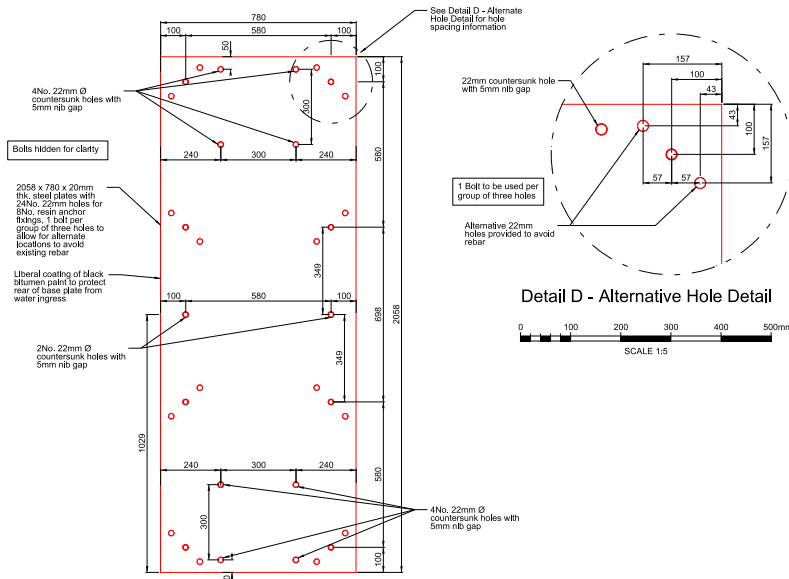
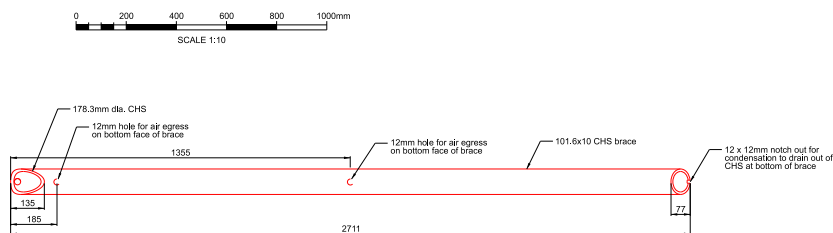


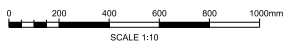


Detail D - Alternative Hole Detail

Detail C - FJD-CVL-CCV-010301-01 - Base Plate Elevation



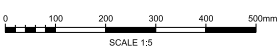
Section C-C - Brace Detail



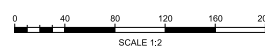
Detail E - CHS End Plate Welded Connections



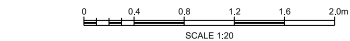
Detail F - CHS End Plate Detail



Detail G - Lift Point Detail



Detail A - OLE Cantilever Arm Arrangement Detail



Safety, Health and Environmental Information

Notes below are additional to hazards/risks normally associated with this type of work:

Construction

Ok. Lifting Operations - TRAN01-CVL-HZD-5836

Cx. Existing Reinforcement - TRAN01-CVL-HZD-5837

Operations

Ovii. 8-Metallurgical Corrosion - TRAN01-CVL-HZD-5834

Ok. Filing Failure - TRAN01-CVL-HZD-5831

Oviii. Structure Gauge - TRAN01-CVL-HZD-5835

Oxi. Concrete Defects - TRAN01-CVL-HZD-5901

Maintenance

Mi. OLE - TRAN01-CVL-HZD-5827

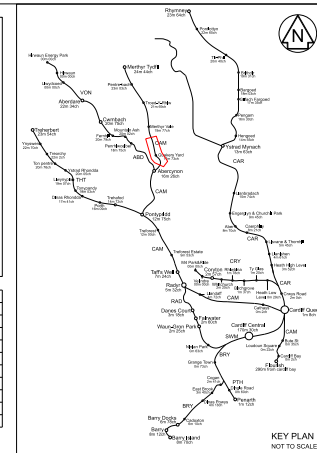
Mv. Bonding Cable - TRAN01-CVL-HZD-5832

Disassembly/Deconstruction (Future)

No Significant Risks

These notes are based on the use of experienced and competent contractors carrying out the work using an approved safe method of working.

Asset Ref.	Part No.	Mass	No.
ALL	FJD-CVL-CCV-010301-01	247.275kg	8
CAM/25/569/UM	FJD-CVL-CCV-010301-02	256.26kg	1
CAM/25/564/UM	FJD-CVL-CCV-010301-03	257.48kg	1
CAM/25/871/DM	FJD-CVL-CCV-010301-04	231.57kg	1
CAM/25/859/DM	FJD-CVL-CCV-010301-05	231.57kg	1
CAM/25/847/DM	FJD-CVL-CCV-010301-06	237.07kg	1
CAM/25/843/DM	FJD-CVL-CCV-010301-07	237.85kg	1
CAM/25/871/DM	FJD-CVL-CCV-010301-08	239.425kg	1
CAM/25/860/DM	FJD-CVL-CCV-010301-09	244.135kg	1



- Notes:
- Do not scale from this drawing.
 - All dimensions are in millimetres unless otherwise stated.
 - All levels are in metres unless stated otherwise.
 - This drawing is to be read in conjunction with the following documents:
 - TRAN01-AND-R1-MER-DDR-CV-012413
 - TRAN01-AND-R1-MER-DDR-CV-012414
 - TRAN01-AND-R1-MER-DDR-CV-012415
 - TRAN01-AND-R1-MER-DDR-CV-012416
 - TRAN01-AND-R1-MER-DDR-CV-012417
 - TRAN01-AND-R1-MER-DDR-CV-012418
 - TRAN01-AND-R1-MER-DDR-CV-012419
 - TRAN01-AND-R1-MER-DDR-CV-012420
 - TRAN01-AND-R1-MER-DDR-CV-012421
 - TRAN01-AND-R1-MER-DDR-CV-012422
 - TRAN01-AND-R1-MER-DDR-CV-012423
 - TRAN01-AND-R1-MER-DDR-CV-012424
 - TRAN01-AND-R1-MER-DDR-CV-012425
 - TRAN01-AND-R1-MER-DDR-CV-012426
 - TRAN01-AND-R1-MER-DDR-CV-012427
 - TRAN01-AND-R1-MER-DDR-CV-012428
 - TRAN01-AND-R1-MER-DDR-CV-012429
 - TRAN01-AND-R1-MER-DDR-CV-012430
 - TRAN01-AND-R1-MER-DDR-CV-012431
 - TRAN01-AND-R1-MER-DDR-CV-012432
 - TRAN01-AND-R1-MER-DDR-CV-012433
 - TRAN01-AND-R1-MER-DDR-CV-012434
 - TRAN01-AND-R1-MER-DDR-CV-012435
 - TRAN01-AND-R1-MER-DDR-CV-012436
 - TRAN01-AND-R1-MER-DDR-CV-012437
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 - TRAN01-AND-R1-MER-DDR-CV-012439
 - TRAN01-AND-R1-MER-DDR-CV-012440
 - TRAN01-AND-R1-MER-DDR-CV-012441
 - TRAN01-AND-R1-MER-DDR-CV-012442
 - TRAN01-AND-R1-MER-DDR-CV-012443
 - TRAN01-AND-R1-MER-DDR-CV-012444
 - TRAN01-AND-R1-MER-DDR-CV-012445
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 - TRAN01-AND-R1-MER-DDR-CV-012497
 - TRAN01-AND-R1-MER-DDR-CV-012498
 - TRAN01-AND-R1-MER-DDR-CV-012499
 - TRAN01-AND-R1-MER-DDR-CV-012500
 - All works to be in accordance with network rail company standard NR/L3/CIV/145 model clauses for specifying civil engineering works. Fixings to be installed in accordance with manufacturer's instructions.
 - Existing steelwork based on archive drawings.
- Steelwork:
- All welds to be full strength and full penetration.
 - S355 steel or stronger to be used for CHS and plates.
 - All shoring and bracing on steelwork shall be ground or rounded (prior to arrival on site).
 - All galvanised small part steelwork allocated a UKMS component reference number to be produced in accordance with 141651-FAF-REP-EPH-000000.
 - After drilling, welding and grinding, steelwork to be hot dip galvanised in accordance with BS EN 1461:2009 and 141651-FAF-SPE-ECH-000007. Min. coating thickness of 70 micrometres. Any damage to galvanising during construction must be painted or sprayed with Galvalume.
 - No site welding or site cutting of steelwork is permitted without the express approval of the structural engineer.
 - Steelwork to be CE marked in accordance with BS EN 1993-1-1+A1:2014 execution class EXC2.
 - Contractor to confirm dimensions on site prior to fabrication.
 - For approximate mass of components, see steelwork data table.
 - Tolerances for elements are based upon their individual member length:
 - 0 to 1000mm: +/- 2mm
 - 1000mm to 3000mm: +/- 3mm
 - Over 3000mm: +/- 5mm
 - Manufacture tolerances:
 - 0 to 300mm: +/- 0.25mm
 - 300mm to 1000mm: +/- 0.25mm
 - Over 1000 mm: +/- 0.5mm
 - Structural element edge holes:
 - All holes: +/- 1mm
 - Edge distances must not be infringed upon by fabrication or on site cutting.
 - All bolts and threaded rods are grade 8.8 and galvanised. The diameter of the fixings may vary and is shown per detail.
 - Exposed parts of bolts and fasteners to be cleaned with white spirit, wire brushed where required and touched up with galvalume.
 - All welds are continuous and full strength. All round filler welds to have a minimum leg length of 5mm unless stated otherwise. Weld symbols are in accordance with BS EN ISO 2553:2010.
 - Steelwork at A470 North and South have been designed to take a wire vertical loading of 125N and an across track load of 1575N away from the supporting anchors. Wind load and weight of OLE cantilever is also taken into account. The steelwork will require reassessing if additional load is added.
 - Steelwork at Pontygwaith have been designed to take a wire vertical loading of 125N and an across track load of 115N away from the supporting anchors. Also on each side will induce wire vertical loading of 30N and an across track load of 700N away from the supporting anchors. Wind load and weight of OLE cantilever is also taken into account. The steelwork will require reassessing if additional load is added.

Steelwork Cantilever - ISO - FJD-CVL-CCV-010301-02:09

Not to scale

Rev	Date	Description of Revisions	Drawn	Checked	Appr	Submittal
P03	15/11/22	Preliminary	TP	DM	MK	
P04	02/12/22	FOR EDC	JM	MK	MK	
P05	09/12/22	For Approval	JM	MS	MK	
P06.1	---	---	MK	---	---	

Initial non-contractual code

SO



Authorised by eSign

FJD Consulting

Asset Location

TRAN01

File CAD drawings

File CV

Location Zone MER

File of Work Stage E

Project

TRAN01 - CVL Transformation

Route Section Group

Route Section Group 1

Route Section

Merthyr Branch

Drawing Title

OLE Fixings - MER

A470 North & South CU 01

Pontygwaith CU F03

Fabrication Details

Designed

Drawn

Checked

Approved

Scale

AS SHOWN

Alternative Reference

Drawing Number

TRAN01-FJD-R1-MER-DDR-CV-010301

Revision

P06.1