

**Archaeological Watching Brief Report
Worthing New Pools, Brighton Road
Worthing
West Sussex**

**NGR: 515535 102641
(TQ 15535 02641)**

Planning Ref: WB/10/0489/WBR3

**ASE Project No: 4832
Site Code: WNP 11**

**ASE Report No: 2012224
OASIS id: 137162**



**Philippa Stephenson,
With contributions by Gemma Ayton, Luke Barber
Trista Clifford and Susan Pringle**

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2012

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Abstract

Archaeology South-East (ASE) were commissioned by Drivers Jonas Deloitte to undertake an archaeological watching brief at Worthing New Pools, Brighton Road, Worthing, West Sussex in advance of redevelopment of the existing leisure facilities.

Areas were observed to the West and East of the northern edges of the actual Beach House grounds. In both areas, only the topsoil was stripped, to a depth of 350-400mm. To the East, two probable garden landscape features were observed: a dry-stone wall and a pathway or rockery. These features may have belonged to the original gardens of Beach House or to a period of grounds refurbishment undertaken in the 19th or 20th century. No remains were encountered to the west.

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1.0 INTRODUCTION

1.1 Site Background

- 1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) was commissioned by Drivers Jonas Deloitte on behalf of their clients Worthing Borough Council to undertake an archaeological watching brief at Worthing New Pools, Brighton Road, Worthing, West Sussex in advance of redevelopment of the existing leisure facilities (NGR TQ 15535 02641; Figure 1).

1.2 Geology and Topography

- 1.2.1 The Geological Survey of England and Wales Sheets 318/333 (Brighton & Worthing) shows the site lies on Aeolian Deposits (formerly Brickearth).
- 1.2.2 The site lies on the seafront (Beach Parade) and is surrounded on all other sides by existing development including the Grade II Listed Beach House to the west.

1.3 Planning Background

- 1.3.1 An application for planning permission for the construction of new swimming and health & fitness facilities and the provision of additional 72 surface car parking spaces and alterations to access on the site has been permitted with conditions (Planning Reference: WB/10/0489/WBR3; Figures 2 and 4). Condition 24 states that:

No development shall take place until the applicant has secured the implementation of a programme of archaeological work which has been submitted to and approved in writing by the Local Planning Authority.

Reason: The site is of archaeological significance and it should be recorded by excavation before it is destroyed by development.

1.4 Aims and Objectives

- 1.4.1 The general objective of the archaeological work was to monitor all intrusive ground works in areas not previously subject to significant depth of disturbance in order to ensure that any features, artefacts or ecofacts of archaeological interest exposed and affected by the excavations are recorded and interpreted to appropriate standards.
- 1.4.2 It was anticipated that the previous ground excavations for construction of existing pools (boating, splash/ paddling), and associated landscaping are likely to have substantially destroyed most, or all, surviving shallowly buried archaeological remains, within the footprints of the new proposed swimming and health & safety facilities. On the west side of the Beach House grounds, the southern part of the proposed western parking extension would occupy the site of a previously landscaped tennis court.

- 1.4.3 It was therefore considered appropriate that an archaeological watching was required only during ground works associated with the southward widening of the northern arm of the proposed parking extension (located to the west and east of the existing access to Beach House, see Figure 2). New landscaping of these parts of the Beach House grounds which have not seen substantial previous ground disturbance may expose shallowly buried archaeological remains which could then be investigated and recorded as appropriate.

1.5 Scope of Report

- 1.5.1 This report details the results of the archaeological work on the site. The work was undertaken on the 3rd February, the 19th and 23rd October 2012 by Kathy Grant and Philippa Stephenson (Archaeologists) Project Management was undertaken by Neil Griffin (fieldwork) and Jim Stevenson (post-excavation management).

2.0 ARCHAEOLOGICAL BACKGROUND

- 2.1 The archaeological background is derived from a 500m radius search of the WSCC Historic Environment Record (HER) centred on TQ 15535 02641 and is summarised below in Table 1 (refer also to Figure 1 for locations). A total of 28 Listed Buildings (Grade II and II*) were identified within the 500m search radius. Only Beach House is included within Table 1 as this lies immediately adjacent to the site.
- 2.2 The reduced area occupies a space within the northern extent of the current Beach House Grounds and would have formed part of the original extensive landscaped gardens of the 19th Century building. Built in 1820 to designs by John Rebecca, the forecourt was refurbished in 1917. The northern part of the extensive gardens was converted to a public park (Beach House Park) by Worthing Borough Council in 1924. The area surrounding the house was purchased also by the council in 1927 and refurbished in 1936-7.

HER Ref.	Co-ordinates (TQ)	Description
3344-MWS393	15170 02680	Sherds of Roman pottery found in association with 13 th -15 th century occupation site at Warwick Gardens
3345-MWS394	15170 02680	Documentary evidence of medieval occupation in Warwick Gardens
3346-MWS395	15650 02720	Late Iron Age and Roman occupation debris found between Merton Road and The Esplanade in 1963 during the laying of water mains
3350-MWS397	15600 02700	Palaeolithic flint axe found on the Aquarena site
3357-MWS399	15300 03000	Mid-19 th century clay pipe manufacture industrial centre in Anchor Lane (now Lydhurst Road)
7472-MWS7545	15200 02400	Location of WW II anti-tank cubes, now destroyed
7501-MWS7574	15600 02600	Site of WW II coastal defence battery
8832-MWS8509	15180 02950	Site of Worthing Gas Works 1834-1931
DWS7723	15449 02653	Grade II* Listed Building. Beach House, originally called Marino Mansion. 1820, designed by Worthing-based architect J B Rebecca

Table 1: Summary of WSCC HER data

3.0 ARCHAEOLOGICAL METHODOLOGY

- 3.1 All excavation was undertaken by machine equipped with a suitably sized toothless bucket (wherever practicable), or by hand tools as appropriate. Where archaeological remains were encountered, machine excavation ceased to allow the remains to be investigated further.
- 3.2 The groundworks associated with the southward widening of the northern arm of the proposed parking extension as described above (Section 3.3) will be observed by an archaeologist, so that any shallowly buried archaeological remains exposed and cut into may be observed and adequately investigated, recorded and reported.
- 3.3 All archaeological features and deposits were recorded using standard ASE recording sheets.
- 3.4 Excavation strategy was in accordance with Annexe B of the WSCC Standard Conditions (WSCC 2007).
- 3.5 Archaeological structures, features and deposits exposed or excavated were planned by taped offsets from known points and levelled with respect to OD.
- 3.6 A full digital photographic record was maintained.
- 3.7 All archaeological features and the spoil heaps were scanned with a metal detector and finds were logged by small finds number tied to location.

3.8 Archive

- 3.9 ASE informed Worthing Museum prior to the commencement of fieldwork that a site archive would be generated. The site archive is currently held at the offices of ASE and will be deposited at Worthing Museum in due course. Worthing Museum does not give out archive accession numbers. The contents of the archive are tabulated below (Table 2).

Number of Contexts	4
No. of files/paper record	1
Plan and sections sheets	2
Bulk Samples	-
Photographs	35
Bulk finds	15
Registered finds	-
Environmental flots/residue	-

Table 2: Quantification of site archive

4.0 RESULTS

4.1 Area 1: Parking Extension West

- 4.1.1 The work, undertaken in February 2012, comprised the topsoil strip of an area 31.25 x 5.0m (156.25m²) in preparation for the construction of an extension to the car-park area situated to the west of Beach House (Parking Extension West, Figure 2).
- 4.1.2 The reduction of the area remained within the topsoil (250-350mm) and no archaeology was observed.

4.2 Area 2: Parking Extension East

- 4.2.1 The work, undertaken in October 2012, comprised the topsoil strip of an area 25.00 x 6.25m (150m²) in preparation for the construction of an extension to the car-park area situated to the East of Beach House (Parking Extension East, Figures 2 and 3).
- 4.2.2 The reduction of the area removed the topsoil by 350-400mm down to the upper horizon of light yellowish-brown clay-silt subsoil [1004]. No archaeological features were observed within this layer.
- 4.2.3 Two built features were observed within the topsoil and at the interface with the subsoil [1/004]: a dry-stone wall [1/002] and a dry-stone paved area or rockery [1/001] and [1/003] situated immediately to the south of and abutting the wall [1/002], (Figure 3).

4.2.4 Wall [1/002]

- 4.2.4.1 Dry-stone of wall [1/002] was constructed on a concrete plinth, 0.30m wide and 0.25m thick.
- 4.2.4.2 The wall [1/002] was built of roughly rectangular, tabular limestone blocks of sizes varying between 0.20 x 0.20m and 0.40 x 0.20m, being 0.05m thick. Four elevation courses survived to a height of 0.30m and a width of 0.25m. The wall survived over a distance of 7.50m.
- 4.2.4.3 The wall [1/002], oriented E-W, was situated towards the northern limit of the reduced area. It was aligned with the existing northern boundary wall of the contemporary extent of the Beach House Grounds (Figure 2), and constructed over the same concrete plinth foundation. The western extremity of dry-stone elevation [1/002] was situated at a distance of 6.25m from the eastern limit of the boundary wall.
- 4.2.4.4 The dry-stone elevation of wall [1/002] undoubtedly forms an earlier phase of the existing boundary wall, prior to the extension of the turf over this area. This may have occurred during the 1917 refurbishment of the house forecourt, the refurbishment of the grounds in 1937-1938 as a public beach-side open space in by Worthing Borough Council (see paragraph 2.2), or more recent changes.

4.2.5 Paving [1/001] and [1/003]

- 4.2.5.1 A paved area, numbered [1/001] at its western extremity and [1/003] to the east, runs along the south side of wall [1/002], extending southwards to a maximum width of 1.5m. It is situated 0.12m lower than the height of the surviving elements of wall [1/002]. Built of tabular limestone blocks identical to those used to construct the wall, the paving was undoubtedly constructed and/or in use at the same time.
- 4.2.5.2 The paved area is narrower to the west where only a single alignment of stones [1/001], 0.25m wide and one course thick, bounds a narrow area 0.20 – 0.40m wide to the south of the conserved concrete boundary wall foundation. Extending over a distance of 2.35m, a possible return south was observed at its eastern end. A gap of 1.00m before the blocks of [1/003] to the east may indicate an opening or walkway between these two paved areas.
- 4.2.5.3 The paved area [1/003] extends over an observed distance of 9.25m. Observations further east were obstructed by the spoil heap. It is situated approximately 0.10m lower than the conserved height of the wall, on a level with the second elevation course (see photographic evidence, Figure 3), and slopes away to the south on a gentle gradient.
- 4.2.5.4 The entirety of the paved area was rapidly cleaned, two zones being cleaned and recorded in detail (Figure 3). To the west, the surviving stones are more closely set forming a paved area, whilst to the west a wider and more irregular spacing is observed.
- 4.2.5.5 The paved area would appear to correspond to a garden feature, possibly a paved walkway and/or rockery.
- 4.2.5.6 Occasional brick fragments and brown salt-glazed stoneware, probably from drainage pipes in re-use, were included in the construction material of the paved area [1/003]. The latter are dated from 1830 onwards, the brick fragments being possibly 18th and 19th century respectively. Peripheral finds retrieved from the upper surface of the subsoil [1/004] confirm a probable 19th century fabrication date for the deposited material.
- 4.2.11 Both the wall and paved area are presumed to form part of the landscaped gardens of Beach House, although possibly belonging to one of the 20th century periods of refurbishment.

Context	Description	Length m	Breadth m	Depth m	Height m AOD
1/001	Paving	2.35	0.25	0.05	5.70
1/002	Wall	7.50	0.25	0.30	5.80
1/003	Paving	9.25	1.00–1.50	0.05	5.70
1/004	Subsoil	Tr.	Tr.	-	-

Table 3: List of recorded contexts

5.0 THE FINDS

5.1 Summary

Context	Pot	Wt (g)	CBM	Wt (g)	Bone	Wt (g)
1/003			4	4136		
1/004	5	92	5	752	1	34
Total	5	92	9	4888	1	34

Table 4: Quantification of finds

5.2 The Pottery by Luke Barber

5.2.1 The watching brief recovered just five sherds of pottery from the site all from [1/004]. All are in fresh condition suggesting they have not been subjected to any notable reworking. The majority of the assemblage (4/76g) is composed of sherds from an unglazed flower pot. The remaining sherd is from a transfer-printed plate with blue floral sheet pattern design. Taken together a mid/late 19th- century date is probable.

5.3 The CBM by Susan Pringle

5.3.1 Introduction

5.3.2 Ceramic building materials were examined from two contexts, [3] and [4]. The nine fragments of brick and tile weighed 4.891 kg. All the brick, roof tile and stoneware is post-medieval in date: Table 5 summarises the date and content of each context. Samples of the brick and tile fabrics have been retained and the remainder of the material discarded.

Context	Context date (approx.)	Material
1/003	1830-1950	Unfrogged 18th-19th century bricks and brown salt-glazed stoneware drain (?)
1/004	1830-1950	Pantile, late 18th or early 19th century bricks with shallow frogs, and brown salt-glazed stoneware pipe

Table 5: Approximate date ranges for material

5.3.3 The materials

5.3.4 Post-medieval roof tile

5.3.5 A single fragment of pantile in a fine orange-red fabric with yellow silty marbling (fabric P1), and fine moulding sand was present in context [1/004]. The date range for pantiles is c. 1630 to 1900 or later.

5.3.6 Post-medieval brick

5.3.7 Context [1/003] contained two types of brick. An unfrogged brick with sharp arrises and fine moulding sand had a flat and well-worn top surface typical of a brick that had been used in a paved floor. The fabric was light red with silty streaks and very coarse yellow silty inclusions (fabric B1), and the dimensions were 221 mm x 116 mm x 44 mm. The probable date range is c. AD 1700-1900.

5.3.8 Context [1/003] also contained a brick in a very hard, possibly vitrified, red fabric with moderate to common red iron oxide and coarse white calcium carbonate inclusions (fabric B2). This brick was also unfrogged with sharp arrises and dimensions of >140 mm x 100 mm x 64 mm. The very hard fabric probably dates the brick to the 19th century.

5.3.9 Context [1/004] contained small fragments of brick which appeared to have shallow frogs, giving them a likely date of late 18th or early 19th century. Their fabric was red with voids and very coarse white calcium carbonate inclusions (fabric B3); one fragment was reduced.

5.3.10 Salt-glazed stoneware

Both contexts [1/003] and [1/004] contained fragments of brown salt-glazed stoneware, probably from sewage pipes or drains. These date from the mid-19th century on, and are probably not earlier than c. 1830.

5.3.11 Summary

5.3.12 Although both contexts [1/003] and [1/004] were dated to the mid-19th century or later by the glazed stoneware, they contained bricks of probable 18th century date. The pantile in context [1/004], which came into use in the early 17th century, was the earliest material noted.

5.4 The Animal Bone by Gemma Ayton

5.4.1 Just one fragment of animal bone was recovered and derives from context [1/004]. The specimen has been identified as an unfused distal end of a tibia belonging to a pig and probably represents domestic waste. The bone is in a good condition with little evidence of surface erosion and there is no evidence of butchery, burning, gnawing or pathology.

5.5 The Coin by Trista Clifford

5.5.1 A single copper alloy penny, RF<1>, was recovered from context [1/004]. The penny is highly corroded; the majority of both faces having flaked off. As such it is not possible to ascribe a Ruler although it certainly dates to 1860 or later.

7.0 DISCUSSION AND CONCLUSIONS

- 7.1 A dry-stone wall elevation employing the same concrete plinth foundation as the existing stretch of northern boundary wall of Beach House Gardens, extends to the east of the house over a distance of 9.25m. It belongs to an earlier phase of this wall prior to the demolition of its eastern extension when the area was turfed.
- 7.2 A paved area abutting this wall to the south over a total distance of 12.0m forms either a paved walkway and/or part of a garden rockery probably functioning at a period contemporary to the wall, although its construction post-dates that of the wall.
- 7.3 Both the wall and paved area belong to the landscaped gardens of Beach House, either the original 1820's garden layout or a period of refurbishment in the 19th or 20th century.
- 7.4 No other archaeological features were observed.

BIBLIOGRAPHY

Archaeology South-East 2011 *Worthing New Pools, Brighton Road, Worthing, West Sussex, Archaeological Watching Brief, Written Scheme of Investigation*

WSCC, 2007 *Recommended Standard Archaeological Conditions*

http://en.wikipedia.org/wiki/Beach_House,_Worthing. Accessed 27 11 12

ACKNOWLEDGEMENTS

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HER Summary Form

Site Code	WNP 11					
Identification Name and Address	Worthing New Pools Aquarena					
County, District &/or Borough	Worthing					
OS Grid Refs.	515535 102641					
Geology	The site lies on Aeolian Deposits (formerly Brickearth).					
Arch. South-East Project Number	4832					
Type of Fieldwork	Eval.	Excav.	Watching Brief <input checked="" type="checkbox"/>	Standing Structure	Survey	Other
Type of Site	Green Field	Shallow Urban <input checked="" type="checkbox"/>	Deep Urban	Other		
Dates of Fieldwork	Eval.	Excav.	WB. 03/02/2012 19/10/2012 23/10/2012	Other		
Sponsor/Client	Drivers Jonas Deloitte					
Project Manager	Neil Griffin					
Project Supervisor	Kathy Grant/Philippa Stephenson					
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB
	AS	MED	PM	Other 19 th or 20 th century Modern		
<p>Summary</p> <p>Archaeology South-East (ASE) were commissioned by Drivers Jonas Deloitte to undertake an archaeological watching brief at Worthing New Pools, Brighton Road, Worthing, West Sussex in advance of redevelopment of the existing leisure facilities.</p> <p>Areas were observed to the West and East of the northern edges of the actual Beach House grounds. In both areas, only the topsoil was stripped, to a depth of 350-400mm. To the East, two probable garden landscape features were observed: a dry-stone wall and a pathway or rockery. These features may have belonged to the original gardens of Beach House or to a period of grounds refurbishment undertaken in the 19th or 20th century. No remains were encountered to the west.</p>						

OASIS Form

OASIS ID: archaeol6-137162

Project details

Project name	An Archaeological Watching Brief at Worthing New Pools, Brighton Road, Worthing
Short description of the project	Archaeology South-East (ASE) were commissioned by Drivers Jonas Deloitte to undertake an archaeological watching brief at Worthing New Pools, Brighton Road, Worthing, West Sussex in advance of redevelopment of the existing leisure facilities. Areas were observed to the West and East of the northern edges of the actual Beach House grounds. In both areas, only the topsoil was stripped, to a depth of 350-400mm. To the East, two probable garden landscape features were observed: a dry-stone wall and a pathway or rockery. These features may have belonged to the original gardens of Beach House or to a period of grounds refurbishment undertaken in the 19th or 20th century.
Project dates	Start: 03-02-2012 End: 23-10-2012
Previous/future work	No / Not known
Any associated project reference codes	WNP 11 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Other 14 - Recreational usage
Monument type	GARDEN LANDSCAPE FEATURES Modern
Significant Finds	COIN Modern
Investigation type	""Watching Brief""
Prompt	Planning condition

Project location

Country	England
Site location	WEST SUSSEX WORTHING WORTHING An Archaeological watching Brief at Worthing New Pools, Brighton Road, Worthing
Postcode	BN11 2EN
Study area	0 Square metres
Site coordinates	TQ 54535 02641 50 0 50 48 07 N 000 11 35 E Point
Height OD / Depth	Min: 5.50m Max: 5.80m

Project creators

Name of Organisation	Archaeology South East
Project brief originator	Archaeology South East
Project design originator	Archaeology South-East
Project director/manager	Neil Griffin
Project supervisor	Kathryn Grant
Project supervisor	Philippa Stephenson
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Drivers Jonas Deloitte

Project archives

Physical Contents	"Ceramics"
Digital Media available	"Images raster / digital photography","Images vector","Text"
Paper Media available	"Context sheet","Plan","Report","Unpublished Text"

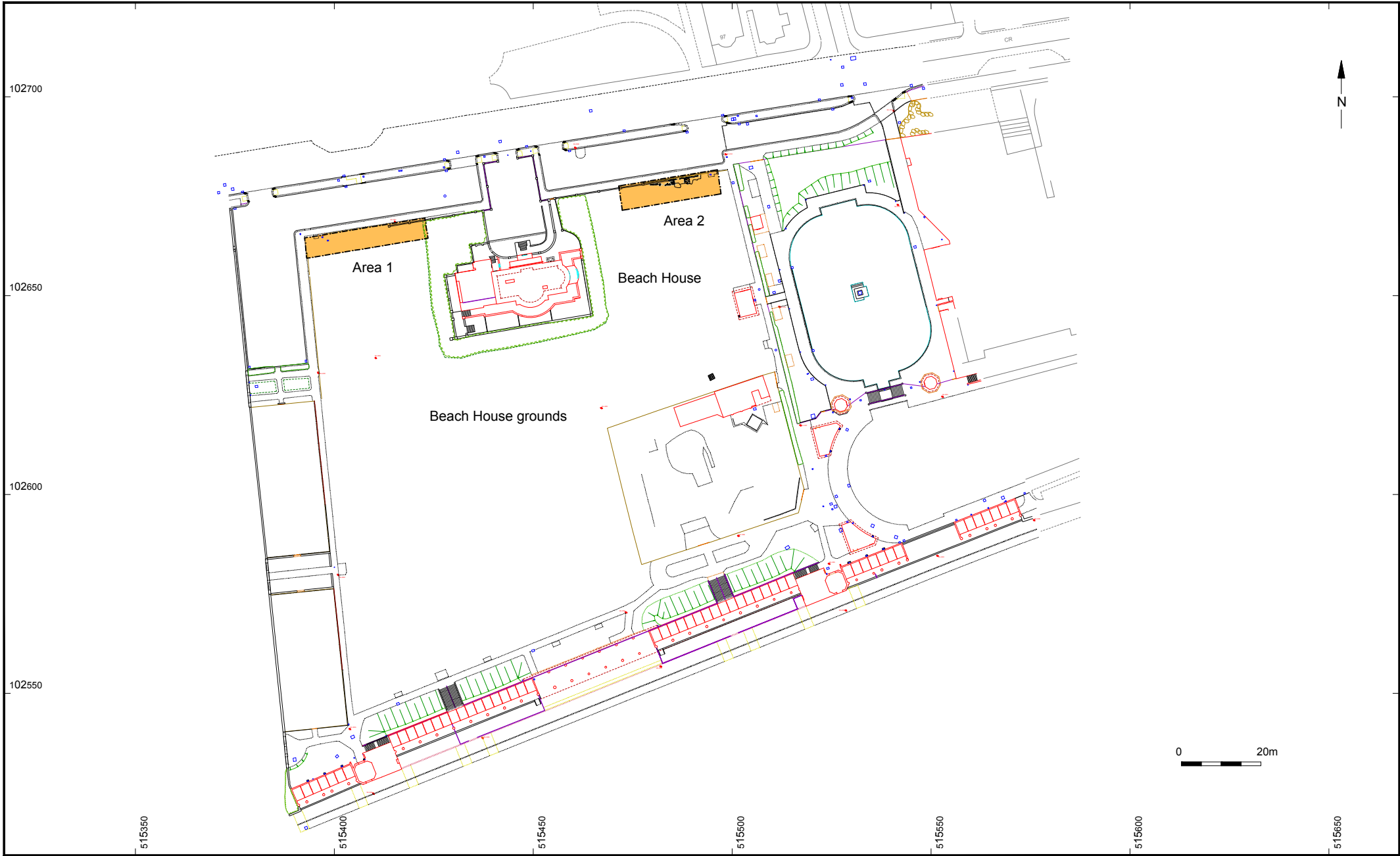
Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An archaeological Watching Brief at Worthing New pools, Brighton Road, Worthing, West Sussex
Author(s)/Editor(s)	Philippa Stephenson
Other bibliographic details	2012224
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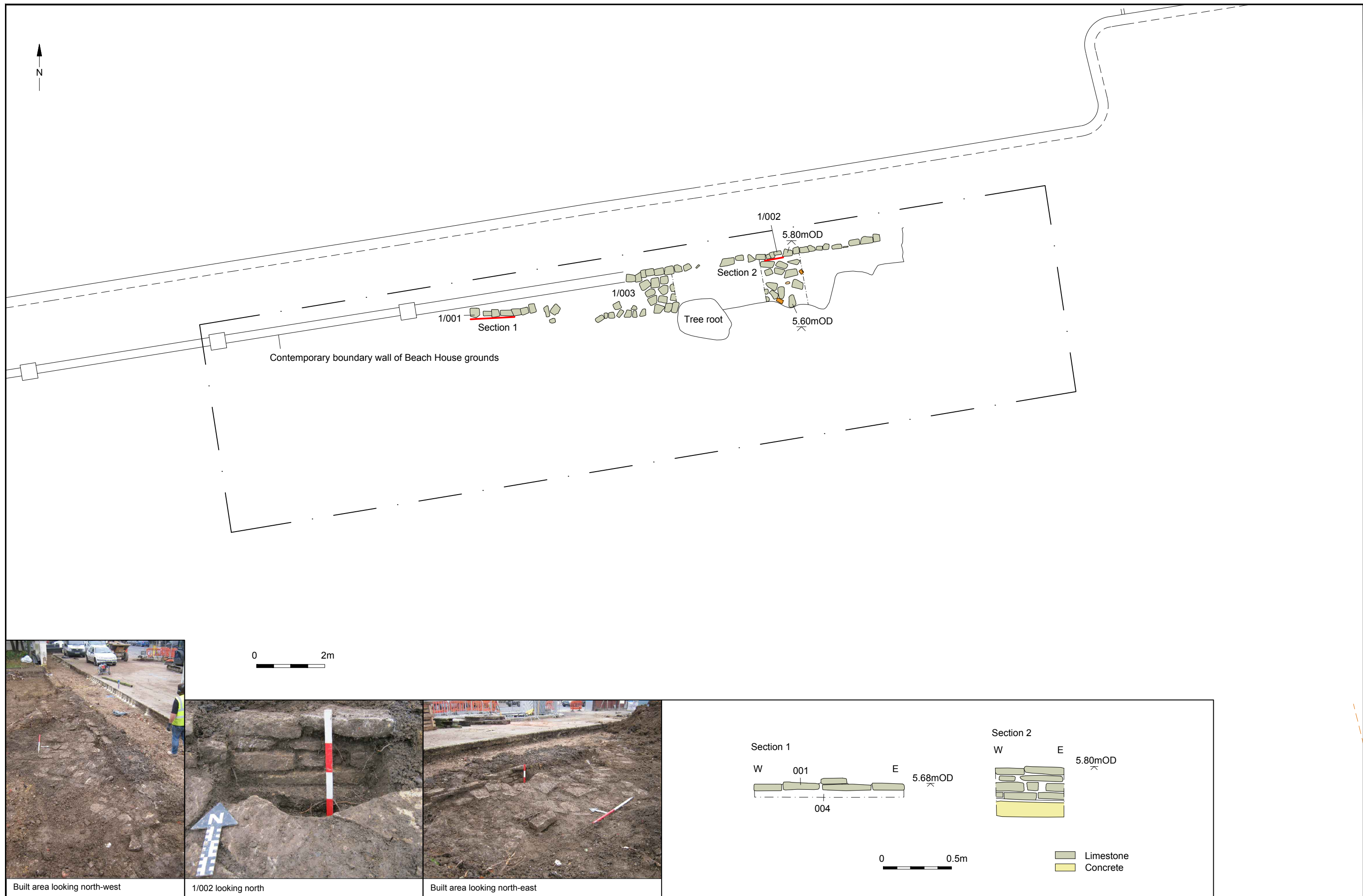
Entered by	Philippa Stephenson (pipstep@hotmail.com)
Entered on	28 November 2012



© Archaeology South-East		Worthing New Pools	Fig. 1
Project Ref: 4832	Nov 2012	Site location	
Report Ref: 2012224	Drawn by: JLR		



© Archaeology South-East		Worthing New Pools	Fig. 2
Project Ref: 4832	Nov 2012	Location of areas covered by the watching brief	
Report Ref: 2012224	Drawn by: JLR		



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