William St Car Park, Botchergate, Carlisle, Cumbria.

Archaeological Evaluation

Oxford Archaeology North

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WYG on behalf of Cumbria County Council

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SUMMARY

Cumbria County Council (CCC) proposes to develop a new office in Carlisle on the site of the present William Street car park, on the north-east side of Botchergate (NY 4055 5550). Following an initial archaeological scoping study undertaken by WYG in 2012, Oxford Archaeology North (OA North) was commissioned in December 2013 to prepare a more detailed archaeological desk-based assessment, to further inform the planning process.

The study indicated that stratified and extremely sensitive archaeological deposits of most historic periods, from (potentially) prehistoric times to the later post-medieval period, may well survive over all or most of the proposed development site. However, the most complex and important deposits are likely to be found on the street frontage where, on the evidence of earlier archaeological work in the vicinity, Roman remains of regional and (potentially) national significance could occur, particularly since the buildings presently occupying the relevant part of the frontage are not thought to be cellared.

Given the potential of the site, CCC produced a further brief defining an archaeological evaluation of the William Street car park, comprising 475m^2 of trial trenching (CCC 2014). Following submission of a project design (*Appendix 1*), OA North were commissioned by WYG, acting on behalf of CCC, to undertake the work. At present, the critical area of probable highest archaeological potential fronting Botchergate is still occupied by standing buildings and is not available for evaluation trenching.

In total, eight evaluation trenches covering an area of 395m^2 were excavated in William Street car park in March 2014. The work demonstrated that features and deposits of considerable archaeological importance survive across much of the proposed development site, which is consistent with the conclusions drawn from the desk-based assessment (OA North 2014). The natural geology was reached in each of the evaluation trenches and, in four of these, several features of probable Roman date were identified, dug into the natural clay. These mostly comprised linear features, including probable ditches and gullies, together with possible beam slots for timber buildings. The associated pottery suggests a broad date in the second-third centuries AD for the majority of these features. The discovery of a few small fragments of burnt bone hints at the possible existence of cremation burials nearby, as are attested elsewhere in the vicinity, though the bone has not yet been positively identified as human.

The early features were sealed by a thick (up to 1m-deep) build-up of dark soils, which appear to have covered the entire site, except where removed by modern cellars and other features. It seems likely that these deposits, which may represent agricultural activity in fields on the periphery of the settlement, accumulated over a very prolonged period, perhaps from the late Roman period to the eighteenth/early nineteenth century.

Extensive remains of walls, cellars and other deposits associated with nineteenth-century housing that had once fronted William Street were also found in all trenches.

On the western half of the site, only wall foundations were found, but on the eastern half there had been some cellaring, which had truncated some or all of the dark soils in some areas, but had only certainly penetrated to the natural geology in one trench.

The evaluation has therefore shown that Roman features may survive over much of the development site, for the most part sealed by, and therefore protected beneath, a thick build-up of dark soils. which has only been truncated in certain areas of the site by modern intrusions. Whilst details of the proposed development works at the site have yet to be finalised, it seems clear that any below-ground works within the evaluated areas have the potential to impact upon extremely important archaeological deposits within the southern suburb of the historic city.

ACKNOWLEDGEMENTS

OA North would like to thank Wilson Irving of WYG and Brian Kirkbride of CCC for commissioning the archaeological works. Thanks are also expressed to the staff of Lawsons Plant Hire.

For OA North, Paul Dunn carried out the evaluation and produced the report; the illustrations were prepared by Anne Stewardson. Christine Howard-Davis examined the finds, and the charred plant remains and charcoal were rapidly assessed by Denise Druce and Sandra Bonsall. The project was managed by Alan Lupton, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Cumbria County Council (CCC) is proposing to develop a new office in Carlisle on the site of the present William Street car park, on the north-eastern side of Botchergate (NY 4055 5550; Fig 1). Precise details of the character and extent of associated ground works are not yet available, but they are likely to include the construction of new footings, foundations and drainage runs. Such features have the potential to damage or disturb buried archaeological deposits, dependent upon the exact nature of the ground works.

1.1.2 The development site, which covers approximately 1.16ha, lies in an area of high archaeological potential, and encroaches into the boundaries of two Conservation Areas; the Botchergate Conservation Area to the south and west, along the main street frontage, and the Portland and Chatsworth Square Conservation Area to the north (WYG 2012, 9; Appendix B, fig 2). Consequently, in 2012, CCC commissioned an initial archaeological appraisal of the area (WYG 2012), which was to be followed by a more detailed archaeological desk-based assessment.

1.1.3 In response to an invitation to tender for this, and in accordance with a *Brief* prepared by CCC (CCC 2013), Oxford Archaeology North (OA North) was subsequently commissioned by CCC to prepare the detailed desk-based assessment (OA North 2014). The work was undertaken in January 2014, and 43 sites were identified within the study area. Three sites are definitely prehistoric, and another site of possible pre-Roman date was also noted. The majority (28) are Roman in date, and there are three sites (all comprising accumulations of possible agricultural soils) that may span the late Roman and early medieval periods, together with the earlier part of the later medieval period (broadly spanning the period from the fourth century AD to the twelfth/thirteenth century AD). Of the remainder, seven are later medieval and one is late post-medieval (OA North 2014).

1.1.4 The study indicated that stratified and extremely sensitive archaeological deposits of most historic periods, from (potentially) prehistoric times to the later post-medieval period, may well survive over all or most of the proposed development site. However, the most complex and important deposits are likely to be found on the street frontage where, on the evidence of earlier archaeological work in the vicinity, Roman remains of regional and (potentially) national significance could occur, particularly since the buildings presently occupying the relevant part of the frontage are not thought to be cellared.

1.1.5 Given the potential of the site, CCC produced a further brief defining an archaeological evaluation of the William Street car park, comprising 475m^2 of trial trenching (CCC 2014). Following submission of a project design (*Appendix 1*), OA North were commissioned by WYG, acting on behalf of CCC, to undertake the work. At present the critical area of probable highest archaeological potential fronting Botchergate is still occupied by standing

buildings and is not available for evaluation trenching. Consequently, OA North propose to return to the site at a future date to evaluate this area using two 2m x 20m trenches (*ie* 80m^2).

1.1.6 In total, eight evaluation trenches, covering an area of 395m^2, were excavated in William Street car park (Fig 2). The following document outlines the results of the exercise, which was carried out in March 2014.

1.2 LOCATION, GEOLOGY AND TOPOGRAPHY

1.2.1 Carlisle lies on the Cumberland Plain approximately 8km above the tidal limit of the River Eden and some 13km upstream of the Solway Firth. The historic city is situated on the south bank of the Eden close to its confluence with the River Caldew (Fig 1). The settlement grew up on a promontory of land extending roughly north to south, bounded by the floodplain of the Eden to the north and north-east, and to the west by the scarp above the Caldew. The prominent bluff at the northern end of the scarp has been occupied by the existing stone castle since the twelfth century (McCarthy *et al* 1990). The proposed development site is situated on the north-east side of Botchergate, which has been the principal route into the settlement from the south since Roman times. It lies *c* 900m south-east of the Roman fort (which underlies the medieval castle (Zant 2009)), on the periphery of the important settlement that grew up around the fort (Fig 1). In terms of the topography of the medieval and earlier post-medieval city, the site is located south-east of the city walls (Fig 1), *c* 300m beyond the medieval south gate and the sixteenth-century Citadel.

1.2.2 The solid geology of the Carlisle area comprises soft, reddish Triassic St Bees sandstone of the Sherwood Sandstone Group, which lies above the Permian St Bees shales and is itself overlain and intercalated with the less extensive grey Kirklinton sandstone (British Geological Survey 1982; McCarthy *et al* 1990, 1–2). At Carlisle itself the sandstone outcrops to form the roughly triangular-shaped bluff occupied today by the medieval castle. Over most of the modern city centre, including the Botchergate area, the sandstone is covered by thick deposits of glacial drift, principally orange or orange-pink sandy clays and gravels. To the north-east, however, east of the castle and just north of the medieval walled city, the southern edge of a pre-Roman channel of the River Eden was found in 1998, some 300m south of the present river channel (Zant *et al* 2011a, 10-11). The precise course of the Roman river in this area is not known, although it probably lay much closer to the core area of settlement than is the case today.

1.2.3 Today, Botchergate rises very gently from a height of approximately 18m above Ordnance Datum (aOD) at its south-eastern end, near the junction with St Nicholas Bridge Road, to *c* 25m aOD at its north-western end, immediately south of the Citadel. The ground also falls away gently to the south-west of Botchergate, towards the railway line and the valley floor of the River Caldew beyond. There are no other significant topographical variations evident at the present day, and there is no evidence to indicate the former existence of buried features, such as streams or palaeochannels, which might have constrained or influenced ancient settlement or land use.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 The OA North project design (*Appendix 1*) was adhered to in full, and all works complied with current legislation and accepted best practice, including the Code of Conduct and the relevant professional standards of the Institute for Archaeologists (IfA 2010). The project design allowed for the excavation of eight evaluation trenches across the area of William Street car park. The trenches were excavated by mechanical excavator, and all archaeological deposits were cleaned manually to define their extent, nature, form and, where possible, date.

2.2 ARCHIVE

2.2.1 A full archive has been produced to professional standards in accordance with current English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited at the Cumbria CRO in Carlisle, and a copy of the report will be deposited with the Cumbria HER in Kendal.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 INTRODUCTION

3.1.1 A detailed historical and archaeological background of the City of Carlisle in general and the study area in particular is provided in the desk-based assessment (OA North 2014) and, for the sake of brevity, will not be repeated here. The following section provides a summary of that background information, and is intended to provide a context for the results of the evaluation.

3.1.2 Previous archaeological investigations in the near vicinity have found evidence for a limited prehistoric presence, including a small number of flint implements of probable early Bronze Age date (*c* 2300-1500 BC), and a few plough marks, the latter undated but conceivably of the later Iron Age (*c* 100 BC-AD 70). However, more intensive activity commenced in the early Roman period (AD 72-3-*c* AD 150), following the construction of a Roman road approximately on the line of modern Botchergate. This represented the main route into the settlement from the south, and made directly for the south gate of the early Roman fort, which lay *c* 900m north-west of the proposed development site. From an early date, Roman cemeteries were established on both sides of the road (Roman law forbade burial within the settlement itself), and late first/early second century cremations, including two nationally rare *grubenbustun*-type burials (where the funeral pyre was built directly over a burial pit), have been excavated north-west of Tait Street, *c* 50m west of the western edge of the development site. Many other cremations and probable inhumation burials have also been recorded by modern excavation north-west of Tait Street (Giecco *et al* 2001; Zant *et al* 2011b), and several nineteenth-century records of Roman graves are also known from the vicinity (Charlesworth 1978). Elsewhere in the area, the discovery of several early Roman 'military-style' ditches (Giecco *et al* 2001) suggests the possible existence of a series of temporary camps in the Botchergate area. This would be consistent with the idea that Carlisle may have been a 'gathering ground' where troops were marshalled prior to the beginning of a new military campaign (Jones 2012).

3.1.3 North-west of Tait Street, the period around AD 150 saw the establishment of an extensive complex of timber buildings, together with associated roads and yards, on the Botchergate street frontage (Giecco *et al* 2001; Zant *et al* 2011b). This seemingly extended along the north-east side of the road for at least 175m, but could have been considerably more extensive than this. The structures located closest to Tait Street were situated little more than 50m west of the western edge of the proposed development site. Most of the excavated structures were of the 'strip-building' type, long, narrow buildings set gable end-on to the main road, and they appear to have occupied plots of roughly equal width, suggesting a degree of central planning. Several of the excavated structures contained large, clay-built hearths or ovens, one of which proved to be a lead-smelting furnace, the only example known from Roman Britain (*ibid*). Other buildings seem to have been associated with iron working, and it is possible that the whole complex functioned as something akin to an 'industrial estate', probably either run or supervised by the Roman

army. This complex was apparently swept away in the late second/early third century, around the time Carlisle was promoted to become an important regional administrative centre (Edwards and Shotter 2005). Thereafter, later Roman activity on the street frontage (*c* AD 200-410) seems to have been restricted largely to burial, though extensive deposits of dark soil accumulated away from the street, perhaps within fields on the periphery of the town.

3.1.4 These deposits seem to have continued to build-up throughout the early medieval (pre-Norman) period (*c* AD 410-1092), a time when the Botchergate area is likely to have lain on the southern periphery of a settlement that appears to have been focused on a religious centre in the vicinity of the medieval cathedral (Newman 2011). However, since the southern approach to the later medieval and post-medieval city clearly followed (and continues to follow) the line of the Roman road beneath Botchergate, this route was presumably retained throughout the early medieval period.

3.1.5 For the later medieval period (1092-*c* 1540), documentary records attest the existence of a suburb at Botchergate by the late twelfth century (Summerson 1993). The limited archaeological evidence suggests that this largely comprised ribbon development along the main road, and the earliest available maps indicate that this was also the case during the earlier part of the post-medieval period (*c* 1540-1800), with significant development to the rear of the Botchergate frontage not occurring until the mid-nineteenth century and later.

3.1.6 By the time the first edition Ordnance Survey was published in 1865 substantive infilling had occurred behind the main street frontage over at least parts of the development site (Pl 1), and this continued to be the case during the later nineteenth century and the first half of the twentieth century. In 1877 the Carlisle Auction Market was built over much of the site and used into the 1970s, when it was demolished to make way for the present William Street/Cecil Street car parks.

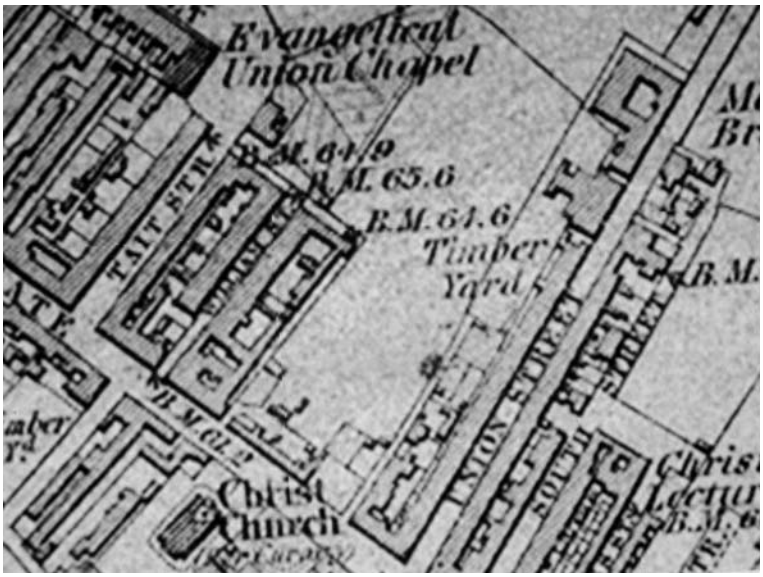

Plate 1: Detail of the development area taken from the OS First Edition map, 1865 (OS 1865)

3.1.7 With the exception of a series of Roman features recorded during an archaeological evaluation on the eastern edge of the Cecil Street car park in 1994 (McCarthy and Flynn 1994), and the late nineteenth-early twentieth-century auction mart itself (*Section 3.1.6*), no sites of archaeological or historical interest were known within the boundaries of the proposed development site itself prior to the evaluation undertaken in March 2014. However, as noted above, complex and highly significant archaeological remains, principally (though not exclusively) of Roman date, had been recorded by modern archaeological excavation in the near vicinity, especially to the north-west of Tait Street, *c* 50m west of the western edge of the site.

4. RESULTS

4.1 INTRODUCTION

4.1.1 In total, eight trenches (Trenches 1-8) were excavated on William Street Car park, covering an area of 395m^2. The trenches were aligned at various angles to cover the area and to test for modern disturbance from cellaring. The following section provides a summary of the results from the work.

4.2 TRENCH 1

4.2.1 Trench 1 was located in the north-east corner of the car park (Fig 2) and was aligned north-west/south-east. The trench measured 10 x 4m, but, due to the unstable character and depth of the late post-medieval deposits encountered, which largely comprised the loose rubble fill of two adjoining nineteenth-century cellars (*Section 4.2.2*), the natural geology was reached only in a limited area, 1.6m wide, located towards the southern end of the trench, beneath the floor of the southernmost cellar. Elsewhere, excavation was taken to a depth of *c* 0.5m.

Plate 2: Trench 1 looking south-east

4.2.2 At the base of the deeper trench (*Section 4.2.1*), the natural geology (***1011***), a pale sandy material, was reached at a depth of 3.5m below modern ground level. It was overlain by what appeared to be a buried soil horizon, *c* 0.5m thick (***1010***), though this proved impossible to characterise due to the depth of the excavation and the unstable nature of the trench edges. This deposit was itself sealed by a thin layer of black clinker (***1009***), 0.1m thick, beneath 0.3m of pale brown sand and gravel (***1008***). These materials served as levelling

deposits for the flagstone floor (***1007***) of a late post-medieval cellar (***1002***), the walls of which (***1002***, ***1003***, ***1004***; Fig 3) were constructed of roughly-hewn sandstone blocks bonded with a pale lime mortar. The internal wall faces were also covered with a thin layer of lime plaster, and the remains of a bricked-up fireplace survived in the north wall (Pl 3). Two openings, either doors or windows, were observed in the east wall (***1004***; Fig 3), but could not be investigated due to their proximity to the trench edge. Ultimately, the cellar was filled with loose sandstone, brick and mortar rubble (***1005***), as was the second cellar to the north (***1012***, filled with rubble ***1006***). Though this feature was not investigated further, a bricked-up fireplace was observed in its south wall, essentially being a mirror-image of the fireplace in cellar ***1002*** (both fireplaces presumably used the same chimney). The rubble fill of both cellars, together with the levelled walls of the buildings (the tops of which lay *c* 0.5m below the modern surface), were sealed by a levelling deposit (***1001***) lying directly beneath the tarmac of the present car park.

*Plate 3: Area of deeper excavation in Trench 1 looking north-west, showing the bricked-up fireplace in the north wall (***1003***) of cellar* **1002**

4.3 TRENCH 2

4.3.1 Trench 2 was located in the north-west corner of the car park (Fig 2) and was aligned north-west/south-east. It measured 7 x 3m and was excavated to a maximum depth of 2.25m, though, due to the poor stability of the ground in this area the trench was completely excavated by machine, with only a narrow slot, 0.6m wide, being excavated to the natural geology at the southern end of the trench (Pl 4).

Plate 4: Trench 2, looking south-east

4.3.2 The natural geology (***2006***), a pale yellow-grey sandy material, was encountered at the base of the deeper slot (Pl 5), 2.25m below modern ground level. This was overlain by a buried soil horizon (***2005***), comprising a dark brown-black silt, *c* 0.85m thick, but, as in Trench 1, this proved difficult to characterise due to the limited nature of the exposure.

*Plate 5: South-west-facing section of Trench 2, showing the natural subsoil (***2006***) at the base, overlain by buried soil* **2005**

4.3.3 The buried soil was sealed by several levelling deposits, the primary material being a reddish pink clay (***2004***), 50mm thick, overlain by a thick (0.7m) layer of mixed black/ brown silty sand (***2003***) containing a large amount of clinker and numerous large sandstone blocks. This deposit was sealed by 0.6m of

loose sandstone rubble (***2002***) that served as a levelling deposit for the modern tarmac surface (***2001***).

4.4 TRENCH 3

4.4.1 Trench 3 was located in the south-west corner of the car park (Fig 2) and was aligned north/south. It measured 10 x 4m and was excavated to a maximum depth of 1.8m below the modern surface. The tarmac and subsequent levelling deposits were mechanically removed to the natural geology. Several features cutting into the natural were identified in this trench, the majority probably being of Roman date.

Plate 6: Trench 3, looking north

4.4.2 The natural geology (***3016***), a brownish-orange sandy clay, was reached 1.8m below the car park surface (Pl 6), and was seen to be cut by four earth-filled linear features (***3007***, ***3010***, ***3012***, ***3014***; Fig 4). Feature ***3007*** was a north-east/south-west-aligned ditch or gully (Pl 7) that was exposed for a length of 1.34m at the northern end of the trench. It was 0.64m wide, survived to a maximum depth of 0.25m, and was filled with a dark grey-brown soil (***3006***), probably representing a gradual silting up of the ditch over time, which yielded fragments of pottery, bone and glass. The ditch was truncated by a modern drain (***3015***), which ran north-west/south-east through the northern half of the trench. Drain ***3015*** also cut through a second linear feature (***3014***), a shallow (*c* 70mm) gully or slot, 0.28m wide, with near-vertical; sides and a flat base. It was filled with a single deposit of dark soil (***3013***) that contained fragments of pottery. At the southern end of the trench was another shallow gully or slot (***3010***, possibly the same as ***3012***) (Pl 7), at least 0.6m wide and 0.14m deep, again filled with a dark soil (***3009***).

Plate 7: Linear feature **3007** *in Trench 3, looking south-west*

4.4.3 These stratigraphically early features were sealed by *c* 0.2m of mixed, dark grey-brown and pale brown silty sand (***3008***), which was in turn cut by a ditch (***3005***) that ran north-east/south-west across the southern end of the trench (Fig 4). This was a fairly substantial feature, 1.2m wide and 0.3m deep, and was filled with a dark silty soil (***3004***) that contained two fragments of pottery.

4.4.4 Ditch ***3005*** was sealed by two layers of buried soil (***3003*** beneath ***3002***) that extended over the entire trench. The two layers do not have a distinct interface, but ***3003*** appeared to be cleaner and less compacted than the overlying deposit. Both were dark greyish-brown sandy silts, ***3003*** being 0.2m thick and ***3002*** having a depth of 0.4m. They were overlain by a spread of rubble (***3001***), 0.25m thick, that served as a levelling deposit for the tarmac surface of the present car park (***3000***).

4.5 TRENCH 4

4.5.1 Trench 4 was located on the north-west side of the car park, just south of the entrance (Fig 2). It measured 10 x 4m and was aligned north-east/south-west. It measured 10 x 4m and was excavated to a maximum depth of 2.20m. Mechanical excavation initially proceeded down to the tops of a number of late post-medieval walls and wall foundations, which were subsequently removed, together with associated levelling deposits and underlying buried soils, down to the top of the natural geology. The latter (***4013***), a grey-yellow

compact sandy clay, was recorded at a depth of 2.2m. It was cut by a shallow, north-east/south-west-aligned ditch (***4012***), 1.12m wide and 0.4m deep as it survived (Fig 5; Pl 8), filled with a dark grey sandy silt (***4011***).

Plate 8: Trench 4: north-east-facing section of gully **4012**

Plate 9: North-west-facing section of Trench 4, showing buried soils **4009**/**4010** *overlying the natural geology and sealed beneath nineteenth-century levelling deposits*

4.5.2 Feature ***4012*** was sealed by a build-up of dark grey-brown soils (***4010*** below ***4009***), up to 0.85m thick (Pl 9), very similar in character and depth to those recorded in Trench 3 (*Section 4.4.4*), the lower deposit again being cleaner

and less compacted. These soils were overlain by a thick (up to 0.88m) build-up of levelling deposits, comprising (from earliest to latest) yellow-buff sand (***4008***), reddish-pink clay (***4007***), and compacted yellow sand (***4006***), that were in turn cut by the foundations for the walls of nineteenth-century buildings that had once fronted William Street (Pl 10). These ran north-west/south-east across the trench and north-east/south-west along its western edge. All were of concrete with large cobble inclusions, and were approximately 1m deep. A single course of brick walling survived in places on top of the foundations; these wall fragments were sealed by 0.58m of rubble (***4001***) that served as a levelling deposit for the tarmac car park surface (***4000***).

Plate 10: Trench 4, looking south-west, showing brick walls and concrete foundations for nineteenth-century buildings

4.6 TRENCH 5

4.6.1 Trench 5 was located on the west side of the car park (Fig 2) and was aligned north-east/south-west. The trench measured 20 x 4m and was excavated to a maximum depth of 2.36m. The modern tarmac and underlying rubble were mechanically removed to the tops of several levelled late post-medieval walls, following which the area between the walls and their foundations was further reduced to the surface of the natural geology (Pl 11).

Plate 11: Trench 5, looking north-east

4.6.2 The natural geology (***5020***), a mixed orange and yellow sandy clay, was recorded at a depth of 2m below the modern surface, and several dark soil-filled linear features were visible, cutting its surface (Fig 6). At the northern end of the trench were a pair of near parallel, north-east/south-west-aligned gullies (***5015/5017***, ***5019***) were recorded. The westernmost (***5015/5017***) was traced for 10m within the trench and was found to be up to 0.75m wide and 0.35m deep, and had been filled with a pale grey/reddish brown sandy silt (***5014/ 5016***). To the north, this feature converged with gully ***5019*** (Pl 12), and it could be proven that ***5015/5017*** was the earlier feature, since it was cut by ***5019*** (Fig 6). The later feature was 0.77m wide and 0.51m deep, and was filled with material (***5018***) similar to that filling the earlier gully.

Plate 12: Trench 5: gullies **5015/5017** *and* **5019**, *looking north-east*

4.6.3 At the southern end of the trench, a shallow gully (***5013***), aligned north-east/south-west, was observed running along the eastern edge of the area excavated (Fig 6). This feature could be only partially investigated, but was 0.28m wide and 0.15m deep, and was filled with mid-brown silty sand (***5012***). It was cut by a considerably more substantial, north-west/south-east-aligned ditch (***5011***), 2.18m wide and 0.52m deep (Pl 13), filled with a mid-brown sandy silt (***5010***).

Plate 13: Trench 5: ditch **5011**, *looking south-east*

4.6.4 As elsewhere, these stratigraphically earlier features were sealed by a thick accumulation of dark grey-brown sandy silt soils (***5009*** below ***5008***), that here attained a maximum depth in excess of 1.2m. Again, the earlier deposit was generally cleaner than the overlying material. Deposit ***5008*** was cut by the stone and concrete foundations for demolished nineteenth-century housing that had once fronted William Street. One of these (***5007***) was composed of sandstone blocks bonded with a pale lime mortar, but the other two (***5004***, ***5005***) were of concrete with large inclusions. Along the western edge of the trench were the remains of two brick-built chimney-breasts (***5003***, ***5006***) that presumably also related to the Victorian terraced housing. The areas between the foundations had been filled with dark brown/black silt and clinker (***5002***), 0.2m thick. This, together with the levelled foundations themselves, were sealed by 0.46m of rubble (***5001***), which served as a levelling deposit for the tarmac surface of the present car park (***5000***).

4.7 TRENCH 6

4.7.1 Trench 6 was located on the east side of the car park (Fig 2; Pl 14) and was aligned north-east/south-west. The trench measured 20 x 4m and was excavated to a maximum depth of 2.6m. As elsewhere, the tarmac and underlying rubble were mechanically removed to the tops of levelled late post-medieval walls, which seem to have represented the remains of a number of cellared buildings (Pl 14). At the south-west end of the trench, the rubble fill of one of the cellars was also removed mechanically to the level of the

floor, beneath which a narrow trench, 0.6m wide, was excavated down to the natural geology.

Plate 14: Trench 6, looking north-east, showing extensive cellaring

4.7.2 The natural geology (***6010***), a pale orange sandy clay, was recorded at a depth of 2.35m. Directly overlying this, beneath the cellar floor, was a levelling deposit of dark brown sandy gravel (***6009***), 0.2m thick, above this was the sandstone flagged floor (***6008***). The cellar walls (***6002***, ***6003***, ***6004***), which survived up to 1.6m above the level of the floor (Pl 15), appeared to have been built directly onto the natural clay. They comprised roughly-hewn sandstone blocks bonded with lime mortar, the internal wall faces being covered with a lime plaster. On both sides of wall ***6004*** were fireplaces, constructed using large sandstone blocks, and another fireplace (***6007***) was observed at the northern end of the trench. The excavated cellar was ultimately filled with loose sandstone and brick rubble (***6012***).

Plate 15: Trench 6: deeper excavation beneath the cellar floor at the south-west end of the trench, looking west

4.7.3 Between walls ***6005*** and ***6006*** was a narrow gap, not large enough for a room and also filled by a different deposit to the material in the cellars. This was most likely a passageway between two buildings, giving access to the back yards. The deposit that filled the area (***6011***) was a dark brown/black silt and clinker. As elsewhere, the demolished and infilled cellars were sealed by a rubble levelling deposit, 0.46m thick (***6001***), above which was the modern tarmac car park surface (***6000***).

4.8 TRENCH 7

4.8.1 Trench 7 was located in the south-east corner of the car park (Fig 2) and was aligned east/west. It measured 10 x 4m and was excavated to a maximum depth of 2.5m. The tarmac and modern rubble beneath were mechanically reduced to the tops of surviving late post-medieval walls and other, contemporary, deposits, which were recorded before the area was reduced further to the level of the natural geology.

4.8.2 The natural geology (***7018***), an orange sandy gravel, was recorded at a depth of 2.5m below the car park surface (Pl 16). It was overlain by an accumulation of brown sandy silt soils (latest to earliest: ***7017***, ***7016***, ***7015***), with a combined thickness of 0.8m (Pl 17).

Plate 16: Trench 7, looking west, showing natural geology **7018**

Plate 17: Trench 7: south-facing section, showing buried soils **7015-7017**

4.8.3 Several levelling layers overlay these soils, the earliest of which (***7014***), a dark brown compact silty clay, was 0.35m thick. This deposit was similar to the underlying soils but contained a large amount of mortar and small fragments of brick rubble, indicating a relatively recent (probably late post-medieval) date. A compact grey/red deposit, 0.1m thick, containing much brick rubble and mortar (***7013***), overlay this, and was itself overlaid by 0.28m of mixed black and orange silt and clinker (***7012***). These deposits lay directly beneath the floors of nineteenth-century buildings (*Section 4.8.4*), and were cut by some of the foundations for the walls of these structures, which in some cases penetrated into the earlier buried soils.

Plate 18: Trench 7 looking east, showing the remains of nineteenth-century buildings and associated external cobbled surfaces

4.8.4 Above the levelling deposits were the remains of several nineteenth-century structures and external areas (Pl 18). At the eastern end of the trench was a large room (***7006***) containing brick-walled cubicles and the remains of toilets. The walls of the room were constructed from bricks and mortar, for the most part, but there was also some sandstone block-work in some parts, possibly representing repairs or earlier elements of the building. The floor, of sandstone flags, was slightly lower than those of the other rooms in the trench, and was sealed by a layer of brick rubble (***7011***).

4.8.5 To the west of room ***7006*** were parts of three other rooms (***7007***, ***7008***, ***7009***), though only ***7009*** contained any internal features. This room seemed similar to ***7006***, in that it contained two cubicles with toilet bases. The rooms all had brick walls with sandstone flagstone floors, but the floors had later been covered in some form of concrete.

4.8.6 To the north and south of the excavated rooms were well preserved cobbled surfaces (***7004***, ***7005***; Pl 18). The cobbles to the south (***7004***), were quite small and were overlain by black silt (***7003***), which contained a large amount of roofing slate. Surface ***7005*** was preserved at a much higher level and was made up from much larger cobbles. All excavated features and deposits were overlain by a spread of rubble (***7002***), 0.17m thick, which lay directly beneath the tarmac car park surface (***7001***).

4.9 TRENCH 8

4.9.1 Trench 8 was located on the east side of the car park (Fig 2), to the east of Trench 6, and was aligned north-west/south-east. It measured 10 x 4m and was excavated to a maximum depth of 2.4m. As elsewhere, the tarmac and the underlying rubble were mechanically reduced to the tops of surviving late post-medieval walls, and associated deposits (Pl 18). These were then removed and the trench was reduced further to the top of the natural geology.

Plate 19: Trench 8, looking north-west

4.9.2 The natural geology (***8027***), an orange sandy gravel, was recorded at a depth of 2.36m, and was cut by several earth-filled features (Fig 7). At the south-eastern end of the trench were two parallel, north-west/south-east-aligned linear features (***8020***, ***8023***; Pl 20). The full profile of ***8020*** was excavated, showing that it had steep sides and a fairly flat base, which would be consistent with its interpretation as a possible beam slot, rather than something like a drainage gully. It was 0.24m wide and survived to a depth of 0.1m, and was filled with a mid-dark brownish-grey sandy silt (***8019***). Feature ***8023*** was only exposed against the western edge of the trench, therefore a full profile could not be obtained, though it had fairly steep sides and survived to a depth of 0.41m. It was filled by two deposits, a primary fill of dark grey sandy silt (***8022***) below an orange-brown silty sand (***8021***), the latter possibly representing intentional back filling of the feature.

Plate 20: Trench 8: linear features **8020** *and* **8023**, *looking south-east*

4.9.3 At the northern end of the trench, the natural clay was cut by several features (Pl 21), the earliest of which appeared to be a shallow, north-east/south-west-aligned gully (***8016***), 0.4m wide but only 80mm deep, and a second, north-west/south-east-aligned linear feature (***8018***), 0.5m wide and 0.25m deep. Both were filled with mixed grey-brown sandy silts (***8015*** and ***8017*** respectively), and were cut by a shallow, north-east/south-west ditch (***8014***), 1.2m wide and 0.19m deep, filled with grey-brown sandy silt (***8013***). ***8014*** also appeared to cut a posthole (***8012***), located on its western edge. This was 0.27m in diameter and 0.26m deep, and was filled with mid-greyish-brown sandy silt (***8011***).

Plate 21: Trench 8: posthole **8012** *and linear features* **8014**, **8016** *and* **8018**, *looking north-west.*

4.9.4 Here too, the earliest features were overlain by a buried soil deposit (***8026***), comprising a dark brown silt, 0.45m thick. In this trench modern levelling and drain runs had heavily truncated the buried soil. It was overlain by a levelling deposit (***8010***) of orange-yellow sandy gravel, 0.40m thick, which was in turn sealed by 0.75m of mixed, dark brown compact clayey silt (***8009***). Above these levelling deposits was a cobbled surface (***8004***), was similar to those seen in Trench 7 (*Section 4.8.6*), and the remains of nineteenth-century structures, represented within the excavated area by three rooms (***8005***, ***8006***, ***8007***). The walls of all these rooms were constructed of large, roughly squared sandstone blocks bonded with lime mortar, and all had floors of sandstone flags. Rooms ***8005*** and ***8007*** were on the same level and appeared to have been toilet blocks, as in Trench 7 (*Section 4.8.4*). Room ***8006*** was on a completely different level and appeared to post-date the other two rooms. All these features and deposits were sealed by a spread of rubble (***8002***), 0.5m thick, that lay directly below the tarmac car park surface (***8001***).

4.10 FINDS

4.10.1 A small assemblage of artefacts was recovered from features excavated during the project. The general make-up of the group is shown in Table 1.

Trench	Context	Roman pottery	Medieval pottery	Roman glass	Other	Bone	*Totals*
1	unstratified				1		*1*
3	***3003***				1		*1*
3	***3004***		2				*2*
3	***3006***	23	2	1	5	2	*33*
3	***3013***	2				1	*3*
4	***4009***		1				*1*
4	***4010***	5	4				*9*
4	***4011***	1	1				*2*
5	***5009***		2				*2*
5	***5010***	15					*15*
5	***5012***	2					*2*
5	***5016***	1					*1*
5	***5018***	1					*1*
7	***7015***	1	1				*2*
7	***7017***	2					*2*
8	***8013***	3					*3*
Totals		*56*	*13*	*1*	*7*	***3***	***80***

Table 1: The artefactual assemblage by material and broad date range

4.10.2 Although a number of the contexts producing pottery contain mixed Roman and medieval ceramics, suggesting that much of the Roman pottery is residual, the assemblage is dominated by Romano-British pottery, the dating of which seems to centre on the mid-later second century. There are undoubtedly some earlier vessels, including a Black-burnished ware jar from context ***3013***, the fill of a stratigraphically early linear feature (***3014***) in Trench 3, which can probably be placed in the earlier part of the second century. However, it could conceivably be even earlier, pre-dating the main period of use in the North (from *c* AD 125 to the early fourth century (Tyers 1996)), perhaps having been acquired elsewhere and brought to Carlisle as a personal possession, as has been noted in assemblages from the early Roman fort (Swan 2009, 609).

4.10.3 There is a range of Romano-British fabrics typical of second-third century Carlisle assemblages. Black-burnished ware 1 is well represented, as are locally-made greywares and orange oxidised wares, many of which would have been made in Carlisle during the second and earlier third centuries. The samian from the site is generally in very small fragments, but a single large fragment from a Dr37 decorated dish, perhaps from the East Gaulish kilns at Trier (Webster 1996, 14) and likely to be of late Antonine date, came from context ***5010***, the fill of a fairly large ditch (***5011***) in Trench 5, where it was found alongside a dish likely to be a Severn Valley product. Although appearing in the North during the late second-century, the latter did not seem to come into general use in Carlisle until the early third century (Hird 2011, 88). A samian dish of form Dr 18/31, most frequent in the first half of the second century (Webster 1996, 35) came from context ***3006***, the fill of a stratigraphically early linear feature (***3007***) in Trench 3, which is a generally mixed context, also producing medieval pottery. Later fabrics include the base of a small Nene valley ware beaker from buried soil ***7015*** in Trench 7, and an as-yet unidentified colour-coated ware vessel from an underlying dark soil

(***7017***) in the same trench, both of which are likely to be of early third-century date. There are, in addition, several fragments of amphora, again in use from the first to the third centuries AD. Nothing in the small assemblage points to any activity later than the mid-late third century, again reflecting the dating of the nearby Botchergate site (Zant *et al* 2011b).

4.10.4 The presence of three small fragments of calcined bone in contexts ***3006*** and ***3013***, both likely Roman deposits in Trench 3, whilst by no means conclusive, echoes the known presence of a late first-early second-century cremation cemetery nearby (Zant *et al* 2011b, 73). A single fragment from a typically Roman mould-blown bottle also comes from ***3006***. Although used for a wide range of storage purposes from the later first to the early third centuries AD, they are often found, re-used as cinerary urns (Price and Cottam 1998, 198).

4.10.5 There is a small group of medieval pottery, deriving from Trenches 3 and 4. It ranges very broadly in date, with red and cream gritty wares dating generally to the twelfth to fourteenth centuries, and a few sherds of fully reduced green-glazed wares from the fourteenth to sixteenth centuries. There were no post-medieval fabrics present, but the reason for this is not clear, and it should not be taken as an indication that activity on the site ceased after the end of the medieval period. There were, in addition, three iron nails from linear feature ***3007*** in Trench 3; these cannot be dated with any precision at this stage, but are likely, given their context, to be Roman.

4.11 PALAEOENVIRONMENTAL REMAINS

4.11.1 Environmental bulk samples taken from secure contexts on the site were processed and rapidly assessed for the presence of charred and waterlogged plant remains and charcoal. The samples came from linear features including ditches/gullies and possible beam slots. The study of plant remains from archaeological sites is a valuable tool in providing an understanding of the economy and environment of an archaeological site. This report comprises an evaluation of the likelihood of charred and waterlogged plant remains and charcoal surviving at the site. Although waterlogged plant remains have been recovered from previous excavations in the area (Zant *et al* 2011b), as yet no charred plant remains have been recovered and/or studied from this part of Carlisle (J Zant *pers comm*).

4.11.2 ***Quantification***: seven bulk samples (10-40 litres in volume) were taken during the trial trenching. Ten litres of each was processed in order to evaluate their potential for containing charred and waterlogged plant remains and charcoal.

4.11.3 Methodology: the samples were hand-floated and the flots collected on a 250 micron mesh and air dried. The flots were scanned with a Leica MZ6 stereo microscope, and the plant material was recorded and provisionally identified were possible. Botanical nomenclature follows Stace (2010). Plant remains were scored on a scale of abundance of 1-4, where 1 is rare (less than 5 items) and 4 is abundant (more than 100 items). The components of the matrix and

other types of remains, such as pot, bone and heat affected vesicular material (havm) were also noted.

4.11.4 ***Results***: the results of the palaeoenvironmental evaluation are summarised in Table 2.

Sample No	Context No	Trench	Feature	Sample volume (ml)	Flot description	Plant remains
1	***3004***	3	Ditch ***3005***	30	Charcoal >2mm 2, coal/clinker 3, calcined bone 1, bone 1, havm 1	CPR 1 Cerealia indeterminate WPR 3 *Sambucus nigra*, *Fumaria* sp
2	***3009***	3	Gully/slot ***3010***	10	Charcoal >2mm 2, coal/clinker 3, calcined bone 1, havm 1	CPR 1 Cerealia indeterminate WPR 2 *Sambucus nigra*, *Fumaria* sp, *Euphorbia* sp
3	***3006***	3	Gully/ditch ***3007***	40	Charcoal >2mm 2, coal/clinker 3, havm 1	
4	***3013***	3	Gully/slot ***3014***	10	Charcoal >2mm 3, ceramic 1, calcined bone 1, iron 1, havm 1	CPR 1 Cerealia indeterminate
5	***5014***	5	Gully ***5015***	30	Charcoal >2mm 2, coal/clinker 3, ceramic 1	
6	***8021/ 8022***	8	Gully/slot ***8023***	20	Charcoal >2mm 2, coal/clinker 3, ceramic 1	
7	***8019***	8	Gully/slot ***8020***	10	Charcoal >2mm 2, coal/clinker 3, havm 1	CPR 1 Cerealia indeterminate, *Corylus avellana* fragments

CPR= Charred Plant Remains HAVM = Heat affected vesicular material
Scale 1= present (up to 5 items), 2= frequent (6-25), 3= common (26-100), 4= abundant (>100)

Table 2: Summary of charred plant remains

4.11.5 Indeterminate charred cereal grains were recorded in four of the samples (contexts ***3004***, ***3009***, ***3013***, and ***8019***), and a fragment of charred hazelnut (*Corylus avellana)* shell was recorded in context ***8019***. Charcoal, including identifiable fragments larger than 2mm in size was also recovered from all seven of the contexts. Uncharred plant remains were recorded in contexts ***3004*** and ***3009***, these included elder (*Sambucus nigra*), fumitories (*Fumaria* sp), and in context ***3009*** sun spurge (*Euphorbia* sp). Although these uncharred remains may represent early material preserved through waterlogging, their presence as modern contaminants seems far more probable, in view of the prevailing (unwaterlogged) ground conditions. Other remains included uncalcined and calcined bone, pot, iron, coal, and havm.

4.11.6 ***Conclusion***: the environmental evaluation suggests that there is the potential for the recovery of charred plant remains and charcoal from the site. Along with the other remains (bone, pot etc), the material is likely to comprise of general settlement and/or industrial waste. The relatively free-draining nature of the soil means that preservation through waterlogging at this particular location is unlikely. However, given waterlogged material survived at two nearby sites (Giecco *et al* 2001; Zant *et al* 2011b), albeit in isolated, deep features, sampling for the recovery of waterlogged remains should also be a

priority as part of future mitigation. The environmental samples from the ditches and linear features did contain material suitable for radiocarbon dating.

5. SIGNIFICANCE AND IMPACT

5.1 INTRODUCTION

5.1.1 The evaluation has demonstrated that features and deposits of considerable archaeological importance survive across much of the proposed development site. This is consistent with the conclusions drawn from the desk-based assessment (OA North 2014), which was based largely on a consideration of the results of earlier archaeological investigations in the near vicinity.

5.1.2 The natural geology was reached in each of the eight evaluation trenches and, even allowing for certain or possible truncation by later activity (most notably in Trench 6, which was cellared), it seems clear that the depth of the natural clay beneath the modern surface varies, being at its shallowest in the south-west corner of the site, and at its deepest along the northern and eastern edges of the development area. Potentially, therefore, archaeological remains could be better preserved in these deeper areas than elsewhere, though this could not be established within the narrow confines of the evaluation trenches.

5.1.3 The existence of stratigraphically early features, principally linear features such as gullies/slots and shallow ditches, was established in Trenches 3, 4, 5 and 8. Too little was seen of the natural subsoil in Trenches 1 and 2 for the presence of early features to be either demonstrated or ruled out, whilst in Trench 6 all archaeological remains had been destroyed by late post-medieval cellaring. Only in Trench 7, therefore, can a seemingly genuine absence of early features be demonstrated.

5.1.4 Some of the excavated feature yielded small quantities of Roman pottery and, indeed, by analogy with excavations nearby (Giecco *et al* 2001; Zant *et al* 2011b), it seems likely that most, if not all, of these are of Roman date. For the most part, the precise purpose of none of the recorded features can be determined at this stage, due to the limited nature of the investigation. However, a few of the narrower linear features could conceivably be construction slots (beam slots), which once held sill beams for the walls of Roman timber buildings. This building technique was commonplace in Roman Carlisle, being attested, for example, within the Roman fort (Zant 2009), in the annexe on the south side of the fort (McCarthy 1991), and in the civilian settlement (*eg* McCarthy 1990), including in second-century buildings excavated on Botchergate itself, not far from the present site (Giecco *et al* 2001; Zant *et al* 2011b). Whilst it is the case that the features recorded during the evaluation were located some considerable distance from the Roman street frontage on Botchergate, this does not preclude the possibility that they represent the remains of timber structures, for although it is the case that the most intensive activity is usually to be found close to the main roads, Roman buildings set well back from the nearest streets have been attested elsewhere in the civilian settlement at Carlisle, for example at the northern Lanes (Zant and Howard-Davis in prep). Some of the other linear features are perhaps likely to be field/property boundaries, similar to those recorded during the nearby Cecil Street evaluation in 1994 (McCarthy and Flynn 1994), whilst others again may have been drainage gullies.

5.1.5 Nothing comparable to the putative military-style ditches attested north of Tait Street (Giecco *et al* 2001), which have been interpreted as the possible remains of early Roman marching camps (OA North 2014), was recorded either. The largest early feature found, ditch ***5010*** in Trench 5, was certainly sufficiently wide (2.18m) to have been such a feature, and a Roman date is indicated by the associated pottery. However, at only 0.52m deep, it appears far too shallow to be a defensive feature, and does not exhibit the 'classic' V-shaped profile indicative of a Roman military origin.

5.1.4 Though no Roman burials were found, the possible presence of cremation burials in the near vicinity is hinted at by the presence of a few small burnt bone fragments in a small number of excavated deposits (*Section 4.10*). Although this material has not been positively identified as human bone (it might, for example, be burnt animal bone from a domestic context), other excavations on Botchergate, for example that conducted on the south-west side of the road in 1997 (Zant 2000) have produced scattered fragments of burnt human bone that were not obviously associated with a discrete burial. Such material might have derived from burials that had been disturbed or largely destroyed by later activity, causing fragments of bone to become widely scattered and incorporated into other deposits, or it could derive from communal pyre-sites, which were often used for the cremation of the dead in Roman Britain (Philpott 1991).

5.1.6 In Trenches 3, 4, 5 and 8, the stratigraphically earliest features were sealed by thick accumulations of dark soils. These deposits were also recorded (certainly or probably) in Trenches 1, 2 and 7, where early features were not seen, being absent only in Trench 6, which was cellared down to the natural clay. It therefore seems likely that these buried soils extend over the entire development area, except where removed by deep modern features, and they clearly have the potential to seal, and therefore to preserve, earlier features over much of the site. It seems clear that these deposits can be equated with stratigraphically equivalent, and morphologically identical, buried soils that have been recorded archaeologically on several adjacent sites, most notably north of Tait Street (Giecco *et at* 2001; Zant *et al* 2011b), but also on the eastern edge of the Cecil Street car park (McCarthy and Flynn 1994). What evidence there is suggests these soils accumulated, perhaps chiefly as a result of agricultural activity in fields on the periphery of the settlement, over a very prolonged period, potentially from the later Roman period to the eighteenth/early nineteenth century. The data recovered from the present evaluation is consistent with this hypothesis, since the buried soils consistently overlie (where present) features of certain or likely Roman date, and were themselves overlain/cut by features and deposits relating to nineteenth-century housing and related activity along William Street.

5.1.7 In terms of modern disturbance, all the evaluation trenches showed disturbance to some degree, but this varies considerably both in extent and depth across the development area. Trenches 1 and 6 showed evidence of cellaring, which, in the case of Trench 6, had resulted in the removal of all archaeological remains, including the buried dark soils. In the other trenches

there is also extensive disturbance, mostly from nineteenth-century building foundations and, to a lesser, extent, service runs. However, whilst many of these do truncate the top of the buried soil horizons, very few appear to penetrate beneath these deposits, which survive to depths of *c* 0.7-1m over much of the area.

5.2 CONCLUSIONS

5.2.1 Whilst details of the proposed development works at the Cecil Street/William Street site have yet to be finalised, it seems clear that any below ground works will have the potential to impact upon important archaeological deposits, principally, though probably not exclusively, pertaining to activities associated with the Roman civilian settlement. This will particularly be the case should any proposed ground works penetrate beneath, or remove, the thick layers of buried soils that are currently sealing, and thereby protecting, the earlier archaeological features beneath. An appropriate scheme of further archaeological investigation in advance of development will therefore be required to mitigate the ultimate loss of the buried remains.

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ILLUSTRATIONS

FIGURES

PLATES

Plate 20: Gullies ***8020*** and ***8023*** looking south-east

Plate 21: Posthole ***8012*** and ditches ***8014***, ***8016*** and ***8018*** looking north-west.

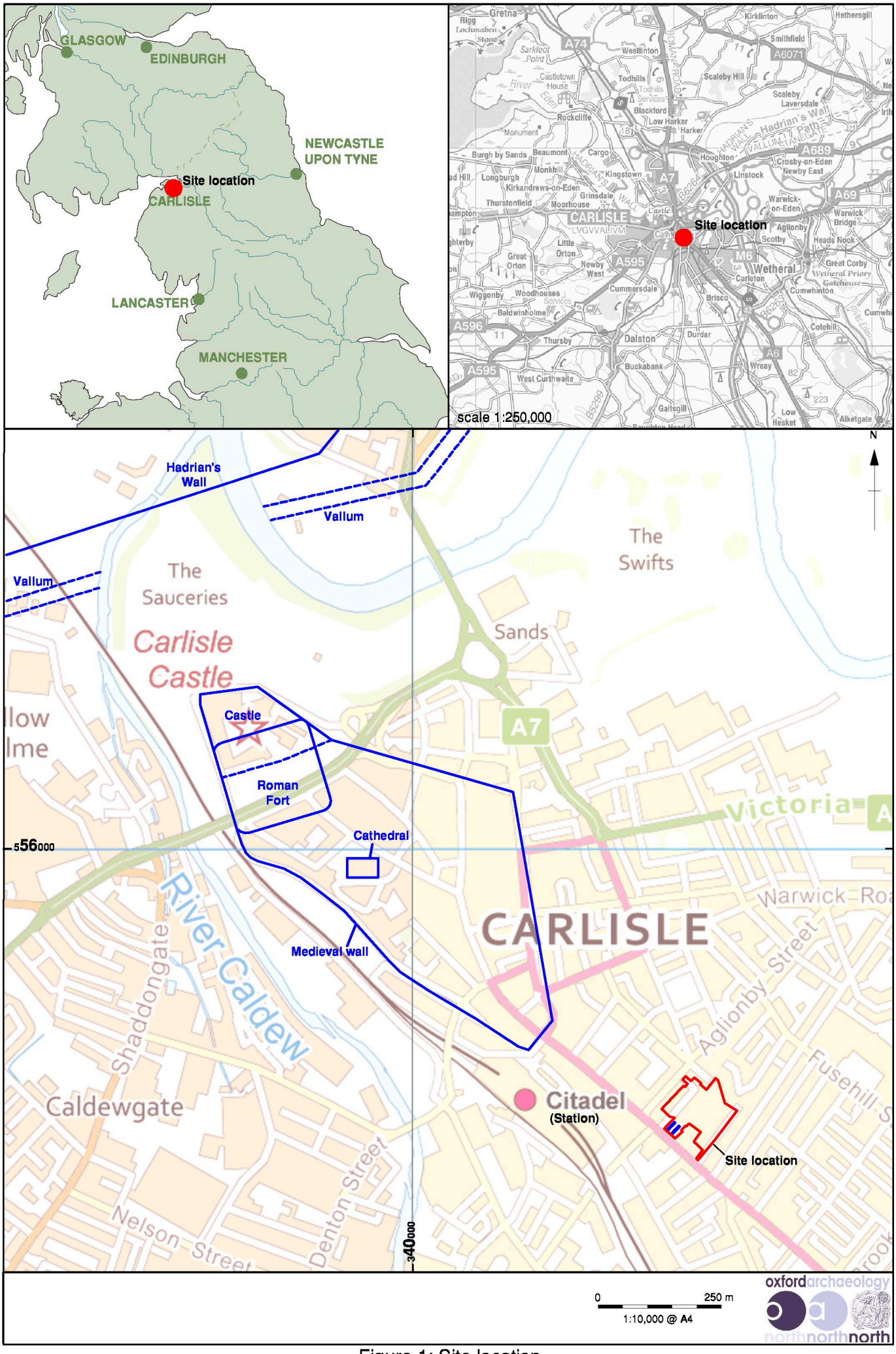


Figure 1: Site location

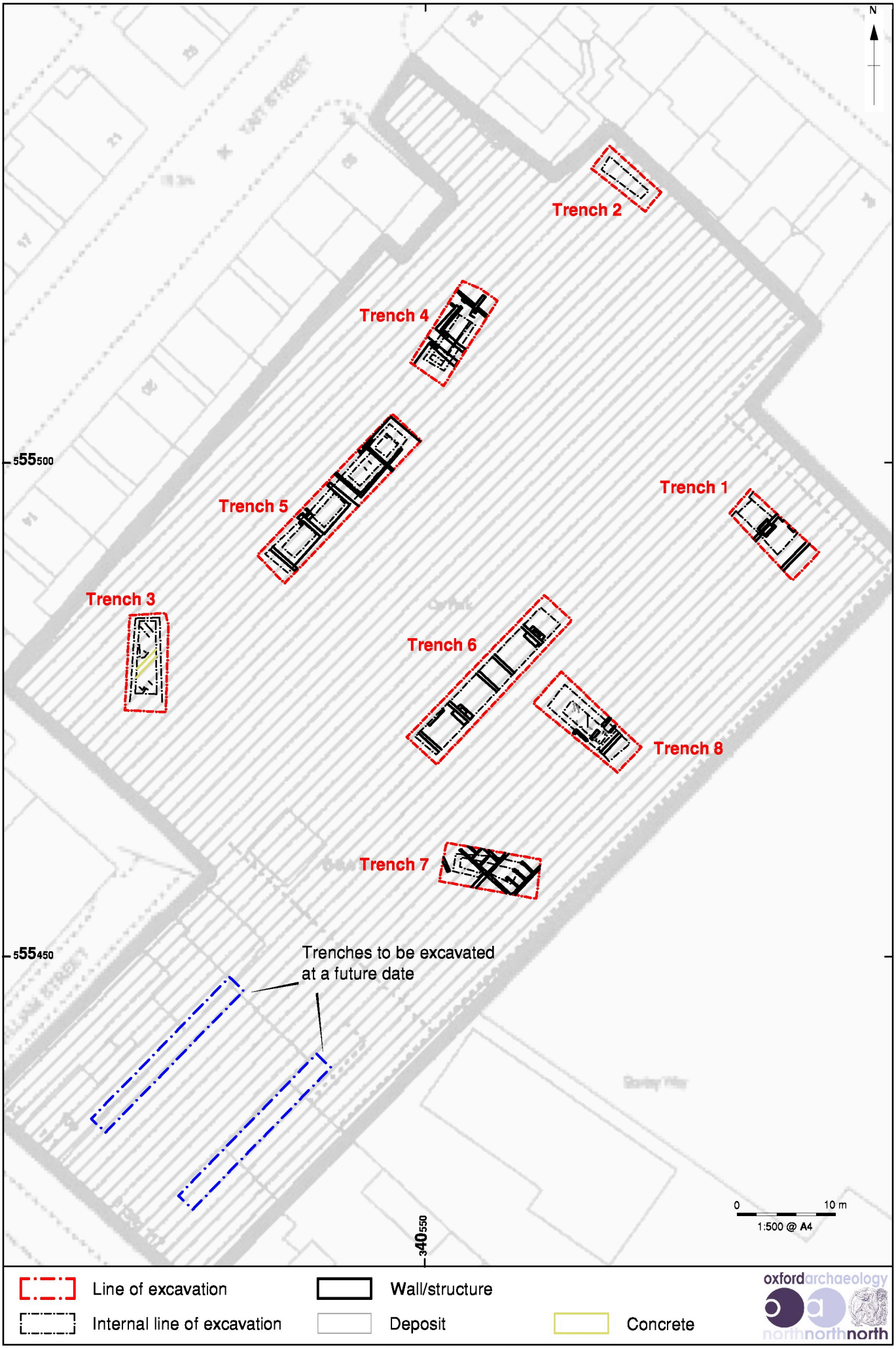


Figure 2: Trench location plan

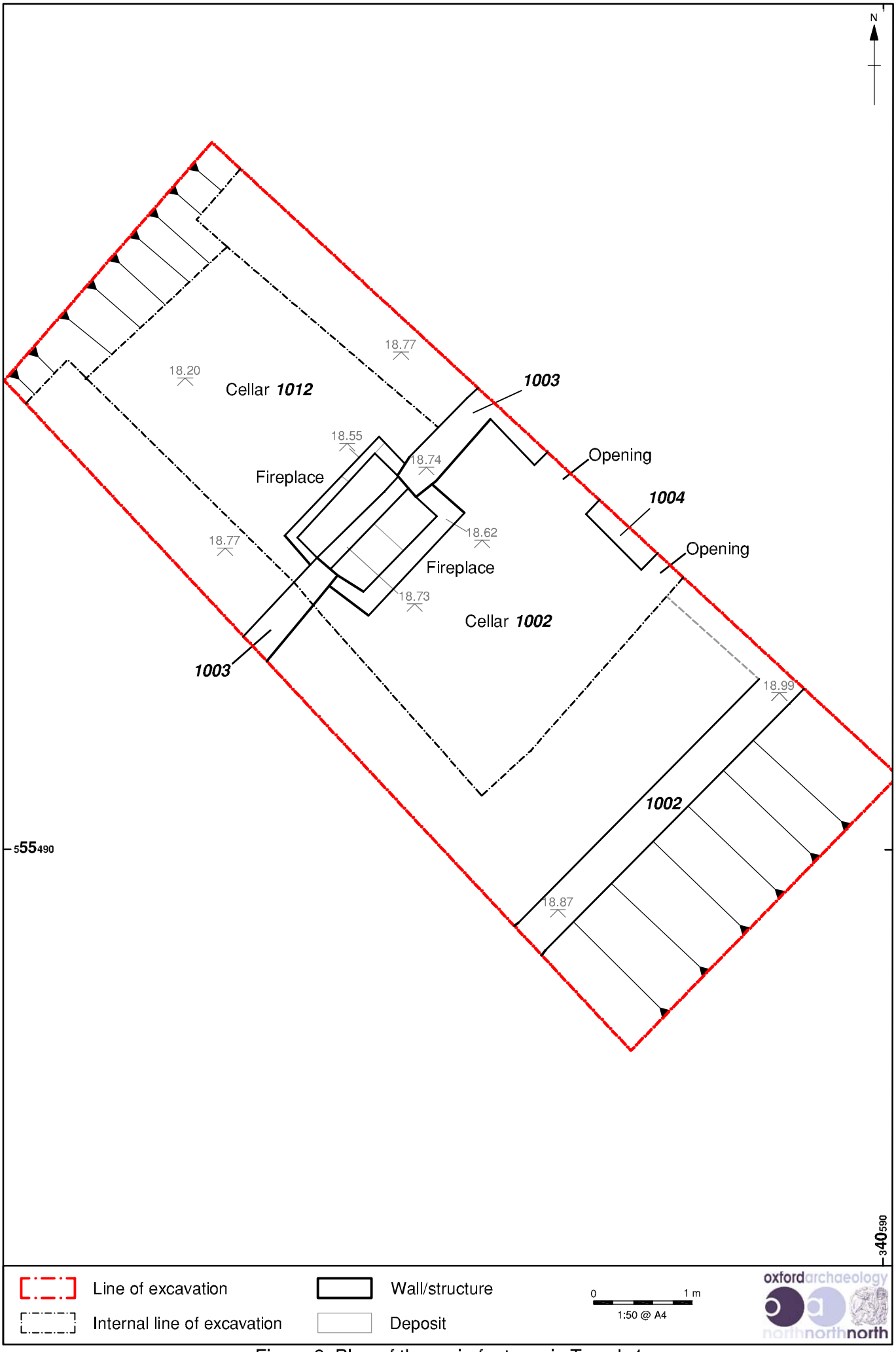
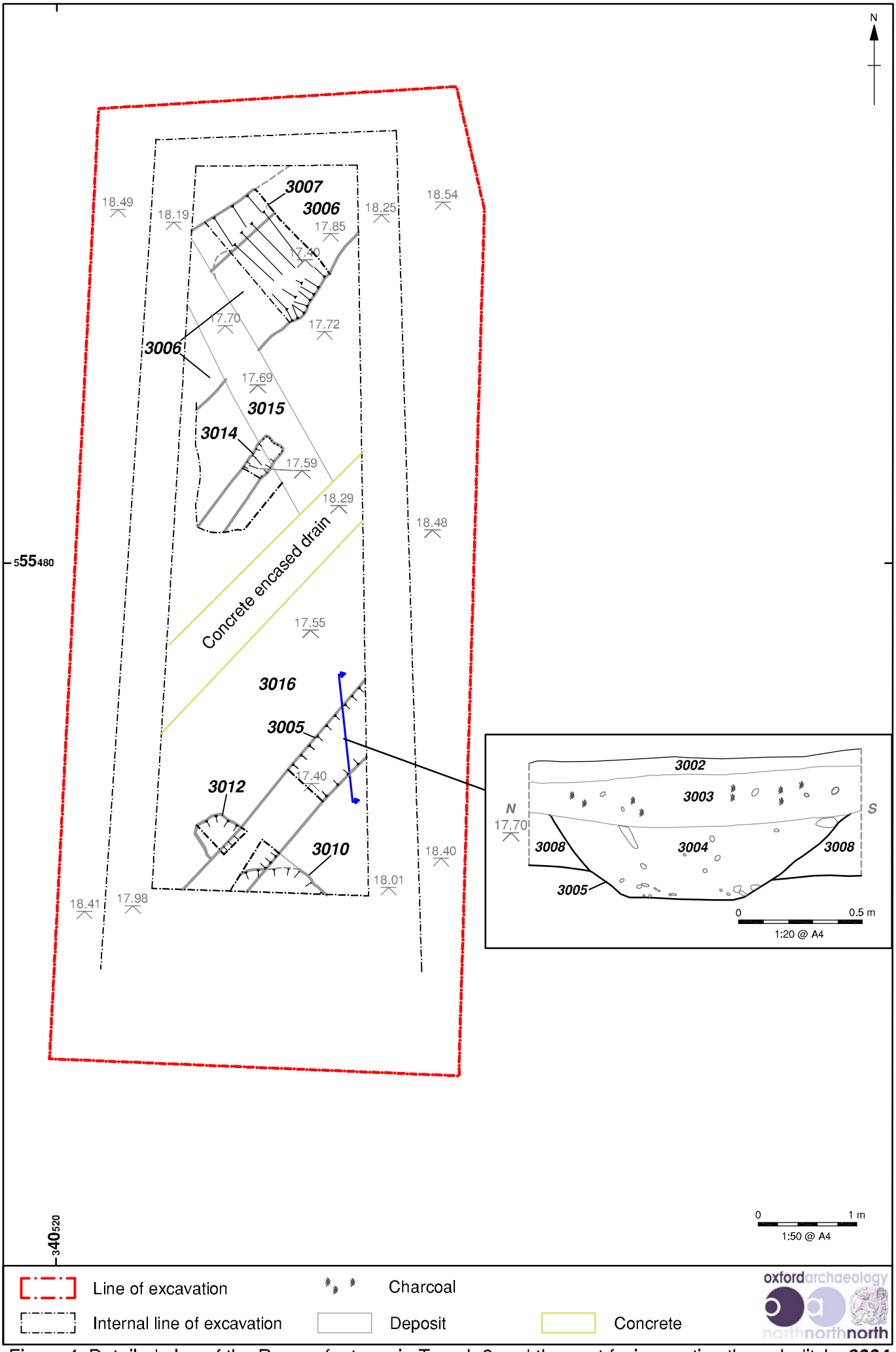


Figure 3: Plan of the main features in Trench 1



AL*L10723*MER*27.03.2014

Figure 4: Detailed plan of the Roman features in Trench 3 and the east-facing section through ditch ***3004***

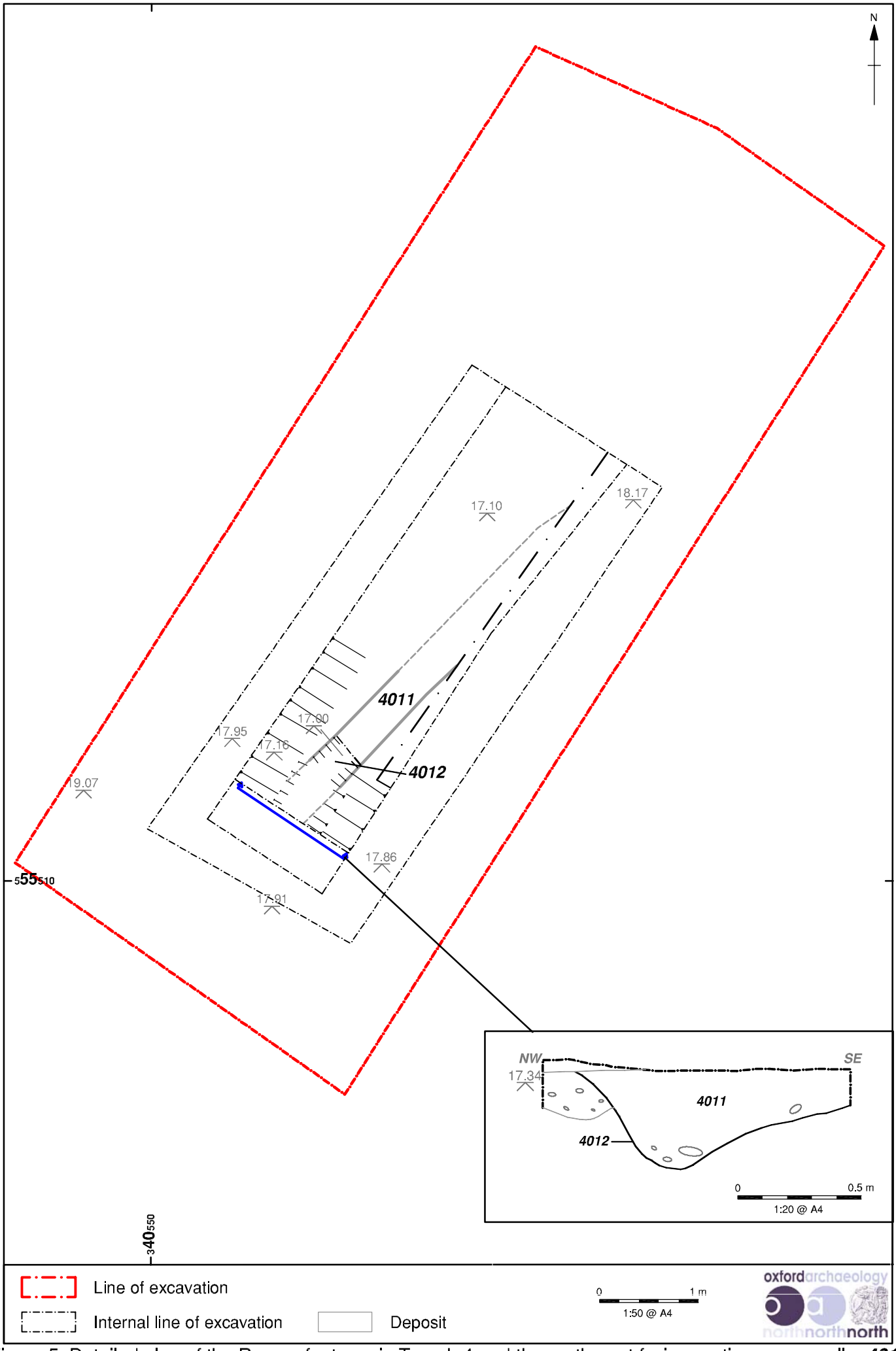


Figure 5: Detailed plan of the Roman features in Trench 4 and the north-east-facing section across gully ***4012***

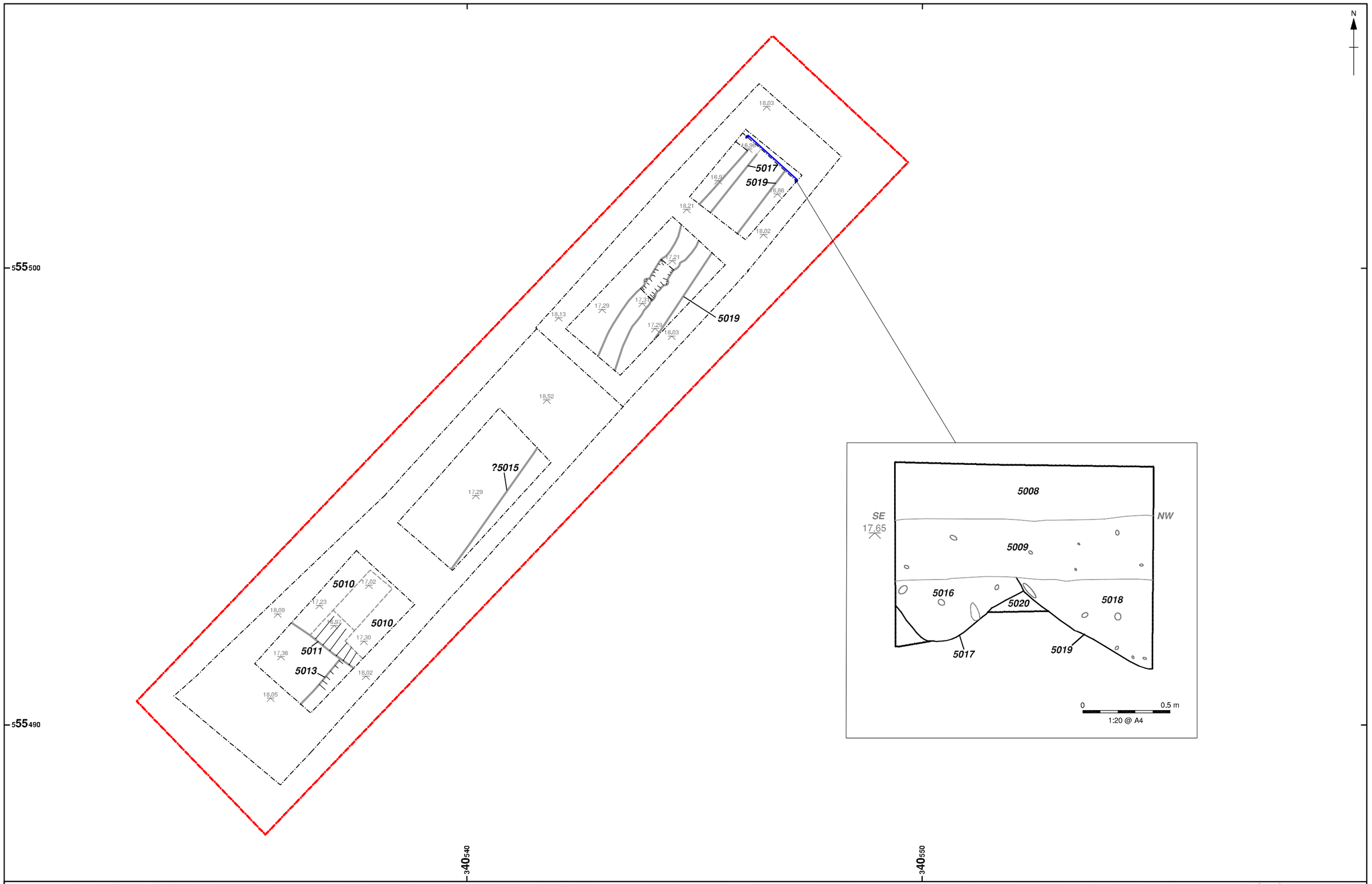


Figure 6: Detailed plan of the Roman features in Trench 5 and the north-east-facing section through ***5017*** and ***5019***

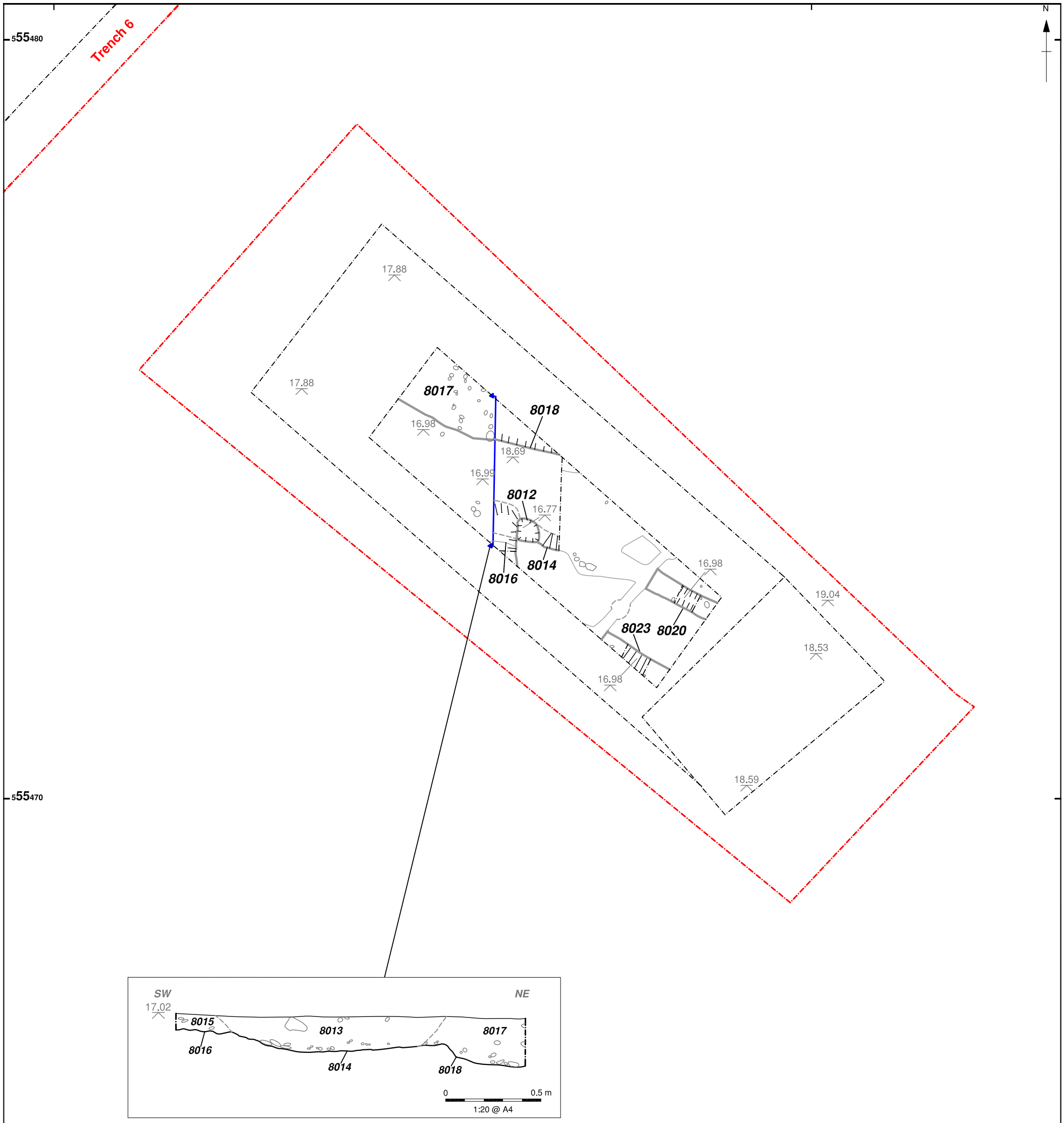


Figure 7: Detailed plan of the Roman features in Trench 8 and the north-west-facing section of ***8016***, ***8014***, and ***8018***

APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Cumbria County Council (CCC) is proposing to develop a new office in Carlisle on the site of the present William Street/Cecil Street car parks, on the north-eastern side of Botchergate (NY 4055 5550). Precise details of the character and extent of associated ground works are not yet available, but they are likely to include the construction of new footings, foundations and drainage runs. Such features have the potential to damage or disturb buried archaeological deposits, dependent upon the exact nature of the ground works.

1.1.2 The development site, which covers approximately 1.16ha, lies in an area of high archaeological potential, and encroaches into the boundaries of two Conservation Areas; the Botchergate Conservation Area to the south and west, along the main street frontage, and the Portland and Chatsworth Square Conservation Area to the north (WYG 2012, 9; Appendix B, fig 2). Consequently, in 2012, CCC commissioned an initial archaeological appraisal of the area (WYG 2012), which was to be followed by a more detailed archaeological desk-based assessment.

1.1.3 In response to an invitation to tender for this, and in accordance with a *Brief* prepared by CCC (CCC 2013), Oxford Archaeology North (OA North) was subsequently commissioned by CCC to prepare the detailed desk-based assessment. The work was undertaken in January 2014 and 43 sites were identified within the study area. Three sites are definitely prehistoric, and another site of possible pre-Roman date was also noted. The majority (28) are Roman in date, and there are three sites (all comprising accumulations of possible agricultural soils) that may span the late Roman and early medieval periods, together with the earlier part of the later medieval period (broadly spanning the period from the fourth century AD to the twelfth/thirteenth century AD). Of the remainder, seven are later medieval and one is late post-medieval (OA North 2014).

1.1.4 The study indicated that stratified and extremely sensitive archaeological deposits of most historic periods, from (potentially) prehistoric times to the later post-medieval period, may well survive over all or most of the proposed development site. However, the most complex and important deposits are likely to be found on the street frontage where, on the evidence of earlier archaeological work in the vicinity, Roman remains of regional and (potentially) national significance could occur, particularly since the buildings presently occupying the relevant part of the frontage are not cellared.

1.1.5 Given the potential of the site, CCC has produced a further brief defining an archaeological evaluation of the northernmost William Street car park, comprising 475 square metres of trial trenching. At present the critical area

of probable highest archaeological potential fronting Botchergate is still occupied by standing buildings and is not available for evaluation trenching. Consequently, OA North would propose to return to the site at a future date to evaluate this area using two 2m x 20m trenches (ie 80m2); this would be the subject of a separate costing to that provided at the end of this document. The following document outlines how OA North would undertake the remaining 395m2 of evaluation trenching over the William Street carpark area.

1.2 LOCATION, GEOLOGY AND TOPOGRAPHY

1.2.1 Carlisle lies on the Cumberland Plain approximately 8km above the tidal limit of the River Eden and some 13km upstream of the Solway Firth. The historic city is situated on the south bank of the Eden close to its confluence with the River Caldew. The settlement grew up on a promontory of land extending roughly north to south, bounded by the floodplain of the Eden to the north and north-east, and to the west by the scarp above the Caldew. The prominent bluff at the northern end of the scarp has been occupied by the existing stone castle since the twelfth century. The proposed development site is situated on the north-east side of Botchergate, which has been the principal route into the settlement from the south since Roman times. It lies *c* 900m south-east of the Roman fort (which underlies the medieval castle (Zant 2009)), on the periphery of the important settlement that grew up around the fort. In terms of the topography of the medieval and earlier post-medieval city, the site is located south-east of the city walls, *c* 300m beyond the medieval south gate and the sixteenth-century Citadel.

1.2.2 The solid geology of the Carlisle area comprises soft, reddish Triassic St Bees sandstone of the Sherwood Sandstone Group, which lies above the Permian St Bees shales and is itself overlain and intercalated with the less extensive grey Kirklinton sandstone. At Carlisle itself the sandstone outcrops to form the roughly triangular-shaped bluff occupied today by the medieval castle. Over most of the modern city centre, including the Botchergate area, the sandstone is covered by thick deposits of glacial drift, principally orange or orange-pink sandy clays and gravels. To the north-east, however, east of the castle and just north of the medieval walled city, the southern edge of a pre-Roman channel of the River Eden was found in 1998, some 300m south of the present river channel (Zant *et al* 2011a, 10-11). The precise course of the Roman river in this area is not known, although it probably lay much closer to the core area of settlement than is the case today.

1.2.3 Today, Botchergate rises very gently from a height of approximately 18m above Ordnance Datum (aOD) at its south-eastern end, near the junction with St Nicholas Bridge Road, to *c* 25m aOD at its north-western end, immediately south of the Citadel. The ground also falls away gently to the south-west of Botchergate, towards the railway line and the valley floor of the River Caldew beyond. There are no other significant topographical variations evident at the present day, and there is no evidence to indicate the former existence of buried features such as streams or palaeochannels, that might have constrained or influenced ancient settlement or land use.

1.2 OXFORD ARCHAEOLOGY NORTH

1.2.1 Oxford Archaeology North has huge experience of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England during the past 30 years. In particular, numerous evaluations, assessments, watching briefs, excavations and building recording have taken place in and around Carlisle within the planning process, to fulfil the requirements of clients and the planning authority (EDC), to very rigorous timetables. OA North is extremely familiar with the archaeology of Carlisle and has an unparalleled record of publishing work carried out in the city having undertaken the post-excavation of some of the largest excavations in Carlisle (eg Zant 2009, Zant *et al* 2011a, Zant and Howard-Davis in prep), together with several strategic studies assessing the archaeological resource within the city (OA North 2007; 2013). In addition to production of the detail desk-based assessment of the archaeological potential of the development site, of particular relevance to the proposed evaluation was the work undertaken by OA North at 53-55 Botchergate a short distance to the north of the development area (Zant *et al* 2011b).

1.2.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute for Archaeologists (IfA) registered organisation, registration number 17, and all its members of staff operate subject to the IfA Code of Conduct (2010).

2 AIMS AND OBJECTIVES

2.1 The archaeological investigation will aim to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. The work will comprise:

- ***A visual inspection of the site:*** a walkover of the site will be undertaken noting any surface features of potential archaeological interest, areas of potentially significant disturbance, and hazards and constraints to undertaking further archaeological work on site (including the siting of live services, Tree Preservation Orders and public footpaths).

- ***Archaeological Evaluation***: a series of eight trial trenches measuring up to 395m² will be excavated to investigate the potential for surviving below ground remains.

- ***Report and Archive:*** the report will aim to provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment will also be provided, wherever possible. An archive will be produced to English Heritage guidelines (MAP 2 (1991)).

3. HEALTH AND SAFETY

3.1 ***Risk Assessment:*** OA North provides a Health and Safety Statement for all projects and maintains a company safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties. If, at the time of the fieldwork, the building is deemed to be unsafe, recording will be restricted to external photographs.

3.2 ***Services and other constraints:*** full regard will, of course, be given to all constraints (services etc.) during the evaluation trenching as well as to all Health and Safety considerations. As a matter of course the field team will use a Cable Avoidance Tool (CAT) and signal generator prior to any excavation to test for services. However, this is only an approximate location tool, and will be used in conjunction with information regarding services, i.e. drawings or knowledge of live cables or services, provided by the client prior to the commencement of the fieldwork.

3.3 ***Contamination:*** any known contamination issues or any specific health and safety requirements on site should be made known to OA North by the client to ensure all procedures can be met, and that the risk is dealt with appropriately. Should any presently unknown contamination be discovered during excavation, it may be necessary to halt the works and reassess the risk assessment. Should it be necessary to supply additional PPE or other contamination avoidance equipment this will be costed as a variation.

3.4 ***Staff issues:*** all project staff will be CSCS qualified, proof of which can be provided in the form of CSCS cards.

3.5 A portable toilet with hand washing facilities will be provided and located on or adjacent to the site, together with other site welfare facilities.

3.6 ***Fencing/hoarding requirements:*** unless significant archaeological deposits are discovered and it is necessary for the trenches to remain open for monitoring purposes, the trenches will be backfilled once they have been recorded. During the course of archaeological recording the trench will be demarcated with barrier tape if necessary, unless specific requirements are requested by the client for heras security fencing, which will be costed as a variation.

4. METHOD STATEMENT

4.1 TRIAL TRENCHING

4.1.1 The programme of trial trenching will comprise eight evaluation trenches (see attached figure) spread across the available area of the William Street carpark. Trenches have been placed in locations that seek to avoid constraints, including services, and maintain access (Fig 2); however, some alteration may be required over the course of the fieldwork. To enable parts of the carpark to remain in use, the trenching will be undertaken in two stages (Phase 1 and 2), separated by a period of reinstatement of the carpark surfaces.

4.1.2 ***Methodology:*** the overburden will be removed by machine fitted with a toothless ditching bucket if suitable. This will be undertaken under archaeological supervision, and thereafter excavation will proceed in level spits of a maximum depth of 0.25m each down to the surface of the first significant archaeological or natural deposit, whichever is encountered first. This deposit will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. All features of archaeological interest will be investigated, subject to health and safety constraints, and recorded unless otherwise agreed by the client and CCCHES.

4.1.3 The trenches will be excavated in a stratigraphical manner, whether by machine or by hand, and will be located by the use of GPS equipment, which is accurate to +/- 0.25m, or using an EDM Total Station, based on a site grid related to the national grid obtained from any available client base mapping. Altitude information will be established with respect to Ordnance Survey Datum.

4.1.4 Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ* or are more easily understood by means of larger-scale excavation at a subsequent date.

4.1.5 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, and monochrome contacts) to identify and illustrate individual features. A Harris Matrix will be compiled during the fieldwork. Primary records will be available for inspection at all times.

4.1.6 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record (both black and white (35mm), and digital shots for illustration purpose) and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). At least one

long section of the trench will be recorded. All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute for Archaeologists guidelines) in order to minimise deterioration.

4.2 GENERAL PROCEDURES

4.2.1 ***Environmental Sampling:*** environmental samples (bulk samples of 40 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by OA North's in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified.

4.2.2 Advice will also be sought as to whether a soil micromorphological study or any other analytical techniques will enhance the understanding of the site formation processes, including the amount of truncation to buried deposits and the preservation of deposits within negative features. Should this be required the costs for analysis have been provided as a contingency.

4.2.3 ***Faunal remains:*** if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA North's specialist in faunal remains, and, subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.

4.2.4 ***Human Remains****:* any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. CCCHES and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations. Any delays caused by unforeseen and complex excavation of inhumations may be subject to a variation to the cost of the contract and will be agreed with the client.

4.2.5 ***Treatment of finds:*** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.

4.2.6 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.

4.2.7 ***Treasure:*** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

4.3 ACCESS

4.3.1 Liaison for basic site access will be undertaken through the client. It is assumed that there will be access for plant to the site and that the site will have been closed as a car park for the duration of the evaluation.

4.4 REINSTATEMENT

4.4.1 The ground will be backfilled with the arisings, and the ground will be roughly graded with the machine. Should there be a requirement by the client for reinstatement to car parking standards, this will involve recosting.

4.5 INSURANCE

4.5.1 OA North has a professional indemnity cover to a value of £5,000,000; proof of which can be supplied as required.

4.6 REPORT

4.6.1 A digital draft copy of the interim results of the fieldwork will be forwarded to the client for approval or required amendment initially by 21st March (ie within a month of the inception of the evaluation fieldwork, assuming that this commences on 23rd February). Once approved, a copy of a finalised written synthetic report will be submitted to the client, together with a digital copy on CD, within four to six weeks of completion of the fieldwork. Relevant copies will be forwarded to the Cumbria HER for reference purposes following agreement with the client. The final report will include;

- a site location plan related to the national grid
- a front cover to include the planning application number, where relevant, and the NGR
- a concise, non-technical summary of the results
- the circumstances of the project and the dates on which the fieldwork was undertaken
- description of the methodology
- a summary of the historical background of the study area
- appropriate plans for the trenching showing the location and position of features

- a statement, where possible, of the archaeological impact
- photographs as appropriate
- a copy of this project design, and indications of any agreed departure from that design
- the report will also include a complete bibliography of sources from which data has been derived, and a list of any further sources identified but not consulted

4.6.2 ***Confidentiality:*** all internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

4.7 ARCHIVE

4.7.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with Appendix 3 of the current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects (paper, magnetic and plastic media) with the County Record Office, Kendal, and the material archive will be submitted to an appropriate museum.

4.7.2 ***OASIS***: the data will be entered into OASIS records, the online database of archaeological events.

5. PROGRAMME

5.1 WORK TIMETABLE

5.1.1 ***Trial trenching:*** it is anticipated that one week will be required to complete the investigation of each of the Phase 1 and Phase 2 areas, with a team of three people, depending on the ground surface/overburden. After the completion of Phase 1, there will be a week of reinstatement of the carpark surfaces. A further week will be required after the completion of Phase 2. The fieldwork could begin on 24th February if the carpark area is fully cleared and available and, including reinstatement, is expected to take about four weeks.

5.1.2 ***Report and Archive:*** an interim report on the first phase of the evaluation trenching can be produced for 21st march if the fieldwork is able to start on 24th February. The final report will be available within four to six weeks of completion of all the fieldwork (ie after both phases of evaluation trenching are complete), and the archive deposited within six months.

6. STAFFING

6.1 The project will be under the direct management of **Stephen Rowland** (OA North Senior Project Manager) to whom all correspondence should be addressed. Stephen was the manager for OA North's recent evaluation at the Carlisle Fratry.

6.2 The fieldwork will be undertaken by **Paul Dunn** an OA North project supervisor experienced in this type of project, such as the recent evaluation of the Roman fort at Little Chester, Derby, a scheduled ancient monument. He will be assisted by two additional archaeologists but due to scheduling constraints it is not possible to provide all staff details at the present time.

6.3 Advice on any archaeological remains that are uncovered and their local and regional context will be provided by **John Zant** (OA North Project Officer). John has unrivalled knowledge of the archaeology of Carlisle (see CV) and has recently produced the detailed desk-based assessment of the William Street site (OA North 2014). He is also currently working on the publication of the results from the important series of excavations in the North Lanes area of Carlisle.

6.4 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis** (OA North finds manager). Christine has extensive knowledge of finds from many periods in the North West and is intimately familiar with the archaeology of Carlisle through her work on the finds assemblages from OA North's projects in the city (*inter alia* Zant 2009 and Zant and Howard-Davis in prep).

6.5 Assessment of any palaeoenvironmental samples will be undertaken by or under the auspices of **Elizabeth Huckerby MSc** (OA North project officer). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey. In addition, she has been involved in the assessment and analysis of palaeoenvironmental remains from most of OA North's projects in Carlisle, so she is intimately familiar with the archaeology of the area.

6.6 Faunal remains from the evaluation would be examined by OA North's in-house faunal specialist **Ian Smith** (OA North project officer). Ian has examined faunal remains from a wide range of sites across the North West and beyond and is a member of the International Council for Archaeozoology and the Professional Zooarchaeology Group.

Schedule of Key Personnel Involved in the Commission

Personnel	**Number of Days**	**Key tasks**
Stephen Rowland - Project Manager	3.5	Attending pre-start meeting, project set up, general management, liaison with client and curator, report editing
Paul Dunn - Project Supervisor	16.5	Excavation of two phases of evaluation trenching (15 days), report compilation (7 days) and sorting of archive (1 day). During the 15 days of trenching Paul will be supported by 2 technicians.
Illustrator	2.5	Report illustration
Christine Howard-Davis - Finds Manager	1.5	Reporting on finds assemblage
Elizabeth Huckerby - Palaeoloenvironmental Manager	2.5	Assessing and reporting on samples (this assumes that 24 samples will have been taken)
Ian Smith - Faunal Remains	1	Assessing and reporting on any faunal remains
Archive supervisor	0.5	Sorting archive
Technicians	5.5	Finds and sample processing

NB then usual place of work for all staff is OA North's Lancaster office.

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APPENDIX 2: TABLE OF CONTEXTS

Context No	Trench No	Category	Description	Depth
1000	1	Layer	Tarmac	0.00 - 0.05m
1001	1	Layer	Rubble overburden	0.05 - 0.45m
1002	1	Structure	South-east Cellar	0.45 - 2.00m
1003	1	Structure	Internal Wall with chimneys	0.45 - 1.00m +
1004	1	Structure	North-west Cellar	0.45 - 1.00m +
1005	1	Deposit	Rubble fill of ***1002***	0.45 - 2.00m
1006	1	Deposit	Rubble fill of ***1004***	0.45 - 1.00m +
1007	1	Structure	Flag-stone floor	2.00 - 2.10m
1008	1	Layer	Sand and gravel levelling layer	2.10 - 2.40m
1009	1	Deposit	Black Clinker deposit	2.40 - 2.50m
1010	1	Deposit	Buried Soil	2.50 - 3.00m
1011	1	Deposit	Natural	3.00m +
2001	2	Layer	Tarmac	0.00 - 0.05m
2002	2	Layer	Loose sandstone rubble	0.05 - 0.65m
2003	2	Layer	Mixed Black silt and sandstone rubble	0.65 - 1.35m
2004	2	Layer	Pink clay levelling layer	1.35 - 1.40m
2005	2	Deposit	Buried Soil	1.40 - 2.25m
2006	2	Deposit	Natural	2.25m +
3000	3	Layer	Tarmac	0.00 - 0.04m
3001	3	Layer	Rubble overburden	0.04 - 0.29m
3002	3	Deposit	Dark compact buried soil	0.29 - 0.69m
3003	3	Deposit	Less mixed buried soil	0.69 - 0.89m
3004	3	Deposit	Fill of linear ***3005***	0.89 - 1.19m
3005	3	Cut	Shallow linear	-
3006	3	Deposit	Fill of ditch ***3007***	0.89 – 1.14m
3007	3	Cut	Ditch	-
3008	3	Deposit	Lower buried soil	0.89 - 1.14m
3009	3	Deposit	Fill of linear ***3010***	1.14 - 1.28m
3010	3	Cut	Linear	-
3011	3	Deposit	Fill of linear ***3012***	1.14 - 1.20m
3012	3	Cut	Linear	-
3013	3	Deposit	Fill of linear ***3014***	0.89 - 0.96m
3014	3	Cut	Linear	-
3015	3	Modern	Drain	-
3016	3	Deposit	Natural	1.14m +
4000	4	Layer	Tarmac	0.00 - 0.08m
4001	4	Layer	Rubble overburden	0.08 - 0.66m
4002	4	Structure	Brick wall	-
4003	4	Structure	Brick wall	0.66 - 1.66m
4004	4	Structure	Brick wall	0.66 - 1.66m

Context No	Trench No	Category	Description	Depth
4005	4	Structure	Brick wall	0.66 - 1.66m
4006	4	Layer	Compact yellow sand levelling	0.66 - 0.84m
4007	4	Layer	Pinkish red clay levelling	0.84 - 1.19m
4008	4	Layer	Loose yellow sand levelling	0.84 - 1.19m
4009	4	Deposit	Upper buried soil	1.19 - 1.56m
4010	4	Deposit	Lower buried soil	1.56 - 2.04m
4011	4	Deposit	Fill of gully ***4012***	2.04 - 2.44m
4012	4	Cut	Gully	-
4013	4	Deposit	Natural	2.04m +
5000	5	Layer	Tarmac	0.00 - 0.10m
5001	5	Layer	Rubble overburden	0.10 - 0.56m
5002	5	Deposit	Black clinker deposit	0.56 - 0.76m
5003	5	Structure	Brick wall	0.56 - 1.56m
5004	5	Structure	Brick wall on concrete foundation	0.56 - 1.56m
5005	5	Structure	Concrete foundation	0.56 - 1.56m
5006	5	Structure	Brick wall	-
5007	5	Structure	Red sandstone wall	0.56 - 1.56m
5008	5	Deposit	Buried soil	0.76 - 1.46m
5009	5	Deposit	Earlier buried soil	1.46 - 1.98m
5010	5	Deposit	Fill of ditch ***5011***	1.98 - 2.50m
5011	5	Cut	Ditch	-
5012	5	Deposit	Fill of narrow linear ***5013***	1.98 - 2.13m
5013	5	Cut	Narrow linear	-
5014	5	Deposit	Fill of narrow linear ***5015***	1.98 - 2.13m
5015	5	Cut	Narrow linear	-
5016	5	Deposit	Fill of narrow linear ***5017***	1.98 - 2.33m
5017	5	Cut	Narrow linear	-
5018	5	Deposit	Fill of narrow linear ***5019***	1.98 - 2.49m
5019	5	Cut	Narrow linear	-
5020	5	Deposit	Natural	1.98m +
6000	6	Layer	Tarmac	0.00 - 0.10m
6001	6	Layer	Rubble overburden	0.10 - 0.56m
6002	6	Structure	Cellar wall	0.56 - 1.60m
6003	6	Structure	Cellar wall	0.56 - 1.60m
6004	6	Structure	Cellar wall and chimneys	0.56 - 1.60m
6005	6	Structure	Cellar wall (External)	0.56 - 1.00m +
6006	6	Structure	Cellar wall (External)	0.56 - 1.00m +
6007	6	Structure	Cellar wall and chimneys	-
6008	6	Structure	Sandstone floor in South-west cellar	1.60 - 1.70m
6009	6	Layer	Levelling layer	1.70 - 1.90m
6010	6	Deposit	Natural	1.90m +
6011	6	Deposit	Clinker deposit	0.56 - 1.00m +

Context No	Trench No	Category	Description	Depth
6012	6	Deposit	Rubble fill of cellars	0.56 – 1.60m
7001	7	Layer	Tarmac	0.00 - 0.05m
7002	7	Layer	Rubble overburden	0.05 - 0.22m
7003	7	Deposit	Silt above cobbles ***7004***	0.22 - 0.32m
7004	7	Layer	Cobble Surface	0.32 - 0.47m
7005	7	Layer	Cobble Surface	0.22 - 0.47m
7006	7	Structure	Main toilet block	0.22 - 0.97m
7007	7	Structure	Room	0.22 - 0.47m
7008	7	Structure	Room	0.22 - 0.47m
7009	7	Structure	Toilet block	0.22 - 0.47m
7010	7	Structure	Wall	0.05 - 0.22m
7011	7	Deposit	Rubble fill of ***7006***	0.22 - 0.97m
7012	7	Layer	Loose clinker and gravel levelling	0.97 - 1.25m
7013	7	Layer	Mortar and brick levelling	1.25 - 1.35m
7014	7	Layer	Dark brown levelling	1.35 - 1.70m
7015	7	Deposit	Upper buried soil	1.70 - 2.15m
7016	7	Deposit	Mid buried soil	2.15 - 2.30m
7017	7	Deposit	Lower buried soil	2.30 - 2.50m
7018	7	Deposit	Natural	2.50m+
8001	8	Layer	Tarmac	0.00 - 0.06m
8002	8	Layer	Rubble overburden	0.06 - 0.56m
8003	8	Deposit	Silt above cobbles ***8004***	0.56 - 0.66m
8004	8	Layer	Cobble surface	0.66 - 0.86m
8005	8	Structure	Room	0.56 - 0.86m
8006	8	Structure	Room	0.56 - 0.86m
8007	8	Structure	Room	0.56 - 0.86m
8008	8	Modern	Drain	-
8009	8	Deposit	Dark soil below modern features	0.86 - 1.61m
8010	8	Deposit	Levelling deposit	1.61 - 2.01m
8011	8	Deposit	Fill of posthole ***8012***	2.46 - 2.72m
8012	8	Cut	Posthole	-
8013	8	Deposit	Fill of linear ***8014***	2.46 - 2.65m
8014	8	Cut	Linear	-
8015	8	Deposit	Fill of linear ***8016***	2.46 - 2.54
8016	8	Cut	Linear	-
8017	8	Deposit	Fill of linear ***8018***	2.46 - 2.71m
8018	8	Cut	Linear	-
8019	8	Deposit	Fill of linear ***8020***	2.46 - 2.56m
8020	8	Cut	Linear	-
8021	8	Deposit	Upper fill of linear ***8023***	2.46 - 2.61m
8022	8	Deposit	Lower fill of linear ***8023***	2.61 - 2.87m
8023	8	Cut	Linear	-
8024	8	Deposit	Fill of linear ***8025***	-

Context No	Trench No	Category	Description	Depth
8025	8	Cut	Linear	-
8026	8	Deposit	Buried soil	2.01 - 2.46m
8027	8	Deposit	Natural	2.46m+