

South Wales Trunk Road Agent

Managing and Improving
Motorways and Trunk Roads
through South Wales



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Cymru

Bishton-Llanmartin Overbridge M4 23A-24 51 Principal Inspection Report 2025/26



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**Bishton-Llanmartin Overbridge
M4 23A-24 51
Principal Inspection Report 2025/26**

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South Wales Trunk Road Agent

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Executive Summary

A Principal Inspection was undertaken on 12th June 2025, 16th July 2025 and 17th July 2025 at M4 23A-24 51, Bishton-Llanmartin Overbridge. Overall, the structure was noted to be in fair to poor condition, with Spans 1 and 3 being in fair condition, but Span 2 in poor condition.

The following defects require repair/maintenance:

- Concrete repairs to the beam soffits at areas of, loose concrete, spalling and delamination caused by severe impact damage.
- Concrete repairs to spalled parapet fascia panels.
- Concrete repairs to the northeast pier and crossheads at areas of spalling.
- Clear dirt and debris from south abutment bearing shelf.
- Clear vegetation and debris from drainage gully.
- Clear dirt and debris from south footway expansion joint.
- Clear vegetation from joint between parapet and northwest wing wall.
- Clean off and repaint parapets.
- Clear vegetation from carriageway and footways.
- Clear vegetation from approach fencing, revetments and embankments.
- Replace decayed northeast approach timber fencing.

The following defects require ongoing monitoring:

- Multiple minor spalls to southeast parapet fascia panels.
- Water ingress between parapet fascia panels and deck beams.
- Green algae staining and historic water ingress to both abutments.
- Isolated surface corrosion to south abutment bearings.
- Minor cracking to north abutment strip bearings.
- Isolated minor corrosion to south expansion joint.
- Minor cracking to footway surfacing.
- Minor surface corrosion to the TVCB connections.

It is recommended that an assessment of the structure in its current condition is undertaken due to deterioration to the deck beams since the previous assessment in October 2010. Given the proximity of some of the defects to post-tensioning in the web of each beam, a PTSI is recommended to ensure the effects of the vehicle strikes has not impacted the post-tensioning system.

The option of lowering the carriageway beneath the structure, as stated in the 2009 report entitled 'M4 Bishton Llanmartin Overbridge Options to Prevent Vehicular Impact Feasibility Report', should be urgently considered again in light of the further vehicle impact and deterioration. Consideration should be also given to restricting the traffic atop the structure in the interim.

1 Introduction

Arcadis has been commissioned by the South Wales Trunk Road Agent (SWTRA), to undertake the Principal Inspections of overbridges, underbridges, footbridges, culverts & retaining walls on the M4.

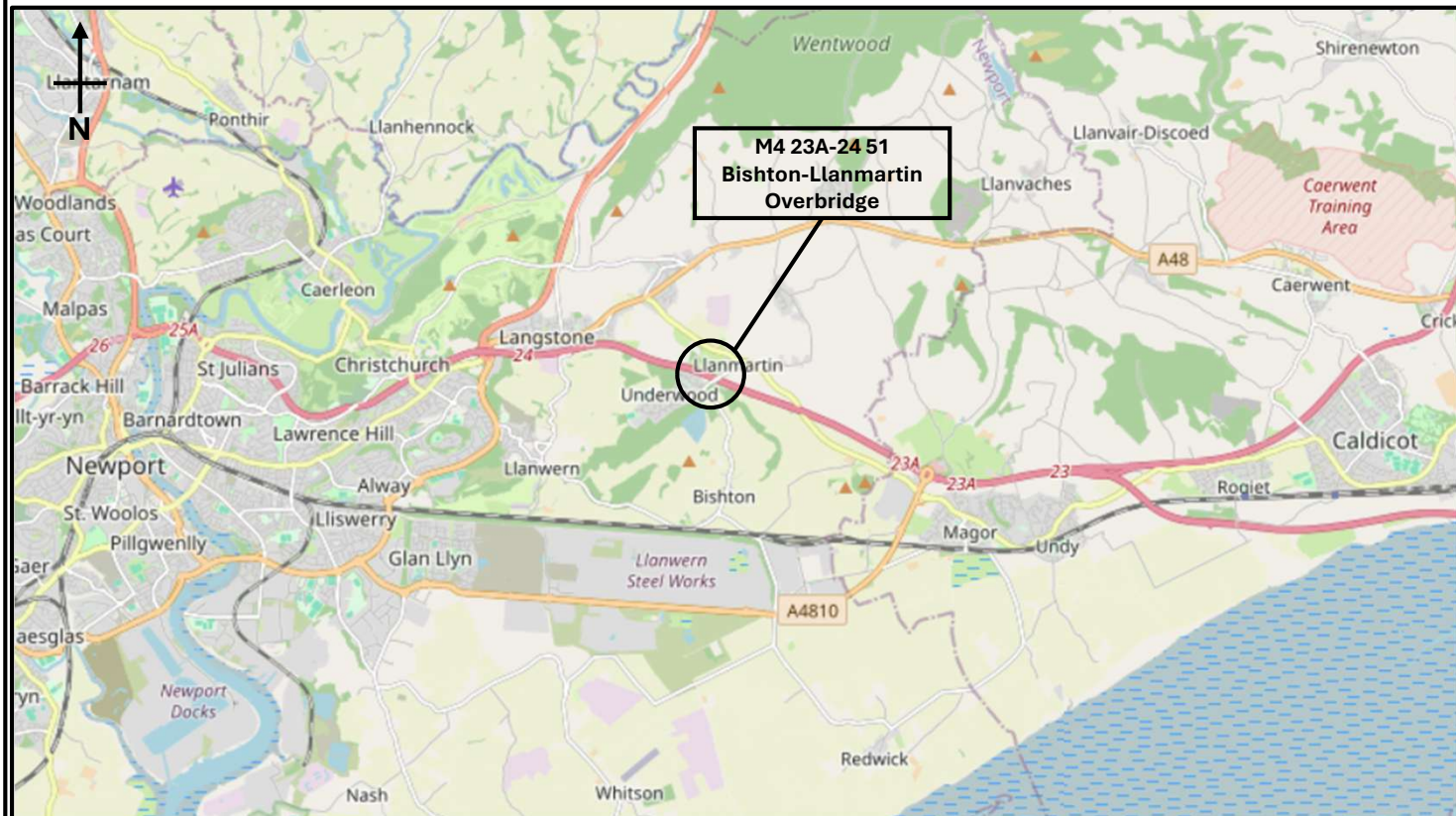
This report presents the findings of the Principal Inspection of M4 23A-24 51, Bishton-Llanmartin Overbridge.

1.1 Location

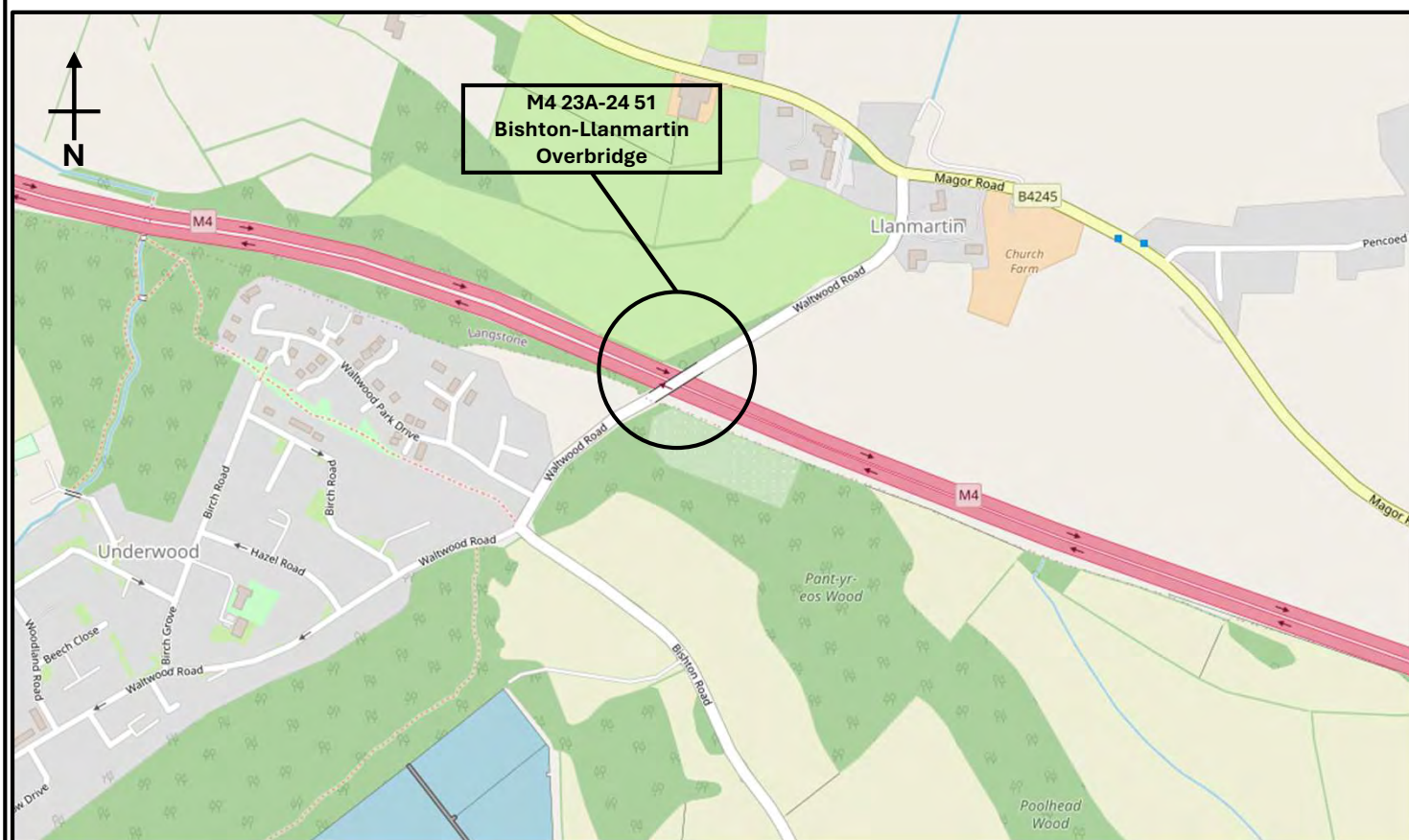
The structure is located along the M4 Motorway approximately 2 miles east of Coldra Roundabout near Newport and carries Waltwood Road over the M4 at Ordinance Survey grid reference 339121, 189225.

A structure location plan, General Arrangement drawing and Roads 277 form are included in this report.

1.2 General Arrangement Drawing & Roads 277 Form



LOCATION PLAN



LOCATION PLAN

1 IN 1/2 EMBANKMENT UNDER THE BRIDGE TO BE REVETTED WITH LIMESTONE BLOCKS LAID TO APPROX. PLANE SURFACE @ AVERAGE THICKNESS, BEDDED ON 3" 1/6 MORTAR AND POINTED IN 1:1 G MORTAR. APPEARANCE SIMILAR TO SQUARED COURSED RUDDLE

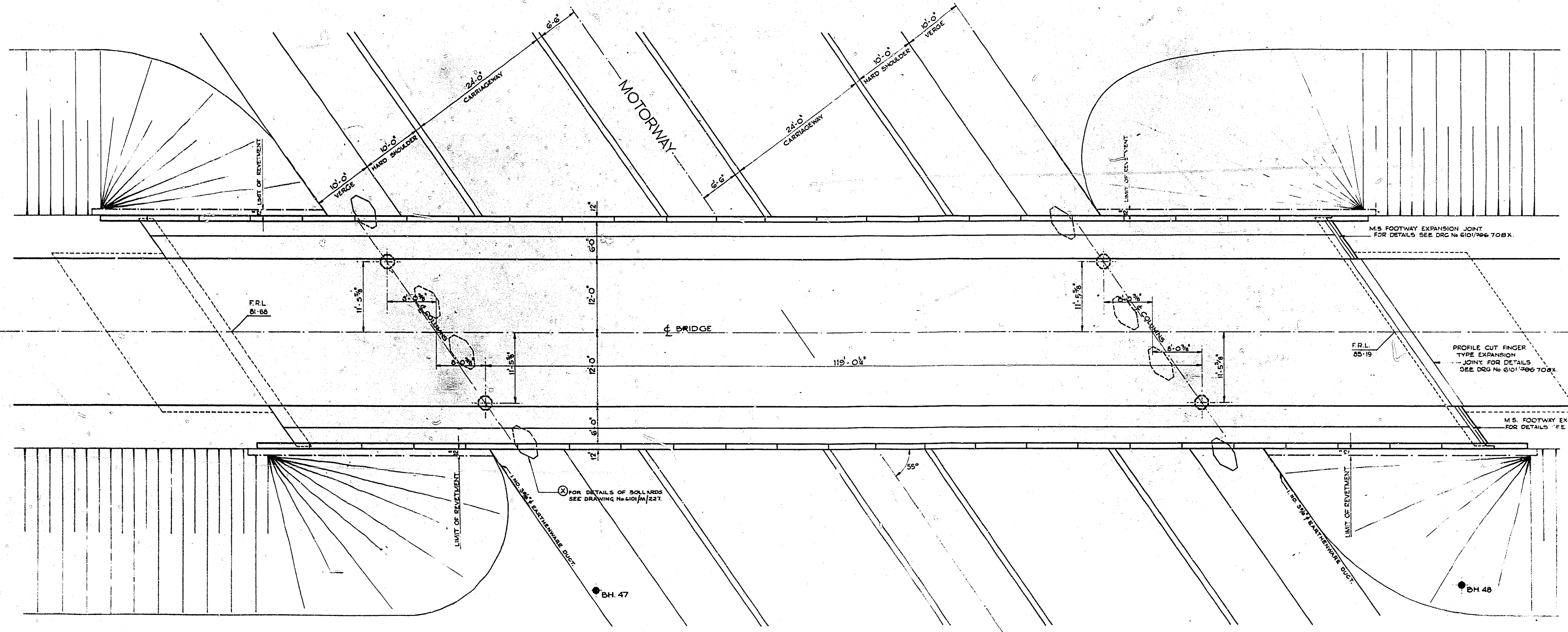
63.09 63.05

ELEVATION
LEVELS UNDER & OVERBRIDGE

1 IN 1/2 EMBANKMENT UNDER THE BRIDGE TO BE REVETTED WITH LIMESTONE BLOCKS LAID TO APPROX. PLANE SURFACE @ AVERAGE THICKNESS, BEDDED ON 3" 1/6 MORTAR AND POINTED IN 1:1 G MORTAR. APPEARANCE SIMILAR TO SQUARED COURSED RUDDLE

60.4
59.4
54.4

GR
TOP
ST
SE
ST
MC
DR
FR
HA



NOTE: STABILITY DURING CONSTRUCTION.
FINAL LONGITUDINAL STABILITY IS PROVIDED BY ANCHORS
INTO THE FINISHED EMBANKMENTS. DURING CONSTRUCTION
THE CONTRACTOR MUST ENSURE STABILITY OF THE
STRUCTURE AND HINGED COLUMNS BY ADEQUATE BRACING
OF THE COLUMNS, OR OTHER SUITABLE METHODS.

MINISTRY OF TRANSPORT
LONDON — SOUTH WALES MOTORWAY
COLDRA — CRICK

BISHTON - LLANMARTIN OVERBRIDGE
GENERAL ARRANGEMENT

G. MAUNSELL & PARTNERS
CONSULTING ENGINEERS
WESTMINSTER, S.W.1.

SCALE 1/8" TO 1'-0"	DATE OCTOBER 1963
DRG. NO. 6101/301 ^x	

STRUCTURE NAME

BISHTON-LLANMARTIN OVERBRIDGE

ROADS 277(REV 4/24) WALES



W.G.	M4 23A-24 51	National Grid Ref:	339121	189225
Structure No.				
W.G. File Ref		Date of issue of form	MARCH 2026	
Current LA	MONMOUTHSHIRE COUNTY COUNCIL	Date of Last Principal Inspection	JULY 2025	
Previous LA	GWENT COUNTY COUNCIL			
Maintaining Agent For Structure	SOUTH WALES TRUNK ROAD AGENT	Structure Owner		
For Road Surface	SOUTH WALES TRUNK ROAD AGENT	If not W.G.		
		Maintaining Agent		
		Structure Ref:		

Min Headroom Clearance *under/over *Motorway/Trunk Road carriageways				
N. Bound / W. Bound	5130	Design Load	UNKNOWN	
S. Bound / E. Bound	5030	Design standard version	-	
* Please delete as necessary		Special loading/restriction	-	
Assessed Capacity HA/HB	HA & 30 UNITS HB	CS 470 Monitoring	YES ☒	NO ☐
Date of Assessment	2010			
CS 461 Parapet Risk Rating	VERY LOW	CS 453 At Risk Support Cat.	-	

Year Structure Commissioned	1966	WGAMP Asbestos Status	Red Asbestos Identified	
Design Office	UNKNOWN			
Does the road go *over/under	UNDER			
*Railway, Canal, River, Road?	ROAD	Is the Structure susceptible to scour?	YES ☐	NO ☒
Railway Bridge Number	N/A	BD 97 Scour Risk Rating	N/A	
		Road/Rail Incursion Score	N/A	
Is the River/Canal Tidal?	YES ☐	NO ☐	Is the Structure on the High Load Route?	YES ☐
Is the River/Canal navigable?	YES ☐	NO ☐	Is the Structure on the Heavy Load Route?	YES ☐
			YES ☐	NO ☒
Name of Navigation/Drainage Authority	N/A	Name of Statutory Undertakers having services on bridge		
Is the Structure scheduled as an Ancient Monument?	YES ☐		NO ☒	

*Please delete as necessary

Materials:	Construction Details
Deck/Wall/Mast (e.g. in situ PSC)	PRECAST POST-TENSIONED I-BEAMS WITH IN-SITU
	REINFORCED CONCRETE DECK SLAB
Type of Construction (e.g. Solid Slab)	BEAMS AND SLAB
Form of Deck (e.g. Propped Cantilever)	3 SPAN CONTINUOUS
End Supports (e.g. Skeleton Abutment)	SKELETON ABUTMENTS
Intermediate Supports (e.g. Slab Wall)	COLUMNS WITH CROSSHEAD INTEGRAL WITH DECK
Nature of Foundations (e.g. Caissons)	CONCRETE PAD FOUNDATIONS
Half joint / Hinge Joint / Post tensioned?	POST-TENSIONED CONCRETE I-BEAMS



Site Plan (1:2500)

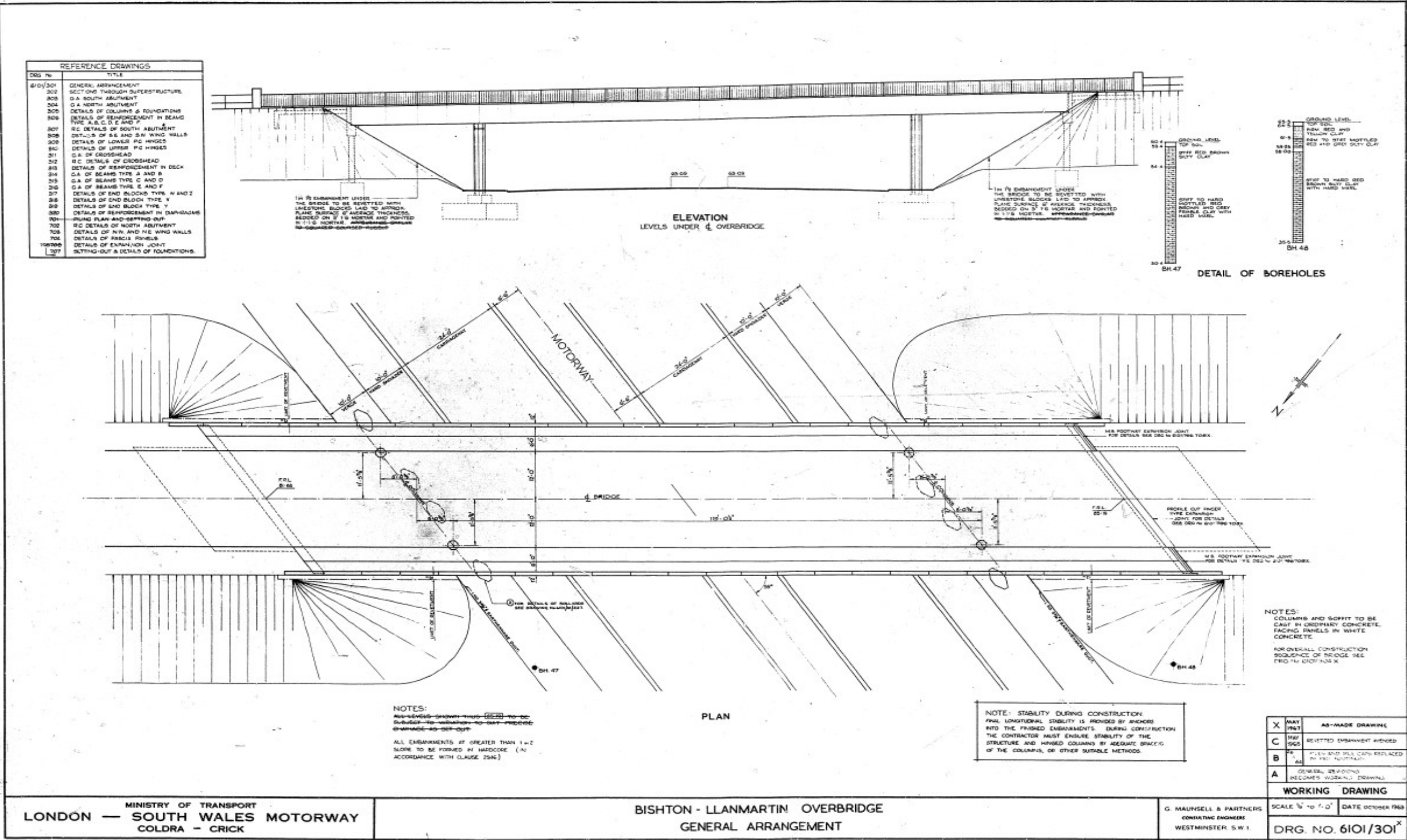


Photographs



Dimensional Elevation, Cross Section and Components of Structure.

Indicate all materials of construction, e.g. steel wrought iron, cast iron, concrete, brick stone etc.
Indicate roadway and pavement widths of the reference road and also of the crossing road where appropriate (include spans)
Indicate type and position of bearings and joints.



		Manufacturer	Type
Paint System:	Parapet		
	Internal		
	External		

		Manufacturer	Type	Position
Bearings*			STEEL POT BEARING	SOUTH ABUTMENT
Joints*			STEEL COMB TOOTH	SOUTH ABUTMENT
Parapets			STEEL PEDESTRIAN GUARDRAIL	
Waterproofing			DEW PITCHMASTIC	

*Indicate on sketch above

2 Description of Structure

2.1 General Description

The structure is located along the M4 Motorway approximately 2 miles east of Coldra Roundabout near Newport and carries Waltwood Road over the M4 at Ordinance Survey grid reference 339121, 189225.

2.2 Form of Construction

The structure is comprised of three spans (10.26m north side, 36.26m main span and 12.18m south side) giving an overall length between abutments of approximately 58.7 m. The deck is comprised of a varying depth in-situ reinforced concrete slab supported on 9 No. longitudinal precast post-tensioned 'I' beams with cast in-situ post-tensioned transverse diaphragms. The supports are constructed of cast in-situ reinforced concrete. The deck acts continuously over the supports as the precast beams were built into the cast in-situ crossheads. The structure is fixed at the north end and with longitudinal movement accommodated at the southern end via pot bearings and a comb tooth expansion joint. Precast concrete parapet fascia panels mask the beams at each elevation and steel pedestrian parapets are fixed to the 0.3 m wide reinforced concrete parapet beams on each side.

There are 27 precast beams, with 9 beams per span. These beams are classified into six types, labelled from Type A to Type F. Each span contains two types of precast beams. The distribution of these six types is as follows: 2 Type A, 7 Type B, 2 Type C, 7 Type D, 2 Type E, and 7 Type F as shown in Figure 1.

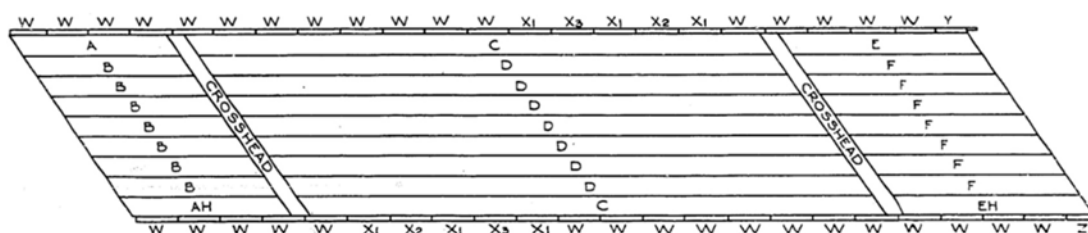


Figure 1 - Layout of types of precast beams and end blocks.

The precast beams are post-tensioned longitudinally through the beam webs, top flanges and bottom flanges. Different beam types have a differing number of tendons that follow differing profiles. Beam types 'A', 'B', 'E' and 'F' each have a total of 2 No. tendons that follow a straight profile. Beam types 'C' and 'D' each have 3 No. tendons in total. One of the 3 No. tendons follows a straight profile and run through the bottom flange. The remaining 2 No. tendons follow a parabolic profile, sagging at midspan and rising towards the end anchorages. The tendons in each beam are arranged vertically adjacent to each other along their full length and are anchored at beam ends. The longitudinal tendons each comprise 7 No. 0.7" (17.78 mm) diameter strands supplied by Cable Covers Limited. The tendon ducts were grouted after stressing.

The deck is post-tensioned transversely through the intermediate cast in-situ transverse diaphragms. In addition to the reinforced concrete cast in-situ end diaphragms, there is 1 No. intermediate diaphragm in each end span and 5 No. intermediate diaphragms in the centre span. Only the intermediate transverse diaphragms are post-tensioned. Each diaphragm is post-tensioned with 3 No 1 ¼" (31.75 mm) Macalloy bars. The bars follow a straight profile, are arranged vertically adjacent to each other and are anchored on the outer elevations of the edge beams. The Macalloy bar ducts were grouted after stressing.

2.3 Assessed Capacity

Following numerous bridge strikes dating back to 1973, an assessment of the structure was undertaken in 2010 to determine the capacity of the structure in its damaged condition. The assessment reported that the structure was capable of 40 Tonne Assessment Live Loading and SV 100 vehicle in conjunction with HA Assessment Live Loading.

A BD 101/11 structural review was undertaken in 2018 following a bridge strike to the eastbound soffit in August 2017. It was concluded that neither the damage nor the update to BD44 since the previous assessment warranted undertaking further assessment.

CS 470 interim measures were introduced in 2022 following a bridge strike. Following a brief road closure, damaged concrete remained present to the precast beams. Weekly inspections were conducted to monitor the damaged concrete, until it was all safely removed. There is no indication from available records to suggest CS 470 measures are ongoing. There are no available records to suggest a further structural assessment of the structure has been undertaken since.

There is evidence of one further bridge strike on WG TEDDMS, dated 7th March 2023, this time on the westbound carriageway. Only 4 images are available so understanding the exact extent of further damage to the structure is not possible.

2.4 Maintenance History

There is evidence of one further bridge strike on WG TEDDMS, dated 7th March 2023, this time on the westbound carriageway. Only 4 images are available so understanding the exact extent of further damage to the structure is not possible.

The structure has a history of bridge strikes dating back to 1973 due to its limited height clearance. Concrete repairs were undertaken to the bottom flanges of the post-tensioned bridge beams over the M4 eastbound carriageway in 2018, following a bridge strike in 2017.

The minimum maintained headroom for an existing structure in TD 27/05 is 5.03m. The headroom clearance was measured in 2018 to be 5.01m on the east face adjacent to the Temporary Vertical Concrete Barrier (TVCB) in the verge of the M4 westbound carriageway. The bridge headroom clearance is therefore not compliant. Historic inspection reports have identified the bearings over the south abutment to be in poor condition and one of the bearings is recorded as having become progressively misaligned since 1972. In 2021 the bearings were replaced to each end of the structure.

Examination of structure records available on WG TEDDMS shows the most recent Routine Maintenance Form dated April 2020. The completed pro forma states that the following work was undertaken:

- Remove any graffiti.
- Cleanse of various drainage systems, including weepholes, drainage pipes, channels, outlet manholes etc.
- Remove vegetation or debris on or around the structure, including weed control.
- Cleanse expansion joints.
- Check & repair fall protection fences.
- Remove general dirt & debris from bearings and bearing shelves.
- Check seating of drainage gratings or covers.
- Check, clean & repair where necessary safety features for pedestrians.
- Check assemblies for loose or missing bolts & tighten where required.
- Remove all loose debris that could be used as missiles to drop from structures.

A full review of the completeness and accuracy of the data held for this structure has not been undertaken as part of the Principal Inspection, as detailed exercises of this nature have been completed previously under discrete briefs from Welsh Government. However, the records available on TEDDMS were reviewed ahead of the inspection, to inform the inspection team. It was evident from this review that no record data was absent.

3 **Description of Inspection**

3.1 **Previous Inspections**

Examination of structure records available on the WG TEDDMS show there are five previous Principal Inspection reports available dating back to 1999, seven previous General Inspection reports dating back to 2007, five Special Inspection reports dating back to 1991, and 11 No. BE11 Inspection Reports dating back to 1972.

The defects identified during the last General Inspection dated September 2023 are as listed below.

Primary Deck Element:

- Areas of spalled concrete with exposed, corroded reinforcement on the deck soffit.
- Longitudinal cracks to the deck soffit.
- Significant impact damage to deck soffit, exposing reinforcement (span 2).

Parapet Beam / Cantilever:

- Minor spalling exposing corroded reinforced concrete to parapet beam.
- Areas of spalled concrete with exposed, corroded reinforcement on the parapet fascia panels.

Abutments:

- Cracks to both abutments.

Pier / Column:

- Areas of spalled concrete with exposed, corroded reinforcement to the NE column (span 2).

Crosshead / Capping Beam:

- Areas of spalled concrete with exposed, corroded reinforcement on the crosshead.
- Hairline crack to north crosshead.

Substructure Drainage:

- Blocked drainage at the back of the south bearing shelf.

Waterproofing:

- Waterproofing de-bonded from deck at location of pothole (adjacent to south joint).
- Areas of calcite staining to soffit (span 3).

Movement / Expansion Joints:

- Water leakage through south expansion joint.
- Surface corrosion to toothcomb joint.
- Worn areas of material on the south expansion joint in the footway and verge at Waltwood Road.
- No crack inducer to buried north joint.

Painting: Parapets / Safety Fences:

- Paint loss to parapets.

Handrail / Parapets / Safety Fences:

- Substandard parapets.
- Ribbons and streamers attached along the parapets.
- Surface corrosion where paintwork has failed (span 1 & 3).
- Surface corrosion to parapet rails and HD bolts (span 2).
- Vegetation partially obscuring parapet (span 3).

Carriageway Surfacing:

- Pothole adjacent to south joint.

Footway / Verge / Footbridge Surfacing:

- Vegetation growth in the footway and verge of Waltwood Road.
- Cracked areas to verge and footway surfacing.
- Exposed and corroded reinforcement visible in footway due to low cover (span 2).

Revetment / Batter Paving:

- Vegetation growth.
- Minor cracks to masonry pointing (span 3).

Wing Walls:

- Minor hairline crack to SE wing wall.

Embankments:

- Vegetation growth.

Approach Rails / Barriers / Walls:

- Lack of barriers does not conform with CD 377.
- Surface corrosion of concrete barrier block connections.

3.2 Details of Inspection

The inspection was carried out in accordance with CS 450: Inspection of Highway Structures contained within the Design Manual for Roads and Bridges, Welsh Government Structures Inspection Manual 2015, and SWTRA's Practical Inspection Methodologies for Principal Inspections.

The inspection was carried out over three shifts, as shown below.

12th June 2025

Inspectors: O. Cull & H. Lees

Time: Daytime, 0900 – 1400

Weather: Wet, approximately 20 degrees Celsius

Access: On foot, parking on Waltwood Road

Traffic Management: Hard shoulder & lane 1 westbound

16th July 2025

Inspectors: O. Cull & A. Rowbury

Time: Overnight, 2000 – 0300

Weather: Cloudy, approximately 15 degrees Celsius

Access: On foot / Mobile elevating works platform, parking within closure

Traffic Management: Hard shoulder, lane 1 & lane 2 westbound

17th July 2025

Inspectors: O. Cull & A. Rowbury

Time: Overnight, 2000 - 0300

Weather: Cloudy, approximately 15 degrees Celsius

Access: On foot / Mobile works elevating platform, parking within closure

Traffic Management: Hard shoulder, lane 1 & lane 2 eastbound

Elements above lane 3 and the central reserve were inspected visually from the lane 2 closures. This included the deck soffit and parapet fascia panels.

Unexposed and buried parts of the structure were not inspected. This included the foundations, waterproofing, deck post-tensioning system and any service ducts.

4 Inspection Report

The following report should be read in conjunction with the photographs included within Appendix A and the defect sketch included within Appendix B. For the sake of simplicity and to avoid confusion, the M4 Motorway will be assumed to run in an east-west direction. The span element naming convention is as follows:

- Span 1 – southernmost.
- Span 3 – northernmost.
- Pier 1 – southernmost.
- Pier 2 - northernmost.
- Deck beams numbered from west (B1) to east (B9).

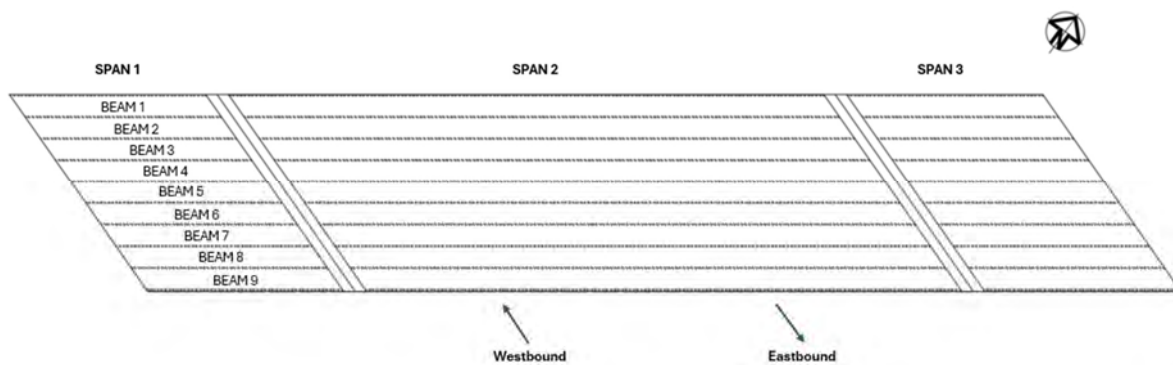


Figure 2 - Schematic plan on bridge deck showing naming conventions used for inspection.

4.1 Primary Deck Element

Span 1 (4, 7-8)

Overall, the span 1 deck soffit was in good to fair condition ⁽⁴⁾. Two areas of spalled concrete with exposed reinforcement exhibiting minor corrosion were noted to the deck soffit. Since the previous Principal Inspection in 2019, the span 1 deck soffit does not appear to have deteriorated.

Span 2 (5, 9-49)

Overall, the span 2 deck soffit was in poor condition, with multiple areas in poor condition ⁽⁵⁾. Multiple areas of spalled concrete, caused by vehicle strikes, with exposed, corroded reinforcement were observed to the bottom flanges of the beams. There is a significant loss of section to multiple beams with potential for loss of capacity. Additionally, longitudinal cracking was noted to the soffits of the beams.

The extent of the spalled areas appears to have significantly deteriorated since the previous Principal Inspection in 2019. It is noted that a bridge strike in March 2022 damaged the concrete I beams, and loose concrete was manually removed. Little details were provided regarding a bridge strike in 2023. It has however been identified during this inspection that the extent of the spalling, loose concrete, evidence of vehicle impact and cracking has greatly increased since the previous Principal Inspection.

Span 3 (6, 50-51)

Overall, the span 3 deck soffit was in good to fair condition ⁽⁶⁾. An area of spalled concrete with exposed, corroded reinforcement was noted to the bottom flange of beam 1. Further, calcite staining was noted to the soffit of beam 1. Since the previous Principal Inspection in 2019, the span 3 deck soffit does not appear to have deteriorated.

4.2 Secondary Deck Element(s) – Transverse Beams

Not applicable.

4.3 Secondary Deck Element(s) – Table G5

Not applicable.

4.4 Half Joints

Not applicable.

4.5 Tie Beams / Rods

Not applicable.

4.6 Parapet Beam or Cantilever

Overall, the parapet beams were in fair condition, with multiple areas in poor condition.

Multiple minor spalls, typically measuring 100x100x10mm, with exposed reinforcement exhibiting minor corrosion were observed to the southeast parapet fascia panels ⁽⁵²⁾.

Within span 2, multiple areas of spalling with exposed, corroded reinforcement were observed to the parapet fascia panels ⁽⁵³⁻⁶¹⁾. Water ingress between the parapet fascia panels and beams was also noted ⁽⁶²⁾. This does not appear to be significantly worse than in the previous inspection.

4.7 Deck Bracing

Not applicable.

4.8 Foundations

The foundations were not exposed for inspection. However, there were no signs of any movement or distress, so the foundations were deemed to be in good condition.

4.9 Abutments

Overall, the abutments appeared to be in good condition. Historic water seepage and algae staining was observed to both abutments ⁽⁶³⁻⁶⁴⁾.

4.10 Spandrel Wall / Headwall

Not applicable.

4.11 Pier / Column

Span 1

Overall, the south intermediate piers were in good condition with no defects observed.

Span 2

Overall, the north intermediate piers were in good condition. A minor spall with exposed reinforcement exhibiting minor corrosion was noted to the northeast column, measuring 200x200x25mm ⁽⁶⁵⁾.

4.12 Crosshead / Capping Beam

Span 1

Overall, the south crosshead was in fair condition. An area of spalling, measuring 650x150x80mm, with exposed reinforcement exhibiting minor corrosion was noted to the west edge of the south crosshead ⁽⁶⁶⁾.

Span 2

Overall, the north crosshead was in fair condition. An area of spalling, measuring 600x100x30mm, with exposed reinforcement exhibiting minor corrosion was noted to the north crosshead ⁽⁶⁷⁾.

4.13 Bearings

Span 1

Overall, the south abutment bearings were in good condition. Isolated surface corrosion was noted to the pot bearings ⁽⁶⁸⁾. Since the previous Principal Inspection in 2019, the abutment bearings have been replaced.

Span 3

The north bearing strip material is cracking ⁽⁶⁹⁾.

4.14 Bearing Plinth / Shelf

Span 1 & 3

The south abutment bearing shelf appeared to be in good condition. However, a build-up of dirt and debris prevented the full inspection of the bearing shelf ⁽⁷⁰⁾.

4.15 Superstructure Drainage

The drainage gully at the southern end of the structure was partially blocked by vegetation and debris ⁽⁷¹⁾.

4.16 Substructure Drainage

Not applicable.

4.17 Waterproofing

The waterproofing system was not exposed for inspection. However, there were no defects that pointed towards the failure of the waterproofing system.

4.18 Movement / Expansion Joints

Span 1

Overall, the south expansion joint was in good condition ⁽⁷²⁾. Isolated, minor corrosion was observed to the south expansion joint ⁽⁷³⁾. Further, a build-up of dirt and debris was noted within the footway expansion joints ⁽⁷⁴⁾.

Span 3

Overall, the northern buried expansion joint was in good condition. However, no crack inducer was present within the carriageway surfacing ⁽⁷⁵⁾. Vegetation growth was also noted to the joint between the parapet panel and northeast wing wall ⁽⁷⁶⁾.

4.19 Painting: Deck Elements

Not applicable.

4.20 Surface Finishes: Superstructure Elements

Not applicable.

4.21 Surface Finishes: Substructure Elements

Not applicable.

4.22 Painting: Parapets / Safety Fences

Overall, the parapet paint system was in fair condition. Isolated breakdown of the paint system was noted to the parapet rails, infill bars, base plate, holding down bolts and welded connections ⁽⁷⁷⁻⁸⁰⁾.

4.23 Access Walkways / Gantries

Not applicable.

4.24 Handrail / Parapets / Safety Fences

Overall, the parapets were in fair condition. Isolated minor corrosion was noted to the parapets where the paint system had broken down ⁽⁷⁷⁻⁸⁰⁾.

4.25 Carriageway Surfacing

Overall, Waltwood Road carriageway surfacing was in good condition. A surfacing repair at the north edge of the southern expansion joint was noted ⁽⁸¹⁾. Minor vegetation growth was also observed at the edges of the carriageway ⁽⁸²⁾. No defects were noted to the M4 carriageway.

4.26 Footway / Verge / Footbridge Surfacing

Overall, the footway surfacing was in fair condition. Cracking was noted to both footways, with minor vegetation growth also observed ⁽⁸³⁾.

4.27 Invert / River Bed

Not applicable.

4.28 Aprons

Not applicable.

4.29 Fenders / Cutwaters

Not applicable.

4.30 River Training Works

Not applicable.

4.31 Revetment***Span 1***

Overall, the south revetement was in fair condition with moderate vegetation growth observed ⁽⁸⁴⁾.

Span 3

Overall, the north revetement was in fair condition with minor vegetation growth observed ⁽⁸⁵⁾.

4.32 Wing Walls

Not applicable.

4.33 Retaining Walls

Not applicable.

4.34 Embankments

Dense vegetation obscured the inspection of the embankments. However, there were no indications of failure to the slope.

4.35 Machinery

Not applicable.

4.36 Approach Rails / Barriers / walls

Dense vegetation growth obscured the full inspection of the approach timber fencing on Waltwood Road ⁽⁸⁶⁾. However, moderate timber decay was noted to the northeast approach fencing ⁽⁸⁸⁾.

Minor surface corrosion was observed to the connections of the TVCBs located in the M4 carriageway verges ⁽⁸⁷⁾.

4.37 Signs

Not applicable.

4.38 Lighting

Not applicable.

4.39 Services

Not applicable.

4.40 Trash Screens

Not applicable.

5 Inspection Form(s)



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004



Asiant Cefnffyrdd De Cymru
South Wales Trunk Road Agent



Yn gweithio ar ran
Llywodraeth Cymru
Working on behalf of the
Welsh Government



Asiant Cefnffyrdd Gogledd a Chanolbarth Cymru
North & Mid Wales Trunk Road Agent

Name: **BISHTON-LLANMARTIN**

Ref No: **M4 23A-24 51**

CSS PRINCIPAL INSPECTION		Inspector: Oliver Cull, Harrison Lees & Anamaria Rowbury		Form 1 of 3 for this structure	
Bridge Name: BISHTON-LLANMARTIN				Date: 17/07/2025	
Bridge Ref/No: M4 23A-24 51			Span Width: 11.60 m		Map Ref: 339121,189225
BCI Span Number: 1		BCI Span Total: 3		Length of Span: 12.18 m	Primary Deck Form: 04 Beam / Girder at or Below Deck Surface
Span description: South abutment to intermediate support 1					Primary Deck Material: C Post -Tensioned Concrete
All above ground elements inspected: Yes			Photographs: Yes		Secondary Deck Form: 24 Slab - No Transverse Beams
Number of construction forms in Bridge/Span: 1					Secondary Deck Material: A Reinforced Concrete

Inspector's Overall Assessment		Condition Indicator and Scores							
Fair		Average Score for structure				Span Score			
		BCI av	78.59	BCS av	1.96	BCI av	85.13	BCS av	1.80
		BCI crit	47.86	BCS crit	2.73	BCI crit	78.88	BCS crit	2.10

Set	No	Element Description	S	Ex	Def	W	P	Cost	M	Comments
Deck Elements	1	Primary Deck Element (Table G4)	2	B	2.2	R	2	2000		Two areas of spalled concrete with exposed reinforcement exhibiting minor corrosion, measuring 1200x100x20mm & 700x100x15mm.
	2	Secondary Deck Element/S - Transverse Beams								
	3	Secondary Deck Element/S - Element From Table G5								
	4	Half Joints								
	5	Tie Beam/Rods								
	6	Parapet Beam Or Cantilever	2	B	2.2	N	-	0		Multiple minor spalls with exposed reinforcement exhibiting minor corrosion to the southeast parapet panels.
	7	Deck Bracing								

Load Bearing Sub Structure	8	Foundations	1	A	6.1	-	-	0		
	9	Abutments (Incl. Arch Springing)	2	C	5.2	N	-	0		Green algae staining and historic water ingress to south abutment face.
	10	Spandrel Wall/Head Wall								
	11	Pier/Column	1	A	2.2	-	-	0		
	12	Cross-head/Capping Beam	2	C	2.2	R	2	2000		Area of spalling with exposed reinforcement exhibiting minor corrosion to west edge of south crosshead, measuring 650x150x80mm.
	13	Bearings	2	B	12.1	N	-	0		Isolated surface corrosion to south bearings.
	14	Bearing Plinth/Shelf	2	B	5.2	RM	1	1		Build-up of dirt and debris to south bearing shelf.

Durability Elements	15	Superstructure Drainage								
	16	Substructure Drainage								
	17	Waterproofing	1	A	14.1	-	-	0		Not exposed for inspection.
	18	Movement/Expansion Joints	2	C	1.1	N	-	0	✓	Isolated minor corrosion to south expansion joint.
	19	Painting: Deck Elements								
	20	Surface Finishes: Superstructure Elements								
	21	Surface Finishes: Substructure Elements	5	C	4.1	P	2	2000		Areas of paint system failure to parapet rails, infill bars, base plates, holding down bolts and welded connections.
	22	Painting: Parapets/Safety Fences								



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004

Name: **BISHTON-LLANMARTIN**

Ref No: **M4 23A-24 51**

Safety Elements	23	Access/Walkways/Gantries								
	24	Handrail/Parapets/Safety Fences	2	C	1.1	R	2	5000		Isolated minor corrosion to parapet rails, infill bars, base plates, holding down bolts and welded connections.
	25	Carriageway Surfacing	2	B	5.2	RM	1	1		Minor vegetation growth to edges of carriageway.
	26	Footway/Verge/Footbridge Surfacing	2	B	5.2	RM	2	1	✓	Vegetation growth to footway.

Other Bridge Elements	27	Invert/River Bed								
	28	Aprons								
	29	Fenders/Cutwaters/Collision Protection								
	30	River Training Works								
	31	Revetment/Batter Paving	2	D	5.2	RM	2	1		Moderate vegetation growth to south revetment.
	32	Wing Walls	1	A	2.2	-	-	0		
	33	Retaining Walls								
	34	Embankments	3	D	5.2	RM	2	1		Moderate vegetation growth.
	35	Machinery								

Ancillary Elements	36	Approach Rails/Barriers/Walls	4	D	5.2	RM	2	1		Dense vegetation growth to south approach barriers.
	37	Signs								
	38	Lighting								
	39	Services								

Other Primary Deck Elements	40	Trash screens								
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Multiple Defects

Element Number	Defect Number	Severity	Extent	Defect	W	P	Cost	Comments
18	1	2	C	5.2	RM	1	£1	Build-up of dirt and debris to south expansion joint in the footway.
26	2	2	C	9.2	N	-	£0	Minor cracking to verge and footway surfacing.

Inspector's Comments

Overall span 1 remains in good to fair condition with the defects present typically minor, and expected with the age and location of the structure.

Name: Oliver Cull, Harrison Lees & Anamaria Rowbury

Digitally sign/date:

Engineer's Comments

The structure was overall in fair condition, albeit the superstructure to span 2 was found to be in poor condition with defects which require immediate attention to prevent further deterioration and to mitigate against hazards to the public.

In alignment with the recommendations of the recent CS 452 Structural Review undertaken in August 2025, it is recommended that an assessment be carried out to ascertain the capacity of the structure. The condition of the deck beams has significantly worsened since the previous Principal Inspection, owing to repeat instances of impact damage. The current condition of the bridge is not considered in the current assessed loading capacity. It is also recommended that the option of lowering the carriageway beneath the structure is progressed, as stated in the conclusion of the 2009 report entitled "M4 Bishton to Llanmartin Overbridge Options to Prevent Vehicular Impact Feasibility Report".

It is recommended that both of these actions are addressed as a matter of priority.

Other defects should be remediated in a timely manner to limit further deterioration.

Name:

Digitally sign/date:



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004

Name: BISHTON-LLANMARTIN

Ref No: M4 23A-24 51

Work Required			
Reference No.	Suggested Remedial Work	Priority	Estimated Cost
1	R - REPAIR / MAINTAIN	2 - Minor	£2,000
12	R - REPAIR / MAINTAIN	2 - Minor	£2,000
14	RM – ROUTINE MAINTENANCE (additional to CS 450)	1 - Insignificant	£1
18	RM – ROUTINE MAINTENANCE (additional to CS 450)	1 - Insignificant	£1
21	P - PAINT	2 - Minor	£2,000
24	R - REPAIR / MAINTAIN	2 - Minor	£5,000
25	RM – ROUTINE MAINTENANCE (additional to CS 450)	1 - Insignificant	£1
26	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
31	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
34	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
36	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004

Name: BISHTON-LLANMARTIN

Ref No: M4 23A-24 51

CSS PRINCIPAL INSPECTION		Inspector: Oliver Cull, Harrison Lees & Anamaria Rowbury		Form 2 of 3 for this structure														
Bridge Name: BISHTON-LLANMARTIN				Date: 17/07/2025														
Bridge Ref/No: M4 23A-24 51			Span Width: 11.60 m		Map Ref: 339121,189225													
BCI Span Number: 2		BCI Span Total: 3		Length of Span: 36.28 m														
				Primary Deck Form: 04 Beam / Girder at or Below Deck Surface														
Span description: Intermediate support 1 to intermediate support 2				Primary Deck Material: C Post - Tensioned Concrete														
All above ground elements inspected: Yes			Photographs: Yes		Secondary Deck Form: 24 Slab - No Transverse Beams													
Number of construction forms in Bridge/Span: 1				Secondary Deck Material: A Reinforced Concrete														
Inspector's Overall Assessment			Condition Indicator and Scores															
Poor			Average Score for structure				Span Score											
			BCI av		78.59		BCS av		1.96		BCI av		74.38		BCS av		2.31	
			BCI crit		47.86		BCS crit		2.73		BCI crit		28.08		BCS crit		4.10	
Set	No	Element Description	S	Ex	Def	W	P	Cost	M	Comments								
Deck Elements	1	Primary Deck Element (Table G4)	4	C	2.2	R	4	100000	✓	Multiple areas of spalled concrete with exposed reinforcement exhibiting corrosion.								
	2	Secondary Deck Element/S - Transverse Beams																
	3	Secondary Deck Element/S - Element From Table G5																
	4	Half Joints																
	5	Tie Beam/Rods																
	6	Parapet Beam Or Cantilever	3	C	2.2	R	4	20000	✓	Areas of spalled concrete with exposed reinforcement exhibiting minor corrosion to parapet fascia panels.								
	7	Deck Bracing																
Load Bearing Sub Structure	8	Foundations	1	A	6.1	-	-	0										
	9	Abutments (Incl. Arch Springing)																
	10	Spandrel Wall/Head Wall																
	11	Pier/Column	2	B	2.2	R	2	2000		Minor spall with exposed reinforcement exhibiting minor corrosion to northeast column, measuring 200x200x25mm.								
	12	Cross-head/Capping Beam	2	B	2.2	R	2	2000		Area of spalling with exposed reinforcement exhibiting minor corrosion to north crosshead, measuring 600x100x30mm.								
	13	Bearings																
	14	Bearing Plinth/Shelf																
Durability Elements	15	Superstructure Drainage	2	B	8.1	RM	2	1		Drainage gully partially blocked by vegetation and debris.								
	16	Substructure Drainage																
	17	Waterproofing	1	A	14.1	-	-	0		Not exposed for inspection.								
	18	Movement/Expansion Joints																
	19	Painting: Deck Elements																
	20	Surface Finishes: Superstructure Elements																
	21	Surface Finishes: Substructure Elements																
	22	Painting: Parapets/Safety Fences	5	C	4.1	P	2	2000		Isolated paint system failure to parapet rails, base plates, holding down bolts and welded connections.								
Safety Elements	23	Access/Walkways/Gantries																
	24	Handrail/Parapets/Safety Fences	2	C	1.1	R	2	5000		Isolated minor corrosion to parapet rails, infill bars, base plates, holding down bolts and welded connections.								
	25	Carriageway Surfacing	2	B	5.2	RM	1	1		Minor vegetation growth to edges of carriageway.								
	26	Footway/Verge/Footbridge Surfacing	2	B	5.2	RM	2	1	✓	Vegetation growth to footway.								



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004

Name: BISHTON-LLANMARTIN

Ref No: M4 23A-24 51

Other Bridge Elements	27	Invert/River Bed								
	28	Aprons								
	29	Fenders/Cutwaters/Collision Protection								
	30	River Training Works								
	31	Revetment/Batter Paving								
	32	Wing Walls								
	33	Retaining Walls								
	34	Embankments								
	35	Machinery								

Ancillary Elements	36	Approach Rails/Barriers/Walls	2	B	1.1	N	-	0		Minor surface corrosion to concrete barriers connection.
	37	Signs								
	38	Lighting								
	39	Services								

Other Primary Deck Elements	40	Trash screens								
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Multiple Defects

Element Number	Defect Number	Severity	Extent	Defect	W	P	Cost	Comments
1	1	3	B	2.3	R	4	£10,000	Longitudinal cracking present to beam soffits, likely caused by vehicle impact.
1	2	2	B	2.5	R	4	£10,000	Multiple areas of delamination to beam soffits.
6	3	2	B	14.1	N	-	£0	Water ingress between parapet fascia panels and deck beams.
26	4	2	C	9.2	N	-	£0	Minor cracking to verge and footway surfacing.

Inspector's Comments

Span 2 was noted to be in poor condition, predominantly due to the extensive evidence of vehicle strikes to the deck soffit. This has resulted in large areas of missing concrete to the main beam flanges, with some areas of delamination and longitudinal cracking all of concern. Other minor defects similar to spans 1 and 3 were also noted.

Name: Oliver Cull, Harrison Lees & Anamaria Rowbury

Digitally sign/date:

Engineer's Comments

The structure was overall in fair condition, albeit the superstructure to span 2 was found to be in poor condition with defects which require immediate attention to prevent further deterioration and to mitigate against hazards to the public.

In alignment with the recommendations of the recent CS 452 Structural Review undertaken in August 2025, it is recommended that an assessment be carried out to ascertain the capacity of the structure. The condition of the deck beams has significantly worsened since the previous Principal Inspection, owing to repeat instances of impact damage. The current condition of the bridge is not considered in the current assessed loading capacity. It is also recommended that the option of lowering the carriageway beneath the structure is progressed, as stated in the conclusion of the 2009 report entitled "M4 Bishton to Llanmartin Overbridge Options to Prevent Vehicular Impact Feasibility Report".

It is recommended that both of these actions are addressed as a matter of priority.

Other defects should be remediated in a timely manner to limit further deterioration.

Name:

Digitally sign/date:



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004

Name: BISHTON-LLANMARTIN

Ref No: M4 23A-24 51

Work Required			
Reference No.	Suggested Remedial Work	Priority	Estimated Cost
1	R - REPAIR / MAINTAIN	4 - Severe Action Needed	£100,000
1	R - REPAIR / MAINTAIN	4 - Severe Action Needed	£10,000
1	R - REPAIR / MAINTAIN	4 - Severe Action Needed	£10,000
6	R - REPAIR / MAINTAIN	4 - Severe Action Needed	£20,000
11	R - REPAIR / MAINTAIN	2 - Minor	£2,000
12	R - REPAIR / MAINTAIN	2 - Minor	£2,000
15	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
22	P - PAINT	2 - Minor	£2,000
24	R - REPAIR / MAINTAIN	2 - Minor	£5,000
25	RM – ROUTINE MAINTENANCE (additional to CS 450)	1 - Insignificant	£1
26	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004

Name: BISHTON-LLANMARTIN

Ref No: M4 23A-24 51

CSS PRINCIPAL INSPECTION		Inspector: Oliver Cull, Harrison Lees & Anamaria Rowbury		Form 3 of 3 for this structure														
Bridge Name: BISHTON-LLANMARTIN				Date: 17/07/2025														
Bridge Ref/No: M4 23A-24 51			Span Width: 11.60 m		Map Ref: 339121,189225													
BCI Span Number: 3		BCI Span Total: 3		Length of Span: 10.26 m														
				Primary Deck Form: 04 Beam / Girder at or Below Deck Surface														
Span description: Intermediate support 2 to north abutment				Primary Deck Material: C Post - Tensioned Concrete														
All above ground elements inspected: Yes			Photographs: Yes		Secondary Deck Form: 24 Slab - No Transverse Beams													
Number of construction forms in Bridge/Span: 1				Secondary Deck Material: A Reinforced Concrete														
Inspector's Overall Assessment			Condition Indicator and Scores															
Fair			Average Score for structure				Span Score											
			BCI av		78.59		BCS av		1.96		BCI av		85.73		BCS av		1.77	
			BCI crit		47.86		BCS crit		2.73		BCI crit		81.00		BCS crit		2.00	
Set	No	Element Description	S	Ex	Def	W	P	Cost	M	Comments								
Deck Elements	1	Primary Deck Element (Table G4)	2	B	2.2	R	2	2000		Area of spalled concrete with exposed reinforcement exhibiting minor corrosion, measuring 500x120x300mm.								
	2	Secondary Deck Element/S - Transverse Beams																
	3	Secondary Deck Element/S - Element From Table G5																
	4	Half Joints																
	5	Tie Beam/Rods																
	6	Parapet Beam Or Cantilever	1	A	2.2	N	-	0		Good condition.								
	7	Deck Bracing																
Load Bearing Sub Structure	8	Foundations	1	A	6.1	-	-	0										
	9	Abutments (Incl. Arch Springing)	2	C	5.2	N	-	0		Green algae staining and historic water ingress to north abutment face.								
	10	Spandrel Wall/Head Wall																
	11	Pier/Column																
	12	Cross-head/Capping Beam																
	13	Bearings	2	B	12.1	N	-	0		Isolated surface corrosion to replacement bearings.								
	14	Bearing Plinth/Shelf																
Durability Elements	15	Superstructure Drainage																
	16	Substructure Drainage																
	17	Waterproofing	2	B	14.1	N	-	0		Not exposed for inspection. Calcite staining indicating water seepage through the deck.								
	18	Movement/Expansion Joints	2	B	5.2	RM	2	1		Vegetation growth to joint between parapet panel and northeast wing wall.								
	19	Painting: Deck Elements																
	20	Surface Finishes: Superstructure Elements																
	21	Surface Finishes: Substructure Elements																
22	Painting: Parapets/Safety Fences	5	C	4.1	P	2	2000		Isolated paint system failure to parapet rails, base plates, holding down bolts and welded connections.									
Safety Elements	23	Access/Walkways/Gantries																
	24	Handrail/Parapets/Safety Fences	2	C	1.1	R	2	5000		Isolated minor corrosion to parapet rails, infill bars, base plates, holding down bolts and welded connections.								
	25	Carriageway Surfacing	2	B	5.2	RM	1	1		Minor vegetation growth to edges of carriageway.								
	26	Footway/Verge/Footbridge Surfacing	2	B	5.2	RM	2	1		✓	Vegetation growth to footway.							



Bridge Inspection Pro Forma

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Name: **BISHTON-LLANMARTIN**

Ref No: **M4 23A-24 51**

Other Bridge Elements	27	Invert/River Bed								
	28	Aprons								
	29	Fenders/Cutwaters/Collision Protection								
	30	River Training Works								
	31	Revetment/Batter Paving	2	B	5.2	RM	2	1		Minor vegetation growth to north revetment.
	32	Wing Walls	1	A	2.2	-	-	0		
	33	Retaining Walls								
	34	Embankments	3	D	5.2	RM	2	1		Moderate vegetation growth.
	35	Machinery								

Ancillary Elements	36	Approach Rails/Barriers/Walls	4	D	5.2	RM	2	1	✓	Dense vegetation growth to north approach barriers.
	37	Signs								
	38	Lighting								
	39	Services								

Other Primary Deck Elements	40	Trash screens								
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Multiple Defects

Element Number	Defect Number	Severity	Extent	Defect	W	P	Cost	Comments
26	1	2	C	9.2	N	-	£0	Minor cracking to verge and footway surfacing.
36	2	2	B	16.1	RM	1	£1	Moderate timber decay to northeast approach barrier.

Inspector's Comments

Overall span 3 remains in good to fair condition with the defects present typically minor, and expected with the age and location of the structure.

Name: Oliver Cull, Harrison Lees & Anamaria Rowbury

Digitally sign/date:

Engineer's Comments

The structure was overall in fair condition, albeit the superstructure to span 2 was found to be in poor condition with defects which require immediate attention to prevent further deterioration and to mitigate against hazards to the public.

In alignment with the recommendations of the recent CS 452 Structural Review undertaken in August 2025, it is recommended that an assessment be carried out to ascertain the capacity of the structure. The condition of the deck beams has significantly worsened since the previous Principal Inspection, owing to repeat instances of impact damage. The current condition of the bridge is not considered in the current assessed loading capacity.

It is also recommended that the option of lowering the carriageway beneath the structure is progressed, as stated in the conclusion of the 2009 report entitles "M4 Bishton to Llanmartin Overbridge Options to Prevent Vehicular Impact Feasibility Report".

It is recommended that both of these actions are addressed as a matter of priority.

Other defects should be remediated in a timely manner to limit further deterioration.

Name:

Digitally sign/date:



Bridge Inspection Pro Forma

Based on Volume 2 Addendum: August 2004

Name: BISHTON-LLANMARTIN

Ref No: M4 23A-24 51

Work Required			
Reference No.	Suggested Remedial Work	Priority	Estimated Cost
1	R - REPAIR / MAINTAIN	2 - Minor	£2,000
18	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
22	P - PAINT	2 - Minor	£2,000
24	R - REPAIR / MAINTAIN	2 - Minor	£5,000
25	RM – ROUTINE MAINTENANCE (additional to CS 450)	1 - Insignificant	£1
26	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
31	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
34	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
36	RM – ROUTINE MAINTENANCE (additional to CS 450)	2 - Minor	£1
36	RM – ROUTINE MAINTENANCE (additional to CS 450)	1 - Insignificant	£1



Asiant Cefnffyrdd De Cymru
South Wales Trunk Road Agent



Yn gweithio ar ran
Llywodraeth Cymru
Working on behalf of the
Welsh Government



Asiant Cefnffyrdd Gogledd a Chanolbarth Cymru
North & Mid Wales Trunk Road Agent

6 **Concrete Testing**

Not applicable.

7 Summary of Defects

A summary of the defects is as follows:

Primary Deck Element:

- Areas of spalling and delamination to the beam soffits with exposed, corroded reinforcement.
- Longitudinal cracking to the beam soffits within span 2.
- Calcite staining to the beam soffits within span 3.

Parapet Beam / Cantilever:

- Multiple minor spalls to the southeast parapet fascia panels, with exposed reinforcement exhibiting minor corrosion.
- Multiple areas of spalling with exposed reinforcement exhibiting minor corrosion to the parapet fascia panels within span 2.
- Water ingress was noted between parapet beams and edge beams.

Abutments:

- Historic water seepage and algae staining to both abutments.

Pier / Column:

- Minor spalling with exposed reinforcement exhibiting minor corrosion to the northeast column.

Crosshead / Capping Beam:

- Areas of spalling with exposed reinforcement exhibiting minor corrosion to both crossheads.

Bearings:

- Isolated surface corrosion to abutment bearings.
- North strip bearing cracking.

Bearing Plinth / Shelf:

- Build-up of dirt and debris to south abutment bearing shelf.

Superstructure Drainage:

- South drainage gully partially blocked by vegetation and debris.

Movement / Expansion Joints:

- Isolated, minor corrosion to south expansion joint.
- Build-up of dirt and debris to south footway expansion joint.
- No crack inducer to north buried joint.
- Vegetation growth to the joint between the parapet panel and northeast wing wall.

Painting: Parapets / Safety Fences:

- Isolated breakdown of the parapet paint system.

Handrail / Parapets / Safety Fences:

- Isolated minor corrosion where parapet paint system had failed.

Carriageway Surfacing:

- Minor vegetation growth at edges of the carriageway.

Footway / Verge / Footbridge Surfacing:

- Cracking to both footways with minor vegetation growth.

Revetment / Batter Paving:

- Moderate vegetation growth to south revetment.
- Minor vegetation growth to north revetment.

Embankments:

- Dense vegetation to all embankments.

Approach Rails / Barriers / Walls:

- Dense vegetation growth obscured full inspection.
- Moderate timber decay to northeast approach fencing.
- Minor surface corrosion to connections of the TVCB.

8 **Condition Statement, Conclusion and Recommendations**

A Principal Inspection was undertaken on 12th June 2025, 16th July 2025 and 17th July 2025 at M4 23A-24 51, Bishton-Llanmartin Overbridge. Overall, the structure was noted to be in fair to poor condition, with Spans 1 and 3 being in fair condition, but Span 2 in poor condition.

The following defects require repair/maintenance:

- Concrete repairs to the beam soffits at areas of, loose concrete, spalling and delamination caused by severe impact damage.
- Concrete repairs to spalled parapet fascia panels.
- Concrete repairs to the northeast pier and crossheads at areas of spalling.
- Clear dirt and debris from south abutment bearing shelf.
- Clear vegetation and debris from drainage gully.
- Clear dirt and debris from south footway expansion joint.
- Clear vegetation from joint between parapet and northwest wing wall.
- Clean off and repaint parapets.
- Clear vegetation from carriageway and footways.
- Clear vegetation from approach fencing, revetments and embankments.
- Replace decayed northeast approach timber fencing.

The following defects require ongoing monitoring:

- Multiple minor spalls to southeast parapet fascia panels.
- Water ingress between parapet fascia panels and deck beams.
- Green algae staining and historic water ingress to both abutments.
- Isolated surface corrosion to south abutment bearings.
- Minor cracking to north abutment strip bearings.
- Isolated minor corrosion to south expansion joint.
- Minor cracking to footway surfacing.
- Minor surface corrosion to the TVCB connections.

It is recommended that an assessment of the structure in its current condition is undertaken due to deterioration to the deck beams since the previous assessment in October 2010. Given the proximity of some of the defects to post-tensioning in the web of each beam, a PTSI is recommended to ensure the effects of the vehicle strikes has not impacted the post-tensioning system.

The option of lowering the carriageway beneath the structure, as stated in the 2009 report entitled 'M4 Bishton Llanmartin Overbridge Options to Prevent Vehicular Impact Feasibility Report', should be urgently considered again in light of the further vehicle impact and deterioration. Consideration should be also given to restricting the traffic atop the structure in the interim.

Appendices

Appendix A – Photographs

Photograph Schedule

Photograph 1 - General view of the structure looking east.
 Photograph 2 - General view of the structure looking west.
 Photograph 3 - General view of Waltwood Road looking north.
 Photograph 4 - General view of the span 1 deck soffit looking south.
 Photograph 5 - General view of the span 2 deck soffit looking south.
 Photograph 6 - General view of the span 3 deck soffit looking east.
 Photograph 7 - Span 1, beam 8. Area of spalling with exposed reinforcement exhibiting minor corrosion and delamination, measuring 1200x100x30mm.
 Photograph 8 - Span 1, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x100x15mm.
 Photograph 9 - Span 2 W/B, beam 1. Area of spalling with exposed reinforcement exhibiting moderate corrosion, measuring 800x80x55mm.
 Photograph 10 - Span 2 W/B, beam 1. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x80x50mm.
 Photograph 11 - Span 2 W/B, beam 4. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 400x80x20mm.
 Photograph 12 - Span 2 W/B, beam 5. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 200x60x35mm.
 Photograph 13 - Span 2 W/B, beam 5. Sporadic areas of spalled concrete with exposed reinforcement exhibiting minor corrosion to the beam soffit.
 Photograph 14 - Span 2 W/B, beam 6. Sporadic areas of spalled concrete with exposed reinforcement exhibiting minor corrosion between the beam & crosshead.
 Photograph 15 - Span 2 W/B, beam 8. Longitudinal crack to deck soffit, 1200mm in length and up to 0.2mm in width.
 Photograph 16 - Span 2 W/B, beam 8. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x80x35mm.
 Photograph 17 - Span 2 W/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 2500x80x100mm.
 Photograph 18 - Span 2, W/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 2000x80x55mm.
 Photograph 19 - Span 2 W/B, beam 9. Area of spalling and loose concrete to edge unit connection.
 Photograph 20 - Span 2 W/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x80x50mm.
 Photograph 21 - Span 2 E/B, beam 1. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 1100x600x100mm.
 Photograph 22 - Span 2 E/B, beam 1. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 3200x60x100mm.
 Photograph 23 - Span 2 E/B, beam 1. Area of delamination, measuring 800x150mm.
 Photograph 24 - Span 2 E/B, beam 1. Area of delamination to end of beam, measuring 200x150mm.
 Photograph 25 - Span 2 E/B, beam 1. Area of spalling & delamination with exposed reinforcement exhibiting minor corrosion, measuring 300x200x40mm.
 Photograph 26 - Span 2 E/B, beam 2. Longitudinal crack to beam soffit, measuring 2500mm in length and up to 0.9mm in width.
 Photograph 27 - Span 2 E/B, beam 2. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x300x100mm.
 Photograph 28 - Span 2 E/B, beam 3. Longitudinal crack, measuring 1700mm in width and up to 0.2mm in width.
 Photograph 29 - Span 2 E/B, beam 3. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 900x120x100mm.
 Photograph 30 - Span 2 E/B, beam 3. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x600x100mm.
 Photograph 31 - Span 2 E/B, beam 3. Area of delaminated concrete, measuring 250x75mm.
 Photograph 32 - Span 2 E/B, beam 3. Area of delamination, measuring 1100x100mm.
 Photograph 33 - Span 2 E/B, beam 4. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 400x40x75mm.
 Photograph 34 - Span 2 E/B, beam 4. Area of spalling and delamination, measuring 1000x200mm.
 Photograph 35 - Span 2 E/B, beam 4. Area of delamination to beam soffit, measuring 600x100mm.
 Photograph 36 - Span 2 E/B, beam 5. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 800x200x100mm.
 Photograph 37 - Span 2 E/B, beam 5. Area of spalling, measuring 300x400x100mm.

Photograph 38 - Span 2 E/B, beam 6. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 300x400x100mm.

Photograph 39 - Span 2 E/B, beam 6. Area of spalling, measuring 400x100x10mm.

Photograph 40 - Span 2 E/B, beam 7. Area of spalling (700x200x100mm) & delamination (200x300mm) with exposed reinforcement exhibiting minor corrosion.

Photograph 41 - Span 2 E/B, beam 7. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 1200x450x100mm.

Photograph 42 - Span 2 E/B, beam 7. Area of delamination, measuring 700x500mm.

Photograph 43 - Span 2 E/B, beam 8. Area of delamination, measuring 800x200mm.

Photograph 44 - Span 2 E/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 900x500x100mm.

Photograph 45 - Span 2 E/B, beam 9. Area of spalling (400x200x35mm) and delamination (1100x250mm).

Photograph 46 - Span 2 E/B, beam 9. Area of delamination (2000x500mm) and spalling (1200x550x100mm) with exposed reinforcement exhibiting minor corrosion.

Photograph 47 - Span 2 E/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x200x100mm.

Photograph 48 - Span 2 E/B, beam 9. Area of delamination & spalling with exposed reinforcement exhibiting minor corrosion, measuring 2000x200x40mm.

Photograph 49 - Span 2 E/B, beam 9. Area of delamination & spalling with exposed reinforcement exhibiting minor corrosion, measuring 1800x200x40mm.

Photograph 50 - Span 3, beam 1. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x120x30mm.

Photograph 51 - Span 3, beam 1. Calcite staining indicating water seepage through the deck.

Photograph 52 - Span 1. Multiple minor spalls with exposed reinforcement exhibiting minor corrosion to southeast parapet panels, measuring 100x100x10mm.

Photograph 53 - Span 2 W/B, east parapet fascia panel. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 600x120x75mm.

Photograph 54 - Span 2 W/B, east parapet fascia panel. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 900x75x75mm.

Photograph 55 - Span 2 W/B, east parapet fascia panel. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x50x75mm.

Photograph 56 - Span 2 W/B, west parapet fascia panel. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x150x35mm.

Photograph 57 - Span 2 W/B, west parapet fascia panel. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 100x120x75mm.

Photograph 58 - Span 2 W/B, west parapet fascia panel. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 2600x300x20mm.

Photograph 59 - Span 2 E/B, west parapet fascia panel. Three areas of spalling exposing reinforcement exhibiting minor corrosion, measuring 1200x100x75mm, 2500x100x75mm, and 300x75x75mm.

Photograph 60 - Span 2 E/B, east parapet fascia panel. Area of spalling measuring 1100x150x20mm.

Photograph 61 - Span 2 E/B, east parapet fascia panel. Three minor spalls, all measuring 200x100x20mm.

Photograph 62 - Water ingress between parapet fascia panels and deck beams.

Photograph 63 - Span 1. Historic water seepage & algae staining to south abutment.

Photograph 64 - Span 3. Historic water seepage & algae staining to north abutment.

Photograph 65 - Span 2, northeast column. Minor spall with exposed reinforcement exhibiting minor corrosion, measuring 200x200x25mm.

Photograph 66 - Span 1, west edge of south crosshead. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 650x150x80mm.

Photograph 67 - Span 2, north crosshead. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 600x100x30mm.

Photograph 68 - Span 1, south abutment. Isolated surface corrosion to bearings.

Photograph 69 - Span 3, north abutment. Minor cracking to strip bearings.

Photograph 70 - Span 1. Build-up of dirt and debris to south bearing shelf.

Photograph 71 - Drainage gully partially blocked by vegetation and debris.

Photograph 72 - Span 1. South expansion joint.

Photograph 73 - Span 1. Isolated minor corrosion to south expansion joint.

Photograph 74 - Span 1. Build-up of dirt and debris to expansion joint in footways, southwest shown.

Photograph 75 - Span 3. No crack inducer to north expansion joint.

Photograph 76 - Span 3. Vegetation growth to joint between parapet panel and northeast wing wall.

Photograph 77 - Isolated minor corrosion to parapet rails where the paint system had failed.

Photograph 78 - Isolated minor corrosion to parapet base plates and holding down bolts.

Photograph 79 - Isolated minor corrosion to parapet welded connections.

Photograph 80 - Span 1. Minor surface corrosion to southeast parapet infill bars.

Photograph 81 - Span 2. Surfacing repair at north edge of southern expansion joint.
Photograph 82 - Minor vegetation growth to edges of carriageway.
Photograph 83 - Vegetation growth and cracking to footway surfacing.
Photograph 84 - Span 1. Moderate vegetation growth to south revetment.
Photograph 85 - Span 3 - Minor vegetation growth to north revetment.
Photograph 86 - Dense vegetation growth to spans 1 & 3 approach fencing.
Photograph 87 - Span 2. Minor surface corrosion to the TVCB connections.
Photograph 88 - Span 3. Moderate timber decay to northeast approach fencing.

Photographs



Photograph 1 - General view of the structure looking east.



Photograph 2 - General view of the structure looking west.



Photograph 3 - General view of Waltwood Road looking north.



Photograph 4 - General view of the span 1 deck soffit looking south.



Photograph 5 - General view of the span 2 deck soffit looking south.



Photograph 6 - General view of the span 3 deck soffit looking east.



Photograph 7 - Span 1, beam 8. Area of spalling with exposed reinforcement exhibiting minor corrosion and delamination, measuring 1200x100x30mm.



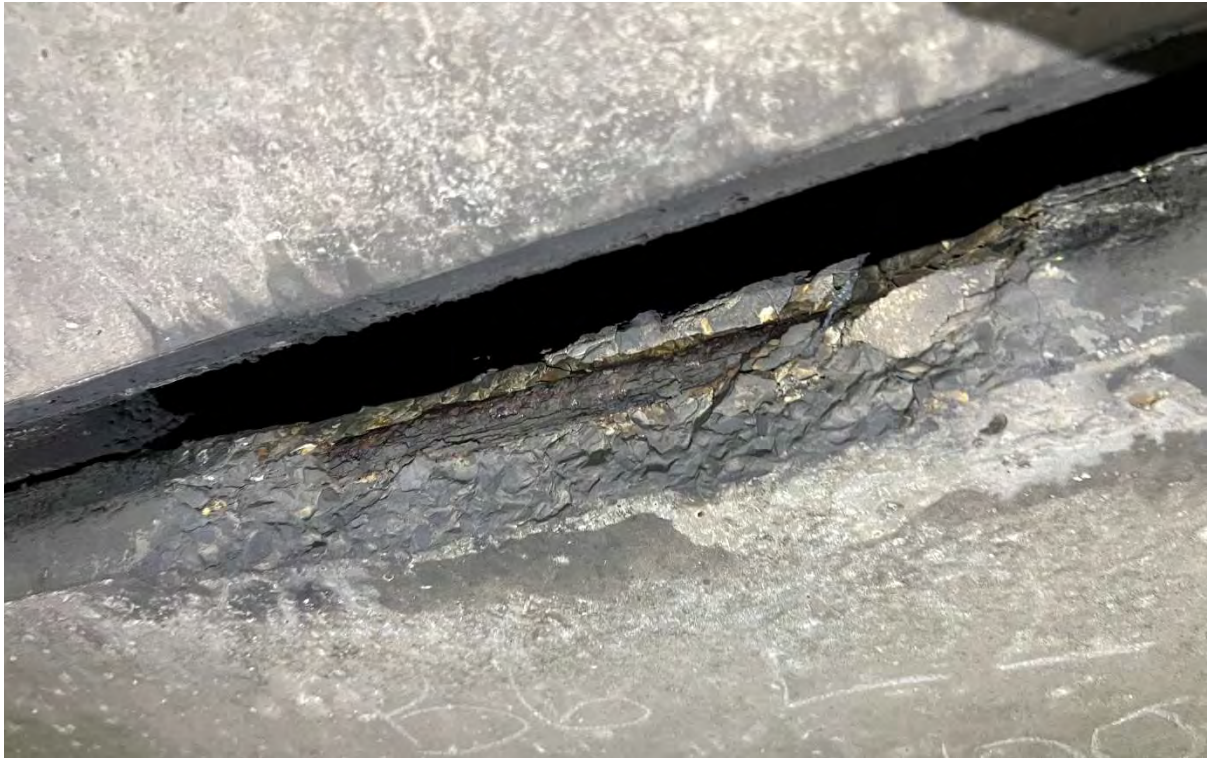
Photograph 8 - Span 1, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x100x15mm.



Photograph 9 - Span 2 W/B, beam 1. Area of spalling with exposed reinforcement exhibiting moderate corrosion, measuring 800x80x55mm.



Photograph 10 - Span 2 W/B, beam 1. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x80x50mm.



Photograph 11 - Span 2 W/B, beam 4. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 400x80x20mm.



Photograph 12 - Span 2 W/B, beam 5. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 200x60x35mm.



Photograph 13 - Span 2 W/B, beam 5. Sporadic areas of spalled concrete with exposed reinforcement exhibiting minor corrosion to the beam soffit.



Photograph 14 - Span 2 W/B, beam 6. Sporadic areas of spalled concrete with exposed reinforcement exhibiting minor corrosion between the beam & crosshead.



Photograph 15 – Span 2 W/B, beam 8. Longitudinal crack to deck soffit, 1200mm in length and up to 0.2mm in width.



Photograph 16 - Span 2 W/B, beam 8. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x80x35mm.



Photograph 17 - Span 2 W/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 2500x80x100mm.



Photograph 18 - Span 2, W/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 2000x80x55mm.



Photograph 19 - Span 2 W/B, beam 9. Area of spalling and loose concrete to edge unit connection.



Photograph 20 - Span 2 W/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x80x50mm.



Photograph 21 - Span 2 E/B, beam 1. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 1100x600x100mm.



Photograph 22 - Span 2 E/B, beam 1. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 3200x60x100mm.



Photograph 23 - Span 2 E/B, beam 1. Area of delamination, measuring 800x150mm.



Photograph 24 - Span 2 E/B, beam 1. Area of delamination to end of beam, measuring 200x150mm.



Photograph 25 - Span 2 E/B, beam 1. Area of spalling & delamination with exposed reinforcement exhibiting minor corrosion, measuring 300x200x40mm.



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Photograph 27 - Span 2 E/B, beam 2. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x300x100mm.



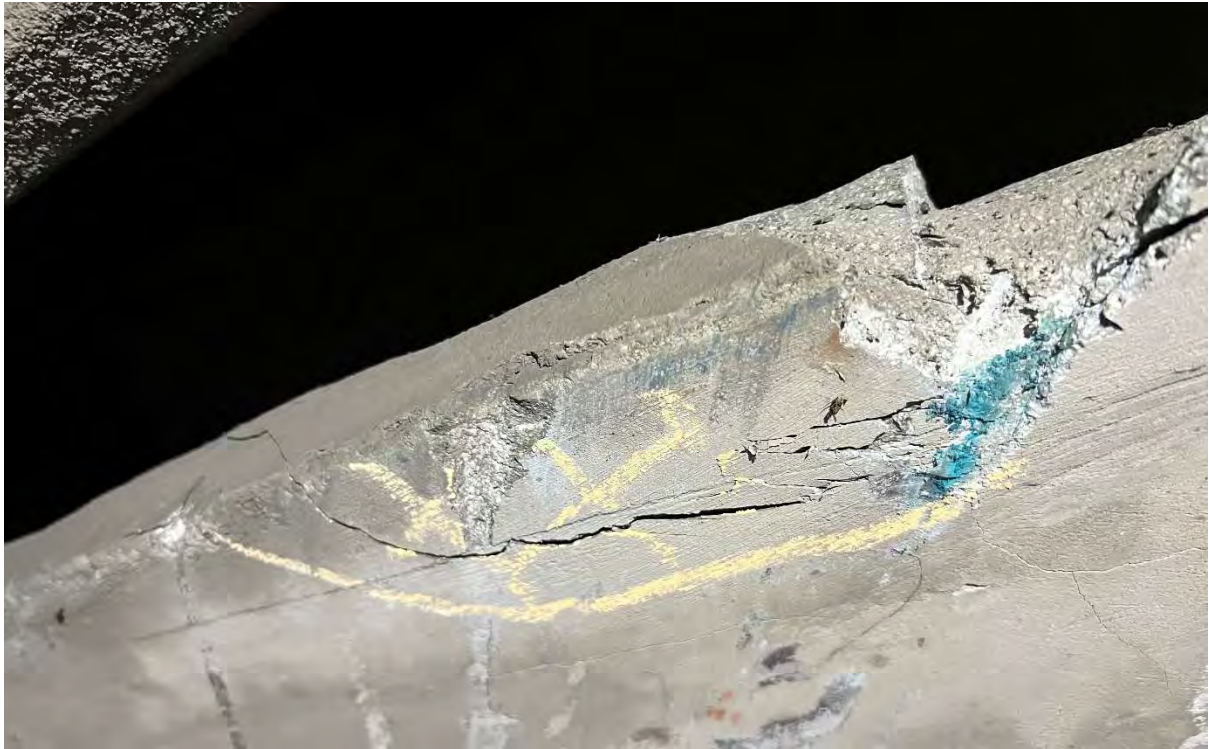
Photograph 28 - Span 2 E/B, beam 3. Longitudinal crack, measuring 1700mm in width and up to 0.2mm in width.



Photograph 29 - Span 2 E/B, beam 3. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 900x120x100mm.



Photograph 30 - Span 2 E/B, beam 3. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x600x100mm.



Photograph 31 – Span 2 E/B, beam 3. Area of delaminated concrete, measuring 250x75mm.



Photograph 32 - Span 2 E/B, beam 3. Area of delamination, measuring 1100x100mm.



Photograph 33 - Span 2 E/B, beam 4. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 400x40x75mm.



Photograph 34 - Span 2 E/B, beam 4. Area of spalling and delamination, measuring 1000x200mm.



Photograph 35 - Span 2 E/B, beam 4. Area of delamination to beam soffit, measuring 600x100mm.



Photograph 36 - Span 2 E/B, beam 5. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 800x200x100mm.



Photograph 37 - Span 2 E/B, beam 5. Area of spalling, measuring 300x400x100mm.



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Photograph 44 - Span 2 E/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 900x500x100mm.



Photograph 45 - Span 2 E/B, beam 9. Area of spalling (400x200x35mm) and delamination (1100x250mm).



Photograph 46 - Span 2 E/B, beam 9. Area of delamination (2000x500mm) and spalling (1200x550x100mm) with exposed reinforcement exhibiting minor corrosion.



Photograph 47 - Span 2 E/B, beam 9. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 500x200x100mm.



Photograph 48 - Span 2 E/B, beam 9. Area of delamination & spalling with exposed reinforcement exhibiting minor corrosion, measuring 2000x200x40mm.



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Photograph 51 - Span 3, beam 1. Calcite staining indicating water seepage through the deck.



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Photograph 58 - Span 2 W/B, west parapet fascia panel. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 2600x300x20mm.



Photograph 59 - Span 2 E/B, west parapet fascia panel. Three areas of spalling exposing reinforcement exhibiting minor corrosion, measuring 1200x100x75mm, 2500x100x75mm, and 300x75x75mm.



Photograph 60 - Span 2 E/B, east parapet fascia panel. Area of spalling measuring 1100x150x20mm.



Photograph 61 - Span 2 E/B, east parapet fascia panel. Three minor spalls, all measuring 200x100x20mm.



Photograph 62 - Water ingress between parapet fascia panels and deck beams.



Photograph 63 - Span 1. Historic water seepage & algae staining to south abutment.



Photograph 64 - Span 3. Historic water seepage & algae staining to north abutment.



Photograph 65 – Span 2, northeast column. Minor spall with exposed reinforcement exhibiting minor corrosion, measuring 200x200x25mm.



Photograph 66 - Span 1, west edge of south crosshead. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 650x150x80mm.



Photograph 67 - Span 2, north crosshead. Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 600x100x30mm.



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Photograph 69 - Span 3, north abutment. Minor cracking to strip bearings.



Photograph 70 - Span 1. Build-up of dirt and debris to south bearing shelf.



Photograph 71 – Drainage gully partially blocked by vegetation and debris.



Photograph 72 - Span 1. South expansion joint.



Photograph 73 - Span 1. Isolated minor corrosion to south expansion joint.



Photograph 74 - Span 1. Build-up of dirt and debris to expansion joint in footways, southwest shown.



Photograph 75 - Span 3. No crack inducer to north expansion joint.



Photograph 76 - Span 3. Vegetation growth to joint between parapet panel and northeast wing wall.



Photograph 77 - Isolated minor corrosion to parapet rails where the paint system had failed.



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Photograph 79 - Isolated minor corrosion to parapet welded connections.



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Photograph 81 - Span 2. Surfacing repair at north edge of southern expansion joint.



Photograph 82 - Minor vegetation growth to edges of carriageway.



Photograph 83 - Vegetation growth and cracking to footway surfacing.



Photograph 84 - Span 1. Moderate vegetation growth to south revetment.



Photograph 85 - Span 3 - Minor vegetation growth to north revetment.



Photograph 86 - Dense vegetation growth to spans 1 & 3 approach fencing.

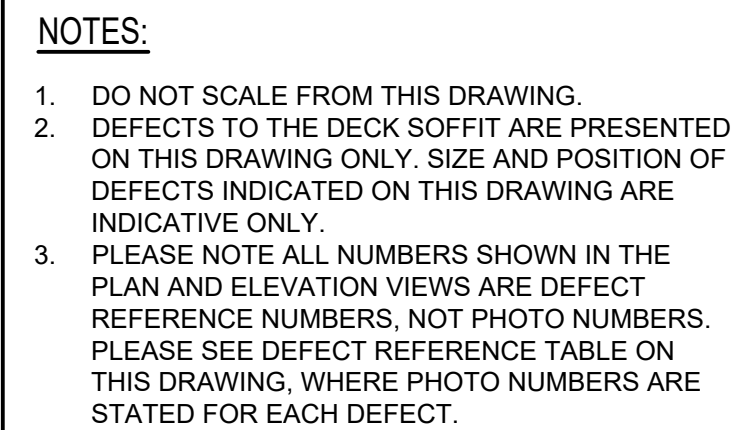


Photograph 87 - Span 2. Minor surface corrosion to the TVCB connections.



Photograph 88 - Span 3. Moderate timber decay to northeast approach fencing.

Appendix B – Defect Sketch



LEGEND:

-  SPALLING
-  CRACKING
-  DELAMINATED CONCRETE
-  CALCITE STAINING

P01	28/11/25	FOR INFORMATION	HL	HC	AB
Rev	Date	Description	Drawn	Check	Approv



PROJECT:
SWTRA PRINCIPAL INSPECTIONS 2025/26

Site	Client
BISHTON-LLANMARTIN OVERBRIDGE M4 23A-24 51	SOUTH WALES TRUNK ROAD AGENT
	Phone
	Fax



Registered office: Arcadis House
34 York Way
London
N1 9AB

Coordinating office:
Unit 17 Innovation Centre
Bridge of Don
Aberdeen AB23 8GX
Tel: 44 (0)1224 822494

www.arcadis.com

TITLE:

BISHTON-LLANMARTIN
M4 23A-24 51
DEFECT SKETCH
SHEET 1 OF 1

Designed	H. LEES	Signed	Date 28/11/2025
Drawn	H. LEES	Signed	Date 28/11/2025
Checked	H. CRABB	Signed	Date 28/11/2025
Approved	A. BRANCH	Signed	Date 28/11/2025
Scale:	As shown	Datum:	AOD
Original Size:	A1	Grid:	OS
Suitability Code:	S2	Project Number:	30286543

Suitability Description:	
FOR INFORMATION	
Drawing Number:	Revision:
30286543-ARC-SBR-M4-DR-CB-00043	P01

DEFECT REFERENCE TABLE	
1	Area of spalling with exposed reinforcement exhibiting minor corrosion and delamination, 1200x100mm (Photo 7)
2	Area of spalling with exposed reinforcement exhibiting minor corrosion, 700x700x15mm (Photo 8)
3	Area of spalling with exposed reinforcement exhibiting minor corrosion, 800x80x55mm (Photo 9)
4	Area of spalling with exposed reinforcement exhibiting minor corrosion, 500x80x50mm (Photo 10)
5	Area of spalling with exposed reinforcement exhibiting minor corrosion, 400x80x20mm (Photo 11)
6	Area of spalling with exposed reinforcement exhibiting minor corrosion, 200x80x35mm (Photo 12)
7	Sporadic areas of spalled concrete with exposed reinforcement exhibiting minor corrosion to the beam soffit (Photo 13)
8	Sporadic areas of spalled concrete with exposed reinforcement exhibiting minor corrosion between the beam & crosshead (Photo 14)
9	Longitudinal crack to deck soffit, 1200mm in length and up to 0.2mm in width (Photo 15)
10	Area of spalling with exposed reinforcement exhibiting minor corrosion, 500x80x35mm (Photo 16)
11	Area of spalling with exposed reinforcement exhibiting minor corrosion, 2500x80x100mm (Photo 17)
12	Area of spalling with exposed reinforcement exhibiting minor corrosion, 2000x80x55mm (Photo 18)
13	Area of spalling and loose concrete to edge joint connection (Photo 19)
14	Area of spalling with exposed reinforcement exhibiting minor corrosion, measuring 700x80x50mm (Photo 20)
15	Area of spalling with exposed reinforcement exhibiting minor corrosion, 1100x600x100mm (Photo 21)
16	Area of spalling with exposed reinforcement exhibiting minor corrosion, 3200x60x100mm (Photo 22)
17	Area of delamination, 800x150mm (Photo 23)
18	Area of delamination at end of beam, 200x150mm (Photo 24)
19	Area of spalling & delamination with exposed reinforcement exhibiting minor corrosion, 300x200x40mm (Photo 25)
20	Longitudinal crack to beam soffit, measuring 2500mm in length and up to 0.9mm in width (Photo 26)

21	Area of spalling with exposed reinforcement exhibiting minor corrosion, 500x300x100mm (Photo 27)
22	Longitudinal crack, measuring 1700mm in width and up to 0.2mm in width (Photo 28)
23	Area of spalling with exposed reinforcement exhibiting minor corrosion 900x120x100mm (Photo 29)
24	Area of spalling with exposed reinforcement exhibiting minor corrosion, 700x600x100mm (Photo 30)
25	Area of delaminated concrete, measuring 250x75mm (Photo 31)
26	Area of delamination, measuring 1100x100mm (Photo 32)
27	Area of spalling with exposed reinforcement exhibiting minor corrosion, 400x40x75mm (Photo 33)
28	Area of spalling and delamination, 1000x200mm (Photo 34)
29	Area of delamination to beam soffit, 600x100mm (Photo 35)
30	Area of spalling with exposed reinforcement exhibiting minor corrosion, 800x200x100mm (Photo 36)
31	Area of spalling measuring 300x400x100mm (Photo 37)
32	Area of spalling with exposed reinforcement exhibiting minor corrosion, 300x400x100mm (Photo 38)
33	Area of spalling, measuring 400x100x100mm (Photo 39)
34	Area of spalling (700x200x100mm) & delamination (200x300mm) with exposed reinforcement exhibiting minor corrosion (Photo 40)
35	Area of spalling with exposed reinforcement exhibiting minor corrosion 1200x450x100mm & delamination 700x500mm (Photo 41-42)
36	Area of delamination to beam soffit, measuring 800x200mm (Photo 43)
37	Area of spalling with exposed reinforcement exhibiting minor corrosion, 900x500x100mm (Photo 44)
38	Area of spalling (400x200x35mm) and delamination (1100x250mm) to beam soffit (Photo 45)
39	Area of delamination 2000x500mm and spalling 1200x550x100mm with exposed reinforcement exhibiting minor corrosion (Photo 46)
40	Area of spalling with exposed reinforcement exhibiting minor corrosion, 500x200x100mm (Photo 47)

41	Area of delamination & spalling with exposed reinforcement exhibiting minor corrosion, 2000x200x40mm (Photo 48)
42	Area of delamination & spalling with exposed reinforcement exhibiting minor corrosion, 1800x200x40mm (Photo 49)
43	Area of spalling with exposed reinforcement exhibiting minor corrosion, 500x120x30mm (Photo 50)
44	Calcite staining indicating water seepage through the deck (Photo 51)
45	Multiple minor spalls with exposed reinforcement exhibiting minor corrosion, 100x100x10mm (Photo 52)
46	Area of spalling with exposed reinforcement exhibiting minor corrosion, 600x120x75mm (Photo 53)
47	Area of spalling with exposed reinforcement exhibiting minor corrosion, 900x75x75mm (Photo 54)
48	Area of spalling with exposed reinforcement exhibiting minor corrosion, 700x50x75mm (Photo 55)
49	Area of spalling with exposed reinforcement exhibiting minor corrosion, 500x150x35mm (Photo 56)
50	Area of spalling with exposed reinforcement exhibiting minor corrosion, 100x120x75mm (Photo 57)
51	Area of spalling with exposed reinforcement exhibiting minor corrosion, 2600x300x20mm (Photo 58)
52	Three areas of spalling exposing reinforcement exhibiting minor corrosion (Photo 59)
53	Area of spalling measuring 1100x150x20mm (Photo 60)
54	Three minor spalls, all measuring 200x100x20mm (Photo 61)

Appendix C – Asbestos Survey Report

Asbestos Management Survey Report

Job Ref No: **681715**, Account Ref No: **23912**, Contract Ref No: **131477**, Structure Key: **M423A-24 51**

M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Title: Management Survey



Registered Office
Unit 5 Abbots Park, Preston Brook,
Runcorn, Cheshire WA7 3GH
E: enquiries@lucionservices.com
T: 0345 5040 303

Issuing Office:
LI - Survey
Lucion Services Ltd, 7 Halifax
Court, Dunston, Gateshead, NE11
9JT



Asiant Cefnffyrdd De Cymru
South Wales Trunk Road Agent

Report Summary

This certificate is for the attention of	Sharon Davies South Wales Trunk Road Agent Neath Port Talbot County Borough Council The Quays Brunel Way Baglan Energy Park Neath SA11 2GG
Contract Title	Asbestos Management Surveys for 2025-26 PI Program
Survey Type	Survey, Management (Highways)
Asset Address	M4 23a - 24 51 Bishton Llanmartin Waltwood Road
Assets Surveyed	M4 23a - 24 51 Bishton Llanmartin Waltwood Road
Structure Key(s)	M423A-24 51
Surveyor(s)	David Wilcox, Kye Tilson
Surveyor signature(s)	 
Survey Date	Monday, 23rd June, 2025, Thursday, 18th December, 2025 - Friday, 19th December, 2025
Analyst(s)	Danielle English
Analyst signature(s)	
Approved signatory	Ashley White
Approved signature	
Approval date	Wednesday, 14th January, 2026
Report Rendered on	Thu 15 Jan 2026 @ 14:00:22

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Asbestos Register and Executive Summary

Scope of Survey

N/A

Summary of Asbestos Containing Materials

Ordered By Risk

Asset	Structure	Inspection Point	Component Examined	Component Material Description	Actions Necessary*	Recommended Initial Control Actions
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant to timber permanent shuttering between deck beam gap	Asbestos-containing Mastic	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Drainage Channels in abutments	Asbestos-containing Bituminous paint replacing PVC	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Coating to buried surfaces	Asbestos-containing bituminous paint	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Undefined permanent shuttering to north abutment	Asbestos-containing insulating board	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Fixings for facing panels	Asbestos-containing Aluminium scaffold tube caulked with mortar or Philplug	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Ducts in verges	Asbestos-containing 4" asbestos cement	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Building paper beneath verges	Asbestos-containing Paper	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Expansion joint in footpaths bed on offcuts	Asbestos-containing Pluvex or similar	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Dressing to prestressed beam Tendons	Asbestos-containing bitumastic	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Coating to Aluminium scaffolding tube fixings	Asbestos-containing bitumen paint	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Undefined permanent shuttering to crosshead	Asbestos-containing insulating board	B	Manage
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Undefined permeant shuttering to deck beams	Asbestos-containing insulating board	B	Manage

Summary of Areas Excluded & Not Fully Accessed During Survey

Asset	Structure	Inspection Point	Component Examined	Accessibility	Access Comments
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	<i>Entire Location</i>	Limited Access	unable to access within deck beam gap
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant to timber permanent shuttering between deck beam gap	Limited Access	Could not be sampled due to reasons of height
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant to south joint between deck beams and Abutment	Limited Access	Physically restricted space
				 Sample taken from accessible areas where material was present. No asbestos detected in sample.	

* As per GG 105 Asbestos Management.

Introduction

This report aims to:

- Introduce pertinent legislation relating to the management of asbestos
- Outline the sample testing and inspection methodology employed by the surveyor
- Relate the significance of the report contents to the Control of Asbestos Regulations (2012) and GG 105 Asbestos Management
- Detail survey findings compliant with GG 105 Asbestos Management
- Serve as a reference document to assist in making further steps towards the management of any asbestos containing materials identified
- Provide the information necessary to compile an asbestos action plan(AAP) compliant with GG 105 Asbestos Management
- Form an asbestos register
- Comply with the requirements of Highways Agency publication GG 105 Asbestos Management (Current Revision)

Assets Included in Survey Scope

Asset Address: **M4 23a - 24 51 Bishton Llanmartin Waltwood Road**

Assets Surveyed: **M4 23a - 24 51 Bishton Llanmartin Waltwood Road**

This survey was conducted in accordance with Health and Safety Guidance - Publication "Asbestos: The Survey Guide" (HSG 264) and GG 105 Asbestos Management (Current Revision). Lucion Services Ltd cannot accept any liability for loss, injury, damage or penalty issues that arise for reasons of survey scope limitations. Lucion Services Ltd cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the nature and necessity of sampling for asbestos some damage is unavoidable and will be limited to that necessary for taking of the samples.

The "areas excluded and not fully accessed during survey" section of this report gives details of those assets, structures and components not accessed at the time of the survey (where appropriate, and if all areas were fully accessed, no items are listed). The "assets surveyed" list above gives details of those assets included in the survey scope. The inspection log should be referenced for details of specific points of inspection within these assets.

Where suspect asbestos containing materials e.g. ceiling finishes, board materials etc exist no attempt (unless otherwise stated) will be made to investigate behind these materials. Lucion Services Ltd has a duty under Regulation 16 of the Control of Asbestos Regulations (2012) to prevent or reduce the spread of asbestos; penetration of such materials without appropriate control measures may be in contravention of this duty. These should however, be accessed during the course of any future demolition / pre-refurbishment surveys commissioned.

The scope of this survey relates only to area(s) inspected and does not include any form of investigation of the land on which any inspected element is situated.

Where investigation of an intrusive nature (within the scope of the survey being performed) is needed to discern the presence of a material and the asset is occupied or in use during the inspection the level of intrusion may be restricted. As far as is reasonably practicable such restrictions will be indicated within the "areas excluded & not fully accessed during survey" section of this report. Scenarios leading to intrusion restriction may [by way of example] include (but are not limited to) integrity of the asset, significant damage to finishes, risk to the structural integrity of the asset, occupation within adjacent areas. Investigations undertaken in such situations may, through circumstantial restrictions, be incomplete. Further investigation works may be required once unrestricted access can be offered.

Items or areas not covered by this survey that are scheduled to undergo works that may result in the release of asbestos fibres should be investigated prior to commencement of such activities.

Asset Data

Lucion Asset ID	344160
Structure Key(s)	M423A-24 51
Asset Address	M4 23a - 24 51 Bishton Llanmartin Waltwood Road
Asset Description	Bridge
Asset Build Date	1966
Asset Construction Type	The deck comprises nine post tensioned concrete I-beams with post tensioned intermediate diaphragms. The abutments, columns and crossheads are all in-situ reinforced concrete.

Survey Methodology

The asbestos survey findings detailed in this report were gathered using documented in house inspection (TOP01.05 Surveying for Asbestos in Highways Structures) and sampling procedures (TOP01.02.02) that implement the requirements of the Health and Safety Executive Publications HSG 264 (Asbestos: The survey guide) and HSG 248 (Asbestos: The analysts' guide for sampling, analysis and clearance procedures). All asbestos surveys aim to locate as far as is reasonable practical, the presence and extent of any ACMs in the asset within the defined scope of the survey (refer HSG 264). This method complies with section 3 of Regulation 4 (CAR, 2012)

HSG 264 Asbestos: The Survey Guide

Publication HSG 264 sub-divides asbestos surveys into 2 principal types, termed: Management and Refurbishment & Demolition surveys respectively. These survey types may be summarised as follows (both have been shown to allow visualisation of the scope of the present management survey relative to the refurbishment & demolition survey specification and their suggested application/s).

Management Survey - Standard Sampling, Identification and Assessment

The underlying purpose and inspection methodology of the management survey is to locate the presence, extent and condition by way of sampling and inspection of suspect asbestos containing materials as they are encountered. Where possible, representative samples of materials suspected by the surveyor to contain asbestos are taken and analysed for the presence and type of asbestos fibre present. This survey is intended for integration into a plan for the management of asbestos containing materials under Regulation 4 of CAR (2012) and GG 105 Asbestos Management. The management surveys offers information allowing routine and simple maintenance works to be carried and this reflects the surveyor's level of intrusion at the time of the inspection. More extensive maintenance or repair work may require additional investigations to be undertaken; the findings of this survey should be checked with this in mind to confirm whether or not they of adequate scope.

Refurbishment & Demolition Survey - Full Access, Sampling and Identification

The refurbishment and demolition survey is fully intrusive (as far as is reasonably practicable) and is aimed at locating all asbestos containing materials within the scope of the survey. Normally, unless otherwise specified, it involves fully invasive and possibly destructive investigation of all survey areas, in order to locate and assess all materials suspected as containing asbestos. The survey records only the location and estimated extent of asbestos containing materials. A priority rating is not assigned to asbestos containing materials encountered as refurbishment and demolition surveys normally precede removal of these materials rather than their management in situ so negating the need to assess their risk (unless asbestos removal work will not take place for some time). This type of survey is normally recommended prior to demolition/ major refurbishment work commencing in the survey area. There is a specific requirement in CAR (2012) (Regulation 7) for all asbestos containing materials to be removed as far reasonably practicable before major refurbishment or final demolition.

Survey Methodology - Important Notes

Reasonable Skill and Care

Although all survey areas that have been examined are reported in accordance with HSG 264 and GG 105 Asbestos Management are documented in house procedures (for the specified survey type) and all reasonable skill and care has been exercised by the surveyor in doing so, it must be realised that no survey can reasonably guarantee beyond doubt that all asbestos containing materials have been located. Reasons for this limitation may include health and safety issues, reasons of practicality, non-access to live equipment and dangerous or contaminated environments or risk of unsafe levels of damage being inflicted on the survey area amongst others, or the location of the material being outside the investigative scope of the survey type undertaken.

ACM/non-ACM Categories

For ACM risk register compilation GG 105 Asbestos Management (current edition) splits component materials of structures and highways into three distinct categories, as follows.

(i) Known ACMs

These are ACMs that have been confirmed analytically by sampling or are clearly stated as such on supplied information i.e.: stated on supplied plans and other documentation as ACMs or a known product type that contains ACMs.

(ii) Presumed ACMs

These are materials where no contradictory information is available and are default presumed to contain ACMs i.e.: unidentified service ducts in bridge decks, unidentified waterproofing layers etc. Appropriate presumptions with appropriate material assessment scores will be made for materials that are visible on site but are not accessible to sample.

(iii) Presumed Non ACM`s and confirmed non ACM`s after testing

These are items which are either:

- Known non-ACMs such as metal railings, in situ- concrete, PVC drainage pipes etc.
- A product identified from the supplied information that has been confirmed as a non-asbestos material that has been verified by either extensive sampling of the exact product type or verification correspondence is available from the supplier in the form of letters/e mails stating categorically that the product does not contain asbestos. Lucion Services Ltd maintains an extensive database of product information and correspondence with manufactures for this purpose. If there is any doubt regards the ACM status of the product type, the item will be classified as a presumed item.

Sampling of Materials

If access to the material permits, a representative sample of the material is taken according to the "sampling strategy". An assessment (where necessary or possible) of the material's extent and condition is made. As no practical sampling strategy can be assured as being entirely representative of the circumstances encountered during surveying,

care should be exercised when interpreting results. That is to say that if works are planned that may cause disturbance or require the removal of asbestos containing materials, implementation of a more intense sampling regime may be desirable.

Desktop Study

A desktop study will be considered if all available information is provided by the client and will be incorporated in to the report. Such information might include as built plans, bridge inspection reports, maintenance information etc.

Material Cross Referencing

In the event of a suspect material being encountered with a frequency that does not permit repeated re-sampling on the grounds of practicality, the surveyor may cross reference this item with one that has already been sampled. To do this the surveyor will ensure that the material is identical in nature (through examining visual appearance e.g. colour) to that of the material to which it is referenced. Nota bene: as no definitive assessment of asbestos fibre type contained in the material may be made, this portion of the priority score is presumed as being the same as that of the material from which it is cross referenced.

Method of Sample analysis

The bulk asbestos fibre identification results detailed in this report and the appended certificate of bulk analysis were obtained using a documented in house testing procedure (TOP01.02.03) that implements the requirements of Health and Safety Executive Publication HSG 248, Appendix 2 (Asbestos: The analysts' guide for sampling, analysis and clearance procedures). All samples collected during the course of this survey are tested in accordance with this method.

HSG 248 Asbestos: The Analysts' Guide for Sampling, Analysis and Clearance Procedures

Publication HSG 248 describes a two stage approach to the detection and subsequent identification of asbestos fibre in bulk (i.e. suspect sample) materials. Initially the microscopist will examine the material under a low power stereo light microscope. The microscopist then performs extensive optical tests using polarised light microscopy in order to confirm or refute that the material contains an asbestos mineral. This technique allows for the detection of the six common forms of asbestos fibre as follows:

Asbestos Fibre Type	Common Nomenclature
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Asbestos Actinolite	N/A
Asbestos Anthophyllite	N/A
Asbestos Tremolite	N/A

The results of this test are given, where appropriate, in the inspection detail report for each sample taken and are summarised in the management recommendation report.

They are also separately detailed in the bulk-analysis report appended to this report. The homogeneity of asbestos containing materials can differ depending on their type. Typically, homogeneous materials include sprayed coatings, insulating board and asbestos cement products. Other materials are typically less homogeneous including pipe lagging (due to patch repairs, hand mixing at time of application), textured coatings (due to low concentration of asbestos fibre and hand application), composites (due to low concentration of asbestos fibre and material matrix) and debris samples (due to the potentially inconsistent occurrences that have led to their presence). Whilst sampling frequencies / techniques and analysis methods attempt to address the issue of non-homogeneity it should be realised that sampling in accordance with HSG 264 and analysis in accordance with HSG 248 cannot always obviate the problems of determining asbestos fibre content in non-homogeneous materials. The results of sample analysis presented in this report therefore pertain to the samples analysed and so relate only to the time at which sampling took place and to the conditions prevailing during that time.

Sampling Strategy

Product Type	Sampling Strategy
Vinyl, composite floor coverings, surface coverings	One sample per location encountered, or one sample per 40m ² per product type or colour. Where large expanses of the same material have been used throughout an area, the frequency of sampling may be decreased at the discretion of the surveyor.
Textured Coatings	One composite sample per location encountered or one sample per 9m ² dependent on similarity of coating type. Where large expanses of the same material have been used throughout an area. The frequency of sampling may be increased or decreased at the discretion of the surveyor.
Gaskets, ropes, woven product, seals, mastics, papers, felts	One sample per product type, or if appropriate, per area or location.
Asbestos containing insulating board	One sample per location or per 25m ² of continuous product run. The frequency of sampling may be increased or decreased at the discretion of the surveyor dependent on such factors as consistency of product type or occurrence of different board types. The specific nature of this material has been determined on site using the competence and experience of the surveyor. Lucion Services accepts no liability for any decision based on this determination and as such it should only be regarded as an opinion. Where doubt exists as to the classification of a board material HSE Approved Code of Practice L143 "Managing and working with asbestos" recommends carrying out a water absorption test. Lucion Services will perform this test only upon specific request.
Cement Products	One sample per product type, or if appropriate, per area or location. The specific nature of this material has been determined on site using the competence and experience of the surveyor. Lucion Services accepts no liability for any decision based on this determination and as such it should only be regarded as an opinion. Where doubt exists as to the classification of a board material HSE Approved Code of Practice L143 "Managing and working with asbestos" recommends carrying out a water absorption test. Lucion Services will perform this test only upon specific request.
Debris	One sample per location, or more at the discretion of the surveyor. Where debris exists in a location quantification can be hindered by a number of factors including paint coverings, air movement, the passage of time etc. The surveyor reports only the material discernable within the confines of the survey sufficient to show that debris exists in a location. Further focused investigation may be needed to determine the extent of debris for the purposes of decontamination.

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Product Type	Sampling Strategy
Insulative Materials	One sample per material product type (to include change in outward appearance) and at least one sample per 10 metre pipe run. In addition, one sample per different product applied to pipe bends.
Sprayed Insulation	One sample per 20m ² of material

Results and Findings

The item examination and inspection findings, bulk analysis results, material assessment and initial risk level assessment are reported in the form of an asbestos inspection and testing detail register. The purpose and structure of this register are explained in the proceeding sections.

Initial Risk Level Assessment

The initial risk level assessments made within this report for those items presumed, or positively proven by sampling and subsequent analysis, to contain asbestos have been made on the basis of the Material Assessment Algorithm detailed within the publications HSG 264 and HSG 227.

This assessment aims to elucidate the potential for a particular material to release hazardous fibres and expose those within the specific area to asbestos dust. The following table gives the scoring strategy for the initial risk level assessment and indicates the scoring degree of those points that are considered, namely product type, condition, surface treatment and asbestos fibre type present.

	Score	Score Category
Product Type An assessment of the inherent risk a product may pose (Product debris is assessed on the product type from which it originates)	1	Asbestos reinforced composites - Plastics / resins / mastics / felts / vinyl tiling / semi rigid paints / decorative finishes / asbestos cement and other such similar bound materials.
	2	Materials of a medium asbestos content including - Asbestos insulating board / millboard / low density insulation board / textiles / gaskets / ropes / papers / debris from asbestos containing composite material and cement.
	3	Materials of a high asbestos content including - Thermal insulation / sprayed asbestos / loose asbestos / packing / filled padding / all other debris.
Material Condition An assessment of the damage or deterioration in condition of product	0	Undamaged - No visible signs of damage
	1	Minor damage - Light material surface abrasion / abrasion to edges
	2	Medium damage - Evidence of loose asbestos fibre protruding from material / poor condition of material is notable
	3	Major damage - Significant damage to materials often resulting in the short-term production of asbestos containing debris / delamination of sprays and thermal insulation / asbestos debris

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	Score	Score Category
Surface Treatment An assessment of the level of fibre retention the surface of a material may be capable of	0	Composite materials - Plastics / resins / mastics / felts / vinyl tiling / semi rigid paints / decorative finishes
	1	Sealed and enclosed materials - Painted asbestos insulating board (with exposed face painted or encapsulated) / enclosed asbestos lagging and sprayed asbestos (as originally installed) / unsealed asbestos cement products
	2	Unsealed and encapsulated materials - Unsealed asbestos insulating board / asbestos lagging, sprayed asbestos and woven material encapsulated (remedially)
	3	Unsealed friable materials - Unsealed asbestos lagging and sprayed asbestos
Asbestos Fibre Type An assessment of asbestos fibre types propensity to cause asbestos related diseases	1	Serpentine Asbestos - Chrysotile
	2	Amphibole Asbestos - Amosite / Anthophyllite / Tremolite / Actinolite
	3	Amphibole Asbestos - Crocidolite

Material / Accessibility Score

Following the rating of a material using the above criteria, the resulting aggregated additive material score may be assessed in terms of accessibility to derive an assessment of action level as follows:

Disturbance Rating	No Asbestos Identified	Material Score < 4	Material Score 5-6	Material Score 7-9	Material Score 10 +
Low Chance (1)	A	B	B	B	C
Medium (2)	A	B	B	C	D
High Chance of Disturbance (3)	A	B	C	D	D

General Interpretation of Action Level

Action Level	[1]
A	indicates those materials or asset elements which are known not to contain asbestos as a result of a direct test, or presumed to be non ACM because of age or constituent material. More detail can be found in HSG264
B	indicates ACMs which as a result of the survey and assessment process have a low score and can be left in place and managed. This will also include materials which were not investigated in the survey because they were hidden, buried and not likely to be disturbed during most work activities.
C	indicates known ACMs which as a result of assessment are in a condition which requires repair, sealing, covering or other means of encapsulation to prevent fibre release. When work has been carried out these elements should be regraded to Action Level A or B in the register.
D	indicates known ACMs which as a result of assessment are in a condition such that the material should be removed and replaced with non-ACM.

Recommendations

In addition to the action level assigned to materials, a management control recommendation is also made (for presumed and identified asbestos containing materials). It must be realised that this/these management recommendations are made on the basis of prevailing material conditions and access at the time of the survey and as such

1. Interpretation of the Recommended Control Action level is determined on the basis of information collated during the course of the survey. The action level needs to be reviewed periodically, (normally in line with a frequency defined in an asbestos action plan) to verify its validity and prior to any refurbishment work within the asset. This risk assessment may account for greater knowledge of the material's location (i.e. greater than that of the surveyor at the time of survey) or knowledge (current or future) of activities or works surrounding or concerning the material. Note: this risk level assessment is outside Lucion's scope of UKAS accreditation.

are intended solely as a guide to assist in the effective control of the materials concerned. Where doubt may be raised about the action that should be taken regarding an asbestos containing material, measures should be implemented to a degree that reflect either those of a higher risk or a more in depth risk assessment should be carried out. This risk assessment may account for greater knowledge of the material's location (i.e. greater than that of the surveyor at the time of survey) or knowledge (current or future) of activities or works surrounding or concerning the material.

The current recommendations conventionally made by the surveyor may include the following:

Recommendation	Description	Notes
Manage	Management actions may include periodic reinspection.	
Seal	Sealing of the material in a manner that ensures the complete enclosure of any remaining asbestos fibres.	Sealing of materials is a possible alternative to their removal, where reasonable safe to do so. Works should also be accompanied by appropriate air test performed by a UKAS accredited laboratory.
Remove	Removal of the material in instances where its remaining would lead to high residual risk level. Or to permit work within the location. Removal of materials may also be carried out on a preventative basis.	Removal works should be carried out in accordance with relevant ACOP (approved code of practice), L143.
<i>Any recommendations made within this report are made on the basis of findings collated at the time of survey and during the desktop study.</i> <i>Recommendations should undergo careful client evaluation prior to a final management decision being made.</i> <i>Lucion Services Ltd does not accept any responsibility for any works carried out as a result of recommendations made within this report.</i> <i>Recommendations given here are as per GG 105 Asbestos Management (Current Revision) and as such Lucion Services Ltd accept no liability of selection.</i>		

Cited References and Further Reading

1. Control of Asbestos Regulations (2012) ~ The Stationery Office. **ISBN 978-0111521083**
2. Construction (Design and Management) Regulations (2015) ~ The Stationery Office. **ISBN 9780717666263**
3. The Hazardous Waste (England and Wales) Regulations (2005) ~ The Stationery Office. **ISBN 011072685-5**
4. Managing and working with asbestos Control of Asbestos Regulations 2012. Approved Code of Practice & guidance L143 (second edition, 2013) ~ HSE Books. **ISBN 978-0717666188**
5. A Comprehensive Guide to Managing Asbestos in Premises (2002) ~ HSE Books. **ISBN 978-0717623815**
6. Asbestos Essentials: A task manual for building, maintenance and allied trades of non-licensed asbestos work (third edition, 2012) ~ HSE Books. **ISBN 978-0717665037**
7. [Asbestos Essentials Task Sheets \[http://www.hse.gov.uk/asbestos/essentials/ \]](http://www.hse.gov.uk/asbestos/essentials/) ~ HSE. *electronic downloadable version of the above*
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10. Asbestos: The Survey Guide HSG 264 (second edition, 2012) ~ HSE Books. **ISBN 978-0717665020**
11. The Management of Health and Safety at Work Regulations (1999) ~ The Stationery Office. **ISBN 011085625-2**
12. The Health & Safety at Work etc. Act (1974) ~ The Stationery Office.
13. Design manual for roads and bridges. Part 4. Asbestos management in trunk road assets. GD 5/16. Highways England, Transport Scotland, Welsh Government or the Department for Infrastructure Northern Ireland.

Management Recommendation Detail

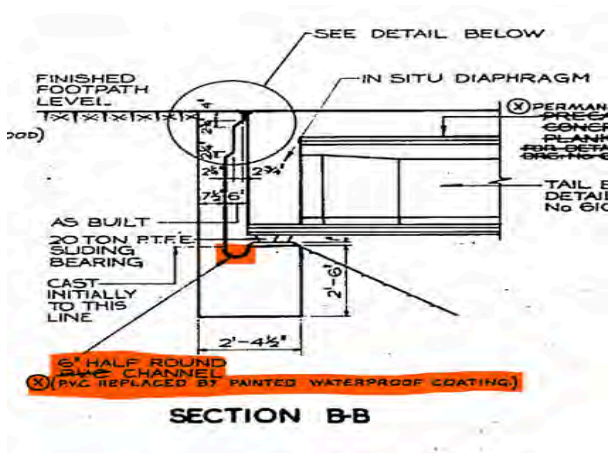
Asset	Structure	Inspection Point	Component Examined	Sample No.	Findings Source	Component Material Description	Fibre Type	Material Score	Extent	Action Level	Recommended Initial Control Actions	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant to timber permanent shuttering between deck beam gap	N/A	Onsite Findings	Asbestos-containing Mastic	Presume Chrysotile	3	Extensive	B	Manage	
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Drainage Channels in abutments	N/A	Desktop Findings	Asbestos-containing Bitumous paint replacing PVC	Chrysotile	3	Extensive	B	Manage	

table continued from previous page...

Asset	Structure	Inspection Point	Component Examined	Sample No.	Findings Source	Component Material Description	Fibre Type	Material Score	Extent	Action Level	Recommended Initial Control Actions	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Coating to buried surfaces	N/A	Desktop Findings	Asbestos-containing bituminous paint	Chrysotile	3	Extensive	B	Manage	
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Undefined permanent shuttering to north abutment	N/A	Desktop Findings	Asbestos-containing insulating board	Amosite	7	Extensive	B	Manage	

table continued from previous page...

Asset	Structure	Inspection Point	Component Examined	Sample No.	Findings Source	Component Material Description	Fibre Type	Material Score	Extent	Action Level	Recommended Initial Control Actions	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Fixings for facing panels	N/A	Desktop Findings	Asbestos-containing Aluminium scaffold tube caulked with mortar or Philplug	Chrysotile	3	Extensive	B	Manage	
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Ducts in verges	N/A	Desktop Findings	Asbestos-containing 4" asbestos cement	Crocidolite	6	2 No.	B	Manage	

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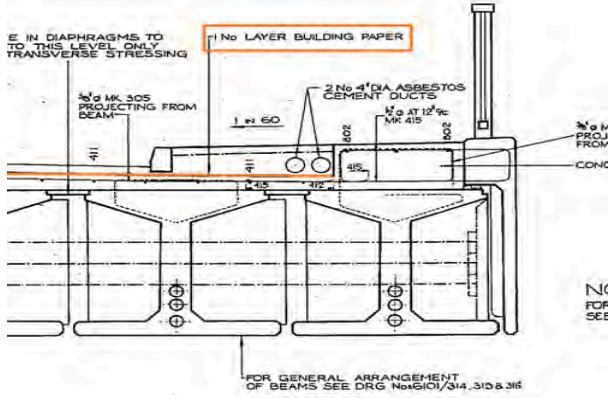
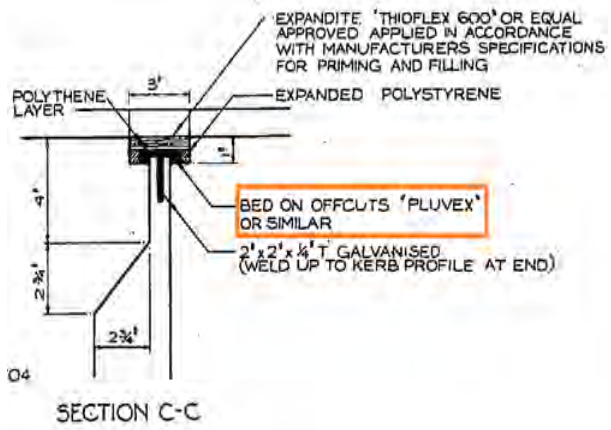
Asset	Structure	Inspection Point	Component Examined	Sample No.	Findings Source	Component Material Description	Fibre Type	Material Score	Extent	Action Level	Recommended Initial Control Actions	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Building paper beneath verges	N/A	Desktop Findings	Asbestos-containing Paper	Chrysotile	5	Extensive	B	Manage	
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Expansion joint in footpaths bed on offcuts	N/A	Desktop Findings	Asbestos-containing Pluvex or similar	Chrysotile	3	Extensive	B	Manage	

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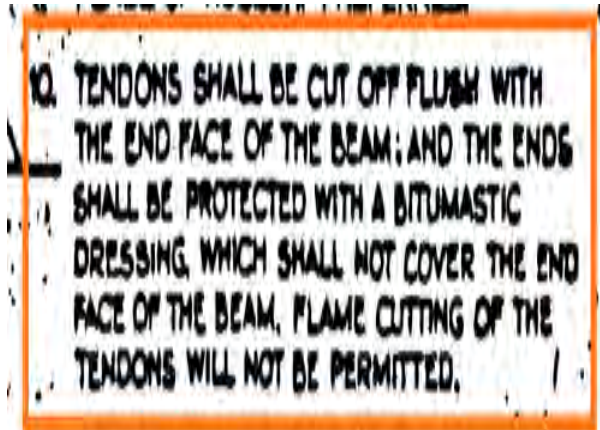
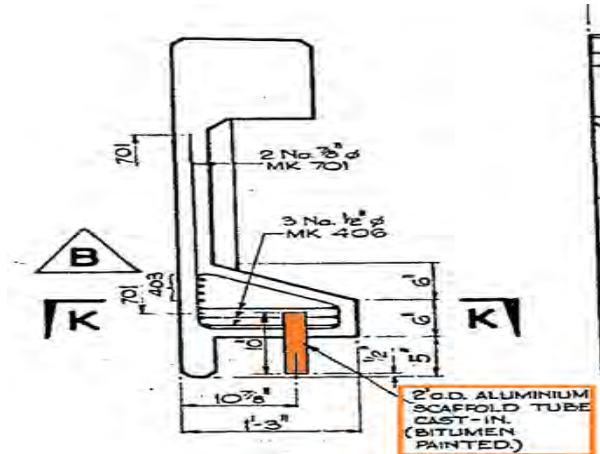
Asset	Structure	Inspection Point	Component Examined	Sample No.	Findings Source	Component Material Description	Fibre Type	Material Score	Extent	Action Level	Recommended Initial Control Actions	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Dressing to prestressed beam Tendons	N/A	Desktop Findings	Asbestos-containing bitumastic	Chrysotile	3	Extensive	B	Manage	
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Coating to Aluminium scaffolding tube fixings	N/A	Desktop Findings	Asbestos-containing bitumen paint	Chrysotile	3	Extensive	B	Manage	

table continued from previous page...

Asset	Structure	Inspection Point	Component Examined	Sample No.	Findings Source	Component Material Description	Fibre Type	Material Score	Extent	Action Level	Recommended Initial Control Actions	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Undefined permanent shuttering to crosshead	N/A	Desktop Findings	Asbestos-containing insulating board	Amosite	8	Extensive	B	Manage	
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Undefined permeant shuttering to deck beams	N/A	Desktop Findings	Asbestos-containing insulating board	Amosite	8	Extensive	B	Manage	

Areas Excluded & Not Fully Accessed During Survey

⊖ Asbestos should be presumed to be present within Locations and Items not accessed until a further assessment can be performed.

 Additional surveyor comments.

Asset	Structure	Inspection Point	Component Examined	Accessibility	Access Comments	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Entire Location	Limited Access	unable to access within deck beam gap	
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant to timber permanent shuttering between deck beam gap	Limited Access	Could not be sampled due to reasons of height	

table continued from previous page...

Asset	Structure	Inspection Point	Component Examined	Accessibility	Access Comments	Photograph
M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant to south joint between deck beams and Abutment	Limited Access	Physically restricted space	
				🗨 Sample taken from accessible areas where material was present. No asbestos detected in sample.		

Survey Inspection Detail, Sample Test Report and Action Level Report

🛑 Asbestos should be presumed to be present within structures and components not accessed until a further assessment can be performed.

Additional surveyor comments.

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



⚠ Limited Access: unable to access within deck beam gap

Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Piers	Concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road							Structure: Bridge			Inspection Point: substructure		
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Revetment	LimeStone blockwork and concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Bearing shelves	Concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road								Structure: Bridge		Inspection Point: substructure			
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Bearings	Modern - Metal and PTFE bonded with epoxy resin	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road								Structure: Bridge		Inspection Point: substructure		
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Abutments	Concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road								Structure: Bridge		Inspection Point: substructure		
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Underside of deck beams	Concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road								Structure: Bridge		Inspection Point: substructure			
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Permanent shuttering to deck beam gap	Timber	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road					Structure: Bridge			Inspection Point: substructure				
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Sealant to timber permanent shuttering between deck beam gap	Asbestos-containing Mastic	Presume	N/A	Onsite Findings	Extensive	1	1	0	Presume Chrysotile	3	Low	
 Limited Access: Could not be sampled due to reasons of height												
B												

B

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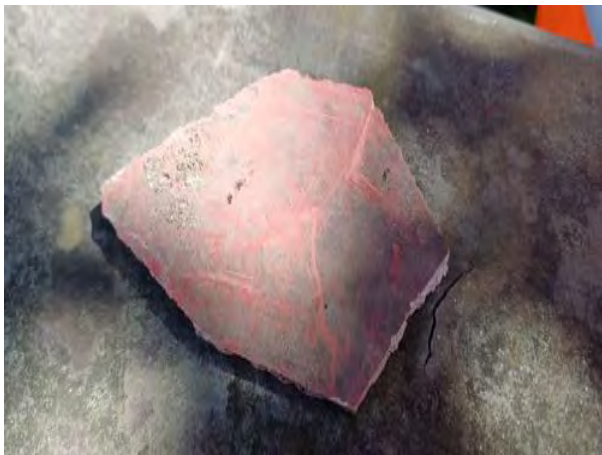
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road					Structure: Bridge			Inspection Point: substructure				
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Red coated cement debris to Revetment	Cement	Sample	681715-4	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A		
No asbestos detected in sample												NAD

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road					Structure: Bridge					Inspection Point: substructure		
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Sealant between abutment and deck joint	Bituminous product	Sample	681715-5	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A		
 No asbestos detected in sample												NAD

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road									Structure: Bridge		Inspection Point: substructure	
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Sealant to south joint between deck beams and Abutment	Mastic	Sample	681715-6	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A		
⛔ Limited Access: Physically restricted space 🗨️ Sample taken from accessible areas where material was present. No asbestos detected in sample.												NAD

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge Inspection Point: substructure



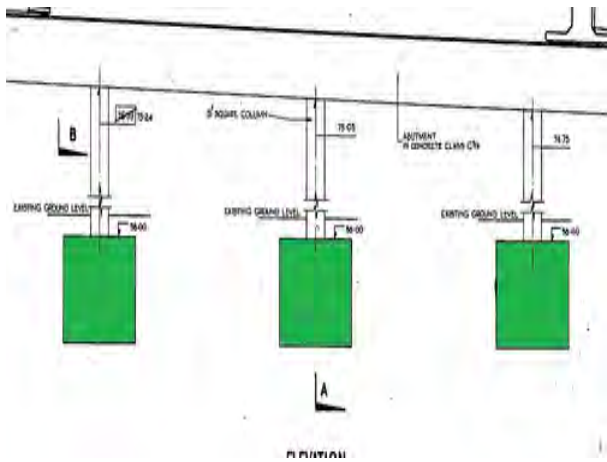
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Foundations	Concrete spread footings	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Item is a known non-asbestos containing material												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Deck fixing bars through deck into rear of ballast wall	Metal	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CONSTRUCTION SEQUENCE OF BRIDGE: 1. MAIN COLUMNS AND CROSSHEADS CONSTRUCTED, AND ABUTMENT COLUMNS AND BEAMS CONSTRUCTED UP TO LEVEL OF REBATE. COMPLETELY ADEQUATE BRACING MUST BE PROVIDED BETWEEN THE HINGED COLUMNS TO ENSURE THE STABILITY OF THE WHOLE STRUCTURE UNTIL THE ANCHOR BEAMS ARE CAST INTO THE APPROACH EMBANKMENTS.
Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Drains from abutment sump	3" PVC	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



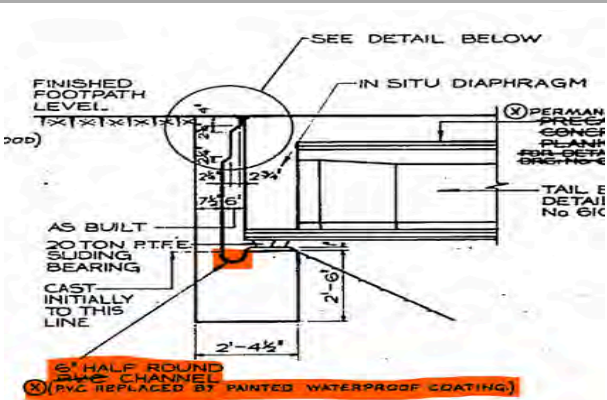
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Drainage Channels in abutments	Asbestos-containing Bituminous paint replacing PVC	Desktop Finding	N/A	Desktop Findings	Extensive	1	1	0	Chrysotile	3	Low	
Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Joint filler to north abutment	Flexcell	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	0	0	N/A	N/A	Low	
Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Coating to buried surfaces	Asbestos-containing bituminous paint	Desktop Finding	N/A	Desktop Findings	Extensive	1	1	0	Chrysotile	3	Low	

Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Undefined permanent shuttering to north abutment	Asbestos-containing insulating board	Desktop Finding	N/A	Desktop Findings	Extensive	2	1	2	Amosite	7	Low	
Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: substructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
In north abutment Material at top of revetment at interface between abutment and deck	Bonded cork strip	NO: Desktop Finding	N/A	Desktop Findings	Extensive	1	1	0	N/A	N/A	Low	

Item is a known non-asbestos containing material.

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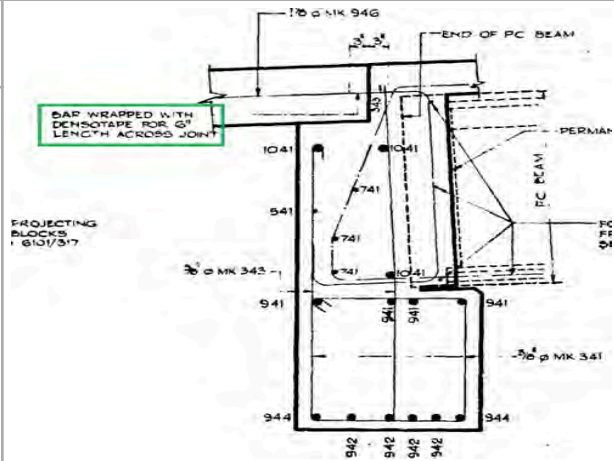
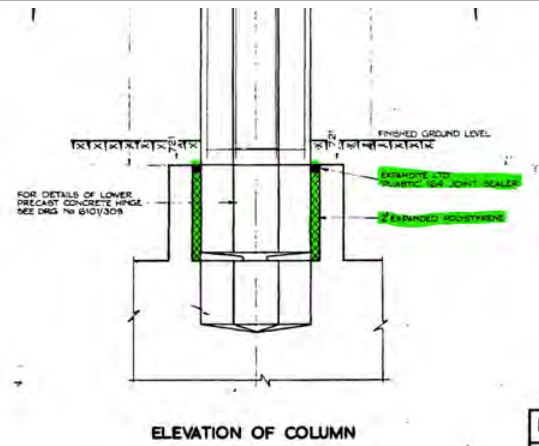
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road						Structure: Bridge			Inspection Point: substructure			
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Wrap to Reinforcement in north abutment	Denso tape	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road										Structure: Bridge		Inspection Point: substructure	
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Sealant and filler to Column hinge interface with foundations bellow ground level	Expandite Ltd 164 Joint Sealant and 2" Expanded Polystyrene	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure

Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Edge Beam	Concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

Item is a known non-asbestos containing material.

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road							Structure: Bridge			Inspection Point: superstructure		
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Parapet and anchor bolts	Metal	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road										Structure: Bridge		Inspection Point: superstructure	
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Walkway	Concrete and Asphalt	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Kerb	Concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road							Structure: Bridge		Inspection Point: superstructure			
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Road surface	Asphalt	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Expansion Joint to bridge	Metal and buried	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	 
 Item is a known non-asbestos containing material												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road										Structure: Bridge		Inspection Point: superstructure	
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Sealant to Parapet joint	Mastic	Sample	681715-1	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A			
 No asbestos detected in sample													

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road							Structure: Bridge			Inspection Point: superstructure		
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Sealant to concrete section of walkway	Mastic	Sample	681715-2	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A		 NAD  NAD
 No asbestos detected in sample												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road						Structure: Bridge			Inspection Point: superstructure			
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Expansion Joint to walkway	Bituminous product	Sample	681715-3	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A		
 No asbestos detected in sample												 NAD

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road										Structure: Bridge		Inspection Point: superstructure	
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Parapet end columns	Concrete	No Asbestos Suspected	N/A	Onsite Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge Inspection Point: superstructure



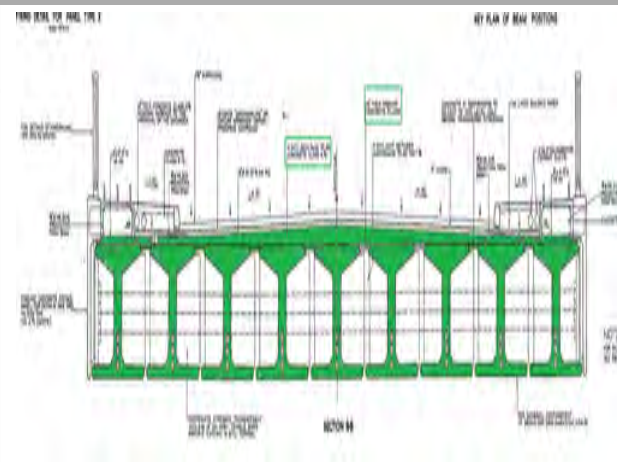
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Deck	Concrete 'I' beams and planks topped with slab	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material												

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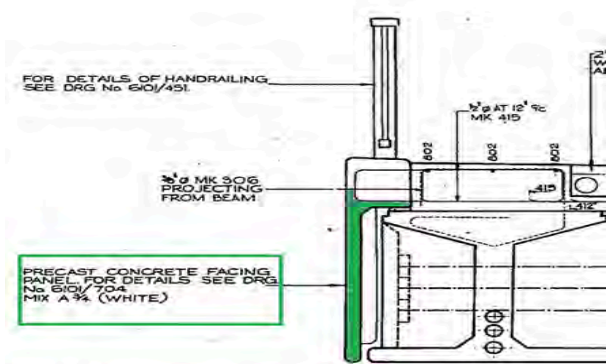
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road								Structure: Bridge		Inspection Point: superstructure			
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Facing panels	Precast Concrete	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

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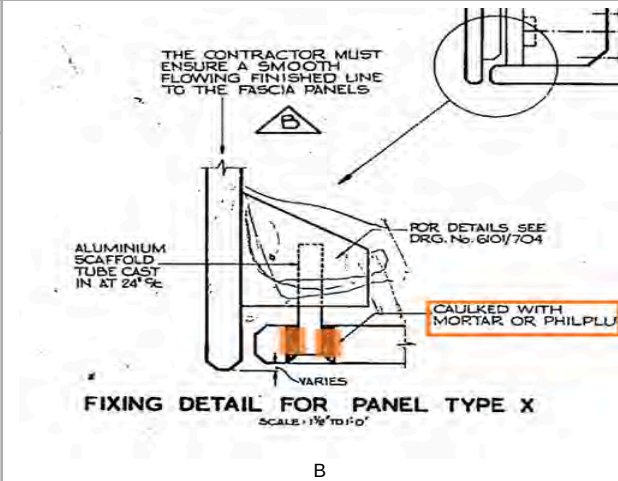
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road													Structure: Bridge		Inspection Point: superstructure	
																
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level				
Fixings for facing panels	Asbestos-containing Aluminium scaffold tube caulked with mortar or Philplug	Desktop Finding	N/A	Desktop Findings	Extensive	1	1	0	Chrysotile	3	Low					
 Philplug is known to contain asbestos. Element is presumed to contain asbestos containing material until tested otherwise.																

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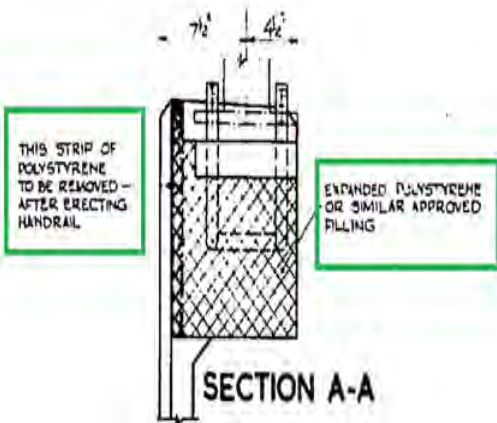
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road										Structure: Bridge		Inspection Point: superstructure	
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Filler behind facing panels	Expanded polystyrene	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

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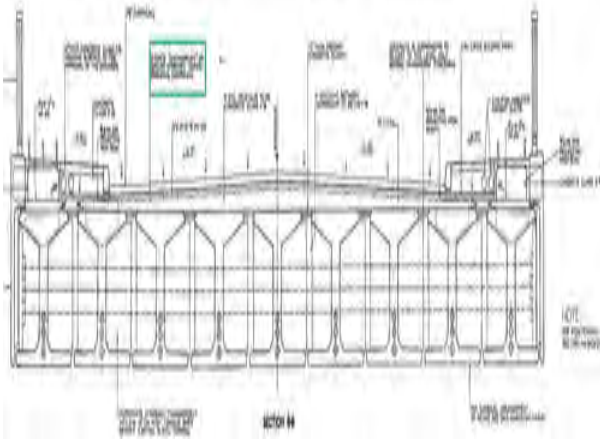
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road						Structure: Bridge			Inspection Point: superstructure			
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Waterproofing to deck	Synthaprufe replaced with Dew Pitchmastic 2005	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge Inspection Point: superstructure



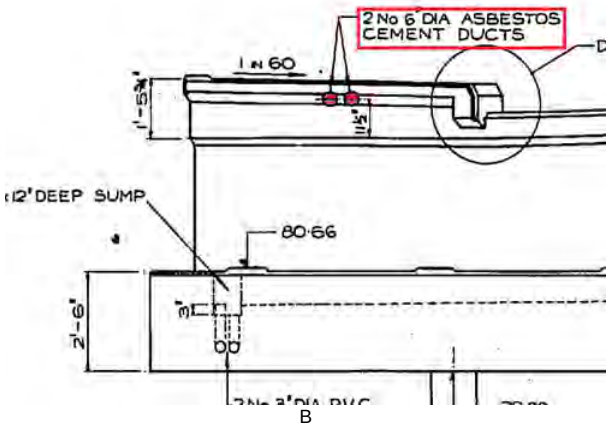
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Ducts in verges	Asbestos-containing 4" asbestos cement	Desktop Finding	N/A	Desktop Findings	2 No.	1	1	1	Crocidolite	6	Low	
 Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

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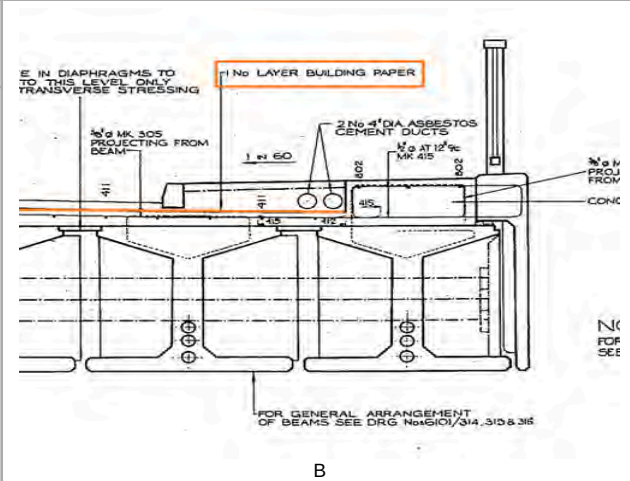
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road						Structure: Bridge			Inspection Point: superstructure			
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Building paper beneath verges	Asbestos-containing Paper	Desktop Finding	N/A	Desktop Findings	Extensive	2	1	1	Chrysotile	5	Low	
 Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



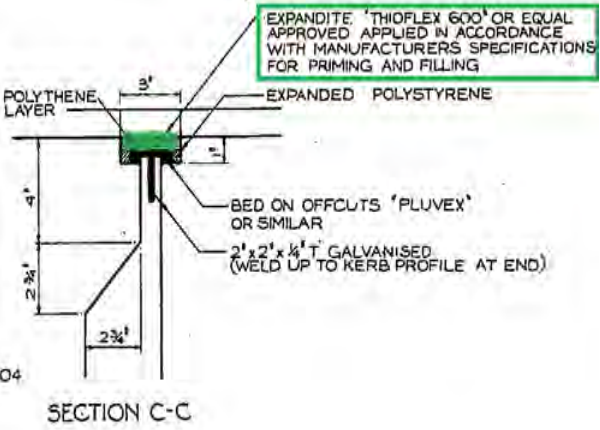
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Expansion joint in footpaths	Expandite Thioflex or equally approved primer/filler with polyethylene bottom layer	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Expansion joint in footpaths filler	Polystyrene	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Item is a known non-asbestos containing material.												

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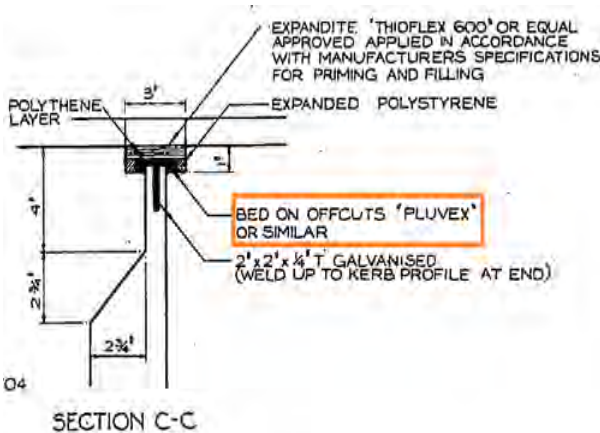
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road							Structure: Bridge		Inspection Point: superstructure			
												
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Expansion joint in footpaths bed on offcuts	Asbestos-containing Pluvex or similar	Desktop Finding	N/A	Desktop Findings	Extensive	1	1	0	Chrysotile	3	Low	
🗨️ Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



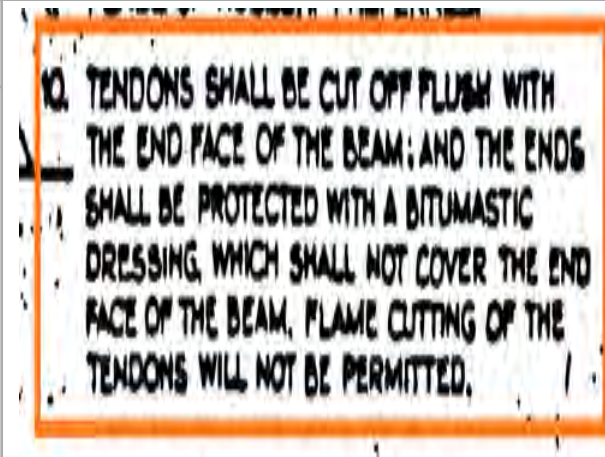
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Dressing to prestressed beam Tendons	Asbestos-containing bitumastic	Desktop Finding	N/A	Desktop Findings	Extensive	1	1	0	Chrysotile	3	Low	 B
 Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



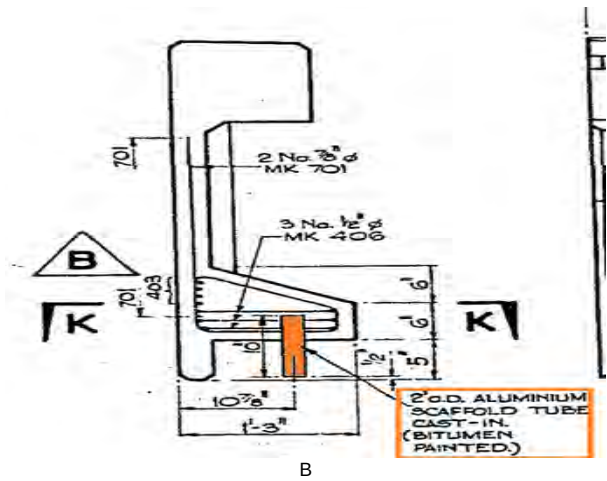
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Coating to Aluminium scaffolding tube fixings	Asbestos-containing bitumen paint	Desktop Finding	N/A	Desktop Findings	Extensive	1	1	0	Chrysotile	3	Low	
 Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

table continued from previous page...

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge Inspection Point: superstructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Grunite repair	Grunite, expanded polystyrene form for edge beam and expanded metal back shutter	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Item is a known non-asbestos containing material.												

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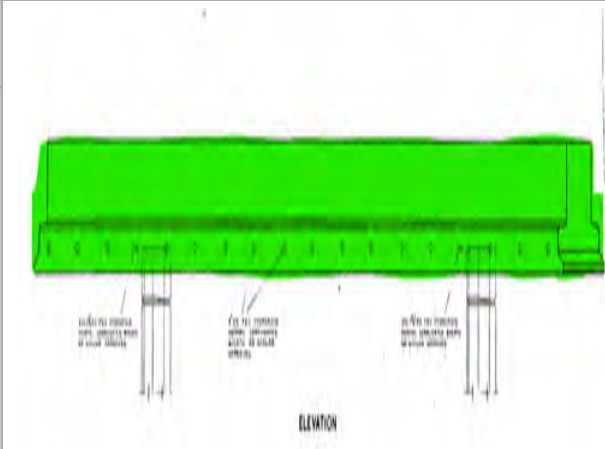
Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road												Structure: Bridge	Inspection Point: superstructure
													
Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level	
Crosshead	Concrete	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
 Item is a known non-asbestos containing material.													

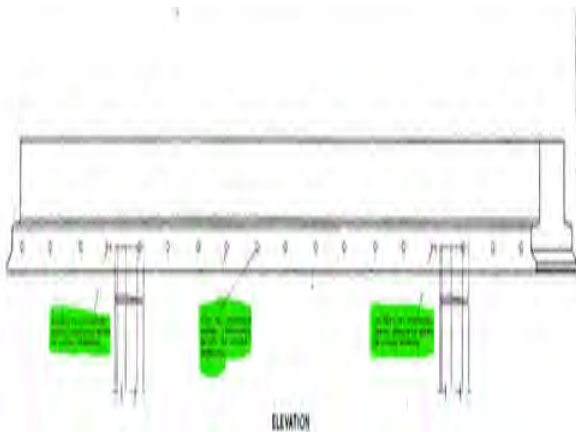
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Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Crosshead corrugated sheaths	Hydragrid	NO: Desktop Finding	N/A	Desktop Findings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
 Item is a known non-asbestos containing material.												

Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Inspection Point: superstructure

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Asset: M4 23a - 24 51 Bishton Llanmartin Waltwood Road

Structure: Bridge

Inspection Point: superstructure



Component Examined	Component Material Description	Strategy	Sample No.	Findings Source	Extent	Product Score	Material Condition	Surface Treatment	Fibre Id.	Material Score	Accessibility Score	Action Level
Undefined permeant shuttering to deck beams	Asbestos-containing insulating board	Desktop Finding	N/A	Desktop Findings	Extensive	2	2	2	Amosite	8	Low	FINISHED FOOTPATH LEVEL 10'1"x11"x11"x11" IN SITU DIAPHRAGM (X) PERMANENT SHUTTER PREF. CAST CONCRETE SEE DETAILS SEE DRG. NO. 610/316 TAIL BEAMS FOR DETAILS SEE DRG No 610/316 AS BUILT 20 TON RIFE SLIDING BEARING CAST INITIALLY TO THIS LINE 6' HALF ROUND RVC CHANNEL (X) (RVC REPLACED BY PAINTED WATERPROOF COATING) SECTION B-B
Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.												

Additional Documents

The following documents accompany this report and should be regarded as an integral part of this report.

They can be downloaded from <https://web.lucion.co.uk/reports/681715/attachments>.

- Risk Assessment [https://web.lucion.co.uk/print/risk_assessment/681715?s=2275507875946592bf567055a6ac8a9c]
- M4-23A-24-51-Bishton--Llanmartin-Overbridge.Drawing.DWI-(1).pdf
- M4-23A-24-51-Bishton--Llanmartin-Overbridge.DT.JB.pdf

Additional Advice and Information

As the reader of this report you are recommended to make sure that it meets with your requirements. Publication HSG 264 Asbestos: The survey guide suggests the following:

- Check your report against our quotation or your tender
- Check for any caveats or disclaimers you are unsure of
- Check that the survey is as you requested
- Check you understand the included plans
- Check that we have accessed all the areas and rooms you wanted us to

Asbestos Fibre Identification Material Test Certificate

Job Ref No: **681715**, Account Ref No: **23912**, Contract Ref No: **131477**, Structure Key: **M423A-24 51**

This certificate is for the attention of	Sharon Davies South Wales Trunk Road Agent Neath Port Talbot County Borough Council The Quays Brunel Way Baglan Energy Park Neath SA11 2GG
Asset Address	M4 23a - 24 51 Bishton Llanmartin Waltwood Road
Assets Sampled	M4 23a - 24 51 Bishton Llanmartin Waltwood Road
Analyst(s)	Danielle English
Analyst signature(s)	
Approved signatory	Ashley White
Approved signature	
Approval date	Wednesday, 14th January, 2026
Report Rendered on	Thu 15 Jan 2026 @ 14:00:22

Analysis method - In-house method TOP01.02.03 in accordance with HSG 248 - Asbestos: The Analysts' Guide For Sampling, Analysis and Clearance Procedures H.S.E. 2005.

Lucion bear no responsibility for sample collection or sample description related information provided by the client.

Where Lucion Services Ltd has not undertaken sampling; any prior sampling activity is beyond the company's responsibility. Where Lucion Services Ltd has sampled the test material, this has been done in accordance with in-house method TOP01.02.02. Any opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

The results quoted in this report relate to:

1. Samples analysed in accordance with methods described above
2. Samples analysed and not necessarily to the material from which the samples were taken
3. The time during which sampling took place and to the conditions prevailing during that time

The samples referred to in this report will be retained for 6 months unless requested otherwise.

Total Samples	No Asbestos Detected	Asbestos-Containing Samples	Presumed Asbestos Items
6	6	0	1

Fibre Identification Analysis Results

Sample No.	Analysis Date	Assets	Structure	Inspection Point	Component Examined	Component Material Description	Analyst Comments	Fibre Identification
681715-1	2025-07-20	M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Sealant to Parapet joint	Mastic		NAD
681715-2	2025-07-20	M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Sealant to concrete section of walkway	Mastic		NAD
681715-3	2025-07-20	M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	superstructure	Expansion Joint to walkway	Bituminous product		NAD
681715-4	2025-07-20	M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Red coated cement debris to Revetment	Cement		NAD
681715-5	2025-07-20	M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant between abutment and deck joint	Bituminous product		NAD
681715-6	2025-07-20	M4 23a - 24 51 Bishton Llanmartin Waltwood Road	Bridge	substructure	Sealant to south joint between deck beams and Abutment	Mastic		NAD

SMIS

Note: SMIS Remedial Action Fields will only be displayed where remedial actions such as "protect, replace, or remove" have been interpreted from the report.

Where this is the case an appropriate action time (i.e: 3 months, 6 months etc) will be recommended by the surveyor based on their judgement at the time of the inspection.

Appraisal Review Fields

Date of Survey	Thursday, 12th June, 2025
Appraisal Type	Management Survey
Date of Next Review	Saturday, 12th June, 2027
Asbestos Status	Presume ACM present until confirmed otherwise
Conducted By	David Wilcox, Kye Tilson
Condition	Borderline, review periodically

AAP Record Fields

Title	M4 23a - 24 51 Bishton Llanmartin Waltwood Road
Reference	N/A
Version	Initial
Date of Report	Wednesday, 14th January, 2026
Reason	N/A

Constraints on Access for Survey or Inspection

Comments of Constraints	Do not disturb known ACM's
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Risk Register

Asset Name and Reference						M4 23a - 24 51 Bishton Llanmartin Waltwood Road			
Asset Description						Bridge			
Location Name	Component Name / Description	Findings Source	Survey Type	Sample Ref	Positive for ACM's	Material Assessment Score	Rating for Disturbance During Maintenance	Actions Necessary	Grounds for presumption (Section 2) or Grounds for presumed non ACM (section 3)
Section 1 - Known ACM's									
Nothing to report									
Section 2 - Presumed ACM's									
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Sealant to timber permanent shuttering between deck beam gap - Asbestos-containing Mastic	Onsite Findings	M	N/A	N/A	3	Low	B	Could not be sampled due to reasons of height
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Drainage Channels in abutments - Asbestos-containing Bitumous paint replacing PVC	Desktop Findings	M	N/A	N/A	3	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Coating to buried surfaces - Asbestos-containing bituminous paint	Desktop Findings	M	N/A	N/A	3	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Undefined permanent shuttering to north abutment - Asbestos-containing insulating board	Desktop Findings	M	N/A	N/A	7	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Fixings for facing panels - Asbestos-containing Aluminium scaffold tube caulked with mortar or Philplug	Desktop Findings	M	N/A	N/A	3	Low	B	Philplug is known to contain asbestos. Element is presumed to contain asbestos containing material until tested otherwise.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Ducts in verges - Asbestos-containing 4" asbestos cement	Desktop Findings	M	N/A	N/A	6	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Building paper beneath verges - Asbestos-containing Paper	Desktop Findings	M	N/A	N/A	5	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Expansion joint in footpaths bed on offcuts - Asbestos-containing Pluvex or similar	Desktop Findings	M	N/A	N/A	3	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Dressing to prestressed beam Tendons - Asbestos-containing bitumastic	Desktop Findings	M	N/A	N/A	3	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.

Location Name	Component Name / Description	Findings Source	Survey Type	Sample Ref	Positive for ACM's	Material Assessment Score	Rating for Disturbance During Maintenance	Actions Necessary	Grounds for presumption (Section 2) or Grounds for presumed non ACM (section 3)
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Coating to Aluminium scaffolding tube fixings - Asbestos-containing bitumen paint	Desktop Findings	M	N/A	N/A	3	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Undefined permanent shuttering to crosshead - Asbestos-containing insulating board	Desktop Findings	M	N/A	N/A	8	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Undefined permeant shuttering to deck beams - Asbestos-containing insulating board	Desktop Findings	M	N/A	N/A	8	Low	B	Desktop study identifies item is asbestos containing but could not be sampled due to being a buried material and is therefore presumed to contain asbestos.
Section 3 - Presumed Non ACMs or Confirmed Non ACMs following testing									
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Piers - Concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Revetment - LimeStone blockwork and concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Bearing shelves - Concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Bearings - Modern - Metal and PTFE bonded with epoxy resin	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Abutments - Concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Underside of deck beams - Concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Permanent shuttering to deck beam gap - Timber	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Red coated cement debris to Revetment - Cement	Onsite Findings	M	681715-4	No	N/A	N/A	A	No asbestos detected in sample
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Sealant between abutment and deck joint - Bituminous product	Onsite Findings	M	681715-5	No	N/A	N/A	A	No asbestos detected in sample
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Sealant to south joint between deck beams and Abutment - Mastic	Onsite Findings	M	681715-6	No	N/A	N/A	A	Sample taken from accessible areas where material was present. No asbestos detected in sample. Physically restricted space

Location Name	Component Name / Description	Findings Source	Survey Type	Sample Ref	Positive for ACM's	Material Assessment Score	Rating for Disturbance During Maintenance	Actions Necessary	Grounds for presumption (Section 2) or Grounds for presumed non ACM (section 3)
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Foundations - Concrete spread footings	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Deck fixing bars through deck into rear of ballast wall - Metal	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Drains from abutment sump - 3" PVC	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Joint filler to north abutment - Flexcell	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	In north abutment Material at top of revetment at interface between abutment and deck - Bonded cork strip	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Wrap to Reinforcement in north abutment - Denso tape	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - substructure	Sealant and filler to Column hinge interface with foundations below ground level - Expandite Ltd 164 Joint Sealant and 2" Expanded Polystyrene	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Edge Beam - Concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Parapet and anchor bolts - Metal	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Walkway - Concrete and Asphalt	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Kerb - Concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Road surface - Asphalt	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Expansion Joint to bridge - Metal and buried	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material

Location Name	Component Name / Description	Findings Source	Survey Type	Sample Ref	Positive for ACM's	Material Assessment Score	Rating for Disturbance During Maintenance	Actions Necessary	Grounds for presumption (Section 2) or Grounds for presumed non ACM (section 3)
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Sealant to Parapet joint - Mastic	Onsite Findings	M	681715-1	No	N/A	N/A	A	No asbestos detected in sample
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Sealant to concrete section of walkway - Mastic	Onsite Findings	M	681715-2	No	N/A	N/A	A	No asbestos detected in sample
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Expansion Joint to walkway - Bituminous product	Onsite Findings	M	681715-3	No	N/A	N/A	A	No asbestos detected in sample
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Parapet end columns - Concrete	Onsite Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Deck - Concrete 'I' beams and planks topped with slab	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Facing panels - Precast Concrete	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Filler behind facing panels - Expanded polystyrene	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Waterproofing to deck - Synthaprufe replaced with Dew Pitchmastic 2005	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Expansion joint in footpaths - Expandite Thioflex or equally approved primer/filler with polyethylene bottom layer	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Expansion joint in footpaths filler - Polystyrene	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Grunite repair - Grunite, expanded polystyrene form for edge beam and expanded metal back shutter	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Crosshead - Concrete	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.
M4 23a - 24 51 Bishton Llanmartin Waltwood Road - superstructure	Crosshead corrugated sheaths - Hydragrid	Desktop Findings	M	N/A	N/A	N/A	N/A	A	Item is a known non-asbestos containing material.



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