

ARCHAEOLOGICAL
SERVICES
DURHAM UNIVERSITY

on behalf of
Banks Developments

Mount Oswald Golf Course
Durham
County Durham

archaeological evaluation

report 3111
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1. Summary

The project

- 1.1 This report presents the results of an archaeological evaluation conducted in advance of a proposed development at Mount Oswald Golf Course, Durham. The works comprised the excavation of 79 trial trenches.
- 1.2 The works were commissioned by Banks Developments and conducted by Archaeological Services Durham University.

Results

- 1.3 Evidence of ridge and furrow ploughing, in the form of truncated plough furrow bases, was observed in the majority of trenches excavated. Landscaping and drainage features from the development of the modern golf course were also recorded in many of the trenches.
- 1.4 Undated shallow gullies were recorded in Trenches 53 and 13, whilst one sherd of medieval pottery was recovered from a similar gully in Trench 17. All of these features were probably used for groundwater management, or were former stream or drainage channels. A probable terracing ditch was observed in Trench 5, and the heavily-landscaped remains of a possible field boundary found in Trench 36.
- 1.5 Features relating to the development of the grounds of Mount Oswald manor house were exposed by Trenches 15, 16, and 42. Drainage culverts were observed in Trenches 15 and 42, with landscaping and building rubble dumps also recorded in the latter trench. Features relating to the walled garden and the remains of an earlier ha-ha were exposed in Trench 16.

Recommendations

- 1.6 Archaeological recording may be required in relation to groundworks within the vicinity of the walled garden.
- 1.7 No further archaeological works are required in relation to the development of the remainder of the site.

2. Project background

Location (Figure 1)

- 2.1 The site is located at Mount Oswald, Durham, County Durham (NGR centre: NZ 265 405). The site is roughly triangular in plan, and covers an area of approximately 41 ha. To the north is a housing estate and university colleges, with further housing to the south. The eastern and western boundaries of the site are formed by South Road (the A177) and the Darlington Road (the A167) respectively.

Development proposal

- 2.2 The proposal is for a mixed use development comprising dispersed, medium and higher density housing, student accommodation, and associated landscaping and services.

Objective

- 2.3 The objective of the scheme of works was to assess the nature, extent and potential significance of any archaeological resource within the proposed development area, so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in relation to the development.

Specification

- 2.4 The works have been undertaken in accordance with a Written Scheme of Investigation provided by Archaeological Services Durham University (reference DS13.71 revised) and approved by the planning authority. An earthwork survey has also been conducted which has been reported on separately (Archaeological Services 2014).

Dates

- 2.5 Fieldwork was undertaken between the 25th of February 2013 and the 24th of April 2014. This report was prepared for May 2014.

Personnel

- 2.6 Fieldwork was conducted by Janice Adams, Matt Claydon, Paul Murtaugh, Dr Dave Webster, and Mark Randerson (supervisor). This report was prepared by Mark Randerson, with illustrations by Janine Watson and David Graham. Specialist reporting was conducted by Jennifer Jones (conservation and other artefacts) and Dr Charlotte O'Brien (palaeoenvironmental), with sample processing undertaken by Patricia Edwards. The Project Manager was Daniel Still.

Archive/OASIS

- 2.7 The site code is **DMO13**, for **D**urham **M**ount **O**swald 2013. The archive is currently held by Archaeological Services Durham University and will be transferred to the Bowes Museum in due course. The charcoal fragments will be retained at Archaeological Services Durham University. The flots and residues have been scanned in their entirety, with all material of palaeoenvironmental or dating value removed, and have therefore been discarded. Archaeological Services Durham University is registered with the **Online Access to the Index of archaeological investigationS** project (**OASIS**). The OASIS ID number for this project is **archaeol3-179093**.

3. Landuse, topography and geology

- 3.1 At the time of the archaeological works, the proposed development area comprised a golf course with associated greens, bunkers, and other landscaping. Mount Oswald House is surrounded by woods, gardens and designed landscape features.
- 3.2 The proposed development area is on ground which slopes gently from approximately 90m OD in the south-west to around 80m OD in the north-east. The site is located on a plateau of higher ground between the River Browney to the west and the River Wear to the east. The area as a whole is undulating, with predominantly level tables of land interrupted by watercourses, hollows and depressions. A steeply-sided dene crosses the southern end of the site on a roughly east-west orientation, and a densely-wooded footpath divided the northern part of the area on a similar alignment. Two other deep gullies, the routes of former watercourses, cross the site. One lies close to the northern boundary, extending eastwards toward the north-east corner of the study area, whilst the other leads southwards away from the position of the pond next to the walled garden.
- 3.3 The underlying solid geology of the area comprises the Westphalian coal measures overlain by boulder clay and morainic drift.

4. Historical and archaeological background

Previous archaeological works

- 4.1 Several archaeological works have previously been undertaken on the site. Initially an archaeological and cultural heritage assessment (Parker 2007) was carried out, which highlighted the potential for remains to exist dating from the prehistoric period through to the post-medieval period to exist. A subsequent geophysical survey (Hurst 2008) identified possible prehistoric or Roman features, post-medieval field systems, 19th-century gardens and landscaping for the golf course. These were amalgamated, with other projects in the surrounding area, into a document summarising the archaeological works (Archaeological Services 2011b). A brief overview of these results is given here.
- 4.2 There have been several archaeological investigations within the surrounding area: archaeological features have been identified on the site of the former Cock O' The North Public House, to the immediate south of the study area, and at Howlands Farm, directly to the east. Extensive archaeological remains have also been identified at Mountjoy, north-east of the study site (Brogan 2006; Archaeological Services 2009 & 2010), with more exposed during the redevelopment of Durham University Science Site (Archaeological Services 2011a).

The prehistoric period (up to AD 70)

- 4.3 Earlier prehistoric activity is known from the wider landscape surrounding the site. Mesolithic flint tools have been recovered from Old Durham, with Neolithic flintwork found on the University Science Site (Archaeological Services 2011a). A multi-phased enclosure site at Mountjoy (Archaeological Services 2010), to the north-east, may contain features dating from the Neolithic or Bronze Age. Further Bronze Age activity is known at Houghall and Stonebridge. A later prehistoric Iron Age round house and hearth was exposed at Howlands Farm, east of the study site (Proctor 2005), and a possible Iron Age promontory fort has been identified at Maiden Castle.

The Roman period (AD 70 to 5th century)

- 4.4 There is no direct evidence for Roman occupation within the site boundary, although Roman activity is known from the surrounding area. Two Roman roads are thought to pass through Durham: Cades Road is believed to lie approximately 1km to the east of the site, and Dere Street has been exposed by excavations near Stonebridge, to the north-west. A 3rd or 4th century AD Roman settlement has been identified at Mountjoy (Archaeological Services 2010), with another settlement known at Old Durham, to the north-east.

The medieval period (5th century to 1540)

- 4.5 There is no evidence for settlement on the study site during the medieval period, which was probably open moor, although the surrounding area was occupied by several manors during the period. Directly east of the site, ridge and furrow ploughing was identified and medieval pottery recovered at Howlands Farm (Archaeological Services 2004).

The post-medieval period (1541 to 1899)

- 4.6 The area of the study site was known as Elvet Moor from at least the 17th century. Between 1589 and 1597 Durham was affected by plague, and many of the city's poorer residents fled to the moors surrounding the city. It is thought that huts and booths were set up on Elvet Moor, and were still evident just prior to enclosure. Elvet moor was enclosed in 1772 (Page 1928, 32 & 145) and the remains of ridge and furrow earthworks probably dating from this time are present across the majority of the site (Hurst 2008).
- 4.7 In 1800, John Richardby commissioned the construction of Oswald House on the site. The property was bought by the Wilkinsons of Brancepeth in 1806, and became a rental property by 1820. In 1829, Phillip Wyatt was engaged to redesign the renamed Mount Oswald. The present large, L-shaped, two storey building was constructed (Meadows 1990) with an associated pair of matching single-storey pavilions flanking the drive entrance to the south-east. The house was shown on the 1838 tithe map surrounded by outbuildings, lawns, a pleasure ground, and a walled garden.

The modern period (1900 to present)

- 4.8 In 1900 the central parts of the house were destroyed by fire, although the structure was rebuilt and restored. The grounds of Mount Oswald were converted into a golf course in 1928.

5. The evaluation trenches

Introduction (Figure 2)

- 5.1 Trial trenches were excavated across the whole of the site. Trenches were positioned to record sections of the ridge and furrow earthworks, or were targeted on anomalies and potential archaeological features identified by the geophysical survey. Trees or other obstacles meant that several trenches had to be moved from their planned locations, although it was possible to re-position these trenches where they could still investigate the intended earthworks or potential features. A similar natural glacial subsoil [25] was exposed across the majority of the trenches on the site, although this deposit was not uniform and showed a number of localised variations.

Trench 1

- 5.2 Trench 1 was located in the south-west corner of the site, in an area of boggy ground, with the southern end of the trench extending into rough, overgrown scrubland outside the area of the main golf course. It measured 15m x 1.5m, and was orientated north-south. Natural glacial subsoil, [25], was exposed across the base of the trench at a depth of 0.4m. This was a heavily compact stiff to friable silty clay, light yellowish-grey to mid yellowish-brown, with inclusions of frequent small fragments of decayed sandstone. This was overlain by a well-developed subsoil of moderately compact mid brownish-grey clayey silt [24: 0.15 – 0.2m thick]. This was cut through by a single linear field drain, orientated north-east / south-west, containing a ceramic drain pipe. The trench was sealed by a moderately-compact dark greyish-brown clayey silt topsoil [23: 0.2m thick]. The remains of three plough furrows were visible at the northern end of the trench, aligned east-west: these survived as earthworks, with no cuts into the subsoil visible. No furrows were evident to the south, where the ground had clearly been landscaped. No archaeological features were recorded.

Trench 2

- 5.3 This trench was located to the east of Trench 2, parallel with the south boundary of the site. It was orientated east-west, and measured 20m x 1.5m. Natural glacial subsoil [25] was exposed at a depth of 0.3m below ground level, overlain by a well-developed subsoil [24: 0.15m thick]. Four plough furrows, again surviving as earthworks, were visible along the length of the trench, orientated roughly north-south. Toward the west, two sub-square pits were exposed against the north side of the trench, extending out of the excavation area. Each of these pits lay in the base of a furrow. They were clearly modern in origin, cutting through subsoil [24]. A high volume of surface groundwater was visible across the area, mainly lying in the bases of the plough furrows. These pits presumably acted as drainage soakaways for this groundwater, channelling it away from the waterlogged surface. The trench was sealed by a layer of topsoil [23: 0.2m thick]. No archaeological features were recorded.

Trench 3

- 5.4 This trench was located to the east of Trench 2, also parallel with the southern boundary of the site. It measured 20m x 1.5m, and was orientated east-west. At 0.35m below ground level, natural subsoil [25] was exposed across the base of the trench, varying from mid yellow-grey to light brownish-yellow. This was sealed by a layer of subsoil [24: 0.15m thick]. Four furrows were observed surviving as earthworks, running north-south across the width of the trench. Four field drains cut through layer [24]. Each of these was laid along the base of one of the plough furrows, and contained a ceramic drainpipe. The two westernmost drains were bedded onto loose, sub-rounded gravel, used to further aid drainage in the waterlogged soil. These drains were overlain by topsoil [23: 0.2 – 0.24m thick]. No archaeological features were exposed.

Trench 4

- 5.5 Trench 4 lay directly to the north of Trench 3, again orientated east-west. It measured 20m x 1.5m. Natural subsoil [25], a uniform light yellowish-grey without the localised colour variations seen to the south, was exposed across the base of the trench at a depth of 0.35m. This was overlain by subsoil [24: 0.15 – 0.2m thick], and the earthwork remains of four furrows were observed running north-south across

the trench. Two narrow, linear drain cuts were also observed, one truncating the subsoil [24] and cutting into the base of the westernmost furrow, and another toward the eastern end of the trench. These were both French drains, containing loose, sub-rounded medium gravel but no pipe. The trench was sealed by dark grey-brown clayey silt topsoil [23: 0.2 – 0.24m thick]. No archaeological features were observed, and no finds recovered.

Trench 5 (Figure 3)

- 5.6 This trench was located at the south end of the eastern boundary of the site, and was orientated north-west / south-east. The trench was positioned to investigate a series of curvilinear anomalies identified by the geophysical survey. A natural subsoil of light yellow-grey fine silty clay [25] was exposed at a depth of 0.3m. At the north-west end of the trench, this layer was cut by a wide, linear feature [F28: 1.3m wide, 0.4m deep], orientated north-north-east to south-south-west. This cut had moderately sloping sides and a smooth, rounded base, giving a U-shaped profile (Figure 6). It was filled with a deposit of moderately compact mid brownish-grey clayey silt [27], flecked with orange-brown and containing occasional sand and pea grit. This was then overlain by a layer of mid greyish-brown subsoil [24: 0.1m thick], which extended across the whole trench.
- 5.7 Toward the south-east end of the trench, another linear feature was observed, again aligned north-north-east to south-south-west. This feature, however, did not have any discernible separate cut or fill, and appeared to be a hollow preserved as an earthwork, much like the plough furrows encountered elsewhere. Two field drains cut through subsoil [24]. One, at the south-east end of the trench, was orientated north-east / south-west, and contained a narrow ceramic pipe. Toward the north-west end of the trench another, more substantial drain was exposed. This followed roughly the same course as cut [F28], truncating its eastern side, although the two features did not appear to be related. A layer of topsoil [23: 0.2 – 0.25m thick] sealed the trench. No other archaeological deposits were recorded. It is possible that cut [F28] was the remains of a curvilinear ditch, roughly following the natural contours of the ground, possibly associated with terracing activity, or to aid drainage of the ploughed land to the south-west. The hollow encountered may also be associated with this activity, with the feature surviving less well in the slightly higher, flatter ground at the south-east end of the trench.

Trench 6

- 5.8 This trench was orientated east-west, and measured 20m x 1.5m. Natural glacial subsoil [25] was exposed across the whole of the base of the trench at a depth of 0.35m. This was a heavily compact silty clay, light brownish-yellow, but with small localised lenses of light yellow-grey sandy silty clay and patches of stone and gravel. This was covered by a layer of subsoil [24: 0.1 – 0.15m thick], and the remains of four furrow bases were visible, crossing the trench on a north-south alignment. The trench was sealed by a layer of topsoil [23: 0.2 – 0.25m thick]. No archaeological features were observed, and no finds recovered.

Trench 7

- 5.9 This trench was located to the west of Trench 6, and was also orientated east-west. It measured 20m x 1.5m. Natural subsoil was exposed at a depth of 0.35m. This again showed localised variation, containing occasional lenses of light greyish-white mottling and occasional small angular stone fragments. A layer of subsoil [24: 0.15 –

0.2m thick] overlay this deposit. The remains of three furrows were visible in the trench, orientated north-south. A layer of topsoil [23: 0.2m thick] sealed the trench, and no archaeological features were recorded.

Trench 8

- 5.10 Trench 8 lay to the west of Trench 7, close to the edge of a long, linear valley which crossed the south part of the course on a north-east / south-west orientation. The trench followed roughly the same alignment as this valley, and measured 20m x 1.5m. Natural subsoil [25], similar in composition to that observed in Trench 7, was exposed between 0.35m and 0.4m below ground level. This was sealed by a layer of subsoil [24: 0.15 – 0.2m thick], which was in turn overlain by a layer of topsoil [23: 0.2m thick]. The earthwork remains of four furrows crossed the trench, following a north-south alignment. No archaeological features were exposed.

Trench 9

- 5.11 This trench lay to the north-east of Trench 1, in the south-west corner of the site. It was orientated north-south, roughly parallel with the site's western boundary, and measured 20m x 1.5m. A light brownish-yellow silty clay natural subsoil [25] was exposed at a depth of 0.3m across the whole base of the trench. This was overlain by a layer of subsoil [24: 0.1 – 0.15m thick]. Five closely-spaced furrows, surviving as earthworks, crossed the trench on an east-west orientation. The trench was sealed by a deposit of topsoil [23: 0.2m thick], and no archaeological features were observed.

Trench 10

- 5.12 This trench lay to the north-west of Trench 9, closer to the western boundary of the site. Natural subsoil [25] was exposed at a depth of 0.3m below ground level, overlain by a 0.1m – 0.15m thick layer of subsoil [24]. The earthwork remains of five furrows, orientated roughly east-west, were recorded crossing the trench, which was sealed by a layer of topsoil [23: 0.2m thick]. No archaeological features were recorded.

Trench 11 (Figure 3)

- 5.13 Trench 11 lay next to the western boundary of the site, close to the route of the A167, and was positioned to investigate a north-south aligned linear anomaly identified by the geophysical survey. The trench was orientated east-west, and had to be shortened at the western end due to trees and heavy undergrowth along the site boundary: the excavated area measured 14m x 1.5m in total. Natural subsoil [25] was exposed at a depth of 0.3m. This was overlain to the west by a layer of subsoil [24: 0.1m thick]. To the east, however, a different soil was exposed. This deposit [26: 9.4m long, 0.1m thick] lay over a slight ridge of higher ground on the east side of the trench, where a high percentage of fragmented, angular sandstone could be seen in natural subsoil [25]. The deposit itself was a moderately compact, friable mid orangey-brown clayey silt, containing frequent medium fragments of angular stone. It was cut to the west by a shallow, linear gully [F22: 1.4m wide, 0.15m deep] which crossed the trench on a north-south orientation, separating layers [24] and [26] (Figure7).
- 5.14 Gully [F22] had gently sloping sides and a smooth, rounded base. It followed the western side of the slight ridge, and was clearly the origin of the anomaly recorded by the geophysical survey. It was filled by a stiff dark grey clayey silt [21], which

contained very frequent fragments of slate and brick, in addition to sherds of modern pottery and glass. The gully was clearly of recent origin: it may mark the line of a former boundary feature, parallel to the main site boundary. It seems likely that layer [26] was deposited during landscaping of the area, presumably as part of the development of the golf course. Gully [F22] may be related to this activity. Trench 11 was sealed by a layer of topsoil [23: 0.2m thick].

Trench 12

- 5.15 This trench lay to the south of the line of the dene which crossed the south part of the site, close to a wooded area on the western boundary. The original location of the trench was directly across one of the fairways of the course, and so the excavation was moved further to the west. The trench measured 20m x 1.5m, and was aligned roughly north-west / south-east. Natural glacial subsoil was exposed at a depth of 0.32m below the present ground surface. In this area, this deposit [25] was a heavily compact light to mid yellow silty clay, gradually changing to light yellowish-grey to the west, and containing occasional sub-rounded stone. This was overlain by a layer of subsoil [24: 0.12 - 0.2m thick], and four furrows were observed crossing the width of the trench. These furrows again existed as solely earthworks, without any surviving cut or fill deposits, and were aligned roughly north-south. Two gravel-filled French drains, similar to those recorded in Trench 4, were cut through subsoil [24] and into the bases of two of the furrows, and the trench was overlain by a layer of topsoil [23: 0.2m thick]. No archaeological deposits were exposed.

Trench 13 (Figures 3, 8)

- 5.16 Trench 13 was located on steeply-sloping ground on the north bank of the dene, to the north of Trench 8. The trench was positioned to investigate several linear anomalies recorded by the geophysical survey, and was orientated north-north-east to south-south-west. It measured 20m x 1.5m. Natural subsoil [25], containing inclusions of moderate small sub-rounded stone fragments, was exposed across the base of the trench. To the north-east, this was cut through by a shallow, linear gully [F30: 0.6m wide, 0.15m deep] which crossed the trench on a north-west / south-east alignment, following the line of the dene to the south. This gully had moderately sloping sides and a smooth, pointed base, giving it a V-shaped profile: it contained a fill of mottled mid brownish-grey moderately compact clayey sandy silt [29]. This was almost certainly a drainage feature, intended to move groundwater into and along the slightly higher western end of the dene (Figure 8). A layer of subsoil [24: 0.1 – 0.15m thick] lay over gully [F30], and extended across the trench.
- 5.17 At the south-west end of the trench, a wide, gravel-filled drain cut through subsoil [24]. This also lay on a north-west / south-east alignment, following the line of the dene, and was clearly a modern drainage feature. A layer of subsoil [23: 0.2m thick] lay across the whole of the trench. To the north, this was cut through by a very modern drain which partially truncated the western end of gully [F30]. This drain was linear, aligned north-west / south-east, and was sealed only by a layer of turf. The narrow, steeply-sided cut was lined with geofabric and filled with a fine, pink sand, presumably designed to move groundwater into the dene by capillary action. No other features were exposed.

Trench 14

- 5.18 Trench 14 lay on a small area of low-lying ground on the north bank of the dene, close to the south-eastern boundary of the site. It was orientated north-west /

south-east, and measured 14.5m x 1.5m. The natural subsoil [25] was exposed at 0.37m below ground level. This was overlain by a deposit of subsoil [24: 0.1 – 0.27m thick] in which three furrows were preserved as earthworks. These furrows were aligned roughly north-south, and crossed the width of the trench, which was sealed by a layer of topsoil [23: 0.24m thick]. No archaeological deposits were exposed.

Trench 15 (Figures 4, 9)

- 5.19 Trench 15 was located inside the walled garden, to the south-west of the main manor house. The trench was aligned north-west / south-east, and was positioned across the centre of the garden, where it was intended to investigate a series of linear geophysical anomalies. It measured 15m x 1.5m. Natural subsoil [25] was exposed across the base of the trench at a depth of 0.4m. Within the garden, this deposit was very mottled, with frequent flecks of light grey and dark brownish-yellow, and occasional small irregular lenses of sandy clay, presumably as the result of root disturbance, and the intense cultivation of the ground above. Toward the centre of the trench, the natural subsoil was truncated by a steeply-sided, linear cut [F4: 0.8m wide, 0.2m deep] running north-east / south-west across the trench. This contained a culvert [3], with walls constructed out of a single course of brick and capped with reused sandstone flags, laid directly onto the natural clay (Figure 9). A layer of moderately compact dark brown slightly sandy clayey silt subsoil [2], containing pea grit, lay over both culvert [F4] and deposit [25]. A thin field drain containing a narrow ceramic pipe cut through this subsoil deposit at the western end of the trench, and two modern, gravel-filled French drains were also recorded, one of which truncated the field drain. The trench was overlain by a layer of well-developed soft dark greyish-brown clayey silt topsoil [1: 0.2m thick].

Trench 16 (Figures 4, 10)

- 5.20 Trench 16 was also located inside the walled garden, and lay north of Trench 15. The trench lay on a north-north-west / south-south-east orientation, and measured 15m x 1.5m. Natural subsoil [25] was exposed at a depth of 0.3m across most of the base of the trench. This deposit showed the same mottling and evidence of disturbance that was observed in Trench 15. Toward the centre of the trench, a linear ditch cut truncated this natural subsoil. This cut [F16: 2.65m wide, 0.9m deep] was irregular in profile, with only the south-eastern edge of the feature visible. This had a gentle to moderate slope and a rounded, even base. A substantial stone wall (Figure 10) was built against the north-western edge of the cut, constructed of regular, well-dressed and finished sandstone blocks bonded with a dense lime mortar [F15: 0.25m wide and 0.5m high as excavated]. Several layers of fine silt and silty clay fills lay in the base of cut [F6] and abutted wall [F15].
- 5.21 The ditch [F6] and wall [F15] together are the remains of a ha-ha, built to provide a barrier near to the manor house without restricting the view of the surrounding grounds. However, the location of this boundary feature does not appear to sit well with the present position of the house and the layout of the grounds. This ha-ha may therefore date to the construction and occupation of Oswald House from 1800, with the feature made unnecessary by the later redesigning and rebuilding of the manor. Certainly, the position of the ha-ha does not make sense inside the present walled garden. The top of wall [F15] was overlain by a thin deposit of loose, angular stone fragments and mortar [16: 0.46m wide, 0.12m thick]. This had the appearance of a demolition deposit, indicating that the height of the wall has been reduced, presumably when the ha-ha was decommissioned.

- 5.22 A linear drain cut, [F13: 0.44m wide, 0.3m deep] lay hard against the south-eastern face of wall [F15]. This contained a segmented ceramic drainpipe [14] and was backfilled by a deposit of loose light greyish-white coarse sand and mortar fragments [12], most probably derived from the demolition of the upper courses of the wall. This drain cut through deposit [9], the uppermost of the original fills of [F6], and had obviously been constructed to aid drainage along the line of the backfilled ha-ha. The north-west side of the drain, along with demolition rubble [16], were both covered by a thin cap of re-deposited natural clay, [17: 0.32m wide, 0.06m thick]. All these deposits were then sealed by a thick, homogenous dump layer of loose, friable mid to dark brown sandy silt [8: 2.06m wide, 0.53m thick] which backfilled the remainder of ditch [F6]. This was clearly a deliberate backfilling deposit, covering and consolidating the slumped fills in the base of the ditch and landscaping the area, removing the ha-ha from sight. The buried ditch obviously continued to present a problem for drainage, however, as a further linear drain, [F18: 0.45m wide, 0.35m deep] lay across the top of the north-western edge of the feature. This drain was of very modern construction, and contained a perforated plastic drainpipe in addition to backfills of gravel and dense yellow-brown clay.
- 5.23 At the north-west end of the trench, a wide, shallow cut was exposed, truncating the natural subsoil. This feature [F7: 1.7m wide, 0.04m deep] had steeply-sloping, near-vertical sides and a flat, smooth base. It was filled with a deposit of soft, loose mid greyish-brown sandy silt [5]. The position of several flower beds near to the north-west wall of the walled garden corresponded to the location of cut [F7], and it seems certain that the cut was a garden feature, part of an earlier phase of planting inside the garden. A single linear French drain ran roughly north – south across the south-eastern end of the trench. Successive layers of subsoil [2: 0.13m thick] and topsoil [1: 0.22m thick] overlay all these features, and sealed the trench.

Trench 17 (Figures 4, 11)

- 5.24 This trench was located in the north-east part of the site, to the north of the manor and main buildings. Trench 17 was orientated north-west / south-east, and was positioned to investigate two irregular, indeterminate anomalies recorded by the geophysics. The trench measured 15m x 1.5m. Natural subsoil [25] was exposed at a depth of 0.3m. Toward the north end of the trench, this layer was cut through by a shallow, linear gully [F33: 0.5m wide, 0.08m deep], running on a north-east / south-west alignment (Figure 11). Gully [F33] had low, gently-sloping sides and a rounded, smooth base, and contained a fill of mid yellow-brown moderately compact clayey silt [32]. One fragment of medieval pottery was recovered from this fill (below, 6.2). This feature was overlain by a layer of subsoil [24: 0.1m - 0.15m thick]. Three very heavily eroded furrow bases, orientated roughly east - west, crossed the trench. These were 0.4m wide and 0.04m deep at their greatest extent. The trench was finally covered by a layer of topsoil [23: 0.2m thick]. It seems clear that gully [F33] was the cause of one of the geophysical traces noted in this area.

Trench 18

- 5.25 Trench 18 was also located in the north-east area of the site, to the east of Trench 17. It was orientated north-east / south-west, and measured 15m x 1.5m. Glacial subsoil [25] was exposed at a depth of 0.3m below ground level. This was overlain by subsoil layer [24: 0.15m – 0.2m thick], which was in turn sealed by topsoil deposit [23: 0.2m thick]. No archaeological features were observed, and no finds recovered.

Trench 19

- 5.26 Trench 19 lay in the low-lying north-eastern corner of the site, where the ground conditions were comparatively wet and boggy. The trench was orientated roughly east-west, and measured 15m x 1.5m. Natural subsoil [25] was revealed at 0.3m below ground level. This was overlain by subsoil [24], which varied between 0.1m and 0.2m in thickness. Three modern drains were exposed: one deep field drain running along most of the length of the trench, a gravel-filled French drain to the west, aligned north-east to south-west, and a similar gravel and rubble-filled drain at the east. This drain was orientated north-west / south-east, and extended across only the southern side of the trench. It roughly followed the alignment of plough furrows visible in the area, and was probably intended to aid drainage along these, much like the drains exposed in Trenches 2 and 3 to the south. A deposit of topsoil [23: 0.2m thick] sealed the trench. No archaeological features were recorded.

Trench 21

- 5.27 Trench 21 was located to the north of Trench 19, toward the base of a steep north-facing slope, across a linear geophysical anomaly. It was aligned roughly east-west, and measured 15m x 1.5m. Natural subsoil [25] was exposed at a depth of 0.3m, and was overlain by a layer of subsoil [24: 0.1m – 0.15m thick]. A north-south aligned field drain, 0.15m wide, was exposed at the west end of the trench. To the east, subsoil [24] was partially overlain by a layer of re-deposited natural subsoil, a friable mid yellow-brown clayey silt [31: 0.15m thick]. This layer extended across the eastern half of the trench, thickening to the east, but was not observed to the west. It may have been deposited during the construction of the college buildings to the immediate north, or it may be linked to landscaping works on the golfing green further to the east. A layer of topsoil [23: 0.2m thick] sealed the trench.

Trench 22

- 5.28 Trench 22 was positioned near to the south-east border of the site, to the north of Trench 14. It was orientated roughly east-west, and lay across the steeply-sloping west-facing bank of a gully which extended southwards from the walled garden pond to the north. The trench was 20m long and 1.6m wide. Natural subsoil [25] was exposed at a depth of 0.35m at the west end of the trench, although this deepened to 0.85m to the north. This glacial subsoil was slightly different to that exposed elsewhere on the site, with the layer varying to a dense very fine mid yellow-brown silty sand toward the east end of the trench. This localised variation may have been related to the trench's position in the former watercourse of the gully, with the character of the natural subsoil affected by water action, and no such variation was noted further to the west. Natural subsoil along the whole length of the trench was sealed by a layer of subsoil [24: 0.15m – 0.2m thick].
- 5.29 At the east end of the trench, the subsoil was overlain by a thick dump layer of heavily compacted mid orange-brown silty clay [49: 8m long, 0.7m thick]. This dump deposit was clearly associated with landscaping further to the east of the trench where a green had been constructed for the golf course. To the west, three very similar field drains crossed the trench on a north-south alignment. These drains were 0.4m wide, and contained ceramic pipes laid into V-profiled cuts which were backfilled with a loose, mixed deposit of ash, gravel, clinker, and modern refuse. All three drains were still active, and were flowing downslope toward a watercourse in the dene south of Trench 14. The trench was sealed by a layer of topsoil [23], 0.15m thick to the east and 0.25m thick at the base of the slope to the west.

Trench 23

- 5.30 This trench lay to the south-west of Trench 22, on the northern bank of the dene which crossed the southern part of the site. It was aligned north-west / south-east across a sharp south-facing slope, and measured 20m x 1.6m. Glacial subsoil [25] was revealed along the base of the trench at a depth of 0.3m, and was overlain by subsoil [24: 0.1m - 0.2m thick]. Three furrow bases were observed crossing the width of the trench. These were orientated roughly north-north-west to south-south-east and extended to a maximum depth of 0.05m. The trench was covered by a layer of topsoil [23], 0.2m thick to the north but 0.25m thick on the southern, downslope side of the excavation. No archaeological features were observed, and no finds recovered.

Trench 24

- 5.31 This trench was positioned close to the north of Trench 23. It was aligned roughly south-west to north-east, and measured 20m x 1.6m. Glacial subsoil [25] was exposed as a depth of 0.35m, and was covered by a layer of subsoil [24: 0.15m – 0.2m thick]. The bases of four plough furrows, again running north-west to south-east, crossed the base of the trench. The trench was sealed by topsoil [23: 0.2m thick]. No other features were identified, and no finds recovered.

Trench 25

- 5.32 Trench 25 was orientated north-east / south-west in the centre of the southern part of the site, west of trenches 23 and 24. It was 20m long and 1.6m wide. Natural subsoil [25] was revealed at 0.3m below ground level, and was covered by a 0.1m to 0.15m thick layer of subsoil [24]. Three furrow bases crossed the trench, 0.4m wide and 0.05m deep at their maximum extent. A layer of topsoil [23: 0.2m thick] overlay the other deposits.

Trench 26

- 5.33 Trench 26 lay to the north-west of Trench 25, and was orientated roughly east-west. It measured 20m by 1.6m. The natural subsoil [25] was reached at a depth of 0.35m, and was overlain by a layer of subsoil [24: 0.15m – 0.2m thick]. Four furrow bases were visible crossing the base of the trench, 0.4m wide and 0.05m thick at their greatest extent. Two field drains were also visible. These were 0.25m wide, and were located at the centre and western end of the trench, following the lines of two of the furrow bases. The trench was sealed by a 0.2m thick layer of topsoil [23]. No other features were exposed, and no finds recovered.

Trench 27

- 5.34 This trench was located to the west of Trench 26. It was aligned roughly north-east / south-west, and measured 20m x 1.6m. Again, natural subsoil [25] was exposed at a depth of 0.3m and was overlain by a layer of subsoil [24: 0.1m – 0.15m thick]. Three furrow bases, 0.6m wide and 0.05m thick, were observed along the length of the trench. Five field drains were cut into these furrow bases, clearly to improve drainage of groundwater along the features. The two south-western furrows each contained two drains, whilst only one had been dug along the remaining, north-eastern furrow base. All five drains were 0.25m – 0.3m wide, and were filled with loose sub-rounded medium gravel. The trench was sealed by topsoil [23: 0.2m thick].

Trench 28

- 5.35 Trench 28 lay on the north bank of the dene, close to the western boundary of the study area. It measured 15m by 1.6m, and was orientated north-east / south-west. Glacial subsoil [25] was exposed at 0.3m below current ground level. This was sealed by a layer of subsoil [24: 0.1m – 0.15m thick]. Three furrow bases were exposed, equally spaced along the base of the trench. Field drains were recorded running along the length of the two north-eastern furrows: these were both 0.25m wide, the northernmost one containing a ceramic pipe, the other gravel and stone fragments. These were overlain by a deposit of topsoil [23: 0.2m thick] which sealed the trench. No other features were exposed.

Trench 29

- 5.36 This trench was 20m long and 1.6m wide. It was orientated north-east / south-west, and lay close to the eastern boundary of the site. Natural subsoil [25] was exposed at 0.3m below ground level, sealed by a layer of subsoil [24: 0.1m – 0.15m thick]. Three furrow bases crossed the trench, 0.5m wide and 0.05m thick. At the south-west end of the trench, two field drains were revealed. One of these followed the line of the base of the southernmost furrow, while the other, although running parallel, lay further to the south, outside the furrow base. Both drains were 0.2m wide. The trench was sealed by topsoil [23: 0.2m thick]. No other features were recorded.

Trench 30

- 5.37 Trench 30 was located towards the centre of the site, and was positioned over an east-west geophysical anomaly detected by the earlier survey. The trench was 20m long and 1.6m wide, and was orientated north-east / south-west. Natural deposits [25] were located at a depth of 0.3m, overlain by subsoil [24: 0.1m – 0.15m thick]. Three heavily-truncated furrow bases were observed crossing the trench: these were 0.5m wide and 0.03m deep at their maximum extent. At the south-west end of the trench, one 0.2m wide field drain followed the line of a furrow base. The trench was sealed by topsoil [23: 0.2m thick]. The route of a modern footpath could be seen on the ground surface near the trench, where it had eroded the ploughing ridges. This path would have produced the geophysical anomaly. No other features were observed.

Trench 31

- 5.38 Trench 31 lay to the west of Trench 30, and measured 20m by 1.6m. It was aligned north-east / south-west. Natural subsoil [25] was exposed at a depth of 0.3m, and was overlain by subsoil [24: 0.1m – 0.15m thick]. Three plough furrow bases were visible crossing the base of the trench at the eastern end: these were 0.8m wide at the maximum extent and 0.05m deep. Two of these furrows held field ceramic-pipe drains 0.2m wide which ran along the length of the furrow bases. No other features were observed, and the trench was sealed by a layer of topsoil [23: 0.2m thick].

Trench 32

- 5.39 Trench 32 was located to the north of Trench 31, over a linear anomaly identified by the geophysics. The trench was orientated east - west, and measured 15m x 1.6m. Glacial subsoil [25] was exposed at 0.4m below the present ground level. Whilst this deposit was mainly the same composition as was recorded elsewhere on the site, one area of natural variation was noted. This was a large irregular lens of heavily mottled light grey and yellow-white slightly sandy silty clay, found in the centre of

the trench. It is probable that this natural variation was the cause of the geophysical anomaly. The trench was overlain by subsoil [24: 0.25m thick], and sealed by topsoil [23: 0.15m – 0.2m thick]. No features were recorded, and no finds recovered.

Trench 33

- 5.40 This trench was positioned to the north-west of Trench 32, and was intended to investigate another linear geophysical anomaly. It was aligned roughly east-north-east to west-south-west, and measured 15m x 1.6m. Glacial subsoil [25] was exposed at a depth of 0.3m. Again, natural variation was seen in this deposit, with a large, irregular lens of very stiff light yellow silty clay encountered in the centre of the trench. Glacial deposits were overlain by a layer of subsoil [24: 0.1m – 0.15m thick]. This was cut through by two linear field drains, orientated east-west, and sealed by topsoil [23: 0.2m thick]. As with Trench 32, it seems most probable that the geophysical anomaly was produced by the natural variation of glacial subsoil in this area: no features were exposed, and no finds recovered.

Trench 34

- 5.41 Trench 34 lay to the north-east of Trenches 32 and 33, near to the south side of the path which divided the site. The trench measured 15m x 1.6m, and was orientated roughly north-south. Natural subsoil [25], and was exposed at a depth of 0.3m. This was sealed by a layer of subsoil [24: 0.1m – 0.15m thick], which was overlain in turn by topsoil [23: 0.2m]. No archaeological features were exposed.

Trench 35

- 5.42 This trench was orientated north-east / south-west, and lay to the south of Trench 34. It measured 20m x 1.6m. Natural subsoil [25] was exposed at a depth of 0.35m. Although no defined furrow bases were visible, three clusters of plough scars cut into this natural layer. These scars were linear, running east-west across the trench, and were 0.02m deep at the greatest extent. A layer of subsoil [24: 0.15m – 0.2m thick] overlay these and extended along the whole trench. Three east-west aligned field drains cut through this and into natural subsoil below. The southernmost drain was 0.4m wide, whilst the other two were 0.2m wide. All were sealed by topsoil [23: 0.2m thick]. No other features were exposed.

Trench 36 (Figures 5, 12)

- 5.43 Trench 36 lay to the east of Trenches 34 and 35. It was orientated roughly east-west, and was positioned over the earthwork remains of a possible trackway or field boundary. This feature was also positively identified by the geophysical survey. The trench measured 15m x 1.6m. Natural subsoil was exposed at a depth of 0.3m. As with Trench 35, the remains of occasional shallow, narrow plough scars were visible cutting into this deposit, but no defined furrow bases were evident. A layer of subsoil [23: 0.15m thick] extended across the trench. Toward the centre of the area, this layer was cut through by a linear, north-west ditch cut (Figure 12). This ditch [F38: 0.68m wide, 0.36m deep] had moderate to gently-sloping side and a rounded, smooth base. It contained a primary fill of stiff, heavily compact grey silty clay [47: 0.11m thick]. Above this lay a second fill deposit [48: 0.11m thick] of very mixed, moderately compact mid brownish-yellow silty clay and dark brown clayey silt, containing moderate small sub-angular stone fragments.
- 5.44 The sides of cut [F38] were uneven, with the eastern side of the feature surviving to a greater height than the west. A soil layer [39: 6.18m long, 0.15m thick] lay against

this higher eastern side of the ditch cut, but overlay the western side and extended over the rest of the western end of the trench. This deposit was moderately to loosely compact and friable, composed of dark grey-brown clayey silt with inclusions of medium sub-angular stone and fragments of brick and tile. Both this layer and fill [48] beneath it appear to be of relatively modern origin, laid down as landscaping for the golf course grounds. Whilst fill [47] is most probably an original fill of ditch [F38], laid down during the life of the feature, fill [48] mainly comprised reworked and re-deposited natural subsoil. This deposit had been deliberately placed in ditch [F38], presumably in an attempt to completely backfill the feature, whilst layer [39] was intended to level and consolidate the surrounding area. Layer [48] was sealed by a deposit of topsoil [23: 0.2m thick], which overlay the whole trench.

Trench 37

- 5.45 Trench 37 lay south-east of Trench 36. It measured 20m x 1.6m, and was orientated roughly east-west, in order to investigate two linear geophysical anomalies. Natural subsoil [25] was exposed across the base of the trench at a depth of 0.3m. This was overlain by subsoil [24: 0.1m – 0.15m thick]. Two field drains, each 0.2m wide, crossed the trench on an east-west alignment. Although these two drains occurred at approximately the same position as the identified anomalies, their alignment was very different, with the geophysical features orientated far more sharply north-west / south-east. However, no other features were exposed to explain the geophysical results: it is possible that they were caused by a localised variation in the underlying natural subsoil which was not identifiable during excavation. The trench was sealed by topsoil [23: 0.2m thick]. No archaeological features were exposed, and no finds recovered.

Trench 38

- 5.46 This trench lay to the north-east of Trench 37. It was orientated roughly north-south, and measured 20m x 1.6m. Glacial subsoil [25] was revealed at a depth of 0.3m below ground level. As with other trenches in this area of the site, clusters of shallow plough scars were visible cutting into this, but no coherent, well-defined furrow bases were visible. A layer of subsoil [24: 0.1m – 0.15m thick] was over the natural glacial subsoil. One gravel-filled field drain, 0.25m wide and aligned north-west /south-east, crossed the centre of the trench, but no other features were exposed. A layer of topsoil [23: 0.2m thick] overlay the trench.

Trench 39

- 5.47 Trench 39 was positioned to the south of Trench 38, in a comparatively waterlogged part of the site between two stands of trees. It measured 15m x 1.6m, and was aligned approximately north - south. Natural subsoil [25] was exposed at 0.35m below ground level, and was overlain by subsoil [24: 0.15m - 0.2m thick]. A network of field drains crossed the base of the trench. Three french drains, 0.25m wide and filled with a mixture of loose gravel and crushed brick, were orientated north-east / south-west and were evenly spaced along the trench, while a further two similar drains lay on a more north-west /south-east alignment toward the north end of the excavation. Topsoil [23: 0.2m thick] covered the trench. No other features were exposed, and no finds recovered.

Trench 40

- 5.48 Trench 40 was located to the west of the main building of Mount Oswald manor, in a heavily-landscaped area used as the first tee of the golf course. The trench was

positioned to investigate a series of linear geophysical anomalies, and was orientated roughly north - south and measured 15m x 1.6m. Natural subsoil deposits [25] were exposed at 0.2m below ground level, overlain by a thin layer of subsoil [24: 0.1m thick]. Six irregularly-spaced field drains crossed the line of the trench, mainly aligned east - west. These drains were all of recent origin, containing loose rounded gravel and perforated plastic pipe. These drains were clearly the origin of the geophysical results, and no other features were exposed by the excavation. The trench was sealed by a layer of topsoil [23: 0.1m- 0.2m thick]. No finds were recovered.

Trench 41

- 5.49 This trench lay directly to the east of Trench 41, across another area of linear geophysical anomalies. It was orientated north - south and measured 15m by 1.6m. Natural subsoil was exposed across the whole of the base of the trench at between 0.2m and 0.6m below ground level. At the north end of the trench, this was overlain by a layer of subsoil [24: 0.3m thick]. This deposit became thinner as it progressed south, and was absent from the southernmost four metres of the trench. Seven field drains crossed the length of the trench, all running on a roughly east - west orientation. The majority of these were french drains, filled with compacted ash and gravel and containing occasional angular fragments of brick and tile, although the southern drain also contained a perforated plastic pipe. A thin dump layer of moderately compact black ash and pea grit lay over these drain at the north end of the trench [50: 0.1m thick, 10m N – S]. This was a landscaping deposit, used to level and drain the area of the golfing green. It was sealed by a layer of topsoil [23: 0.2m – 0.3m thick] which also covered the southern end of the trench.

Trench 42 (Figures 5, 13)

- 5.50 Trench 42 lay directly to the north of the manor buildings, in a yard area of hard standing and tarmac previously used as a car park. Brick walls and sheds surround part of the area. The trench measured 20m x 1.6m, and was orientated roughly north – south. Natural subsoil [25] was exposed at a depth of between 0.65m and 0.75m across the base of the whole trench. This deposit was mottled and mixed in localised areas, clearly showing the effects of disturbance from nearby building works. A brick culvert crossed the north end of the trench, following a north-west / south-east alignment (Figure 13). This culvert was fitted into a construction cut with near-vertical sides and a flat, even base [F43: 5m long, 0.31m wide, 0.2m deep]. Two lines of stretcher-laid bricks, three courses high at the maximum extent, formed the main body of the culvert [42]. This brickwork was laid directly against the sides of the construction cut, with no apparent base slab, and with any capping stone or bricks that there may have been apparently removed by later horizontal truncation. The two walls of the culvert lay 0.06m apart. This was filled by a deposit of plastic mid brown clayey silt [41], presumably laid down as the feature silted up.
- 5.51 A thick, homogenous layer of friable mid brown medium coarse silty sand [44: 10.78m long, 0.44m thick] lay across the central and southern parts of the trench. This deposit lay directly onto natural subsoil [25], filling hollows and variation in the uneven surface of this underlying layer. Deposit [44] was a spread of dumped material. A similarly deposited layer [40: 11.15m long, 0.65m thick] lay over [44] to the north, and sealed culvert [F43]. This layer was equally homogenous, made of stiff dark brown silty clay with frequent inclusions of sub-rounded and sub-angular stone fragments and cobbles. Both deposit [40] and [44] were presumably

landscaping dumps of imported material, laid down to raise the ground level on the north side of the manor buildings. At the south end of the trench, layer [44] was truncated by a large irregular, angular cut [F46: 5.9m long, 0.45m deep] containing a friable, light grey deposit of mixed angular stone, brick, mortar fragments, ash, and charcoal. This was presumably a demolition dump, related to one of the phases of rebuilding of the manor house. The trench was sealed by a layer of mixed modern dolomite and tarmac.

Trench 43

- 5.52 Trench 43 lay in the north-western area of the site, near to the western boundary and to the north of the east – west footpath. The trench was orientated north – south, and measured 20m by 1.6m. Glacial subsoil [25] was exposed at a depth of 0.2m below ground level. This was overlain by a layer of subsoil [24: 0.1m thick]. Five furrow bases were visible crossing the trench on an east – west alignment. These furrow bases were 0.8m wide at the maximum extent, spaced roughly four metres apart, and 0.04m deep. The trench was sealed by a layer of topsoil [23: 0.1m – 0.15m thick]. No other features were encountered, and no finds recovered.

Trench 44

- 5.53 Trench 44 lay to the north-east of Trench 43. It was also aligned roughly north-south, and measured 20m by 1.6m. Natural subsoil [25] was revealed at a depth of 0.3m. This was covered by a layer of subsoil [24: 0.15m – 0.2m thick]. Five furrow bases crossed the trench, 0.9m wide and 0.04m deep at their maximum extent. These were overlain by topsoil [23: 0.15m - 0.2m thick]. No other features were exposed.

Trench 45

- 5.54 This trench was positioned north-west of Trench 44, close to the western boundary of the site. It was aligned north - south, and measured 15m x 1.6m. Natural subsoil [25] was encountered at 0.25m below contemporary ground level. This was sealed by subsoil [24: 0.1m – 0.15m thick]. Three east – west running furrow bases, 0.9m wide and 0.05m deep at the greatest extent, were exposed against the eastern side of the trench. However, none of these bases extended across the trench, suggesting the presence of a former field boundary or headland to the west. The northernmost furrow contained a modern dump of mixed crushed concrete, brick, and angular stone, clearly deposited to aid groundwater drainage. These furrows and subsoil [23] were overlain by a deposit of topsoil [23: 0.15m – 0.2m thick]. No other features were revealed.

Trench 46

- 5.55 Trench 46 was located north of Trench 45, in an area lightly planted with trees. The trench was positioned to investigate an irregular geophysical anomaly. Trench 46 was orientated north-east / south-west and measured 15m by 1.6m. Glacial subsoil [25] was exposed at a depth of 0.3m, and was overlain by subsoil [24: 0.15m – 0.2m thick]. At the south-western end of the trench, both these deposits were disturbed by roots from the surrounding trees: this root disturbance may have been the cause of the geophysical traces noted in the area. The trench was sealed by topsoil [23: 0.15m – 0.2m thick]. No features were identified, and no artefacts recovered.

Trench 47

- 5.56 Trench 47 lay to the north of Trench 46, close to the western boundary of the site. The trench was intended to investigate the same series of irregular geophysical

anomalies studies by Trench 46, and was orientated north-south. It measured 15m by 1.6m. Natural subsoil [25] was exposed along the base of the trench at a depth of 0.35m to 0.4m. This was covered by a layer of subsoil [24: 0.15m – 0.2m thick]. Heavy root disturbance was encountered along most of the trench's western side. As with Trench 46, this disturbance may have been the cause of the geophysical anomaly. At the north-eastern end of the trench, a ceramic field drain was exposed, 0.3m wide and running east - west. The trench was sealed by topsoil [23: 0.2m thick]. No archaeological features were exposed, and no finds recovered.

Trench 48

- 5.57 This trench was located to the north of Trenches 46 and 47. It was orientated north-east / south-west, and measured 15m x 1.6m. Glacial subsoil [25] was encountered at 0.2m below ground level. A layer of subsoil [24: 0.15m thick] sealed these glacial deposits. At the north end of the trench, the remains of a possible heavily-truncated furrow base were exposed. This was aligned roughly east - west, and was 1m wide and 0.02m thick at the greatest extent. To the east of the trench, surviving furrow earthworks were orientated roughly north - south, lying at a right angle to the possible furrow exposed in Trench 48. It is possible that this feature was not a surviving furrow base, but was rather connected with a golfing green which lay immediately to the north. The trench was sealed by a layer of topsoil [23: 0.1m thick]. No finds were recovered.

Trench 49

- 5.58 Trench 49 was positioned east of Trench 48. It was aligned roughly east - west, and measured 20m by 1.6m. Natural subsoil was exposed at 0.2m below ground level. This was overlain by subsoil [24: 0.1m – 0.15m thick]. The heavily-disturbed remains of four furrow bases crossed the base of the trench. These furrows ran roughly north - south, and had clearly been affected by a high degree of horizontal truncation, surviving to a maximum depth of between 0.01m and 0.02. At the east end of the trench, a further possible furrow base was observed, although this feature survived only as an area of slight disturbance and occasional plough scarring. A linear field drain, orientated north-east / south-west crossed the centre of the trench, cutting through both subsoil [24] and deposit [25]. The trench was sealed by topsoil [23: 0.1m – 0.15m thick].

Trench 50

- 5.59 Trench 50 was located to the east of Trench 49, close to the west end of the northern boundary of the site. It was 20m long, 1.6m wide, and orientated roughly east – west. Natural subsoil [25] was encountered at 0.3m below ground level. Again, this deposit was overlain by a layer of subsoil [24: 0.2m thick]. Two horizontally-truncated furrow bases were exposed along the length on the trench. One of these was at the east end, where the furrow crossed the whole width of the trench. Toward the centre of the excavation, however, the other furrow base only partially extended from the south side of the trench. This shortened furrow was most probably caused by the complete horizontal truncation of the feature. One field drain, 0.3m wide and orientated north-east / south-west, was exposed at the western end of the trench. All these deposits were sealed by a layer of topsoil [23: 0.1m – 0.15m thick]. No other features were recorded.

Trench 51

- 5.60 This trench was also located close to the northern boundary of the site, east of Trench 50. It was orientated roughly north - south, and measured 20m x 1.6m. Natural subsoil [25] was exposed at a depth of 0.3m, and was overlain by subsoil [24: 0.15m – 0.2m thick]. Three heavily-eroded furrow bases crossed the trench on an east – west alignment. Two of these furrows were encountered at the south end of the trench, with the final one at the north. They were 0.4m wide and 0.02m deep at their maximum extent. A layer of topsoil [23: 0.1m – 0.15m] sealed the trench. No other features were exposed.

Trench 52

- 5.61 This trench was situated directly to the south of Trench 51. It was also aligned roughly north - south, and measured 20m x 1.6m. Glacial subsoil [25] was exposed at 0.3m below present ground level. This was overlain by subsoil [24: 0.15m thick]. The remains of three heavily-truncated plough furrows were encountered, clustered in the centre and toward the north end of the trench. These were 0.8m wide and 0.04m deep at their maximum extent, and were spaced roughly 4m apart. They were covered by a layer of topsoil [23: 0.15m thick] which sealed the trench.

Trench 53 (Figures 5, 14)

- 5.62 Trench 53 lay to the south of Trench 52. It was orientated north-east / south-west, and was located over a linear anomaly identified by the geophysical survey. The trench measured 15m by 1.6m. Natural subsoil [25] was exposed at a depth of 0.25m. An irregular, sub-linear very shallow gully cut through layer [25]. This feature extended along most of the north-west side of the trench, with only the south-eastern edge of the gully exposed. The gully [F35: 12m long, 0.6m wide, 0.1m deep] had uneven, moderately sloping sides and a flat, smooth base (Figure 14). It contained a friable, moderately compact fill of mottled light brownish grey slightly sandy clayey silt with inclusions of small to medium sub-angular and sub-rounded stone. No finds or dating evidence was recovered from the fill. It seems unlikely, given the uneven, irregular edges of the feature, that gully [F35] was deliberately created as a field boundary or drain. This feature is likely to be the remains of a former streamcourse or water channel.
- 5.63 Gully [F35] was covered by a layer of subsoil [24: 0.1m – 0.15m thick] which extended across the whole trench. Although the earthwork remains of plough furrows and ridges survived in the areas surrounding the trench, no furrow bases or ploughscars were identified during excavation. This may be due to the location of the trench in the centre of a fairway of the golf course, where the area would have undergone a significant level of modern disturbance. The trench was sealed by a layer of topsoil [23: 0.15m thick]. No finds were recovered.

Trench 54

- 5.64 Trench 54 lay to the south-west of Trench 53. It measured 20m by 1.6m, and was orientated north-east / south-west. Glacial subsoil was exposed at 0.35m below the present ground surface. This was covered by subsoil [24: 0.15m – 0.2m thick]. Two very heavily-truncated and only partially surviving furrow bases were revealed in the centre of the trench: these were 0.2m wide and 0.02m deep at their greatest extent. The trench was overlain by topsoil [23: 0.2m thick]. No features were encountered, and no finds recovered.

Trench 55

- 5.65 This trench was located to the south-west of Trench 54, on the northern side of the footpath which divided the site. It was aligned roughly north - south and measured 20m by 1.6m. Natural subsoil was encountered at a depth of 0.25m. This was covered by a layer of subsoil [23: 0.1m - 0.15m thick]. At the north end of the trench, four furrow bases were visible. These ran east - west across the trench. The bases were 1.1m wide and 0.05m deep at their maximum extent, and were spaced approximately 4m apart. Horizontal truncation had clearly removed the remains of any furrow bases from the southern end of Trench 55. These furrow bases were covered by a layer of topsoil [23: 0.15m thick] which overlay the whole trench.

Trench 56

- 5.66 Trench 56 lay directly to the east of Trench 55. It was also orientated roughly north - south and was 20m long by 1.6m wide. Natural subsoil was exposed at a depth of 0.35m, and was overlain by subsoil [24: 0.15m – 0.2m thick]. The remains of two heavily-truncated furrow bases were exposed in the centre of the trench. To the north of these, a short, linear cut filled with loose dark grey dolomite extended from the western edge of the excavation, clearly a modern drain. Topsoil [23: 0.2m thick] sealed the trench. No other features were identified.

Trench 57

- 5.67 Trench 57 was positioned to the south-east of Trench 56, near to the north side of the footpath. The trench was aligned roughly north - south and measured 20m x 1.6m. Natural glacial subsoil was encountered at a depth of 0.25m. This was sealed by a deposit of subsoil [24: 0.1m – 0.15m thick]. Three irregularly-spaced and heavily-truncated furrow bases were exposed at the southern end of the trench. These were 0.9m wide at their maximum extent, and 0.04m deep. To the north of these furrows, a field drain crossed the trench on a north-east / south-west alignment. No other features were observed, and the trench was overlain by a layer of topsoil [23: 0.15m thick].

Trench 58

- 5.68 This trench lay to the north of Trench 57, in a lightly-wooded area of the site. The trench was positioned across a long, east - west linear anomaly identified by the geophysical survey. The trench was orientated north - south and measured 20m x 1.6m. Natural subsoil was revealed at 0.35m below ground level. This was covered by subsoil [24: 0.15m – 0.2m thick]. Root disturbance from the nearby tree planting truncated both these deposits at the south-west end of the trench. The remains of two furrow bases were exposed in the centre of the trench. These had also been heavily disturbed by the surrounding planting, with no other evidence of ploughing seen in the rest of the trench. The surviving furrows were 0.8m wide and 0.03m deep at their maximum extent, spaced approximately 4m apart. The southernmost of these furrows had a modern gravel-filled french drain, 0.3m wide, cut into the base. This drain followed the line of the feature, and was presumably the cause of the geophysical trace. The trench was sealed by a layer of topsoil [23: 0.2m thick]. No other features were identified.

Trench 59

- 5.69 Trench 59 was located directly north of Trench 58. As with Trench 58, trees occupied the intended position of the trench, and the excavation was therefore moved to the south-east. Glacial subsoil [25] was exposed at a depth of 0.35m. This was covered

by a layer of subsoil [24: 0.15m – 0.2m thick], which was in turn covered by a layer of topsoil [23: 0.2m thick]. No features were encountered.

Trench 60

- 5.70 Trench 60 was located across the line of a possible field boundary, to the north of Trench 59. It was orientated approximately east – west, and measured 20m by 1.6m. Natural subsoil [25] was exposed at 0.35m below ground level. A layer of subsoil [24: 0.15m – 0.2m thick] lay over this deposit. The remains of three furrow bases, all aligned north – south, were identified crossing the trench. Two of these features lay toward the centre of the excavation, spaced at a distance of 3m apart, with the remaining one near to the east end. Whilst the two eastern furrows were shallow and clearly horizontally truncated, the westernmost furrow base was notably deeper. This survived to a depth of 0.1m, with a higher, more obvious earthwork ridge notable on the surface. However, no indications of a ditch or clear boundary feature were apparent. The trench was sealed by a layer of topsoil deposit [23: 0.2m thick]. No other features were exposed.

Trench 61 (Figure 15)

- 5.71 This trench lay to the north of Trench 60, and was intended to investigate the same possible field boundary feature. The trench was again orientated roughly east - west, and measured 20m x 1.6m. Natural subsoil [25] was identified across the base of the trench at a depth of 0.35m. This was overlain by subsoil [24: 0.15m – 0.2m thick]. Three furrow bases were also identified in the trench, irregularly spaced and surviving to a maximum extent of 0.9m wide and 0.05m deep. As with Trench 60 to the south, the surface ridge associated with the westernmost of these furrows was very pronounced, and more obvious than others in the area. However, the furrow itself was very heavily truncated by two successive field drains which had been excavated along the length of the feature (Figure 15). Both of these drains were clearly modern in origin, and had been created to increase groundwater drainage from the main area of the golf course toward the lower-lying land to the north. No other features were observed, and the trench was sealed by a layer of topsoil [23: 0.2m thick].

Trench 62

- 5.72 Trench 62 was located to the east of Trench 60, and was positioned across two sub-linear geophysical anomalies. It measured 20m x 1.6m, and was aligned north-west / south-east. Natural subsoil [25] was exposed at a depth of 0.35m. This was a very mottled deposit, containing occasional medium to large cobbles and a high degree of iron panning. It was covered by a layer of subsoil [24: 0.15m – 0.2m thick]. Five furrow bases were observed crossing the base of the trench. These were aligned north - south roughly three metres apart, and were 0.95m wide and 0.05m deep at their greatest extent. Two of these furrows had ceramic field drains, 0.3m wide, cut along their length, clearly draining toward the lower-lying ground to the north. Neither of these drains corresponded with the orientation of the anomalies on the geophysical survey, however, and no other features were identified. The trench was sealed by a deposit of topsoil [23: 0.2m thick].

Trench 63

- 5.73 Trench 63 was positioned to the north-east of Trench 62, on a lightly wooded area of sloping ground which dropped downwards toward a former watercourse gully to the north. The trench was intended to investigate a linear anomaly identified by the

geophysical survey. It was orientated north-east / south-west, and measured 15m by 1.6m. Natural subsoil [25] was exposed at a depth of 0.35m at the southern end of the trench, falling to 0.55m at the northern, downslope end. This natural subsoil changed from a heavily compact stiff light yellow-brown silty clay at the south-west of the trench to a moderately compact dense mid to light brownish-yellow medium sand containing large fragments of coal and lignite to the north-east. These glacial soils were overlain by a deposit of subsoil [24: 0.15m – 0.35m thick] which thickened toward the northern end of the trench. One furrow base, 1.1m wide and 0.04m thick, was visible to the south, with several irregular areas of root disturbance disrupting underlying deposits to the north. The trench was covered by topsoil [23: 0.2m thick]. No other features were observed, and no finds recovered.

Trench 64

- 5.74 Trench 64 lay to the south-east of Trench 62, and was positioned to investigate the same area of sub-linear geophysical anomalies. The trench measured 15m x 1.6m, and was aligned north-east / south-west. Glacial subsoil [25] was encountered at 0.25m below ground level. As with Trenches 62 and 63, this deposit showed considerable local variation, with heavy mottling of colours and with a high proportion of manganese flecks and areas of iron panning. This was overlain by subsoil [24: 0.1m – 0.15m thick]. Two plough furrow bases crossed the trench, 1.1m wide and 0.04m thick, with a 0.3m wide field drain cut into the base of the western furrow. A layer of topsoil sealed the trench [23: 0.15m thick]. Natural variation in the glacial subsoil most probably caused the geophysical trace in this area.

Trench 65

- 5.75 This trench was located to the north of Trench 64. It was orientated roughly east - west, and measured 20m x 1.6m. Natural subsoil [25] was exposed at a depth of 0.35m below ground level. This was overlain by subsoil [24: 0.15m – 0.2m thick]. The remains of three heavily-truncated plough furrows were encountered at the eastern end of the trench. These were aligned north - south, spaced roughly 4m apart, and survived to 1m wide and 0.05m deep that their greatest extent. The trench was sealed by topsoil [23: 0.2m thick]. No other features were exposed, and no finds recovered.

Trench 66

- 5.76 Trench 66 lay to the east of Trench 64. It was aligned very roughly east - west, and measured 20m x 1.6m. Glacial subsoil [25] was encountered at a depth of 0.3m. This was overlain by subsoil [24: 0.1m – 0.15m thick]. Five furrow bases were observed. These were spaced 4m apart, and were 1m wide and 0.05m deep at the maximum extent. Four field drains, 0.25m wide, were dug along the bases of the western furrows. One further drain, orientated north-east / south-west, lay at the very western end of the trench. These were covered by a layer of topsoil [23: 0.2m thick] which sealed the trench.

Trench 67

- 5.77 Trench 67 was located close to the north boundary of the site, on an area of southward-sloping high ground on the north side of the former watercourse gully. The position of the trench had to be moved slightly to the south-west due to dense planting of trees along the site boundary. The trench was aligned north-west / south-east, and measured 20m x 1.6m. Natural glacial subsoil [25] was encountered 0.3m below ground level. This was covered by subsoil [24: 0.1m – 0.15m thick]. The

remains of three heavily-truncated plough furrow bases were exposed in the centre of the trench. These were again spaced roughly 4m apart, and survived to a maximum extent of 0.8m wide and 0.05m deep. The trench was sealed by topsoil [23: 0.2m thick].

Trench 68

- 5.78 Trench 68 lay to the south of Trench 67, on the crest of a lightly-planted ridge which dropped sharply to the north toward the northern boundary of the site. The trench measured 20m x 1.6m, and was orientated north-west / south-east. The position of the excavation was altered slightly to avoid trees on the ridge's crest, further to the north. Natural subsoil [25] was exposed at a depth of 0.35m, and was covered by subsoil [24: 0.15m – 0.2m]. Two surviving furrow bases, 0.8m wide and 0.05m deep, were also exposed at the eastern end of the trench. These were sealed by a layer of topsoil [23: 0.2m thick]. The trench was positioned in order to investigate a linear, north - south geotechnical anomaly. However, no such feature was observed in the excavation. It is possible that the survey again detected natural variation in the glacial subsoil, as appears to have been the case further to the west. However, it may be more likely that the results were affected by standing groundwater filling the bases of furrow earthworks, which was observed in the furrows on the fairway to the south of the trench. No other features were exposed, and no finds recovered.

Trench 69

- 5.79 This trench also lay on the lightly-wooded ridge, and was positioned to the east of trench 68. The intended location of the trench was altered due to the tree planting, with the excavation moved to the south. The trench was aligned roughly east - west, and measured 20m by 1.6m. Natural subsoil [25] was identified at 0.35m below ground level. This was covered by subsoil [24: 0.15m – 0.2m thick]. At the west end of the trench, four heavily-truncated furrow bases were exposed. These were in varying states of survival: the best-preserved were 1.2m wide and 0.05 deep, while the heavier truncated furrows were 0.4m wide, and were mainly marked by the lines of plough scars. No furrows were observed at the eastern end of the trench. The excavation was sealed by a layer of topsoil [23: 0.2m thick], and no finds were recovered.

Trench 70

- 5.80 Trench 70 lay toward the centre of the northern part of the site, to the east of Trench 58. The trench was positioned north - south in another lightly-wooded area, and measured 20m x 1.6m. Glacial subsoil [25] was exposed at a depth of 0.35m. This was overlain by subsoil [24: 0.15m - 0.2m thick]. At the south end of the trench, three field drains were identified. These were constructed of ceramic pipes and were 0.3m wide. Two of these features were aligned north-west / south-east, whilst the middle drain ran directly east - west across the trench. Against the eastern edge of the trench, two sub-square planting holes, clearly related to the nearby trees, also cut through deposits [24] and [25]. These holes were backfilled with topsoil [23: 0.2m thick], which also sealed the trench. No archaeological features were recorded.

Trench 71

- 5.81 Trench 71 was excavated to the south-east of Trench 70, close to a stand of denser woodland on the north side of the manor house. The trench measured 20m x 1.6m, and was orientated north-west / south-east. Natural subsoil [25] was encountered at a depth of 0.3m, and was covered by a layer of subsoil [24: 0.1m – 0.15m thick]. Four

horizontally truncated furrow bases crossed the trench. These were aligned east - west, and were set roughly three metres apart. They survived to a width of 0.7m and a depth of 0.05m at their maximum extent. In the centre of the trench, one field drain followed the course of one of these furrow bases. The trench was sealed by a layer of topsoil [23: 0.2m thick].

Trench 72

- 5.82 This trench was located to the north-east of Trench 71. It followed a similar north-west / south-east alignment, and measured 15m by 1.6m. It was positioned across a series of parallel linear geophysical anomalies, in another area of the golf course lightly planted with young trees. Natural subsoil [25] was exposed at a depth of 0.3m. This was covered by subsoil [24: 0.1m – 0.2m thick]. Two heavily-truncated furrow bases crossed the north-western end of trench, and two parallel, intercutting field drains were observed to the south-east. These drains were aligned north - south, across the pattern of ploughing in this area. The later drain contained a ceramic pipe, while the earlier one was a french type, filled with loose dark grey to black gravel and grit. Root disturbance was visible along both the north-eastern and north-western edges of the trench, obviously related to the stand of trees to the north. No features were observed which appeared to correspond with the position of the geophysical anomalies. No other features were identified, and no finds recovered.

Trench 73

- 5.83 Trench 73 lay to the east of Trench 72, and measured 15m x 1.6m. It was orientated roughly east - west. Natural subsoil [25] was exposed at 0.35m below the present ground surface. This was overlain by a layer of subsoil [24: 0.15m – 0.2m thick]. Two gravel-filled field drains containing ceramic pipes crossed the trench, cutting through this subsoil deposit. The westernmost of these drains ran north - south across the east end of the trench, while the other crossed the centre of the excavation on a north-east / south-west alignment. They were covered by a deposit of topsoil [23: 0.2m thick] which sealed the trench. No finds were recovered, and other features exposed.

Trench 74

- 5.84 Trench 74 was located across a north-east / south-west aligned geophysical anomaly. This lay to the east of Trench 71, in a heavily-landscaped area next to one of the greens of the golf course. The trench was orientated north-west / south-east, and measured 20m x 1.6m. Glacial subsoil [25] was encountered at 0.3m below ground level. This lay underneath subsoil [24: 0.1m – 0.15m thick] which extended across the whole of the trench. Two furrow bases were exposed to the south-east. These lay 4m apart, were orientated east - west, and were 1.1m wide and 0.05m deep at their maximum extent. Two field drains, 0.3m wide and containing ceramic pipes, crossed the centre of the trench on an identical alignment. One of these drains lay in the base of the northernmost furrow, whilst the other was further to the north. The trench was sealed by a layer of topsoil [23: 0.2m thick]. No other features were exposed, and no finds recovered.

Trench 75

- 5.85 This trench lay to the north of Trench 74, and was positioned to investigate an east - west aligned geophysical anomaly. However, dense planting with trees in this area of the golf course meant that the position of the trench had to be moved further to

the north. The trench was orientated north - south and measured 20m by 1.6m. Natural subsoil [25] was exposed at a depth of 0.3m. This was overlain by subsoil [24: 0.1m – 0.2m thick]. Toward the north, a single field drain, 0.3m wide, ran east - west across the trench and cut through both deposit s [24] and [25]. The trench was sealed by a layer of topsoil [23: 0.2m thick].

Trench 76

- 5.86 Trench 76 was located east of Trench 75, again close to an area of dense tree planting. The trench was orientated north – south, and measured 15m x 1.6m. Natural subsoil [25] was identified at a depth of 0.3m, and was overlain by subsoil [24: 0.1m - 0.15m]. One furrow base was identified at the northern end of the trench. This crossed the trench on an east - west alignment, and was 0.8m wide and 0.05m deep at the greatest extent. A single field drain lay to the south of this furrow, and the trench was sealed by a layer of topsoil [23: 0.2m thick]. No other features were recorded, and no finds recovered.

Trench 77

- 5.87 Trench 77 lay to the south-east of Trench 76. It measured 20m x 1.6m, and was orientated roughly north – south. Natural subsoil [25] was exposed at 0.35m below ground level. This was sealed by a layer of subsoil [24: 0.15m – 0.2m thick]. Three furrow bases survived at the southern end of the trench. These furrows lay roughly 4m apart, and were 0.9m wide and 0.04m deep at the maximum extent. The southern two furrows contained modern field drains, again clearly positioned to aid groundwater drainage. These deposits were overlain by topsoil [23: 0.2m wide]. No finds were recovered, and no other features identified.

Trench 78

- 5.88 This trench was positioned to the north-east of Trench 77. It was similarly aligned roughly north - south, and measured 20m x 1.6m. Natural subsoil [25] was encountered at 0.35m below ground level, and was overlain by subsoil [24: 0.15m - 0.2m]. Five furrow bases were observed crossing the width of the trench. All these furrows also contained modern ceramic pipe field drains, laid into the furrow bases and running along the same orientation as the features. The trench was sealed by a layer of topsoil [23: 0.2m thick], and no other features were noted.

Trench 79

- 5.89 Trench 79 was located in the north-eastern corner of the study site, on the north-west side of a heavily-landscaped golf course green. The trench was orientated north - south, and measured 15m x 1.6m. Glacial subsoil [25] was exposed across the base of the trench at a depth of 0.3m at the northern end, rising to 0.55m at the south. This natural deposit was covered by a layer of subsoil [24: 0.1m – 0.15m thick]. At the southern end of the trench, this subsoil was overlain by a landscaping deposit of reworked natural subsoil, a mixed and mottled dump of mid brown and yellowish-brown silty clay containing frequent sub-rounded and sub-angular stone fragments and cobbles [36: 5.6m long, 0.2m thick]. This deposit had clearly been laid down to construct the flat plateau of the golfing green to the south-east. Two associated modern drains, both containing ceramic pipes, crossed the trench further to the north. The trench was sealed by a layer of topsoil [23: 0.2m thick]. No archaeological features were exposed.

Trench 80

- 5.90 Trench 80 lay to the east of Trench 79, across the eastern side of the golfing green. It was aligned north-east / south-west, and measured 20m by 1.6m. Natural subsoil [25] was exposed at a depth of 0.6m at the north-east end of the trench and at 1.1m at the south-west. This was covered by a layer of subsoil [23: 0.15m – 0.2m thick] which was in turn overlain by a deposit of reworked natural clay [37: 0.7m thick]. As with deposit [26], this clay had clearly been lain down to landscape the area, and to build up and level the golfing green. A substantial field drain, 0.9m wide, crossed the southern end of the trench. This drain was also associated with the modern landscaping works. It contained a wide ceramic pipe, and was backfilled with a loose deposit of dark grey ash and sub-rounded gravel. The trench was sealed by a layer of well-developed topsoil [23: 0.2m thick]. No other features were exposed.

6. The artefacts**Pottery assessment****Results**

- 6.1 Eighty four sherds with a weight of 635g came from five contexts, the majority from topsoil context [23] (Table 1.2).
- 6.2 Very few (8) are medieval or late medieval, and these include a piece of green glazed reduced sandy ware from context [23] and pieces of oxidised sandy ware from [23, 24 & 32]. The medieval sherds are rather abraded, but the group of four from context [24] are (recently broken) joining fragments from a vessel base with sooting outside and traces of splash glazing.
- 6.3 The later material includes a sherd from a thin-walled German stoneware bowl from context [24] and sherds of white salt glazed stoneware and pearlware from [23], which could be late 18th century. The remaining material is of 19th or early 20th century date.

Discussion

- 6.4 The very small quantity of medieval material suggests deposition through field manuring. The later material is probably the result of casual or deliberate rubbish disposal.

Recommendation

- 6.5 No further work is recommended.

Animal bone assessment**Results**

- 6.6 Part of a single sheep/goat-sized rib bone was found in context [11].

Recommendation

- 6.7 No further work is recommended.

Clay pipe assessment**Results**

- 6.8 Two fragments of post-medieval clay tobacco pipe stem came from topsoil context [23] from Trench 10. Neither has a stamp or a maker's mark.

Recommendation

- 6.9 No further work is recommended.

Glass assessment

Results

- 6.10 Eight fragments of glass were recovered. A piece from the base of an 18th/19th century, mid-green glass wine bottle came from context [21], the drainage cut fill. The remaining pieces were found in topsoil context [23] and comprise two fragments of green and one of clear bottle glass, two pieces of clear ornamental 'cut' glass and two of thin (<2mm) opaque, white glass, again probably ornamental. All the material is of post-medieval date.

Recommendation

- 6.11 No further work is recommended.

Building materials assessment

Results

- 6.12 A mould-made brick was recovered from drain culvert context [42]. It is 242mm long x 123mm wide x 63mm thick, with no frog or maker's stamp. It is in a fairly hard orange/red fabric with sparse inclusions of soft white rock. There are mortar traces on all faces. Its dimensions suggest a possible 18th century date.
- 6.13 Small pieces of post-medieval pantile came from contexts [11] and [23]. Only the thickness (13mm & 15mm) is measurable. Both are in a hard, orange/pink fabric and have one sanded face.

Recommendation

- 6.14 No further work is recommended.

Iron objects assessment

Results

- 6.15 Part of a highly corroded nail was recovered from context [11], 37mm long and incomplete. The head is obscured, but the shape of the shank suggests it was hand wrought. Such nails had a very long life and it could date from the medieval through to the early modern period.

Recommendation

- 6.16 No further work is recommended.

Flint assessment

Results

- 6.17 A fragment of burnt flint came from subsoil context [24]. Though unworked, its presence indicates that it was deliberately brought to site. It cannot be dated.

Recommendation

- 6.18 No further work is recommended.

7. The palaeoenvironmental evidence

Methods

- 7.1 A palaeoenvironmental assessment was carried out on four bulk samples, taken from ditch and gully fills of medieval or unknown origin. The samples were manually floated and sieved through a 500µm mesh. The residues were examined for shells, fruitstones, nutshells, charcoal, small bones, pottery, flint, glass and industrial residues, and were scanned using a magnet for ferrous fragments. The flots were examined at up to x60 magnification using a Leica MZ7.5 stereomicroscope for waterlogged and charred botanical remains. Identification of these was undertaken by comparison with modern reference material held in the Environmental Laboratory at Archaeological Services Durham University. Plant nomenclature follows Stace (1997). Habitat classifications follow Preston *et al.* (2002).
- 7.2 Selected charcoal fragments were identified, in order to provide material suitable for radiocarbon dating. The transverse, radial and tangential sections were examined at up to x600 magnification using a Leica DMLM microscope. Identifications were assisted by the descriptions of Schweingruber (1990) and Hather (2000), and modern reference material held in the Environmental Laboratory at Archaeological Services Durham University.
- 7.3 The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the regional archaeological research framework and resource agendas (Petts & Gerrard 2006; Hall & Huntley 2007; Huntley 2010).

Results

- 7.4 Small fragments of charcoal, coal/coal shale and modern roots were noted in the samples. The charcoal is poorly preserved and heavily mineralised, and in most cases could not be identified, although a few fragments of oak were noted in contexts [32] and [34]. A small amount of fired clay and fuel waste was recorded in context [27]. The results are presented in Table 1.3. The charcoal may not be suitable for radiocarbon dating.

Discussion

- 7.5 The samples comprise a small amount of fuel waste, but the assessment can provide little additional information about the age or nature of the features due to the low numbers of palaeoenvironmental remains.

Recommendations

- 7.6 No further analysis is required due to the low numbers and poor preservation of palaeoenvironmental remains.

8. The archaeological resource

- 8.1 Furrows, the remains of medieval and post-medieval ploughing, were recorded in the majority of the trenches on the main area of the golf course. Little medieval or early post-medieval pottery was recovered, suggesting either a lack of cultivation or manuring during these periods, or indicating that these features are of later post-medieval date. No evidence of post-medieval occupation or burial was noted across the site (see 4.6, above), although one shallow gully exposed [F33] is of possible medieval date. No evidence of prehistoric exploitation of the site was found.

- 8.2 Post-medieval remains relating to the construction and development of the manor grounds were encountered in Trenches 15, 16, and 42. These include the remains of a boundary ha-ha which pre-dates the walled garden and drainage and planting features relating to the walled garden.

9. Impact assessment

- 9.1 The development has the potential to remove or truncate the remains of ridge and furrow cultivation across most of the site, which is of probable post-medieval date.
- 9.2 Development in the area of the walled garden has the potential to impact on features associated with the garden and a probable earlier ha-ha.
- 9.3 There are no indications that the development will impact on any significant archaeological resource from earlier periods.

10. Recommendations

- 10.1 Archaeological recording may be required in relation to groundworks within the vicinity of the walled garden.
- 10.2 No further archaeological works are required in relation to the development of the remainder of the site.

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Appendix 1: Data tables

Table 1.1: Context data

The * symbols in the columns at the right indicate the presence of artefacts of the following types: P pottery, B bone, M metals, F flint, G glass, C ceramic building material, O other materials.

No	Area	Description	P	B	M	F	G	C	O
1	Tr. 15 & 16	Topsoil inside the walled garden							
2	Tr. 15 & 16	Subsoil inside the walled garden							
3	Tr. 15	Stone and brick culvert							
F4	Tr. 15	Cut for culvert							
5	Tr. 16	Fill of [F7]							
F6	Tr. 16	Ditch cut							
F7	Tr. 16	Cut of garden feature							
8	Tr. 16	Backfill deposit							
9	Tr. 16	Fill of [F6]							
10	Tr. 16	Fill of [F6]							
11	Tr. 16	Fill of [F6]	•	•	•			•	
12	Tr. 16	Fill of [F13]							
F13	Tr. 16	Cut of field drain							
14	Tr. 16	Ceramic drainpipe							
F15	Tr. 16	Stone wall of ha-ha							
16	Tr. 16	Rubble from demolished wall							
17	Tr. 16	Clay capping							
F18	Tr. 16	Cut for field drain							
19	Tr. 16	Fill of [F18]							
20	Tr. 16	Fill of [F18]							
21	Tr. 11	Fill of [F22]	•				•		
F22	Tr. 11	Linear gully cut							
23	-	Topsoil across the golf course	•				•	•	•
24	-	Subsoil across the golf course	•			•			
25	-	Natural glacial subsoil							
26	Tr. 11	Landscaping deposit							
27	Tr. 5	Fill of [F28]							
F28	Tr. 5	Probable ditch cut							
29	Tr. 13	Fill of [F30]							
F30	Tr. 13	Linear drainage gully							
31	Tr. 21	Made ground deposit							
32	Tr. 17	Fill of [F33]	•						
F33	Tr. 17	Shallow gully cut							
34	Tr. 53	Fill of shallow gully							
F35	Tr. 53	Gully cut							
36	Tr. 79	Landscaping dump deposit							
37	Tr. 80	Landscaping dump deposit							
F38	Tr. 36	Ditch cut							
39	Tr. 36	Rubble spread							
40	Tr. 42	Landscaping deposit							
41	Tr. 42	Culvert fill							
42	Tr. 42	Brick culvert						•	
F43	Tr. 42	Construction cut for culvert							
44	Tr. 42	Landscaping deposit							
45	Tr. 42	Demolition dump							
46	Tr. 42	Demolition dump cut							
47	Tr. 36	Primary fill of [F38]							
48	Tr. 36	Secondary fill of [F38]							
49	Tr. 22	Dump/landscaping deposit							
50	Tr. 41	Landscaping dump layer							

Table 1.2: Pottery numbers and types by context

Context	Med/late med	Includes	Post-med	Includes
11			4	HE; YGCW; CGW
21			1	PWW
23	3	OSW;RSW	69	BGCW; BGST; BSTW, MGCW; PWW; TPWW; YGCW; WSGSW; CGW; PW; HE
24	4	OSW	1	GSW
32	1	OSW	1	YGCW;
Total	8		76	

Key:

BGCW	brown-glazed coarseware	OSW	oxidised sandy ware
PW	pearlware	BGST	brown-glazed stoneware
PWW	plain whiteware	BSTW	buff stoneware
RSW	reduced sandy ware	CGW	colour-glazed ware
TPWW	transfer-printed whiteware	GSW	German stoneware
WSGSW	white salt-glazed stoneware	HE	horticultural earthenware
YGCW	yellow-glazed coarseware	MGCW	mottle-glazed coarseware

Table 1.3: Data from palaeoenvironmental assessment

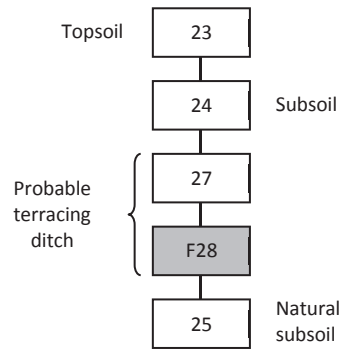
Sample	1	2	3	4
Context	27	29	32	34
Feature	Ditch	Gully	Gully	Gully
<i>Material available for radiocarbon dating</i>	(✓)	-	(✓)	(✓)
<i>Volume processed (l)</i>	15	7	8	10
<i>Volume of flot (ml)</i>	100	150	100	200
<i>Residue contents</i>				
Fired clay	(+)	-	-	-
Fuel waste	(+)	-	-	-
<i>Flot matrix</i>				
Charcoal	(+)	(+)	(+)	++
Coal / coal shale	+	+	+	+
Roots (modern)	++	+++	+++	+++
Wood / woody roots (modern)	-	++	(+)	-

[(+): trace; +: rare; ++: occasional; +++: common; ++++: abundant

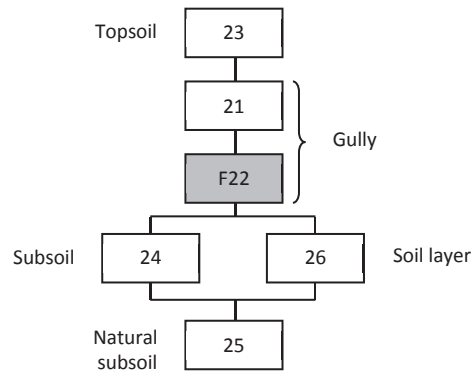
(✓) may be unsuitable for dating due to size or species]

Appendix 2: Stratigraphic matrices

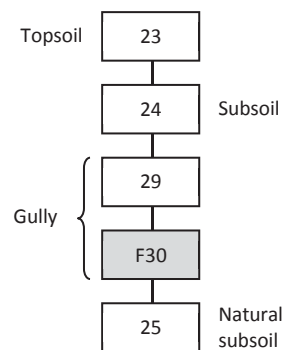
Trench 5



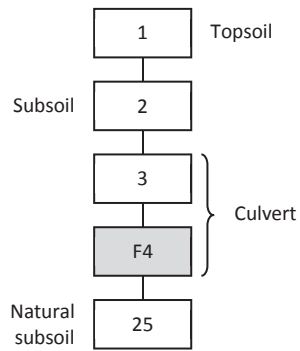
Trench 11



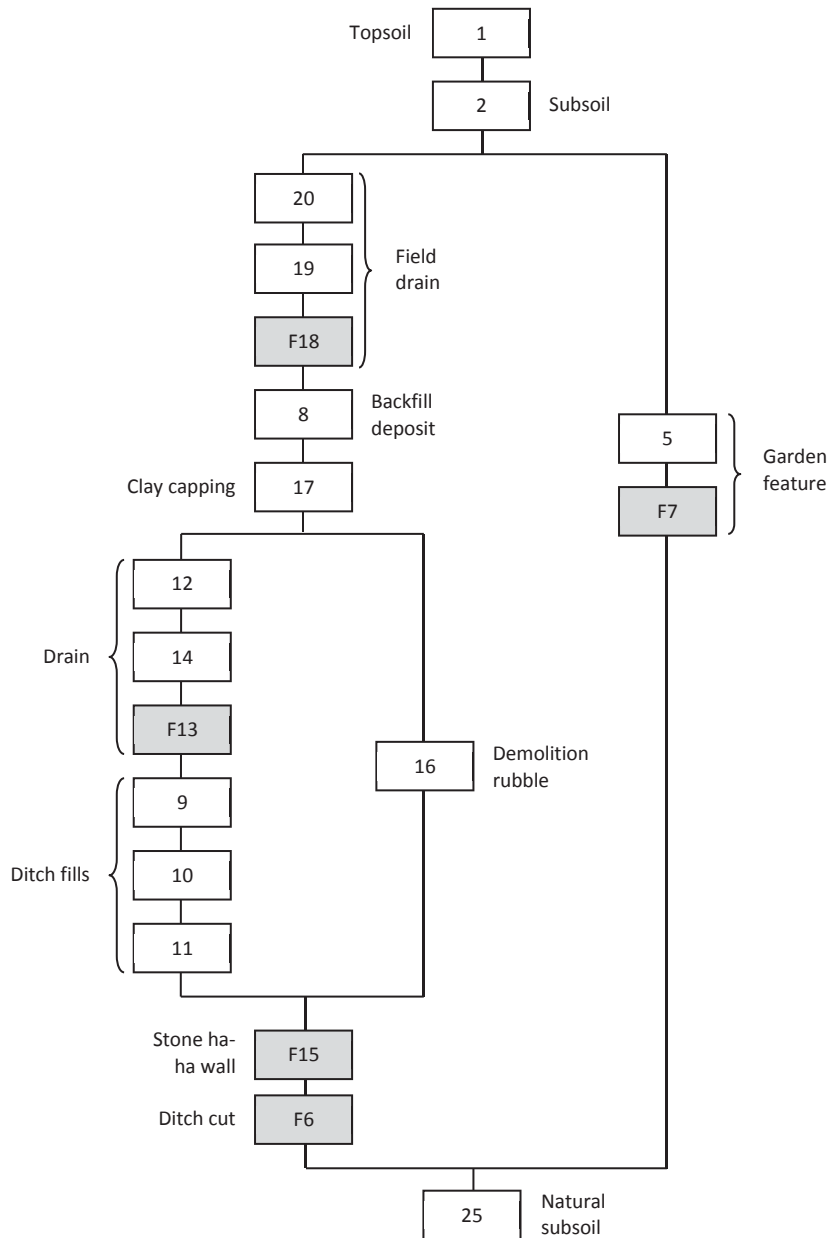
Trench 13



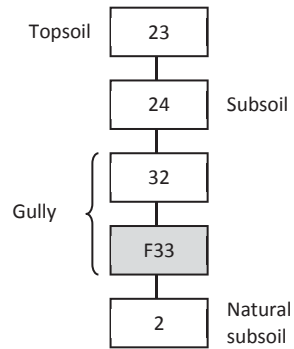
Trench 15



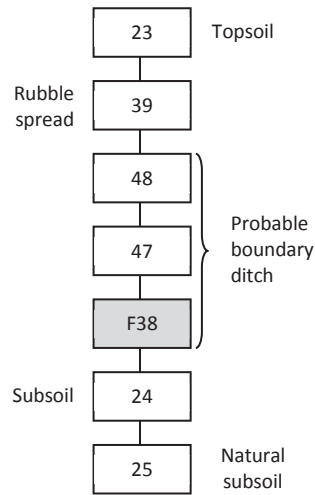
Trench 16



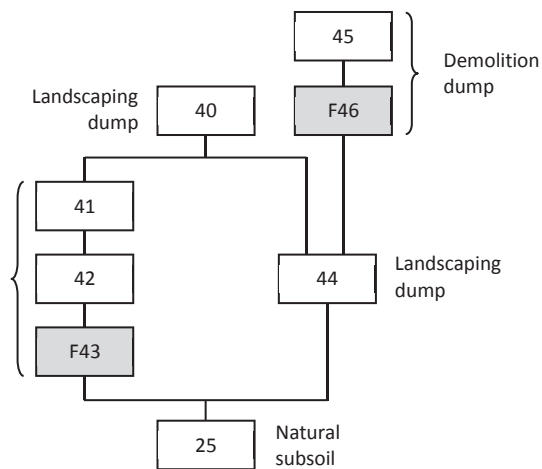
Trench 17



Trench 36



Trench 42



Trench 53

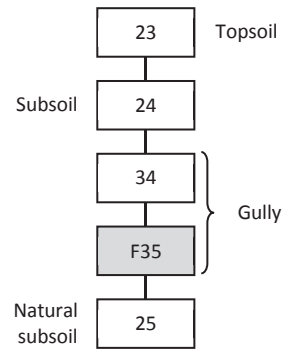
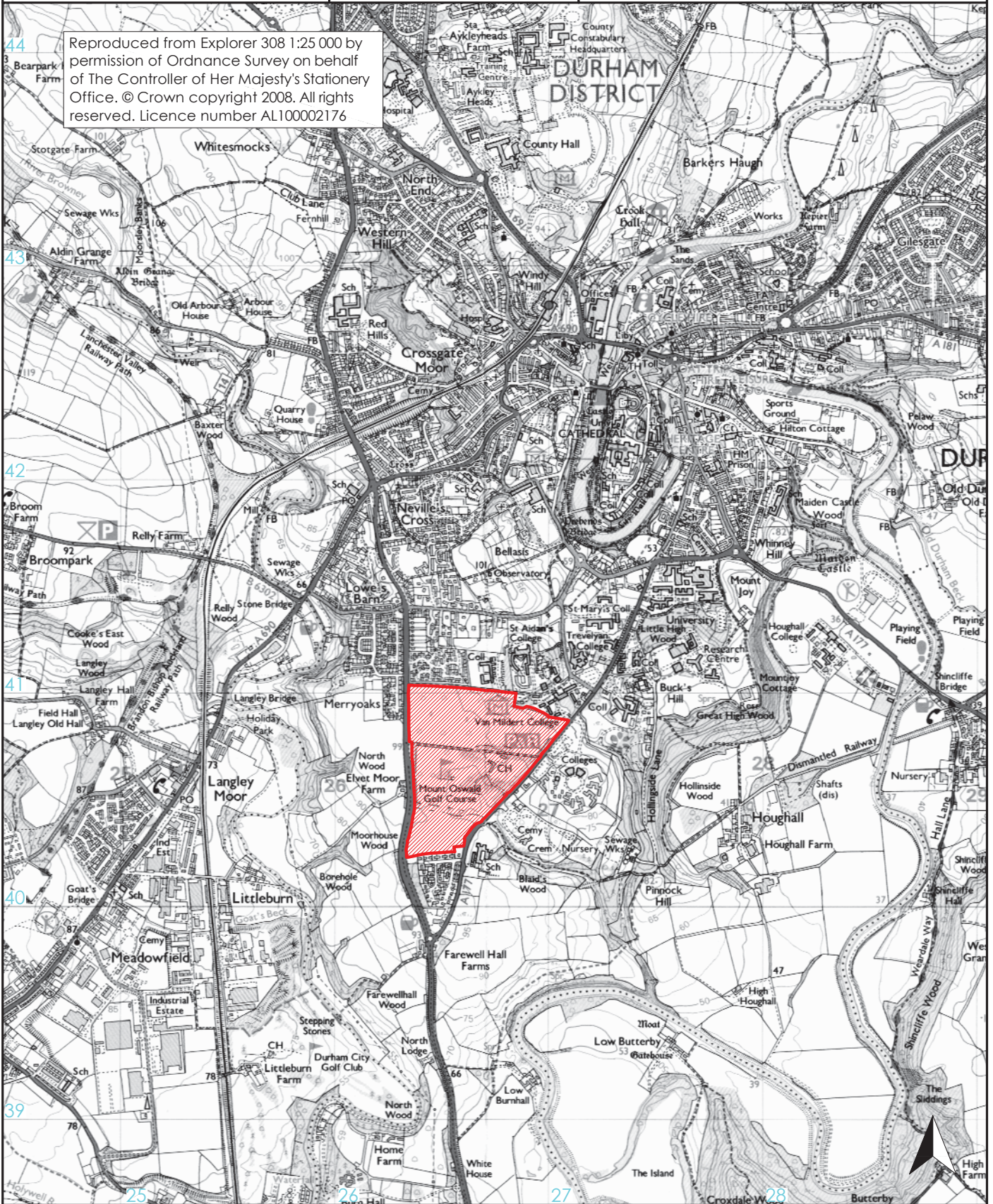


Figure 1: Site location

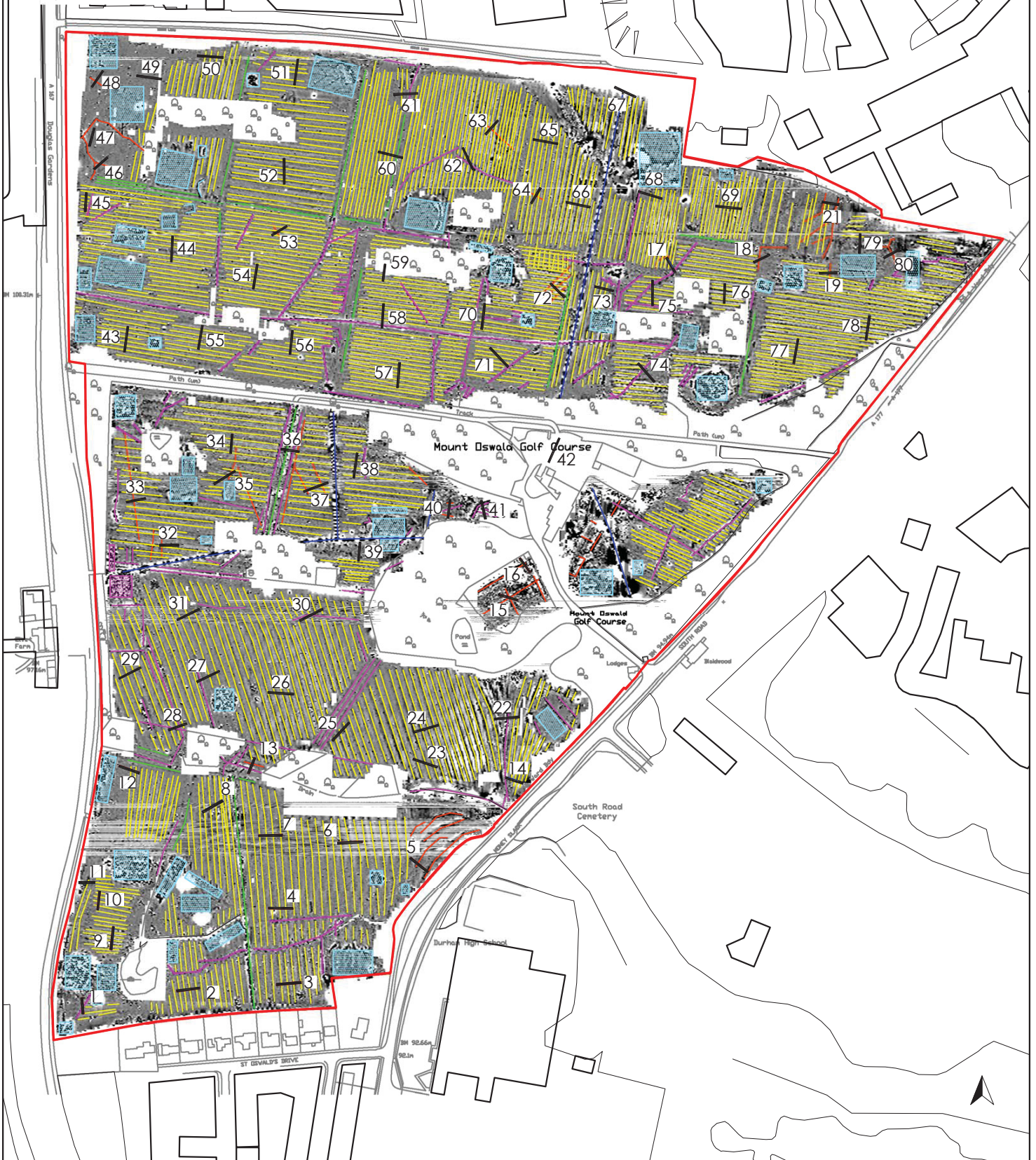


 site location

0 1km
scale 1:25 000 for A4 plot

— trench

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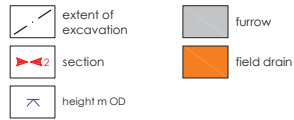
on behalf of
Banks Developments

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scale 1:3000 for A3 plot

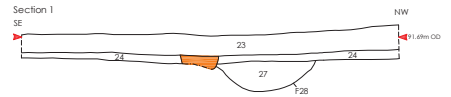
Mount Oswald Golf Course
Durham
County Durham

archaeological evaluation
report 3111

Figure 2: Trench locations



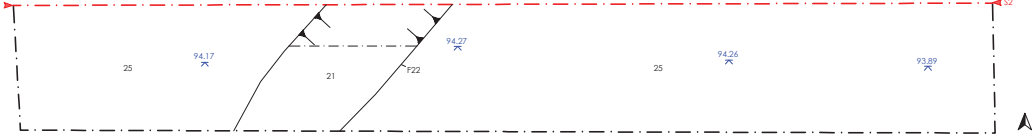
Trench 5, plan



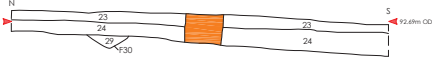
Section 2



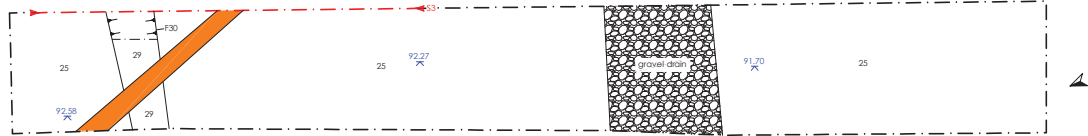
Trench 11, plan

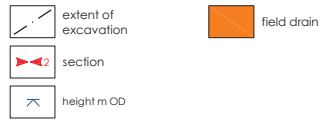


Section 3

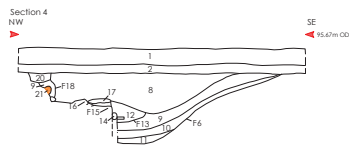
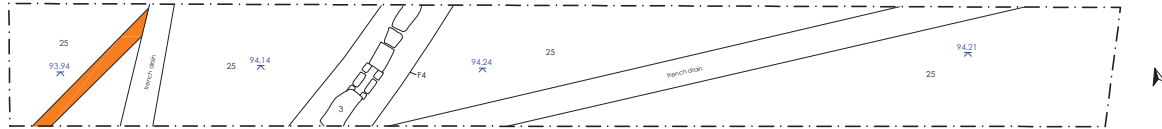


Trench 13, plan





Trench 15, plan



Trench 16, plan



Trench 17, plan



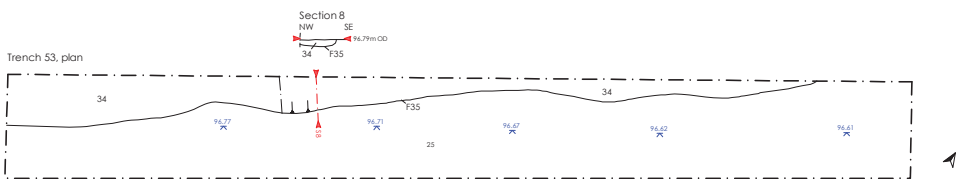
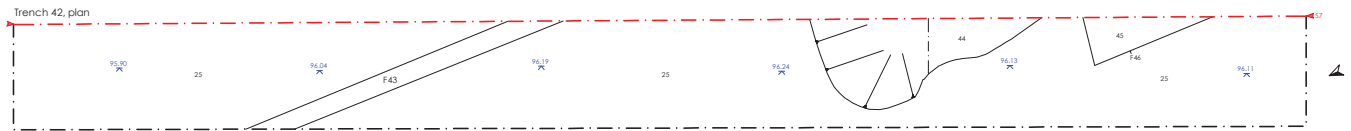
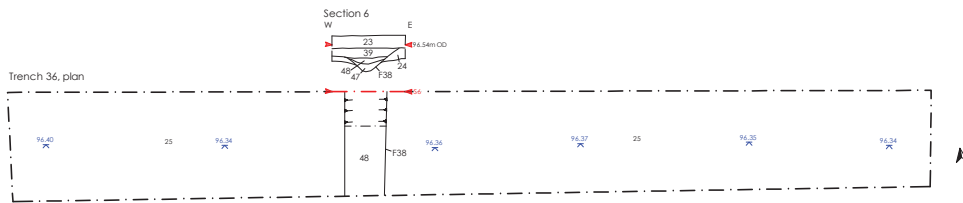
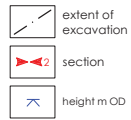




Figure 6: Trench 5, [F28], facing south-west. The modern field drain truncating the east side of the cut is visible to the left of frame



Figure 7: Trench 11, gully [F22], facing north, and showing made ground deposit [26] to the right of frame (indicated)



Figure 8: Trench 13, gully [F30] (indicated), facing south-east



Figure 9: Trench 15, culvert [F4], facing south



Figure 10: Trench 16, ditch [F6] and the ha-ha wall [F15] (indicated), facing north



Figure 11: Trench 17, shallow gully [F33], facing north-east



Figure 12: Trench 36, possible field boundary [F38], facing north. The landscaping spread [39] lies to the left of frame (indicated)



Figure 13: Trench 42, brick culvert [F43], facing east



Figure 14: Trench 53, irregular gully [F35], facing north-east



Figure 15: Trench 61, successive field drains cut into a furrow base, facing north. The undisturbed edge of the furrow base is indicated on the right of frame