



Judges' Lodgings, Lancaster, Lancashire

Archaeological Excavation



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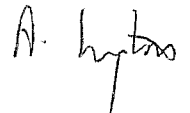
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SUMMARY

Lancashire County Council Property Service Group proposed to undertake a programme of remedial works to the western boundary wall to the rear of Judges' Lodgings, on the east side of Castle Hill, Lancaster, Lancashire (centred NGR SD 47448 61875), comprising the removal of a garage, the construction of three stone buttresses and the rebuilding of the top section of the wall. Judges' Lodgings may well be the oldest surviving townhouse in Lancaster and is a Grade I listed building, recognising that it is of exceptional interest and national importance.

In response to this proposal, Lancashire County Archaeology Service requested a programme of archaeological works. This comprised the archaeological excavation of three trenches for the new buttress foundations and monitoring during the removal of the concrete floor slab of the garage, followed by archaeological cleaning and recording. Oxford Archaeology North (OA North) undertook the required archaeological work over 16 days, from 3rd - 24th August and 30th October 2012.

The site is situated within an area of considerable archaeological potential, originally being the site of both the original, and the expanded, Roman fort, and on the projected line of the fourth century fortifications. Investigations during previous remedial works on the site, immediately to the south of the current works, carried out by OA North in 2003-4, encountered significant Roman material, whilst a recent geotechnical investigation, ahead of the current remedial works, comprising three test pits excavated against the boundary wall, identified sandstone cobbles and boulders.

The excavation revealed floor surfaces in each of the three trenches, a drain running parallel to the wall in Trenches 1 and 3, and a trough and small wall in Trench 1. These features appear to belong to a small building shown on an early map of the site, which probably dates to the same period of construction as the Judges' Lodgings in the early seventeenth century. This building appears relatively short-lived, on the basis of the cartographic and artefactual evidence, being demolished by the latter part of the century.

The excavation also produced evidence to suggest that the current boundary wall may have been constructed in at least two phases; the earlier phase being the northern portion revealed in Trenches 1-3, the latter revealed in the previous phase of remedial works.

The lack of any Roman features during the excavation is somewhat surprising, given the concentration of Roman remains discovered during the previous phase of remedial works, and appears to suggest a fairly significant truncation during the construction of the seventeenth century building identified during the current excavation, although as the two areas investigated were not contiguous, this remains unproven.

The current excavation has produced regionally-significant evidence of a seventeenth-century building associated with Judges' Lodgings, which merits publication, preferably alongside the results of the previous phase of remedial works. The local journal, *Contrebis*, is the obvious location for this publication.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to thank Gary Stoll of Lancashire County Council for commissioning the project, and Peter Iles, Specialist Advisor (Archaeology) for Lancashire County Council, for his advice and suggestions on site. The help and assistance provided by the staff of Colin Briscoe Construction, particularly Tony Butts, Kevin Dodgson and Robert Briscoe, is also gratefully acknowledged.

The excavation was undertaken by Paul Clark and Mike Birtles. The animal bone was assessed by Andrew Bates, and the rest of the finds by Chris Howard-Davis. The illustrations were compiled by Mark Tidmarsh. Paul Clark wrote this report; it was edited by Emily Mercer, who also managed the project.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 Lancashire County Council Property Service Group (LCCPSG) proposed to undertake a programme of remedial works to the western boundary wall to the rear of Judges' Lodgings, on the east side of Castle Hill, Lancaster. The boundary wall is approximately 4m high, and is shared with residential property higher up the slope to the west (Fig 1; Plate 1). The lower 1.5m of the wall retained the gardens to the adjacent properties, which was deteriorating and required support. The remedial works involved the removal of a late twentieth century garage within the north-west corner of the rear garden area, which acted as a support to the wall, and the construction of three stone buttresses and their associated foundations. The top section of the boundary wall was also removed and rebuilt using the existing stones, together with other repair works.
- 1.1.2 The site is situated within an area of considerable archaeological potential, originally being the site of the Roman fort. Investigations during previous remedial works on the site, carried out by OA North in 2003-4 (OA North 2009), encountered significant Roman material, whilst a recent geotechnical investigation to inform the current remedial work (LCC 2012), comprising three test pits excavated against the boundary wall, identified sandstone cobbles and boulders.
- 1.1.3 Lancashire County Archaeology Service (LCAS) requested that a programme of archaeological works be carried out during the remedial works, comprising the excavation of the buttress foundation trenches under archaeological conditions, and archaeological monitoring during the removal of the concrete floor slab of the garage, followed by archaeological cleaning and planning of any features revealed. LCCPSG requested that Oxford Archaeology North (OA North) submit a project design (*Appendix 1*) for this required programme of archaeological work; following its acceptance, OA North were commissioned and undertook the site work over 16 days, from 3rd - 24th August and 30th October 2012.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The site is located within the rear garden of Judges' Lodgings, on the east side of Castle Hill (centred NGR SD 47448 61875; Fig 1), which lies on the south bank of the River Lune, and rises to a maximum height of 25m above the river. The natural strength and strategic importance of the site has been recognised from at least Roman times, when a fort was established there. On the bluff to the east, an extramural settlement was established during the Roman period (Shotter and White 1990, 32-3), and this area also formed the focus of the later medieval town. It is known that narrow terraces were constructed on the north-east slopes of Castle Hill in the eighteenth century (Potter *et al* 1988, 31), although the full extent to which Roman military engineers had previously altered the topography of the hill has yet to be established.

- 1.2.2 The solid geology of Lancaster consists predominantly of Silesian (Upper Carboniferous) grey-brown or reddened, medium to coarse-grained sandstones of the Pendle Grit Formation, which is part of the Millstone Grit Group (British Geological Survey 1992). These sandstones are thickly bedded with thin siltstone partings, and with mixed sandstone/siltstone units near the top. The drift geology within the study area comprises glaciofluvial sheet deposits of clayey sands and gravels (*op cit*).

1.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 1.3.1 **Prehistoric period:** whilst a sparse distribution of Neolithic and Bronze Age finds, including pottery, flint tools and some Bronze Age burials, is known from the modern city (White 1988; Shotter and White 1990, 5), there is currently no evidence for Iron Age activity at Lancaster, although late prehistoric settlement in Lancashire as a whole has proved extremely difficult to recognise archaeologically (Haselgrove 1996, 62). That Castle Hill may have been a favoured location for prehistoric settlement seems possible, in view of its natural strength, but the chance discovery of a Bronze Age palstave currently represents the only evidence for pre-Roman activity on the hill (White 1988, 207). At the beginning of the Roman period, Lancaster may have lain, politically, within the territory of the Brigantes, a tribe, or possibly tribal confederation, extending over most of what is now northern England (Shotter and White 1990, 17; Shotter 2004, 2-3).
- 1.3.2 **Roman period:** the evidence available suggests that the Roman military established an auxiliary fort on Castle Hill in the late first century AD, above the lowest fording point of the River Lune (Jones and Shotter 1988). The precise date at which the fort was established is unclear, although coin evidence (Shotter 2001, 7) suggests it may have been founded during the governorship of Petillius Cerialis (AD 71-4), a period when the Roman army was undertaking the subjugation of the Brigantes and the occupation of their territories through the construction of an extensive network of forts and roads. The primary fort garrison is not known, though a 500-strong cavalry regiment, the *ala Augusta*, is known to have been stationed at Lancaster sometime during the late first-early second century (Bull 2007), and the fort was certainly large enough to have accommodated a unit of this type from the outset.
- 1.3.3 After a possible short phase of abandonment towards the end of the first century AD (Shotter 2004, 44), the fort was rebuilt with a stone-fronted rampart at the beginning of the second century (Shotter and White 1990, 21-2) and was enlarged considerably, either at this time or possibly slightly earlier (*op cit*, 21). Structural evidence for second- and third-century occupation is slight; however, numismatic evidence suggests that a further episode of abandonment, probably related to the Antonine reoccupation of southern Scotland in the early AD 140s (Shotter and White 1995, 22), was followed by reoccupation (albeit possibly at a reduced level) in the second half of the second century (*op cit*, 22-3). An inscription of the AD 260s recording the rebuilding of a bath-house and a basilica by the *ala Sebosiana* indicates that the fort was again garrisoned by cavalry at this time. The fact that the reconstructed buildings are described as having collapsed through old age suggests that the site may have been demilitarised for some time prior to the refurbishment (Jones and Shotter 1988, 208-9), unless this phraseology was an euphemism for destruction by enemy action (Shotter 2001, 11). What was probably the fort bath-house was partly

exposed in the early 1970s at Mitre Yard, immediately east of the fort defences (Jones and Shotter 1988).

- 1.3.4 During the first half of the fourth century, perhaps around AD 330-40, a major new fortification was constructed on the site of the earlier forts. This was enclosed by massive stone walls incorporating projecting bastions. The upstanding stub of masonry in the northern Vicarage Field, known as the Wery Wall, represents the remains of one such bastion on the north wall (Shotter and White 1990, 23). Although details remain unclear, this installation was perhaps similar in type to the Saxon Shore forts of the south-east coast, and to contemporary installations at Caer Gybi (Anglesey), Caernarfon and Cardiff on the Welsh coast (*op cit*, 26; 1995, 78-9), which were built in response to developing sea-borne threats in the later Roman period. What little evidence there is concerning the late Roman defensive perimeter suggests that Judges' Lodgings lies close to the projected line of the south wall (Jones and Shotter 1988). If current interpretations of the very limited evidence are broadly correct, the part of the site investigated in 2002-4 (OA North 2009) would have lain just outside the southern defences, c 55m south-west of the putative south gate, the possible remains of which were recorded under salvage conditions at the southern end of the Mitre Yard site in the early 1970s (Leather 1988). It has been suggested that Lancaster may have been garrisoned at this time by the boatmen or bargemen (*numerus Barcariorum*) recorded on an altar found at Halton, although the style of the inscription might indicate that this unit was present during the second or third century (Shotter and White 1990, 29-30; Shotter 2001, 13). Numismatic and ceramic evidence suggests that intensive occupation of the site continued into the late fourth or early fifth century at least (Shotter and White 1990, 27; Shotter 2001, 27).
- 1.3.5 In common with other forts in Britain, it seems likely that a civil settlement was established outside the primary fort at Lancaster within a few years of the arrival of the Roman army (Sommer 1984, 11), but there is as yet little firm evidence for settlement before the very late first century or early second century (Shotter and White 1990, 32, 36; Howard-Davis *et al* in prep). Precisely where the earliest elements of the Lancaster settlement lay remains unclear, although it seems likely that the settlement originated as ribbon development along the road leading from the fort's east gate, the line of which is followed by modern Church Street (Shotter and White 1990, 32, 36). The limited evidence available suggests that the settlement's focus lay principally on Church Street, extending from China Street on the west (immediately outside the fort's eastern defences) eastwards to Cheapside (Shotter 2001, 16). To the north it may also have extended along a road leading from the north gate of the fort to the River Lune (Shotter and White 1990, 32, 37-8). Archaeological evidence suggests that the settlement flourished during the second and third centuries, before suffering a decline during the fourth century (Shotter 2001, 20, 27; 2004, 162). The precise situation is uncertain, however, as in many areas the latest Roman levels have been destroyed by post-medieval cellars (Shotter 2001, 20, 27).
- 1.3.6 **Early medieval period:** archaeological evidence for activity on Castle Hill in the immediate post-Roman period is extremely slight, being based largely upon isolated chance finds, but it is conceivable that settlement persisted during the fifth to seventh centuries AD. Certainly, elements of the late Roman stone-built fort, including the Wery Wall, which survives to this day, must have remained upstanding throughout this period. A

reference in the foundation charter of the medieval priory, established in 1094, to a veteri muro ('from the old wall') suggests that elements of the fort defences stood sufficiently high to be used as a boundary in the late eleventh century (White 2001, 33). Several fragments of early medieval stone crosses, found when the north wall of the priory church was demolished in 1903 (*op cit*, 34), including pieces in Anglian and Scandinavian styles and a number with inscriptions, suggest the existence of a monastic establishment on Castle Hill from at least the eighth century to the tenth century (Newman 1996, 98). The discovery of a hoard of mid-ninth-century Northumbrian stycas in the same area in 1914 (Edwards 1988, 223) also points to activity during this period. More widely, place-name evidence suggests that the region may have been home to an ethnically mixed population during this period, including people of Norse descent (Penney 1981, 13; Newman 1996, 95).

- 1.3.7 The precise location of the early medieval religious establishment on Castle Hill is not known, but it is likely to have been in the vicinity of the later priory church. It may be significant that the Domesday Survey of 1086 records two independent villis of the manor of Halton, Loncastre and Chercaloncastre (Church Lancaster). It has been suggested (White 2001, 35), that these were not necessarily two geographically discrete places, but may have represented a division between religious and secular ownership that occurred during the early Norman period. There is no good reason, though, why this clearly defined dual focus of settlement should not have had pre-Norman origins. Following this hypothesis, Chercaloncastre may have been an estate or land holding, quite possibly corresponding to the site of the Roman fort on Castle Hill (which could have retained some residual status long after the end of the Roman period), that was gifted to the church (presumably by a Northumbrian king) at some point in the early medieval period. Loncastre itself may have been a secular settlement associated with, and perhaps dominated by, this religious establishment. If this was the case, the focus of the secular lordship may have lain elsewhere, which would account for the otherwise inexplicable shift, recorded in Domesday of the caput baroniae to the manor at Halton (Faull and Stinson 1986).
- 1.3.8 **Medieval period:** in the late eleventh century, large tracts of north-west England, including Lancaster and the surrounding district, were granted by William I to Roger of Poitou (White 2001). It seems that it was Roger who effectively created the Honour of Lancaster (which subsequently became the County), and also that of Lonsdale, by depriving the manor of Halton of its former status.
- 1.3.9 Throughout the medieval period, as today, Castle Hill was dominated by the Norman castle and the priory. Very little is known of the early history of the castle; it is presumed to have originated during the late eleventh-early twelfth century (White 2001, 42-4; Higham 2004, 146, 207), although expenditure on the castle is not actually recorded until the reign of King John, a century later (White 2001, 44). During the Anarchy of King Stephen's reign (1134-54), Lancaster came briefly under Scottish control, and it is possible that the castle's stone keep was built by David I (Grant 1985), as seems also to have been the case at Carlisle (McCarthy *et al* 1990, 119-20). The priory was founded, or re-established, by Roger of Poitou in 1094, presumably in the vicinity of the earlier religious establishment (Jones and Shotter 1988). It is noteworthy that the castle appears to have been constructed

wholly or largely within the presumed defensive circuit of the earlier Roman forts, but seemingly failed to reference the reoriented ground plan of the fourth-century installation, although elements of this were clearly still standing at this time (*Section 1.3.6*).

- 1.3.10 The medieval town appears to have developed rapidly after the granting of a borough charter in 1193 (*ibid*), which encouraged the establishment of full urban functions, including a weekly market. There is some evidence that the layout of the town was influenced by that of the Roman extramural settlement, as suggested particularly by the alignment of Church Street (Penney 1981, 12), which implies some continuity of settlement and town planning. As is typical of many towns of the period, the land flanking the streets was subdivided into individual burgage plots (Jones and Shotter 1988). In the older parts of the town, some of these may also have had Roman origins, since excavations on Church Street demonstrated that medieval plots respected the line of underlying Roman boundaries (Howard-Davis *et al* in prep). However, the prosperity of medieval Lancaster may not have been maintained throughout the period. A devastating Scottish raid in 1322, followed in the late 1340s by the arrival of the Black Death, may well have dealt severe economic blows to the town (White 2001, 66-8), and there are indications that the period from the fifteenth century to the later seventeenth century was one of recession and decay (Penney 1981; White 2001, 73).
- 1.3.11 The site occupied presently by the Judges' Lodgings may have lain within a medieval burgage plot orientated on Church Street, although direct evidence is lacking. The earliest depiction of buildings on the site appears on John Speed's map of 1610 (Speed 1610), where a structure known as the 'Olde Hall' is shown. This building may be the structure that appears in 1314 in a rental of the lands of Thomas, Earl of Lancaster, which records the building of a new house for Sir Robert de Holand (White 2001, 49-50).
- 1.3.12 **Post-medieval period:** the present Judges' Lodgings building dates to the early seventeenth century, and is claimed to be the oldest surviving townhouse in Lancaster (Penney 1981, 24). Its construction may be seen as presaging the prosperity that was shortly to return to Lancaster after the apparent downturn in the town's fortunes during the later Middle Ages (*Section 1.3.10*). The late seventeenth and eighteenth centuries saw the revitalisation of Lancaster, as the port expanded and the shipping trade prospered, particularly with the development of the trade with the West Indies (Schofield 1946). This era was not without its setbacks, however; a fire in 1698, for example, spread along much of Church Street, although this event provided an opportunity for the widespread reconstruction of buildings in stone (Dalziel 2001). The construction of cellars beneath many of these buildings destroyed much valuable archaeological evidence for earlier periods, particularly within the core area of the Roman civil settlement along Church Street.

2 METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 Following a request from LCCPSG, a project design (*Appendix 1*) was submitted by OA North. Following the approval of the project design by LCAS, the archaeological work was undertaken by OA North. All work undertaken complied with the methodology within the project design, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 METHODOLOGY

- 2.2.1 Three foundation trenches for buttresses were excavated by hand in an archaeological manner (Fig 1). To prevent trench collapse and provide safe working conditions, wooden cross-braced shoring was installed once the trenches reached a depth of 1m. The excavation recorded all deposits to the required construction level, in terms of. the position, extent, and character of any surviving archaeological features.
- 2.2.2 Following the removal of the concrete slab in the area of the former garage, an archaeological strip and record exercise was undertaken, comprising hand cleaning and mapping of archaeological features, even though the area of the garage was not subjected to any further impact. This work was undertaken to ascertain the archaeological potential of this area, in line with a request from LCAS.
- 2.2.3 Putative archaeological features and/or deposits identified during the excavation, together with the immediate vicinity of any such features, were cleaned by hand, using either hoes, shovel scraping, and/or trowels, as appropriate and, depending on the subsoil conditions, sections were studied and drawn. All features and associated deposits were either completely excavated, sampled and recorded, or preserved *in situ*.
- 2.2.4 Recording comprised a full description and preliminary classification of features and materials revealed, and their accurate location (either on plan and/or section). Features were planned accurately at appropriate scales. A photographic record in monochrome film and colour digital images was undertaken simultaneously.

2.3 ARCHIVE

- 2.3.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (MAP 2, second edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the project. It will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context. All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists.

- 2.3.2 The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IfA Code of Conduct (2012). OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Lancashire HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects from Lancashire with the County Record Office, Preston. The material archive (artefacts and ecofacts) will be returned to the Judges' Lodgings Museum, as requested by the client.

3 RESULTS

3.1 INTRODUCTION

- 3.1.1 The work undertaken comprised the excavation of three foundation trenches (Fig 1), for new buttresses, against the face of the western boundary wall. The trenches measured 2.4m x 1.2m in plan, with the long side of the trench perpendicular to the wall and the western end exposing the lower levels of the wall. The trenches were excavated to a maximum depth of 2.05m (Trench 1) and displayed broadly similar stratigraphy. The trenches and strip and record area are described individually below (*Sections 3.2-5*), followed by the finds (*Section 3.6*) and an integrated discussion of the results (*Section 4*). The contexts encountered are listed in *Appendix 2*, which includes the equivalent context for those deposits which could be positively identified across different trenches.

3.2 TRENCH 1

- 3.2.1 This was the southernmost trench and was excavated to a maximum depth of 2.05m (Fig 2). The earliest strata encountered was the natural boulder clay, **1013**. This was truncated by a drain, **1011**, adjacent, and running parallel, to the boundary wall (Fig 3), which was rendered to the base of the excavation. The drain was constructed of flat capping stones overlying two rows of stone blocks forming the sides, with the base of the drain comprising flat stones; it contained a large collection of animal bone (*Section 3.6.14-18*). The drain appeared to have suffered a degree of damage at some point in the past, with some of the stones forming the sides of the drain apparently having been pushed out of position; as a result of this the width of the channel as excavated varied from 0.05m to 0.48m. The drain was overlain by a stone trough, **1008**, which measured 1.35m x 0.61m x 0.34m (Plate 2; Fig 4). Towards one end of the trough, a shallow oval depression had been carved (Plate 3), measuring 0.42m x 0.15m. This drained into a channel, carved through the external wall of the trough, although the channel had been filled with lead. The trough was abutting a small wall, **1014** (Plate 4) to the north, which lay outside the extent of the trench, although the southern end of the structure was visible. The wall was 0.8m wide and 0.35m high and aligned north/south. The trough was lifted from the trench (Plate 5), prior to construction of the buttress foundation.
- 3.2.2 The trough was abutted by a clay deposit, **1009**, against the boundary wall and by a layer of sand, **1012**, which appeared to have been laid as bedding material for a cobbled surface, **1007**. The cobbled surface (Plate 6) was located in the eastern part of the trench and mostly comprised well-rounded, water-worn cobbles, averaging 0.15m x 0.1m, although it also contained a number of larger flat slabs. This was sealed by a dump deposit, **1006** (Plate 7), which predominantly consisted of large blocks of sandstone, up to 0.8m x 0.4m x 0.4m, including some large pieces of wall, with the blocks still mortared together. This layer was up to a metre thick, and was overlain by another dump deposit, **1005**, of redeposited natural clay and rubble. This deposit varied considerably in depth, from 0.1m in the south of the trench to 0.55m against the northern edge. This was sealed by a 0.16m thick gravel

deposit, **1003**, which probably represented bedding for a garden path, and was overlain by further bedding material, **1001**, which was 0.2m thick. This was truncated by a cut, **1004**, of unknown function, although it seems likely that this represents a recent geotechnical test pit; this cut was located at the western end of the trench, against the face of the boundary wall, and was 0.9m wide and 0.4m deep. This fill of this feature, **1002**, was sealed by the topsoil, **1000**, which had a maximum thickness of 0.35m.

3.3 TRENCH 2

- 3.3.1 This trench was situated to the north of Trench 1 and was excavated to a maximum depth of 1.9m (Fig 5). Across most of the trench, the earliest feature encountered was a cobbled surface **2011** (Plate 8), although a small area of cobbles was removed in the north-eastern corner of the trench, revealing clay bedding material, **2012**, beneath. The cobbles extended across the majority of the trench, with some flat stones encountered against the boundary wall, which was rendered to the base of the excavation. Beyond the area of cobbles removed, the rest remained *in situ*, protected by a layer of membrane, with the concrete foundation poured on top of them. The cobbles were sealed by a layer of rubble, **2010**, which was 0.2m thick. This was overlain by a further rubble deposit, **2009**, which was up to 0.44m thick. Overlying this a deposit of clay and rubble, **2008**, was encountered, sealed by a very thin deposit, **2007**, predominantly comprising mortar. This was overlain by a layer of redeposited natural clay and rubble, **2006**, up to 0.2m deep, which was itself sealed by a layer of gravel, **2003**, apparently associated with a garden path. Overlying this was a subsoil deposit, **2002**, 0.36m deep, which was sealed by the bedding deposit, **2001**, for the current garden path. This was overlain by the topsoil, **2000**, which had a maximum depth of 0.25m and was truncated by cut **2004**, which was positioned adjacent to the boundary wall and appeared to represent a modern geotechnical test pit.

3.4 TRENCH 3

- 3.4.1 This was the northernmost of the three trenches and was excavated to a depth of 1.95m (Fig 6). The earliest strata encountered was the natural boulder clay, **3011**, which was truncated by a drain, **3009** (Plate 9), similar in nature to that uncovered in Trench 1. This drain was also constructed of two rows of parallel stone sides, 0.1m apart, with the base of the drain comprising flat stones. The drain was covered by large flat stones adjacent to the boundary wall (Plate 10), part of a somewhat rough flagged surface, **3008**, which was constructed of smaller, although still angular, stones further away from the wall (Plate 11), which was rendered to a lesser depth than in the other trenches. The cobbled surface was sealed by a rubble layer, **3007**, which contained a concentration of artefacts and was itself sealed by a mixed rubble deposit, **3006**, containing a fairly high proportion of bricks. This was overlain by a rubble deposit, **3004**, containing a high proportion of roof slate, which was sealed by a layer of redeposited natural clay, **3003**, up to 0.28m thick. This was overlain by the subsoil, **3002**, which was 0.3m thick. Overlying this, was a clinker bed, **3001**, 0.12m thick, for the concrete floor, **3000**, of the former garage and, outside the former garage, topsoil, **3005**.

3.5 STRIP AND RECORD

- 3.5.1 Following the removal of the concrete slab from the former garage at the northern end of the site, which had a maximum impact of 0.15m depth below the existing ground surface, an area measuring 6.5m x 7m was inspected for archaeological remains (Plate 12). Across the entire area deposits of made ground were revealed, which is unsurprising given the minimal impact here, and the depths of made ground deposits encountered within the trenches (*Sections 3.2-4*).

3.6 FINDS

- 3.6.1 In total, 1030 artefacts and ecofacts were recovered from the site. Their distribution, by material is shown in Table 1, below. All were in relatively good condition, with pottery fragments generally large and unabraded, with cross-joins within contexts, suggesting that there had not been a significant amount of disturbance subsequent to deposition.
- 3.6.2 **Pottery:** only two of the 261 fragments of pottery can be regarded as potentially earlier than the late seventeenth century. They are part of a narrow-diameter neck from a vessel in a relatively fine incompletely reduced, green-glazed fabric, which could be of thirteenth-fourteenth-century date. This fragment was from dump deposit **2007**, which also produced late seventeenth to early eighteenth-century manganese speckled ware, and is thus likely to be residual in the context. A fragment of green-glazed Silverdale-type ware from dump **3007** could also be late medieval in date, but fully reduced green-glazed wares in the North West, and the North more generally seem to remain in use into the seventeenth century, and is known from seventeenth-century contexts elsewhere in the city, for instance, Mitchells Brewery in Church Street (Miller and White *fc*).
- 3.6.3 Otherwise it would be reasonable to suggest that the main period of deposition had begun in the second half (possibly the last quarter) of the seventeenth century, a date supported by the vessel glass and the clay tobacco pipe (*Sections 3.6.8-10*). Diagnostic fabrics include Staffordshire slipwares, with a small cup from **2010**, and early blackwares, with a multi-handled cup from **3006**. Tin-glazed wares have a slightly longer currency, remaining in use into the final quarter of the late eighteenth century (Jennings 1981, 187), and there is part of a small plate from dump **1006** (Plate 13). A single fragment of Westerwald stoneware, imported from the early seventeenth century (*op cit*, 123), came from the gravel base of a path (**1001**).
- 3.6.4 Tin-glazed and other eighteenth-century fabrics also came from gravel **1003**, with little to suggest a date later than the third quarter of the century. However, a small fragment of red stoneware, possibly engine-turned, came from gravel **2003**, and probably dates to between c 1750 and 1800.
- 3.6.5 Although largely confined to blackwares and manganese mottled wares, and occasional yellow wares, the pottery from the dump deposits appears to be of exclusively late seventeenth to mid-eighteenth-century date, and reflects the rather more pragmatic side of domestic life, rather than being fine tablewares. An almost complete, if fragmentary, cylindrical storage vessel and most of a manganese mottled chamber pot (Plate 14) came from dump deposit **2010** and presumably reflect the date at which the dump was

accumulating. Nothing from other dump deposits, for example **1006**, **2006**, **2008**, **2009**, **3004**, **3006**, **3007**, would contradict this dating. Manganese speckled ware from redeposited natural clays, **1005** and **3003**, also points to localised ground disturbance around this time.

Context	Pottery	Clay tobacco pipe	Glass	Metalwork	Building materials	Animal bone	Marine shell	Totals
1000	16	4	1	1				22
1001	9	1						10
1002	11	2						13
1003	5	1						6
1005	6					1		7
1006	9	4	1	6	1	9		26
1009						3		3
1010		1				638		2
2000	5		1					6
2001	2							2
2002	10	9						19
2003	1							1
2005		1						1
2006	3					2		5
2007	2	1		1	6	2	3	15
2008	5	4			2	3		14
2009	1			1		3	1	7
2010	148	3	10	3	1	6		172
2011		1						1
2012						5	2	8
3003	1							1
3004	1							1
3005	2	1						3
3006	7	4	4			1		17
3007	17	2	4			2		25
3010						6		
Totals	261	39	21	12	10	681	6	1030

Table 1: Distribution of finds by material

- 3.6.6 Material from the fill (**1002**) of cut **1004** is marginally later than that from the dumps, with creamware and brown stonewares alongside the same range of earlier eighteenth-century fabrics, suggesting a later eighteenth to early nineteenth-century date for the disturbance, although this has been interpreted as being much more recent in date (see paragraph 3.2.1).
- 3.6.7 The latest pottery types were, as might be expected, from topsoils **1000**, **2000**, and **3005**, and included a range of well-known later eighteenth and nineteenth-century fabrics including locally-made black-glazed storage vessels, white salt-glazed stoneware, Creamwares, Pearlwares, Nottingham-type stonewares, Industrial slipwares and refined white earthenwares, some of them transfer-printed. Considered together, these imply domestic deposition from the later eighteenth century and well into the nineteenth-century. The presence in **1000** of part of the handle of a creamware ladle (Plate 15) seems to hint at a relatively high-status household, which is not an unreasonable assumption.

- 3.6.8 **Clay Pipe:** only five of the 39 fragments of clay tobacco pipe were chronologically diagnostic, with bowls from **1000**, **1006** (x2) and **3007**, and a rouletted stem fragment from **2002**. The earliest bowl came from dump deposit **3007**; heeled, and with a blurred stamp (possibly “R”), it can be dated to c 1625-50. A second heeled bowl, stamped “HL”, is from **1006**. It is possibly a Rainford product, dated c 1640-60 (Higgins 2011, 172, fig 77.1) and a second spurred bowl from the same context is probably dateable to c 1690-1710/5 (*op cit* fig 76.2). The rouletted stem fragment (bearing the name “MAT GRENOH”) from **2002** is almost certainly of early eighteenth-century date, and a spurred bowl with leaf decorated seams, from topsoil **1000**, dates to the first half of the nineteenth century.
- 3.6.9 **Glass:** there were 21 fragments of glass. From topsoil **1000** there was a single fragment of probably nineteenth-century window glass, in the form of an incomplete quarry of colourless metal cased in ruby and engraved with a symmetrical floral pattern. It seems most likely to have come from a door or a decorative leaded window. Good quality tablewares came only from dump deposit **3007**, with fragments of two vessels in green ‘Forest glass’, and two in fine colourless metal. The former, one probably from the base of a ribbed beaker, the other from the high foot of a second drinking vessel, could be as early as the sixteenth century in date, with the production of this type of glass beginning in the North in the later sixteenth century (Courtney 2004, 331). The production of fine tablewares in ‘Forest glass’ continued into the later seventeenth century, but after then its use was confined to the production of bottles and phials (*ibid*). A small decorative prunt, effectively a decorative blob applied to the outside of a small vessel, from the same context appears to be in the distinctive greyish metal characteristic of colourless glass of the same period, reflecting attempts to imitate the perfectly colourless ‘crystallo’ imported from Venice (Hurst Vose 2008, 365). A blown stopper of leaded cut glass came from dump deposit **3006**. Leaded glass was patented in the late seventeenth century (*op cit*, 118), but it is likely that this fragment is appreciably later, perhaps dating to the later eighteenth century, a time when Irish lead crystal dominated the market, and fragments of Irish glass were recovered during earlier excavations at Judges' Lodgings (OA North 2009).
- 3.6.10 The remainder of the glass derives from dark olive green wine bottles, introduced in the late seventeenth century and continuing in production into the nineteenth century (Hurst Vose 2008, 367). Few of the fragments are chronologically diagnostic, but a small neck-fragment from **1006** and body fragments from **2010** point to a late seventeenth- or early eighteenth-century date at the latest.
- 3.6.11 **Ironwork:** there were 11 small fragments of ironwork. Due to the nature of the site, with repeated episode of dumping, it was regarded as unnecessary to submit the fragments for x-ray. Single fragments from topsoil **1000** and dump deposit **1006** in Trench 1 remain unidentifiable, whilst the latter also produced four fragmentary iron nails and one of copper alloy. Further nail fragments were from dump deposits **2007** and **2009** in Trench 2, and a large but featureless bar and two small fragments of sheet were from dump deposit **2010**.
- 3.6.12 **Building Material:** although there was clearly a large amount of building material dumped on the site, little of it was collected, with only seven fragments of brick, two of stone, and a small sample of mortar. The hand-made brick from dump deposit **2007** (Plate 16) is perhaps unusual in the high organic content of the clay (indicated by voids and impressions

of what appear to be straw), perhaps suggesting that they were intended for some specialist use. A large fragment of stone from dump deposit **2010** is clearly architectural, having a deeply rebated depression in one side, but what its purpose is remains unclear. It is possible that it is Roman in date, deriving from the extensive Roman remains that underlie most of the area.

- 3.6.13 **Marine molluscs:** small amounts of cockle and oyster shells were collected, which probably represent food waste.
- 3.6.14 **Animal Bone:** 681 bone and teeth fragments were recovered, weighing c 0.9kg. The material has been divided as bone from drain **1011/3009**, from the buildings phase of the site, and from rubble deposits. Drain **1011/3009** lies at the bottom of the stratigraphic sequence, and rubble deposits towards the top.
- 3.6.15 Identification was completed using reference material held by the author. Reference was also made to Halstead and Collins (1995) and Schmid (1972). The separation of sheep from goat was done following Boessneck (1969), Kratochvil (1969) and Prummel and Frisch (1986). The mandibular tooth wear of sheep and goats was recorded following Payne (1973), Payne (1987), and Grant (1982), and of pig following Halstead (1992). All measurements taken followed those set out in von den Dreisch (1976).
- 3.6.16 Of the 681 bone and teeth fragments, 81 were identified to a species level or low order group. The assessed assemblage is quantified in Tables 2 and 3, below. The sheep/goat category is likely to be predominantly sheep rather than goat, with only relatively small numbers of goat bones disposed of at the site in line with the national norm (Maltby 1981, 161).
- 3.6.17 Generally the bones are in a good condition, being normally fragmented but with limited erosion to their surface. Only one sheep/goat and one pig mandible was recorded from which the age of the animal could be estimated from the wear pattern of the teeth. In addition, five bones had butchery marks upon them and 31 bones were measured, predominantly bird bones from drain **1011/3009**.
- 3.6.18 The animal bone has limited potential for further analysis beyond commenting on the species present. A significant number of bird bones were excavated from drain **1011/3009**, and overall the bone assemblage appears similar to a typical kitchen assemblage, although further work is required to confirm this.

Species	Drain <i>1011/3009</i>	Buildings Phase	Rubble Deposits	Total
<i>Mammal bone</i>				
Cattle			3	3
Pig		2	1	3
Sheep/Goat		1	5	6
Sheep			2	2
Rabbit			1	1
Cattle/Red Deer		1	2	3
Sheep/Goat/Roe Deer		1	1	2
<i>Rattus sp</i>			2	2
Medium Mammal	1		3	4
Large Mammal		1	6	7
<i>Bird bone</i>				
Domestic Fowl		1		1
Domestic/Greylag Goose			1	1
Heron		1		1
Domestic Fowl/Pheasant			1	1
Unidentified Bird			1	1
Total	1	8	29	38
NISP identified to a species level or low order group		5	12	17

Table 2: Number of Individual Specimens (NISP) by species of hand collected bone

Species	Drain <i>1011/3009</i>
<i>Mammal bone</i>	
Cattle	2
Pig	7
Sheep/Goat	1
Deer	1
Rabbit	15
<i>Rattus sp</i>	1
Cat Sized Mammal	18
Medium Mammal	1
Large Mammal	9
Unidentified Mammal	454
<i>Bird bone</i>	
Domestic Fowl	12
Domestic/Greylag Goose	4
Partridge	2
Mallard	10
Teal	1
Woodcock	5
Godwit	1
Snipe	3
<i>Galliform</i>	1
Unidentified Bird	95
Total	643
NISP identified to a species level or low order group	64

Table 3: Number of Individual Specimens (NISP) by species of bone from soil samples

4 DISCUSSION

4.1 INTEGRATED RESULTS

- 4.1.1 The earliest feature encountered on site was the drain (**1011=3009**), observed truncating the natural geology in Trenches 1 and 3. It is almost certain that this would have extended through Trench 2, although this is unproven as this trench was not excavated to the same depth as the others. The large stones identified adjacent to the wall in this trench, however, were similar to those seen in Trenches 1 and 3 covering the drain. There was no direct relationship observed between the drain and the boundary wall, and no obvious foundation cut for the wall observed at the base of the trench; it remains unproven whether the material between drain and wall represented the undisturbed natural geology or whether it had been redeposited. The boundary wall had been rendered, with the render surviving almost to the base of the trench within Trenches 1 and 2; in Trench 3 it did not survive to such depth, although it is unclear whether this is differential preservation, or a genuine difference in the original rendering.
- 4.1.2 The drain was overlain by trough **1008** in Trench 1 and a rough stone floor in Trench 3 (and Trench 2, if the drain was originally positioned here); abutting the trough were the small wall **1014** and the cobbled surface **1007**, which appeared to be the same as **2011** in Trench 2. The stone floor, **3008**, revealed in Trench 3, however, was of much rougher construction than that revealed in the other trenches.
- 4.1.3 Sealing the floor deposits was a series of dump deposits of broadly similar nature across the three trenches; noticeable differences were the large sections of wall identified in Trench 1 and the high concentration of roof tile in Trench 3. These deposits were overlain by the make-up layers and the remains of a garden path, and a concrete garage floor. Two probable geotechnical test pits were also identified.

4.2 CONCLUSIONS

- 4.2.1 No Roman remains were identified during the excavation and, given that the natural geology was exposed in Trenches 1 and 3, it appears that no Roman deposits survive in this area. This is somewhat surprising given the concentration of such finds discovered during the previous phase of remedial works immediately to the south of this site (OA North 2009). Wherein the natural geology was encountered at a height of 23.96m OD in Test Pit 5, the closest area to the current excavation (*op cit*, Fig 7), approximately 0.1m higher than in the current Trench 1. This was directly overlain in Test Pit 5 by 0.45m of intact Roman stratigraphy, to a height of 24.39m OD (*ibid*). At the same level in Trench 1 of the current excavation, rubble deposits, **1006**, **2009**, and **3006** respectively, were exposed, above the cobbled floors.
- 4.2.2 If the Roman stratigraphy originally extended across both excavation areas, then the evidence of the levels suggests significant truncation in the northern part of the garden, covered by the current excavations. Indeed, it is difficult to imagine a situation, with the

possible exception of extensive Roman terracing, that would otherwise account for the archaeology observed.

- 4.2.3 The drain identified in Trenches 1 and 3 was not observed in the previous phase of works; indeed none of the observed structural elements were. There was little in the way of datable finds recovered from these features, although a large collection of animal bone, indicative of kitchen waste, was recovered from the drain. The lack of continuity between the two excavations, combined with the level and finds data, suggests that the remains identified in the current excavation belong to a building that was later in date, but lower in elevation, to the Roman remains to the south. The building, which contained a trough, and associated drain, a low wall and a well-constructed cobbled floor, presumably abutted the boundary wall, with the render on the boundary wall in Trenches 1 and 2 suggesting that this was internal to the structure. Given the probable kitchen assemblage of bones in the drain, and the presence of the stone trough, it seems reasonable to suggest that this structure, to the rear of the garden, was largely domestic in nature, perhaps a place to undertake some of the less pleasant tasks associated with running a significant house, such as the Judges' Lodgings. It is possible that this building is shown on Docton's (1957) reconstructed 1684 plan, shown in the south-west corner of the Judges' Lodgings gardens; this building disappears by Mackreth's 1778 map of Lancaster, which also appears to show the southward extension of the boundary wall.
- 4.2.4 The change in flooring in Trench 3 and the lack of render on the wall in this trench, suggest that this trench may well be outside the building seen in Trenches 1 and 2; this would also fit the cartographic evidence mentioned above. The significantly higher proportion of roofing slate recovered from the dump deposits in this trench perhaps derived from the roof of the now-demolished structure.
- 4.2.5 The finds recovered from the layers sealing the features in Trenches 1-3, suggest that the dump deposits started accumulating during the second half of the seventeenth century, providing a *terminus ante quem* for the demolition of the structural elements, which again agrees with the cartographic evidence. It seems likely, given the cartographic and finds evidence, that this building was built at the same time as the Judges' Lodgings, which was constructed in the early seventeenth century (Penney 1981, 24), surviving for around 50 to 75 years, before being demolished, and covered with a significant depth of material.
- 4.2.6 The base of the boundary wall was observed at approximately 24.22m OD during the previous excavations (OA North 2009, 20; Fig 5), whilst in the current excavation the wall was at least 0.4m deeper, and extended beneath the limit of excavation, at 23.81m OD, again suggesting a difference in levels between the two areas, and that the wall was built in two phases, the earlier in the area of the current excavation, the later in the area of the previous excavation, as suggested by the map evidence. During the previous excavation, an eighteenth-century date was suggested for the construction of the boundary wall (*op cit*, 41); the finds evidence (Section 3.6) from the current excavation suggests a date prior to the later part of the seventeenth century for this construction.
- 4.2.7 The foundations of a levelled east/west-aligned wall, **339**, were revealed at the northern end of the previous excavation (*op cit* 41; Fig 10), which was observed as being contemporary with the boundary wall. These were at least a metre deep, suggesting a

substantial wall, and were constructed of limestone blocks, bonded with white mortar. This material appears very similar to the large fragments of wall encountered within dump deposit **1006**, within Trench 1, and it is possible that they represent the demolished remains of this wall. Given the difference in levels, it seems possible that wall **339** was constructed as a retaining wall for the higher southern part of the garden area, during the construction works associated with the construction of the Judges' Lodgings and the ancillary structure identified in Trenches 1 and 2.

- 4.2.8 In itself, the discovery of the remains of a seventeenth-century building and associated ecofactual remains is certainly interesting, but only of local significance. However, given that this particular building appears to relate to the earliest phase of Judges' Lodgings, which is a Grade I listed building, then the discovery has to be considered at least regionally significant.

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6 ILLUSTRATIONS

6.1 PLATES

Plate 1: General view of site prior to excavation

Plate 2: West-facing view of cobbled surface **1007** abutting trough **1008**

Plate 3: View of trough **1008**, showing channel through external wall

Plate 4: West-facing view of wall **1014**, abutting trough **1008**

Plate 5: View of trough **1008** being lifted

Plate 6: East-facing view of cobbled surface **1007**

Plate 7: West-facing view of large stone blocks within **1006**

Plate 8: South-facing view of cobbled surface **2011**

Plate 9: West-facing view of drain **3009**

Plate 10: West-facing view of western end of flagged surface **3008**

Plate 11: South-facing view of eastern end of flagged surface **3008**

Plate 12: North-facing view of eastern half of strip and record area

Plate 13: Tin-glazed plate from dump **1006**

Plate 14: Chamber pot from dump deposit **2010**

Plate 15: Handle of Creamware serving ladle

Plate 16: Handmade brick from **2007**

6.2 FIGURES

Figure 1: Site location

Figure 2: South-facing section through Trench 1

Figure 3: Plan of drains **1011** and **3009**

Figure 4: Plan of sandstone trough **1008**

Figure 5: South-facing section through Trench 2

Figure 6: South-facing section through Trench 3



Plate 1: General view of site prior to excavation



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Plate 7: West-facing view of large stone blocks within **1006**



Plate 8: South-facing view of cobbled surface **2011**



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Plate 10: West-facing view of western end of flagged surface **3008**



Plate 11: South-facing view of eastern end of flagged surface **3008**



Plate 12: North-facing view of eastern half of strip and record area



Plate 13: Tin-glazed plate from dump **1006**



Plate 14: Chamber pot from dump deposit **2010**



Plate 15: Handle of Creamware serving ladle



Plate 16: Handmade brick from **2007**

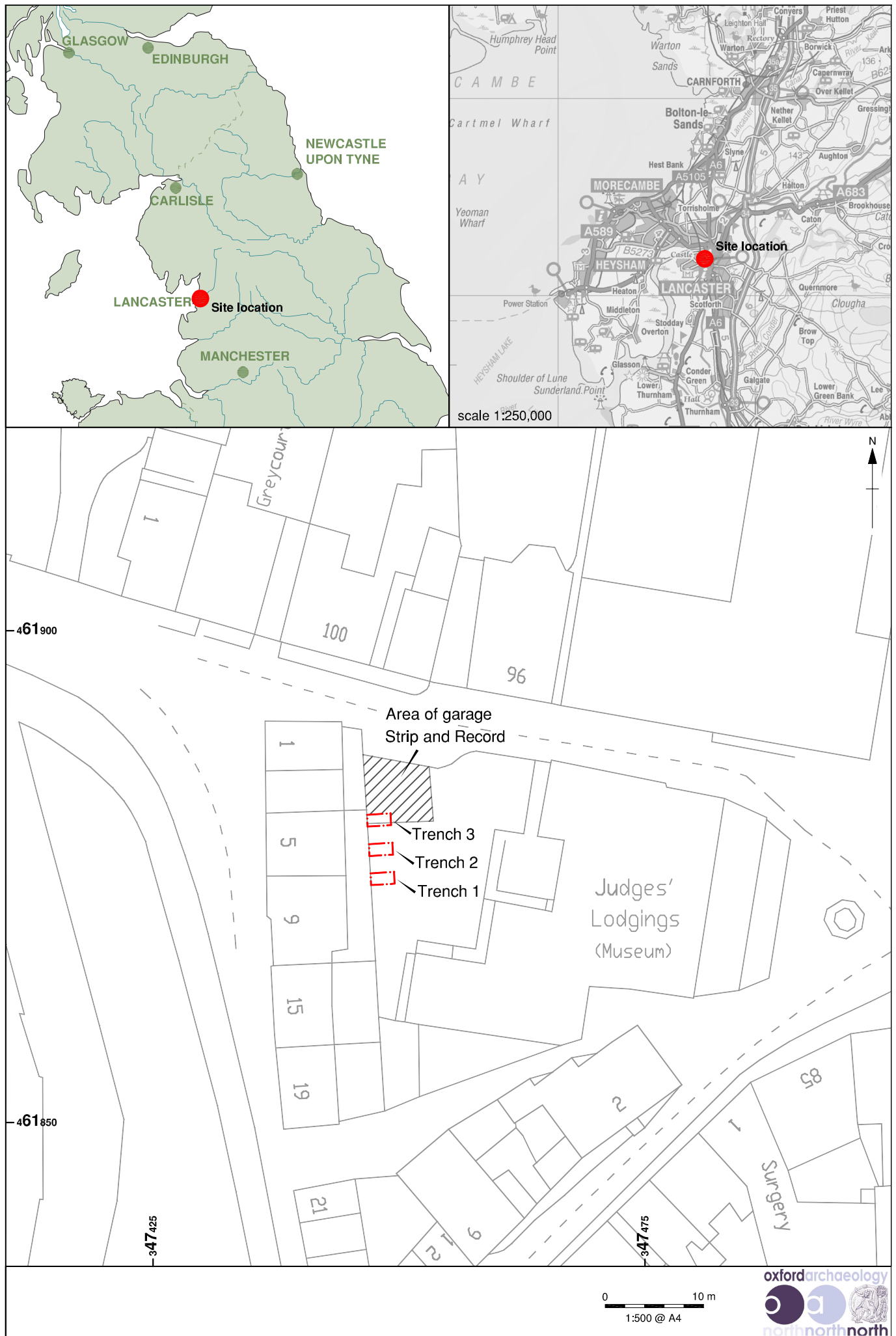


Figure 1: Site location

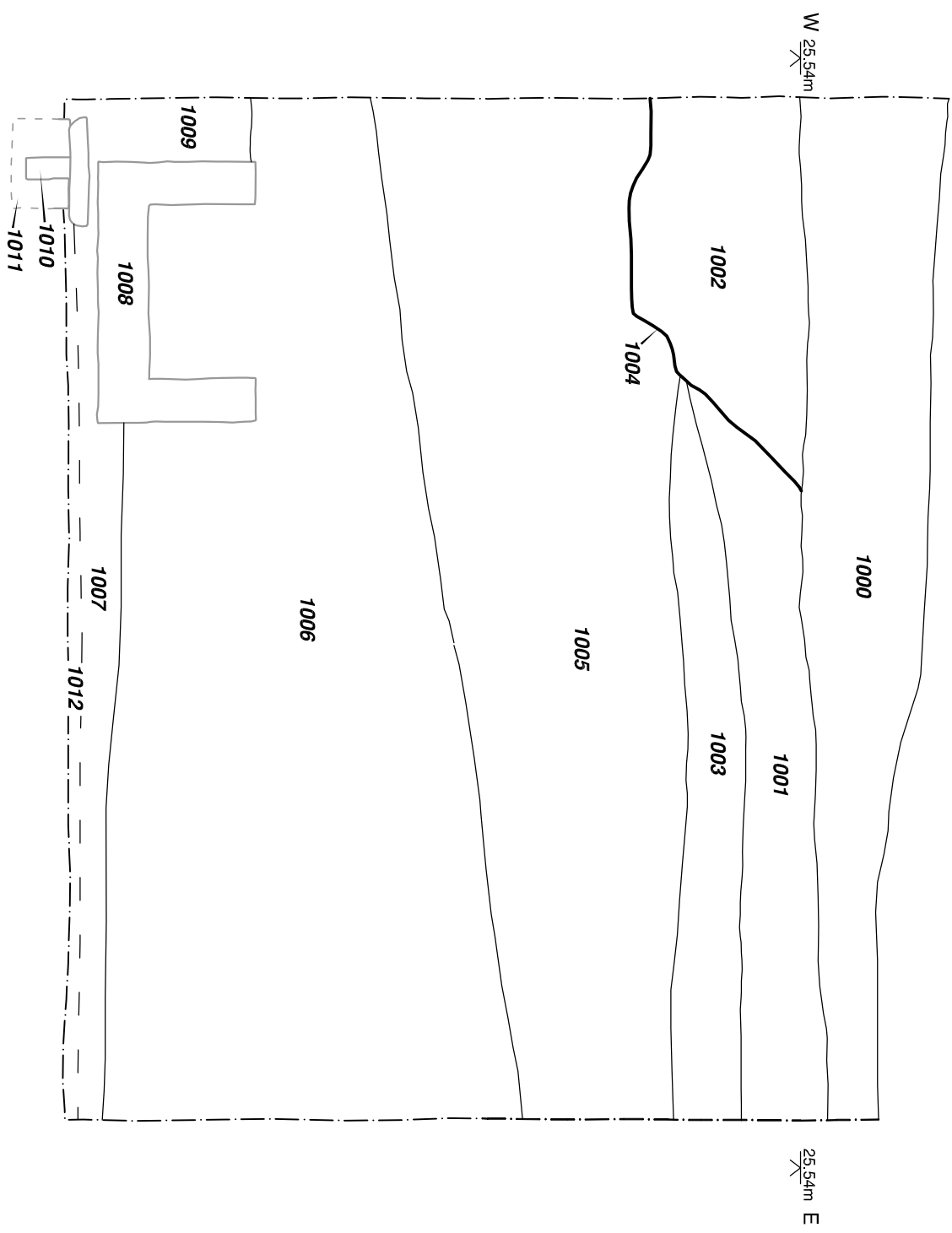


Figure 2: South-facing section through Trench 1

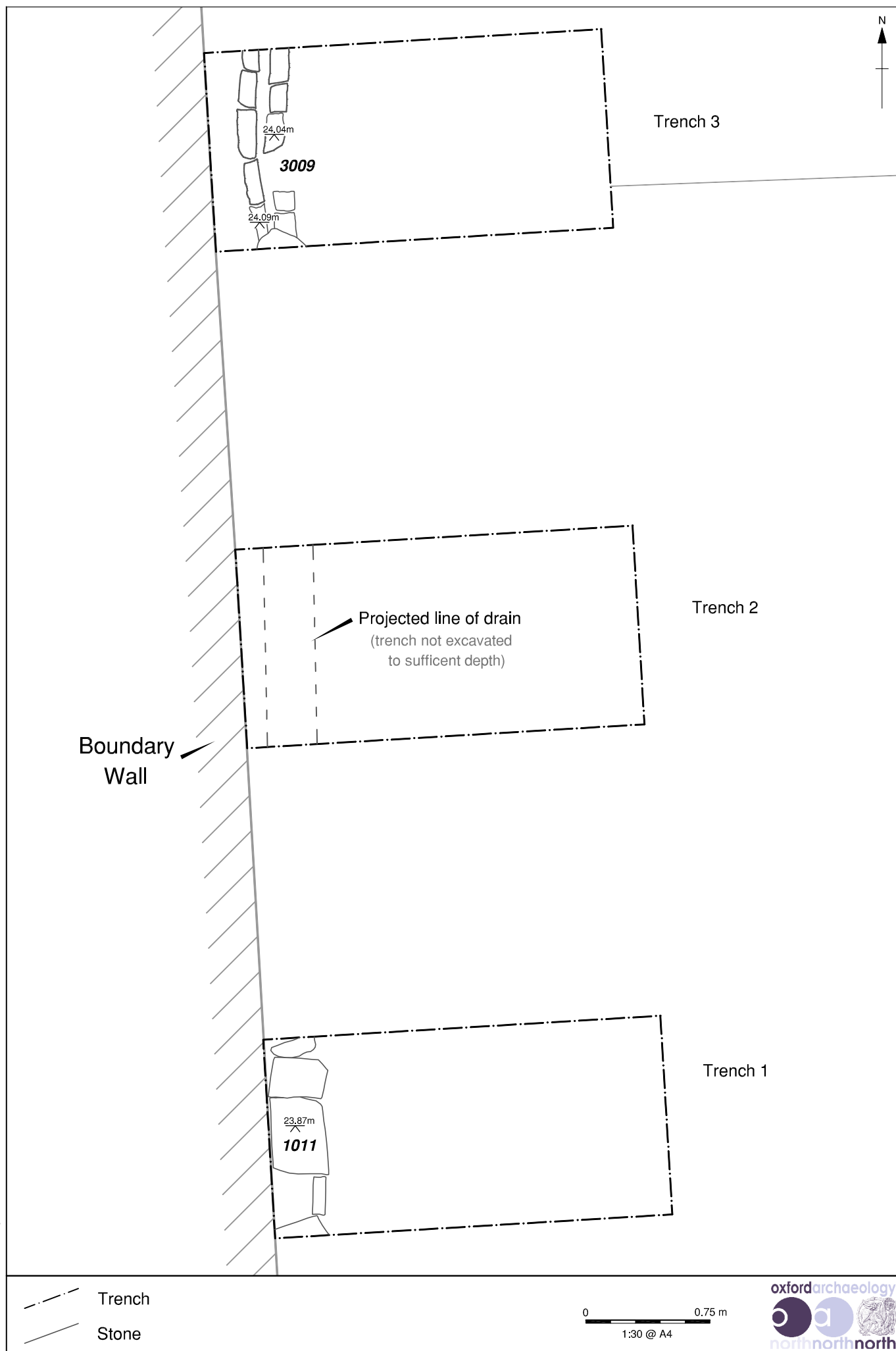


Figure 3: Plan of drains **1011**, and **3009**

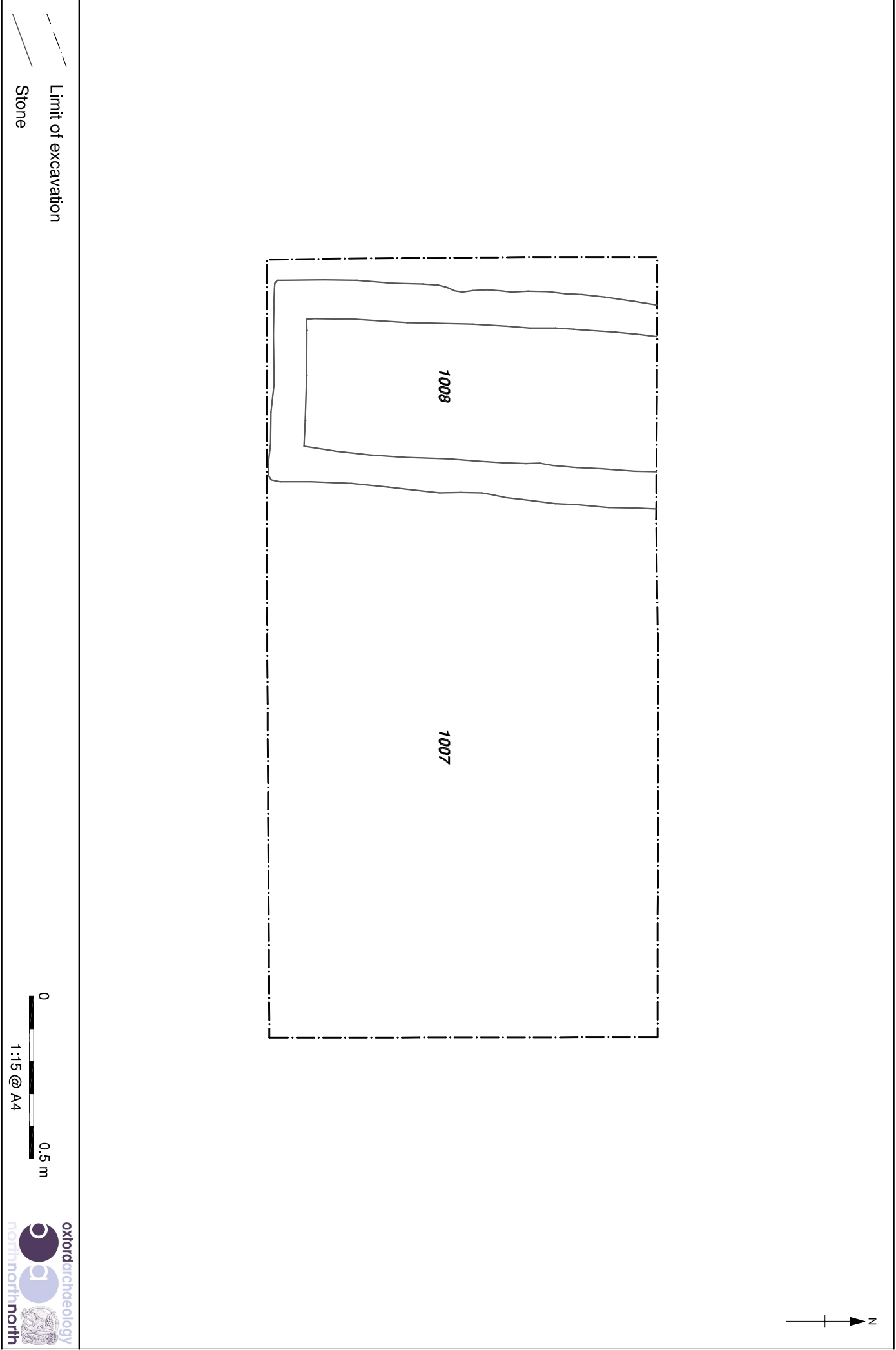


Figure 4: Plan of sandstone trough **1008**, in Trench 1

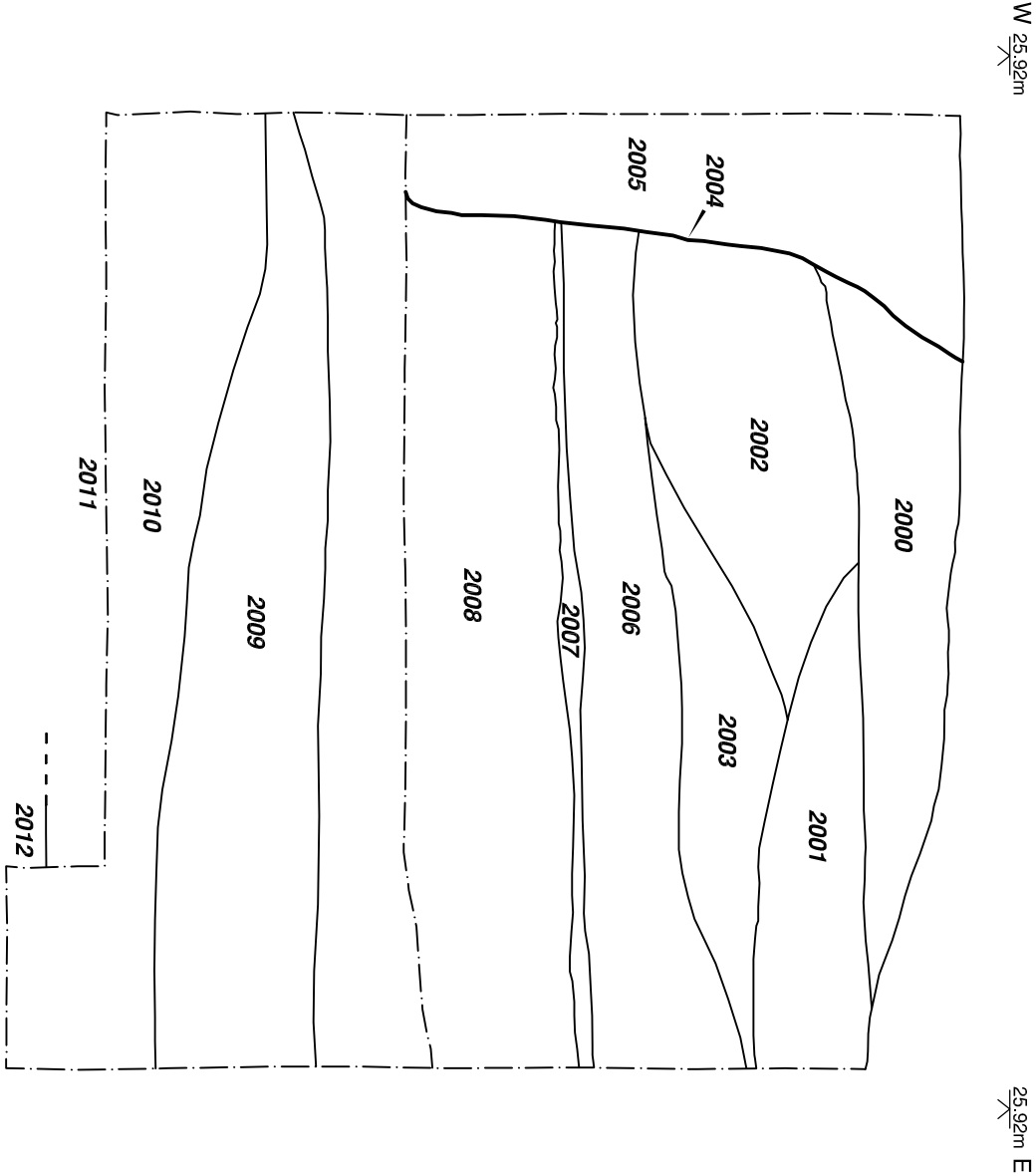


Figure 5: South-facing section through Trench 2

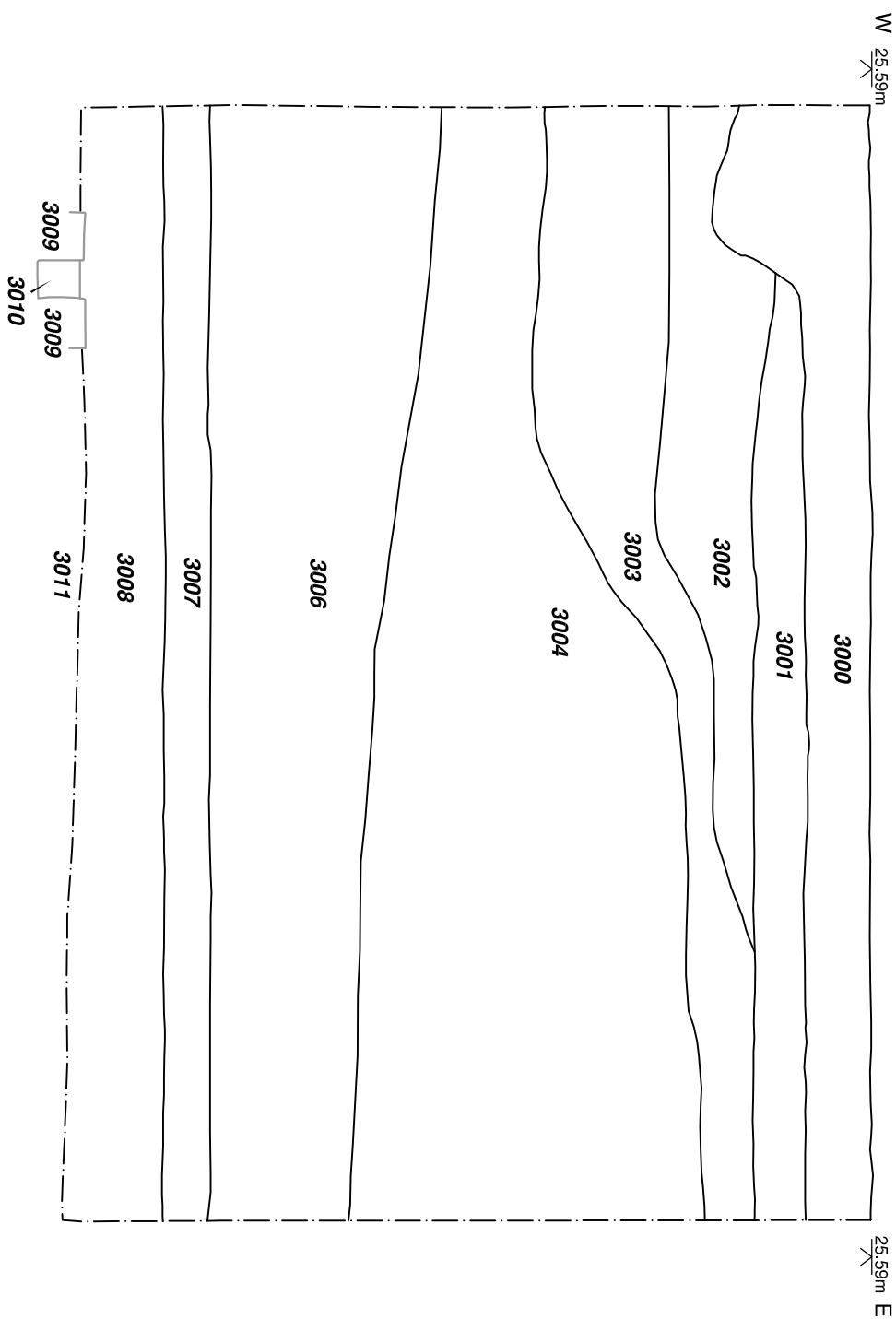


Figure 6: South-facing section through Trench 3

APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Lancashire County Council Property Service Group has requested that Oxford Archaeology North (OA North) submit a project design for a programme of archaeological work that is required in conjunction with remedial works to the western boundary wall to the rear of Judges' Lodgings, on the east side of Castle Hill, Lancaster (centred SD 47448 61875; Fig 1). The boundary wall is approximately 4m high, and is shared with residential property higher up the slope to the west. The lower 1.5m of the wall retains the gardens to the adjacent properties, which is deteriorating and requires support. Approximately ten years ago wooden supports were put into place as a temporary measure. These sit within the rear garden area to Judges' Lodgings, which is currently an overgrown mainly grassed area.

1.1.2 The remedial works will involve the removal of a late twentieth century garage within the north-west corner of the rear garden area, which is currently acting as a support to the wall, and the construction of three stone buttresses and their associated foundations. The top section of the boundary wall will also be removed and rebuilt using the existing stones, together with other repair works.

1.1.3 The site is situated within an area of considerable archaeological potential, originally being the site of the Roman fort. Previous remedial works on the site carried out by OA North in 2003-4 (OA North 2009) encountered significant Roman material. Furthermore, a recent geotechnical investigation, wherein three test pits were excavated against the boundary wall (LCC 2012) under the supervision of the Specialist Advisor (Archaeology) of the Lancashire County Archaeology Service (LCAS), found there to be sandstone cobbles and boulders in two of the test pits (TPs 1 and 3) at 0.9-0.95m depth. This is likely to be structural remains pertaining to the Roman fort. A layer of cobbles was found in TP2 suggesting a relict surface of the same period.

1.1.4 Consequently, LCAS have requested that a programme of archaeological works be carried out during the construction of the buttress foundations. Specifically, in the areas of the foundation trenches for the three buttresses there is a requirement to monitor, under archaeological supervision, the mechanical removal (using a toothless ditching bucket) of the upper soil horizons until the first significant archaeological soil horizon is encountered. In addition, similar monitoring is required during the removal of the concrete floor slab of the garage once it has been broken out, and the removal of any overlying modern overburden. Following the archaeological monitoring of each intervention, excavation of each foundation trench will continue by hand in an archaeological manner by OA North staff, recording and sampling features as they are encountered, until the required construction depth of 1050mm is reached. The precise dimensions of the buttress foundations (concrete cast on top of which the sandstone buttresses will site) will be 2400mm out from the wall, by 1200mm wide. The area of the garage, once the modern deposits have been removed will be archaeologically cleaned and any features revealed will be planned; due to their vulnerability, and requirement to assess their significance in any area of known high archaeological potential, there will be a requirement to investigate and record the features following further consultation with LCAS. Any additional archaeological work will be dealt with in a separate project design.

1.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

1.2.1 Castle Hill lies on the south bank of the River Lune, and rises to a maximum height of 25m above the river. The natural strength and strategic importance of the site has been recognised from at least early Roman times, when a fort was established there. On the bluff to the east, an extramural settlement was also established during the Roman period (Shotton and White 1990, 32-3), and this area formed the focus of the later medieval town.

- 1.2.2 While there is a scattering of prehistoric material from Lancaster (White 1988; Shotter and White 1990, 5), the only evidence from Castle Hill is a Bronze Age palstave (White 1988, 207). The first significant activity on Castle Hill, though was the establishment of a Roman auxiliary fort in the late first century AD, above the lowest fording point of the River Lune (Jones and Shotter 1988). The fort continued to be occupied and modified, at least twice radically, into the late fourth or early fifth century at least (Shotter and White 1990, 27; Shotter 2001, 27). Beyond the fort there is extensive evidence for a civil settlement along the road leading from the fort's east gate, the line of which is followed by modern Church Street (Shotter and White 1990, 32, 36). The limited evidence available suggests that the settlement's focus lay principally on Church Street.

1.3 OXFORD ARCHAEOLOGY NORTH

- 1.3.1 OA North has considerable experience of the excavation of sites of all periods, having undertaken a great number of small and large-scale projects throughout Northern England during the past 30 years. Evaluations, desk-based assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. 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.

2. OBJECTIVES

2.1 INTRODUCTION

- 2.1.1 The following programme has been designed to identify, excavate completely and record any archaeological deposits affected by the proposed development of the site, in order that they can be preserved by record. To this end, the following programme has been designed, in accordance with normal LCAS requirements, to provide an archaeological strip and record. The required stages to achieve these ends are as follows:

- **Archaeological strip and record:** to undertake a programme of observation, excavation and recording during any ground disturbance, to determine the presence, depth, quality, extent and importance of any archaeological remains on the site. Explicitly, this will involve the archaeological monitoring of the removal of topsoil and the hand excavation of archaeologically significant deposits to the required depth;
- **Report and Archive:** a report will be produced for the client within six weeks of completion of the fieldwork. A site archive will be produced to English Heritage (2006) and UKIC (1990) guidelines.

3. METHOD STATEMENT

3.1 STRIP AND RECORD

- 3.1.1 **Methodology:** a programme of field observation will monitor and record the mechanical excavation, using a toothless bucket, of all topsoil deposits in the foundation trenches and area of the garage during groundwork disturbance by the Main Contractor, Colin Briscoe Construction. This work will comprise observation during all ground reduction and excavations for the proposed development, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.
- 3.1.2 Upon encountering the first significant archaeological layer, mechanical excavation will cease and any further excavation will continue by hand in an archaeological manner by OA North staff. The hand excavation will excavate and record all deposits to the required level. This hand excavation will accurately record the location, extent, and character of any

surviving archaeological features and/or deposits within the whole area of the proposed ground disturbance.

- 3.1.3 The strip and record will cover the whole of the area to be disturbed by the proposed works. Although the area of the garage is not intended for any extensive development works, LCAS has requested that this area be investigated in order to ascertain the potential for archaeological remains, and thereafter the extent, nature, date and significance of any remains that may be vulnerable to any subsequent disturbance. Therefore, once stripped and planned, additional consultation will be required with LCAS as to the further investigation.
- 3.1.4 Putative archaeological features and/or deposits identified during the observation of groundworks, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels, as appropriate and depending on the subsoil conditions and sections will be studied and drawn. Any features or associated deposits will be completely excavated, sampled and recorded.
- 3.1.5 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid co-ordinates where appropriate). Features will be planned accurately at appropriate scales. A photographic record in monochrome film and colour digital images will be undertaken simultaneously.
- 3.1.5 A plan will be produced of the areas of groundworks showing the location and extent of the ground disturbance and one or more dimensioned sections will be produced.
- 3.1.6 **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.
- 3.1.7 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. It is anticipated that resultant find assemblage will be deposited with the Lancashire County Museum Service and specifically Lancaster City Museum.
- 3.1.8 **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.
- 3.1.9 **Human Remains:** if any human remains are uncovered, these 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. LCAS 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 licence, under section 25 of the Burial Act of 1857. The removal of human remains will be carried out with due care and sensitivity under the environmental health regulations.
- 3.1.10 **Contingency Plan:** in the event of significant archaeological features being encountered during the strip and record that extend beyond the extent of the foundations, discussions will take place with LCAS as to the extent of any further works to be carried out. All further works would be subject to a variation to this project design. In the event of environmental/organic deposits being present on site, it will be necessary to discuss and agree a programme of palaeo-environmental sampling and or dating with LCAS.

3.2 REPORT AND ARCHIVE

- 3.2.1 **Report:** one bound copy of a written synthetic report, together with a digital copy on CD, will be submitted to the client. In addition, a pdf version of the report on CD will be submitted to the Lancashire HER within six weeks of completion. The report will include:
 - a front cover to include the planning application number and the NGR;

- a site location plan, related to the national grid;
 - the dates on which the fieldwork was undertaken;
 - a concise, non-technical summary of the results;
 - a description of the methodology employed, work undertaken and results obtained;
 - plans and sections at an appropriate scale, showing the location of features;
 - other illustrations and photographic plates showing, as appropriate, features of interest or to demonstrate the absence of archaeological features;
 - the report will also include a complete bibliography of sources from which data has been derived;
 - a copy of this project design as an appendix, and indications of any agreed departure from that design.
 - costed recommendations for appropriate post-excavation assessment works (if required), the results of which will be incorporated into a revised version of the report. Such a programme of assessment might make recommendations for further analysis and publication.
- 3.2.2 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (MAP 2, second edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of all features, finds, or palaeo-environmental data recovered during fieldwork, which will be catalogued by context. All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists.
- 3.2.3 The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IfA in that organisation's code of conduct. OA North conforms to best practice in the preparation of project archives for long-term storage. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Lancashire HER (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects from Lancashire with the County Record Office, Preston. The material archive (artefacts and ecofacts) will be deposited with the Lancaster City Museum following agreement with the client.
- 3.2.4 **Collation of data:** the data generated will be collated and analysed in order to provide an assessment of the nature and significance of the archaeological remains identified.
- 3.2.5 The Arts and Humanities Data Service (AHDS) online database project Online Access to index of Archaeological Investigations (OASIS) will be completed as part of the archiving phase of the project.
- 3.2.6 **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. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

4. HEALTH AND SAFETY AND SITE ATTENDANCES

4.1 RISK ASSESSMENT

- 4.1.1 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). It is assumed that OA North will be inducted into the Main Contractor's Health and Safety Risk Assessment, although OA North will also prepare a task specific risk assessment in advance of any on-site works and copies will be made available on request to all interested parties.
- 4.1.2 It is assumed that the responsibility for ensuring the stability of the wall during the works lies with the client.

4.2 SERVICES AND OTHER CONSTRAINTS

- 4.2.1 Full regard will, of course, be given to all constraints (services etc) during the investigation, as well as to all Health and Safety considerations. It is assumed that the Main Contractor will have obtained all service information, i.e. drawings or knowledge of live cables or services, within the site, prior to excavation, and that this includes scanning the site using a Cable Avoidance Tool (CAT) and Signal Generator.
- 4.2.2 Any known contamination issues or any specific health and safety requirements on site should be made known to OA North by the client or Main Contractor ahead of the fieldwork commencing 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.

4.3 STAFF ISSUES

- 4.3.1 All project staff will be CSCS qualified, proof of which can be provided in the form of CSCS cards.
- 4.3.2 It is assumed that the client or Main Contractor will provide all necessary welfare facilities.

4.4 FENCING REQUIREMENTS

- 4.4.1 It is assumed that there will be no public access to the site during the archaeological investigation. The archaeological groundworks area will be marked by barrier tape if necessary. Any other requirements for fencing at the client's request will be charged as a variation.

4.5 INSURANCE

- 4.5.1 OA North has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

5. OTHER MATTERS

5.1 WORK TIMETABLE

- 5.1.1 **Archaeological Strip and Record:** the duration of this element is dependent upon the duration of any ground-disturbing activities on the site, and subsequent consultation with LCAS.
- 5.1.2 **Report and Archive:** a report will be submitted within six weeks of the completion of the fieldwork, and the archive will be completed within six months.

5.2 PROJECT MONITORING

- 5.2.1 Whilst the work is undertaken for the client, LCAS will be kept fully informed of the work and its results, and will be notified a week in advance of the commencement of the fieldwork.

Any proposed changes to the project design will be agreed with LCAS in consultation with the client.

5.3 SPOIL

- 5.3.1 It is proposed to place the resultant spoil from the excavation of the foundations in the area of the, by then, removed garage, and that the Main Contractor will be responsible for its redistribution or disposal.

5.4 STAFFING PROPOSALS

- 5.4.1 The project will be under the direct management of **Emily Mercer** (OA North Senior Project Manager) to whom all correspondence should be addressed.

- 5.4.2 All elements of the archaeological investigation will be supervised by either an OA North project officer or supervisor experienced in this type of project. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

- 5.4.3 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 project officer). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England. However, she has specialist knowledge regarding glass, metalwork, and leather of all periods, the recording and management of waterlogged wood. She also has published reports from numerous major excavations (eg Buxton and Howard-Davis 200; Howard-Davis 2009).

- 5.4.4 Assessment of any palaeo-environmental samples which may be taken will be undertaken by **Elizabeth Huckerby** (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 and worked on many Roman sites subsequently. Assessment of any faunal material will be undertaken by **Andrew Bates** (OA North project officer).

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APPENDIX 2: CONTEXT LIST

Context	Type	Trench	Interpretation	Equivalent Context
1000	Deposit	1	Topsoil	2000, 3005
1001	Deposit	1	Gravel base for path	2001
1002	Deposit	1	Fill of 1004	
1003	Deposit	1	Brown gravel deposit	2003
1004	Cut	1	Late truncation of unknown function	
1005	Deposit	1	Mixture of rubble and redeposited boulder clay	2006
1006	Deposit	1	Substantial dump deposit, including some very large masonry	
1007	Deposit	1	Cobbled surface	2011
1008	Structure	1	Stone trough	
1009	Deposit	1	Redeposited boulder clay between trough and boundary wall	
1010	Deposit	1	Fill of drain 1011	
1011	Structure	1	Drain	
1012	Deposit	1	Bedding material for cobbled surface 1007	
1013	Deposit	1	Natural boulder clay	
1014	Structure	1	Wall abutting trough 1008	
2000	Deposit	2	Topsoil	1000, 3005
2001	Deposit	2	Garden path	1001
2002	Deposit	2	Subsoil	
2003	Deposit	2	Brown gravel deposit	1003
2004	Cut	2	Cut of geotechnical pit?	
2005	Deposit	2	Fill of 2004	
2006	Deposit	2	Mixture of rubble and redeposited boulder clay	1005
2007	Deposit	2	Dump deposit	
2008	Deposit	2	Mixture of rubble and redeposited boulder clay	
2009	Deposit	2	Dump deposit	
2010	Deposit	2	Dump deposit	
2011	Deposit	2	Cobbled surface	1007
2012	Deposit	2	Bedding material for cobbled surface 2011	
3000	Deposit	3	Concrete garage floor	
3001	Deposit	3	Clinker bedding layer for floor 3000	
3002	Deposit	3	Subsoil	
3003	Deposit	3	Redeposited natural	
3004	Deposit	3	Dump deposit, including some large masonry and large amounts of roof slate	

3005	Deposit	3	Topsoil	2000, 1000
3006	Deposit	3	Dump deposit, containing a fairly high proportion of bricks	
3007	Deposit	3	Dump deposit	
3008	Deposit	3	Flagged surface	
3009	Structure	3	Drain	
3010	Deposit	3	Fill of drain 3009	
3011	Deposit	3	Natural boulder clay	

APPENDIX 3: FINDS CATALOGUE

Context	OR no	Material	Category	No frags	Description	Date
1000	1059	Ceramic	tobacco pipe	3	Two stem, one bowl fragment.	Late eighteenth century?
1000	1067	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
1000	1066	Ceramic	vessel	16	One rim and one body fragment blue-painted pearlware, two joining fragments Creamware ?spoon handle, one body fragment creamware; one body fragment orange printed ?creamware; two body fragments, one over-fired black-glazed ware; one rim fragment plate/dish cream-bodied black-glazed ware; one small body fragment tin-glazed ware; one body fragment self-glazed redware; one body fragment manganese speckled ware; one small fragment yellow-glazed redware; one fragment slip-decorated press-moulded plate, one rim fragment gilded refined white earthenware saucer.	Eighteenth century or later
1000	1075	Glass	window	1	Cased engraved decorative quarry in red and colourless metal.	Nineteenth century?
1000	1074	Iron	object	1	Unidentifiable fragment.	Not closely dateable
1001	1072	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
1001	1063	Ceramic	vessel	9	Two body fragments black-glazed redware; three joining base fragments heavy self-glazed redware vessel; one very thin dark brown-glazed ware; one small fragment Westerwald stoneware; two body fragments refined white earthenware.	Eighteenth century or later
1002	1070	Ceramic	tobacco pipe	2	Stem fragment.	Not closely dateable
1002	1069	Ceramic	vessel	11	Body fragment creamware; body fragment plain white tin-glazed; rim-fragment brown stoneware; body fragment manganese speckled ware; small body fragment black-glazed redware; body and rim fragment unglazed slip-decorated redware; one glazed fragment same; , one coarse yellow ware body; two redware chips.	Eighteenth century or later
1003	1073	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
1003	1071	Ceramic	vessel	5	Two body fragments black-glazed redware; one rim fragment plain white tin-glazed; one body fragment Staffs-type slip decorated ware.	Late seventeenth to late eighteenth century
1005	1076	Bone	animal	1	Cattle metacarpal.	Not closely dateable
1005	1078	Ceramic	vessel	6	One unglazed fragment; two body fragments black-glazed redware; one rim one body fragment manganese speckled ware jar.	Late seventeenth to late eighteenth century
1006	1060	Bone	animal	2	One dom./greylag goose femur, one medium mammal.	Not closely dateable
1006	1058	Bone	animal	7	Six large mammal vertebrae fragments, one bird.	Not closely dateable
1006	1064	Ceramic	tobacco pipe	2	One stem fragment, one bowl.	Eighteenth century
1006	1015	Ceramic	tobacco pipe	2	One stem fragment, one stamped bowl (HL).	Seventeenth century
1006	1016	Ceramic	vessel	3	Small rim-fragment tin-glazed flatware; body fragment black-glazed redware; rim fragment self-glazed redware.	Late seventeenth to late eighteenth century
1006	1065	Ceramic	vessel	1	Body fragment black-glazed redware.	Eighteenth century or later
1006	1077	Ceramic	vessel	5	One body fragment black-glazed redware; one body fragment coarse yellow ware, three fragment (complete profile) small tin-glazed dish or lid.	Late seventeenth to late eighteenth century
1006	1062	Copper alloy	nail	1	Long slender nail with flat round head.	Not closely dateable
1006	1068	Glass	vessel	1	Rim fragment, dark olive green wine bottle.	Early eighteenth century
1006	1061	Iron	nail	4	Nail fragments.	Not closely dateable
1006	1057	Iron	object	1	Unidentifiable fragment.	Not closely dateable
1006	1079	Mortar		1	Small fragment of mortar.	Not closely dateable
1009	1031	Bone	animal	3	One sheep/goat tibia, one pig tibia, one pig femur.	Not closely dateable
1010	0	Bone	animal	637	91 bird, one bird femur, two bird humeri, 16 cat-sized mammal, two cat-sized mammal lumbar vertebra, one cattle metapodial, one cattle phalanx one, one deer patella, two dom. fowl carpo-metacarpi, two dom. fowl humeri, two dom. fowl radii, one dom. fowl scapula, one dom. fowl tarso-metatarsus, three dom. fowl ulnae, two dom./greylag goose coracoids, one	Not closely dateable

Context	OR no	Material	Category	No frags	Description	Date
					dom./greylag goose femur, one dom./greylag goose ulna, one galliform tibio-tarsus, one godwit scapula, nine large mammal, four mallard coracoids, one mallard humerus, four mallard scapulae, one mallard tarso-metatarsus, one medium mammal, two partridge tibio-tarsi, two pig loose tooth, one pig mandible, one pig phalanx two, one pig tibia, two pig ulnae, one rabbit femur, two rabbit humeri, two rabbit pelvises, three rabbit radii, two rabbit scapulae, one rabbit tibia, four rabbit ulnae, one rodentia sp tibia, one sheep/goat phalanx one, one snipe humerus, two snipe tarso-metatarsi, one teal humerus, 444 unidentified mammal, one unidentified mammal coracoid, six unidentified mammal unidentified, one woodcock coracoid, one woodcock humerus, one woodcock scapula, one woodcock tarso-metatarsus.	
1010	1057	Bone	animal	1	Medium mammal.	Not closely dateable
1010	1055	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
2000	1043	Ceramic	vessel	5	One body fragment Ind slipware; one base fragment black-glazed redware, one base fragment refined white earthenware, one fragment early brown stoneware; one handle fragment Pearlware.	Late eighteenth to- nineteenth century?
2000	1044	Glass	vessel	1	Body fragment, dark olive green wine bottle.	Eighteenth century
2001	1039	Ceramic	vessel	2	Joining body fragments self-glazed redware.	Eighteenth century or later
2002	1040	Ceramic	tobacco pipe	9	Stem fragments, one with rouletted stamp MAT GRENOH.	Eighteenth century
2002	1042	Ceramic	vessel	10	Two rim fragments white salt-glazed stoneware bowl and plate; leg of Pearlware statuette; three body fragments self-glazed redware; Base and rim fragment slip-decorated self-glazed redware; body fragment black-glazed redware; body fragment unglazed redware.	Eighteenth century or later
2003	1047	Ceramic	vessel	1	One small fragment red stoneware.	Eighteenth century
2005	1048	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
2006	1002	Bone	animal	2	One cattle/red deer lumbar vertebra, one sheep/goat tibia.	Not closely dateable
2006	1049	Ceramic	vessel	3	Body and handle fragments black-glazed redware; rim fragment tin-glazed ware, mainly dark blue.	Late seventeenth to late eighteenth century
2007	1038	Bone	animal	2	One <i>rattus</i> sp pelvis, one <i>rattus</i> sp femur.	Not closely dateable
2007	1028	Ceramic	building material	4	Handmade brick.	Post-medieval
2007	1035	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
2007	1036	Ceramic	vessel	1	Base fragment manganese speckled ware.	Late seventeenth to late eighteenth century
2007	1030	Ceramic	vessel	1	One fragment narrow diameter neck of fine cream, partially reduced fabric, green-glazed vessel.	Medieval?
2007	1037	Iron	nail	1	Nail fragments.	Not closely dateable
2007	1034	Mollusc	marine	3	Three cockle valves.	Not closely dateable
2007	1043	Stone	building material	1	Slate.	Post-medieval
2007	1029	Stone	building material?	1	Sandstone slab?	Not closely dateable
2008	1046	Bone	animal	3	One sheep/goat humerus, one medium mammal, one sheep/goat/roe deer thoracic vertebra.	
2008	1009	Ceramic	building material	2	Handmade brick.	Post-medieval
2008	1007	Ceramic	tobacco pipe	4	Stem fragment.	Not closely dateable
2008	1008	Ceramic	vessel	5	One rim and three body fragments black-glazed redware; one unglazed fragment redware.	Late seventeenth to late eighteenth century
2009	1045	Bone	animal	3	One pig calcaneus, one cattle phalanx one, one sheep/goat skull - zygomatic arch.	Not closely dateable
2009	1011	Ceramic	vessel	1	One body fragment yellow ware.	Late seventeenth to late eighteenth century
2009	1012	Iron	nail	1	Nail fragment.	Not closely dateable
2009	1010	Mollusc	marine	1	One cockle valve.	Not closely dateable
2010	1018	Bone	animal	3	One sheep calcaneus, one rabbit femur, one medium mammal.	Not closely dateable

Context	OR no	Material	Category	No frags	Description	Date
2010	1027	Bone	animal	3	One sheep tibia, one sheep/goat , one dom. fowl/pheasant tibio-tarsus.	Not closely dateable
2010	1019	Ceramic	building material	1	Handmade brick.	Post-medieval
2010	1017	Ceramic	tobacco pipe	3	Stem fragment.	Not closely dateable
2010	1001	Ceramic	vessel	46	One rim and 45 body fragments black-glazed redware - single vessel.	Eighteenth century??
2010	1000	Ceramic	vessel	102	Late seventeenth to late eighteenth century.	Late seventeenth to late eighteenth century
2010	1041	Glass	vessel	10	Body fragments, dark olive green wine bottles including early body.	Seventeenth century?
2010	1003	Iron	object	3	Large bar and two small fragments of sheet.	Not closely dateable
2011	1033	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
2012	1014	Bone	animal	5	One large mammal, one sheep/goat/roe deer thoracic vertebra, one cattle/red deer femur, one heron humerus, one dom. fowl ulna.	Not closely dateable
2012	1013	Mollusc	marine	2	Two oyster valves.	Not closely dateable
3003	1056	Ceramic	vessel	1	Base fragment manganese speckled ware.	Late seventeenth to late eighteenth century
3004	1032	Ceramic	vessel	1	Rim fragment bowl, self-glazed redware.	Eighteenth century or later
3005	1054	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
3005	1053	Ceramic	vessel	2	One small body fragment Nottingham-type stoneware; one handle fragment black-glazed redware.	Eighteenth century?
3006	1004	Bone	animal	1	Sheep/goat mandible.	Not closely dateable
3006	1024	Ceramic	tobacco pipe	1	Stem fragment.	Not closely dateable
3006	1050	Ceramic	tobacco pipe	3	Stem fragment.	Not closely dateable
3006	1026	Ceramic	vessel	7	Two joining base fragments multi-handled blackware cup; one base two body fragments black-glazed redware; one small body fragment slip-decorated self-glazed redware; one small body fragment Staffordshire-type slipware.	Late seventeenth to early eighteenth century?
3006	1025	Glass	vessel	1	Body fragment, dark olive green wine bottle.	Eighteenth century
3006	1051	Glass	vessel	3	Two body fragments dark olive green wine bottle, one blown colourless (leaded?) stopper.	Eighteenth century or later
3007	1020	Bone	animal	2	One cattle radius, one cattle/red deer.	Not closely dateable
3007	1005	Ceramic	tobacco pipe	2	One stem fragment, one stamped bowl.	Seventeenth century
3007	1052	Ceramic	vessel	3	One base, one handle, one body fragment black-glazed redware.	Eighteenth century or later
3007	1022	Ceramic	vessel	2	One base fragment ?late Silverdale ware - unusual faceted vessel; one rim fragment black-glazed redware.	Late seventeenth century or earlier?
3007	1006	Ceramic	vessel	5	One handle, one body, one base fragment black-glazed redware; one body one base fragment manganese speckled ware.	Late seventeenth to mid-eighteenth century
3007	1023	Ceramic	vessel	7	Five body fragments black-glazed redware, one a cup/handle seating; two small body fragments manganese speckled ware.	Late seventeenth to late eighteenth century
3007	1021	Glass	vessel	4	Base small green blown vessel, raised foot small green vessel; two small body fragments ?colourless, including an applied prunt.	Seventeenth century?
3010	0	Bone	animal	6	One bird ulna, one dom. fowl tarso-metatarsus, one woodcock coracoid, three unidentified mammal.	Not closely dateable