aeon archaeology

Upton-by-Chester High School, Chester, Cheshire.
August 2013

Archaeological Watching Brief
Project Code: A0021
Report no. 0020

aeon archaeology

Upton-by-Chester High School, Chester, Cheshire. August 2013

Report no. 0020 v1.0

Archaeological Watching Brief

Aeon Archaeology
17 Cecil Street
Chester
CH3 5DP

Project Code: A0021
Date: 16/08/2013
Client: Upton by Chester High School
Written by: Richard Cooke BA MA MIfA
richard.cooke@aeonarchaeology.co.uk

Figures

Plates

Contents

aeon archaeology

1.0 Non Technical Summary

1.0 NON-TECHNICAL SUMMARY

Aeon Archaeology was commissioned by Julie Gerke (Premises Manager) to carry out an archaeological watching brief as a condition of a planning application (ref: **13/01168/FUL**) during the construction of a multi-use games area with floodlights at Upton-by-Chester High School, St. James's Avenue, Upton, Chester.

The groundworks associated with the construction of the new multi-use games area did not reveal any archaeological features, deposits, or structures, despite its proximity to the Scheduled Ancient Monument of *Roman camp 300.0m west of Upton Grange Farm* (1014376), located 20.0m to the north. It may be the case that due to the self-contained nature of Roman practice camps that ancillary features did not extend away from the defended enclosure, and as such there were no archaeological features to be observed within the watching brief area. However, it seems probable that at least artefacts such as broken ceramic sherds would have been deposited outside of the camp, although no artefacts of Roman date were found.

The lack of any archaeological features within the watching brief area and within the eight lighting column trenches can almost certainly be attributed to the disturbance experienced in the last twenty years. The construction of the staff car park, existing tennis courts, hard-standing around the school proper, and the former bungalow site has resulted in a truncation of the natural glacial substrata. This would have removed all archaeological remains with the exception of deeply cut negative features such as defensive ditches. As such the watching brief may have been within the correct location to observe archaeological remains associated with the Roman camp, but the evidence no longer exists.

.

aeon archaeology

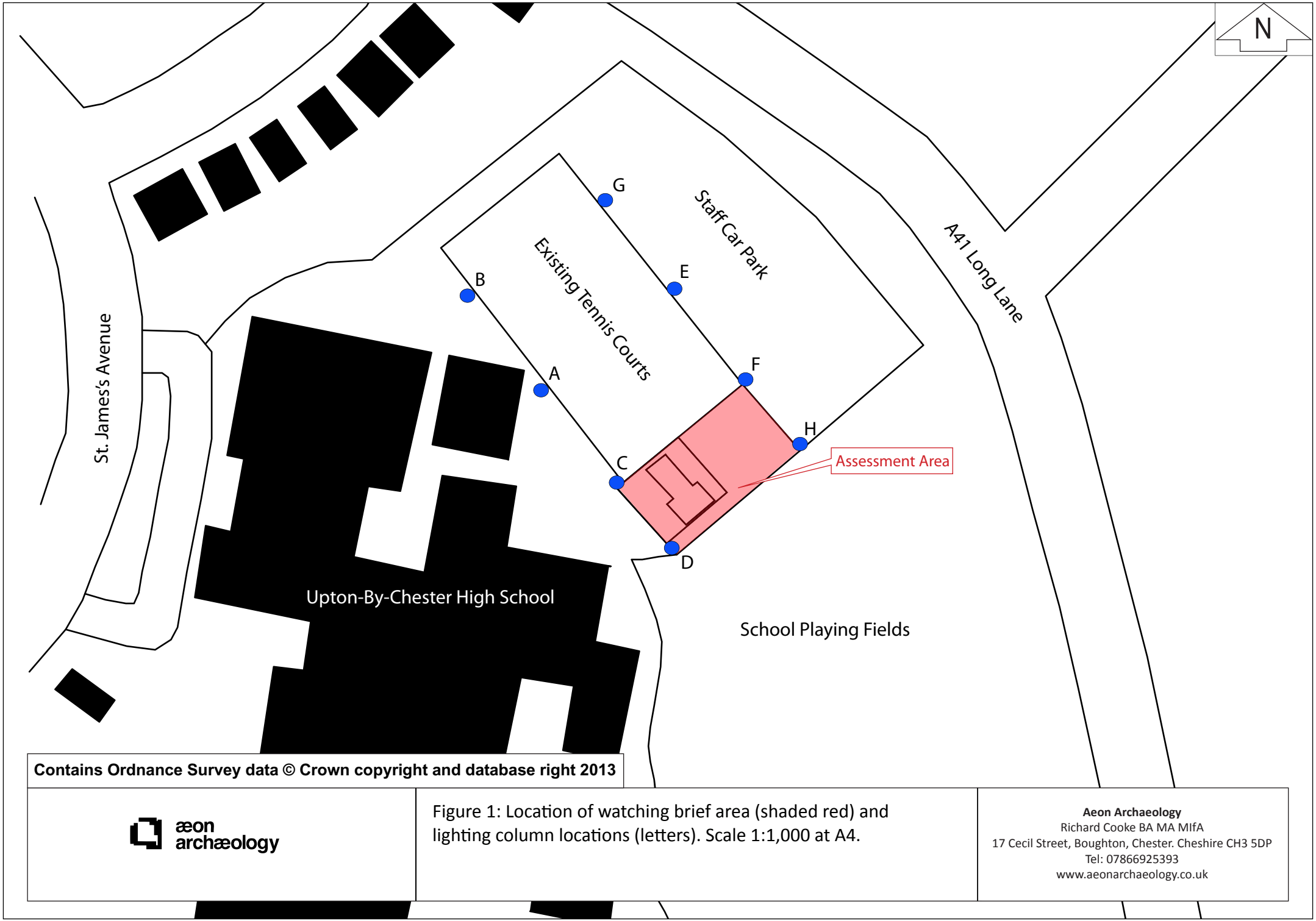
2.0 Introduction and Acknowledgements

2.0 INTRODUCTION AND AKNOWLEDGEMENTS

Aeon Archaeology was commissioned by Julie Gerke (Premises Manager) to carry out an archaeological watching brief as a condition of a planning application (ref: **13/01168/FUL**) during the construction of a multi-use games area with floodlights at Upton-by-Chester High School, St. James's Avenue, Upton, Chester, CH2 1NN (**NGR SJ 42064 69022**) (figure 1).

The area requiring monitoring by watching brief lies to the immediate southeast of existing tennis courts and is partly occupied by a patch of grass to the northeast and an area of tarmac to the southwest that was used to cap the foundations of a former bungalow that occupied the site (figure 2) (plates 1 and 2). To enable the construction of the new multi-surface games pitch the grassed area and former bungalow site were required to be reduced by approximately 0.3m below the existing tennis court level, to a gradient of 80% running southwest to northeast in order to allow water to run into a new drain. In addition the watching brief monitored the hand-dug foundations of eight new lighting columns.

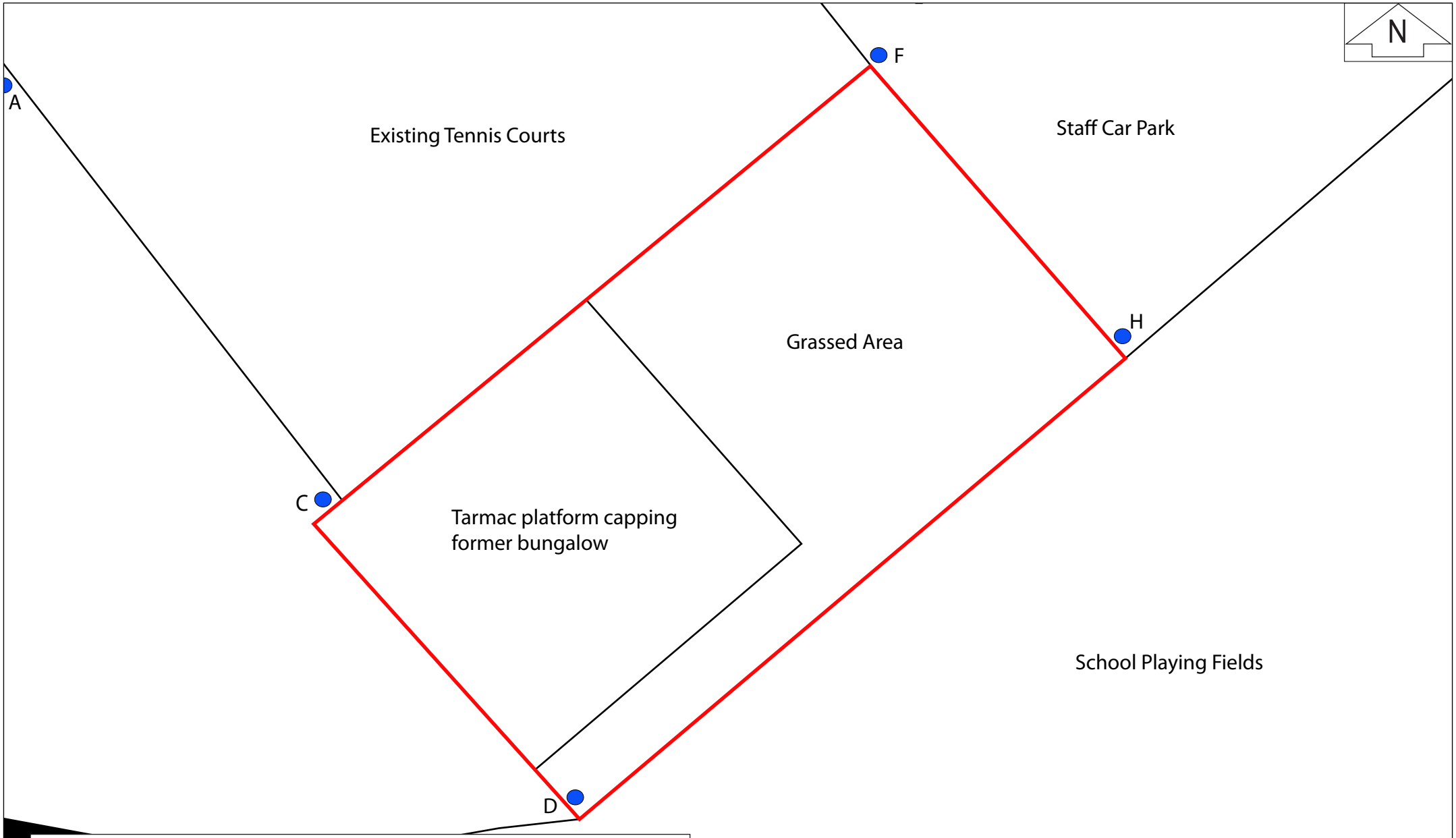
The following people and organisations are thanked for their help and contribution to the project. Julie Gerke of Upton by Chester High School; and Julie Edwards of the Cheshire Archaeology Planning Advisory Service.



æon archæology

Figure 1: Location of watching brief area (shaded red) and lighting column locations (letters). Scale 1:1,000 at A4.

Aeon Archaeology
Richard Cooke BA MA MIfA
17 Cecil Street, Boughton, Chester. Cheshire CH3 5DP
Tel: 07866925393
www.aeonarchaeology.co.uk



æon archæology

Figure 2: Location of Watching Brief area (outlined red; lighting column locations shown as blue circles). Scale 1:250 at A4.

Aeon Archaeology
Richard Cooke BA MA MIfA
17 Cecil Street, Boughton, Chester. Cheshire CH3 5DP
Tel: 07866925393
www.aeonarchaeology.co.uk

aeon archaeology

3.0 Project Aims

3.0 PROJECT AIMS

The aim of the works was to monitor and where relevant characterise the known, or potential, archaeological remains uncovered during the ground reduction works at the site.

The principal archaeological interest derives from the fact that the site is located approximately 20.0m southeast of a site of national significance, Scheduled Ancient Monument 1014376 *Roman camp 300.0m west of Upton Grange Farm*. The Scheduled Ancient Monument is one of a cluster of five Roman camps in the Upton area which form part of a wider distribution of such monuments on the northern and eastern outskirts of the city of Chester.

Cheshire Archaeology Planning Advisory Service had produced a design brief (CHE21WB dated 20/06/2013) for the archaeological watching work. This determined that the broad aims of the archaeological watching brief were:

- To determine, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains on the site, the integrity of which may be threatened by development at the site.

- To establish the nature and extent of existing disturbance and intrusion to sub-surface deposits and, where the data allows, assess the degree of archaeological survival of buried deposits of archaeological significance.

The detailed objectives of the archaeological watching brief were determined to be:

- Insofar as possible within methodological constraints, to explain any temporal, spatial or functional relationships between the structures/remains identified, and any relationships between these and the archaeological and historic elements of the wider landscape.

- Where the data allows, identify the research implications of the site with reference to the regional research agenda and recent work in Denbighshire.

An Archaeological Project Design (appendix III) was written by Aeon Archaeology and submitted to the Cheshire Archaeology Planning Advisory Service in June 2013. This formed the basis of a method statement submitted for the work. The archaeological watching brief was undertaken in accordance with this Project Design.

The management of this project has followed the procedures laid out in the standard professional guidance *Management of Archaeological Projects* (English Heritage, 1991), *Management of Research Projects in the Historic Environment Project Manager's Guide* (English Heritage 2006), and in the Institute for Archaeologists *Standard and Guidance for an archaeological watching brief* (1994 rev. 2001 and 2008). Five stages are specified:

- Phase 1: project planning
- Phase 2: fieldwork
- Phase 3: assessment of potential for analysis and revised project design
- Phase 4: analysis and report preparation
- Phase 5: dissemination

The current document reports on the phase 4 analysis and states the means to be used to disseminate the results. The purpose of this phase is to carry out the analysis identified in phase 3 (the assessment of potential phase), to amalgamate the results of the specialist studies, if required, with the detailed

site narrative and provide both specific and overall interpretations. The site is to be set in its landscape context so that its full character and importance can be understood. All the information is to be presented in a report that will be held by Cheshire Historic Environment Record so that it can be accessible to the public and future researchers. This phase of work also includes archiving the material and documentary records from the project.

aeon archaeology

4.0 Methodology

4.0 METHODOLOGY

4.1 Watching Brief

(Reproduced from IFA. 2001. *Institute for Archaeologists 1994 rev. 2001 and 2008 Standard and Guidance for an archaeological watching brief)*

The definition of an archaeological watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

This definition and standard do not cover chance observations, which should lead to an appropriate archaeological project being designed and implemented, nor do they apply to monitoring for preservation of remains *in situ.*

An archaeological watching brief is divided in to four categories according the IFA. 2001. *Institute for Archaeologists 2001 Standard and Guidance for an archaeological watching brief:*

- comprehensive (present during all ground disturbance)
- intensive (present during sensitive ground disturbance)
- intermittent (viewing the trenches after machining)
- partial (as and when seems appropriate).

An intensive watching brief was maintained during the excavation of the floodlight foundations and during intrusive groundworks for the multi-use games area.

4.2 Data Collection from Site Records

A database of the site photographs was produced to enable active long-term curation of the photographs and easy searching. The site records were checked and cross-referenced and photographs, plans and finds were cross-referenced to contexts. These records were used to write the site narrative and the field drawings and survey data were used to produce an outline plan of the site.

All paper field records were scanned to provide a backup digital copy. The photographs were organised and precisely cross-referenced to the digital photo record so that the Cheshire Historic Environment Record (CHER) can curate them in their active digital storage facility.

4.3 Artefact Methodology

All artefacts were collected and processed including those found within spoil tips. Finds numbers were attributed and they were bagged and labelled as well any preliminary identification taking place on site. After processing, all artefacts were cleaned and examined in-house at Aeon Archaeology.

4.4 Environmental Samples Methodology

The sampling strategy and requirement for bulk soil samples was related to the perceived character, interpretational importance and chronological significance of the strata under investigation. This ensured that only significant features would be sampled. The aim of the sampling strategy was to recover carbonised macroscopic plant remains, small artefacts particularly knapping debris and evidence for metalworking.

4.5 Storage and curation
The artefacts are currently the property of the landowner but it is strongly recommended that these are donated to a museum for long-term storage. Acceptance of this report by the client is taken as agreement to this transfer of ownership to a museum; to be confirmed with the Cheshire West and Chester Museums Service.

The finds have been prepared for deposition according to the Museum and Gallery's established guidelines. A full inventory of the archive will be created to aid accession.

4.6 Report and dissemination
This report will be placed in the public domain by submitting it to the Cheshire Historic Environment Record within 6 months of completion unless the client specifically requests the report to remain confidential for a longer period. The report will also be made available through a site notification form deposited with the Oasis Project.

aeon archaeology

5.0 History of the site

5.0 HISTORY OF THE SITE

The site occupies an area measuring approximately 0.6 hectares and lies approximately 20.0m southeast of a site of national significance, Scheduled Ancient Monument 1014376 *Roman camp 300.0m west of Upton Grange Farm*. The Scheduled Ancient Monument is one of a cluster of five Roman camps in the Upton area which form part of a wider distribution of such monuments on the northern and eastern outskirts of the city of Chester.

Archaeological fieldwork has taken place in the areas immediately bordering the tennis courts to the northwest and southwest. Geo-physical survey and evaluation in 1994 located the southern side of the enclosure ditch of the Roman camp which was subsequently scheduled in 1996. However the remaining evaluation trenches to the southwest of the camp and adjacent to the tennis courts did not reveal any features of archaeological significance but artefacts of Roman and later date were recovered. A watching brief conducted in 2005 during the construction of a new drama facility for the school did not identify any features of archaeological significance.

A cropmark recorded in 1991 indicates another rectangular enclosure in the grounds of Upton by Chester High School 125.0m to the southwest of the application area which is possibly another camp (Cheshire Historic Environment Record MCH1521).

The proposed development site occupies a flat plateau of land immediately southwest of the A41 road, which is currently utilised by existing tennis courts, the staff car park, and grassed playing fields. The site bedrock comprises the Chester pebble beds formation, a sedimentary bedrock that formed approximately 242 to 248 million years ago in the Triassic Period when the local environment was dominated by rivers. Above this lies Devensian – Diamicton till, superficial deposits that formed up to 2 million years ago in the Quaternary Period when the local environment was dominated by Ice Age conditions (British Geological Survey).

aeon archaeology

6.0 Quantification of results

6.0 QUANTIFICATION OF RESULTS

6.1 The Documentary Archive

The following documentary records were created during the archaeological watching brief.

Context sheets	3
Watching brief day sheets	9
Drawings	0
Digital photographs	68

6.2 Environmental Samples

No environmental samples were taken as part of the watching brief as no suitable archaeological deposits were encountered.

6.3 Artefacts

Midlands Black Ware/Buckley Ware (17th-19th Century)	19
Clay pipe fragments	4
Victorian Ceramic (19th-20th Century)	19
Modern Ceramic (20th Century)	15
Modern Glass (20th Century)	8
Iron	1
Total	**66**

7.0 Summary assessment of the material archive

7.0 SUMMARY ASSESSMENT OF THE MATERIAL ARCHIVE

Artefacts are referred to with their assigned small find number (SF) the details of which can be found in appendix II.

Sixty-three percent of the artefacts recovered during the programme of archaeological watching brief were ceramic and glass sherds of modern 20th century date. These consisted of broken fragments of modern white glazed wall tiles (SF 3); clear, green, and brown glass fragments (SF 6); and sherds of assorted white china (SF 5 and 10). The modern artefacts were found unstratified within both the topsoil (1001) and the subsoil (1002) horizons and can be almost certainly attributed to the demolition phase of the former bungalow that occupied the south-western part of the site.

In addition a further 29% of the artefacts recovered were Victorian (19th-20th Century) ceramic sherds. These were found unstratified within both the topsoil (1001) and the subsoil (1002) horizons and constituted fourteen sherds of a cream glazed earthenware ceramic (SF 8); two sherds of ridged unglazed earthenware (SF 9 and 12); and three sherds of white glazed earthenware ceramic (SF 4). These artefacts are typical to the type of domestic ceramics found dating to the Victorian period and were possibly deposited when the land formed part of the fields belonging to the Plas Newton Estate.

The earliest artefacts found were nineteen sherds of Midlands Black Ware/Buckley Ware (SF 1 and 7) and four fragments of clay pipe stem (SF 2). Two of the Buckley Ware sherds were found within the topsoil layer (1001) but the majority were found in the subsoil layer (1002) and are almost certainly indicative of the utilisation of the site as agricultural land prior to the 20th Century. Buckley Ware was produced from the 17th Century until the end of the 19th Century and is characterised by a red fabric with a black glaze achieved by the addition of iron (Laing, 2003). The most common vessels produced in this fabric were bread bowls but cups, mugs, beakers, and pitchers were all commonly produced as well. Sherds of this fabric are often found on former agricultural land where seasonal labourers would discard broken vessels rather than repair them, due to it being a cheap and widely available ceramic.

aeon archaeology

8.0 Results of the archaeological watching brief

8.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF

The watching brief observed the ground reduction at the former bungalow site/grassed area to the immediate southeast of the existing tennis courts (figure 2), including the excavation of a new drain. In addition eight hand-dug foundation trenches for lighting columns were also observed and recorded (figure 1). The location and orientation of photographs are shown on figure 4.

Former bungalow site/grassed area (figure 3)

Description

The area consisted of a 0.6 hectare site located to the immediate southeast of the existing tennis courts. The site was divided roughly in two by a grassed area to the northeast (plate 1) and an area of raised tarmac surrounded by a fence to the southwest (plate 2), marking the site of a former bungalow that had been demolished and capped. The tarmac area was raised approximately 0.4m above the height of the existing tennis courts and was reduced using a toothed ditching bucket. As the bungalow foundations were removed it was found that a 0.1m thick layer of tarmac had been placed over a thick demolition layer of hardcore rubble comprising stone, brick and concrete and measuring approximately 0.6m in depth (plate 3).

The demolition material from the bungalow was removed on to a natural glacial substrata (1003) comprising mixed beige and black mottled clay with fairly frequent small angular stone inclusions. The substrata had almost certainly been truncated by the construction of the bungalow and was found to be highly disturbed by the foundations, utilities, and numerous field drains (plate 4). No archaeological features, deposits or structures were identified within the area of the former bungalow.

Once the demolition material from the former bungalow site had been removed the contractor focused on reducing the grassed area to the immediate northwest of the bungalow site using a toothless ditching bucket (plate 5). The topsoil (1001) layer was removed and measured approximately 0.3m in depth, comprising a dark black-brown silt-clay-loam with occasional small sub-angular stone inclusions. The topsoil layer produced two sherds of 18th Century Buckley Ware (SF 1) as well as four fragments of clay pipe stem (SF 2); seven fragments of modern ceramic wall tile (SF 3); three sherds of Victorian glazed earthenware (SF 4); one sherd of unglazed Victorian earthenware (SF 12); seven sherds of modern white glazed ceramic (SF 5); and eight fragments of modern clear, green, and brown glass (SF 8). The modern artefacts recovered from the topsoil layer were clearly indicative of the demolition material found strewn within the topsoil from the former bungalow, and were found alongside demolition debris including concrete, brick, and iron pipe.

The subsoil layer (1002) was then removed which measured approximately 0.3m in depth and constituted a mid to dark red-brown silt-clay with infrequent small sub-angular stone inclusions. The subsoil layer produced seventeen sherds of 18th Century Buckley Ware (SF 7); fourteen sherds of Victorian cream glazed earthenware ceramic (SF 8); one sherd of Victorian unglazed earthenware ceramic (SF 9); one sherd of modern white glazed ceramic (SF 10); and half of an iron horse-shoe (SF 11).

The subsoil layer lay above the natural glacial substrata (1003) of mixed beige and black mottled clay as seen beneath the former bungalow, although due to the 80% gradient of the ground reduction level the natural substrata was only visible in a band measuring approximately 8.0m in width at the north-western edge of the site (plate 6). The substrata was not as disturbed as the area beneath the bungalow but was criss-crossed by modern utilities and field drains. Overall the ground was reduced by approximately 0.35m beneath the level of the existing tennis courts to the immediate northwest (plate 7) and by approximately 0.4m beneath the level of the existing grass playing fields to the immediate southeast (plate 8). No archaeological features, deposits or structures were observed.

Once the ground level had been reduced and graded, the contractor used a toothless ditching bucket to excavate a new drain and manhole (plate 9). The drain measured approximately 0.4m in width and was excavated to a depth of 0.5m into the glacial substrata at its south-eastern point. From there the drain ran for approximately 12.0m southeast to northwest before turning and heading northeast for approximately 20.0m, where it rose to a depth of 0.1m. Several field drains and utilities were observed within the drain section, some of which were not apparent on the surface of the substrata (plate 10).

Discussion

The construction of the bungalow had resulted in the natural substrata clay layer (1003) being truncated and disturbed by numerous utilities as well as the foundations of the building. As such it had removed any potential for preserved buried archaeological remains within this area. The demolition material and associated artefacts were found to spread into the topsoil layer (1001) of the grassed area and it is clear that as the bungalow was demolished its remains were pulled out across the site. As the subsoil layer (1002) was removed, artefacts and debris associated with the bungalow demolition became fewer and artefacts associated with the Victorian period and 18th Century were found. These artefacts were almost certainly deposited prior to the construction of the school and bungalow and most likely date to when the land was utilised for agriculture as part of the Plas Newton estate.

The natural substrata was only visible in a 8.0m wide band running from northeast to southwest at the north-western edge of the site, as the contractor had to create an 80% gradient to allow water to drain away. As such the natural substrata was not observed across the south-eastern half of the watching brief area. It is however unlikely that any archaeological features would have been preserved within this area as the remaining part of the subsoil layer was criss-crossed by utilities and field drains.

Plate 01: Former bungalow site/grassed area prior to ground reduction, from the northeast.

Plate 02: Location of former bungalow, from the northeast.

Plate 03: Demolition material from the former bungalow, from the west. Scale 1.0m.

Plate 04: Foundations of the former bungalow, from the northeast. Scale 1.0m.

Plate 05: Removing the topsoil and subsoil layers within the grassed area, from the northwest. Scale 1.0m.

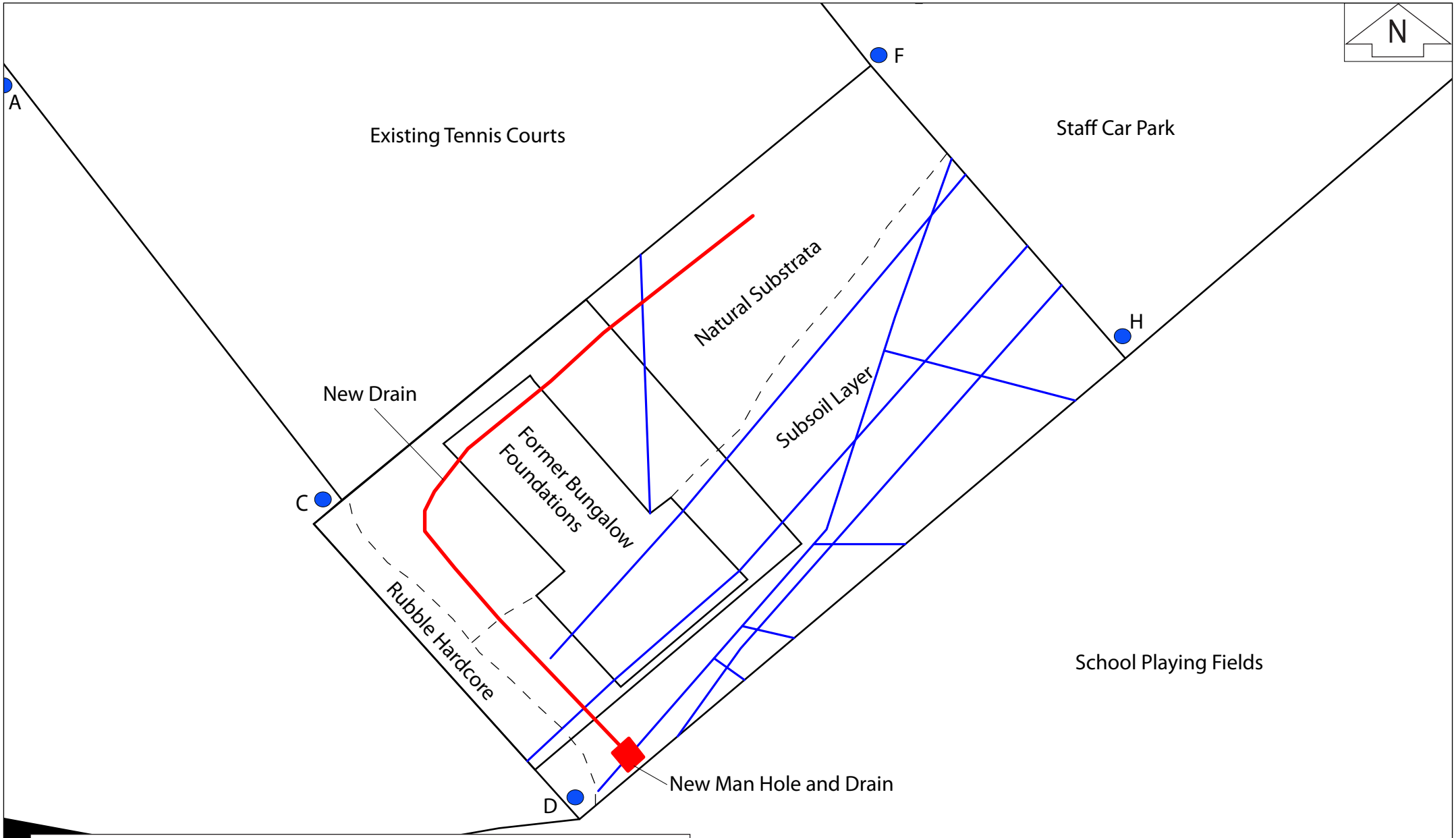
Plate 06: Watching brief area stripped down to natural glacial substrata and remaining subsoil layer, from the northeast. Scale 1.0m.

Plate 07: Trench section showing the ground reduction beneath the existing tennis courts, from the southeast. Scale 0.5m.

Plate 08: Trench section showing the ground reduction beneath the existing playing fields, from the northwest. Scale 0.5m.

Plate 09: New drain excavated through the natural glacial substrata, from the northeast. Scale 0.5m.

Plate 10: Section of new drain showing buried ceramic field drain, from the northeast. Scale 0.5m.



æon archæology

Figure 3: Results of the Watching Brief showing the former bungalow foundations, field drains (shaded blue), areas where the natural substrata was reached, and new excavations (shaded red; lighting column locations shown as blue circles). Scale 1:250 at A4.

Aeon Archaeology
Richard Cooke BA MA MIfA
17 Cecil Street, Boughton, Chester. Cheshire CH3 5DP
Tel: 07866925393
www.aeonarchaeology.co.uk

Lighting column trench A (figure 1; plate 11)

Description

Lighting column A was located at NGR SJ 42040 69049, towards the west of the existing tennis courts. A trench measuring 0.3m in width and 0.5m in depth was excavated by hand for approximately 4.0m in length from the edge of the existing tennis courts southwest towards the main school building. The trench cut through a layer of tarmac measuring 0.3m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had been truncated prior to the deposition of the tarmac layer, and as such all but the deepest of cut archaeological features would have been removed by the works.

Lighting column trench B (figure 1; plate 12)

Description

Lighting column B was located at NGR SJ 42024 69066, in the northwest corner of the existing tennis courts. A foundation hole measuring 0.8m by 0.4m and orientated from northeast to southwest was excavated by hand to a depth of 1.1m. The trench cut through a layer of tarmac measuring 0.22m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had been truncated prior to the deposition of the tarmac layer, and as such all but the deepest of cut archaeological features would have been removed by the works.

Lighting column trench C (figure 1; plate 13)

Description

Lighting column C was located at NGR SJ 42052 69030, towards the west of the existing tennis courts. A foundation hole measuring 0.5m by 0.4m and orientated from northeast to southwest was excavated by hand to a depth of 1.1m. The trench cut through a layer of tarmac measuring 0.1m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had not been truncated in this part of the site. However the lighting column lay to the immediate southwest of the bungalow site which was heavily disturbed by utilities and field drains.

Lighting column trench D (figure 1; plate 14)

Plate 11: Lighting column trench A, from the southeast. Scale 0.5m.

Plate 12: Lighting column trench B, from the southeast. Scale 0.5m.

Plate 13: Lighting column trench C, from the northwest. Scale 0.5m.

Description

Lighting column D was located at NGR SJ 42065 69016, to the southeast of the former bungalow site. A foundation hole measuring 0.4m in diameter was excavated by hand to a depth of 1.1m. The trench cut through a layer of tarmac measuring 0.4m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had been truncated prior to the deposition of the tarmac layer, and as such all but the deepest of cut archaeological features would have been removed by the works.

Lighting column trench E (figure 1; plate 15)

Description

Lighting column E was located at NGR SJ 42066 69070, towards the east of the existing tennis courts. A foundation hole measuring 0.7m by 0.4m and orientated from northeast to southwest was excavated by hand to a depth of 1.1m. The trench cut through a dark black-brown silt-clay subsoil layer (1002) measuring 0.15m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had been truncated prior to the deposition of the tarmac layer, and as such all but the deepest of cut archaeological features would have been removed by the works.

Lighting column trench F (figure 1; plate 16)

Description

Lighting column F was located at NGR SJ 42080 69050, towards the east of the grassed area. A foundation hole measuring 0.4m in diameter was excavated by hand to a depth of 1.1m. The trench cut through a layer of tarmac measuring 0.4m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had been truncated prior to the deposition of the tarmac layer, and as such all but the deepest of cut archaeological features would have been removed by the works.

Plate 14: Lighting column trench D, from the northwest. Scale 0.5m.

Plate 15: Lighting column trench E, from the southeast. Scale 0.5m.

Plate 16: Lighting column trench F, from the northeast. Scale 0.5m.

Lighting column trench G (figure 1; plate 17)

Description

Lighting column G was located at NGR SJ 42051 69090, towards the northeast corner of the existing tennis courts. A foundation hole measuring 0.4m in diameter was excavated by hand to a depth of 1.1m. The trench cut through a layer of tarmac measuring 0.25m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had been truncated prior to the deposition of the tarmac layer, and as such all but the deepest of cut archaeological features would have been removed by the works.

Lighting column trench H (figure 1; plate 18)

Description

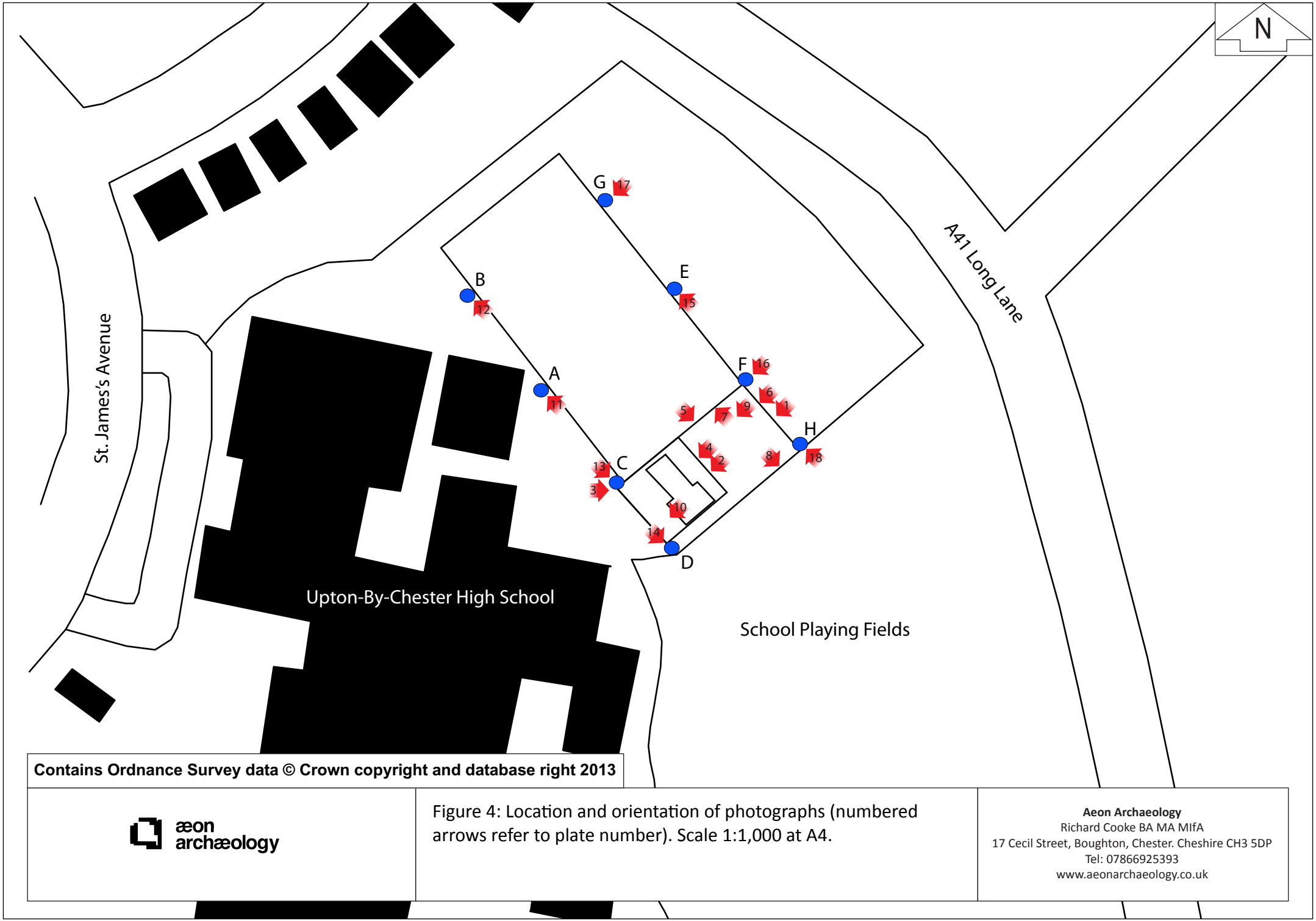
Lighting column H was located at NGR SJ 42093 69034, in the southeast corner of the grassed area. A foundation hole measuring 0.6m by 0.4m and orientated from northeast to southwest was excavated by hand to a depth of 1.1m. The hole was widened to the northeast to avoid a water main discovered during excavation. The northeast side of the trench cut through a dark black-brown silt-clay subsoil layer (1002) measuring 0.3m in depth and then cut through the natural glacial substrata (1003) comprising mixed beige and black mottled clay. The stratigraphy of the southwest side of the trench was entirely disturbed by the water main. No archaeological features were observed and no artefacts were recovered.

Discussion

The stratigraphy in the lighting column trench shows that the natural glacial substrata had not been truncated in this part of the site. However the lighting column lay immediately adjacent to an area of land disturbed by a buried water main.

Plate 17: Lighting column trench G, from the northeast. Scale 0.5m.

Plate 18: Lighting column trench H, from the southeast. Scale 0.5m.



æon archæology

Figure 4: Location and orientation of photographs (numbered arrows refer to plate number). Scale 1:1,000 at A4.

Aeon Archaeology
Richard Cooke BA MA MIfA
17 Cecil Street, Boughton, Chester. Cheshire CH3 5DP
Tel: 07866925393
www.aeonarchaeology.co.uk

aeon archaeology

9.0 Conclusion and recommendations

9.0 CONCLUSION AND RECOMMENDATIONS

The groundworks associated with the construction of the new multi-use games area at Upton-by-Chester High School did not reveal any archaeological features, deposits, or structures, despite its proximity to the Scheduled Ancient Monument of *Roman camp 300.0m west of Upton Grange Farm* (1014376), located 20.0m to the north. It may be the case that due to the self-contained nature of Roman practice camps that ancillary features did not extend away from the defended enclosure, and as such there were no archaeological features to be observed within the watching brief area. However, it seems probable that artefacts such as broken ceramic sherds would have been deposited outside of the camp, although no artefacts of Roman date were found.

The lack of any archaeological features within the watching brief area and within the eight lighting column trenches can almost certainly be attributed to the disturbance experienced in the last twenty years. The construction of the staff car park, existing tennis courts, hard-standing around the school proper, and the former bungalow site has resulted in a truncation of the natural glacial substrata. This would have removed all archaeological remains with the exception of deeply cut negative features such as defensive ditches. As such the watching brief may have been within the correct location to observe archaeological remains associated with the Roman camp, but the evidence no longer exists.

As there is still a likelihood of observing deeply cut negative features, coupled with the lack of archaeological excavation work associated with Roman practice camps in Cheshire, it is recommended that any future intrusive groundworks at the site be monitored in a similar fashion.

aeon archaeology

10.0 Sources

10.0 SOURCES

British Geological Survey: www.bgs.ac.uk

Cheshire Archaeology Planning Advisory Service design brief CHE21WB (dated 20/06/2013)

Cheshire Historic Environment Record

English Heritage, 1991. *Management of Archaeological Projects*

English Heritage, 2006. *Management of Research Projects in the Historic Environment Project Manager's Guide*

Institute of Field Archaeologists, 1994, rev. 2001 & 2008. *Standard and Guidance for Archaeological Watching Brief*

Institute of Field Archaeologists, 1995 revised Oct 2008. *Standards and Guidance: Excavation*

Laing, L. 2003. *Pottery in Britain: 4000 BC to AD 1900.*

Appendix I: Details of recorded contexts

APPENDIX I – DETAILS OF RECORDED CONTEXTS

Context Number	Form	Description	Artefacts
1001	Topsoil	0.3m in depth, comprising a dark black-brown silt-clay-loam with occasional small sub-angular stone inclusions.	SF 1-6, and 12.
1002	Subsoil	0.3m in depth and constituted a mid to dark red-brown silt-clay with infrequent small sub-angular stone inclusions.	SF 7-11.
1003	Glacial substrata	mixed beige and black mottled clay with fairly frequent small angular stone inclusions.	n.a.

Appendix II: Gazetteer of artefacts

APPENDIX II – GAZETTEER OF ARTEFACTS

Finds no.	Context	Description	Photograph
1	1001	1x base sherd and 1x handle sherd 18th Century Midlands Black Ware/ Buckley Ware	I
2	1001	4x clay pipe stem fragments	I
3	1001	7x sherds of modern ceramic wall tile	II
4	1001	3x sherds of 19th Century Victorian cream glazed earthenware	III
5	1001	7x sherds of assorted modern white glazed china	IV
6	1001	8x sherds of modern glass	V
7	1002	17x sherds of 18th Century Midlands Black Ware/ Buckley Ware	VI
8	1002	14x sherds of 19th Century Victorian white and yellow glazed earthenware	VII
9	1002	1x sherd of 19th Century Victorian unglazed ridged earthenware	VIII
10	1002	1x sherd 20th Century modern brown and yellow glazed earthenware	VIII
11	1002	1x half iron horse shoe	VIII
12	1001	1x sherd of 19th Century Victorian unglazed ridged earthenware	III

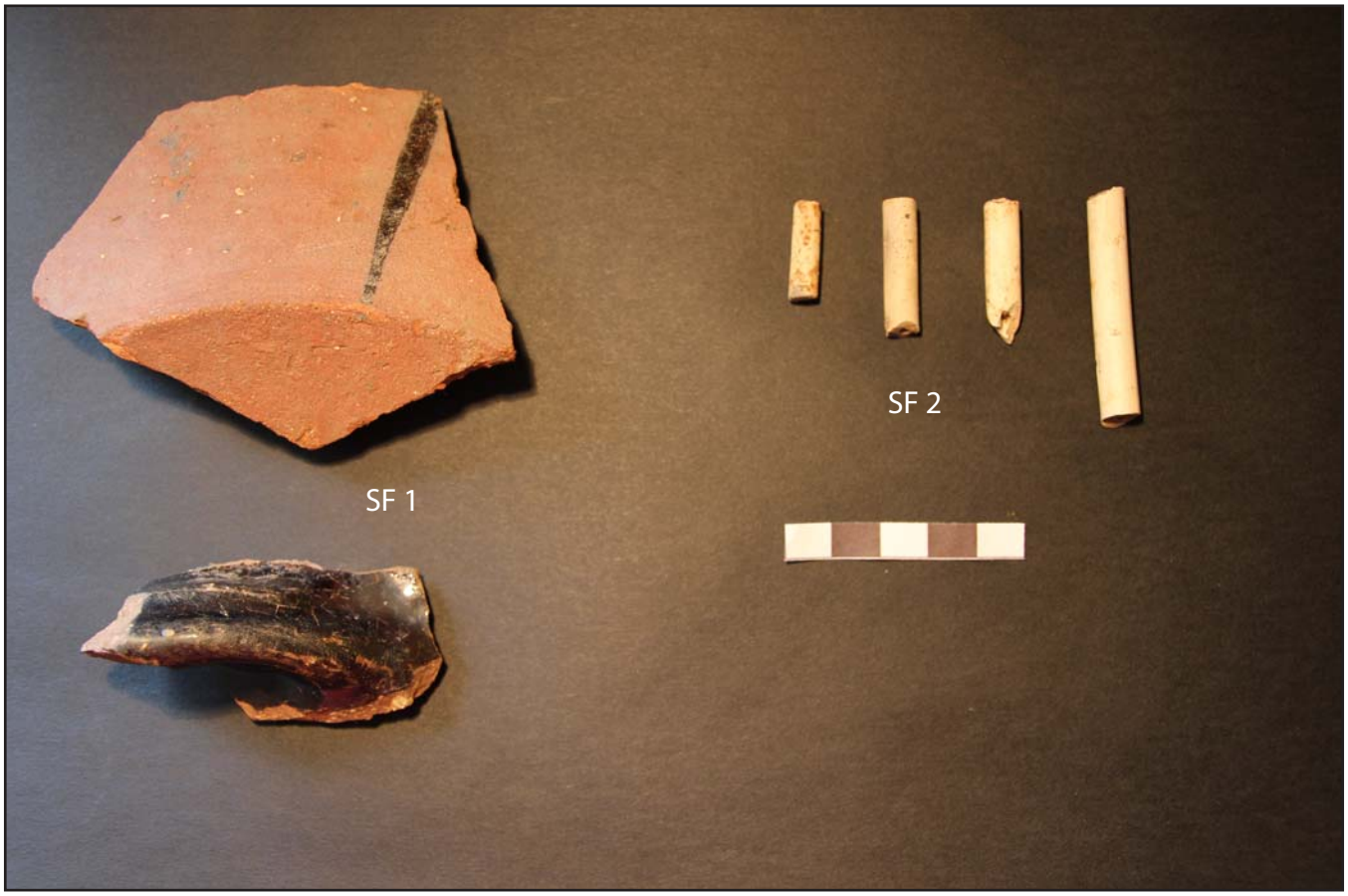


Plate I: Artefacts recovered from the topsoil (1001) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

Plate II: Artefacts recovered from the topsoil (1001) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

Plate III: Artefacts recovered from the topsoil (1001) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

Plate IV: Artefacts recovered from the topsoil (1001) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

Plate V: Artefacts recovered from the topsoil (1001) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

Plate VI: Artefacts recovered from the subsoil (1002) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

Plate VII: Artefacts recovered from the subsoil (1002) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

Plate VIII: Artefacts recovered from the subsoil (1002) (Numbers refer to small find numbers, see appendix II). Scale 5cm.

aeon archaeology

Appendix III:
Project design for archaeological watching brief

1. INTRODUCTION

Aeon Archaeology has been asked by Julie Gerke (Premises Manager) to provide a cost and project design for carrying out an archaeological watching brief as a condition of a planning application (ref: **13/01168/FUL**) during the construction of a multi-use games area with floodlights at Upton-by-Chester High School (**NGR SJ 4205 6904**).

A mitigation brief has been prepared for this work by the **Cheshire Archaeology Planning Advisory Service** which in accordance with planning condition AR03 states:

'*No development shall take place within the area indicated until the implementation of a programme of archaeological work in accordance with a written scheme of investigation has been secured by the applicant, or their agents or successors in title and approved in writing by the local planning authority. The work shall be carried out strictly in accordance with the approved scheme'* (1301168CW Upton High School Archaeological Dig).

This project design is for the intensive watching brief and reporting of the archaeological remains found during the intrusive groundworks associated with the new multi-use games area and floodlight foundations. The design does not cover any requirement for a watching brief during ground reduction of the existing tennis courts.

<u>In accordance with the planning condition (AR03) it is a requirement that this project design be submitted to and approved by the Cheshire Archaeology Planning Advisory Service prior to the commencement of works.</u>

Reference will be made to the guidelines specified in Standard and Guidance for Archaeological Watching Brief (Institute for Archaeologists, 1994, rev. 2001 and 2008).

2. STATUTORY AND NON-STATUTORY DESIGNATIONS

- The site lies approximately 20.0m southeast of the *Roman camp 300.0m west of Upton Grange Farm* Scheduled Ancient Monument (1014376);

- The site lies approximately 125.0m northeast of a possible second Roman camp (MCH1521).

3. ARCHAEOLOGICAL BACKGROUND

The application site of 2,380 sq metres lies approximately 20.0m southeast of a site of national significance - Scheduled Monument 1014376 Roman camp 300.0m west of Upton Grange Farm. The scheduled monument is one of a cluster of five Roman camps in the Upton area which form part of a wider distribution of such monuments on the northern and eastern outskirts of the city of Chester. Archaeological fieldwork in 1994, in the areas immediately bordering the tennis courts to the northwest and southwest, located the southern side of the enclosure ditch of the Roman camp which was subsequently scheduled in 1996.

A cropmark recorded in 1991 indicates another rectangular enclosure in the grounds of Upton-by-Chester High School 125.0m to the southwest of the application area which is possibly another camp (Cheshire Historic Environment Record MCH1521).

The proposed development site occupies a flat plateau of land immediately southwest of the A41 road, which is currently utilised by existing tennis courts, the staff car park, and grassed playing fields. The site bedrock comprises the Chester pebble beds formation, a sedimentary bedrock that formed approximately 242 to 248 million years ago in the Triassic Period when the local environment

was dominated by rivers. Above this lies Devensian – Diamicton till, superficial deposits that formed up to 2 million years ago in the Quaternary Period when the local environment was dominated by Ice Age conditions (British Geological Survey).

4. ARCHAEOLOGICAL AIMS

The **watching brief** will consist of the following:

- Observation of all intrusive groundworks associated with the new multi-use games area and floodlight foundations to identify and record any archaeological deposits revealed in the development area.
- A written and photographic record of any archaeological features.
- Production of a report on the work.
- Preparation and deposition of a full project archive.

If archaeological/ human remains are encountered during the watching brief it may be necessary to suspend development work in that area. The client should have a suitable contingency in place in case of such a scenario.

5. PROGRAMME OF WORK

5.1 Archaeological Watching Brief

(Reproduced from IFA. 2001. *Institute for Archaeologists 1994 rev. 2001 and 2008 Standard and Guidance for an archaeological watching brief)*

The definition of an archaeological watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

This definition and *Standard* do not cover chance observations, which should lead to an appropriate archaeological project being designed and implemented, nor do they apply to monitoring for preservation of remains *in situ.*

An archaeological watching brief is divided in to four categories according the IFA. 2001. *Institute for Archaeologists 2001 Standard and Guidance for an archaeological watching brief:*

- comprehensive (present during all ground disturbance)
- intensive (present during sensitive ground disturbance)
- intermittent (viewing the trenches after machining)
- partial (as and when seems appropriate).

An **intensive** watching brief is to be maintained during the excavation of the floodlight foundations and during intrusive groundworks for the multi-use games area.

The groundworks will comprise the reduction of the ground surface for the creation of a new multi-use games area. In addition foundation pits will be excavated for the erection of new floodlights. Archaeological deposits revealed will be recorded in detail using context records on individual pro-forma sheets, with each layer, fill, cut or structure described and numbered.

A register will be maintained throughout the watching brief for all photographs, levels, plans, sections and environmental samples. In addition all plans will be made to the most suitable scale of either 1:50 or 1:20 and all section drawings will be made at 1:10 or 1:20 depending upon complexity. A location plan at a suitable scale will be used to show the locations of trenches and all exposed features in relation to published boundaries/modern topograph.

A photographic record will be maintained throughout, using a digital SLR camera (Canon 550D) set to maximum resolution and any subsurface remains will be recorded photographically, with detailed notations and a measured survey using a handheld GPS (Satmap Active 10). The archive produced will be held at Aeon Archaeology under the project code (**A0021**).

6. FURTHER ARCHAEOLOGICAL WORKS

- The discovery of substantial buried archaeological remains during the watching brief may result in the requirement for a wider programme of archaeological mitigation. This may require the submission of revised quotes to the client.

- This design does not include a methodology or cost for examination, conservation and archiving of finds discovered during the watching brief, nor of any radiocarbon dates required, nor of examination of palaeoenvironmental samples. The need for these will be identified in the post-fieldwork programme (if required), and a new design will be issued for approval by the Development Control Archaeologist.

7. ENVIRONMENTAL SAMPLES

If necessary, relevant archaeological deposits will be sampled by taking bulk samples (a minimum of 10.0 litres and maximum of 30.0 litres) for flotation of charred plant remains. Bulk samples will be taken from waterlogged deposits for macroscopic plant remains. Other bulk samples, for example from middens, may be taken for small animal bones and small artefacts.

Bulk environmental samples will also be taken from any fills, deposits or structures which yield archaeological artefacts, charcoal flecks/ fragments, bone, or any other historic remains.

Advice and guidance regarding environmental samples and their suitability for radiocarbon dating, as well as the analysis of macrofossils (charcoal and wood), pollen, animal bones and molluscs will be obtained from Oxford Archaeology.

8. HUMAN REMAINS

Any finds of human remains will be left *in-situ*, covered and protected, and both the coroner and the Cheshire Archaeology Planning and Advisory Service Archaeologist informed. If removal is necessary it will take place under appropriate regulations and with due regard for health and safety issues. In order to excavate human remains, a licence is required under Section *25* of the Burials Act 1857 for the removal of any body or remains of any body from any place of burial. This will be applied for should human remains need to be investigated or moved.

9. FINDS

All artefacts and ecofacts will be retrieved for identification and recording and will be treated in accordance with IfA 2008 Guidelines for the collection, documentation, conservation and research of archaeological materials

All finds are the property of the landowner (Upton-by-Chester High School) but it is recommended that finds are deposited with the rest of the project archive with Cheshire West and Chester Museums Service. Furthermore, the client agrees to granting access to all finds recovered by Aeon Archaeology for analysis, study and publication as necessary. All finds would be treated according to advice provided within *First Aid for Finds* (Rescue 1999). Aeon Archaeology staff will undertake initial identification, but any additional advice would be sought from a wide range of consultants.

The recovery policy for archaeological finds will be kept under review throughout the watching brief. Any changes in recovery priorities will be under guidance from an appropriate specialist and agreed with the Cheshire Archaeology Planning and Advisory Service Archaeologist. There will be a presumption against the disposal of archaeological finds regardless of their apparent age or condition.

All finds will be collected and processed including those found within spoil tips. Their location and height will be plotted; finds numbers attributed, bagged and labelled as well any preliminary identification taking place on site. Where specialist advice is required provision will be made to do so at the earliest possible convenience.
After processing, artefacts which are suitable will be cleaned and conserved in-house. Artefacts requiring specialist cleaning and conservation will be sent to the relevant specialist. All finds will then be sent to a specialist for analysis, the results of which will then be assessed to ascertain the potential of the finds assemblage to meet the research aims of the project. The value of the finds will also be assessed in terms of the wider educational and academic contributions.

<u>The cost for examination, conservation and archiving of finds discovered during the watching brief are not included within this quote.</u>

If well preserved materials are found it may be necessary to employ additional staff. Furthermore, it may be necessary to suspend work within a specific region of the site, or across the whole site, while conservation and excavation/recording takes place. Aeon Archaeology accepts no responsibility for any costs incurred from delays as a result of unexpected archaeological finds.

<u>The cost for the additional staff, resources, and time required to excavate/ record unexpected archaeological finds/ features are not included within this quote and a separate project design and costs will be submitted to the client if necessary.</u>

10. UNEXPECTED DISCOVERIES: TREASURE TROVE

Treasure Trove law has been amended by the Treasure Act 1996. The following are Treasure under the Act:

- *Objects other than coins* any object other than a coin provided that it contains at least 10% gold or silver and is at least 300 years old when found.

- *Coins* all coins from the same find provided they are at least 300 years old when found (if the coins contain less than 10% gold or silver there must be at least 10. Any object or coin is part of the same find as another object or coin, if it is found in the same place as, or had previously been left together with, the other object. Finds may have become scattered since they were

originally deposited in the ground. Single coin finds of gold or silver are not classed as treasure under the 1996 Treasure Act.

- *Associated objects* any object whatever it is made of, that is found in the same place as, or that had previously been together with, another object that is treasure.

- *Objects that would have been treasure trove* any object that would previously have been treasure trove, but does not fall within the specific categories given above. These objects have to be made substantially of gold or silver, they have to be buried with the intention of recovery and their owner or his heirs cannot be traced.

The following types of finds are not treasure:

- Objects whose owners can be traced.

- Unworked natural objects, including human and animal remains, even if they are found in association with treasure.

- Objects from the foreshore which are not wreck.

All finds of treasure must be reported to the coroner for the district within fourteen days of discovery or identification of the items. Items declared Treasure Trove become the property of the Crown.

The British Museum will decide whether they or any other museum may wish to acquire the object. If no museum wishes to acquire the object, then the Secretary of State will be able to disclaim it. When this happens, the coroner will notify the occupier and landowner that he intends to return the object to the finder after 28 days unless he receives no objection. If the coroner receives an objection, the find will be retained until the dispute has been settled.

11. REPORT PRODUCTION

Following completion of the watching brief as outlined above, a report will be produced incorporating the following:

- Non-technical summary
- Introduction
- Project Design
- Methodology
- Archaeological Background
- Description of the results of the watching brief
- A finds report
- Summary and conclusions
- Bibliography of sources consulted.

Illustrations will include plans of the location of the study area and archaeological sites, section drawings and if appropriate plans. Historical maps, when appropriate and if copyright permissions allow, will be included. Photographs of relevant sites and of the study area where appropriate will be included.

A draft copy of the report will be sent to the Cheshire Archaeology Planning Advisory Service archaeologist and to the client prior to production of the final report.

12. ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, in line with the IfA 2012 Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives and in consultation with Cheshire West and Chester Museums Service

and lodged with Cheshire West and Chester Museums Service within two months of the completion of the project.

Bound copies of the report and an archive CD will be sent to the regional HER (CHER, The Forum, Chester, Cheshire, CH1 2HS).

13. PERSONNEL

The work will be managed and undertaken by Richard Cooke, Archaeological Contractor and Consultant at Aeon Archaeology.

14. MONITORING

Monitoring visits can be arranged during the course of the project with the clients and with the appropriate Development Control archaeologist.

15. HEALTH AND SAFETY

Aeon Archaeology has a Health and Safety Policy Statement which can be supplied upon request. Furthermore, site-specific Risk Assessments and Method Statements are compiled and distributed to every member of staff involved with the project prior to the commencement of works.

16. INSURANCE

Liability Insurance – Towergate Insurance Policy 000467

- Employers' Liability: Limit of Indemnity £10m in any one occurrence
- Public Liability: Limit of Indemnity £2m in any one occurrence
- Legal Defence Costs (Health and Safety at Work Act): £250,000

The current period expires 30/09/13

Professional Indemnity Insurance – Towergate Insurance Policy 2011025521290

- Limit of Indemnity £500,000 any one claim

The current period expires 30/09/13

17. SOURCES CONSULTED

Cheshire Archaeology Planning Advisory Service: *Upton High School design brief.* CHE321WB

Cheshire Archaeology Planning Advisory Service. 1301168CW

Standard and Guidance for Archaeological Watching Brief (Institute for Archaeologists, 1994, rev. 2001 and 2008).

COST ESTIMATE

1. Intensive watching brief attendance	10 days	
2. Report, illustration and archiving .	5 days	

By commissioning Aeon Archaeology to undertake this work the client agrees to be invoiced directly at the end of each calendar month for works to date or once the project concludes, whichever occurs first. In addition, the client agrees to pay the invoice no more than 1 calendar month after issue from Aeon Archaeology.

Please note the following:

Aeon Archaeology will not be held responsible for any delays to the work programme resulting from the discovery of archaeological sites or finds.

The cost quoted does not include examination of, conservation of or archiving of finds discovered during the archaeological programme, nor of any radiocarbon dates required, nor of examination of palaeoenvironmental samples. Contingency costs are provided below.

CONTINGENCY COSTS

The following contingency costs will apply if relevant:

Cost of orange mesh fencing: £22.95 per roll

Cost of road pins: £2.50 each.

Cost of TERAM geotextile matting: @£39.95 roll

Shoring of pits, if required, will be charged at cost of material and acro-prop hire.

Removal of excess spoil, or temporary storage of spoil at cost of haulage and tipping. It is anticipated that the spoil will be stored on-site ready for re-instatement.

Cleaning, examination and drawing of finds £250/day

Conservation of finds £250/day

Materials and containers for storage of finds will be charged at cost

Examination and report of skeletal remains £250/day

Examination of palaeo-ecological samples £250/day

Radiocarbon dates: AMS £450 per date

Note: All figures are quoted exclusive of VAT, which will be added at the appropriate rate.

SPECIALISTS

Specilaist advice required will be sought from the following list:

- Bone: Nora Bermingham
- Glass: Hilary Cool, Barbican Research Associates.
- Metal artefacts: Phil Parkes, Cardiff Conservation Services, Cardiff.
- Slag, burnt clay, hammerscale: Dr. Tim Young, Geoarch, Cardiff.
- Stone artefacts: Oxford Archaeology
- Wood artefacts: Jane Foley, Foley Conservation, Builth Wells.
- Leather: Quita Mould, Barbican Research Associates.
- Waterlogged environmental: Dr Mike Allen, Allen Environmental Archaeology.
- Environmental samples: Oxford Archaeology
- Numismatics: Peter Guest, Barbican Research Associates.
- Pottery (all periods): Oxford Archaeology
- Clay pipe: Oxford Archaeology

Depending upon the material of the remains the following experts will be consulted regarding the conservation of waterlogged material:

- Organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)
- Non-organic material: Mr Phil Parkes, Cardiff Conservation Services (tel: +44(0)29 2087 5628)