

PRINCE OF WALES RESURFACING PROJECT OVERVIEW

Water Proofing & Concrete Repair

DATE: April 2024

INTRODUCTION

Amey is the leading provider of full life-cycle engineering, operations and decarbonisation solutions, for Transport Infrastructure and Complex Facilities

We are at the heart of modern Britain, helping the economy to grow by designing, maintaining, and transforming the nation's strategic assets.

Our 14,000 people are behind the critical services the country relies on every day and we each take personal pride in our public service.

Our unique engineering and operations experience, together with data driven insight from our consulting business, delivers better results for our clients.

We are trusted partners of Government – both national and local – managing assets and complex projects that are vital to the sustainable growth of the country. www.amey.co.uk.

AMEY's structure means we have multiple offices and 70 operational locations across 3 business units. These locations and delivery of works are spread across England, Scotland, Wales and Northern Ireland.

BACKGROUND

The Prince of Wales bridge was opened in 1996 and carries a 5.2km stretch of the M4 motorway across the River Severn, between England and Wales. The carriageway comprises three lanes and a hard shoulder in each direction, separated by a 2m central median with central barrier.

The bridge is currently maintained by Amey on behalf of National Highways.

The Prince of Wales Bridge carries the M4 motorway over the River Severn, between Gwent and Avon. The bridge comprises three main structures: two approach viaducts, known as Gwent and Avon approach viaducts and one main cable stayed structure. The surfacing is original to the bridge, laid prior to opening in 1996. The surfacing has a stated Design Service Life of 15 + years, and by the end of Road Investment Strategy (RIS 2) (2025) shall be approaching 30 years old.

The cable stayed section of the bridge, also known as "Shoots Bridge", is 947 metre long in total, with a 456m central span. Twin planes of parallel strand cable stays in a modified harp arrangement support the deck. These are attached to pylons each side of the central span. The cables are transversely inclined inwards from the pylons and anchor to the deck between the safety fence and parapet. The deck is of composite construction comprising fabricated longitudinal steel plate girders with transverse trusses at 3.634m centres on the back span and 3.648m centres on the main span. Both longitudinal and transverse members act compositely through shear connectors with a minimum 200mm thick reinforced concrete deck slab. Incorporated into the deck are edge beams containing the anchorages which transfer the deck loads into the cables. The concrete slab supports wind shielding barriers, parapets, lighting columns, safety fences, emergency walkways, drainage outlets, other deck furniture and carriageway surfacing.

The lower half of the twin leg pylons are constructed of in-situ reinforced concrete whilst the upper half are vertically prestressed with external unbonded tendons. Each vertical leg is hollow and rectangular in section. The pylons have two horizontal concrete crossbeams, one at the underside of the deck and the second within the upper half of the pylon. The lower crossbeams are reinforced concrete, and the upper crossbeams are prestressed concrete. Horizontal precast prestressed concrete beams within the cable anchorage zones accommodate tensile forces across the pylon walls. The horizontal prestressing is provided by high strength alloy steel bars which are anchored on the external faces of the pylon.

Each backspan deck is supported on two pairs of prestressed pier concrete columns. The deck is tied down to these with prestressing tendons anchored in the lower region of the piers.

SCOPE

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. Full resurfacing of Cable Stay Bridge including traffic management, any concrete repairs and waterproofing. Works are further detailed within the attached scope and specification documents.

AMEY is seeking bids from qualified Suppliers for the delivery of Waterproofing and Concrete Repair activities on the SBIM project (Severn Bridge)

Bids should be in accordance with the details, terms and conditions, documents detailed herein.

TENDER FORMAT

Suppliers are requested to provide tender responses within the Contract Finder Portal, Log on details to the portal will be provided via the Contract Finder Portal to the nominated Supplier contact on the day of Tender launch.

Suppliers are requested to review the information provided within the Project Overview and its appendices. Tender questions should be addressed to the following people:

Technical – Laurence Green (laurence.green@amey.co.uk)

Operational – Andy Wood (andy.wood@amey.co.uk)

Commercial – Pedro Bastos (Pedro.bastos2@amey.co.uk)

Procurement – Michael Lindsay (michael.lindsay@amey.co.uk)

Suppliers are requested to review the attachments and populate the Activity Schedule with pricing, which can be found within **Documents** within the online event.

Supplier questions relating the content or requirement of the Tender shall be submitted and responded to Michael Lindsay (michael.lindsay@amey.co.uk)

Tender Documents for Review

1. Project Overview
2. Activity Schedule
3. Project Scope and Specification with associated appendices
4. Draft programme of works
5. Drawings

SELECTION & EVALUATION CRITERIA

All Proposals will be evaluated by AMEY. Each proposal will be evaluated according to a number of criteria within the following categories:

- 30% Commercial Offer & Pricing and Project Commercial
- 30% Health & Safety and Operational Delivery
- 20% Compliance (Technical and accreditation)
- 10% Environment, Social & Governance (ESG)
- 10% Innovation

The tender questions and activity schedule are designed to address your capabilities while providing the opportunity for you to demonstrate your Organisations strengths within these areas.

SCHEDULE OF EVENTS

Tender Published to Supplier:	15th April 2024
Tender Responses Due:	1st May 2004
Supplier Evaluation:	2nd to 16th May 2024
Internal approvals:	16th May to 30th May 2024
Tender Award:	6th June 2024

*Please note that all dates and times are subject to change. If it becomes necessary to change the times/dates listed above in the schedule, all suppliers will immediately be notified.

Charges & Payment

Pricing will be exclusive of VAT.

The currency of the agreement will be Pounds Sterling

Payment terms will be as detailed in main subcontract agreement.

APPENDIX 1 - REQUIREMENTS

The supplier agrees to the following Amey requirements in submitting their bid through the eSourcing Portal.

Commercial Offering

- The agreement duration will be for the duration of the contract period.
- The form of agreement will be a NEC4 Term Service Contract (TSC) with pricing Main Option A (priced contract with activity schedule).
- Pricing submission in line with the applicable scope, specifications and drawings submitted against the relevant package Activity Schedule.
- All assumptions and clarifications listed within a schedule.

Insurance

The Supplier shall ensure as a minimum, the following insurance policies are held:

- Public Liability min £10,000,000
- Product Liability min £10,000,000
- Professional Indemnity £5,000,000
- Motor Vehicle Insurance by law.
- Any other insurances required by law.

Quality Standards, Regulations & Policies

AMEY require the successful Supplier to meet:

- ISO 9001:2015 Quality Management Systems
- ISO 14001:2015 Environmental Management Systems
- ISO 45001:2017 Occupational Health and Safety
- ISO 17020:2012 Conformity Assessment
- ISO/IEC 27001:2022 Information security, cyber security and privacy protection
- Constructionline Gold Accreditation
- National Highways Safety Passports
- All staff working on or visiting site are required to hold suitable industry accreditation such as CSCS.
- Appropriate Waterproofing and Concrete Repair accreditation

Amey Policies (link here : [The Amey Code and Policies](#))

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|--------------------------|----------------------------------|
| - The Amey Code | - Dignity at Work Policy |
| - Alcohol & Drugs Policy | - Health & Safety Policy |
| - Inclusion Policy | - Recruitment & Selection Policy |



- Social Value Policy
- Anti-slavery & Human Trafficking Policy
- Volunteering Policy
- Wellbeing Policy
- Anti-Corruption Policy
- Business Ethics Policy
- Charity & Sponsorship Policy
- Gifts & Hospitality Policy
- Environmental Policy
- Sustainable Procurement & Supply Chain Policy
- Quality Policy
- Anti-Fraud Policy
- Whistleblowing Policy

AMEY-FP-SCP-PR-01 Mandatory Arrangements for Safety Critical Plant

All policies are available for review at www.amey.co.uk.

APPENDIX 2 – TENDER QUESTIONS

Supplier responses to questions/statements detailed in appendix 2 to be captured as part of the tender response in the and to be reviewed by Amey as part of the adjudication process:

1. Project Commercial
2. Health & Safety and Operational Delivery
3. Compliance (Technical and Accreditation)
4. Environment, Social & Governance (ESG)
5. Innovation

Capping the levels on the response to the questions set out in appendix 2 to:

1. Project Commercial - Limit response to 5 sides of A4 plus supporting documentation.
2. Health & Safety and Operational Delivery- Limit response to 10 sides of A4 plus supporting documentation.
3. Compliance (Technical and Accreditation) - Limit response to 4 sides of A4 plus supporting documentation.
4. Environment, Social & Governance (ESG) - Limit response to 4 sides of A4 plus supporting documentation.
5. Innovation- Limit response to 4 sides of A4 plus supporting documentation.

1. Project Commercial

Please describe how you will coordinate and manage the Contract to ensure a consistently high level of service at all times. Your response should consider, as a minimum:

- a. an organogram of the contract management team showing clear lines of responsibility
 - a. Please provide one curriculum vitae (CV) for each of the key persons noted below.
The CVs shall provide details of the qualifications and relevant skills and experience of the proposed key persons within your team.
 - i. Project QS
 - ii. Commercial Manager with specific responsibility for this project.
- b. how you will manage the project costs (systems), interim payments and ensure accurate and timely forecasts
- c. how you will manage the risk register including all Early Warnings and Compensations Events in line with the Contract
- d. how you manage performance of subcontractors
- e. your other secured workload, and how this scheme will be managed within that.

2. Health & Safety & Operational Delivery

- a. Confirm that you will adhere to the Amey Code & Zero Code at all times.
- b. What level of Health and safety competency will your delivery team have.
- c. Is there a dedicated Health and Safety Professional resource dedicated to the project.
- d. It is a mandatory requirement to attend regular project Amey Safety meetings when requested by Amey, can you confirm your representative will be available.
- e. What is your reporting system for identifying and managing close calls / Near Misses.
- f. What is your reporting system for managing Accidents.
- g. All Accidents significant Incidents and High Potential Close calls shall be reported to the Principal Contractor (Amey) within one hour of the occurrence.
- h. All Accidents significant Incidents and High Potential Close calls investigations shall have a preliminary report completed within forty-eight hours of the occurrence and be reviewed by the Principal Contractor (Amey)
- i. All Accidents significant Incidents and High Potential Close calls investigations shall have a full investigation report along with root cause analysis and corrective actions completed within seven days of the occurrence and be reviewed by the Principal Contractor (Amey)
- j. Can you advise how Hand Arm Vibration will be managed.
- k. Can you advise how Occupational Health will be managed.
- l. Can you advise how Noise will be managed.
- m. Can you advise how COSHH will be managed.
- n. Can you advise how Occupational Asthma will be managed.
- o. All Risk Assessments Method Statements must be reviewed by Amey Subject Matter Experts at least two weeks to commencing works.
- p. How is competency measured of the workforce.
- q. AI Human detection system or similar system e.g. Spillard should be considered for Planners, Pavers and Rollers etc.
- r. No Excavators under 3 tonne will be permitted to be used on the contract, can you confirm acceptance of this directive.
 - a. Confirm how you will deliver the technical aspects of the project in terms of capability, resourcing and capacity within the surrounding areas to ensure a localised approach is embedded throughout the project.
- s. Is it your intention to subcontract any of the works.
 - a. If so, what elements will be subcontracted and to whom.
- t. If you intend to sub-contract any of the works confirm you have evaluated their intended supply chain and how you will ensure on going competency of their Subcontractors.
- u. Provide details on how you will manage interface works with other suppliers, provide previous experience examples that demonstrates positive project outcomes.
- v. How you will deliver the service aspects of the project in terms of risk management, innovation and added value and communication within your organisation and Amey
- w. How you will deliver the quality aspects of the project in terms of quality for service and customer care

- x. What direct experience do you have of delivering projects of the is nature i.e. long span bridge deck waterproofing, Traffic Management and resurfacing? Please give at least one recent example explaining your role on the project.
- y. Please provide a method statement detailing how you will undertake the works paying particular attention to the undulating deck, Working around complex expansion joints and potential issues around standards and specifications.
- z. How would you plan to avoid and mitigate any potential delays to the programme.
- aa. What is the proximity of your resources to the works.
- bb. Please provide CVs for key persons – Examples -Project Manager, Programme Planner, Interface Works Manager

3. Compliance (Technical and Accreditation)

- a. Can you confirm how you audit any external supplier for compliance to Amey policies.
- b. How would you ensure only Safety Critical Approved suppliers are used to provide any Safety Critical Plant?
- c. Confirm that you have appropriate accreditation as required.
- d. Confirm that you have the appropriate Constructionline Accreditation and are fully verified.
- e. Provide details of all other accreditation you hold in relations to the scope of works.
- f. Please provide technical specifications of all materials you propose to use within this contract.
- g. Detail experience in dealing with departures from standard.

4. Environment, Social & Governance (ESG)

- a. Confirm you will work proactively to use greener-alternative plant were possible to support Amey's and its client target to reduce Carbon output.
- b. Confirm you will adopt an innovative approach with regards to improving ESG.
- c. What sustainability ratings & accreditations do you carry.
- d. How will you enhance and quantify biodiversity on Amey's network and quantify improvements.
- e. Please provide details of how you manage and monitor across your business the following topics:
 - a. Carbon
 - b. Social Value
 - c. Human rights & Labour Standards
 - d. Health & Safety
- f. Can you report on anticipated Co2 output for plant equipment to be used during contract period.
- g. Please provide an example of your Co2 methodology & reporting capabilities
- h. How will you contribute to minimising disturbance (noise, dust, light) to local communities and wildlife on Amey's network.
- i. Please demonstrate how you will adopt an innovative approach with regards to ESG.
- j. How will you minimise waste-to-landfill.

5. Innovation

- How do you propose to ensure Amey is at the forefront of any innovations in relation to materials or operating methods for this scheme



- Please provide evidence of recent innovations brought to market.
- Please detail any specific relationships that are uniquely exclusive to your business that can enhance this project.