

Kier Highways Project No: HE570122

Client Reference No: 1050443

(M49 J22-18A SB MP 0 - 8.4 RS)

Pre-Construction Information

	Yes	No
Are Works to be carried out under the Commission / Contract Health and Safety Plan? Not applicable to Design Services Contracts, delete row if required		X
Is the Scheme notifiable under the CDM Regulations 2015?		X
1. Last longer than 30 working days and have more than 20 workers simultaneously at any point in the project;		
2. Exceed 500 person days		

Project type as categorised by GG104 (if applicable to contract / delete in not required)	A
* If applicable GG104 will determine the Kier Highways minimum Scheme Principal Designer (Scheme PD) level. Refer to SHEMS-FOR-HIG-S-055 for GG104 type categorisation and minimum Scheme PD level. Type A projects the Design Team Lead, Type B projects the Senior Manager, Type C projects the Service Director.	

This document has been produced in accordance with the recommendations and requirements of the Construction (Design and Management) Regulations 2015.

		Date
Prepared by: Designer		28/11/2019
Reviewed by; Design Team Lead		28/11/2019
Accepted by: Scheme PD		28/11/2019

'Reviewed by' & 'Accepted by' can be the same person for GG104 type A projects (where the Design Team Lead is the Scheme PD)



Authorised By: [REDACTED]	Page 1 of 14	SHEMS-FOR-HIG-051
Author: Highways CDM Team	Date: October 2019	Version: 1.0
As part of our system review, this document is valid until April 2020		



Site Specific Hazards Identified in Design		
<i>ONLY include significant and unusual hazards that a competent contractor would need to know, could not reasonably foresee, or are likely to be difficult to manage effectively.</i> Note – Consideration to be given to all ‘populations’ affected, Workers, Users, Other Parties.		
Activity	Residual Hazard	Comments
Excavation/ general site works	Limited access of emergency vehicles (within the extents of the closed sections)	Traffic management plan will need to ensure access or suitable alternative routes for emergency services.

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1 Project Description**Scope of works**

The site is located on the M49 J22-18A SB and is subject to deteriorated road conditions. Fretting, cracking, open joints, have also been identified. Coring and trial pits are to be taken at the stated locations shown in the excel spreadsheets 'Defect & Treatment plan' and 'Core & Trial Pit Schedule'. GPR & DCP testing will also be carried out along the extents of the scheme.

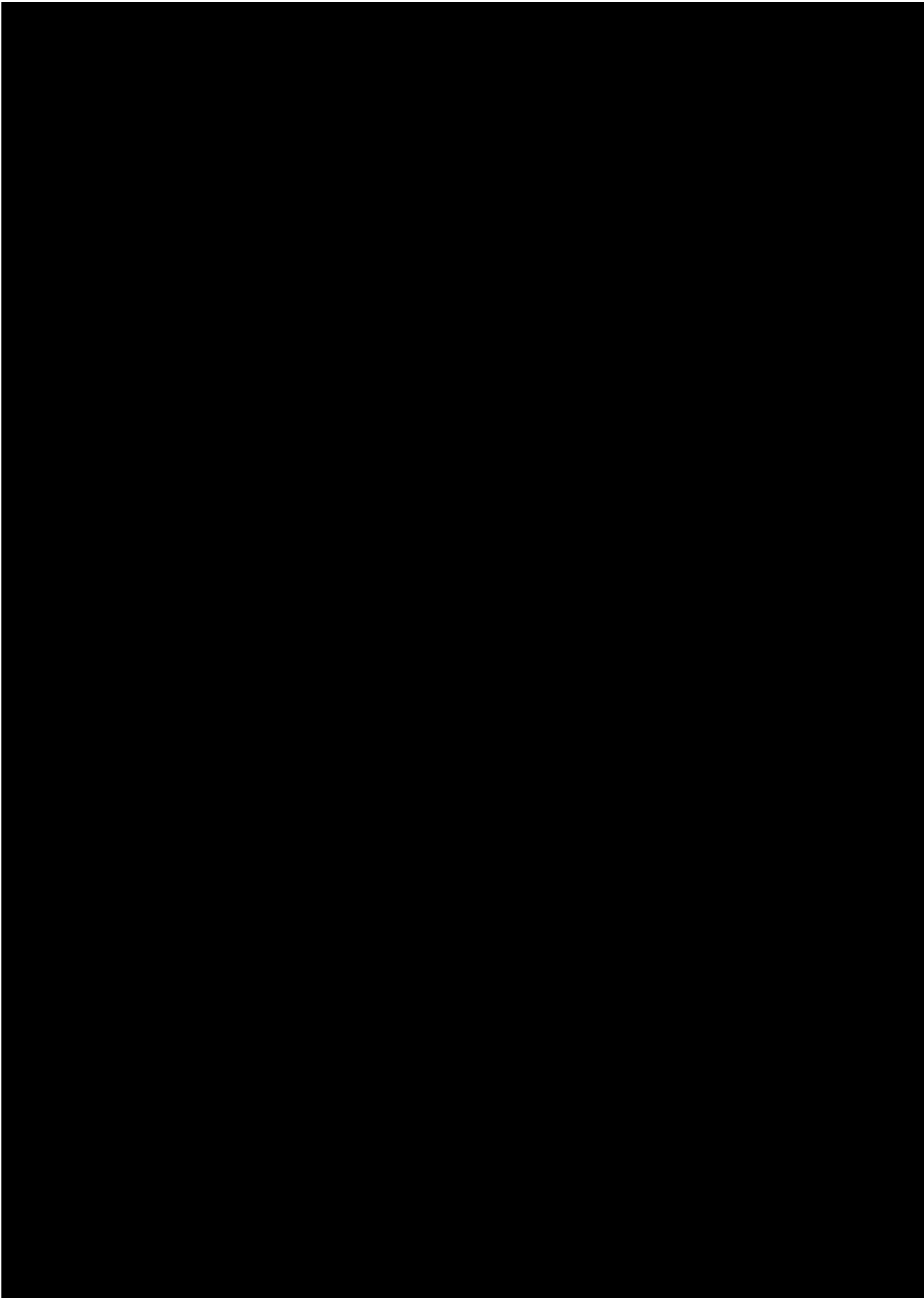
Cores required to determine the pavement condition and likely pavement construction thicknesses.

GPR – The survey is to be carried out on all lanes of the main carriageway (and slip roads if applicable) excluding the hardshoulder and is intended to determine the likely pavement construction thicknesses, the location of the underlying concrete slab joints transversely and longitudinally, voids, cracks & moisture content as well as an indication of any potential structural issues that might become apparent in the foreseeable future. It is recommended that the GPR output be calibrated using the cores taken at the site.

Trial pits – the survey is to be carried out approx. between MP 6.5 and 6.9 over the structure of Hallen Trough, where trial pits are to be dug down to the red sand carpet (approx. 250mm), the red sand carpet is to be carefully brushed aside by hand to reveal waterproofing. Pictures of waterproofing condition are to be taken and recorded.

1 Project Description	
Location	
	
Site Address	Start of scheme: M49, Pilning and Severn Beach New Passage South Gloucestershire BS35 4PA

1 Project Description					
End of scheme: M49, Lawrence Weston Bristol City of Bristol South West England BS11 0 HAPMS Sections: 0100M49/5 0100M49/21 0100M49/41 0100M49/63 0100M49/83					
Site Photographs					
N/A					
OSGR, MP or	From	MP 0.0	To	MP 8.4	
Traffic Management					
Traffic Management arrangements It is expected that traffic management for the M49 J22-J18A SB survey works will consist of a full night time closure of the SB carriageway with an appropriate diversion route.					
Anticipated Working Hours, subject to Traffic Counts			TBC		
Mobilisation Period	TBC	Anticipated Start Date	TBC	Anticipated End Date	TBC



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3. Scheme Specific Requirements			
	Yes	No	Comments
A pre-start meeting will be mandatory			
Does an H&S file exist?		x	<i>Pavement construction information is available in the project file together with visual condition surveys.</i>
Site Welfare	x		<i>Requirements to be determined by Principal Contractor</i>
Security / Segregation	x		<i>Existing highway boundary and temporary traffic management including pedestrian diversions is adequate to protect the site. Any excavations, open chambers and the like to be protected particularly if left unattended.</i>
Are there any other projects taking place in the vicinity?		x	<i>Principal contractor to check with HE for road space clashes</i>
Are there any restrictions on vehicle movements?	x		<i>All site vehicles (incl. delivery vehicles) must abide by the TM requirements and regulations</i> 1. enter and exit site from the dedicated points; 2. Comply with the designated site safety speed limits; <i>All vehicles within Traffic Management shall comply with the conspicuity requirements of Chapter 8.</i>
Are there any restrictions on deliveries, waste collection, or storage?	x		<i>No deliveries to take place unless Traffic Management is in place.</i> <i>No waste shall be stored on site.</i> <i>Waste Carriers Licence required</i>
Are there any parking restrictions?	x		<i>All vehicles and plant within the works area shall be parked in a safe area clear of access and egress points.</i> <i>All vehicles and plant shall be removed from the carriageway prior to removal of traffic management.</i> <i>No Private vehicles are allowed on site</i>
Height Restrictions	x		<i>There are only overhead cables as detailed below</i>
Overhead Cables	x		<i>Have overhead cables been identified on site? YES</i> <i>Overhead cables have been identified throughout the site. See Appendix E</i> <i>Location of overheads cables and overbridges are clearly marked on the core Defects & Treatment Plan (contract drawings).</i>
Structures	x		<i>Are there any overhead structures? Yes</i> <i>See Appendix C for list of structures.</i>
Will fire precautions be required?	x		<i>Suitable fire precautions shall be in place and in accordance with the Contractors hot works permit.</i>

3. Scheme Specific Requirements			
	Yes	No	Comments
Are emergency procedures and means of escape required?	x		<i>The Contractor shall ensure that emergency procedure plans are in place and all staff have been inducted. One lane will remain serviceable throughout the works duration for emergency services at all times.</i> <i>Nearest hospital with A&E facilities:</i> <i>Southmead Hospital</i> <i>Southmead Road</i> <i>Westbury-on-Trym</i> <i>Bristol</i> <i>Avon</i> <i>BS10 5NB</i> <i>Tel: 0117 9505050</i>
Are there any areas in or around the site classified as no-go areas?	x		<i>No site personnel shall enter the safety zones or tapers within the extents of the traffic management unless trained and competent for installation/removal/maintenance of TM.</i> <i>Provision of minimum 20m Pedestrian worker Exclusion zone, behind and in front of Operating Road Sweeper to be in place.</i> <i>Sub-Contractor's Method Statements and Risk Statements shall contain suitable risk control to protect pedestrian workers and plant operators.</i>
Are there any noise restrictions?		x	N/A
Are temporary works required?		x	N/A
Are there any vibration restrictions?		x	N/A
Are there any poor or hazardous ground conditions		x	N/A
Are there any unstable structures?		x	N/A
Are there any areas classed (existing or designed) classed as confined spaces?		x	N/A
Are there any smoking restrictions?	x		<i>No smoking is allowed on site. Designated smoking areas to be confirmed during site inductions.</i>
Any environmental constraints identified?		x	N/A

Materials and Substances with Health and/or Safety Hazards

Asbestos

AAP exists and mentions that there are presumed ACM's within the electrical cabinets, however the works are contained within the pavement where no ACM's have been identified.

If Asbestos Containing Materials are found during construction, all works shall stop immediately, and the area is to be isolated from the workforce. The Contractor must inform the Principal Contractor, who will then implement the necessary emergency response procedures in line with the Company policy.

Under no circumstances will the Contractor attempt to remove any Asbestos Containing Materials without prior consent from the overseeing organisation.

Lead

Scope of Works are unlikely to encounter lead.

Tar based pavement/surfacing

Coring will determine whether tar-based pavement/surfacing is present or not.

Leptospirosis/Weil's disease / Psittacosis

Contact with highway drainage during coring works potential risk of Weil's disease. The Contractor is to ensure sufficient welfare facilities are in place at all times. All appropriate PPE must be worn at all times.

Any instances of illness / sickness on site should be reported to the Site Manager/Principal Contractor Representative immediately and the persons affected should seek medical advice.

4. Existing Services		Refer to STATS plans listed in Appendix C		
Statutory Undertaker	Not Present	Over head	Under ground	Comments
Electricity				
400/132kV [pylons]		X		Western Power Distribution – LV UG cable Western Power Distribution – 132kV OG Western Power Distribution – Unidentified power duct UG National Grid – 400kV OG
66kV	X			
33kV	X			
11kV			X	
133kV	X			
LV.OG/UG, U & other Unknown			X	
Water (Foul and Potable)				
Public Foul			X	Wessex water – foul main, foul pumping Wessex water – Rising main Bristol water – Distribution main
Pressurised Foul	X			
Public Combined Gravity	X			
Pressurised Combined	X			
Culverted Watercourse	X			
Water Main			X	
Aqueduct	X			
Communications				
Communications			X	Instalcom
British Telecom				
British Telecom			X	
National Grid				
National Grid			X	High pressure gas main
Wales & West Utilities Ltd – Wales & South West England				
LP Mains	X			National Grid – UG high pressure gas main Wales & West Utilities – UG abandoned gas main Esso – UG gas main – pressure not specified
MP Mains			X	
IP Mains	X			
LHP Mains	X			
NHP Mains			X	
Government Pipelines				
Government Pipelines	X			
Fisher German Pipelines				
Fisher German Pipelines	X			
Energis				
Energis	X			
Motorway Communication – Genesys NRTS				
Motorway Comms - Loops			X	Throughout extents of scheme.
Street Lighting				
Street lighting	X			
Highway Drainage				
	X			
Other				
Virgin Media			X	Fibre cable

5. Health and Safety file requirements

All information will be produced in an electronic format. The format of the electronic data issued is to be as follows: All documents and product data sheets are to be in PDF format, drawings are to be in PDF and AutoCAD DWG format.

The Principal Contractor shall collate all appropriate information as it becomes available, and this shall subsequently be collated in the File. The Principal Contractor is to implement an early procedure that advises contractors and materials suppliers of the detailed requirements for this record information. The health and safety file will be created and/or updated in accordance with the requirements of the IAN105/08.

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Reference	Rev	Title
M49 J22-18A SB MP 0 - 8.4 RS	-	Defect & Treatment Plan

Appendix B - Construction Drawings

Reference	Rev	Title
N/A		

Appendix C – Existing Records and As-Built Drawings

Reference	Rev	Title	Company
N/A			

Appendix D - Statutory Undertaker Drawings

Reference	Rev	Title	Company
M49-001		C2 STATS Service Location	KIER PROVE IT
M49-002		C2 STATS Service Location	KIER PROVE IT
M49-003		C2 STATS Service Location	KIER PROVE IT
M49-004		C2 STATS Service Location	KIER PROVE IT
M49-005		C2 STATS Service Location	KIER PROVE IT

Appendix E – Overhead cables

Overhead Cables can be found within the works area at the following locations.

Location / MP	Overhead cable type
MP 2/4 + 20m	National Grid - 400kV
MP 4/7 + 45m	Western Power Distribution – 132kV
MP 5/5 + 30m	Western Power Distribution – 132kV
MP 5/6 + 50m	Western Power Distribution – 132kV
MP 6/8 + 70m	Western Power Distribution – 132kV
MP 7/7	Western Power Distribution – 132kV

Appendix F - List of Structures

Structure	Type	Str key	OSGR
Highway overbridge	Bridge and culvert	13376	354442, 185495
Severn tunnel culvert	Small span structure	34478	354450, 185449
Footbridge	Bridge and large culvert	13378	354644, 184996
Highway overbridge	Bridge and large culvert	13379	354844, 184688
Large culvert	Bridge and large culvert	13380	354860, 184604
Highway overbridge	Bridge and large culvert	13381	355556, 183796
Highway overbridge	Bridge and large culvert	13382	355901, 182899
Highway overbridge	Bridge and large culvert	13386	354547, 180834
Poplar Farm culvert	Not a bridge – small span structure	34480	354588, 180864

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Highway overbridge	Bridge and culvert	13376	354442, 185495
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Highway overbridge	Bridge and large culvert	13379	354844, 184688
Large culvert	Bridge and large culvert	13380	354860, 184604
Highway overbridge	Bridge and large culvert	13381	355556, 183796
Highway overbridge	Bridge and large culvert	13382	355901, 182899
Highway overbridge	Bridge and large culvert	13386	354547, 180834
Highway overbridge	Bridge and large culvert	138388	354225, 180064
Hallen trough	Not a bridge – service crossing & other structure	13387	354207, 180014
Highway overbridge	Bridge and large culvert	13425	354109, 179627
Culvert	Not a bridge – small span structure	34474	353963, 179311
Pedestrian subway	Bridge and large culvert	13432	353945, 179308
Highway underbridge	Bridge and large culvert	13434	353743, 178681

Appendix G - Asbestos Action Plans

AAP exists and mentions that there are presumed ACM's within the electrical cabinets, however the works are contained within the pavement where no ACM's have been identified.

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