NEW HELIPAD, ST MARY'S HOSPITAL 2, NEWPORT, ISLE OF WIGHT: ARCHAEOLOGICAL WATCHING BRIEF REPORT

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Planning Ref:	P01897/11
NGR:	449629 090939
Site Code:	SMHN12
Report:	R11324

Prepared for the client:	NHS Isle of Wight Facilities Directorate
On behalf of:	Ramboll
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New Heliport, St Mary's Hospital 2, Newport, Isle of Wight: Written Scheme of Investigation for an Archaeological Watching Brief © Pre-Construct Archaeology Ltd. August 2012

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1 ABSTRACT

This report presents the results of a watching brief carried out on the site of a new helipad at St Mary's Hospital, Newport, Isle of Wight. The watching brief was required as a condition of planning permission for the helipad granted by Isle of Wight Council, based on the advice of its Planning Archaeologist Owen Cambridge. The watching brief was carried out by Pre-Construct Archaeology Ltd on behalf of Ramboll on the 20th of August and on the 8th & 9th October 2012.

The new helipad site, an area of approximately 625m², is located to the east of the modern hospital complex in an area of car parks and landscaping formerly the site of a 19th and early 20th century cemetery associated with a workhouse the hospital. The cemetery's original extent is fairly well understood and it was considered likely the new helipad would be sited within its western extent and could potentially disturb burials within the cemetery.

The watching brief was carried out in two stages. The initial stage monitored ground-bearing tests just below topsoil designed to establish whether the proposed foundation of the helipad, a 200mm thick reinforced concrete base, would be suitable. The second stage monitored ground reduction for the foundation base to a depth of 200mm below the existing ground surface.

No burials or any other archaeological resources were revealed during the course of the groundwork that was monitored in the watching brief. Material revealed by ground reduction comprised redeposited reddish clay containing modern building materials. It was noted that the helipad site was relatively flat, compared to ground to the east that sloped gently down to the south-west, and that the site was raised above the adjacent car park to the west and access road to the south; this appeared to suggest the helipad site is located on modern made-ground. It may be concluded that this made ground provides a buffer between the proposed helipad and any archaeological resources that survive beneath it.

2 INTRODUCTION

1.1 Project Background

- 2.1.1 Pre-Construct Archaeology Ltd (PCA) was appointed by Ramboll, on behalf of the Isle of Wight NHS Trust, to undertake an archaeological watching brief during groundwork to form a helipad at St Mary's Hospital, Newport Isle of Wight, (Figure 1). This report provides the results of the watching brief, which was carried out in two stages, an initial stage during Plate Bearing tests and a second stage of groundwork to form the helipad foundation.
- 2.1.2 The watching brief was a requirement of the IoW Planning Archaeologist and was intended to address archaeological Condition 6 of planning permission for the helipad granted by Isle of Wight Council, the Local Planning Authority (planning ref. P01897/11). The watching brief followed a Written Scheme of Investigation (WSI) (Ramboll 2012), approved by the Planning Archaeologist, addressing the potential archaeological resources (Heritage Assets) that may survive beneath the proposed Helipad footprint. The scheme of work included monitoring initial Plate Bearing Tests and subsequent Ground Reduction for the foundation of the helipad.
- 2.1.3 The watching brief on the Plate Bearing tests was carried out on 20th of August and on the ground reduction on the 8th and 9th of October 2012.
- 2.1.4 This document has been prepared in accordance with the Institute for Archaeologists standard and guidance for archaeological watching briefs (IfA 2008) and *Management of Research Projects in the Historic Environment* (English Heritage, 2006).

2.2 Location, Topography and Geology

- 2.2.1 The site of proposed works (NGR 449629 090939) is located within the grounds of St. Mary's Hospital in Newport, in the east of the main hospital grounds. It lies immediately to the west of Dodnor Lane, to the south of the mental health unit, and is located within the south-western corner of the land once occupied by the former burial grounds of the St. Mary's 'House of Industry'. The gravestones were removed from this burial ground in the 1950s (with no visible traces remaining).
- 2.2.2 A range of previous development works have occurred within, and surrounding what were, the limits of the burial ground. These include the construction of a former tarmac helipad in 1996, within the northern limits of the area of the proposed new helipad (the former helipad was later converted into a memorial garden now dilapidated), the construction of a service road in 1999 and the site of a temporary car park (Gifford, 2000, St. Mary's Hospital: Inpatient Mental Health Unit Archaeological Watching Brief. The site of proposed development therefore occupies an area that is believed to have been subject to significant past ground engineering and landscaping.
- 2.2.3 According to the British Geological Survey map (BGS Drift Edition, 1976), the underlying geology is Hamstead (Hempstead) Beds, which consists of variably coloured clays, silts, sands and shale. It is a mostly an estuarine deposit, which is often embedded with shells. Excavations observed during an archaeological watching brief in the surrounding area in 1999 (section 3.4) recorded orange-grey coloured mottled clay

2.3 Archaeological and Historical Background

2.3.1 The archaeological and historical background to the Site has been investigated in detail in a Heritage Statement prepared by Gifford in 2011 (Gifford 2011).

- 2.3.2 The document concluded that the principal heritage significance of the Site is that it lies within the former burial ground of the St Mary's House of Industry. The House was built as a direct result of a local Act of Parliament passed in 1771. A burial ground would have been constructed at the same time, but there is no mention of a burial ground in documents until Worsley's 1781 book 'on the History of the Isle of Wight'. The first confirmed record showing the actual location of the former burial ground is the 1st edition Ordnance Survey Map of 1865-80.
- 2.3.3 In the 1830s the House of Industry was renamed as the Isle of Wight Workhouse and between 1866 and 1898 the associated burial ground was extended to the north as it reached capacity, with the extension being consecrated by the Bishop of Portsmouth.
- 2.3.4 The Workhouse was renamed the Public Assistance (PA) Institution by 1931 and it was recorded at this time (according to PA Committee Minutes) that the burial ground was once again full. However, instead of further extending the burial ground it was decided that bodies would be buried deeper in the north-eastern part of the cemetery, fitting two burials into each grave cut.
- 2.3.5 There was a diminishing need for the burial ground from the 1930s onwards and the last known burials were interred in the early 1940s. By 1951 the burial ground was described as 'disused'. It was decommissioned in 1952.
- 2.3.6 The Heritage Statement indicated that the Site has been subject to three main phases of disturbance. In 1993 a rectangular structure of unknown provenance was constructed; followed by the construction of a (now disused) helipad by 1996. An aerial photograph dating from 1990 also shows that there has been extensive disturbance across the extent of the Site and this may potentially have removed some or all of the buried archaeological remains.

2.4 Previous Investigations

- 2.4.1 During geotechnical works carried out by Gifford in October 1997, a ground investigation was undertaken in two areas in advance of the construction of the Mental Health Unit. One of these locations lay within the limits of the former burial ground (though this was not known prior to the work), near to what was the former helipad site which was very close to the north of the proposed development. Eight trial pits were excavated with a JCB within the area of the former burial ground. Layers of ash and timber (some burnt) were encountered in three of the trial pits excavated along with, in one trial pit, a skull. This material was encountered at an average depth of 1.5m below the ground level at that time and is highly likely to have been related to disturbed coffins (Gifford 2000). As a consequence of these finds a building that was proposed for construction in this area was not progressed.
- 2.4.2 A resistivity survey of the former burial ground undertaken by Stratascan in February 1999 failed to delineate the extent of burials as a result of the presence of dense undergrowth.
- 2.4.3 A range of archaeological works have been undertaken within the limits of the former burial ground. This has included a number of instances of archaeological watching brief managed by Gifford between 1999 and 2000 (Gifford, 2000). These archaeological works monitored the excavation of a service road, drainage channels and service channels. In most instances the works revealed no archaeological remains, especially when works were below 500mm in depth. However, in the northern end of the former burial ground, where ground stripping works associated with the creation of the service road were undertaken, grave cuts were encountered. In total nineteen grave cuts were exposed. Five of these grave cuts contained coffins and one contained an inhumation. The average depths of these were 1.0m below the ground level at that time (RPS Consultants, 1999).

- 2.4.4 The graves encountered were typically only 1.5m (4' 11") long by 0.5m wide, suggesting that the burials were of sub-adults. The coffins were not disturbed and, after archaeological recording, were covered with a double layer of Terram prior to the road makeup being built on top of this.
- 2.4.5 Isle of Wight NHS Primary Care Trust were granted planning permission by the Isle of Wight County Council (ref 01720/08 TCP/026037/V) in 2009 to construct a three storey building to form a hospital supplies decontamination unit to the west of the former burial ground. In advance of these works seven archaeological evaluation trenches were excavated to the west covering the footprint of the proposed new building and services. The trenches measured 10m by 2m at base. The archaeological investigation encountered no features or artefacts of archaeological interest and natural clay was recorded at between 20.05mOD and 18.15mOD. There was no evidence that the former burial ground to the east of the area investigated extended into the area of proposed new building. Large modern truncations, most likely related to the construction of the helipad, were recorded in two trenches (Trench 6 and 7).

3 AIMS AND OBJECTIVES

3.1 Archaeological Watching Brief

- 3.1.1 The aim of the archaeological mitigation strategy set out in this WSI was to assess and record the nature, extent, character and significance of any surviving archaeological features and deposits. A major aim was to assess the presence/absence and state of preservation of any human remains related to the known burial ground within the Site.
- 3.1.2 Depending on the results of the archaeological watching brief and the assessment of the extent of survival of archaeological features and deposits, the approach to and scope of subsequent mitigation (if required) was to be agreed between Ramboll (on behalf of the Client), the Isle of Wight Planning Archaeologist and the Diocese of Portsmouth Diocesan Advisory Committee and Registrar (DAC). The options for such mitigation comprised a strategy to preserve the archaeological remains in situ, to instigate a programme of archaeological excavation to remove and rebury human remains at an appropriate location or the conclusion may be reached that the construction of the helipad will cause little or no impact to archaeological remains and no further work is required.
- 3.1.3 This report aims to be sufficient to demonstrate to the Local Planning Authority and the Planning Archaeologist that the watching brief was carried out in accordance with the WSI.

4 METHOD

4.1 Watching Brief

- 4.1.1 The method of the watching brief was agreed as follows, to be undertaken in two stages:
- 4.1.2 **Stage 1 Plate Bearing Test:** The main contractor will secure site area using Heras fencing with weighted feet. Track-ways suitable for the plant will be formed in order to avoid disturbance of the ground to the burial ground area.
- 4.1.3 A tracked excavator fitted with a toothless grading bucket under the supervision of an archaeologist and an engineer will carefully track into position, strip back a small area of topsoil (1m x1m) to allow for a plate bearing test to be undertaken. The machined overburden will be loaded onto a dumper, which will remain on the track-ways at all times when working within the burial ground zones.
- 4.1.4 Once the topsoil has been stripped the archaeologist will undertake all the necessary recording.
- 4.1.5 On completion of archaeological recording a metal plate will be placed on the reduced area. The machine excavator will then move into position over the metal plate, and a hydraulic test rig will be placed between the machine and plate. The engineer will then undertake the plate bearing test.
- 4.1.6 On completion of each test the area will be backfilled with the excavated materials.
- 4.1.7 It is estimated that about 6 test areas spread over the helipad area will need to be undertaken.
- 4.1.8 Should the tests prove the ground conditions suitable for the proposed construction, Stage 2 will commence.

4.2 Stage 2 – Ground Reduction:

- 4.2.1 The main contractor will secure site area using Heras fencing with weighted feet. Track-ways suitable for the plant formed in Stage 1 will be used in order to avoid disturbance of the ground to the burial ground area.
- 4.2.2 A tracked excavator fitted with a toothless grading bucket will carefully strip back the topsoil under archaeological supervision and load the overburden into up the dumper, which will remain on the track-ways at all times when working within the burial ground zones.
- 4.2.3 No plant will be allowed to move around on the stripped back areas to avoid damage to the ground.
- 4.2.4 Once the entire area of the proposed development has been stripped, the archaeologist will undertake all the necessary recording.
- 4.2.5 Depending on the results of the archaeological watching brief, it is possible that a strategy might need to be developed to preserve any burials *in situ*; or to instigate a programme of archaeological excavation (Stage 3) to remove and rebury human remains at an appropriate location. Should other significant archaeological remains be discovered, a programme of archaeological excavation may also be required.
- 4.2.6 In these events a decision will be made following a consultation between Ramboll, the client, the Isle of Wight Archaeological Officer and the Diocese of Portsmouth Diocesan Advisory Committee and Registrar (DAC).
- 4.2.7 Subsequently the stripped and archaeologically recorded area will be carefully covered by the main contractor's operatives with a geotextile and the machine will work its way back into the stripped area covering it with the stone capping layer.

- 4.2.8 All excavated material from the burial ground area will remain on site and be formed into bunds.
- 4.2.9 If human remains are found, their treatment will be subject to the authority of appropriate environmental health regulations and Ministry of Justice license.

5 RESULTS

5.1 Watching Brief

5.1.1 The following provides an account of the observations made during the watching brief. The archive of the watching brief is held by PCA under the site code SMHN12.

5.2 Stage 1 - Plate Bearing Test Watching brief

5.2.1 Plate bearing tests were undertaken within the footprint of the proposed helipad on the 20th August 2012. The test was conducted at six locations and commenced with stripping off topsoil to expose the upper surface of the subsoil; a small 360 degree tracked excavator was employed for this task. Generally, the exposed subsoil was reached at *c*. 50mm depth (Plate 1). At each of the locations subsoil was revealed comprising reddish brown loam containing frequent small pebbles and modern building debris including brick and concrete fragments. No archaeological features or deposits were observed.

5.3 Stage 2 - Ground Reduction Watching Brief

- 5.3.1 Ground reduction for the foundation of the new helipad was undertaken from the 8th October 2012. The extent of ground reduction for the helipad was approximately 25m by 25m (625m²) and was 200mm deep. Additionally, banked ground to the west and south was also stripped. The ground reduction was undertaken using a 360 degree tracked excavator, working back from the south-west corner of the helipad footprint (**Plate 2**). Up-cast was mounded to the east of the site.
- 5.3.2 At the required depth of 200mm below ground level (**Plate 3**), the stripped surface comprised reddish brown loam containing frequent pebbles and modern building debris including brick and concrete fragments, polythene and plastic pipe off-cuts. In areas, bands of cream or grey clay occurred. No archaeological features or deposits were observed.



Plate 1: Plate Bearing test strip, view to south-west (1m scale)



Plate 2: General view of site and stripping operation, view to west



Plate 3: The stripped surface at the required maximum 200mm depth, view to west (1m scale)

6 CONCLUSIONS

6.1 Statement of Potential

In the course of the ground reduction watching brief it was noted that the helipad site was relatively flat, compared to ground to the east that sloped gently down to the south-west, and that the site was raised above the adjacent car park to the west and access road to the south; this appeared to suggest the helipad site is located on modern made-ground. It may be concluded that this made ground provides a buffer between the proposed helipad and any archaeological resources e.g. elements of the 19th century cemetery that may survive beneath it. As such, the archaeological potential of the site appears to remain intact and will be unaffected by the helipad.

7 ARCHIVE PREPARATION & DEPOSITION

7.1 The Site Archive

- 7.1.1 The Site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with Guidelines for the Preparation of Excavation Archives for Long-term Storage (UKIC 1990). On completion of the project PCA will arrange for the archive to be deposited in accordance with the provisional arrangements made with a suitable museum or repository at the onset of fieldwork. Any alternative arrangements will be agreed with the Isle of Wight Planning Archaeologist.
- 7.1.2 The Site archive comprises the daybook maintained during the watching brief, digital photographs and a copy of this report. In view of the result of the watching brief, there are no other records.

8 **REFERENCES**

AOC Archaeology Group, 2009, St Mary's Hospital. Newport, Isle of Wight: An Archaeological Evaluation Report

Gifford 2000, St Mary's Hospital: Inpatient Mental Health Unit – Archaeological Watching Brief

Gifford 2008, St Mary's Hospital, Newport, Isle of Wight – Specification for an Archaeological Evaluation

Gifford 2011, Heritage Statement for a New Helipad At St Mary's Hospital, Newport, Isle Of Wight, Doc Ref: 19939/INFPLA/R02

Ramboll 2012, New Helipad, St Mary's Hospital, Newport: Written Scheme of Investigation for an Archaeological Watching Brief, Doc Ref: 61019939/CHA/R01 Rev A

RPS Consultants, 1999, St Mary's Hospital, Newport, Isle of Wight – An Archaeological Watching Brief during New Road Construction

9 ACKNOWLEDGEMENTS

<mark>XX</mark>

APPENDIX 1: OASIS FORM

OASIS ID: preconst1-137263

Project details	
Project name	New Helipad, St Mary's Hospital, Newport, Isle of Wight
Short description of the project	A watching brief was carried out in advance of construction of a helipad at St May's Hospital, Newport, Isle of Wight. The watching brief monitored initial ground bearing tests and then 200mm deep ground reduction for the concrete foundation of the helipad, an area of 625sqm. The site lies over a former burial ground of 19th and 20th century date. Modern made ground was observed over the entire helipad footprint and no archaeological resources of any date were observed.
Project dates	Start: 20-08-2012 End: 09-10-2012
Previous/future work	Yes / Not known
Type of project	Recording project
Current Land use	Other 5 - Garden
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	CEMETERY Post Medieval
Monument type	CEMETERY Uncertain
Significant Finds	NONE None
Investigation type	"Watching Brief"
Investigation type Prompt	"Watching Brief" Planning condition
5 7.	
Prompt Project location Country	Planning condition England
Prompt Project location Country Site location	Planning condition England ISLE OF WIGHT ISLE OF WIGHT NEWPORT St Mary's Hospital
Prompt Project location Country Site location Postcode	Planning condition England ISLE OF WIGHT ISLE OF WIGHT NEWPORT St Mary's Hospital PO30 5GT
Prompt Project location Country Site location Postcode Study area	Planning condition England ISLE OF WIGHT ISLE OF WIGHT NEWPORT St Mary's Hospital PO30 5GT 625.00 Square metres
Prompt Project location Country Site location Postcode Study area Site coordinates Project creators Name of	Planning condition England ISLE OF WIGHT ISLE OF WIGHT NEWPORT St Mary's Hospital PO30 5GT 625.00 Square metres SZ 449629 090939 49 -1 49 58 46 N 001 22 22 W Point
Prompt Project location Country Site location Postcode Study area Site coordinates Project creators Name of Organisation Project brief	Planning condition England ISLE OF WIGHT ISLE OF WIGHT NEWPORT St Mary's Hospital PO30 5GT 625.00 Square metres SZ 449629 090939 49 -1 49 58 46 N 001 22 22 W Point PCA

director/manager	
Project supervisor	Paul McCulloch
Type of sponsor/funding body	NHS
Name of sponsor/funding body	Isle of Wight NHS Trust
Project archives	
Physical Archive Exists?	No
Digital Archive recipient	To be designated by Local Planning Authority
Digital Contents	"none"
Digital Media available	"Images raster / digital photography"
Paper Archive recipient	To be designated by Local Planning Authority
Paper Contents	"none"
Paper Media available	"Diary","Photograph","Report"
available Project	"Diary","Photograph","Report"
available	
available Project	"Diary","Photograph","Report" Grey literature (unpublished document/manuscript)
available Project bibliography 1	
available Project bibliography 1 Publication type	Grey literature (unpublished document/manuscript) New Helipad, St Mary's Hospital, Newport, Isle of Wight: Archaeological
available Project bibliography 1 Publication type Title	Grey literature (unpublished document/manuscript) New Helipad, St Mary's Hospital, Newport, Isle of Wight: Archaeological Watching Brief Report
available Project bibliography 1 Publication type Title Author(s)/Editor(s) Other bibliographic	Grey literature (unpublished document/manuscript) New Helipad, St Mary's Hospital, Newport, Isle of Wight: Archaeological Watching Brief Report McCulloch, P
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