

REF.	LOCATION	PHOTO REF.	DRAWING REF.	DESCRIPTION OF DEFECT	NO. OF DEFECTS	DEFECT REF.	INDICATIVE DEFECT SIZE (mm)	REPAIR TYPE	INDICATIVE REPAIR SIZE (mm)
SPAN 1 - DEFECTS SCHEDULE AND REPAIR PROPOSAL									
R1	MGE2 - OVER ABUTMENT	2	000004	10mm L.O.S TO STIFFENER ANGLE AT THE INTERFACE OF TOP FLANGE AND WEB	1	D1	100mm LONG	A	-
R2	MGE2 - NEAR IS1	7	000004	L.O.S TO WEB/STIFFENER INTERFACE AT LAST CROSS GIRDER CONNECTION	1	D2	-	A	-
R3	MGE2 - AT IS1	10	000004	5 TO 10mm LOSS TO WIDTH OF VERTICAL PLATE RIVETED TO END BEARING STIFFENER	1	D3	500mm LONG	A, E	-
R4	MGE2 - NEAR ABUTMENT	3	000004	MISSING RIVET AT FIRST INTERMEDIATE STIFFENER	1	D4	-	D	1 NO. BOLT
R5	MGE2 - NEAR MIDSPAN	5	000004	SECTION LOSS TO RIVET HEAD AT 7th INTERMEDIATE STIFFENER	1	D5	-	A	-
R6	MGE2 - NEAR MIDSPAN	6	000004	STIFFENER ANGLE SLIGHTLY DISLODGED FROM FLANGE PLATE	1	D6	-	A	-
R7	MGE2	8	000004	CORROSION TO HANDRAIL OF SPAN 1	1	D7	-	A	-
R8	MGE2 - NEAR MIDSPAN	4	000004	KNIFE EDGING TO FIFTH SUPPORT ANGLE OF HANDRAIL	1	D8	20mm x 20mm	-	-
R9	BALLAST PLATE AT MGE1 AND MGE2	9	000004	1 TO 2mm SECTION LOSS, DELAMINATION AND LOSS OF WATERPROOFING LAYER TO BALLAST PLATE THROUGHOUT SPAN 1	2	D9	32000mm		
R10	MGE1 - NEAR ABUTMENT	12	000005	2 TO 3mm L.O.S TO MGE1 BOTTOM FLANGE	1	D10	400mm x 110mm	A	-
R11	MGE1 - NEAR IS1	11	000005	2 TO 3mm L.O.S TO MGE1 BOTTOM FLANGE, DOUBLER PLATE THICKNESS AT CURTAILMENT LOCATION	1	D11	400mm x 100mm	A, B	-
R12	MGE2 - NEAR IS1	17	000005	20% LOSS IN WIDTH OF XG1 BOTTOM FLANGE OVER A LENGTH OF 150mm DUE TO PITTING CORROSION	1	D12	150mm LONG	B	400mm x 150mm
R13	MGE1 AND MGE2	15	000005	PITTING CORROSION TO XGI BOTTOM FLANGE AT MAIN AND CROSS GIRDER CONNECTIONS (2 TO 3mm LOSS OF THICKNESS)	10	D13	-	A	-
R14	MGE1 - MIDSPAN	16	000005	PITTING CORROSION TO XGI BOTTOM FLANGE AT MAIN AND CROSS GIRDER CONNECTIONS (80% BOTTOM FLANGE WIDTH L.O.S)	1	D14	100mm LONG	B	400mm x 125mm
R15	SOFFIT OF DECK PLATE	13	000005	25% AREA OF DECK HAS PITTING CORROSION PATCHES (2 TO 3mm LOSS OF SECTION)	-	D15	1000mm x 1000mm	A	WHOLE DECK
R16	CROSS GIRDER AT IS1	14	000005	SURFACE CORROSION AND MOSS FORMATION ON BOTTOM FLANGE OF CROSS GIRDER	1	D16	8000mm x 400mm	A	-
R17	WEST ABUTMENT - NEAR MGE1	-	000013	OPEN JOINTS IN PILASTER	-	D17	-	H	-
R18	WEST ABUTMENT - WINGWALL 2	18	000013	OPEN JOINTS BETWEEN COPERS AND WINGWALL	-	D18	3000mm	H	-
R19	WEST ABUTMENT TOP	19	000013	OPEN JOINT BETWEEN PADSTONES AND STONE MASONRY	1	D19	12000mm	H	-
R20	WEST ABUTMENT TOP	20	000013	OPEN JOINTS IN STONE MASONRY	-	D20	1500mm	H	-
R21	WEST ABUTMENT TOP	20	000013	WATER SEEPAGE BETWEEN PAD STONES AND ABUTMENT	4	D21	-	H	-
R22	WEST ABUTMENT BOTTOM	21	000013	STAIRCASE SIGNIFICANTLY DAMAGED	-	D22	-	-	-
R23	WEST ABUTMENT - BELOW MGE2	18	000013	VEGETATION GROWTH	-	D23	2500mm x 3500mm	J	-
R24	IS1 - COLUMNS 1 AND 2	-	000010	SURFACE CORROSION TO PIER CAP	2	D24	-	A	-
R25	IS1 - TOP HORIZONTAL BRACING	22	000010	2mm LOSS IN THICKNESS TO TOP FLANGE DUE TO SIGNIFICANT PITTING CORROSION		D25	2800mm	A	-
R26	IS1 - X BRACING CONNECTION	24	000010	SIGNIFICANT CORROSION AND SECTION LOSS TO BOLTS	5	D26	-	D	5 NOS. BOLTS
R27	IS1 - COLUMNS 1 AND 2	23	000010	FLAKED PAINTWORK THROUGHOUT AND MOSS FORMATION AT GROUND LEVEL	-	D27	-	A	-
R28	JOINT BETWEEN SPAN 1 AND SPAN 2	-	000004	ACCUMULATION OF DEBRIS IN THE JOINT BETWEEN ADJACENT DECKS		D28	-	G	-
SPAN 2 - DEFECTS SCHEDULE AND REPAIR PROPOSAL									
R1	MGE2 - OVER IS2	26	000004	100 TO 200mm HIGH SURFACE CORROSION TO TOPSIDE OF WEB (TRACK SIDE)	1	D1	17000mm	A	-
R2	MGE2 - NEAR IS1	25	000004	CORROSION TO MGE2 BOTTOM SIDE OF TOP FLANGE	1	D2	-	A	-
R3	MGE2 - NEAR MIDSPAN	28	000004	VEGETATION GROWTH IN THE BALLASTED PORTION	1	D3	-	J	-
R4	CROSS GIRDER SOFFIT	30	000005	4 TO 5mm LOSS TO ALL CROSS GIRDER BOTTOM FLANGES THICKNESS DUE TO SIGNIFICANT CORROSION	7	D4	-	A	-
R5	CROSS GIRDER WEB	29	000005	SURFACE CORROSION TO 3m² WEB SURFACE AREA OF CROSS GIRDERS	1	D5	3000mm²	A	-
R6	IS2 - COLUMNS 1 AND 2	34	000010	SURFACE CORROSION TO PIER CAP	2	D6	-	A	-
R7	IS2 - TOP HORIZONTAL BRACING	33	000010	1m LONG x 60% LOSS OF SECTION TO TRESTLE TOP FLANGE DUE TO PITTING CORROSION	1	D7	1000mm LONG	C	FULL LENGTH OF TOP FLANGE
R8	IS2 - COLUMN 2	36	000010	TRESTLE BANDING (STEEL STRAP) IS DETACHED AND MOVING FREELY	1	D8	-	F	LIKE FOR LIKE
R9	IS2 - COLUMNS 1 AND 2	35	000010	FLAKED PAINTWORK THROUGHOUT AND MOSS FORMATION ON CAISSONS UP TO HALF OF THE HEIGHT	-	D9	-	A	-
R10	IS2 - COLUMN 2 PIER CAP	34	000010	LOCALIZED SECTION LOSS TO PIER CAP (APPROX. 10 TO 15mm DEEP OVER A LENGTH OF 200mm)	1	D10	200mm x 15mm	A	-
R11	BALLAST PLATE ON DECK	27	000004	DAMAGED WATERPROOFING LAYER OVER BALLAST PLATE	1	D11	-	K	-
R12	JOINT BETWEEN SPAN 2 AND SPAN 3	-	000004	ACCUMULATION OF DEBRIS IN THE JOINT BETWEEN ADJACENT DECKS	1	D12	-	G	-
SPAN 3 - DEFECTS SCHEDULE AND REPAIR PROPOSAL									
R1	MGE2 - OVER IS2	37	000004	100 TO 200mm HIGH SURFACE CORROSION TO TOPSIDE OF WEB (TRACK SIDE)	1	D1	16000mm	A	-
R2	MGE2 - NEAR MIDSPAN	-	000004	LOSS OF WATERPROOFING LAYER OVER BALLAST PLATE	1	D2	4500mm	K	-
R3	CROSS GIRDER SOFFIT	40	000004	4 TO 5mm LOSS TO ALL CROSS GIRDER BOTTOM FLANGES THICKNESS DUE TO SIGNIFICANT CORROSION	7	D3	-	A	-
R4	MGE2 - OVER IS3	45	000005	SIGNIFICANT PITTING TO 600mm² AREA OF CROSS GIRDER BOTTOM FLANGE (2 TO 3mm PENETRATION)	1	D4	600mm²	A	-
R5	RAIL BEARERS	39	000005	SURFACE CORROSION SPOTS TO ALL RAIL BEARERS (LESS THAN APPROX. 5% AREA)	-	D5	-	A	-
R6	SOFFIT OF DECK PLATE	-	000005	SURFACE CORROSION SPOTS < 5% OF SOFFIT AREA	-	D6	-	A	-
R7	IS3 - COLUMN 2 - TOP BANDING	47	000011	FREE MOVEMENT OF TRESTLE AND BANDING (STEEL STRAP) DUE TO SEPARATION CRACK. BANDING IS DETACHED AND IS MOVING FREELY	1	D7	-	F	LIKE FOR LIKE
R8	IS3 - COLUMN 2 - TOP BANDING	47	000011	SIGNIFICANT CORROSION AND DELAMINATION TO BANDING	1	D8	-	F	LIKE FOR LIKE
R9	IS3 - COLUMNS 1 AND 2	-	000011	FLAKED PAINTWORK THROUGHOUT AND MOSS FORMATION ON CAISSONS UP TO HALF OF THE HEIGHT	-	D9	-	A	-
R10	MAINTENANCE ACCESS GANGWAY	43	-	3rd SUPPORT FROM LOW MILEAGE DEFLECTED BY 100mm	1	D10	-	I	SEE DETAIL 1
R11	JOINT BETWEEN SPAN 3 AND SPAN 4	-	000004	ACCUMULATION OF DEBRIS IN THE JOINT BETWEEN ADJACENT DECKS	1	D11	-	G	-

PAINTWORK SPECIFICATIONS:

1. CLEANING AND PAINTING TO BE CARRIED OUT ACCORDANCE WITHIN NETWORK RAIL NR/SP/CIV/039 'SPECIFICATION FOR THE ASSESSMENT AND CERTIFICATION OF PROTECTIVE COATINGS AND SEALANTS' AND NR/GN/CIV/002 'USE OF PROTECTIVE TREATMENTS AND SEALANTS'.

2. CONTRACTOR TO SUBMIT SAFETY METHOD STATEMENT FOR PROTECTION OF PERSON, PROPERTY AND EQUIPMENT TO THE EMPLOYER'S REPRESENTATIVE FOR ACCEPTANCE BEFORE WORK COMMENCES.

3. PRIOR TO APPLICATION OF ANY PAINT COAT THE SURFACE SHALL BE CLEAN, DRY AND FREE FROM ALL SURFACE CONTAMINANTS SUCH AS DUST, DIRT, GRIT, OIL , GREASE , LOOSE PAINT, ETC. AND THE RESIDUE REMOVED WITH A SUITABLE SOLVENT.

4. ALL STEELWORK TO HAVE THE FOLLOWING PAINT SPECIFICATION IN ACCORDANCE WITH NR/L3/CIV/040 'SPECIFICATION FOR THE USE OF PROTECTIVE COATING SYSTEMS', BASED UPON THE FOLLOWING REQUIREMENTS.

• PROTECTIVE SYSTEM = M20 WITH 25 YEARS DESIGN LIFE (ALL STEELWORK OTHER THAN TRACKSIDE FACES AND OTHER THAN CAISSONS UPTO 1m ABOVE HIGH-WATER LEVEL).
= M34 WITH 15 YEARS DESIGN LIFE (FOR TRACKSIDE STEELWORK AND FOR CAISSONS UP TO A HEIGHT OF 1m ABOVE HIGH-WATER LEVEL).

• EXPOSURE CONDITION (TO BS EN ISO 12944-2) = C4 (ALL STEELWORK EXCEPT CAISSONS) = C5 (CAISSON STEELWORK)

• THERE MAY BE LEAD PRESENT IN THE EXISTING PAINT COATING.

5. ALL METALLIC ELEMENTS ON THE TRACK SIDE AND CAISSONS (UP TO 1m ABOVE HIGH WATER LEVEL) ARE TO BE CLEANED TO ACHIEVE A SURFACE FINISH OF ST3 AND REPAINTED.

6. ALL METALLIC ELEMENTS (SUPERSTRUCTURE - OTHER THAN IN THE TRACK SIDE) ON DECK AND CAISSONS (1m ABOVE HIGH WATER LEVEL AND HIGHER) ARE TO BE GRIT BLASTED TO ACHIEVE A SURFACE FINISH OF SA2.5 AND REPAINTED.

7. ALL GAPS, EDGES AND JOINTS TO BE SEALED WITH MASTIC SEALANT BETWEEN APPLICATION OF INTERMEDIATE AND TOP COATS.

8. COMPATIBILITY TESTS OF THE EXISTING PAINTWORK TO BE UNDERTAKEN BY SPECIALIST PAINTING CONTRACTOR PRIOR TO THE WORKS COMMENCING.

9. PAINT COLOUR TO MATCH THE ORIGINAL COLOUR. .

10. PAINT PROTECTIVE SYSTEM FOR CAISSON STEELWORK TO BE SHERWIN WILLIAMS XM92/M34-181 OR EQUIVALENT APPROVED BY NR.
-
- HAZARD SUMMARY TABLE
- | SIGNIFICANT DESIGNER'S IDENTIFIED HAZARDS | LIFE SAVING RULES |
|---|-------------------|
|---|-------------------|
- SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
- THE FOLLOWING NOTES HIGHLIGHT SIGNIFICANT RESIDUAL HAZARD IDENTIFIED BY THE DESIGNER. TYPICAL HAZARDS THAT SHOULD BE IDENTIFIED BY A COMPETENT CONTRACTOR ARE NOT INCLUDED.THE CONTRACTOR SHALL CARRY OUT THE WORKS USING AN APPROVED SAFE SYSTEM OF WORK
- SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED DURING THE COURSE OF THE WORKS, THE CONTRACTOR SHALL NOTIFY ALL RELEVANT MEMBERS OF THE PROJECT TEAM
-
- | | |
|---|---|
| A | WORKING ON / ADJACENT TO LIVE RAILWAY |
| B | DAMAGING TRACK SIDE INFRASTRUCTURE |
| C | WORKING OVER A WATERCOURSE |
| D | PRESENCE OF LEAD WITHIN EXISTING PAINTWORK |
| E | TEMPORARY INSTABILITY OF STRUCTURE DURING THE WORKS |
| F | TEMPORARY WORKS NEED TO CONSIDER GAUGING |
| G | HANDLING HEAVY / LONG PLATES (MANUAL HANDLING LIMITATIONS) |
| H | FAILURE OF TEMPORARY WORKS |
| I | RISK OF STRIKING EXISTING SERVICES |
| J | DAMAGE TO THE EXISTING STRUCTURE DURING RIVET REMOVAL OPERATIONS |
| K | INJURY DUE TO LIMITED / CONSTRAINED ACCESS FOR BOLTING OPERATIONS |
| • FOR MORE DETAILED INFORMATION PLEASE REFER TO THE PROJECT HAZARD RECORD LOG. DOCUMENT REF.: 152093-ARC-LOG-SSD-000001 | |
- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.

2. STEELWORK TO BE REINSPECTED IMMEDIATELY AFTER GRIT BLASTING TO CONFIRM FULL EXTENT OF REPAIR REQUIRED AND EXACT DIMENSIONS. CONTRACTOR/FABRICATOR TO MEASURE UP FOR ALL REPAIRS/REPLACEMENT TO EXISTING STEEL ELEMENTS AND RIVETS PRIOR TO FABRICATION.

3. ONCE ALL STEELWORK REPAIRS HAVE BEEN UNDERTAKEN, ALL EXISTING STEELWORK TO HAVE SURFACE PROTECTIVE SYSTEM M20/M34 (AS SPECIFIED) IN ACCORDANCE WITH NR/L3/CIV/039 "SPECIFICATION FOR THE ASSESSMENT AND CERTIFICATION OF PROTECTIVE COATINGS AND SEALANTS" AND NR/GN/CIV/002 "THE USE OF PROTECTIVE COATINGS AND SEALANTS".

4. ALL VEGETATION WITHIN 3m OF STRUCTURE TO BE REMOVED. ALL TREE AND STUMPS TO BE TREATED TO PREVENT REGROWTH. HERBICIDE TO BE USED IN ACCORDANCE WITH NETWORK RAIL STANDARD NR/L2/CIV/140"MODEL CLAUSES FOR SPECIFYING RAIL ENGINEERING WORKS".

5. PHOTOS REFERENCED WITHIN TABLE CAN BE FOUND IN THE INSPECTION REPORT REF.152093-AR-REP-ECV-000001-A02.

6. ALL STEELWORK TO BE PAINTED WITHIN M20 PROTECTIVE SYSTEM IN ACCORDANCE WITH NR/L3/CIV/039
- | | | | | | |
|--------|---------------------|--------------------------|-------|------|------|
| A02 | 12.06.2020 | UPDATED TO DRN COMMENTS | T.A | B.K | J.L |
| A01 | 24.04.2020 | FOR FORM 001 REVIEW | N.M | B.K | J.L |
| Rev | Date | Description of Revisions | Drawn | Chkd | Appr |
| Status | FOR FORM 001 REVIEW | | | | S3 |
-
- Contractor(s):
-
- Project:
- RIVER NEATH SWING
BRIDGE GRIP 4
- Drawing Title:
- PROPOSED REPAIRS SCHEDULE
SPANS 1, 2, 3, 5 & 6
(SHEET 1 OF 2)
- | | | | | | |
|-----------------------|------------------------------|--------|-----|------|--------------|
| Designed | S. ALURU | Signed | S.A | Date | 12.06.2020 |
| Drawn | N.MANISHA | Signed | N.M | Date | 12.06.2020 |
| Checked | B. KING | Signed | B.K | Date | 12.06.2020 |
| Approved | J. LYNN | Signed | J.L | Date | 12.06.2020 |
| Scale(s) | AS SHOWN @ A1 SD11 207m 63ch | | | | |
| Alternative Reference | 152093 | | | | Sheet 1 of 2 |
| Drawing Number | 152093-ARC-DRG-ECV-000031 | | | | Revision A02 |
- 100mm on Original
- C:\Users\lat00420\ARCADIS\River Neath - GRIP 4 - E - Our Drawings\F001\152093-ARC-DRG-ECV-000031 & 000032_Proposed Repire Schedule (Sheet 1 & 2).dwg
- Sheet Size A1 594 x 841