C257 Archaeology Central

Fieldwork Report

Archaeological Watching Briefs on Utilities Works at London Wall and Blomfield Street (XSZ11)

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Non technical summary

This report presents the results of watching briefs carried out by Museum of London Archaeology (MOLA) on cable diversion works on the junction between Blomfield Street and London Wall, and a trial hole for the insertion of monitoring equipment outside 41/42 London Wall, both in the City of London, EC2. The utilities work was undertaken by UK Power Networks (UKPN) and the trial hole excavated for Thames Water. This report was commissioned from MOLA by Crossrail Ltd and is being undertaken as part of a wider programme to mitigate the archaeological implications of railway development proposals along the Crossrail route.

This report covers a UKPN utilities diversion trench running down the centre of Blomfield Street, turning east on the northern carriageway of London Wall, and a trial trench adjacent to 41/42 London Wall. Given the proximity of the Roman and medieval City Wall, a Scheduled Monument (LO26P), fieldwork was focused around the junction between the two roads, and the immediate vicinity. The trial hole was located approximately 15m east of the junction between Moorgate and London Wall, in the southern carriageway.

No archaeologically significant deposits were exposed in the trial hole adjacent to 41/42 London Wall.

This archaeological watching brief followed requirement set out in a Scheduled Monument Deed under the Crossrail Act (2008). A further aim was to ensure that the works did not damage the Scheduled Monument, should the City Wall be encountered. The City Wall and associated deposits were left in situ.

Natural deposits were not uncovered; the deepest trench was 1.4m below street level (111.14m ATD).

Two small sections of The City Wall (LO26P) were exposed, recorded and surveyed – the earliest deposits identified. The first, a 0.38m by 0.2m fragment of ragstone wall had been heavily truncated by 19th–20th century utilities, and only survived as an isolated feature exposed at 1.34m below street level, slightly to the north of the junction between Blomfield Street and London Wall. During the fieldwork it was believed that this section of the scheduled monument had been previously exposed and recorded by Compass Archaeology in 2006 (WBH06). However the precise location of that trench is uncertain, and given that this new fragment had no protective membrane, it is likely that it is a previously unrecorded section of the scheduled monument.

A larger section of wall was also exposed to the south-east, which had been previously exposed during earlier Crossrail works, also monitored by MOLA (MOLA 2010).

The anticipated postern (gate) that had also been previously recorded by Compass Archaeology to the north of the traffic island (southern end of Blomfield Street) did not survive within the narrow utilities trench.

MOLA's fieldwork helped to more accurately record and locate these surviving parts of the wall, adding to the wider database of the predicted east–west wall alignment along London Wall. As previously (MOLA 2010), the remains of the City Wall lay immediately outside the EH scheduled Monument mapping.

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1 Introduction

Crossrail is a new cross-London Rail Link project which will provide transport routes across the south-east of England and London. The route will link Maidenhead and Heathrow in the west with Shenfield in the north-east and Abbey Wood in the south-east. In central London, from Royal Oak in the west to Pudding Mill Lane and Royal Victoria Dock in the east, Crossrail will consist of a tunnelled section with seven new stations linked to the existing transport network.

The Crossrail mitigation response to archaeology is described in the Crossrail Generic WSI (Crossrail 2009a) and the detailed desk based assessment (DDBA: MOLA 2008), and can be summarised as follows:

- In the event that intact and important archaeological remains are identified at Crossrail worksites through this process, it may be preferable, where practicable, to preserve these where they are found (ie preservation *in situ*).
- However, because of the nature of major works projects such as Crossrail, experience of other similar projects suggests that preservation by record is usually the most appropriate method of dealing with archaeological finds.
- Following an extensive Environmental Impact Assessment (EIA) supporting the Crossrail Bill, and the production of site-specific DDBAs, appropriate mitigation measures were scoped and specified in detail in individual project designs (site-specific WSIs – Written Schemes of Investigation) which were prepared in accordance with the principles set out in the Generic WSI, and developed in consultation with the relevant statutory authorities.
- Archaeological information that is gained from fieldwork will be followed by analysis and publication of the results and will be transferred to an approved public receiving body.

This fieldwork report describes the results of archaeological watching briefs carried out on and around the junction between Blomfield Street and London Wall, and a trial trench on London Wall, by Museum of London Archaeology (MOLA) under Crossrail contract C257 Archaeology Central.

The monitored works were located around the junction of Blomfield Street and London Wall, and to the east of the junction of Moorgate and London Wall, London EC2, in the City of London (Fig 1). The approximate centre of the utility diversion trench is at OS National Grid Reference 532937 181506, and trial trench TM01F at OS National Grid Reference 532734 181542

The UKPN works at Blomfield Street and London Wall were conducted under a Method Statement agreed with English Heritage as part of a scheduled monument deed (see section 2). All fieldwork was conducted between 25/6/13 and 10/9/13 and supervised by Sam Pfizenmaier, Emily Wright and Simon Davies (MOLA Supervisors).

All levels in this document are quoted in metres Above Tunnel Datum (m ATD). To convert Tunnel Datum to Ordnance Datum subtract 100m, ie 1m OD = 101m ATD.

Table 1 Site Details

Task	Principal Contractor	Provisional Programme
• **General Watching Brief** on UKPN utilities trench Blomfield Street–London Wall	Compass (C502)	August 30th–September 7th 2013
• **General Watching Brief,** Installation of Thames Water Monitoring equipment, London Wall (Trench TM01F)	C295 CSjv	24–26th June 2013

The event code (sitecode) is XSZ11.

2 Planning background

The legislative and planning framework in which all archaeological work took place was summarised in the Site Specific Written Scheme of Investigation (Crossrail 2009b) and the Addendum to that WSI (Crossrail 2011) (see section 4 below) – which should be referred to for further detail. A brief summary is included here:

The overall framework within which archaeological work will be undertaken is set out in the Environmental Minimum Requirements (EMR) for Crossrail (Crossrail 2008a). The requirements being progressed follow the principles of Planning Policy Guidance Note 16 (PPG16) (DoE 1990), and its replacements Planning Policy Statement 5 (PPS5) (DCLG 2010) and the National Policy Planning Framework (NPPF) (DCLG 2012), on archaeology and planning. Accordingly the nominated undertaker or any contractors will be required to implement certain control measures in relation to archaeology before construction work begins.

Schedules 9, 10 and 15 of the Crossrail Act 2008 concern matters relating to archaeology and the built heritage, and allow the dis-application by Crossrail of various planning and legislative provisions including those related to listed building status, conservation areas and scheduled ancient monuments (Schedule 9). Schedule 10 allows certain rights of entry to English Heritage given that Schedule 9 effectively disapplied their existing rights to the Cross Rail project, and Schedule 15 allows Crossrail to bypass any ecclesiastical or other existing legislation relating to burial grounds.

Notwithstanding these disapplications, it is intended that agreements setting out the detail of the works and requiring relevant consultations and approvals of detail and of mitigation arrangements will be entered into by the nominated undertaker with the relevant local planning authorities and English Heritage in relation to listed buildings and with the Department of Culture, Media and Sport (DCMS) and English Heritage in relation to Scheduled Monuments.

The Crossrail Act 2008 contains clauses that disapply the usual statutory controls for works that affect Scheduled Monuments. Consequently, the Nominated Undertaker (Crossrail) has signed the Deed relating to works affecting scheduled monuments in the City of London (Crossrail Act 2008), hereafter referred to in this document as ‘the Deed’, with the Secretaries of State and English Heritage. The Deed requires details of works that may affect Scheduled Monuments to be approved by the Secretaries of State. The Deed is reproduced in Appendix B of the Crossrail Method Statement for these works (Crossrail 2013).

The disapplication’s outlined in sections 1.1 and 1.2 of the 2013 Crossrail Method Statement only apply to the UK Power Networks cable diversion trench, in the junction of Blomfield Street and London Wall. The Thames Water works were located outside the scheduled area.

3 Origin and scope of the report

This report has been commissioned from Museum of London Archaeology (MOLA) by Crossrail Ltd. The report has been prepared within the terms of the relevant standard specified by the Institute for Archaeologists (IFA 2001). It considers the significance of the fieldwork results (in local, regional or national terms) and makes appropriate recommendations for any further action, commensurate with the results.

This report will be made available from The London Archaeological Archive and Research Centre (LAARC) in due course.

4 Previous work relevant to archaeology of site

The principal previous Crossrail studies are as follows:

- Crossrail 2005a Environmental Statement
- Crossrail 2005b Assessment of Archaeology Impacts, Technical Report. Part 2 of 6, Central Route Section, 1E0318-C1E00-00001, [Specialist Technical Report (STR)]
- Crossrail, 2010, Liverpool Street Station, Site-specific Written Scheme of Investigation, Doc. No. C138-MMD-T1-RST-C101-00001 Version 2, (SS-WSI)
- Crossrail, 2013, Method Statement for UK Power Networks cable diversion works at London Wall in relation to the Scheduled Monument City Wall (LO26P), Doc No. CRL1-XRL-T1-GMS-CRG03-50001 Version 1 07.06.13.
- MOLA for Crossrail, 2008 Crossrail, Utilities diversions: London Wall, Moorgate, Blomfield Street, Old Broad Street, Bishopsgate, Past observations of City Wall, v2 03.11.08 [DDBA].
- MOLA for Crossrail, 2010 Archaeological Watching Brief & Evaluation, Utilities trial trenches, Liverpool Street and London Wall, November 2009, Revision 2.0, 10.03.10. [Fieldwork report].
- MOLA for Crossrail 2012a Archaeological Watching Brief, Verizon Utility Trench, Old Broad Street and London Wall (XSZ11), Revision 2.0. Museum of London Archaeology. Doc. No. C257-MLA-X-RGN-C101-50001 [Fieldwork report].
- MOLA for Crossrail, 2012b C257 Archaeology Central, Fieldwork Report, Archaeological Watching Brief, Gas Main Trial Trenches, London Wall (XSZ11), Document Number: C257-MLA-X-RGN-CRG02-50131 v2, 22.08.12

All fieldwork was carried out to a method statement prepared by Crossrail's archaeologists to satisfy the process set out in the deed covering works in the area of the Scheduled Monument. The above cited reports will be made available from the London Archaeological Archive and research Centre (LAARC).

5 Geology and topography of site

The geological and topographical setting was covered in detail in the SS-WSI – Liverpool Street Station Design Package 138, Crossrail, April 2010, Document No C138-MMD-T1-RST-C101-00001, Revision 2.0 summarised below. The natural geology lies too deep to be reached by these works.

The area around the site lies on Taplow terrace gravels (*c* 109m ATD), generally *c* 3.5 to 6m below modern ground levels, which forms the base of the archaeological sequence. The river terrace deposits are overlaid by a layer of alluvium probably associated with the River Walbrook and the formation of Moorfields Marsh. Sporadic deposits of brickearth have been known to occur in areas of the site, as recorded at MOLA site Astral House, London Wall (sitecode LNA99), overlying the river terrace gravels and sealed by the alluvium. The alluvium also seals stream channels of tributaries of the River Walbrook.

5.1 Archaeological and Historical Background

The archaeological potential of the site is summarised below, and covered in detail in the WSI SS-WSI – *Liverpool Street Station Design Package 138,* Crossrail, April 2010, Document No C138-MMD-T1-RST-C101-00001, Revision 2.0.

The following summary of the archaeological background concentrates on those elements likely to be affected by the trial pit, ie those likely to survive within *c* 1.5m of modern ground level in the area of the trench (the expected maximum depth).

5.1.1 Roman Period (AD 50 to 450)

There is limited evidence for prehistoric activity in the Liverpool Street area, however, this area is situated immediately north of the Roman city of *Londinium*. When the city boundary was formally marked by a wall in *c* AD 200, this ran approximately east–west either along the line of the road named London Wall, or a short distance to the north (see the reconstructed line of the wall in Fig 1 and Fig 2). The wall divided the urban area of the city to the south, from extra-mural areas to the north, where various activities, possibly including some occupation, took place. Roman cemeteries were placed outside the city boundaries, in particular along roads leading out of the city such as Ermine Street, modern Bishopsgate. The wall itself was constructed of Kentish ragstone with tile courses around a rubble and mortar core.

5.1.1.1 The City Wall

Remains of Roman and medieval City Wall along London Wall (road), from Moorgate to Blomfield, have been designated a Scheduled Monument (LO26P). The Roman and medieval City Wall was identified during the Crossrail EIA as being a resource of high importance. The need to avoid or minimise potential impacts on the City Wall has been taken into consideration by Crossrail.

The route of the UKPN utilities diversion trench crossed both the English Heritage mapping of Scheduled Monument LO26P, and MOLA's reconstruction of the line of the City Wall (Fig 2; MOLA 2008).

Pit TM01F lies approximately 2 to 3 metres south of this Scheduled Monument mapping (LO26P), which at this point coincides with the 2008 MOLA reconstruction of the route of the wall (Fig 1). The location of pit TM01F is likely to lie over an intra-mural road (running parallel to the City Wall) in the Roman period.

The extent of survival of the buried parts of the wall is uncertain. The wall has been observed surviving up to 0.3m to 0.4m below ground level in a number of places, but in others severely truncated remains only survived at widely varying levels, depending on the extent of later damage. At points this was as much as 3.25m below ground level, possibly 3.7m in one unreliable record.

Of the three trenches dug at the junction of Blomfield Street and London Wall during a Crossrail watching brief and evaluation in 2009 (XRF09)(LIV16, 25 and 26), two contained sections of the City Wall (LIV16 and 26) (MOLA 2010)(Fig 2, Fig 3). The top of the wall survived to 111.78m ATD (0.8m bGL). Sections of the City Wall were also exposed at the eastern side of the junction of Blomfield Street and London Wall, during an excavation at Blomfield House (BLM87) in 1988, and recorded by Compass Archaeology in a watching brief for Thames Water in 2008 (WBH06)(Fig 2, Fig 3).

5.1.2 Medieval Period (AD 450 to 1540)

Whilst the Moorfields Marsh would have inhibited human activity in much of the area north of the wall during the medieval period, repairs and reconstruction of the wall included the addition of new exits from the City at Moorgate (The Moor Gate).

The location of pit TM01F is likely to remain over the intra-mural road in this period.

A radar anomaly considered in the 2008 reconstruction *might* represent an extension of the medieval gatehouse to the south of the wall at Moorgate, as no similar southern extension is seen on post-medieval maps. However, if this does represent surviving masonry, it too is unlikely to extend to pit TM01F.

5.1.3 Post-medieval (AD 1540 to 1900)

The area north of the City Wall, around Moorgate, gradually filled in with buildings between the 16th and 18th centuries, with the exception of the open Moor Field lying between Moorgate (road) and Blomfield Street, which survived as open ground until drainage schemes were carried out, which allowed this area of wasteland to be utilised.

The Copperplate map of *c* 1553, shows the area of the Thames Water trial hole to roughly correspond with a wide intra-mural road, lined by houses to the south.

Parts of the City Wall, notably the gates at Moorgate and Bishopsgate, had been rebuilt or refaced in brick during the 17th century, but from the mid 18th century onwards, large portions of the wall, and eventually the gates, were demolished to ground level.

6 Research objectives and aims

6.1 Fieldwork Objectives

The prime purpose of the watching brief was to prevent damage to the Scheduled Monument, if it survived in this location, in order for it to be preserved *in situ*.

This included giving toolbox-talk/briefings to the contractors at the start of the work, continuous monitoring of excavation, and supervising the installation of protection measures should the wall be identified.

Secondly, archaeological recording was to provide information on the presence, absence, and survival quality of the City Wall (within the limited area and depth of the trench) or other archaeological deposits.

6.2 Research Aims

The original aims and objectives were listed in the WSI (Crossrail 2010), and stated that should sections of the London Wall be uncovered the following research theme may be relevant:

1. Understanding the cultural and symbolic roles played by London's defences through the ages as reflections of power and political security or imposition and dominance.

7 Methodology of site-based and off-site work

All archaeological excavation and recording during the general watching brief was carried out in accordance with:

- Crossrail, 2009a *Archaeology Generic Written Scheme of Investigation*, Doc No. CR-PN-LWS-EN-SY-00009
- Crossrail, 2013, *Method Statement for UK Power Networks cable diversion works at London Wall in relation to the Scheduled Monument City Wall (LO26P)*, Doc No. CRL1-XRL-T1-GMS-CRG03-50001 Version 1 07.06.13.
- Costain Skanska, 2013, C295 – TWUL Asset Monitoring, Method Statement, Installation of Monitoring Equipment
- Museum of London *Archaeological Site Manual* (MoL 1994)
- MOLA, 2013, *Method Statement for Archaeological Watching Brief London Wall (junction with Moorgate and Copthall Avenue), installation of TW monitoring equipment* (XSZ11),Doc No: C257-MLA-X-GMS-C101-50003 Version 2 20.06.13
- English Heritage Greater London Archaeology Advisory Service, June 1998 *Archaeological Guidance Papers 1–5*
- English Heritage Greater London Archaeology Advisory Service, May 1999 *Archaeological Guidance Papers 6*
- English Heritage Greater London Archaeology Advisory Service, 2009 Archaeological Guidance Papers 1–5 (consultation draft) [1. Desk-Based Assessments, 2. Written Schemes of Investigation, 3. Fieldwork, 4. Reporting, dissemination and publication, 5. Popular dissemination and communication of archaeology]

The site finds and records can be found under the site code XSZ11 in the MOLA archive. They will be stored there pending a future decision over the longer-term archive deposition and public access process for the wider Crossrail scheme.

7.1 General watching brief Methodology

The General Watching Briefs consisted of a basic monitoring presence to observe the works carried out by the Principal Contractor (Crossrail 2009c). All on-site archaeological work was carried out in accordance with the Crossrail *Method Statement* (Crossrail 2013), and the Museum of London *Archaeological Site M*anual 3rd edition (1994).

Compass mechanics were subcontracted by C502 to machine and hand excavate (where necessary) a utilities trench of length *c* 100m (monitored length 15m), width 0.65m and between 1.1m and 1.4m deep.

Compass broke out the concrete road surface by machine, further excavation was undertaken by hand, and particular care was given to excavation within 0.5m of the predicted location of the scheduled monument (LO26P). Care was taken so as not to damage any part of the listed structure, where encountered, as well as the variety of live services that were frequently observed. These factors limited works between 0.5–1m below ground level to hand excavation.

The contractors' work was conducted under close archaeological supervision, and the

archaeologists inspected the trench at appropriate intervals, entering when required. When archaeological remains were reached; the archaeologist carefully exposed and recorded them. With the exception of the City Wall and related deposits left *in situ,* there were no finds from the trial trench and diversion trenches.

Monitoring and recording during the general watching brief was generally made by observation from ground level. MOLA staff only entered the trench by agreement with the Principal Contractor (where there was provision of proper access and where it was safe to do so). The trenches were not shored, where excavations were made beyond 1.2m bGL particular care was taken to not enter these parts of the trenches.

A written and drawn record was made in accordance with the principles set out in the Museum of London site recording manual (MoL 1994). The photos and figures included in this report have been specifically chosen so as to illustrate the archaeological features encountered. The UKPN works on Blomfield–London Wall were surveyed by MOLA surveyors, and the location co-ordinates of the TW trial trench on London Wall was off-set from surrounding building edges, kerb, and street furniture.

8 Results and observations including stratigraphic report and quantitative report

8.1 UKPN Blomfield Street–London Wall cable diversion trench

Photo 1 Fragment of City Wall [12] at 1.34m bGL, every face is truncated by later activity, looking north

Cable Diversion trench (Fig 1, Fig 2, Fig 3, Photo 1, Photo 2)	
Location	Junction of Blomfield Street and London Wall
Dimensions	15.0m long by 0.65 wide and between 1.1 and 1.4m deep
OS National grid coordinates	532937 181506
LSG grid coordinates	83283 36193
Modern Ground Level/top of the slab	112.54m ATD
Modern subsurface deposits	Pipes, ducts and modern deposits mostly to base of trench, except where the remains of the City Wall were observed
Level of base of archaeological deposits observed	Lowest exposure of City Wall at 111.20m ATD (probably continues below that level)
Natural geology observed	Not exposed

Extent of modern truncation	19th/20th-century made ground and utilities filled the trench, only City Wall [13] survived
Archaeological remains	**Dating Evidence, Finds, and Samples**
[12] Ragstone wall with yellow sand, grit and chalk mortar. 0.8m wide by 0.6m long, surviving to a depth of 0.4m, roughly coursed-heavily truncated visible between 111.64m and 111.20m ATD.	Roman-medieval City Wall Scheduled Monument (LO26P)
[13] Ragstone, yellow sand, grit and chalk mortar. Surviving to a depth of 0.44m. Irregular roughly coursed-heavily truncated visible between 111.64m and 111.20m ATD. Only visible in narrow south-facing section.	Roman-medieval City Wall Scheduled Monument (LO26P), previously exposed in trench LIV26 (XRF09 [6])
(7,8,9,10 & 11) between 111.80 and 110.40m ATD	Modern backfill and levelling
Interpretation and summary	
Natural deposits were not observed within the relatively shallow utilities trench. The City Wall [12] and [13] was the solitary archaeological feature identified. Both contexts [12] and [13] had been heavily truncated by modern services, with no faces surviving. The City Wall description is consistent with that of the Roman City Wall (Photo 1 and Photo 2). Context [13] is the same fragment observed in trench LIV26 during a previous evaluation by MOLA, for Crossrail (XRF09 [6]). Context [12] is similar in construction and located 1.2m to the north-west. Along with a fragment of wall recorded (for which a precise location is not available) by Compass Archaeology to the east in 2006 (WBH06) (Fig 2, Fig 3), these isolated fragments lie on the predicted route of the City Wall (reconstruction 2008 – see Fig 2, Fig 3). The rest of the trench was occupied by modern services; It is probable that remains of the wall survive at a lower depth than exposed in this trench.	

Photo 2 City Wall [13], (scheduled monument LO26P) this section has been previously recorded by MOLA (XSF09 [6]), looking north

8.2 Thames Water Trial trench TM01F

Photo 3 Trial trench TM01F, modern services aligned east–west, only modern backfill of utility trenches was exposed, looking north

Trial trench TM01F (Fig 1, Photo 3)	
Location	15m east of the junction between Moorgate and London Wall, in the westbound southern carriageway
Dimensions	2.20m (N–S) by 0.78m (E–W) and 1.10m deep
OS National grid coordinates	532734 181542
LSG grid coordinates	83081 36234
Modern Ground Level/top of the slab	113.05m ATD
Modern subsurface deposits	20th-century utilities and associated backfill filled the trial pit to depth of 1.1m bGL
Level of base of archaeological deposits observed	None observed

Natural geology observed	Not reached
Extent of modern truncation	Extensive, filling the trial pit
Archaeological remains	**Dating Evidence, Finds, and Samples**
None	
Interpretation and summary	
Modern backfill, concrete and service pipes and cables occupied the whole area of the trial pit, for this reason a detailed (close-up) figure has not been created.	

9 Assessment of results against original research aims

The draft revised GLAAS guidelines (English Heritage 2009) require an Assessment of results against original expectations (these no longer mention the criteria for assessing national importance).

Likewise City of London guidance (CoL 2004) sets out advice for work carried out in London, including an assessment of results against original expectations (assessment against the above criteria are only required for evaluations).

9.1 Original research aims

- *The prime purpose of the watching brief is to prevent damage to the Scheduled Monument, if it survives in this location, in order for it to be preserved in situ.*

  All excavations were fully monitored by MOLA. Where exposed the scheduled monument (LO26P) was cleaned of modern debris prior to recording and surveying, careful attention was paid to not disturb the *in situ* remains. The wall was covered in sand and terram for protection, prior to the trench being backfilled.

9.1 Research Aims

The original aims and objectives were listed in the WSI (Crossrail 2010) and stated that should sections of the London Wall be uncovered the following research themes may be relevant:

- *Understanding the cultural and symbolic roles played by London's defences through the ages as reflections of power and political security or imposition and dominance.*

  The two fragments of City Wall recorded were too truncated, and too limited in extent, to help in understanding wider archaeological questions.

10 Statement of potential archaeology

The watching brief has **demonstrated the survival** of a previously unrecorded fragment of the Scheduled Monument, along with a section exposed by MOLA in 2009 (in evaluation trench LIV26), within the utility diversion trench, in close proximity to further sections previously recorded by MOLA and Compass Archaeology. There is a **high potential** for further survival of the Scheduled Monument (LO26P) in and around this area, particularly to the east of the new section identified.

The depth limitations of the utilities diversion trench, the density of existing services and subsequent modern truncation, limits any wider inferences with regard to predictive modelling of archaeological deposit survival in this area.

10.1 Importance of Resources

The importance of the excavated remains has been assessed using professional judgement (including consulting MOLA's buildings specialists), informed, where applicable, by the criteria for assessing the national importance of monuments (DCMS 2010, Annex 1)

These observations of the City Wall, surveyed to modern standards, are of considerable local importance, in that they help to confirm the revised reconstruction of the line of the City Wall in this area (MOLA 2008).

These sections of the City Wall are assumed to form part of Scheduled Monument LO26P, whose scheduled status infers national importance for length LO26P as a whole. It should, however, be noted that the sections exposed in this work fall outside English Heritage's mapping of the Scheduled Monument.

11 Conclusions

11.1 Roman to medieval remains

The only surviving archaeological deposits related to the City Wall (scheduled monument LO26P), two sections of which were recorded. One [12] at 0.98m bGL (Photo 1) has probably not been observed before, although it is comparatively near (0.5m west) to the tentatively located Compass trench of 2006 (see Fig 2). The second fragment observed [13] (Photo 2), was previously exposed by MOLA during Crossrail works in 2009, in evaluation trench LIV26. Given their proximity, they are likely to be part of the same surviving fragment of wall (Fig 2 & Fig 3). It suggests that there may be greater survival to the east of the utilities trench, and north (LIV26) and west (LIV16) of MOLA's 2008 evaluation trenches (MOLA 2009), but over an unknown area.

The scheduled monument did not survive within 1.4m below the modern road surface in remainder of the utilities trench, suggesting localised truncation to the north, specifically utilities respecting the north–south alignment of Blomfield Street.

Areas of this trench did not exceed 1.1m below ground level because services were too crowded to allow excavation between. Therefore the presence of the City Wall in these locations remains uncertain. It should be noted that where the City Wall was not present in these shallow trenches, it may survive at greater depths.

Similarly, no surviving remains of the City Wall (or associated deposits) were exposed in trial trench TM01F. Given its location south of the Scheduled monument (LO26P) and the limited depth of excavation (1.1m bGL) this is not surprising (Fig 1).

It should be noted that the levels to which the City Wall survives are highly variable and localised (MOLA 2008). The depths (and areas of absence) seen in the watching brief are not necessarily a guide to survival outside the trenches concerned, or below their bases.

11.2 Late 19th and 20th-century remains

The remaining deposits were all associated with the backfilling of the trench(s) following modern utilities work, and are not of any archaeological interest.

12 Publication and dissemination proposals

The Watching Brief results will initially be disseminated via this report and the supporting site archive of finds and records (including digital data). Any publication proposals will be considered in relation to later fieldwork at the Farringdon Eastern Ticket Hall site, and also the wider context of archaeological potential and results across the Crossrail scheme.

A summary report will be published in the London Archaeologist excavation round up and also deposited with the LAARC.

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14 Acknowledgements

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The watching brief was supervised by the author, who wrote the report. Other supervision was undertaken by Emily Wright and Simon Davies. The fieldwork was managed by MOLA Project Manager Nicholas Elsden.

15 NMR OASIS archaeological report form

OASIS ID: molas1-159639

Project details

Project name	Crossrail Cable Diversion Works trench and monitoring equipment trial pit London Wall
Short description of the project	A small section of The London wall (LO26P) was exposed, recorded and surveyed- the earliest deposit identified. The 0.38m by 0.2m fragment been heavily truncated by 19th-20th century utilities, and only survived as an isolated feature slightly to the north of the junction between Blomfield Street and London Wall. A larger section of wall was also exposed to the south-east, which had been previously exposed during earlier Crossrail works, also monitored by MOLA (MOLA 2010). The anticipated postern (gate) that had also been previously recorded by compass to the north of the traffic island (southern end of Blomfield Street) did not survive within the narrow utilities trench. MOLA's fieldwork helped to more accurately record and locate these surviving parts of the wall, adding to the wider database of the predicted east-west wall alignment along London Wall. No archaeologically significant deposits were exposed in the trial hole adjacent to 41/42 London wall.
Project dates	Start: 25-06-2013 End: 10-09-2013
Previous/future work	Yes / No
Any associated project reference codes	XRF09 - Sitecode
Type of project	Recording project
Site status	Scheduled Monument (SM)
Current Land use	Transport and Utilities 1 - Highways and road transport
Monument type	LONDON WALL Roman
Investigation type	"Watching Brief"
Prompt	Scheduled Monument Consent
Status	Incomplete
Missing Fields	Significant Finds

Project location

Site location	GREATER LONDON CITY OF LONDON CITY OF LONDON Crossrail London wall
Postcode	EC2

Study area	40.00 Square metres
Site coordinates	NGR - TQ 3282 8156 LL - 51 0 (decimal) LL - 51 31 00 N 000 05 07 W (degrees) Point
Site coordinates	NGR - TQ 3263 8159 LL - 51 0 (decimal) LL - 51 31 01 N 000 05 17 W (degrees) Point
Lat/Long Datum	Unknown
Status	Incomplete
Project creators	
Name of Organisation	MOL Archaeology
Project brief originator	Crossrail
Project design originator	MoL Archaeology
Project director/manager	Nicholas Elsden
Project supervisor	Sam Pfizenmaier
Type of sponsor/funding body	Crossrail Ltd
Status	Incomplete
Project archives	
Physical Archive Exists?	No
Digital Archive recipient	LAARC
Digital Contents	''Stratigraphic'',''Worked stone/lithics''
Paper Archive recipient	LAARC
Paper Contents	''Stratigraphic'',''Survey''
Paper Media available	''Context sheet'',''Map'',''Plan'',''Report''
Status	Incomplete
Project bibliography 1	

Title	C257 Archaeology Central Fieldwork Report Archaeological Watching Brief London Wall (junction with Blomfield Street) (XSZ11)
Author(s)/Editor(s)	Pfizenmaier, S.
Date	2013
Issuer or publisher	MOLA
Place of issue or publication	London
Description	A4 Ringbound report
Status	Incomplete

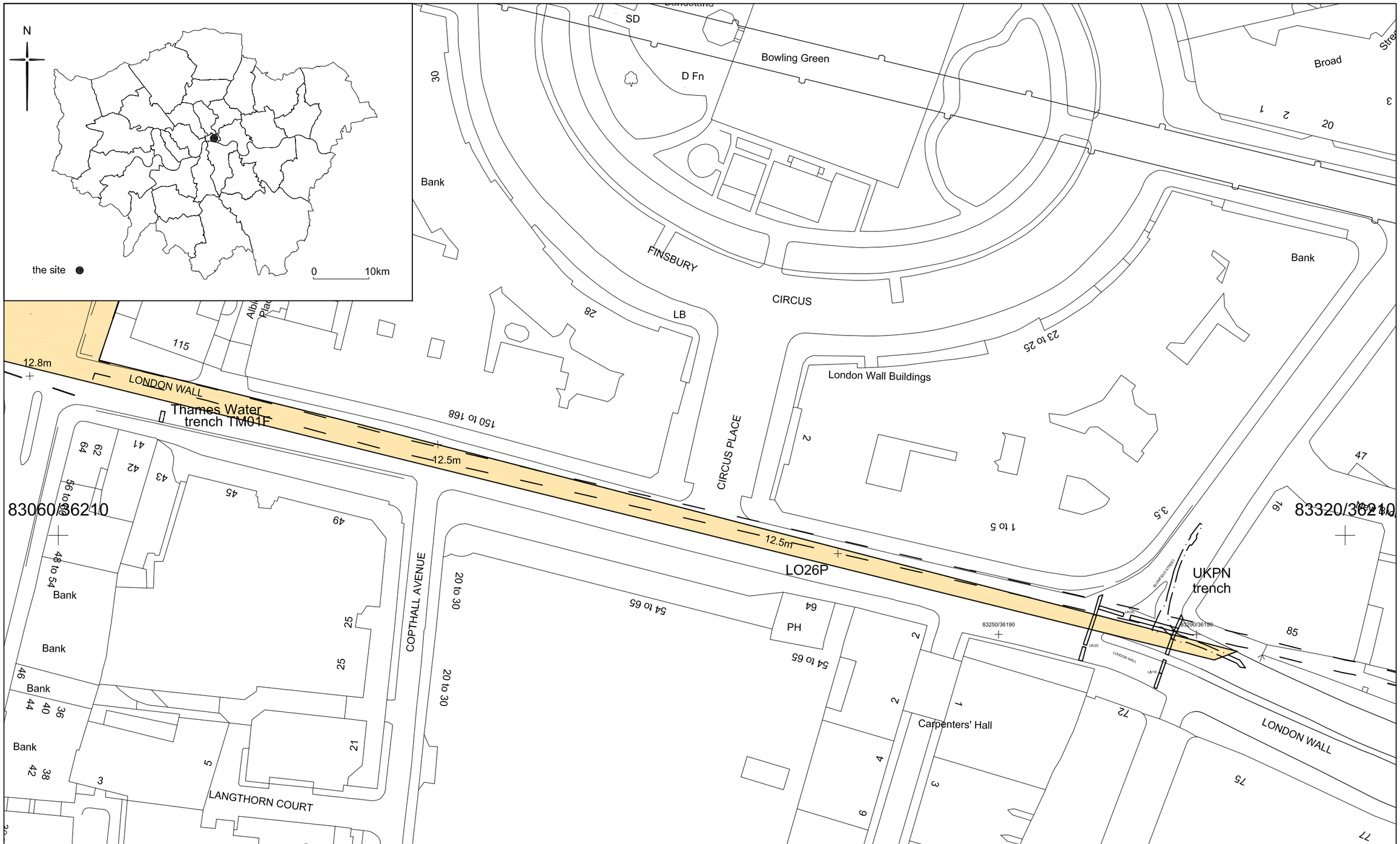

Fig 1 Location of cable UKPN diversion trench and trial trench TM01F.

Trench edge
XRF09 trench edge
2009 Reconstruction of City Wall location
Scheduled Monument (City Wall)

1:750 @ A3

0 37.5m

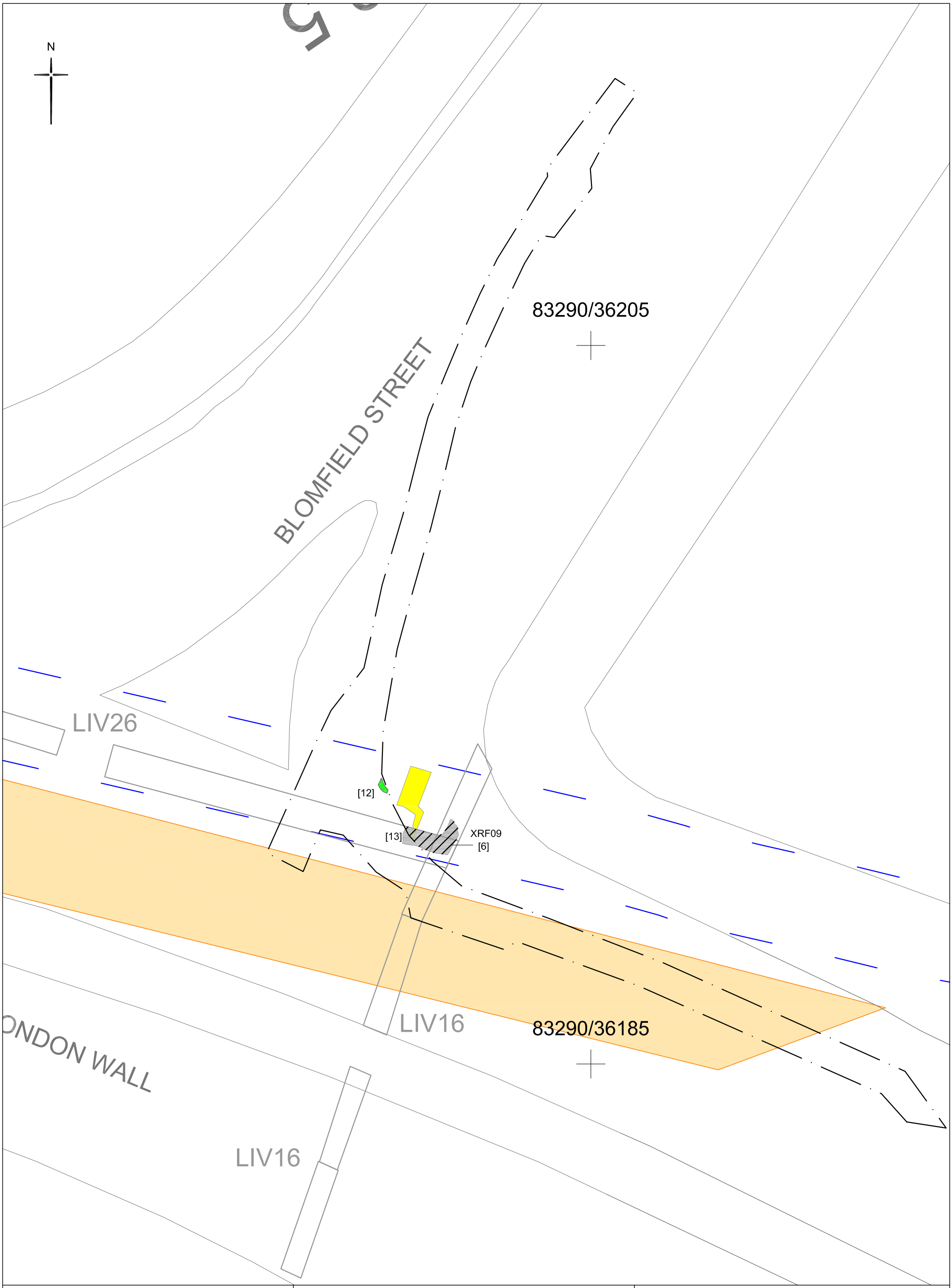

Fig 2 UKPN cable diversion trench and previous archaeological interventions

Trench edge

[11] Archaeological features

2009 Reconstruction of City Wall location

Scheduled Monument (City Wall)

Compass Archaeology WBH06

new section of City Wall

XRF09 City Wall

XRF09 trench edge

City Wall seen only in XRF09

1:100 @ A3

0 5m

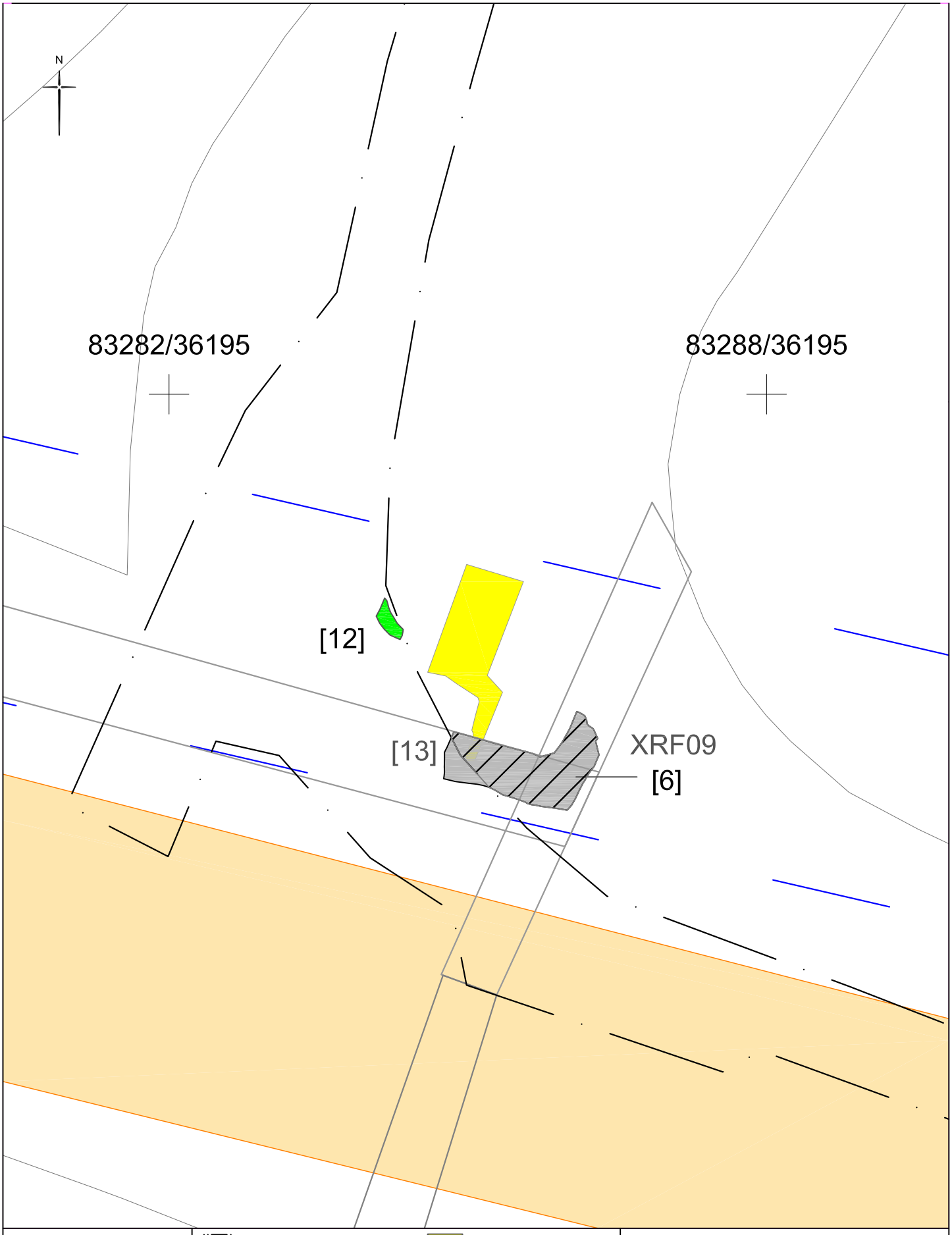

Fig 3 Detail of UKPN cable diversion trench

Trench edge
[13] XSZ11 Archaeological features
2009 Reconstruction of City Wall location
Scheduled Monument (City Wall)
XRF09 City Wall
Compass Archaeology WBH06
new section of City Wall
City Wall seen only in XRF09
XRF09 trench edge

1:50 @ A4
0 2.5m