

East Cowes Development Isle of Wight Former GKN Works Site



Archaeological Evaluation Report



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East Cowes Development, Isle of Wight

Stage 2a Archaeological Evaluation (trenching)

Former GKN Works

Summary

The evaluation was carried out on behalf of the South East England Development Agency (SEEDA) in respect of an outline planning application for mixed use residential and commercial redevelopment of the East Cowes harbour area (Planning Application No. PCP/27465, P/00027/06). The field evaluation is designated Stage 2a in the programme of archaeological work for the development (Stage 1 being the desk-based assessment). Stage 2a is preliminary trenching, targeted in areas of the site accessible at the outline planning stage, comprising the former GKN Aerospace industrial works.

The present stage of evaluation comprised 17 trenches (a 2.06% sample of the available area).

The hill slope to the east of Castle Street and Maresfield Road has been extensively terraced, principally in the mid-19th century and in the 1930s during construction of the GKN works, destroying or severely truncating any earlier archaeological deposits that may have been present in the affected areas. The evaluation has demonstrated that the original profile of the hill side is preserved in limited areas, particularly on the lower slopes to the south and west of the site (Figure 3). The most extensive survival is in the area of former tennis court (Trenches 119 and 113). The presence of buried pre-terrace soil horizons indicates that there is some potential for archaeological features to survive in these areas, although the evaluation did not identify any archaeological artefacts or features earlier in date than the 19th century.

Gravel, probably Pleistocene terrace deposits, was present immediately adjacent to Castle Street in Trench 103, overlying clay of the Headon and Osborne Beds. The coarse gravel deposits encountered at this location are unsuitable for OSL dating or palaeoenvironmental analysis, but they do indicate the potential for surviving Pleistocene deposits to the west of Castle Street.

Nineteenth or early 20th-century features include probable rubbish pits, containing fragments of bone, brick/ tile and clay pipe stems, concentrated in the trenches alongside Castle Street and Maresfield Road (100 and 102). Features possibly associated with 'The Lodge', a house built and demolished in the 19th century, were identified in Trench 116.

Throughout the site there was much evidence for 20th-century features associated with the former GKN works and sports ground site, including concrete platforms and structural features in the former building footprints. Other features include drainage culverts, paths, surfaces and a soakaway. The terracing in general appears to have involved levelling off the upper parts of the hill slope and depositing the soil in terraces further downslope. However, the GKN works building terraces were built up using loose brick rubble within reinforced concrete retaining walls. In this area each terrace is part cut into the slope and part built up, resulting in narrow strips with intermittent potential for archaeological survival.

Of the areas unavailable for trench evaluation at the outline planning application stage: as stated in the desk-based assessment, archaeological potential in the area to the west of Castle Street and Maresfield Road is assumed to be high, in view of waterlogged conditions and

extensive made ground sealing potential archaeological deposits in this area. However the ground conditions and the nature of the development proposals offer considerable scope for preservation of significant deposits in situ. The potential of the slow-worm habitat areas in the former GKN works site is considered to be low, given the extensive truncation and modern disturbance recorded during the Stage 2a evaluation, although uncertainty remains in the areas indicated on Figure 3. The potential of the Sylvan Avenue woodland plot remains unknown.

In light of the Stage 2a evaluation results, it is considered that further evaluation trenching within the Former GKN works site would not be productive, except potentially in the slow-worm habitat areas. It is clear from a 2% trenching sample that no significant, complex archaeological sites survive within the GKN site. There is some residual potential for ephemeral pre-19th-century archaeology to be found, in areas with preserved natural ground surface levels. Ideally, preservation of these areas would be incorporated in the detailed development designs. If this proves impossible, Stage 2c Strip, Map and Sample will be preferred where feasible (rather than further evaluation trenching) to allow a basic record of the post-medieval features surviving on the site to be obtained, and increase the chance of detecting ephemeral remains of earlier date.

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1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 Between 18th January and 10th February 2006 OA carried out a field evaluation at East Cowes, Isle of Wight. The site of the proposed development is centred on OS coordinates SZ 4503 9584 (Fig. 1). The evaluation was carried out on behalf of the South East England Development Agency (SEEDA) in respect of an outline planning application for mixed use residential and commercial redevelopment of the East Cowes harbour area (Planning Application No. PCP/27465, P/00027/06). The present stage of evaluation is restricted to areas of the site accessible at the outline planning stage, comprising the former GKN Aerospace industrial works. The current phase of evaluation trenching excludes waterfront areas of the proposed onshore development to the west of Maresfield Road and Castle Street, which comprise the Red Funnel Ferry Terminal, car parks, factory premises and other properties occupied by tenants at the time of writing. Other parts of the site unavailable for trenching at this stage comprise the Sylvan Avenue woodland plot, on the eastern side of the scheme, due to ecological restrictions, and parts of the GKN site which have been identified as protected slow worm habitats.
- 1.1.2 A brief for evaluation of the development area was set by the Isle of Wight Council Archaeology Service, which specified a 5% evaluation trenching sample by area (Isle of Wight Council 2004). This was modified in discussion with the Heritage Officer, by the adoption of a staged approach which envisaged that 2% of available land parcels would be trenched at the outline planning application stage. The intention is to provide sufficient information in support of the outline planning application, for archaeological risk management and planning purposes, by eliminating the possibility of unexpected major discoveries requiring preservation in situ over substantial parts of the development area.
- 1.1.3 Further stages of evaluation and mitigation are proposed prior to, or at, the detailed planning application stage for individual plots. A Section 106 agreement will be used, if necessary, to ensure that further stages of archaeological work are carried out by future developers to a common plan considering the whole site.

1.2 Scope of this document

- 1.2.1 OA has previously produced a detailed archaeological desk-based assessment, which assessed the archaeological potential of the whole onshore development site, in the light of existing archaeological, documentary and cartographic sources (OA 2005). This allowed the nature, extent, preservation and importance of heritage features present in the area to be assessed in general terms.
- 1.2.2 This report details the results of an initial stage of trial trenching (Stage 2a evaluation) carried out within areas of the site available at the outline planning application stage. Available areas comprise the former GKN works to the east of Castle Street and Maresfield Road. As this part of the site has been heavily terraced, particular attention is given to comparing ground levels and buried soil horizons in order to identify areas of truncation and potential preservation. Figure 3 shows the general distribution of truncated and preserved areas, as interpreted from the results of archaeological trenching and geotechnical records.
- 1.2.3 The report discusses the significance of the findings and makes recommendations with regard to further works.

1.3 Topography and geology

- 1.3.1 The available parts of the development fall within the former GKN works site, which forms an irregular plot, covering an area c. 5.4 ha (or 4.7 ha excluding the slow worm habitats). The onshore site as a whole covers an area of c. 11.7 ha. The site falls within the administrative area of Medina, although historically it lay in the parish of Whippingham. It is bounded to the north-east by Cambridge Road and to the east by Hefford Road and Sylvan Avenue; the southern limit of development is formed by Ferry Road and Well Road, while the western edge is bounded by the Medina River.
- 1.3.2 The northern part of the site slopes up to the north-east, caused by the presence of a 'hard' geology, probably the Seagrave member (sandstone).
- 1.3.3 The 1:50,000 Geological Survey of Great Britain (BGS sheet 331) shows that the underlying geology of the site consists of the Headon and Osborne beds. However, the geology of the Cowes region is stratigraphically ambiguous, and it is not known which members of the Osborne and Headon beds are present (pers. com. Martin Munt).
- 1.3.4 The westernmost area of the site is characterised by industrial use, which continued up until the present era. Prior to demolition work the former GKN site comprised a mixture of large industrial buildings interspersed by areas of hard standing, mostly laid to concrete, and terraced into the slope by a combination of cut and fill. The south-eastern area of the site was characterised by sports pitches such as tennis courts, a bowling green and large open car parks. The majority of this area is also hard standing.

1.4 Archaeological and historical background

- 1.4.1 The archaeological background to the evaluation has been the subject of the Stage 1 Evaluation (desktop assessment) the results of which are summarised below (OA 2005).
- 1.4.2 The desk-based assessment considered the whole onshore development area, including the waterfront site. It identified 28 sites of archaeological/historical significance within the study area, consisting of find spots and upstanding structures.
- 1.4.3 The assessment also identified a moderate potential for the recovery of palaeontology dating to the Eocene horizon, a moderate potential for the recovery of archaeology dating to the Palaeolithic, and an unknown potential for uncovering archaeological remains dating to the Mesolithic, Neolithic, Bronze Age, Iron Age and Roman period (though this could be due to the lack of past investigation in the area). There is a high potential for the discovery of significant sub-surface archaeological deposits dating to the early medieval, later medieval and post medieval periods. However, historic map studies indicate that this potential lies mainly in the area of the Tudor development, to the west of High Street, Maresfield Road and Castle Street.
- 1.4.4 Prior to the post-medieval period the study area is likely to have been marshy to the west. This area was drained and reclaimed in response to expanding waterfront industrial and harbour development in the Tudor and later periods. The scale of this industry increases the likelihood of finding preserved archaeological features, especially due to the nature of later industrialisation, sealing large areas under rafted hard standing and floors.
- 1.4.5 The assessment identified a high potential for the preservation of archaeological features within the inter-tidal and sub-tidal zone, and high potential along the present High Street, which may have delineated the original shore line prior to land reclamation.
- 1.4.6 The potential for pre-19th-century archaeology in the eastern part of the development area, on the slopes overlooking the harbour, was unknown but considered to be generally low. There are few features marked on early maps of the area, which lies on the periphery of the medieval settlement pattern. In the early 19th century a house ('The Lodge') was built on this part of the site, but was demolished in the late 19th century. There were also buildings to the east of Maresfield Road, including a house called 'Slatwood' (outside the development boundary) and a late 19th-century stable block (demolished in 2005 along with the GKN works buildings).
- 1.4.7 The development of the former GKN works site in the 1930s is linked to the history of the engineering corporation S.E. Saunders, a brief history of which is provided in the desk-based assessment. In 1928 S.E. Saunders was renamed Saunders-Roe after A V Roe took a financial interest in the company. It went on to design and build flying boats through to the 1950s. In 1935 the company bought the boat yard in Castle Street, and built the Columbine works, on either side of Castle Street and Maresfield Road. Westland Aircraft Ltd took over the Saunders-Roe hovercraft interests in July 1959, and in 1966 Westland and Vickers' hovercraft activities were merged to form

the British Hovercraft Corporation (changed to Westland Aerospace in 1984 as production changed predominantly to aerospace contracts). The company is now known as GKN Aerospace.

1.5 Previous development impact assessment

- 1.5.1 It is apparent that the onshore development area has been extensively landscaped in the course of previous development.
- 1.5.2 To the west of Castle Street the land is reclaimed marshland that has been extensively built up, resulting in high potential for preserved archaeology. To the east of Castle Street, the hill slope overlooking the harbour has been extensively terraced, to create level platforms for buildings and sports pitches.
- 1.5.3 Prior to evaluation, evidence for terracing and truncation comes from three principal sources: 1) historic map regression 2) test pit and borehole records 3) modelling of detailed topographical data.

Historic map regression

- 1.5.4 Two broad phases of landscaping can be identified on the basis of historic map regression:

Landscaping phase 1 - early 19th century

- 1.5.5 The eastern/ central part of the on-shore site was extensively landscaped when the 'The Lodge' was built at some point between the production of the 1793 OS map and the 1841 Tithe map (on which the house is marked for the first time). The house is also shown on the 1862 OS map, but was demolished before the 1890 OS revision. The substantial terracing in the eastern central part of the site relates to this phase.

Landscaping phase 2 - 1930s

- 1.5.6 The western and central part of the onshore development area, to the east of Castle Street and Maresfield Road, was terraced in the 1930s when the industrial buildings in that area were constructed. The available architects drawings show that the terraces were typically cut partly into the natural slope and partly built up. However, in the former industrial building plot to the north-east of the junction of Well Road and Castle Street, it is clear that the terrace had been cut back deeply into the natural slope (the exposed vertical face being supported by a 2m high reinforced concrete retaining wall), removing any archaeological deposits that may have been present.
- 1.5.7 The sports pitches and clubhouse in the south-eastern part of the site first appear on the 1" OS map of 1939 (they are not marked on the 1907 edition). The terracing in this area was carried out to create level ground for sports pitches, and is probably broadly contemporary with the 1930s industrial development along Castle Street and Maresfield Road. This development may in part have re-used terraces created for construction of the 'The Lodge' in the early 19th century. Comparison of the sports

ground car park terraces with the wooded area immediately to the east, where the original ground profile is largely preserved, suggested, prior to evaluation, that the lowest car park terrace is cut into the slope, the middle terrace is part cut, part fill, and the upper terrace is largely built up.

Other sources of disturbance

- 1.5.8 Apart from terracing, other, more localised, impacts are likely to have occurred in the course of landscaping and construction work. These include the digging of ponds, drains or ditches, the passage of heavy plant or the improvement of access routes for the same.

Test pit and borehole records

- 1.5.9 Test pits and borehole records are available for all parts of the development area except for the wooded area on the eastern edge of the site. The former were observed by an archaeologist during excavation. They record the present levels of natural subsoil and thickness of made ground across the site. In conjunction with existing topographical models they provide a good general indication of the extent of terracing, although longer trenches, across the terrace profiles, are required to predict precisely those areas with potential for surviving archaeology.

1.6 Evaluation aims

- 1.6.1 The overall aim of the evaluation, as stated in the brief, was to gather sufficient information to establish the presence/ absence, extent, condition, character, quality and date of any archaeological deposits present.
- 1.6.2 The former GKN site has been extensively terraced. A key objective of this phase of work was to establish the extent and depth of truncation caused by terracing and other modern disturbance.

2 EVALUATION METHODOLOGY

2.1 Scope of fieldwork

2.1.1 The evaluation consisted of 17 trenches varying in length from 10.5m to 60m comprising a total area of 970 square metres (Fig. 2). All trenches were 2m wide except for Trench 116, which was 5m wide. The evaluation area included three plots, all of which fall within the former GKN works site. The majority of trenches (13) were excavated in the main GKN works site. Three trenches were excavated in the Maresfield Road plot to the north of the main site, and one in the Castle Street plot to the south (the former King's Building). A number of trenches were relocated from planned positions to avoid obstacles or increase the percentage sample in particular areas of the site.

2.2 Fieldwork methods and recording

2.2.1 Hard standing (concrete) was removed by a 21T tracked excavator fitted with a breaker. The overburden was removed under close archaeological supervision by a 21T tracked excavator fitted with a toothless bucket. Excavation was undertaken in spits of 100mm which were reduced when potential archaeological features or significant deposits were encountered.

2.2.2 The trenches were cleaned by hand and the revealed features were sampled to determine their extent and nature, and to retrieve finds and environmental samples. All trenches were planned at 1:50 and sections drawn at scales of 1:50 and 1:20. All features and trenches were photographed using colour slide and black and white print film. Additional digital photography was used to record trenches and running sections. Recording followed procedures laid down in the OAU Fieldwork Manual (Wilkinson 1992).

2.3 Finds

2.3.1 Finds were recovered by hand during the course of the excavation and bagged by context.

2.4 Palaeo-environmental evidence

2.4.1 After due consideration no environmental sampling was deemed necessary (see results below).

2.5 Presentation of results

2.5.1 Section 3 of the report is a technical account detailing the geological and archaeological deposits encountered in each trench. Section 4 summarises the evidence for archaeological preservation across the site at an interpretative level. Section 5 presents revised options for future archaeological mitigation in the former GKN works site in light of the discoveries made.

3 RESULTS

3.1 Soils and ground conditions

3.1.1 The site is located on Headon and Osborne beds (clay). Overlying gravels, potentially of Pleistocene age, were encountered in Trenches 100 and 103 at the extreme western edge of the site in the lower-lying areas alongside Castle Street. Colluvial silts (hill wash) were present in patches on the upper terrace of the main site, but appear generally to have been removed in the course of terracing. Hard standing comprised reinforced concrete at building locations and tarmac and asphalt in carparks and the former sports ground. Made ground deposits were present in many trenches, but were only built up to significant depths at the front edge of terraces. In the north western part of the site the concrete was commonly laid directly on the natural clay. The watertable was encountered at variable depths in deep test excavations.

3.2 General topography

3.2.1 The modern ground surface levels drops away to the south and west, towards the River Medina to the south and the waterfront to the west, from a high point at c.19m OD at the north-east corner of the site, near the junction of Old Road and Cambridge Road. At the southern and western boundaries of the former GKN site the modern ground surface lie at c. 4m OD. Alluvial clay deposits were recorded at c. 3.7m OD in Trenches 107 and 103.

3.2.2 In all three plots the natural deposit sequence is extensively truncated by terracing of the natural hill slope. The ground is also extensively disturbed by building foundations, services and drainage features.

3.3 Trench 100

3.3.1 Trench 100 (20m x 2m) was cut across the terrace along the south west corner of the main GKN site, alongside Castle Street (Fig. 5). The trench was aligned east to west to characterise the terrace profile and assess potential for surviving archaeological deposits. The modern ground level drops from 8.64m OD on the upper terrace to 6.93m OD on the lower terrace at this location. The natural clay of the Headon and Osborne beds (100008) comprising a green and orange mottled clay with overlying sandy gravel lenses, was uncovered at 7.4m OD at the eastern end and 5.4m OD at the western end. At the eastern end of the trench a layer of hill-wash or made ground (100012 - reddish yellow gravel containing a small quantity of CBM fragments and charcoal flecks) overlay the natural clay, sloping from 6.2m OD to 5.4m OD east to west. A 400mm thick, dark brown silty clay made ground deposit (100003) containing clay pipe fragments sealed the colluvium (100012) between 6.3m OD (east) and 5.9m OD (west). The front edge of the building terrace was built up using reinforced concrete retaining walls and surfaces, filled with loose brick rubble and gravel.

3.3.2 Made Ground deposit 100003 sealed a south to north aligned gully (100006) and a pit (100010) (6.59 OD). The gully fill contained 19th-century brick and tile fragments. The pit was 290mm deep and 500mm in diameter and also contained brick and tile, as

well as charcoal and small fragments of animal bone. It may have been dug for rubbish disposal. Both features are likely to pre-date construction of the GKN buildings, although the finds have been spot-dated to the 19th century.

- 3.3.3 The concrete terrace surface (100000) sealed a rectangular feature (100005) at 7.46m OD, located near the east end of the trench, which was cut into the natural clay (100008). The feature was 410 mm deep and contained CBM fragments. It was probably associated with construction of the GKN building.
- 3.3.4 Truncation caused by terracing was limited to the eastern upper end of the trench (the back of the terrace). The natural clay (100008) had been reduced slightly, but without completely removing a pre-terrace pit, cut into the clay. Towards the front edge of the terrace the build-up of made ground over the lower slope has allowed limited preservation of 19th-century features cut into the subsoil in a narrow band. This pattern was also observed in trench 103, so probably extends along the length of the terrace.

3.4 Trench 101

- 3.4.1 Trench 101 (11m x 2m) was aligned east to west (Fig. 2). It was cut across the upper western terrace of the GKN building site, in order to characterise the terrace profile. The modern ground level lay at 8.4m OD. Natural clay 101001 was uncovered at 8.18m OD at the eastern extent and 8.16m OD at the western extent. A 110mm thick reinforced concrete surface (101000) lay immediately over the natural clay.
- 3.4.2 Terracing in this area has clearly cut substantially into the slope, removing any trace of the former land surface and any archaeological features that may have been present.

3.5 Trench 102

- 3.5.1 Trench 102 (20m x 2m) was located in the Maresfield Road plot, on the middle terrace on a north-south alignment (Fig. 4). Modern ground level lay at 5.77m OD. Natural clay (102002) was uncovered at 4.84m OD sloping down to the west. The clay was sealed by a yellowish brown silty clay hill-wash (102005) which occurred only in the southern end of the trench, where the terrace was built up. The colluvium was capped by a buried soil (102001) containing 19th-century pottery, roof tile, brick and shell. An 80 mm thick concrete surface (102000) formed the current ground surface at 5.81m OD.
- 3.5.2 The buried soil (102001) which pre-dates the terraces sealed a possible rubbish pit (102003) and a localised area of iron staining, perhaps the corroded remains of a sheet metal object (102006 - 220mm x 430mm in area). The pit was 430mm deep with a 1030mm diameter and contained 19th- or 20th-century roof tile, pottery, chalk fragments, a large fragment of unworked limestone and a yellow brick. Both features were situated toward the northern end of the trench at 5.1m OD.

3.6 Trench 103

- 3.6.1 Trench 103 (20m x 2m) was aligned east to west, crossing the lower western terraces of the main GKN building site, in order to assess the impact of terracing on any archaeological deposits that may have been present (Fig. 5).
- 3.6.2 On the middle terrace the modern ground level lay at 7.01m OD at the eastern end of the trench and at 6.89m OD at the western end. On the lower western terrace, the modern ground level lay at 4.32m OD at the eastern end and 4.27 m OD at the western end. Natural clay (103002) was encountered at 6.66m OD at the upper eastern end of the trench and at 5.38m OD at the western end. On the lower terrace natural clay was encountered at 3.83m OD and 3.69m OD at the western end.
- 3.6.3 On the middle terrace four localised lenses of colluvium overlay the natural clay (103002). These were 103001, 103000, 103003 and 103004; all three contained post-medieval roof tile fragments. All three lenses were sealed by a 100mm thick buried soil horizon (103015). This was sealed by terrace deposits comprising brick rubble (103014) and a reinforced concrete surface (103013). The thickness of the soil horizon increased towards the west end of the trench, from 100mm to 1200mm, at which point it was truncated by the terrace revetment wall (Fig. 10, section 26).
- 3.6.4 The stratigraphy of the western part of the trench was different as it cut through the lower terrace, encountering two distinct layers of alluvial clay. The upper layer (103021 and 103005) contained fragments of unworked wood, indicating waterlogged conditions. Layer 103005 was overlain by a thin layer of brown silty clay with pebbles and post-medieval roof tile fragments, probably equivalent to the buried soil horizon in trench 100 (100003) indicating the pre-terrace ground profile. The lower layer (103010) was encountered at 3.5m OD. A concrete footing associated with the former GKN buildings (103012) and subsequent fills (103018, 103019 and 103020) were cut through the clay. The present ground level comprises a reinforced concrete surface (103016) overlying a layer of broken concrete (103017).

3.7 Trench 104

- 3.7.1 Trench 104 (30m x 2m) was located on the upper terrace of the GKN building site, close to Old Road. Due to the proximity of services the trench was staggered, forming two east-west aligned sections. The eastern section was 20m long and the western section 10m long (Fig. 5).
- 3.7.2 In the eastern trench section the modern ground level lay at 13.40m. Natural clay 104000 was found at 13.04m OD (east) sloping down to 12.63m OD (west). The natural clay (104000) was overlain by made ground (104004) comprising rubble and chalk, covered by a reinforced concrete surface. A foundation wall return (104002) crossed the eastern end of the trench at 13.16m OD. The wall was 560mm wide and had an upright iron girder on the outside corner. It was contained in a large construction cut (104001) along with a service pipe. A concrete footing, which had been poured into a construction cut (104003) crossed the middle of the trench. A drain crossed the trench at an oblique south east to north west angle at the western end.

- 3.7.3 Ground level in the western trench section lay at 13.18m OD to the east, sloping down to 12.29m OD to the west. Two drains ran across the eastern end of the trench 104 from north to south, cutting the natural clay 104000 at 12.53m OD and 12.22m OD respectively.
- 3.7.4 Terracing, building foundations and drains in this area have clearly removed traces of the pre-1930s land surface and any archaeological features that may have been present.

3.8 Trench 105

- 3.8.1 Trench 105 (30m x 2m) was aligned from north to south, on the eastern edge of the former sports ground bowling green, within the GKN works main site (Fig. 8). Modern ground level lay at 8.37m OD at the northern end of the trench and 8.69m OD at the southern end. Natural clay (105006) was uncovered at 7.55m OD at the northern end of the trench and 7.49m OD at the southern end. At the northern end of the trench the natural clay was overlain by a layer of clay and gravel (105004) at 7.76m OD. At the southern end of the trench the natural clay was overlain by a buried soil horizon (105008), which indicates the slope of the pre-terrace ground surface. The soil varied in thickness from 00mm-400mm at the northern end of the trench and sloped down to the south, from 7.98m to 7.53m OD. It contained some fragments of cattle bone.
- 3.8.2 Made ground, deposits forming the terrace overlying the buried soil, comprised two distinct layers: a greenish grey re-deposited clay (105007) 200mm thick at the southern end, thinning to the north, and a layer of mortar and crushed brick rubble debris (105005). Two further thin layers (105007 and 105008) were present between the natural clay and the preparation layers for the bowling green.
- 3.8.3 Preparation layers for the bowling green comprised a black layer of grit with chalk fragments (105003) varying in thickness from 100mm-180mm, overlain by 60mm thick layer of orange sand (105002), overlain by a layer of clay (105001). Turf (105000) formed the ground surface.

3.9 Trench 106

- 3.9.1 Trench 106 (8m x 2m) was located on the upper sports ground carpark terrace in the main site. It was moved eastwards after test excavation at the originally planned location, within the footing of the former sports club building, indicated the presence of a rubble filled basement underneath the concrete floor slab, which would have removed any archaeology present.
- 3.9.2 The modern ground surface lay at 8.8m OD. Natural clay (106004 and 106005) was uncovered at 7.67m OD at the eastern end and 7.66m OD at the western end. The natural clay was overlain by a layer of made ground comprising gravel, brick rubble and chalk (106003). The surface layer comprising a 200mm thick layer of clay, gravel, crushed brick and concrete fragments (106002), overlain by topsoil (106001).
- 3.9.3 Terracing in this area has cut back into the original slope, removing any

archaeological features that may have been present.

3.10 Trench 107

- 3.10.1 Trench 107 (30m x 2m) was located in the south-eastern area of the site, along the lower sports ground carpark terrace (Fig. 2). The modern ground level lay at 5.0m OD. Natural clay (107000) was uncovered at 3.68m OD at the eastern end of the trench and 3.64m OD at the western end. A test pit was excavated at the western end of the trench, showing the clay to be 1600mm thick with an underlying sand layer (107007) at 2.1m OD. The natural clay 107000 was overlain by a gravel layer (107008). The natural deposits were overlain by a levelling layer (107006) and the tarmac carpark surface.
- 3.10.2 Two possible former channels crossed the trench from north to south. Channel 107001 was located at the eastern end and was 2.5m wide x 0.37m deep, lying at 3.67m OD. It was filled with alluvial clay (107002) with a high constituent of rolled gravel. The second channel (107009) measured 4000mm wide by 810mm deep and crossed the middle of the trench. A brick culvert 107005 crossed the trench's eastern end adjacent to channel 10700. Three field drain cuts were identified in the area of the channel, indicating attempts to drain this low lying area of the site on the edge of the Medina floodplain. A wooden stake (107003) driven through the middle field drain 107004, is clearly of modern origin.
- 3.10.3 It is clear from the carpark terrace profile that the original slope has been cut back, substantially truncating the natural clay and removing any archaeological features that may have been present, with the possible exception of the extreme southern edge of the terrace, along the southern site boundary.

3.11 Trench 109

- 3.11.1 Trench 109 (12m x 2m) was located along the southern edge of the Castle Street compound, on the site of the former King's Building (demolished 2005) (Fig. 7). Modern ground level lay at 3.4m OD at the eastern end of the trench and 2.66m OD at the western end. Natural clay (109000) was uncovered at 2.71m OD at the eastern end of the trench. The natural was overlain by topsoil (109001). This deposit was 80mm thick, lying at 2.6m OD, rising to form an artificial bank at the eastern end at 3.4m OD.
- 3.11.2 Two parallel brick piers forming part of the recently demolished building (109002) were uncovered at the eastern end of the trench constructed from red brick, set in a lime mortar, and concrete. A wall footing (109003) crossed the trench near the western end. To the east of the wall footing ran two service pipe trenches. The concrete floor of the former King's Building was uncovered at the western end of the trench. All features were cut into the natural clay 109000 and sealed by the topsoil 109001.
- 3.11.3 Levelling for construction of the Castle Street building has clearly cut back substantially into the natural slope, removing any archaeological deposits that may have been present in this area.

3.12 Trench 110

- 3.12.1 Trench 110 (21m x 2m) was located across the southern end of the upper terrace of the GKN buildings, cutting through onto the next terrace down, to examine the profile of the retaining wall (Fig. 5). The modern ground level lay at 13.57m OD on the upper terrace and at 12.45m OD on the lower terrace. Natural clay (110007) was uncovered at 11.17m OD at the eastern end of the trench and 10.8m OD at the western end (Fig. 10, section 24).
- 3.12.2 At the western edge of the upper terrace the natural clay was overlain by a buried soil horizon containing roof tile, brick fragments and charcoal (110006) which indicates the pre-1930s ground slope (Fig. 10, section 24). There were also traces of the soil surviving on the lower terrace, although only visible in the southern trench section. 110006 was overlain by a levelling layer (110005) which also contained brick fragments. The front edge of the upper terrace was built up from reinforced concrete retaining walls and surfaces (110000) filled with brick rubble (110001). The terrace revetment comprised a red brick retaining wall (110002). A set of concrete supports comprising reinforced steel pillars in concrete bases, were set into the natural clay (110007). On the upper terrace, layer 110005 was retained by the revetment wall. Other features in trench include a drain cutting the buried soil horizon at the western end of the trench, and a service trench cutting layer 110005 to the east.
- 3.12.3 On both terraces, traces of a buried soil horizon indicating the pre-terrace ground profile survived in patches, although much disturbed by services and building foundations. The soil appeared to be truncated to the north, as it was not visible in the northern trench section. Some building material of 18th or 19th-century date was present in the buried soil but no features were identified underlying it.

3.13 Trench 111

- 3.13.1 Trench 111 (10 x 2m) was located at the eastern edge of the upper terraces of the former GKN buildings (Fig. 5). The eastern end cut through the terrace bank in order to examine its profile. The modern ground level lay at 13.03m OD on the upper terrace and 10.14m OD on the lower terrace. Natural clay (110004) was uncovered at 10.9m OD at the western end and 11.35m OD at the eastern end. The natural clay was overlain by made ground (110003) which contained brick and roof tile fragments. At the eastern end of the trench, the made ground was overlain by a rubble layer (110002) which in turn was overlain by a reinforced concrete surface (110001). The terrace bank, which lay outside the concrete area, was covered by made ground (110003) overlain by top soil 110005.
- 3.13.2 Trench 111 produced comparable results to Trench 104. Terracing has clearly removed traces of the pre-1930s land surface and any archaeological features that may have been present in this area.

3.14 Trench 113

- 3.14.1 Trench 113 (30m x 2m) was located along the eastern edge of the former sports ground tennis court, within the main site (Fig. 8). The modern ground level lay at

5.62m OD at the northern end of the trench and 5.9m OD at the southern end. Natural clay 113006 was uncovered at 5.4m OD at the northern end and 4.23m OD at the southern end. The natural clay was overlain by a buried soil horizon (113005 and 113003) with pottery, roof tile and brick inclusions. The buried soil horizon lay at 5.34m OD at the northern end of the trench and 4.38m OD at the southern end. A second buried soil horizon (113002) overlay layers 113005 and 113003. It also contained modern brick and tile. Made ground 113001, containing flint nodules, chalk fragments, gravel, pebbles and charcoal, overlay 113002. A layer of dark red sand (113000) formed the tennis court preparation layer. A deep drain cut was present along the entire length of the trench and must relate to construction of the tennis court, as it follows the eastern edge of the court, and was cut from below the preparation layers.

- 3.14.2 Two buried soil horizons were identified (113002 and 113005). The upper horizon (113002), a humic dark brown garden soil, was probably the pre-1930s ground surface. It had a gentle gradient tipping south and produced post-medieval brick or tile. The lower soil horizon (113005) may indicate the ground surface prior to construction of 'The Lodge', and associated terracing, in the early 19th century. Comparable results were produced by Trench 119, indicating that the area of the tennis courts and bowling green have some archaeological potential, although no pre-19th century features were identified.

3.15 Trench 114

- 3.15.1 Trench 114 (52m x 2m) was aligned from north to south through the southern carpark terraces (Fig. 2). The modern ground level at 8.71m OD on the upper terrace lay, 6.69m OD on the middle terrace and 4.71m OD on the lower terrace.
- 3.15.2 On the upper terrace natural clay (114010) was encountered at 7.77m OD. A modern square cut (114004) was partly within the trench. The fill contained a plastic coat hanger and rubber pipe length.
- 3.15.3 The level of the natural clay drops to 7.07m OD at the back edge of the middle terrace and 6.6m OD at the front edge (Fig. 10, section 25). At the front edge of the middle terrace a buried soil horizon (114009) overlay the natural clay at 5.8m OD; no finds were recovered from it. The deposit was cut by an east-west aligned construction trench (114013) containing a lime mortar bonded red brick culvert (114016). This was overlain by a rubble layer (114006).
- 3.15.4 On the lowest of the three terraces the natural clay was encountered at 4.08m OD. The back edge of the lower terrace was cut substantially into the natural clay. A concrete pad (114008 and 114007) or strip, covered with clay, lay along the foot of the terrace bank (Fig. 10, section 25). The concrete pad had parallel grooves running along its length, though its function is difficult to determine. The grooves have the appearance of tracks, but are linked at the slab's northern edge and do not continue. If the block were part of a floor foundation they could be shallow drainage beneath a boarded floor. It could be associated with a rifle range shown on early 20th-century maps in the vicinity. Alternatively it may represent a path or part of an unrecorded wartime structure.

- 3.15.5 The sequence on three terraces was capped by modern carpark surfacing layers, except at the terrace banks, which were covered with topsoil.
- 3.15.6 With the exception of the strip of buried soil surviving along the front edge of the middle terrace (Fig. 3), terracing has removed any archaeological features that may have been present in the carpark area. The terracing in this area is likely to be part of landscaping associated with construction of 'The Lodge' in the mid-19th century. If so the buried soil may be contemporary with 18th/19th-century horizons (113005 and 119005) uncovered in trenches 113 and 119.

3.16 Trench 116

- 3.16.1 Trench 116 (7 x 5m and 17 x 5m) was located at the north eastern corner of the main site (Fig. 6). Due to the discovery of a buried oil tank or soakaway, excavation in the central part of the trench was abandoned and the trench was effectively split into two areas. The trench was 5m wide in the expectation that the depth of made ground and truncation from terracing would be limited in this part of the site. A larger area was considered more conducive for detecting ephemeral pre-19th-century archaeology.
- 3.16.2 The modern ground level lay at 16.48m OD at the eastern end, and 15.77m OD at the western end. Natural clay with gravel inclusions (116010) was encountered at 14.52m OD, underlying a possibly redeposited clay layer (116013) at 15.94m OD. Made ground 116005 lay at 16.32m OD and was overlain by a subsoil layer (116001) which contained brick and tile fragments. The current ground surface (116000) consisted of gravel (extending from an adjacent path surface) and topsoil.
- 3.16.3 A steep-sided pit (116002) containing modern brick and tile, was found cut through made ground layer (116005). The pit was sealed by subsoil layer 116001.
- 3.16.4 A rectangular, poured concrete and corrugated iron structure (116007) partly infilled with clay and containing waste oil, was cut through subsoil layer 116001 at 16.62m OD. The construction cut was lined with clay. Due to the risk of ground contamination the feature, a buried oil tank or soakaway, was reburied without excavation and the central part of the trench abandoned.
- 3.16.5 In the western section of the trench, natural clay (116010) was encountered at 16.07m OD at the eastern end of the trench and 15.02m OD at the western end. The deposit sequence was the same as that seen in the eastern area. A brick wall foundation (116020) crossed the trench from north-west to south-east, and had been almost entirely removed by a robbing cut (116015). A second wall foundation (116018) ran from east to west, cutting through 116020 and 116015. It was filled with crushed brick. The footings are probably part of 'The Lodge', which was situated on this upper terrace during the 19th century.

3.17 Trench 117

- 3.17.1 Trench 117 was located on the upper terrace at the Maresfield site (Fig. 4). Due to the presence of abandoned service pipes it was split into two parts. The main eastern section measured 10.5m x 2m and the smaller western section (located on the next

terrace down) measured 2m x 2m. Natural clay (117002) was uncovered at 12.9m OD. It was overlain by a 390mm thick layer of brick and concrete fragments (117001) which was covered by a reinforced concrete surface (117000) at 13.36m OD.

- 3.17.2 The smaller western area was excavated on the slope below the terrace's western edge. The terrace was cut into the slope, resulting in substantial truncation of the natural clay, which was present at 12.12m OD.
- 3.17.3 Terracing, building foundations and service runs have removed traces of the pre-1930s land surface and any archaeological features that may have been present in this area.

3.18 Trench 118

- 3.18.1 Trench 118 was located adjacent to Castle street, on the lower terrace in the Maresfield Road plot (Fig. 4). It measured 21.5m by 2m. Natural clay (118002) was uncovered at 3.43m OD at the northern end of the trench and 2.85m OD at the southern end. A 100mm thick layer of crushed brick concrete fragments and rubble (118001) overlay the natural at 3.52m OD and was sealed by the current concrete surface (118000).
- 3.18.2 The edge of an existing tree-lined boundary was present in the southern end of the trench.
- 3.18.3 Seven brick bases belonging to the former Maresfield building (demolished in 2005) were also recorded, spaced at regular intervals of c.2500mm along the length of the trench (118005, 118006, 118007, 118010 and 118013). They were situated immediately alongside a north-south aligned wall (118803). The brick bases were stanchion/buttresses supporting both roof and wall. Because the building was constructed as a sub-basement the counterpart eastern wall is still standing. Two service pipe cuts, a field drain and an iron service pipe also crossed the trench. The concrete surfacing 118003 in the north-east corner is a small section of the former street frontage.
- 3.18.4 Map regression shows the Maresfield Building plot as an area of trees on the 1862 OS map which is replaced by an apparently empty enclosure on the 1890 OS map. The area was probably reduced to the level of Maresfield Road between those two dates. The enclosure is present on the 1907 and 1909 maps but the first buildings are marked on the 1939 OS map, indicating that the previously levelled area was developed as part of the Saunders-Roe factory in the mid-1930s.

3.19 Trench 119

- 3.19.1 Trench 119 was located adjacent to Trench 113 toward the western edge of the sports ground tennis court and measured 30m by 2m (Fig. 8). Natural clay (119006) was uncovered at 5.76m OD at the northern end of the trench and 4.8m OD at the southern end (Fig. 10, section 23). A reddish brown silty clay (119005) overlay the natural clay at 4.85m OD to the south and disappeared to the north. A layer of mottled yellow

clay (119004) sealed layer (119005). It was 220mm thick to the north, at 5.92m OD, reducing to 100mm at the southern end, lying at 4.9m OD. A thick buried soil horizon of dark brown silty clay (119003) overlay clay layer 119004. The soil contained modern pottery, glass, brick and tile and was 120mm thick at the southern end of the trench, but disappeared before the north end of the trench as a result of truncation by terracing. It lay at 5.7m OD at its northern extent, sloping down to 5.1m OD to the south. A mottled yellow brown clay made ground deposit (119002) overlay layer 119003 at 6.12m OD to the north, sloping down to 5.5m OD to the south. The thickness increased correspondingly from 120mm to 210mm. The uppermost layer was the tennis court surface (119001) which was 200-300mm thick and lay at 5.93m OD.

- 3.19.2 The buried soil horizon is equivalent to that uncovered in Trench 113, showing it to extend across the tennis court area. One difference between the trench sequences is that in trench 119 deposits 119005 and are divided by a layer of mottled yellow clay (119004). The layer appears to be relatively clean, re-deposited natural, and may be evidence for two phases of landscaping in the area.

3.20 Finds

- 3.20.1 A small quantity of finds were recovered from stratified contexts. They comprise 19th and 20th-century brick, pot, ceramic building material, clay pipe from various contexts. Animal bone fragments were found in a 19th-century rubbish pit in Trench 100.

3.21 Palaeo-environmental evidence

- 3.21.1 No palaeoenvironmental samples were taken as no suitable deposits were present.

4 DISCUSSION AND INTERPRETATION

4.1 Reliability of field investigation

- 4.1.1 The trenches as implemented have provided coverage for all currently accessible areas of the former GKN works site, although two areas were not investigated as they are protected slow worm habitats (Figure 3). The evaluation has generally confirmed and clarified the extent of truncation caused by previous terracing of the site and other modern disturbance, and reliably identified areas with potential for surviving archaeology.
- 4.1.2 The absence of significant archaeological evidence appears to be the result of extensive truncation, and does not necessarily reflect a real absence of archaeological features in the pre-19th-century landscape.

4.2 Features present

- 4.2.1 No pre-19th-century archaeological artefacts or features were recovered in the course of the trenching.
- 4.2.2 An east-west aligned linear gully (100006) and adjacent pit (100010) in trench 100 were sealed by the terrace and must pre-date the 1930s GKN works. Clay pipe and building material recovered from these features suggest a 19th-century date.
- 4.2.3 The culverts uncovered in trenches 114 and 107 constitute later 19th- or early 20th-century drainage in the low-lying southern part of the site. Nineteenth-century wall footings associated with 'The Lodge' were found in Trench 116.
- 4.2.4 The remaining features and structures encountered throughout the site comprise concrete and brick wall footings and surfaces forming part of the former GKN works, dating from the 1930s or later. An unidentified concrete pad or strip in Trench 114 could be associated with a rifle range shown on early 20th-century maps in the vicinity. Alternatively it may represent a path or part of an unrecorded wartime structure.
- 4.2.5 In the Maresfield Road and Castle Street sites, ground disturbance and reduction appears to have removed most archaeological potential. However, in the main site there are some areas, concentrated in the lower-lying southern and western terraces, in which the original ground profile is preserved beneath built up terrace deposits. These areas are indicated by buried 18th to early 20th-century soil horizons occurring in trenches 100, 102, 103, 110, 113, 115 and 119. In general these are fragmentary survivals along the front edge of terraces where the ground has been built up. However, in trenches 113 and 119 the soils occur throughout the trench, indicating an area of higher potential under the sports ground tennis court. In Trench 113 there are two buried soils, which may be evidence for the two phases of landscaping indicated by the map regression.

4.3 Periods represented and character of archaeological remains

- 4.3.1 Archaeological deposits encountered comprise 19th/20th-century features associated with two documented major phases of landscaping in the eastern part of the onshore site. Mid to late 19th-century features include brick wall footings in trench 116, probably associated with 'The Lodge' and rubbish pits alongside Castle Street. Remains of the recently demolished Maresfield Building, at the junction of Castle Street and Old Road were present in Trench 102. Remains associated with the 20th-century development of the Columbine works include reinforced concrete industrial and recreational building platforms, drainage features and surfaces. Both phases of landscaping, particularly the latter, have involved extensive terracing of the site.

4.4 Complexity of deposits

- 4.4.1 The deposit sequence within the former GKN site is comparatively simple and well understood as a result of this evaluation and previous geotechnical work.

4.5 Taphonomic issues

- 4.5.1 Archaeological features may have been present in the pre-19th landscape on the rising ground to the west of the waterfront area, but if so they have been largely removed by 19th- and 20th-century terracing of the former GKN works site. There is some remaining potential in areas where the original ground profile is preserved to some extent, as indicated on Figure 3, although even in these areas there is evidence for extensive disturbance by service runs and drainage features.

4.6 Range and preservation of finds

- 4.6.1 A small quantity of finds were recovered from stratified contexts. They comprise 19th- and 20th-century brick, pottery, brick, tile and clay pipe stems from various contexts. Very small quantities of animal bone fragments were found in a 19th-century rubbish pit in Trench 100 and a buried soil horizon in Trench 119.

4.7 Range and preservation of palaeoenvironmental deposits

- 4.7.1 No archaeological deposits earlier than the 19th century were discovered, and no palaeoenvironmental sampling was undertaken. With regard to probable Pleistocene terrace deposits seen in the western end of Trench 103, preliminary specialist consultation indicated very low potential for palaeoenvironmental work or OSL dating, as the deposits comprised coarse gravel in a truncated stratigraphic sequence. There is no indication, at present, of palaeolithic archaeological evidence from the immediate area. The deposits do confirm the potential for surviving Pleistocene deposits to the west of Castle Street.
- 4.7.2 The edge of the flood plain alluvial deposits of the river Medina were uncovered in Trench 107, although they were heavily truncated by levelling of the lower car park terrace in this area. No environmental samples were taken as the remaining deposits comprised minerogenic clays and the exposed sequences were truncated.

4.8 Summary of anticipated significance/ potential

- 4.8.1 The desk-based assessment concluded that, given the geographical location of the development area at the mouth of the River Medina, the potential for significant archaeology of all periods was generally high. This was particularly the case with regard to remains of the documented Tudor waterfront development. Prehistoric, Roman or early medieval remains could also be expected; the waterfront area has potentially very good preservation conditions, given the extensive waterlogged deposits, and evidence for medieval land reclamation to the west of Castle Street and Maresfield Road.
- 4.8.2 The evaluation trenching to the east of Castle Street did not identify any significant archaeological artefacts or features. The hill slope has been extensively terraced, principally in the 1930s during construction of the GKN works, destroying or severely truncating any earlier archaeological deposits that may have been present in the affected areas. The evaluation has demonstrated that the original profile of the hill side is preserved in limited areas, particularly on the lower slopes to the south and west of the site (Fig. 3). The preserved former ground surfaces indicate areas that should be targeted for preservation in situ, if possible, or mitigation if not. These deposits do not constitute significant archaeology in themselves, but form a marker horizon below which archaeological features could potentially survive.

5 REVIEW AND UP-DATE OF MITIGATION STRATEGY

5.1 Revised mitigation strategy for the former GKN works site

- 5.1.1 In light of the Stage 2a evaluation results, it is considered that further evaluation trenching within the Former GKN works site would not be productive, except potentially in the slow-worm habitat areas excluded from the present phase of work (see figure 3).
- 5.1.2 Of the two principal slow-worm habitat areas (see fig. 3):
- The western slow-worm area appears not to have been terraced and therefore has some potential for archaeological survival.
 - The eastern slow-worm area coincides with the location of the 'The Lodge'. The building itself is not considered significant and its construction is likely to have resulted in severe disturbance of any pre-19th archaeological deposits. However, this remains unproven in the absence of evaluation trenches.
- 5.1.3 The archaeological design identifies appropriate methods for further investigation. These could include either:
- Stage 2b: Further evaluation trenches to obtain a 5% sample.
 - or Stage 2c: Strip, Map and Sample, in areas of shallow overburden, with limited archaeological potential.
- 5.1.4 It is clear from a 2% trenching sample (in conjunction with geotechnical records) that no significant, complex archaeological sites survive within the former GKN site (although given the extent of truncation, significant features may once have been present). There is some residual potential for ephemeral pre-19th-century archaeology to be found in areas with preserved ground surface levels (as shown on Figure 3), in particular the sports ground former tennis court area.
- 5.1.5 Ideally, preservation of these areas would be incorporated in the detailed development designs. If this proves impossible, Stage 2c Strip, map and sample will be preferred where feasible (rather than further evaluation trenching) to allow a basic record of the post-medieval features surviving on the site to be obtained, and increase the chance of detecting ephemeral remains of earlier date. The depth of overburden is comparatively shallow in both the slow worm habitat areas and the areas of preserved ground profile, so this is a feasible option.

6 ACKNOWLEDGEMENTS

- 6.1.1 This report was prepared by T Davies (OA) under the supervision of S Foreman (OA). A Dawes and R Orton of Mouchel Parkman managed the work on behalf of the client SEEDA, represented by D Hollifield. The Isle of Wight Archaeological Officer is O Cambridge.

APPENDICES

Appendix 1: Archaeological Context Inventory

Trench	Ctxt No	Type	Width (m)	Thick. (mm)	Comment	Finds	Date
100							
	100000	Layer		230	Reinforced Concrete		
	100001	Layer		280	Made Ground		C20th
	100002	Layer		780	Made Ground		
	100003	Layer		340	Buried Soil Horizon	Clay pipe	C18-19th
	100004	Cut			Pit		C20th
	100005	Fill			Pit Fill		
	100006	Cut	600	210	Gully		C18-19th
	100007	Fill			Gully Fill	Clay pipe, Oyster shell, Glass, CBM	
	100008	Layer		320+	Natural clay		
	100009	Layer			N/a		
	100010	Cut	500	290	Pit		C18-19th
	100011	Fill			Pit Fill	Clay pipe, CBM	
	100012	Layer		240	Colluvium	Clay pipe	
101							
	101000	Layer		220	Concrete		
	101001	Layer			Natural Clay		
102							
	102000	Layer		80	Concrete		
	102001	Layer		280+	Made-Ground		C19-20th
	102002	Layer			Natural Clay		
	102003	Cut	1030	430	Pit		C19th
	102004	Fill			Pit Fill	CBM, pot,	
	102005	Layer		100	Colluvium?		
	102006	Lense	220	30	Iron stain		C19th
103							

Trench	Ctxt No	Type	Width (m)	Thick. (mm)	Comment	Finds	Date
	103000	Layer		250	Colluvium		
	103001	Layer			Natural clay		
	103002	Layer			Natural clay		
	103003	Lense		30	Buried soil horizon	CBM	C18-19th
	103004	Lense			Buried soil horizon	CBM	C18-19th
	103005	Layer			Natural clay		
	103006	Cut			Pipe trench		
	103007	Layer			Buried soil horizon		C18-19th
	103008	Cut			Drain		C20th
	103009	Struct			Wall		C20th
	103010	Layer			Natural clay		
	103011	Struct			Wall		C20th
	103012	Struct			Wall/slab		C20th
	103013	Layer		80	Concrete surface		
	103014	Layer		1250	Demolition/Made Ground		C20th
	103015	Layer		100	Re-deposited clay		C20th
	103016	Layer			Concrete surface		
	103017	Layer			Made Ground		C20th
	103018	Layer		400	Levelling deposit		
	103019	Layer		1200	Terrace deposit		C20th
	103020	Layer			Wall backfill		
	103021	Layer			Natural clay		
104							
	104000	Layer			Natural clay		
	104001	Cut			GKN works cut		C20th
	104002	Struct			Wall Foundation		
	104003	Cut			Wall Footing		
	104004	Layer			Made Ground		
	104005	Layer			Disturbed Nat		
	104006	Layer			Made Ground		
105							
	105000	Layer			Top soil		
	105001	Layer		400	Levelling deposit		C20th

Trench	Ctxt No	Type	Width (m)	Thick. (mm)	Comment	Finds	Date
	105002	Layer		600	Levelling deposit		C20th
	105003	Layer		200	Levelling deposit		C20th
	105004	Layer		200	Colluvium		
	105005	Layer		180	Levelling deposit		C20th
	105006	Layer			Natural Clay		
	105007	Layer			Re-deposited natural clay		
	105008	Layer			Grit layer		
106							
	106001	Layer			Top soil		C20th
	106002				Made Ground		C20th
	106003				Made Ground		C20th
	106004				Natural clay		
	106005				Natural clay		
107							
	107000	Layer			Natural clay		
	107001	Cut			Paleochannel		
	107002	Fill			Channel fill		
	107003	Wood			Post		C20th
	107004	Cut			Drain		C20th
	107005	Struct			Culvert		C19-20th
	107006	Layer			Made Ground		C20th
	107007	Layer			Natural sand		
	107008	Layer			Flood plain gravel		
	107009	Cut			Paleochannel		
	107010	Fill			Channel fill		
109							
	109000	Layer			Overburden		
	109001	Layer			Natural clay		
	109002	Struct			Brick piers		C20th
	109003	Struct			Wall foundation		C20th
	109004	Struct			Service		C20th
110							
	110000	Layer			Concrete		C20th

Trench	Ctxt No	Type	Width (m)	Thick. (mm)	Comment	Finds	Date
	110001	Layer			Made Ground		
	110002	Layer			Terrace Wall		
	110003	Layer			Concrete supports		
	110004	Struct			Top soil		
	110005	Layer			Made Ground		
	110006	Layer			Buried soil horizon		C18-19th
	110007	Layer			Natural clay		
111							
	111001	Layer			Concrete		C20th
	111002	Layer			Made Ground		
	111003	Layer			Disturbed natural clay		
	111004	Layer			Natural clay		
	111005	Layer			Top soil		
	111006	Layer			Sub soil		
113							
	113000	Layer			Top soil		C20th
	113001	Layer			Made ground		C20th
	113002	Layer			Buried soil horizon		C19-20th
	113003	Layer			Buried soil horizon		C19-20th
	113004	Cut			N/a		
	113005	Layer			Buried soil horizon		C18-19th
	113006	Layer			Natural clay		
114							
	114000	Layer			Top soil		C20th
	114001	Layer			Tarmac/ gravel		
	114002	Layer			Re-dep chalk		
	114003	Layer			Made Ground		
	114004	Cut			Rubbish pit		
	114005	Fill			Pit fill		
	114006	Layer			Rubble layer		
	114007	Cut			Concrete cut		C19-20th
	114008	Fill			Concrete slab		
	114009	Layer			Buried soil horizon		

Trench	Ctxt No	Type	Width (m)	Thick. (mm)	Comment	Finds	Date
	114010	Layer			Colluvium and natural clay		
	114011	Cut			Drainage cut		
	114012	Fill			Drainage fill		
	114013	Cut			Culvert cut		C19-20th
	114014	Cut			Lower terrace cut		C19-20th
	114015	Fill			Concrete's clay cap		
	114016	Fill			Culvert and fill		C19-20th
116							
	116000	Layer			Car park surface		C20th
	116001	Layer			Made Ground		
	116002	Cut			Pit		
	116003	Fill			Pit fill		
	116004	Fill			Pit fill		
	116005	Layer			Made Ground		
	116006	Cut			Oil dump		
	116007	Struct			Oil dump		
	116008	Fill			Packing		
	116009	Fill			Oil dump		
	116010	Layer			Natural clay		
	116011	Cut			Wall foundation		C19-20th
	116012	Fill			Foundation fill		
	116013	Layer			Natural clay and gravel		
	116014	Layer			Made Ground		
	116015	Cut			Wall robbing		
	116016	Cut			Pit		
	116017	Cut			Pit		
	116018	Cut			Wall foundation		C19-20th
	116019	Struct			Wall remnant		
	116020	Cut			Reduction		
117							
	117000	Layer			Concrete		C20th
	117001	Layer			Made Ground		
	117002	Layer			Natural clay		

Trench	Ctxt No	Type	Width (m)	Thick. (mm)	Comment	Finds	Date
	117003	Cut			GKN Construction		
	117004	Layer			GKN building		
118							
	118000	Layer			Concrete		C20th
	118001	Layer			Made Ground		
	118002	Layer			Natural clay		
	118003	Layer			Former concrete		
	118004	Layer			Stanchion		
	118005	Struct			Stanchion		
	118006	Struct			Stanchion		
	118007	Struct			Stanchion		
	118008	Cut			Stanchion cut		
	118009	Fill			Stanchion fill		
	118010	Struct			Stanchion		
	118011	Struct			Wall		
	118012	Cut			Wall cut		
	118013	Struct			Stanchion		
	118014	Cut			Robbing		
	118015	Fill			Robber fill		
119							
	119001	Layer			Tennis court surface		C20th
	119002	Layer			Made Ground		
	119003	Layer			Buried soil horizon		C19-20th
	119004	Layer			Re-deposited clay		
	119005	Layer			Buried soil horizon		C18-19th
	119006	Layer			Natural clay		

APPENDIX 2: ARTEFACT ASSESSMENTS AND SPOT DATING

Pottery

By Paul Blinkhorn

The pottery assemblage comprised 25 sherds with a total weight of 1408 g. It comprised entirely post-medieval material, most of which dates to the 19th century.

The fabrics were as follows:

RE: *Red Earthenwares*: Fine sandy earthenware, usually with a brown or green glaze, occurring in a range of utilitarian forms. Such 'country pottery' was first made in the mid-late 16th century, and in some areas continued in use until the 19th century (Crossley 1990). 11 sherds, 456 g.

IG: *Iron-glazed Earthenwares*. Hard, sandy fabric, usually brick-red, but can be paler or browner. Vessels usually have an even coating of thick black glaze. Made in a range of utilitarian forms, particularly large bowls or pancheons (ibid., 247). 1 sherd, 66 g.

LES: *English Stoneware*: White/grey stoneware with a salt glaze. Made at numerous centres, such as Staffordshire, London and Nottingham, from the later 17th century onwards, in a wide range of utilitarian forms (ibid.). The material from this site was all of 19th-century type. 1 sherd, 672 g.

MISC: *Miscellaneous 19th century wares*: Encompasses a whole range of common later 19th-century material, such as transfer-printed Ironstone china and flower pots. 12 sherds, 214 g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*.

Table 2: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Context	RE		IG		LES		WE		Date
	No	Wt	No	Wt	No	Wt	No	Wt	
102001					1	672	2	8	19thC
102004	1	13					1	20	19thC
103004	1	57							17thC
105007	2	182					1	35	19thC
113002	4	96					3	40	19thC
113003	1	5					1	5	19thC
116001	1	85					2	33	19thC
116005			1	66					18thC
116012	1	18					2	73	19thC
Total	11	456	1	66	1	672	12	214	

The Building Material

By Cynthia Poole

A total of 74 fragments weighing 6530 g were recovered from 14 contexts. The majority of this was ceramic, but also included was pieces of cement, mortar and slate. The material has been recorded on an Excel spread sheet and quantities summarised in Table 1 below. The fragments were assigned to broad fabric categories based on the standard types common to post-medieval ceramic building material. These are summarised in the data file.

The material is virtually all of post-medieval date, predominantly 18th-20th century, apart from a single fragment of probable medieval roof tile, though this could be early post-medieval also.

Apart from a single fragment of ceramic field drain pipe, the material divides into roofing and bricks. The roofing consists mainly of flat roof tiles, probably all peg tiles, though only one fragment had a peg hole. One of these was made in cement and of late 20th-century date. Other roofing material included a fragment of ridge tile and fragments of slate, probably all Welsh, though a slightly more greenish one could be from Devon, in which case it would be of 12th-16th-century date. However this piece has a very modern looking patch of cement on it, so it is more likely to be Welsh and recent in origin.

No complete bricks were recovered but thicknesses ranged from 56 to 68 mm and two widths measured 95 and 112 mm. The variation in size suggests they cover a range of time probably 18th-19th centuries, but none appears to be as late as the 20th century. The one measuring 56mm could be slightly earlier than the 18th century, but there is no other reason to think it might be.

The material appears to derive from buildings constructed during the 18th or 19th centuries with repairs or alterations to the roofs continuing into the 20th century.

Table 3: Types and quantities of retained building material

Form	Nos	Wt	Fabrics
Roof: flat	32	1952	1,3,4,5, cement
Roof: ridge	1	70	3
Roof slates	7	90	Welsh
Brick	32	4386	3, 4, 5, 6, 7
Pipe	1	19	3
Mortar	1	13	~

Appendix 3: Bibliography and references

Isle of Wight Council 2004

OA, 2005 East Cowes Project, Archaeological Desk-Based Assessment, produced by Oxford Archaeology in association with Mouchel Parkman, on behalf of SEEDA.

Crossley, D, 1990 *Post-Medieval Archaeology in Britain*, Leicester University Press

Wilkinson, D (ed.), 1992 *OAU Fieldwork Manual*

Appendix 4: Summary of Site Details

Site name: East Cowes Development, Isle of Wight. Stage 2a Archaeological Evaluation (trenching). Former GKN works site.

Site code: IOWSMR5626

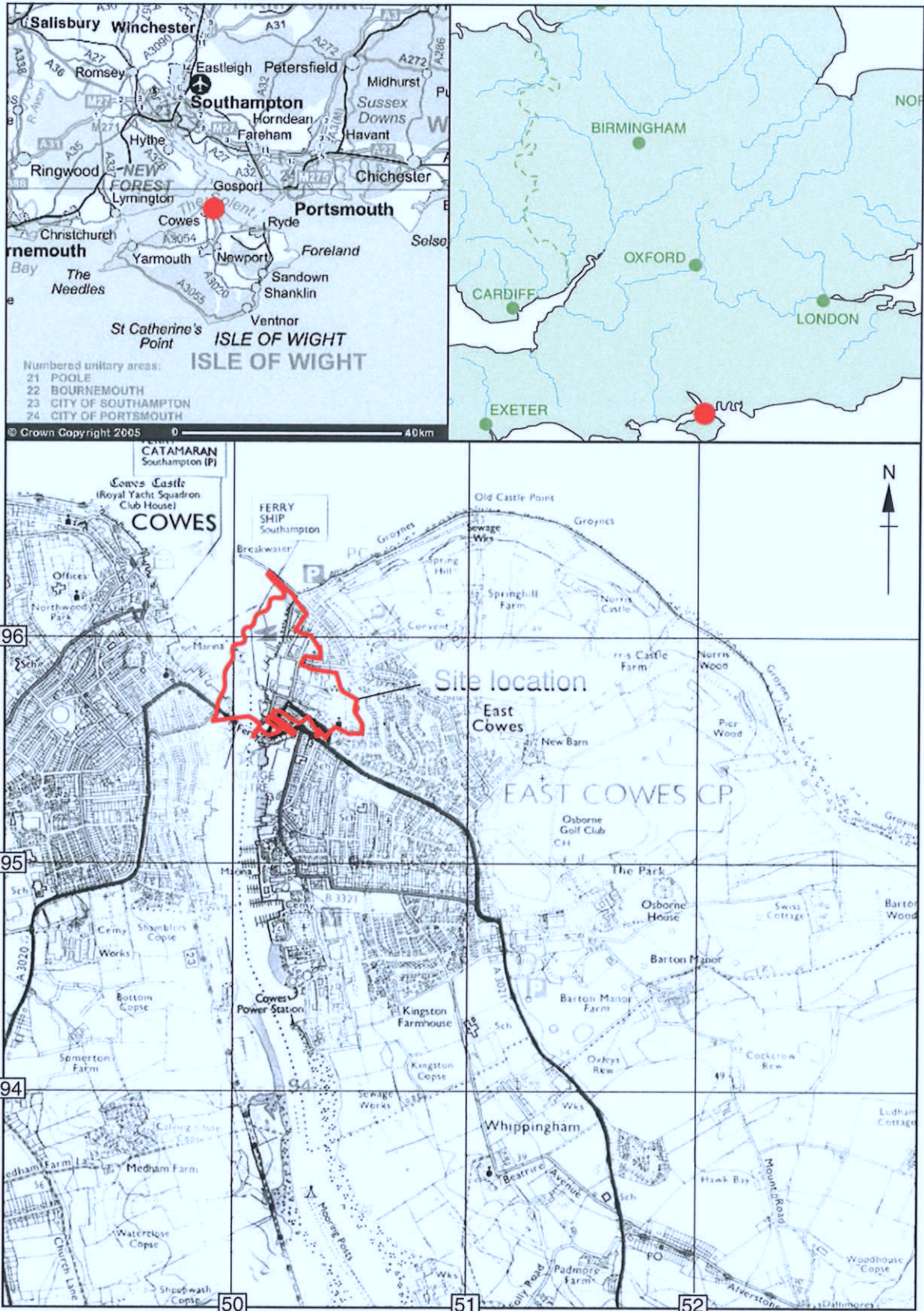
Type of evaluation: 17 trenches

Date and duration of project: 18/01/06-10/02/06

Area of site: 340 x 220 m/ 7.5 hectares.

Summary of results: The hill slope to the east of Castle Street and Maresfield Road has been extensively terraced, principally in the 1930s during construction of the GKN works, destroying or severely truncating any earlier archaeological deposits that may have been present in the affected areas. The evaluation has demonstrated that the original profile of the hill side is preserved in limited areas, particularly on the lower slopes to the south and west of the site (Figure 3). The survival of buried pre-terrace soil horizons indicates that there is some potential for archaeological features to survive in these areas, although the evaluation did not identify any archaeological artefacts or features earlier in date than the 19th century.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with County Museum in due course:



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Figure 1: Site Location

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- Evaluation Trench
- 110 number
- Site boundary
- OS basemap



OS Coordinates

Survey Data supplied by :
Oxford Archaeology

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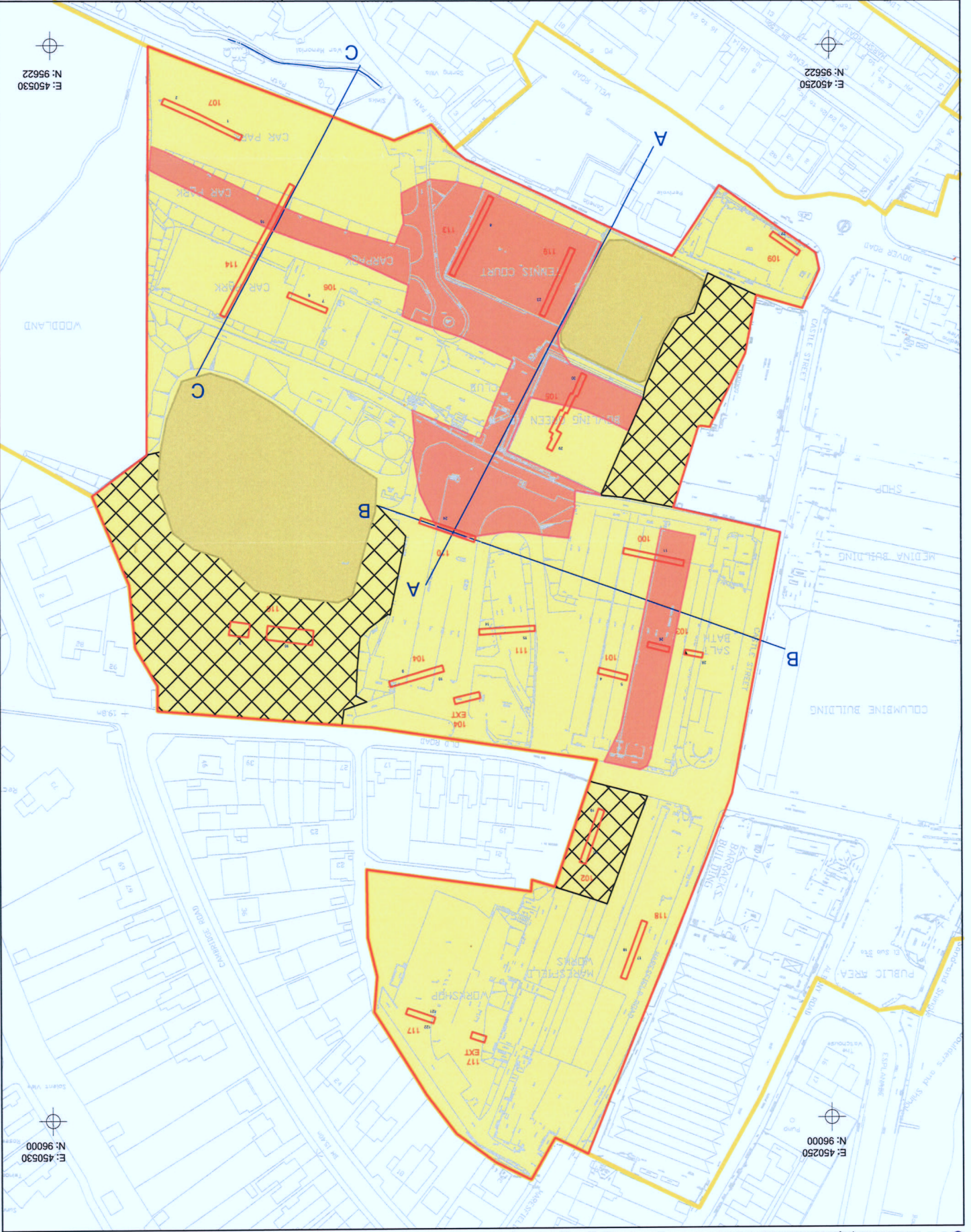
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East Cowes Development
Drawing No. []
Date printed 22 Mar 2006

Figure 2:
Trench Location

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Figure 3:
Potential for
Archaeological
Survival

Scale at A3 1:1250
0 20 m

North arrow pointing up.

OS Coordinates

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Ordnance Survey
Ordnance Survey Head Office
Crested House, Colindale Avenue, London NW9 1EU
Tel: 01645 26800 Fax: 01645 273496
email: mof@ordnancesurvey.co.uk
web: www.ordnancesurvey.co.uk

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OS Coordinates

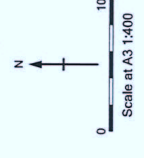
Legend:

- Red rectangle: Evaluation Trench number 110
- Red line: Site boundary
- Blue line: OS basemap
- Blue line: Transect
- Blue line: Transect letter
- Red rectangle: survival (former ground surface preserved).
- Yellow rectangle: Limited vertical truncation but evidence for much localised ground disturbance.
- Yellow rectangle: Extensive vertical truncation caused by terracing the slope.
- Yellow rectangle: Uncertain potential (slow worm areas unavailable for trenching)
- Yellow hatched rectangle: Potential for Archaeological survival (former ground surface preserved).
- Yellow hatched rectangle: Limited vertical truncation but evidence for much localised ground disturbance.
- Yellow hatched rectangle: Extensive vertical truncation caused by terracing the slope.
- Yellow hatched rectangle: Uncertain potential (slow worm areas unavailable for trenching)

CHECKED BY:

- Structure
- Modern feature
- OS basemap
- Evaluation trench
- Evaluation trench number
- Site boundary
- Section line
- Section number
- Area of extensive truncation

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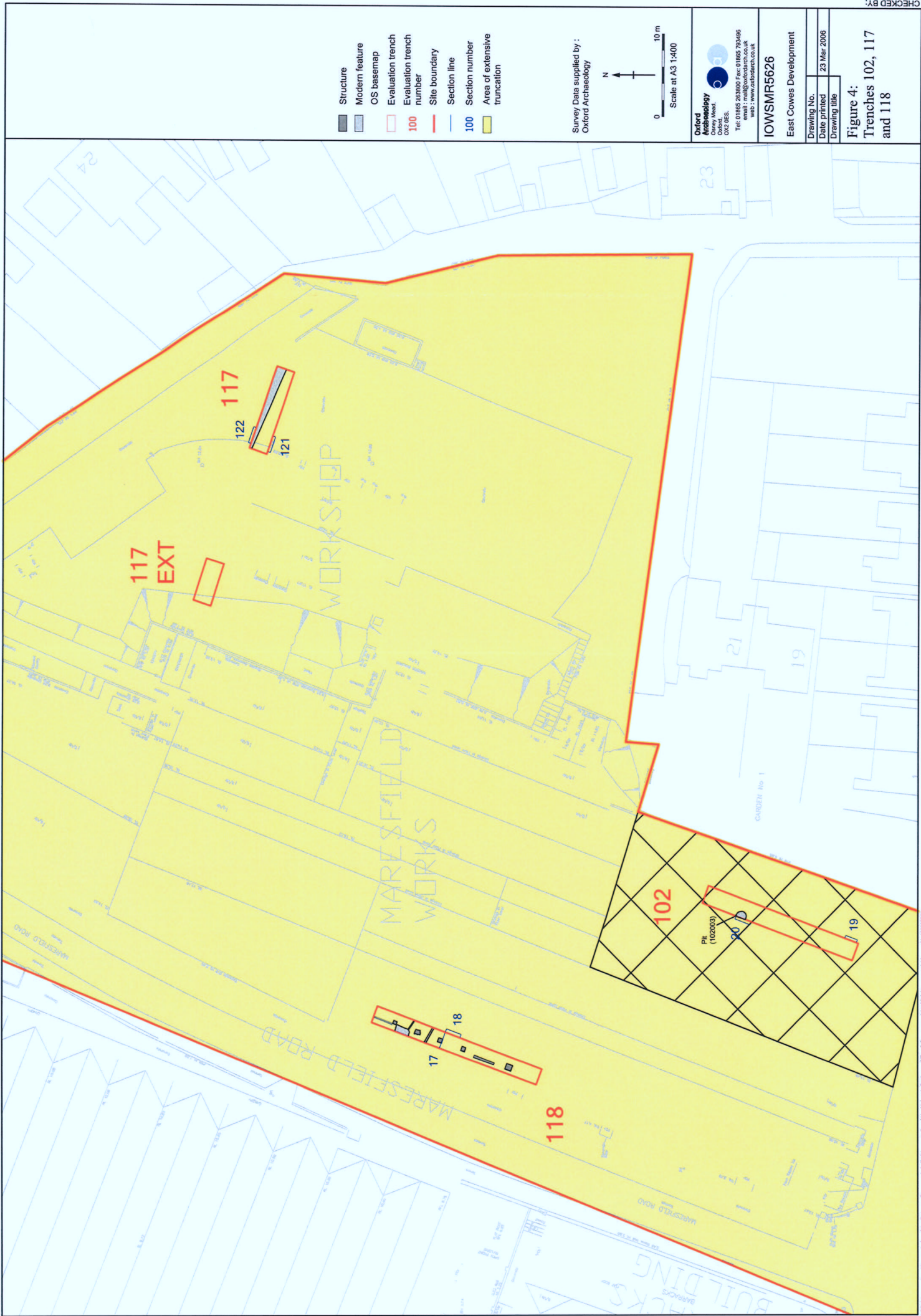
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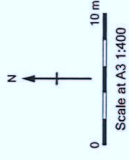
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Drawing title	

Figure 4:
Trenches 102, 117
and 118



- Structure
- Modern feature
- OS basemap
- Evaluation trench
- Evaluation trench number
- Site boundary
- Section line
- Section number
- limit of excavation (sondage)
- Area of extensive truncation
- Area of limited truncation
- Area of buried soil
- Slow Worm area

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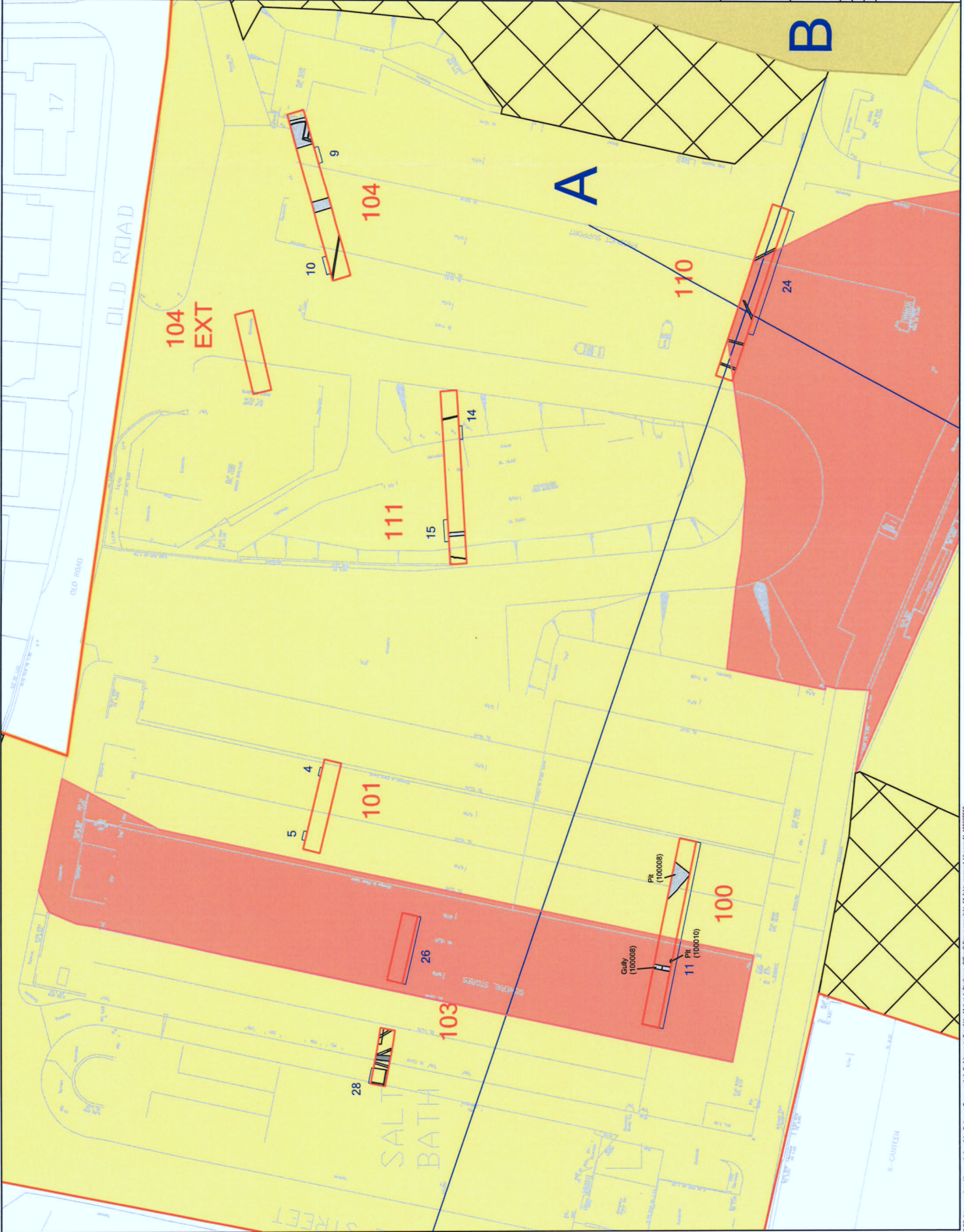
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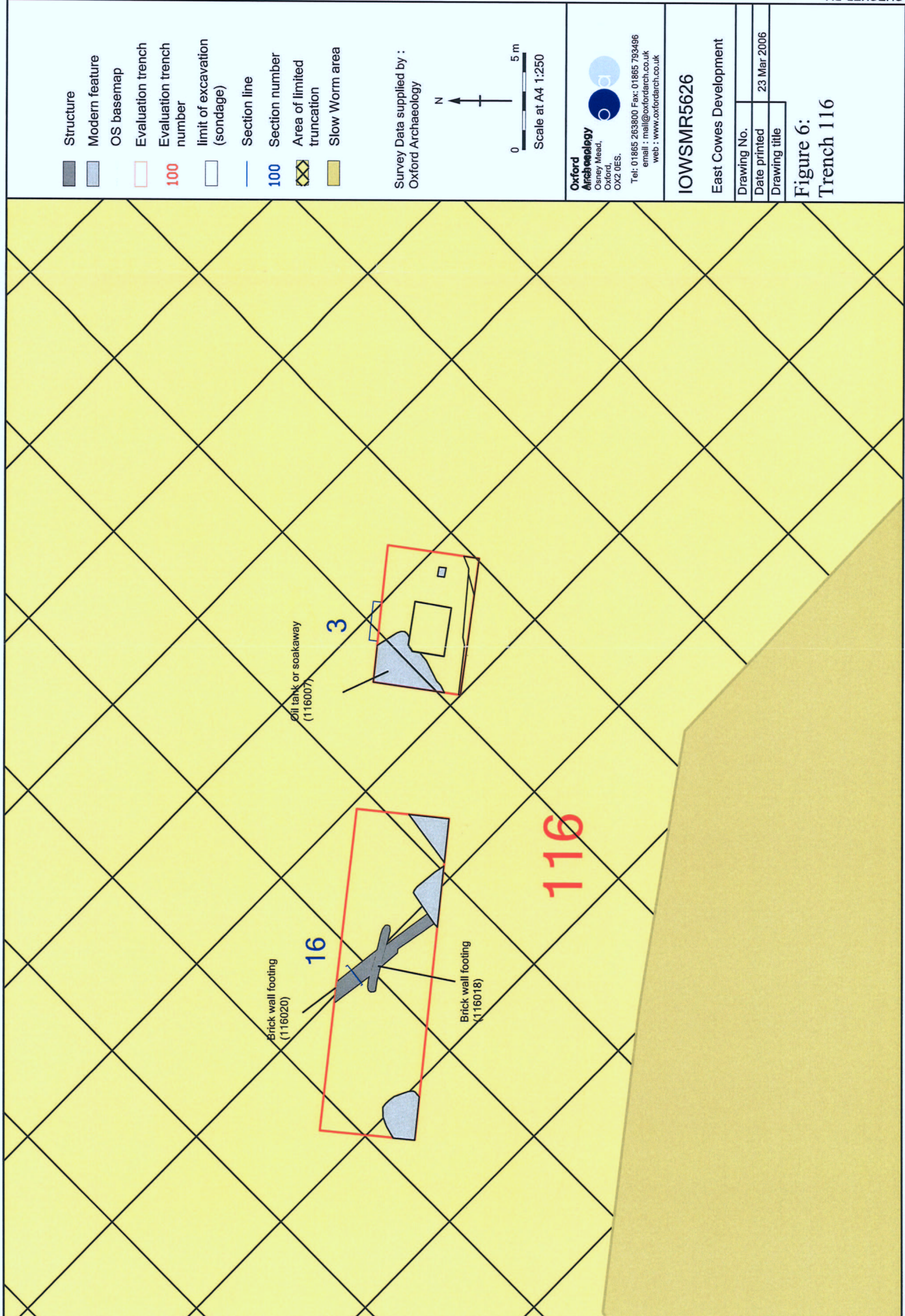
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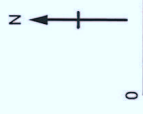
Figure 5:
Trenches 100,
101, 103, 104, 110
and 111





- Structure
- Modern feature
- OS basemap
- Evaluation trench
- Evaluation trench number
- limit of excavation (sondage)
- Section line
- Section number
- Area of limited truncation
- Slow Worm area

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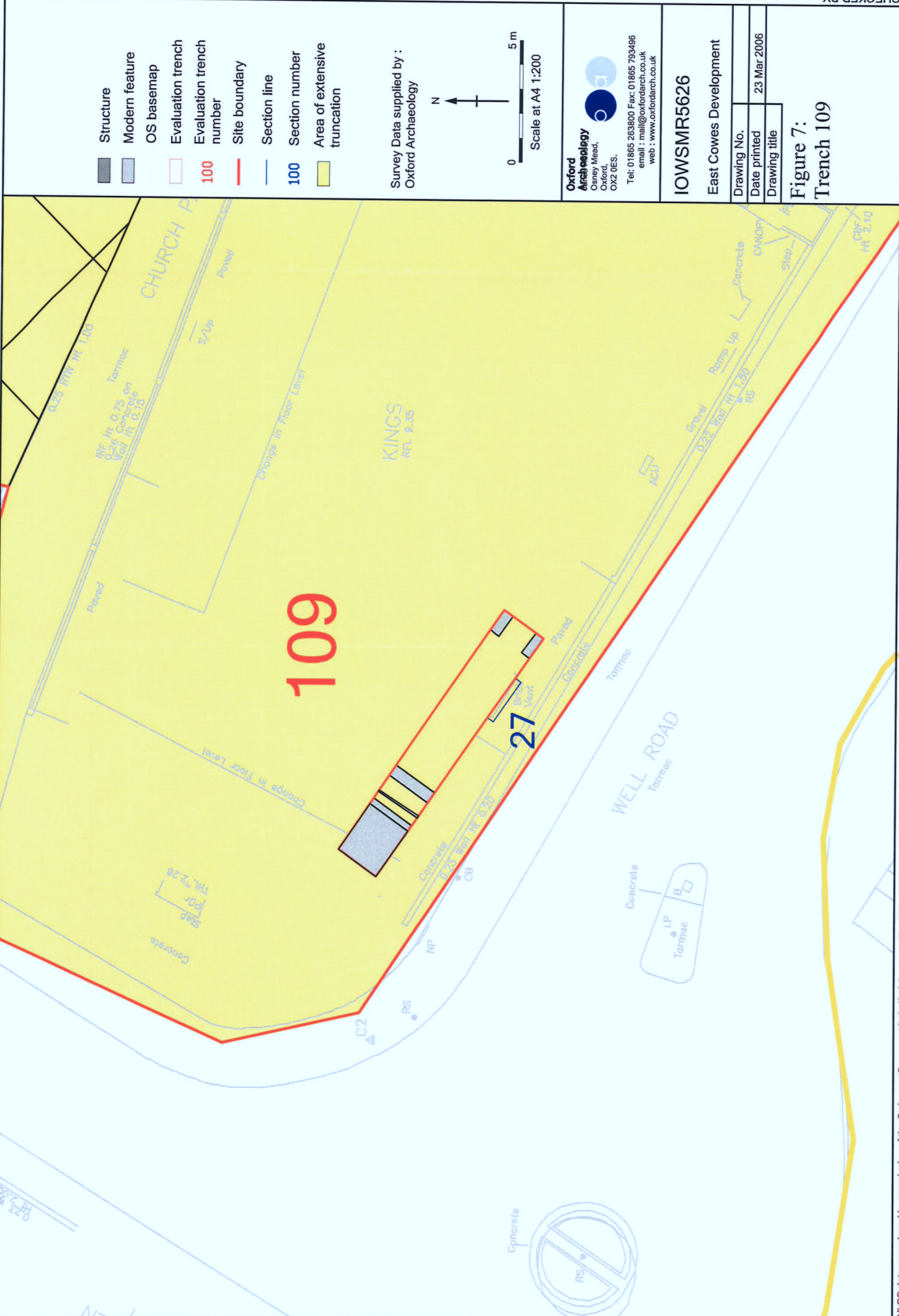
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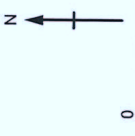
Figure 6:
Trench 116

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- Structure
- Modern feature
- OS basemap
- Evaluation trench
- Evaluation trench number
- Site boundary
- Section line
- Section number
- Area of extensive truncation

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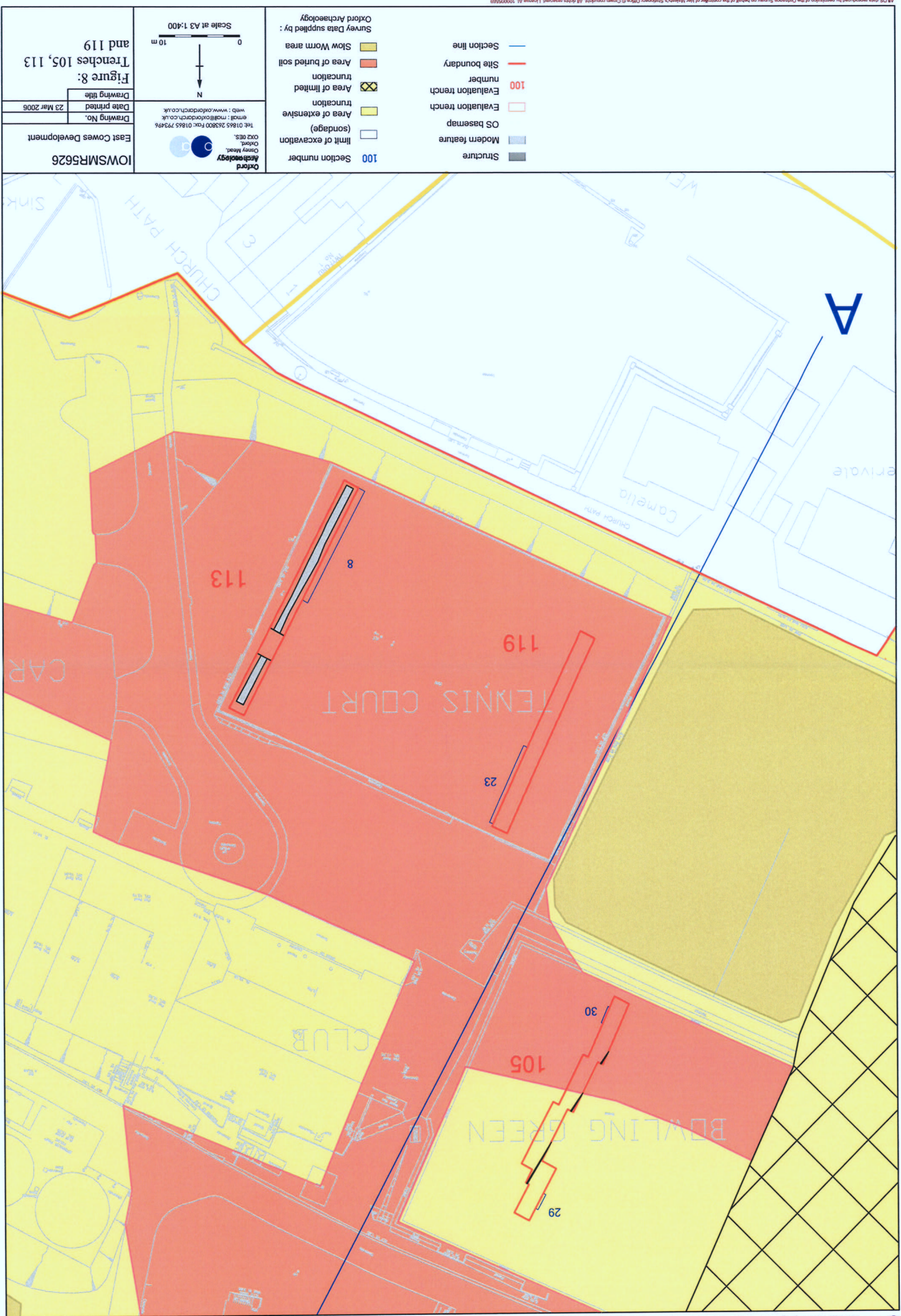
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Figure 7:
Trench 109



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100 Section number
100 Area of extensive truncation
100 Area of limited truncation
100 Area of buried soil
100 Slow Worm area

Structure
Modern feature
OS basement
Evaluation trench
Evaluation trench number
Section line

Scale at A3 1:400
0 10m
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Figure 8:
Trenches 105, 113
and 119

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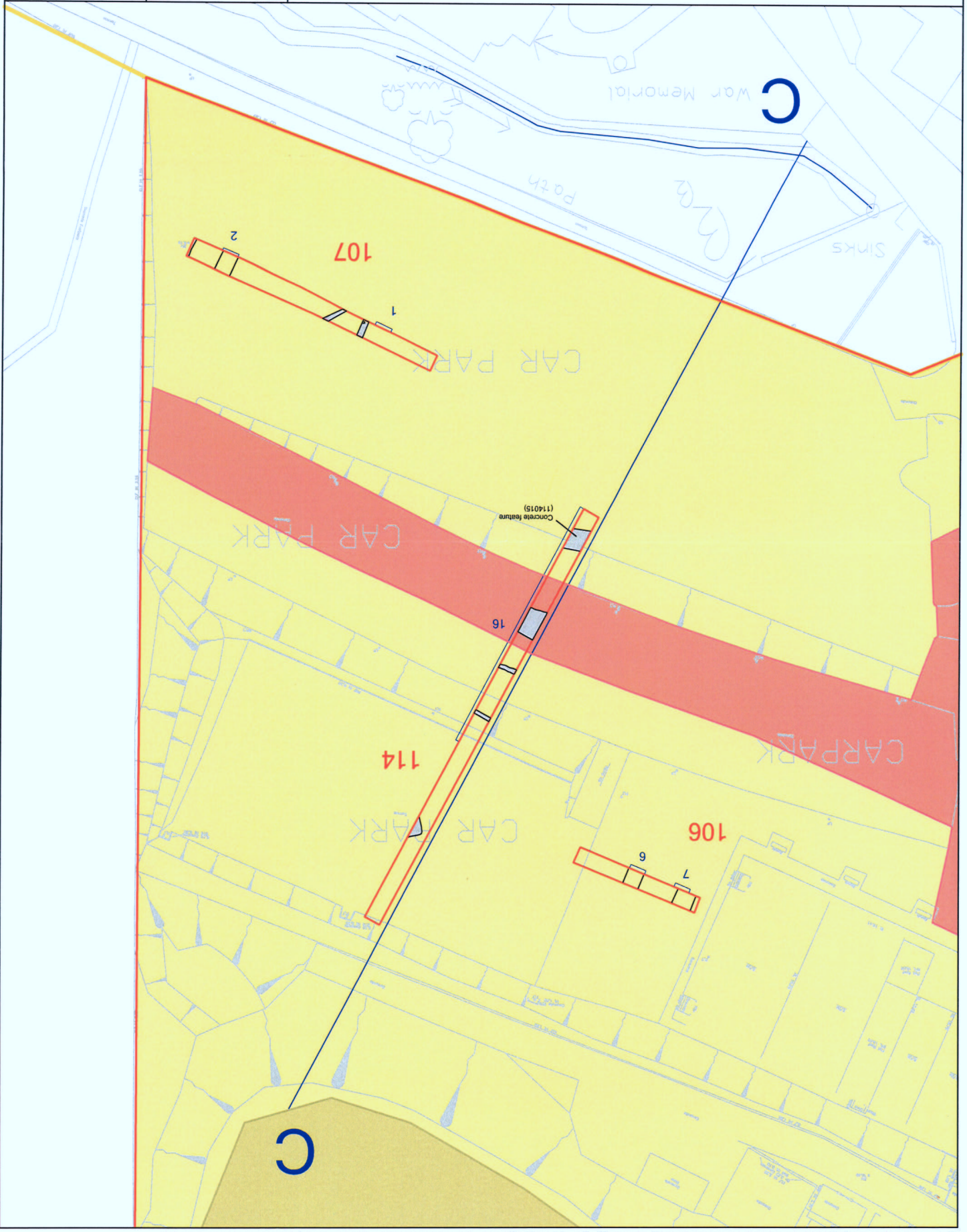
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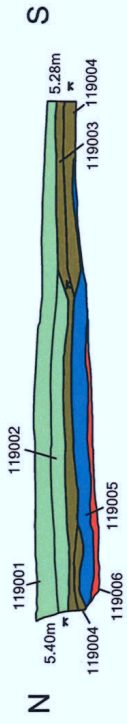
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Figure 9:
Trenches 106, 107
and 114

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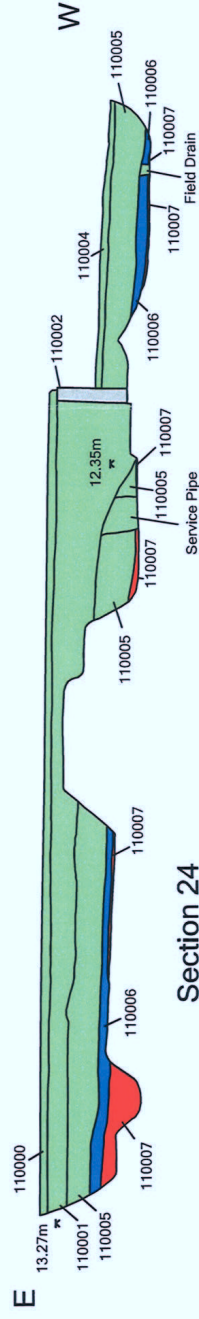
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Oxford Archaeology
- Limit of excavation
 - Section line
 - 100 Section number
 - Area of extensive truncation
 - Area of buried soil
 - Slow Worm area

- Structure
- Modern feature
- OS basemap
- Evaluation trench
- 100 Evaluation trench number
- Site boundary

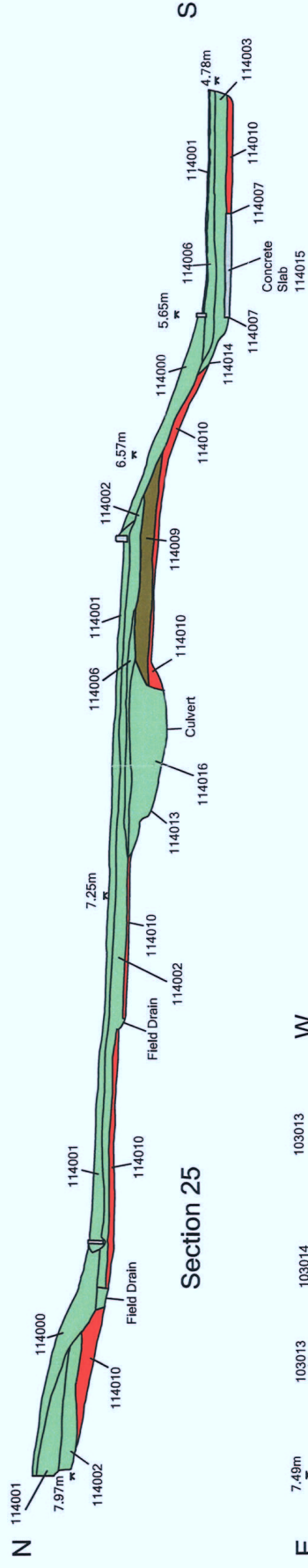




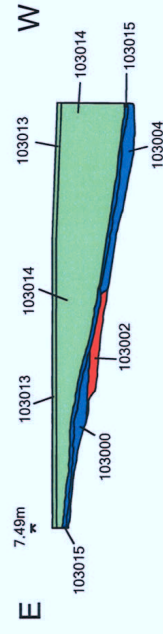
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Section 24



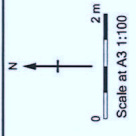
Section 25



Section 26

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Figure: 10
Sections 23, 24, 25
and 26





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