

**NEW RAVENS' CAGES,
INMOST WARD,
TOWER OF LONDON**

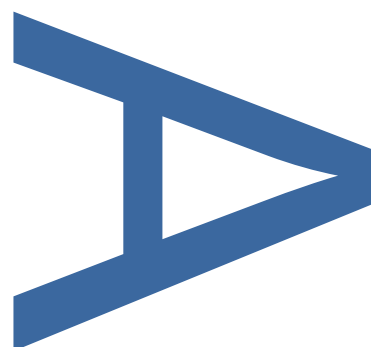
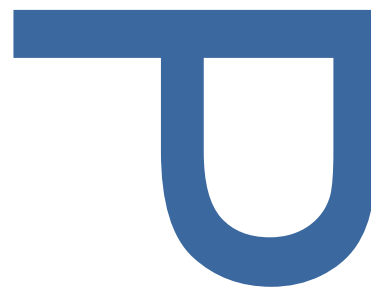
**AN ARCHAEOLOGICAL WATCHING
BRIEF**

PCA REPORT NO: 12417

REV 1

SITE CODE: TOL144

MARCH 2016



PRE-CONSTRUCT ARCHAEOLOGY



DOCUMENT VERIFICATION

NEW RAVENS' CAGES, INMOST WARD, TOWER
OF LONDON

AN ARCHAEOLOGICAL WATCHING BRIEF

Quality Control

Pre-Construct Archaeology Ltd	
Project Number	K3848
Report Number	R12417

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Revision No.	Date	Checked	Approved
01	31 March 2016	C Mayo	C Mayo
Inclusion of comments from Dr George Roberts			

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New Ravens' Cages, Inmost Ward, Tower of London

An Archaeological Watching Brief

Site Code: TOL144

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March 2016

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March 2016

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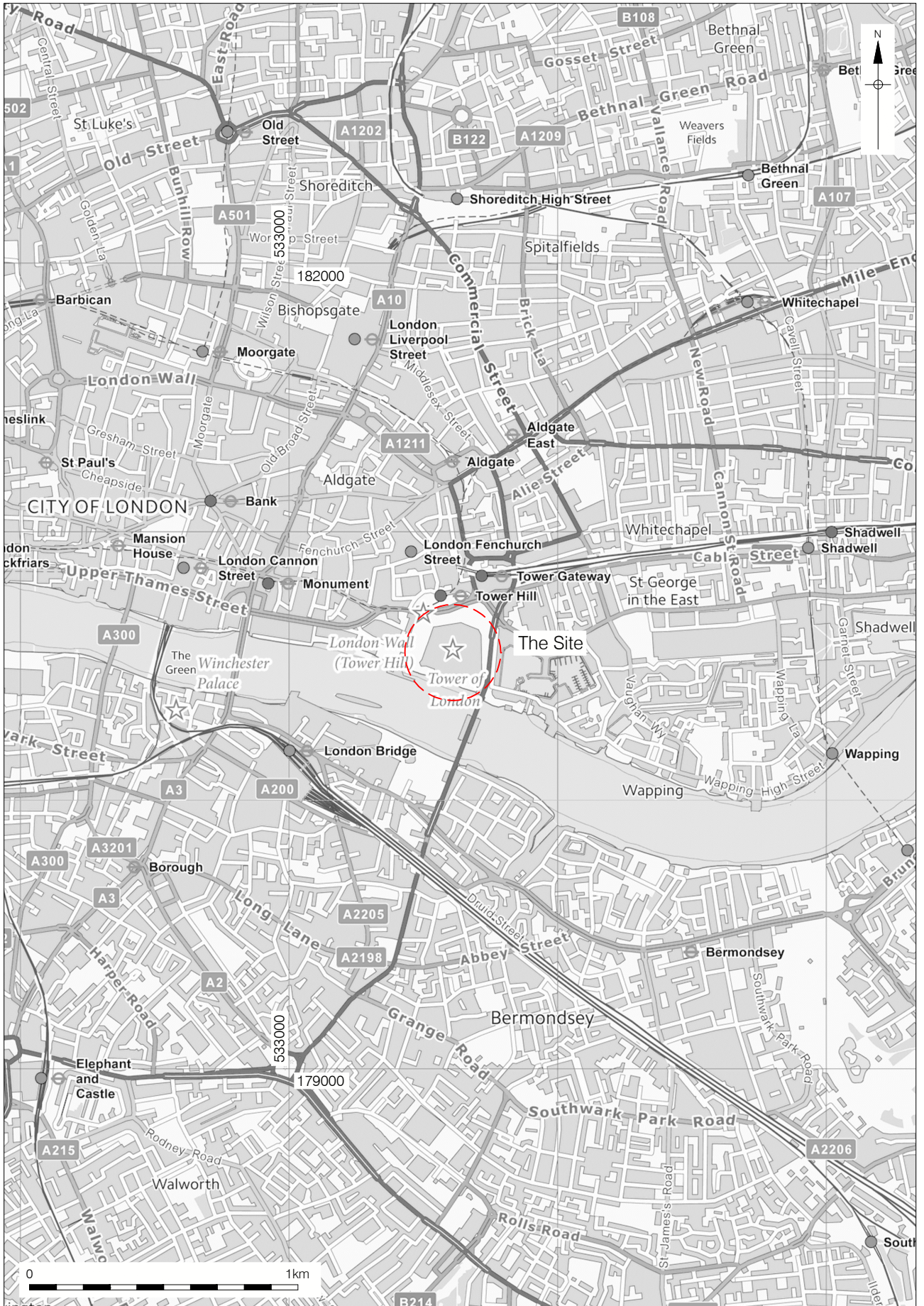
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1 ABSTRACT

- 1.1 This report details the results of an archaeological watching brief undertaken at the Tower of London by Pre-Construct Archaeology Ltd. The watching brief was located in the Inmost Ward of the Tower and was conducted in three phases. The first phase was between the 14th and 16th of January 2015, the second phase was between the 6th and 9th February 2015 and the third phase was between 6th and 7th July 2015. The work was commissioned by Historic Royal Palaces to monitor groundworks necessitated by the construction of new Ravens' Cages and associated drainage.
- 1.2 The groundworks for the redevelopment of the Ravens' Cages comprised sixteen shallow foundation trenches and a drainage channel, the latter dug on the north side of the structure. All excavations were monitored and recorded by archaeologists from Pre-Construct Archaeology Ltd.
- 1.3 The watching brief recorded walls and floor surfaces associated with the Main Guard building of 1898-1900 and a possible medieval chalk and mortar surface (Trench 12B) related to the Main Guard Wall. The trenches which these archaeological surfaces were exposed were all located along the southern edge of the site, at the base of the grassed slope descending from the White Tower. All archaeological horizons were recorded and left *in situ*.

2 INTRODUCTION

- 2.1 An archaeological watching brief was conducted by Pre-Construct Archaeology Ltd at the Tower of London, London Borough of Tower Hamlets (Figure 1) during groundworks associated with the re-development of the Ravens' Cages. The watching brief monitored excavations necessary for the construction of concrete footings and a drainage channel for the new cages. The work was undertaken in order to observe and record anything of archaeological significance revealed in the course of the groundworks. The site code assigned to this archaeological project by Historic Royal Palaces was ToL144.
- 2.2 The fieldwork was undertaken intermittently: the first phase was between the 14th and 16th of January 2015, the second phase was between the 6th and 9th February 2015 and the third phase was between 6th and 7th July 2015. The works were undertaken in accordance with the 'Brief' prepared by the Assistant Curator of the Tower of London, Alden Gregory of Historic Royal Palaces (2014).
- 2.3 The Inmost Ward coincides with the bailey of William I's original castle, and throughout the medieval period contained the main buildings of the royal residence. The site area is bounded by the line of the Roman landward city wall to the east, inner curtain to the south, Main Guard wall to the west and the White Tower to the north.
- 2.4 At present the majority of the Inmost Ward is displayed as a grassed over area with a number of mature trees and metal railings framing views of the White Tower from the south. The area has a number of changes in level, generally descending from the north at a height of 6.29m AOD to the south at a height of 5.05m AOD. The central National Grid Reference of the site is TQ 3365 8058.
- 2.5 The watching brief was supervised by Guy Seddon and Aidan Turner and was managed by Chris Mayo, all of Pre-Construct Archaeology Limited. The archaeological works were commissioned by Tracy Simmons, Conservation Building Surveyor, HRP, monitored by Alden Gregory, Assistant Curator of Historic Buildings on behalf of HRP and by Dr Jane Sidell, Inspector of Monuments, Historic England.
- 2.6 The Tower of London is a World Heritage Site and a Scheduled Ancient Monument (Greater London No. 10).
- 2.7 The site was given the unique site code TOL144 by HRP's curator, and all site archive material was labelled with that code. The completed archive comprising written and photographic records from the excavation will be deposited at the Historic Royal Palaces archive at the Tower of London.



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Figure 1
 Site Location
 1:20,000 at A4

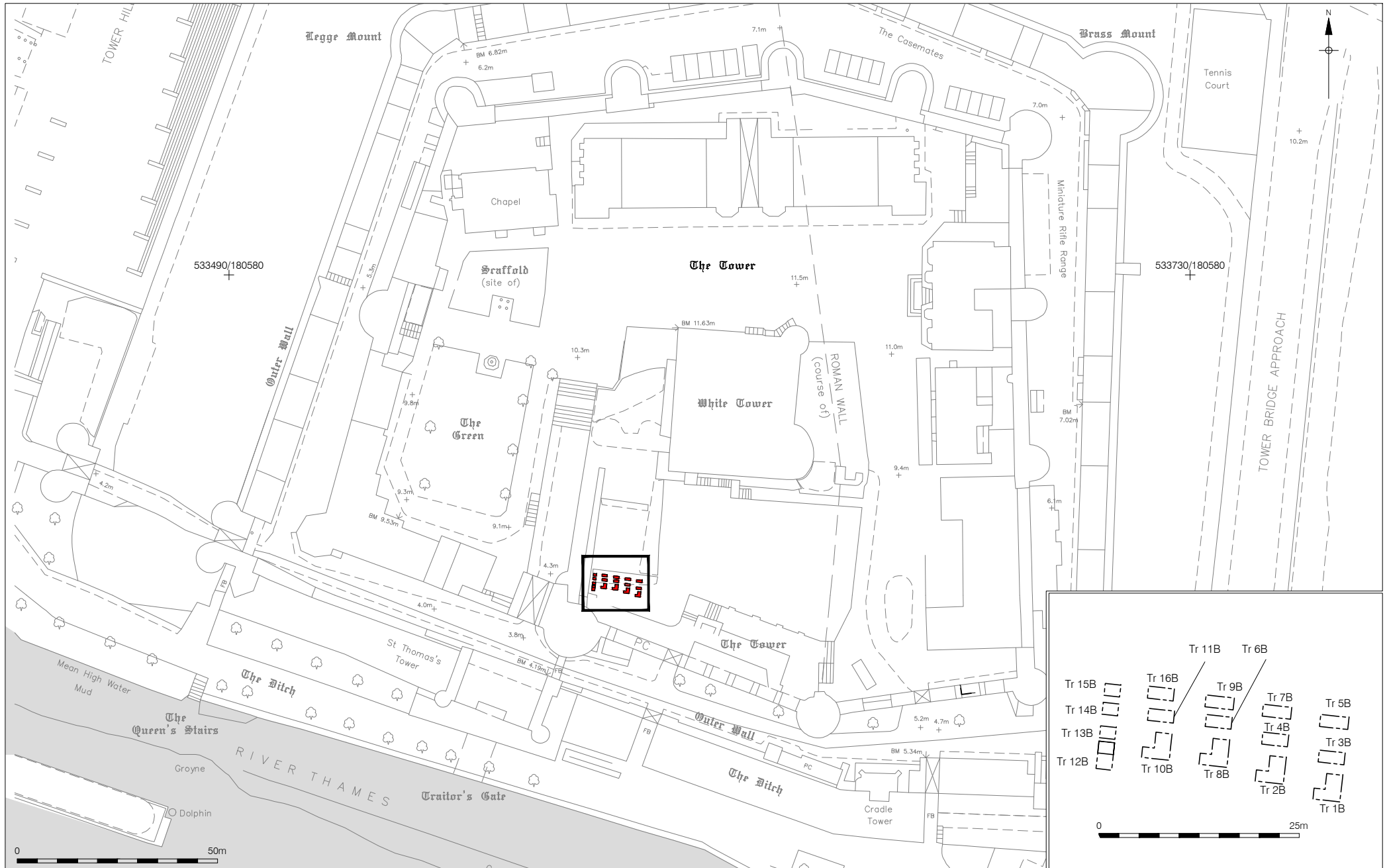
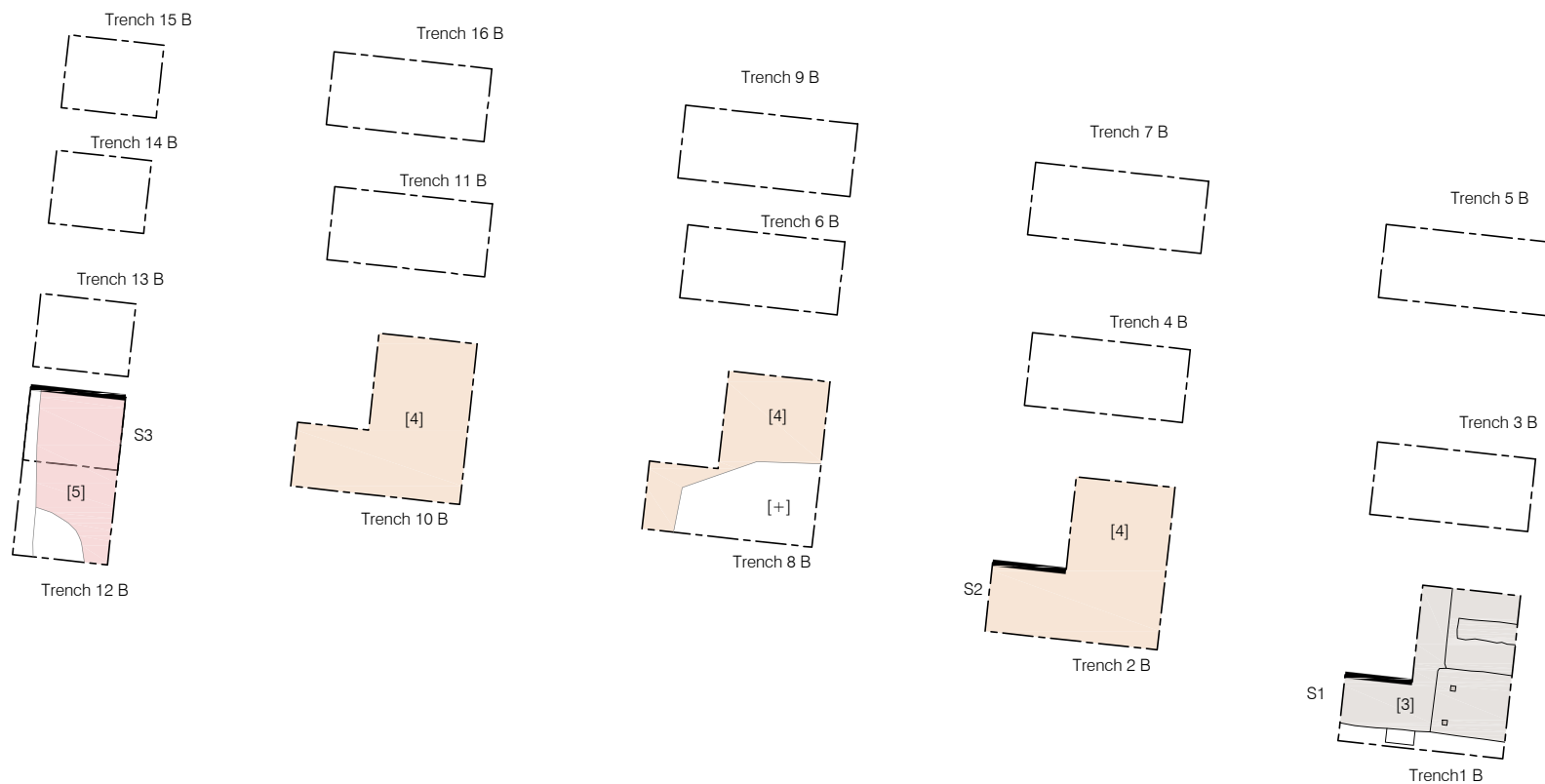


Figure 2
 Detailed Site Location
 1:1,250 and 1:250 at A4



- Victorian Wall
- Victorian Floor Surface
- Medieval Floor Surface



Figure 3
Detailed Trench Plan
1:60 at A4

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 General

- 3.1.1 In the early 3rd century, the principal city of Roman Britain, *Londinium*, was protected by a defensive wall, and the site of the future Tower of London lay within the southeast corner of the Roman city defences (Parnell. 1993, 13-16).
- 3.1.2 With the arrival of the Normans, William the Conqueror (1066-1087) consolidated his authority over Saxon London by establishing a motte and bailey castle utilising the surviving Roman city walls to the south and east and adding defensive ditches to the north and west. During the last decade of William's rule, construction began on the building that was to form the core of the Tower of London, the White Tower (Parnell. 1993, 17-22).
- 3.1.3 The first significant expansion of the defences of the Tower date to the end of the 12th century in the reign of Richard I (1157-1199). During this period the fortifications extended west to encompass the positions later occupied by the Bell and Beauchamp Towers (12th and 13th centuries respectively).
- 3.1.4 During the reign of Henry III (1216-1272), the Tower of London underwent extensive alterations and expansions (Parnell 1993, 27-34).
- 3.1.5 In the post-medieval period, the Tower was increasingly used as an armoury by the Ordnance Office, as well as the base for the Mint and the Record Office, which resulted in numerous alterations to adapt it from its medieval form. By the mid-19th century, these institutions had begun to re-locate elsewhere and led by the architect Anthony Salvin, many of the post-medieval constructions were removed to reinstate the earlier vistas."
- 3.1.6 The Tower suffered small amounts of damage during World War II which required some restoration. It is currently one of the most popular tourist attractions in the country.

3.2 Site Specific

- 3.2.1 The Brief prepared by the Curator to the Tower of London for the archaeological work included the following statement (summarised here) regarding the Inmost Ward:
- The Inmost Ward formed the bailey of William I's original castle and remained the core inner area of the palace compound throughout the Middle Ages containing the principle buildings of the royal residence.
 - The Main Guard Wall, which forms the western boundary of the Inmost Ward is early- mid 13th century in date and appears to have been constructed in two phases as part of the strengthening of the castles defences.
 - It seems likely that in its earliest phases the wall was abutted to the Great Kitchen and Salsary. Evidence for these buildings is, however, scant and they remain a matter of speculation. By 1597 when the Haiward and Gascoyne plan of the Tower was drawn the east side of the Main Guard Wall was free from buildings within the area of the watching

brief.

- In the early 1670s, a storehouse was built along most of the east side of the wall. It probably functioned as an ordnance store, but was converted in 1846 for use as the Main Guard. The storehouse was demolished in 1898-9 and replaced by a new Main Guard which was completed in 1900. This building was however bombed during the night of 29th-30th December 1940 and it was demolished in July 1943. The area was then grassed over and has remained pretty much the same until the present day.

3.3 Site Significance

3.3.1 Appendix 01 of the project brief's, "Conservation Management Plan Gazetteer extract for the Inmost Ward" has determined:

- The Inmost Ward is of exceptional significance because:
- It marks the extent of William I's primary castle.
- It forms the central core of the medieval Royal Palace.
- It continues in use as the heart of the Tower, framing views of the principle building – the White Tower.
- There is substantial potential for important archaeological remains, despite much building and ground disturbance.
- It is the home of the Tower Ravens, an iconic element of the castle's history and a visitor attraction in their own right.

4 ARCHAEOLOGICAL METHODOLOGY

- 4.1 During the initial phase of the Watching Brief thirty two pits were excavated by hand to a depth of 0.60m, these were numbered 1 - 32 in the order that they were excavated.
- 4.2 The test pits were excavated by ground workers to a depth of 600mm from the current ground surface and were monitored by the attending archaeologist. Within each location spoil was kept separate to allow correlation of artefacts to pits. All the pits were recorded by the attending archaeologist.
- 4.3 After the initial phase of excavation the pits were examined by an engineer in order to assess whether they were suitable for the foundations. The engineer reported that further excavation was needed in order to make the concrete pads structurally sound.
- 4.4 A further phase of hand digging was then carried out, with the 32 original, small pits being incorporated into 15 larger ones. The larger pits were numbered 1B - 15B and it is this numbering system that is referenced in the text and as shown on figures 2 and 3.
- 4.5 The pits were again monitored and recorded by the attending archaeologist.
- 4.6 A third phase of work monitored the excavation of a drainage channel associated with the new Ravens' Cages. This was hand excavated to a depth of 300m and was recorded by the attending archaeologist.
- 4.7 Archaeological features were recorded using the single context recording system, with individual descriptions of all archaeological features and strata excavated and exposed entered onto pro-forma recording sheets. All detailed plans and sections of archaeological deposits and features were recorded on polyester based drawing film, the plans and sections being drawn at a scale of 1:10, 1:20 and 1:50 as appropriate. The OD height of all principal strata was calculated and indicated on the appropriate plans and sections. Features that were evidently modern were not given context numbers, and were recorded as modern intrusions in plan.
- 4.8 All levels were calculated from a topographic survey covering this part of the Tower¹.
- 4.9 Photographs in digital format were taken of the archaeological features and deposits where relevant.

¹ Sterling Surveys, Drawing No: TOL/ENV/038/96, dated May 1996

5 ARCHAEOLOGICAL PHASE DISCUSSION

5.1 Phase 1: Medieval

- 5.1.1 The earliest deposit encountered, [5], was a rough man-made surface constructed from chalk and mortar in the base of Pit 12B, located in the very southwest of the study area, next to the Main Guard Wall. Although no dating evidence could be obtained the construction materials suggest that it could be a make-up layer for a floor of medieval date, possibly making it part of the Great Kitchen and Salsary. The surface appeared to be in a fairly stable condition and covered the entire base of the trench, measuring 570mm east-west by 1.35m north-south at a height of 5.11m AOD.

5.2 Phase 2: Post-Medieval

- 5.2.1 Recorded within Pits 1B, 2B, 8B and 10B were a floor surface, [4], and wall stubs, [3], probably associated with the Victorian Main Guard constructed in 1900. These pits were all located in the southernmost line, at the base of the incline towards the White Tower. The walls had been horizontally truncated down to the level of the floor, at a height of 5.13m AOD and were constructed from red bricks and peg tile, presumably laid as levelling (Plate 3). The floor was constructed from yellow stocks and in patches a bitumen coating was still attached, which is often used as a setting agent during the laying of a parquet or similar floor.

5.3 Phase 3: 20th Century

- 5.3.1 Directly overlying both the medieval and post-medieval surfaces and recorded in all the pits, was a thick layer, (upwards of 300mm) of demolition rubble, [2] which had been used to landscape the Inmost Ward. This very substantial amount of rubble appears to have originated from the demolition of the Victorian Main Guard in July 1943.
- 5.3.2 The drainage channel that was monitored during the last phase of the watching brief was only 300mm in depth and therefore only exposed more of this demolition horizon.
- 5.3.3 Sealing the demolition rubble was a 300mm thick layer of topsoil and turf, [1], which was the current surface at the time of the watching brief.



Plate 1: Trench locations, looking north



Plate 2: Trench locations, looking south-west



Plate 3: Tr 1B: Showing SW corner of Victorian guardhouse, looking north



Plate 4: Tr 2B, showing Victorian bitumen covered surface, looking north



Plate 5: Tr 8B, showing Victorian surface, looking north



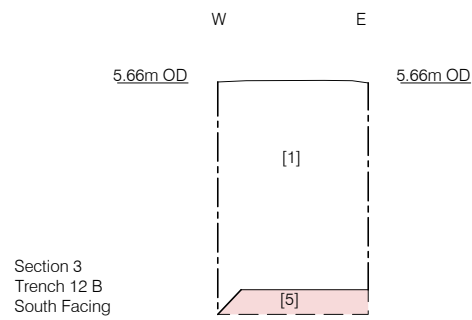
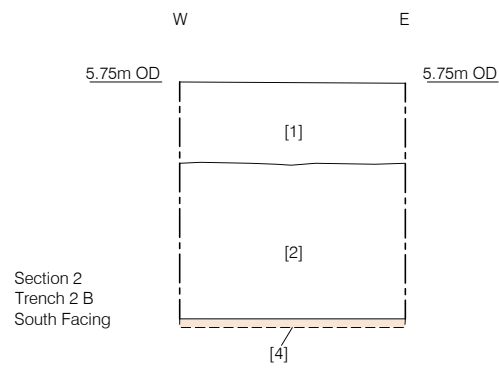
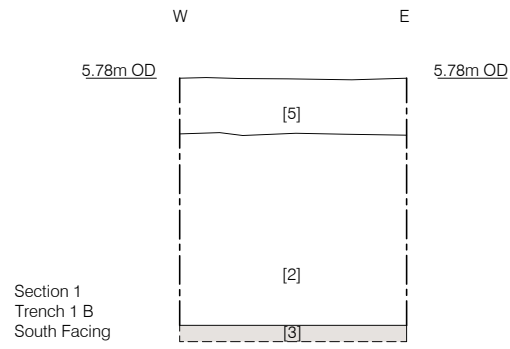
Plate 6: Tr 10B, showing Victorian bitumen covered surface, looking north






Plate 7: Tr 12B, showing possible medieval surface, looking north



Plate 8: Tr 10B showing the trenches proximity to the Main Guard Wall, looking west



-  Victorian Wall
-  Victorian Floor Surface
-  Medieval Floor Surface Surface



6 CONCLUSIONS

- 6.1 Although the site of the Ravens' Cages is located in an archaeologically sensitive location the very shallowness of the trenches and relatively recent (19th century) construction works, combined to limit the finding of archaeological features.
- 6.2 A possible floor make-up of chalk and mortar construction recorded in Trench 12 B may have belonged to the Great Kitchen and Salsary of medieval date.
- 6.3 No other significant archaeological remains were revealed in the course of the watching brief.
- 6.4 All archaeological horizons were left *in situ*. No finds were recovered during the watching brief.
- 6.5 The results of the site investigation will be published by PCA as a summary in the annual 'Round-Up' of *London Archaeologist*.
- 6.6 Upon approval this report and with confirmation that the site work is complete, the archive will be transferred to the Historic Royal Palaces archive at the Tower of London.

7 ACKNOWLEDGMENTS

- 7.1 Pre-Construct Archaeology Ltd would like to thank Tracy Simmons, Historic Royal Palaces commissioning this project. We also thank Paul Turnham of Ward & Co for his assistance.
- 7.2 The author would like to thank Aidan Turner for supervising the final phase of the watching brief, Chris Mayo for his project management and editing, and Ray Murphy for the illustrations.

8 BIBLIOGRAPHY

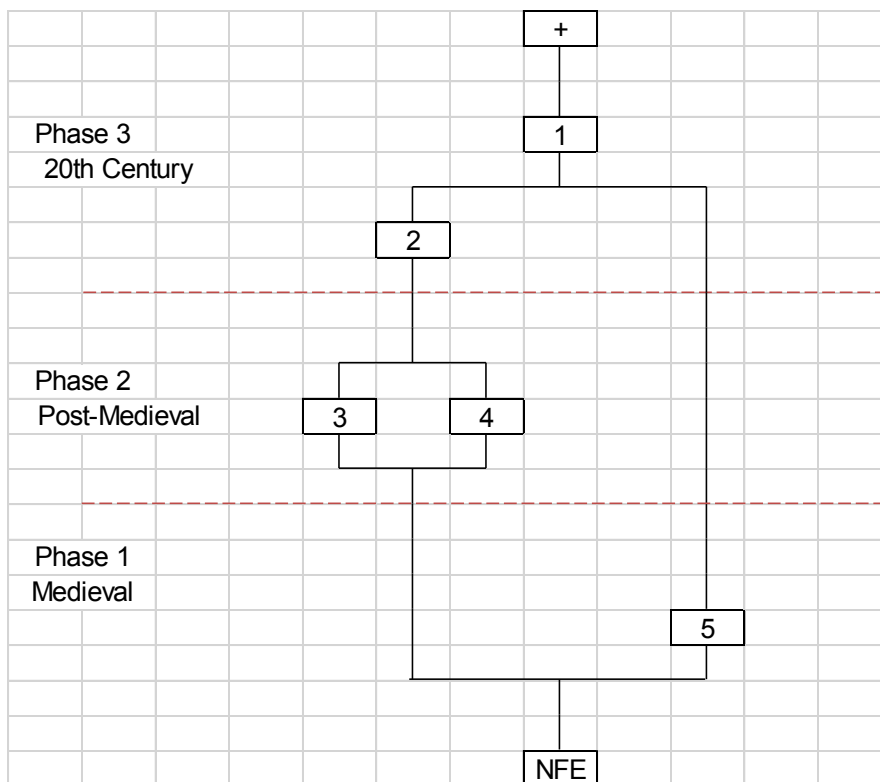
Gregory, A. 2014, 'Ravens' Cages Ground Works: Inmost Ward, Brief for Archaeological Watching Brief', unpublished document.

Parnell, G. 1993, *The Tower of London*. B.T. Batsford / English Heritage. London.

9 APPENDIX 1: CONTEXT INDEX

Site Code	Context No.	Trench	Plan	Section	Type	Description	Date	Phase
TOL144	1	All	*	All	Layer	Topsoil	20thC	3
TOL144	2	All	*	All	Layer	Demolition Rubble	20thC	3
TOL144	3	1B, 2B, 8B, 10B	1B, 2B, 8B, 10B	*	Masonry	Walls	Post-Med	2
TOL144	4	1B, 2B, 8B, 10B	1B, 2B, 8B, 10B	*	Masonry	Floor	Post-Med	2
TOL144	5	12B	12B	*	Masonry	Chalk and Mortar Surface	Medieval	1

10 APPENDIX 2: MATRIX



11 APPENDIX 3: OASIS REPORT FORM

OASIS ID: preconst1-246341

Project details

Project name	New Ravens' Cages, Inmost Ward, Tower of London
Short description of the project	A watching brief was conducted in the Inmost Ward of the Tower of London to monitor groundworks necessitated by the construction of new Ravens' Cages and associated drainage. The watching brief recorded walls and floor surfaces associated with the Main Guard building of 1898-1900 and a possible medieval chalk and mortar surface (Trench 12B) related to the Main Guard Wall. The trenches which these archaeological surfaces were exposed were all located along the southern edge of the site, at the base of the grassed slope descending from the White Tower. All archaeological horizons were recorded and left in situ.
Project dates	Start: 14-01-2015 End: 07-07-2015
Previous/future work	Yes / Not known
Any associated project reference codes	ToL144 - Sitecode
Type of project	Recording project
Site status	Scheduled Monument (SM)
Current Land use	Other 8 - Land dedicated to the display of a monument
Monument type	WALL Post Medieval
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Scheduled Monument Consent

Project location

Country	England
Site location	GREATER LONDON TOWER HAMLETS TOWER HAMLETS New Ravens' Cages, Inmost Ward, Tower of London
Postcode	EC3N 4AB
Study area	30 Square metres
Site coordinates	TQ 3362 8059 51.507921815315 -0.074391909797 51 30 28 N 000 04 27 W Point
Lat/Long Datum	Unknown

Project creators

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Historic Royal Palaces
Project design originator	n/a
Project director/manager	Chris Mayo
Project supervisor	Guy Seddon
Project supervisor	Aidan Turner
Type of sponsor/funding body	Charitable Trust
Name of sponsor/funding body	Historic Royal Palaces

Project archives

Physical Archive Exists?	No
--------------------------	----

Digital Archive recipient	Historic Royal Palaces
Digital Archive ID	ToL144
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography","Images vector","Spreadsheets","Text"
Paper Archive recipient	Historic Royal Palaces
Paper Archive ID	ToL144
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet","Notebook - Excavation',' Research',' General Notes","Plan","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	New Ravens' Cages, Inmost Ward, Tower of London: An Archaeological Watching Brief
Author(s)/Editor(s)	Seddon,G.
Other bibliographic details	PCA R12417
Date	2016
Issuer or publisher	Pre-Construct Archaeology Limited
Place of issue or publication	London
Description	A4 client report with PCA covers

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