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**A Geophysical Survey and Archaeological Evaluation at
Brighton Racecourse, Brighton, East Sussex
for
Northern Racing Ltd
and
Brighton & Sussex University Hospitals NHS Trust**

Project Number CBAS0109

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Summary

A programme of archaeological work was carried out in respect of the proposed construction of a new car park and associated access at Brighton Racecourse, Brighton, East Sussex. These works assessed the archaeological potential of the development area and included a geophysical survey and archaeological evaluation comprising 14 trenches. The geophysical survey identified a number of anomalies, most notably two rectilinear structures located approximately 80m apart in the central portion of the proposed car parking area. Evaluation trenches confirmed the presence of 18th-20th century structural remains in both locations, little more than 100mm below the ground surface. Further trenches were used to sample the site and confirmed a significant level of 19th-20th century made ground deposits and associated landscaping. However, at the southwest end of the development, adjacent to the upstanding Scheduled Ancient Monument, and at the north end no made ground deposits were recorded. Three undated postholes were also identified and it has been suggested that both areas have the potential for significant surviving archaeological deposits. An appropriate level of mitigation has therefore been recommended.

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1.0 INTRODUCTION

- 1.1** Chris Butler Archaeological Services was commissioned by Tom Wood Architecture on behalf of Northern Racing Ltd and Brighton & Sussex University Hospitals NHS Trust (The Clients) to carry out geophysical survey and archaeological evaluation in advance of the construction of a new car park and associated access at Brighton Racecourse, Brighton, East Sussex (Fig. 1).
- 1.2** The site for the proposed new car park is situated on the east side of the racecourse, taking advantage of the existing loop track layout. The development includes a new access road from Warren Road, and vehicle underpass under the racecourse, together with new tree planting (Fig. 2).
- 1.3** The site is situated immediately to the north of the Whitehawk Neolithic causewayed enclosure, which is a Scheduled Ancient Monument (Fig. 3). Although the site itself lies outside the Scheduled Monument Area, it does lie with an Archaeologically Sensitive Area (Fig. 4). Some minor remedial works may be required the Scheduled Ancient Monument Area.
- 1.4** English Heritage and the Archaeological Team at East Sussex County Council require an archaeological assessment to be undertaken to inform determination of the planning application and scheduled monument consent application
- 1.5** An appropriate programme of archaeological work, in accordance with a brief prepared by the Archaeology Team at ESCC, comprised a geophysical survey (resistivity) in the proposed area of the new carp park, and a total of 14 archaeological evaluation trenches sampling both the car park area and the proposed new access road (Fig.5). A written scheme of investigation was prepared covering both phases of work, and was subsequently approved by the Archaeology Team at East Sussex County Council.
- 1.6** The geophysical fieldwork was undertaken by Chris Butler, Keith Butler and Clive Meaton on the 28th and 29th January and the 3rd February 2010. The archaeological evaluation was carried out by Chris Butler, Clive Meaton, Tash Scullion and Jim Ball between the 16th February and the 2nd March. Illustrations were drawn by Jane Russell and the project was managed by Chris Butler (Project Manager).

2.0 HISTORICAL AND RCHAEOLOGICAL BACKGROUND

- 2.1 The Neolithic causewayed enclosure at Whitehawk was first recognised in the 19th century, but has subsequently been badly damaged by housing developments, the Brighton race track, road upgrades and allotments. Although Whitehawk Hill would have been a visually striking landform from the Coastal Plain, the enclosure itself would only have been visible from the Downs to the north of the site¹.
- 2.2 The causewayed enclosure at Whitehawk is one of eight such sites in Sussex², with around 70 causewayed enclosures being known from the whole of the UK. Other causewayed enclosures are situated at Offham, just to the north of Lewes, and at Combe Hill near Eastbourne, whilst to the west there is a group of enclosures comprising the Trundle, Barkhale, Bury Hill, Halnaker Hill and Court Hill.
- 2.3 The first excavations at Whitehawk Camp were undertaken by Curwen in 1929. These established the nature of the causewayed ditches around the site, and recovered Neolithic pottery and flintwork³.
- 2.4 Further excavations were carried out by Curwen in 1932-3⁴, and again in 1935⁵. These excavations sampled all four ditches and other parts of the causewayed enclosure, and revealed evidence for timber gate structures, and a rampart and palisade within the inner ditch. Pits and quantities of flintwork, pottery and animal bone suggested possible settlement within the enclosure.
- 2.5 Rescue excavations were undertaken in 1991 in advance of housing development, whilst in 1993 further archaeological watching briefs were undertaken during the removal of chalk bunding and the insertion of 88 bollards and four gates, mostly along Manor Hill Road⁶. This work found evidence for a further ditch circuit, together with two tangential ditches, and suggested a sequence of three chronologically distinct phases for the enclosure.

¹ Oswald, A. et al. 2001 *The Creation of Monuments*, English Heritage.

² Drewett, P. 2003 'Taming the Wild: The first farming Communities in Sussex, in Rudling, D. (Ed) *The Archaeology of Sussex to AD2000*, Kings Lynn, Heritage Marketing & Publications Ltd, 39-46.

³ Ross Williamson, R.P. 1930 'Excavations in Whitehawk Neolithic Camp, Near Brighton', *Sussex Archaeological Collections* **71**, 57-96.

⁴ Curwen, E.C. 1934 'Excavations in Whitehawk Neolithic camp, Brighton, 1932-3', *The Antiquaries Journal* **14**, 99-133.

⁵ Curwen, E.C. 1936 'Excavations in Whitehawk camp, third season, 1935', *Sussex Archaeological Collections* **77**, 60-92.

⁶ Russell, M. et al. 1996 'Excavations at Whitehawk Neolithic enclosure, Brighton, East Sussex: 1991-93', *Sussex Archaeological Collections* **134**, 39-61.

- 2.6** Subsequent to the above work, further disturbance to Whitehawk causewayed enclosure has been recorded in 2003⁷ and 2007⁸. A watching brief was carried out during the erection of a gate and bollards adjacent to the Transmitting Station on Whitehawk Hill in April 2009⁹. No archaeological features were seen, but artefacts ranging from prehistoric flintwork to 19th and early 20th century pottery were collected during the watching brief.
- 2.7** Whitehawk causewayed enclosure is situated in a high position and the scale of its construction would suggest that a large surrounding area would be within its site catchment both in terms of the manpower required for its construction and the use of the monument throughout its long existence¹⁰.
- 2.8** Whitehawk causewayed enclosure appears to have been constructed in an area which had been recently, but extensively, cleared woodland, and the landscape around it remained open. Two Carbon 14 dates obtained from the primary ditch silts within the third and fourth ditches were 2750±130bc and 2695±95bc respectively, later than The Trundle and Court Hill, but consistent with other Sussex causewayed enclosures such as Offham and Bury Hill¹¹.
- 2.9** The form and nature of activities occurring at individual causewayed enclosures may have been many and varied, particularly given the lengthy timescale over which some enclosures were used and re-used¹². With its multiple bank and ditch circuits, and evidence for internal features, Whitehawk causewayed enclosure is likely to have had a lengthy and varied use, which almost certainly had a major impact on its immediate landscape.
- 2.10** A number of barrows (burial mounds) existed at one time outside Whitehawk Causewayed enclosure (MES184), but were levelled in 1822 to improve the race course. The exact location of the barrows is not known. Various artefacts have been associated with these barrows, or have come from nearby, including Roman coins and pottery. It is likely that the barrows were Bronze Age in origin, but may have had secondary Roman and Anglo-Saxon burials associated with them.
- 2.11** In 1783 a group of Brighton's richest and most established inhabitants that included the Duke of Cumberland, Marquess of Queensbury and Earl of Egremont set up the first Brighton races on White Hawk Down which later became known as the Race Hill. The two day event soon became a popular retreat and in only its second year attracted the presence of the Prince of Wales. In 1786 the Brighton Races were extended to four days with the first stand erected in 1788 with a capacity of 24¹³. An engraving of the racecourse and stand c.1790¹⁴ shows no other structures.

⁷ BHAS Field Unit Archive 2003 (http://www.brightonarch.org.uk/13_4_1.htm)

⁸ BHAS Archaeology Report Autumn 2007 (http://www.brightonarch.org.uk/3_18.htm)

⁹ Butler, C. 2009 *An archaeological watching brief at Whitehawk Hill, Brighton, East Sussex*, CBAS Report

¹⁰ Oswald et al. 2001 *The Creation of Monuments*, Swindon, English Heritage.

¹¹ Drewett, P. 2003 'Taming the Wild: The first farming Communities in Sussex', in Rudling, D. (Ed) *The Archaeology of Sussex to AD2000*, Kings Lynn, Heritage Marketing & Publications Ltd, 39-46.

¹² Oswald et al. 2001 *The Creation of Monuments*, Swindon, English Heritage.

¹³ http://www.talkhorseracing.co.uk/guides/brighton_racecourse.html

- 2.12** More land was granted in 1822 by a number of local landowners, which was marked by boundary stones in 1861, some of which can still be found in the area known as the Race Ground. With the emergence of the railway network which provided a direct link between London and Brighton the races, known for their fashionable attendees, soon attracted a lower class crowd and funding became a real issue in the 1840s. A solution was found with the establishment of the 'Race Stand Trustees' in 1849-50. Several improvements were made to the course as well as the erection of a new stand¹⁵.
- 2.13** The 1st Edition OS map of 1879 shows the racecourse and grandstand, whilst the earthworks of the causewayed enclosure are shown at the south end of the racecourse (Fig. 6). A path runs from north to south through the site of the proposed car park. A 19th century picture of the racecourse, shows the new stand on the west side of the racecourse, but although there are large numbers of spectators on the east side, there are no structures shown (Fig. 9).
- 2.14** As the racecourse grew in popularity the town's local authority assumed full control in 1898. The 2nd Edition OS of 1899 shows little change, whilst the 3rd Edition OS map (1911) shows the same, but with a chalk pit and recreation ground now located to the east of the site in Whitehawk Bottom.
- 2.15** A view of the racecourse *c.*1905¹⁶ shows two buildings on the east side of the racecourse, with the area also being used for grazing sheep and horses. The First World War forced a suspension of all races between 1914 and 1917 while the stand was used as an ammunition dump and food store¹⁷. A photograph *c.*1920¹⁸, apparently taken from the main stand looking north-east, shows a stand on the east side of the racecourse on a race day, with a number of other temporary structures and fixtures also shown (Fig. 10).
- 2.16** In the 1930s Brighton Corporation spent some £60,000 on improvements to the race-course, including the totalisator buildings in 1930, stabling and administrative blocks in 1931, and the subway to Whitehawk in 1936. Several stands were also built, the Tattersall in 1934, two more in 1936, and a new grandstand in 1938¹⁹.
- 2.17** The 4th Edition OS map of 1938 again shows little change to the area of the site, although there are now additional buildings shown around the grandstand on the west side of the racecourse. New schools and housing developments are now filling up Whitehawk Bottom. The 1946 aerial photograph²⁰ shows a number of buildings and structures located on the east side of the racecourse, all of which are within the area of the proposed car park, whilst at the north end a pedestrian underpass now takes a path under the racecourse (Fig. 7).

¹⁴ *Brighton & Hove in Pictures*, Brighton & Hove City Council

¹⁵ http://www.talkhorseracing.co.uk/guides/brighton_racecourse.html

¹⁶ *Brighton & Hove in Pictures*, Brighton & Hove City Council

¹⁷ *Ibid.*

¹⁸ www.greyhoundderby.com

¹⁹ Carder, T. 1990 *Encyclopaedia of Brighton*, East Sussex County Libraries

²⁰ University of Sussex (3.G/TUD/UK/157.PARTI.19.APR.46 F12//138SQDN)

- 2.18** In 1951 a new covered stand was added for 1,600 people in the north-western enclosure, followed by another covered stand in the eastern enclosure. The pulling-up ground was laid out in 1952, and the present grandstand, which holds 5,420 people including 1,445 standing, opened in May 1965 at a cost of £400,000; all the other stands, except the 1951 covered stand, were subsequently removed²¹.
- 2.19** Various OS maps from the 1950's through to the 1980's show four large structures, labelled as stands, on the east side of the racecourse, although some of these do not occupy the same footprints as the earlier buildings, and a smaller structure is located at the south end (Fig. 8). By the end of the 1980's the maps show that the four larger structures have gone, but the smaller building at the south end is still present.

3.0 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

- 3.1** A site visit was carried out on the 21st January 2010. This showed that the site comprised an existing tarmac road in an elongated loop along the site with access at the north and south ends. The area within this loop and around the outside is mown grass.
- 3.2** On the whole the proposed location of the new car park occupies a relatively flat area of ground, sloping down gradually down the northeast to southwest, with a secondary somewhat more erratic gradient from the southwest to the northeast. Its northwest edge is bounded by the racetrack and to the southeast by a fence, associated tree line and steep embankment. The race track itself occupies the highest ground, whereas the site of the proposed access road lies immediately to the northwest of the track, and slopes away to the northwest. The proposed site of the car park seems to lie in an area of previously levelled and made ground, whilst the course of the access road may instead cross undisturbed topography.
- 3.2** At the south end of the site there is a gate and a tarmac access road linking the site to Manor Hill Road. The ground to the east of the gate is higher than the ground outside the site, and as discussed above may have been built-up at some stage in the past. This feature continues along the east side of the site, where the steep drop from the site to the ground on its east is as much as 10m.
- 3.3** A number of structures stand in the south-west corner of the site, including the winning post, a shed, a fenced compound, and the base of a possible removed building. A similar building base measuring 8m x 8m stands in the south-east corner of the site. There is also evidence for drains and other services at the south end of the site.

²¹ Carder, T. 1990 *Encyclopaedia of Brighton*, East Sussex County Libraries

- 3.4** Along the length of the site there are further manhole covers, and evidence for a drain along the west side of the site (confirmed by ground staff). A brick built electricity structure is situated in the centre of the loop, and is connected by an underground cable to the main buildings.
- 3.5** Situated along the east side of the site is a large toilet block, and three small concrete, whitewashed, structures, which appear to have drainage holes at their centres. In the central part of the site parts of brick and concrete structures could be seen within the grass, and may be surviving remains of the stands that stood here in the earlier 20th century.
- 3.6** The north end of the site is narrower, and has a single lane tarmac road to a gate. Another gate on the north-east corner leads to the pedestrian underpass, which goes under the race track and emerges on the west side.
- 3.7** Areas of grass had been disturbed, and these were inspected for artefacts. A small collection of artefacts including prehistoric flint flakes, 19th and early 20th century pottery sherds and glass fragments, and a 1987 £1 coin, were recovered (see Section 6).
- 3.8** The geology of the site, according to the British Geological Survey (sheet 319/334), comprises Seaford Chalk at the north end of the site, with Newhaven Chalk at the south end of the site. To the east of the site is made ground, and in the valley bottom Head Deposit. There are some outcrops of Clay-with-flints further to the east (Fig. 11).

4.0 METHODOLOGY

4.1 *Geophysics*

- 4.1.1** The central grassed area of the existing car park, and the area of grass between the roadway and the racecourse was subjected to a Resistivity survey in an attempt to locate any anomalies of interest which could subsequently be targeted during the trenching phase of the evaluation. The survey was in accordance with a Written Scheme of Investigation (WSI) agreed with the East Sussex County Archaeologist.
- 4.1.2** The survey was carried out by Chris Butler, Keith Butler and Clive Meaton using a Geoscan RM15 Resistance Meter on the 28th and 29th January and 3rd February 2010. The weather conditions were overcast, and there had been overnight rain each day, with some drizzle and showers during the survey. The ground conditions were damp, but with no standing water on the ground surface. The ground cover was mown grass, with the adjacent roadway having a tarmac surface. There were a number of manhole covers and a single brick built structure within the survey area. The probes were frequently contacting below ground obstructions.
- 4.1.3** The grid was set out using tapes and canes, and then a grid of lines with markers set out at the correct intervals was laid out. The RM15 was traversed across the grid using a zig-zag pattern taking readings at 1m intervals. Each 20m grid square was surveyed in their correct numerical order, with the first grid being at the south end, each starting in the south-west corner.
- 4.1.4** The first part of the survey involved a transect of grids from south to north, numbered 1 to 20 along the central grassed area of the existing car park, with the tarmac roadway on each side. The area being surveyed was approximately 13m wide, so the 'dummy grid' facility was used to complete each grid square. The remote probes were moved a total of four times during the survey of this transect; each time it was possible to exactly re-establish the correct reading.
- 4.1.5** The second transect was along the grassed area between the roadway and the racecourse. This transect was again started at the south end, and ran from grid 21 to 37. The area being surveyed was approximately 8m wide, so again the 'dummy grid' facility was used to complete each grid square. The remote probes were repositioned three times; each time it was possible to exactly re-establish the correct reading.
- 4.1.6** The results of the survey were collected in an automatic data-logger and downloaded into Geoplot 3.0 for processing by Chris Butler. The data will be copied onto a CD and retained with the site archive.

4.2 *Evaluation*

- 4.2.1** The general objective of the archaeological work was to ascertain the depth of made ground deposits and the presence or absence of any archaeological significant features, artefacts or ecofacts and to record and interpret any relevant deposits to appropriate professional standards, and in accordance with ESCC's *Standards for Archaeological Fieldwork, Recording and Post-Excavation in East Sussex* dated April 2008 (Recommended Standards).
- 4.2.2** In accordance with the WSI a total of fourteen trenches were excavated. Trenches 1-12 were located on the eastern side of the racecourse, sampling the site of the proposed car park (Fig. 5a), whereas trenches 13-14 were positioned to the west of the track covering the proposed location of the new access road (Fig. 5b). Trenches 4, 6, and 9 were located so as to test specific anomalies revealed during the geophysics survey (see 5.1 below)
- 4.2.3** Most trenches were between 10m and 20m long and 1.8m wide, but on occasion it was necessary to alter a particular trench location and dimensions. This was done in consultation with the County Archaeologist and reasons for specific changes are discussed in greater detail below.
- 4.2.4** A CAT scan was undertaken prior to the excavation of every trench. Where necessary the location of a trench was altered to avoid impacting buried services.
- 4.2.5** The excavation of trenches 1-12 was undertaken using a 5 tonne 360 degree excavator equipped with a 1.5m wide flat bladed ditching. Due to difficulties with access, trenches 13 and 14 were excavated using a wheeled JCB also equipped with a 1.5m wide flat ditching bucket.
- 4.2.6** The turf was removed carefully using the mechanical excavator, and for the first few trenches spoil was placed directly onto plastic tarpaulin sheets. However, following consultation with the clients this method was abandoned and spoil was instead placed onto the adjacent turf/tarmac. All trenches were backfilled and the turf replaced.
- 4.2.7** Mechanical excavation continued to the base of the sub soil and ceased immediately the underlying natural substrate, or archaeological deposits were exposed, whichever was higher. Care was taken not to damage archaeological deposits through excessive use of the machine. All exposed sections and surfaces were inspected for archaeological features, structures or finds. Removed spoil was also scanned for the presence of unstratified finds, and a Garrett ACE 250 metal detector was used during the course of the work.

- 4.2.8** Where made ground deposits were encountered, health and safety considerations dictated the depth of excavation. A safe depth was considered to be between 1.2m and 1.4m depending on the make up of the made ground. Trenches deeper than 1.4m below the ground surface were not entered, and recording was undertaken from the edge of the trench.
- 4.2.9** All archaeologically significant deposits, features and finds were excavated and recorded according to accepted professional standards and to the ESCC Recommended Conditions. Deposit colours were recorded by visual inspection and not by reference to a Munsell Colour chart.
- 4.2.10** All trenches were levelled in relation to the Ordnance Datum Bench Mark (118.29m OD), located on the stone marker on the western edge of Manor Hill Road opposite the site entrance. Levels are fully discussed in the text and the levels register is included as Appendix II
- 4.2.11** A full photographic record of the work was kept as appropriate and will form part of the site archive. The archive is presently held by Chris Butler Archaeological Services. A site reference of BRC09, and project number CBAS0109 was allocated.

5.0 RESULTS

5.1 *Geophysics* by Chris Butler

- 5.1.1** The results of the survey are shown in Fig 12, and have been plotted onto the map of the site in Fig. 13. The survey has shown a number of features along the central part of the site, which appear to relate to the stands that stood here in the early 20th century, and correspond with bricks and concrete seen in the grass during the survey. Resistivity survey on the chalk typically shows the underlying natural chalk as having low resistance and cut features having a higher resistance due to the permeable nature of the chalk²².
- 5.1.2** In the central part of the site (Fig. 13) there are two rectangular structures orientated north-south (Grids 7/8 & 13), each being just over 20m in length and about 7m wide. These appear to correspond with the location of two of the stands that were built here in the 1930's. Other areas of high resistance shown further south (Grids 4 & 6) are likely to be the underground septic tank associated with the toilets, and the area around the brick-built electricity structure.
- 5.1.3** Areas of low resistance shown on the east side of Grids 2 & 5/6, may be below ground services, and the linear low resistance feature shown entering from the west in Grid 21 and then turning north through Grids, 1 to 3 may be the electricity cable which runs north to connect to the brick structure in Grid 6.
- 5.1.4** The patchy nature of the resistance readings over most of the southern part of the site would indicate that this area is largely made ground, with the patchy results being due to the different deposits of made ground that have been dumped here, with some being quite permeable. Towards the north end of the site the very high resistance may be due the more compact nature of the made ground found here.
- 5.1.5** At the extreme north end and along most of the western side of the area surveyed, the more regular levels of resistance found here almost certainly reflect the shallow nature of the topsoil and the underlying chalk, with variations in resistance hinting at the presence of underlying features here.

²² Clark, A. 1990 *Seeing beneath the Soil*, London, Batsford

5.2 *Evaluation* by Clive Meaton

5.2.1 *Introduction*

A total of 14 trenches were excavated. Trenches 1-12 were located within the proposed site of the new car park (Fig. 5a) and trenches 13 and 14 were located along the route of the proposed access road (Fig. 5b). The results of the evaluation are fully summarised in Table 1 below.

5.2.2 *General Site Stratigraphic Sequence*

The general stratigraphic sequence recorded across site was as follow:

- Top Soil (c.100-200mm thickness)
A mid to dark brown silty loam containing rare chalk flecking, and rare sub angular flint nodules to 50mm.

Allocated contexts in Trench order:

(1, 68, 74, 46, 41, 80, 38, 71, 34, 20, 14, 10, 87, 96)

- Made Ground (c.100mm-c.2m minimum)
Variable contexts discussed below with reference to specific trenches.
- Buried Soil (c.100-200mm)
Not always present, discussed below with reference to specific trenches.
- Bioturbated Chalk (70mm-200mm)
Loosely packed, off white fractured chalk nodules 25mm-100mm, with frequent aggregated patches of mid brown silty loam and rare sub angular flints to 50mm. The bioturbated chalk was an upper horizon in the natural substrate, primarily impacted by root/animal action and subsequent chemical weathering.

Allocated contexts in Trench order:

(76, 64, 44, 86, 60, 23, 19, 11, 88, 97)

- Solid Chalk (Achieved from 300mm below the ground surface)
A compact off white chalk containing occasional sub angular flint nodules to 300mm. The solid chalk became increasingly more compact with depth.

Allocated contexts in Trench order:

(77, 45, 24, 13, 89, 98)

Further context descriptions of top soil, bioturbated chalk, and solid chalk deposits will only be discussed where they differ markedly from those given above.

Table 1: Trench Summaries

Tr.No	Orientation	Depth to Natural	Comments/Archaeology	Date
1	NE-SW	Not obtained	Made ground to 1.2m – not bottomed Max depth of Tr. 2m	C19-20th
2	N-S	Not obtained	Made ground – pulverised fuel ash to 2m deep – not bottomed Max Depth of Tr.2m	C19-20th
3	N-S	230mm-250mm	NO MADE GROUND. No archaeological features noted Max depth of Tr. 950mm	
4	NE-SW	1.1m at SW end of Tr. Not obtained at NE end.	Made ground & demolition material to 1.3m at NE end of Tr. Overlying buried soil – not bottomed Max Depth of trench 1.4m	C20th
5	NE-SW	650mm-800mm across Tr.	Made Ground 600-700mm below ground surface, overlying buried soil. Max depth of Tr. 850mm	C19-20th
6	NE-SW	1.1m at SW end of Tr. Not obtained at NE end	In situ remains of stands c.200mm below ground surface. 2 parallel wall lines. Made ground to 1.2m Max depth of Tr. 1.3m	C18-20th
7	N-S	Not obtained	Made ground across trench to 1.3m depth – not bottomed Max depth of Tr. 1.3m	C19-20th
8	NE-SW	Not obtained	Made ground – pulverised fuel ash to 2.3m depth. Max depth of trench 2.3m	C19-20 th
9	NE-SW	1.1m at N end.	In situ remains of stands c. 100-200mm below ground surface. Also made ground over buried soil to 1.4m. Max depth of Tr. 1.4m	C19-20 th
10	NE-SW	500-600mm across Tr.	Made ground to 500mm depth over buried soil. 3 undated post holes from 500mm beneath ground surface Max depth of Tr. 780mm	Late C18th –C19th
11	N-S	600mm at N. end . to 1.1m mid Tr. Not obtained to S.	Made ground – pulverised fuel ash to 1.4m in southern half of trench – not bottomed Max depth of Tr. 1.4	C19-20th
12	NE-SW	200-250mm across Tr.	Thin layer of disturbance below topsoil 4 post-med post holes Alignment of steel t-bars Max depth of Tr. 1.1m at SW end	C19-20th
13	E-W	180-200mm across Tr.	NO MADE GROUND. 2 post-med post holes and a possible tree bole. Max depth of Tr. 1m	C19-20th
14	NW-SE	150-250mm across Tr.	NO MADE GROUND. No archaeological feature.	

5.2.3 Trench 1 (Fig. 14 Section A1, and Plate 1)

Trench 1 was cut in position, being 20m long and 1.8m wide, orientated northeast to southwest and attaining a maximum depth of 1.4m below the ground surface.

The topsoil Context 1 was up to 100mm thick and overlay Context 2; a very mixed made ground deposit between 100mm-200mm thick and containing occasional sub angular flint nodules to 50mm, occasional chalk flecking and nodules to 300mm, along with frequent ceramic building material (CBM) including large pieces of concrete. Below Context 2, was Context 4; a firm dark bluish grey silt, up to 1m thick and containing horizons of crushed chalk pieces forming up 10% of the matrix.

This context comprised pulverised fuel ash (hereafter PFA), probably obtained from Shoreham Power Station and frequently used in the 20th century as ground make up. Context 4 was not bottomed at the northeast end of the trench. Context 3 was recorded beneath Context 4. This was another made ground deposit up to 1m thick and forming a mid greyish brown sandy silty clay with very frequent chalk nodules to 100mm (60%) and sub angular flint nodules to 100mm. Dumps of artefactual material were noted within this context. Below Context 3, Context 5 was a loose brownish grey chalk rubble deposit with mid brown silty clay (10%) and sub angular flint nodules to 100mm (<1%).

Context 6 lay below Context 5 and formed a mid brown silty clay up to 100mm thick containing rare chalk flecking. Context 6 was interpreted as a buried soil, and overlay another made ground deposit (Context 7). Context 7 was similar to Context 5 being up to 500mm thick and containing much larger chalk nodules up to 400mm in size. Context 8 was the oldest stratigraphic unit in the made ground sequence, being up to 750mm thick and comprising small chalk nodules up to 40mm (85%) in a mid brownish grey silty clay matrix (15%). It overlay the natural sold chalk, (Context 9).

Figure 14 (Section A1) shows how the made ground deposits in Trench 1 form tip lines, thickening from the southwest to the northeast. However this may be product of the trench orientation and in actual fact the deposits are following the former topographic gradient down slope from northwest to southeast.

The top of Trench 1 at the southwest end was levelled to 122.85m OD and the bottom to 121.68m OD. The top of the trench at the NE end was levelled to 122.49m OD and 121.29m OD at it base.

A modern plastic water pipe was broken and subsequently repaired in the southern half of Trench 1. Other than the 19th - 20th century made ground deposits no archaeologically significant features were recorded. The finds recovered from Contexts 1, 2 and 3 indicated a date range from the early 19th century through to the 20th century.

5.2.4 *Trench 2* (Not illustrated – Plate 2)

Due to the obvious depth of made ground across the site, and following discussions with Greg Chuter (County Archaeologist), it was decided that Trenches 2 and 8 would be utilised to assess the depth of made ground on the southeast edges of the site.

Therefore, Trench 2 was cut in position, but only its southwest extent was excavated. It measured 3.5m long by 1.8m wide and attained a depth of 2m below the ground surface.

Approximately 100mm of topsoil (Context **68**) overlay Context **69**, a friable mid brown sandy silty loam up to 100mm thick and containing chalk flecking/nodules to 30mm (5%) and sub angular flints to 40mm (1%). Context **69** was interpreted as a sub soil and overlay Context **70**. Context **70** was a thick horizon of PFA (pulverised fuel ash), not bottomed at 2m below the ground surface, and containing seams of crushed chalk (10%).

The top of Trench 2 was levelled to 122.55m OD, and the bottom to 120.56m OD. No finds were recovered from this trench.

5.2.5 *Trench 3* (Fig. 15 Section D2, and Plate 3)

The position and dimensions of Trench 3 were altered so as avoid impacting buried services. It was moved approximately 20m to the south, remaining on a northeast to southwest alignment but measuring 17m long by 1.5m wide and attaining a maximum depth of 950mm in the sondage located at its southwest end.

Approximately 100mm of topsoil (Context **74**) overlay a thin layer of subsoil (Context **75**) c.150mm thick. Context **75** was a loose mid brown chalky silt loam with occasional sub angular flints to 40mm. The bioturbated chalk (Context **76**) was recorded below Context **75**, being c.200mm and having an undulating contact with the more solid chalk below Context **77**. A sondage to 9500mm below the ground surface at the southwest end of the trench confirmed the stratigraphy and the increasing compaction of the natural chalk with depth.

The top of Trench 3 at its southwest end was levelled to 122.94m OD and the base of the sondage to 121.98m OD. The ground surface mid trench was levelled to 123.04m OD and the base to 122.48m OD. The top of the trench at its northeast end was levelled to 123.04m OD and the base to 122.79m OD.

A plastic cable (optics) was identified running parallel along the southeast edge of the trench and an electric cable was encountered at its northeast end. No archaeologically significant features were recorded, however, no made ground deposits relating to the racecourse were identified either and the ground in this area appeared relatively undisturbed, thereby increasing the potential for preserved archaeology in the general vicinity of Trench 3.

5.2.6 Trench 4 (Not Illustrated – Plate 4)

Trench 4 was moved 20m to the southwest, but remained in the same northeast to southwest alignment, measuring 20 long by 1.8m wide and attaining a maximum depth of 1.4m in a sondage at its northeast end. The trench was repositioned so as to still test the anomaly identified during the geophysical survey (Grids 5/6). This anomaly was now located at its northeast end.

Approximately 100-250mm thickness of top soil (Context **46**) overlay Context **47**. Context **47** was a mid brown sandy silty clay containing occasional chalk flecking/nodules to 30mm, occasional sub angular flint nodules to 50mm and rare charcoal. Context **47** was a finds rich deposit located at the southwest end of the trench and was interpreted as a midden deposit, with finds dated to the early 19th century. The stratigraphic unit beneath Context **47** was Context **63**. Context **63** was a c.300mm thick and comprised a mid yellowish brown sandy silty clay with frequent chalk nodules, sub angular flints to 50mm and CBM.

Context **64** lay below **63** and formed another made ground deposit, being a mid yellowish brown sandy silty clay with very frequent chalk nodules to 200mm (50%), occasional sub angular flint nodules to 100mm, and frequent building demolition material including concrete, CBM, and mortar. Context **64** was up to 1m thick and overlay **62**. Context **62** was not bottomed and only recorded in the deepest parts of the trench at its northeast end. It was a mid brown silty sandy clay with occasional small chalk nodules and sub angular flints to 20mm. Context **62** was interpreted as a buried soil horizon. The bioturbated chalk Context **67** was achieved in the southwest half of the Trench from 1.1m below the ground surface end.

Two possible structural contexts were also recorded in Trench 4. At the southwest end of the trench a possible concrete pillar was recorded (Context **66**), orientated perpendicular to the trench and being 800mm wide and 450mm thick; it was a very hard mid grey concrete with 70% rounded gravel aggregate. It was not possible to ascertain whether Context **66** was *in-situ* not. At the opposite end of the trench a concrete raft was recorded (Context **65**), the surface of which was levelled to 121.01m. It was also formed of a very hard mid grey concrete with 70% rounded gravel aggregate and appeared to be contained within Context **64**. Although due to its solid nature this was not proved, and it may have been the case that Context **65** was in fact an *in-situ* surface lying on an earlier made ground deposit. It certainly seems likely that Context **65** was the anomaly revealed during the geophysical survey.

The top of Trench 4 at its southwest end was levelled to 121.67m OD and its base to 120.46m OD. At its northeast end the top was levelled to 121.24m OD and the base to 120.72m OD. The base of the sondage was levelled to 119.86m OD

The finds recovered from Context **47** were of an early 19th century date, and is of some interest as artefactual groups of this period are not that common.

5.2.7 Trench 5 (Fig. 15 Section A6, and Plate 5)

The position of Trench 5 was shifted approximately 20m to the northeast, in order to avoid buried services. Its alignment was altered slightly to run parallel with the road southwest to northeast. It measured 20m long by 1.8m wide and attained a maximum depth of 1m at the extreme southwest end.

The stratigraphic sequence in Trench 5 was as follows. Approximately 100mm of topsoil (Context **41**) overlay a made ground deposit Context **42**. Context **42** was between 600-700mm thick, being a brownish white chalk, containing nodules up to 100mm (90%), a light brown silty clay (9%) and sub angular flint nodules to 50mm (1%). Context **42** sealed Context **43**, which formed a friable light brown silty clay loam containing frequent chalk flecking and rare sub angular flints to 20mm.

This context was interpreted as a buried soil between 50mm-100mm thick, but became much thinner to the northeast end of the trench, so much so that it was no longer identifiable in section, although it should be noted that an identical stratigraphic sequence was recorded in Trench 10 some 100m or so to the northeast. The buried soil overlay the bioturbated chalk (Context **44**) some 650mm-800mm below the ground surface. The solid chalk (Context **45**) was exposed in the surface of the trench and a higher than normal level of root/animal disturbance was recorded in the bioturbated chalk. Particularly three nebulous patches of darker soil noted mid trench, impacting into the solid chalk. All were investigated and interpreted as root action, probably indicative of remnant tree boles.

The top of Trench 5 at its southwest end was levelled to 120.73m OD and its bottom to 119.68m OD. At its northeast end the top was levelled to 120.41m OD and the bottom to 119.65m OD.

Other than the made ground, no archaeological significant features were identified in Trench 5. Likewise no dateable artefacts were recovered from Trench 5.

5.2.8 Trench 6 (Fig. 17 Plan E2, and Plates 6, 7, and 8)

The position of Trench 6 was moved approximately 10m to the north due to buried services, and its alignment altered further to the southwest-northeast. It was repositioned so as to still test the possible wall lines revealed during the geophysical survey (Grids 13/14). It measured 20m long and at its southwest end was widened from 1.8m to 3.5m in order to expose a deep feature sealed beneath unstable made ground. Its maximum depth was c.1.3m.

Top soil (Context **80**) was between 150mm-200mm thick. At the southwest end Trench 6 it overlay made ground (Context **82**). Context **82** was up to 1m thick and noted at both ends of the trench, although not mid trench as excavation stopped at c.200mm below the ground surface due to *in-situ* remains of a grandstand. It comprised very loosely packed creamy white chalk pieces to 70mm (90%), with a mid brown silty clay (9%) and sub angular flints to 50mm (1%).

At the southwest end of the trench it overlay the bioturbated chalk (Context **86**), which was recorded from a depth of 1.1m to 1.3m. The solid chalk was not achieved. Interestingly a north to south aligned linear cut was recorded at the southwest end of the trench cut into the bioturbated chalk. Cut **78** was 500mm wide and had an exposed length of 7m, continuing to be both the south and north. It was a shallow feature, being only 150mm deep, with a broad u-shaped profile, and was filled by Fill **79** a mid yellowish brown silty clay containing frequent chalk flecking/nodules to 10mm and rare sub angular flints to 10mm.

The feature contained iron, glass and shell and was interpreted as a constructional feature relating to the *in-situ* wall lines identified in Trench 6 and on the same alignment. The southeast end of Trench 6 was very unstable and suffered a substantial baulk collapse overnight, even though the trench had been broadened out to 3.5m wide at this point. Therefore, Cut **78** was quickly recorded and the trench backfilled at this end.

At the northeast end of Trench 6, below the topsoil (Context **80**) Context **81** was revealed. This context was up to 800mm deep, and was an off white compact chalk, containing horizons of PFA (5%). Context **81** clearly sealed a truncated but partially upstanding wall line (Wall **84**) aligned north to south. Its exposed depth was c.900mm and maximum length was 3m but it continued in all directions. It was constructed from red bricks measuring 220mm by 110mm and 70mm thick, with 12 exposed courses laid in an English bond with a hard brownish yellow sandy mortar. Only the west facing side of the wall was revealed, having a very course finish with lumps of mortar overhanging the brickwork. Presumably this was a lower level interior wall face. The footing was not revealed, and the relationship with the made ground deposit Context **82** was not established.

The depth of the trench for much of its length was little more than 200mm-350mm below the ground surface as another wall line (Wall **85**) was exposed at this depth running mid trench north-south and continuing into both baulks. Wall **85** was a double thickness, single course of very truncated bricks, being the same dimensions and having the same mortar adhering to them as Wall **84**, but laid directly onto a very hard grey concrete footing with sub rounded gravel aggregate to 20mm (50%). The width of the concrete was c.100m but its depth was not attained. Wall **85** ran parallel with Wall **84** approximately 2.5m apart but with a footing depth much higher than that of Wall **84**. The top of the concrete/base of the bricks for Wall **85** was levelled to 120.33m OD whereas the lowest exposed brick course for Wall **84** was 119.64m OD.

Context **83** was recorded overlying Wall **85**, but in an uncertain relationship with the chalky made ground (Context **81**) which sealed Wall **84**. Context **83** was c.50mm thick where investigated and comprised a mixed mid greyish brown silty clay containing chalk flecking/nodules to 40mm (10%) and building demolition material, CBM/concrete/mortar (20%). What appeared to be large pieces of asbestos were also noted in Context **83**.

Both Contexts **81** and **83** clearly post dated the demolition of the buildings, whereas the made ground deposit Context **82** was probably contemporary with their construction. Especially seeing as how Context **82** sealed Cut **78**, which itself was interpreted as a constructional element based on artefactual material and its identical alignment to the Walls **85** and **84**.

Levels for the *in-situ* features in Trench 6 are shown in Figure 17 (Plan E2). The top of Trench 6 at its southwest end was levelled to 120.94m OD and its base to 119.63m OD. At its northeast end the top was levelled to 120.82m OD and its base to 119.64m OD.

The finds from Context **6** were of 20th century date. Interestingly though the brick from Wall **84** was of a mid 18th to 19th century date. This may indicate an earlier phase of building for this structure as the majority of demolition and structural material from all the trenches is of 19th to 20th century origin.

5.2.9 Trench 7 (Not Illustrated – Plate 9)

Trench 7 was cut in position as laid out in the WSI. It was orientated broadly north to south and measured 20m long by 1.8m wide, attaining a maximum depth of 1.3m at its southeast end. Trench 7 was positioned so that its southern end could sample an anomaly revealed during the geophysical survey.

The topsoil (Context **38**) was between 150mm-200mm and overlay a made ground deposit (Context **39**). Context **39** was up to 750mm thick maximum but wedged out towards the north end of the trench. It comprised a soft mid brownish orange silty clay containing frequent chalk nodules to 200mm and rare sub angular flints to 100mm.

Context **39** overlay Context **40**. Context **40** was not bottomed across the trench and was recorded as up to 1m thick. It formed a loose brownish-white silty clay containing sub angular flints to 100mm (5%), chalk nodules to 300mm (10%), concrete and reinforced concrete (15%) and CBM (5%). It was clearly a horizon of building demolition material probably relating to the demolition of one of the former stands, and presumably related to the anomaly identified during the geophysical survey. The underlying natural substrata as not exposed in this trench.

The top of Trench 7 at its northern end was levelled to 119.98m OD and its base to 118.84m OD. At its southern end the top was levelled to 119.95m OD and its base to 118.76m OD.

Material from Trench 7 indicated a mid to late 19th century date.

5.2.10 *Trench 8* (Not Illustrated – Plate 10)

As with Trench 2, Trench 8 was utilised to assess the depth of the made ground along the southeast edge of the site. It was cut in position but at a mid point along its proposed location. It measured 2.5m long, 1.5m wide and 2.3m deep. Trench 8 was orientated northeast-southwest.

The topsoil (Context **71**) was up to 100mm thick and overlay Context **72**, a friable mid brown sandy silty clay containing frequent chalk flecking/nodules to 30mm and rare sub angular flints to 40mm. Context **72** was interpreted as a sub soil and lay directly over a made ground deposit (Context **73**). Context **73** was a thick deposit of pulverised fuel ash (PFA) containing horizons of crushed chalk (5%). It was not bottomed at 2.3m below the ground surface at which point machining ceased on health and safety grounds.

The top of Trench 8 was levelled to 119.58m OD and its base to 117.39m OD.

No finds were recovered from Trench 8 but the PFA deposit indicates a 20th century date.

5.2.11 *Trench 9* (Fig. 18 Plan C2 and Fig. 19 Section C1, and Plates 11, 12 and 13)

Trench 9 was cut in position, being located so as to test an anomaly interpreted as a possible wall following the geophysical survey (Grid 13/14). It was orientated broadly northwest to southwest and measured 20m long by 1.8m wide and attained a maximum depth at its mid point of c.1.4m.

For the most part the stratigraphic sequence for Trench 9 was as follows and is illustrated in Fig. 19 (Section C1). The topsoil (Context **34**) was between 100mm-300mm thick and overlay a made ground deposit Context **35**. Context **35** was a loose light creamy brown silty sandy clay comprising chalk nodules to 50mm (75%) and rare sub angular flints to 30mm. It was up to c.1m thick and overlay another made ground horizon Context **37**. Context **37** was also up to c.1m thick and was a loose off white chalk with nodules up to 400mm in size. It contained aggregated patches of a mid brown silty clay (10%) and lenses of PFA (5%). Within Context **37** a finds rich dump of material was recorded Context **36**. Context **36** was a friable mid brown sandy silty clay with frequent chalk nodules to 200mm, and occasional sub angular flints to 100mm. Iron, pottery, glass and bone were recovered from this context.

Directly beneath Context **37**, Context **59** was identified. This was a friable dark brown silty clay with rare chalk flecking and sub angular flints to 20mm. Context **59** was between 50-100mm thick and was interpreted as a buried soil. In the northeast half of the trench it was seen to overlay the natural bioturbated chalk (Context **60**) at a depth of c.1.3m below the ground surface. The bioturbated chalk was only exposed in the northeast half of the trench and the solid chalk was not revealed along its extent.

At the southwest end of the trench, 2 structures were revealed. Context **55** was a north south aligned wall, only exposed in the southeast facing section of Trench 9. It lay immediately beneath the top soil (Context **34**) and formed ten courses of red brick laid predominantly in a Header bond with a friable brownish yellow sandy mortar. The brick themselves were of the same dimensions found in Trench 6, being 220mm long by 110mm wide and 70mm thick. The exposed face was cleanly finished and presumably related to a lower level internal facing wall. The ten brick courses were laid onto a footing approximately 100mm thick, which comprised a very hard grey concrete with sub rounded gravel aggregate to 30mm (50%). The exposed length of Wall **55** was c.2.4m and clearly continued to the south, however on its northern end it was bonded with another wall line (Wall **56a**) which ran perpendicular to Wall **55** on an east-west alignment, continuing into both trench baulks.

Wall **56a** was built of the same bricks as Wall **55** and formed 12 courses laid in a course Header bond but with a very friable brownish yellow sandy mortar, so much so that many of the bricks had become dislodged and lay at slightly irregular angles within the wall line. The exposed bricks of Wall **56a** faced south and its depth was c.1m. Its upper two courses were very truncated, and its lower courses continued beneath the base of the trench. No concrete footing was identified, and the footing on which Wall **55** was laid did not continue, instead rounding off at the junction between Wall **55** and **56a**.

Parallel to Wall **56a**, Wall **56c** was recorded with a distance between them of c.1m. Wall **56c** was also aligned east-west but was significantly more truncated in its upper levels. Eight courses of brick survived of the same form as the other walls, laid in an English bond with a well pointed very hard grey sandy mortar. The lower courses of brick in Wall **56c** were partially obscured by a discontinuous deposit of hard grey concrete with sub rounded gravels to 30mm (50%). The concrete appeared not to be a footing but instead adhered to parts of the wall. Wall **56c** continued below the excavated depth of the trench.

Adjacent and running parallel to the northwest facing baulk of Trench 9, wall lines Walls **56a** and **56c** were joined at right angles by another short stretch of wall, Wall **56b**. Wall **56b** was only revealed in plan but comprised a twin thickness of red brick bound with a hard brownish yellow sandy mortar, with four courses exposed. Wall **56b** was bonded with Wall **56a/c** and together Walls **56a-c** formed a coherent structure.

Investigation of the deposits contained between Walls **56a-c** was undertaken to a depth of c.200mm and revealed that made ground deposit Context **35** was overlain by a thin layer of sub round flint cobbles Context **61** to 20mm thick. On Context **61** a thin strip of iron was recorded, possibly tied into Wall **56b**, and measuring c.200mm wide by c.900mm long. It may be that this piece of metal once acted as structural brace but had since become partially dislodged/broken.

Alternatively it may have simply been demolition material. Contexts **57** and **58** were a very mixed demolition deposit ranging in colour and containing concrete blocks (15%), PFA (60%), chalk debris (10%) and CBM (5%). Context **58** was recorded as a thin horizon overlying the shingle Context **61** whereas Context **57** was excavated from in the southeast extent of Trench 9, and contained within wall lines Context **56a** and **55**.

A range of levels for Trench 9 relating to the *in-situ* structural deposits are shown on Fig. 18 (Plan C2). However the top of Trench 9 at its northeast end was levelled to 119.36m OD and its base to 118.16m OD. The top at its southwest end was levelled to 119.68m OD and its base to 118.52m OD.

Finds from Trench 9 Contexts **34**, **35**, **36**, **37** and **58** were all 19th to 20th century origin.

5.2.12 Trench 10 (Fig. 20 Plan T10 and Sections, and Plates 14 and 15)

Trench 10 was re-orientated slightly so as to avoid buried services. It was aligned northeast to southwest between the tarmac road and the racecourse, and measured 20m long by 1.8m wide and attained a maximum depth of 780mm.

The stratigraphic profile in Trench 10 was the same as encountered in Trench 5, both trenches being located parallel to the tarmac road on its northwest edge. The top soil (Context **20**) was between 100mm-120mm thick and overlay a made ground deposit (Context **21**). Context **21** was between 200mm-400mm thick and comprised a mid grey brown sandy loam with darker brown patches, containing chalk nodules to 75mm (75%), and rare sub angular flints to 100mm. Context **21** sealed Context **22** which was a c.100mm thick horizon of firm dark brown sandy clay loam with occasional chalk flecking/nodules and rare sub angular flint nodules to 50mm. Context **22** was interpreted as buried soil, probably relating to a former land surface. Below Context **22** the bioturbated chalk Context **23** was exposed being c.150mm thick and directly overlying the more solid chalk Context **24**. As with Trench 5 the exposed deposits appeared to slope down to the southeast clearly following the original topographic fall of the landscape down slope from the northwest to the southeast

Three undated features were excavated and recorded in Trench. At its northeast end a small sub circular post hole was located (Cut **48**). Cut **48** was approximately 300mm in diameter and 90mm deep with steep sides to flat base. It was filled by Fill **49**, a friable light greyish brown sandy silty clay. The feature was 100% excavated but no finds were recovered.

To the southwest, located roughly mid trench another slightly larger post hole (Cut **50**) was excavated. Cut **50** was c.500mm in diameter and up to 300mm deep with steep sides and a slightly rounded base. Its primary fill (Fill **52**) was up to 300mm thick and formed a loose mid yellowish brown sandy silty clay containing very frequent chalk nodules to 20mm. Above Fill **52**, Fill **51** was recorded. This was a friable dark brown silty sandy clay with frequent chalk and sub angular flint nodules to 20mm. Fill **51** was interpreted as a possible post pipe.

The post hole cut was 100% excavated, and a 10 litre soil sample taken. Fill **52** produced a small sherd of pot and small piece of glass. Fill **51** contained a few small fragments of bone, and further small fragments were found in the soil sample. Approximately 3m to the southwest another small sub circular feature was recorded. Cut **53** was c.300mm in diameter and c.180mm deep, with steep sides and a flat base. It was filled by Fill **54**; a friable dark yellowish brown sandy silty clay containing frequent sub angular flint pieces to 20mm and frequent chalk nodules to 20mm.

At its southwest end the trench was offset slightly to avoid an electric cable running alongside the road. Several lighter patches of chalk were also investigated in Trench 10 which proved to be either geological variation, or root disturbance. It is worth noting that wherever nebulous darker areas of material were investigated, such as in Trench 5 and Trench 14, a thin interface of light friable chalk was identified beneath. Given the probable shallow tree boles in Trench 5 and the lighter patches of lighter chalk in Trench 10, it is possible that they represent a tree line formerly running parallel to the racecourse.

The top of Trench 10 at its northeast end was levelled to 119.57m OD and its base to 118.91m OD. At its southwest end the top was levelled to 119.44m OD and its base to 118.91m OD.

Dateable artefacts were only recovered from the topsoil in Trench 10 and were of late 18th to 19th century origin.

5.2.13 *Trench 11* (Fig. 14 Section A2, and Plate 16)

Trench 11 was cut in position, and orientated north to south. It measured 20m in length and 1.8m wide attaining a maximum depth of 1.4m.

At its southern end c.100m of topsoil (Context **14**) overlay a thin horizon of made ground Context **15**. Context **15** was between 100mm-200mm thick and formed a friable light brown silty clay with very frequent chalk flecking/nodules to 50mm (20%) and rare sub angular flints to 30mm. Context **15** wedged out to the north of Trench 11. Below Context **15** another thick deposit of PFA was present Context **16**. The pulverised fuel ash (Context **16**) was a very compact mid bluish grey with occasional pockets of crushed chalk (5%). At the south end of the trench Context **16** was not bottomed and reached up to 1m thick. The excavation of Trenches 2 and 8 would indicate that Context **16** in Trench 11 continued to greater depth.

To the north of Trench 11 Context **16** wedged out and overlay another made ground deposit Context **17**. Context **17** was up to 500mm thick and formed a loose off white chalk with nodules up to 200mm mixed with frequent aggregated mid brown silty clay (5%) and rare sub angular flints 20mm. Beneath the made ground (Context **17**) Context **18** was recorded. This was a mid to dark brown silty sandy clay with occasional chalk flecking/nodules to 30mm and rare sub angular flint nodules to 50mm. Context **18** was interpreted as a buried soil probably lying on the former ground surface. It lay directly over the bioturbated chalk Context **19** which was up to 200mm thick. At the extreme north end of the trench solid chalk Context **33** was also exposed, from c.700mm below the ground surface.

The top of Trench 11 at its north end was levelled to 119.45m OD and its base to 118.69m OD. At its south end the top was levelled to 119.33m OD and its base to 118.11m OD.

Finds from the buried soil (Context **18**) were of a 19th century date.

5.2.14 *Trench 12* (Fig. 14 Section A3, and Plate 17)

Trench was cut in position. It was orientated northeast to southwest and measured 21m long by 1.8m wide, attaining a maximum depth of 1.1m in a sondage at its southwest.

The topsoil (Context **10**) was up to 100mm thick and overlay Context **12**; a mid greyish brown friable sandy silty clay between 100mm-200mm thick and containing chalk flecking/nodules to 40mm (5%) and rare sub angular flints to 20mm. Context **12** was interpreted as a possible sub soil, or thin horizon of made ground. The bioturbated chalk Context **11** lay below Context **12** and was between 100mm-200mm thick The solid chalk Context **13** was encountered from a depth of 350mm-4500 below the ground surface. A sondage excavated at the southeast end of the trench to a depth of 1.1m confirmed the stratigraphic sequence, and also showed how the solid chalk became increasingly more compact with depth.

Four post holes were also excavated in Trench 4, and from southwest to northeast were recorded as Cut **25** filled by Fill **26**, Cut **27** filled by Fill **28**, Cut **29** filled by Fill **30** and Cut **31** filled by Fill **32**. All were of modern origin and produced a small array of finds including a plastic comb, concrete, corroded sheet iron and glass. An alignment of 4 paired T-irons, with each pair secured to an iron plate, buried with the T-irons set vertically were also recorded in Trench 12. They possibly once supported a substantial fence line which may have continued through Trench 11, as a solitary pair was also recorded in the north end of that trench.

The top end of Trench 12 at its northeast end was levelled to 120.15m OD and its base to 119.83m OD. The top at its southwest end was levelled to 119.54m OD and the base of the sondage to 1189.52m OD.

Finds recovered from Trench 12 were of a mid 19th to early 20th Century date

5.2.15 *Trench 13* (Not Illustrated – Plates 18)

Trench 13 was excavated on the northwest side of the race track. It was located within a triangular area demarcated with a large metal fence. Because of buried services and the restricted nature of the area, the trench was reduced in length to 10m. It was orientated east to west and measured 10m long by 1.8m wide, attaining a maximum depth of 1m in a sondage excavated at its east end.

Up to 200mm of top soil (Context **87**) was recorded directly overlying the bioturbated natural chalk (Context **88**). The solid chalk (Context **89**) was exposed from a depth of between 300mm-400mm. Two features were excavated in the west end of the trench were cut into the surface of the bioturbated chalk. Cut **90** was sub circular in plan measuring c.400mm in diameter with very steep sides to an almost flat base. It was filled by Fill **91**; a loose light greyish sandy silty clay containing chalk nodules to 20mm (10%) and sub angular flints to 30mm (5%). Immediately to the southeast Cut **92** was recorded; being rectangular in plan and measuring 440mm x 410mm by 100mm in depth. It had vertical sides to a flat base and was filled by Fill **93**; a loose dark greyish brown sandy silty clay containing frequent chalk nodules to 30mm and rare sub angular flints to 20mm. Cut **92** produced a large piece of flat concrete during excavation, and Cut **90** a small sherd of glass. Certainly Cut **92** was of modern origin, and it seems likely that Cut **90** was also a recent feature. However Trench 13 was clearly located on the original land surface and no made ground deposits were present, just a normal down land sequence of stratigraphy.

A tree bole (Cut **94**) was also investigated mid trench, revealing a feature of shallow irregular morphology with undercut edges. A relatively large number of sub angular flints to 100mm (5%) were noted in its fill (Fill **95**). A thin horizon of pale degraded chalk was again recorded at the interface between the darker material and the solid chalk Context **89**.

The top of the trench at its west end was 121.90m OD and its base to 121.63m OD. At its east end the top was levelled to 122.12m OD and the base of its sondage to 121.17m OD.

The top soil in Trench 13 contained 20th century cement.

5.2.15 *Trench 14* (Fig. 17 Section E4, and Plates 19 and 20)

Trench 14 was also located on the northwest side of the race track. However its position was altered to avoid the hard cored track that linked the main road to the fenced triangular area. Its new location ran parallel to the track just to the southwest of its bund. Because of spatial constraints the trench was also reduced in length to 10m. Its alignment was northwest to southeast and final dimensions 10m long by 1.8m wide with a maximum depth of 700mm depth.

The topsoil (Context **96**) was up to a maximum of 250mm thick and directly overlay the natural bioturbated chalk Context **97**. The solid chalk (Context **98**) was exposed from a depth of 400mm below the ground surface, and a sondage excavated in the northwest end of the trench confirmed the stratigraphic sequence.

A thin irregular patch of degraded chalk (Context **99**) was investigated mid trench and interpreted as either geological variation or further root/animal disturbance. No significant archaeological features were identified in Trench 14.

The top of Trench 14 at its southeast end was levelled to 121.35m OD and at its base to 120.74m OD. At its northwest end the top was levelled to 120.57m OD and the base of the sondage to 119.87m OD.

No dateable artefacts were recovered from Trench 14.

6.0 THE FINDS

6.1 *Introduction*

6.1.1 The archaeological work recovered a moderately sized assemblage of finds. The material is quantified in Table 2, where an approximate spot date is also given for each relevant deposit, and Table 4.

6.1.2 The assemblage of finds from the site is moderately sized, predominantly late in date and from open contexts. As such the vast majority of the assemblage is not considered to hold any potential for further analysis and is recommended for discard. The assemblage from Context **47** is potentially of more interest as groups of this period are not that common (most refuse of this period ending up in large municipal dumps). If further work at the site recovers more from this midden, and it can be historically sourced, the whole assemblage may need further evaluation.

6.2 *Pottery and Clay Tobacco Pipe* by Luke Barber

6.2.1 The pottery from the site is very variable in sherd size, with pieces ranging from under 10mm to 50mm across. Despite this the material does not show extensive signs of abrasion though this may be due to the hard-fired nature of the wares represented. All of the pottery from the site is of the late post-medieval period.

6.2.2 The earliest sherds consist of one or two pieces of late 18th to early 19th century date. These include a residual late creamware sherd from Context **1** and a scatter of pearlware sherds, probably of the early 19th century. The pearlwares are dominated by transfer-printed plates, typically with blue Chinese landscapes (Context **1**) or floral designs (Context **4**). Context **3** also produced three sherds from an industrially slipped pearlware measure tankard/jug with sprigged crowned 'VR'. With the possible exception of the single sherd from Context **4**, all of the pearlware appears to be residual.

Table 2: Quantification of Pottery, Ceramic Building Material, and Clay Tobacco Pipe (number of pieces/weight in grams)

Context	Pottery	Ceramic Building Material	Clay Tobacco Pipe	Spot Date
Walk Over	6/45g	Peg tile 1/5g	-	C20th
1	6/58g	Peg tile 1/26g Cement tile 1/17g	Clay pipe 1/2g	C19th – 20 th mix
2	5/123g	Brick 6/3,375g Peg tile 2/241g	-	Later C19th – mid 20 th
3	12/301g	Brick 3/9,165g Drain 7/1,054g	-	Mid/late C19th
4	1/10g	-	-	Early C19th
18	2/16g	-	-	C19th
20	-	Peg tile 1/11g	-	Late C18th – 19 th
22	7/19g	Peg tile 1/29g	Clay pipe 2/3g	Mid C19th – early 20 th
30	2/5g	-	-	Mid C19th – early 20 th
34	1/16g	Brick 1/105g	-	C20th
35	-	Brick 1/27g	-	C20th
36	4/86g	Drain 2/310g	-	Mid C19th – 20 th
37	-	Brick 1/2,700g	-	C20th
40	-	Brick 1/2,450g	-	mid/late C19th
46	11/178g	Peg tile 1/274g Decorative tile 1/274g	-	C20th
47	92/1,328g	Floor tile 1/51g	-	Early/mid C20th (c. 1900-1940)
56	-	Brick 1/1,875g	-	C20th
58	2/5g	Floor tile 2/265g	-	Mid C19th – mid 20 th
83	-	Brick 1/3,125g	-	C20th
84	-	Brick 1/1,925g	-	Mid C18th – 19 th
87	-	Cement tile 1/131g	-	C20th

6.2.3 Although there is a scatter of transfer-printed wares which could be of the middle of the 19th century the vast majority of the assemblage can be placed in the late 19th to 20th centuries. A typical range of domestic wares is represented: unglazed earthenware flower pots (Contexts **2**, **18** and **47**), glazed red earthenware bowls (Contexts **3** and **47**), Sunderland-type slipware (Context **3**), English stoneware bottles (Contexts **2**, **3**, **36**, **46** and **47**), transfer-printed ware plates (Contexts **2**, **3**, **22**, **30**, **36** **47** and **58**), refined white earthenware plates and bowls (Contexts **18**, **22**, **30**, **46** and **47**) and English porcelain plates and cups (Contexts **1**, **22**, **46** and **47**). With the exception of the midden assemblage from Context **47** makers' marks are restricted to a single vessel from Context **46** – an English stoneware preserve jar with its base stamped 'Not Genuine Unless Bearing The Wm P. Hartley Label'.

6.2.4 The largest context assemblage from the site by far was recovered from Context **47** which produced 92 sherds (1,328g). A wide range of domestic wares are represented and the group as a whole appears to represent an uncontaminated assemblage dumped during the early 20th century, perhaps between 1900 and 1940. The group is summarised in Table 2.

6.2.5 Only three clay pipe pieces were recovered. All consist of quite fresh, but plain, 19th century stem fragments (Contexts **1** and **22**).

Table 3: Context 47 Pottery Summary.

Ware	No.	Weight	Forms	Notes
Glazed red earthenware	1	36g	Storage jar	
Unglazed red earthenware	12	180g	Flower pots	
Yellow ware	3	66g	Mixing bowl	Internal white slip, moulded decoration on outer surface
Normandy stoneware	1	11g	Margarine pot	
Refined red earthenware	3	51g	Teapots	Brown glazed
English stoneware	19	407g	Ginger beers and preserve jars	X1 Hartley preserve jar (as from [46]), x1 black transfer-printed Brighton ginger beer and x1 Bourne Denby produced bottle
Transfer-printed ware	9	124g	Plates, wash bowl	Mainly blue floral designs
Coloured 'china'	4	69	Inc Jug/vase	Blue & red/purple
Refined white earthenware (plain 'china')	30	285g	Plates, cups	X1 with black transfer-print of a Brighton crest; x1 with maker's print ...?SH AND...ENGLAND'; x1 with maker's print [BE]NNETT & Co, [VI]CTORIA POTTERY, [B]URSLEM, STAFFS below crown
Pearlware	2	8g	Bowl	Blue transfer-print. Residual?
English porcelain	7	85g	Cups & saucers	
Chinese porcelain	1	5g	Unknown	Blue floral decoration

6.3 *Ceramic Building Material* by Luke Barber

6.3.1 A relatively large collection of ceramic building material was recovered from the site. The majority consists of whole or fragmentary bricks all of which can be placed in the 19th to 20th centuries. The earliest examples are probably of the later 18th to mid 19th centuries. These include a complete quite well formed and fired unfrogged brick (220 x 110 x 60mm) tempered with abundant fine/medium sand from Context **84** as well as some early, quite crudely made frogged bricks likely to be from the latter part of this date range.

6.3.2 The latter include a very crude example (235 x 92 x 70mm) with deep dished frog, tempered with sparse fine sand with moderate slag and flint to 3mm (Context **40**) as well as three quite rough-formed examples tempered with abundant slag and having ill-defined shallow frogs (226-230 x 102-105 x 65-68mm) from Context **3**. These slag-tempered bricks all contain the same orange buff sandy mortar demonstrating they derived from the same structure.

6.3.3 Four notable 20th- century bricks are present. Context **2** produced part of a press-moulded frogged brick in a dense red fabric with abundant clay pellet inclusions. The frog is clearly stamped 'WARNHAM' over 'SB CO' (Sussex Brick Company). Contexts **56** and **83** produced complete frogged London Brick Company bricks (220 x 105 x 65mm), both well formed with abundant white clay pellets. The frogs are stamped 'LBC' over 'PHORPRES'.

- 6.3.4** Two more fragments from Contexts **34** and **35** are also in the London Brick Company fabric. Context **37** produced a complete press-moulded cover brick for an electricity cable run. The piece, which measures 230 x 110 x 41mm (to 52mm at the apex) is formed in a very dense fine sandy fabric with 'ELECTRIC CABLES' stamped on its upper surface, with the maker, 'BALDWIN' stamped between in smaller letters.
- 6.3.5** Relatively little tile was recovered. Most consists of well formed and fired peg tile pieces tempered with sparse fine sand, occasionally with white clay swirls (e.g. Context **2**). These are likely to be of 19th century date. A decorative tile, possibly for wall cladding, with moulded edge from Context **46** is in a similar fabric range and is probably of the same date. The 20th century is represented by press-moulded tiles in typically granular fabrics from Contexts **1** and **46** as well as two fragments from sandy cement tiles from Contexts **1** and **87**. Patterned glazed floor tiles of late 19th to early 20th century date were recovered from Context **47** (a 20th- century example with brown and black design) and Context **58** (a blue/black chequerboard design).
- 6.3.6** The work also produced a number of fragments of salt-glazed stoneware drain of later 19th to mid 20th century date (Contexts **3** and **36**).

6.4 *Flintwork* by Chris Butler

- 6.4.1** A small assemblage of flintwork comprising 19 pieces weighing 311gms was recovered during the project, together with three pieces of fire-fractured flint weighing 133gms. The assessment comprised a visual inspection of each piece of worked flint, noting details of the range and variety of pieces, general condition, and the potential for further detailed analysis. Classification follows Butler²³.
- 6.4.2** Most of the pieces were hard hammer-struck flint flakes, most of which were undiagnostic in character, although the two flakes from Context **20** appear to be fresh, and do not have the usual traits of prehistoric flintwork, possibly resulting from later accidental damage. The only soft hammer-struck flake (Context **22**) is well patinated, suggesting an earlier date than the remaining pieces.
- 6.4.3** Two possible cores or core fragments were also recovered. The first was from Context **18**, a buried soil, and was a small two-platform flake core in a mottled grey flint, with some evidence for possible platform preparation. The second possible core, from Context **87**, also had two-platforms, and was quite small.
- 6.4.4** Context **22**, a buried soil, produced the largest group of flintwork, comprising six hard hammer-struck flakes, the soft hammer-struck flake, and two chips, together with the two fire-fractured flints. This is almost certainly evidence for residual prehistoric activity, preserved within the buried soil.

²³ Butler, C. 2005 *Prehistoric Flintwork*, Stroud, Tempus Publications Ltd

Table 4: Other Finds
(number of pieces/weight in grams)

Context	Flintwork	Glass	Metal	Bone/shell	Other
U/s	4 / 24g	1 / 13g	-	1 Shell / 1g	1 Coin
1	-	3 / 21g	1 / 4g	1 Bone / <1g	2 Coins
2	-	3 / 24g	6 / 54g	-	-
3	-	40 / 2.655kg	2 / 57g	33 Shell / 2.108kg 1 Bone / 3g	3 Stone / 130g
10	-	-	-	-	1 Coin
12	-	-	2 / 48g	-	1 Coin
18	1 / 36g	2 / 44g	-	-	-
20	2 / 42g	9 / 70g	2 / 11g	-	1 Coin
22	9 / 144g 2 FF / 85g	8 / 71g	8 / 35g	1 Bone / 1g 1 Shell / 42g	1 Stone / 17g
26	-	-	1 / 1g	-	3 Slag / 61g
28	-	1 / 2g	47 / 183g	-	6 Slag / 31g
30	-	15 / 75g	5 / 58g	-	4 Wood / 3g
32	-	3 / 10g	1 / 6g	-	1 Plastic / 4g
34	-	2 / 59g	-	-	-
35	-	-	4 / 75g	-	-
36	-	5 / 167g	5 / 101g	25 Bone / 167g	
42	-	1 / 152g	-	-	-
46	1 / 34g 1 FF / 48g	8 / 328g	-	1 Bone / 7g	2 Stone / 56g 1 Mortar / 22g
47	-	249 / 1.082kg	5 / 147g	1 Shell / 17g 2 Bone / 23g	1 Stone / 5g 4 Asbestos / 77g 1 Plastic / 1g
51	-	-	-	14 Bone / 3g	-
52	-	1 / 4g	-	-	1 Rubber / <1g
58	1 / 1g	13 / 56g	6 / 60g	1 Bone / 2g	1 Tube / 4g 1 Stone / 3g 1 Slag / 59g
79	-	8 / 17g	2 / 84g	12 Shell / 44g	-
82	-	2 / 260g	-	-	1 Coin
83	-	3 / 13g	-	-	11 Asbestos / 883g
84	-	-	-	-	3 Mortar / 20g
87	1 / 30g	1 / 58g	-	-	-
91	-	1 / 6g	-	-	-
93	-	-	2 / 14g	-	-

6.4.5 This small assemblage of flintwork is very difficult to date, although the lack of white patination on almost all of the pieces would indicate that it is not contemporary with the Neolithic causewayed enclosure to the south of the site. Apart from the core in Context **18** and the soft hammer-struck flake in Context **22**, the remainder of the assemblage is likely to date to the Later Neolithic or Bronze Age.

6.4.6 It is recommended that no further work be undertaken on this assemblage, although the flintwork should be retained for possible further study in the future, or incorporated into a report if further work is to be undertaken at the site. The summary above should be included in the report.

6.5 *The Glass* by Chris Butler

6.5.1 A total of 154 pieces of glass, weighing 5.118kg were recovered (Table 4). The vast majority of the glass derives from bottles, although there were 11 pieces of window glass and two fragments from cut glass vessels, probably bowls.

6.5.2 The largest groups of glass came from Contexts **3** and **47**, both of which were midden deposits. Context **3** produced 40 pieces of glass, mostly from green glass bottles, including three large mineral water bottle bases with kick-ups, and five smaller bottles, four with kick-ups and one flat-bottomed. A light green thick-walled bottle base had a flat bottom, and had been made in two moulded halves. All of the bottle fragments from Context **3** date to the latter part of the 19th century.

6.5.3 Context **47** produced one complete bottle and 23 pieces of glass. The complete bottle was a small perfume or ointment bottle 83mm high, in clear glass, made in two moulded halves with an applied lip, and weighing 86gms. On the base is embossed A52/C23/UGB. UGB refers to United Glass Bottle Manufacturers Ltd, which was formed in 1913.

6.5.4 Other bottle fragments from Context **47** include a fragment from a light green bottle embossed with []YLANDS BA[]; this bottle was made by Rylands Glass & Engineering Company, which was producing Codd bottles from the 1870's and went out of business in 1927. Other fragments include a brown glass bottle base embossed with MILTON; probably a Milton Chemists medicine bottle, an oval brown bottle base with CTG, and a green tinted bottle fragment embossed with CHAMPION.

6.5.5 Also found in Context **47** were base fragments from three clear glass tumblers, pieces from brown, green and clear glass bottles; the neck of a brown beer bottle with an aluminium bottle top still in place, a brown mineral water bottle neck & rim, and five pieces (69g) from a white glass jar with external screw thread. The glass from this context is all of a late 19th or early 20th century date.

6.5.6 A complete clear glass medicine bottle was found in Context **46**. This was rectangular in shape, and 120mm tall, made in two moulded halves with an applied rim. The base has GB on it. This bottle dates from the late 19th to early 20th century. Four fragments (186g) from clear glass milk bottle(s) were also found in Context **46**. One is embossed with BRIGHTON 'DAIRIES' and SAFETY FIRST', and probably dates to the mid 20th century.

6.5.7 Context **36** produced a number of green bottle fragments, including a base from a late 18th to early 19th century light green bottle, and a rectangular bottle embossed with []NSEED / []MPOUND/TRADEMAR[]. This is almost certainly a bottle of Linseed Compound, which was used as a laxative, possibly produced by Kays Brothers of Stockport in the late 19th century.

6.5.8 Although the glass ranges in date from the 18th through to the 20th century, the majority of dated or diagnostic pieces come from the later 19th and early 20th century. The bottles are predominantly for mineral water or beer, although a small number appear to be medicine or chemists bottles. It is recommended that no further work is undertaken on this assemblage of glass.

6.6 *The Coins* by David Rudling

6.6.1 Seven nineteenth and twentieth century coins were submitted for identification and recording purposes:

6.6.2 *England*

1. Victoria. Bronze 'bun head' issue halfpenny. Dated 1873. Trench12, Context **12**.
2. George V. Bronze halfpenny. Dated 1916. Trench 6, Context **82**.
3. Elizabeth II. Nickel-brass one pound. Dated 1987. Surface find.
4. Elizabeth II. Bronze new penny. Dated 1979. Context **20**.
5. Elizabeth II. Bronze new halfpenny. Dated 1971. Context **1**.
6. Elizabeth II. Bronze new halfpenny. Dated 1971. Context **1**.

Ireland

7. Bronze new penny. Dated 1982. Context **10**.

6.7 *Animal bone* by Chris Butler

6.7.1 A small assemblage of 46 pieces of animal bone weighing 203g was found (Table 4). Most of the bones were small unidentifiable fragments, although Context **47** produced single examples of sheep and pig bones.

6.7.2 Context **36** produced the largest group of animal bone comprising 25 pieces weighing 167g. This included fragments of rib from both cattle and sheep, a sheep tibia and pelvis fragment, a chopped pig limb bone, and two chicken bones. Some bones had evidence of butchery, and a few appeared to have been gnawed.

6.7.3 Context **51** produced 14 small fragments of bone, whilst the soil sample from Contexts **51/52** also produced numerous very small fragments of degraded bone, none of which could be identified.

6.8 *Marine Molluscs* by Chris Butler

6.8.1 Four contexts produced marine molluscs (Table 4). A large quantity of marine molluscs was found in Context **3**, and a representative sample was collected. This comprised 28 oyster shells (2.108kg), mostly of a large size, with 14 being upper shells and 12 lower shells. Most were free of infestations, although one upper shell was very badly infested. Five large common whelk shells (78g) were also recovered from Context **3**.

6.8.2 A single oyster shell was found in Context **22**, whilst 12 oyster shell fragments were recovered from Context **79**. A single fragment of scallop shell was found in Context **47**.

6.9 *Metal objects* by Chris Butler

6.9.1 Metal objects were recovered from most contexts across the site. Most of the metal objects were iron, with two fragments from aluminium cans (Contexts **3** and **58**) and a can pull (Context **20**), and two pieces of lead (Contexts **3** & **30**).

6.9.2 The iron objects were mostly nails of various types, but there were also examples of a screw, bolt head, wire and a washer. Parts of iron fittings (e.g. plates, hinge, brackets) and a fragment from a small horseshoe were also found. None of these items are particularly diagnostic, and all date from the late 19th to 20th century.

6.10 *Other finds* by Chris Butler & Luke Barber

6.10.1 A fragment from a plastic comb was recovered from Context **32**, whilst a small fragment of rubber came from Context **52**. Both of these date to the mid 20th century or later. A toothpaste tube for Macleans peroxide toothpaste was found in Context **58**. Macleans Ltd was established in 1919, and acquired by Beechams in 1938. Peroxide toothpaste was developed in 1927. The style of the tube suggests a date in the 1950/60's.

6.10.2 Four fragments of wood were found in Context **30**, whilst clinker/slag pieces were recovered from Contexts **26** (3/61g) and **28** (6/31g). A single piece of dense iron slag was recovered from Context **58**. This piece is not particularly diagnostic of process but its clean consistence suggests it is of Post-Medieval date.

6.10.3 All of the stone from the site consists of fragments from roofing slates. With the exception of a small finer-grained silver-grey spotted example from Context **58** (unknown source) and a piece of Medieval West Country slate from Context **47** all are of typical Welsh slate and are likely to be of 19th to early 20th century date.

6.10.4 A small fragment of grey sandy cement render (with blue paint on its finished/outward surface) of probable 20th century date was recovered from Context **46**. The only other pieces (excluding bits adhering to the bricks mentioned above) consist of dull yellow sandy mortar from Context **84**. The site also produced a few pieces of asbestos board (Table 4).

6.11 *Environmental samples* by Chris Butler

6.11.1 A single soil sample was taken from Context **51/52** (Table 5). The sample comprised 10 litres collected in two 5 litre tubs. A sub-sample of 5 litres was initially processed to assess whether the sample had any potential for organic or micro-faunal remains.

6.11.2 The sample was processed using bucket floatation, with the residue being washed through a 1mm mesh sieve. Once the residue was dry it was sorted by eye to extract material of archaeological and environmental interest. The results are shown in Table 5.

Table 5: Environmental Sample

Context	Modern roots	Charcoal	Seeds	Molluscs	Residue
51/52	-	*	-	*	Bone ** Glass * Flint * FF Flint *

Frequency Key: None - ; Very low * ; Low ** ; Moderate *** ; High ****

6.11.3 The floatation produced small quantities of charcoal and molluscs, together with two (intrusive?) insects. Further small quantities of charcoal were found in the residue. Numerous small fragments of bone were found during the floatation and from the residue. These were all <10mm in size, and most were much smaller; all were very eroded, and none could be identified. The residue also produced a small quantity of fire-fractured flint, one or two flint chips and a single small fragment of green glass.

6.11.4 The processed samples and residue has been retained in the archive. It is recommended that no further processing of the soil samples is undertaken, and the remaining un-processed sample be discarded.

7.0 DISCUSSION (Fig. 21)

- 7.1 The geophysical survey and archaeological evaluation undertaken between January and March 2010 proved to be highly productive. Several geophysical anomalies were successfully investigated and a range of archaeological deposits were exposed, including the *in-situ* remains of 20th century structures. These were most probably surviving walls, once belonging to the 1930's race course stands that once occupied the site. Most importantly, the extent, and in many areas the depth, of the made ground was established. Thus allowing for an assessment of where archaeologically significant deposits may survive, and whether they are preserved at a depth likely to be impacted by the development proposals.
- 7.2 The geophysical survey highlighted a number of anomalies, of particular interest were a couple of distinct rectilinear features which appeared to outline two separate rectangular buildings approximately 80m apart, but positioned centrally to the main body of the site. Trenches 6 and 9 were therefore located in order to investigate these potential structures (Grids 7/8 and 13/14). At its extreme southwest end Trench 9 confirmed the presence of upstanding structural remains, with an east-west Wall **56a-c** crossing the width of the trench, bonded to southerly running return Wall **55**. Both wall structures were exposed little more than c.100mm below the ground surface.
- 7.3 In Trench 6 two more wall lines were revealed, both on a north-south orientation and running parallel, approximately 2.5 apart. Wall **84** was exposed in the northeast end of the trench whilst Wall **85** ran obliquely across the central portion of the trench. Due to its location wall line Wall **85** was only exposed in plan, and both structures were encountered a little over 100mm below the ground surface. Interestingly a brick recovered from Wall Wall **85** indicated a mid 18th to 19th century date, which was somewhat incongruous with the 19th to 20th century date of the surrounding demolition material and structures Walls **55** and **56a-c** in Trench 9.
- 7.4 Thus, it may be that Wall **84** represents a slightly earlier phase of construction. Furthermore, given that the geophysical interpretation has proved correct in establishing the presence of these structures, it seems reasonable to assume that the geophysics was also correct in indicating the potentially substantive survival of rectangular buildings immediately below the current ground level in these locations.
- 7.5 Trenches 4 and 7 were also located so as to test the geophysical anomalies. Trench 4 identified a possible concrete raft at its northwest end approximately 50mm below the ground which may have been *in-situ*, although this was not proved. No structures were revealed in Trench 7 but both Trenches 4 and 7 encountered comparatively dense concentrations of demolition material, most notably large blocks of concrete, and reinforced concrete. It is possible that further structures once stood in both these locations.

- 7.6** On the whole the evaluation in the area of the new car park was most notable for the abruptly changing depth of made ground, as well as the variety of materials that had been used to build up the area. In the vicinity of the probable structures (Trenches 4, 6, 7 and 9) demolition material appeared to dominate, although at depth variable chalk matrixes were also recorded. Conversely in Trenches 1, 5, and 10 located around the northwest and southern edges of the main area, chalk rubble comprised the majority of made ground deposits. However, the trenches nearest to the southeast boundary and its steep embankment revealed deep deposits of pulverised fuel ash (PFA). In the southeast end of Trench 11 the PFA was not bottomed at 1.3m below the ground, whilst in Trenches 2 and 8 it was not bottomed at 2m and 2.3m respectively.
- 7.7** The majority of artefactual material recovered belonged to the 19th and 20th centuries, although the assemblage was too small and lacked suitable resolution to attempt any close phasing of the made ground deposits. However what is clear is that the depth of made ground increases dramatically with the natural topographic gradient of the landscape, falling from the northwest to the southeast. In those trenches closest to the race track (Trenches 5 and 10) the made ground reached between 500mm-700mm below the ground surface, whereas the trenches closest to the southeast boundary (Trenches 2, 8 and 11) revealed made ground in excess of 2m. In general the trenches located along the middle portion of the main area (Trenches 1, 4, 6, 7, and 9) revealed made ground deposits reaching between 1.2m and 1.4m below the ground surface, possibly deeper in some places.
- 7.8** Of further note was the buried soil encountered in Trenches 1, 4, 5, 9, 10 and 11 (Contexts **6, 62, 43, 59, 22, and 18**). This deposit seemed relatively consistent and in all but one instance was recorded directly overlying the bioturbated soil at depths between 360mm and 1.3m below the ground surface. The depth below ground surface of the buried soil appeared to increase from the northwest to the southeast, again following the former topographic gradient. Interestingly, in Trench 1, located at the southwest end of the site, the buried soil (**Context 6**) sealed further made ground deposits rather than lying on the natural chalk suggesting an earlier phase of landscaping, at least at the southwest end of the site. Artefacts recovered from the buried soil deposits indicate a 19th century origin with residual prehistoric flintwork.
- 7.9** Most significantly in archaeological terms were the depths of Trenches 3, 12, 13, 14. In Trench 3 positioned in the southwest corner of the main area the natural substrate was exposed at between 230mm and 250mm below the ground surface. No made ground deposits were encountered, and whilst no archaeological features were exposed the potential for significant archaeological deposits surviving in this area is considerable. Any such remains would be especially important given the trenches close proximity to the upstanding remains of the Scheduled Ancient Monument.

- 7.10** At the opposite end of the site, Trench 12 on the southeast side of the track and Trenches 13 and 14 on its northwest side also revealed relatively shallow overburden, with little evidence for dramatic disturbance or landscaping. In these trenches the natural bioturbated chalk was exposed between 180mm and 250mm below the ground surface. Modern cut features recorded in Trenches 12 and 13 (Contexts **25, 27, 29, 31, 90** and **92**) indicated the potential for surviving archaeological deposits in these localities.
- 7.11** Furthermore, Trenches 5 and 10 indicated that archaeological deposits may have survived at comparatively shallow depths alongside the track itself. Trench 10 revealed three undated postholes (Contexts **48, 50,** and **53**) cut into the surface of the bioturbated chalk, between c.500mm-600mm below the ground surface. And although no archaeological features were revealed in Trench 5, if any such deposits do survive, they should also be preserved beneath c.650mm to 800mm of made ground.
- 7.12** In summary, the depth of made ground across large parts of the site is substantial. However, at least two trenches revealed evidence for partially surviving structures little more than c.100mm below the surface (Trenches 6 and 9). In the other trenches located in the central part of the site (Trenches 1, 4, 7, and 11) any archaeological features of greater antiquity than the racecourse will be most probably be buried beneath a significant depth of overburden, potentially up to 1.4m below the ground surface and increasing with depth towards the southwest boundary of the site (Trenches 2 and 8).
- 7.13** In contrast the strip of grass located between the race track and the tarmac running the length of the proposed car park site (Trenches 5 and 10) did provide some indication for surviving archaeological deposits at between c.650mm-800mm below the existing ground surface. However, Trenches 3, 12, 13 and 14 hold the greatest potential as they lie in areas that appear to have been relatively undisturbed by the episodes of landscaping associated with the development of Brighton racecourse.

8.0 IMPACTS AND RECOMMENDATIONS

8.1 *Past Impacts*

- 8.1.1** It is clear from the archaeological evaluation, combined with the pictorial and map evidence that the race course has had a major impact on the site over the last 200 years, mostly in the 20th century. In the early 20th century a number of stands and other structures were situated along the length of the site.
- 8.1.2** There are also numerous drains and services across the site especially at the south end, which were connected with its uses as a caravan site, although some of these are no longer in use. There is also an underground cess tank associated with the toilet block. Some of these may have been excavated to some depth and may have impacted further on any underlying archaeology.
- 8.1.3** Clearly the greatest impact to the site is the raising of the ground level across the east side of the site to form a level terrace. The 19th century OS maps do not appear to show any change in slope along the east edge of the site (e.g. Fig 6), although there is a fenced enclosure here. The picture of c.1905²⁴ shows the ground to slope gently downhill from the eastern edge of the race track, however by the time of the 1911 OS 1:2500 hachures appear to show the presence of a sharp slope, although it is not very clear.
- 8.1.4** A more distinct slope is indicated on the 1938 OS map and it is at this time that the major improvements were made to the racecourse, including the erection of stands along the east side. However the 1947 aerial photograph does not appear show a prominent slope (Fig. 7). The 1974/80 OS map shows the terrace on the east side of the race track to be much enlarged and with a distinct bank (Fig. 8), much as it appears today, suggesting that a substantial amount of in-fill had taken place. It therefore seems very likely that the eastern side of the site has a substantial amount of made ground over the original ground surface
- 8.1.5** The underpass at the north end of the site was installed in the mid 20th century, and currently provides pedestrian access under the racetrack. The construction of the underpass has obviously caused some extensive damage to any archaeology that may have existed in this area.

8.2 *Future Impacts*

- 8.2.1** The impact of the proposed development includes the construction of a new road access at the north end of the site from Warren Road, together with the removal of the existing underpass and the construction of a new ramped roadway under the racecourse. This will have a substantial impact on this part of the site, with the potential to destroy any surviving archaeology here, especially in the area of the new road access and at the northern end of the current car park which appear to have little in the way of past impact (Fig. 21).

²⁴ *Brighton & Hove in Pictures*, Brighton & Hove City Council

- 8.2.2** Although the new car park road will use the existing loop track, the construction of some new roadway, car parking bays and the planting of trees could have a serious impact on any archaeology preserved below ground, especially if this survives at shallow depths.
- 8.2.3** If the assessment of past impacts is correct, then any archaeological remains on the east side of the site are likely to be well preserved and buried below some depth of made ground, and therefore any potential future impact here is likely to be limited (Fig. 21).
- 8.2.4** At the south end of the site minor remedial work within the Scheduled Ancient Monument to remove existing road surfaces and bunds will be required. This will require Scheduled Ancient Monument consent, and will require an archaeological watching brief to monitor this work as it may affect the buried archaeology.
- 8.2.5** In summary, the presence of the Neolithic causewayed enclosure immediately to the south of the site would indicate that there is a very high possibility of there being extensive evidence for prehistoric activity at the site, whilst the previous existence of a number of barrows may indicate the presence of burials and evidence for further barrows. Although past impacts may have caused some damage to this archaeology, and made ground may have buried it across part of the site, it is still very likely that this archaeology survives and may be affected by the proposed development.
- 8.2.7** It seems likely that there will be little change in the visual impact of the development from the current situation, although the planting of trees may help to soften the impact when looking north from the monument. Although the causewayed enclosure occupies a visually striking landform when seen from the Coastal Plain, the enclosure itself is only visible from the chalk Downs to the north of the site²⁵.

8.3 Recommendations

- 8.3.1** Figure 21 summarises the depth below ground surface of the natural chalk substrata, and thus the potential for surviving archaeology likely to be impacted by the construction of the new car park and access road.
- 8.3.2** Given the considerable thickness of made ground across the central and southeast parts of the site it is thought unlikely that groundwork associated with the construction of the new car park will be deep enough to impact any archaeological deposits that survive beneath the made ground. Any such features have been effectively preserved *in situ*, at least for the immediate future. An examination of levels relating to the proposed formation depths should therefore be sufficient to inform mitigation in these areas. However, the structural remains identified in both Trenches 6 and 9 survive just below the ground and as such will almost certainly be disturbed by any work in the area.

²⁵ Oswald et al. 2001 *The Creation of Monuments*, Swindon, English Heritage.

- 8.3.3** Given that the state of their preservation appears to be good, careful consideration will be needed regarding the level of archaeological recording required, given their 20th century status. Furthermore, some level of mitigation may be deemed necessary in respect of the midden deposit (Context **47**) exposed at the southwest end of Trench 4 (see Section 6.2.4 & Table 3).
- 8.3.3** The level of mitigation required along the strip between the race track and the tarmac road will depend on the impact depth of the ground work. Whilst any archaeological features will have probably have been preserved in this area, the evaluation evidence indicates that they are they are likely to be situated at least 500mm below the ground surface and in places possibly up to 800mm, except at the north and south ends of the site where the depth is only *c.*250mm (Fig. 21).
- 8.3.4** Potential deposits at most risk are those that might survive in the locality of Trench 1. This is of particular concern given the close proximity to the upstanding remains to the Scheduled Ancient Monument. Also at the northern end of the site, where Trenches 12, 13 and 14 were excavated, good evidence indicating surviving deposits was recorded. In both areas the depth of overburden is little more than 250mm below the ground surface, and therefore any ground work in the areas is likely to be highly destructive. In these areas it is recommended that most care be taken when considering the degree of archaeological mitigation.

9.0 ACKNOWLEDGEMENTS

- 9.1** We would like to thank Tom Wood, of Tom Wood Architecture for commissioning the work on behalf of Northern Racing Ltd and Brighton & Sussex University Hospitals NHS Trust. We would also like to thank the ground staff at Brighton Racecourse for their help and co-operation during the fieldwork.
- 9.2** FNR Plant Hire provided the machines and drivers for the excavation. The artefacts were processed by Tash Scullion and Rachel Butler. Luke Barber and David Rudling provided specialist reports, and Jane Russell prepared the drawings for the report. Greg Chuter monitored the project for East Sussex County Council.

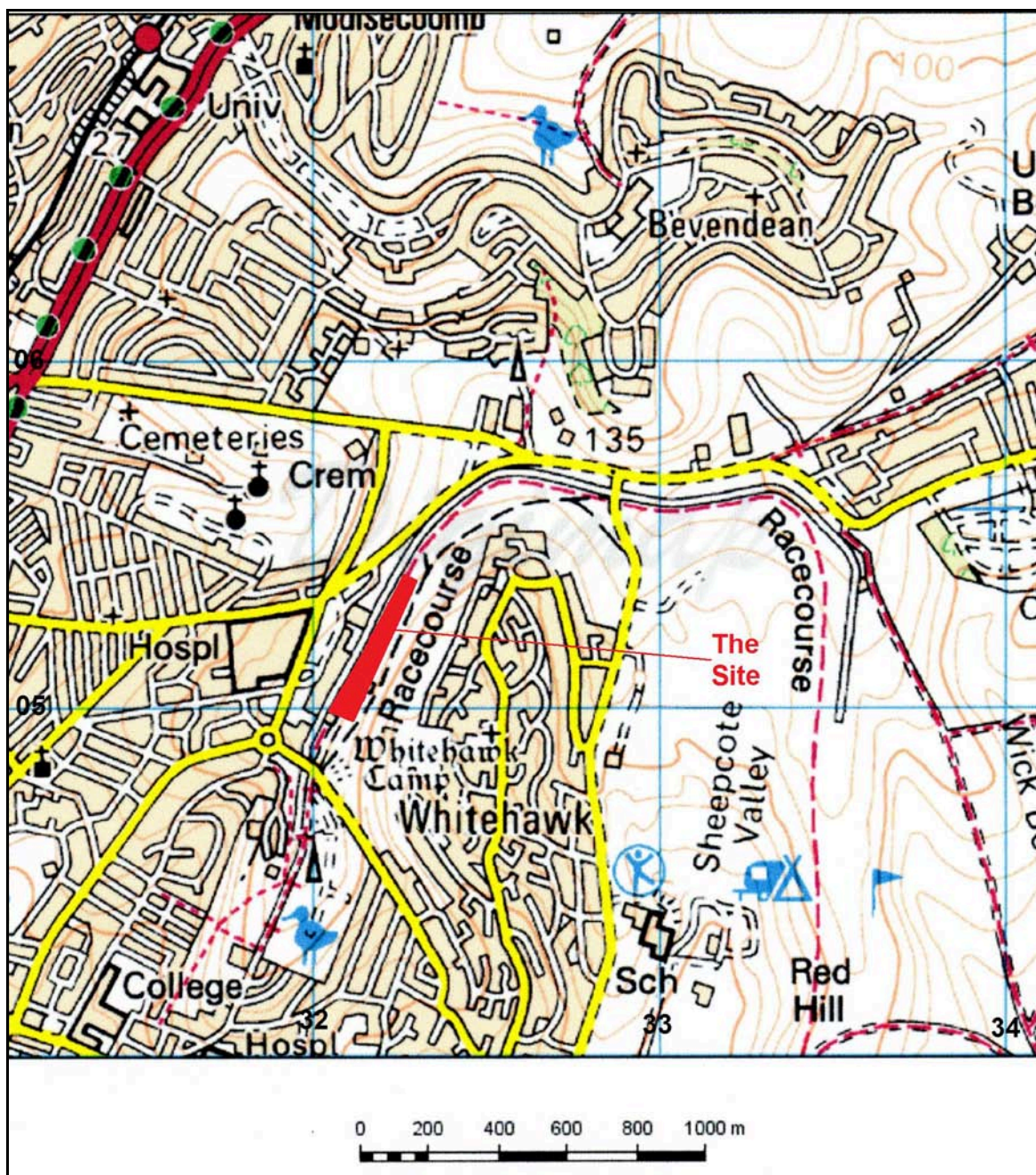


Fig. 1: Brighton Racecourse, Brighton: Location Map
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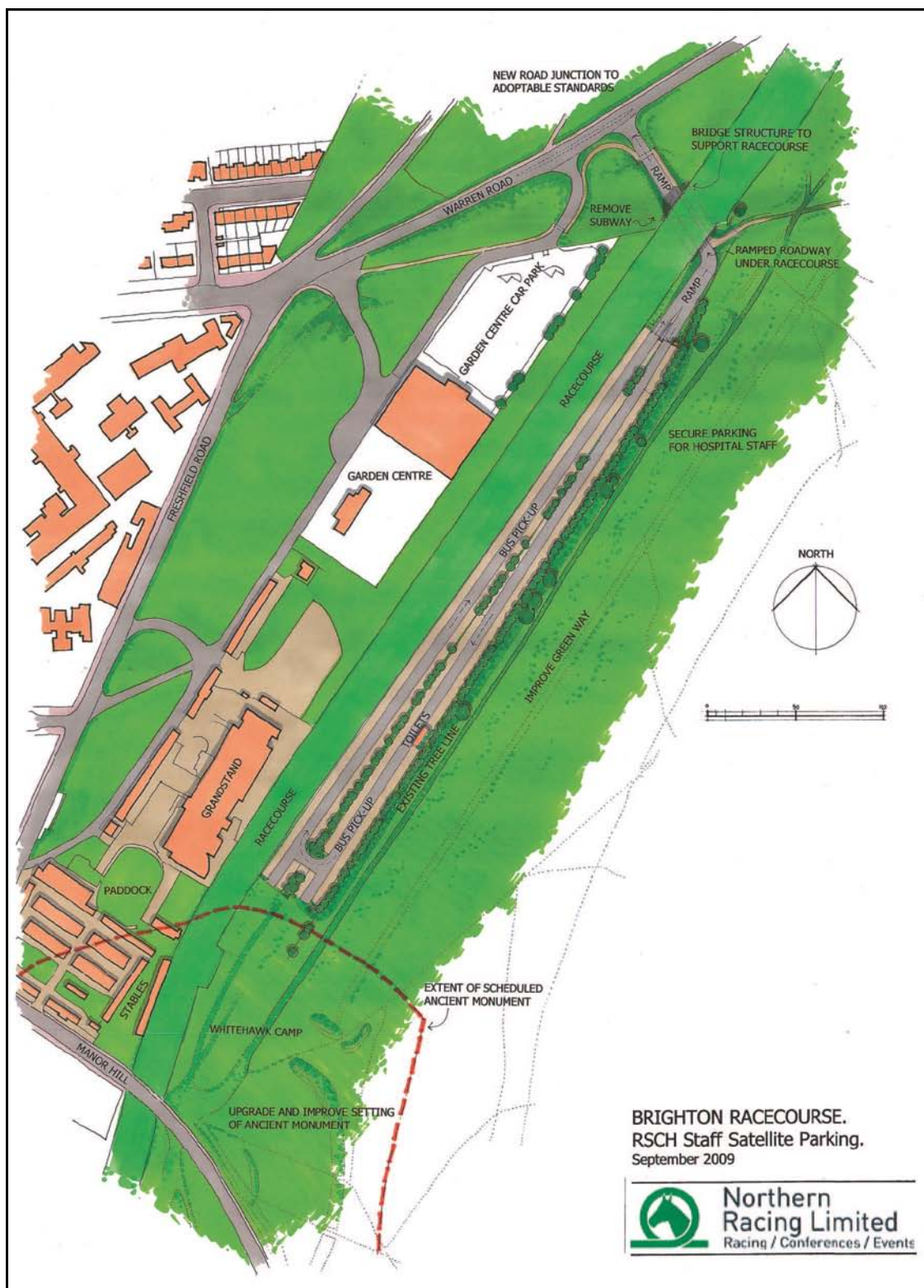


Fig. 2: Brighton Racecourse, Brighton: Plan of car park development
(Northern Racing Ltd)

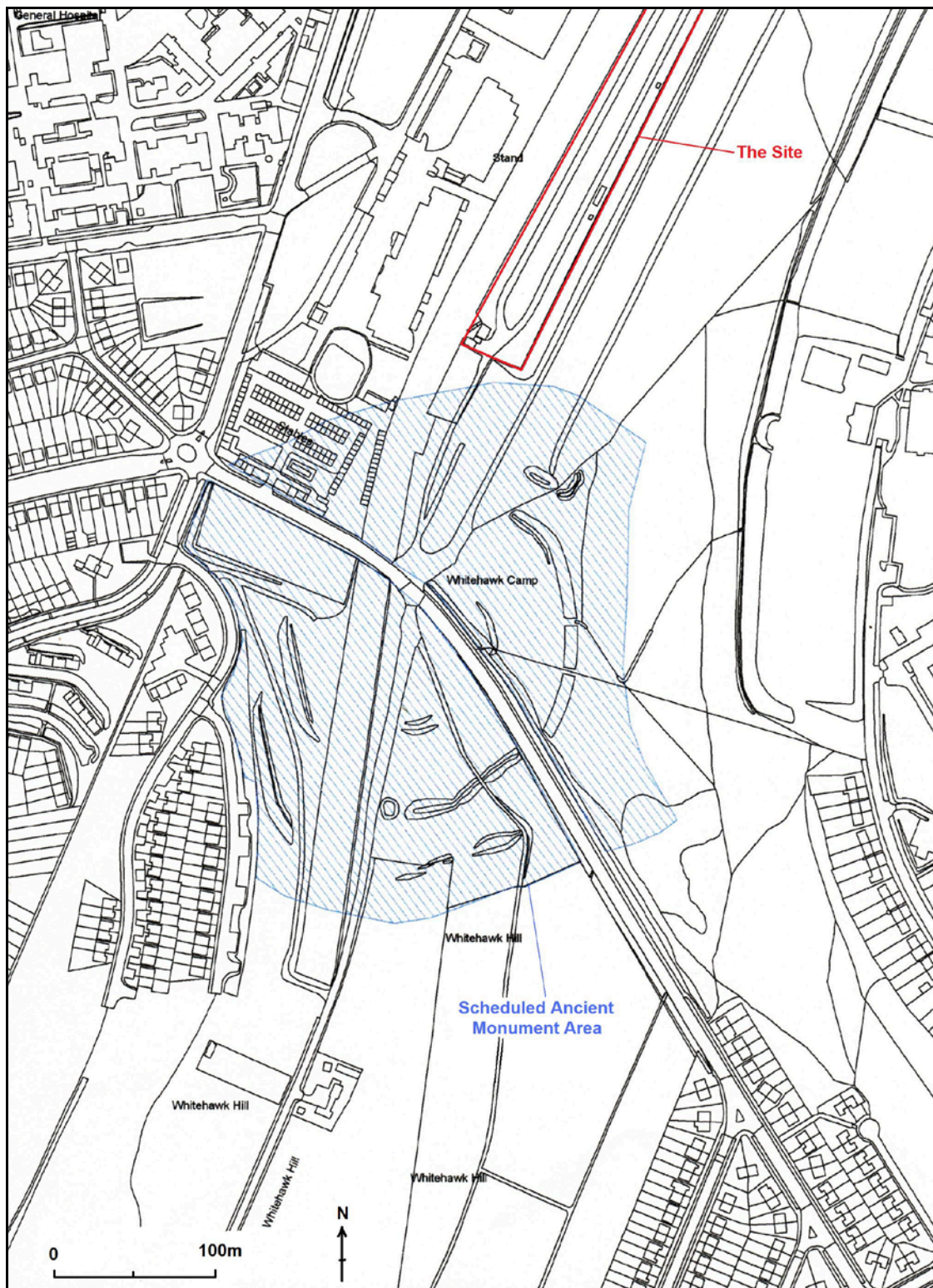


Fig. 3: Brighton Racecourse, Brighton: Map showing site and Scheduled Ancient Monument Area of Whitehawk Causewayed Enclosure
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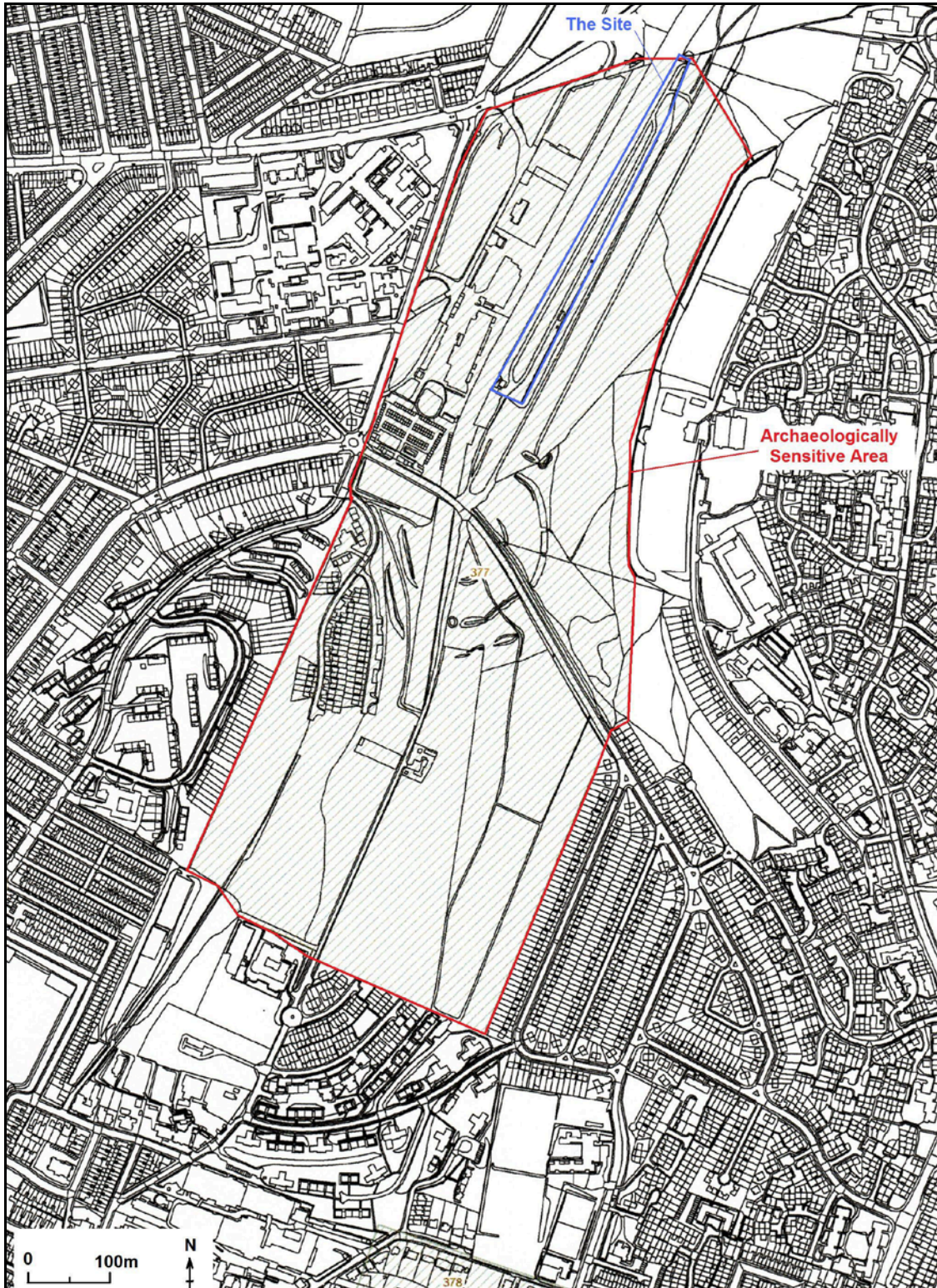


Fig. 4: Brighton Racecourse, Brighton: Map showing the site and the Archaeologically Sensitive Area
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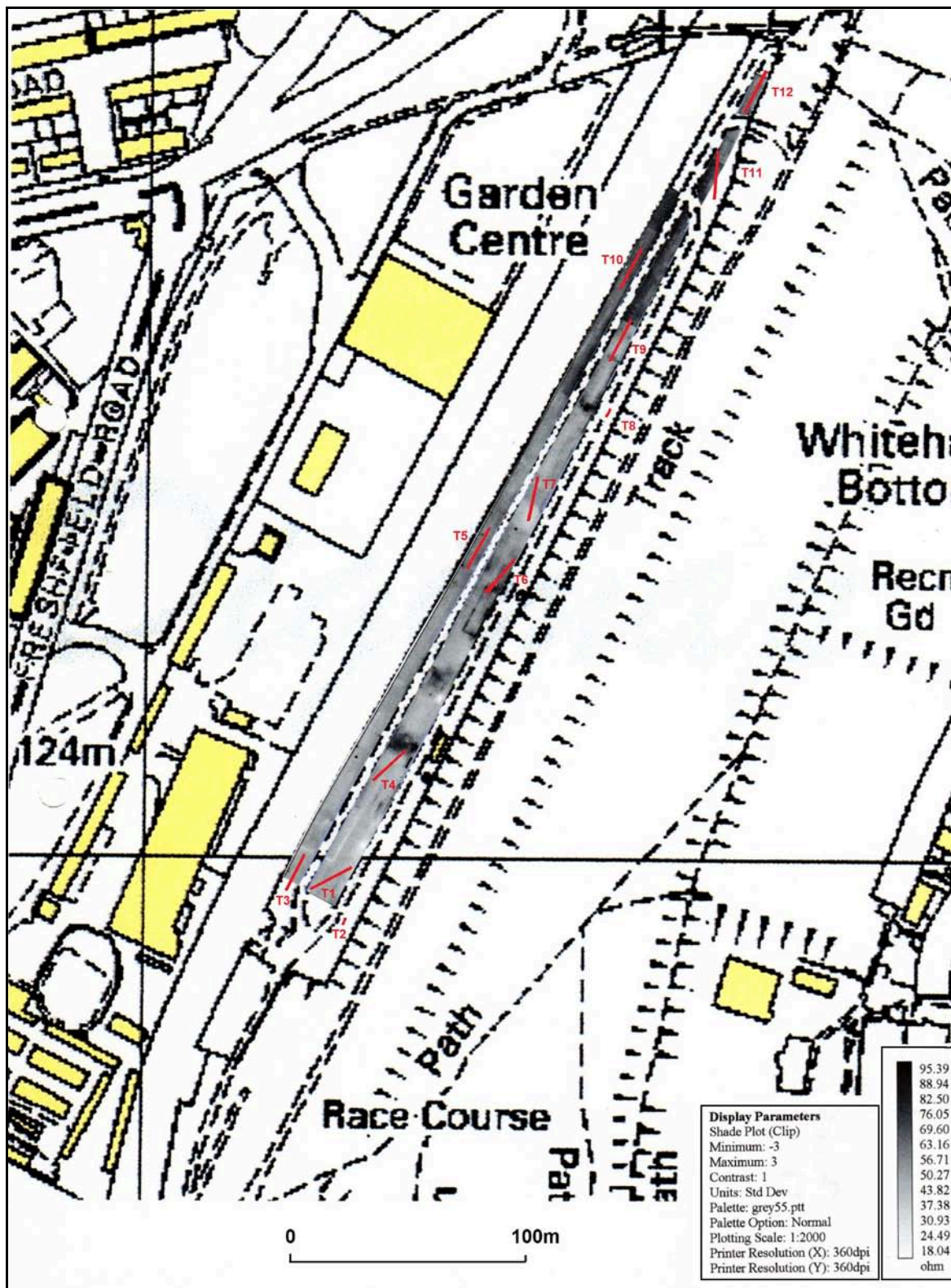


Fig. 5a: Brighton Racecourse, Brighton: Location of evaluation trenches (shown in red) on east (car park) side of site
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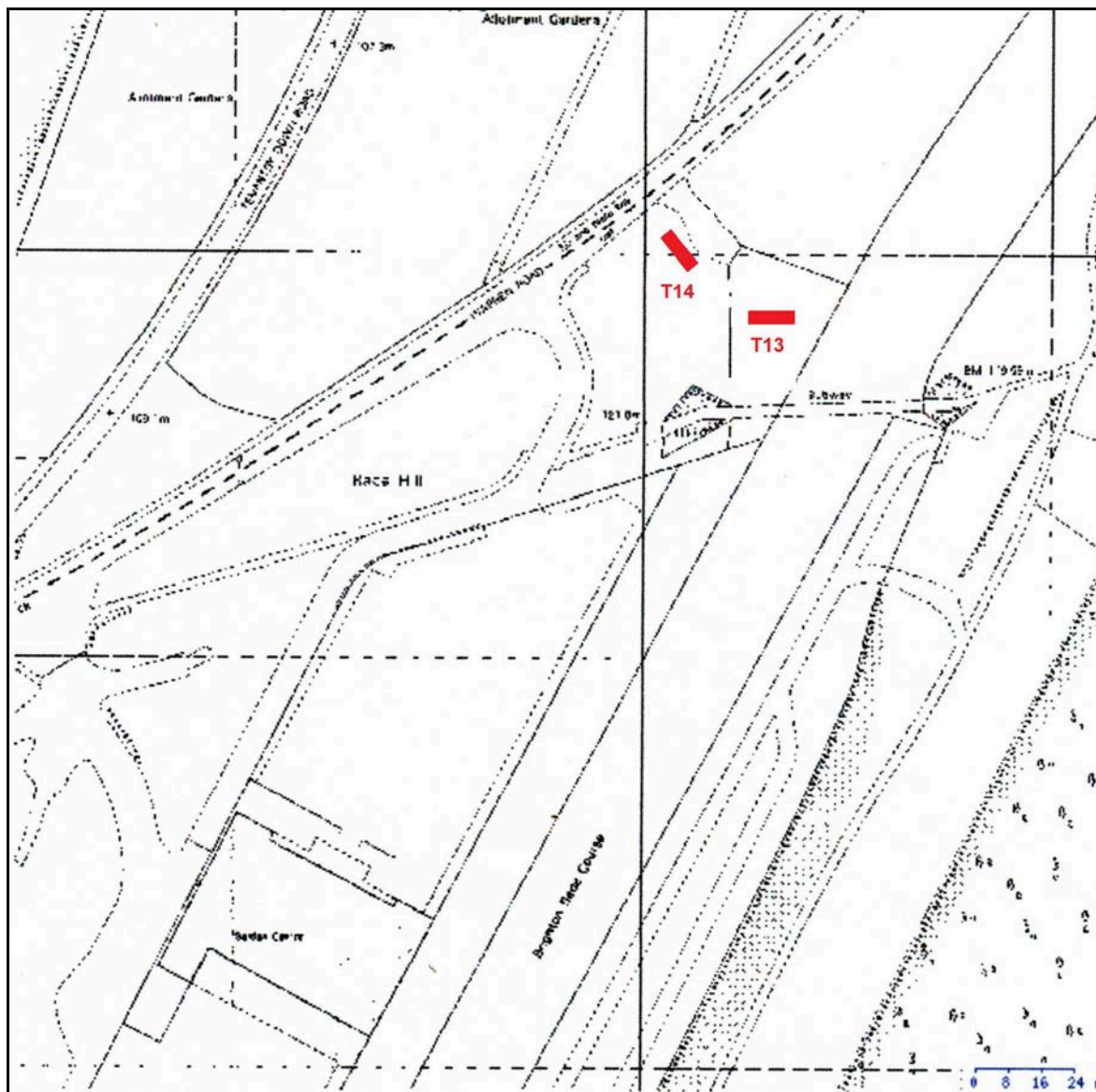


Fig. 5b: Brighton Racecourse, Brighton: Location of evaluation trenches (shown in red) on west (entrance) side of site
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Fig. 6: Brighton Racecourse, Brighton: 1st Edition OS Map (1878)



Fig. 7: Brighton Racecourse, Brighton: 1946 Aerial Photograph
University of Sussex (3.G/TUD/UK/157.PART1.19.APR.46 F12//138SQDN)

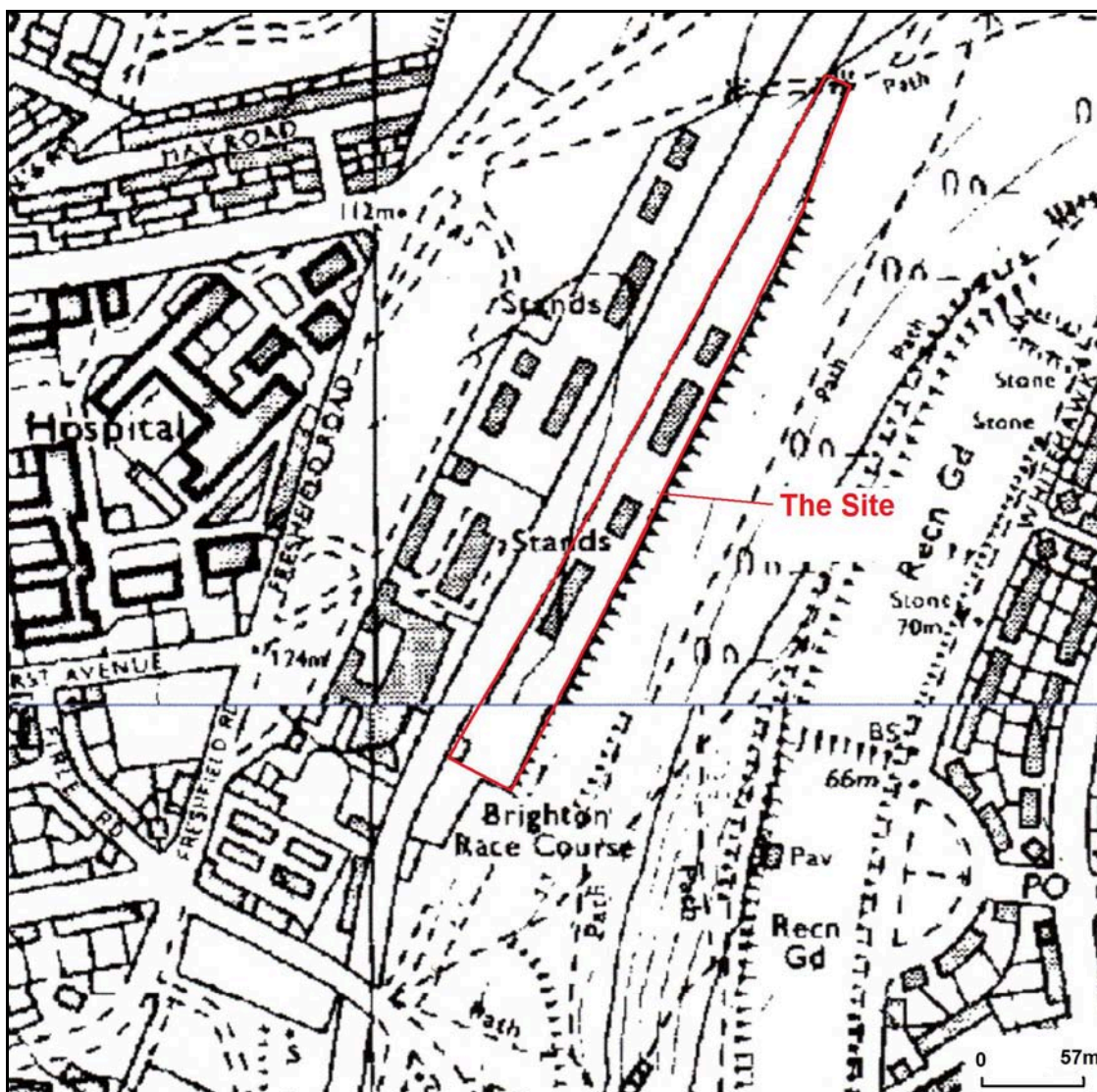


Fig. 8: Brighton Racecourse, Brighton: 1:10,000 OS Map (1974-80)
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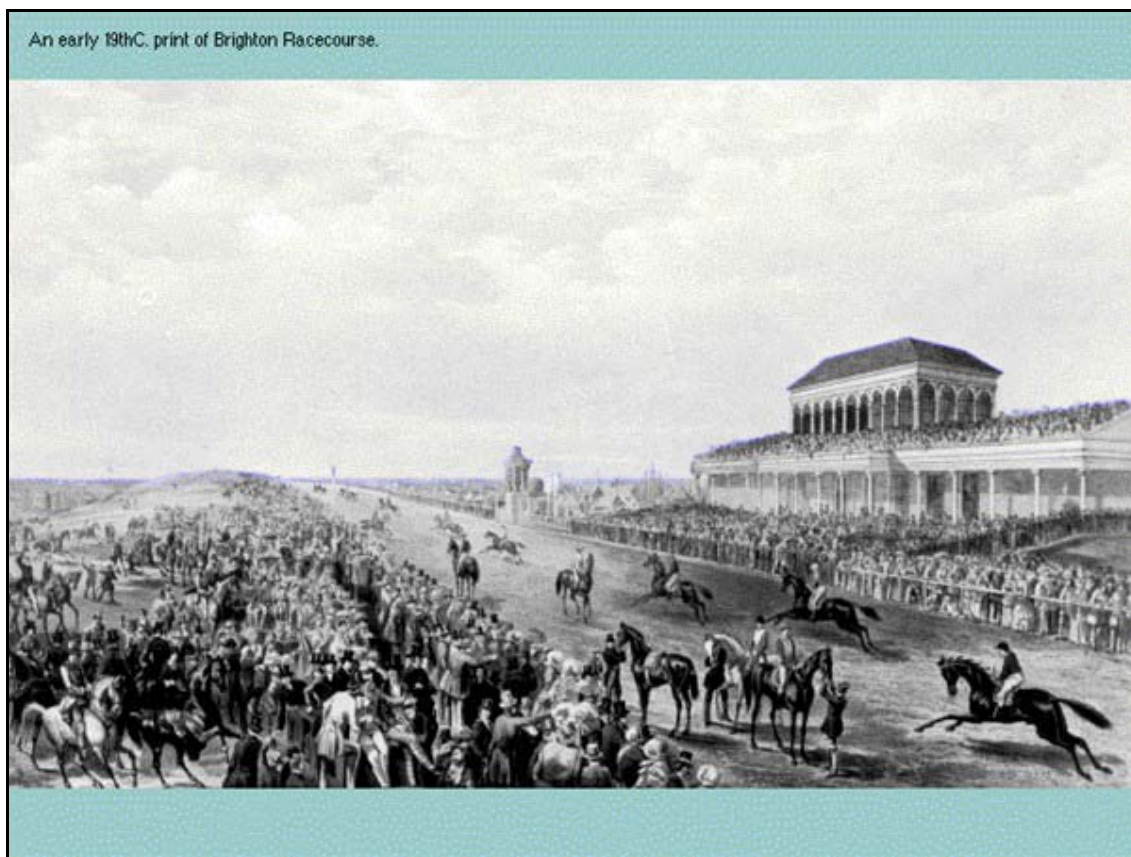


Fig. 9: Brighton Racecourse, Early 19th century picture looking south with main grandstand on the right (Copyright unknown)



Fig. 10: Brighton Racecourse, Photograph c.1920 looking north-east towards stand on east side of racecourse (Copyright: www.greyhoundderby.com)



Fig. 11: Brighton Racecourse, Brighton: Geological Map
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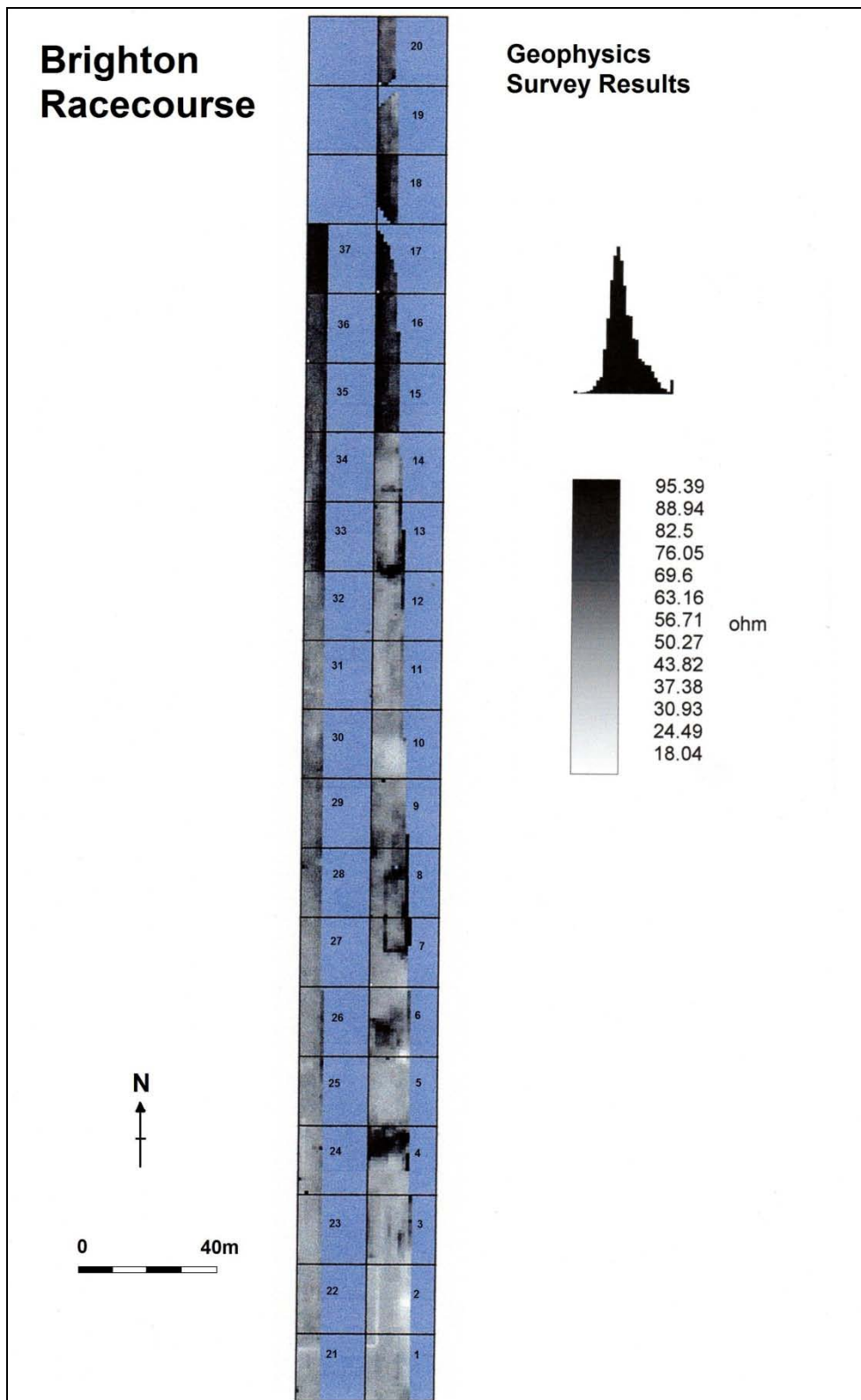


Fig: 12 : Brighton Racecourse: Results of Geophysics survey

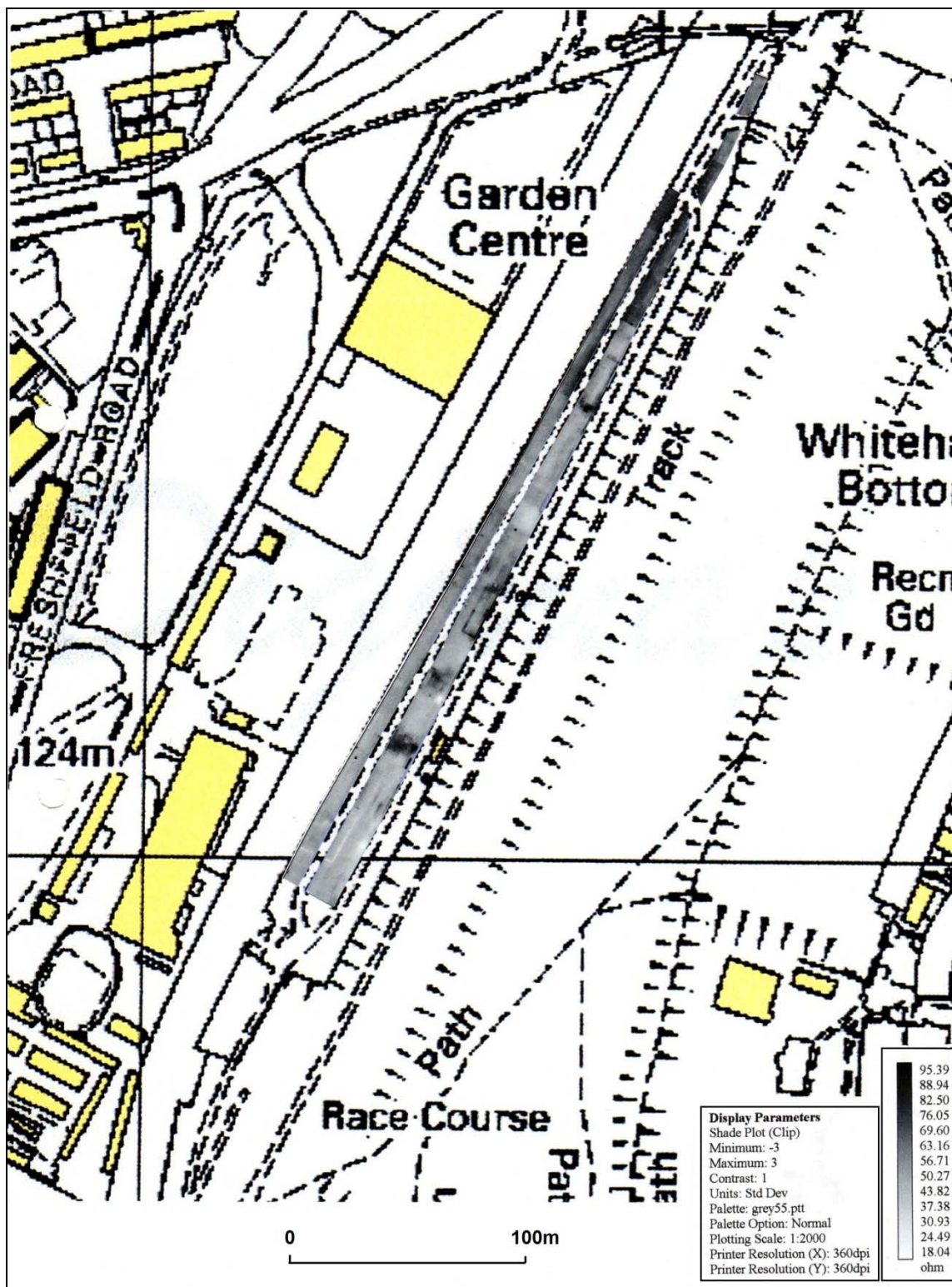


Fig: 13: Brighton Racecourse: Results of Geophysics survey superimposed onto a map of the site

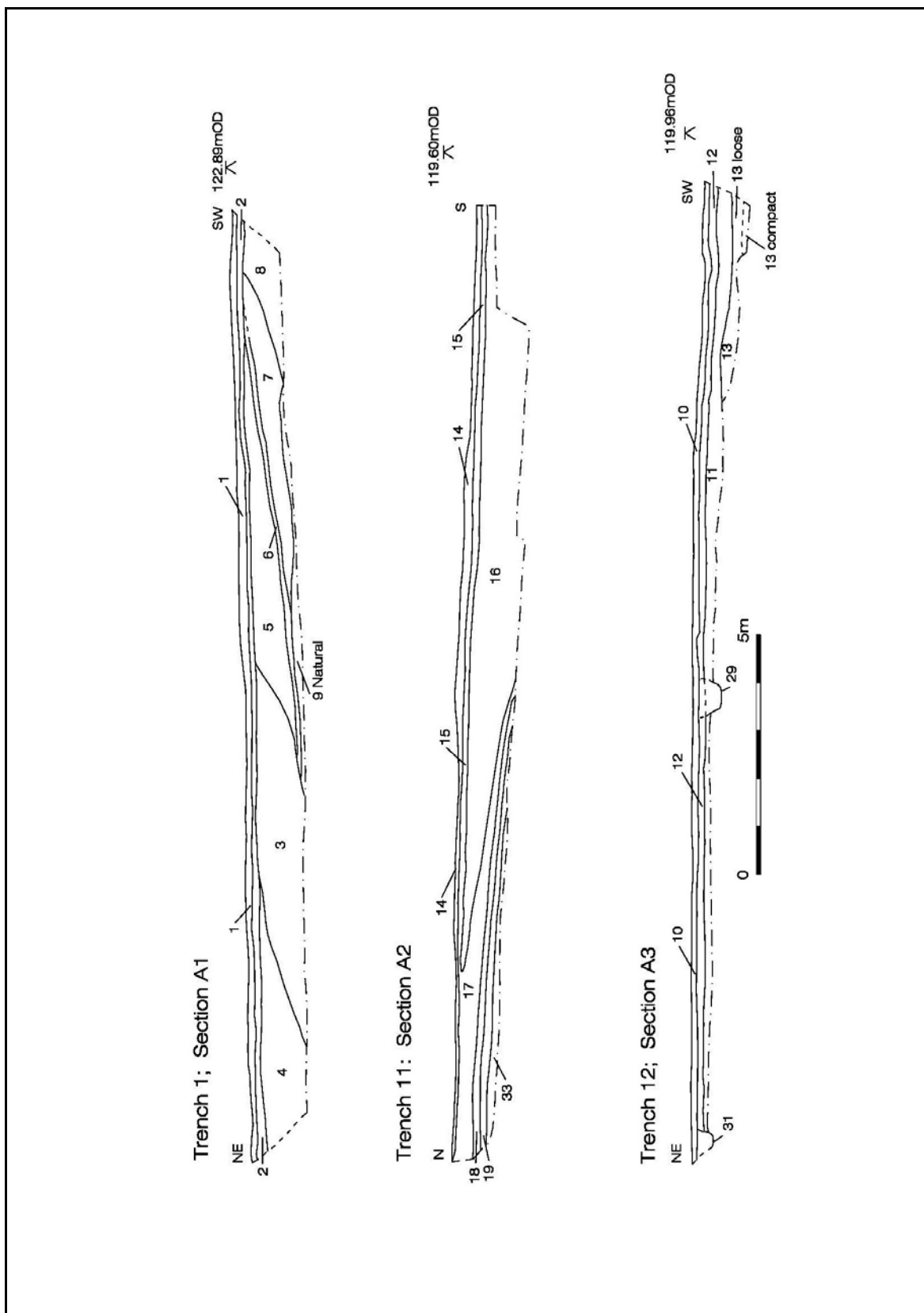


Fig: 14: Brighton Racecourse: Trench 1, 11 & 12 Sections

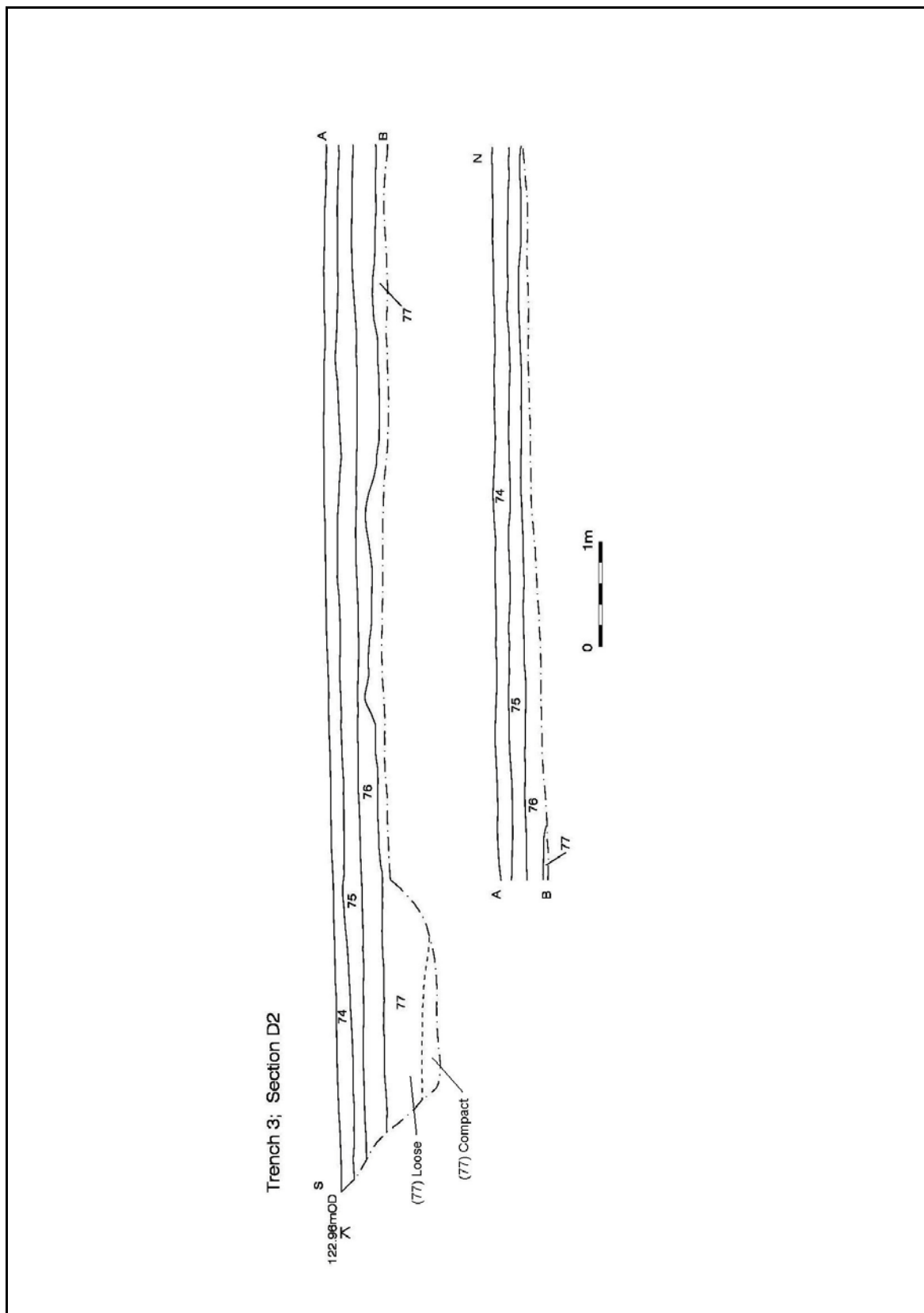


Fig: 15: Brighton Racecourse: Trench 3 Section

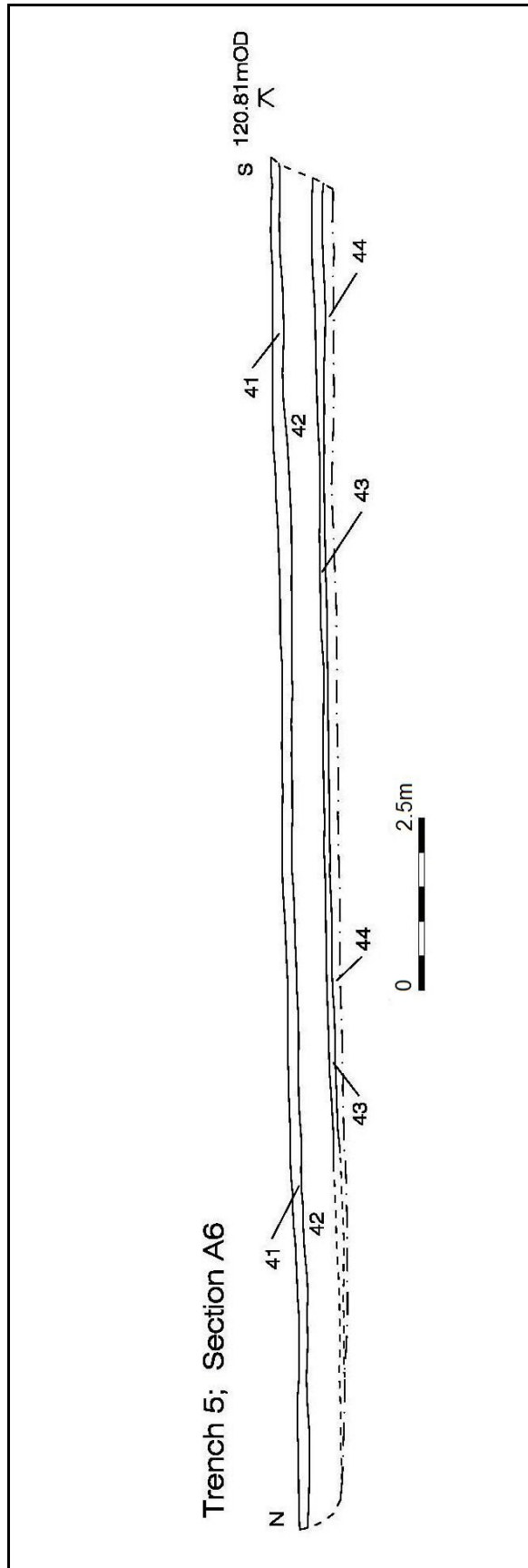


Fig: 16: Brighton Racecourse: Trench 5 Section

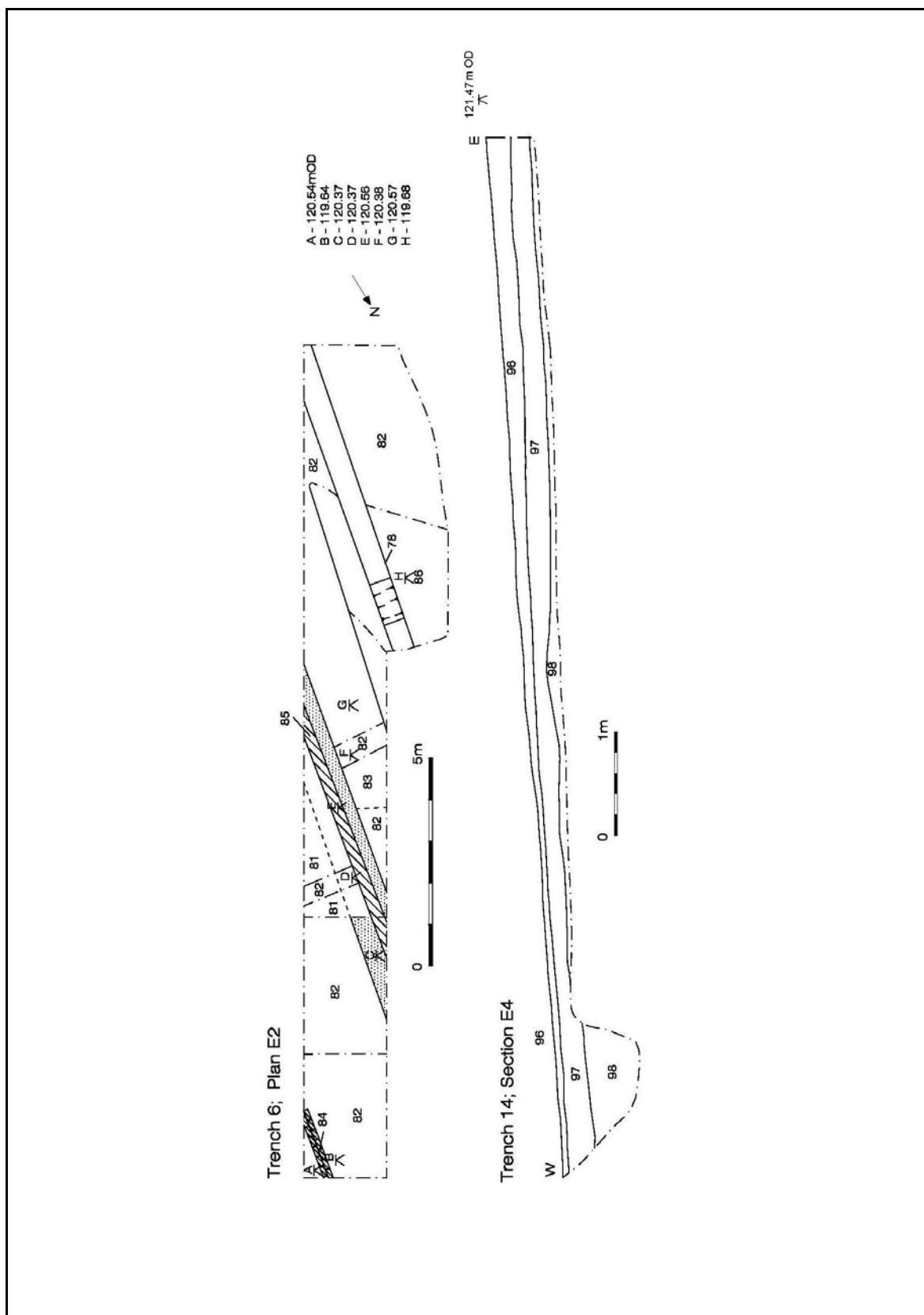


Fig: 17: Brighton Racecourse: Trench 6 Plan & Trench 14 Section

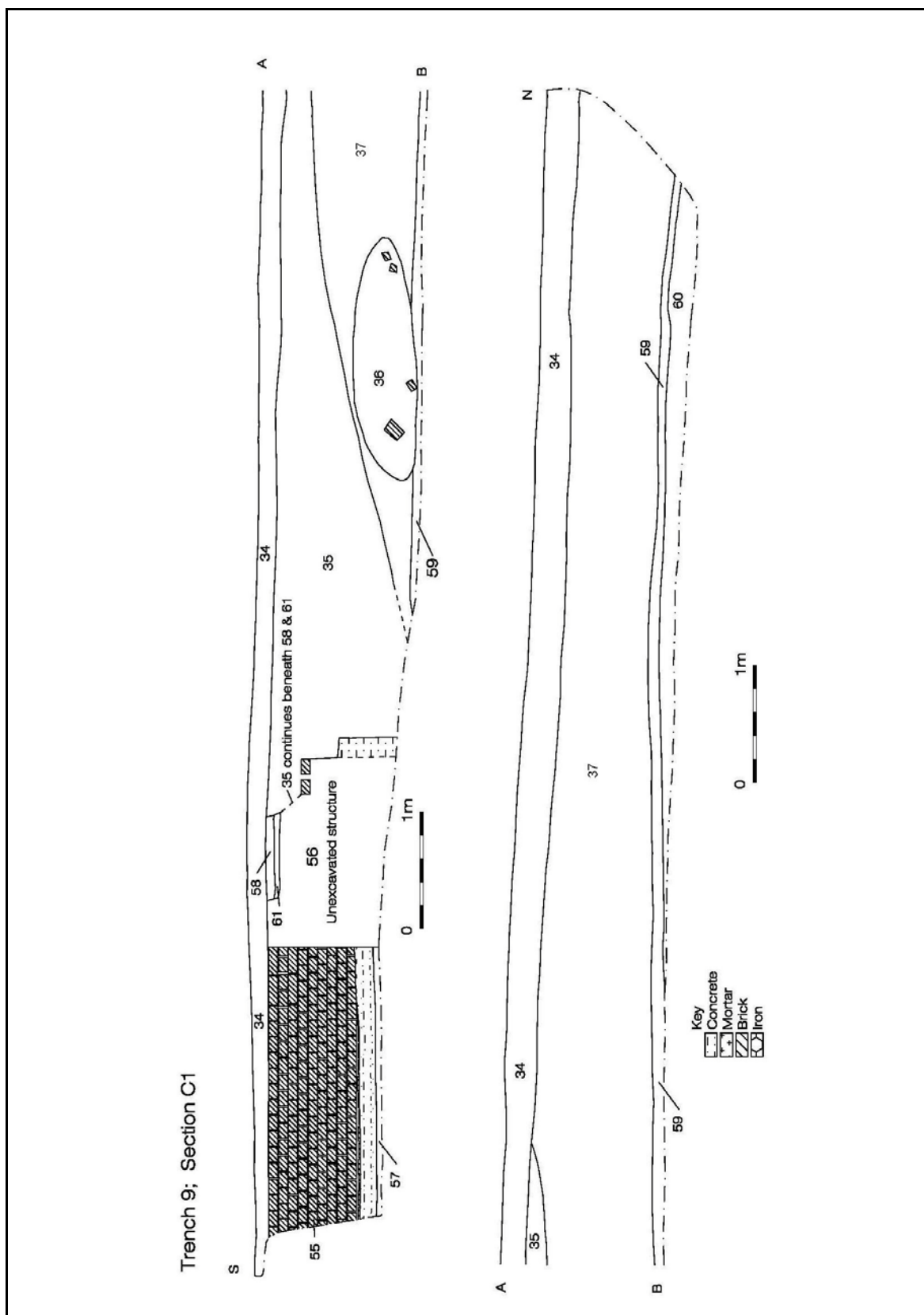


Fig: 19: Brighton Racecourse: Trench 9 Section

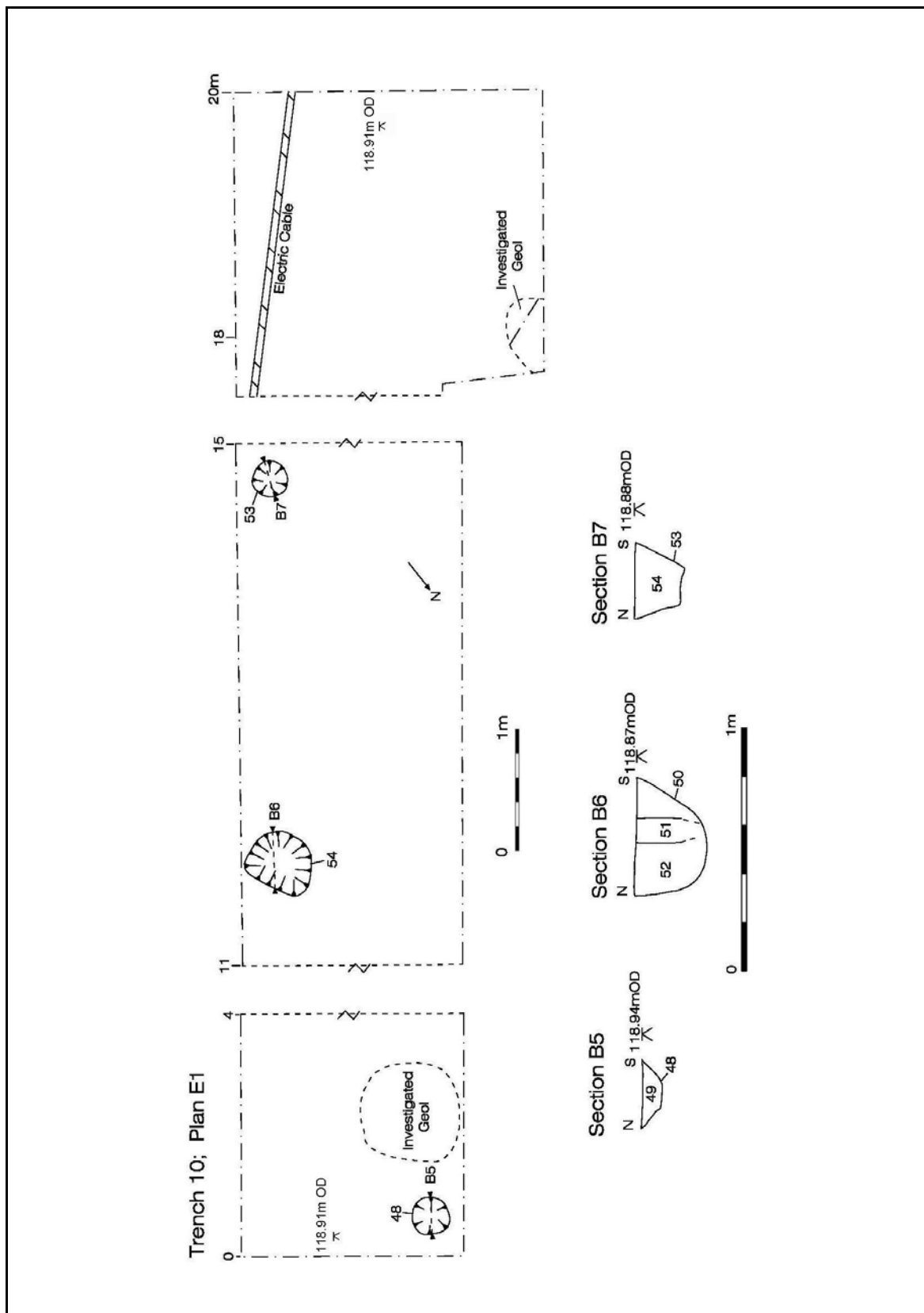


Fig: 20: Brighton Racecourse: Trench 10 Plan & cut feature sections

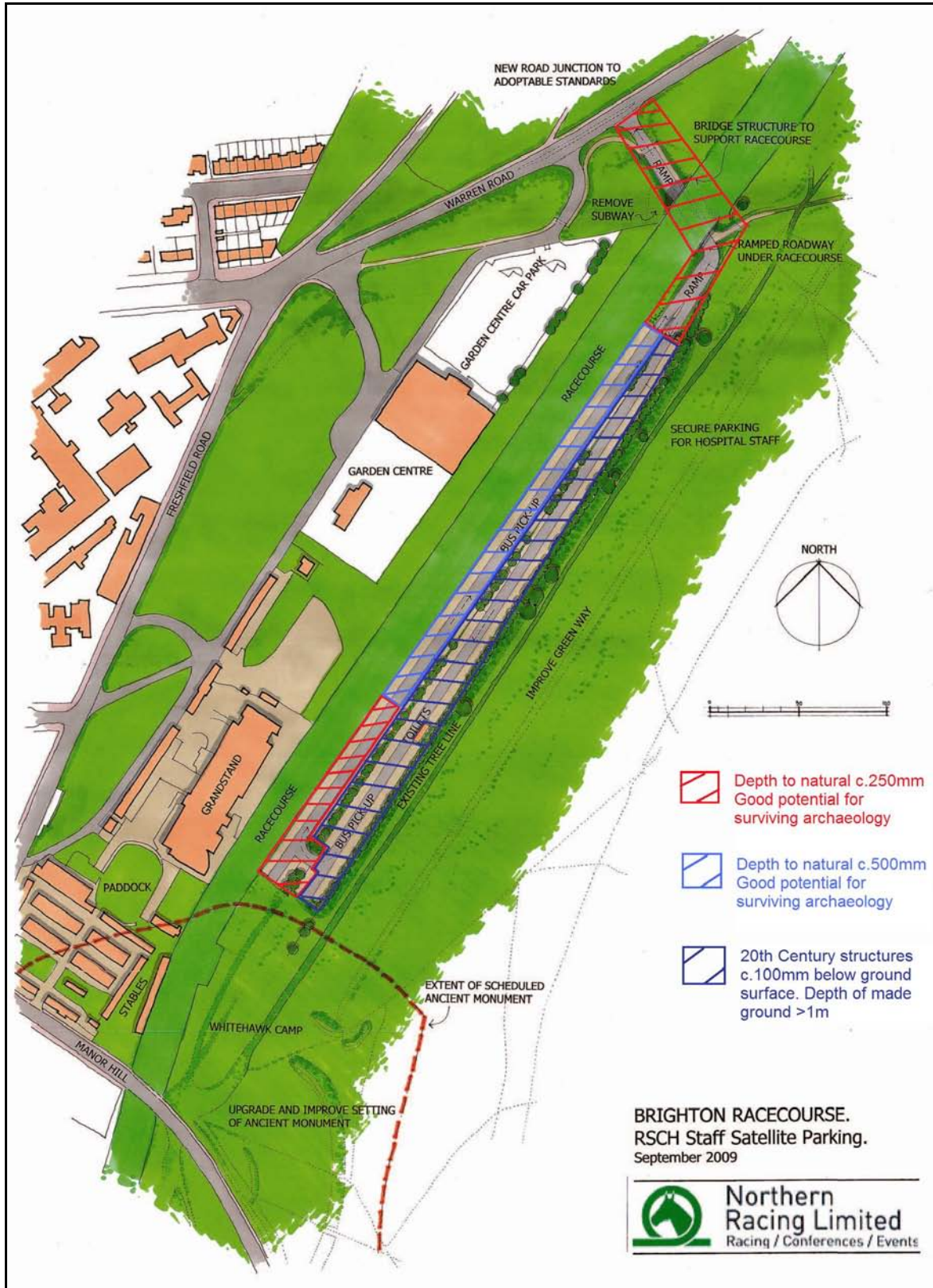


Fig: 21: Brighton Racecourse: Projected areas of archaeological interest and depth of overburden



Plate 1: Tr.1 Buried Soil in NW Facing Section



Plate 2: Tr.2 NW Facing Section



Plate 3: Tr.3 SE Facing Bulk Section



NE



Plate 4:
Tr.4
NW
Facing
Section

Plate 5:
Tr.5
General
Looking



Plate 6: Tr.6 Looking N. at [84] & [85]



Plate 7: Tr. N.Towards [84] & [85]



Plate 8: Tr.6 West Facing Wall [84]



Plate 9: Tr.7 NE Facing Baulk



Plate 10: Tr.8 NW Facing Section



Plate 11: Tr.9 Looking NE at [55] & [56]



Plate 12: Tr.9 Looking SW at [56] & [55]



Plate 13: Tr.9 Looking NW at [55] & [56]



Plate 14: Tr.10 NW Facing Baulk with Buried Soil



Plate 15: Tr.10 Excavated Post Hole [50]



Plate 16: Tr.11 W. Facing Section



Plate 17: Tr.12 NW Facing Section



Plate 18: Tr. 13 Looking East



Plate 19: Tr.14 Looking East



Plate 20: Tr.14 General Looking West

APPENDIX I: CONTEXT REGISTER

No.	Type	Trench	Relationships	Comments	Spot Dates
1	Deposit	T-1		Top Soil/Turf	C20th
2	Deposit	T-1	Below (1)	Made Ground - Below Top Soil	C19th-20th
3	Deposit	T-1	Below (4)	Made Ground - Mixed	Mid-Late C19th
4	Deposit	T-1	Below (2)	Made Ground PFA/Chalk	Early C19th
5	Deposit	T-1	Below (3)	Made Ground Chalk Rubble	
6	Deposit	T-1	Below (5)	Buried Soil	
7	Deposit	T-1	Below (6)	Made Ground - Chalk	
8	Deposit	T-1	Below (7)	Made Ground - Loose Chalk	
9	Deposit	T-1	Below (8)_	Natural Chalk	
10	Deposit	T-12		Top Soil/Turf	
11	Deposit	T-12		Natural Bioturbated Chalk	
12	Deposit	T-12	Below (10)	Made Ground/Sub Soil	
13	Deposit	T-12		Natural Solid Chalk	
14	Deposit	T-11		Top Soil/Turf	
15	Deposit	T-11	Below (14)	Thin Made Ground Horizon	
16	Deposit	T-11	Below (15)	Made - PFA - Power Station Residue	
17	Deposit	T-11	Below (16)	Made Ground - Chalk Rubble	
18	Deposit	T-11	Below (17)	Buried Soil	C19th
19	Deposit	T-11	Below (18)	Natural Bioturbated Chalk	
20	Deposit	T-10		Top Soil/Turf	Late C18th- C19th
21	Deposit	T-10	Below (20)	Chalky Made Ground	
22	Deposit	T-10	Below (21)	Buried Soil	Mid C19th- C20th
23	Deposit	T-10	Below (22)	Natural Bioturbated Chalk	
24	Deposit	T-10	Below (23)	Natural Solid Chalk	
25	Cut	T-12	Filled by (26)	Small Post Hole	
26	Fill	T-12	Fill of [25]	Fill of P/H	
27	Cut	T-12	Filled by (27)	Modern P/H	
28	Fill	T-12	Fill of [27]	Fill of P/H	
29	Cut	T-12	Filled by (30)	Modern P/H contains concrete	Mid C19th- C20th
30	Fill	T-12	Fill of[30]	Fill of P/H	Mid C19th- C20th
31	Cut	T-12	Filled by (32)	Modern P/H contained plastic comb?	C20th
32	Fill	T-12	Fill of [31]	Fill of P/H	C20th
33	Deposit	T-11	Below (19)	Natural Solid Chalk	
34	Deposit	T-9		Top Soil/Turf	C20th
35	Deposit	T-9	Below (34)	Loose Made - Seals Grandstand Remains	C20th
36	Deposit	T-9	Within (37)	Finds Rich Dump in Made Ground	Mid C19th- C20th
37	Deposit	T-9	Below (35)	Made Ground with chalk pieces	C20th

No.	Type	Trench	Relationships	Comments	Spot Dates
38	Deposit	T-7		Top Soil/Turf	
39	Deposit	T-7	Below (38)	Made Ground - mid brownish orange	
40	Deposit	T-7	Below (39)	Made Ground - Building Demo Material	Mid-Late C19th
41	Deposit	T-5		Top Soil/Turf	
42	Deposit	T-5	Below (41)	Made Ground Chalk Rubble	
43	Deposit	T-5	Below (42)	Buried Soil	
44	Deposit	T-5	Below (43)	Natural Bioturbated Chalk	
45	Deposit	T-5	Below (4)	Natural Solid Chalk	
46	Deposit	T-4		Top Soil/Turf	C20th
47	Deposit	T-4		Midden Dump	Early/Mid C20th
48	Cut	T-10	Filled by (49)	Sub circular post hole	
49	Fill	T-10	Fill of [48]	Post Hole fill	
50	Cut	T-10	Filled by (51,52)	Post Hole with possible post pipe	
51	Fill	T-10	Fill of [50]	Possible fill to post pipe	
52	Fill	T-10	Fill of [50]	Packing fill	
53	Cut	T-10	Filled by (54)	Small Post Hole	
54	Fill	T-10	Fill of [53]	Single fill of [53]	
55	Structure	T-9		Remains of Grandstand	
56	Structure	T-9		Remains of Grandstand	C20th
57	Deposit	T-9		Demo B/Fill - Probably same as (58)	
58	Deposit	T-9		Demo B/Fill - Probably same as (57)	Mid C19th-C20th
59	Deposit	T-9	Below (37)	Buried Soil	
60	Deposit	T-9	Below (59)	Natural Bioturbated Chalk	
61	Deposit	T-9	Below (58) & (57)	Shingle	
62	Deposit	T-4	Below (64)	Buried Soil	
63	Deposit	T-4	Below (47)	Made Ground	
64	Deposit	T-4	Below (63)	Made; frequent chalk & demo material	
65	Structure	T-4		Possible concrete raft at NE end of Tr	
66	Structure	T-4		Concrete pillar at the SW end of trench	
67	Deposit	T-4		Natural Bioturbated Chalk	
68	Deposit	T-2		Top Soil/Turf	
69	Deposit	T-2	Below (68)	Made Ground/Sub Soil	
70	Deposit	T-2	Below (69)	Made Ground/Power Station Residue	
71	Deposit	T-8		Top Soil/Turf	
72	Deposit	T-8	Below (71)	Made Ground/Sub Soil	
73	Deposit	T-8	Below (72)	Made Ground/Power Station Residue	

No.	Type	Trench	Relationships	Comments	Spot Dates
74	Deposit	T-3		Top Soil/Turf	
75	Deposit	T-3	Below (74)	Subsoil	
76	Deposit	T-3	Below (75)	Natural Bioturbated Chalk	
77	Deposit	T-3	Below (76)	Natural Solid Chalk	
78	Cut	T-6	Filled by (79)	North-South aligned linear	
79	Fill	T-6	Fill of [78]	Shallow fill of [78]	
80	Deposit	T-6		Top Soil/Turf	
81	Deposit	T-6	Below (80)	Made Ground - Post Dates Walls [84/85]	
82	Deposit	T-6	Below [84/85]	Made Ground - Pre dates Wall [84/85]	
83	Deposit	T-6	Below (80)	Demolition layer	C20th
84	Structure	T-6		N-S aligned wall, not bottomed	Mid C18th- C19th
85	Structure	T-6		N-S aligned wall, on concrete footing	C20th
86	Deposit	T-6		Natural Bioturbated Chalk	
87	Deposit	T-13		Top Soil/Turf	C20th
88	Deposit	T-13	Below (87)	Natural Bioturbated Chalk	
89	Deposit	T-13	Below (88)	Natural Solid Chalk	
90	Cut	T-13	Filled by (91)	Post with glass	
91	Fill	T-13	Fill of [90]	P/H Fill	
92	Cut	T-13	Filled by (93)	Geometric p/h, contained concrete	
93	Fill	T-13	Fill of [92]	P/H Fill	
94	Cut	T-13	Filled by (95)	Tree Bole	
95	Fill	T-13	Fill of [94]	Fill of Tree Bole	
96	Deposit	T-14		Top Soil/Turf	
97	Deposit	T-14		Natural Bioturbated Chalk	
98	Deposit	T-14	Below (97)	Natural Solid Chalk	
99	Deposit	T-14	Below (97)	Variability in chalk	

APPENDIX II: LEVELS

No.	TBM	Back Sight	Fore Sight	Collimation	Reduced Level	Notes
1	122.73	1.68	1.52	124.41	122.89	T-1: A1 Datum
2	122.73	1.68	1.56	124.41	122.85	T-1: Top SW End
3	122.73	1.68	2.73	124.41	121.68	T-1: Bottom SW End
4	122.73	1.68	1.92	124.41	122.49	T-1: Top NE End
5	122.73	1.68	3.12	124.41	121.29	T-1: Bottom SW End
6	119.07	2.21	1.68	121.28	119.6	T-11: Datum A2
7	119.07	2.21	1.83	121.28	119.45	T-11: Top NW End
8	119.07	2.21	2.59	121.28	118.69	T-11: Bottom NW End
9	119.07	2.21	1.95	121.28	119.33	T-11: Top SE End
10	119.07	2.21	3.17	121.28	118.11	T-11: Bottom SE End
11	119.07	2.21	1.82	121.28	119.46	T-12: [25] W.Facing Section
12	119.07	2.21	1.81	121.28	119.47	T-12: [27] W.Facing Section
13	119.07	2.21	1.39	121.28	119.89	T-12: [29] W.Facing Section
14	119.07	2.21	1.51	121.28	119.77	T-12: [31] W.Facing Section
15	119.07	2.21	1.13	121.28	120.15	T-12: Top North End
16	119.07	2.21	1.45	121.28	119.83	T-12: Bottom North End
17	119.07	2.21	2.76	121.28	118.52	T-12: Bottom South End
18	119.07	2.21	1.74	121.28	119.54	T-12: Top South End
19	119.07	2.21	1.32	121.28	119.96	T-12: Datum Baulk Section
20	120.56	1.11	1.55	121.67	120.12	T-7: Datum A5
21	120.56	1.11	1.72	121.67	119.95	T-7: Top SE End
22	120.56	1.11	2.91	121.67	118.76	T7: Bottom SE End
23	120.56	1.11	1.8	121.67	119.87	T7: Top NW End
24	120.56	1.11	2.83	121.67	118.84	T7: Bottom NW End
25	120.56	1.67	1.42	122.23	120.81	T5: A6 Datum
26	120.56	1.67	1.5	122.23	120.73	T5: Top South End
27	120.56	1.67	2.55	122.23	119.68	T5: Bottom South End
28	120.56	1.67	1.82	122.23	120.41	T5: Top North End
29	120.56	1.67	2.58	122.23	119.65	T5: Bottom North End
30	120.56	0.59	1.28	121.15	119.87	T9: Datum C1
31	120.56	0.59	1.47	121.15	119.68	T9: Top South End
32	120.56	0.59	2.63	121.15	118.52	T9: Bottom South End
33	120.56	0.59	2.37	121.15	118.78	T9: Concrete [55]
34	120.56	0.59	1.62	121.15	119.53	T9: Top of Shingle (61)
35	120.56	0.59	1.53	121.15	119.62	T9: Top of Bricks [56]
36	120.56	0.59	1.86	121.15	119.29	T9: Top of Bricks [56]
37	120.56	0.59	2.18	121.15	118.97	T9: Top of Concrete [56]
38	120.56	0.59	2.8	121.15	118.35	T9: Base of Trench on (35)
39	120.56	0.59	2.9	121.15	118.25	T9: Top of Buried Soil (59)
40	120.56	0.59	2.98	121.15	118.17	T9: Top of Bioturbated Chalk (60)

No.	TBM	Back Sight	Fore Sight	Collimation	Reduced Level	Notes
41	120.56	0.59	1.79	121.15	119.36	T9: Top North End
42	120.56	0.59	2.99	121.15	118.16	T9: Bottom North End
43	119.07	2.05	1.43	121.12	119.69	T10: Datum B8
44	119.07	2.05	1.55	121.12	119.57	T10: Top North End
45	119.07	2.05	2.21	121.12	118.91	T10: Bottom North End
46	119.07	2.05	1.68	121.12	119.44	T10: Top South End
47	119.07	2.05	2.21	121.12	118.91	T10: Bottom South End
48	119.07	2.05	2.24	121.12	118.88	T10: B7 [53]
49	119.07	2.05	2.25	121.12	118.87	T10: B6 [50]
50	119.07	2.05	2.18	121.12	118.94	T10: B5 [48]
51	120.56	2	0.88	122.56	122.56	T4: Datum D1
52	120.56	2	1.32	122.56	121.24	T4: Top NE End
53	120.56	2	1.84	122.56	120.72	T4: Bottom NE End
54	120.56	2	0.89	122.56	121.67	T4: Top SW End
55	120.56	2	2.1	122.56	120.46	T4: Bottom SW End
56	120.56	2	2.7	122.56	119.86	T4: Base of Sondage NE End
57	122.73	1.57	1.75	124.3	122.55	T2: Top
58	122.73	1.57	3.74	124.3	120.56	T2: Bottom
59	120.56	0.65	1.63	121.21	119.58	T8: Top
60	120.56	0.65	3.82	121.21	117.39	T8: Bottom
61	120.56	2.07	1.62	122.63	121.01	T4: Concrete Raft SW End
62	120.56	2.07	1.62	122.63	121.01	T4: Concrete Raft NE End
63	122.73	1.48	1.25	124.21	122.96	T3: Bulk Section, ground S.End
64	122.73	1.48	1.27	124.21	122.94	T3: Top South End
65	122.73	1.48	2.23	124.21	121.98	T3: Bottom South End
66	122.73	1.48	1.18	124.21	123.03	T3: Top North End
67	122.73	1.48	1.42	124.21	122.79	T3: Bottom North End
68	122.73	1.48		124.21		Not Taken
69	122.73	1.48	1.17	124.21	123.04	T3: Mid Trench Top
70	122.73	1.48	1.73	124.21	122.48	T3: Mid Trench Bottom
71-79						Missed in number generation
80	120.56	1.9	1.64	122.46	120.82	T6: Top NE End
81	120.56	1.9	2.82	122.46	119.64	T6: Bottom NE End
82	120.56	1.9	1.92	122.46	120.54	T6: Top NE End [84] Wall
83	120.56	1.9	2.82	122.46	119.64	T6: Bottom NE End [84] Wall
84	120.56	1.9	2.13	122.46	120.33	T6: Top of Concrete [85]
85	120.56	1.9	2.09	122.46	120.37	T6: Top of Concrete [85]
86	120.56	1.9	1.84	122.46	120.62	T6: Top of Brick Wall [85]
87	120.56	1.9	1.89	122.46	120.57	T6: Top of (83)
88	120.56	1.9	2.83	122.46	119.63	T6: Linear [78]
89	120.56	1.9	1.52	122.46	120.94	T6: Top SW End
90	120.56	1.9	2.08	122.46	120.38	T6: Top of (82)

No.	TBM	Back Sight	Fore Sight	Collimation	Reduced Level	Notes
91	118.29	3.47	0.53	121.76	121.23	Traverse: OD on S.side of Manor Hill
92	121.23	3.1	1.6	124.33	122.73	TBM1
93	122.73	1.6	3.19	124.33	121.14	Traverse returned and Checked to
94	121.14	0.06	2.91	121.2	118.29	Stone marker on S.side of Manor Hill
95	122.73	1.23	3.4	123.96	120.56	Traverse to TBM3
96	120.56	0.8	2.29	121.36	119.07	Traverse to TBM1
97	119.07	3.79	1.26	122.86	121.6	Traverse to TBM4
98	121.6	1.95	1.11	123.55	122.44	T13: D5 Datum
99	121.6	1.95	1.96	123.55	121.59	T13: [90] Section
100	121.6	1.95	1.88	123.55	121.67	T13: [92] Section
101	121.6	1.95	1.65	123.55	121.9	T13: Top West End
102	121.6	1.95	1.92	123.55	121.63	T13: Bottom West End
103	121.6	1.95	1.43	123.55	122.12	T13: Top East End
104	121.6	1.95	2.38	123.55	121.17	T13: Bottom/Sondage East End
105	121.6	1.95	2.08	123.55	121.47	T14: Datum
106	121.6	1.95	2.2	123.55	121.35	T14: Top East End
107	121.6	1.95	2.81	123.55	120.74	T14: Bottom East End
108	121.6	1.95	2.98	123.55	120.57	T14: Top West End
109	121.6	1.95	3.68	123.55	119.87	T14: Bottom West End

APPENDIX III HER Summary Form

Site Code	BRC09					
Identification Name and Address	Brighton Racecourse, Brighton, East Sussex.					
County, District &/or Borough	East Sussex County Council					
OS Grid Refs.	533125 105065					
Geology	Chalk					
Type of Fieldwork	Eval. X	Excav.	Watching Brief	Standing Structure	Survey	Other
Type of Site	Green Field	Shallow Urban	Deep Urban X	Other		
Dates of Fieldwork	Other.	Excav.	WB.	Eval. 28 th January 2010 – 3 rd March 2010		
Sponsor/Client	Tom Wood Architecture on behalf of Northern Racing Ltd and Brighton and Sussex University Hospitals NHS Trust					
Project Manager	Chris Butler MIFA					
Project Supervisor	Clive Meaton					
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB
	AS	MED	PM X	Other: General Prehistoric		
<p><i>A programme of archaeological work was carried out in respect of the proposed construction of a new car park and associated access at Brighton Racecourse. These works assessed the archaeological potential of the development area. Geophysics identified several anomalies, most notably two rectilinear structures and evaluation trenches confirmed the presence of 18th-20th century structural remains in both locations, little more than 100mm below the ground surface. Further trenches were used to sample the site and confirmed a significant level of 19th-20th century made ground deposits and associated landscaping. However, at the southwest end of the development, adjacent to the upstanding Scheduled Ancient Monument, and at the north end no made ground deposits were recorded. Three undated postholes were also identified and it has been suggested that both areas have the potential for significant surviving archaeological deposits. An appropriate level of mitigation has therefore been recommended.</i></p>						

Chris Butler Archaeological Services

Chris Butler has been an archaeologist since 1985, and formed the Mid Sussex Field Archaeological Team in 1987, since when it has carried out numerous fieldwork projects, and was runner up in the Pitt-Rivers Award at the British Archaeological Awards in 1996. Having previously worked as a Pensions Technical Manager and Administration Director in the financial services industry, Chris formed **Chris Butler Archaeological Services** at the beginning of 2002.

Chris is a Member of the Institute of Field Archaeologists, a committee member of the Lithic Studies Society, and is a part time lecturer in Archaeology at the University of Sussex. He continues to run the Mid Sussex Field Archaeological Team in his spare time.

Chris specialises in prehistoric flintwork analysis, but has directed excavations, landscape surveys and watching briefs, including the excavation of a Beaker Bowl Barrow, a Saxon cemetery and settlement, Roman pottery kilns, and a Mesolithic hunting camp.

Chris Butler Archaeological Services is available for Flintwork Analysis, Project Management, Military Archaeology, Desktop Assessments, Field Evaluations, Excavation work, Watching Briefs, Field Surveys & Fieldwalking, Post Excavation Services and Report Writing.

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