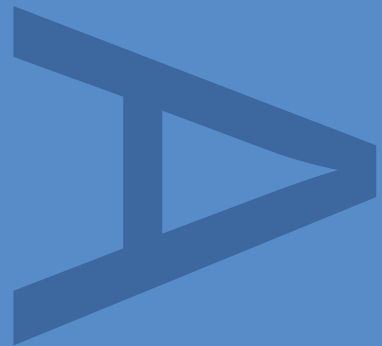




**AN ARCHAEOLOGICAL WATCHING BRIEF  
AT 17 SOUTH BAILEY, DURHAM,  
COUNTY DURHAM**

**MAY 2013**



**DOCUMENT VERIFICATION**

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17 SOUTH BAILEY, DURHAM, COUNTY DURHAM**

Pre-Construct Archaeology Limited Quality Control	
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Text prepared by:	Aaron Goode and Robin Taylor-Wilson		May 2013
Text checked by:	Jenny Proctor	<i>J Proctor</i>	16 May 2013
Graphics prepared by:	Mark Roughley		13 May 2013
Graphics checked by:	Josephine Brown	<i>Josephine Brown</i>	13 May 2013
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Pre-Construct Archaeology Limited  
North Regional Office  
Unit N19a TurSDale Business Park  
Durham  
DH6 5PG

# An Archaeological Watching Brief at 17 South Bailey, Durham, County Durham

**National Grid Reference: NZ 27315 41925**

**Site Code: SOB 13**

**Commissioning Client:**

**St. Johns College, Durham University**  
3 South Bailey  
Durham  
DH1 3RJ



**Tel: 0191 334 3500**

**Historic Environment Consultant**

**Archaeo-Environment Limited**

Marian Cottage  
Lartington  
Barnard Castle  
Co. Durham  
DL12 9BD



**Archaeo-Environment Ltd**

**Tel: 0183 365 0573**

**Contractor:**

**Pre-Construct Archaeology Limited**

Northern Office  
Unit N19a Tursdale Business Park  
Durham  
DH6 5PG



**Tel: 0191 377 1111**

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## **1. NON-TECHNICAL SUMMARY**

- 1.1 Pre-Construct Archaeology was commissioned by Archaeo-Environment, on behalf of St. John's College, Durham University, to undertake an archaeological monitoring and recording exercise at 17 South Bailey, Durham, in association with geotechnical site investigations. The work forms part of the early planning stages for a proposed development.
- 1.2 The central National Grid Reference for 17 South Bailey is NZ 27315 41925. The site is of archaeological interest due to its location on the peninsula of Durham City and within the boundaries of both the Durham Cathedral and Castle World Heritage Site and the Durham City Centre Conservation Area. It lies immediately to the south-west of the church of St. Mary the Less.
- 1.3 The geotechnical site investigations comprised five boreholes (BH4-8) and three test pits (TP1-3) located on open ground to the front and rear of the property. The boreholes were undertaken to supplement data gathered by a previous geotechnical investigation to gain a better understanding of the ground conditions and geology of the site. The test pits were located to investigate the foundations of the properties of Nos. 16 (TP3) and 17 South Bailey (TP1), as well as the foundation of the northern boundary wall of No. 17 (TP2).
- 1.4 In two boreholes located in front of No. 17, weathered bedrock was encountered at depths of 1.75m in (BH4) and 2.10m (BH5) below existing ground level. Overlying this material in BH5 were two deposits of potential archaeological interest, including a possible ancient sub-soil, of combined thickness c. 0.75m. All deposits recorded above bedrock in BH4 (combined thickness 2m) and the uppermost strata in BH5 (combined thickness 1.35m) were most probably levelling deposits of late post-medieval or modern date, capped by topsoil.
- 1.5 In three boreholes located to the rear of No. 17 (BHs 6-8) weathered bedrock was encountered at varying depth: 2.24m (BH6); 2.46m (BH7); 2.70m (BH8), below existing ground level. A probable superficial geological deposit was recorded at each location, overlain in BH7 and BH8 by a possible ancient sub-soil. Deposits of potential archaeological interest were recorded overlying geological material in BH6 and the possible sub-soil in BH7 and BH8. These deposits varied in thickness: 0.90m (BH6); 0.68m (BH7); 0.20m (BH8). Various levelling deposits of probable late post-medieval or modern date were recorded overlying the deposits of potential archaeological interest in BH6-8. The combined thickness of this material varied: 0.96m (BH6); 1.65m (BH7); 1.90m (BH8).
- 1.6 The test pits produced limited archaeological information of note. TP1, located against the south facing elevation of the rear portion of No. 17, encountered the concrete foundation of the structure at a depth of 0.54m below existing ground level. TP2, located close to the south facing elevation of the northern rear boundary wall of No. 17, encountered the concrete foundation of the structure at a depth of 0.19m below existing ground level. TP3, located against the west facing elevation of the rear portion No.16, close to its northern boundary wall, encountered a brick supporting structure directly below the existing paved surface, while the base of the stone wall of the building was encountered at a depth of 0.55m below existing ground level.

## **2. INTRODUCTION**

### **2.1 General Background**

2.1.1 This report details the results of an archaeological monitoring and recording exercise (hereafter 'watching brief') undertaken in May 2013 in association with geotechnical site investigations at No. 17 South Bailey, Durham. The watching brief was commissioned by Archaeo-Environment Limited, on behalf of St. John's College, Durham University (the Client), and undertaken by Pre-Construct Archaeology Limited (PCA). The work was undertaken ahead of a development proposal for No. 17.

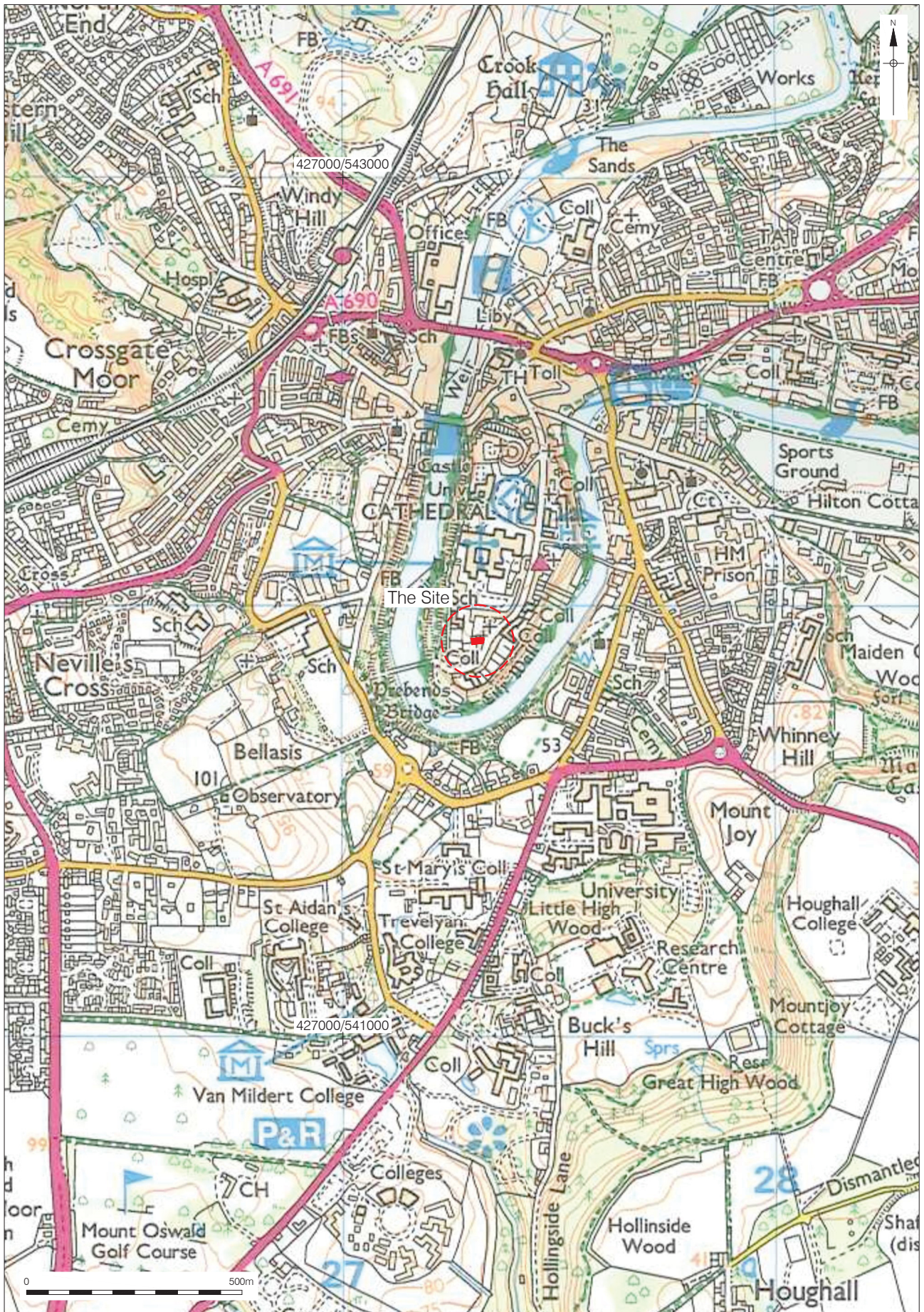
2.1.2 The site of No. 17 South Bailey is of archaeological interest due to its location on the peninsula of Durham City, which has been occupied from at least the early medieval period; it lies within the boundaries of both the Durham Cathedral and Castle World Heritage Site and the Durham City Centre Conservation Area. No. 17 is a modern era detached property with front and rear gardens. It is unclear from documentary evidence if the existing plot was previously substantially developed, although it certainly includes part of the former garden of a former rectory of the church of St. Mary the Less. While the rectory itself is no longer present, the church remains, located c. 20m to the north-east of No. 17.

2.1.3 The proposed development of No. 17 would entail demolition of the existing building and new build, potentially with a basement level. The archaeological watching brief was undertaken to help inform the design of the proposal by providing information regarding the likely presence of archaeological remains of significance, as well as their depth, date and character, where possible. A previous geotechnical investigation was undertaken at the site (Armstrong Site Investigation 2009). A Heritage Assessment undertaken for four separate sites on the South Bailey, including No. 17, concluded that the site had high potential for below ground archaeological remains of 19th century or earlier activity (Archaeo-Environment, 2010, 49). An archaeological investigation undertaken earlier in 2013 within the adjacent property, No. 16, recorded important remains of medieval and early post-medieval date at relatively shallow depths below the existing floor level (PCA forthcoming).

2.1.4 At the time of writing, the Site Archive, comprising written, drawn, and photographic records, is housed at the Northern Office of PCA, Unit N19a Tursdale Business Park, Durham, DH6 5PG. When complete, the Site Archive will be deposited with the appropriate repository for archaeological archives generated by projects within the former Durham City District under the site code SOB 13. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the project is: preconst1-150941.

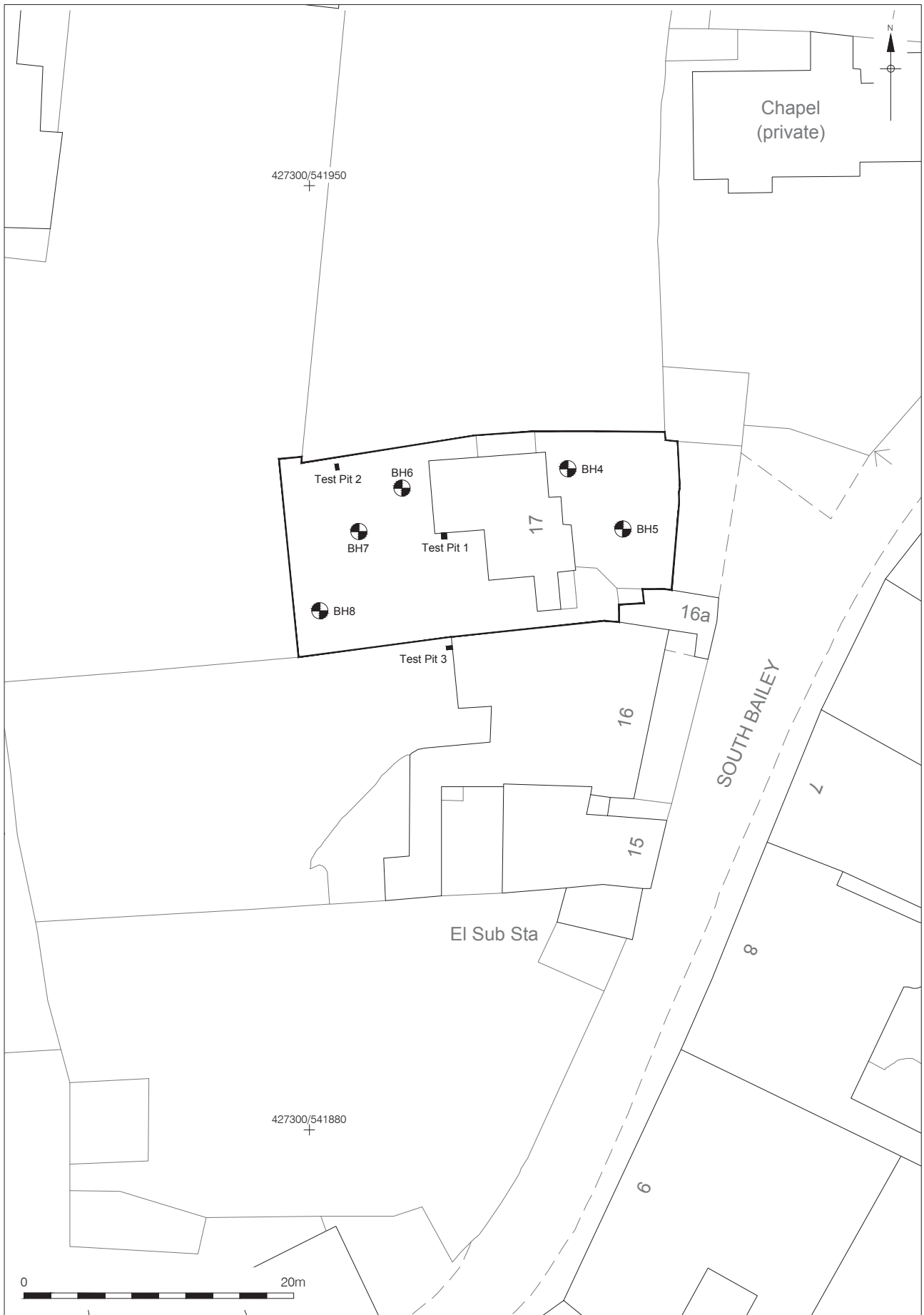
### **2.2 Site Location and Description**

2.2.1 The site is located within the southern portion of the Durham peninsula (Figure 1). South Bailey runs along the south-eastern side of the peninsula, continuing southwards from North Bailey, and No. 17 lies on its west side, to the south-west of the grounds of the church of St. Mary the Less. The site is centred at National Grid Reference NZ 27315 41925, with the existing building situated roughly centrally to the plot and with gardens to the front and rear (Figure 2).



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Figure 1  
 Site Location  
 1:12,500 at A4



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Figure 2  
 Detailed Site Location showing locations of Boreholes 4-8 and Test Pits 1-3  
 1:400 at A4



- 2.2.2 The site is roughly rectangular, measuring up to c. 30m east-west by c. 14m north-south, covering c. 420m<sup>2</sup>. To the north, it is bounded by a substantial stone wall, with a similar but lesser structure to the west. To the west, the northern boundary wall is evidently a modern era rebuild, with much older fabric to the east. To the south, the rear garden part of the site is bounded by a substantial stone wall, which is also the northern boundary wall of No. 16, this structure being entirely ancient masonry. East of the low fence delimiting the front garden is a small car parking area, beyond which is the cobbled surface of South Bailey.

## 2.3 Geology and Topography

- 2.3.1 Durham City lies within the Wear Lowlands portion of County Durham where the solid geology is the Carboniferous Pennine Middle Coal Measures Formation, which comprises interbedded grey mudstone, siltstone, pale grey sandstone and coal seams. Superficial deposits comprise Devensian glaciofluvial material, mostly sand and gravel (information from the *Durham Landscape* and *British Geological Survey* websites).
- 2.3.2 An incised meander of the River Wear created the prominent peninsula upon which the principle elements of the historic core of Durham were established. The Market Place occupies the narrow northern neck of the meander, with ground level at c. 47m OD. To the south lie the castle and cathedral, with access to the eastern side of the peninsula provided by Saddler Street, giving way to North Bailey and South Bailey. Street level in the immediate vicinity of the site is c. 57m OD.

## 2.4 Archaeological and Historical Background

*The majority of the information used for the following summary has been taken from the aforementioned Heritage Assessment for the South Bailey properties - the research and writing of those responsible is gratefully acknowledged; those documents should be consulted for sources.*

- 2.4.1 Despite its prominent topography and naturally defensible position, evidence of prehistoric activity on the Durham peninsula is somewhat limited. There is rather more evidence of Roman period occupation; by the 1st century AD parts of the peninsula were probably in use for small scale farming, with some of the natural tree cover having been cleared. However, by the time of the well documented arrival of St. Cuthbert's body in AD 995, much of the peninsula remained densely wooded, with only part of the central area evidently having been cleared for cultivation. The lower lying Elvet area, east of the peninsula, remains the assumed location for the focus of Anglo-Saxon settlement.
- 2.4.2 Construction of a castle at the northern end of the Durham peninsula began in 1072, this becoming the main residence and power base of the Bishops of Durham, with work on the cathedral, to the south of the castle, beginning in 1093. The bailey walls of the castle were erected 1099-1128 and North and South Baileys derive their name from being the confines of the east side of the outer castle bailey. Although they only appear in documentary records from the 14th century it is likely that long, narrow, tenement plots ('burgage' plots) were established along the Baileys much earlier. It is largely recognised that the outer bailey was the site of dwellings for palatine officials and the castle garrison by the end of the 12th century and in much of Durham such plots were probably established as early as the late 11th century.

- 2.4.3 By the 14th century, the Durham peninsula was a growing town, in addition to being a military stronghold and religious centre, with the parish church being St. Mary the Less on South Bailey. The boundary wall at the rear of No. 17 follows the fossilised route of the internal monastic precinct wall which subsequently became the parish boundary.
- 2.4.4 Monastic properties on the peninsula passed into the ownership of the Dean and Chapter from 1541 and they administered leases on most of their properties on South Bailey. From their establishment, tenement plots along the Baileys appear to have been of a fairly uniform size. Across the peninsula as a whole during this time, the topography was the main constraint to development and, where space was limited, buildings inevitably increased in height rather than width. Access along tenements was gained by very narrow lanes known as vennels, but as pressure on land increased from the 15th century, these too were built over and now survive as closes or passages within properties. Vennels enabled the construction of buildings behind the original street frontage houses and although this process is evident from cartographic evidence to some extent on the relatively wealthy South Bailey, it was undertaken far more on Silver Street and Saddler Street, the trading streets which gave access to the Market Place along the narrow neck of the peninsula.
- 2.4.5 Of relatively wealthy status, the houses on the Baileys were of a high quality and probably largely built of local sandstone in medieval times, although timber framing of upper floors may have been used before the 16th century. Some brick was used from the 17th century and rendering of buildings was especially fashionable from the early 19th century. Roofing materials were probably stone slate in medieval times, with black thatch in poorer parts, some pantile possibly from the 17th century, with Welsh slate increasing in popularity with the improved rail transport in the mid-19th century. When properties were updated or rebuilt, their relationship to the street frontage largely remained constant.
- 2.4.6 As previously mentioned, the Heritage Assessment undertaken for four separate sites on the South Bailey, including No. 17, concluded that the site had high potential for below ground archaeological remains of 19th century or earlier activity (Archaeo-Environment, 2010, 49). The existing building at No. 17 is of 20th-century brick construction and is currently used as a residential dwelling. Maps of 19th-century date indicate that prior to the construction of the current building the plot was, for the most part, undeveloped. The exception is John Wood's map of 1820, which depicts the rear part of a building, the rectory of St. Mary the Less, lying within the easternmost part of the site. The Ordnance Survey 1st edition map of 1857 shows a different layout, with that building evidently gone and another, smaller, L-shaped building having been erected on the street frontage, immediately to the east of the current boundary of the site, this filling the gap between No. 16 and a new, larger, rectory building. The church itself was rebuilt in 1847 and the new rectory was possibly contemporary with that development. The Ordnance Survey 1st edition depicts the northern and western boundaries of the existing plot of No. 17 as part of the parish boundary of St. Mary the Less. This layout largely survived until the construction of the current detached brick building in the 1930-40s.

2.4.7 From the establishment of the tenement plots along the Baileys, the properties would have had gardens to the rear of the houses and, from the 18th century, layouts on historic mapping appear to reflect national trends for formal design. Thomas Forster's map of 1754 depicts many of the properties along the Baileys with planned rear gardens. The garden to the rear of No. 17 is first shown in any detail on Forster's map, although it simply depicts a rectangular garden, possibly of formal design, within the westernmost portion of the overall property boundary. The properties immediately to the south are depicted with a large, square, planned rear garden. Wood's map of 1820 shows no detail of the gardens, while the Ordnance Survey 1st edition map depicts No. 17 with a planned garden with perimeter pathway, some planting of small trees in the internal portion and a geometric design in the north-eastern corner.

### 3. PROJECT AIMS AND RESEARCH OBJECTIVES

#### 3.1 Project Aims

- 3.1.1 The overarching aim of the watching brief was to build on data collected during the aforementioned previous geotechnical investigation to gain a better understanding of the ground conditions and underlying geology of the site.
- 3.1.2 A specific aim was to identify, where possible, deposits of potential archaeological interest in the boreholes and test pits.

#### 3.2 Research Objectives

- 3.2.1 In view of the likely potential for archaeological remains of the medieval period in particular to be present at the site, the investigation had the potential to make a contribution to archaeological knowledge of the medieval period in the area. The work was carried out with reference to *The North East Regional Research Framework* (NERRF) (Petts and Gerrard 2006). The NERRF highlights the importance of research as a vital element of development-led archaeological work and sets out key research priorities for all periods of the past so that all elements of commercial archaeological work can be related to wider regional and national priorities for the study of archaeology and the historic environment.
- 3.2.2 Archaeological work at No. 17 South Bailey principally relates to the medieval and post-medieval periods. The NERRF identifies the following research priorities for these periods which are of direct relevance to this project, as set out in the WSI;

- **Medieval period**

MDi	Settlement
MDiii	Urbanism
MDiv	Castles and defensive structures
MDvii	Medieval ceramics and other artefacts
MDxi	The medieval to post-medieval Transition

- **Post-medieval period**

PMv	The growth of civic life
PMvi	The Reformation
PMix	Environmental evidence

## **4. ARCHAEOLOGICAL METHODOLOGY**

### **4.1 Fieldwork**

- 4.1.1 The watching brief at No. 17 South Bailey was undertaken 9-10 May 2013. The fieldwork was undertaken in accordance with the relevant Institute for Archaeologists standard and guidance document (IfA 2008). PCA is an IfA-Registered Organisation.
- 4.1.2 The geotechnical investigation comprised five mechanically driven boreholes (BHs 4-8) and three hand-dug test pits (TPs 1-3). Two boreholes (BH4 and BH5) were located within the frontage area of the property and three (BHs 6-8) were located within the rear garden. A tracked percussion bore rig was used for all of the boreholes.
- 4.1.3 The test pits were sited to investigate wall foundations. All were excavated by hand. TP1 measured 0.45m north-south x 0.38m east-west and was located against the south facing elevation of the rear portion of No. 17. TP2 measured 0.44m north-south x 0.26m east-west and was located close to the south facing elevation of the northern rear boundary wall of No. 17. TP3 measured 0.44m east-west x 0.27m north-south and was located against the west facing elevation of the rear portion No. 16, close to its northern boundary wall; its intended location had been at the western extent of the northern boundary wall of No. 16.
- 4.1.4 Exposed deposits in boreholes and test pits and were recorded on the *pro forma* 'Borehole Recording Sheet' and 'Test-Pit Recording Sheet'. A digital photographic record of the work was compiled. All boreholes and test pits were located relative to the Ordnance Survey National Grid by appropriate measured means.

### **4.2 Post-excavation**

- 4.2.1 The stratigraphic data for the project comprises written and photographic records. A total of five borehole recording sheets and three test pit recording sheets were compiled and 44 archaeological contexts were defined during the fieldwork (Appendix B). Post-excavation work involved checking and collating site records and phasing the stratigraphic data (Appendix A). Details of the boreholes are given in Appendix C. A written summary of the archaeological sequence was then compiled, as described below in Section 5. No artefactual or organic material was recovered and no bulk samples for palaeoenvironmental remains were collected during the watching brief.
- 4.2.2 In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker 1990) and the most recent IfA publication relating to archiving (IfA 2009).
- 4.2.3 The depositional requirements of the body to which the Site Archive will be ultimately transferred will be met in full. This will be the repository which takes on the responsibilities of the Old Fulling Mill, Durham as repository for archaeological archives generated by projects within the former Durham City District. The Archive will be organised as to be compatible with the other archaeological archives produced in the former Durham City District. A completed transfer of title deed will accompany the Site Archive on deposition.

## **5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE**

### **Boreholes**

#### **5.1 Natural Sub-stratum**

- 5.1.1 Natural geological material was encountered within all five boreholes. Weathered bedrock, representing the solid geology of the peninsula, comprised interleaving layers of weathered sandstone and mudstone, [4.1], [5.1], [6.1], [7.1] and [8.1]. The depth at which this material was encountered below existing ground level varied across the site: 1.75m in BH4, 2.10m in BH5, 2.24m in BH6, 2.46m in BH7 and 2.70 in BH8. Therefore, the depth below existing ground level of the solid geology increased from east to west.
- 5.1.2 Glaciofluvial deposits, representing the superficial geology of the peninsula, were encountered in BH6, BH7 and BH8 in the western portion of the site. These comprised various compositions of sterile sand and sandy silt, [6.2], [7.2] and [8.2]. In BH6, the material was just 90mm thick and was encountered at a depth of 2.15m below existing ground level. In BH7, the material was 0.22m thick, encountered at a depth of 2.24m below existing ground level, and, in BH8, it was 0.15m thick, at a depth of 2.55m.

#### **5.2 Sub-soil**

- 5.2.1 Probable sub-soil deposits were recorded directly overlying geological material in BH5, BH7 and BH8. These deposits comprised mid brown clayey silt with no inclusions. The depth at which the deposits were encountered below existing ground level varied across the site. Within the eastern portion of the site, the sub-soil in BH5, [5.2], was 0.36m thick and was encountered at a depth of 1.74m. To the west, the sub-soil in BH7, [7.3], was encountered at a depth of 2.13m and was 0.11m thick. The sub-soil in BH8, [8.3], was 0.20m thick and was encountered at a depth of 2.35m.

#### **5.3 Deposits of Potential Archaeological Interest**

- 5.3.1 Deposits of potential archaeological interest were recorded within BH5, BH6, BH7 and BH8. These were of essentially similar composition, mid brown clayey sandy silt. Although no artefactual material was recovered from any of the deposits, various inclusions noted were flecks of charcoal and a fragment of burnt sandstone in BH5, [5.3], two fragments of tooth in BH7, [7.4], and inclusions of organic material in BH6 and BH7, [6.3] and [7.4].
- 5.3.2 East of the building in BH5, deposit [5.3], 0.39m thick, was encountered at a depth of 1.35m below existing ground level. This potentially represents a developed soil of post-medieval or earlier origin.
- 5.3.3 West of the building in BH6, deposit [6.3], 0.90m thick, was recorded at a depth of 1.25m below existing ground level. Given the relatively substantial thickness of this deposit, it is possible that this represents the backfill of a cut feature, such as a pit, rather than a developed soil. Again, it is potentially of post-medieval or earlier origin. In BH7, deposit [7.4], 0.68m thick, was encountered at a depth of 1.45m below existing ground level. This may also represent the fill of a cut feature, and is also potentially of post-medieval or earlier origin. In BH8, deposit [8.4], 0.20m thick, was encountered at a depth of 2.15m below existing ground level. This potentially represents a developed soil of post-medieval or earlier origin.

## **5.4 Late Post-Medieval and Modern**

- 5.4.1 The latest deposits encountered within all boreholes most likely represent late post-medieval levelling/ground raising or the material was the existing topsoil. Deposits interpreted as representing late post-medieval activity comprised various compositions of clay, sand and silt, [4.2]-[4.4], [5.4], [5.5], [6.4], [7.5], [7.6] and [8.5]-[8.7].
- 5.4.2 In BH4, the combined thickness of the probable levelling/ground raising deposits was 1.56m and they were encountered from a depth of 0.44m below existing ground level. In BH5, the combined thickness was 1.05m and the material was encountered from a depth of 0.30m.
- 5.4.3 In BH6, the combined thickness of the probable levelling/ground raising deposits was 0.96m and they were encountered from a depth of 0.29m. In BH7, they were up to 1.05m thick and the material was encountered from 0.40m below present ground level. In BH8, the probable levelling/ground raising deposits had a combined thickness of 1.90m and the material was encountered from a depth of 0.25m below existing ground level.
- 5.4.4 Thus the probable levelling/ground raising material was of relatively greater thickness in the western part of the site compared to the eastern part. This presumably reflects a greater need to elevate the ground there and the material potentially relates to the creation of a formal garden area as depicted on 18th- and 19th-century maps. Alternatively, the material may simply have been deposited when the existing property was built and its garden created in the mid-20th century.
- 5.4.5 Sandy silt topsoil, [4.5], [5.6], [6.5], [7.7] and [8.8], was recorded in all boreholes and varied in thickness from a maximum of 0.44m in BH4 to a minimum of 0.25m in BH8.

### **Test Pits**

## **5.5 Deposits of Potential Archaeological Interest**

- 5.5.1 TP3 investigated the foundation of the west facing northernmost rear portion of No. 16. The base of a stone wall foundation, [3.2], was encountered c. 0.41m below existing ground level, formed by a paved stone surface. The foundation was built directly onto the natural sub-stratum, [3.1], which at this location was glaciofluvial sandy silt. Building recording undertaken at No. 16 earlier in 2013 concluded that the earliest portion of this part of No. 16 was of probable medieval date, possibly part of a rear boundary wall or alternatively part of a one-storey extension to a two-storey street frontage building to the east (PCA forthcoming). No further deposits or features were recorded within TP3, with all deposits overlying the wall comprising modern levelling and consolidation deposits.

## **5.6 Late Post-Medieval and Modern**

- 5.6.1 TP1 investigated the foundation of the south facing wall of the rear extension of No. 17. It was located within a small garden border area within a concrete paving stone surface. The top of the foundation, [1.1], encountered at a depth of 0.54m below existing ground level, comprised a concrete slab c. 0.20m thick, which projected c. 0.27m out from the line of the overlying brick wall. It was overlain by a loose, sandy silt garden soil, [1.2], up to c. 0.75m thick.

- 5.6.2 TP2 investigated the foundation of the western portion of the boundary wall of the rear garden of No. 17. The earliest deposit encountered, at a depth of c. 0.80m below existing ground level, comprised friable, sandy silt, [2.1], at least 0.10m thick, with inclusions of lime mortar throughout and fragments of sandstone. Although no datable material was recovered from this deposit, based on its composition it is interpreted as representing a post-medieval dump deposit. In turn, it was overlain by a loose, sandy silt deposit, [2.3], c. 0.55m thick, probably a levelling/ground raising deposit.
- 5.6.3 The wall foundation, [2.2], was built within a narrow construction cut, [2.5], which cut into levelling deposit [2.3]. The top of the footing was recorded at a depth of 0.19m below existing ground level and the structure comprised a c. 0.60m thick concrete slab projecting out from the line of the wall by c. 0.60m. This portion of the boundary wall was a modern era rebuild, with the portion to the east of far greater age and in poor condition, supported by scaffolding. The wall foundation was overlain by loose sandy silt topsoil, [2.4], c. 0.25m thick.
- 5.6.4 Modern levelling and consolidation deposits comprising compact silty sand and clayey coarse sand, [3.3] and [3.4], respectively, were recorded overlying wall [3.2] in TP3; these had a combined maximum thickness of 0.47m. Located immediately adjacent to the wall was a brick structure, [3.5], encountered immediately below the paved surface, [3.6]. It comprised two courses of brick in stretcher bond, bonded with concrete, and was 0.34m high, projecting out from the wall line for c. 0.20m. The function of this structure is unclear, although it may be a 20th-century addition to give greater support to the rear wall. Surface [3.6] comprised c. 70mm thick stone paving slabs.



## **6. CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Conclusions**

- 6.1.1 Solid geological material was encountered in all five boreholes. In two boreholes located in the eastern part of the site, weathered bedrock was encountered at depths below existing ground level of 1.75m in (BH4) and 2.10m (BH5). In three boreholes located to the west of the building, weathered bedrock was encountered at depths below existing ground level of 2.24m (BH6), 2.46m (BH7) and 2.70m (BH8). A probable superficial geological deposit was recorded at each borehole location to the west, between 90mm and 0.22m thick.
- 6.1.2 A possible ancient sub-soil was recorded in BH5, BH7 and BH8, the material between 0.11m and 0.36m thick. Overlying this in BH5 was a deposit of potential archaeological interest, a possible developed soil, 0.39m thick. Deposits of potential archaeological interest were recorded overlying geological material in BH6 and the possible sub-soil in BH7 and BH8. These deposits varied in thickness: 0.90m (BH6); 0.68m (BH7); 0.20m (BH8). The greater thickness of the material recorded in BH6 and BH7 perhaps indicates that these were the fills of cut features, rather than developed soils or dump deposits.
- 6.1.3 The period of origin of all the deposits identified as being of potential archaeological interest is uncertain, but they are considered likely to be of post-medieval or earlier origin. Inclusions of organic material, charcoal flecks and fragments of animal tooth underline their potential significance. The backlots of burgage plots were often the location for refuse pits in the medieval period and the deposits recorded in the boreholes sited in the western part of the site, particularly the more substantial material recorded in BH6 and BH7, could conceivably represent the infill of such features. Alternatively, the deposits could relate to a formal garden set out in the post-medieval period.
- 6.1.4 All deposits (combined thickness 2m) recorded above bedrock in BH4 and the uppermost strata (combined thickness 1.35m) in BH5 were most probably levelling/ground raising deposits of late post-medieval or modern date, capped by topsoil. Similar deposits of probable late post-medieval or modern date were recorded overlying the deposits of potential archaeological interest in BH6-8. The combined thickness of this material varied: 0.96m (BH6); 1.65m (BH7); 1.90m (BH8).
- 6.1.5 The test pits were sited to investigate various wall foundations and, to this end, the work was successful, although limited archaeological information of note was recorded. TP1, located against the south facing elevation of the rear portion of No. 17, encountered the concrete foundation of the structure at a depth of 0.54m below existing ground level. TP2, located close to the south facing elevation of the northern rear boundary wall of No. 17, encountered the concrete foundation of the structure at a depth of 0.19m. TP3, located against the west facing elevation of the rear portion No. 16, close to its northern boundary wall, encountered a brick footing directly below the current paved surface. The base of the stone wall was encountered at a depth of 0.55m below existing ground level.

## **6.2 Recommendations**

- 6.2.1 Deposits of potential archaeological significance were encountered within BH5-8. Due to the limitations of the geological investigations, the precise character and periods of origin of the deposits were not established.
- 6.2.2 No further work is required on the information recorded during the watching brief, with the Site Archive, including this report, forming the permanent record of the strata encountered.

## 7. REFERENCES

### Bibliography

- Archaeo-Environment, 2010. *Heritage Assessment for Proposed Developments at St. John's College, The University of Durham, Parts I and II*, unpublished.
- Archaeo-Environment, 2013. *16 South Bailey, Durham. Archaeological Monitoring in Association with Alterations, Repairs and Refurbishment. Written Scheme of Archaeological Investigation*, unpublished.
- Armstrong Site Investigation 2009. *Minor Ground Investigation. Site at St. John's College, 17 South Bailey, Durham*, unpublished.
- Brown, D.H., 2007. *Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation*, Archaeological Archives Forum.
- Institute for Archaeologists, 2008. *Standard and guidance for an archaeological watching brief*, IfA.
- Institute for Archaeologists, 2009. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*, IfA.
- Pre-Construct Archaeology, forthcoming. *Archaeological Investigations at 16 South Bailey, Durham*, unpublished.
- Petts, D. and Gerrard, C., 2006. *Shared Visions: North East Regional Research Framework for the Historical Environment*, English Heritage, Durham County Council and Durham University.
- Walker, K., 1990. *Guidelines for the Preparation of Excavation Archives for Long-term Storage*, Archaeology Section, United Kingdom Institute for Conservation.

### Online Sources

*British Geological Survey* website: <http://www.bgs.ac.uk> for geological information.

*Durham Landscape* website: <http://www.durhamlandscape.info> for geological and landscape information.

## 8. ACKNOWLEDGEMENTS AND CREDITS

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### **PCA Credits**

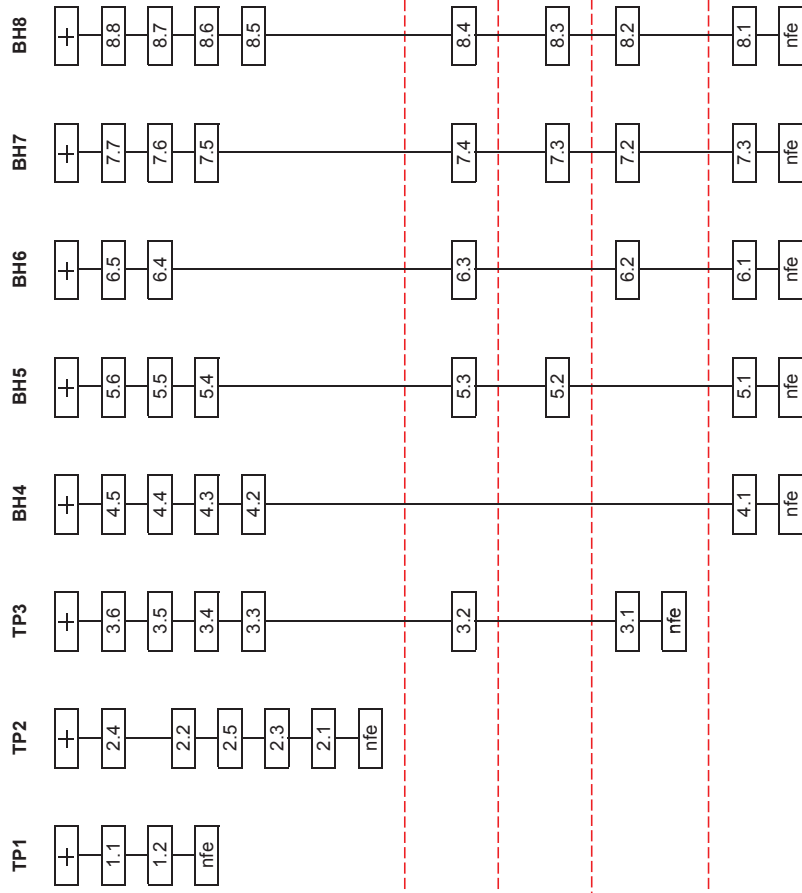
*Fieldwork and Report:* Aaron Goode and Robin Taylor-Wilson

*Project Manager:* Robin Taylor-Wilson

*CAD:* Mark Roughley

**APPENDIX A**  
**STRATIGRAPHIC MATRICES**

SOB 13: STRATIGRAPHIC MATRICES



Probable late post-medieval and modern

Undated - probable archaeological interest

Potential sub-soil

Natural superficial deposits

Natural bedrock

**APPENDIX B**  
**CONTEXT INDEX**

**SOB 13: CONTEXT INDEX**

<b>Context</b>	<b>Borehole/Test Pit No.</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Interpretation</b>
1.1	TP1	Structure	Wall	Concrete footing
1.2	TP1	Deposit	Layer	Garden soil
2.1	TP2	Deposit	Layer	Levelling deposit
2.2	TP2	Deposit	Wall	Concrete footing
2.3	TP2	Deposit	Layer	Levelling deposit
2.4	TP2	Deposit	Layer	Topsoil
2.5	TP2	Cut	Linear	Construction cut for footing [2.2]
3.1	TP3	Deposit	Layer	Natural glaciofluvial deposit
3.2	TP3	Masonry	Structure	Stone wall
3.3	TP3	Deposit	Layer	Consolidation/levelling deposit
3.4	TP3	Deposit	Layer	Consolidation/levelling deposit
3.5	TP3	Masonry	Structure	Brick footing
3.6	TP3	Masonry	Surface	Paved surface
4.1	BH4	Deposit	Layer	Natural weathered bedrock
4.2	BH4	Deposit	Layer	Levelling deposit
4.3	BH4	Deposit	Layer	Levelling deposit
4.4	BH4	Deposit	Layer	Levelling deposit
4.5	BH4	Deposit	Layer	Topsoil
5.1	BH5	Deposit	Layer	Natural weathered bedrock
5.2	BH5	Deposit	Layer	Sub-soil
5.3	BH5	Deposit	Layer	Developed soil
5.4	BH5	Deposit	Layer	Levelling deposit
5.5	BH5	Deposit	Layer	Levelling deposit
5.6	BH5	Deposit	Layer	Topsoil
6.1	BH6	Deposit	Layer	Natural weathered bedrock
6.2	BH6	Deposit	Layer	Natural glaciofluvial deposit
6.3	BH6	Deposit	Layer	Backfill of feature?
6.4	BH6	Deposit	Layer	Levelling deposit
6.5	BH6	Deposit	Layer	Topsoil
7.1	BH7	Deposit	Layer	Natural weathered bedrock
7.2	BH7	Deposit	Layer	Natural glaciofluvial deposit
7.3	BH7	Deposit	Layer	Sub-soil
7.4	BH7	Deposit	Layer	Backfill of feature?
7.5	BH7	Deposit	Layer	Levelling deposit
7.6	BH7	Deposit	Layer	Levelling deposit
7.7	BH7	Deposit	Layer	Topsoil
8.1	BH8	Deposit	Layer	Natural weathered bedrock
8.2	BH8	Deposit	Layer	Natural glaciofluvial deposit
8.3	BH8	Deposit	Layer	Sub-soil
8.4	BH8	Deposit	Layer	Developed soil
8.5	BH8	Deposit	Layer	Levelling deposit
8.6	BH8	Deposit	Layer	Levelling deposit
8.7	BH8	Deposit	Layer	Levelling deposit
8.8	BH8	Deposit	Layer	Topsoil



**APPENDIX C**  
**BOREHOLE DETAILS**

**SOB 13: BOREHOLE DETAILS**

<b>Borehole No.</b>	<b>Context</b>	<b>Thickness (m)</b>	<b>Depth bgl (m)</b>	<b>Archaeological Interest</b>	<b>Interpretation</b>
BH4	4.5	0.44	0.00	No	Topsoil
	4.4	0.16	0.44	Possible	Levelling deposit
	4.3	0.40	0.60	Possible	Levelling deposit
	4.2	1.00	0.75	Possible	Levelling deposit
	4.1	>2.81	1.75	No	Natural weathered bedrock
BH5	5.6	0.30	0.00	No	Topsoil
	5.5	0.35	0.30	Possible	Levelling deposit
	5.4	0.70	0.65	Possible	Levelling deposit
	5.3	0.39	1.35	Yes	Developed soil
	5.2	0.36	1.74	Yes	Sub-soil
	5.1	>1.8	2.10	No	Natural weathered bedrock
BH6	6.5	0.29	0.00	No	Topsoil
	6.4	0.96	0.29	Possible	Levelling deposit
	6.3	0.90	1.25	Yes	Backfill of feature?
	6.2	0.09	2.15	No	Natural glaciofluvial deposit
	6.1	>1.46	2.24	No	Natural weathered bedrock
BH7	7.7	0.40	0.00	No	Topsoil
	7.6	0.81	0.40	Possible	Levelling deposit
	7.5	0.24	1.21	Possible	Levelling deposit
	7.4	0.68	1.45	Yes	Backfill of feature?
	7.3	0.11	2.13	Yes	Sub-soil
	7.2	0.22	2.24	No	Natural glaciofluvial deposit
	7.1	>2.14	2.46	No	Natural weathered bedrock
BH8	8.8	0.25	0.00	No	Topsoil
	8.7	0.99	0.25	Possible	Levelling deposit
	8.6	0.66	1.24	Possible	Levelling deposit
	8.5	0.25	1.90	Possible	Levelling deposit
	8.4	0.20	2.15	Yes	Developed soil
	8.3	0.20	2.35	Yes	Sub-soil
	8.2	0.15	2.55	No	Natural glaciofluvial deposit
	8.1	>2.10	2.70	No	Natural weathered bedrock

# PCA

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## **PCA SOUTH**

UNIT 54  
BROCKLEY CROSS BUSINESS CENTRE  
96 ENDWELL ROAD  
BROCKLEY  
LONDON SE4 2PD  
TEL: 020 7732 3925 / 020 7639 9091  
FAX: 020 7639 9588  
EMAIL: [info@pre-construct.com](mailto:info@pre-construct.com)

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## **PCA NORTH**

UNIT 19A  
TURSDALE BUSINESS PARK  
DURHAM DH6 5PG  
TEL: 0191 377 1111  
FAX: 0191 377 0101  
EMAIL: [info.north@pre-construct.com](mailto:info.north@pre-construct.com)

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## **PCA CENTRAL**

7 GRANTA TERRACE  
STAPLEFORD  
CAMBRIDGESHIRE CB22 5DL  
TEL: 01223 845 522  
FAX: 01223 845 522  
EMAIL: [info.central@pre-construct.com](mailto:info.central@pre-construct.com)

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## **PCA WEST**

BLOCK 4  
CHILCOMB HOUSE  
CHILCOMB LANE  
WINCHESTER  
HAMPSHIRE SO23 8RB  
TEL: 01962 849 549  
EMAIL: [info.west@pre-construct.com](mailto:info.west@pre-construct.com)

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## **PCA MIDLANDS**

17-19 KETTERING RD  
LITTLE BOWDEN  
MARKET HARBOROUGH  
LEICESTERSHIRE LE16 8AN  
TEL: 01858 468 333  
EMAIL: [info.midlands@pre-construct.com](mailto:info.midlands@pre-construct.com)

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