

**National Asset Delivery  
Technical Surveys and Testing**

**Works Information for 564176- M5 to  
Splatford WB (Do Som)  
Proposed Pavement Cores and DCP  
Testing Survey Works.**

**CONTENTS AMENDMENT SHEET**

<b>Amend. No.</b>	<b>Revision No.</b>	<b>Amendments</b>	<b>Initials</b>	<b>Date</b>
0	0	Original version issued with tender	ET	11/3/20

FOR INFORMATION ONLY

## TABLE OF CONTENTS

<b>1</b>	<b>Description of the works</b> .....	4
1.1	Project objectives .....	4
1.2	Scope of works .....	4
1.3	Deliverables.....	4
<b>2</b>	<b>Existing INFORMATION</b> .....	5
<b>3</b>	<b>Constraints on how the Contractor Provides the Works</b> .....	6
3.1	General .....	6
3.2	Working hours & site specific constraints .....	6
3.3	Health, Safety and Environment & Risk Management.....	6
<b>4</b>	<b>Requirements for the programme</b> .....	8
<b>5</b>	<b>Services and other things provided by the <i>Employer</i></b> .....	9
<b>6</b>	<b>Specification for the works</b> .....	10

## LIST OF ANNEXES

### Appendix 1 Supplementary Constraints

## 1 DESCRIPTION OF THE WORKS

### 1.1 Project objectives

- (1) The principle objective of this project is to undertake a pavement core survey on the A38 westbound carriageway from the M5 to Kennford.

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

### 1.2 Scope of works

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

- (1) 25 No. 150mm cores are to be taken as per drawings HE564176-KIER-VPS-A38\_ML\_MP112.4-A-DR-CH-0100\_06 to 08. All the cores as per located on the drawing shall have dynamic cone penetration tests undertaken.  
9 No. cores to be tested for Coal containing Tar, via a PAK Marker test, should a positive result be found further testing will be required in the lab, a full PAH and Phenol analysis shall be undertaken in order to ascertain the presence of carcinogenic compounds and determine a suitable place of disposal.
- (2) This scheme stretches across the following HAPMS chart section;  
1100A38/303, 1100A38/305, 1100A38/307, 1100A38/308, 1100A38/310,  
1100A38/92 – part length 54m, 1100A38/93, 1100A38/95

### 1.3 Deliverables

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

- (1) Complete core logs including photographing.
- (2) Dynamic cone penetration report of the results.
- (3) PAK marker test.
- (4) PAH and Phenol analysis.
- (5) Reinstate bituminous pavement following coring.

As referenced on drawings HE564176-KIER-VPS-A38\_ML\_MP112.4-A-DR-CH-0100\_06 to 08.

## 2 EXISTING INFORMATION

- 2.1.1 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.

<b>Drawing Number</b>	<b>Title</b>	<b>Revision / Date</b>
HE564176-KIER-VPS-A38_ML_MP112.4-A-DR-CH-0100_06	Proposed core locations Sheet 1 of 3	C1 21/08/19
HE564176-KIER-VPS-A38_ML_MP112.4-A-DR-CH-0100_07	Proposed core locations Sheet 2 of 3	C1 21/08/19
HE564176-KIER-VPS-A38_ML_MP112.4-A-DR-CH-0100_08	Proposed core locations Sheet 3 of 3	C1 21/08/19

### **3 CONSTRAINTS ON HOW THE CONTRACTOR PROVIDES THE WORKS**

#### **3.1 General**

- 3.1.1 The *Contractor* Provides the Works in such manner as to minimise the risk of damage or disturbance to or destruction of third party property.
- 3.1.2 The *Contractor* complies with the constraints and meets with the requirements outlined in Appendix 1.
- 3.1.3 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**

- 3.2.1 Access to the site for undertaking works will not be possible without the provision of traffic management – This will be provided by the Employer under the Construction Works Framework.
- 3.2.2 Due to the requirement for traffic management and specialist access it is envisaged that works will be restricted to night-time shifts. Temporary traffic management is to be provided by the Construction Works Framework. Traffic management shall not be implemented prior to the hour of 20:00 nor removed later than 06:00hrs. Late installation / early removal of traffic management or alteration to the length of closure may occur subject to the recorded on-site traffic flow. It is anticipated that in most cases traffic management removal will commence at 04:00 hrs to allow sufficient time for removal.
- 3.2.3 Traffic management layout to be confirmed by Construction Works Framework Contractor. Layout provided to be in accordance with TSM Chapter 8.
- 3.2.4 Any site and task-specific lighting shall be directed away from dense vegetation and shall be positioned such that it does not cause a hazard to on-coming road users.

#### **3.3 Health, Safety and Environment & Risk Management**

##### Health and Safety requirements

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

- 3.3.3 For details of the CDM duty holders, refer to the pre-construction information (PCI) and the Designer Hazard Checklist and Risk Reduction Schedule (DHIRRS)
- 3.3.4 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

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

#### Risk Management

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

- 4.1.1 The *Contractor* submits programme to the *Employer* with his tender.
- 4.1.2 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)
  - (iii) Highways England to provide details of any further constraints on the sequence and timing that work that is to be undertaken. Requirements for completion of site work, including any phasing of works, and deadlines for reporting.
- 4.1.3 The programme should be in the form of an activity and time related bar chart, produced as a result of a critical path analysis.
- 4.1.4 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
  - (iii) review periods for any reporting requirements
  - (iv) Highways England to provide details of any further constraints on the sequence and timing that work that is to be undertaken. Requirements for completion of site work, including any phasing of works, and deadlines for reporting.
- 4.1.5 The *Contractor* submits an updated programme to the *Employer* upon request.

## 5 SERVICES AND OTHER THINGS PROVIDED BY THE *EMPLOYER*

5.1.1 The following temporary traffic management will be provided by the *Employer under the Construction Works Framework* to allow the *Contractor* to Provide the Works:

(1) It is assumed, based on site constraints / traffic flow data that phased lane closures during off-peak night-time periods to maintain a minimum of single-lane running throughout the works period. It shall be assumed that this will consist of:

- Eastbound and/or westbound hard strip and Lane 1 closure

5.1.2 The other things that will be provided by the *Employer* are as follows:  
Welfare facilities to be provided by the Principal Contractor

FOR INFORMATION ONLY

## 6 SPECIFICATION FOR THE WORKS

The *Contractor* shall undertake the following works:

- Core logs are to be extracted by core cutting method in accordance with BS EN 12697-27:2001 and BS EN 12504-1:2009 and to be documented in accordance with the requirements of the DMRB HD 29/08. To be taken to full depth of bituminous pavement construction in accordance with Core Location Drawings and Core Schedule.
- Visual examination and logging of the core shall be carried out in accordance with HD29/08.
- All core logs to be referenced to GPS grid coordinates and also referenced by Marker Post within core log report.
- Each core log shall contain a clear colour photograph of the core 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 core samples to be cleaned with a damp brush or cloth prior to logging and photographing.
- Changes in core 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.
- 2 No Dynamic Cone Penetrometer (DCP) test/analysis to be undertaken at the core locations identified within the Core Schedule. The Californian Bearing Ratio (CBR) shall be ascertained/calculated and plots/results shall be shown within the report.
- 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.
- Each core/core 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.
- PDF colour-copy factual report required within two weeks of agreed completion on site to detail the above results.
- Each core sample shall be stored by the Contractor until approval has been sought from Highways England to confirm its disposal.

FOR INFORMATION ONLY