Project Title:	**Prince of Wales Cable Stayed Bridge Resurfacing Detail Design**
National Highways PIN:	**617317**
Project Number:	**SBIM-TO824**

Pre-Construction Information

Prince of Wales Cable Stayed Bridge Resurfacing Detail Design

Is this scheme notifiable under the CDM Regulations 2015-?	Yes
Level of Principal Designer required?	Senior

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

	Name	Signature	Position	Date
Prepared by:	Liam Bailey		Engineer	12/04/2024
Reviewed by:	Santosh Pandey	Santosh Pandey Digitally signed by Santosh Pandey	Senior Engineer	12/04/2024
Authorised on behalf of Amey:	Mladen Dragojlovic	Dragojlovic, Mladen1 Digitally signed by Dragojlovic, Mladen1 DN: cn=Dragojlovic, Mladen1 e=Mladen.Dragojlovic1@amey.co.uk Reason: Certification Location: Date: 2024-04-12 14:31+01:00	Principal Designer	12/04/2024
Accepted by Client:	Karolina Golota / Chris Pope		NH Project Manager	
Note:	Please ensure that you have the final version of this document signed and authorised for issue PDF the signed document cover and add it to the electronic version of this document as a Quality Assurance Record			

Pre-Construction Information

Record of Revisions		
Document History		
Issue	**Date**	**Purpose/Amendment**
1.1	12/04/2024	Issued for Tender.

Authorisation and Acceptance Summary					
Issue	**Date**	**Prepared By**	**Reviewed By**	**Authorised By**	**Status**
1.1	12/04/2024	Liam Bailey	Santosh Pandey	Mladen Dragojlovic	I

Status	
I	Information
D	Draft
F	Final

Pre-Construction Information

Appendices

1. Nature of the Project

1.1 Project Description

Scope of Works

M4 Prince of Wales Bridge carries the M4 motorway across the River Severn, between England and Wales. The highway is a 3-lane motorway, and the crossing consists of three major structures; Gwent and Avon Viaduct at either end respectively, and a cable stayed bridge which connects the two spanning the 'shoots channel'. See Figure 2 below for further details.

With continuing deterioration and repairs of the existing surfacing, a task order was issued in 2023 for a detail design of the resurfacing of the Cable Stay section of the bridge by National Highways. This is intended as the first phase of the works, with the resurfacing of the Gwent and Avon Viaduct likely to follow suit. The works to include the removal of the existing surfacing, binder course and waterproofing layer of all three lanes up to the edge of the drainage systems within the hard shoulder. This should allow for the proposed waterproofing layer to be 'lapped' in the hard shoulder before reinstatement of the new binder and surfacing layer.

Figure 1 - Prince of Wales Bridge (Avon Embankment)

Site Address & post code

Amey Prince of Wales Bridge Maintenance Unit, Severn Beach, Redwick, Bristol, BS35 4NG

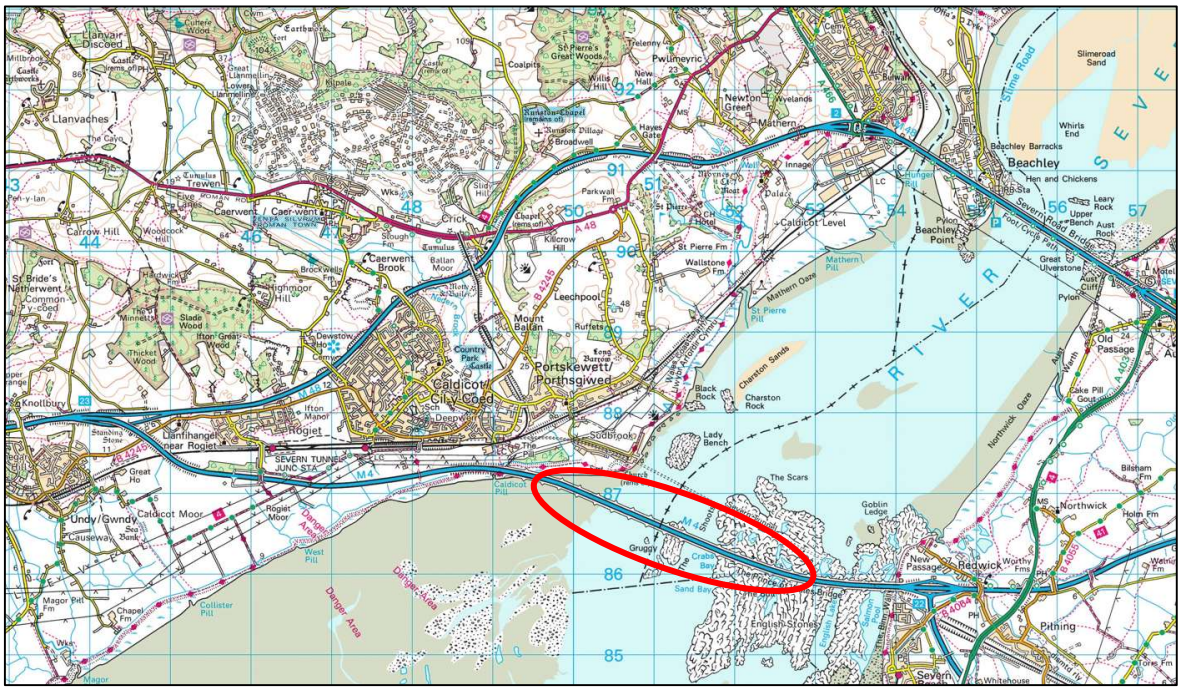

Figure 2 - Prince of Wales Location

1.2 Programme			
Time Allowed by Client (Mobilisation Period in weeks)		4 weeks	
Proposed Start Date of Works	13/07/2024	**Duration of Works (in weeks)**	15 weeks
Maximum number of people at work on site at one time	Not known.	**Planned number of contractors**	Not known.
Proposed Phasing		Four phased approach to align with Traffic Management.	

1.3 Details of Client, Principal Designers, Designers, Principal Contractors, Contractors and other Consultants			
Client	national highways	**Contact**	Chris Pope
		Position	Programme Manager
		Tel	07713 146 362
		Email	chris.pope@highwaysengland.co.uk
Client Project Manager	national highways	**Contact**	Karolina Golota
		Position	Project Manager
		Tel	07354 249 085
		Email	Karolina.golota@highwaysengland.co.uk
Principal Designer	Amey	**Contact**	Mladen Dragojlovic
		Position	Prince of Wales Bridge Manager
		Tel	07729072503
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Designer	Amey	**Contact**	Patrick Madden
		Position	Engineer
		Tel	07523 919 087
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Amey HSEQ Advisor	Amey	**Contact**	Martyn Griffith
		Position	Operational Health and Safety Advisor
		Tel	07761757996
		Email	Martyn.griffith1@amey.co.uk
Principal Contractor	Amey	**Contact**	Andy Wood
		Position	Principal Operations Manager
		Tel	07837 601 986
		Email	andy.wood@amey.co.uk

1.4 Use of the Structure as a Workplace

The structures comprising this project will not be used as a Workplace. The Workplace (Health, Safety and Welfare) Regulations 1992, Regulation 2 (1)(b) - Interpretation, refers to 'any room, lobby, corridor, staircase, road or other place used as a means of access to or egress from the workplace or where facilities are provided for use in connection with the workplace other than a public road.'

1.5 Extent and Location of Existing Records and Plans

Existing Site Records

	Yes	No	Comments
Existing Drawings	✓		Please see Appendix A.
Health and Safety Files		✓	None provided.
Ground Conditions/Soils Reports	✓		Core samples and DCP tests have been undertaken, week commencing 11th March 2024. Please see Appendix E for details.
Asbestos Records/Register and Surveys	✓		No asbestos containing materials are recorded to be present within the site works. See asbestos survey report for further details, Appendix E.
Contamination Test Results		✓	Not required.
Services/Utilities	✓		Please see Appendix C for details. Updated Stats will be required prior to construction.
Public Rights of Way	✓		M4 (Motorway)
Other Available Information		✓	

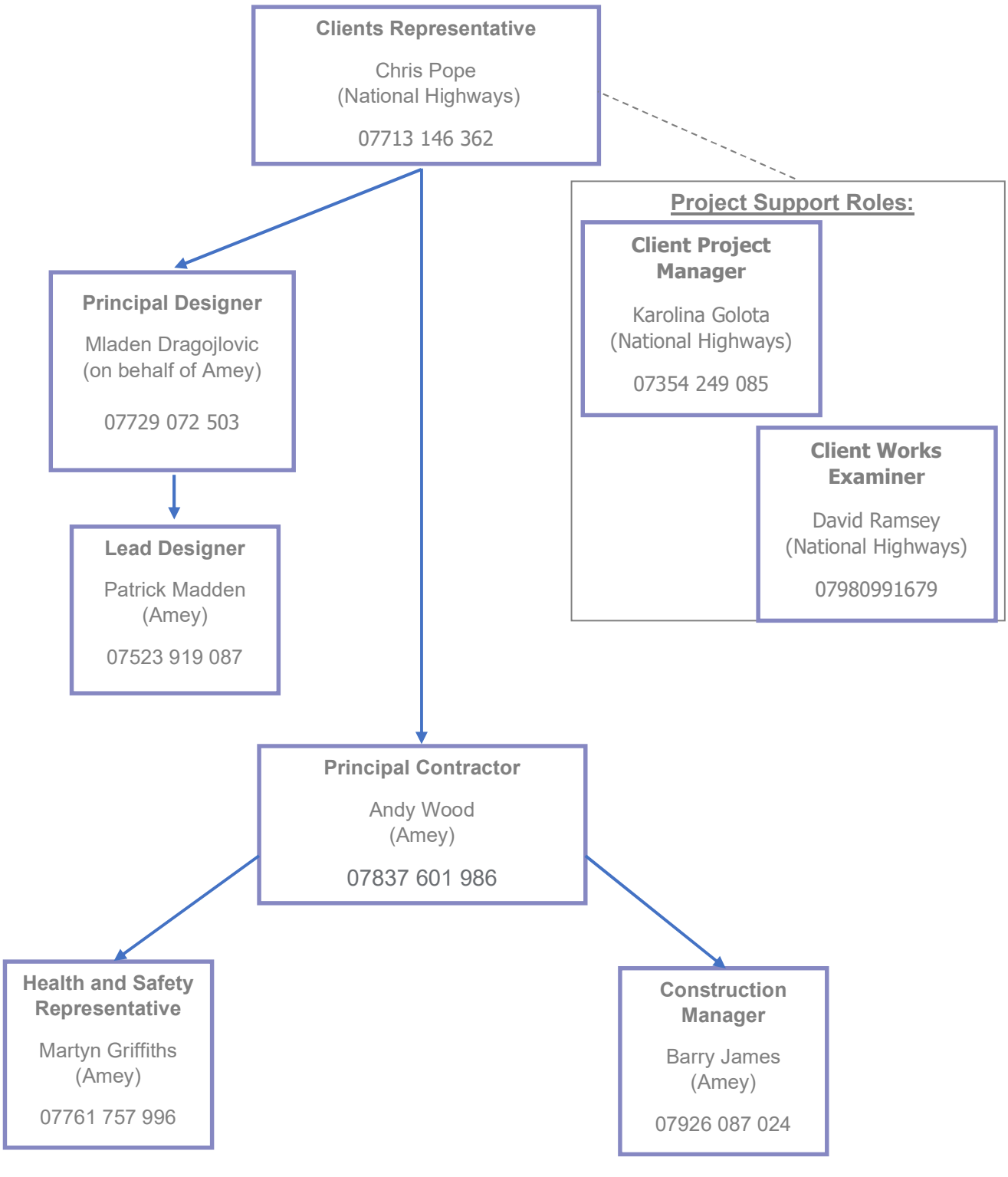
Buildings/Structures to be refurbished, altered or demolished

	Yes	No	Comments
Architectural		✓	
Structural	✓		Resurfacing of Prince of Wales Cable Stayed Bridge carriageways.
Mechanical and/or electrical		✓	
Public Health		✓	

2. Clients Considerations and Management Requirements

2.1 Arrangements for:

2.1.1 Planning for and managing the construction work - Management structure and responsibilities



2.1.2 Planning for and managing the construction work – Values and Imperatives

- To achieve a sustainable working time ethos throughout the business to support the health & safety of all our people.
- To achieve a culture of safe and responsible operation of road vehicles and associated equipment
- To reduce the impact that others have on the safety of our people by ensuring compliance with CDM Regulations by both internal and external parties.
- To encourage further environmental awareness and improve sustainability of our operations and reduce pollution.
- All design and construction to be in accordance with National Highways imperatives including **ensuring no one is harmed when travelling or working on our roads.**

2.1.3 Monitoring and review

Audits by Client

Site Audits will be carried out by National Highways Site Representatives. These will include, but are not limited to, checking the construction Phase Plan (CPP) and on site to ensure that;

- All parties are competent for the task they are carrying out
- Communication Coordination and Cooperation is taking place on site
- Sufficient time and resource has been allocated to have a safe project
- Suitable Welfare is present and that facilities are being kept clean and tidy

2.1.4 Liaison between Customers including Police, Fire, Ambulance Services etc.

It is envisaged Health & Safety, including CDM considerations will be included as a specific item on the agenda at progress meetings.

The Principal Contractor is to record all liaison affecting H&S matters regarding consultation with emergency services etc.

2.1.5 Security of the site

Scheme/Site limits are indicated in the construction documentation and include any traffic management measures associated with the works.

The Principal Contractor is responsible for maintaining the safety and security of the site and any remote locations used for accommodation and the storage of plant and materials.

The Principal Contractor will control access to the site at all times and is responsible for establishing and maintaining the safety and security of the site and any remote locations used for accommodation. There are no special requirements regarding site security.

Attention is drawn to the fact that acts of trespass, vandalism and attempted theft may occur at the site and that these factors should be considered when formulating security measures. Appropriate measures such as secure perimeter fencing may be necessary to prevent unauthorised access to works areas during and outside normal working hours.

Any security arrangements put in place by the Contractor shall not impede access to adjacent operations.

2.1.6 Welfare provision

The Principal Contractor shall ensure that suitable and sufficient welfare facilities are provided, in accordance with Part 3 - Reg. 13(4)(c) and Schedule 2 of the CDM Regulations. These are to be identified in the Construction Phase Plan.

2.2 Requirements relating to the Health and Safety of the Clients Employees, Customers, or those involved in the Project

2.2.1 General site requirements

	Yes	No	Comments
Is the site to be fenced off?	✓		Site to be enclosed with restricted Traffic Management
Are there any client restrictions on vehicle movements?	✓		Traffic management shall allow for two running lanes in each direction. A stepped speed limit of 70>50mph, and 50>40mph shall be introduced on the approaches to the cross-overs. These shall be enforced by average speed cameras.
Are there any client restrictions on deliveries, waste collection, or storage?		✓	Principal Contractor to arrange deliveries and waste collection from maintenance unit as required. Movements only to be carried out during road closures (night works).
Does the client require any permit to work systems?	✓		Permit to dig required. Coordination between Principal Contractor and Contractor required.
Are there any areas in or around the site classified as no-go areas or that require authorisation to enter?	✓		No site personnel will enter any of the other walkways or maintenance areas that are out-with the site boundary.
Has the client designated any areas as confined spaces?		✓	
Are there any other activities/projects taking place within the vicinity?	✓		Principal Contractor to coordinate work onsite accordingly and notify all activities during the Daily Awareness Briefings at the start of each shift.
Are there any parking restrictions?	✓		Vehicles to be parked in marked bays within the maintenance depot or allocated areas within traffic management.

2.2.2 General site requirements

Principal Contractor shall put forward application for required TTRO's (in liaison with National Highways), these required for lane closures and temporary speed limits.

2.2.3 Fire precautions

The Principal Contractor shall undertake an assessment of risk from fire on the works and shall put into place and monitor sufficient measures to prevent, control or otherwise deal with the significant risks there from.

2.2.4 Emergency procedures

Near Miss / Close Call procedure

The Principal Contractor (PC) shall implement investigations into all near miss occurrences in order to prevent a more serious occurrence. The near miss occurrences shall be reported to the Project Manager weekly in a written format with the corrective actions undertaken. Toolbox talks shall be provided by PC on near miss procedure.

Management Responsibilities

All accidents and incidents shall be reported.

Incident Statistics

All Principal Contractors or Sub-Contractors are responsible for reporting their own accident statistics to the HSE in accordance with the RIDDOR Regulations but will be required to submit a copy to Safety team to confirm reporting has been done (refer to paragraph below).

Accident Book

The Accident Book or electronic equivalent must be available on site.

Health and Safety Accident and Incident Reporting requirements

All accidents and incidents shall be reported in accordance with Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, with reportable accidents being reported immediately and no time loss injuries to be reported in accident book within 24 hours. An investigation team will be convened by the Principal Contractor and Project Manager as soon as practicable to investigate all major injuries, dangerous occurrences or fatalities.

Responsibility for reporting shall be as described below and a copy of the F2508 (and F2508A, in the case of a specified disease), shall be supplied to the Safety team to verify that reporting has been done.

Nature of Accident or Incident	Person responsible for notifying the HSE of the event
Death, major injury, over 7-day injury, or case of disease	The Person's Employer
Of a self-employed person at work in premises under the control of someone else.	The person in control of the premises at the time of the event.
Specified injury, over 7-day injury or case of disease: Of a self-employed person at work in premises under their control.	The self-employed person or someone acting on their behalf.
Death, or injury requiring removal to a hospital for treatment (or specified injury occurring at a hospital): of a person who is not at work (but is affected by the work of someone else), e.g. a member of the public or a visitor to site not employed by any contractor or supplier involved in the works.	The person in control of the premises at the time of the event, where or in connection with the work, the accident causing the injury took place. (Subject to information available)

3. Environmental, Geotechnical & On-Site Restrictions

3.1 Restrictions for: Environmental

3.1.1 Environmental Requirements

Summary of ecological risks, protections measures and relevant responsibilities. Refer to Appendix E for more detail.

Consultation with the environment team has been undertaking with environmental requirements highlighted within the EIA and PEAR attached in Appendix E.

Environment management during the operational stages will be highlighted during the Construction Environmental Management Plan (CEMP) which is to be arranged by the Principal Contractor.

Environmental Task	When Required?
Notice of intent to relevant environmental bodies.	Before construction commences
Pre-construction walkover survey within a 30m radius of the proposed works area be undertaken for presence of badgers	6-8 weeks before construction begins
Any hedgehogs discovered during works to be moved out of the works area to a safe and suitable location and covered over	During construction
If works are required within areas containing Japanese knotweed and/or cotoneaster, then this must be carried out under an invasive species method statement to prevent the spread of these species	Before construction commences

3.1.2 Restrictions on deliveries, waste collection or storage

Storage of materials/plant/machinery etc. shall be located within working areas and an appropriate barrier provided. No materials/plant/machinery should be left on site between shifts.

The Contractor shall comply with the requirements of the Control of Pollution Act and all other relevant waste management regulations or guidance.

Arrangements for any on-site storage of materials, plant and spoil must be agreed with the Overseeing Organisation. Storage areas must be positioned as far away from 'live' traffic and watercourses as reasonably practicable. Physical barriers must be erected where appropriate in accordance with Chapter 8 of the Traffic Signs Manual.

All storage facilities, whether on-site or remote, must be kept tidy and secure. Appropriate measures are required to ensure the safe movement of vehicles and personnel between storage areas and the works.

Spill kits must be made available on site. In the event of a pollution incident, work should cease in the vicinity and contaminants must be cleaned up immediately.

All incidents must be reported, and a Pollution Incident Report form completed. If an unexpected source of pollution is identified on site during works, works should cease immediately. The area around the pollution should be sealed off to prevent further spread/exposure of contaminants to workers.

Equipment, chemicals and fuels should be used and stored in accordance with Environment Agency Pollution Prevention Guidelines (PPGs) See http://www.environment-agency.gov.uk for guidance.

The contractor should ensure materials are reused where feasible. If not possible, waste should be segregated and suitably stored to enable collection and recycling ex-situ.

Waste to be transported only be registered waste carriers to suitably licenced waste carriers. All waste transport should be documented with transfer notes.

3.1.3 Adjacent land uses

Existing Transport Systems and Restrictions

	Yes	No	Comments					
National Highways Roads	✓		**AADT**	77,629	**% HGVs**	11.54%	**Speed limit**	70mph
Waterways	✓		The bridge spans the River Severn.					
Public Rights of Way	✓		M4 (Motorway)					
Other		✓						
Other restrictions and land uses								
Emergency Access Routes	✓		In the case of an emergency, the carriageway can be accessed directly by suitable Amey Vehicle or by emergency services as appropriate.					
Access to adjacent land		✓	No adjacent land will be affected by the works.					
Access to occupiers/visitors		✓	There will be no access issues for occupiers/visitors for the works.					
High pedestrian or traffic generators	✓		The carriageway will remain partially open in one direction during the works - average annual daily traffic counts are listed above and is taken from Department of Transport Road Traffic Data – Site number 73955 – year 2019.					
Other		✓						

3.1.4 Significant design assumptions and suggested work methods, sequences or other control measures

A copy of the designer's hazard management schedule is stored in Appendix D. This document lists the hazards identified during the design and the design measures taken to eliminate or reduce the hazard.

The Principal Contractor shall consider all potential construction hazards and review existing hazards already identified. All identified risks and hazards shall be integrated into the construction phase plan.

Concrete repairs requiring removal of concrete behind existing reinforcement shall be limited to 1m widths in the transverse direction and spaced a minimum of 1m from other repair areas.

3.2 Restrictions for: Geotechnical

3.2.1 Ground conditions, underground structures or water courses (Where this may affect the safe use of plant or the safety of groundworks)

	Yes	No	Comments
Instability		✓	It is not likely that there will be any hazards associated with ground conditions and contaminated land. The proposed areas where small scale excavations are required steep batters will be encountered; however, ground conditions are stable underfoot. Awareness of potential hazards of slips, trips and falling should be mitigated through standard procedures and best practice. It is not considered to be likely that the site will be affected by past or present coal workings within the site boundary.
Subsidence		✓	
Old Mine Workings		✓	
Underground Tanks & Obstructions		✓	
Other		✓	

3.2.2 Information about existing structures

Structures within scheme extents are:

Structure Name and Marker Post (MP)	Structure Key	Structure Number	Min. Headroom
M4 Prince of Wales Bridge		26624	N/A

Existing structural information that is considered relevant is included in Appendix A.

3.2.3 Previous structural modifications, including strengthening

Resurfacing works show potential of poor cover on the reinforcement in the bridge deck. Additionally, a number of gully's adjacent to the CSB pylons have been permanently blocked.

3.2.4 Fire damage, ground shrinkage, movement or poor maintenance

Areas of surface patch repair works, excluding those undertaken in 2014 did not reinstate the waterproofing and therefore create a risk of damaged concrete and reinforcement.

3.2.5 Difficulties relating to the use of plant and equipment in the premises

No material to be stored on the structure. All plant and materials to be stored at a compound to be located on junction 22.

3.2.6 Health and safety information contained in earlier designs/drawings

N/A

3.2.7 Materials requiring precautions

Material data sheets/COSHH forms must be read prior to working with hazardous materials and the appropriate Personal Protective Equipment must be used. Contractors are required to submit COSHH data sheets to the Principal Contractor prior to working on site.

3.3 On Site Restrictions

Location of existing services, particularly those that are concealed

All affected STATS to be bold red as indicated below

Statutory Undertaker	Not Present	Over Head	Underground	Unknown	Comments
Gas					
LP Mains	✓				REFER PCI APPENDIX C FOR DETAILED FINDINGS.
MP Mains	✓				
IP Mains	✓				
LHP Mains	✓				
NHP Mains	✓				
Water & Sewer					
Public Foul	✓				REFER PCI APPENDIX C FOR MORE DETAILED FINDINGS.
Pressurised Foul	✓				
Public Combined Gravity	✓				
Pressurised Combined	✓				
Culverted Watercourse	✓				
Water Main	✓				
BT					
BT Openreach	✓				REFER PCI APPENDIX C FOR MORE DETAILED FINDINGS.
Electricity					
400KV	✓				REFER PCI APPENDIX C FOR MORE DETAILED FINDINGS.
132KV	✓				
33KV	✓				
11KV	✓				
LV	✓				
National Grid Telecoms			✓		ON THE SOUTHBOUND VERGE FOR FULL SCHEME EXTENTs. REFER PCI APPENDIX C FOR MORE DETAILED FINDINGS.

Cable					
Vodafone	✓				VIRGIN MEDIA DUCT/TRENCH CABLE ON NORTHBOUND VERGE FOR THE FULL SCHEME EXTENTS. REFER PCI APPENDIX C FOR MORE DETAILED FINDINGS.
Virgin Media			✓		
BSkyB	✓				
GTT	✓				
Colt	✓				
KPN	✓				
Sota	✓				
CGI Logica	✓				
SSE Telecom	✓				
City Fibre	✓				
Telia Sonera	✓				
Instalcom	✓				
KCom	✓				
Verizon	✓				
Trafficmaster	✓				
Zayo Group	✓				
Tata Comms	✓				
Gamma	✓				
Gigaclear Plc	✓				
Network Rail	✓				
Independent Utilities					
GTC	✓				REFER PCI APPENDIX C FOR DETAILED FINDINGS.
Energetics	✓				
SSE	✓				
Harlaxton	✓				
Utility Assets	✓				
UK Power Dist.	✓				
Albion Water	✓				
Leep Utilities	✓				

ESP	✓				
Fulcrum Pipelines	✓				
Energy Assets	✓				
Street lighting					
Street lighting			✓		WHILST NATIONAL HIGHWAYS LIGHTING CABLES ARE PRESENT IN THE VICINTY OF THE WORKS NO AS-BUILT INFORMATION IS AVAILABLE. THE CONRACTOR MUST LOCATE ALL LIGHTING CABLES USING SUITABLE METHODS PRIOR TO ANY EXCAVATION WORKS ON SITE
Other					
Loops					NRTS CABINETS AND CABLES RUN ON THE NORTHBOUND AND SOUTHBOUND VERGE AND CROSS THE CARRIAGEWAY AT FEW LOCATIONS, PRESEUMED UNDER THE DECK REFER PCI APPENDIX C FOR DETAILED FINDINGS.
NRTS			✓		

Those items listed above in **RED** are services considered to be present within the scheme extents. Those services shown in **GREY** have either not been identified as part of the C2 Statutory Enquiries or are not considered to be within the extents of the scheme and subsequently not affected.

3.4 On Site NRTS Restrictions

- **NO MACHINE OR ASSISTED DIGGING CAN TAKE PLACE WITHIN 1.5 METRES IN ANY DIRECTION FROM MARKED ASSETS**. If there are marks within 1.5 metres of a safety barrier, this becomes a safety zone with no mechanical works allowed. Additionally, no safety barrier works within the 1.5 metre zone can be installed by driven methods. Holes for safety barriers within the 1.5 metre zone shall be hand dug.
- It is the responsibility of the Contractor/Authority responsible for site works to maintain the pegs and other markings.
- If any unmarked assets are found within the works area, it is the responsibility of the Contractor/Authority responsible for site works to halt machine or assisted excavation in the area and contact the Telent Service Desk on 0845 6032239 or by fax on 0121 5066102. It is the responsibility of the Contractor/Authority to ensure that no machine or assisted excavation will resume until the assets have been identified.
- Please refer to Appendix A for copy of the ES2 to confirm NRTS pegging and Marking has been conducted.

3.5 On Site Local Power & Communications Cable Restrictions

- All local power and communications cables shall be pegged out prior to any groundbreaking works.

3.6 Health hazards

Asbestos/lead/Leptospirosis/Weil's disease/Psittacosis

- If Asbestos containing materials are suspected or found during construction, all works shall stop immediately. 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.

Leptospirosis/Weil's disease/Psittacosis

- The Contractor is to ensure sufficient welfare facilities are in place at all times in accordance with CDM 2015. All appropriate PPE must be worn at all times.
- Any instances of illness / sickness on site should be reported to the Site Manager/Principle Contractor Representative immediately and the persons affected should seek medical advice.

4. Arrangements for co-ordination of on-going design work and handling design changes

The design is considered complete at the time of issue of this pre-construction information pack. Any amendments will be notified by issue of revised drawings with covering issue-sheet or letter.

All design queries to be directed through the Principal Contractor to the National Highways Project Manager and Principal Designer.

Health and Safety aspects of any design carried out on behalf of the Contractor, for example temporary works, are to be assessed by the Contractor and details submitted to the National Highways Project Manager and Principal Designer.

5. Information on significant risks identified during the design		
Element of Duties / Activity	Hazard	Information on Residual Risk
Risk Ref: HS-01 Services/ Water/ Gas/ Motorway communication	Damage to services, injury, death. Fire, explosions, damage to services, death. Death, injury due to excavation near live statutory equipment.	All statutory to be marked up in advance using C.A.T. GENNY systems and trial holes where required.
Risk Ref: HS-02 Temporary instability of bridge because of carriageway / concrete removal	Uneven loading of the cable stay bridge causing centre span uplift or exceeding load capacity of the stay cables or pier tie-downs. Failure or weakening of the concrete deck supported by the cable stay bridge truss system, potentially resulting in failure causing injury/death."	Agree maximum size of repair areas. Unless otherwise agreed, where a deep concrete repair is undertaken needing to hydrodem behind reinforcement, repair width shall be limited to 3.6m transversely x 3.6m longitudinally, with no additional concrete repairs to be undertaken within 7.3m longitudinally and 2m transversely from the edge of the repair until it has reached the minimum strength required. Alternatively, if larger concrete repair areas are required to be undertaken for programme requirements, a structural review (and potentially assessment) shall be undertaken for temporary stability of the required repair area. Otherwise, the Contractor may design temporary works to support the deck at repair locations. The repair patches shall be remain unloaded by plant and traffic until repair material strength reaches the full required strength. The exposed patch substrate shall remain unloaded and protected during the initial 7 day curing period.
Risk Ref: HS-03 Risk of injury from protruding reinforcement	Protruding reinforcement from construction works may cause injury to personnel on site. The planing undertaken previously have resulted in sharpening of the reinforcement and could cause severe injury / death.	PC to note residual risk from protruding anchor bolts. PC shall reduce this risk at the site stage through their risk assessment and method statements.
Risk Ref: HS-04 RA1 procedure limitations may cause injury or workforce fatigue.	Inability to undertake RA1 mini-bus drop offs of personnel to Pylons may mean that walking to pylons is required.	PC shall make temporary amendments to RA1 procedure where required.

Risk Ref: HS-05 Reduction in deck thickness due to hydro demolition	Instability/failure of bridge deck due to loss in overall depth	Refer to HS-02
Risk Ref: HS-06 Temporary loss in overall thickness of the deck during surface defect repair	Instability/failure of bridge deck due to loss in overall depth	Principal Contractor to avoid any loading of the deck when the thickness is lost temporarily. Suitable RAMS to be in place to safely carry out the treatments of the deck surface defects without any excessive loading.
Risk Ref: HS-07 Trafficking of the deck following treatments to the deck surface defects	Failure of the deck due to premature loading	Principal Contractor to avoid any loading of the deck when the thickness is lost temporarily. Suitable RAMS to be in place to safely carry out the treatments of the deck surface defects without any excessive loading.
Note: List only the High or Unusual Risks Identified during the design phase, which must be addressed within the Construction Phase by means of method statements, risk assessments etc.		

6. The Health and Safety File

The Health and Safety File should contain information needed to allow future construction work, including maintenance, alterations and demolition to be carried out safely. The level of detail should be sufficient to allow the likely risks to be identified and addressed by those carrying out future work.

It is the responsibility of the Principal Designer to ensure the Health and Safety File is started during the pre-construction phase, if one does not already exist. The Principal Contractor and other duty holders are required to provide relevant documentation for incorporation into the Health and Safety File.

The Principal Designer shall agree with the Client the structure and format of the Health and Safety File. The Principal Contractor shall collect and collate relevant information required for inclusion in the Health and Safety File during the construction phase of the contract in an electronic format. The completed information shall be provided to the Principal Designer on issue of the Completion Certificate or similar being issued for the works within one month.

If the Principal Designer is not retained beyond the pre-construction phase of a project, the Principal Contractor is required to complete the Health and safety File.

A Health and Safety File template/structure can be found within Appendix F.

APPENDIX A

Existing Records and Plans from Section 1.5

Reference	Title	Company
SAL-E-1000 G	Vertical & Horizontal Alignment	Halcrow Group
SDD-E-1000 H	Deck Drainage Details	Halcrow Group
SDF-E-1009 G	Carriageway Markings Sheet 1 of 2	Halcrow Group
SDF-E-1010 G	Carriageway Markings Sheet 2 of 2	Halcrow Group
SGN-E-1100 G	Bridge GA 1 of 2 (GV)	Halcrow Group
SGN-E-1101 G	Bridge GA 2 of 2 (CSB & AV))	Halcrow Group
SGN-E-1102	Bridge Road Surfacing Regulating Layer	Halcrow Group
SSCG-S-751 A	M4 Carriageway Edge Details CR1	Second Severn Crossing Group / WS Atkins / Maunsell
2722/WH/0706	Asbestos Survey Report M4 Second Severn Crossing	Laing O'Rourke
C8248	SBIM M4 PoW Bridge – DCP Results	CC Ground Investigation Ltd
C8248	SBIM M4 PoW Bridge – Road Core Logs	CC Ground Investigation Ltd
C8248	SBIM M4 PoW Bridge – Site Location & EHLP	CC Ground Investigation Ltd

APPENDIX B

Construction Drawings and Scope of Works

Reference	Rev	Title	Company
SBIM-POW-TO824-DWG-0001	C01	Location Plan including extent of resurfacing works for SBIM Prince of Wales Bridge Cable Stay Section	Amey Consulting
SBIM-POW-TO824-DWG-0002	C01	Prince of Wales Bridge Cable Stay Bridge – Existing General Arrangement	Amey Consulting
SBIM-POW-TO824-DWG-0003	C01	Prince of Wales Bridge Miscellaneous Details – Sheet 1 of 2	Amey Consulting
SBIM-POW-TO824-DWG-0004	C01	Prince of Wales Bridge Miscellaneous Details – Sheet 2 of 2	Amey Consulting
SBIM-POW-TO824-DWG-0005	C01	Prince of Wales Bridge Proposed Details	Amey Consulting
SBIM-POW-TO824-DWG-0006	C01	Prince of Wales Bridge Cable Stay Bridge – Proposed Phasing of Traffic Management	Amey Consulting
SBIM-POW-TO824-DWG-0007	C01	Core and Patch Repair Record	Amey Consulting
SBIM-POW-TO824-DWG-0008	C01	Details of Suspected Damaged and Cover Compromised Deck Concrete	Amey Consulting
SBIM-POW-TO824-DWG-0009	C01	Details of Phasing for Concrete Patch Repairs	Amey Consulting
SBIM-POW-TO824-DWG-0201	C01	Prince of Wales Bridge Cable Stay Bridge – Site Clearance	Amey Consulting
SBIM-POW-TO824-DWG-0701	C01	Prince of Wales Bridge Cable Stay Bridge – Proposed Surfacing (Sheet 1 of 2)	Amey Consulting
SBIM-POW-TO824-DWG-0702	C01	Prince of Wales Bridge Cable Stay Bridge – Proposed Surfacing (Sheet 2 of 2)	Amey Consulting
SBIM-POW-TO824-DWG-1201	C01	Prince of Wales Bridge Cable Stay Bridge - Roadmarkings	Amey Consulting

APPENDIX C

Statutory Undertakers' Records from Section 3.3

Reference	Title	Company	Dated received
M4 J22-23, COSBIM0123	Interim Utilities Search Report	Cornerstone	09/04/2024

APPENDIX D

Risk Assessments and Residual Risks from Section 5

Reference	Rev	Title	Company
NH617317-AMEY-GEN-M4-HS-ZS-0001	P01	Design Hazard Management Register	Amey

APPENDIX E

Interface, Environmental & Geotechnical Issues

Title	Company
PoWB Gwent Concession Area – Preliminary Ecological Appraisal Plan	Amey
SBIM PoW TO453 R005 Environmental Screen Response	Amey
NE 2809231049CB – Severn Estuary SSSI	Natural England

APPENDIX F

Health & Safety File Format

1.0 Nature of the Project

- 1.1 Project Description
- 1.2 Contact Information

2.0 As Built Drawings and Photographs

3.0 Summary of Environmental Restrictions, Interface Issues and remaining On-site Risks

- 3.1 Boundary and Access
- 3.2 Environmental Restrictions
- 3.3 Adjacent Lane Uses
- 3.4 Storage of Hazardous Materials
- 3.5 Statutory Undertakers' Services
- 3.6 Ground Conditions
- 3.7 Existing Structures
- 3.8 Other Remaining On-Site Risks

4.0 (a) Residual Design and Construction Hazards (To be used on smaller projects)

- 4.1 Design Information
- 4.2 Construction Methods
- 4.3 Materials, Components and Treatments
- 4.4 Installed Materials, Plant and Equipment
- 4.5 Maintenance Procedures
- 4.6 Demolition

4.0 (b) Residual Design and Construction Hazards (To be used on larger or more complex projects where individual sections follow the Specification for Highway Works (SHW))

- 4.1 Brief description and location of this section of the works
- 4.2 Design Information
- 4.3 Construction Methods
- 4.4 Materials, Components and Treatments
- 4.5 Installed Materials, Plant and Equipment
- 4.6 Maintenance Procedures
- 4.7 Demolition

SHW sections used:

SHW Series No.	Title	Used (Y/N)
0000	INTRODUCTION	Y
0100	PRELIMINARIES	Y
0200	SITE CLEARANCE	Y
0300	FENCING AND ENVIRONMENTAL BARRIERS	N
0400	ROAD RESTRAINT SYSTEMS (VEHICLE AND PEDESTRIAN)	Y
0500	DRAINAGE AND SERVICE DUCTS	Y
0600	EARTHWORKS	N
0700	ROAD PAVEMENTS - GENERAL	Y
0800	ROAD PAVEMENTS - Unbound, Cement and Other Hydraulically Bound	N
0900	ROAD PAVEMENTS - Bituminous Bound Materials	Y
1000	ROAD PAVEMENTS - Concrete and cement bound materials	Y
1100	KERBS, FOOTWAYS AND PAVED AREAS	N
1200	TRAFFIC SIGNS	Y
1300	ROAD LIGHTING COLUMNS AND BRACKETS CCTV MASTS AND CANTILEVER MASTS	Y
1400	ELECTRICAL WORK FOR ROAD LIGHTING AND TRAFFIC SIGNS	Y
1500	MOTORWAY COMMUNICATIONS	Y
1600	PILING AND EMBEDDED RETAINING WALLS	N
1700	STRUCTURAL CONCRETE	N
1800	STRUCTURAL STEELWORK	N
1900	PROTECTION OF STEELWORK AGAINST CORROSION	N
2000	WATERPROOFING FOR CONCRETE STRUCTURES	Y
2100	BRIDGE BEARINGS	N
2200	PARAPETS	N
2300	BRIDGE EXPANSION JOINTS AND SEALING OF GAPS	N
2400	BRICKWORK, BLOCKWORK AND STONEWORK	N
2500	SPECIAL STRUCTURES	N
2600	MISCELLANEOUS	N

SHW Series No.	Title	Used (Y/N)
3000	LANDSCAPE AND ECOLOGY	N
5000	MAINTENANCE PAINTING OF STEELWORK	N
5700	CONCRETE REPAIRS	Y
Note: If the sections are not used, delete them from the main document.		

(The tables within the appendices should be updated and cross referenced to files holding the relevant information).

A: As Built Drawings and Photographs

B: Surveys, Reports and Audits

C: Design Information

D: Construction Methods

E: Materials, Component and Treatments

F: Installed Materials, Plant and Equipment

G: Maintenance Procedures

H: Demolition

I: Legislative Requirements

Content should be tailored to include items agreed within the CPP