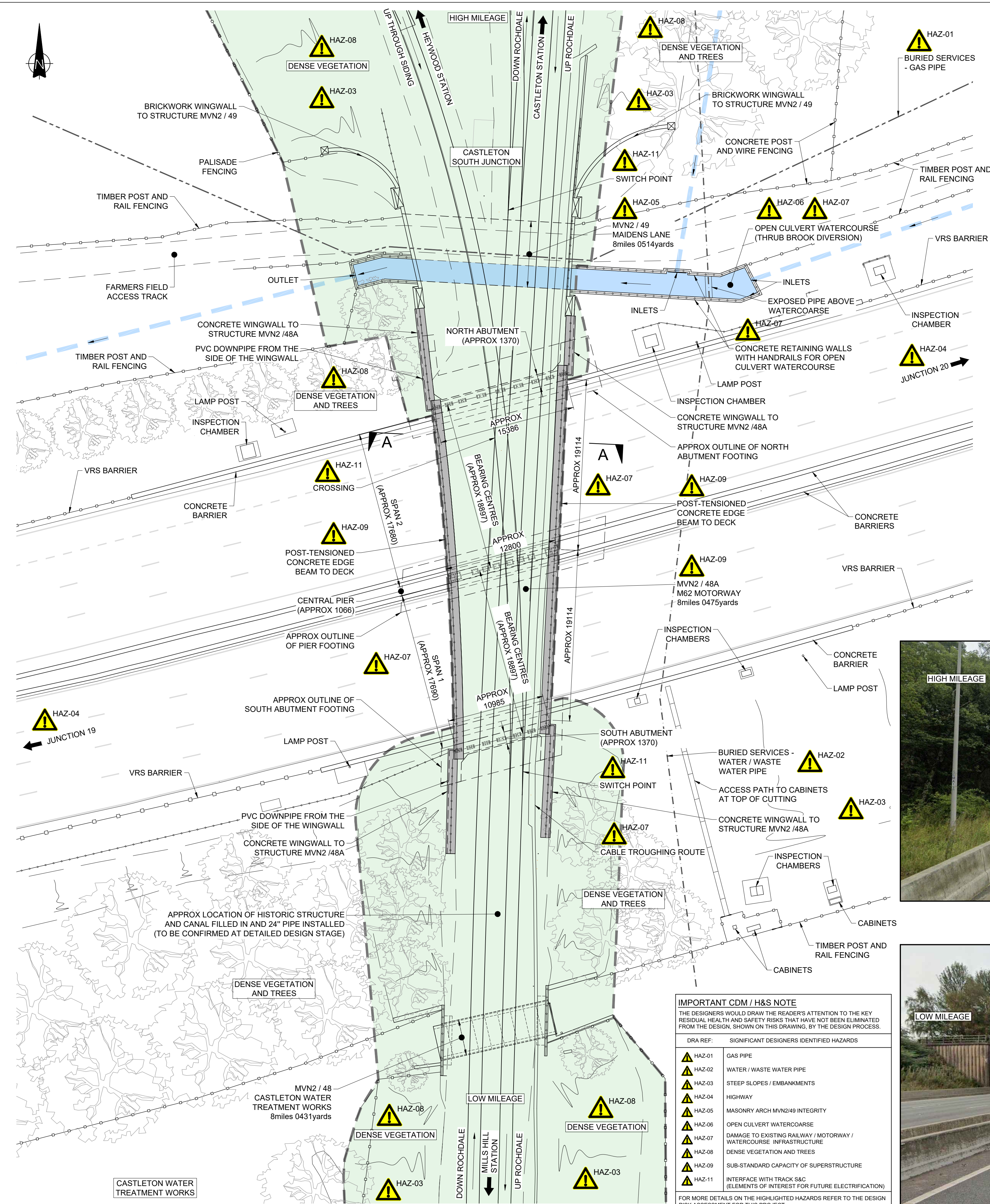
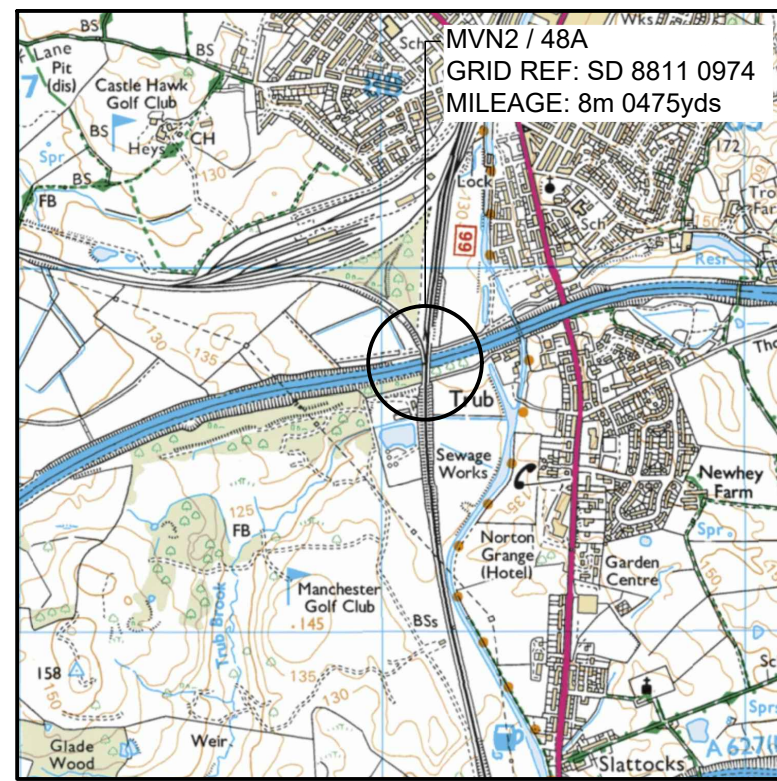


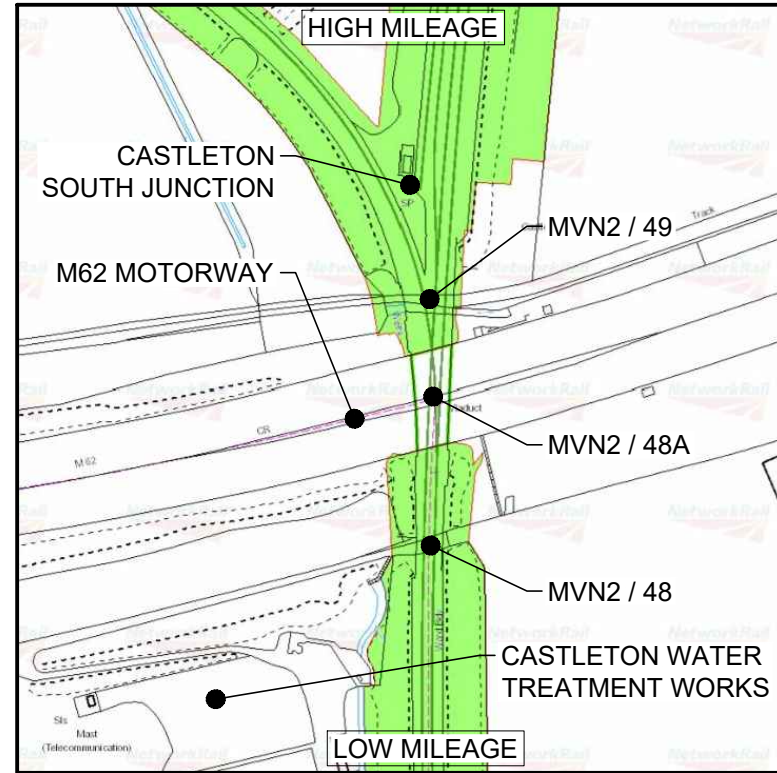


PLAN
SCALE 1:250

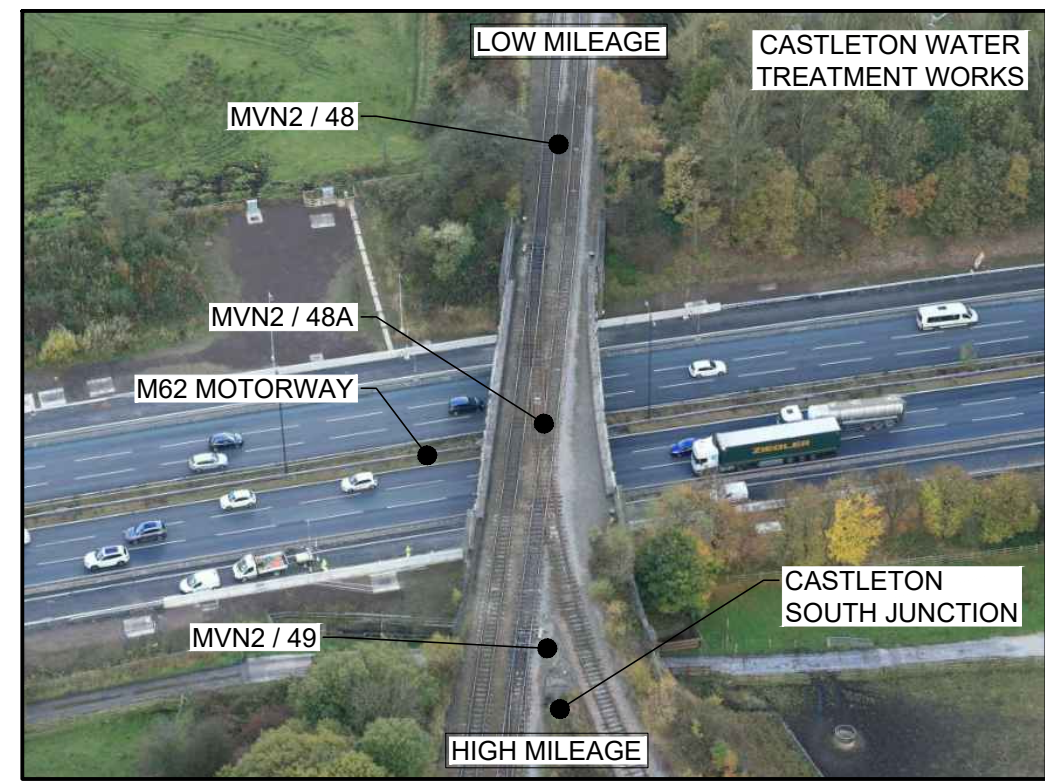
IMPORTANT CDM / H&S NOTE	
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DRA REF:	SIGNIFICANT DESIGNERS IDENTIFIED HAZARDS
HAZ-01	GAS PIPE
HAZ-02	WATER / WASTE WATER PIPE
HAZ-03	STEEP SLOPES / EMBANKMENTS
HAZ-04	HIGHWAY
HAZ-05	MASONRY ARCH MVN2/49 INTEGRITY
HAZ-06	OPEN CULVERT WATERCOURSE
HAZ-07	DAMAGE TO EXISTING RAILWAY / MOTORWAY / WATERCOURSE INFRASTRUCTURE
HAZ-08	DENSE VEGETATION AND TREES
HAZ-09	SUB-STANDARD CAPACITY OF SUPERSTRUCTURE
HAZ-11	INTERFACE WITH TRACK SAC (ELEMENTS OF INTEREST FOR FUTURE ELECTRIFICATION)
FOR MORE DETAILS ON THE HIGHLIGHTED HAZARDS REFER TO THE DESIGN RISK ASSESSMENT FOR THIS PROJECT	
"EVERYDAY" LOW RISK HAZARDS AND THOSE HAZARDS WHICH SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED DURING THE COURSE OF THE WORKS THE CONTRACTOR SHALL NOTIFY ALL RELEVANT MEMBERS OF THE PROJECT TEAM.	



LOCATION PLAN



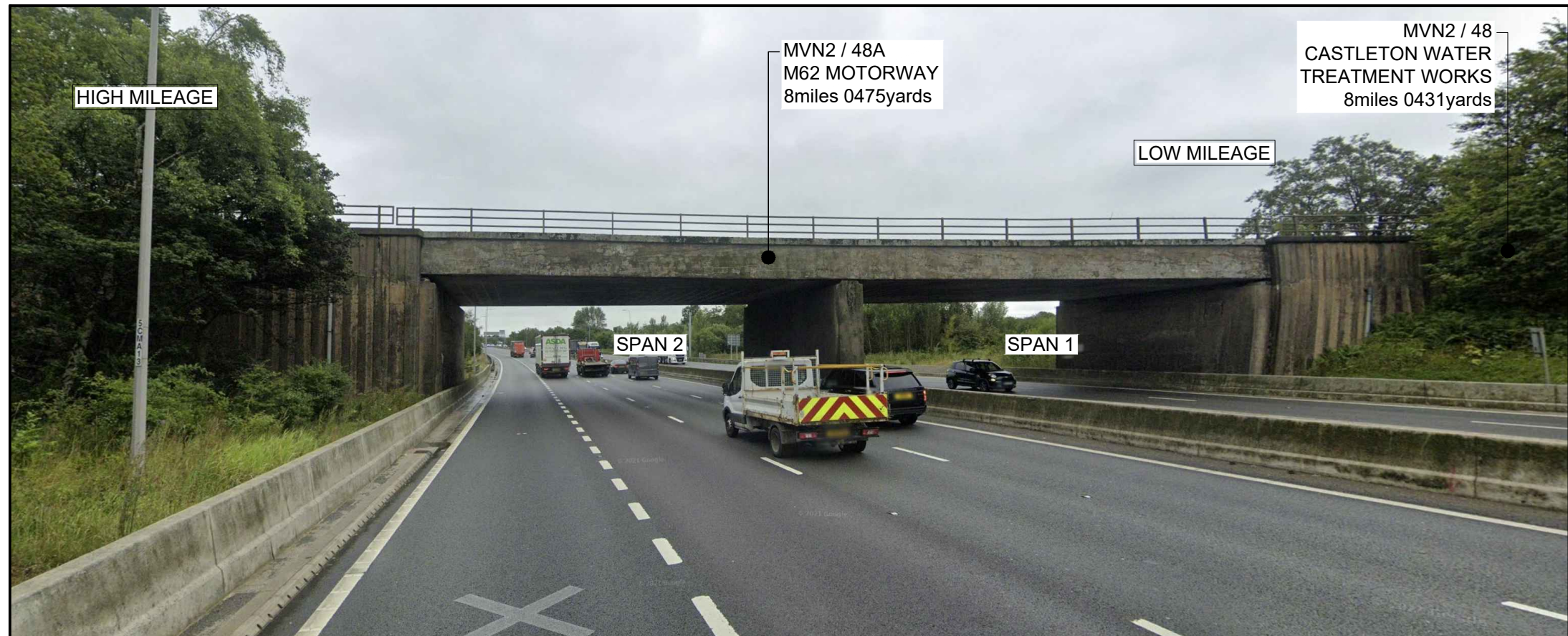
PLAN SHOWING NETWORK
RAIL OWNERSHIP



BIRDSEYE VIEW LOOKING SOUTH
TOWARDS LOW MILEAGE



TRACKSIDE VIEW LOOKING
SOUTH TOWARDS LOW MILEAGE



WEST ELEVATION (DOWNSIDE) FROM M62 MOTORWAY



EAST ELEVATION (UPSIDE) FROM M62 MOTORWAY

- Legend/Notes
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
 2. DO NOT SCALE FROM THIS DRAWING.
 3. THIS DRAWING IS TO BE PRINTED IN COLOUR.
 4. THIS DRAWING IS BASED ON AVAILABLE NETWORK RAIL RECORD INFORMATION AND A TRACKSIDE SURVEY HAS BEEN UNDERTAKEN BY AECOM IN DECEMBER 2022. THIS SURVEY HAS NOT YET BEEN ISSUED BY AECOM. OTHER SURVEYS CARRIED OUT BY AECOM IN THE SAME PERIOD INCLUDE:
 - ECOLOGICAL SURVEY
 - HORIZONTAL STRUCTURAL CORES TO THE FACES OF THE ABUTMENTS AND CENTRAL PIER TO TEST THE COMPRESSIVE STRENGTH OF THE EXISTING CONCRETE
 - TRIAL PITS AT THE ABUTMENTS TO CONFIRM THE DEPTH OF THE FOUNDATIONS' PILE CAPS
 5. THE EXISTING UNDERBRIDGE WAS CONSTRUCTED IN 1968 AND HAS A LONG HISTORY OF DEFECTS ASSOCIATED WITH CONCRETE CRACKING AND SPALLING EXPOSING TENDONS AND REINFORCEMENT BARS. A PTSI BY RAMBOLL IN APRIL 2021 FOUND A SIGNIFICANT NUMBER OF TENDONS IN THE DECK SLAB TO BE UNGROUTED / UNBONDED, EVIDENCE OF BROKEN / LOOSE STRANDS WITH LOSS OF TENSION AS WELL AS WATER INGRESS TO UNGROUTED DUCTS. THE SOFFIT OF THE DECK HAS BEEN SUBJECT TO STRENGTHENING WITH TRANSVERSE CARBON FIBRE PLATES. THE CENTRAL PIER HAS BEEN INTERVENED WITH HYDRODEMOLITION OF ITS SURFACE CONCRETE AND REPAIRED WITH SPRAYED CONCRETE.
 6. THE APPROXIMATE WEIGHT OF THE EXISTING DECK IS 1700t.

SCOPE OF WORK:

- RECONSTRUCT M62 MOTORWAY BRIDGE

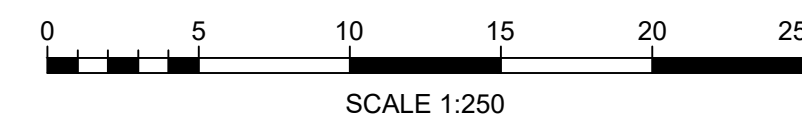
DRAWING LIST:

168158-NRD-1700-MVN2-DRG-ECV-

- 000010 - EXISTING GENERAL ARRANGEMENT (SHEET 1 OF 2)
- 000011 - EXISTING GENERAL ARRANGEMENT (SHEET 2 OF 2)
- 000020 - PROPOSED GA OPTION 1 - STEEL BOX GIRDER
- 000021 - PROPOSED GA OPTION 2 - STEEL E-TYPE

KEY:

- NETWORK RAIL OWNERSHIP BOUNDARY
- OPEN CULVERT WATERCOURSE
- CULVERTED WATERCOURSE
- FENCING / RAILINGS
- BURIED SERVICES - GAS
- BURIED SERVICES - WATER / WASTE WATER



REV	DATE	DESCRIPTION OF REVISIONS	DRAWN	CHKD	APPRD
P02	03/02/2023	OPTIONS FIRST ISSUE	RD	JO	GM
P01	24/01/2023	IDC ISSUE	RD	JO	GM

STATUS	DATE	DESCRIPTION OF REVISIONS	DRAWN	CHKD	APPRD
STATUS					



Manchester Square One, 4 Travis Street, Manchester, M1 2NY
Tel: 0161 880 3936 Web: www.networkrail.co.uk

PROJECT:

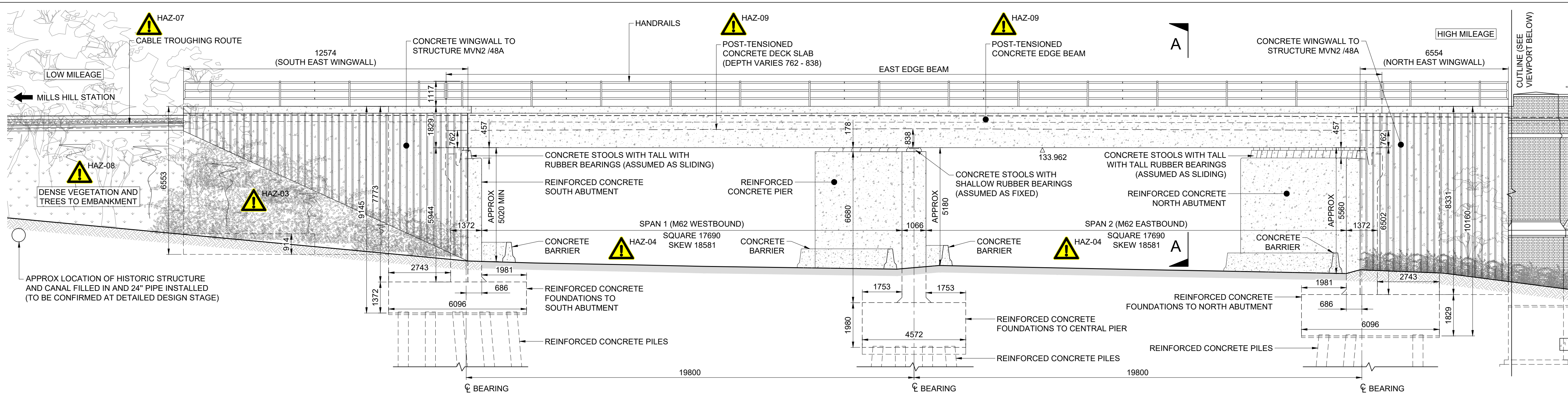
MVN2 48A UNDERBRIDGE RECONSTRUCTION

DRAWING TITLE:

EXISTING GENERAL ARRANGEMENT (SHEET 1 OF 2)

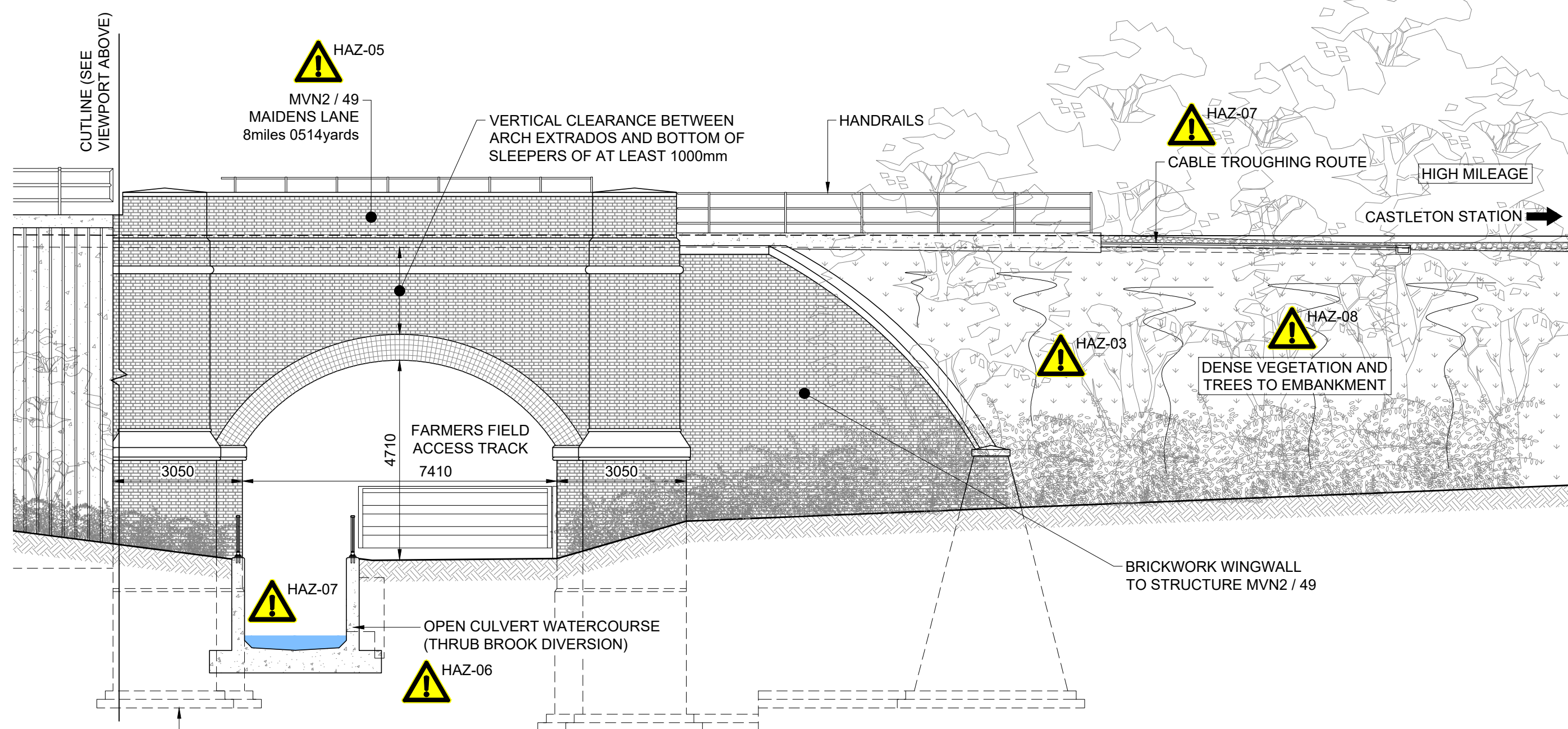
DESIGNED	SIGNED	Date
G. TELO		03/02/2023
DRAWN	SIGNED	Date
R. DIVILLY		03/02/2023
CHECKED	SIGNED	Date
J. OLLERHEAD		03/02/2023
APPROVED	SIGNED	Date
G. MICHAEL		03/02/2023

SCALE	ELR	MILEAGE
SCALE (8 A1 SHEET SIZE - 841 x 594)	ELR	MILEAGE
AS SHOWN	MVN2	8 miles 0475 yards
DRAWING NUMBER		REVISION
168158-NRD-1700-MVN2-DRG-ECV-000010		P02



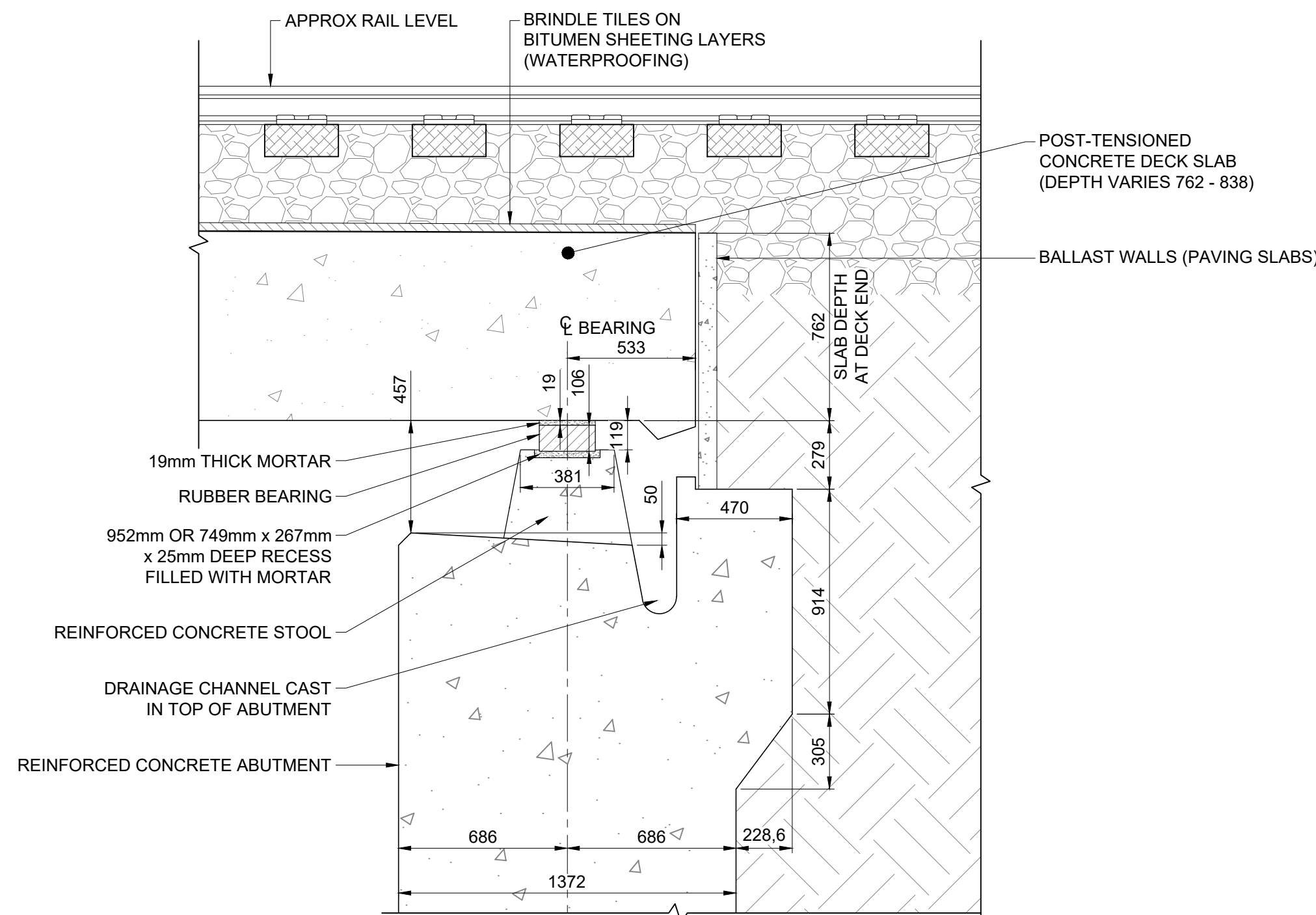
PART EAST ELEVATION (UPSIDE)

SCALE 1:100



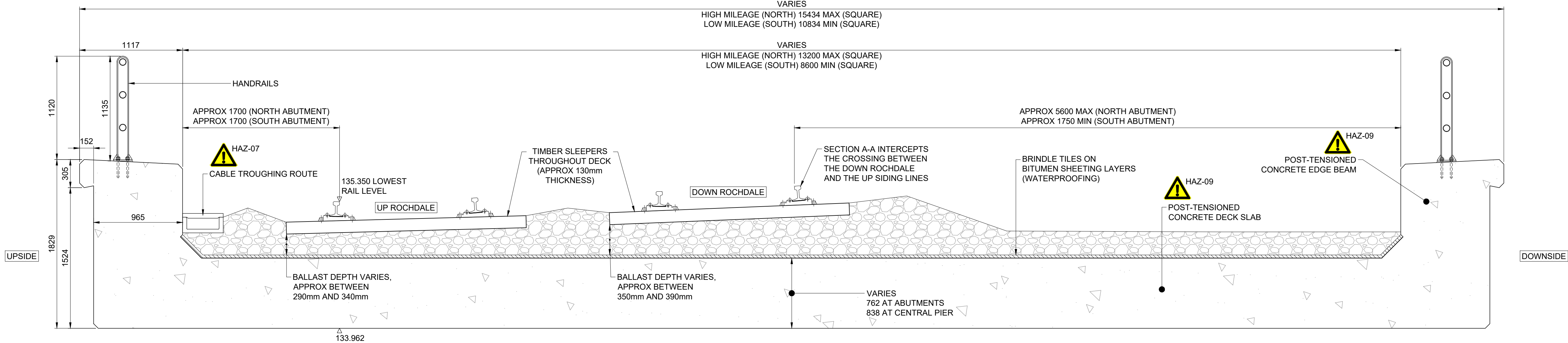
PART EAST ELEVATION (UPSIDE)

SCALE 1:100



TYPICAL SECTION THROUGH ABUTMENT

SCALE 1:20



SECTION A-A TYPICAL SECTION THROUGH DECK

SCALE 1:25

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0 0.4 0.8 1.2 1.6 2.0m

SCALE 1:20

0 0.5 1.0 1.5 2.0 2.5m

SCALE 1:25

0 2 4 6 8 10m

SCALE 1:100

REV	DATE	DESCRIPTION OF REVISIONS	DRAWN	CHKD	APPRD
P02	03/02/2023	OPTIONS FIRST ISSUE	RD	JO	GM
P01	24/01/2023	IDC ISSUE	RD	JO	GM
REV	DATE	DESCRIPTION OF REVISIONS	DRAWN	CHKD	APPRD
STATUS					

OPTIONS

DESIGNERS



Manchester Square One, 4 Travis Street, Manchester, M1 2NY
Tel: 0161 880 3936 Web: www.networkrail.co.uk

PROJECT:

MVN2 48A UNDERBRIDGE
RECONSTRUCTION

DRAWING TITLE:

EXISTING GENERAL ARRANGEMENT
(SHEET 2 OF 2)

DESIGNED	G. TELO	SIGNED	<i>G. Telos</i>	Date	03/02/2023
DRAWN	R. DIVILLY	SIGNED	<i>R. Divilly</i>	Date	03/02/2023
CHECKED	J. OLLERHEAD	SIGNED	<i>J. Ollerhead</i>	Date	03/02/2023
APPROVED	G. MICHAS	SIGNED	<i>G. Michas</i>	Date	03/02/2023

SCALE (8 A1 SHEET SIZE - 841 x 594) ELR MILEAGE

AS SHOWN MVN2 8 miles 0475 yards

DRAWING NUMBER REVISION

168158-NRD-1700-MVN2-DRG-ECV-000011

P02

