

Argent (King's Cross) Ltd

King's Cross Central

Archaeological Written Scheme of
Investigation - Specification

Realignment of Pancras Road

February 2007

This report takes into account the particular instructions and requirements of our client.
It is not intended for and should not be relied upon by any third party and no responsibility is
undertaken to any third party.

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FIGURES

- 1 Area of Archaeological Watching Brief

1 Introduction

1.1 Objective of this Specification

The realignment of Pancras Road is one of the Enabling Works for the King's Cross Central (KXC) scheme. The construction of the realignment will involve earthworks and some of these have the potential to impact on buried archaeological remains.

Volume 2, Part 10 of the Environmental Statement submitted with the outline planning application comprises the Cultural Heritage Specialist Report. It includes an account of the known archaeological conditions within KXC, and determines the archaeological potential. It discusses mitigation objectives incorporated within the development proposals based on anticipated effects.

This specification provides the strategy for archaeological investigation and mitigation of the potential effects of the realignment of Pancras Road, as reported in the Environmental Statement. It commits to undertaking appropriate works and directs the contents of the Written Scheme of Investigation provided by the commissioned archaeological contractor. As such, this specification fulfils in part the requirements of Condition 56 of the outline planning permission 2004/2307/P.

This specification does not address the above-ground aspects of the realignment such as the recording and monitoring of the Stanley Buildings, as explained further in Section 1.2.1 below.

1.2 Planning Conditions

Conditions 55 and 56 of the outline planning permission require programmes of 'Building Recording and Analysis' and 'Archaeological Investigation and Mitigation' respectively to be carried out during the implementation of the scheme.

The only building to be affected by the realignment works is the Grade II listed Stanley Buildings North block, which will be demolished under Listed Building Consent 2004/2313/L. A separate Written Scheme of Investigation relating to the above-ground aspects of this building and the adjacent Stanley Buildings South block has been prepared to address Condition 55 and the corresponding Condition 3 within the Listed Building Consent.

In compliance with these conditions, initial building recording and analysis (including assessment) of the two Stanley Buildings blocks is to be carried out in advance of the demolition of the north block. This work is described separately in the IHCM 'Building Recording and Analysis: Stanley Buildings - Specification' and the 'Stanley Buildings Written Scheme of Investigation for Archaeological Recording' by Pre-Construct Archaeology.

On this basis, this specification considers only the archaeological effects of the proposed Enabling Works.

Condition 56 (Archaeological Investigation and Mitigation) requires:

"the implementation of a programme of archaeological work in accordance with a written scheme of investigation"

For the realignment of Pancras Road an Archaeological Watching Brief process is considered to be the appropriate mitigation measure, as identified within the Environmental Statement. This specification sets out the strategy proposed for the Archaeological Watching Briefs, which will be in place during the engineering works including any related works to the foundations of the Stanley Buildings North block.

1.3 The Character of the Engineering Works for Re-routing Pancras Road

The engineering works for the realignment of Pancras Road include:

1. Trial pitting to establish the precise location of services buried in the ground.

2. Removal of Stanley Buildings North block including foundations.
3. Removal of any shallow buried obstructions encountered.
4. Cut and fill earthworks to new formation level including the removal and treatment of any contaminated soils encountered.
5. Repositioning of shallow services.
6. Laying of road materials and associated pavement and landscaping.

The nature of these works is described in greater detail in Section 2 of this document.

1.4 Archaeological Watching Brief Process

A series of Archaeological Watching Briefs will accompany the engineering works, providing archaeological information to satisfy the aforementioned planning Conditions. Section 3 of this specification defines an Archaeological Watching Brief. Figure 1 defines the area to be covered by the watching briefs.

Paragraph 10.8.1 and Table 10.8 of the Environmental Statement sets out the mitigation measures proposed. It confirms that Archaeological Watching Briefs would be in place where any engineering ground works would encounter made ground from the 19th Century or earlier, or River Fleet Alluvium.

The Watching Brief will conform to standards required by the Institute of Field Archaeologists and the guidelines of the Greater London Archaeological Advisory Service of English Heritage. The Archaeological Contractor shall be a member of the Institute of Field Archaeologists.

Ms Diane Walls, the present archaeological officer of English Heritage for the London Borough of Camden, will monitor the site and post-site works on behalf of English Heritage and the London Borough of Camden.

IHCM (International Heritage Conservation and Management) is the Archaeological Consultant to the Employer for this work, Argent (King's Cross) Limited.

2 Details of Engineering Works

The design for the realignment of Pancras Road is detailed within other submission documents. Works to achieve this scheme will comprise those referred to in Section 1.3 above. These are explained further below.

2.1 Removal of Old Foundations, Obstructions, Trial Pitting

The new Pancras Road route is to be formed in an area of complex ground conditions resulting from more than 200 years of development and change, the latest (modern) phase of which can be presently observed to the east of St Pancras Station. Below the modern ground surface may be the remains of former roads and buildings. It is expected that the following types of old/redundant features may be present:

- Backfilled basements.
- Basement walls.
- Brick and concrete foundations likely to be of various forms and sizes.
- Wells and cess pits (open or backfilled).
- Metal water, gas and hydraulic power pipes.
- Sewer brick/stoneware pipes.
- Backfilled WWII craters.
- Older road fabrics.
- Elements of commercial/industrial plant.

2.2 Treatment of Contaminated Soils

Given the industrial and commercial history of King's Cross, it is possible that there are still localities of 'hot-spots' of soil contamination. The contamination, if it is related to 19th century industrial processes, may have a heritage interest, especially where such contamination is associated with structural remains and where the contamination may need treatment. Treatment could include on-site encapsulation and / or removal off site.

2.3 Repositioning of Shallow and Deep Buried Services

The realignment of Pancras Road will necessitate diversion of existing buried services and insertion of new ones, related both to existing buildings and street functions and also in anticipation of future redevelopment. Shallow infrastructure works may be located above soil formations of archaeological interest. Similarly, services inserted in trenches below 0.5 m deep, and in areas where there may be physical obstructions and ground contamination, could traverse through archaeologically interesting ground conditions.

2.4 Cut and Fill, and Laying of New Road Materials

Achieving the new Pancras Road design will involve a general modification of the route topography - to obtain correct alignments, gradients, curves, junctions etc. Less than 1 m of general ground reduction will occur, resulting in an appropriate formation level on which the road will be constructed. Local penetration of the ground may be more than 2 m.

3 Archaeological Objectives of the Watching Brief

3.1 Definitions

3.1.1 Archaeological Watching Brief

An Archaeological Watching Brief, as recommended by the Institute of Field Archaeologists (IFA, 1994), refers to:

"A formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area or site on land or underwater where there is the possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive."

In all cases, the watching brief is intended:

"to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works."

"to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support a treatment to a satisfactory and proper standard."

"to establish and make available information about the archaeological resource existing on a site."

The Institute stresses that an Archaeological Watching Brief is not intended to reduce the requirement for excavation or preservation of known or probable deposits, and is intended only to guide, not to replace, any requirement for contingent excavation or preservation of possible deposits.

3.1.2 Archaeological Heritage Value

Based on the understanding of the history of the area as considered and presented in the Environmental Statement, the archaeological mitigation strategy will be to undertake Archaeological Watching Briefs as defined above. The strategy responds to the anticipated archaeological features having minor to moderate heritage value, as defined in Table 10.2 of the Environmental Statement.

3.2 General Archaeological Watching Brief Objectives at King's Cross Central

The Archaeological Watching Briefs will collect and interpret data from the several site-based engineering components of the Pancras Road scheme, as described in Sections 1.3 and 2 of this document. The archaeological objectives shall be related to:

1. The character of the site and landscape prior to first-phase industrial development, including information about the rural topography with evidence of Prehistoric to Post-Medieval land use; the exploitation of soils for brick making; the environment along the River Fleet; early commercial and residential development as part of the rapidly expanding early 18th century urban fabric of London.
2. The mid 18th to early 19th century 'early' urban and commercial land uses prior to the insertion of the great mid 19th century railway buildings and associated railway facilities.
3. The character of foundations and soils of mid to late 19th century, related to residential and commercial occupation and continual urban change processes.
4. Adding archaeological data to that obtained for CTRL and LUL development works that have been taking place for the last few years at King's Cross and St. Pancras.

5. The Watching Brief will also provide specialist advice to the Developer (Argent), the Engineer, and the Principal Engineering Contractor on made ground and historic engineering features during the site works, if and when discoveries are made. The Archaeological Watching Brief will monitor site works to reduce the chance of accidental damage occurring to retained heritage buildings and to any uncovered archaeological remains that are to be retained *in situ*.
6. Updating Archaeological Watching Brief objectives from time to time, responding to findings and interpretation discussions between all concerned parties.
7. A report on the findings is planned to be issued within one month following the completion of site works.

3.3 The Archaeological Watching Brief Programme

3.3.1 During Engineering Site Investigations

It is likely that the Archaeological Watching Brief will initially be for the engineering site investigation(s) into existing services, and this work will inform future archaeological site-based tasks.

3.3.2 During Removal of Ground Obstructions

No Archaeological Watching Brief will be required during the removal of the present hard landscaping, down to approximately 0.5 m below ground level, as this material is assumed to be formed of modern materials of no heritage value, as defined in Table 10.2 of the Environmental Statement. The exception to this is at Stanley Buildings North block, where mid 19th century foundations will still be present to ground level. Here an Archaeological Watching Brief will be required.

The major phase of archaeological site works will relate to those works occurring deeper than 0.5 m below present ground level, and this may involve grubbing out of hard obstructions and replacing of soft spots. Hard obstructions are most likely to be foundations of former buildings and therefore may have a heritage interest. Soft spots would include backfilled basements, cess pits and wells, these likewise having a heritage documentation value. At the present time it is not possible to be precise as to where such local features are likely to occur.

The removal of the obstructions and replacement with engineered fills would be mechanically achieved, and would therefore affect the ground around the treatment locations.

At Stanley Buildings North block the Archaeological Watching Brief will add data to the heritage documentation of the above-ground structure.

4 Actions by the Archaeological Contractor Prior to and During Pancras Road Development Programme

The two Stanley Buildings blocks are listed Grade II. The entire Pancras Road investigation area is within the King's Cross Conservation Area. All statutory requirements relating to work with listed structures and in a Conservation Area are to be complied with.

To satisfy Archaeological Watching Brief requirements, the appointed Archaeological Contractor shall:

1. Provide a Written Scheme of Investigation (WSI) for IHCM, for onward submission to the London Borough of Camden and English Heritage. This shall be approved in writing prior to any development work starting on site.
2. Provide a Health & Safety Plan under CDM Regulations and work to it.
3. Obtain an archaeological site code.
4. Be fully familiar with the heritage documentation undertaken by IHCM in the Environmental Statement produced for Argent (King's Cross) Limited – to be provided at tender.
5. Be familiar with archaeological site works carried out for CTRL and LUL at King's Cross and St. Pancras.
6. Be familiar with the conditions attached to the Planning, Listed Building and Conservation Area Consents associated with the King's Cross Central development.
7. Coordinate the fieldwork programme with Argent, the Engineer, IHCM and the English Heritage archaeological officer representing the London Borough of Camden.
8. Attend, unless otherwise agreed, all works that penetrate below the present hard landscape surfaces.
9. Generally advise the Principal Engineering Contractor on made-ground and structural features within it, related to the site history potentially spanning Prehistoric to Modern times. Advise on archaeological value of the heritage assets, with an assumption that only remains (including building fabric) of no and low value may be penetrated/removed without the agreement of IHCM and/or Camden/English Heritage.
10. Observe and document, from ground level, machine excavation without shoring and hand digging undertaken by the Principal Engineering Contractor.
11. Descend at agreed times pits and areas less than 1.2 m deep without shoring, and deeper pits with shoring, to observe, explore, photograph and document made ground and alluvial soil formations, structural remains of the various buildings and other archaeological remains.
12. Provide advice to the Principal Engineering Contractor on backfilling and reinstatement, ensuring protection of archaeological features and accurate historic reinstatement respectively.

5 Provisions to be Made by the Archaeological Contractor after the Site Works

The following requirements are to be satisfied by the Archaeological Contractor:

1. Provision of a factual and interpretive report on the site works in respect of made ground and alluvial soil formations, structural remains, artefacts and ecofacts. The report shall conform to methods prescribed by 'MAP2', Management of Archaeological Projects draft 2 (English Heritage, 1991) and by English Heritage Greater London Division (English Heritage, 1998, Archaeological Guidance Papers 3 and 4). The report shall contain text, drawings and photographs as appropriate.
2. Provision of each agreed report in draft one month following the completion of site works, and the final reports one month after receiving comments on the drafts from IHCM.
3. Provision of a completed 'Online Access to the Index of Archaeological Investigation' form (OASIS form) to English Heritage.
4. Lodging of the site paper archive with the Museum of London. Artefacts are to be retained by the landowners or their nominated agency pending consideration of the potential for museum displays.

6 Provisions by the Principal Engineering Contractor and Developer in Support of the Archaeological Site Works

6.1 General Developer Provisions

1. Office and temporary Accommodation for the Archaeological Contractor.
2. Male and female washing and lavatory facilities for the Archaeological Contractor.
3. Secure storage for the Archaeological Contractor.
4. Planning Supervisor.
5. Contract Manager.

6.2 General Contactor Provisions

1. Production of investigation and construction method statements that reference the integration of archaeological site works.
2. Right of legal entry to the site and preparation of the site ready for archaeological attendance.
3. All electricity and lighting necessary for archaeological equipment and working conditions.
4. Site induction to ensure safe working methods by archaeologists and approved visitors.

6.3 Technical Contractor Provisions

1. Allow inspection of and provide technical advice on services drawings.
2. With the Engineer or other client representative define all possible constraints that have to be taken into account and including those related to:
 - Listed buildings
 - Conservation Areas.
3. Dispose of the spoil from the agreed archaeological working areas, if and when necessary.
4. Provide geotechnical advice and information to aid archaeological works and interpretation programme.
5. Prepare and undertake break-out of 20th century structures and soils agreed with the Archaeological Consultant.
6. Provide all supportive works to excavations deeper than 1.2 m, where access is required and the excavation faces are not battered.
7. Break out all unnatural obstructions impeding archaeological works when requested by the Archaeological Contractor.
8. Provide, if necessary, tent covers over evaluation areas to be dug in winter conditions where very sensitive archaeological resources are encountered.
9. Provide labour for moving spoil away from evaluation areas, pits and trenches.
10. Provide labour for protecting archaeological surfaces when temporary works are being set in place, and for working pumps, etc.

11. Undertake all required reinstatement of the excavation areas incorporating as necessary special protective materials over important/fragile archaeological resources (Terram and/or sand).

7 The Archaeological Contractor nominated for the Watching Brief

The Archaeological Contractor proposed for the archaeological Watching Brief is:

Gary Brown

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Or, alternatively, the Watching Brief may be undertaken by IHCM to satisfy special client requirements.

8 References

English Heritage. Management of Archaeological Projects. 1991.

English Heritage. Standards and Practices in Archaeological Fieldwork in London, Archaeological Guidance Paper 3. June 1998.

English Heritage. Archaeological Reports, Archaeological Guidance Paper 4. June 1998.

Institute of Field Archaeologists. Standards for Archaeological Watching Briefs. 1994.

FIGURE 1 - AREA OF ARCHAEOLOGICAL
WATCHING BRIEF

- Area to be covered by watching brief
- Stanley Buildings addressed seperately

FOR INFORMATION

