National Asset Delivery
Technical Surveys and Testing

Works Information for 605858
A40 Dursley Cross To Boxbush EB & WB MP 184.2 - 184.7 RS
Trial Hole Survey

CONTENTS AMENDMENT SHEET

Amend. No.	Revision No.	Amendments	Initials	Date
0	0	Original version issued with tender	CD	30/04/21

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LIST OF ANNEXES

1 DESCRIPTION OF THE WORKS

1.1 Project objectives

1.1.1 The principle objective of this project is to undertake the following surveys:

- Trial Holes to determine the nature and depth of construction thickness, defects, condition and to confirm the presence of coal tar / PAH in existing pavement.

1.1.2 The specification that applies to the *works* is included in Section 6

1.2 Scope of works

1.2.2 The *works* to be provided under this contract are:

- 8 No. of 300x300mm trial holes
- 2 No. of DCP test and analysis
- 8 No PAK spray test on site to all cores
- 8 No. follow up PAH lab testing if any PAK test identifies a positive indication of tar bound materials (requirement for PAH tests to be agreed by Highways England on receipt of the report)
- PDF colour-copy factual core report

1.3 Deliverables

1.3.2 The *Contractor* is required to produce the following deliverables:

- A factual report detailing findings of site and laboratory testing and analysis:
- Detailed drawing / map and references (including Marker Posts and OSGRs) to position the actual locations of pavement sampling

2 EXISTING INFORMATION

2.1.2 All relevant existing information including C2 STATs searches can be found within the Pre-Construction Information document (PCI). Individual stats plans provided as part of the handover documents.

2.1.3 The Drawings listed below apply to this contract. Refer to the site information for details of existing site conditions including ground conditions, limitation on access, position of existing structures etc.

Proposed works requirements are as detailed in section 6. The core location drawing is attached with the PCI.

Drawing Number	Title	Revision / Date
HE605858-KIER-HPV-A40_184.2_184.7_Z-DE-CH-0703-04-C1	Core and Trial Hole Location Plan	22/04/2021

3 CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE WORKS

3.1 General

3.1.2 The *Contractor* Provides the Works in such manner as to minimise the risk of damage or disturbance to or destruction of third party property.

3.1.3 The *Contractor* complies with the constraints and meets with the requirements outlined in Appendix 1.

3.1.4 The *Contractor* submits information detailing how the *Contractor* will provide the Works to the *Employer* prior to the *works* commencing. This information will include any lifting plans, risk assessments, method statements, the *Contractor's* staff training information and any other relevant Health and Safety requirements.

3.2 Working hours & site specific constraints

1.1.1 Access to the site for undertaking works will not be possible without the provision of traffic management – this will be provided by the *Employer*.

1.1.2 Anticipated dates on-site are 06/07/2021 – 07/07/2021.

1.1.3 The *Contractor's* working hours for site works shall be day time working, anticipated to be between 9.00 and 16.00.

1.1.4 TM to utilise 2/3 way traffic lights. TM Layout provided, to be in accordance with TSM Chapter 8.

3.3 Health, Safety and Environment & Risk Management

Health and Safety requirements

3.3.2 In Providing the Works the *Contractor* meets the requirements of Annex 2 of the supplementary constraints in relation to health and safety duties.

3.3.3 When implemented, the *Contractor* shall comply with the requirements of Highways England's safety passport scheme and ensure that all of his employees, and any of his subcontractor's, are registered in accordance with the implementation of the scheme. Details on the scheme can be found here: http://www.highwayssafetyhub.com/safety-passport.html

3.3.4 For details of CDM duty holders, refer to the Pre-Construction Information which is issued as part of this package of work

3.3.5 Before commencing the construction phase of the *works*, the *Contractor* confirms to the *Employer* that adequate welfare facilities are in place. Where the facilities detailed in section 5 are not deemed adequate, the *Contractor*

provides all necessary facilities to Provide the Works and to comply with the minimum requirements set out in HSE guidance document L153.

Environmental requirements

3.3.6 In Providing the Works the *Contractor* meets the requirements of Annex 2 of the supplementary constraints in relation to environmental duties.

Risk Management

3.3.7 The *Contractor* identifies, manages and mitigates risks in accordance with the principles of ISO31000.

3.3.8 The *Contractor* submits a risk register, which captures all risks associated with the delivery of the *works* including those identified by the *Employer*, with his tender and maintains it for the contract period.

4 REQUIREMENTS FOR THE PROGRAMME

4.1.2 The *Contractor* submits programme to the *Employer* with his tender.

4.1.3 The *Contractor* Provides the Works taking into account the following programme constraints:

(i) the *starting date* and *completion date* and any post site works, reporting and review period

(ii) The services and other things provided by *Employer* (see Section 5)

4.1.4 The programme should be in the form of an activity and time related bar chart, produced as a result of a critical path analysis.

4.1.5 The programme should preferably be provided in either a PDF or MS Excel format and cover the full contract period including post site activities. Activities should be clearly defined and named and the programme should detail the following:

(i) dates and times associated with the project, including the *starting date*, *completion date* & *Contractor's* planned completion, and any other dates or times that will specifically impact the delivery of the project

(ii) activities associated with delivering the project

(i) review periods for any reporting requirements

(ii) key dates for the Employer to provide 'services and other things'

(iii) key dates for co-ordination with Others

1.1.5 The *Contractor* updates the programme every week. The *Contractor* submits an updated programme to the *Employer* upon request.

5 SERVICES AND OTHER THINGS PROVIDED BY THE *EMPLOYER*

1.1.6 The following temporary traffic management will be provided by the *Employer* to allow the *Contractor* to Provide the Works:

(i) TM anticipated to utilise 2/3 way traffic lights. TM Layout provided to be in accordance with TSM Chapter 8. Full details will be finalised upon successful award of the contract.

1.1.7 The other things that will be provided by the *Employer* are as follows:

(ii) Welfare facilities (to be provided by the Principal Contractor).

6 SPECIFICATION FOR THE WORKS

6.1.2 The *Contractor* shall undertake the works in accordance with:

(i) Indicative locations of trial holes are shown on the drawings listed in Section 2. Locations are to be agreed prior to works and will again be agreed and confirmed on site.

(ii) A CAT scan shall be carried out to detect below ground services prior to digging.

(iii) All trial holes must be excavated by suitably trained and competent persons (Category B) in accordance with the Control of Asbestos Regulations (CAR) 2012.

(iv) Trial holes to be taken to full depth of bituminous pavement construction in accordance with Core Location Drawings and Core Schedule.

(v) Visual examination and logging of the trial hole shall be carried out in accordance with CS 229.

(vi) All trial holes to be referenced to GPS grid coordinates and also referenced by Marker Post within core log report.

(vii) Each trial hole log shall contain a clear colour photograph of the trial hole (with measuring tape depicting depth) with the layer thickness, type of material, results of the PAK testing and description of the condition of all the layers recorded in an adjacent table. All bound samples to be cleaned with a damp brush or cloth prior to logging and photographing.

(viii) Changes in trial hole layers and cracks shall be clearly marked with a white mark (e.g. a white pen) across the interface of each of the different layers.

(ix) Dynamic Cone Penetrometer (DCP) test/analysis to be undertaken at the Trial Hole location identified within the Core Schedule. If the location of the trial hole, once exposed, is above a structure, no DCP is to be carried out.

The Californian Bearing Ratio (CBR) shall be ascertained/calculated and plots/results shall be shown within the report.

(x) Each trial hole layer to be subject to PAH and Phenol analysis if required. The cores to be subject to further analysis shall be agreed once the report has been received by Highways England.

(xi) Care must be taken to not cause damage to the structure including the waterproofing layer. Any accidental damage shall be notified to the relevant highway authority. Repairs of any accidental damage

shall be the responsibility of the Contractor and shall be agreed with Highways England.

(xii) Where the waterproofing layer is encountered, an Asbestos Refurbishment Survey is to be carried out. The survey shall comply with CAR 2012 and GG 105.

(xiii) The thickness of the existing waterproofing membrane is to be recorded as part of the refurbishment survey.

(xiv) An asbestos refurbishment survey report for each separate structure shall be issued to the HE. The report will be used to update the current AAP's.

(xv) Any damage to waterproofing to be repaired with a suitable and approved system that is compatible with the system already present. Waterproofing repair material to be applied in accordance with the manufacturer's instructions, ensuring that the minimum required overlap with the existing system is achieved in accordance with those instructions.

(xvi) Reinstatement – All excess water to be removed with a sponge. Hole to be fully coated with a cold applied HAPAS approved bituminous sealant immediately prior to reinstatement. The holes shall then be filled with a HAPAS approved 6mm permanent bituminous repair material, added in 50mm layers. Each layer shall be compacted with hydraulic compactor for at least 30 seconds to ensure adequate compaction before adding the next layer. The final layer will be finished flush with the surrounding surface. All reinstatement to be completed within the same works shift as extraction.

(xvii) For Points P1-P4 – Contractor to record locations of the subway box culvert corners and provide the coordinates for the purpose of aligning the structure in relation to the surface defects.

(xviii) PDF colour-copy factual report required within two weeks of agreed completion on site to detail the above results.

(xix) Each trial hole sample shall be stored by the Contractor until approval has been sought from Highways England to confirm its disposal.