

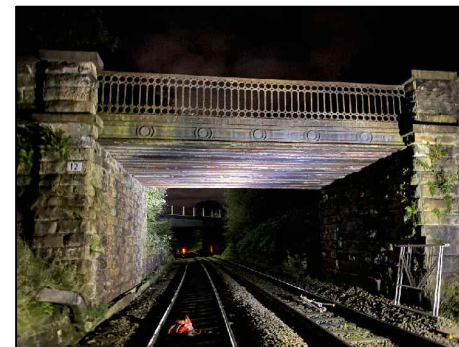
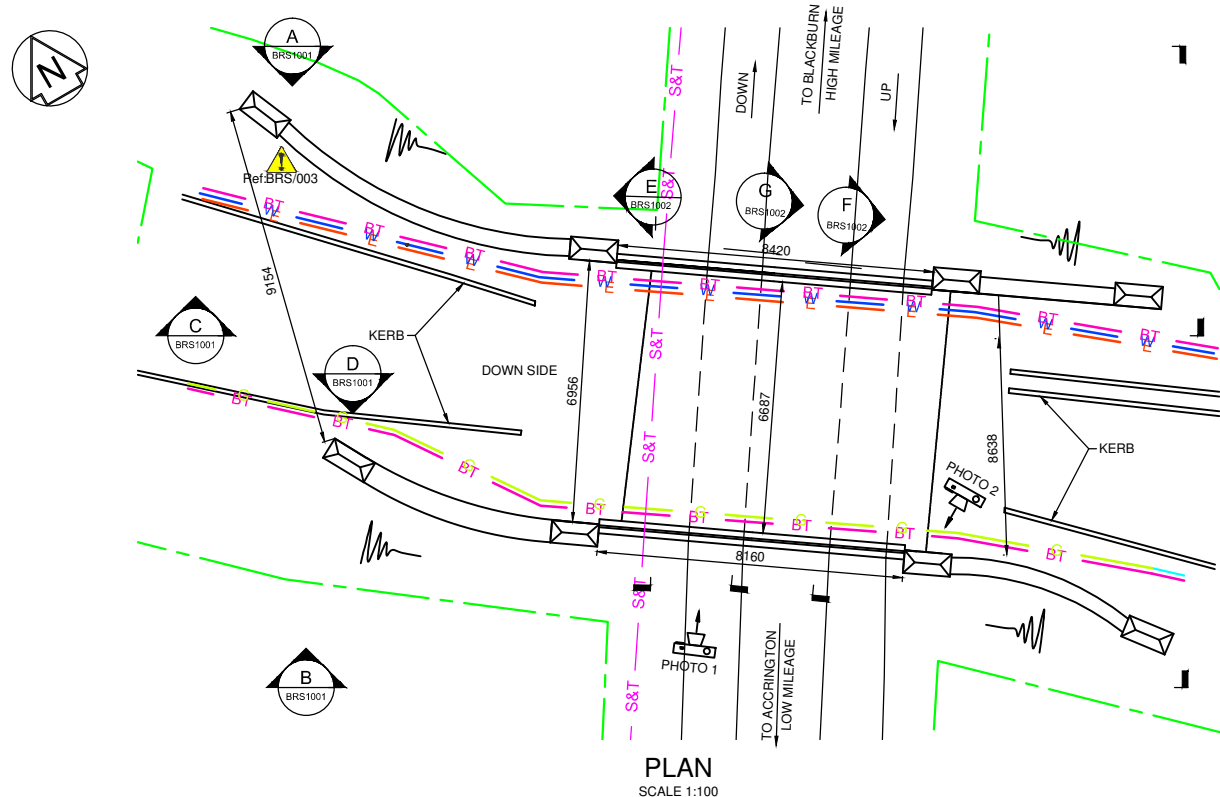
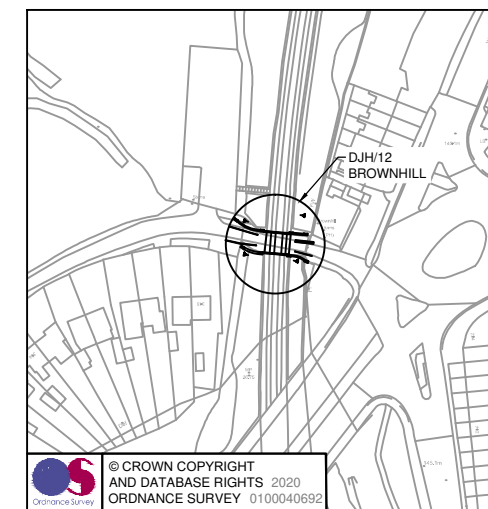


PHOTO 1



PHOTO 2



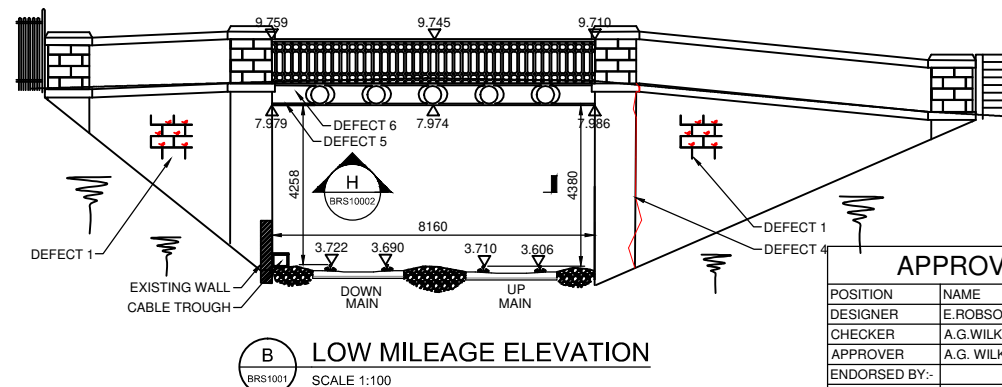
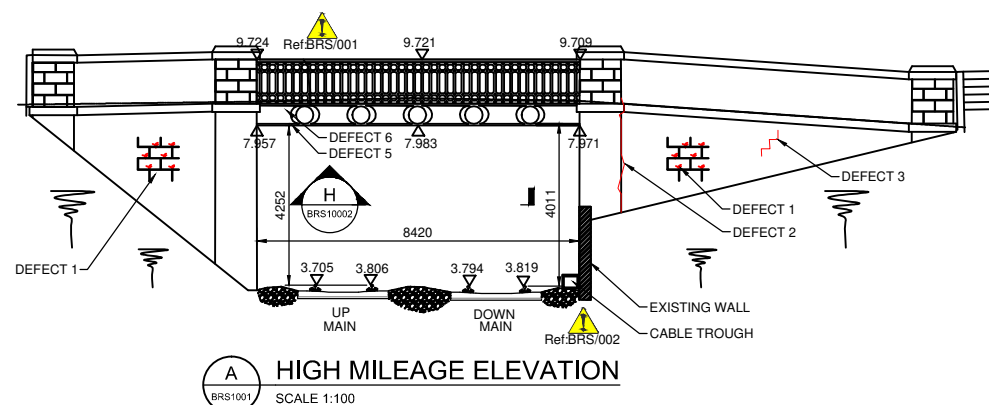
LOCATION PLAN
OS REF: SD 684309
SCALE 1:1250

- NOTES
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
 - ALL LEVELS IN METERS ABOVE ORDNANCE DATUM.
 - THIS DRAWING IS BASED UPON NETWORK RAIL INFORMATION AND SITE SURVEY UNDERTAKEN BY SYSTRA ON 19/09/20.
 - ALL DIMENSIONS ARE INDICATIVE UNLESS STATED OTHERWISE.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH:-
B92118-BRS-1002 - EXISTING GENERAL ARRANGEMENT SHEET 2 OF 2
B92118-BRS-1003 - DEFECTS AND SCHEDULE OF REPAIRS
B92118-BRS-1004 - PROPOSED GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-1005 - PROPOSED GENERAL ARRANGEMENT SHEET 2 OF 2
- KEY:
- E = ELECTRIC CABLES
 - G = GAS
 - BT = TELECOM CABLES
 - W = WATER SUPPLY
 - = NETWORK RAIL BOUNDARY
 - PHOTO 1 = PHOTO AND DIRECTION TAKEN

SIGNIFICANT DESIGNERS IDENTIFIED RESIDUAL HAZARDS

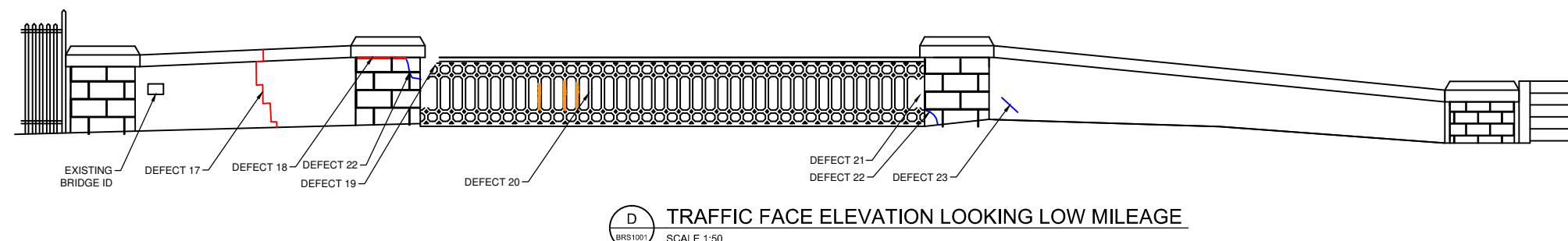
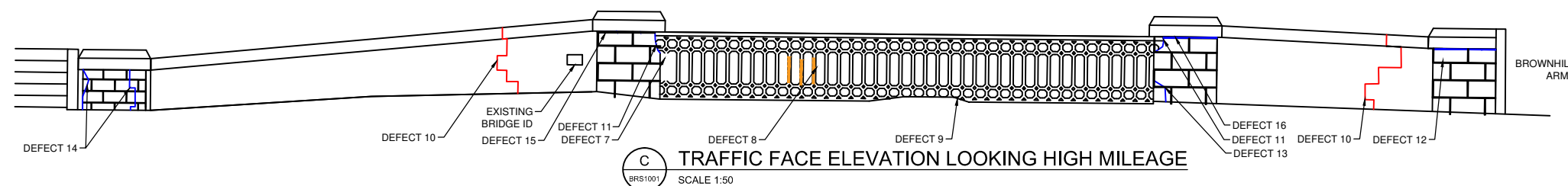
Ref: BRS/001 - WORKING AT HEIGHT
BRS/002 - WORKING NEAR OPERATIONAL RAILWAY
BRS/003 - BURIED SERVICES
BRS/004 - MANUAL HANDLING
BRS/005 - INACCURATE RECORD INFORMATION
BRS/006 - WORKING ON A SLOPE
BRS/007 - EXCESSIVE VEGETATION
BRS/008 - PUBLIC INTERFERENCES

- FOR MORE DETAILED INFORMATION REFER TO DESIGNERS RISK LOG (FORMING PART OF THE PCI): B92118-CDM-BRS1001
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APPROVED FOR CONSTRUCTION

POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	E. ROBSON	SYSTRA	Ellie Robson	23/07/21
CHECKER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	23/07/21
APPROVER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	23/07/21
ENDORSED BY:-				
CEM	D. WILCOCK	STORY CONTRACTING		



DO NOT SCALE

C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B01	05/03/21	DETAILED DESIGN	ER	AGW	AGW
A01	06/11/20	F001 ISSUE	ER	HVD	AGW
P01	30/10/20	FIRST ISSUE FOR DESIGN REVIEW MEETING	ER	HVD	AGW
REV.	DATE	DESCRIPTIONS OF REVISION	DES	CHD	APPR



Network Rail
Square One
4 Travis St
Manchester
M1 2NY

CONTRACTOR



CONSULTANT



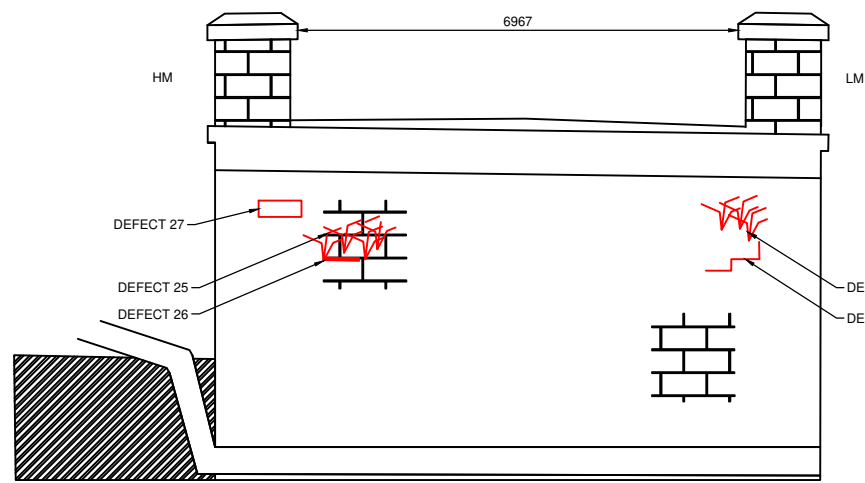
SECURITY CLASSIFICATION

STATUS	APPROVED FOR CONSTRUCTION	SUITABILITY	S04
DESIGNED	E. ROBSON	DATE	30/10/2020
CHECKED	H. V. DANG	DATE	30/10/2020
APPROVED	A.G. WILKINSON	DATE	30/10/2020

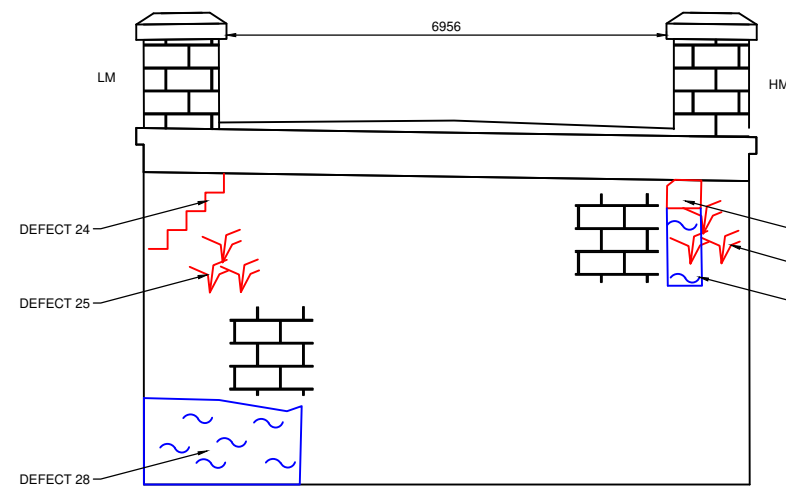
North West Structures

BROWNHILL
EXISTING
GENERAL ARRANGEMENT
SHEET 1 OF 2

SCALES	SURVEY GRID	REVISION
As Shown	SD 684 309	C01
DRAWING NUMBER	B92118-DRG-BRS1001	



E ABUTMENT UP
BRS1001 SCALE 1:50

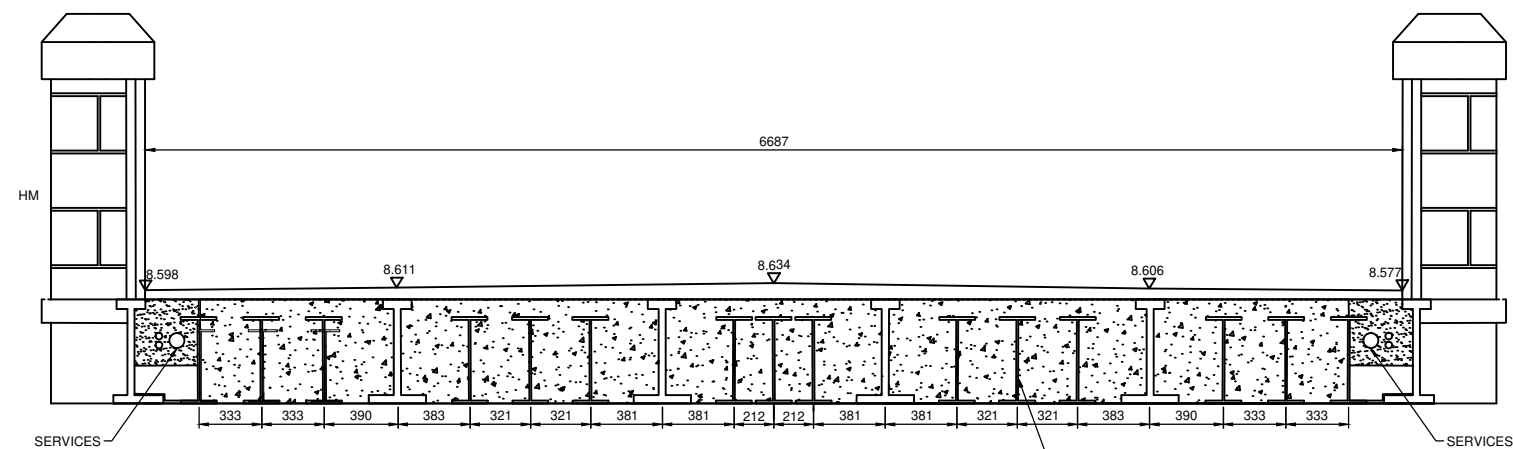


F ABUTMENT DOWN
BRS1001 SCALE 1:50

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B92118-BRS-1002 - EXISTING GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-1003 - DEFECTS AND SCHEDULE OF REPAIRS
B92118-BRS-1004 - PROPOSED GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-1005 - PROPOSED GENERAL ARRANGEMENT SHEET 2 OF 2

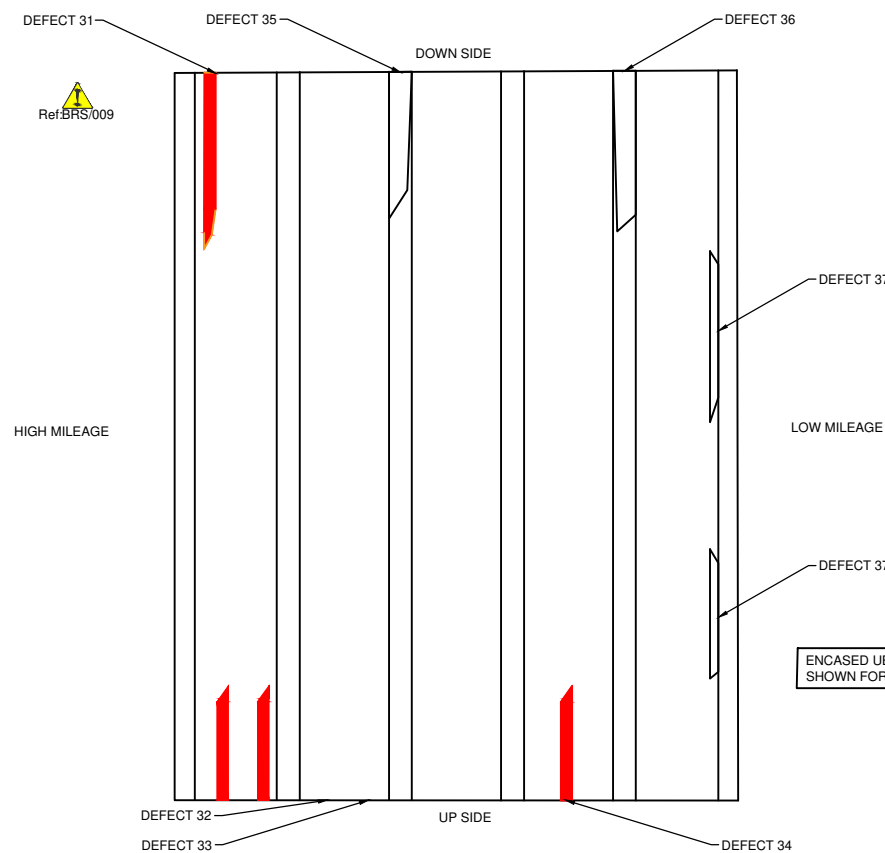
DEFECTS TO BE REPAIRED
DEFECTS NOT TO BE REPAIRED

- SIGNIFICANT DESIGNERS IDENTIFIED RESIDUAL HAZARDS
- Ref: BRS/001 - WORKING AT HEIGHT
BRS/002 - WORKING NEAR OPERATIONAL RAILWAY
BRS/003 - BURIED SERVICES
BRS/004 - MANUAL HANDLING
BRS/005 - INACCURATE RECORD INFORMATION
BRS/006 - WORKING ON A SLOPE
BRS/007 - EXCESSIVE VEGETATION
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BRS/009 - LEAD PAINT
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- SHOULD ANY ADDITIONAL SIGNIFICANT HAZARDS BE IDENTIFIED THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS



G SECTION THROUGH DECK
BRS1001 SCALE 1:50

APPROVED FOR CONSTRUCTION				
POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	E. ROBSON	SYSTRA		23/07/21
CHECKER	A.G. WILKINSON	SYSTRA		23/07/21
APPROVER	A.G. WILKINSON	SYSTRA		23/07/21
ENDORSED BY:-				
CEM	D. WILCOCK	STORY CONTRACTING		



H SOFFIT
BRS1001 SCALE 1:50

0 0.4 0.8 1.2 1.6 2.0m
SCALE 1:20

0 1 2 3 4 5m
SCALE 1:50

DO NOT SCALE

REV.	DATE	DESCRIPTIONS OF REVISION	DES.	CHKD.	APPR.
C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B01	05/03/21	DETAILED DESIGN	ER	AGW	AGW
A01	30/10/20	F001 ISSUE	ER	HVD	AGW
P01	30/10/20	FIRST ISSUE FOR DESIGN REVIEW MEETING	ER	HVD	AGW

Network Rail
Network Rail Square One
4 Travis St
Manchester
M1 2NY

STORY

SYSTRA

STATUS		SUITABILITY
APPROVED FOR CONSTRUCTION		S04
DESIGNED	E. ROBSON	DATE 30/10/2020
CHECKED	H.V. DANG	DATE 30/10/2020
APPROVED	A.G. WILKINSON	DATE 30/10/2020

North West Structures

BROWNHILL
EXISTING
GENERAL ARRANGEMENT
SHEET 2 OF 2

SCALES	SURVEY GRID	REVISION
AS SHOWN	SD 684 309	C01
DRAWING NUMBER	B92118-DRG-BRS1002	

APPROVED FOR CONSTRUCTION				
POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/21
CHECKER	W. TAH	SYSTRA	Wesley Tah	08/10/21
APPROVER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/21
ENDORSED BY:-				
CEM	D.WILCOCK	STORY CONTRACTING		

- NOTES
1.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
2.

ALL LEVELS IN METERS ABOVE ORDNANCE DATUM.
3.

THIS DRAWING IS BASED UPON NETWORK RAIL INFORMATION AND SITE SURVEY UNDERTAKEN BY SYSTRA ON 19/09/20.
4.

ALL DIMENSIONS ARE INDICATIVE UNLESS STATED OTHERWISE.
5.

THIS DRAWING TO BE READ IN CONJUNCTION WITH:-
B92118-BRS-1002 - EXISTING GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-1003 - EXISTING GENERAL ARRANGEMENT SHEET 2 OF 2
B92118-BRS-1004 - PROPOSED GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-1005 - PROPOSED GENERAL ARRANGEMENT SHEET 2 OF 2
6.

ALL EXPOSED METALWORK TO BE MECHANICALLY PREPARED TO SURFACE FINISH STANDARD ST3 AND TREATED WITH XM92 EQUIVALENT TO M24 FLUOROPOLYMER PAINT SYSTEM, CAST IRON EDGE GIRDERS AND DECK SOFFIT TO BE 00 A.09 BATTLESHIP GREY, CAST IRON PARAPETS TO BE RAL 9005 JET BLACK

	BROWNHILL DEFECTS DESCRIPTION	PROPOSED REPAIRS
1	VEGETATION GROWTH	VEGETATION TO BE REMOVED
2	AREA OF OPEN JOINTS, UP TO 10mm WIDE	RAKE OUT AND REPOINT THE OPEN JOINTS
3	1.5M LONG VERTICAL STEP FRACTURE, UP TO 25mm WIDE	FRACTURE TO BE CROSS-STICHED IN ACCORDANCE WITH NETWORK RAIL STANDARD DETAIL DRAWING NR/CIV/SD/108 & 109
4	AREA OF OPEN JOINTS, UP TO 15mm WIDE	RAKE OUT AND REPOINT THE OPEN JOINTS
5	PAINT LOSS AND SURFACE CORROSION TO OUTER WEB (FULL LENGTH)	MECHANICALLY PREPARED TO ST3 SURFACE AND APPLY XM92 EQUIVALENT TO M24 FLUOROPOLYMER SYSTEM (BATTLESHIP GREY - BS4800 COLOUR 00 A 09)
6	CORROSION UP TO 0.5mm, TO OUTER WEB FOR FULL HEIGHT OF DECORATIVE PANEL	MECHANICALLY PREPARED TO ST3 SURFACE AND APPLY XM92 EQUIVALENT TO M24 FLUOROPOLYMER SYSTEM (BATTLESHIP GREY - BS4800 COLOUR 00 A 09)
7	MISSING VERTICAL RAIL	SHARP EDGES ARE REQUIRED TO BE ROUNDED OFF. GRP PARAPET TO BE ADDED BEHIND. CAST IRON PARAPET IS FOR AESTHETIC PURPOSES ONLY
8	PAINT LOSS AND SURFACE CORROSION THROUGHOUT IRON PARAPET	LOOSE/DEFORMED METALWORK TO BE REMOVED. REMAINDER TO BE MECHANICALLY PREPARED TO ST3 SURFACE AND APPLY XM92 EQUIVALENT TO M24 FLUOROPOLYMER SYSTEM (JET BLACK - RAL 9005)
9	17X POST SHEARED OFF AT BASE PORTION OF RAILING OVER 6X POSTS LOOSE TO IMPACT	ANY CRACKS TO BE FILLED WITH COMPATIBLE SEALANT TO PAINT SYSTEM, SHARP EDGES ARE TO BE ROUNDED OFF.
10	OPEN JOINTS THROUGH PARAPET AND PILASTER (SOME BEEN REPOINTED)	RAKE OUT AND REPOINT THE OPEN JOINTS
11	PORTION OF STONE CHIPPED OUT	NO REPAIR REQUIRED
12	2M LENGTH OF OPEN JOINTS, UP TO 15mm WIDE AT TOP OF PILASTER	RAKE OUT AND REPOINT THE OPEN JOINTS
13	CRACK ADJACENT TO CAST IRON RAILING INTERFACE	NO REPAIR REQUIRED, MONITOR THE FRACTURE
14	PILASTER AND PARAPET LEANING UP TO 100mm TOWARDS THE HM	OLD STANDING DEFECT DATED 1998. NO REPAIR NEEDED, ONLY MONITOR
15	OVERSAILING OF TOP COURSE AND COPING	NO REPAIR NEEDED, ONLY MONITOR
16	PILASTER LEANING TOWARD HM	NO REPAIR NEEDED, ONLY MONITOR
17	1.5M LENGTH OF OPEN JOINTS UP TO 10mm WIDE	RAKE OUT AND REPOINT THE OPEN JOINTS
18	2M LENGTH OF OPEN JOINTS UP TO 15mm WIDE	RAKE OUT AND REPOINT THE OPEN JOINTS
19	SECTION OF TOP RAIL & PORTION OF VERTICAL POSTS COMPLETELY SHEARED OFF	SHARP EDGES ARE REQUIRED TO BE ROUNDED OFF. GRP PARAPET TO BE ADDED BEHIND. CAST IRON PARAPET IS FOR AESTHETIC PURPOSES ONLY
20	PAINT LOSS AND SURFACE CORROSION THROUGHOUT	LOOSE/DEFORMED METALWORK TO BE REMOVED. REMAINDER TO BE MECHANICALLY PREPARED TO ST3 SURFACE AND APPLY XM92 EQUIVALENT TO M24 FLUOROPOLYMER SYSTEM (JET BLACK - RAL 9005)
21	MISSING VERTICAL RAIL	SHARP EDGES ARE REQUIRED TO BE ROUNDED OFF. GRP PARAPET TO BE ADDED BEHIND. CAST IRON PARAPET IS FOR AESTHETIC PURPOSES ONLY
22	PORTION OF STONE CHIPPED OUT	NO REPAIR REQUIRED
23	90mm LONG HAIRLINE CRACK	NO REPAIR NEEDED, ONLY MONITOR
24	1.5mm LONG VERTICAL STEP FRACTURE, UP TO 25mm WIDE	FRACTURE TO BE CROSS-STICHED IN ACCORDANCE WITH NETWORK RAIL STANDARD DETAIL DRAWING NR/CIV/SD/109
25	MINOR SAPLING GROWTH THROUGH JOINTS	VEGETATION TO BE REMOVED
26	450mm LENGTH OPEN JOINT, UP TO 30mm WIDE AT LM END	RAKE OUT AND REPOINT THE OPEN JOINTS
27	1m2 OF OPEN JOINTS, UP TO 20mm WIDE AT HM END	RAKE OUT AND REPOINT THE OPEN JOINTS
28	2-3m2 OF WATER STAINING AT BASE OF ABUTMENT	NO REPAIR REQUIRED
29	0.5m2 OF OPEN JOINTS, UP TO 20mm WIDE	RAKE OUT AND REPOINT THE OPEN JOINTS
30	2m² DAMPNESS BELOW	NO REPAIR REQUIRED
31	PAINT LOSS AND CORROSION, UP TO 1mm TO BF OF FIRST ENCASED UB FROM HM	CLEAN UP, PREPARE AND PAINT GIRDERS
32	PAINT LOSS CORROSION AND LAMINATION, UP TO 0.5mm TO BOTH SIDES BF OF SECOND ENCASED UB FROM HM	CLEAN UP, PREPARE AND PAINT GIRDERS
33	CORROSION AND LAMINATION, UP TO 0.5mm TO BOTH SIDES OF BF OF THIRD ENCASED UB FROM HM	CLEAN UP, PREPARE AND PAINT GIRDERS
34	PATCHES OF PAINT FLAKING & SURFACE CORROSION TO ENCASED GIRDERS 4 - 14 FROM HM	MECHANICALLY PREPARED TO ST3 SURFACE AND APPLY XM92 EQUIVALENT TO M24 FLUOROPOLYMER SYSTEM (BATTLESHIP GREY - BS4800 COLOUR 00 A 09)
35	1mm LOSS AND LAMINATION TO BF OF ALL MAIN GIRDERS	MECHANICALLY PREPARED TO ST3 SURFACE AND APPLY XM92 EQUIVALENT TO M24 FLUOROPOLYMER SYSTEM (BATTLESHIP GREY - BS4800 COLOUR 00 A 09)
36	LAMINATION TO SIDE OF BF, UP TO 6mm WIDE AT QUARTER SPAN FROM ES2 ABT1	MECHANICALLY PREPARED TO ST3 SURFACE AND APPLY XM92 EQUIVALENT TO M24 FLUOROPOLYMER SYSTEM (BATTLESHIP GREY - BS4800 COLOUR 00 A 09)
37	VOIDS IN CONCRETE INFILL AT INTERFACE WITH MAIN CAST IRON GIRDER AND ENCASED Ubs	NO REPAIR REQUIRED

C02	08/10/21	MINOR UPDATES, APPROVED FOR CONSTRUCTION	AGW	WT	AGW
C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B03	03/06/21	MINOR UPDATES, F003 ISSUE	ER	AGW	AGW
B02	07/05/21	DETAILED DESIGN	ER	AGW	AGW
B01	05/03/21	DETAILED DESIGN	ER	AGW	AGW
A01	06/11/20	F001 ISSUE	ER	HVD	AGW
P01	30/10/20	FIRST ISSUE OF DESIGN REVIEW MEETING	ER	HVD	AGW
REV.	DATE	DESCRIPTIONS OF REVISION	DES	CHKD	APPR
CLIENT					

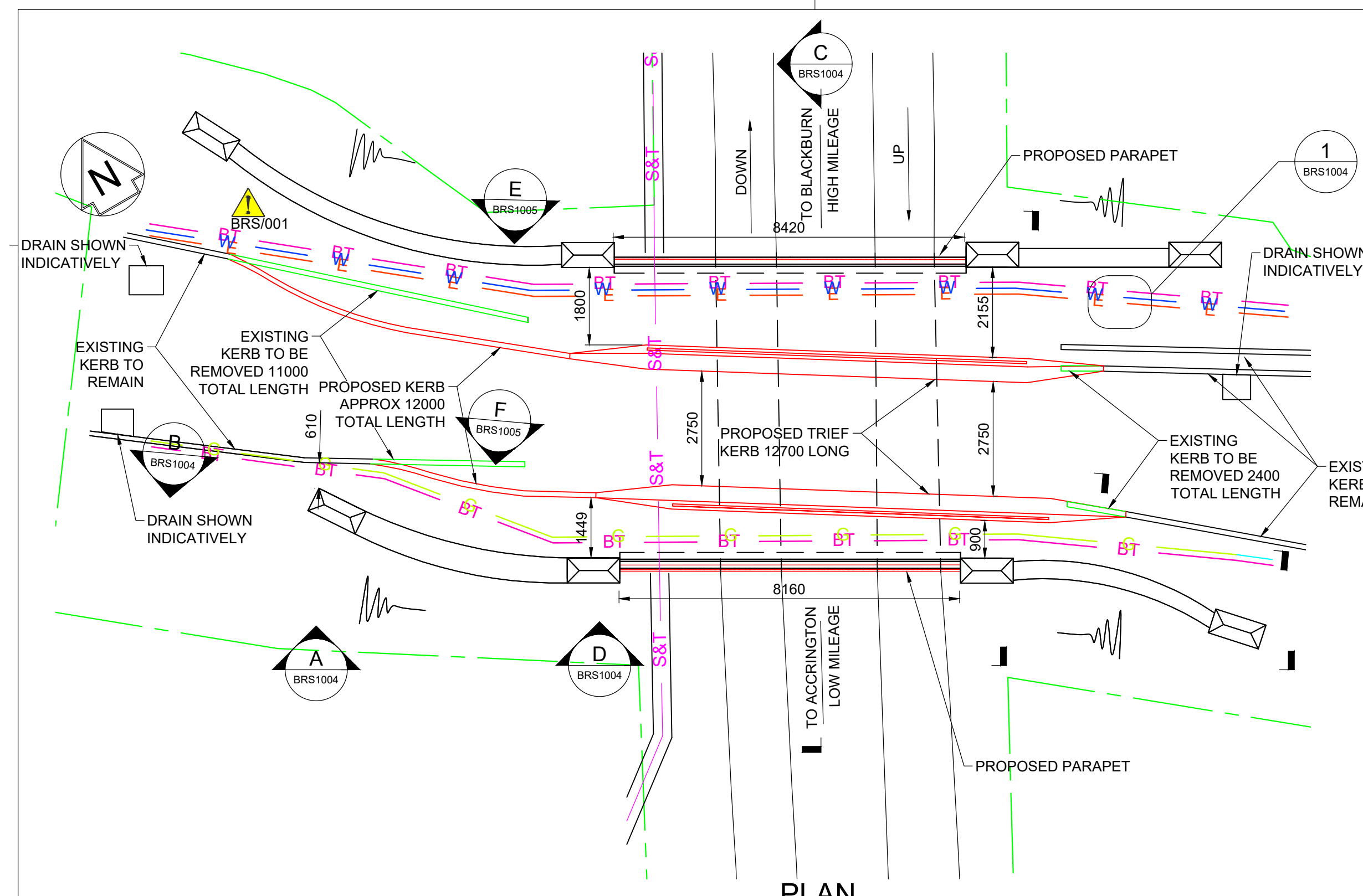


Network Rail
Square One
4 Travis St
Manchester
M1 2NY



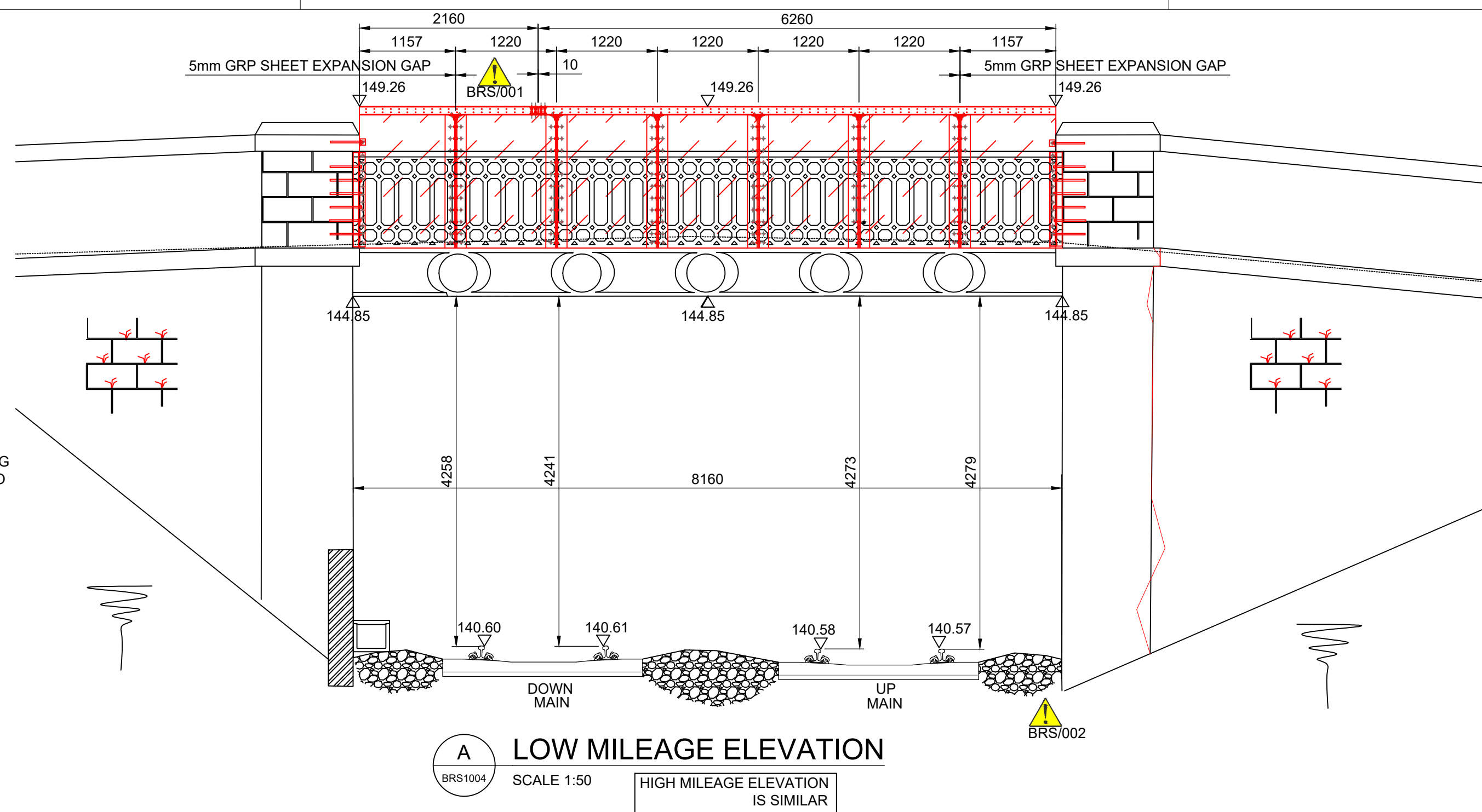
SECURITY CLASSIFICATION		
STATUS		SUITABILITY
DETAILED DESIGN		S04
DESIGNED	E. ROBSON	DATE 30/10/2020
CHECKED	H.V. DANG	DATE 30/10/2020
APPROVED	A.G. WILKINSON	DATE 30/10/2020
North West Structures		
BROWNHILL EXISTING DEFECTS AND SCHEDULE OF REPAIRS		
SCALES	SURVEY GRID	REVISION
As Shown	SD 684 309	C02
DRAWING NUMBER	B92118-DRG-BRS1003	

DO NOT SCALE

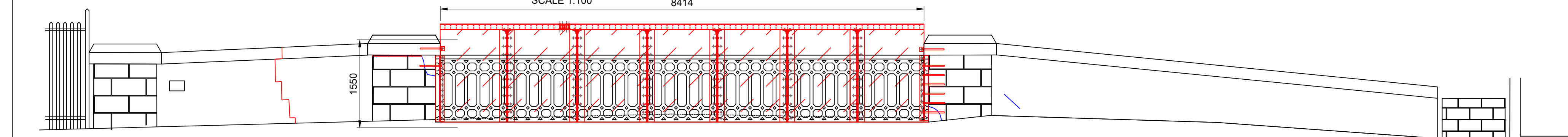


PLAN

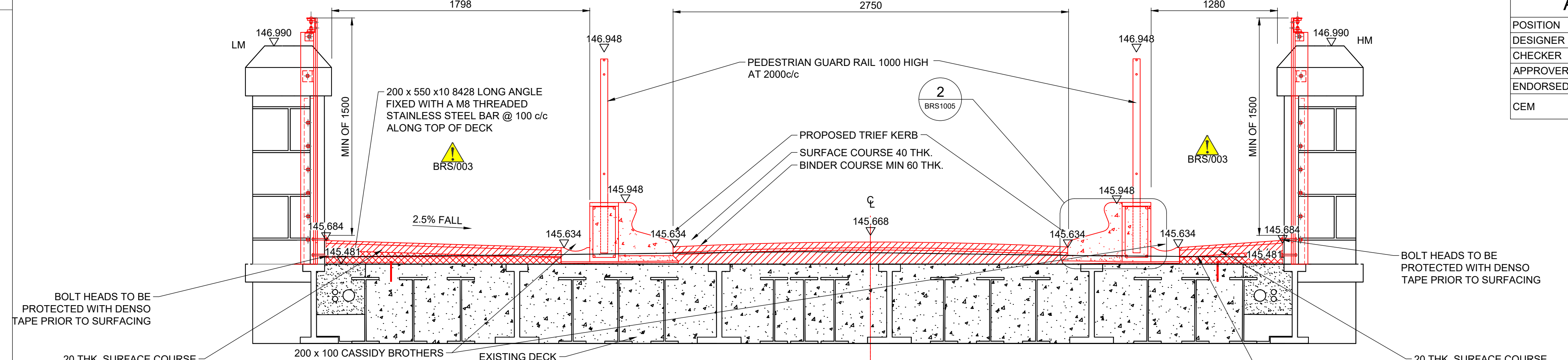
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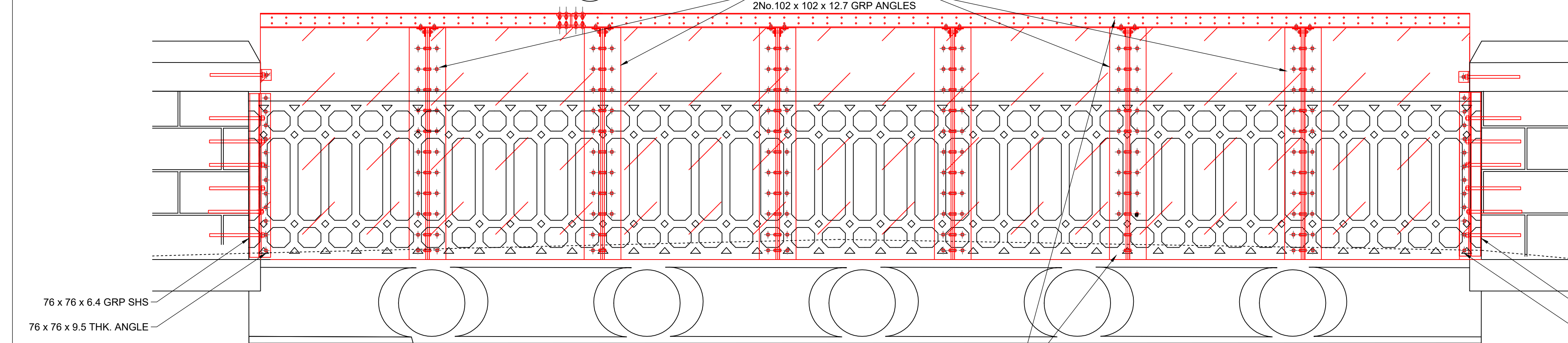
A LOW MILEAGE ELEVATION
SCALE 1:50
HIGH MILEAGE ELEVATION IS SIMILAR



B TRAFFIC ELEVATION LOOKING TO LOW MILEAGE
SCALE 1:50



C SECTION THROUGH BRIDGE LOOKING TOWARDS DOWNSIDE
SCALE 1:20



D PROPOSED PARAPET DETAIL
SCALE 1:20

APPROVED FOR CONSTRUCTION				
POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	E.ROBSON	SYSTRA	Ellie Robson	23/07/21
CHECKER	A.G.WILKINSON	SYSTRA	Andrew Wilkinson	23/07/21
APPROVER	A.G. WILKINSON	SYSTRA	Wilkinson	23/07/21
ENDORSED BY:-				
CEM	D.WILCOCK	STORY	CONSTRUCTION	

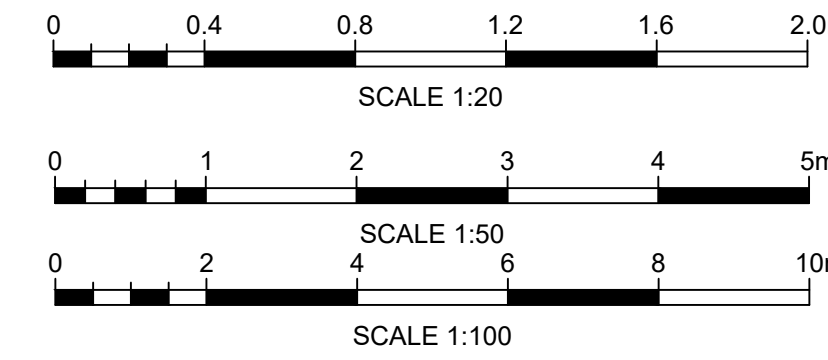
SIGNIFICANT DESIGNERS IDENTIFIED RESIDUAL HAZARDS

Ref: BRS/001 - WORKING AT HEIGHT
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BRS/007 - EXCESSIVE VEGETATION
BRS/008 - PUBLIC INTERFERENCES
BRS/009 - LEAD PAINT

• FOR MORE DETAILED INFORMATION REFER TO DESIGNERS RISK LOG (FORMING PART OF THE PCI): B92118-CDM-BRS0001

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B92118-BRS-1001 - EXISTING GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-1002 - EXISTING GENERAL ARRANGEMENT SHEET 2 OF 2
B92118-BRS-1003 - DEFECTS AND SCHEDULE OF REPAIRS
B92118-BRS-1005 - PROPOSED GENERAL ARRANGEMENT SHEET 2 OF 2
B92118-BRS-1006 - ASSEMBLY DETAILS
B92118-BRS-1008 - LONG SECTION HIGHWAY DETAILS
 - GRP SECTIONS BY DURA COMPOSITES COLOURED GREY
 - ALL FIXINGS TO GRP TO BE A4-80 STAINLESS STEEL WITH SECURITY HEADS TO PUBLICLY ACCESSIBLE FACES
 - CONCRETE TO TRIEF KERB BACKING BEAM TO BE STANDARD MIX RC 35/40. KERB BEDDING TO BE ST5.
 - ALL EXPOSED METALWORK TO BE MECHANICALLY PREPARED TO SURFACE FINISH STANDARD ST3 AND PROTECTED WITH XM92 (EQUIVALENT TO M24) FLUOROPOLYMER PROTECTIVE TREATMENT. MAIN GIRDERS TO BE BATTLESHIP GREY (00A09), CAST IRON PARAPETS TO BE RAL9005 JET BLACK
- KEY:
- E = ELECTRIC CABLES
 - G = GAS
 - BT = TELECOM CABLES
 - W = WATER SUPPLY
 - = NETWORK RAIL BOUNDARY
- COLOUR KEY:
- BLACK INDICATES EXISTING OR UNCHANGED ASSETS.
BLUE INDICATES ASSETS TO BE MODIFIED
GREEN INDICATES EXISTING ASSETS TO BE REMOVED OR ABANDONED.
RED INDICATES PROPOSED ASSETS.

C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B03	03/06/21	GRP SECTIONS UPDATED BASED ON AVAILABILITY	ER	AGW	AGW
B02	7/05/21	UPDATED TO DRM COMMENTS	ER	AGW	AGW
B01	05/03/21	DETAILED DESIGN	AGW	ER	AGW
A01	06/11/20	F001 ISSUE	ER	HVD	AGW
P01	30/10/20	FIRST ISSUE FOR DESIGN MEETING	ER	HVD	AGW
REV.	DATE	DESCRIPTIONS OF REVISION	DES	CHKD	APPR
CLIENT					

Network Rail
Square One
4 Travis St
Manchester
M1 2NY

CONTRACTOR

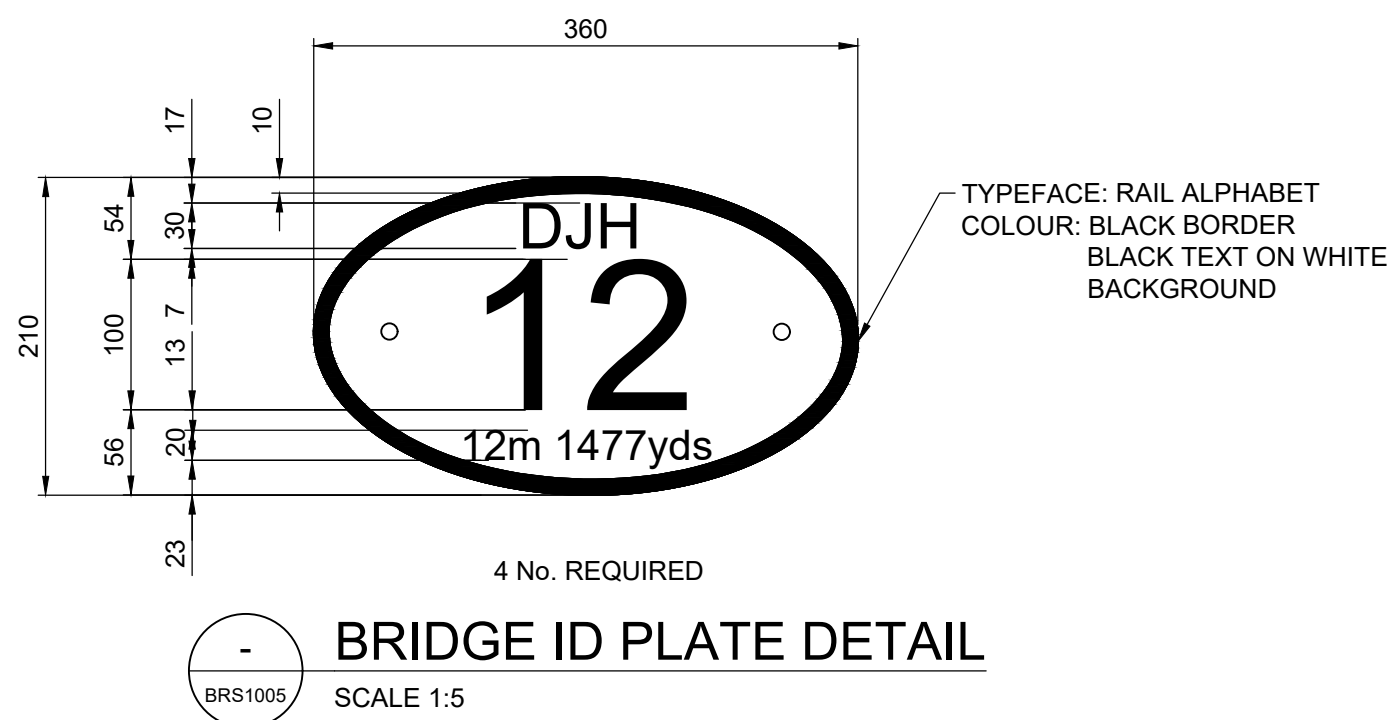
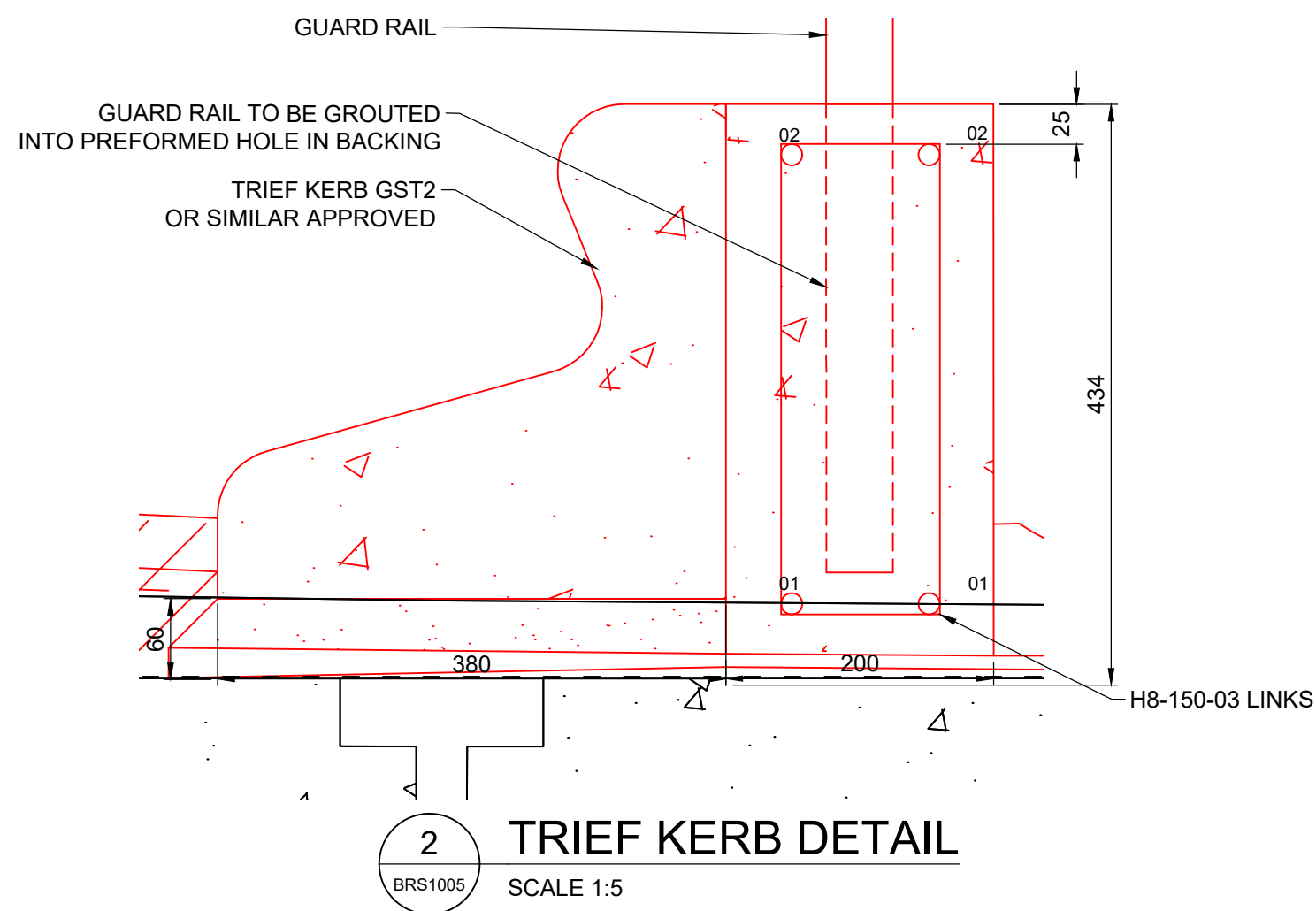
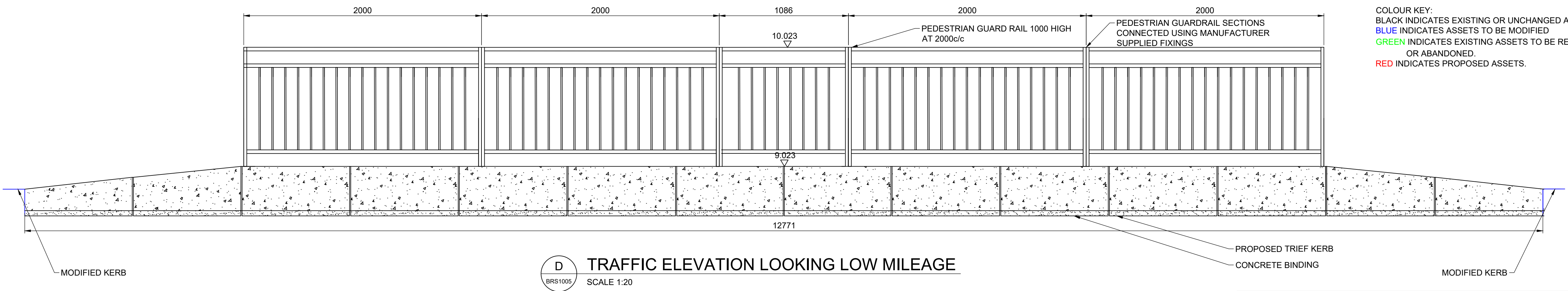
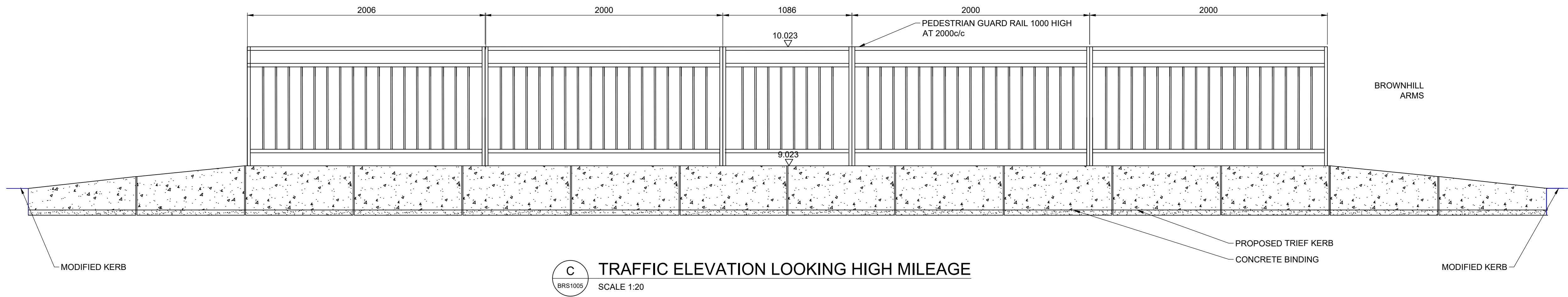
STORY

CONSULTANT

SYSTRA

SECURITY CLASSIFICATION	
STATUS	APPROVED FOR CONSTRUCTION
DESIGNED	E.ROBSON
CHECKED	A.G. WILKINSON
APPROVED	A.G. WILKINSON
North West Structures	
BROWNHILL PROPOSED GENERAL ARRANGEMENT 1 OF 2	
SCALES	SURVEY GRID
As Shown	SD 684 309
DRAWING NUMBER	REVISION
B92118-DRG-BRS1004	C01

DO NOT SCALE



APPROVED FOR CONSTRUCTION				
POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/2021
CHECKER	W.TAH	SYSTRA	Wesley Tah	08/10/2021
APPROVER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/2021
ENDORSED BY:-				
CEM	D.WILCOCK	STORY CONSTRUCTION		

- SIGNIFICANT DESIGNERS IDENTIFIED RESIDUAL HAZARDS
- Ref: BRS/001 - WORKING AT HEIGHT
BRS/002 - WORKING NEAR OPERATIONAL RAILWAY
BRS/003 - BURIED SERVICES
BRS/004 - MANUAL HANDLING
BRS/005 - INACCURATE RECORD INFORMATION
BRS/006 - WORKING ON A SLOPE
BRS/007 - EXCESSIVE VEGETATION
BRS/008 - PUBLIC INTERFERENCES
BRS/009 - LEAD PAINT
- Ref:XXX/000
- FOR MORE DETAILED INFORMATION REFER TO DESIGNERS RISK LOG (FORMING PART OF THE PCI): B92118-CDM-BRS0001
 - EVERY DAY OR LOW RISK HAZARDS HAVE NOT BEEN INDICATED ON THIS DRAWING, NEITHER HAVE HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR
 - SHOULD ANY ADDITIONAL SIGNIFICANT HAZARDS BE IDENTIFIED THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS

- NOTES
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
 - ALL LEVELS IN METERS ABOVE ORDNANCE DATUM.
 - THIS DRAWING IS BASED UPON NETWORK RAIL INFORMATION AND SITE SURVEY UNDERTAKEN BY SYSTRA ON 19/09/20.
 - ALL DIMENSIONS ARE INDICATIVE UNLESS STATED OTHERWISE.
 - BRIDGE IDENTITY SIGNS ARE IN ACCORDANCE WITH SIGN AK213 OF RAILWAY GROUP STANDARD RIS-0733-CCS NOTING THAT SIGNS MUST BE PLACED SO THEY ARE CLEAR AND VISIBLE ACCOUNTING FOR OBSTRUCTING SIGNS AND SIGNALS.
 - ALL SIGNS ARE EPOXY GLUED TO STRUCTURE AND SECURED WITH 2No. 8mm DIA. STAINLESS STEEL TAMPERS PROOF FIXING WITH A MINIMUM EMBEDMENT OF 65mm INTO MASONRY. BOLT HOLES ARE TO BE PRE-DRILLED BY MANUFACTURER
 - CONCRETE TO TRIEF KERB BACKING BEAM TO BE STANDARD MIX RC 35/40. KERB BEDDING TO BE ST5.
 - RAILS TO BE M2 PEDESTRIAN GUARD RAILS GROUTED INTO CORE DRILLED HOLE FROM ALPHA RAIL OR SIMILAR APPROVED. ALPHA RAIL, NUNN BROOK RISE, COUNTY ESTATE, HUTHWAITE, NOTTINGHAMSHIRE, NG17 2PD
 - ENDS OF GUARD RAILS TO BE SUPPLIED WITH RETRO-REFLECTIVE WARNING MARKERS
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH:-
B92118-BRS-1001 - EXISTING GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-1002 - EXISTING GENERAL ARRANGEMENT SHEET 2 OF 2
B92118-BRS-1003 - EXISTING DEFECT AND SCHEDULE OF REPAIR
B92118-BRS-1004 - PROPOSED GENERAL ARRANGEMENT SHEET 1 OF 2
B92118-BRS-DRG-1006 - ASSEMBLY DETAILS
B92118-BRS-DRG-1008 - LONG SECTION HIGHWAY DRAWING
 - SURFACE FINISH TO TRIEF BACKING TO BE F3/U3
 - GROUT TO SAFETY FENCE POCKETS TO BE NON-SHRINK CEMENTIOUS GROUT SUCH AS GP GROUT BY PAREX

C02	08/10/21	MINOR UPDATES, APPROVED FOR CONSTRUCTION	AGW	WT	AGW
C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B03	03/06/21	MINOR UPDATES, F003 ISSUE	ER	AGW	AGW
B02	07/05/21	MINOR UPDATES FOLLOWING DRM	ER	AGW	AGW
B01	05/03/21	DETAILED DESIGN	AGW	ER	AGW
A01	06/11/20	F001 ISSUE	ER	HVD	AGW
P01	30/10/20	FIRST ISSUE FOR DESIGN REVIEW MEETING	ER	HVD	AGW
REV.	DATE	DESCRIPTIONS OF REVISION	DES	CHKD	APPR
CLIENT					



CONTRACTOR



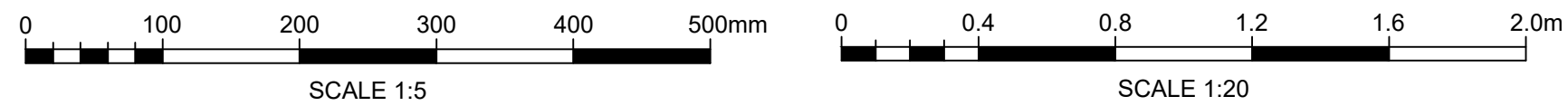
CONSULTANT



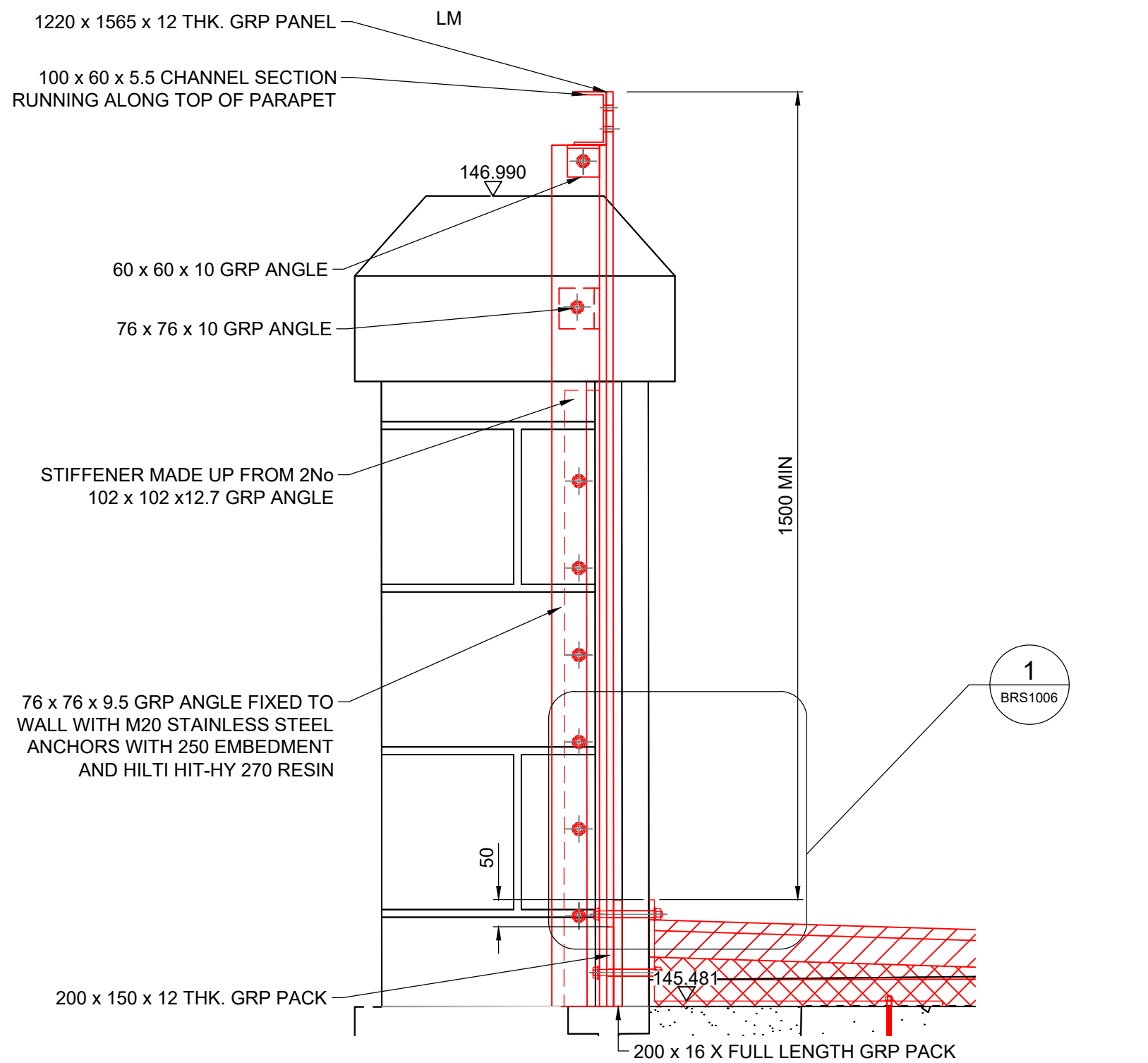
SECURITY CLASSIFICATION

STATUS	SUITABILITY
DESIGNED	S04
CHECKED	
APPROVED	

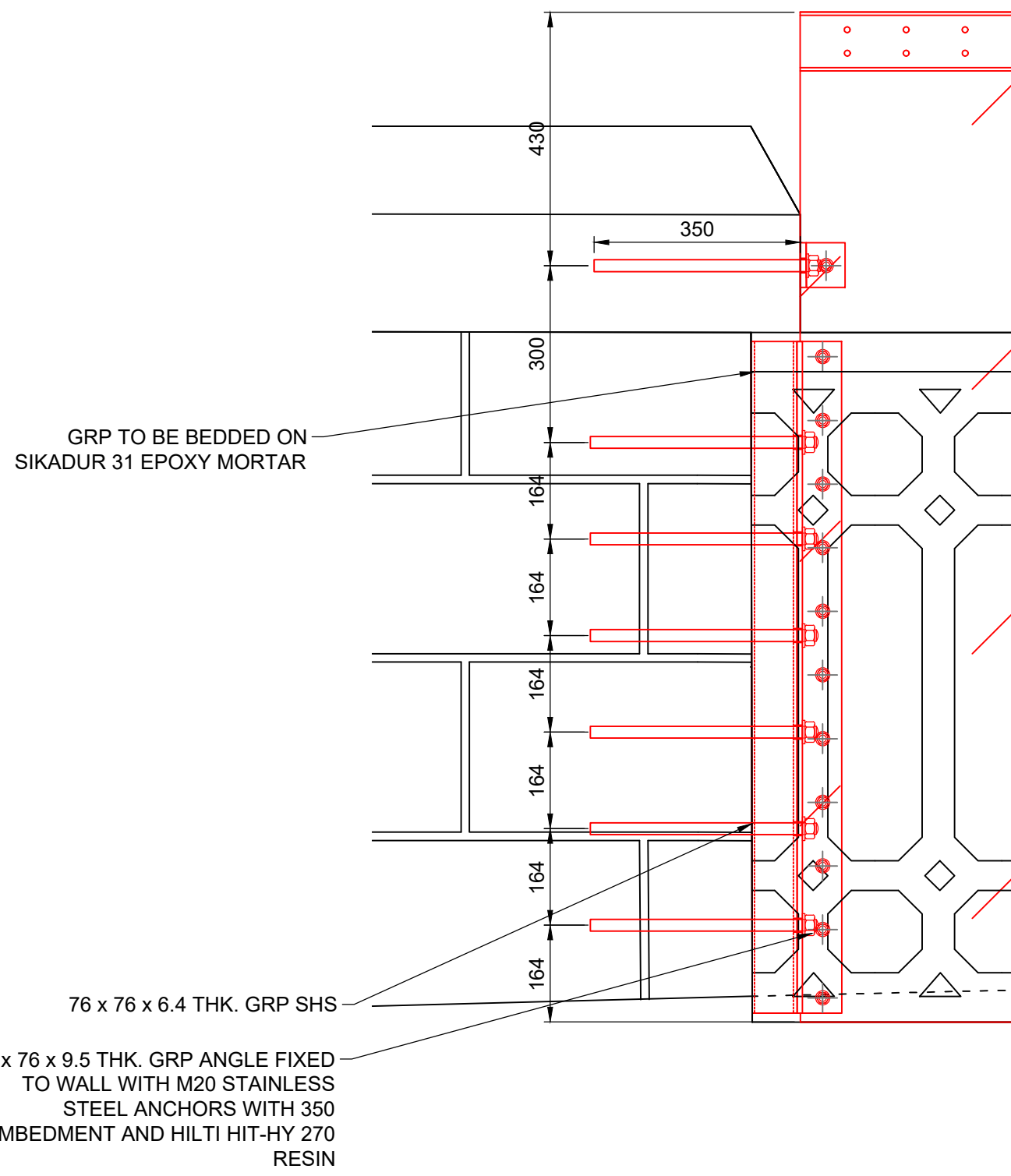
North West Structures	
BROWNHILL PROPOSED GENERAL ARRANGEMENT 2 OF 2	
SCALES	SURVEY GRID
AS SHOWN	SD 684 309
DRAWING NUMBER	REVISION
B92118-DRG-BRS1005	C02



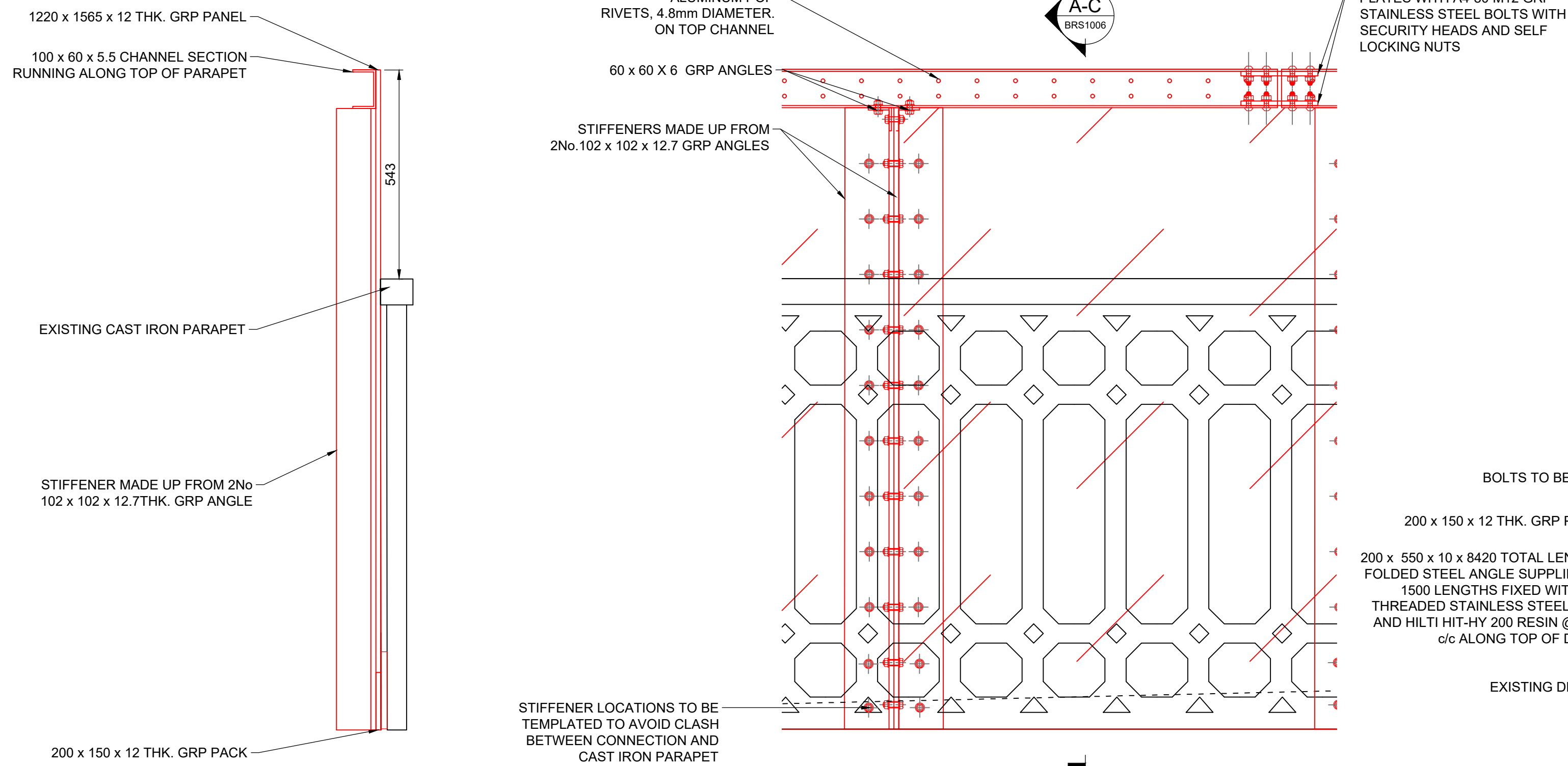
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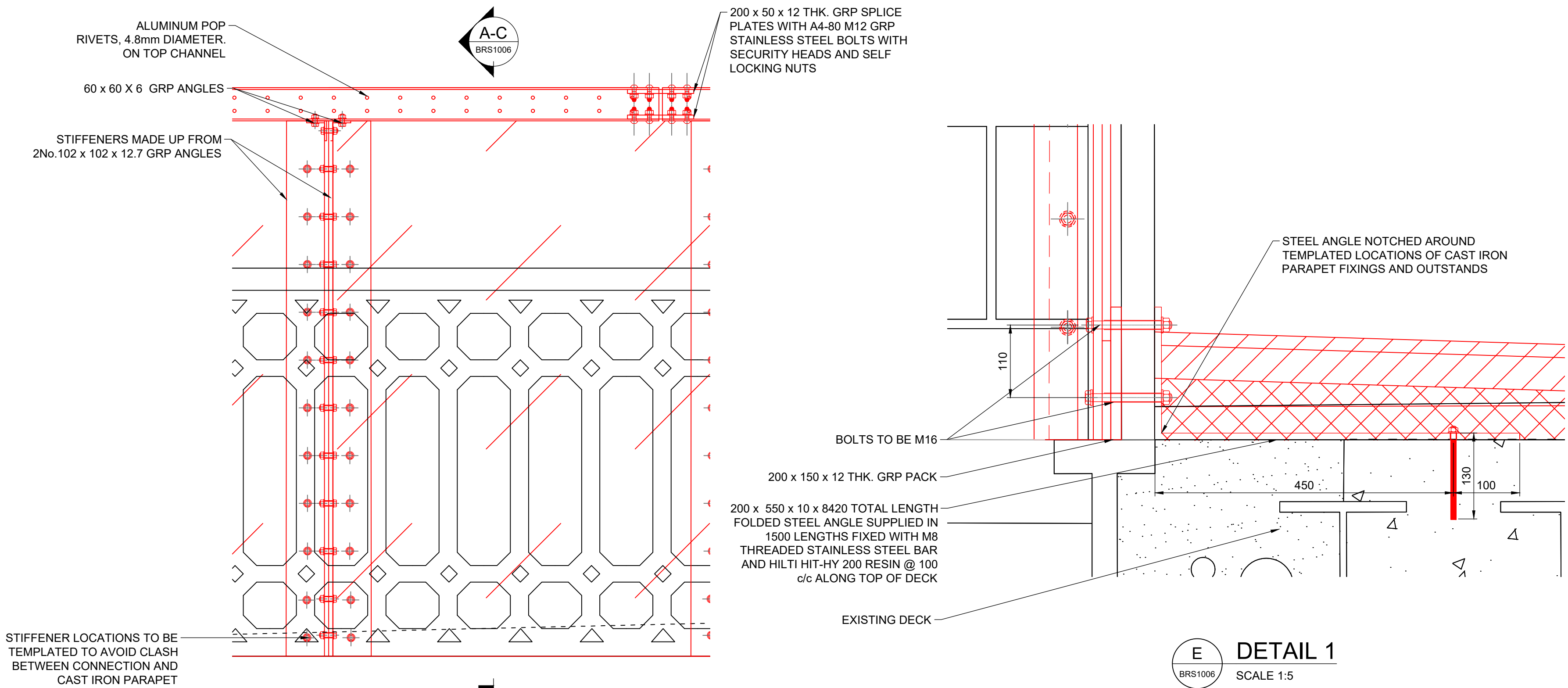
A **DETAIL THROUGH BRIDGE LOOKING TOWARDS DOWNSIDE**
SCALE 1:10



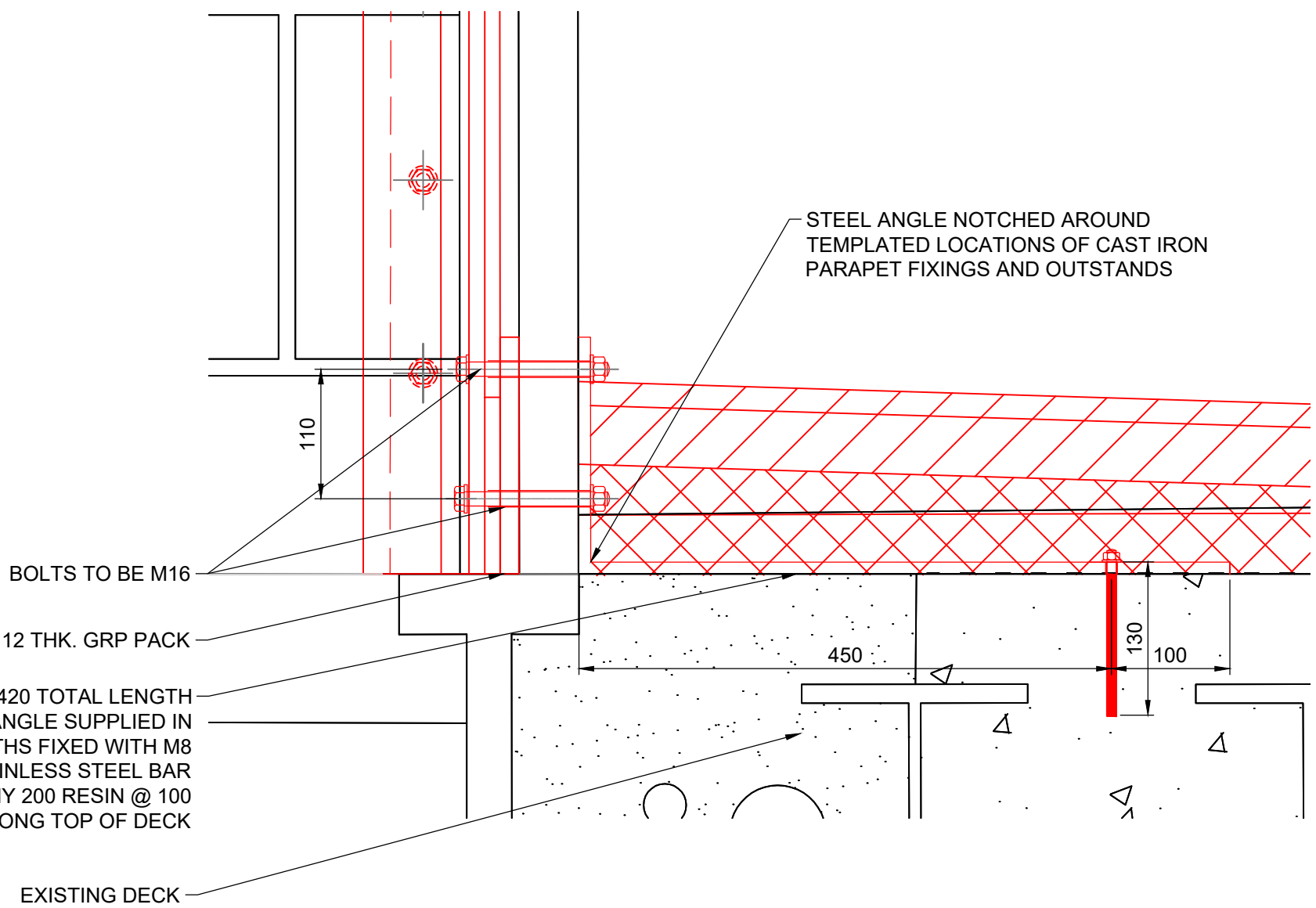
B **LEFT DETAIL ON PROPOSED PARAPET**
SCALE 1:10



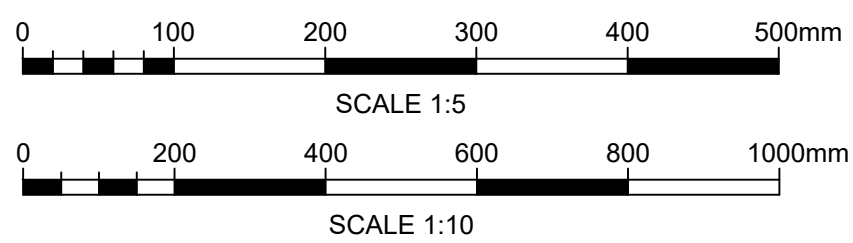
C **SECTION DETAIL ON PROPOSED PARAPET**
SCALE 1:10



D **INTERNAL DETAIL ON PROPOSED PARAPET**
SCALE 1:10



E **DETAIL 1**
SCALE 1:5



DO NOT SCALE

APPROVED FOR CONSTRUCTION				
POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/2021
CHECKER	W. TAH	SYSTRA	Wesley Tah	08/10/2021
APPROVER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/2021
ENDORSED BY:-				
CEM	D.WILCOCK	STORY CONSTRUCTION		

- NOTES
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
 - THIS DRAWING IS BASED UPON NETWORK RAIL INFORMATION AND SITE SURVEY UNDERTAKEN BY SYSTRA ON 19/09/20.
 - ALL DIMENSIONS ARE INDICATIVE UNLESS STATED OTHERWISE.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH:-
 - B92118-BRS-1001 - EXISTING GENERAL ARRANGEMENT SHEET 1 OF 2
 - B92118-BRS-1002 - EXISTING GENERAL ARRANGEMENT SHEET 2 OF 2
 - B92118-BRS-1003 - DEFECTS AND SCHEDULE OF REPAIRS
 - B92118-BRS-1004 - PROPOSED GENERAL ARRANGEMENT SHEET 1 OF 2
 - B92118-BRS-1005 - PROPOSED GENERAL ARRANGEMENT SHEET 2 OF 2
 - B92118-BRS-1008 - LONG SECTION HIGHWAY DRAWING
 - ALL ANCHORS TO BE INSTALLED IN LINE WITH THE REQUIREMENTS OF BS 8539
 - 200 x 550 x 10 ANGLE WILL BE A FOLDED SECTION. STEEL GRADE TO BE MINIMUM S275J2 IN ACCORDANCE WITH BS EN 10025

COLOUR KEY:
BLACK INDICATES EXISTING OR UNCHANGED ASSETS.
RED INDICATES PROPOSED ASSETS.

C02	08/10/21	MINOR UPDATES, APPROVED FOR CONSTRUCTION	AGW	WT	AGW
C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B03	03/06/21	MINOR UPDATES, F003 ISSUE	ER	AGW	AGW
B02	03/06/21	GRP SECTIONS UPDATED BASED ON AVAILABILITY	ER	AGW	AGW
B01	07/05/21	FORM F003 ISSUE	ER	AGW	AGW
REV.	DATE	DESCRIPTIONS OF REVISION	DES	CHKD	APPR
CLIENT					

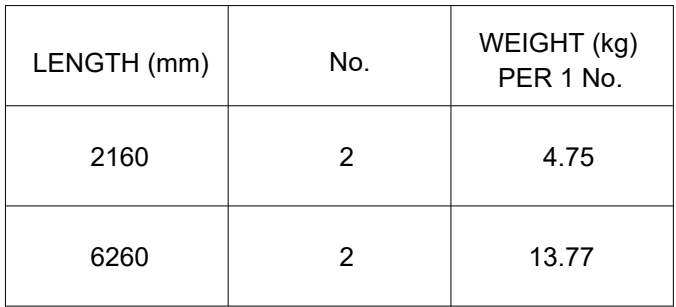


SECURITY CLASSIFICATION	
STATUS	SUITABILITY
DESIGNED	S04
CHECKED	DATE
APPROVED	DATE

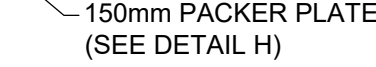
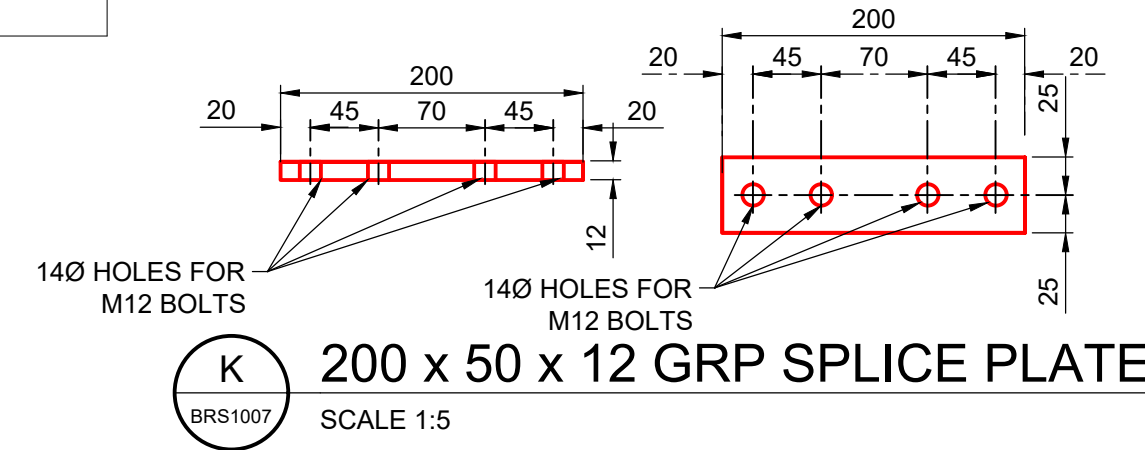
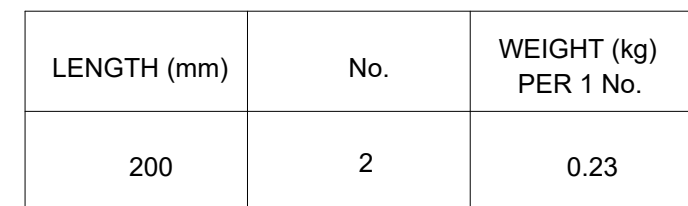
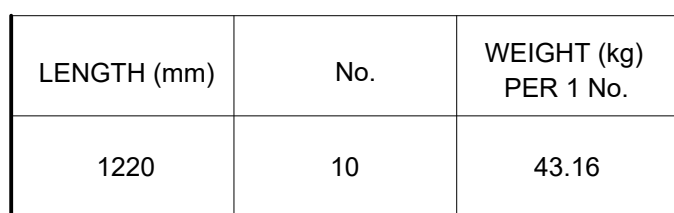
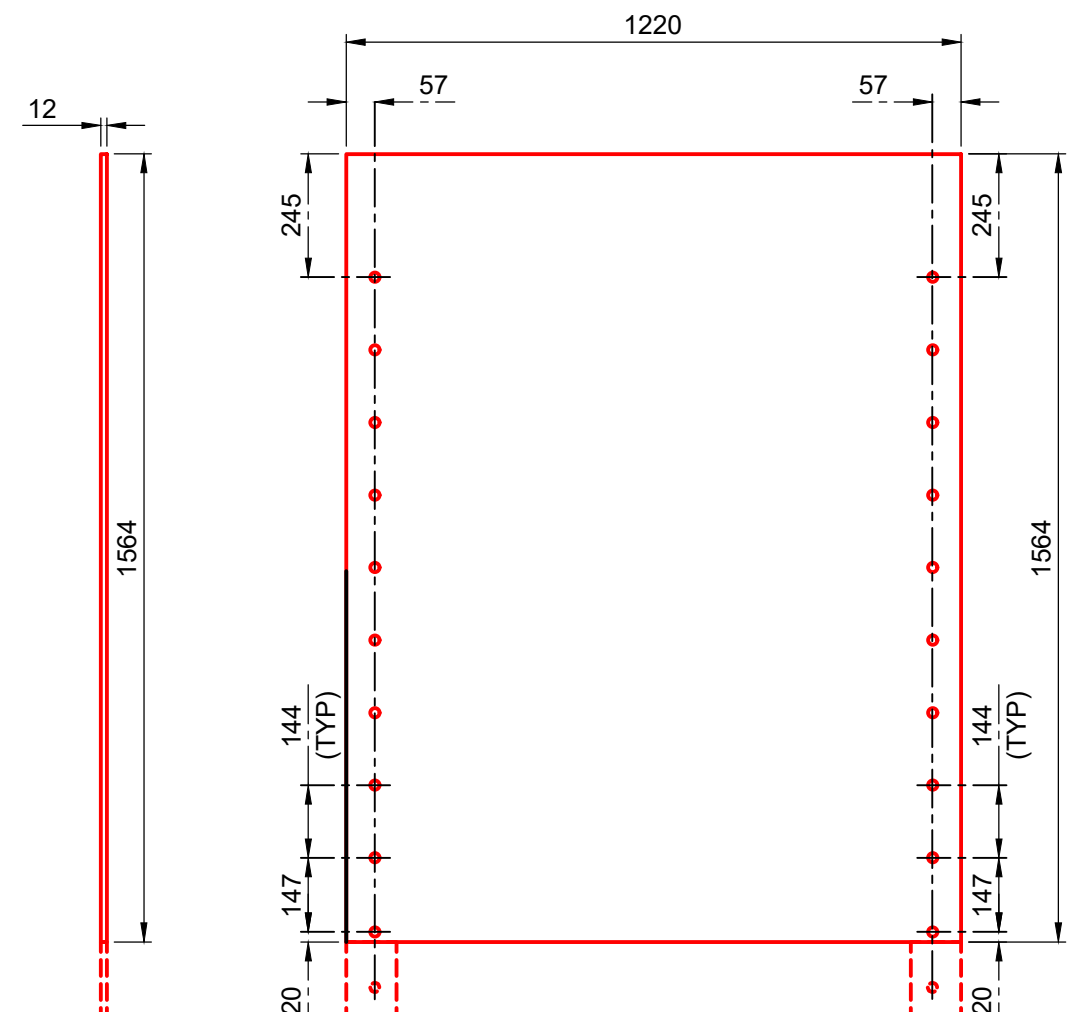
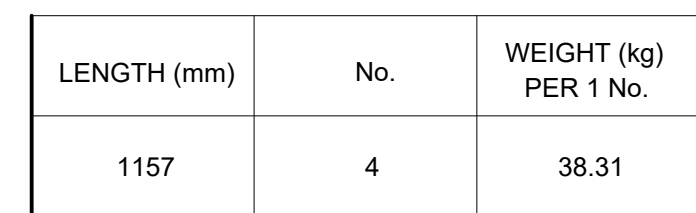
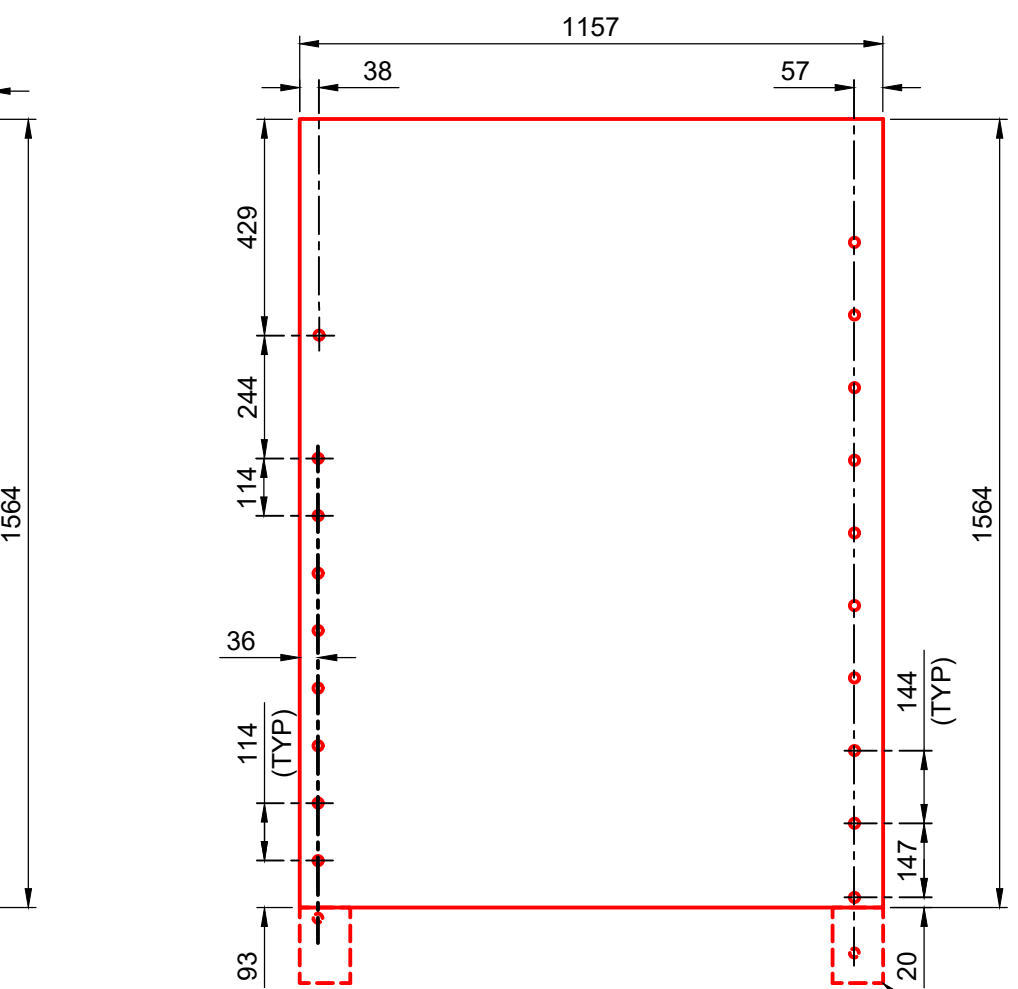
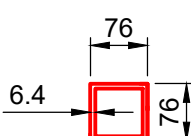
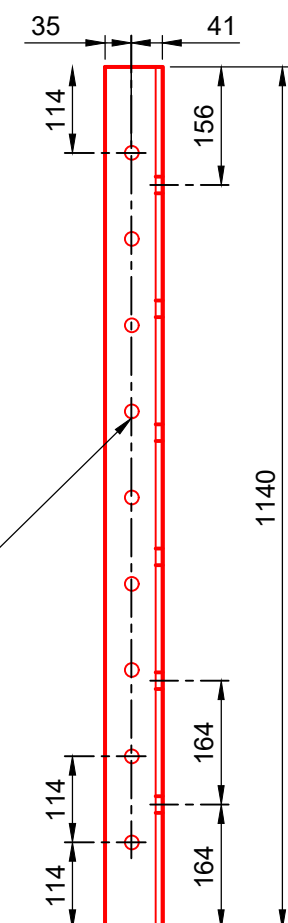
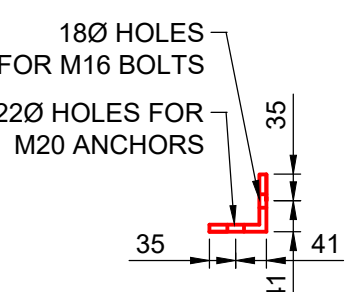
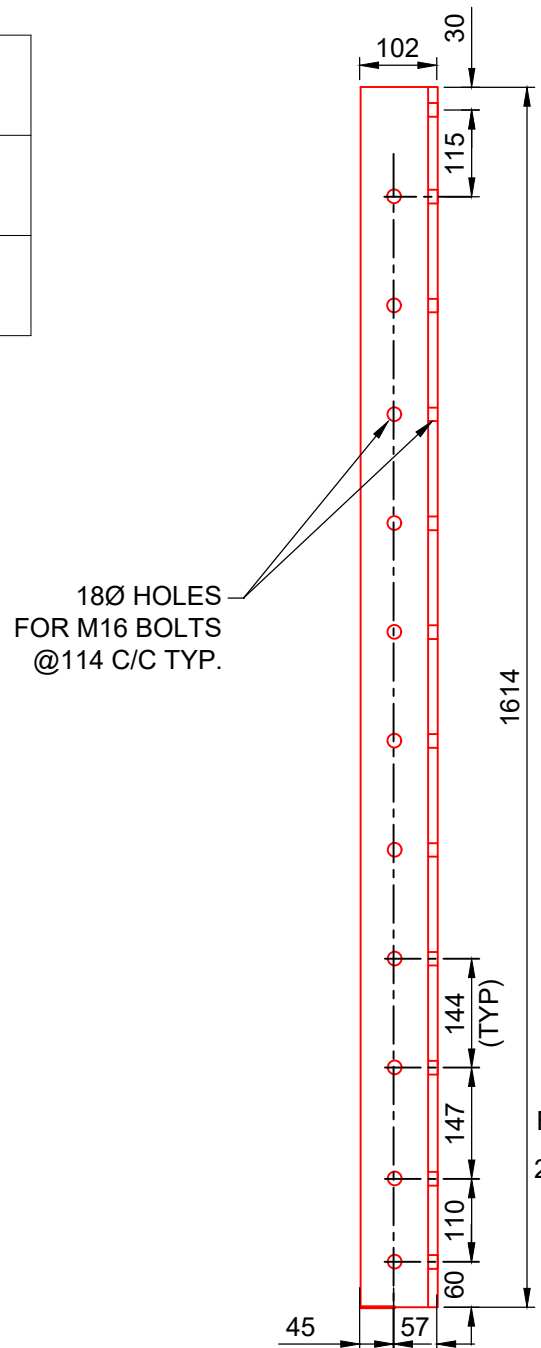
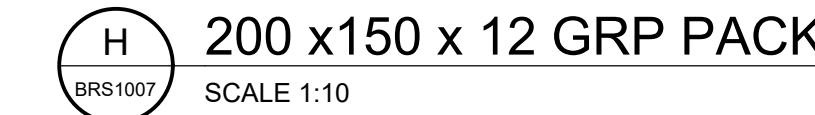
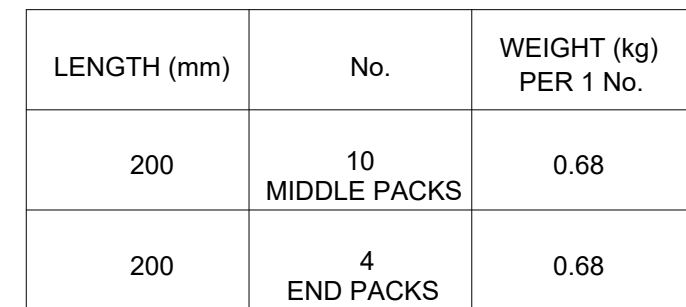
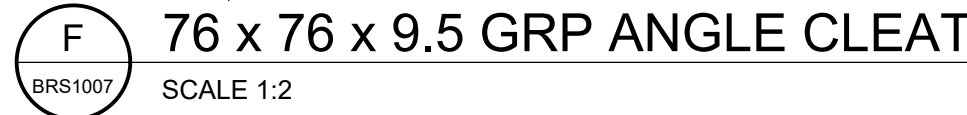
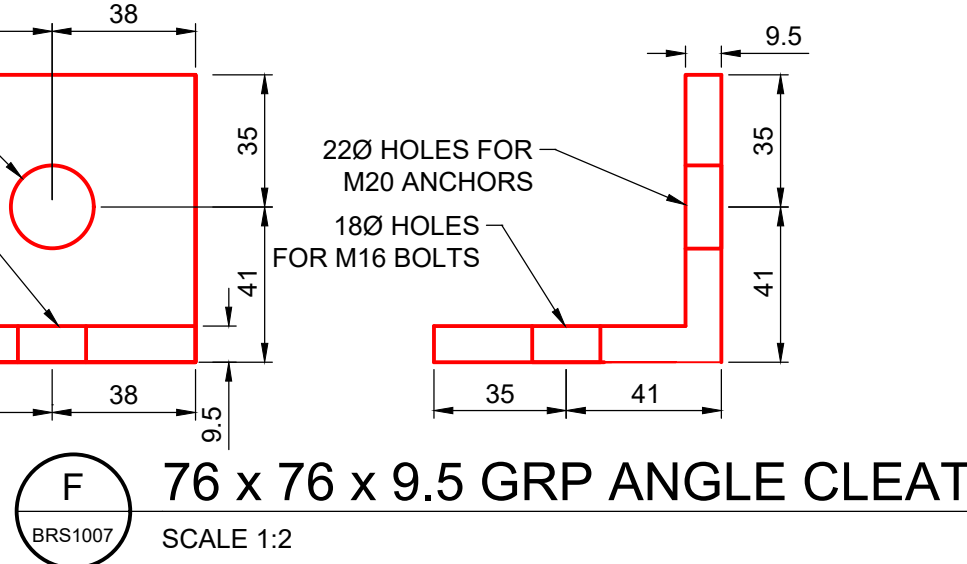
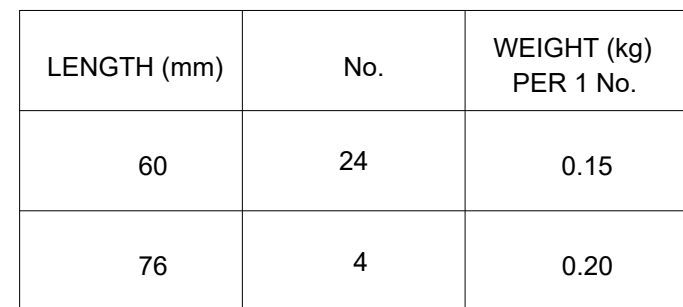
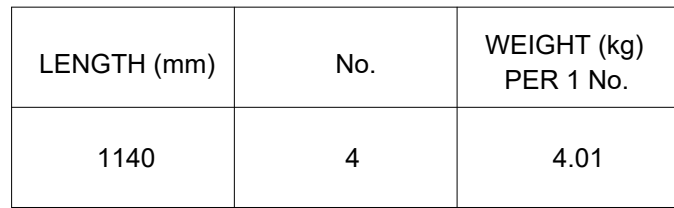
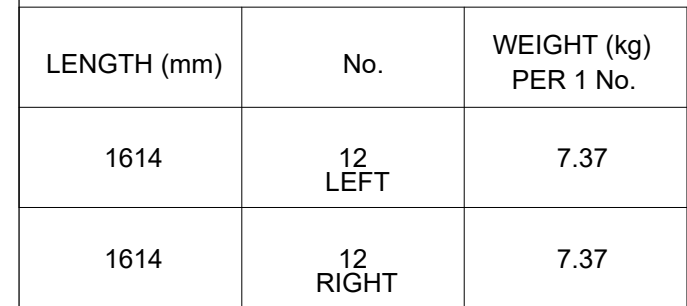
North West Structures

BROWNHILL
PROPOSED
ASSEMBLY DETAILS

SCALES	SURVEY GRID
AS SHOWN	
DRAWING NUMBER	REVISION
B92118-DRG-BRS1006	C02

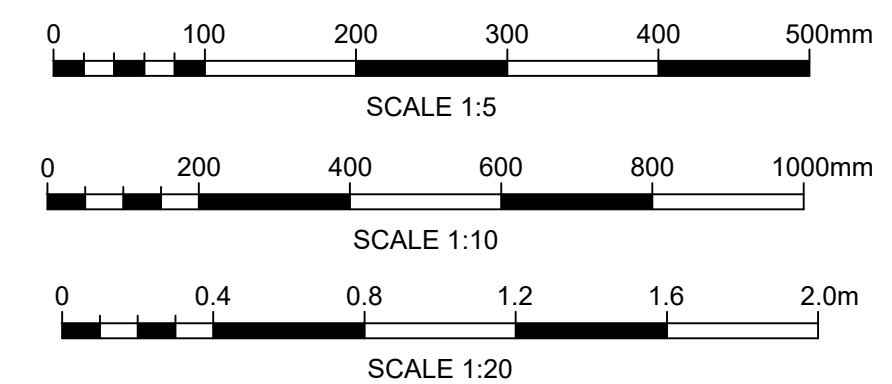


LENGTH (mm)	No.	WEIGHT (kg) PER 1 No.
1500	10	87.42
920	2	52.62



- COLOUR KEY:
- RED INDICATES PROPOSED ASSETS.

APPROVED FOR CONSTRUCTION				
POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson Signature of Andrew Wilkinson Date: 08/10/2021	08/10/2021
CHECKER	W. TAH	SYSTRA	Wesley Tah Signature of Wesley Tah Date: 08/10/2021	08/10/2021
APPROVER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson Signature of Andrew Wilkinson Date: 08/10/2021	08/10/2021
ENDORSED BY:-				
CEM	D. WILCOCK	STORY CONTRACTING		



C02	08/10/21	MINOR AMENDMENTS, APPROVED FOR CONSTRUCTION	AGW	WT	AGW
C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B01	24/04/21	DETAILED DESIGN	ER	AGW	AGW
REV. CLIENT	DATE	DESCRIPTIONS OF REVISION	DES	CHKD	APP



Network Rail
Square One
4 Travis St
Manchester
M1 0NY

CONTRACTOR	
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CONSULTANT



SECURITY CLASSIFICATION

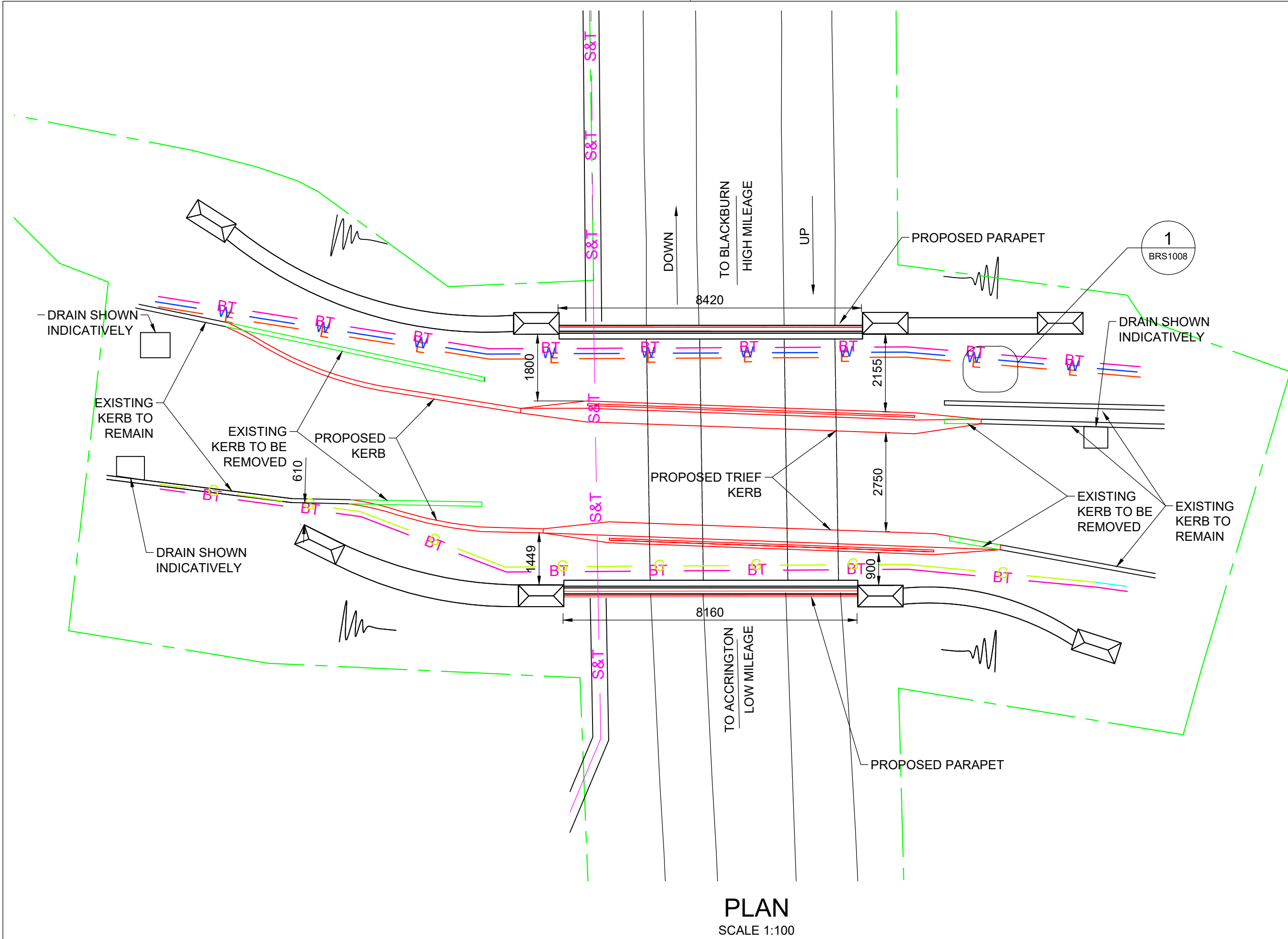
STATUS		SUITABILITY
APPROVED FOR CONSTRUCTION		S04
DESIGNED	E. ROBSON	DATE
CHECKED	A.G. WILKINSON	DATE
APPROVED	A.G. WILKINSON	DATE

North West Structures

BROWNHILL
PROPOSED
COMPONENT DETAILS

SCALES AS SHOWN	SURVEY GRID SD 684 309
DRAWING NUMBER B92118-DRG-BRS1000	REVISION C02

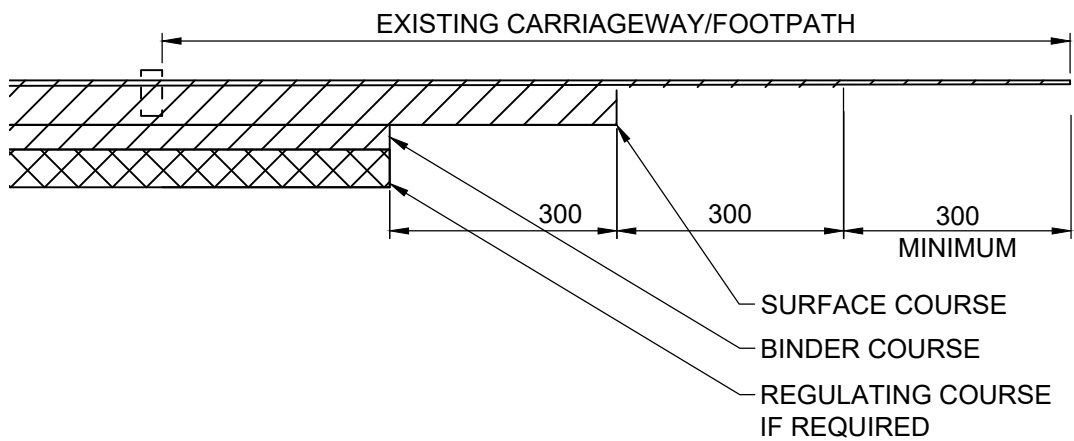
DO NOT SCALE



SETTING OUT POINTS		
LOCATION	EASTING	NORTHING
NW KERB TIE IN	361205	432507
NW START OF TRIEF	369394	430113
NE KERB TIE IN	364691	427709
NE END OF TRIEF	382168	429813
SW START OF TRIEF	370022	426902
SW END OF TRIEF	382709	426455

- KEY:
- E = ELECTRIC CABLES
 - G = GAS
 - BT = TELECOM CABLES
 - W = WATER SUPPLY
 - - - = NETWORK RAIL BOUNDARY

- NOTES
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
 - ALL LEVELS IN METERS ABOVE ORDNANCE DATUM
 - THIS DRAWING IS BASED UPON NETWORK RAIL INFORMATION AND SITE SURVEY UNDERTAKEN BY SYSTRA ON 19/09/20 AND HISTORICAL TOPOGRAPHIC SURVEY INFORMATION CONTAINED IN ARCADIS GA DRAWING DATED JUNE 2018.
 - ALL DIMENSIONS ARE INDICATIVE UNLESS STATED OTHERWISE.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH:-
 - B92118-BRS-1001 - EXISTING GENERAL ARRANGEMENT SHEET 1 OF 2
 - B92118-BRS-1002 - EXISTING GENERAL ARRANGEMENT SHEET 2 OF 2
 - B92118-BRS-1003 - DEFECTS AND SCHEDULE OF REPAIRS
 - B92118-BRS-1005 - PROPOSED GENERAL ARRANGEMENT SHEET 2 OF 2
 - B92118-BRS-1007 - COMPONENT DETAILS
 - EXISTING CARRIAGEWAY LEVELS ARE A COMBINATION OF CHANNEL, TOP OF KERB AND DECK SURFACE, PROPOSED LEVELS ARE CHANNEL LINE
 - EXISTING SOUTH EAST FOOTWAY SITS BELOW TOP OF KERB LEVEL, WHICH IS MAINTAINED IN THIS DESIGN



APPROVED FOR CONSTRUCTION				
POSITION	NAME	COMPANY	SIGNATURE	DATE
DESIGNER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/2021
CHECKER	W. TAH	SYSTRA	Wesley Tah	08/10/2021
APPROVER	A.G. WILKINSON	SYSTRA	Andrew Wilkinson	08/10/2021
ENDORSED BY:-				
CEM	D.WILCOCK	STORY CONSTRUCTION		

MAIN CARRIAGEWAY (HRA)

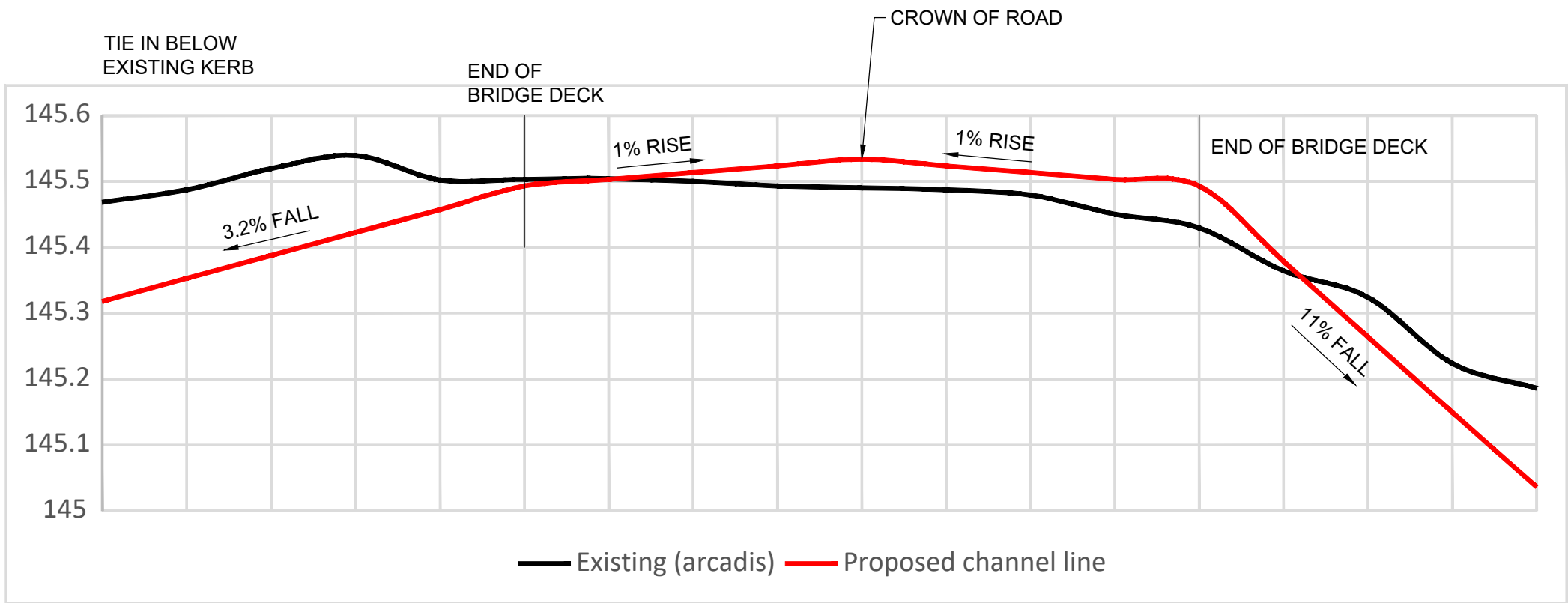
SURFACED COURSE:
40mm THICK HRA 35 /14 TO PD 6691 ANNEX C TABLE C2.A COL 8/ COL 10.
MIN TARGET BINDER 5.8% COURSE AGGREGATE CRUSHED ROCK ONLY EXCLUDING LIMESTONE. NO RECYCLED AGGREGATE IN MIX.

BINDER COURSE:
60mm ASPHALT CEMENT 20 DENSE BIN 100/150 REC. CRUSHED ROCK AGGREGATE PD6691 TABLE B11 & SHW CLAUSE 906.

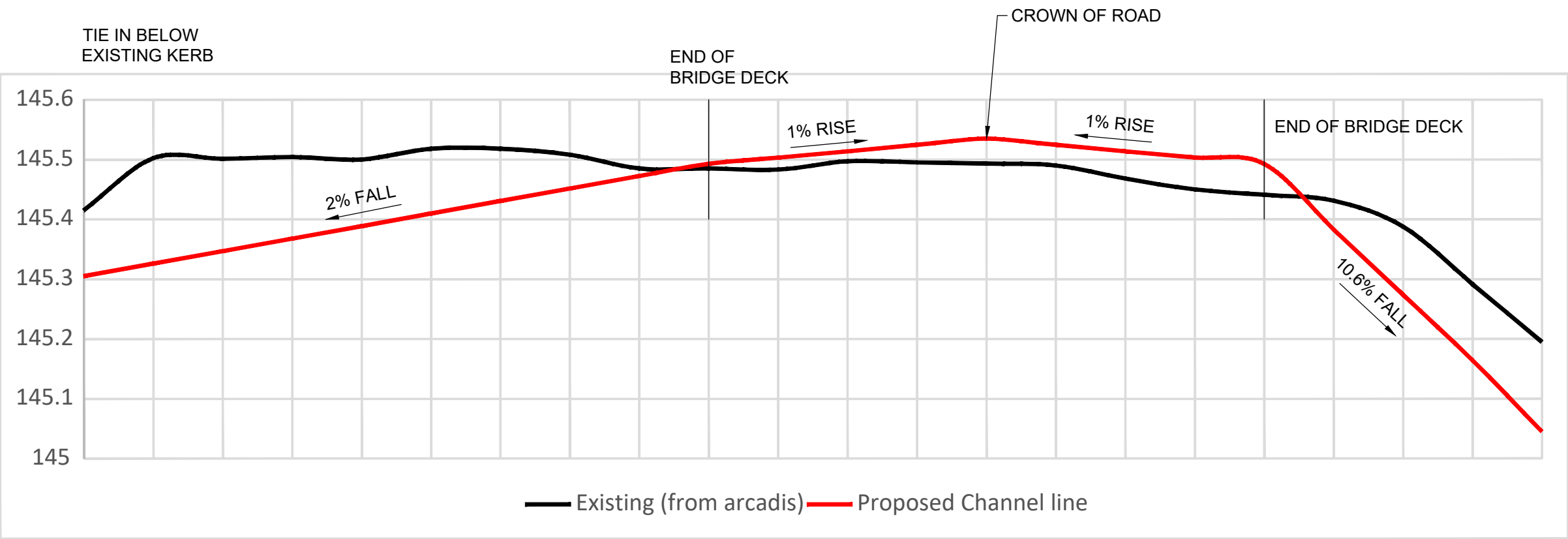
FOOTWAY
SURFACE COURSE:
20mm ASPHALT CEMENT 6 DENSE SURF160/220. MIN. PSV OF COARSE AGGREGATE 45 PD6691 TABLE B16 & SHW CLAUSE 1105 ON.

BINDER COURSE:
50mm MIN. ASPHALT CEMENT 20 DENSE BIN REC 160/220. PD6691 TABLE B11 & SHW CLAUSE 1105 ON.

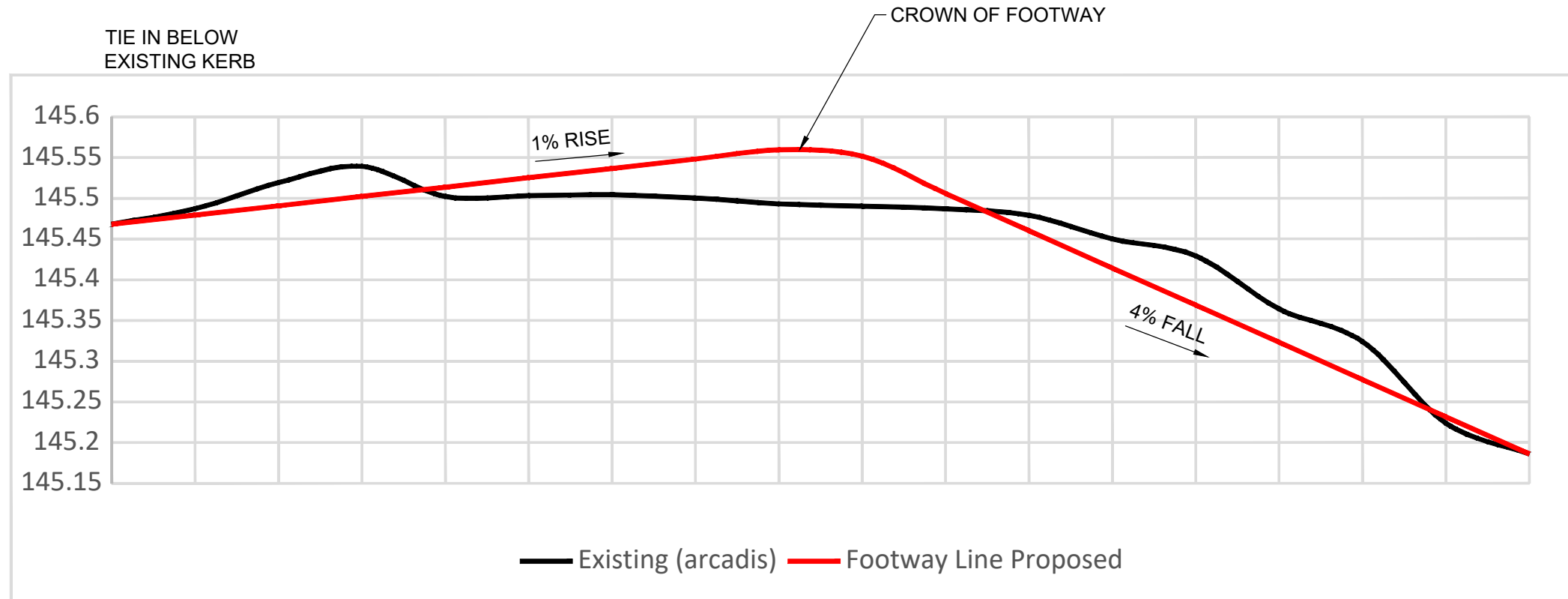
REGULATING:
50mm MIN. ASPHALT CEMENT 20 DENSE BIN REC 160/220. PD 6691 TABLE B11 & SHW CLAUSE 1105.



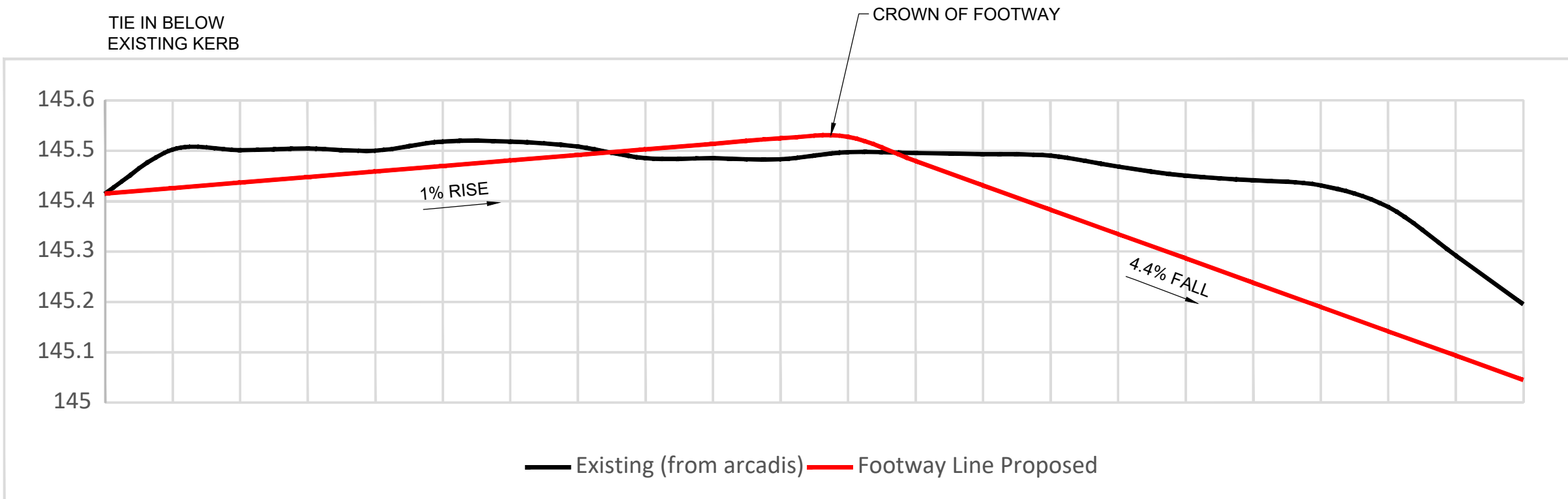
LM ROAD ALIGNMENT



HM ROAD ALIGNMENT



LM FOOTWAY ALIGNMENT



HM FOOTWAY ALIGNMENT

C02	08/10/21	MINOR AMENDMENTS, APPROVED FOR CONSTRUCTION	AGW	WT	AGW
C01	23/07/21	APPROVED FOR CONSTRUCTION	ER	AGW	AGW
B01	27/04/21	DETAILED DESIGN	ER	AGW	AGW
REV.	DATE	DESCRIPTIONS OF REVISION	DES	CHKD	APPR
CLIENT					



SECURITY CLASSIFICATION	
STATUS	APPROVED FOR CONSTRUCTION
DESIGNED	E.ROBSON
CHECKED	A.G.WILKINSON
APPROVED	A.G.WILKINSON

North West Structures

BROWNHILL
PROPOSED
LONG SECTION HIGHWAY DETAILS

SCALES	AS SHOWN	SURVEY GRID	SD 684 309	REVISION	C02
DRAWING NUMBER	B92118-DRG-BRS1008				

DO NOT SCALE