AN ARCHAEOLOGICAL EVALUATION AT J.W. COATS & SONS, WARDLEY LANE, WARDLEY, GATESHEAD, TYNE AND WEAR

PCA

PRE-CONSTRUCT ARCHAEOLOGY

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AN ARCHAEOLOGICAL EVALUATION AT J.W. COATS & SONS, WARDLEY LANE, WARDLEY, GATESHEAD, TYNE AND WEAR

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An Archaeological Evaluation at J. W. Coats & Sons, Wardley Lane, Wardley, Gateshead, Tyne and Wear

Central National Grid Reference: NZ 3508 6194

Site Code: WLG 14

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1.1 An archaeological evaluation was undertaken in April 2014 by Pre-Construct Archaeology Limited at the salvage yard premises of J.W. Coats & Son Limited, Wardley Lane, Wardley, Gateshead. The work was carried out ahead of a proposed residential development and was commissioned by the landowner and occupier of the premises. A Written Scheme of Investigation for the evaluation was prepared earlier in 2014.

1.2 The proposed re-development site comprises an irregular-shaped plot of land covering 5.6 ha, centred on NGR NZ 3508 6194, located *c.* 300m north of the A184 (T) road and *c.* 200m south of the Tyne and Wear Metro railway line. The larger, south-eastern part of the site is currently occupied by the salvage yard compound of the premises of J.W. Coats & Sons, while the smaller, north-western part is occupied by a group of derelict modern buildings. The overall site is bounded to the south-east by the line of the Bowes Railway and to the south-west by a disused railway, now known as the Leamside Line but originally part of the Durham Junction Railway. To the north-west, the site is bounded by Wardley Lane, beyond which is a wooded area, and a made track bounds the north-eastern side, beyond which is a large area of open scrubland.

1.3 The salvage yard portion of the overall proposed re-development site falls within the area of 'Wardley Moated Site', a Scheduled Monument. The monument includes the moated medieval manor of Wardley and related earthworks and deposits. This was a high status medieval dwelling and administrative nucleus, of a regionally unusual form, and is the only moated site known in Tyne and Wear. The precise date of its foundation is not known, but it was certainly in existence by 1264. Amongst structures noted in medieval accounts was a bridge, presumably over the moat. Medieval accounts indicate that it may have supplied food produce to Durham Priory. The manor was sub-divided into five farms in the 18th century, including Manor House Farm, which was located within the moated area, and South Wardley Farm, to the south-east of the site. Manor House Farm was demolished by the late 1980s. Remains of the moat are visible on the south and south-east sides; the east side was infilled in the 1970s and has been relocated by excavation. The northern two-thirds of the moat circuit have been obscured by various industrial activities; the overall site was occupied by Wardley Colliery from the mid 19th century, with the core elements of the workings in its north-westernmost portion.

1.4 Five hand dug trenches were excavated in 1991 across the moat, to the east of the proposed re-development site boundary. This revealed the moat to be 2.20m deep and 7–8m wide at the top. The trenches were backfilled in 1994 and the moat was mechanically excavated to a depth of 1m and width of 6m. An archaeological watching brief was undertaken in 1995 within the salvage yard during the excavation of foundations for a building located largely across the yard area of the former Manor House Farm. Deposits of 13th- and 14th-century origin were encountered at a shallow depth below ground level, along with structural features which pre-dated the farm.

1.5 Significant archaeological features relating to the more recent industrial heritage of the region bound the development site to the south-east. The Bowes Railway, originally known as known as the 'Pontop and Jarrow Railway', was founded in 1826 as an early planned colliery line originally linking staithes at Jarrow to Mount Moor Colliery, Gateshead. A stretch of the Bowes Railway to the south-west of the proposed re-development site is a Scheduled Monument.

1.6 An archaeological desk-based assessment of the south-eastern portion of the overall proposed re-development site was undertaken in 2008. This was followed by an archaeological evaluation in the same year in which three trenches located in the western part of the salvage yard recorded no archaeological remains of significance.

1.7 Scheduled Monument Consent (SMC) was required for the undertaking of the archaeological evaluation due to the status of its south-easternmost portion. In broad terms, the work aimed to establish the archaeological potential of the salvage yard portion of the overall site by determining the level of truncation by recent activity and the degree of survival of any remains of archaeological significance. The evaluation comprised 10 machine-excavated trenches (Trenches 1-10), all situated within the area currently occupied by the salvage yard. Trenches 1, 2, 4 and 9 were sited in the scheduled area to test the locations of earthworks depicted on the Ordnance Survey first edition map of 1857 or the projected lines of such earthworks and likely representing various elements of the medieval moated site. Trenches 3, 5, 6, 7 and 8 were 'judgement' trenches to test the scheduled area. Trench 10 was a 'judgement' trench sited in the westernmost portion of the salvage yard immediately to the east of a substantial earthwork mound of modern origin. The proposed basal dimensions for the trenches were: Trenches 1 and 3, 25m x 2m; Trench 2, 30m x 2m and; Trenches 4-10, 10m x 2m.

1.8 Deposits and features encountered within the trenches were placed with four broad phases of activity. The boulder clay 'drift' geological material (Phase 1) was the basal deposit recorded in each trench and generally comprised stiff to firm yellowish brown and brownish yellow clay.

1.9 Features of medieval and probable medieval date (Phase 2) were recorded in Trenches 3 and 10, cutting into the natural clay sub-stratum. A NW-SE orientated linear feature exposed in the central portion of Trench 3 probably represents a drainage and/or boundary feature. A large piece of tile which may be of medieval date or may be a residual Roman find, was recovered from its excavated portion. A gully and a posthole were exposed to the west and east, respectively, of the ditch. Although no artefactual material was recovered from these features the similarity of their fills indicates contemporaneity with the ditch. The features exposed in Trench 3 probably represent settlement activity located immediately to the north of the manorial complex. A NE-SW orientated linear feature was exposed within the southern part of Trench 10. No dateable material was recovered from its excavated portion but its fill was similar to that within the ditch in Trench 3. This feature is interpreted as a drainage and/or boundary feature and probably represents agricultural activity within the wider vicinity of the manorial complex.

1.10 Phase 3 comprises post-medieval remains associated with Manor House Farm and industrial era remains associated with Wardley Colliery. Post-medieval structural elements associated with the buildings and yard areas of Manor House Farm were recorded in Trenches 3 and 5, cutting into the natural clay sub-stratum. The south-west corner of a stone-built wall foundation exposed within the central portion of Trench 3 represents the corner of an enclosed yard located to the west and south of the main farm buildings.

1.11 A substantial NE-SW orientated stone-built wall foundation and the basal portion of a hearth were recorded in the central portion of Trench 5. This trench was sited across the north-eastern corner of the complex of buildings at the former Manor House Farm and the structures are likely to represent elements associated with this complex.

1.12 Industrial era structures associated with Wardley Colliery in the 19th century were recorded in Trenches 9 and 10. These included the eastern portion of a stone-lined reservoir in Trench 9 – depicted on historic mapping - and elements of two brick-built structures in Trench 10. Further deposits derived from colliery activity included dumped colliery waste material in Trenches 1, 2, 3 and 4 and various drainage and service features recorded in Trenches 1, 2 and 3.

1.13 Phase 4 comprised modern activity. Various dumping and levelling deposits of modern date were recorded in Trenches 5, 6, 7, 8 and 10. Such deposits, although derived from industrial era colliery activity, probably represent levelling activity either associated with the demolition of the former buildings of the Manor House Farm or associated with the establishment of the salvage yard. Further 20th-century structures and features comprised drainage and service features in Trenches 3, 5, 6 and 7 and concrete and brick structures in Trenches 7 and 8.

1.14 The uppermost deposits recorded in each trench comprised levelling and consolidation deposits and associated surfaces of concrete and compact gravel.

1.15 In summary, the evaluation recorded archaeological features of importance in Trenches 3 and 5. A watching brief undertaken previously within the area formerly occupied by the yard of Manor House Farm, in the area between Trenches 3 and 5, also recorded important archaeological deposits and structures of medieval and post-medieval date. An archaeological feature of note was also encountered to the west, within Trench 10.

1.16 Collectively, the archaeological remains recorded by the evaluation are considered to be of low to at best medium archaeological importance, of significance at a local level. These remains could be considered by English Heritage to no longer merit scheduling, with the result that the south-easternmost portion of the salvage yard compound could be 'descheduled'. While there would then be no statutory constraints to the re-development proposals with regard to the historic environment, further archaeological work would be required ahead of the re-development in areas where groundworks would potentially disturb the archaeological remains recorded by the evaluation, or any remains of similar date.

2. INTRODUCTION

2.1 General Background

2.1.1 This report details the methodology and results of an archaeological evaluation undertaken by Pre-Construct Archaeology Limited (PCA) in April 2014 on land off Wardley Lane, Wardley, Gateshead (Figure 1). The work was carried out ahead of a proposed residential development by Persimmon Homes and was commissioned by the owner of a vehicle salvage business premises, J.W. Coats & Sons Limited, which occupies the larger, south-eastern part of the overall site. The smaller, north-western part of the overall site is occupied by a group of derelict modern buildings.

2.1.2 From the mid 19th century, the overall site was occupied by various components of Wardley Colliery, with the main workings situated to the north-west. However, the site has particular potential for medieval archaeological remains as its easternmost portion, within the salvage yard, lies within the Scheduled Monument 'Wardley Moated Site' (Figure 2). Scheduled Monument Consent (SMC) was therefore required for the undertaking of the archaeological evaluation.

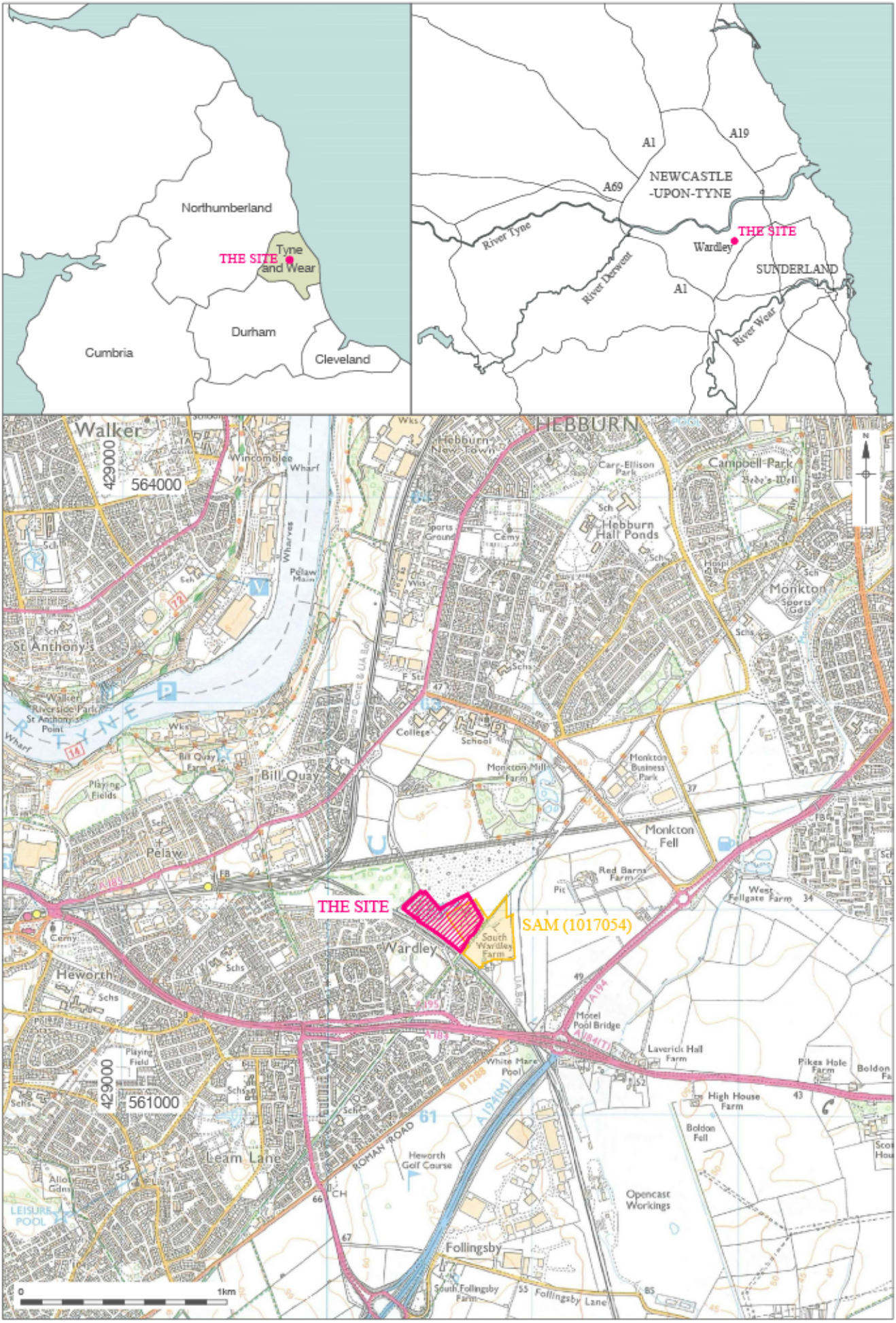
2.1.3 An archaeological desk-based assessment (DBA) of the salvage yard portion of the overall site was undertaken in 2008 (The Archaeological Practice 2008a). This concluded that there was high potential for significant archaeological remains of medieval date in areas not truncated by recent activity. An archaeological evaluation undertaken, also in 2008, in the western part of the salvage yard recorded no remains of significance (The Archaeological Practice 2008b).

2.1.4 The work described herein was undertaken according to a Written Scheme of Investigation (WSI) prepared in 2014 (AD Archaeology 2014) and approved by English Heritage and the Tyne and Wear Specialist Conservation Team at Newcastle City Council. The evaluation comprised 10 machine-excavated trial trenches, all located within the south-eastern part of the overall proposed re-development site, *i.e.* J.W. Coats & Sons Limited salvage yard (Figure 2).

2.1.5 The Site Archive (Site Code: WLG14) is currently held at the Northern Office of PCA and the retained element, comprising the written, drawn and photographic records, as well as a small assemblage of artefactual material, will be deposited with the Tyne and Wear Museums and Archives at Arbeia, South Shields, Tyne and Wear. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the project is: preconst1-178532.

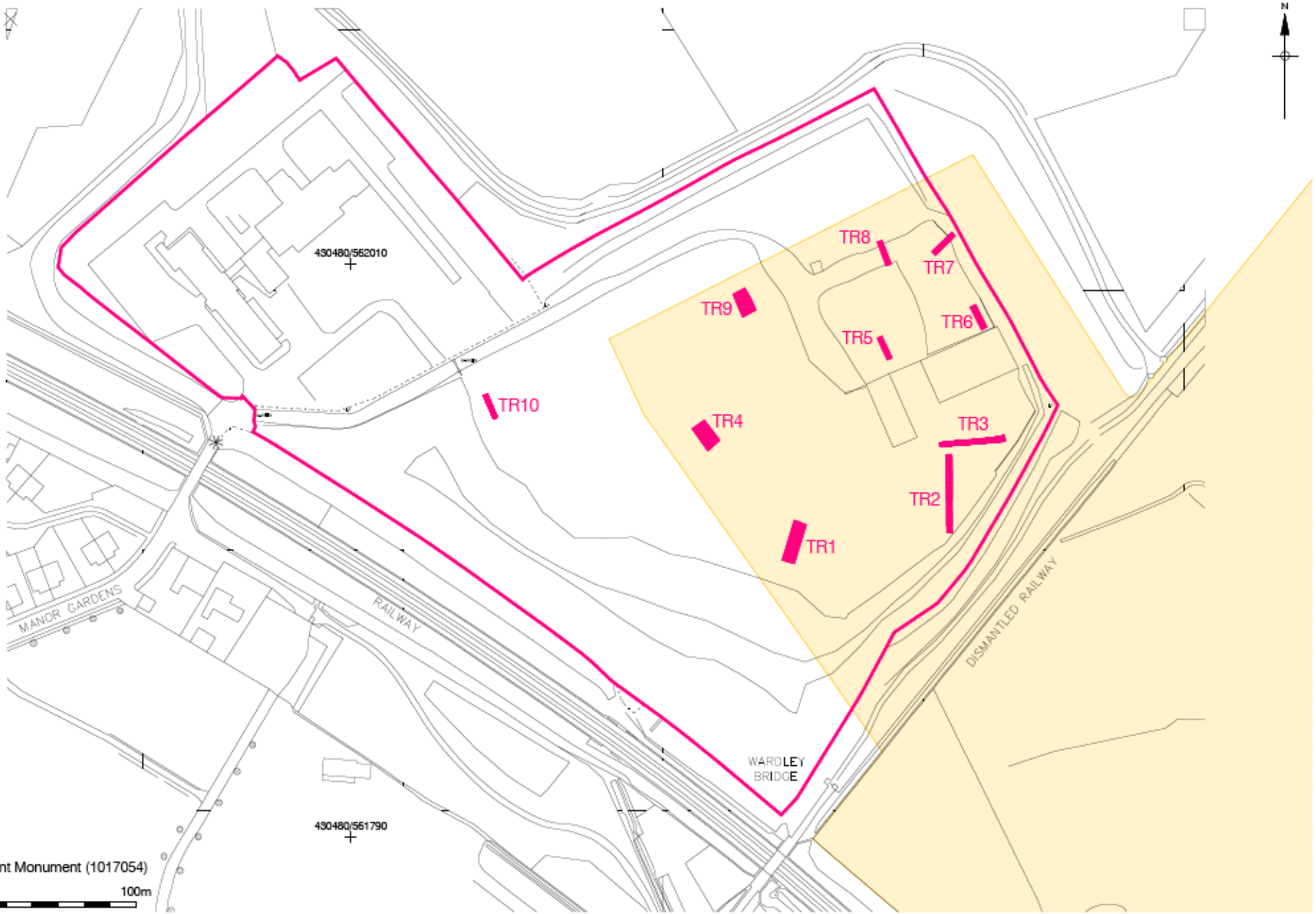
2.2 Site Location and Description

2.2.1 The proposed re-development site lies in the Wardley area at the eastern end of the Metropolitan Borough of Gateshead, close to the administrative boundary with South Tyneside. It located to the south-east of Wardley Lane, *c.* 300m north of the A184 (T) road and *c.* 200m south of the Tyne and Wear Metro railway line, centred at National Grid Reference NZ 3508 6194 (Figure 1). The overall site comprises an irregular-shaped plot of land covering 5.6 ha; the larger, south-eastern part of the overall site is currently occupied by J.W. Coats & Sons Limited salvage yard compound and the smaller, north-western part is occupied by a group of derelict modern buildings, most recently used a paint-balling centre.



02/05/14 HB

Figure 1
Site Location
1:2,000,000; 500,000 & 25,000 at A4



Scheduled Ancient Monument (1017054)

0 100m

Map Data based on survey drawing supplied by client

06/05/14 HB

Figure 2
Trench Location
1:2,000 at A4

2.2.2 The overall site is bounded to the south-east by the line of the Bowes Railway and to the south-west by a disused railway, originally part of the Durham Junction Railway. To the north-west, the site is bounded by Wardley Lane, beyond which lies a wooded area, and a made track bounds the north-eastern side, beyond which is a large area of open scrubland.

2.2.3 The north-western part of the overall site was formerly occupied by the core elements of Wardley Colliery; extensive colliery buildings and associated infrastructure which covered this area were demolished following the closure of the pit in 1974. The structures currently occupying this area were built sometime before 1988. The remainder of this part of the site is occupied by concrete tracks and areas of hardstanding surrounded by scrubland. Wardley Road skirts the north-western and south-western boundaries of this part of the overall site, turning to run southwards across the line of the disused railway.

2.2.4 The salvage yard compound occupying the larger, south-eastern part of the overall site was formerly occupied by other elements of Wardley Colliery, including a large colliery waste heap and a row of workers' housing. It is divided from the north-western portion of the site by a road leading north-eastwards from Wardley Lane at the crossing of the adjacent disused railway line. The road continues into the salvage yard and curves round to serve the eastern portion, occupied by concrete hardstanding and a single modern building which houses the offices and workshops of the business. The remainder of the open area within the salvage area is currently rough hardstanding, mostly compact rubble. A substantial mound of rubble, colliery waste and soil occupies the south-western site margin, continuing alongside the south-eastern boundary, but narrowing to the north-east.

2.2.5 The evaluation was undertaken only within the south-eastern part of the overall site proposed for re-development, namely the portion occupied by J.W. Coats & Sons salvage yard compound.

2.3 Geology and Topography

2.3.1 The solid geology of the area is the Pennine Middle Coal Measures Formation - Sandstone. Sedimentary Bedrock formed approximately 309 to 312 million years ago in the Carboniferous Period (*British Geological Survey* website). Coal deposits have been extensively exploited across the region.

2.3.2 Bedrock is overlain by glacial clay deposits, in this area comprising the Pelaw Clay formation which is generally 1–2m thick, but can reach up to 4.5m in thickness. This is a reddish-brown to dark brown silty clay containing well dispersed pebbles and cobbles which has been extensively exploited across the region for brick and tile manufacture.

2.3.3 The River Tyne lies *c.* 1.2 km to the north-west of the site. The topography in the wider area of the site is generally flat, lying between the 45m OD and 50m OD contour. Within the site itself, existing ground level gradually slopes downwards from the west in the area of Trench 10, where the ground was recorded at a maximum height of 54.17m OD, to the east, with ground level recorded at a minimum height 50.94m OD in the area of Trench 2.

2.4 Planning Background

2.4.1 The archaeological evaluation was carried out in advance of a proposed housing development by Persimmon Homes. In general, the Tyne and Wear Specialist Conservation Team (T&WSCT), headed by the County Archaeologist, at Newcastle City Council provides archaeological development control throughout Tyne and Wear. In this case, since part of the site lies within a Scheduled Monument, the input of English Heritage, represented by their Inspector of Ancient Monuments, was required.

2.4.2 Because the south-easternmost portion of the salvage yard compound lies within a scheduled area, any archaeological remains within it have statutory protection under the *Ancient Monuments and Archaeological Areas Act 1979* (as amended). Accordingly, the archaeological evaluation required Scheduled Monument Consent (SMC) from the Department of Culture, Media and Sport (DCMS) prior to its undertaking.

2.4.3 In accordance with the 1979 Act, the Secretary of State for Culture, Media and Sport consulted with English Heritage before deciding whether or not to grant SMC after an application for the evaluation work was submitted by Mr. Coats of J.W. Coats & Sons on 17 March 2014. The application was accompanied by the aforementioned Written Scheme of Investigation (WSI) for the evaluation and a plan of the proposed evaluation trenches.

2.4.4 English Heritage considered (as set out in a letter to Mr. Coats dated 25 March 2014) that *'…the effect of the proposed works upon the monument to be archaeological evaluation necessary to assess the extent, depth and nature of archaeological deposits in order to provide information to underpin decisions on the management of the monument, changes in its land use, and development proposals'*.

2.4.5 Accordingly, SMC was granted by the Secretary of State, advised by English Heritage, subject to a series of conditions set out in the aforementioned letter. Condition b) of SMC stated '*The specification of work for which consent is granted shall be executed in full*', the 'specification' referred to being the submitted WSI. Condition h) of SMC required a summary excavation report to be submitted to the Inspector of Ancient Monuments (English Heritage) and the County Archaeologist (T&WSCT), within three months of completion of the work.

2.4.6 Any archaeological remains related to 'Wardley Moated Site' within the scheduled portion of the salvage yard would fall within the category of 'designated heritage assets' as defined within current guidance on the historic environment set out within *National Planning Policy Framework* (NPPF) (Department for Communities and Local Government 2012). Heritage assets - those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest - remain a key concept of the NPPF, retained from the previous national planning policy *Planning Policy Statement 5 'Planning for the Historic Environment'* (PPS5) (Department for Communities and Local Government 2010a).. Despite the deletion of PPS5, the PPS5 Historic Environment Planning Practice Guide (Department for Communities and Local Government 2010b) remains a valid and UK Government endorsed document.

2.4.7 In broad terms, the archaeological evaluation was required to inform English Heritage, the Local Planning Authority (LPA), as advised by the T&WSCT, and the landowner and prospective developer, regarding the extent, depth and nature of archaeological deposits within the salvage yard portion of the overall site, but specifically the scheduled area.

2.4.8 The specific aim of the evaluation was, therefore, to provide results to inform decisions on the management of the Scheduled Monument, including whether archaeological remains in the scheduled area could be considered by English Heritage to no longer merit scheduling. This would potentially mean that the south-easternmost portion of the site could be 'descheduled', so that there would then be no statutory constraints to the re-development proposals with regard to the historic environment. Further mitigation measures would, however, be required to record any archaeological remains present, which, although of importance, could be considered to be of significance only at local or regional level, rather than being nationally important, where these remains were threatened by the re-development proposals.

2.5 Archaeological and Historical Background

The following information is taken from the 2008 DBA, the 2014 WSI for the evaluation and from Sitelines, the online Historic Environment Record (HER) for Tyne and Wear. The work of the individual authors responsible is acknowledged.

2.5.1 A stretch of the Wrekendyke Roman road runs *c.* 0.5 km to the south-east of the proposed re-development site; the Tyne and Wear HER number for the road in this area is HER 277. It is generally agreed that this NE-SW aligned Roman road connected the fort at Chester-le-Street to South Shields on the River Tyne. Versions of the name 'Wrekendyke' or 'Wrekendike' are recorded from the 13th century. A considerable stretch of the route of this road remains in use, from Jarrow Slake to Wrekenton, and to the west it is now largely built over. A section excavated through the road revealed it to be 16ft (*c.* 4.9m) wide, and on the east side of Long Bank, Wrekenton, it was 19ft (*c.* 5.8m) wide (Wright 1940). Until comparatively recently, long stretches of the Wrekendyke formed parish boundaries. Bidwell argues for a pre-Hadrianic date for the Wrekendyke (Bidwell and Snape 2002).

2.5.2 A section of the eastern area of the proposed re-development site falls within the area of the 'Wardley Moated Site' Scheduled Monument (SM reference no. 1017054; HER 719). The scheduled area includes the moated medieval manor of Wardley and related earthworks and deposits, which are situated to the north of South Wardley Farm (see Figures 1 and 2).

2.5.3 A Scheduled Monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Culture, Media and Sport according to the regime set out in the *Ancient Monuments and Archaeological Areas Act 1979,* as amended. As mentioned above, archaeological remains within a scheduled area fall within the category of 'designated heritage assets' as defined within current UK Government guidance on the historic environment set out within the NPPF. This degree of protection means that it is against the law to:

- disturb a Scheduled Monument by carrying out works without consent;
- cause reckless or deliberate damage to a Scheduled Monument;

- use a metal detector or remove an object found at a Scheduled Monument without a licence from English Heritage.

2.5.4 Around 6,000 moated sites are known in England. They consist of wide ditches, often or seasonally water-filled, partly or completely enclosing one or more islands of dry ground on which stood domestic or religious buildings. In some cases the islands were used for horticulture. The majority of moated sites served as prestigious aristocratic and seigneurial residences with the provision of a moat intended as a status symbol rather than a practical military defence. The peak period during which moated sites were built was between *c.* 1250 and 1350 and by far the greatest concentration lies in central and eastern parts of England. Moated sites are rare in the historic counties of Durham and Northumberland and Wardley is the only known example in Tyne and Wear.

2.5.5 Wardley is not included in Henry II's confirmation of the estates of the prior and convent of Durham so the usual inference is that it was later defined from one or more of the surrounding townships. In 1313 it was assigned to William de Tanfield on his resignation as prior of Durham. The precise date of its foundation is not known, however it is documented that Walter de Selby resigned the vill of Wardley to the prior and convent, probably in the mid 13th century and the manor was certainly in existence by 1264 when Prior Hugh de Derlington built a camera, hall and chapel there. Other structures noted in the medieval accounts are kitchen, grange, bovaria, byre, stable, henhouse, herringhouse, farina, dovecot and a bridge, presumably over the moat. The medieval accounts indicate that it may have supplied fish and agricultural produce to Durham Priory. For much of the 14th century it was used for the monks' recreation and was leased or granted out thereafter, sometimes to retired priors. The manor has an almost unbroken series of leases into the mid-18th century. The manor was sub-divided into five farms in the 18th century and this had certainly been accomplished by 1783. This included Manor House Farm which was located within the moated area and until recently stood within the eastern part of the area proposed for re-development, prior to its use as a salvage yard. South Wardley Farm, which is located to the south-east of the site, was also one of the five farms.

2.5.6 By 1783 Manor House Farm comprised three ranges around a courtyard with the northern range extended by 1851 and gin-gang attached to the north-eastern corner constructed by the 1850s. The farm was demolished by the late 1980s. A watching brief was undertaken in 1995 during the excavation of foundation trenches for a building in the salvage yard which was largely located within the former Manor House Farm courtyard. Deposits which produced 13th- and 14th-century pottery were recorded at a depth of just 0.20m below present ground level (Newcastle City Archaeology Unit 1995). Structural remains were also encountered, but no dateable material was recovered in association with these. Some of the walls lay under the south range of the Manor House Farm courtyard and potentially represented medieval structural remains subsumed by the post-medieval farm. Organic sediments which evidently pre-dated the farm, and were therefore considered to be of probable medieval date, were also observed.

2.5.7 Remains of the moat are visible on its south and south-east sides; the east side was infilled in the 1970s and has been relocated by excavation. The northern two-thirds of the moat circuit have been obscured by various industrial activities. The visible earthworks immediately north of South Wardley Farm have been surveyed and comprise activity associated with the medieval enclosure and recent activity relating to the use of the site for dumping refuse. The original defining boundary is seen in the west corner of the field immediately north of the farm. Here the moat has an internal and external bank, standing 0.50m high. The outer edge of the external bank is *c.* 10m from the moat. The external bank can be seen on the south and east sides of the enclosure. The internal bank can be seen on the south side of the enclosure before it becomes obscured by accumulated 19th-century refuse. On the east side and in parts of the south side of the enclosure the accumulated refuse stands 1m higher than the surrounding surface and infills the moat area. The refuse also fills two fishponds, which are depicted on the Ordnance Survey first edition maps, 1856 and 1857. To the north of the field the monument is overlain by the Bowes Railway and the salvage yard compound.

2.5.8 Five hand dug trenches were excavated in 1991 across the moat, which had been infilled in the 1970s, to the east of the salvage yard boundary. This revealed the moat to be 2.20m deep and 7–8m wide at the top. The trenches were backfilled in 1994 and the moat was mechanically excavated to a depth of 1m and width of 6m.

2.5.9 An archaeological evaluation was undertaken in 2008 comprising three trenches located in the western part of the salvage yard compound; no features of archaeological significance were encountered (The Archaeological Practice 2008).

2.5.10 Immediately north of South Wardley Farm, to the south-east of the salvage yard compound, several blocks of medieval or later ridge and furrow are visible as earthworks and cropmarks on air photographs. Some display the characteristic 'reverse-S' pattern indicative of medieval cultivation (HER 11749).

2.5.11 The south-eastern side of the proposed re-development site is bounded by the disused Bowes Railway. A stretch of the railway to the south-west of the site is a Scheduled Monument (reference no. 1003723; HER 1005). The Bowes Railway was founded in 1826 as an early planned colliery line originally linking staithes at Jarrow to Mount Moor Colliery, Gateshead. A brief outline of the historical background of the Bowes Railway in general and Black Fell Incline in particular, is set out in the following paragraphs. Much of this discussion is taken from *The Bowes Railway* (Mountford 1976), which is recommended as a source for more detailed historical information concerning the railway.

2.5.12 The Bowes Railway, known as the 'Pontop and Jarrow Railway' until 1932, was one of a number of early colliery railways developed in the North-East to transport coal to riverside staithes. Early in the exploitation of the Durham coalfield, wooden waggonways, which employed horses to pull the waggons, were constructed to transport coal to the staithes. Advances in technology led to the replacement of the early, wooden waggonways with iron railways operated by stationary or locomotive steam haulage engines, or a combination of the two. On relatively steep slopes, self-acting inclines were sometimes employed, whereby the weight of the full set of waggons going downhill would haul an empty set up the incline. All three of these methods were employed on the Bowes Railway, which opened in its original form in January 1826.

2.5.13 In 1955 the Bowes Railway was linked to the surviving section of the Pelaw Main Railway in order to serve an additional three collieries to the thirteen on the Bowes Railway. However, the following decades saw the line begin to contract from the west as the coal industry went into decline. The last vestige of the line, from Monkton Coke Works to Jarrow closed in 1985, although, prior to this, a length of track between Blackham's Hill Incline and Springwell Bank Top was preserved as a working example of rope haulage on colliery railways.

2.5.14 Archaeological investigations of sections of the Bowes Railway have been carried out at Wardley (NZ 3110 6240 - NZ 2990 6090) and Kibblesworth (NZ 2594 5684 - NZ 2410 5632) (Northern Archaeological Associates 1998). A number of different construction techniques had been used for the original trackbed. No evidence was recovered for a wooden trackway, although horses had been used as a means of traction in the very early days of the railway. The evidence suggested that the original form of the 1826 trackway, at Wardley, consisted of cast-iron fish-bellied rails carried on stone sleeper blocks. The primary trackbed was raised between 0.40m and 0.70m at an unknown date, with a number of later alterations possibly accounting for the change in level. The final phase of the trackbed was heavily eroded, although occasional wooden sleepers, around 2.82m in length, survived.

2.5.15 The section of the Bowes Railway (HER 1007) which bounds the proposed re-development site to the south-east, and which is not scheduled, lies within the route from the bottom of Springwell Incline and the Wardley Locomotive Shed to what became the site of Monkton Coke Works. This section was worked by locomotive and was part of the final stage of the colliery line which culminated in staithes at Jarrow. This part of the line was part of the original line laid out by George Stephenson in 1826, which in its first months was worked by horses. The average gradient was 1 in 220, the steepest section being 1 in 80. The locomotive worked section was almost five miles long. Opening shortly after the Stockton and Darlington it was one of the first sections of railway designed to be worked by locomotive.

2.5.16 Wardley Colliery (HER 3813), the core elements of which occupied the north-western part of the overall proposed re-development site, was founded in 1855 by John Bowes & Partners Limited. It was later owned by Washington Coal Company Limited, until 1947 when it was taken over by the National Coal Board. In 1894 the colliery produced 1,000 tons and employed 800 men. A colliery village developed to the north of the colliery pithead with houses, a Methodist chapel constructed in 1884 and a board school in 1878. The miner's hall and institute were built in 1889; the second floor was a large hall and the floor below two cottages, a reading room and library. By 1897 a row of terraced miners' houses was also located within the south-eastern part of the overall proposed re-development site, in the area now occupied by the salvage yard, originally known as South Row and subsequently Quality Terrace. In 1959 Wardley Colliery merged with Follonsby Colliery, which became known as Wardley No. 1 Pit. Wardley Colliery closed in August 1974 and the colliery buildings were subsequently demolished. The structures currently occupying the north-western part of the overall proposed re-development site were built sometime before 1988.

2.5.17 The proposed re-development site is bounded to the south-west by the line of the disused North Eastern Railway (HER 2625). The southern part of this line was originally the Durham Junction Railway, which was founded in 1834 to connect the Stanhope and Tyne Railway at Washington with Durham. This became the North Eastern Railway, which was the original 'East Coast mainline' route linking London with the Tyne. Adjacent to the south-eastern corner of the site is Wardley Drive Bridge (HER 7642), a 19th-century railway bridge.

3. PROJECT AIMS AND RESEARCH OBJECTIVES

3.1 Project Aims

3.1.1 The overarching aim of the project was to inform English Heritage, the Local Planning Authority (LPA), as advised by the T&WSCT, and the landowner and prospective developer, regarding the extent, depth and nature of archaeological deposits within the salvage yard portion of the overall proposed re-development site. The work was to specifically target the scheduled area, in order to provide information to underpin decisions on the management of the monument.

3.1.2 Additional aims of the project were:

- to compile a Site Archive consisting of all site and project documentary and photographic records, as well as all artefactual and palaeoenvironmental material recovered;
- to compile a report that contains an assessment of the nature and significance of all data categories, stratigraphic, artefactual, *etc.*

3.2 Research Objectives

3.2.1 The specific research objectives of the archaeological evaluation were principally for the medieval and post-medieval periods, since the easternmost portion of the proposed re-development site is occupied by the north-western part of a Scheduled Monument as previously described (Figure 2).

3.2.2 The Scheduled Monument record highlights the importance of site and states: '*Moated sites are rare in the historic counties of Durham and Northumberland, and Wardley is the only known example in Tyne and Wear. The site is an example of a high status dwelling and administrative nucleus, of a regionally unusual form*'.

3.2.3 In 1995 an archaeological watching brief, undertaken within the central portion of the scheduled area for the foundation footprint of a building, recorded features, deposits and structures of medieval and post-medieval date and identified the high potential for the survival of archaeological remains within this part of the site.

3.2.4 Earthworks associated with the moated manor at Wardley are depicted on a plan by Richardson dated 1783 of the *Dean and Chapter Estate of Durham* and this shows the moat with the buildings of Manor House Farm located centrally. Subsequent 19th-century maps also depict the earthworks of the moated manor, again showing the location of the moat and a central banked enclosure thought to represent the location of the manorial complex. Therefore, the evaluation specifically aimed to target earthworks depicted on the 18th- and 19th-century maps to establish if archaeological remains were present in these locations.

3.2.5 The project was considered to have good potential to make a significant contribution to existing archaeological knowledge of the Wardley area in the medieval and post-medieval periods in particular. Specific research objectives to be addressed by the project were formulated with reference to existing archaeological research frameworks. *Shared Visions: The North-East Regional Research Framework for the Historic Environment* (NERRF) (Petts and Gerrard 2006) highlights the importance of research as a vital element of development-led archaeological work and states: '*Our understanding of small defensive sites (moated sites and tower houses) is still inadequate, not helped by contrasting approaches to these sites, particularly the assumption that tower houses are 'Defensive' whereas moated sites are 'Domestic' (EH Monument Class Description)'*.

3.2.6 The NERRF identifies the following key priorities within the research agenda for the medieval period which are of direct relevance to this project:

- MDi – Settlement
- MDii – Landscape
- MDvii – Medieval ceramics and other artefacts
- MDxi – The medieval to post-medieval transition

3.2.7 In sum, the proposed archaeological work had the following site-specific objectives:

- to test the location of earthworks depicted on 18th-19th century maps thought to represent elements of the medieval moated manor in order to establish whether or not corresponding buried archaeological remains were present;
- to establish the presence or absence of medieval activity and, where such remains were identified, to more clearly define the date and nature of the activity;
- to establish the palaeoenvironmental context of any medieval activity;
- to inform the scope and design of other mitigation measures, should they be deemed to be required.

4. ARCHAEOLOGICAL METHODOLOGY

4.1 Fieldwork

4.1.1 The evaluation fieldwork was undertaken 4-16 April 2014. All fieldwork was undertaken in accordance with the relevant standard and guidance document of the Institute for Archaeologists (IfA) (IfA 2008). PCA is an IfA-Registered Organisation. The evaluation was undertaken according to the aforementioned WSI compiled by AD Archaeology (included as Appendix 5 to this report) which should be consulted for full details of methodologies employed regarding archaeological excavation, recording and sampling.

4.1.2 Archaeological trial trenching was considered as the most appropriate investigative tool to test the archaeological potential of the salvage yard portion of the overall proposed re-development site. Ten trenches (Trenches 1-10) were investigated, nine (Trenches 1-9) within the scheduled area within the south-easternmost portion of the salvage yard compound and one (Trench 10) sited towards its north-western corner.

4.1.3 A summary of the rationale for the trenching (with proposed trench dimensions) is set out below:

- Trench 1 (25m x 2m) – sited across the postulated westernmost NW-SE aligned part of the moat depicted on the aforementioned 1783 plan which shows the Wardley Hall Estate.
- Trench 2 (30m x 2m) - southern portion of the trench sited across the postulated location of a banked enclosure of the manorial complex and the northern portion of the trench across an external yard of the Manor House Farm complex, both depicted on the Ordnance Survey first edition map, 1857. With the approval of English Heritage, this trench was repositioned *c.* 8m to the east of its location as depicted in the WSI to avoid known drainage and septic tank installations.
- Trench 3 (25m x 2m) - sited to test the external yard of the Manor House Farm, as depicted on the Ordnance Survey first edition map.
- Trench 4 (10m x 2m) - sited across the postulated westernmost NW-SE aligned part of the moat depicted on the 1783 plan.
- Trench 5 (10m x 12m) - sited to test for the north range of the Manor House Farm buildings depicted on the 1783 plan. With the approval of English Heritage, this trench was repositioned *c.* 3m to the east of its location as depicted in the WSI to avoid a tarmac car park.
- Trench 6 (10m x 2m) - sited between the postulated location of the easternmost NW-SE aligned element of the moat to the east and an enclosed external area of Manor House Farm to the west, both depicted on the Ordnance Survey first edition map. With the approval of English Heritage, this trench was repositioned *c.* 6m to the east of its location as depicted in the WSI to avoid a known drainage installation.
- Trench 7 (10m x 2m) - sited to the west of the postulated location of the easternmost NW-SE aligned element of the moat which lies immediately to the east, beyond the site boundary.

- Trench 8 (10m x 2m) - sited immediately to the south of the line of the moat as depicted on the Ordnance Survey first edition map.
- Trench 9 (10m x 2m) – sited within the vicinity of a pond/reservoir depicted on the Ordnance Survey first edition map, then a reservoir associated with the Wardley Colliery depicted on the Ordnance Survey second edition map of 1897.
- Trench 10 (10m x 2m) - sited in the area of small building depicted on the Ordnance Survey first edition map, at the base of a substantial screen of heaped waste material that extends across the south-western and south-eastern margins of the site. With the approval of English Heritage, this trench was repositioned *c.* 6m to the east of its location as depicted in the WSI to avoid the higher part of the waste heap.

4.1.4 Trenches 1–4 had to be stepped-in to allow the natural sub-stratum to be exposed due to the depth of colliery waste overburden encountered. The investigation of Trenches 1 and 4 was severely hampered by water ingress (seemingly water trapped in the overburden). In practice, Trench 1 had basal dimensions of *c.* 13m NE-SW by 2m NW-SE and Trench 4 had basal dimensions of *c.* 5m NW-SE by 2.50m.

4.1.5 All trenches were set-out by PCA using a Leica Viva Smart Rover Global Navigation Satellite System (GNSS), with pre-programmed co-ordinate data determined by an office-based CAD Technician. The Smart Rover GNSS provides correct Ordnance Survey co-ordinates in real time, to an accuracy of 1cm.

4.1.6 All trenches were mechanically-excavated by an 8-tonne 360° tracked machine with toothless ditching bucket under archaeological supervision. The trenches were excavated to the top of the first significant archaeological horizon, or the clearly defined top of the natural sub-stratum, whichever was reached first. All potential archaeological features were identified and marked on the ground with sprayline at the time of machine clearance of overburden.

4.1.7 Hand cleaning was undertaken in trenches where archaeological features were identified. All potential features were subject to partial or complete excavation within the trenches with photography and archaeological recording taking place at appropriate stages in the process. A selection of digital photographs is included as Appendix 4 to this report. All trenches were recorded, irrespective of whether or not they contained archaeological features.

4.1.8 A Temporary Bench Mark was established at the site using the Smart Rover GNSS instrument. The height of all principal strata and features were calculated relative to Ordnance Datum and indicated on the appropriate plans and sections.

4.2 Post-excavation

4.2.1 The stratigraphic data generated by the project is represented by the written, drawn and photographic records. A total of 125 archaeological contexts were defined in the 10 trenches (Appendix 2). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data (Appendix 1). A written summary of the archaeological sequence was then compiled, as described below in Section 5.

4.2.2 The artefactual material from the evaluation comprised a small assemblage of pottery, ceramic building material and clay tobacco pipe. Examination of the artefactual material was undertaken and relevant comments integrated into Section 5, with a summary report on the material included as Appendix 3. No other categories of organic or inorganic artefactual material were represented. None of the material recovered during the evaluation required specialist stabilisation or an assessment of its potential for conservation research.

4.2.3 The palaeoenvironmental sampling strategy of the project was to recover bulk samples where appropriate, from well-dated stratified deposits covering the main periods or phases of occupation and the range of feature types represented, with specific reference to the objectives of the evaluation. To this end, no appropriate deposits were encountered. No other biological material was recovered.

4.2.4 The complete Site Archive will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document Walker, (UKIC 1990) and the relevant IfA publication (IfA 2009). The depositional requirements of the body to which the Site Archive will be ultimately transferred will be met in full.

5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

During the evaluation, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example [123]. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis in this case. An attempt has been made to add interpretation to the data, and correlate these phases with recognised historical and geological periods.

5.1 Trench 1 (Figure 3; Section 7; Plate1)

Phase 1: Natural sub-stratum

5.1.1 The natural clay sub-stratum, [32], was exposed for a maximum distance of *c.* 13m by 2.70m across the base of Trench 1. This comprised firm mid yellowish brown clay encountered at a depth of *c.* 2.30m below present ground level and recorded at a maximum height of 49.27m OD. This deposit was overlain by a substantial thickness of dumped material, suggesting that the natural sub-stratum had been horizontally truncated by the industrial era activity in this trench; however, due to rapid water ingress it was not possible to confirm this with certainty.

Phase 3: Later post-medieval

5.1.2 Substantial layered deposits of various compositions of crushed shale, sandstone, sand, clay and silt, [74], [75], [84] and [86]-[89], were recorded overlying the natural clay [32] (Section 7, Figure 3). These deposits were exposed for a maximum distance of 16m NE-SW by 5m NW-SE. The combined maximum thickness was *c.* 1.80m, with the uppermost encountered at a maximum height of 50.80m OD. These deposits are interpreted as representing dumping/levelling undertaken during the mid 19th century, this activity associated with the deposition of waste material derived from Wardley Colliery.

5.1.3 A roughly NW-SE aligned service trench, [90], which contained a cast iron pipe, was recorded in the central portion of the trench, cutting deposit [88], for a maximum distance of 2m NW-SE. This was 0.80m wide and up to 0.40m deep and had been backfilled with sandy clayey silt, [91]. This was directly overlain by deposit [84], indicating that the service trench was likely to have been installed during the late 19th century, possibly associated with the row of terraced houses (latterly Quality Terrace) located to the south-west of Trench 1, as depicted on the Ordnance Survey second edition map of 1897.

Phase 4: Modern

5.1.4 Directly overlaying the uppermost Phase 3 deposit, [74], was an asphalt surface, [73], extending across Trench 1 and up to 0.37m thick. This in turn was directly overlain by a *c.* 0.60m thick compact brick rubble deposit, [72], a levelling and consolidation deposit for a *c.* 0.26m thick concrete slab, [71], which formed the existing ground surface.

5.2 Trench 2 (Figure 4; Section 8; Plate 2)

Phase 1: Natural sub-stratum

5.2.1 The natural clay sub-stratum was exposed along the base of Trench 2 and comprised stiff mid brownish yellow clay, [104]. This was encountered at a depth of *c.* 1.60m below the present ground level, at maximum and minimum heights of 49.65m OD and 49.35m OD, respectively.

Phase 3: Later post-medieval

5.2.2 A 0.50m wide NNW-SSE aligned linear feature, [102], extended across the central portion of the trench cutting the natural sub-stratum, recorded for a distance of 8.50m. It contained a salt-glazed ceramic pipe and was backfilled with silty clay, [103]. This feature is interpreted as a drainage feature of 19th-century date associated with Manor House Farm which was located to the north-west of Trench 2.

5.2.3 Truncating drainage feature [102] were two similarly NE-SW aligned linear features *c.* 4.60m apart, [99] and [100], recorded for a maximum distance of 2.20m NE-SW and up to 0.90m wide. The fills of both features comprised grey clayey silt, [99] and [101], and each contained a cast iron pipe.

5.2.4 Directly overlying the 19th-century service trenches was a sequence of dumped/levelling deposits of various compositions of clay and silt, [96], [97] and [95], with each deposit containing various inclusions of shale (see Section 8, Figure 4). Deposits [95] and [96] were exposed across the extent of the trench for a maximum distance of 30m north-south by 2m east-west and deposit [97] was only exposed across the northern extent of Trench 2 for a maximum distance of 5.40m. The combined maximum thickness of these deposits was *c.* 1.10m, with the uppermost material encountered at a maximum height of 50.69mOD. These deposits are interpreted as representing dumping/levelling associated with the deposition of waste material from Wardley Colliery during the 19th century.

Phase 4: Modern

5.2.5 Directly overlying the uppermost Phase 3 dumping/levelling deposit, [95], was a *c.* 0.36m thick clayey silt levelling deposit, [94]. This was overlain by a *c.* 0.32m thick compact silty sandy clay deposit, [93], with frequent inclusions of stone and brick rubble throughout, forming a levelling and consolidation deposit for a 0.20m thick concrete slab, [92], that formed the existing ground surface.

5.3 Trench 3 (Figure 5; Sections 9-12; Plates 4-7)

Phase 1: Natural sub-stratum

5.3.1 The natural clay sub-stratum, [126], was exposed for a maximum distance of *c.* 30m by 2.20m across the base of Trench 3. This comprised firm light brownish yellow clay, encountered at maximum and minimum depths of *c.* 1.70m and 1.20m below present ground level and recorded at a maximum height of 49.83m OD. This deposit was overlain by a substantial thickness of dumped/levelling deposits; it is considered likely that natural sub-stratum had been horizontally truncated by industrial era activity in this area.

Phase 2: Medieval and undated

5.3.2 The earliest features recorded in Trench 3 comprised a roughly NW-SE aligned ditch, [76], and two discrete features, [80] and [82] (Figure 5). These features cut into the natural clay and were encountered at maximum and minimum heights of 49.83m OD and 49.64m OD, respectively.

5.3.3 The westernmost feature, [82], comprised the terminal of a NW-SE aligned linear feature that was exposed for a distance of 0.70m, with a rounded terminus to the north-west and continuing to the south-east beyond the limit of excavation. It was up to 0.42m wide and 0.24m deep (Section 12, Figure 5; Plate 6). Its single fill, which comprised soft mid grey clayey silt, [83], yielded no artefactual remains. Due to the limited exposure of this feature, definitive interpretation is impossible and it is provisionally interpreted as a drainage gully. Alternatively, it may represent part of a timber slot.

5.3.4 A NW-SE aligned linear feature, [76], was located c. 5m to the east of feature [82]. This was recorded for a maximum distance of *c*. 2m and was up to 1.26m wide and 0.48m deep and had a U-shaped profile with a steeply-sloping south-western edge (Section 10, Figure 5; Plate 4). A large fragment of ceramic roof tile was recovered from its single firm light brownish grey clay fill, [77]. The tile may be medieval in date but, as described in Appendix 3, specialist identification was not conclusive and it is possible that it may even be residual Roman material. This feature probably represents a drainage ditch that may also have functioned as a boundary associated with agricultural or settlement activity beyond the manorial complex.

5.3.5 Part of a presumed to be circular feature, [80], was recorded within the central portion of the trench adjacent to the north-facing section (Section 11, Figure 5; Plate 5). This measured 0.46m east-west by at least 0.42m north-south, continuing to the south beyond the limit of excavation, and was up to *c*. 0.20m deep, encountered at a maximum height of 49.71m OD. Its firm light grey clayey silt fill, [81], yielded no artefactual remains and it is provisionally interpreted as a posthole.

Phase 3: Later post-medieval

5.3.6 Part of the south-eastern corner of a stone-built wall, [78], within a narrow construction cut, [79], was recorded in the central portion of Trench 3 (Section 9, Figure 5; Plate 7). It was constructed from sandstone rubble (maximum *c*. 700mm x 300mm x 100mm) bonded by firm light yellowish brown clay. The NW-SE aligned wall element was exposed for a maximum distance of 2m, continuing to the NW beyond the limit of excavation, and a 2.06m return represented by the NE-SW aligned south-eastern wall continued to the south-west, beyond the southern limit of excavation. Both wall elements were up to 0.50m wide and survived to a single course of stone *c*. 0.10m high. Due to the limited exposure of this structure, definitive interpretation is impossible. However, its position broadly corresponds with the south-eastern corner of an enclosed yard located to the east of the buildings of Manor House Farm as depicted on the Ordnance Survey first edition map of 1857 (see Figure 13). Although no artefactual material was recovered from the wall itself, its form and composition suggests a probable post-medieval date and it is tentatively interpreted as representing the corner of this enclosed yard.

5.3.7 Directly overlaying Phase 2 and 3 features and structures was a sequence of dumping/levelling deposits of various compositions of crushed shale, clay and silt, [122], [123], [124] and [125], with a combined maximum and minimum thickness of up to *c.* 0.80m at the western extent of the trench and *c.* 0.60 at the eastern extent of the trench, respectively (Section 9, Figure 5). The uppermost deposit was encountered at a maximum height of 50.48m OD. Deposits [122] and [125] were recorded across the extent of the trench for a distance of least 25m east-west by 2m north-south and deposits [123] and [124] were recorded only at the western extent of the trench and exposed for a distance of at least 3.40m east-west. These deposits are interpreted as representing waste dumped from Wardley Colliery.

5.3.8 The earliest deposit in the sequence, [125], was truncated by a NNE-SSW aligned service trench, [54], which was recorded for a maximum distance of 2m and was 0.50m wide and at least 0.14m deep. This contained a cast iron pipe and had been backfilled with dark grey clayey silt, [33]. This was directly overlain by further dumping/levelling deposit [122] indicating that the service trench was likely to have been installed during the 19th century.

Phase 4: Modern

5.3.9 Directly overlying Phase 3 dump deposit [122] was a *c.* 0.60m thick compact brick rubble levelling and consolidation deposit, [121], for a *c.* 0.32m thick asphalt surface. Truncating deposit [121] was a substantial north-south aligned service trench, [127], recorded in section measuring 1.12m wide and 1.25m deep. Its single fill, [128], contained three disused electricity cables. This in turn was directly overlain by a *c.* 0.30m thick concrete slab, [119], which formed the existing ground surface.

5.4 Trench 4 (Figure 6; Section 3)

Phase 1: Natural sub-stratum

5.4.1 The natural clay sub-stratum, [16], was exposed along the base of Trench 4 for a distance of at least 4.60m NW-SE by 2.50m NE-SW and comprised firm light yellowish grey clay. It was encountered at a depth of *c.* 1.10m below present ground level, being overlain by a substantial thickness of dumped material, at a maximum height of 51.28m OD. Therefore like Trench 1, it appeared that the natural sub-stratum had been horizontally truncated by industrial era activity in this trench, but again, due to rapid water ingress it was not possible to confirm this with certainty.

Phase 3: Later post-medieval

5.4.2 A substantial dumping/levelling deposit comprising compact shale within a silty clay matrix, [15], up to *c.* 1.90m thick was recorded across the extant of Trench 4 for a distance of at least 10m NW-SE by *c.* 6m NE-SW, encountered at a maximum height of 52.10m OD. Mapping evidence from the mid-19th century onwards depicts a substantial heap of colliery waste within the vicinity of Trench 4 and this was presumably the origin of the colliery waste in this trench.

Phase 4: Modern

5.4.3 Directly overlying Phase 3 colliery waste deposit [15] was a 0.22m thick levelling and consolidation deposit comprising compact brick rubble within a silty sand matrix, [14]. This in turn was overlain by a *c.* 0.14m thick compact dark grey silty sandy gravel deposit, [13], recorded at a maximum height of 52.35m OD, which formed the present ground surface.

5.5 Trench 5 (Figure 7; Section 6; Plates 8, 9 & 10)

Phase 1: Natural sub-stratum

5.5.1 The natural clay sub-stratum, [38], comprising firm light brownish yellow clay, was exposed across the base of Trench 5, at relatively shallow depth, *c.* 0.40m below ground level, at a maximum height of *c.* 50.50m OD. Phase 3 structural remains associated with Manor House Farm were recorded cut into the natural sub-stratum and it is evident that this part of the site has been subject to horizontal truncation to some extent during the demolition of these structures and subsequent levelling activity in the 20th century.

Phase 3: Later post-medieval and undated

5.5.2 A substantial NE-SW aligned stone-built wall foundation, [39], was recorded within a broad construction cut, [36], measuring at least 2.40m wide. The wall foundation itself was exposed for a distance of 1.40m NE-SW, truncated to the north-east by a service trench, [46], and was *c.* 1.20m wide, surviving to a single course of large sandstone rubble (maximum 490mm x 440mm x 100mm) bonded with firm mid brown clay. It was encountered at a maximum height of 50.61m OD. The construction cut was backfilled with firm mid yellowish brown clay, [37], which yielded no artefactual material. This wall probably forms part of the buildings associated with Manor House Farm depicted on various 18th and 19th century maps. The map evidence indicates the arrangement of these buildings was substantially altered over this period of time and it is unclear if this wall represents part of the original 18th century or earlier build or the mid-19th century build.

5.5.3 A possible hearth structure, [40], was partially exposed in section within a broad construction cut, [12], truncating the natural sub-stratum along the north-eastern edge of the trench. This was exposed for a distance of 2.02m NW-SE by 0.66m NE-SW, truncated to the south-west by a service trench, [46], and continuing to the north-east beyond the limit of excavation, and was up to 0.18m deep. Its primary fill comprised variously coloured firm clayey silt, [48], with frequent inclusions of charcoal. This was directly overlain by a possible sandstone slab surface, [40], recorded in section for a distance of 0.88m NW-SE and up to 0.16m thick, encountered at a maximum height of 50.66m. This surface was built using rectangular sandstone slabs (maximum 410mm x 110mm) bonded with clay. Due to the limited exposure of the structure a definitive interpretation is impossible, although it is tentatively interpreted as forming the basal portion of a hearth with the dark orange colour of one sandstone slab indicating direct exposure to a heat source. It is unclear if the primary fill had been directly exposed to a heat source or alternatively hearth waste material was used as a bedding deposit for the sandstone slab surface. Although no relationship was established for probable heath [40] and wall [39], it is considered likely that these structures were contemporary.

Phase 4: Modern

5.5.4 Two dumping and levelling deposits, [45] and [42], overlay the Phase 3 structural remains. The earliest, [45], comprised compact sub-angular sandstone fragments within a clayey silt matrix extending across the trench up to 0.20m thick and encountered at a maximum height of 50.72m OD. The sandstone in this deposit was probably derived from the demolition of the Manor House Farm buildings and subsequent levelling activity undertaken during the 20th century. This in turn was directly overlain by *c*. 0.42m thick firm dark grey silty clay and brick rubble levelling and consolidation deposit, [42].

5.5.5 A 0.46m wide and 0.40m deep east-west aligned drainage feature, [43], cut deposit [42] and was recorded in section extending across the north-western portion of the trench for a distance of up to 2.30m. This contained a salt-glazed ceramic pipe and its backfill, [44], comprised silty clay. The western portion of drain [43] was truncated by a modern drainage feature, [46], which extended NW-SE across the trench for a distance of 6.30m and was up to 0.70m wide. This contained a plastic pipe and was backfilled with loose gravel, [47]. The uppermost deposit comprised *c*. 0.22m thick compact sandy silt gravel, [41], forming the present ground surface at *c*. 51.14m OD.

5.6 Trench 6 (Figure 8; Section 13; Plate 11)

Phase 1: Natural sub-stratum

5.6.1 Natural clay sub-stratum was exposed along the majority of the base of Trench 6 and comprised firm mid yellowish brown clay, [118]. The natural clay was encountered at a depth of *c*. 1.20m below the present ground level, encountered at a maximum height of 49.92m OD.

Phase 4: Modern

5.6.2 A sequence of dumping/levelling deposits comprising variously coloured friable to firm clayey silt and silty sandy clay, [109], [110] and [111], overlay the natural clay. These deposits were exposed across the extent of Trench 1 for a maximum distance of *c*. 10m NW-SE by *c*. 2.30m NE-SW. The combined maximum thickness was *c*. 0.80m, with the uppermost material encountered at a maximum height of 50.77m OD. These deposits are interpreted as representing modern era dumping/levelling. Although this was probably waste material derived from Wardley Colliery, it is unclear if the activity was associated with the demolition of the Manor House Farm buildings and subsequent levelling or associated with preparation groundworks for the salvage yard in the later part of the 20th century.

5.6.3 Truncating the uppermost deposit, [109], was a substantial linear feature, [116], which was partially exposed along the south-western edge of the trench for a maximum distance of at least 6.80m NW-SE by at least 1.57m wide. The maximum excavated depth was 0.95m and its single soft dark grey clayey fine sand fill, [116], contained 20th-century refuse material including wood, CBM and an intact ceramic toilet bowl. The function of this feature was not established and it may represent a service trench or drainage feature of 20th century date.

5.6.4 Linear feature [117] was directly overlain by a *c.* 0.20m thick dolomite make-up deposit, [108], for asphalt surface, [107]. Two NE-SW aligned drainage features, [113] and [114], were recorded extending across the central portion and south-eastern extent of the trench, respectively, with both cutting through bedding deposit [108]. Feature [113] contained a ceramic salt-glazed pipe and was backfilled with sandy clay, [112], and [115] was backfilled with gravel, [114]. Drain [113] was directly overlain by a *c.* 0.20m thick asphalt surface, [107].

5.6.5 Directly overlying asphalt surface [107] was a *c.* 0.14mm thick deposit of sand, [106], levelling and consolidation for the 0.16m thick concrete surface.

5.7 Trench 7 (Figure 9; Section 4; Plate 12)

Phase 1: Natural sub-stratum

5.7.1 The natural clay sub-stratum, [7], comprising firm light pinkish brown clay, was encountered across the base of Trench 7 at relatively shallow depth, *c.* 0.40m below existing ground level. It was recorded at maximum and minimum heights of 50.27m OD and 49.97m OD, respectively.

Phase 4: Modern

5.7.2 A sequence of dumping/levelling deposits of various compositions of silt, clay and gravel, [20], [21], and [23], overlay the natural clay [7]. The earliest of these deposits, [23], was recorded across the extent of the trench for a maximum distance of 10m NE-SW by 2m NW-SE with subsequent deposits [20] and [21] recorded to the south-west for a maximum distance of at least 3.90m NE-SW by 2m NW-SE. The combined maximum thickness of these deposits was *c.* 0.80m, with the uppermost material encountered at a maximum height of 50.85m OD. A single sherd of 13th-century pottery was recovered from [23], this undoubtedly residual in context. These deposits are interpreted as representing dumping/levelling activity probably undertaken during the 20th century associated with either the demolition of the Manor House Farm buildings and subsequent levelling or levelling activity associated with preparation groundworks for the salvage yard.

5.7.3 A roughly NW-SE aligned 0.94m wide linear feature, [26], was recorded extending across the central portion of the trench cutting the uppermost levelling deposit, [20], for a distance of 2m. This was at least 0.70m deep and its single silty clay fill, [22], yielded no artefactual material. The function of this feature was not established and is tentatively interpreted as a drainage feature of 20th century date associated with the salvage yard.

5.7.4 Directly overlying feature [26] was a *c.* 0.50m thick compact stone deposit, [19], forming a levelling and consolidation deposit. This was overlain by two dump deposits, [24] and [25], with a combined thickness of up to 0.20m, at the north-eastern extent of the trench, and by a *c.* 0.24m concrete slab in the south-western extent of the trench. The existing ground surface, [17], was formed by a deposit of *c.* 0.14m thick compact gravel.

5.8 Trench 8 (Figure 10; Section 5)

Phase 1: Modern

5.8.1 The natural clay sub-stratum, [11], comprising firm mid pinkish brown clay, was encountered across the base of Trench 8. It was encountered at a minimum depth of *c*. 0.70m below existing ground surface to the north-west, gradually falling away to the south-east, where it lay at a depth of up to *c*. 1.30m below ground level. The maximum and minimum heights that natural sub-stratum was encountered were 50.61m OD and 49.97m OD, respectively. Throughout this trench, the natural sub-stratum is considered to have been horizontally truncated, probably during the 20th century.

Phase 4: Modern

5.8.2 A sequence of dumped/levelling deposits of various compositions of clay and silt, [31], [34] and [35], with each deposit containing various inclusions of shale, overlay the natural sub-stratum. Deposits [31] and [35] were exposed across the extent of the trench for a maximum distance of 10m NW-SE by 2m NE-SW and deposit [34] was only present at the south-eastern extent of the trench for a maximum distance of 1.20m NW-SE by 2m NE-SW. A further dump/levelling deposit comprising *c*. 0.36m thick compact light yellow dolomite, [28], was only present at the north-west end of the trench recorded for a distance of 5m NW-SW by 2m NE-SW. The combined maximum thickness of these deposits was *c*. 1.20m, with the uppermost material encountered at a maximum height of 51.27m OD. Again, these deposits are provisionally interpreted as representing dumping/levelling associated with either the demolition of the Manor House Farm buildings and subsequent levelling or levelling activity associated with preparation groundworks for the salvage yard in the 20th century.

5.8.3 A NE-SW aligned structure comprising a *c*. 0.30m thick concrete slab foundation, [66], and a buttress, [67], was partially exposed at the south-eastern extent of the trench within a narrow construction cut, [64], cutting the uppermost dumping/levelling deposit, [34]. The buttress measured 0.48m NE-SW by at least 0.24m NW-SE and was built using red brick (230mm x 80mm), bonded by concrete mortar and survived to a height of 0.41m. Its clayey silt backfill, [65], yielded no artefactual material. This structure represents an element of a now demolished modern building which formerly stood in the salvage yard, as depicted on a 1988 plan of the site.

5.8.4 A roughly NE-SW aligned concrete surface, [30], which was *c*. 0.20m thick and 2.74m wide with associated rubble bedding deposit, [29], was exposed for a distance of at least 2m NE-SW. This was constructed within a narrow construction cut, [63], also cutting dump/levelling deposit, [34]. This concrete surface is likely to be contemporary with the aforementioned building depicted on the 1988 site plan.

5.8.5 The existing ground surface, [27], was formed by a layer of *c*. 0.18m thick compact gravel directly overlying a dolomite make-up deposit, [28], and elements of the demolished 20th-century buildings the salvage yard.

5.9 Trench 9 (Figure 11; Section 11; Plates 13 and 14)

Phase 1: Natural sub-stratum

5.9.1 The natural clay sub-stratum, [10], comprising firm light brownish yellow clay, was encountered along the base of the lower step in Trench 7, and across the north-eastern portion of the upper step. This material was encountered at a relatively shallow depth of *c*. 0.36m below the existing ground surface, falling away sharply to the south-west where it was truncated by a 19th-century structure, [3]. Across the north-eastern portion of the trench, the natural sub-stratum was recorded at a maximum height of 51.54m OD.

Phase 3: Late post-medieval

5.9.2 The north-eastern extent of a substantial feature, [3], was exposed across Trench 9 for a distance of at least 10m north-south by 5.50m east-west and was up to 1.50m deep (Figure 11; Section 11; Plate 13). Where exposed, the north-eastern edge of this feature was stone-lined, [9], with up to 10 courses of medium to large sandstone rubble (maximum 300mm x 200mm x 150mm), bonded with firm clay, surviving up to 1.20m high. The stone lining, [9], directly overlay a *c*. 0.10m thick firm mid grey silty clay deposit, [8], and probably represents a 'tread' deposit, i.*e*. natural clay disturbed during construction of the structure.

5.9.3 The Ordnance Survey first edition maps, 1856 and 1857, depict a group of three water-filled features to the west and north-west of the Manor House Farm buildings which probably represent ponds and broadly correspond with the alignment of the medieval moat. Trench 9 was located at the eastern end of the larger L-shaped pond located to the north-west of the farm buildings, which was on the alignment of the north-western corner of the moat (Figure 13). The Ordnance Survey second edition map of 1897 depicts a single reservoir in this area with the southern element of the former L-shaped pond and the other two smaller ponds infilled. This reservoir was associated with Wardley Colliery and further reservoirs were located to the north. The stone-lined feature in Trench 9 could potentially represent re-use of part of the earlier pond with the stone-lining constructed in the mid to late 19th century along with the colliery reservoir.

5.9.4 Within the south-eastern corner of the trench, part of a substantial feature, [5], was recorded in section measuring at least 1.65m NW-SE and 0.52m deep. Its single fill, [6], comprised friable mid grey clayey silt which yielded no artefactual material. The function of this feature was not established but it probably represents colliery activity of broadly 19th century date.

Phase 4: Modern

5.9.5 The stone-lined reservoir was backfilled by friable dark grey silty clay, [4]. This material was exposed for a maximum distance of *c*. 9.70m NW-SE by *c*. 5.20m NE-SW and was up to 1.80m thick. The reservoir was still in use by the mid 20th century, as depicted on the 1951 Ordnance Survey map, and was therefore backfilled after this date, probably with colliery waste material.

5.9.6 Directly overlying Phase 3 industrial era features [3] and [5] was a *c*. 0.40m thick compact brick rubble levelling and consolidation deposit, [2], that was overlain by a *c*. 80mm thick deposit of compact gravel, [1], which formed the existing ground surface.

5.10 Trench 10 (Figure 12; Section 14; Plates 15 and 16)

Phase 1: Natural sub-stratum

5.10.1 The natural clay sub-stratum, [52], comprising firm light brownish yellow clay, was encountered across the base of Trench 10. This was encountered at a minimum depth of *c.* 0.70m below existing ground surface to the north-west and a maximum depth of *c.* 1.20m below existing ground level. The maximum and minimum heights at which the natural sub-stratum was encountered were 52.92m OD and 52.73m OD, respectively. Throughout the trench, the natural sub-stratum is considered to have been horizontally truncated, initially in the 19th century by activity associated with Wardley Colliery and in the 20th century during levelling activity associated with the demolition and subsequent levelling of structures prior to the establishment of the salvage yard. However the survival of a possible medieval feature in this trench suggests that the level of truncation within this area was minimal.

Phase 2: Medieval/undated

5.10.2 A NE-SW aligned 1.70m wide linear feature, [56], was recorded for a maximum distance of *c.* 2m NE-SW, cutting the natural sub-stratum. This had an irregular U-shaped profile and was up to 0.70m deep (Figure 12; Section 14; Plate 16). It was encountered at a maximum height of 52.95m OD. Although no artefactual material was recovered from its single firm mid brownish grey clay fill, [57], the deposit had a similar composition to the possible medieval ditch, [76], recorded in Trench 3 and is considered likely to be of a similar date. As with the Trench 3 ditch, this probably represents a drainage feature that may also have functioned as a boundary associated with agricultural activity located to the west of the manorial complex.

Phase 3: Post-medieval and undated

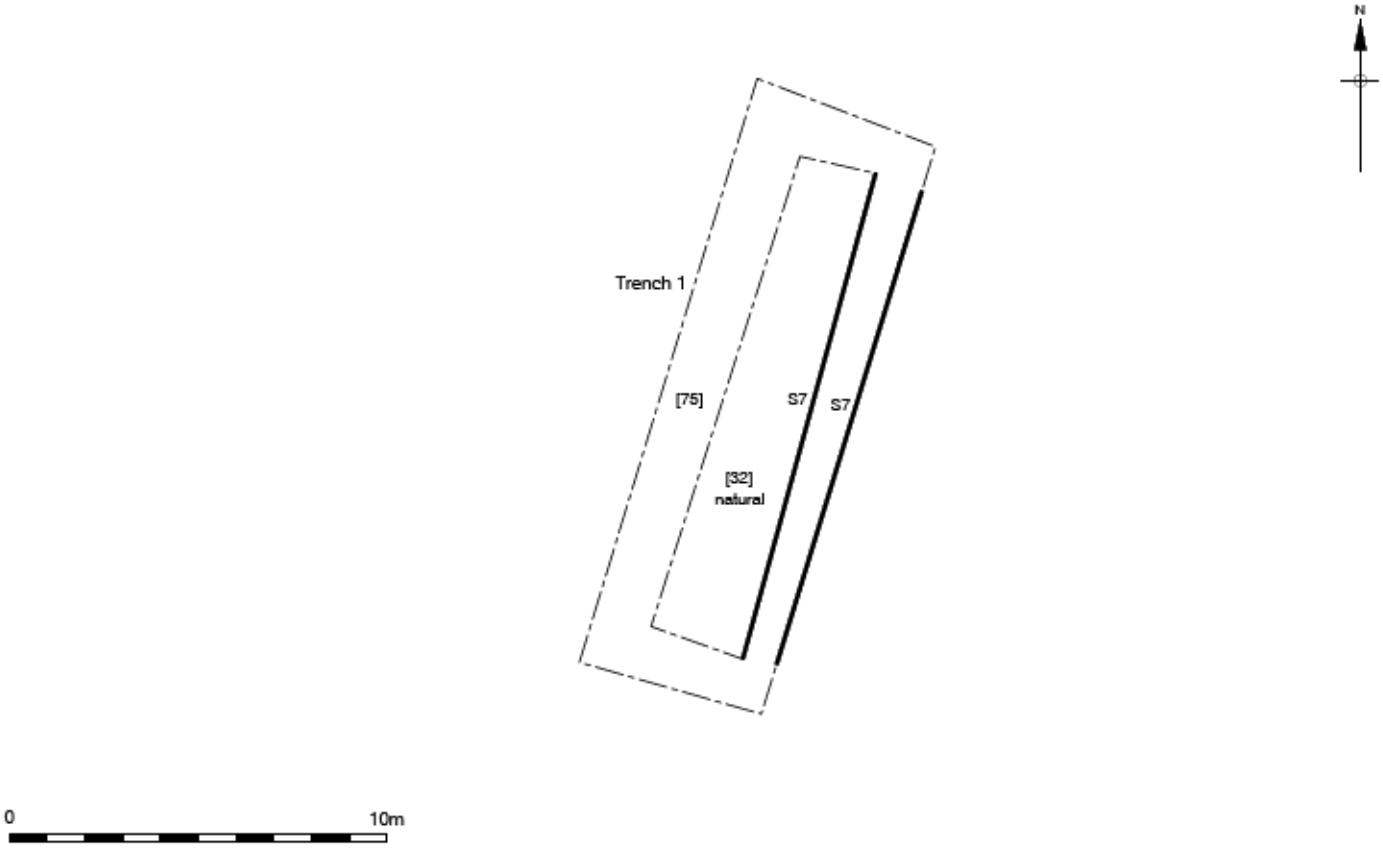
5.10.3 Part of the north-eastern end of a structure, [55], was exposed across the central portion of Trench 10, with its north-eastern portion truncating Phase 2 ditch [56]. The exposed structure measured at least 4.20m NW-SE by at least 2m NE-SW, continuing beyond the limit of excavation to the south-west. Only its foundations survived and these were built within a narrow construction cut *c.* 0.30m wide by up to 0.32m deep, using unfrogged red brick (230mm x 110mm x 80mm), bonded with light grey lime mortar.

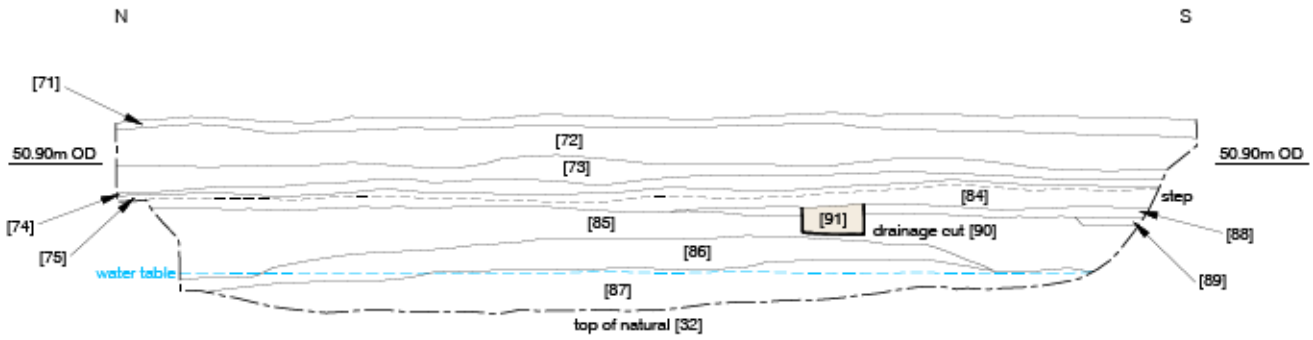
5.10.4 A similarly NE-SW aligned wall foundation, [61], was partially exposed at the south-eastern end of Trench 10, located *c.* 1.50m to the south-east of structure [55]. It was exposed for a maximum distance of 1.65m NE-SW and was up to 0.30m wide and built in a narrow construction cut, [60], using unfrogged red brick (230mm x 110mm x 80mm), bonded by light grey lime mortar. Although the function of both structures [55] and [61] is uncertain, they potentially represent a square building depicted on the Ordnance Survey first edition map of 1857 within the vicinity of Trench 10, possibly a building or yard associated with the early workings of Wardley Colliery (see Figure 13).

5.10.5 Part of a circular feature, [58], was partially exposed within the south-eastern end of the trench, located between structures [55] and [61]. This measured *c*. 0.74m in diameter and was at least *c*. 0.36m deep, encountered at a maximum height of 52.94m OD. Its firm light yellowish brown silty clay fill, [59], yielded no artefactual remains and it is provisionally interpreted as a posthole of probably 19th century date.

Phase 4: Modern

5.10.6 Layered dump/levelling deposits of various compositions of sand, silt and clay, [49], [50], [51] and [69], were recorded overlying the natural clay [52]. Deposits, [50], [51] and [69] were recorded across the extent of the trench for a maximum distance of 10m NW-SE by 2m NE-SW and deposit [49] was only present at the north-western end of the trench. The combined thickness of these deposits was *c*. 0.70m at the south-western extent of the trench, increasing towards the north-west, where the maximum thickness was *c*. 1.30m. The uppermost deposit was encountered at a maximum height of 54.17m OD. These deposits are interpreted as representing dumping/levelling activity undertaken during the 20th century, possibly associated with the construction of the salvage yard.





Section 7
West facing
Trench 1

Cut feature

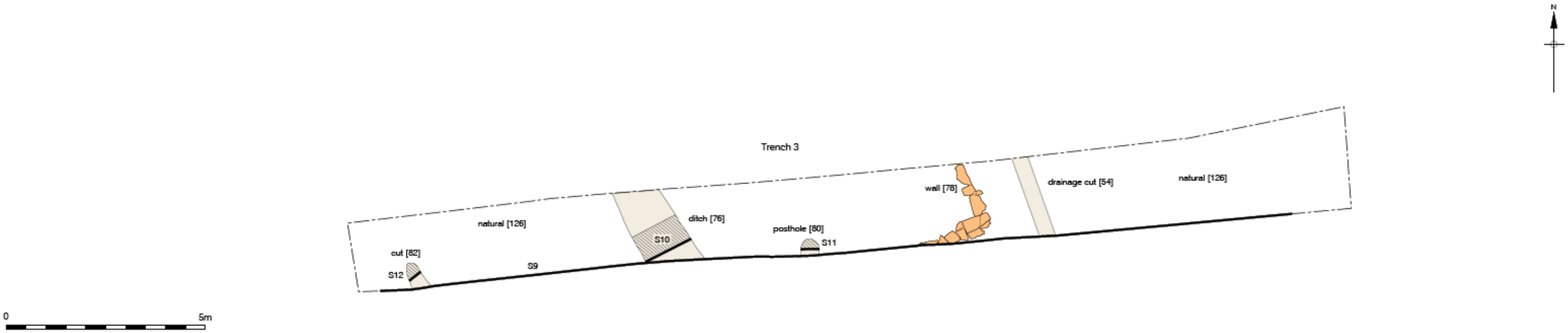
0 5m

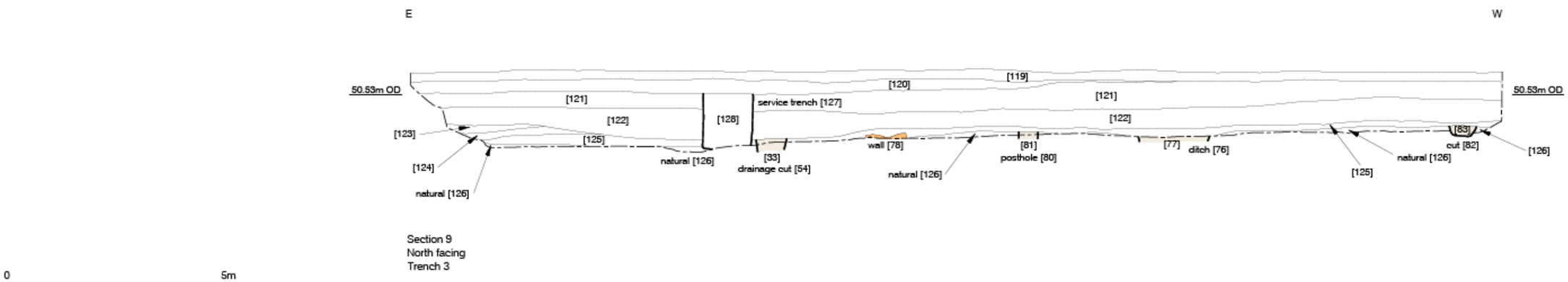
06/05/14 HB

Figure 3
Plan of Trench 1 & Section 7
Plan 1:200 at A4 & Section 1:100 at A4

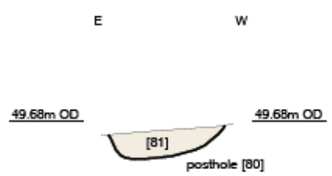
06/05/14 HB

Figure 4
Plan of Trench 2 & Section 8
Plan 1:200 at A4 & Section 1:100 at A4

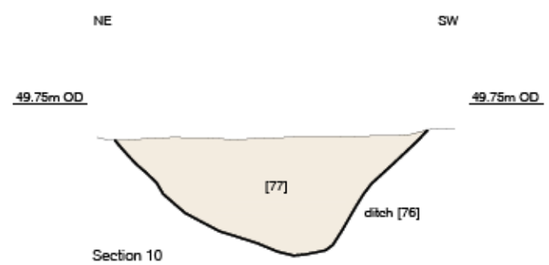




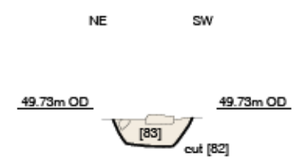
Section 9
North facing
Trench 3



Section 11
North facing section through cut [82]



Section 10
North West facing section through ditch [76]



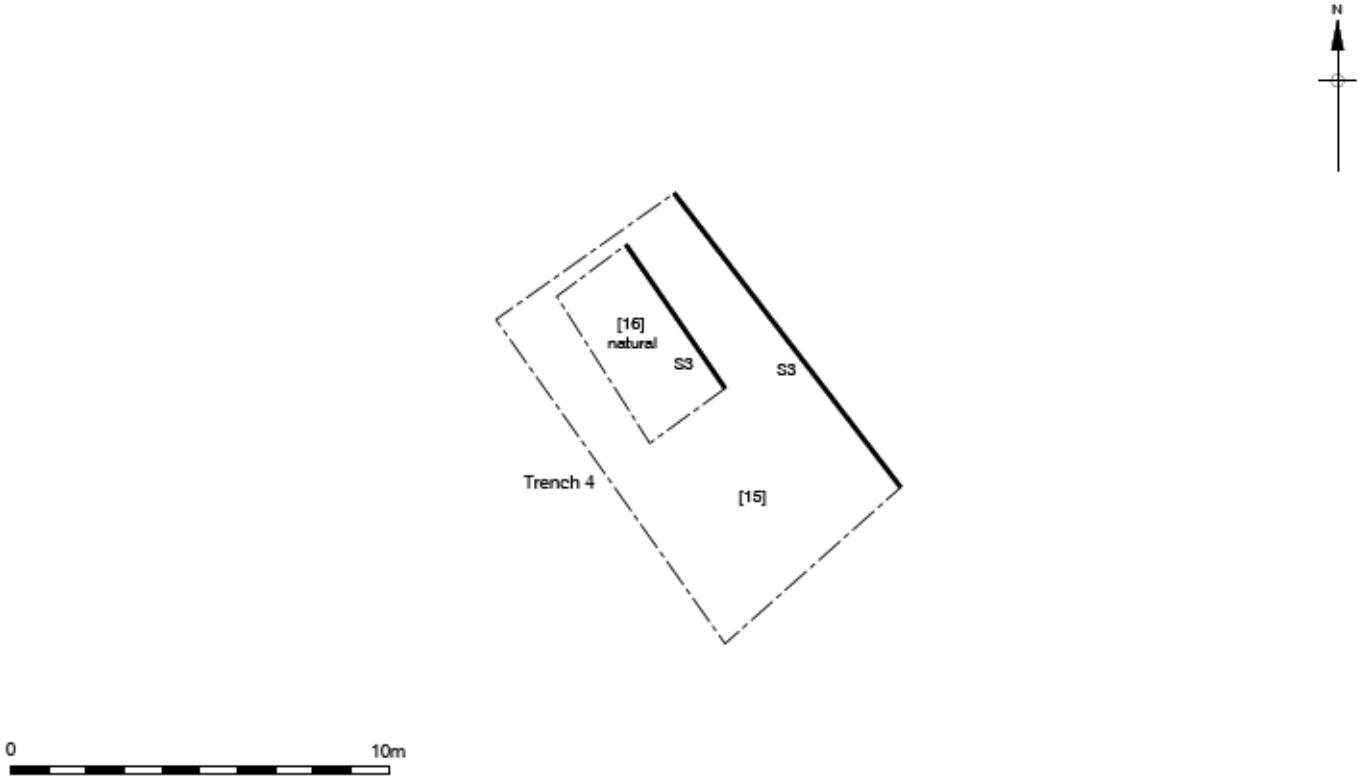
Section 12
North West facing section through cut [82]

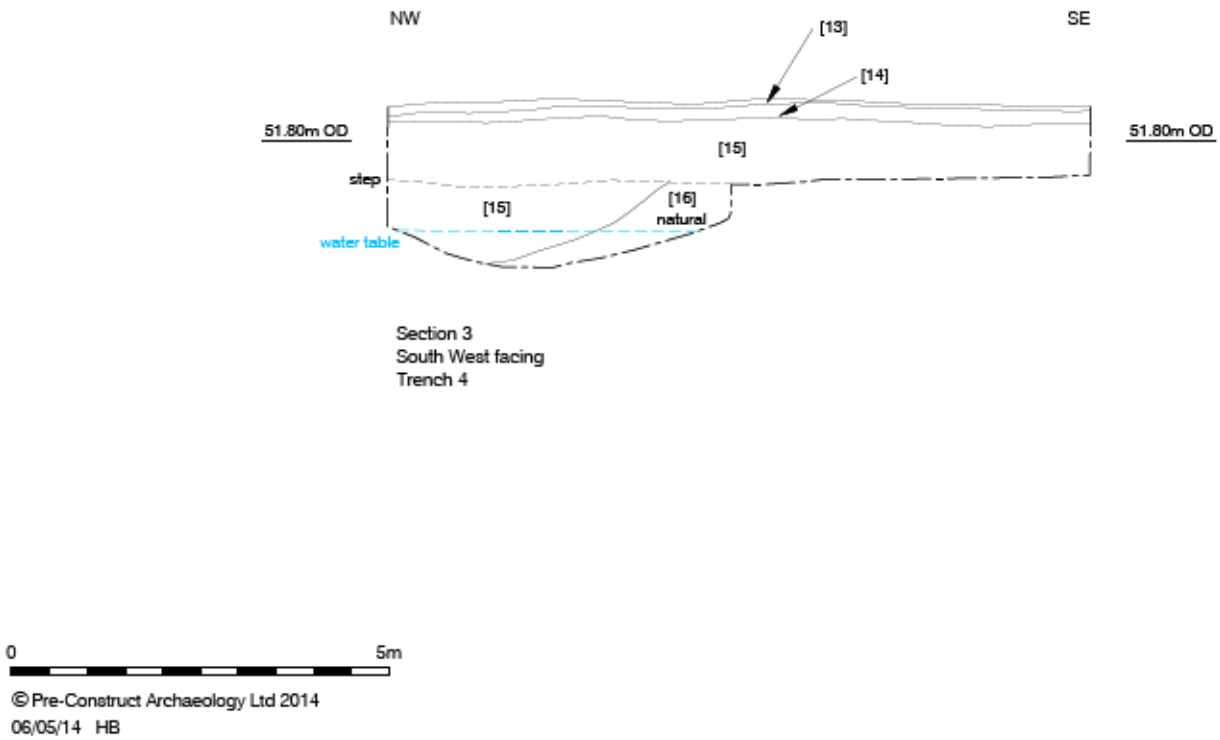
Masonry
Cut feature
Excavated slot

0 1m

06/05/14 HB

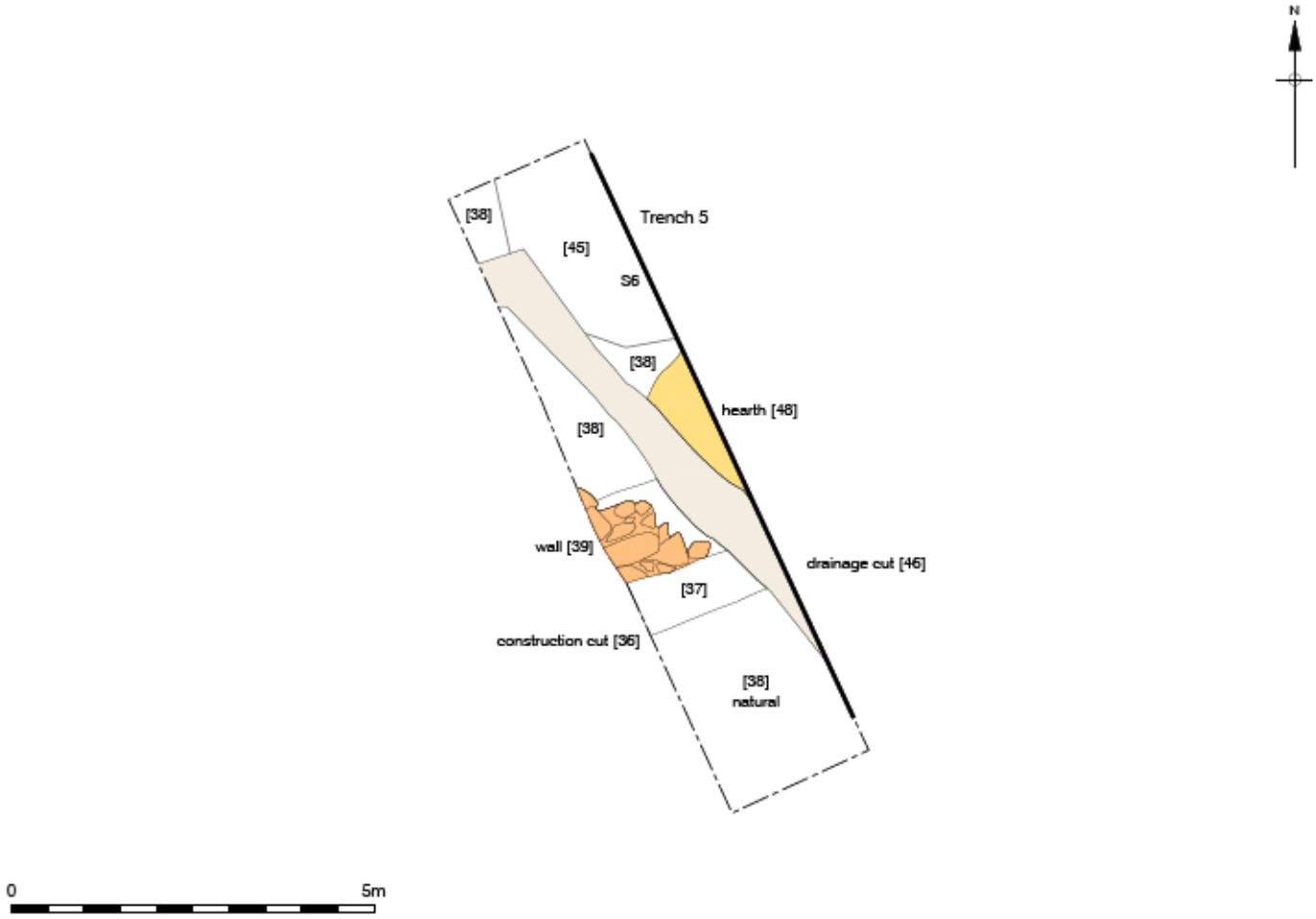
Figure 5
Plan of Trench 3 & Sections 9, 10, 11 & 12
Plan 1:100, Section 1:100 & Section Details 1:25 at A3

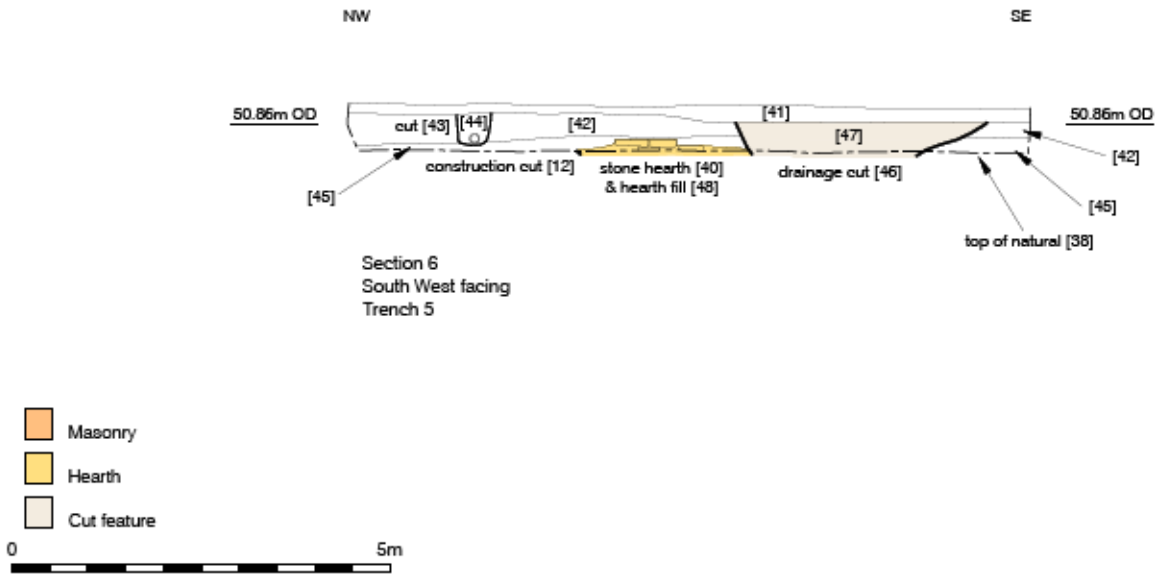




06/05/14 HB

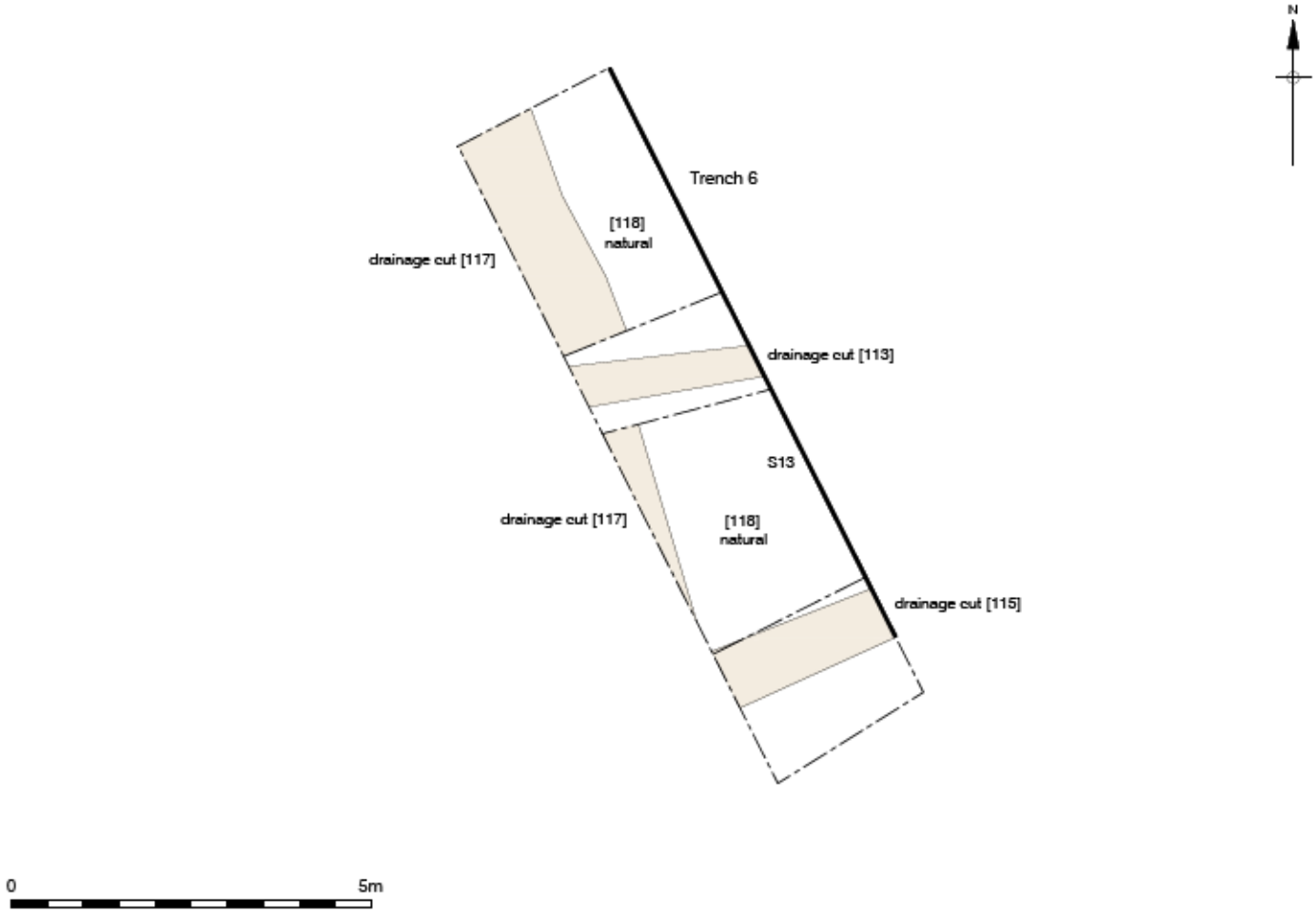
Figure 6
Plan of Trench 4 & Section 3
Plan 1:200 at A4 & Section 1:100 at A4

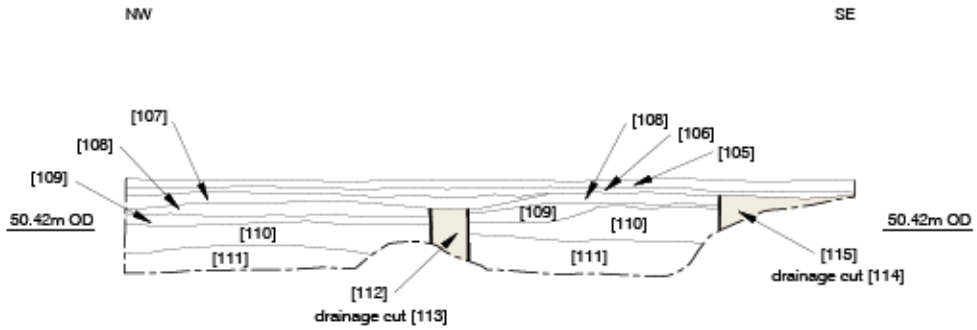




06/05/14 HB

Figure 7
Plan of Trench 5 & Section 6
Plan 1:100 at A4 & Section 1:100 at A4





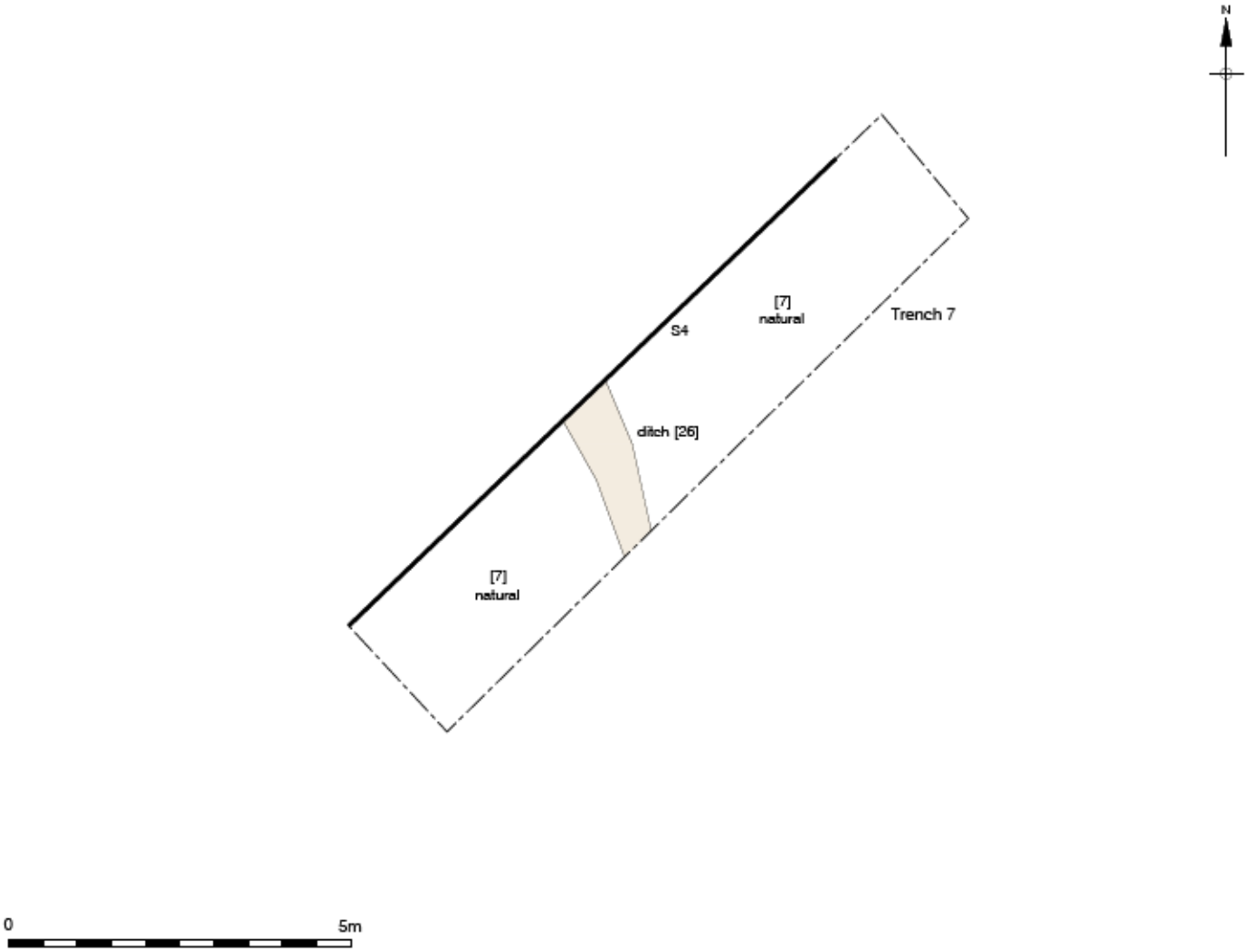
Section 13
South West facing
Trench 6

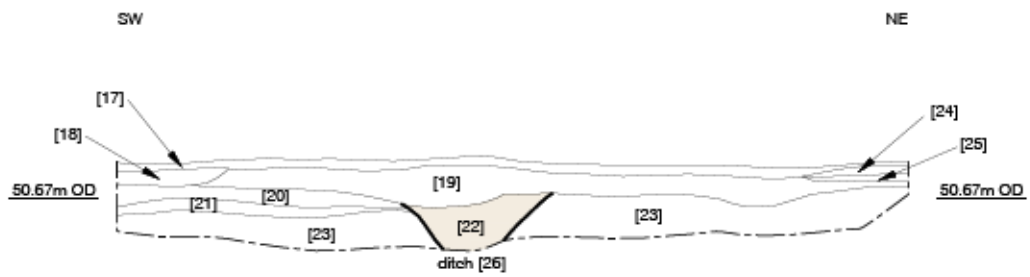
Cut feature

0 5m

06/05/14 HB

Figure 8
Plan of Trench 6 & Section 13
Plan 1:100 at A4 & Section 1:100 at A4





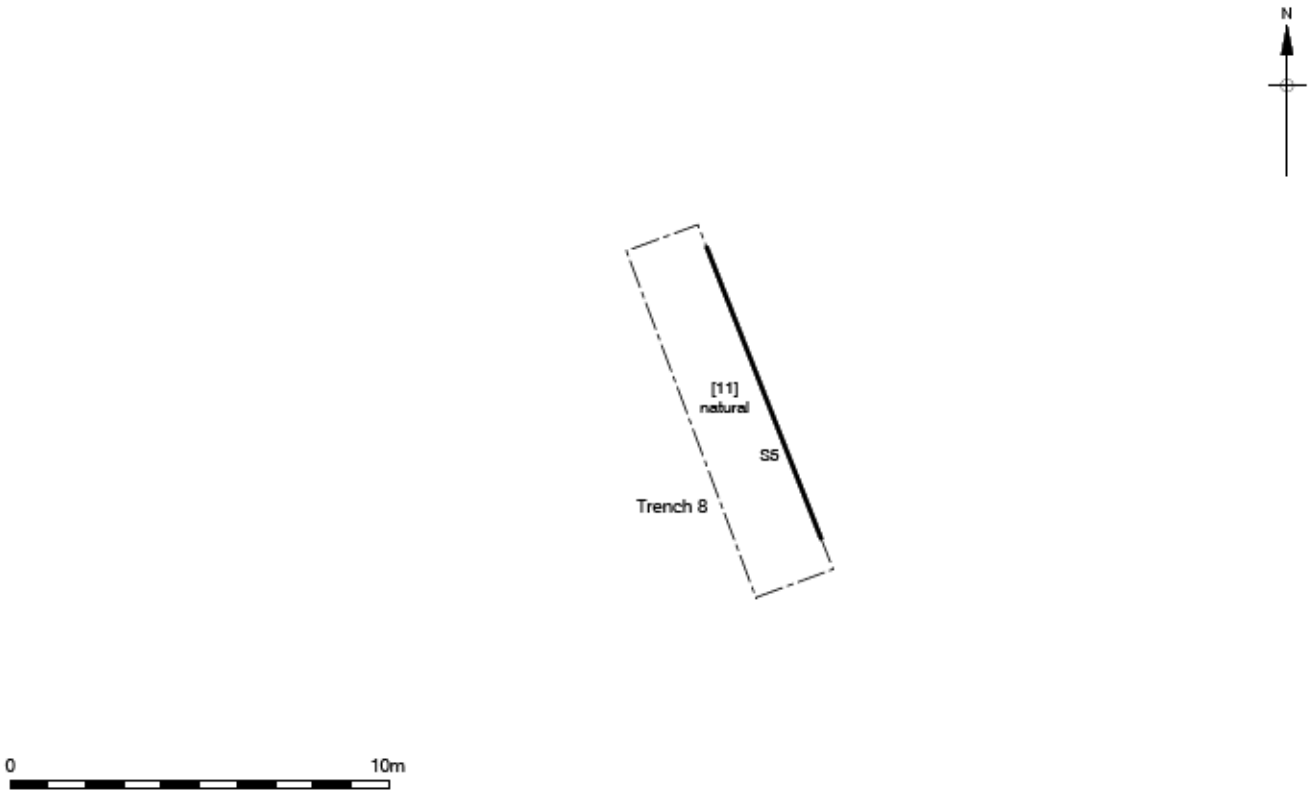
Section 4
South East facing
Trench 7

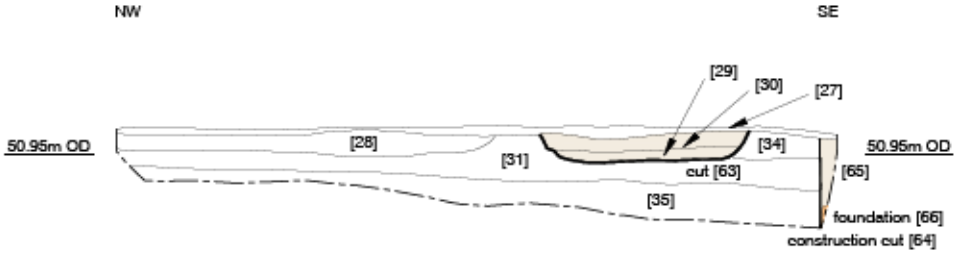
Cut feature

0 5m

06/05/14 HB

Figure 9
Plan of Trench 7 & Section 4
Plan 1:100 at A4 & Section 1:100 at A4





Section 5
South West facing
Trench 8

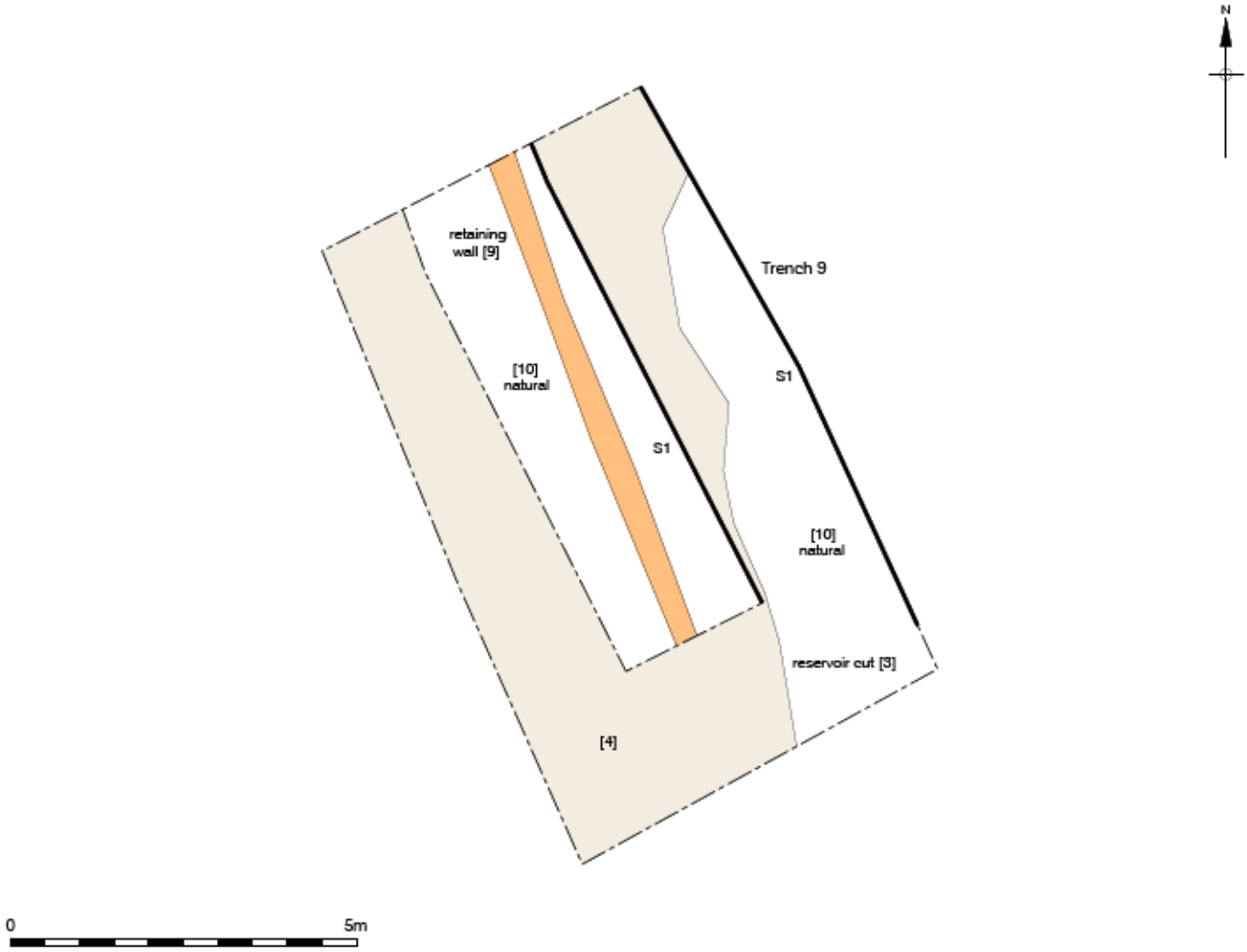
Masonry

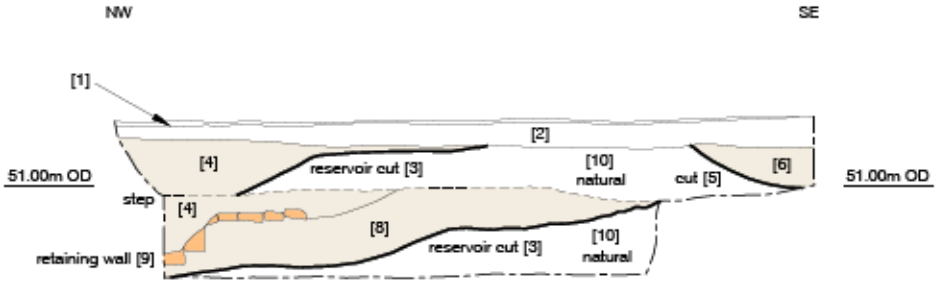
Cut feature

0 5m

06/05/14 HB

Figure 10
Plan of Trench 8 & Section 5
Plan 1:200 at A4 & Section 1:100 at A4





Section 1
South West facing
Trench 9

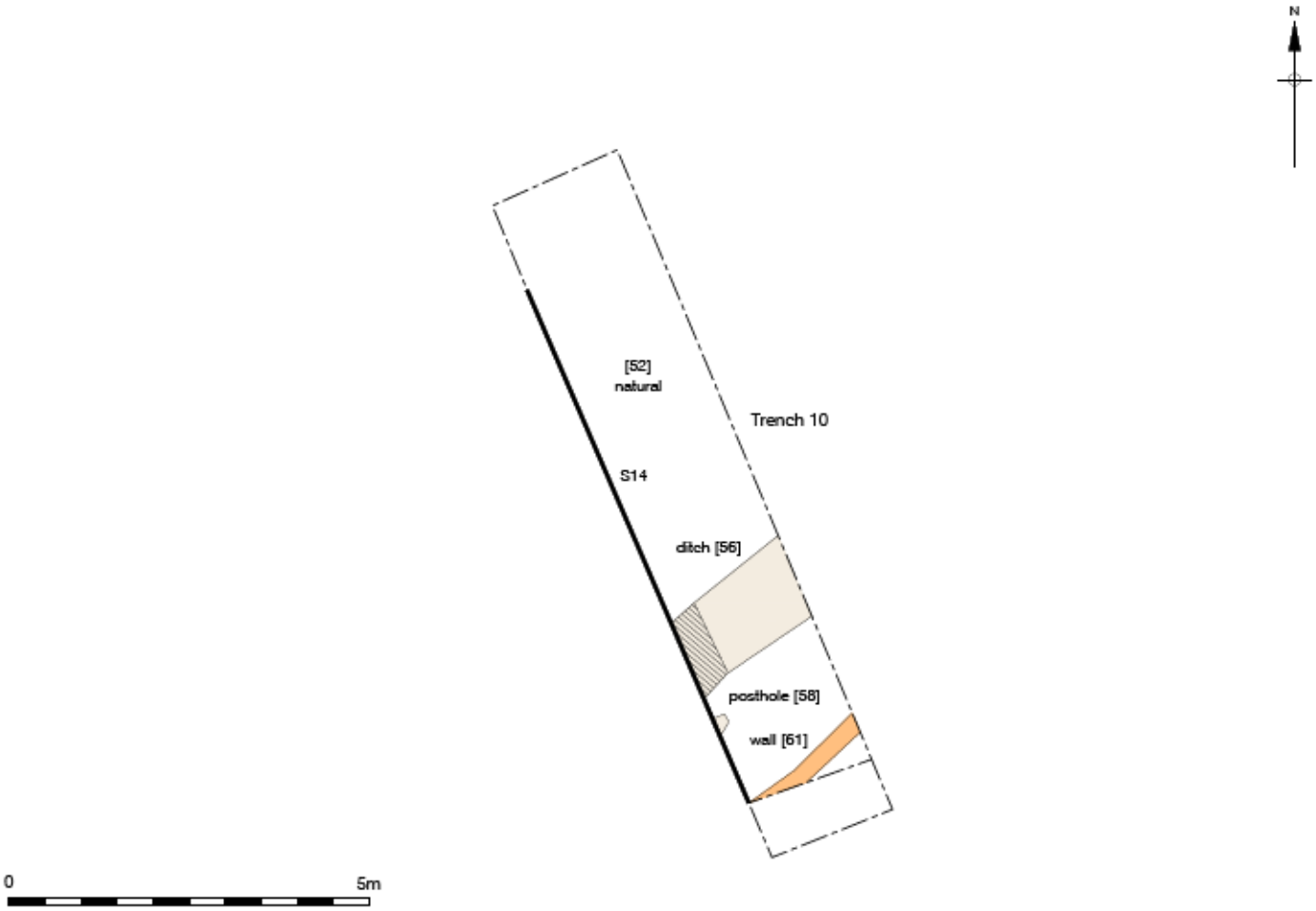
Masonry

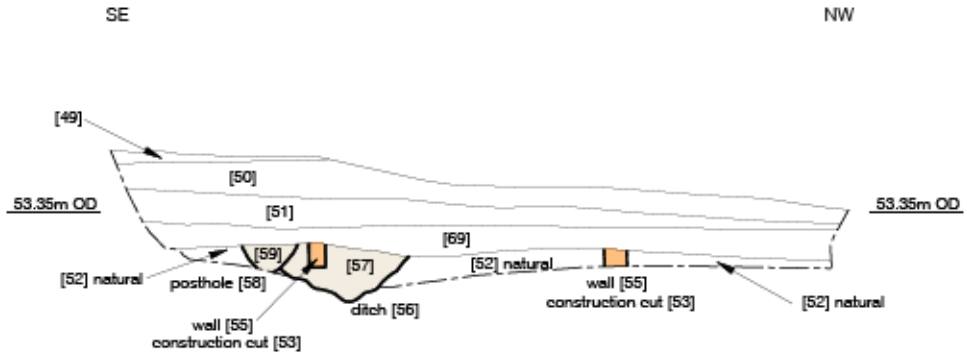
Cut feature

0 5m

06/05/14 HB

Figure 11
Plan of Trench 9 & Section 1
Plan 1:100 at A4 & Section 1:100 at A4





Section 14
North East facing
Trench 10

Masonry

Cut feature

0 5m

02/05/14 HB

Figure 12
Plan of Trench 10 & Section 14
Plan 1:100 at A4 & Section 1:100 at A4

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

6.1.1 Geological deposits and archaeological deposits and features encountered during the evaluation have been assigned to four phases of activity:

Phase 1: Natural sub-stratum

6.1.2 Boulder clay representing the drift geology of the area was the basal deposit encountered within all ten trenches and generally comprised firm to stiff brownish yellow and yellowish brown clay. Currently the ground surface of the site gradually slopes downwards from the west, within the vicinity of Trench 10, to the west, where present ground is relatively level. Although substantial levelling activity has evidently been undertaken across the site, initially during the 19th century and then later during the 20th century, the level at which natural deposits were recorded broadly reflects the current surface level. The maximum height of the natural sub-stratum was 52.92m OD in Trench 10 to the west and the maximum and minimum heights across the eastern portion of the site were 51.54m OD in Trench 9 and 48.97m in Trench 1, respectively.

6.1.3 The depth below present ground level at which the natural sub-stratum was encountered was variable across the site. Within the central and south-eastern portions of the site (Trenches 1, 2, 3 and 4) boulder clay was recorded at maximum and minimum depths below ground level of *c*. 2.30m in Trench 1 and *c*. 1.10m in Trench 4. In contrast, boulder clay was encountered at relatively shallow depths in the north-eastern portion of the site (Trenches 5, 6, 7 and 8); it was recorded at maximum and minimum depths below ground level of 0.70m in Trench 8 and 0.36m in Trench 9.

6.1.4 Horizontal truncation of the natural sub-stratum within the eastern portion of the site, within the scheduled area, and to the west was evidently relatively limited, with features and structures of possible medieval and post-medieval date recorded in Trenches 3, 5 and 10. Rapid water ingress in Trenches 1 and 4 meant that the extent of horizontal truncation was less easy to define within the central portion of the site.

Phase 2: Medieval and undated

6.1.5 A large piece of tile recovered from a NW-SE aligned ditch in Trench 3 may be medieval in date, although the possibility has been raised that this could be a Roman tile as the fabric is not recognisably medieval. Further specialist examination will be undertaken to confirm the identification of this tile. A posthole and gully recorded to the east and west of the ditch did not produce any artefactual material, but the compositions of their fills were similar to the ditch, indicating contemporaneity. Trench 3 was located to the north of the medieval manorial complex and these features may represent ancillary settlement activity, with the ditch possibly representing a burgage plot boundary.

6.1.6 A ditch in Trench 10 may be of medieval date; it ran on a NE-SW alignment and probably represents a drainage feature forming part of a boundary associated with agricultural activity. The ditch was encountered at a depth of *c*. 1.10m below existing ground level.

Phase 3: Post-medieval and undated

6.1.7 The south-eastern corner of a stone wall was exposed within the central eastern portion of Trench 3. This ran NW-SE with a NE-SW return to the south-east and although no dateable material was recovered, its position corresponds with the south-eastern corner of an enclosed yard to the east of the Manor House Farm buildings as depicted on the Ordnance Survey first edition map (Figure 13). The wall recorded in Trench 3 probably represents the south-eastern corner of this yard.

6.1.8 The stone-built wall foundation and basal portion of a possible hearth structure recorded in Trench 5 did not produce any artefactual material. However, this trench was sited within the vicinity of the north-eastern corner of the buildings of Manor House Farm. The earliest plan to show the farm dates from 1783 and the buildings were subsequently altered throughout the 19th century. With such a limited exposure, it is not possible to ascertain whether the structural elements recorded within Trench 5 were associated with the original farm, or subsequent 19th-century buildings. The structures recorded in Trench 5 were recorded at relatively shallow depth, c. 0.40m below the present ground level, at a maximum height of 50.66m OD.

6.1.9 A small portion of the eastern edge of a stone-lined reservoir was exposed in Trench 9. The Ordnance survey first edition map of 1857 depicts a substantial L-shaped pond or reservoir in this area, on the same alignment as the north-western corner of the medieval moat. By the time of the Ordnance Survey second edition map of 1897 these had been infilled with the exception of the NE-SW portion of the L-shaped feature, which by this date formed part of series of reservoirs associated with Wardley Colliery.

6.1.10 A substantial feature was partially exposed at the south-eastern corner of Trench 9. Its function was not established, although it was backfilled with colliery waste material and may represent a quarry of 19th-century date associated with the workings of Wardley Colliery.

6.1.11 In Trench 10, elements of two brick structures were partially exposed comprising the north-eastern portion of a building or yard area and a further short length of a similarly aligned wall was located *c*. 1.50m to the south-east of this. The Ordnance Survey first edition map of 1857 depicts a small square building associated with the early workings of Wardley Colliery within the vicinity of Trench 10 and the structural remains recorded here could represent this structure (Figure 13). Later map evidence, including the Ordnance Survey third edition map of 1916 and the 1988 plan of the site, also depict buildings within the vicinity of Trench 10 and the structural remains recorded could represent these. However, an earlier 19th century date is considered more likely based on the building fabric.

6.1.12 Deposits interpreted as representing industrial era dumping and levelling were recorded in Trenches 1, 2, 3 and 4. Such deposits represent waste material derived from Wardley Colliery in the 19th century and comprised various compositions of crushed shale, sandstone, sand, clay and silt and ranged in thickness from a maximum and minimum of 1.80m in Trench 4 to 0.80m in Trench 3, respectively.

6.1.13 Variously aligned linear features representing services and drainage features were recorded in Trenches 1, 2 and 3. These were probably utilities associated with terraced housing first depicted on the Ordnance Survey second edition map of 1897 and annotated on later editions as Quality Terrace that were located within the south-western part of the site. These features were overlain by the colliery waste.

Phase 4: Modern

6.1.14 Deposits interpreted as dumped and levelling deposits were recorded in Trenches 5, 6, 7, 8 and 10 with combined maximum and minimum thicknesses of 0.50m in Trench 5 and 1.40m in Trench 10, respectively. Such deposits comprised various compositions of silt, clay and gravel and contained various quantities of crushed shale and ash. Although this material is typical of colliery waste material and probably derived from Wardley Colliery in the 19th century, it represents mid to late 20th century levelling activity associated with both the demolition and subsequent levelling of the buildings of Manor House Farm and later levelling activity associated with the establishment of the salvage yard.

6.1.15 Various drainage and service features were recorded in Trenches 3, 5, 6 and 7, some overlain by and some cutting through 20th-century dumped and levelling deposits. The majority of these were disused with the exception of a drainage feature that truncated Phase 3 structures in Trench 5.

6.1.16 A buried asphalt surface recorded in Trench 1 directly overlaying Phase 3 levelling and dumped deposits is probably of late 20th century date. In the majority of the trenches, with the exception of Trenches 9 and 10, levelling and consolidation deposits were recorded, directly overlain by the existing ground surfaces comprising a concrete slab in Trenches 1, 2 and 3 and compact gravel in Trenches 4, 5, 7, 8 and 9.

Significance of results

6.1.17 In summary, the evaluation recorded a boundary ditch, posthole and gully in Trench 3, all of probable medieval date, likely representing ancillary settlement activity immediately beyond the medieval manorial complex. Previous investigations carried out in the area to the north-west of Trench 3, largely within the enclosed yard area of Manor House Farm, revealed the presence of 13th- and 14th-century deposits, while structural features in the same area did not produce any dateable material but were considered to be of medieval or post-medieval date. A further boundary ditch of probable medieval date was recorded in Trench 10 by the evaluation. Although these features and any associated remains are heritage assets of archaeological interest, they are of significance at a local level, but cannot reasonably be considered to be of national importance. The features recorded in Trench 3, within the present scheduled area, and the ditch recorded to the west in Trench 10 probably represent agricultural activity within the wider area of the manorial complex. Any associated remains of similar date could contribute information to the key research priorities for the later medieval period identified within the NERRF research agenda.

6.1.18 Post-medieval structural remains likely associated with the buildings of Manor House Farm were encountered in Trench 5, including the base of a probable hearth and a substantial stone wall foundation. Structural remains considered likely to be associated with the post-medieval farm were also recorded during the previous watching brief. A stone boundary wall possibly representing the corner of a yard associated with the farm was encountered in Trench 3. These structures and any associated remains are heritage assets of archaeological interest, of significance at a local level.

6.1.19 Industrial era features and deposits were recorded across the site principally associated with the 19th-century workings of Wardley Colliery. Structural remains of a colliery building were recorded in Trench 10 and part of the eastern end of a substantial stone-lined reservoir was recorded in Trench 9. Such structural elements associated with Wardley Colliery may be considered heritage assets of limited archaeological interest, of significance at a local level at best. All deposits associated with Wardley Colliery which represent dumped material and levelling activity are of negligible archaeological significance.

6.1.20 Earthworks purported to be associated with the medieval moated site are depicted initially on late 18th-century maps and subsequently on 19th-century maps. These include a roughly rectangular enclosure defined by a ditch and bank 'moat' and a centrally located square enclosure defined by a bank probably representing the manorial complex. Trenches 1, 2 and 9 were sited across the postulated locations of these earthworks, however no archaeological features were present within these areas and it is considered likely that 19th- and 20th-century levelling activity has resulted in their truncation.

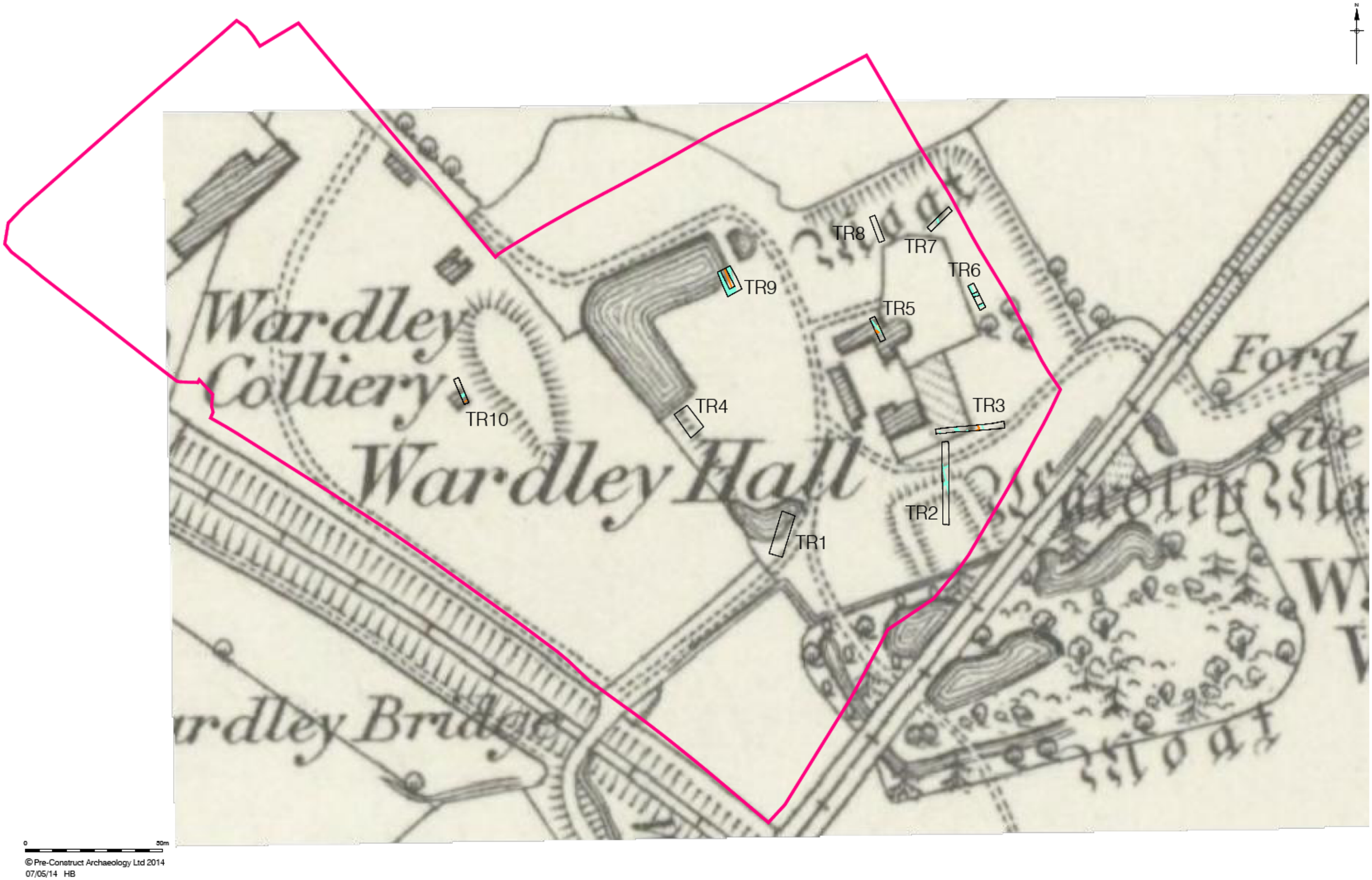
6.2 Recommendations

6.2.1 The results of the archaeological evaluation and previous watching brief indicate that the proposed re-development scheme has the potential to disturb medieval and post-medieval archaeological remains of local importance, specifically within the areas of Trenches 3 and 5 within the present scheduled area, and Trench 10 beyond it.

6.2.2 Further archaeological remains of significance for the industrial era associated with the Wardley Colliery have the potential to be disturbed by the development, specifically within the areas in which Trench 9 and 10 were located.

6.2.3 The main broad aim of the evaluation was to inform English Heritage, the Local Planning Authority (LPA), as advised by the T&WSCT, and the landowner and prospective developer, regarding the extent, depth and nature of archaeological deposits within the salvage yard portion of the overall site, but specifically the scheduled area. The specific aim of the work was to provide results to inform decisions on the management of the Scheduled Monument, including whether archaeological remains in the scheduled area could be considered to no longer merit scheduling.

6.2.4 The evaluation has established that although substantial horizontal truncation has occurred across the majority of the salvage yard, some, albeit evidently limited, archaeological remains of significance for the medieval, post-medieval and industrial era periods are present. Preservation *in situ* of these remains cannot be reasonably warranted and further archaeological fieldwork is the recommended mitigation strategy for the re-development proposal, with the aim of preserving these remains by record. The nature and extent of further archaeological work will depend largely on precise details of the proposed re-development, specifically layout, ground preparation/project formation level and foundation design.



07/05/14 HB

Figure 13
Features overlain on First Edition Ordnance Survey, 1857
1:1,250 at A3

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MAGIC website, at: *http://magic.defra.gov.uk*

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www.twsitelines.info/

8. ACKNOWLEDGEMENTS AND CREDITS

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Report: Aaron Goode and Jenny Proctor

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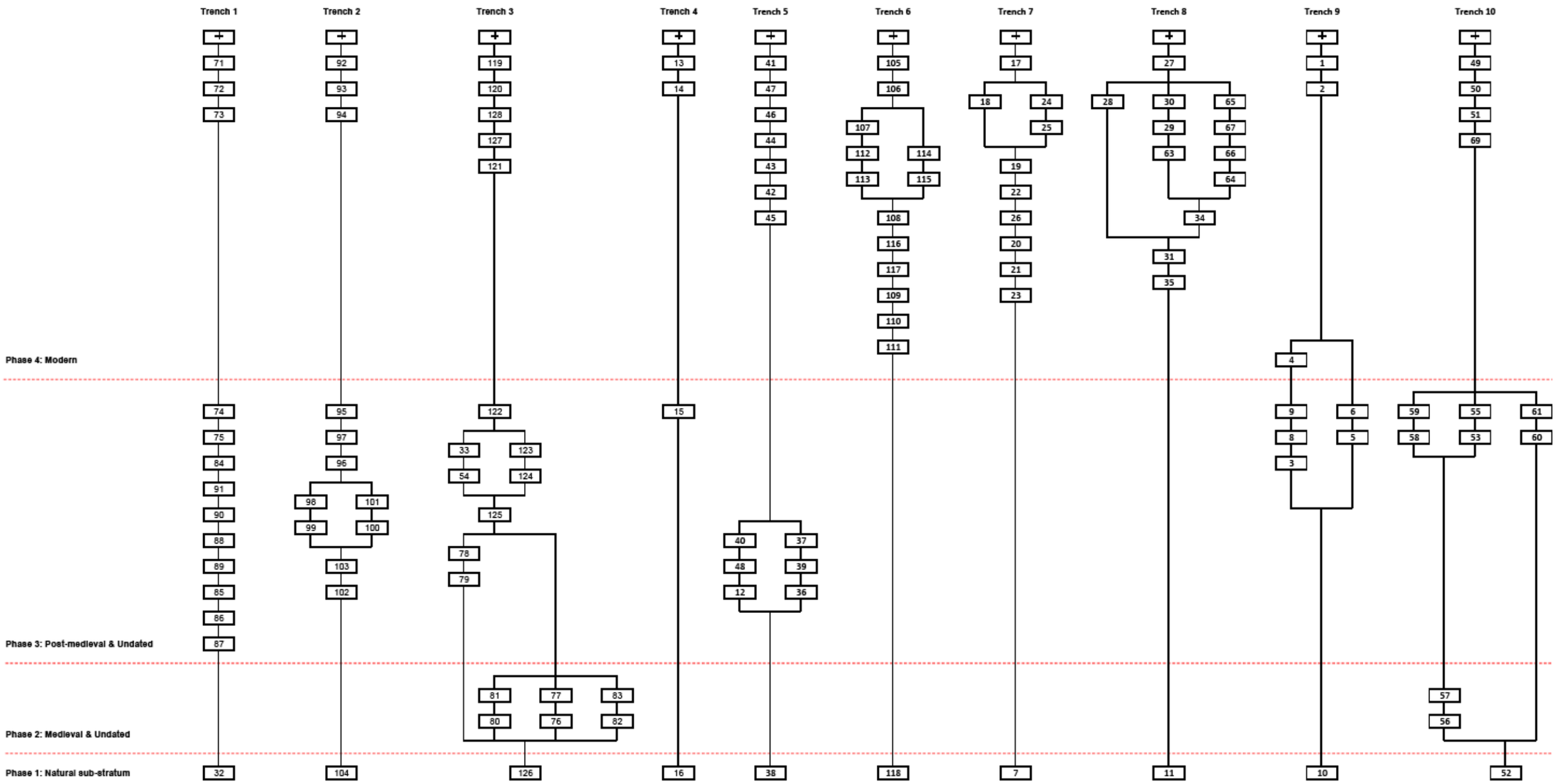
Other Credits

Post-medieval and medieval finds comments: Jenny Vaughan and John Nolan, NCAS

APPENDIX 1
STRATIGRAPHIC MATRICES

WLG 14: STRATIGRAPHIC MATRICES



APPENDIX 2
CONTEXT INDEX

WLG 14: CONTEXT INDEX

Context	Trench	Phase	Type 1	Type 2	Interpretation
1	9	4	Deposit	Layer	Surface
2	9	4	Deposit	Layer	Dump/levelling
3	9	3	Cut	Discrete	Reservoir structure filled by [4], [8], [9]
4	9	4	Deposit	Fill	Infill of reservoir [3]
5	9	3	Cut	Discrete	Feature filled by [6]
6	9	3	Deposit	Fill	Fill of feature [5]
7	7	1	Deposit	Layer	Natural clay
8	9	3	Deposit	Fill	Disturbed natural associated with wall [9] of reservoir [3]
9	9	3	Masonry	Wall	Retaining wall of reservoir [3]
10	9	1	Deposit	Layer	Natural clay
11	8	1	Deposit	Layer	Natural clay
12	5	3	Cut	Discrete	Construction cut for hearth [40]
13	4	4	Deposit	Layer	Surface
14	4	4	Deposit	Layer	Levelling/consolidation
15	4	3	Deposit	Layer	Colliery waste levelling
16	4	1	Deposit	Layer	Natural clay
17	7	4	Deposit	Layer	Surface
18	7	4	Deposit	Structure	Concrete surface
19	7	4	Deposit	Layer	Levelling/consolidation
20	7	4	Deposit	Layer	Colliery waste levelling
21	7	4	Deposit	Layer	Colliery waste levelling
22	7	4	Deposit	Fill	Fill of ditch [26]
23	7	4	Deposit	Layer	Colliery waste levelling
24	7	4	Deposit	Layer	Dump/levelling
25	7	4	Deposit	Layer	Dump/levelling
26	7	4	Cut	Linear	Ditch filled by [22]
27	8	4	Deposit	Layer	Surface
28	8	4	Deposit	Layer	Dump/levelling
29	8	4	Deposit	Fill	Sub-base for surface [30] within construction cut [63]
30	8	4	Deposit	Fill	Concrete surface within construction cut [63]
31	8	4	Deposit	Layer	Dump/levelling
32	1	1	Deposit	Layer	Natural clay
33	3	3	Deposit	Fill	Fill of drainage feature [54]
34	8	4	Deposit	Layer	Dump/levelling
35	8	4	Deposit	Layer	Colliery waste levelling
36	5	3	Cut	Linear	Construction cut for wall [39]
37	5	3	Deposit	Fill	Backfill of construction cut [36]
38	5	1	Deposit	Layer	Natural clay
39	5	3	Masonry	Wall	Stone wall foundation within construction cut [36]
40	5	3	Masonry	Hearth	Stone hearth within construction cut [12]
41	5	4	Deposit	Layer	Surface
42	5	4	Deposit	Layer	Dump/levelling
43	5	4	Cut	Linear	Drainage feature filled by [44]
44	5	4	Deposit	Fill	Fill of drainage feature [43]
45	5	4	Deposit	Layer	Dump/levelling
46	5	4	Cut	Linear	Drainage feature filled by [47]
47	5	4	Deposit	Fill	Fill of drainage feature [46]
48	5	3	Deposit	Fill	Fill of construction cut [12] for hearth [40]
49	10	4	Deposit	Layer	Dump/levelling
50	10	4	Deposit	Layer	Dump/levelling
51	10	4	Deposit	Layer	Dump/levelling
52	10	1	Deposit	Layer	Natural clay
53	10	3	Cut	Linear	Construction cut for wall [55]
54	3	3	Cut	Linear	Drainage feature filled by [33]
55	10	3	Masonry	Wall	Brick wall within construction cut [53]
56	10	2	Cut	Linear	Ditch filled by [57]

WLG 14: CONTEXT INDEX

57	10	2	Deposit	Fill	Fill of ditch [56]
58	10	3	Cut	Discrete	Posthole filled by [59]
59	10	3	Deposit	Fill	Fill of posthole [58]
60	10	3	Cut	Linear	Construction cut for wall [61]
61	10	3	Masonry	Wall	Brick wall in construction cut [60]
62					*Number not used*
63	8	4	Cut	Linear	Construction cut for surface [30] and sub-base [29]
64	8	4	Cut	Linear	Construction cut for buttress [67] and foundation [66]
65	8	4	Deposit	Fill	Backfill of construction cut [64]
66	8	4	Deposit	Structure	Concrete foundation within construction cut [64]
67	8	4	Masonry	Structure	Brick buttress within construction cut [64]
68					*Number not used*
69	10	4	Deposit	Layer	Dump/levelling
70					*Number not used*
71	1	4	Deposit	Structure	Concrete surface
72	1	4	Deposit	Layer	Levelling/consolidation
73	1	4	Deposit	Structure	Tarmac surface
74	1	3	Deposit	Layer	Dump/levelling
75	1	3	Deposit	Layer	Dump/levelling
76	3	2	Cut	Linear	Ditch filled by [77]
77	3	2	Deposit	Fill	Fill of ditch [76]
78	3	3	Masonry	Wall	Stone wall foundation within construction cut [79]
79	3	3	Cut	Linear	Construction cut for wall [78]
80	3	2	Cut	Discrete	Posthole filled by [81]
81	3	2	Deposit	Fill	Fill of posthole [80]
82	3	2	Cut	Linear	Linear feature filled by [83]
83	3	2	Deposit	Fill	Fill of linear feature [82]
84	1	3	Deposit	Layer	Dump/levelling
85	1	3	Deposit	Layer	Dump/levelling
86	1	3	Deposit	Layer	Dump/levelling
87	1	3	Deposit	Layer	Dump/levelling
88	1	3	Deposit	Layer	Dump/levelling
89	1	3	Deposit	Layer	Dump/levelling
90	1	3	Cut	Linear	Drainage feature filled by [91]
91	1	3	Deposit	Fill	Fill of drainage feature [90]
92	2	4	Deposit	Structure	Concrete surface
93	2	4	Deposit	Layer	Levelling/consolidation
94	2	4	Deposit	Layer	Levelling/consolidation
95	2	3	Deposit	Layer	Dump/levelling
96	2	3	Deposit	Layer	Dump/levelling
97	2	3	Deposit	Layer	Dump/levelling
98	2	3	Cut	Linear	Drainage feature filled by [98]
99	2	3	Deposit	Fill	Fill of drainage feature [99]
100	2	3	Cut	Linear	Drainage feature filled by [101]
101	2	3	Deposit	Fill	Fill of drainage feature [100]
102	2	3	Cut	Linear	Drainage feature filled by [103]
103	2	3	Deposit	Fill	Fill of drainage feature [102]
104	2	1	Deposit	Layer	Natural clay
105	6	4	Deposit	Structure	Concrete surface
106	6	4	Deposit	Layer	Levelling/consolidation
107	6	4	Deposit	Layer	Tarmac surface
108	6	4	Deposit	Layer	Levelling/consolidation
109	6	4	Deposit	Layer	Dump/levelling
110	6	4	Deposit	Layer	Dump/levelling
111	6	4	Deposit	Layer	Dump/levelling
112	6	4	Deposit	Fill	Fill of drainage feature [113]
113	6	4	Cut	Linear	Drainage feature filled by [112]

WLG 14: CONTEXT INDEX

114	6	4	Deposit	Fill	Fill of drainage feature [115]
115	6	4	Cut	Linear	Drainage feature filled by [114]
116	6	4	Deposit	Fill	Fill of drainage feature [117]
117	6	4	Cut	Linear	Drainage feature filled by [116]
118	6	1	Deposit	Layer	Natural clay
119	3	4	Deposit	Structure	Concrete surface
120	3	4	Deposit	Structure	Tarmac surface
121	3	4	Deposit	Layer	Levelling/consolidation
122	3	3	Deposit	Layer	Dump/levelling
123	3	3	Deposit	Layer	Dump/levelling
124	3	3	Deposit	Layer	Dump/levelling
125	3	3	Deposit	Layer	Dump/levelling
126	3	1	Deposit	Layer	Natural clay
127	3	4	Cut	Linear	Service trench filled by [128]
128	3	4	Deposit	Fill	Fill of service trench [127]

APPENDIX 3
FINDS IDENTIFICATION

Finds Identification

By: ***Jenny Vaughan and John Nolan (NCAS)***

Three ceramic items were recovered during the trial trenching:

Trench 7: levelling deposit [23]

Pottery: base fragment in a buff to pinkish-buff fabric with partial grey core. The piece is undiagnostic but of broadly 13th-century date. Residual in context.

Trench 3: fill [77] of ditch [76]

Ceramic building material: large corner fragment of tile with a low, blunt ?nib. Well-fired orange fabric with partial reduced core. The form is not recognisably medieval and there is a possibility that this could be residual Roman material.

Trench 3: levelling deposit [125]

Clay tobacco pipe: stem fragment with large bore of about 8/64". This piece is likely to be 17th century in date.

APPENDIX 4
PLATES

Plate 1: Trench 1, looking NNE (scale 1m)

Plate 2: Trench 2, looking NW (scale 1m)

Plate 3: Trench 3, looking east (scale 1m)

Plate 4: Trench 3, ditch [76], NW facing section (scale 1m)

Plate 5: Trench 3, posthole [80], north facing section (scale 0.2m)

Plate 6: Trench 3, linear [82], looking SE (scale 1m)

Plate 7: Trench 3, Wall [78] looking SE (scale 1m)

Plate 8: Trench 5, looking NE (scale 1m)

Plate 9: Trench 5, wall [39], looking west (scale 1m)

Plate 10: Trench 5, hearth [48], looking NE (scale 1m)

Plate 11: Trench 6, looking NW (scale 1m)

Plate 12: Trench 7, looking SW (scale 1m)

Plate 13: Trench 9, showing reservoir [3] stone-block retaining wall [9], looking SE (scale 1m)

Plate 14: Trench 9, reservoir [3] stone-block retaining wall [9] in SW facing section (oblique) (scale 1m)

Plate 15: Trench 10, looking NW (scale 1m)

Plate 16: Trench 10, ditch [56] in NE facing section (oblique) (scale 1m)

APPENDIX 5
WRITTEN SCHEME OF INVESTIGATION

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION AT WARDLEY, SOUTH TYNESIDE, TYNE AND WEAR

1. Introduction

1.1 This written scheme of investigation represents a methods statement for undertaking an archaeological evaluation in advance of a proposed housing development at the Wardley, South Tyneside. The development site comprises 5.6 hectares of currently occupied by a modern scrapyard and depot buildings centred on NGR NZ 3508 6194 (see Figure 1 and 2).

1.2 A section of the eastern area of the development site falls within the area of a Scheduled Ancient Monument (SAM), Wardley Moated Site (reference no. 1017054) (see Figure 1).

1.3 Around 6,000 moated sites are known in England. They consist of wide ditches, often or seasonally water-filled, partly or completely enclosing one or more islands of dry ground on which stood domestic or religious buildings. In some cases the islands were used for horticulture. The majority of moated sites served as prestigious aristocratic and seigneurial residences with the provision of a moat intended as a status symbol rather than a practical military defence. The peak period during which moated sites were built was between about 1250 and 1350 and by far the greatest concentration lies in central and eastern parts of England. However, moated sites were built throughout the medieval period, are widely scattered throughout England and exhibit a high level of diversity in their forms and sizes. They form a significant class of medieval monument and are important for the understanding of the distribution of wealth and status in the countryside. Many examples provide conditions favourable to the survival of organic remains.

1.4 Moated sites are rare in the historic counties of Durham and Northumberland, and Wardley is the only known example in Tyne and Wear. The site is an example of a high status dwelling and administrative nucleus, of a regionally unusual form. The medieval accounts indicate that it may also have supplied fish and agricultural produce to Durham Priory. The infilled ditches and fishponds will retain important environmental information, especially in view of the waterlogged nature of the site.

1.5 The monument includes the moated medieval manor of Wardley and related earthworks and deposits, which are situated to the north of South Wardley Farm. Immediately north of the farm visible remains include an enclosure defined by a bank and moat, and ridge and furrow produced by medieval arable cultivation. There are also visible remains to the north of the Bowes Railway which include a section of the moat. The remainder of the monument survives beneath the Bowes Railway trackbed and by a vehicle dismantling compound incorporating old coal waste tips. Survival of archaeological deposits beneath these has been demonstrated and the waterlogged nature of the site indicates good preservation conditions. The visible earthworks immediately north of the farm have been surveyed and are of at least two phases. The first phase is associated with the medieval enclosure and the second

later phase features relate to the use of the site for dumping refuse. The original defining boundary is seen in the west corner of the field immediately north of the farm. Here the moat has an internal and external bank, standing 0.5m high. The outer edge of the external bank is about 10m from the moat. The external bank can be seen on the south and east sides of the enclosure. The internal bank can be seen on the south side of the enclosure before it becomes obscured by accumulated 19th century refuse. On the east side and in parts of the south side of the enclosure the accumulated refuse stands 1m higher than the surrounding surface and infills the moat area. The refuse also fills two fishponds, which are depicted on the first edition Ordnance Survey 1:2500 map. To the north of the field the monument is overlain by the Bowes Railway and the vehicle dismantling compound. A watching brief of foundation trenches in 1995 recorded medieval deposits at 20cm depth from the surface of the vehicle dismantling compound. In 1994 to the east of the compound a section of the moat was excavated from the Bowes Railway to its north east corner. This excavation was designed to stop at the surface of the pre-19th century infills, which will be preserved beneath. The manor of Wardley was held by Durham Priory. The first reference to the manor was in 1264 when Prior Hugh de Derlington erected a camera, hall and chapel, which was destroyed by Scots. In 1313 it was assigned to William de Tanfield on his resignation as prior of Durham. Medieval accounts note a kitchen, dovecot, bovaria, byre, stable, henhouse, herringhouse, farina and bridge. References in the 19th century show that it also had fishponds within the moated area. The original extent of the enclosure is reported as 220 yards north west to south east by 150 yards south west to north east, enclosing some six acres and thirty-five perches. The manor has an almost unbroken series of leases into the mid-18th century. The manor was subdivided into five farms in the 18th century and this had certainly been accomplished by 1783. The Bowes Railway is excluded from the scheduling, although the ground beneath it is included.

1.6 The National Planning Policy Framework states that "Where a site on which a development proposal includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation" paragraph 128 of the NPPF. In the case of the proposed site the Tyne and Wear Conservation Team and English Heritage have determined that an archaeological evaluation is necessary, in order to provide sufficient information to properly assess the archaeological impact of this application.

1.7 An initial evaluation strategy comprising ten trenches (two trenches measuring 25m by 2m; one 30m by 2m and seven 10m by 2m) has been agreed to establish if the site or parts of the site have been truncated / disturbed and the degree of survival of any archaeological significant remains (see Figure 3). If the initial evaluation shows the survival of archaeological significant remains or deposits further archaeological works may be required which will have to be agreed in consultation with the Tyne and Wear Conservation Team and English Heritage prior to the development of the site.

2. General Standards

2.1 All work will be carried out in compliance with the codes of practice of the Institute of Field Archaeologists (IfA)[1] and will follow the IfA Standard and Guidance for Archaeological Field Evaluation[2]. All work will be in compliance with the Regional Statement of Good Practice (Yorkshire, The Humber and the North-East (25 November 2009).

3. Pre-site work preparation

3.1 All staff will familiarise themselves with the archaeological background of the site, and the results of any previous work in the area, prior to the start of work on site. All staff will be briefed in the work required under the specification and the project aims and methodologies.

3.2 The relevant museum will be contacted to discuss archiving, prior to work commencing.

3.3 An environmental sampling strategy in accordance with the previous advice of the English Heritage North East Regional Science Advisor (see 6. below) will be followed.

4. Fieldwork

4.1 Each evaluation trench will be accurately surveyed and related to the National Grid, using a Total Station Theodolite or GPS system, and located on a map of the area at an appropriate scale.

4.2 Topsoil and unstratified modern material will be removed mechanically by a machine using a wide toothless ditching blade. This machine stripping will be carried out under continuous archaeological supervision

4.3 The topsoil or recent overburden will be removed in successive level spits down to the first significant archaeological horizon or the natural subsoil, whichever is encountered first.

4.4 All faces of the trenches that require examination or recording will be cleaned sufficiently to establish the presence or absence of archaeological remains, particularly the top of the first significant archaeological horizon or the natural subsoil. All subsequent deposits will be hand-excavated.

4.5 The archaeology will be investigated sufficiently to establish its nature, extent and date, unless it is deemed of sufficient importance to require total preservation in situ. This will be achieved by excavation of the following samples of all exposed features.

---

[1] Institute of Field Archaeologists, 2000, Code of Conduct

[2] Institute of Field Archaeologists, 2001, Standards and Guidance for Archaeological Field Evaluation

- 50% of every discrete feature (e.g. pits, post-holes)
- 25% of the area of linear/curvilinear features (e.g. ditches, gullies) with a non-uniform fill
- 10% of the area of linear/curvilinear features (e.g. ditches, gullies) with a uniform fill

4.6 Within the constraints of the site, the excavations will be maintained in a manner that allows quick and easy inspection without any requirement for additional cleaning.

4.7 Deposits will be assessed for their potential for providing environmental or dating evidence. Sampling will be in line with the strategy agreed with English Heritage Regional Science Advisor and the Tyne and Wear Conservation Team.

4.8 In the event of human burials being discovered, they will be left *in situ*, covered and protected and the coroners' office will be informed. If removal is essential, work will comply with relevant Home Office regulations.

4.9 Appropriate procedures under the relevant legislation will be followed in the event of the discovery of artefacts covered by the provisions of the Treasure Act 1996.

4.10 The drawn record from the site will include a representative selection of long sections from the excavations that clearly allow the nature and depth and any significant changes in the deposits recorded to be demonstrated. If there is any uncertainty, advice will be sought from the County Archaeologist as to which sections may be appropriate for inclusion within the site record.

4.11 During and after the excavation, all recovered artefacts will be stored in the appropriate materials and storage conditions to ensure minimal deterioration and loss of information (this will include controlled storage, correct packaging, and regular monitoring of conditions, immediate selection for conservation of vulnerable material).

5. Archaeological Recording

5.1 A full and proper record (written, graphic and photographic as appropriate) will be made for all work, using pro forma record sheets and text descriptions appropriate to the work. Accurate scale plans and section drawings will be drawn at 1:50, 1:20 and 1:10 scales as appropriate.

5.2 The stratigraphy of all trenches will be recorded even where no archaeological deposits have been identified.

5.3 All archaeological deposits and features, the current ground level and base of each trench will be recorded with an above ordnance datum (aOD) level.

5.4 A photographic record of all archaeological features will be taken, both in detail and in a wider context and will include a clearly visible, graduated metric scale. A register of all photographs will be kept.

5.5 Where stratified deposits are encountered, a 'Harris' matrix will be compiled

6. Environmental Sampling and Scientific Dating Strategy

6.1 This sampling strategy is intended to provide sufficient data to characterise the nature and informative potential of the deposits and features observed in the evaluation. This will fulfil the aim of both informing any further archaeological work and creating a record of deposits where no further work is required. Because of the speculative nature of this work and the wide range of features likely to be encountered, this strategy is best set out as a series of principles. These are:

- 10-30l samples should be taken from structural, occupational and industrial features, as well as pits and ditch fills. Other features should be sampled to help to characterise the deposits on the site. Priority should be given to processing samples from identifiable, dated features, or to those undated features which have potential for other forms of dating (e.g. radiocarbon dating)

- Bulk sample residues should be checked for the presence of industrial waste (e.g. slags, hammerscale) and small faunal remains (e.g. fishbones, small mammal/avian bones) as well as for plant material.

- The potential of buried soils and ditch fills to provide dated (using radio-carbon dating) pollen cores or Optically Stimulated Luminescence (OSL) dating of sediments should be considered, although this type of sampling would normally be undertaken in consultation with the English Heritage Regional Scientific Advisor.

6.2 In the event that hearths, kilns or ovens are identified, provision will be made to collect at least one archaeo-magnetic date to be calculated from each individual hearth surface (or in the case of domestic dwellings a minimum of one per building identified). Where applicable, samples to be collected from the site and processed by a suitably trained specialist for dating purposes. In the event that such deposits or structures are identified the Tyne and Wear Conservation Team will be contacted to discuss an appropriate response.

7. Monitoring

7.1 The County Archaeologist will be informed on the start date and timetable for the evaluation in advance of work commencing.

7.2 Reasonable access to the site will be afforded to the County Archaeologists or his/her nominee at all times, for the purposes of monitoring the archaeological evaluation.

7.3 Regular communication between AD Archaeology, the County Archaeologist, English Heritage and other interested parties will be maintained to ensure the project aims and objectives are achieved.

7.4 If appropriate, specialists will be contacted and allowed access to the site to help inform any detailed study / information retrieval depending upon the nature of the archaeological features being revealed.

8. Post excavation work, archive, and report preparation

8.1 Finds

8.1.1 All finds processing, conservation work and storage of finds will be carried out in compliance with the IfA Guidelines for Finds Work[3] and those set by UKIC.

8.1.2 The deposition and disposal of artefacts will be agreed with the legal owner and recipient museum prior to the work taking place. Where the landowner decides to retain artefacts, adequate provision will be made for recording them. Details of land ownership will be provided by the developer.

8.1.3 All retained artefacts will be cleaned and packaged in accordance with the requirements of the recipient museum.

8.2 Site Archive

8.2.1 The archive and the finds will be deposited in the appropriate local museum, within 6 months of completion of the post-excavation work and report.

8.2.2 Archiving work will be carried out compliance with the IfA Guidelines for Archiving[4].

8.2.3 Before fieldwork, contact will be made with the landowners and with the appropriate local museum to make the relevant arrangements. Details of land ownership will be provided by the developer.

8.2.4 The Tyne and Wear Conservation Team will require confirmation that the archive had been submitted in a satisfactory form to the relevant museum.

8.3 Report

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[3] Institute for Archaeologists, 2008, *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (October 2008)

[4] Institute for Archaeologists, 2008. *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives* (October 2008)

8.3.2 The Tyne and Wear Conservation Team require two bound paper copies and digital copies (in Word or PDF format) of the report.

8.3.3 The report will include the following as a minimum:

Each page and paragraph will be numbered within the report and illustrations cross-referenced within the text.

The report will include the following as a minimum:

- The nature and extent of the proposed development and client information
- A location plan of the site at an appropriate scale of at least 1:10 000
- A location plan showing trench locations within the site. This will be at a recognisable planning scale, and located with reference to the national grid, to allow the results to be accurately plotted on the Sites and Monuments Record
- Plans and sections of main trench axes and excavated features located at a recognisable planning scale (1:10, 1:20, 1:50 or 1:100, as appropriate)
- Period based discussion of the known and potential archaeological sites within the proposed development area
- A summary statement of the results
- A table summarising the deposits, features, classes and numbers of artefacts encountered and spot dating of significant finds
- A description of the geology on the site
- Discussion of the physical impact of the proposed development on known and potential archaeological sites
- A copy of the Tyne and Wear Conservation Team brief for the evaluation and its checklist

8.3.4 Any variation to the above requirements will be approved by the planning authority prior to work being submitted

8.4 OASIS

8.4.1 The Tyne and Wear Conservation Team support the Online Access to Index of Archaeological Investigations (OASIS) Project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large scale developer funded fieldwork.

8.4.2 AD Archaeology will therefore complete the online OASIS form at **http://ads.ahds.ac.uk/project/oasis/**. Once a report has become a public document by submission to or incorporation into the HER, Northumberland HER will validate the OASIS form thus placing the information into the public domain on the OASIS website. TWM Archaeology therefore indicate that they agree to this procedure within this written scheme of investigation submitted to NCCCT for approval

8.5 Publication

8.5.1 A short report of the work will be submitted to a local journal if appropriate.

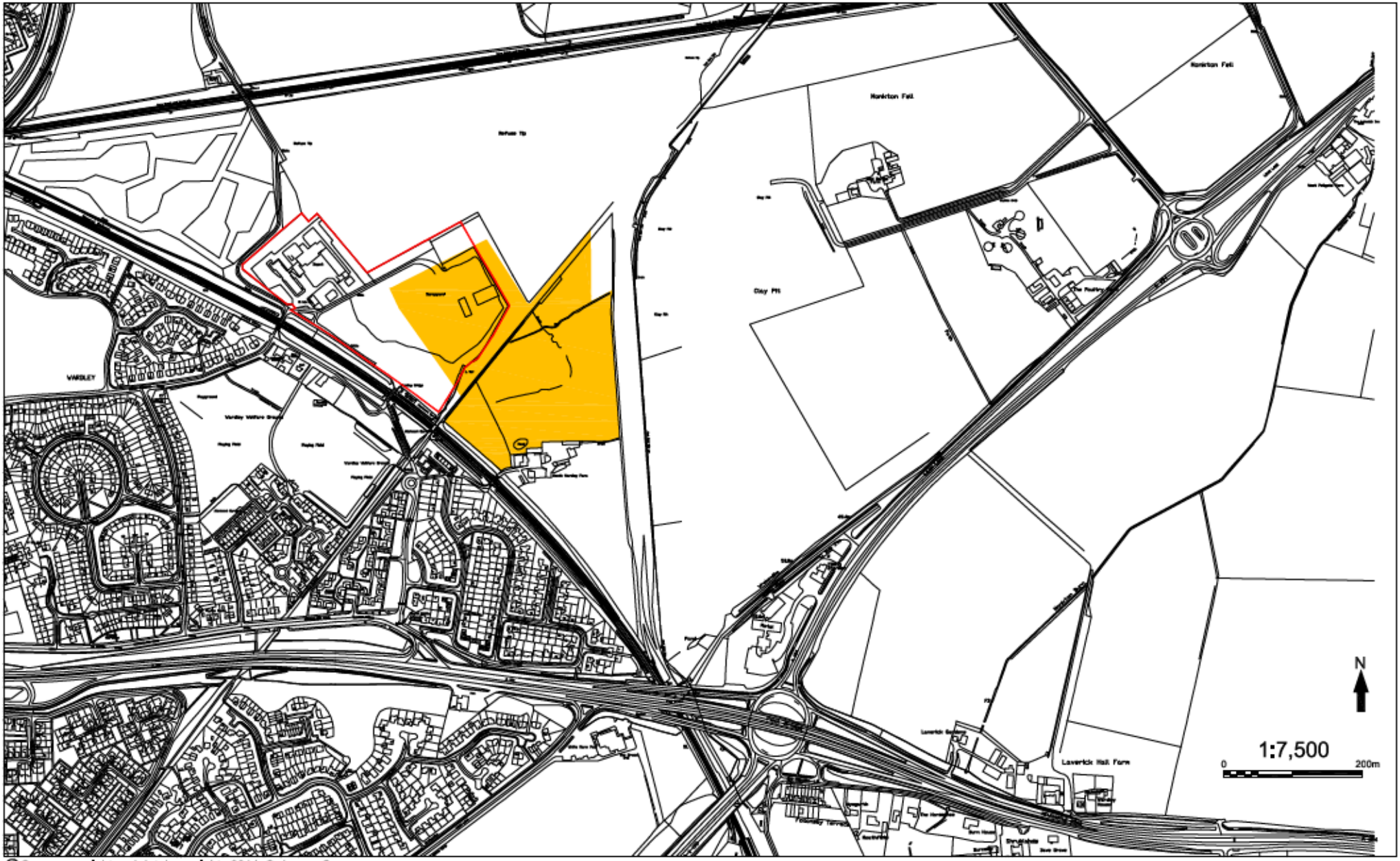

Figure 1: Site location showing proposed development boundary (red line) and SAM (1017054) scheduled area (yellow hatch)

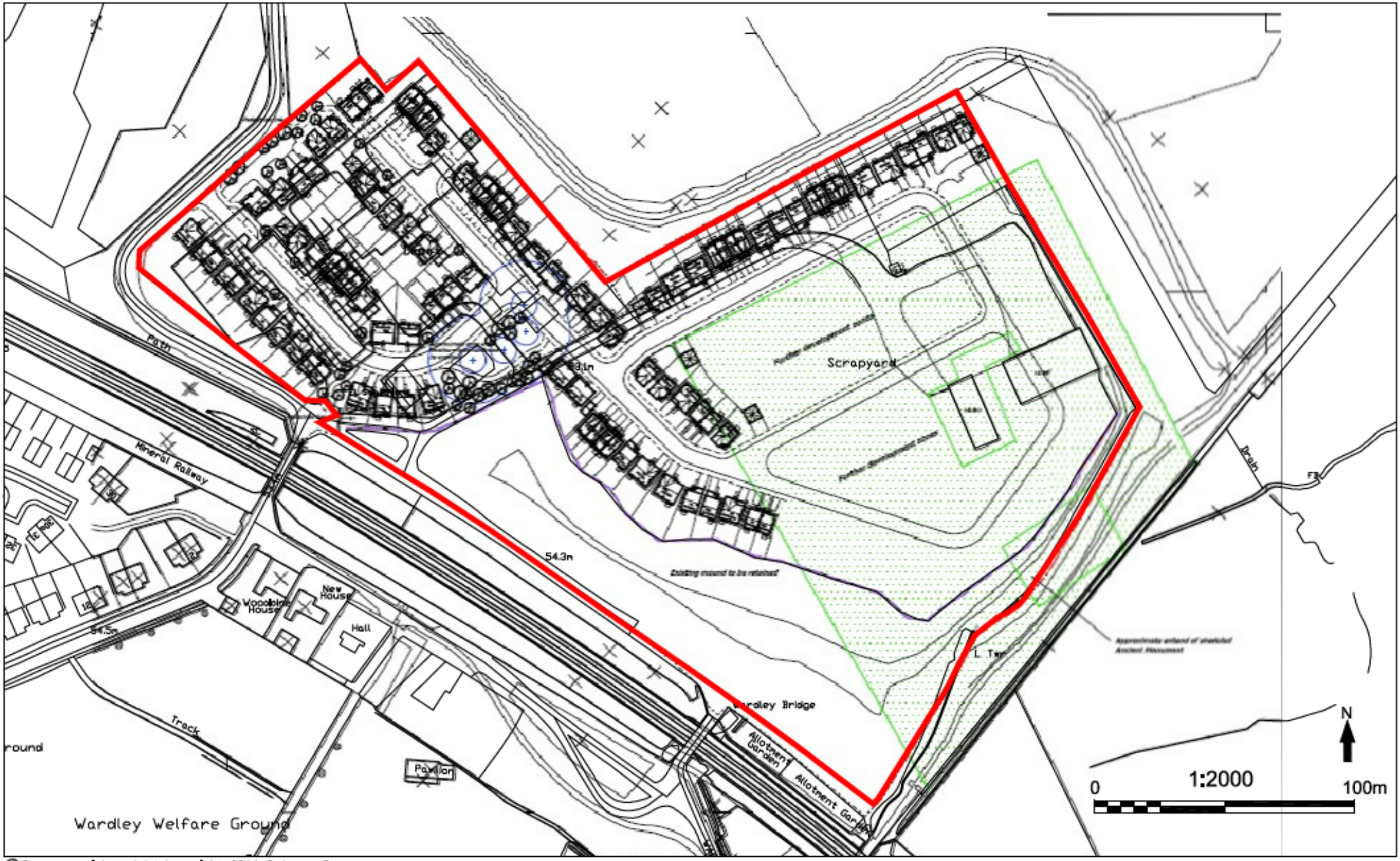

Figure 2: Plan of proposed development

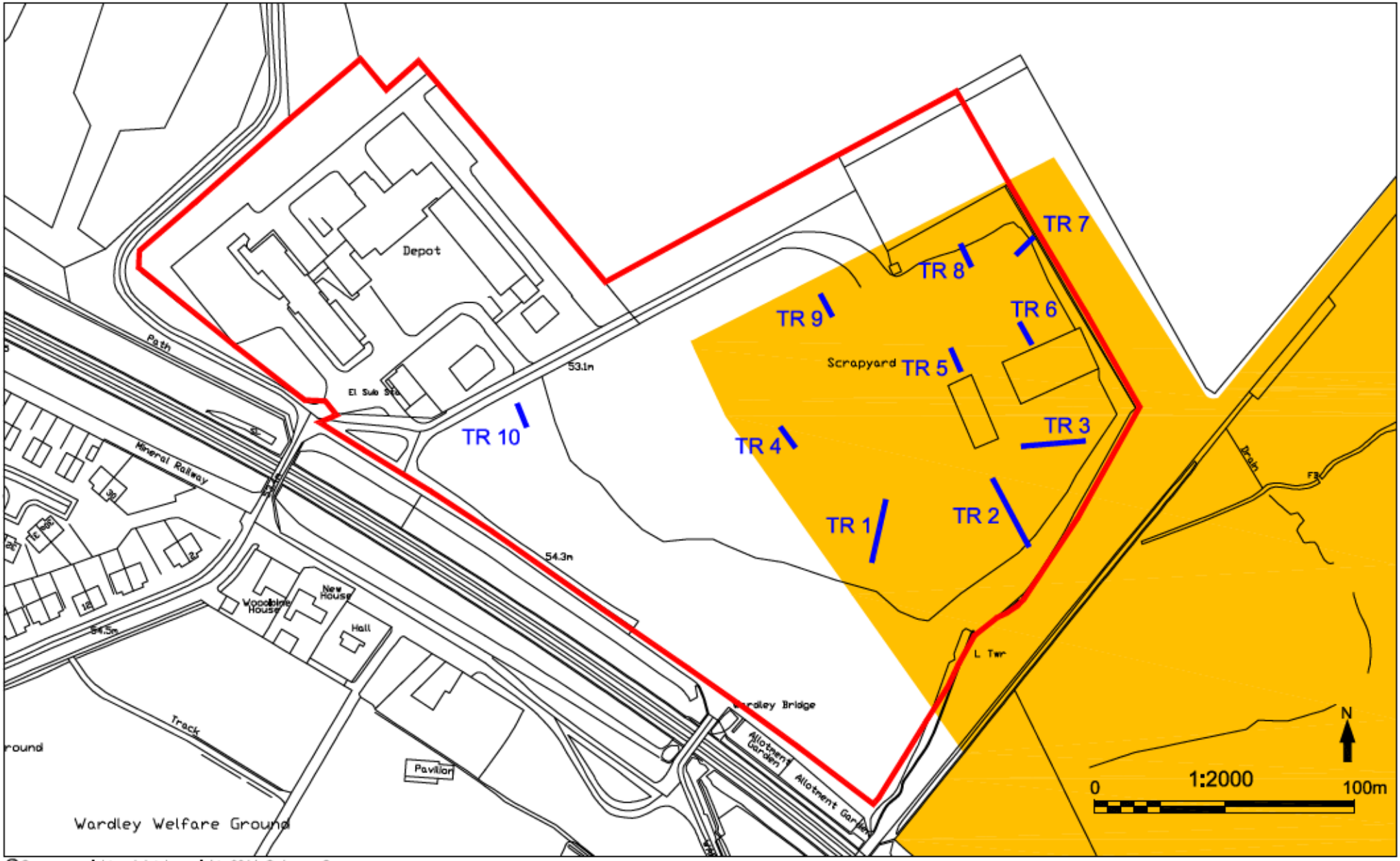

Figure 3: Proposed archaeological evaluation trench layout
(two 25m x 2m, one 30m x 2m & seven 10m x 2m)

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