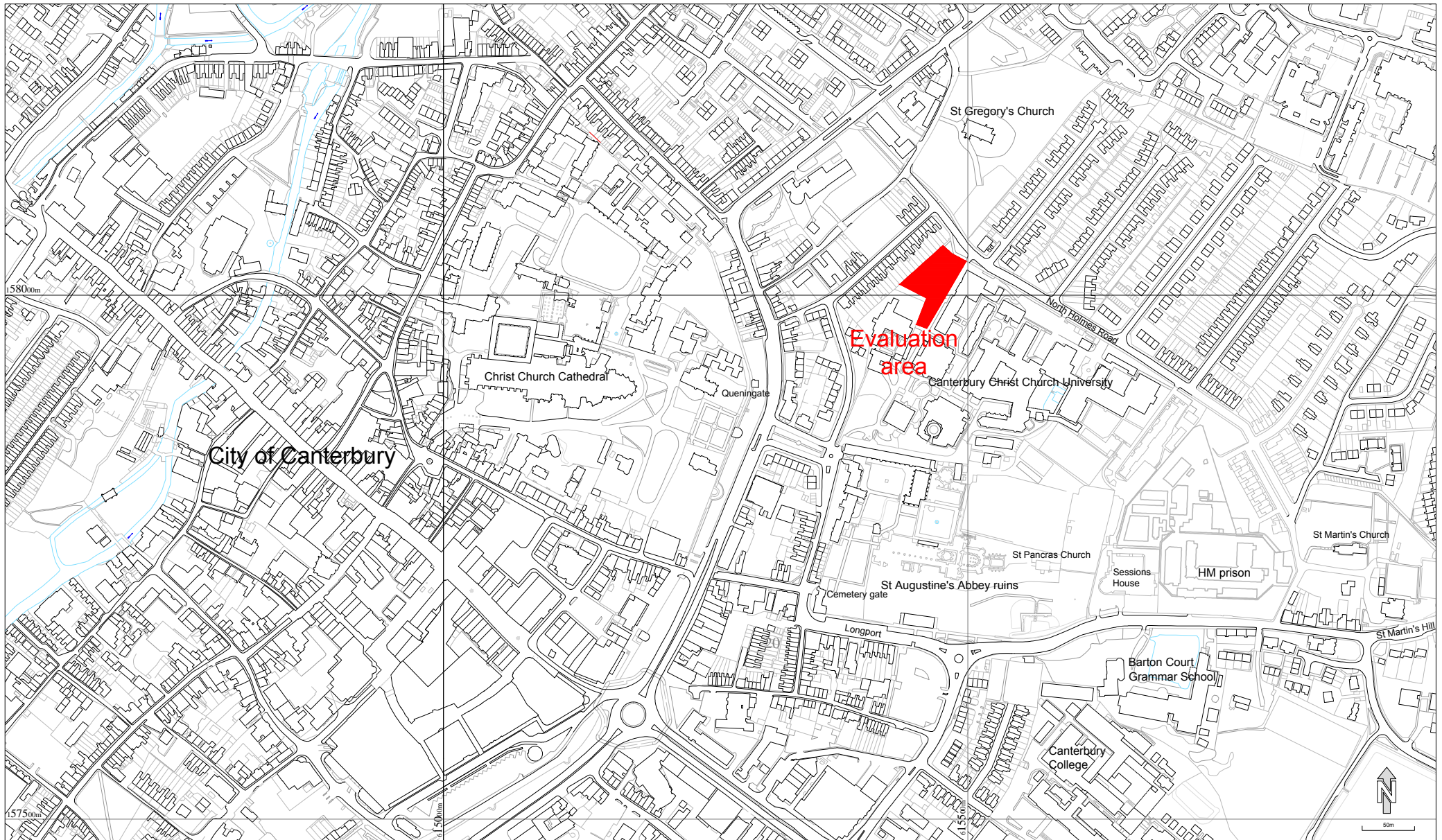
Phase A

Fairly compact putty chalk.

Natural, *in situ* chalk although probably degraded by cryoturbation and/or groundwater.

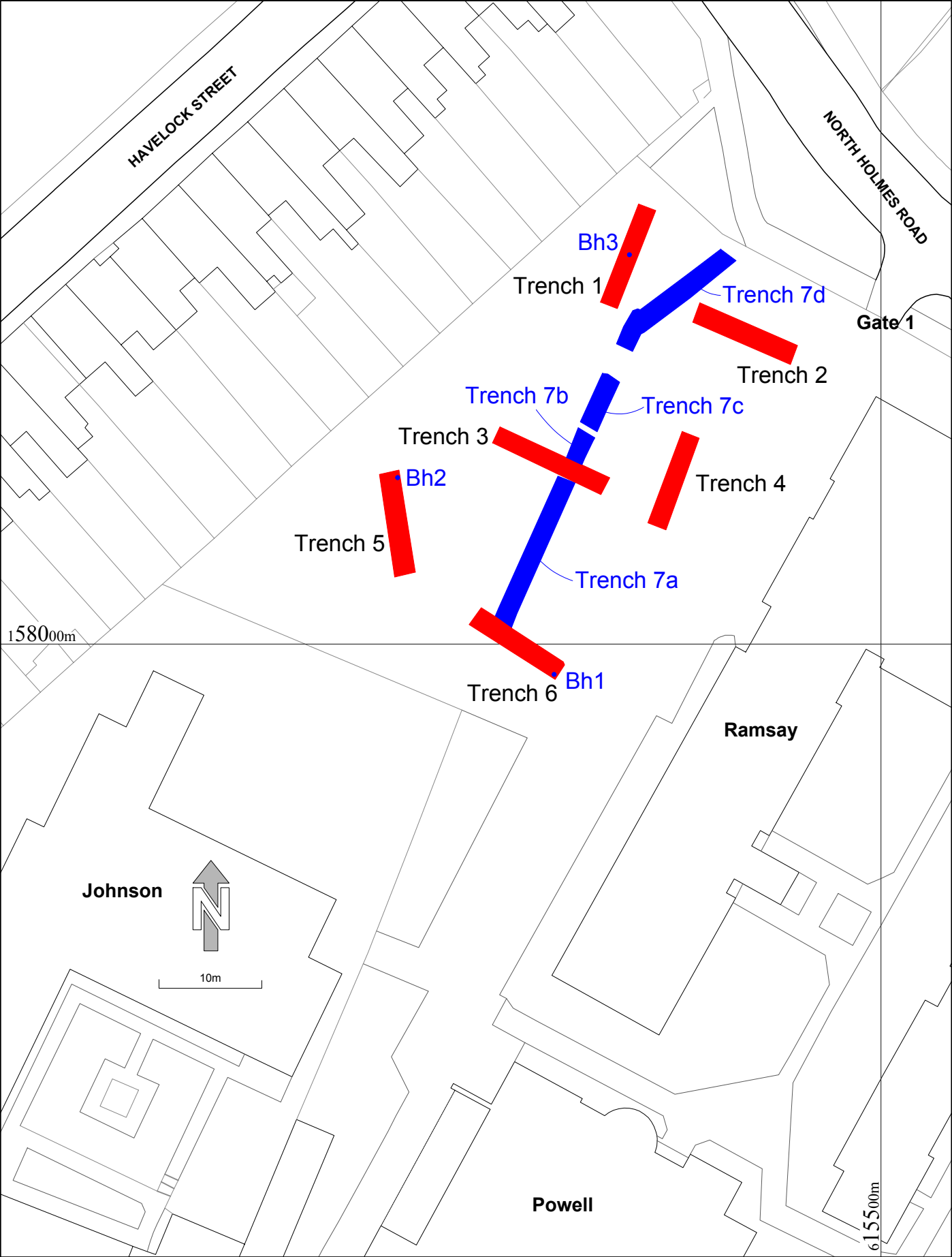
Boreholes: BH1, BH2, BH3

Contexts: 10012, 10041, 10060



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	PROJECT CODE EV CCCU-AB16	REF/DRG NO. CCCU-AB Figure 1			

Figure 1. Site location plan.



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		DRAWN BY AH	SCALE(S) 1:500 @ A4
	PROJECT CODE EV CCCU-AB16	REF/DRG NO. CCCU-AB Figure 2	

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Figure 2. Trench and borehole location plan.

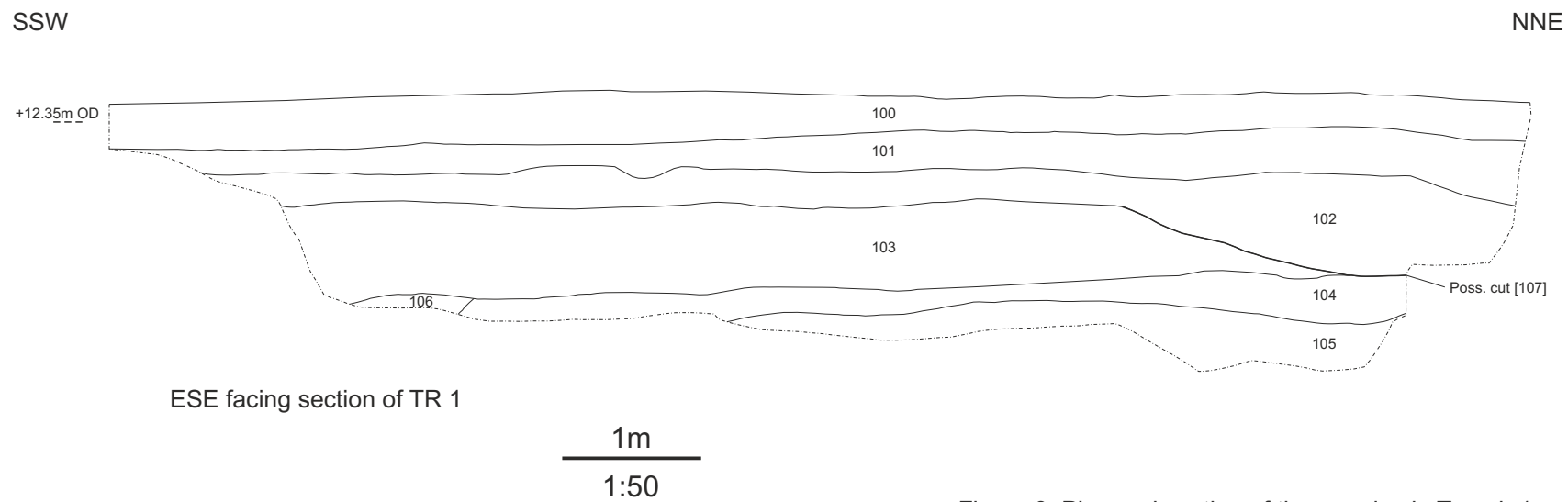
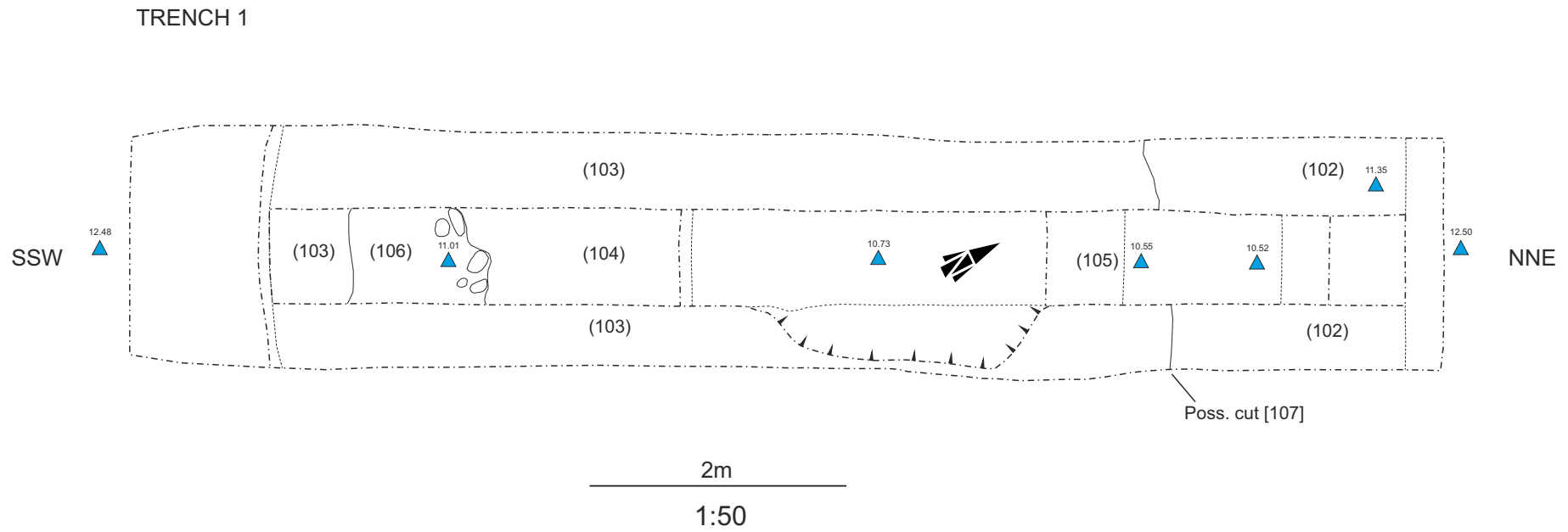
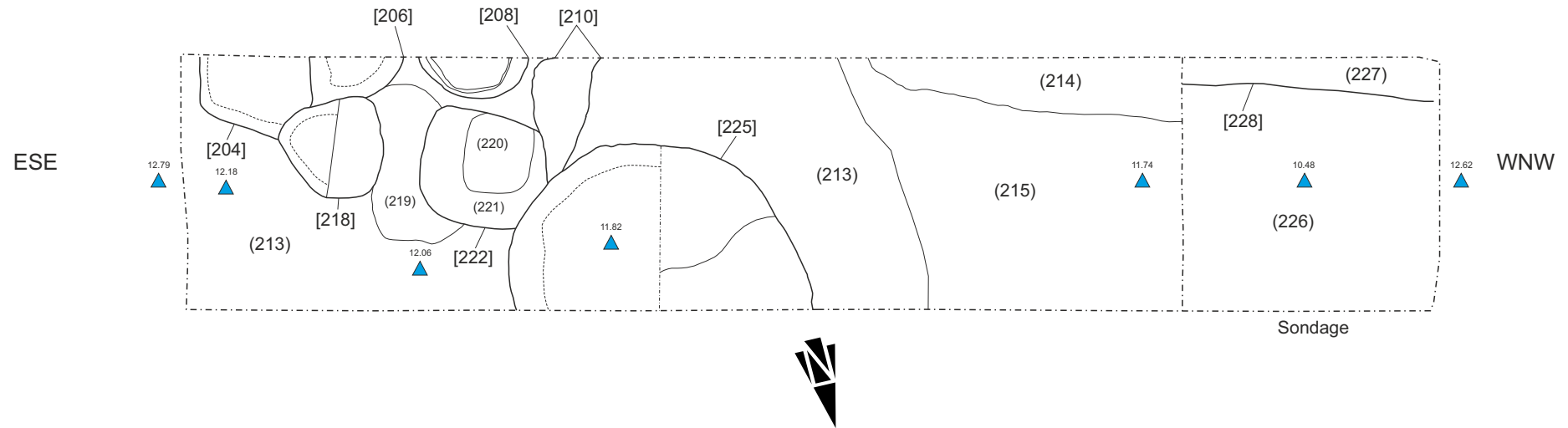


Figure 3. Plan and section of the remains in Trench 1.

TRENCH 2



ESE

WNW

+12.79m OD

200

200

203

205

207

209

202

201

211

[204]

[206]

[208]

[210]

213

215

214

[212]

215

216

227

[228]

NNE facing section of TR 2

1m

1:50

Figure 4. Plan and section of the remains in Trench 2.

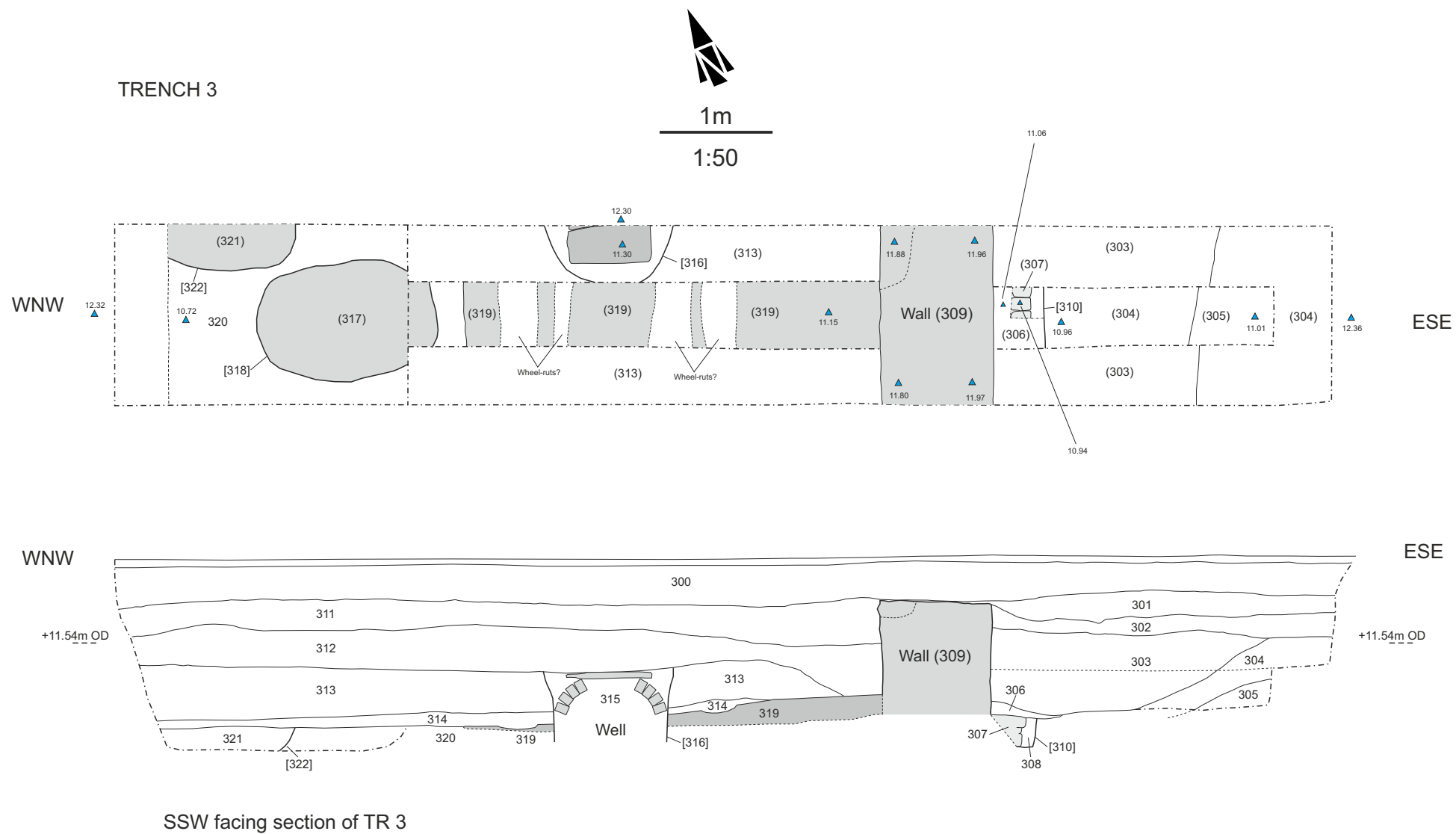


Figure 5. Plan and section of the remains in Trench 3.

TRENCH 4

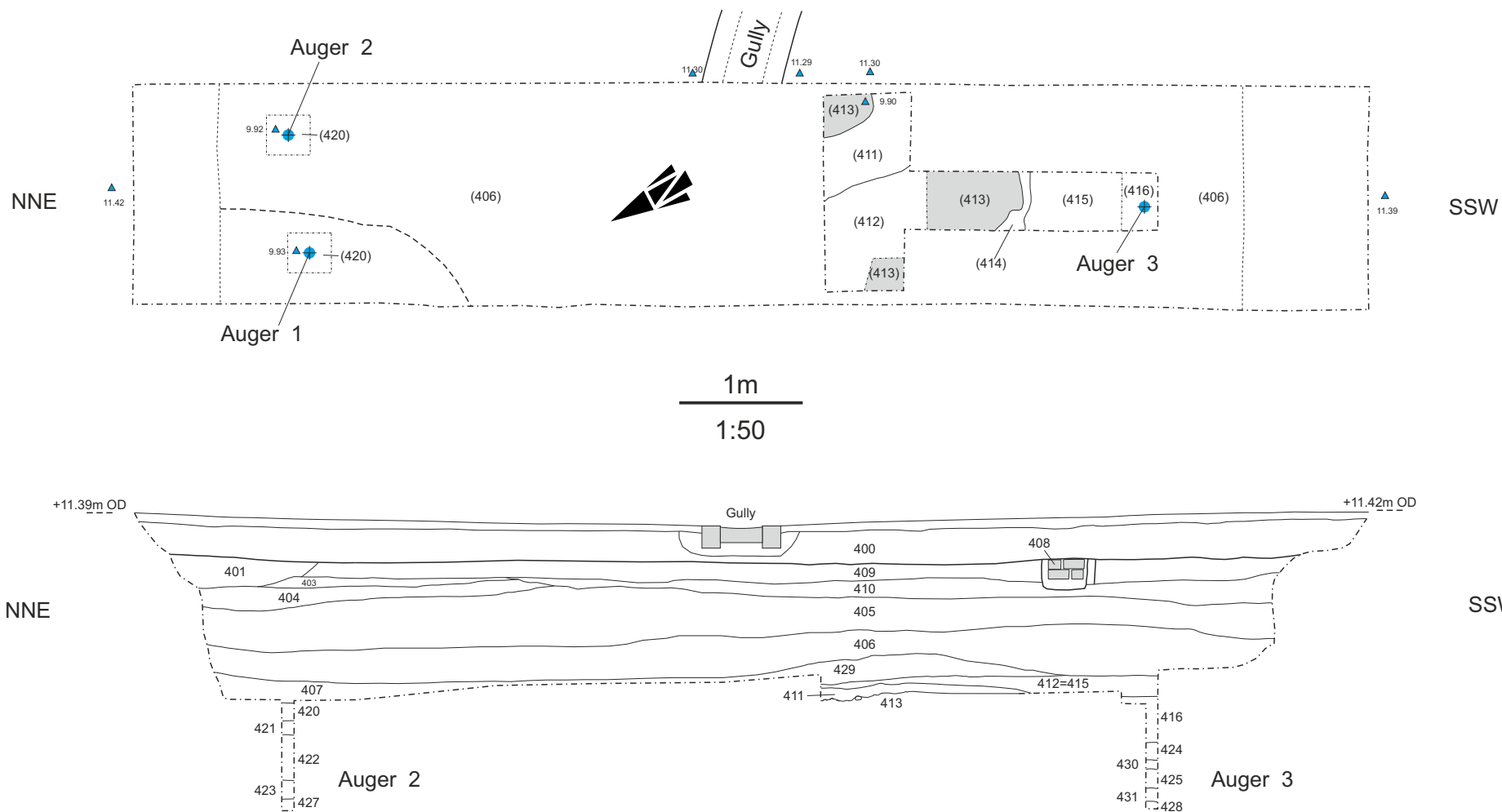
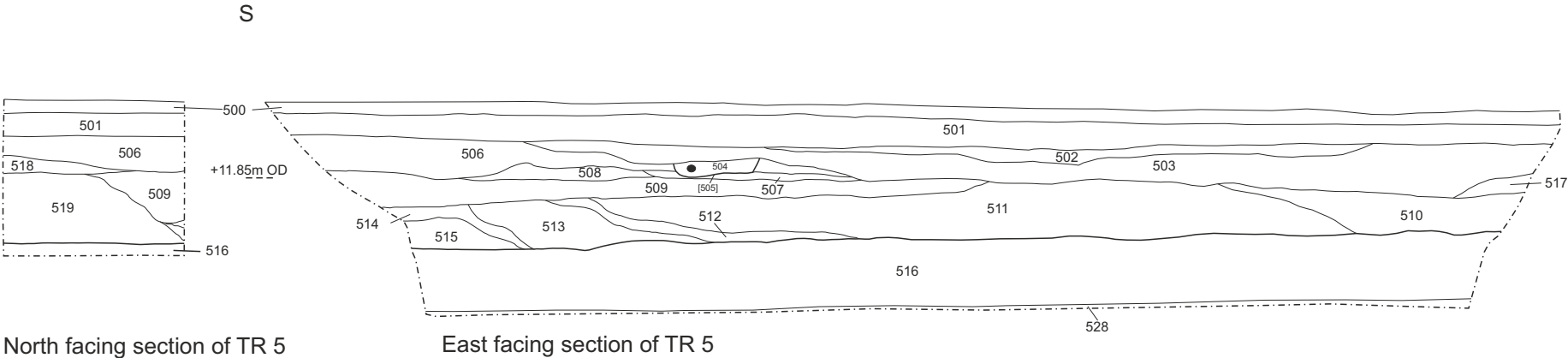
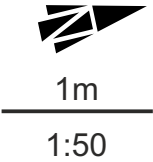


Figure 6. Plan and section of the remains in Trench 4.

TRENCH 5



Plan of TR 5



North facing section of TR 5

East facing section of TR 5

Figure 7. Plan and section of the remains in Trench 5.

TRENCH 6

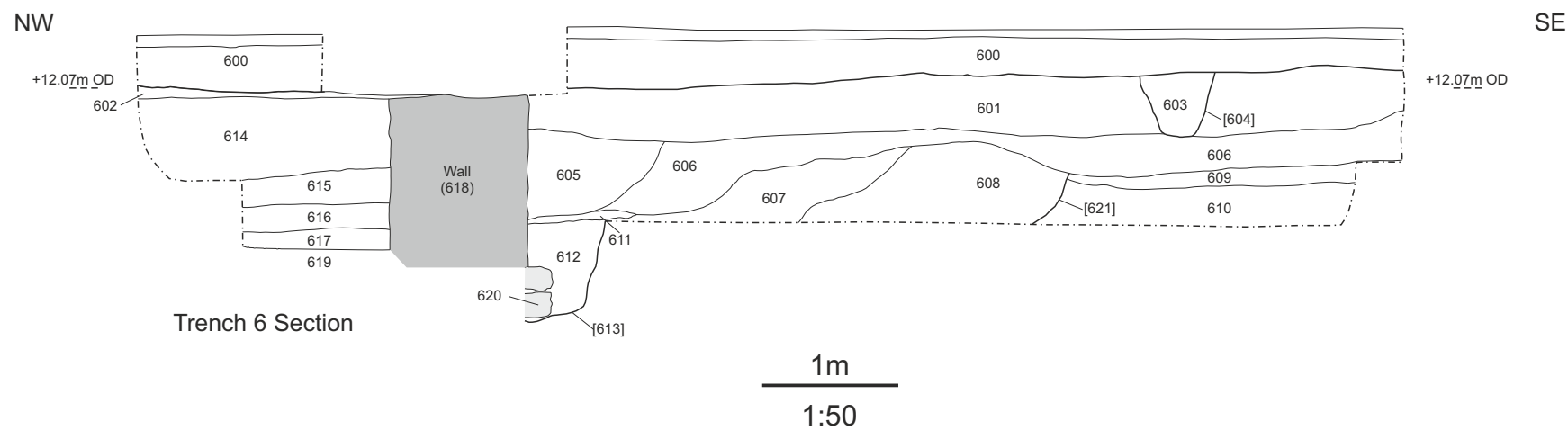
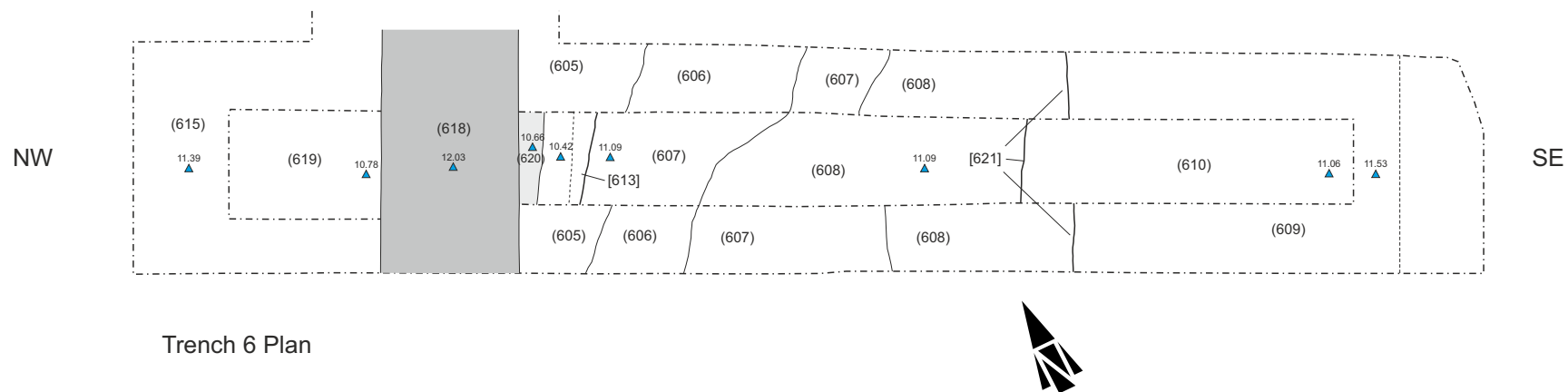


Figure 8. Plan and section of the remains in Trench 6.

TRENCH 7

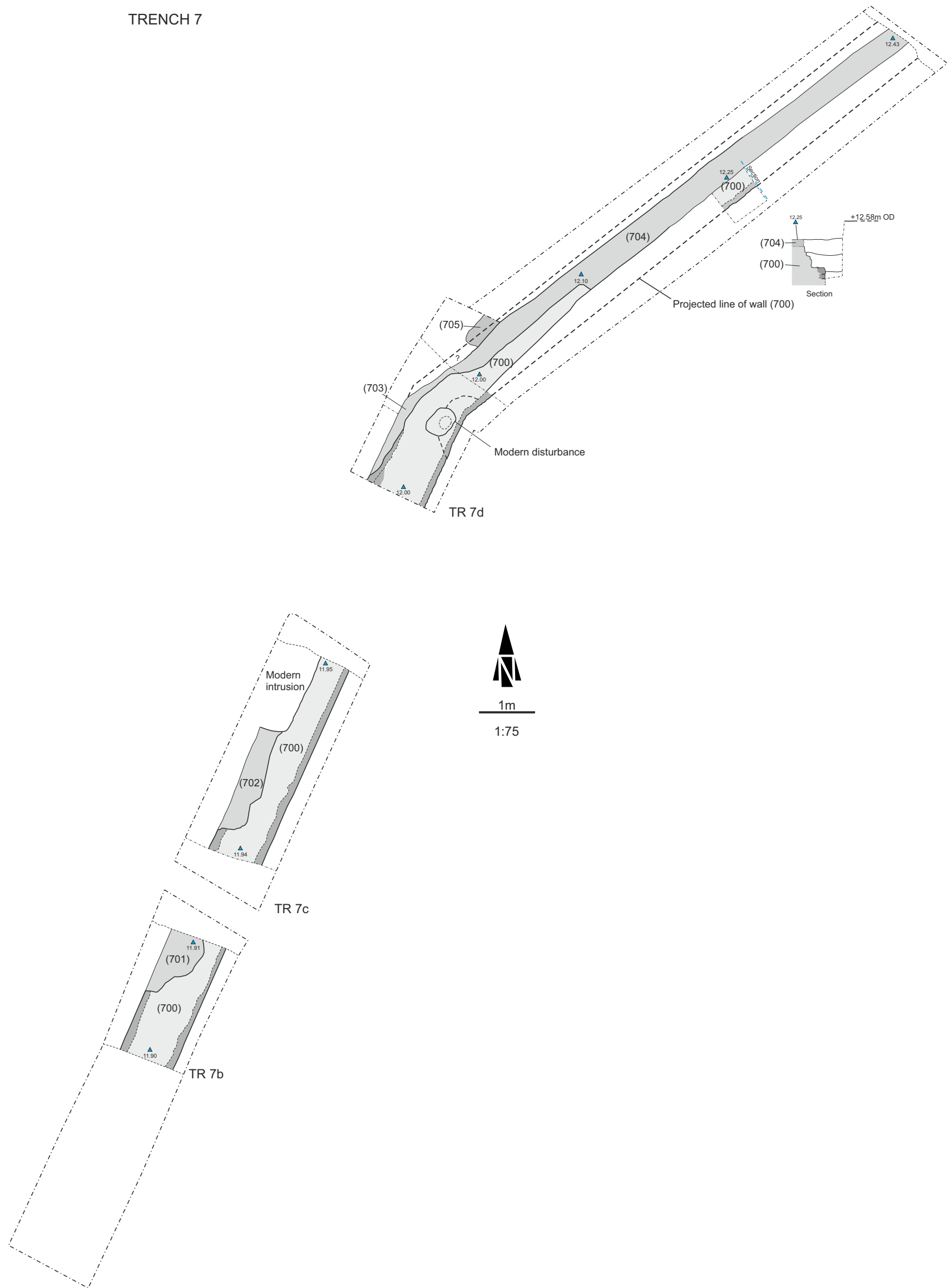
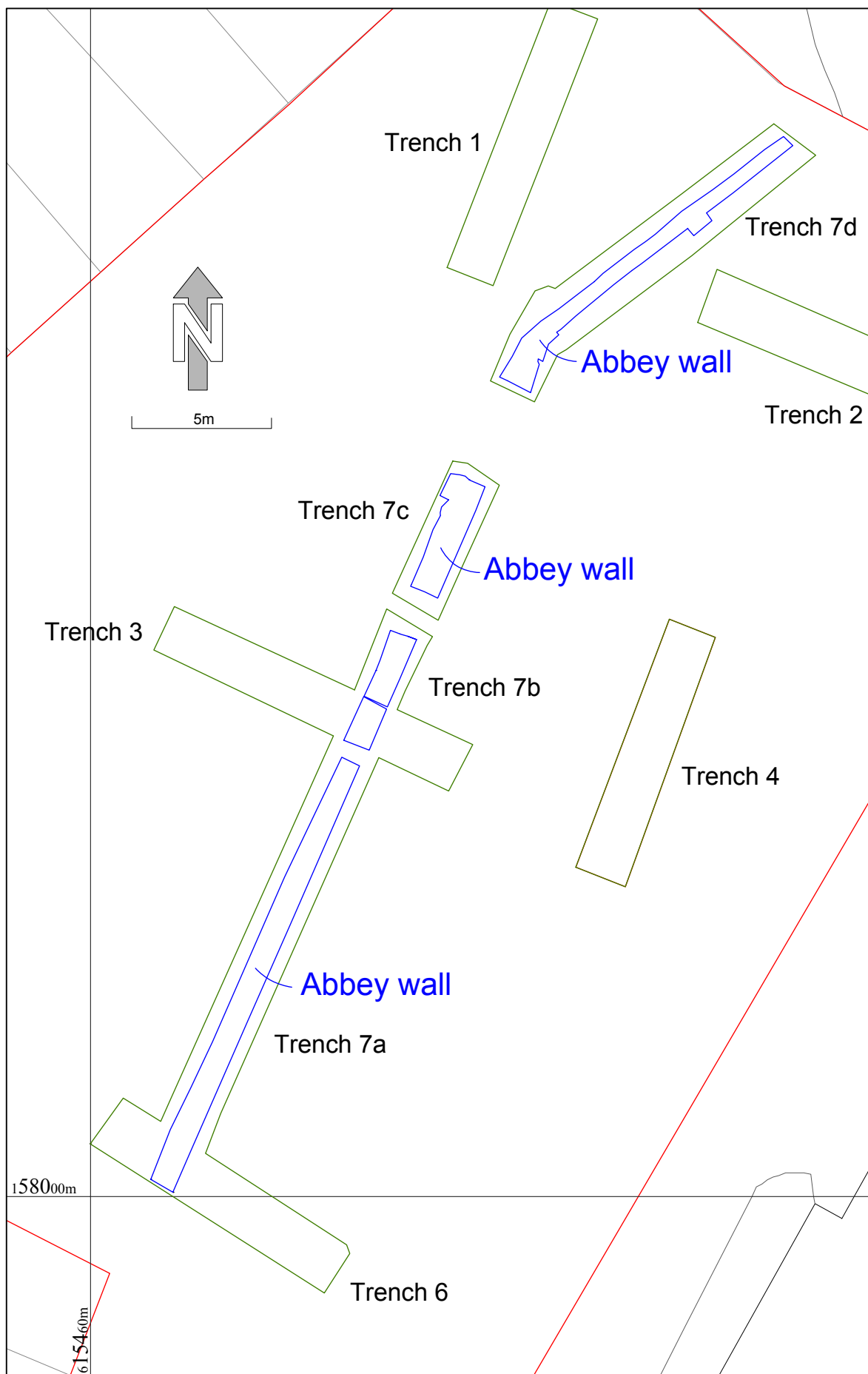


Figure 9. Plan of the remains in Trench 7.



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	PROJECT CODE		DRAWN BY	SCALE(S)
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		REF/DRG NO.		
		CCCU-AB Figure 10		

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Figure 10. Outer edges of abbey wall, with modifications, as surveyed with GPS

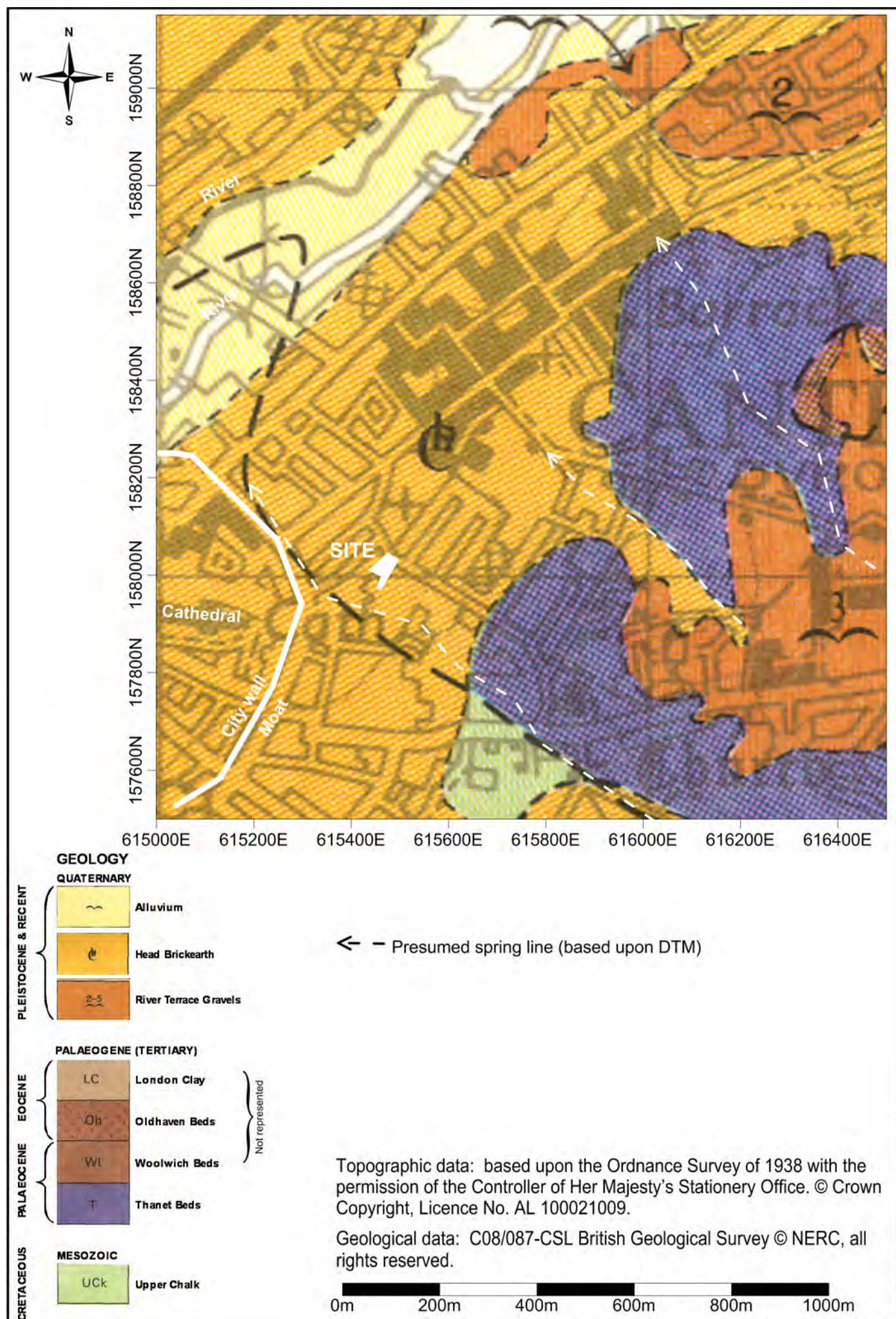
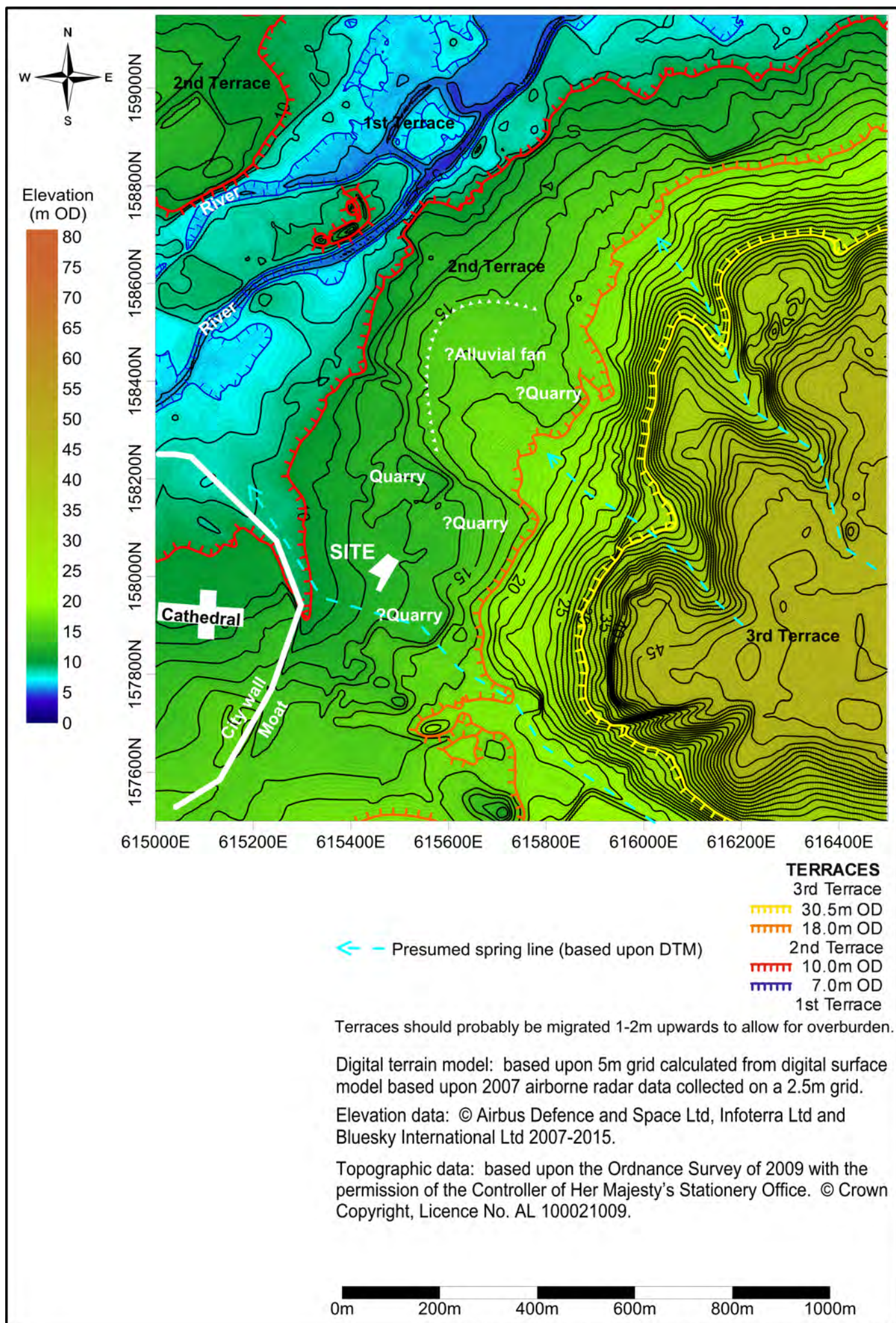
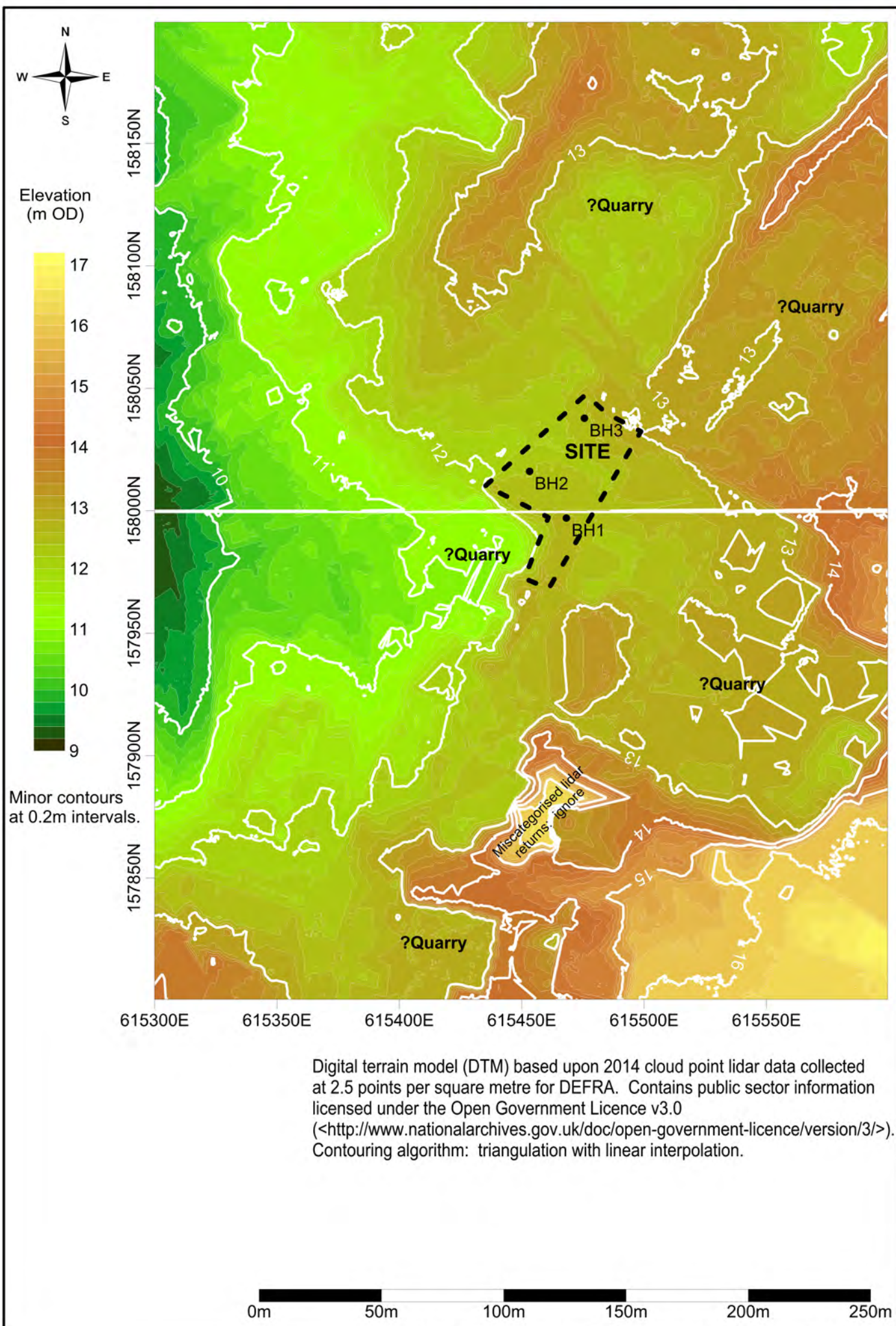


Fig 11 Anticipated superficial geology (1:10,000).





Key to contexts

	Demolition, collapse, razing, abandonment debris <i>etc</i>
	Burning
	Industrial waste, dumped ash <i>etc</i>
	Tread, occupation <i>etc</i> , including <i>in situ</i> hearth ash
	Clay, tile, earthen, chalk or other non-flint stone floor, paving <i>etc</i>
	Dumped flint gravel/pebbles/cobbles or river bed, metalling, tarmacadam <i>etc</i>
	Wall, concrete (including floors), brickwork (including floors), levelling <i>etc</i>
	Root, timber, brushwood, twigs <i>etc</i>
	Ditch, wash, waterlain inorganic silt <i>etc</i>
	Topsoil, pit fill, loam, old ground surface <i>etc</i>
	Waterlain organic silt <i>etc</i>
	Sand or gravelly sand
	Clean ?natural brickearth, clay, loamy clay or sandy clay
	Clean ?natural silty clay or geologically recent ?alluvial clayey sand
	Clean ?natural flint gravel or gravel and sand
	Cess or colluvium
	Sandstone
	Coombe deposit, periglacial fill or cryoturbated chalk
	Natural chalk (numbered) or void/discarded (unnumbered)
	Depth of context ?top only recorded

Key to interpolations

	Demolition <i>etc</i>
	Burning
	Industrial activity <i>etc</i>
	Treads, occupation <i>etc</i>
	Building platforms, floors <i>etc</i>
	Metallings <i>etc</i>
	Walls, levellings, modern features <i>etc</i>
	Timber <i>etc</i>
	Ditches, washes, inorganic waterlain silts <i>etc</i>
	Pit fills, loams, old ground surfaces <i>etc</i>
	Peats <i>etc</i>
	Natural sands or gravelly sands
	Natural brickearths
	Natural silty clays
	Natural gravels or gravels and sands
	Cess or colluvia
	Coombe deposits, periglacial fills and/or or cryoturbated chalk
	Natural chalk
	Unknown

Miscellanea

Chainages and offsets in metres, negative offsets towards the reader.
Intersects indicate positions also on at least one other transect.
Where a position has been moved to improve clarity, the correct chainage is marked by a black square or circle, unshifted positions by a grey one.

Key to inclusions (usually ignored in modern deposits)

	Bone (charcoal ignored if present)
	Charcoal
	Pottery (brick <i>etc</i> ignored if present)
	Brick, tile or daub

Key to sampling

Context number	No archaeological sub-sampling
Context number	Archaeological monolith sample taken
Context number	Archaeological bulk sample taken
Context number	Other archaeological sample taken

Key to probable archaeological potential

D	No archaeological potential
C	Archaeological potential
B	Geoarchaeological potential
A	No archaeological potential

Not all conventions are used in all figures nor on all sites

Fig 14 Standard keys to transects.

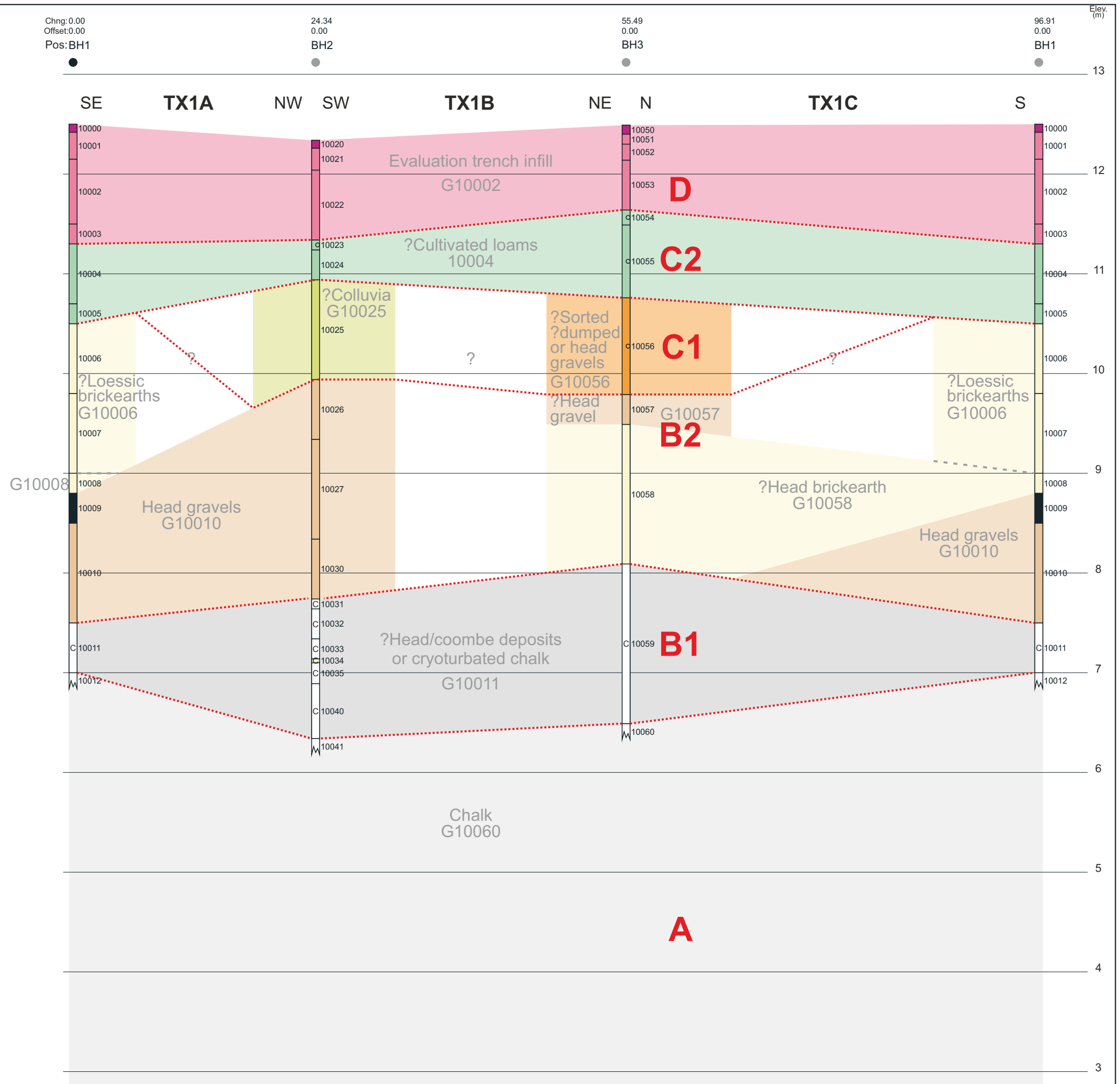
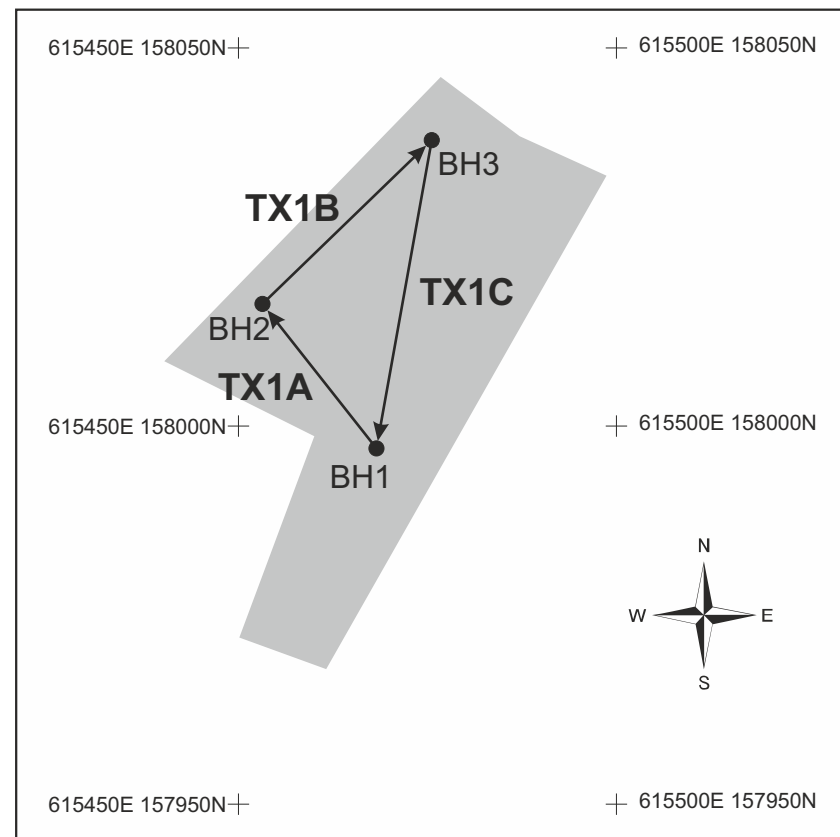
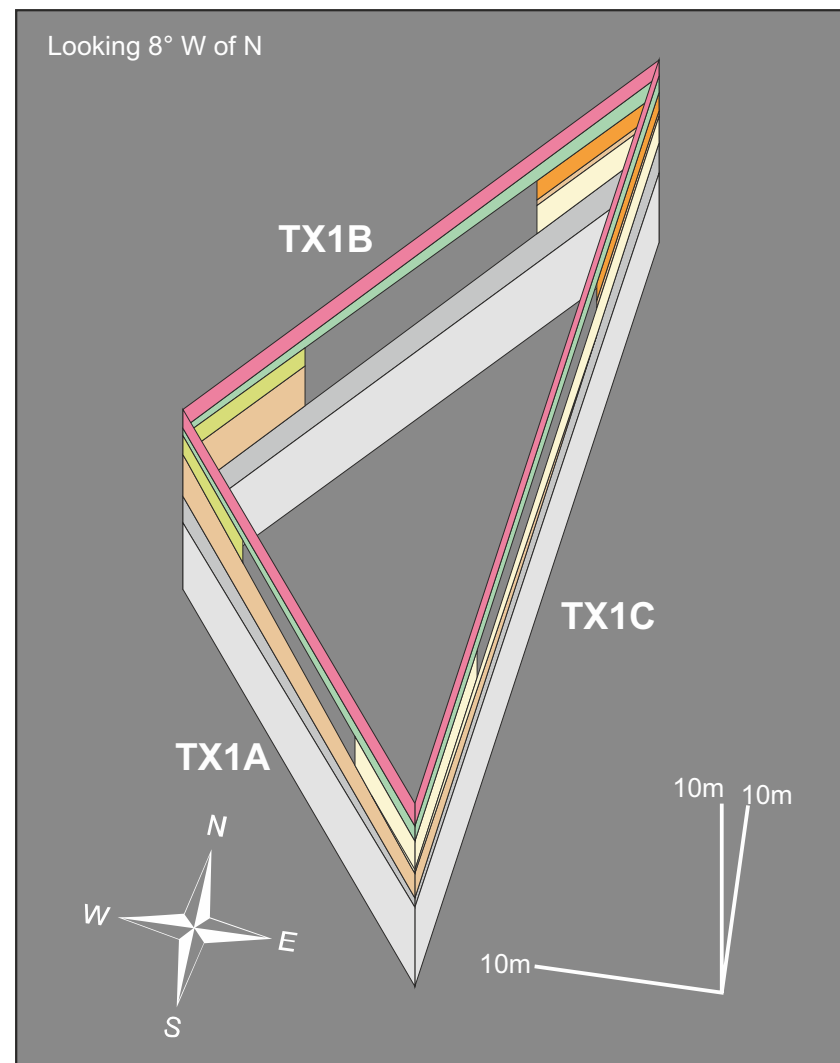


Fig 15 Borehole transects TX1A-TX1C (vertical scale 1:40, ave. horizontal spacing 1:400, upper insert 1:400, lower insert 1:1000).



Plate 1. The site of the proposed Arts Building, looking north.



Plate 2. The site of the proposed Arts Building, looking south-west.



Plate 3. Trench 1 looking south-south-west, scale 0.5m



Plate 4. Trench 2 looking west-north-west, scale 1m.



Plate 5. Trench 3 looking west-north-west, scale 1m.



Plate 6. Detail of chalk wall foundation (307) on east side of wall (309) in Trench 3, scale 0.5m



Plate 7. Trench 3 looking west-north-west showing east facing elevation of wall (309), scale 0.5m



Plate 8. Western end of Trench 3 showing the west facing elevation of wall (309) and flint metalling (319), scale 0.5m



Plate 9. Interior of well (315) in Trench 3 showing iron water pipe.



Plate 10. Southern end of Trench 4 looking north-north-east, scale 1m.



Plate 11. Detail of flint metalling (413) in Trench 4, scale 0.5m.



Plate 12. Trench 5 looking north, scale 1m.



Plate 13: Trench 6 looking west-north-west, scale 1m



Plate 14. East facing elevation of wall (618) in Trench 6, scale 0.5m



Plate 15. Southern end of Trench 7a showing hand cleaning of wall (618, 700)



Plate 16. Trench 7a showing southern extent of wall (700) looking south, scale 1m.



Plate 17. Trench 7b showing wall (700) looking south, scale 0.50m.



Plate 18. Trench 7c showing wall (700) looking north, scale 0.5m.



Plate 19. Trench 7d showing walls (700) and (704) looking north-east, scale 0.5m



Plate 20. Trench 7d showing wall (704) looking south-west, scale 0.5m.



Plate 21. Trench 7d showing wall (700) overlain by wall (704) looking north-west, scale 0.5m.