

M1 Junctions 10 to 13 Improvement Junctions 11 and 12

Written Scheme of Investigation for Archaeological Field Evaluation

Report No: D123846/5/16

March 2010

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EXECUTIVE SUMMARY

This report presents a Written Scheme of Investigation (WSI) for archaeological field evaluation at the proposed junction improvements at Junction 12 of the M1 as part of the M1 Junctions 11 and 12 Improvements Scheme.

The proposed junction improvement area is located within a multi-period archaeological landscape in which known remains date from the Neolithic to modern periods.

Previous archaeological surveys undertaken in the immediate area include field walking, geophysical survey and trial trenching evaluation carried out by Bedfordshire County Archaeological Service (BCAS) in 1993 and Northamptonshire Archaeology in 2007. These have identified a number of archaeological sites.

Appropriate mitigation (if required) will be developed for archaeological remains identified from the proposed trial trenching and will be described in a separate WSI.

1 INTRODUCTION

1.1 Project Background

- 1.1.1 The Highways Agency ('the Employer') has awarded the contract for the M1 Junction 11 and 12 Improvements (the Scheme) to the Costain Carillion Joint Venture (CCJV, 'the Contractor'), who has appointed Scott Wilson Limited as their designer ('the Designer's Archaeologist').
- 1.1.1 This Written Scheme of Investigation (WSI) describes a programme of archaeological field evaluation required to inform the design of detailed mitigation for the impacts of the Scheme on archaeological remains.
- 1.1.2 A programme of non-intrusive archaeological investigations, have previously been undertaken to assess the impact of the Scheme and to inform the archaeological evaluation design. The results of these investigations have been reviewed by the Designer's Archaeologist to help define the requirements for this survey in advance of construction.
- 1.1.3 This scheme specific WSI details the method for archaeological evaluation to inform the mitigation strategy. The evaluation will be through the excavation of targeted trial trenches.
- 1.1.4 The area covered by trial trenching is c.2700m².
- 1.1.5 The works specified in this document will be undertaken on behalf of the Contractor by a competent archaeological organisation, 'the Sub-contractor'.
- 1.1.6 Additional investigation and/or widening of specific trenches may be required to fulfil the evaluation objectives. The sub-contractor would be instructed to undertake additional work during the course of the fieldwork, if required.
- 1.1.7 The archaeological fieldwork, post-excavation assessment, archiving, analysis and preparation of the evaluation report text will be undertaken by the Sub-contractor, unless specified otherwise in this WSI.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Previous Investigations

- 2.1.1 Between 1992 and 1994 a number of cultural heritage studies and field surveys were undertaken for an Environmental Statement for the former modified preferred route for M1 widening (M1 Junction 10 to 15) prepared by Acer Consultants (1994).
- 2.1.2 A Stage 2 Assessment was also undertaken for the Updated Modified Preferred Route by Parsons Brinckerhoff/Highways Agency (Oxford Archaeology 2004), (M1 Junctions 10 to 13). The Stage 2 assessment comprised a desk based study and detailed walk-over.
- 2.1.3 Subsequently a Stage 3 detailed assessment was undertaken to support an Environmental Statement prepared for the M1 Widening Junctions 10 to 13

Scheme published by the Highways Agency in March 2007. The Stage 3 assessment comprised a thorough review of all documentary and desk study evidence, the archaeological analysis of LiDAR data and incorporation of the results of extensive non-intrusive reconnaissance survey (fieldwalking and geophysical survey).

2.2 Junction 12

2.2.1 Junction 12 is located within a multi-period archaeological landscape in which known archaeological remains date from the Neolithic to modern periods.

2.2.2 Previous archaeological surveys undertaken in the immediate area include field walking, geophysical survey and trial trench evaluation carried out by BCAS in 1993 and Northamptonshire Archaeology in 2007, and have identified a number of archaeological sites.

Neolithic or Bronze Age

2.2.3 Neolithic/Bronze Age worked flint scatters were recovered during fieldwalking undertaken by BCAS at Poplars Nursery, Toddington, at Junction 12 and at Redhills Farm.

2.2.4 The absence of settlement evidence means that the identification and investigation of settlement and activity sites, represented for example by flint scatters, is a high priority. The apparent concentration of known settlement and burial/ceremonial sites of this period in the main river valleys and the chalk downland would need to be investigated to determine whether the distribution is real or a result of a bias in the study of those areas. The relationship between monuments, settlement and other activities has also been identified as a possible regional research topic.

Iron Age

2.2.5 A multi-phased Early and Middle Iron Age settlement site has been identified to the east of the M1 and was confirmed by trial trenching undertaken by BCAS in 1993. Pottery recovered indicates occupation from the early Iron Age until the late 3rd century BC. A group of rectilinear enclosures identified from cropmarks visible on aerial photographs may also be associated with the Iron Age settlement and suggest that it may lie within a larger contemporary landscape.

2.2.6 A stray find of possible Iron Age pottery to the north may indicate another settlement or a shift in the settlement pattern.

2.2.7 Evidence for possible late prehistoric field systems and occupation in the form of linear ditches and ring ditches have been identified by geophysical survey (Northamptonshire Archaeology 2007) in the southwest of the existing A5120 junction. This was identified as Site 26 in the previously published M1 Widening Junctions 10 to 13 ES (Highways Agency, 2007a).

2.2.8 Research questions for this period include the development of later prehistoric settlement patterns and the exploitation of the clay lands. It would provide an opportunity to investigate the relationship between settlement and enclosure in both the Iron Age and later periods.

Romano-British

- 2.2.9 A walkover survey conducted by Scott Wilson for the previous M1 Widening Junctions 10 to 13 Scheme noted evidence for Romano-British occupation in the form of a large fragment of Roman pottery immediately west of the M1, in Field 17, south of Long Lane Farm.
- 2.2.10 Key research questions for this period include the character of farmsteads on the Chiltern ridge; site economies and communication in the hinterland of Roman Dunstable; the changing Roman economy and the exploitation of the clay lands.

Medieval

- 2.2.11 The place-name Nuppings Green is recorded east of Long Lane in the area beneath and adjacent to the present route of the M1. Scatters of medieval pottery and ceramic building material recovered during field walking in 1992, suggest the presence of medieval domestic settlement probably in the form of a dwelling or farm building, occupied during the late 11th to 15th century and into the 17th/18th centuries. The distribution of the pottery has been interpreted as out-cast debris from domestic activities spread onto the fields together with animal waste. The lack of glazed wares and imported pottery indicates that it is a settlement of lower status.
- 2.2.12 A medieval rabbit warren was located northwest of Junction 12, west of Long Lane. An oval mound is recorded here and a sub-circular feature is depicted with rabbits and rabbit holes on the 1581 Agas' map.
- 2.2.13 To the north of the proposed Junction 12 improvement works a field between the M1 and Long Lane was recorded as being named 'Gravelpitt Close' on the Agas' map of 1581 and was probably the site of a medieval gravel pit.
- 2.2.14 Evidence for the remains of medieval agriculture comprising the ploughed out remains of ridge and furrow with headlands has been identified from aerial photographic evidence and geophysical survey.
- 2.2.15 In Field 178 to the southwest of the existing A5120 junction geophysical survey has also identified the remains of medieval ridge and furrow agriculture. This was identified as part of Site 26 in the M1 Widening Junctions 10 to 13 Environmental Statement (Highways Agency, 2007a). Fields to the north of the junction also display evidence of medieval ridge and furrow.
- 2.2.16 The Agas' map of 1581 also records the location of a medieval deer park (Toddington Park) and a possible deserted medieval village of Wadelowe east of the M1 and beyond the area of impact of the Scheme.
- 2.2.17 Key research questions for this period are the changing pattern and character of medieval field systems and the different patterns of historic land-use.

Post-medieval

- 2.2.18 At Nuppings Green a small rectangular feature is depicted on the 1891 OS map possibly denoting a building, although other features shown in the area appear to be small quarry pits. A track is shown leading north from the possible building continuing to Harlington Woodend. The possible building is not shown on the OS maps after 1969 and it is possible that potential remains have been disturbed by a buried pipeline adjacent to the motorway (see below).
- 2.2.19 A linear ridge was identified aligned northeast-southwest across Field 17 immediately west of the M1 motorway during analysis of LIDAR data for the M1 route corridor. The ridge corresponds to a former field boundary depicted on the 1st Edition Ordnance Survey map but no longer shown by 1982.
- 2.2.20 Geophysical survey undertaken by BCAS in the early 1990s detected faint linear anomalies in Field 13 to the north of Mill Farm, Toddington; to the southwest of Junction 12. A subsequent walkover survey of the area noted a possible brick wellhead in the centre of the Field 13.
- 2.2.21 An archaeological watching brief was undertaken during April and May 2009 during topsoil stripping of Field 13 in advance of the establishment of a construction compound for the M1 J10-13 HSR Improvement Scheme. The groundworks did not reveal any archaeological remains although extensive evidence for modern disturbance associated with the construction of the existing M1 motorway was observed.
- 2.2.22 Key research issues for this period relate to the development of the rural landscape in terms of enclosure field systems and historic parklands, archaeological evidence to enhance current knowledge of the changes in crop and animal husbandry practices.

3 PROJECT OBJECTIVES

3.1.1 The general trial trenching objectives are detailed below:

- to identify the presence/absence of buried archaeological remains within the proposed junction improvements at Junction 12 as identified in the Environmental Statement ;
- to determine (where possible) the nature, depth, extent, character and date of any archaeological deposits or features encountered;
- to determine the condition or state of preservation of any archaeological deposits or features encountered;
- to determine the likely range, quality and quantity of artefactual and environmental evidence present; and
- to inform the design of archaeological mitigation for this area if appropriate.

4 SCOPE OF WORKS

4.1 Trial Trenching

- 4.1.1 Areas selected for trial trenching are based upon the proposed scheme, and the results of the 2007 geophysical survey (Figure 1).
- 4.1.2 Additional evaluation trenches may be instructed by the Contractor as the trial trenching evaluation progresses.

5 WORKS SPECIFICATION

5.1 General

- 5.1.1 All archaeological works will be carried out in accordance with this WSI (and any further instructions from the Contractor). This design takes account of assessment guidance in DMRB (Vol. 11), Standard and Guidance for Archaeological Assessment and Evaluation prepared by the Institute of Field Archaeologists (IFA), the IFA Code of Conduct (IFA 1997a, 1997b) and other current and relevant best practice and standards and guidance (refer to Appendix A).
- 5.1.2 The Sub-contractor shall prepare and submit a Programme, Method Statement and Risk Assessment for the works prior to commencement of fieldwork for approval by the Contractor and the Designer's Archaeologist.

5.2 Trial Trenching General

- 5.2.1 Trial trenches will be excavated in the locations proposed by the Designer's Archaeologist. The trenches should be positioned using electronic survey equipment to an accuracy of $\pm 100\text{mm}$. Each trench will be opened using an appropriate mechanical excavator fitted with a toothless ditching bucket.
- 5.2.2 The extent of the trial trenches will be clearly demarcated to ensure that persons or plant cannot inadvertently traverse across the area of investigation whilst archaeological works are in progress. The fencing/bunds will be regularly inspected and maintained until works in the area have been completed, inspected and approved by the Designer's Archaeologist.
- 5.2.3 The excavation areas will be subject to a rapid metal detector scan in advance of excavation, in order to identify and recover metal artefacts within the topsoil/subsoil.
- 5.2.4 The excavation will proceed under direct archaeological supervision, in level spits, until either the top of the first archaeological horizon or undisturbed natural deposits are encountered. Particular attention should be paid to achieving a clean and well-defined horizon with the machine. It is not anticipated that entire trenches will require hand cleaning. Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits. The surface achieved through machine excavation will be inspected for archaeological remains. The mechanical excavator will not traverse any stripped areas.

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- 5.2.5 The machined surface will be cleaned by hand, where required, for the acceptable definition of archaeological remains. Following cleaning, all archaeological deposits and remains will be planned, to enable the selection of features and deposits for sample excavation by the Sub-contractor.
- 5.2.6 The trial trenches will not be reinstated without the prior approval of the Designer's Archaeologist. However, some backfilling is permitted if health and safety or ground stability reasons warrant this.
- 5.2.7 In order to complete archaeological investigations within the project programme, it may be necessary to extend the excavated area of the trenches and move swiftly into a phase of strip, map and sample recording. In this instance, the expanded scope of works will be agreed on site (see 6.0 Monitoring, Progress Reports and Meetings, below).
- 5.2.8 Archaeological recording would then proceed in accordance with the WSI for archaeological mitigation (HA 2008).

5.3 Hand Excavation

- 5.3.1 Sample excavation shall be restricted to the minimum required to meet the key objectives of the evaluation.
- 5.3.2 Archaeological deposits/features identified for sample excavation will be hand excavated in an archaeologically controlled and stratigraphic manner in order to meet the aims and objectives of the evaluation. Machine-assisted excavation may be permissible if large deposits are encountered but only after consultation with the Designer's Archaeologist and the County Archaeologist. A sufficient sample of deposits/features will be investigated through sample excavation in each trench to record horizontal and vertical extent of the stratigraphic sequence to the level of undisturbed natural deposits. No archaeological deposit should be entirely removed unless this is unavoidable. The following sampling strategies will be employed.
- 1.1.8 Linear features: A minimum of 10% along the length (each section not less than 1m wide). Key intersections will be investigated to determine the relationship between the component features.
- 5.3.3 Discrete features: Pits, post-holes and other isolated features will normally be half-sectioned. A minimum requirement to meet the project objectives will be agreed in consultation with the Designer's Archaeologist. It is not anticipated that all of these features will be half-sectioned. If large pits or deposits (over 1.5m diameter) are encountered then the sample excavated should be sufficient to define the extent and maximum depth of the feature and to achieve the objectives of the evaluation, but should not be less than 25%.
- 5.3.4 Structures: To be sampled sufficiently to define the extent, stratigraphic complexity and depth of the feature and its associated deposits to achieve the objectives of the evaluation.

5.4 Recording

- 5.4.1 Following machine excavation, the extent of each evaluation trench will be accurately recorded using electronic survey equipment. The data will be

overlaid at a scale of 1:500 onto the OS National Grid (using digital map data).

- 5.4.2 All archaeological remains will be recorded in plan using electronic survey equipment. The resultant digital dataset will be utilised to compare the position of the identified archaeological remains with the geophysical survey.
- 5.4.3 A full written, drawn and photographic record will be made of each trench even where no archaeological features are identified. Hand drawn plans and sections of features will be produced at an appropriate scale (normally 1:20 for plans and 1:10 for sections). One long section of each trench will be drawn at a scale of not less than 1:50. All plans and sections will include spot heights relative to Ordnance Datum in metres, correct to two decimal places.
- 5.4.4 Colour transparency and monochrome negative photographs will be taken at a minimum format of 35mm. In addition to records of archaeological features, a number of general site photographs, which may be in digital format, will also be taken to give an overview of the site. Particular attention should be paid to obtaining shots suitable for displays, exhibitions and other publicity.

5.5 Artefact Recovery

- 5.5.1 All artefacts will be collected, stored and processed in accordance with standard methodologies and national guidelines (refer to Appendix A). All non-modern artefacts will be collected and retained. Each 'significant find' will be recorded three dimensionally. Similarly, if artefact scatters are encountered these should be also recorded three dimensionally. Bulk finds will be collected and recorded by context.
- 5.5.2 Where necessary the artefacts will be stabilised, conserved and stored in accordance with the guidelines of the United Kingdom Institution of Conservators (UKIC). Artefacts will be properly conserved after excavation and will be stabilised for storage. If necessary, a conservator will visit the site to undertake 'first aid' conservation treatment.
- 5.5.3 Artefacts will be stored in appropriate materials and conditions, and monitored to minimise further deterioration.

5.6 Environmental Sampling

- 5.6.1 The English Heritage Regional Advisor for Archaeological Science will be notified of the commencement of the project and consulted regarding the sampling strategy proposed by the Sub-contractor. Provision will be made for the recovery of material suitable for scientific dating.
- 5.6.2 Any samples taken must come from appropriately cleaned surfaces, be collected with clean tools and be placed in clean containers. They will be adequately recorded and labelled and a register of all samples will be kept. Once the samples have been obtained they should be stored appropriately in a secure location prior to being sent to the appropriate specialist.

5.7 Human Remains

5.7.1 Should human remains be discovered during the course of the excavations the remains will be covered and protected and left in situ in the first instance. The removal of human remains will only take place in accordance with a Department of Constitutional Affairs licence and under the appropriate Environmental Health regulations and the Burial Act 1857. In the event of the discovery of human remains the sub-contractor will notify the Designer's Archaeologist immediately, who will arrange to contact H.M. Coroner and the local Environmental Health Inspector.

5.8 Treasure Trove

5.8.1 Any artefacts which are recovered that fall within the scope of the Treasure Act 1996 will be reported to the Designer's Archaeologist and to H. M. Coroner. Any finds must be removed to a safe place and reported to the local coroner as required by the procedures as laid down in the 'Code of Practice'. Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

5.9 Reporting

5.9.1 Upon completion of the archaeological works an interim statement will be prepared and submitted to the Designer's Archaeologist. It will include:

- a brief summary of the results;
- a draft or sketch plan of each trench; and
- a quantification of the primary archive including contexts, finds and samples.

5.9.2 The finds and samples will be processed (cleaned and marked) as appropriate. Each category of find or environmental/industrial material will be examined by a suitably qualified archaeologist or specialist and the results incorporated into the report.

5.9.3 A report will be submitted in draft within four weeks of the completion of fieldwork. The preparation of the site archive will be undertaken in accordance with this Project Design and relevant archaeological standards and national guidelines (Appendix A). The report will include the following:

- a QA sheet detailing as a minimum title, author, version, date, checked
- by, approved by;
- a non-technical summary;
- site location;

- archaeological and historical background;
- methodology;
- aims and objectives;
- results (to include full description, assessment of condition, quality and significance of the remains);
- statement of potential with recommendations;
- a statement of the significance of the results in their local, regional and national context cross referenced to the Bedfordshire Research Agenda (Oake 2007);
- publication proposals if warranted;
- current and proposed arrangements for archive storage and curation (including recipient museum details);
- references;
- general and detailed plans showing the location of the survey accurately positioned on an OS base map (to a standard scale);
- detailed plans and sections illustrating archaeological features (to a standard scale);
- colour photographic plates illustrating the site setting, work in progress and discovered archaeological remains;
- a complete matrix for each trench if appropriate; and
- a cross-referenced index of the project archive.

5.9.4 Two bound hard copies and an electronic pdf copy (complete with illustrations and plates) of the completed reports will be submitted to the Designer's Archaeologist as a draft for comment.

5.9.5 Six bound copies, one unbound master-copy and a digital version will be submitted within one week of the receipt of comments on the draft reports.

5.9.6 A project CD shall be submitted containing image files in JPEG or TIFF format, digital text files shall be submitted in Microsoft Word format, illustrations in AutoCAD format. A fully collated version of the report shall be included in PDF format.

6 MONITORING, PROGRESS REPORTS AND MEETINGS

6.1.1 The archaeological investigation will be subject to regular monitoring visits by the Designer's Archaeologist, who will have unrestricted access to the sites, site records or any other information. The work will be inspected to ensure

that it is being carried out to the required standards and that it will achieve the stated aims and objectives.

- 6.1.2 Weekly written progress reports (via e-mail each Monday 9.30am) will be provided to the Designer's Archaeologist by the Sub-contractor during the main phase of fieldwork.
- 6.1.3 Progress meetings between the Designer's Archaeologist and the Subcontractor will be held on site during the course of the evaluation. The County Archaeological Officer and the Highways Agency's Archaeologist shall be invited to attend. These meetings will be arranged by the Designer's Archaeologist.
- 6.1.4 The Sub-contractor will only accept instruction from the Contractor and Designer's Archaeologist.
- 6.1.5 Weekly progress reports (via e-mail each Monday 9.30am) and monitoring meetings will also be held during the post-excavation phase of the project, if appropriate.
- 6.1.6 Where necessary to achieve the objectives of the investigation within the overall project programme, variations to the scope of works will be agreed on site between the County Archaeological Officer, Highways Agency archaeologist and Designer's Archaeologist at progress meetings as appropriate.
- 6.1.7 The sub-Contractor will submit revised fee proposals for approval by the Contractor, if required. The Designer's Archaeologist will issue a confirmation of verbal instructions (CVI) to the sub-contractor as a record of the amended scope of works.
- 6.1.8 A drawing showing the agreed variation to the scope of works will be prepared by the Designer's Archaeologist and issued to the County Archaeological Officer for approval.

7 COMPLETION OF ARCHAEOLOGICAL FIELDWORK

- 7.1.1 The Sub-contractor shall prepare and submit a completion statement to the Designer's Archaeologist within three working days of vacating the site.
- 7.1.2 The Designer's Archaeologist will prepare a hand-over certificate to allow hold point in contractors programme to be released for general construction to commence.

8 PUBLICATION

- 8.1.1 If significant results are obtained and it is likely that further stages of archaeological work will be required, publication shall be deferred until such time as the project works are substantially complete.
- 8.1.2 The format of any publication shall be commensurate with the importance of the results and be agreed with the Designer's Archaeologist, the Highways

Agency Archaeologist, the County Archaeological Officer and the Subcontractor.

- 8.1.3 The timetable for issuing the final report, incorporating any comments from the Designer's Archaeologist, Highways Archaeologist and County Archaeologist, is twelve months after the completion of fieldwork.

9 ARCHIVE PREPARATION AND DEPOSITION

- 9.1.1 The archive of finds and records generated during the fieldwork will be kept secure at all stages of the project. All records and materials produced will be quantified, ordered, indexed and internally consistent. The archive will be produced to the standards outlined by English Heritage (1991, refer to Appendix A).
- 9.1.2 The Sub-contractor will, prior to the start of fieldwork, liaise with a recipient museum to obtain agreement in principle to accept the artefactual, documentary, digital and photographic archive for long-term storage and curation. The sub-contractor will be responsible for identifying any specific requirements or policies of the museum in respect of the archive, and for adhering to those requirements.
- 9.1.3 The Sub-contractor will store the archive in a suitable secure location until it is deposited in the agreed museum.
- 9.1.4 The deposition of the archive forms the final stage of this project. The Subcontractor shall provide the Designer's Archaeologist with copies of communication with the recipient museum and written confirmation of the deposition of the archive. The Designer's Archaeologist will deal with the transfer of ownership and copyright issues.

10 CONFIDENTIALITY AND PUBLICITY

- 10.1.1 Detailed information regarding the development is not yet in the public domain and the archaeological works may attract interest.
- 10.1.2 All communication regarding this project is to be directed through the Designer's Archaeologist. The Sub-contractor will refer all inquiries to the Contractor or Designer's Archaeologist without making any unauthorised statements or comments.
- 10.1.3 The Sub-contractor will not disseminate information or images associated with the project for publicity or information purposes without the prior written consent of the Highways Agency, Contractor and Designer's Archaeologist.

11 COPYRIGHT

- 11.1.1 The Sub-contractor shall assign copyright in all reports and documentation/images produced as part of this project to the Contractor. The Sub-contractor shall retain the right to be identified as the author/originator of the material. This applies to all aspects of the project. It is the responsibility of the Sub-contractor to obtain such rights from sub-contracted specialists.

11.1.2 The Sub-contractor may apply in writing to use/disseminate any of the project archive or documentation (including images). Such permission will not be unreasonably withheld.

11.1.3 The results of the archaeological works shall be submitted to the Contractor, the Highways Agency and the County Archaeological Officer by the Designer's archaeologist and will ultimately be made available for public access.

12 RESOURCES AND TIMETABLE

12.1.1 All archaeological personnel involved in the project should be suitably qualified and experienced professionals. The Sub-contractor shall provide the Designer's Archaeologist with staff CVs of the Project Manager, Site Supervisor and any proposed specialists. Site assistants' CVs will not be required, but all site assistants should have a minimum of six months excavation experience.

12.1.2 The fieldwork is programmed to be implemented at the earliest available opportunity following publication of the notice to proceed. The works will be completed during a 4 week period.

12.1.3 The Sub-contractor shall give immediate warning to The Designer's Archaeologist should any agreed programme date not be achievable.

13 ACCESS ARRANGEMENTS AND SITE INFORMATION

13.1.1 Access to the site will be arranged by the Contractor's Public Liaison Officer (PLO). Contact details will be provided to the sub-contractor once the tender has been awarded.

13.1.2 Should the sub-contractor require adjustment to the location of trial trenches due to local conditions, particularly to avoid interference from buried or overhead power lines, this shall be agreed with the Designer's Archaeologist prior to implementation.

14 INSURANCE

14.1.1 The Sub-contractor will provide the Contractor with details of their public and professional indemnity insurance.

15 CONSTRUCTION (DESIGN & MANAGEMENT) REGULATIONS 2007

15.1.1 The Construction Design & Management (CDM) regulations apply to these works, therefore, the duty holders are as follows:

- Client – Highways Agency;
- Principal Contractor – Costain-Carillion Joint Venture and
- CDM Co-ordinator – Costain-Carillion Joint Venture represented by Scott Wilson Ltd.

15.1.2 Further information can be found in the Pre-Construction Health and Safety Information which will be issued to the sub-contractor.

16 GENERAL PROVISIONS

16.1.1 No variation from, or changes to, the WSI will occur except by prior agreement with the Designer's Archaeologist (where appropriate in consultation with the Contractor, the Highways Agency and the County Archaeological Officer).

16.1.2 All communications on archaeological matters will be directed through the designer's Archaeologist.

16.1.3 The Sub-contractor shall excavate, and store topsoil and subsoil separately at a safe distance from the trial trenches. Arisings shall be reinstated in the exact reverse order in which they were excavated. The Sub-contractor shall leave the site in a tidy and workmanlike condition and remove all materials brought onto the site.

16.1.4 Access for plant and temporary parking and site welfare facilities shall be agreed with the Contractor prior to entering the site.

16.1.5 Provision should be made by the sub-contractor for fencing (Heras fencing or similar) to prevent access to deep excavations, particularly during trial trenching.

16.1.6 The Sub-contractor may be required to make provision for the security of a site during trial trenching, if sensitive archaeological remains are uncovered.

16.1.7 Individual trench locations at risk of damage shall be protected during the works and overnight security provided to ensure no unauthorised access to the site works outside of normal working hours.

16.1.8 Security staff would be required to make regular patrols of the site. Required site security resources shall be in accordance with a project specific risk assessment to be undertaken by the Sub-contractor.

17 REFERENCES

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APPENDIX A: Archaeological Standards and Guidelines

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APPENDIX B: Drawing List

D123836/AR/DEV/05.001 Location of Archaeological Trenches at Junction 12

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EXCEPTIONAL RISKS RELATING TO THE WORKS ASSOCIATED WITH THIS DRAWING ARE IDENTIFIED BELOW.

CONSTRUCTION
MAINTENANCE / OPERATION / DECOMMISSIONING / DEMOLITION

WORK CAN ONLY BE CARRIED OUT BY SUITABLY TRAINED AND BRIEFED PERSONNEL.

NOTES

Key:
 Proposed scheme
 Survey area
 50m x 2m trench
 Area A = 10 trenches
 Area B = 19 trenches

Revision Details			
By	Check	Date	Suffix

DRAWING STATUS				
Code	Description	Current Status	Appd	Date
P	Preliminary	X	NF	18.02.09
A	Submitted for Review			
F	Final			

Job Title
M1 JUNCTIONS 11 & 12

Drawing Title
Location of archaeological trenches at Junction 12

Scale at A3
1:5,000

Drawn CLH	Approved NF
Stage 1 check NF	Stage 2 check JC
Originated LEEDS	Date 03.02.10



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