

**THE TOWER OF LONDON:  
THE BYWARD TOWER**

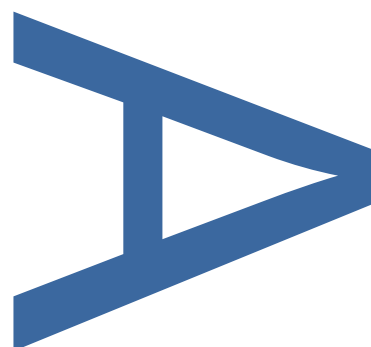
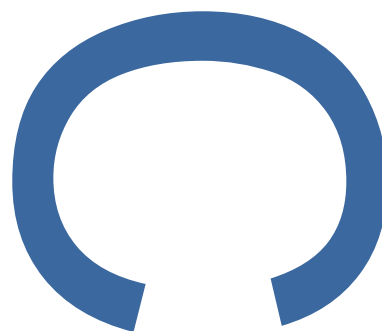
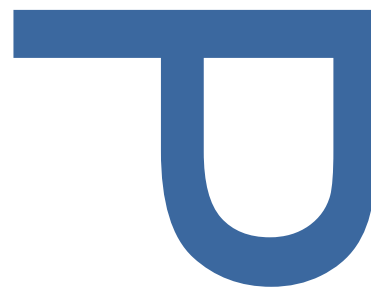
**AN ARCHAEOLOGICAL WATCHING  
BRIEF MONITORING PIPE  
REPLACEMENT**

**PCA REPORT NO: R12238**

**SITE CODE: ToL150**

**SEPTEMBER 2015**

**REVISED DECEMBER 2015**





**PRE-CONSTRUCT ARCHAEOLOGY**

DOCUMENT VERIFICATION

THE TOWER OF LONDON: THE BYWARD TOWER  
AN ARCHAEOLOGICAL WATCHING BRIEF  
MONITORING PIPE REPLACEMENT

Quality Control

Pre-Construct Archaeology Ltd	
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Report Number	R12238

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## **The Tower of London**

### **An Archaeological Watching Brief Monitoring Pipe Replacement at the Byward Tower**

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**Site Code:** ToL150

**Central National Grid Reference:** TQ 3349 8051 (533492,180513)

**Written by:** Shane Maher  
Pre-Construct Archaeology Limited, November 2015

**Project Manager:** Chris Mayo

**Commissioning Client:** Historic Royal Palaces

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**December 2015**

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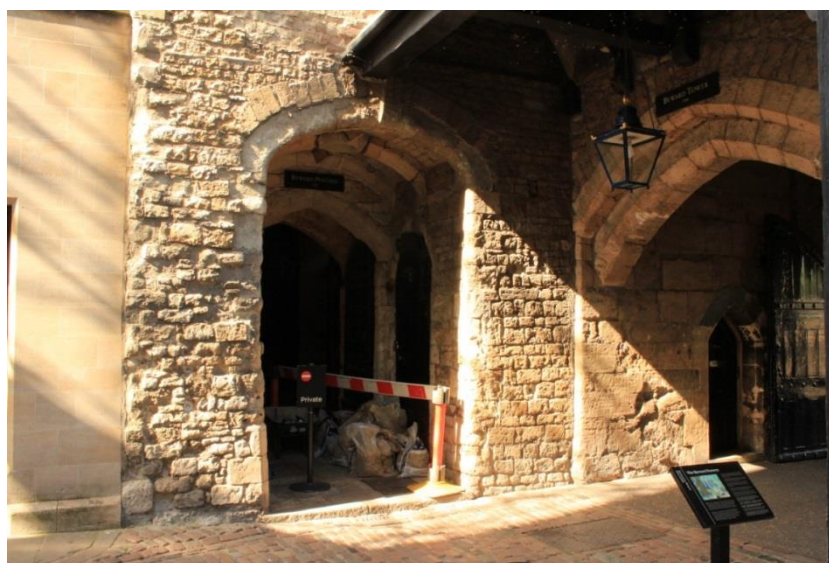
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## **1 INTRODUCTION**

- 1.1 An archaeological watching brief was conducted by Pre-Construct Archaeology Ltd at the Tower of London in the London Borough of Tower Hamlets (Figure 1). The watching brief monitored the excavation of a small trench to gain access to and replace a blocked drainage pipe under the passageway of the Byward Postern. The Byward Postern is located to the immediate east of the south turret of the Byward Tower (Figure 2). The work was undertaken in order to observe and record anything of archaeological significance.

*Plate 1: Byward Postern and Byward Tower looking southeast*



- 1.2 The Tower of London is a World Heritage Site and a Scheduled Ancient Monument (Greater London No. 10).
- 1.3 The investigation was conducted between the 20th and 21st of July 2015 and was commissioned by Historic Royal Palaces, Tower of London. The watching brief was supervised by Shane Maher and was managed by Chris Mayo, both of Pre-Construct Archaeology Limited. The archaeological works were inspected and monitored by George Roberts and Fiona Keith-Lucas of Historic Royal Palaces, and also by Jane Sidell, Inspector of Ancient Monuments for Historic England.
- 1.4 The watching brief was designed to monitor the removal of Yorkstone paving slabs covering the excavation area followed by the excavation of modern backfill deposits to expose and replace the blocked pipe. The excavated area measured 1.22m (N-S) x 1.4m (E-W) at the surface and was 0.54m (N-S) x 0.5m (E-W) at the base; the maximum depth of the trench was 0.84m (Figure 3).
- 1.5 The central National Grid Reference for the site is TQ 3349 8051 (533492,180513).
- 1.6 The site was allocated the unique site code ToL150. The completed archive comprising written and photographic records from the excavation will be deposited at the Historic Royal Palaces store at the Tower of London.

## **2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

### **2.1 The Tower of London, General Background**

2.1.1 The construction of the Tower of London was begun shortly after the Conquest by William the Conqueror, with the great keep, the White Tower, sitting at its heart. The fortress was first constructed within the south eastern corner of the ancient Roman city walls, along the riverbank of the Thames. It was extended beyond the boundaries of the Roman city walls by Henry III and developed as a concentric castle by Edward I in the 13<sup>th</sup> century. The Tower became the home of major state institutions such as the Royal Mint as well as the setting for nationally significant historical events. The Tower is the home of the Coronation Regalia and Crown Jewels and is the birthplace of the Royal Armouries Museum which still displays part of its collection within the White Tower. The fortress is most strongly associated with in popular imagination with the Tudors and the turbulent events of the 16<sup>th</sup> century and in particular with the many prisoners kept within its walls. The 19<sup>th</sup> century Romantic perception of the Tower, together with the castle's emerging identity as a tourist attraction, led to the demolition of many institutional buildings and the addition of new medieval style neo-gothic edifices.

### **2.2 The Byward Postern, Specific Background**

2.2.1 A detailed description of the Byward Postern is presented in the original brief prepared in advance of the watching brief (Roberts 2015), from which the following is summarised:

2.2.2 The Byward Postern is located to the immediate right of the south turret of the Byward Tower and provided access into the fortress via the wharf over a moveable bridge.

2.2.3 It is believed that there was an original 13<sup>th</sup> century postern gate built at the same time as the Byward Tower, but this is not confirmed by any sources. A new postern gate was constructed by Edward II in the 1320's and in 1326 he ordered timber to be supplied for the recently made bridge to a postern.

2.2.4 Masons were instructed to repair and crenellate the postern in 1336, during the reign of Edward III and in the 1340's it was underpinned, large scale timberwork undertaken and a lead roof replaced.

2.2.5 The 14<sup>th</sup>- 15<sup>th</sup> centuries saw the construction of the timber framing for the upper stories. The present turret (incorporating gunports) and new drawbridge (abutting its west flank) was constructed over the former postern entrance in the 15<sup>th</sup>-16<sup>th</sup> centuries. By the 16<sup>th</sup> century the projecting wedge shaped build and the two storey timber framed structure had been added to the original tower.

2.2.6 The Byward Tower has also been the subject of building recording and investigation (OA 2008). That following is summarised from that report (pp 5-6):

*The Byward Tower was originally constructed by Edward I between 1275 and 1281 as part of a major new complex of fortifications around the main western approach to the castle...The original late 13th-century arrangement originally included a small internal*

*courtyard at the south-west corner of the outer bailey, into which the Byward gate passage led, controlling further access to north and east, but this yard has now been lost. The original 13th-century Byward Tower is generally believed to have incorporated a postern entrance and this was rebuilt with the partially surviving early 14th-century Postern tower. In 1326, on a personal instruction from Edward II, timbers were supplied for 'a certain bridge to the postern closer to London, recently made and completed facing the Thames.' This would refer to a western rather than an eastern postern, and it seems likely that postern has always been in the same place, overlooked by the south turret of the Byward Tower.*

*A decade later the Postern tower appears to have been heightened, as part of a more general heightening of the outer curtain wall in this area... This may suggest that the Postern was already three storeys high... Further large-scale works were undertaken to the Postern in 1346 when it is known that timber repairs were carried out and the lead roof was replaced.*

*The present wedge-shaped Postern bastion (sometimes known as the Postern turret) was probably constructed in the late 15th or early 16th century (but see 2.3.4), over the former postern entrance, with a new drawbridge abutting its west flank. This construction, incorporating loopholes for small cannon and handguns has been dated variously to the reigns of Richard III, Henry VII or Henry VIII. It must date to before 1544, as it appears on Anthonis Van Den Wyngaerde's view of that date. The rear walls of the upper floors of the main Byward Tower were rebuilt, probably in the 16th century*

- 2.2.7 In summary, therefore, the Byward Tower was a 13<sup>th</sup> century construction to which was added the Postern Tower in the early 14<sup>th</sup> century, itself then heightened a few years later. The Postern Bastion was added by 1544.

### **3 SUMMARY OF RESULTS**

- 3.1 An area of Yorkstone paving slabs measuring 1.22m (N-S) x 1.4m (E-W) was removed by HRP's groundwork contractors under archaeological supervision. Then modern overburden deposits were excavated by hand to a depth of 0.84m to gain access to and replace a section of blocked drainage pipe. The total basal measurement of the excavation was 0.52m (N-S) x 0.5m (E-W) (Figure 3).
- 3.2 The earliest recorded deposits were portions of the inner face of the western wall of the Byward Postern. These comprised an ashlar block of Kentish Ragstone [1] at the base the arched inner door jamb and a section of brickwork [2] which abutted it. Both were noted directly under the modern bedding material for the Yorkstone paving slabs.
- 3.3 The ashlar block of Kentish Ragstone [1] was seen at 0.12m BGL (Below Ground Level), at approximately 4.13m OD, and measured 220mm x 240mm. This lay under a heavily weathered ashlar block of Caen stone which was part of the base of the inner door jamb. No bedding material was seen.
- 3.4 The brickwork [2] was seen at 0.12m BGL (4.13m OD) abutting the northern edge of [1]. This measured 0.23m (E-W) and extended beyond the northern excavation limits. The brickwork consisted of three courses of light yellow medieval bricks with a height of 0.18m. The bricks measured 220mm x 100mm x 50mm and were bonded with a mid yellow brown sandy mortar with occasional small chalk fragments and charcoal flecks.
- 3.5 Overlying these were deposits of modern backfill material and concrete associated with the blocked drainage pipe and a 20<sup>th</sup> century lead water pipe.

*Plate 2: Medieval stonework [1] and brickwork [2] looking west*





*Plate 3: Pipe repair and medieval masonry [1] and [2] looking west*



## **4 CONCLUSIONS**

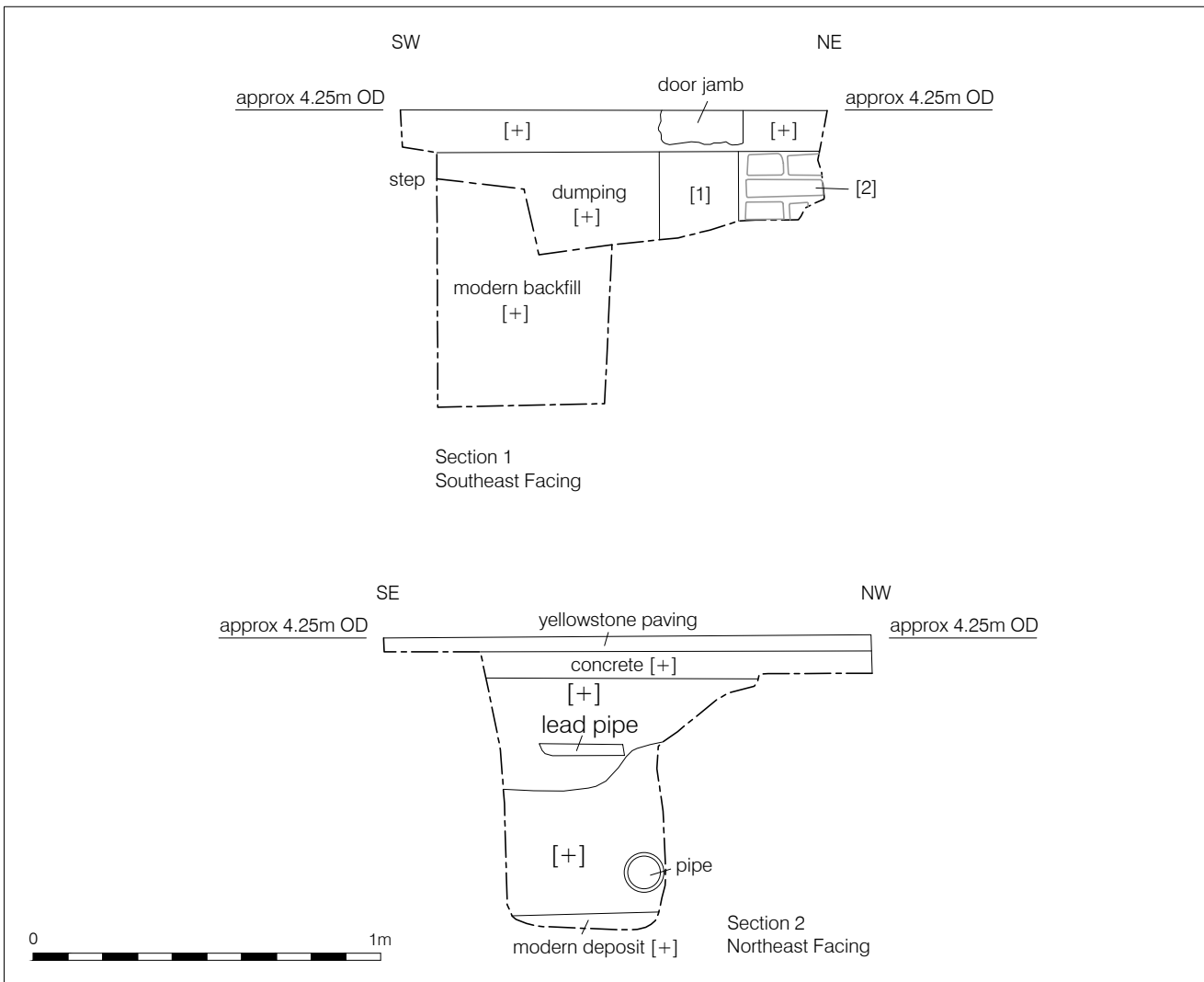
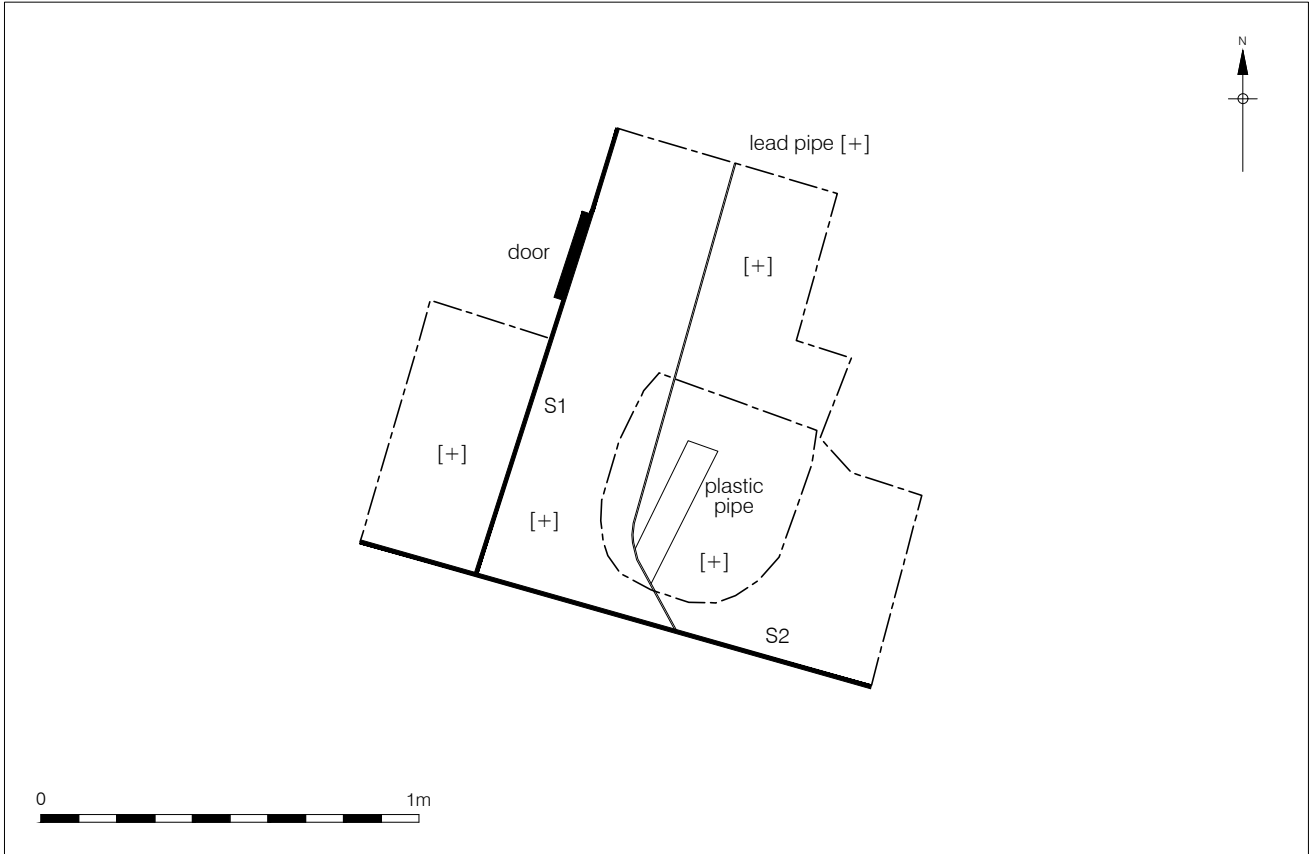
- 4.1 The watching brief revealed masonry associated with the inner passageway of the Byward Postern, situated beneath fill material within the cut of the existing pipe.
- 4.2 It is considered that the ashlar block of Kentish Ragstone and the Caen stone above it relate to the construction of the Postern Tower in the early 14<sup>th</sup> century, based upon the fact that the eastern, external face of the Byward Tower's South Turret (constructed in the 13<sup>th</sup> century) may not have incorporated an external door jamb for an as-yet unbuilt structure, unless (although unlikely) the 14<sup>th</sup> century Postern replaced a previous edifice. If so then the Ragstone block and can be considered as a foundation stone for the Caen stone door jamb above, inserted into the eastern external face of the South Turret when the Postern was built.
- 4.3 A small section of brickwork (comprising only 5 bricks) was seen to the north of the Ragstone block either beneath or inserted into the eastern wall of the South Turret. The colour of the bricks is comparable to those found elsewhere at the Tower of London and also within the upper elevations of the Byward Tower (OA 2015, 15) which are considered to be of 13<sup>th</sup> century date; the dimensions of the bricks vary however this may be because they were handmade. It is possible therefore that the two bricks observed within the current trench are also 13<sup>th</sup> century in an original context beneath the 13<sup>th</sup> century South Turret; however it is also possible that the bricks were reused during the Postern's construction in the 14<sup>th</sup> century, perhaps during the addition of the arched doorway into the Postern. Ultimately, as only 2 bricks were exposed their precise function can only be speculated.
- 4.4 The watching brief observed that cuts for the modern drainage pipe and the lead water pipe had impacted heavily on the investigation area. There was no impact upon in situ archaeological deposits beyond the fill of the cut for the drain. No finds were recovered during the watching brief.

## **5 ACKNOWLEDGMENTS**

- 5.1 Pre-Construct Archaeology Ltd would like to thank George Roberts and Sean Connor of Historic Royal Palaces for commissioning this project and Fiona Keith-Lucas of Historic Royal Palaces and Jane Sidell of Historic England for monitoring it. The author would like to thank Chris Mayo for his project management and editing, and PCA's CAD section for the illustrations.

## **6 BIBLIOGRAPHY**

- Oxford Archaeology, 2008 'The Byward Tower, The Tower of London: Historic Building Investigation and Recording', unpublished report
- Roberts, G. 2015 'Brief for Archaeological Watching Brief, Byward Postern Pipe Replacement', unpublished report for HRP.



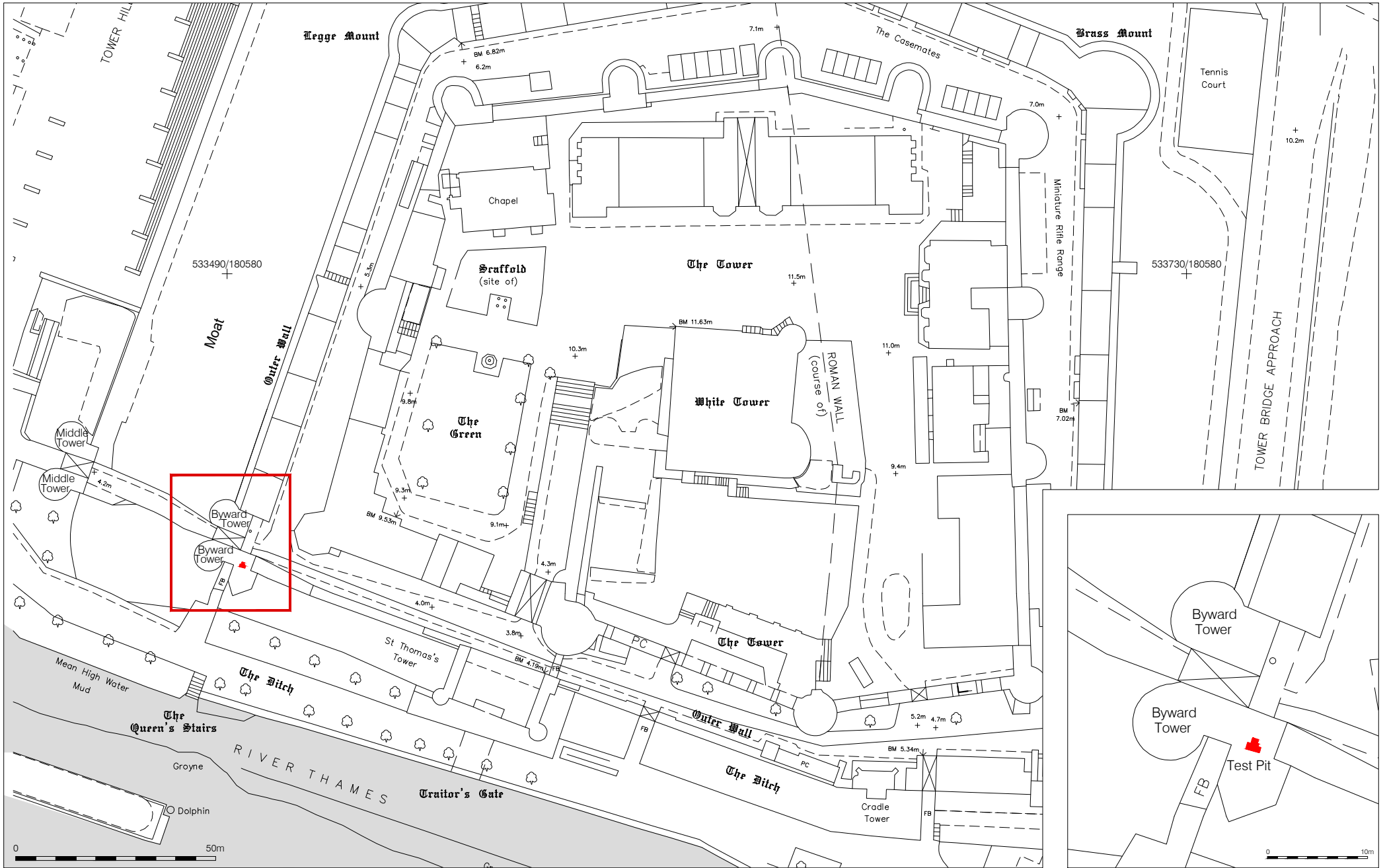
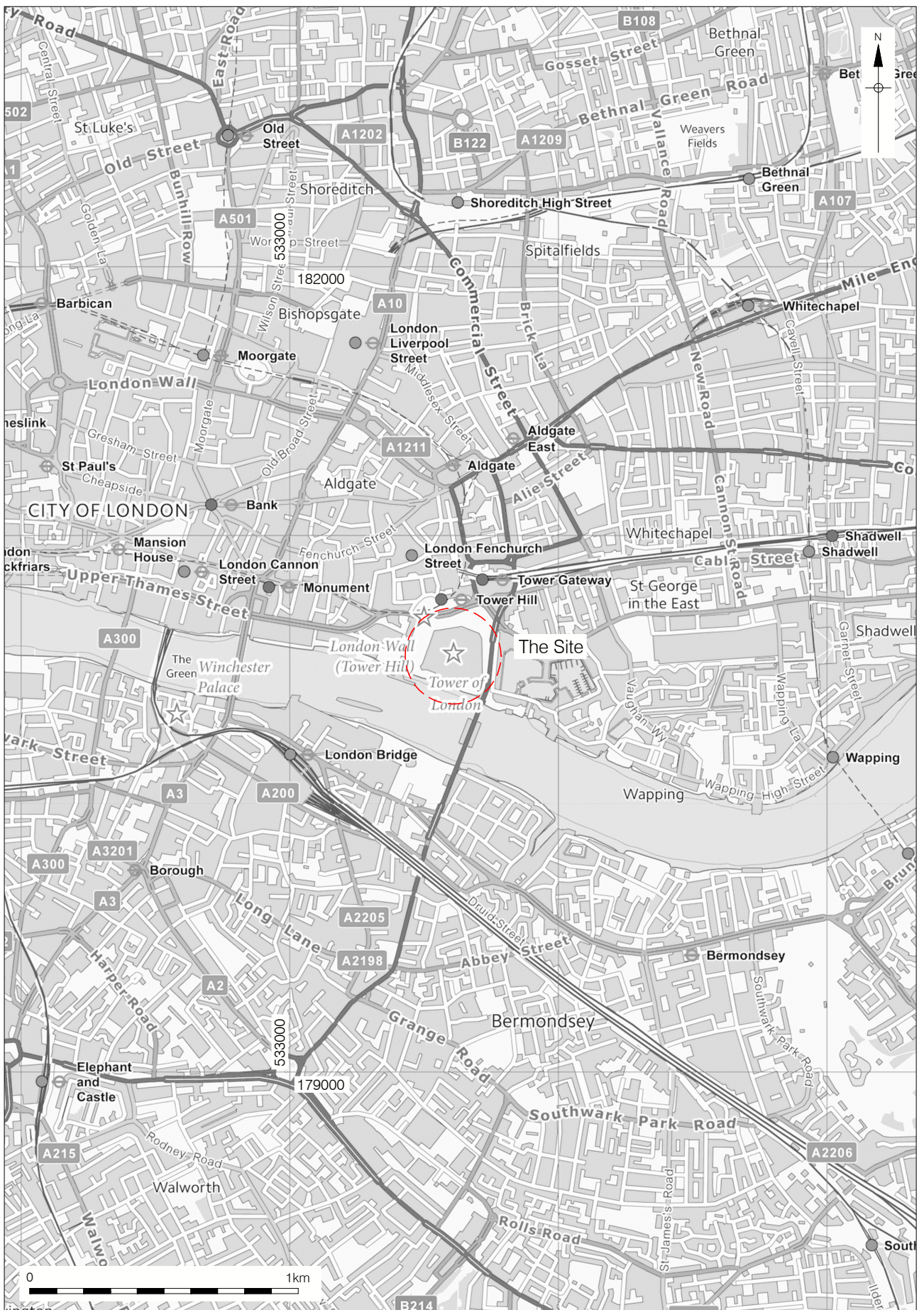


Figure 2  
 Detailed Site Location  
 1:1,250 and 1:500 at A4



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Figure 1  
 Site Location  
 1:20,000 at A4

## **APPENDIX 1: CONTEXT INDEX**

<b>Context</b>	<b>Type</b>	<b>Description</b>
1	Masonry	Ashlar block of Kentish Ragstone
2	Masonry	Three courses of yellow medieval brickwork

## APPENDIX 2: OASIS REPORT FORM

OASIS ID: preconst1-218640

### Project details

Project name	The Tower of London: An Archaeological Watching Brief Monitoring Pipe Replacement at the Byward Tower
Short description of the project	A watching brief was undertaken to monitor the excavation of a small trench to access and replace a blocked pipe in the passageway of the Byward Postern. Two sections of medieval masonry were noted during the investigation, both related to the inner face of the western wall of the postern. At the base of the inner door jamb an ashlar block of Kentish ragstone was recorded and abutting this to the north was a section of yellow medieval brickwork, three courses in height. These were sealed by deposits of modern backfill material.
Project dates	Start: 20-07-2015 End: 21-07-2015
Previous/future work	No / Not known
Any associated project reference codes	TOL150 - Sitecode
Type of project	Recording project
Site status	World Heritage Site
Current Land use	Other 8 - Land dedicated to the display of a monument
Monument type	MASONRY 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 Tower of London, Byward Postern
Postcode	EC3N 4AB
Study area	1.71 Square metres
Site coordinates	TQ 3349 8051 51.507233616934 -0.076294504051 51 30 26 N 000 04 34 W Point
Lat/Long Datum	Unknown

### Project creators

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Historic Royal Palaces
Project design originator	Historic Royal Palaces
Project director/manager	Chris Mayo
Project supervisor	Shane Maher
Type of sponsor/funding body	Charity
Name of sponsor/funding body	Historic Royal Palaces

### Project archives

Physical Archive Exists?	No
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Digital Archive recipient	Tower of London
Digital Archive ID	ToL150
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography", "Images vector", "Text"
Paper Archive recipient	Tower of London
Paper Archive ID	ToL150
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet", "Map", "Plan", "Report", "Section", "Unpublished Text"

#### **Project bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
Title	The Tower of London: An Archaeological Watching Brief Monitoring Pipe Replacement at the Byward Tower
Author(s)/Editor(s)	Maher, T. S.
Other bibliographic details	PCA R11578
Date	2015
Issuer or publisher	Pre Construct Archaeology Limited
Place of issue or publication	London
Description	A4 grey literature document with PCA covers

Entered by	Chris Mayo (cmayo@pre-construct.com)
Entered on	25 September 2015

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