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WORKS PACKAGE 2

TOTTENHAM COURT ROAD STATION
SITE SPECIFIC ARCHAEOLOGICAL
DETAILED DESK-BASED ASSESSMENT

Document Number: CR-SD-TCR-EN-SR-00001

Document History:

Version	Date	Drafted by	Authorised by	Reason for Revision
1.0	28.04 08	██████████		

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Crossrail MDC2		Job number 1198	
Document title		File reference	
Tottenham Court Road Station			
Site Specific Archaeological Detailed Desk-Based Assessment			
Document ref			
CR-SD-TCR-EN-SR-00001			

Revision	Date	Filename			
1.0	28.04.08	Description	Tottenham Court Road Station Site Specific Archaeological Detailed Desk-Based Assessment		
			Prepared by	Checked by	Approved by
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		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
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Issue Document Verification with Document

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Executive Summary

A Detailed Desk-Based Assessment (DDBA) has been undertaken on the construction sites at Paddington Station as part of the construction of Crossrail. The construction sites which have been assessed include:

- Utility Diversions locations;
- Non-Listed Building Demolition;
- Construction sites at Dean Street, Fareham Street & Goslett Yard
- Newman Street lorry waiting and laydown area
- Grout Shafts

Construction activities will take place at two principal locations. These are:

- West site, composed of a single worksite area – Dean Street site to the north and Fareham Street site to the south, bisected by Fareham Street itself, which will be closed and form part of the site.
- East site, composed of two worksite areas – Astoria site to the north and Goslett Yard site to the south, bisected by Sutton Row which will be closed and form part of the site.

The report has found that there is a low likelihood of significant prehistoric features being located in the construction sites but there is a higher likelihood of encountering medieval and post medieval archaeology. There is a moderate likelihood of uncovering further evidence of Roman activities.

Based on the assessment a Targeted Watching Brief (TWB) is considered sufficient to record the anticipated archaeological resource for the compensation grout shafts and utility diversions.

All three construction sites at Dean Street, Fareham Street and Goslett Yard have the potential to locate archaeological material, the extent of which is uncertain. As a result these areas are recommended to be assessed under a Trial Trench Evaluation (TTE). However, the practicalities of this will be required development during the detailed design stage.

1 Introduction

The Cross London Rail Line (Crossrail) is a major new transport link that has been developed to serve London and the south-east of England. The Scheme Design for Tottenham Court Road Station has been developed by MDC2. The details of the Scheme Design for Tottenham Court Road (TCR) station are presented in the following documents:

- Tottenham Court Road Station Scheme Design Report - Volume 3 – Civil, Structural & Tunnel Engineering Report. Document Number: CR-SD-PAD-CE-RT-00002;
- Tottenham Court Road Station Construction Planning Report – Volume 2. Document Number: CR-DV-PAD-X-RT-00019;
- Tottenham Court Road(TCR) Final Option Selection Report – Volume 2. Document Number: CR-DV-TCR-X-RT-00013.

This detailed desk-based assessment (DDBA) addresses the construction areas for the Crossrail development at TCR Station of MDC2. The new Crossrail station at TCR will comprise two platform tunnels stretching approximately 250m between new station entrances at the corners of Dean Street and Charing Cross Road respectively. This will require two surface excavations located at either end of the tunnelled platforms. The excavations are for the construction of the box structures forming the western and eastern entrances to this station.

The streets surrounding the Western and Eastern Entrance sites at TCR station contain a mix of Surface Utilities: water and gas mains, electrical, telecom and TV cables, and combined sewers. All utilities diversions at the TCR sites will be undertaken as enabling works. In addition there are a number of building demolitions that will be required to facilitate construction, some of which are non-listed built heritage structures. Six compensation grout shafts are also to be constructed and a lorry waiting /laydown area at Newman Street.

Figures 1 and 2 (below) illustrate the general scheme layout and locate heritage features such as archaeological sites, located in proximity to the scheme.

This DDBA comprises the second stage of a process in identifying the presence/absence, location, extent, character, quality and date of any archaeological remains or built heritage features which may be affected by the construction of Crossrail. The first stage comprised a general desk-based assessment of high level data gathering and largely predictive analysis of archaeological potential. That work was presented in the Specialist Technical Reports (STR) Assessment of Archaeology Impacts (part 1-6) which was produced in support of the Crossrail Environmental Statement (ES) (2005).

This second stage resulted from an additional programme of targeted research and review of documentation. This was required to further define the archaeological potential and site conditions. This DDBA describes the construction impact of Crossrail and its associated works on the archaeological and built heritage (non-listed) resource in support of the production of a site specific site location, proposes mitigation of potential impacts, and

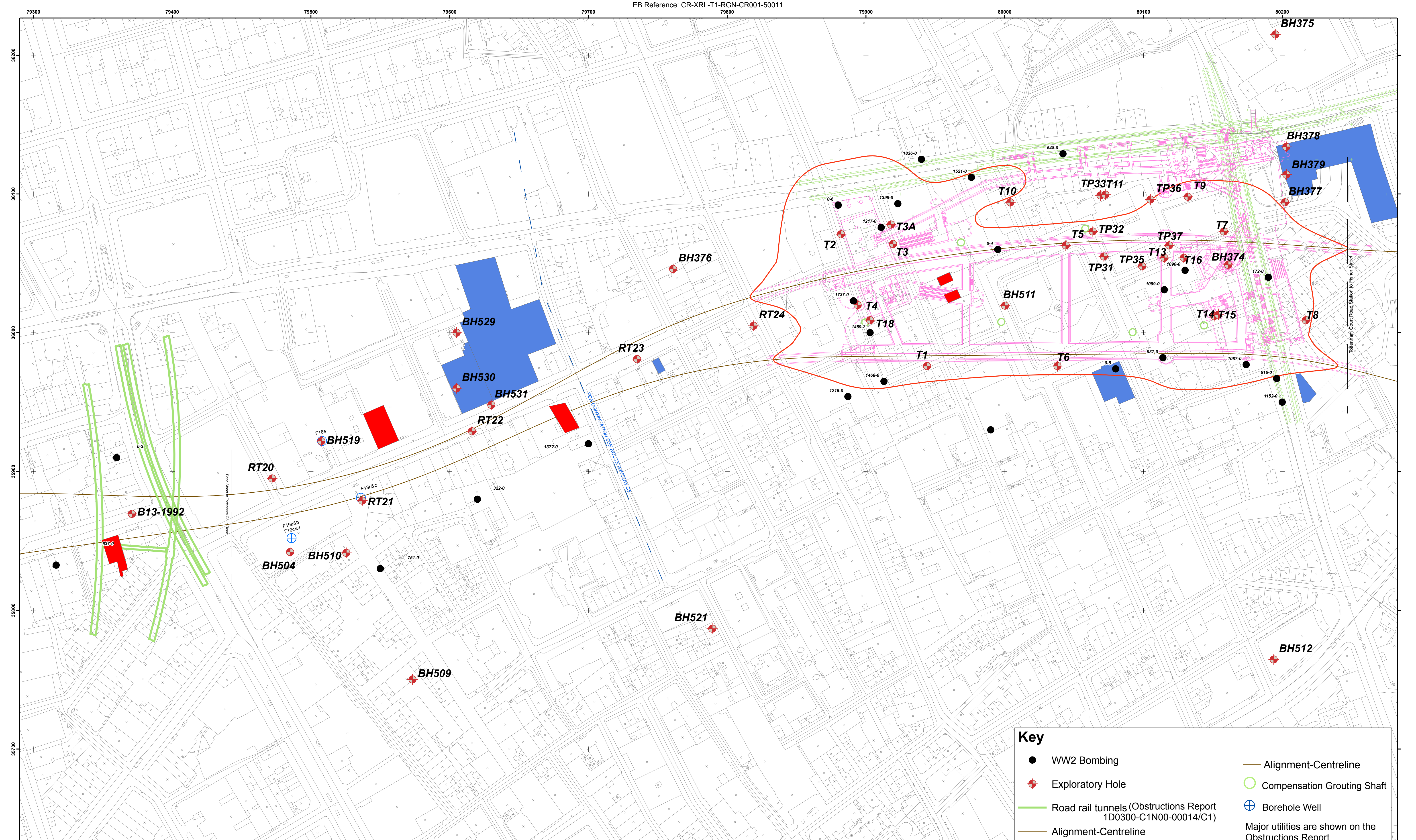
provides the scope for a WSI. The assessment has been undertaken for the latest scheme design for the site.

In compiling the detailed desk-based assessment the following assumptions have been made:

- The assessment is based on scheme details as described in Scheme Design Report available at the time of compilation of this report;
- The assessment is based on site conditions as current at the time of compilation of the report;
- The results of the package 16 geotechnical survey, including test pits, undertaken by GCG have yet to be completed. Only preliminary information has been incorporated into this DDBA. Further review is required.
- No archaeological field survey has been carried out within the site as part of the assessment. An initial site visit was made to understand the general layout and landform of the locality.

A series of documents are being prepared by CLRL in relation to the archaeological works. These are:

- Archaeology Generic Written Scheme of Investigation (14022008-44ES-P2Z1)
- Archaeology Project Design: Information management Plan (in progress)
- Archaeology Procedure for Detailed Desk-based Assessment (in progress)
- Archaeology Procedure for non-Listed built heritage recording (in progress)
- Archaeology Consultation Strategy (in progress)



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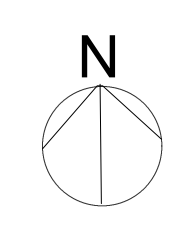
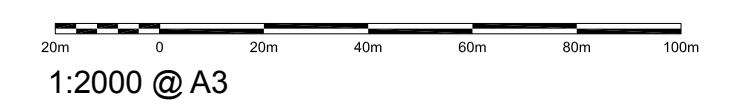
Note:
Zone of influence caused by LUL congestion relief scheme is not shown.

Key

- WW2 Bombing
- ◆ Exploratory Hole
- Road rail tunnels (Obstructions Report 1D0300-C1N00-00014/C1)
- Alignment-Centreline
- Piled Foundations (Obstructions Report 1D0300-C1N00-00014/C1)
- Suspected piled foundations (Obstructions Report 1D0300-C1N00-00014/C1)
- Alignment-Centreline
- Compensation Grouting Shaft
- ⊕ Borehole Well
- Major utilities are shown on the Obstructions Report 1D0300-C1N00-00014/C1

REV	DATE	DESCRIPTION	BY	CHKD	APP	CAD	ACC
A	16/02/07	ISSUED FOR GRIP 3	SP	GM	DK		
B01	21/12/07	ISSUED FOR SCHEME DESIGN	SP	AC	ST		

The zone of influence defines the area of significant settlement (>10mm) arising from the proposed works identified at GRIP 3 stage within which damage mitigation measures may be required. The relevant criteria for determining this region are discussed in the Scheme Design Report Vol. 3, Tottenham Court Road Station Report No. CR-SD-TCR-CE-RT-00002, December 2007



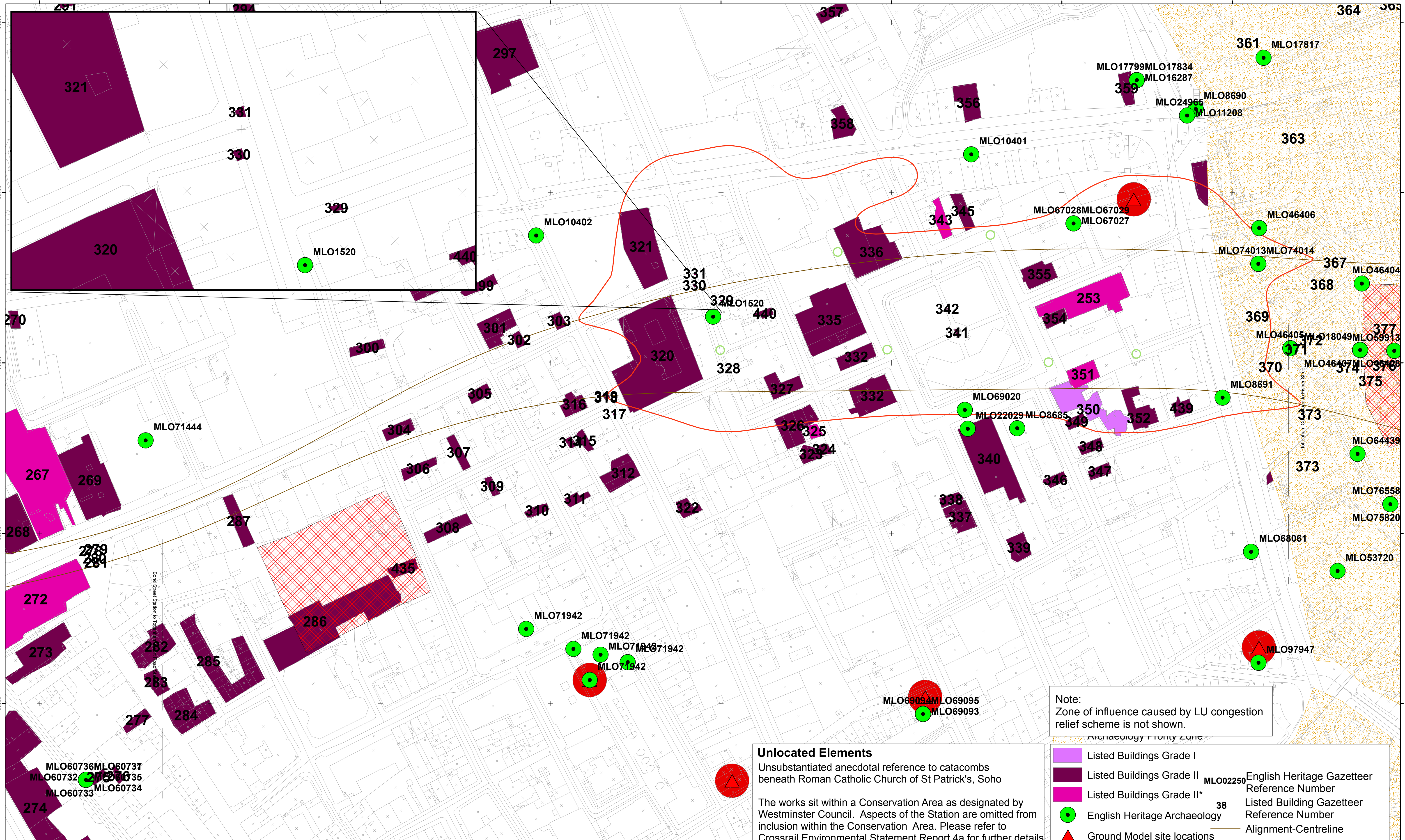
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1198 ARUP ATKINS JV MDC2
TOTTENHAM COURT ROAD STATION
SUB-SURFACE CONSTRAINTS

DRAFT

1. Confirmation of all survey data must be obtained from the Cross London Rail Link Survey Team
2. Coordinates to Crossrail Grid, Heights to Crossrail Height Datum
Crossrail Height Datum is 100 metres below Datum Newlyn
See Crossrail standard 010000-G0500-50048

SCALE: 1:1000 @ A1
DRAWING AND MAP FILE No.: P20201-C1M06-G00-D-00500
REV: B01



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Unlocated Elements
 Unsubstantiated anecdotal reference to catacombs beneath Roman Catholic Church of St Patrick's, Soho
 The works sit within a Conservation Area as designated by Westminster Council. Aspects of the Station are omitted from inclusion within the Conservation Area. Please refer to Crossrail Environmental Statement Report 4a for further details
 The listed building reference numbers have been allocated by MDC2 during the creation of the constraints mapping and the data is held in the AAJV GIS database

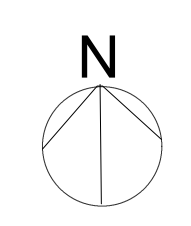
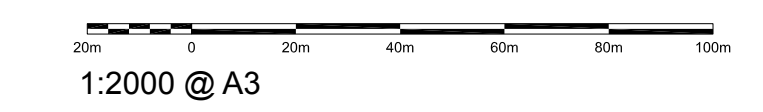
Note:
 Zone of influence caused by LU congestion relief scheme is not shown.

	Listed Buildings Grade I		English Heritage Archaeology
	Listed Buildings Grade II		Ground Model site locations
	Listed Buildings Grade II*		Historic Burial Ground
	Archaeology Priority Zone		Zone of Influence
	Compensation Grouting Shaft		Ground Model site locations

English Heritage Gazetteer Reference Number
 Listed Building Gazetteer Reference Number
 Alignment-Centreline

REV	DATE	DESCRIPTION	BY	CHKD	APP	CAD	ACC
A	16/02/07	ISSUED FOR GRIP 3	SP	GM	DK		
B01	21/12/07	ISSUED FOR SCHEME DESIGN	SP	AC	ST		

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1198 ARUP ATKINS JV MDC2		DRAFT
TOTTENHAM COURT ROAD STATION ARCHAEOLOGY & BUILT HERITAGE CONSTRAINTS		
SCALE: 1:1000 @ A1	DRAWING AND MAP FILE No.: P20201-C1M06-G00-D-XXX04	REV: A1

1. Confirmation of all survey data must be obtained from the Cross London Rail Link Survey Team
 2. Coordinates to Crossrail Grid, Heights to Crossrail Height Datum
 Crossrail Height Datum is 100 metres below Datum Newlyn
 See Crossrail standard 010000-G000-0004s

2 Surface Geology and Topography

The ground surface topography for the study area is situated on a slight slope leading down towards the Thames. The ground level within the TCR study area is generally at 125.45 - 125.7m ATD (above tunnel datum) at the station west end and at 124.65-125.00m ATD at the station east end, sloping slightly from west to east.

The Western Entrance Dean Street Ground Model (Table 10.6, doc ref CR-SD-TCR-CE-RT-00002) identifies made ground at +125.6m ATD; the thickness of that deposits ranges between 3.40-4.10m. Below that, terrace gravels (Lynch Hill) are between 4.90 and 5.20m thick (+121.50 to 122.20m ATD). The terrace gravel deposits overlie London Clay at +116.30 to +117.30m ATD.

The Western Entrance Fareham Street Ground Model (Table 10.7, doc ref CR-SD-TCR-CE-RT-00002) identifies made ground at +125.45 to 125.70m ATD; the thickness of that deposits ranges between 4.30-4.90m. Below that, terrace gravels (Lynch Hill) are between 4.90 and 5.20m thick (+121.45 to 121.90m ATD). The terrace gravel deposits overlie London Clay at +117.00 to +117.15m ATD.

The Eastern Entrance Goslett Yard Ground Model (Table 10.8, doc ref CR-SD-TCR-CE-RT-00002) identifies Made Ground at +124.65 to 124.98m ATD; the thickness of that deposits ranges between 2.30-2.80m. Below that, terrace gravels (Lynch Hill) are between 3.05 and 4.10m thick (+122.00 to 122.35m ATD). The terrace gravel deposits overlie London Clay at +118.15 to +118.95m ATD.

Brickearth (Langley Silts Complex) was identified in the Specialist Technical Report (STR) as overlying the Lynch Hill Thames terrace gravels. Such a differentiation is unlikely to have been made in the geotechnical works. These deposits are of potential archaeological interest.

Further geotechnical ground investigations have been proposed (Package 16) for Crossrail including the route covered by MDC2 and thus the area relevant to the TCR station construction sites. The ground investigation for the TCR station area has not been finished at time of publication, however, as archaeological monitoring of these works are occurring concurrently a full understanding of the implications of this on surviving archaeology is incomplete.

The results of the package 16 ground investigation work have yet to be incorporated and will help to determine the potential for encountering buried archaeological material dating to the medieval or early post-medieval period.

3 Aims and Objectives of Assessment

The aims and objectives of this detailed desk-based assessment are to:

- Determine the potential for, and survival of, archaeological resources within the area of Tottenham Court Road (TCR) station and associated construction activity, building on information provided during the Crossrail ES stage,
- Provide additional information relating to the archaeological impact of the scheme, based on detailed engineering design, interpretive site deposit modelling, and;
- Inform the subsequent phases and scope of mitigation planning, be they targeted trenching or various formats of watching brief under a Written Scheme of Investigation (WSI).

3.1 Methodology

Methodology employed was to define what detailed engineering design information existed and to target research on those areas which required it. This process firstly identified changes to the project since publication of the ES. Other associated works activities which have been considered in relation to this DDBA are enabling and utility works and systems and rolling stock works.

Updated baseline information was supplied to MDC2 by the Museum of London Archaeology Service (MoLAS), acting as specialist archaeological advisors to Crossrail during the Bill process. MoLAS supplied:

- Updated Greater London Sites and Monuments Record (GLSMR) information
- Updated information in relation to designations, e.g. World Heritage Sites, Scheduled Ancient Monuments, Local Authority Archaeological Priority Areas, Listed Buildings and Conservation Areas.
- Historic maps of the locality; thus enabling MDC2 to undertake a map regression exercise facilitating a better understanding of the phasing and use of the site;
- A review to archaeological excavations records held at the London Archaeological Archive & Research Centre (LAARC) to provide data on anticipated deposit heights to assist in ground modelling.

This new information was then compared to the engineering and construction.

A visual site appraisal was made of publicly accessible areas to gain an understanding of the local topography and the construction impact.

Additional documentary sources consulted included:

- Historic building records
- Updated technical reports (i.e. latest Scheme Design Reports);

A review was undertaken of available geotechnical and geological data procured through recent site investigations such as GCG Package 16 on behalf of Crossrail to confirm

depths of superficial deposits and subsurface depths and thickness of potential archaeological deposits. This data was proposed to:

- Further understand the potential of the archaeological resource;
- Aid in understanding the degree of preservation/truncation of archaeological deposits;
- It is noted that TCR station was not included in the work undertaken by MoLAS in 2006 to determine the potential of the archaeological resource which had been detailed in previous reports (Archaeology Programming Assessment, November 2006 1E0318-G0E00-00006 rev. B MoLAS).

4 Results

A separate gazetteer for the recorded archaeological features is presented in Appendix 1. For archaeological records, the number, for example **MOL1313**, in the following text refers to the number allocated on the Greater London Sites and Monuments Record (GLSMR), in the Gazetteer. The sites are located on the map in Figure 2 (above).

For the purposes of the baseline the following periods are used:

Table 1: Time Periods

Prehistoric	
Palaeolithic	450,000 - 12,000BC
Mesolithic	12,000 - 4,000BC
Neolithic	4,000 - 2,000BC
Bronze Age	2,000 - 700BC
Iron Age	700BC - AD43
Historic	
Romano-British	AD43 - 410
Early/Mid Saxon	AD410 - 850
Late Saxon/Early Medieval	AD850 - 1066
Medieval	AD1066 - 1485
Post-Medieval	AD1485 - 1750
Industrial	AD1750 - 1900
Modern	AD1900 - to Date

4.1 Chronological Summary

Prehistoric

The landscape of the study area remained undeveloped until the late medieval. It would have been an ideal location for foraging and settlement during the prehistoric period with the Tyburn Valley to the west and the Thames River to the south. Evidence of this use comes from a Palaeolithic axe located in Great Russell Street (MLO1520), along with another axe located at the site of the YMCA in Great Russell Street (MLO71756). Evidence of a prehistoric trackway was found at New Oxford Street (MLO11208).

Roman

The Roman city of *Londinium* lay to the east of the site. Roads were built linking the city with the surrounding hinterland, two of which crossed quite close to the study area. The trackway located at New Oxford Street and mentioned above (MLO11208) was found to be in use in the Roman period as well and likely connected through to Via Trinobantia (Oxford Street) which ran to the Roman town of Silchester. Further evidence of Roman roads were

uncovered at Theobalds Road (MLO24965) and on Tottenham Court Road itself (MLO17799).

Anglo-Saxon & Medieval

The city went into decline after the 4th century when the Romans left, although for the time period it was still considered to be a major city. The Saxon settlement at *Lundenwic*, located to the west around Charing Cross, is thought to have been seasonal in the first and second quarters of the 7th century. Blackmore (2002) writes that as it became more established the northern and eastern limits may have been located along Long Acre and Drury Lane, to the south east of the study area (2002:284). It is likely that the area was used during the Saxon period by people moving through the area to *Lundenwic*.

Blacklock writes that ‘...[b]y 802, *Lundenwic* had suffered three major fires, two in close succession (in 764, 798,...’ (2002:292) and this coupled with the Viking raids of 842, 851 and 872 led to a decline in population and a move towards the old walled city.

The eastern edge of the site lies within the Archaeological Priority Area designated by the London Borough of Camden for the medieval and later village of St Giles. Figure 2 plots the location of the archaeological (and built heritage) recorded sites.

Post-medieval

Tottenham Court Road was described in 1878 in Volume 4 of *Old and New London* as ‘...one of the busiest thoroughfares in London...’ (1878:467-480). This was a country road which ran ‘...between green hedges and open fields...’(1878:467-480) to the Manor House which belonged since the time of Henry III, to one William de Tottenham. After several changes of ownership the land eventually came to be owned by Queen Elizabeth I and became known as Tottenham Court. As befits a road of some hierarchical distinguishment it is long and wide, the fitting approach for a courtly Manor House. The area is located just to the north of what was called Soho Fields in the 1700s.

The area of Dean Street and Fareham Street was becoming developed in the 1800s. However, the character of the street was recorded as being unfinished in 1720 by local commentators. Strype comments that walking north from Carlisle Street, the path led ‘...into waste Ground betwixt Wardour-street and the Backside of Dean-street: Which Ground is designed to be built upon, there being a street laid out and some houses built.’ (Strype: 1720:86-87). Sheppard notes that building was probably very haphazard as this vacant ground was built on after Titchfields (current day Fareham) was laid out (1966:149).

The intersection where Charing Cross becomes Tottenham Court Road is a busy hub of activity and forms part of a road network ostensibly designed in the 19th century by the Metropolitan Board of Works under the Metropolitan Street Improvement Act of 1877. The improvement works occurred after concerns over large volumes of people coming from Paddington and Euston Stations who were likely to converge on the eastern end of Oxford Street and have to be funnelled elsewhere. An improved line of street was therefore needed to move people down to Charing Cross (Vol. 33 & 34, 1966:296-312).

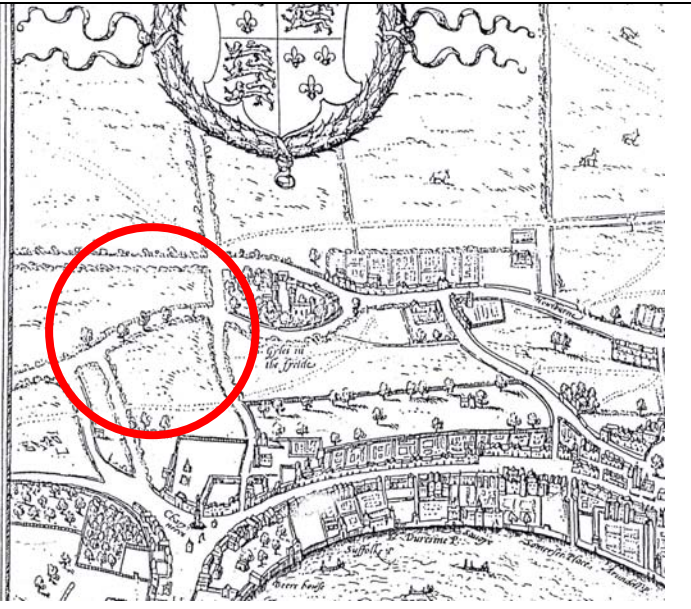
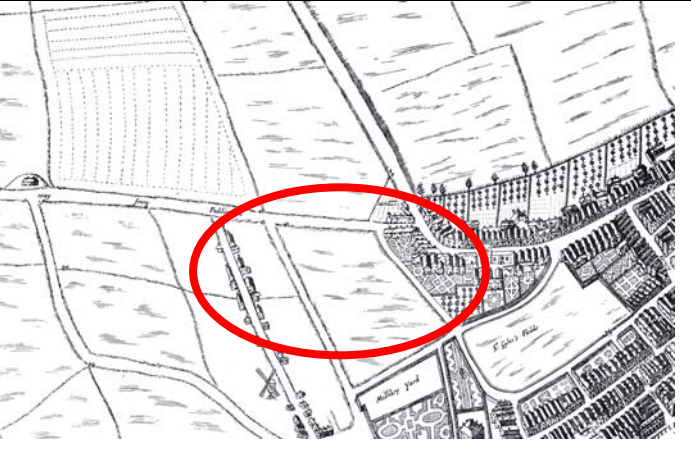
Charing Cross Road was designed to assist flow in a north to south orientation from the Thames towards Oxford Street (past Trafalgar square, the National Art Gallery and Portrait Gallery, Leicester Square, Covent Garden and the British Museum) and then on, following the old path to the Manor towards Euston. Shaftesbury Avenue takes people east to west, towards the British Museum, towards Piccadilly and the theatres, and Regents Street, both designed to ease congestion in the nineteenth century around what is now Tottenham Court Road tube.

The area is considered to have a high potential for remains relating to the post medieval urbanisation known to exist throughout this area. The STR identifies a number of previous archaeological investigations have identified foundations, cellars, floors, drains, cesspits, quarries and dumps of this date. Table 3: Deposit Survival from previous archaeological investigations, summarises a number of these sites and investigations.

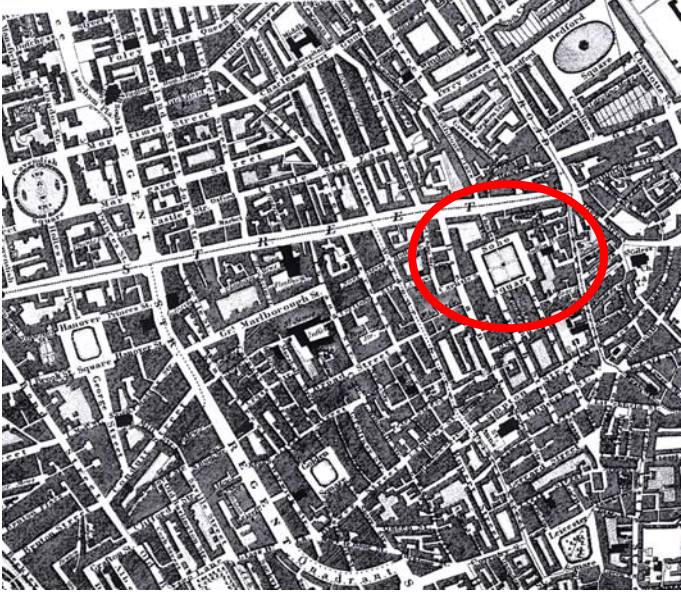

The 'Oxford' Music Hall is recorded as being located on the site of the *Boar and Castle Hostellery and Posting House* near the Junction of Oxford Street and Tottenham Court Road. The Posting House dated back to c. 1620. The "Oxford" was recorded as being one of the earliest and most popular of the metropolitan music-halls (VCA: 1878:469)

Soho Square has been noted as the possible site of post medieval brick kilns (GLSMR 083772) and these could be present to some extent within the Crossrail worksite. St Giles Pound, medieval and post medieval gallows also close the Worksite at the junction of Tottenham Court Road, Charing Cross Road and Oxford Street. Other heritage resources include the remains of Falconberg House, built in the 1680s on the north-eastern corner of Soho Square, and demolished in 1924; its construction spread was identified in excavations at 11, Sutton Row (XRB92).

4.2 Map Regression

MAP NAME	MAP DATE	MAP IMAGE	COMMENTS
Hogenberg	1572		<p>This map demonstrates that the area was already part of a major road network connecting London to outer regions. It formed a main route to Tottenham Court.</p>
Faitorne Newcourt	1658		<p>The main road to Tottenham is surrounded by fields while the study area shows cultivation and small blocks of land fronted by houses. Development is encroaching from the south and east of the study area.</p>

<p>Morgan</p>	<p>1682</p>		<p>Land blocks are becoming sub-divided into smaller narrow units, and a number of houses are fronting the street of the study area. The road layout of Oxford St and Soho Square is established.</p>
<p>Rocque</p>	<p>1746</p>		<p>The area is extensively built up with the alignment of Dean St, Fareham Stand Goslett Yard Continuing to be visible.</p>

<p>Greenwood</p>	<p>1824</p>		<p>The area is now densely populated by a variety of buildings, ranging from private dwellings, over shops and pubs to offices. Basements can be anticipated for many of these structures, although not yet completely clarified.</p>
<p>Ordnance Survey</p>	<p>1870</p>		<p>The locality remains densely populated. A Pickling Factory is situated between Soho Square and what will become the Astoria. Soho Bazaar is marked, on the north west corner of the Square.</p>

Ordnance Survey	1914		Similar to the above OS, the area is even more densely built up.
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4.3 Truncation evidence/disturbance

Table 1 below sets out the deposit survival for the TCR area, as researched by MoLAS from nearby archaeological investigations. The data highlights the variability of survival but also the possibility of deposits surviving below basement level. It cannot therefore be certain that the presence of basements indicates the absence of archaeological deposits.

NB height in the Table below are metres OD, not ATD.

Table 2: Deposit Survival from previous archaeological investigations

Data ID	Easting	Northing	Data Location	Natural surface m OD	Description	Ground Level	Notes
DEA98	529685	181035	68 Dean St	21.50	Taplow Terrace Gravels	25.00	Individual features cut into gravel down to 20.2-21.3mOD; 18 th century basement floor at 22.1mOD.
SIC06	530021	181340	St Giles Ct	22.20	Brickearth	23.00-25.00	Brickearth at 22.2-21.0mOD, over Lynch Hill gravels at 19.6-21.7mOD. Basement slab at 20.8m OD.
XRB92	529800	181330	11 Sutton Row, Falconberg Mews	22.70	Uncertain (silty sand)	24.00	Natural geology sealed by post medieval deposits.
SHA93	530030	181160	172-176 Shaftesbury Ave	20.20	Lynch Hill Terrace Gravels	23.20	Lynch Hill gravels truncated by basement slab down to 19.6-20.2mOD; no archaeological survival.
CGZ04	530020	181135	The Piazza, Covent Gdn	Not seen	-	23.20	Ground level at 21.0-23.2mOD; archaeological (Saxon) deposits at 20.8-21.4mOD; natural geology not observed.

OCM05	529880	181069	95 Charing Cross RD, 13-17 Moor St & 5-11 Old Compton Rd	21.30	Brickearth over Lynch Hill Terrace Gravels	23.80	Basement slab at 21.3mOD; natural gravels at 20.2-21.0mOD, overlain by 17 th -19 th century backyard deposits.
BWJ07	529573	180983	1-5 Berwick St and 4-5 Peter St	22.05	Lynch Hill Terrace Gravels	24.30	Basement slab at 21.5mOD truncating natural geology to 21.0mOD; 17 th century backfilled quarries on TP1 where a basement did not exist.
WIK98	529488	181040	Broadwick House, Broadwick St	20.17	Lynch Hill Terrace Gravels	24.50	Basement slab at 21.18m truncating natural geology to 20.17mOD; later 17 th century quarry pits under basement slab.
MXH07	529275	181660	Middlesex Hospital, Mortimer St	23.14	Lynch Hill Terrace Gravels	27.40	Basement slab at 23.7-24.0mOD; natural geology at 21.4-23.1mOD, overlain by 18 th -19 th century deposits.

As indicated in the above ground model much of the sites being assessed had a basement slab at c21m OD which has truncated natural gravels. Some sites show Brickearth coming onto Lynch Hill gravels, within which it is more likely that archaeological deposits will be located. However for most part these have been truncated and development has cut into the natural gravels.

The LUL station and other infrastructure works around Centre Point are anticipated to have caused extensive truncation. The present buildings fronting the main thoroughfares are likely to have extensive basements. However, as highlighted above localised areas of survival may remain.

A number of forthcoming surveys and activities will assist in more clearly determining the likely survival of potential archaeological deposits. These are set out in Table 4 below (Table 10.2 Summary of outstanding surveys from Volume 3 of the TCR Station Scheme Design report (CR-SD-TCR-CE-RT-00002)).

In particular the surveys relating to basement and foundation information will clarify the potential for the survival of archaeological deposits and therefore the extent of further mitigation works.

Unique Identifying Number	Location	Survey Type	Reason for Survey	Outstanding Information
TCR-0010	5a, 8 & 8a Great Chapel Street	Basement Dimensions and condition	Detailed topographical survey to determine exact location of basement. Insufficient record information exists as to the exact location of these buildings basements.	Detailed topographical survey required to determine exact location and existence of basements Topographical and structural survey required.
TCR-0002	1 to 6 Dean St, Diadem Court & Great Chapel St	Trial Trenches for Utilities	Required for utility design	Scope for site investigations has been defined by MDC2. EWMA arrangements to carry out site investigation works are ongoing.
TCR-0020	Soho Sq & Goslett Yard	Trial Trenches for Utilities	Required for utility design	Scope for site investigations has been defined by MDC2. EWMA arrangements to carry out site investigation works are ongoing.
TCR-0023	Sutton Row	Trial Trenches for Utilities	Required for utility design	Scope for site investigations has been defined by MDC2. EWMA arrangements to carry out site investigation works are ongoing.
TCR-0083	St Patricks Church & 2 storey buildings in Goslett Yard	Foundation survey - record search and trial pits	See RFI-283. Information required to confirm foundations type and extent.	Drawings recovered from CLRL Archive and Westminster, not conclusive regarding existence of multi level basements or piles. Approach to building owner required, with visual and photographic survey before specifying intrusive works.
TCR-0011	Dean St BT Ducts	Location and condition	Required for utility design	Ongoing. Meeting with BT arranged to provide exact location of the ducts.
TCR-0084	4 - 6 Soho Square / 6 Dean St	Foundation survey - record search	See RFI-139. Information required confirming foundation type and extent. Required for escalator tunnel design	Drawings recovered from CLRL Archive and Westminster, not conclusive regarding existence of deep level basements or piles. Foundation form to be confirmed, request to building owner required, with visual and photographic survey before specifying intrusive works.

Table 3: Extract from Table 10.2 Summary of outstanding surveys

4.4 Construction Impacts

There will also be archaeological observation of utility trenches. A number have been identified for the TCR works which will provide further information on potential deposits. These are summarised in Table 5 following, prepared by MoLAS and reviewed by MDC2.

Further revision of proposed mitigation strategy is likely to be required once the results of this work are integrated into our current understanding. However there is a low probability of locating archaeological deposits in most instances due to the depth of the trial trenches in relation to existing utilities.

Table 4: Extract from the list of proposed archaeological monitoring of utilities trial trenches

Trenches	Reason for proposed monitoring
8, 9, 20	Potential impacts on Roman to post-medieval street deposits (and possibly Civil War defences at north end of Trench 20), and as 10–14 etc below.
10–13, 18, 19, 27	Immediately adjacent to (partially within) area of Dean Street works. Potential to provide information for archaeological mitigation project design.
14	On grout shaft location <i>and</i> immediately adjacent to (partially within) area of Dean Street works. Potential to provide information for archaeological mitigation project design. (Western end is adjacent to former open area – <i>possible</i> churchyard of adjacent 18th-century ‘French Church’ – <i>some</i> potential for human remains depending on changes to street lines).
3, 4, 33, 34	On grout shaft locations. Potential to provide information for archaeological mitigation project design.
27–30	Possible monitoring (to be determined from results of Trenches 1 & 3 if conducted previously). Potential ‘rural’ archaeological sequences preceding construction of Soho Square are likely to be heavily truncated by existing services etc. If, however, Trenches 1 and 3 etc show that archaeological survival is better than currently predicted, these may require monitoring.
2, 15–17, 21, & 26	Not currently proposed for monitoring: (unlikely to affect known archaeological resources, unlikely to contribute to archaeological mitigation project designs). Note that although 2 is adjacent to the Charing Cross Road works, the presence of deep basements within that area suggests that this trench is unlikely to provide information applicable to project designs.
Sources	1W0100-C1G08-U00-P-50000 Rev D, 30.08.07 1W0100-C1G08-U00-P-50001 Rev C, 23.08.07 (previous assessment, 26.03.07, of TCR-SK-11-001.pdf)

4.4.1 Grout Shafts.

There are six grout shafts planned for the Bond Street site. These are shown below.

The locations of the grouting shafts, shown on Figure 3, have altered during the design process. It is not anticipated that these alterations will introduce any significant archaeological impacts; they will be incorporated into the archaeological mitigation design. The locations are set out below.

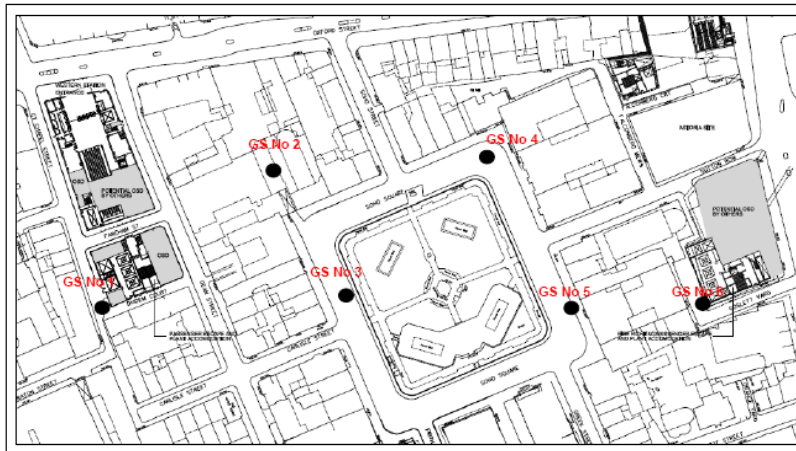


Figure 3: Grout Shaft Locations

4.5 Discussion

There is a moderate potential for the main Roman Road from London to Silchester (Oxford Street/High Holborn) which continued in use from the Saxon period onwards and passed close to the Crossrail site (GLSMR 081172). It may have intersected another Roman Road – Tottenham Court Road/Charing Cross Road (GLSMR 081493). It is also a medieval and post medieval highway (GLSMR 082050).

Other possible deposits of moderate potential relate to the medieval village of St Giles which focused around the High Street, particularly on the junction of TCR and St Giles High Street. Civil War defences may exist within or close to the Crossrail worksite, possibly around Newman Street and its junction with TCR, probably on the north side of Oxford Street.

5 Recommendations

It is considered that given the anticipated extent of truncation of utilities, building foundations and basements, that much of the potential archaeological resource is likely to have been truncated. However, there is still Roman, medieval and post medieval potential across the TCR work sites. The logistical constraints and practicalities of working in existing basements require further definition and consultation prior to finalising the appropriate mitigation response.

Consultation with the Greater London Archaeology Advisory Service, during detailed design will assist this process.

5.1 West Site - Dean Street/Fareham Street

West site, composed of a worksite area at Dean Street site to the north and Fareham Street site to the south, bisected by Fareham Street itself, and to the north of Oxford Street at Newman Street (lorry waiting/ laydown area).

Archaeological evaluation in this area is anticipated as being Phase 1 works. It is recommended that a Trial Trench Evaluation (TTE) to determine the likely survival of archaeology below the basement to the brickearth and gravels.

5.2 East Site – Goslett Yard

East site, composed of two worksite areas – Astoria site to the north and Goslett Yard site to the south, bisected by Sutton Row which will be closed and form part of the site.

Archaeological evaluation in this area is anticipated as being Phase 1 works. It is recommended that a Trial Trench Evaluation (TTE) to determine the likely survival of archaeology below the basement to the brickearth and gravels.

5.3 Compensation Grouting shafts

Archaeological evaluation in this area is defined as being Phase 2 works. All compensation grouting shafts will be subject to a targeted watching brief.

5.4 Utilities

Archaeological evaluation in this area is defined as being Phase 2 works. All compensation grouting shafts will be subject to a targeted watching brief.

6 References:

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<http://www.mappalondon.com/> For Edward Stanford map

MULTI-DISCIPLINARY CONSULTANT WORKS PACKAGE 2 BOND STREET STATION -
SCHEME DESIGN REPORT VOLUME 3 – Civil, Structural & Tunnel Engineering Report
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Appendices 1: GLSMR Gazetteer of known archaeological sites

GLSMR	Easting	Northing	Type	Date	Name/ Description/ Location
MLO10401	529704	181354	Monument	Post Medieval	Oxford St (Grt Russell St to Wardour St) remains of seigework, battery, and fort
MLO1520	529555	181255	Monument	Palaeolithic	Great Russell St, find spot of Palaeolithic hand axe
MLO22029	529706	181193	Monument	Post Medieval	Post-med terraced house, 30 Soho Sq
MLO46404	529935	181284	Monument	Medieval to 17th Century	Hate house at Denmark St
MLO46405	529894	181245	Monument	Medieval to 17th Century	House at Denmark St
MLO46406	529874	181315	Monument	Medieval to 17th Century	Garden identified at St Giles High St
MLO46407	529935	181245	Monument	Medieval to 17th Century	Wall identified at St Giles High St
MLO46408	529935	181245	Monument	Medieval to 17th Century	Chapter House identified at St Giles High St
MLO53720	529925	181115	Monument	Medieval to 17th Century	Orchard located at New Compton St
MLO53998	529974	181255	Monument	Medieval to Post Medieval	Chapel identified at St Giles High St
MLO67027	529765	181315	Monument	Post Medieval	Drain located during excavations at Soho Sq
MLO67028	529765	181315	Monument	Post Medieval	Building features located during excavations at Soho Sq
MLO67029	529765	181315	Monument	Post Medieval	Ditch and water channel features located during excavations at Soho Sq
MLO68061	529874	181125	Monument	Post Medieval	Well uncovered during excavated at 105-107 Charing Cross Rd
MLO69020	529704	181204	Monument	Post Medieval	Brick kiln located during excavations at Soho Sq (?)
MLO70201	529978	181257	Monument	Post Medieval	Church and churchyard at St Giles High St
MLO71756	529904	181505	Monument	Prehistoric	Findspot of a prehistoric axe at Great Russell St, YMCA
MLO75820	529955	181155	Monument	Early Medieval/Dark Age	Find spot of early medieval pottery at former Phoenix Theatre
MLO76558	529955	181155	Monument	16th Century to Modern	Basement dump and building rubble evidence located at former Phoenix Theatre.
MLO17808	529804	181464	Monument	Palaeolithic	Findspot of a Palaeolithic axe at junction of Tottenham Crt Rd.
MLO17817	529874	181415	Monument	Medieval	Location of a medieval brewhouse located at Tottenham Crt Rd
MLO18049	529935	181245	Monument	Medieval to 17th Century	Location of a Leper Hospital on St Giles High St
MLO59913	529955	181245	Monument	Post Medieval	Post-med dump event located during excav at 7 Denmark St
MLO64439	529935	181184	Monument	Post Medieval	Post-med wall located at Phoenix Theatre
MLO8685	529735	181194	Monument	Post Medieval	Post-med house features uncovered during excav at south side of Soho Sq.

GLSMR	Easting	Northing	Type	Date	Name/ Description/ Location
MLO8690	529835	181384	Monument	Medieval to Post Medieval	Site of Gallows, on Oxford St
MLO8691	529855	181215	Monument	Early Medieval/Dark Age to Post M	Medieval origin evidence of road at Charing Cross
MLO11208	529830	181380	Monument	Early Iron Age to Roman	Early evidence for road or trackway uncovered at Oxford St
MLO74013	529874	181294	Monument	Unknown	Ditch of unknown date uncovered at 1-6 Denmark Place
MLO74014	529874	181294	Monument	Medieval	Medieval foundations uncovered at 1-6 Denmark Place
MLO16287	529800	181400	Monument	Post Medieval	Evidence for Post med siegework located in Finsbury
MLO17799	529800	181400	Monument	Roman	Evidence for Roman road on Tottenham Crt Rd
MLO17834	529800	181400	Monument	Medieval	Evidence for medieval road over Roman road at Tottenham Crt Rd
MLO24965	529830	181380	Monument	Roman	Evidence for Roman rd uncovered under Theobalds Rd