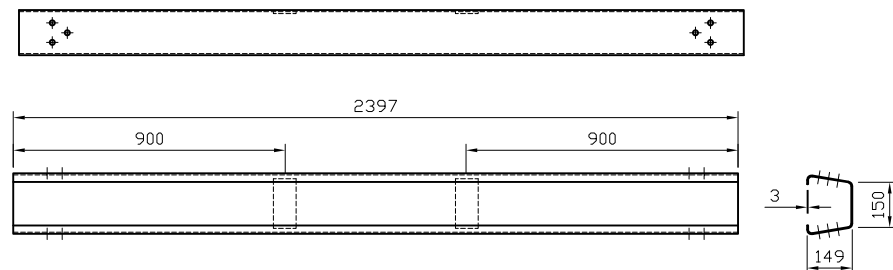
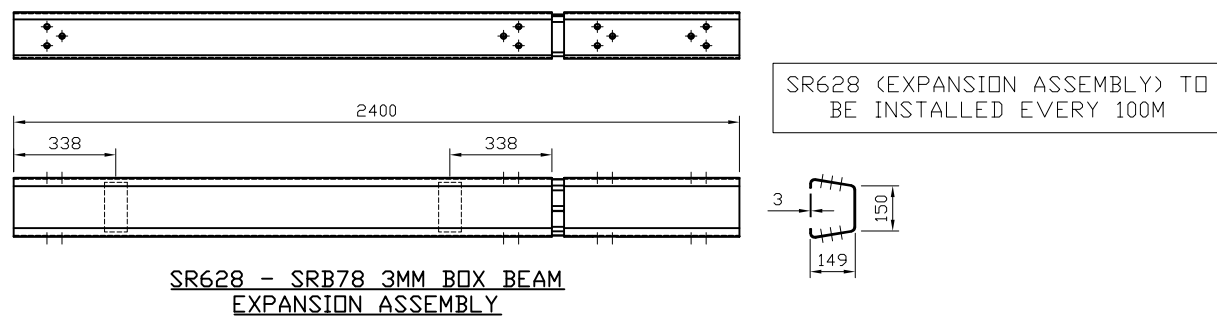


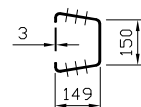
SR585 - SRB03 3MM BOX BEAM



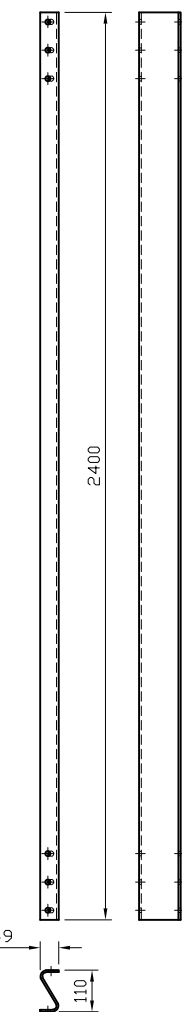
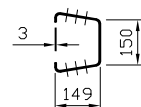
SR627 - SRB04 3MM HALF BOX BEAM



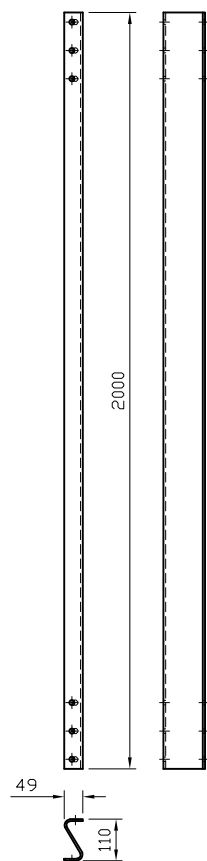
SR628 - SRB78 3MM BOX BEAM  
EXPANSION ASSEMBLY



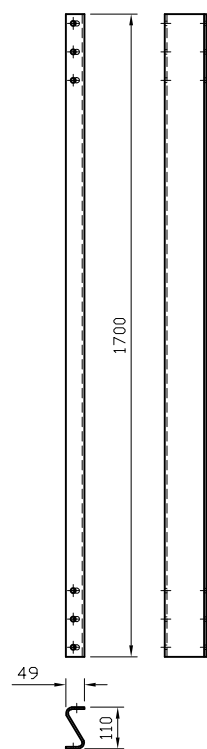
SR628 (EXPANSION ASSEMBLY) TO  
BE INSTALLED EVERY 100M



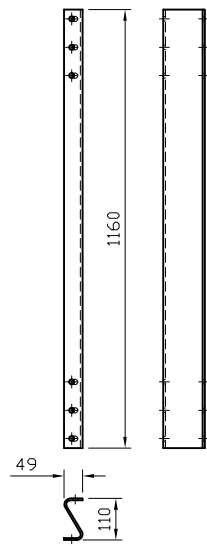
SR620 - SRA18  
EXTRA LONG DRIVEN POST



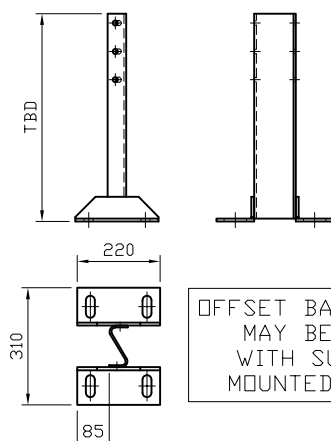
SR619 - SRA18  
LONG DRIVEN POST



SR586 - SRA18  
DRIVEN POST



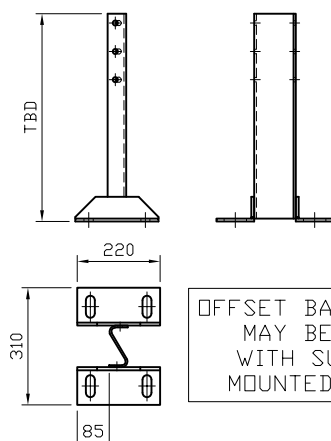
SR590 - SRA18  
SOCKETED POST



\*\*\* SR591 - SRA18  
SURFACE MOUNTED POST

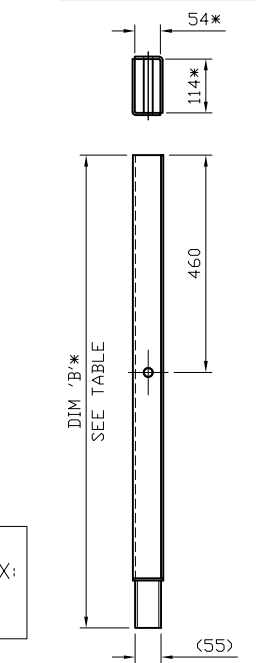
\*\*\* - SURFACE MOUNTED POST  
VERGE OR CENTRAL RESERVE PREFIX:  
SR591.V - VERGE  
SR591.CR - CENTRAL RESERVE

SURFACE MOUNTED POSTS  
FABRICATED AS REQUIRED.  
HEIGHT TO BE DETERMINED



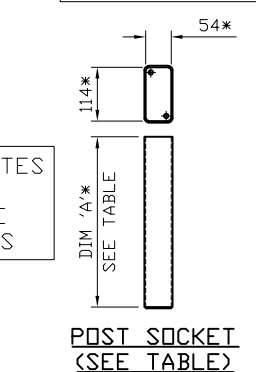
\*\*\* SR591 - SRA18  
SURFACE MOUNTED POST

\* - INTERNAL  
DIMENSION

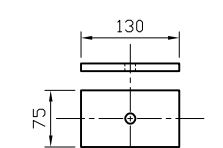


DRIVEN FOUNDATION  
(SEE TABLE)

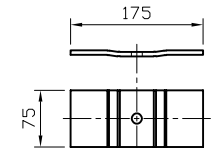
\* - INTERNAL  
DIMENSION



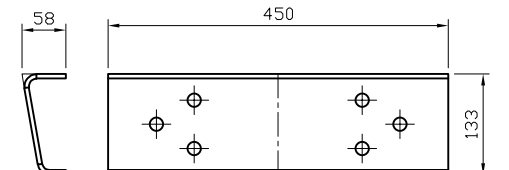
POST SOCKET  
(SEE TABLE)



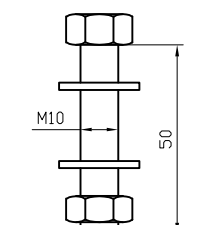
NP583 - B49A  
CLAMP PLATE



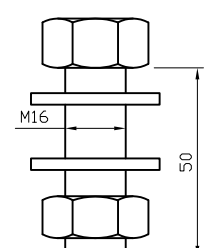
SR588 - SRB17  
CLAMP PLATE



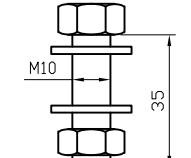
SR587 - SRB12  
FISH PLATE  
(JOINT)



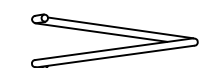
NP502 - F02A  
BOLT ASSEMBLY



NP719 - F06  
BOLT ASSEMBLY



NP501 - F02  
BOLT ASSEMBLY



SR100 - REINFORCING RING

DRIVEN FOUNDATIONS	
COMPONENT NUMBER	DIM 'A'
SR621	1000
SR622	1200
SR623	1400

POST SOCKETS	
COMPONENT NUMBER	DIM 'A'
NP538	360
NP539	380
NP540	400
NP541	420
NP542	450
NP543	470
NP544	500
NP545	520
NP546	550
NP547	570
NP548	600
NP549	625

REVn	DATE	DETAILS	INITIAL
01	14/03/25	DRAWING UPDATED	H.B
00	05/12/24	DRAWING CREATED	H.B

MEGARAIL BB (BOX BEAM)

COMPONENTS SCHEMATIC

SAFEROAD

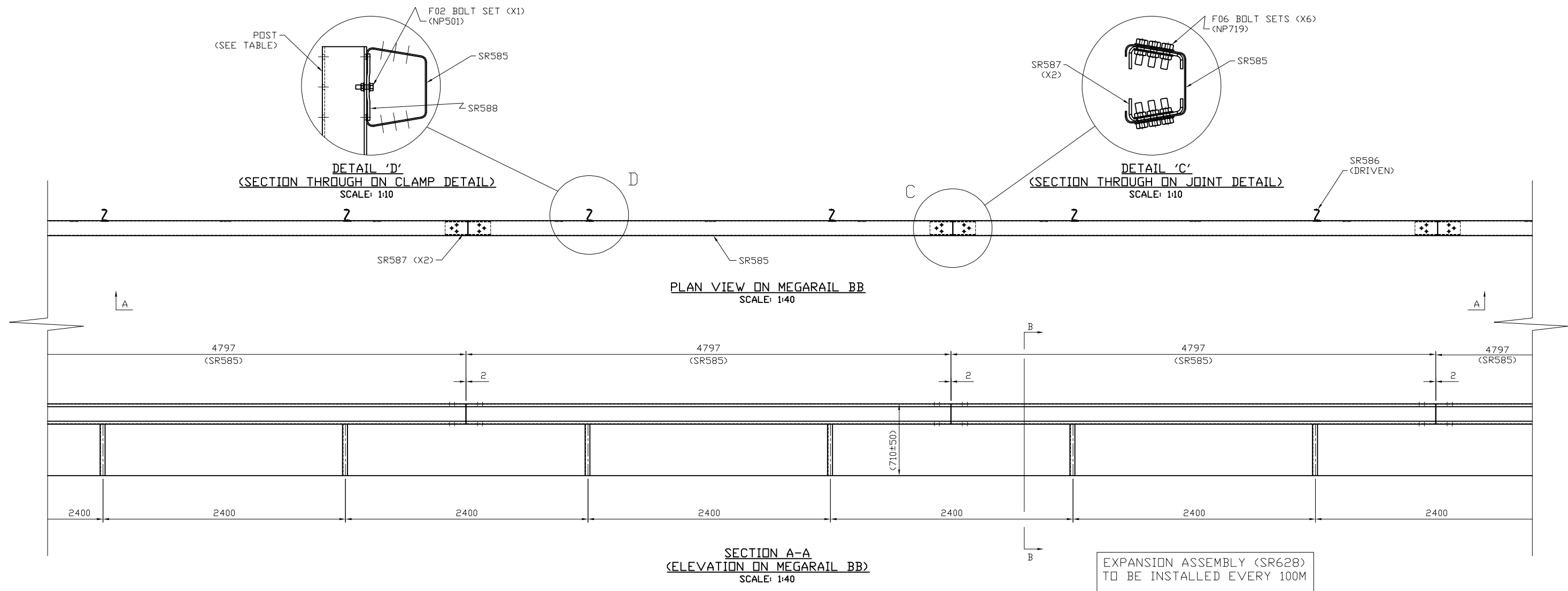
CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
T: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

DRAWING NUMBER:

MRBB-GA-00

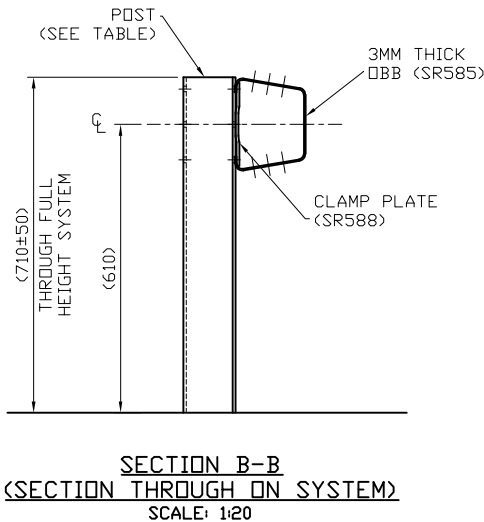
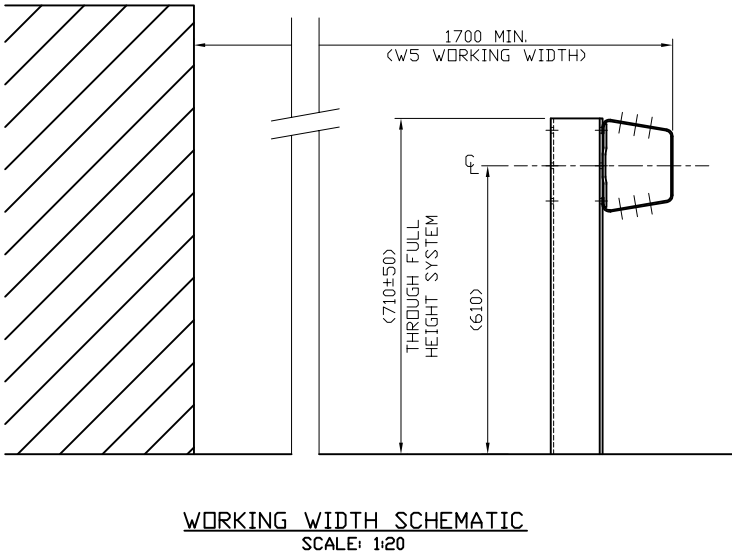
REVn:

01



POST TYPES	
SAFEROAD PART NUMBER	POST DESCRIPTION
SR591	SURFACE MOUNTED POST
SR590	SOCKETED POST 1160MM LONG
SR586	DRIVEN POST 1700MM LONG
SR619	LONG DRIVEN POST 2000MM LONG
SR620	EXTRA LONG DRIVEN POST 2400MM LONG

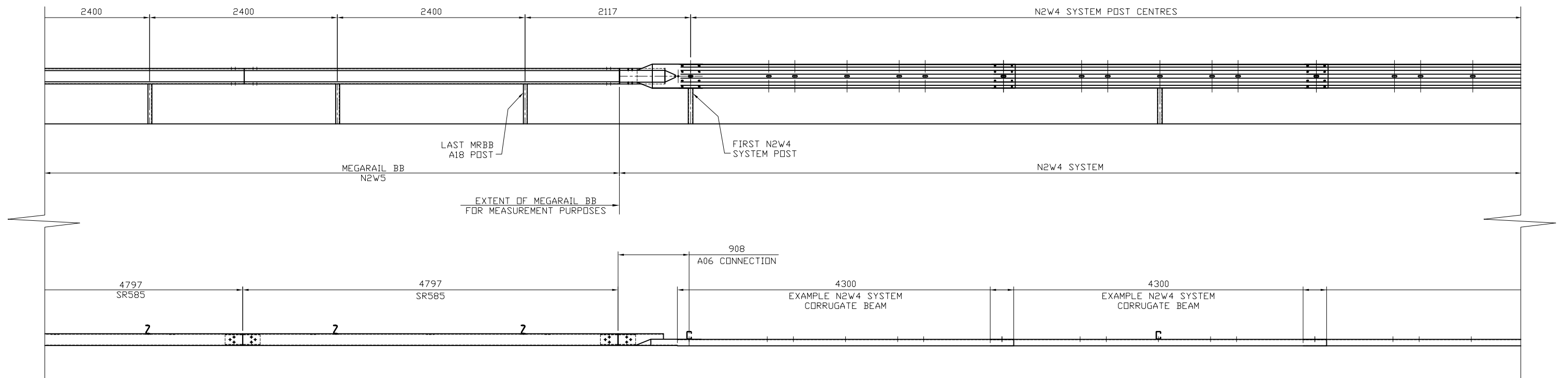
SYSTEM COMPONENT SCHEDULE (P/4.797M BEAM)		
SAFEROAD PART NUMBER	DESCRIPTION	QTY
SR585	SRB03 BOX BEAM 4797x3mm THICK	1
SEE TABLE	SRA18 POST 5mm THICK	2
SR587	SRB12 FISH PLATES (JOINTS)	2
SR588	SRB17 CLAMP PLATES	2



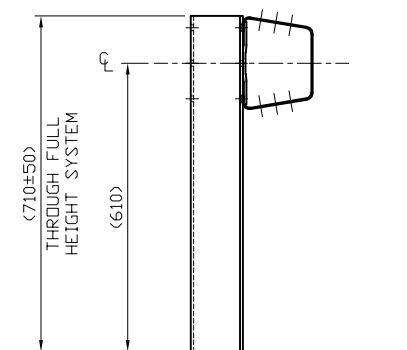
00	05/12/24	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
MEGARAIL BB (BOX BEAM)			
GENERAL ARRANGEMENT			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-01			00

SEE MRBB-GA-01 FOR MEGARAIL BB  
GENERAL ARRANGEMENT & INSTALLATION DETAILS

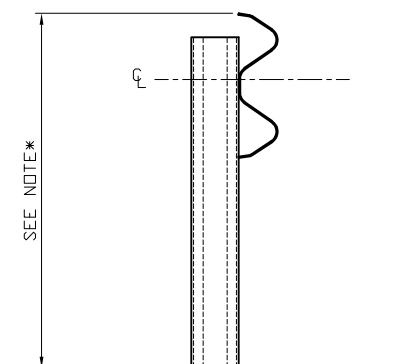
SEE MEGARAIL MANUAL FOR  
AVAILABLE N2W4 SYSTEMS




USE HEIGHT TOLERANCE IN N2W4  
SYSTEM TO MAINTAIN A FLOWING ALIGNMENT

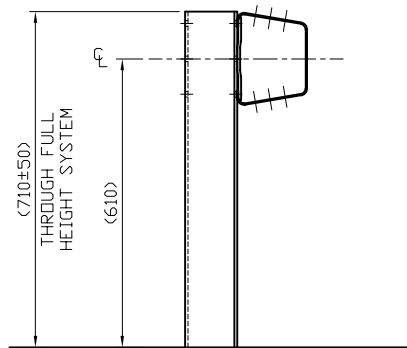
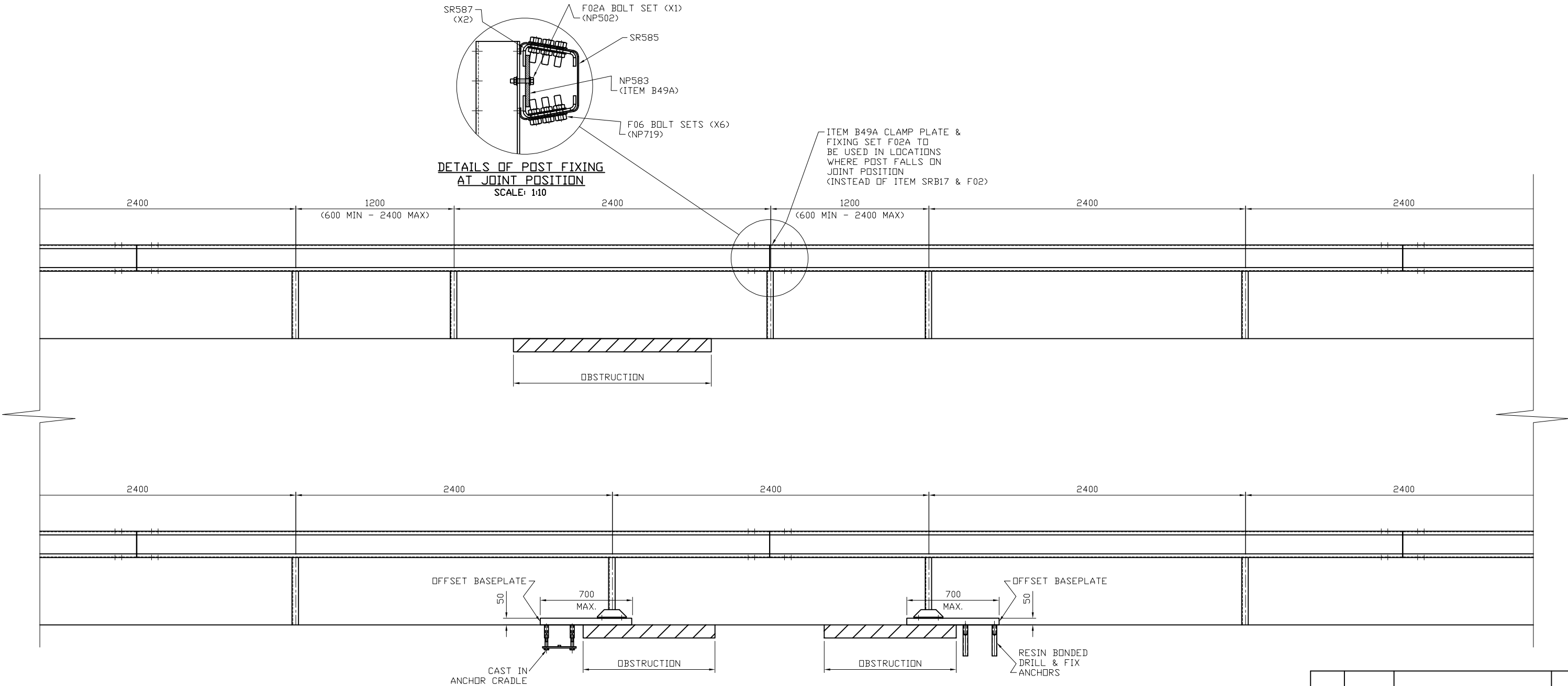


SECTION THROUGH  
ON MEGARAIL BB  
SCALE: 1:20



SECTION THROUGH  
ON N2W4 SYSTEM  
SCALE: 1:20

00	14/03/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
MEGARAIL BB (BOX BEAM)			
SYSTEM PROGRESSION DETAILS			
			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-20			00



SECTION THROUGH ON MEGARAIL BB  
SCALE: 1:20

00	14/03/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL

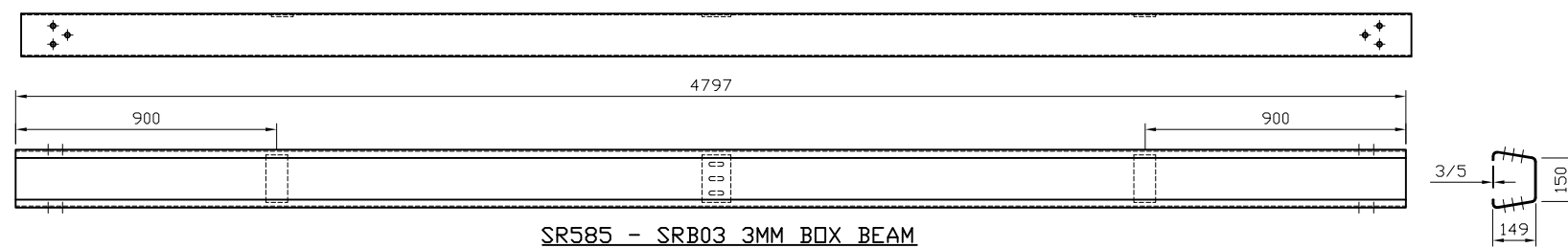
MEGARAIL BB (BOX BEAM)

PERMISSIBLE DEVIATION DETAILS

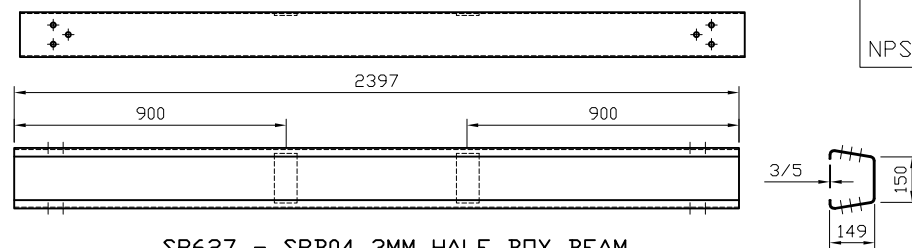


CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
T: 01724 289119  
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john.cudlipp@saferoad.co.uk

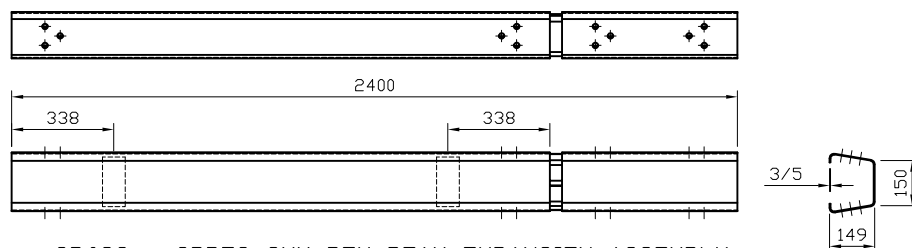
DRAWING NUMBER:	REVn:
MRBB-GA-40	00



SR585 - SRB03 3MM BOX BEAM  
OR  
NP555 - NPSBS B03 5MM BOX BEAM



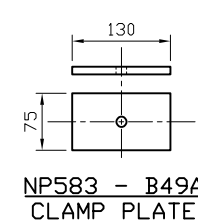
SR627 - SRB04 3MM HALF BOX BEAM  
OR  
NP556 - NPSBS B04 5MM HALF BOX BEAM



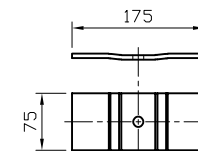
SR628 - SRB78 3MM BOX BEAM EXPANSION ASSEMBLY  
OR  
NP598 - NPSBS B78 5MM BOX BEAM EXPANSION ASSEMBLY

BEAM THICKNESSES:  
MEGARAIL BB - 3MM  
NPSBS OPEN BOX BEAM - 5MM

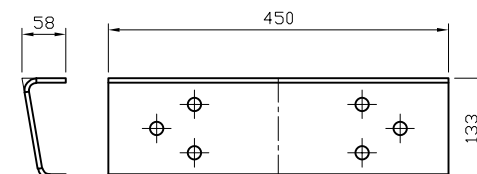
NPSBS OPEN BOX BEAM COMPONENTS MAY BE REPLACED BY ALL COMPONENTS LISTED ON GA-41 & GA-00. FOR EXAMPLE, AN MRBB BEAM MAY BE INSTALLED ONTO NPSBS POSTS, AND VISA VERSA. ALL REPAIRS & RENEWALS SHALL BE CARRIED OUT IN ACCORDANCE WITH BS:7669-3



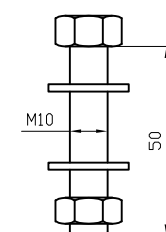
NP583 - B49A  
CLAMP PLATE



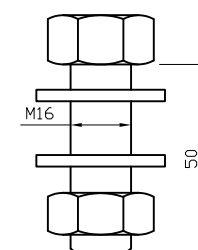
SR588 - SRB17 CLAMP PLATE  
OR  
NP580 - NPSBS B17 CLAMP PLATE



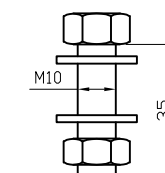
SR587 - SRB12 FISH PLATE (JOINT)  
OR  
NP578 - NPSBS B12 FISH PLATE



NP502 - F02A  
BOLT ASSEMBLY



NP719 - F06  
BOLT ASSEMBLY



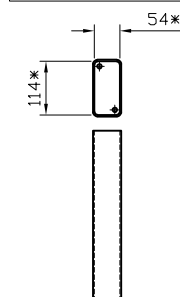
NP501 - F02  
BOLT ASSEMBLY

EXISTING SOCKETS/FOUNDATIONS MAY BE RE-USED IF UN-DAMAGED. IF NEW SOCKETS/FOUNDATIONS ARE REQUIRED, SEE GA-00 FOR COMPONENT DETAILS



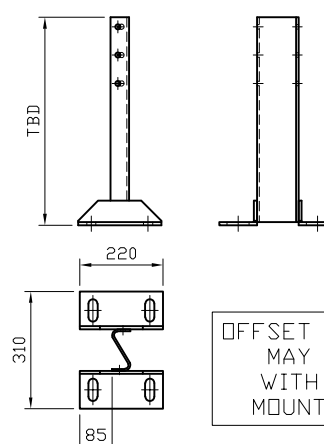
SR100 - REINFORCING RING

\* - INTERNAL DIMENSION



POST SOCKET

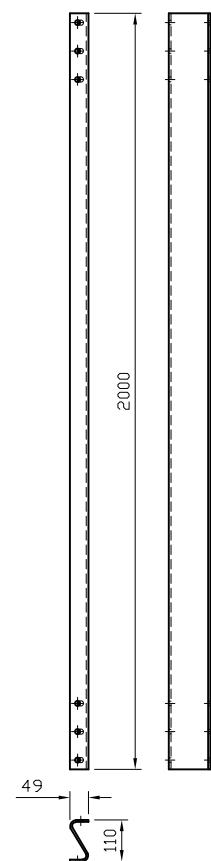
SURFACE MOUNTED POSTS FABRICATED AS REQUIRED. HEIGHT TO BE DETERMINED



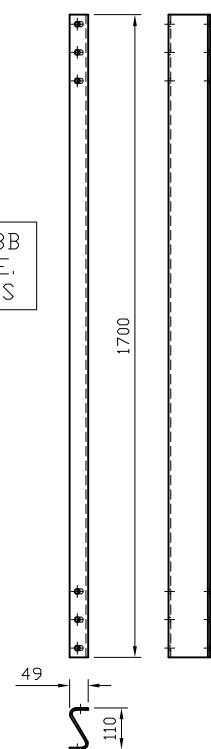
OFFSET BASEPLATES MAY BE USED WITH SURFACE MOUNTED POSTS

SR591V/SR591CR - SRA18 SURFACE MOUNTED POST  
OR  
NP535/NP536 - NPSBS A37/A54 SURFACE MOUNTED POST  
(MEGARAIL BB POST SHOWN)

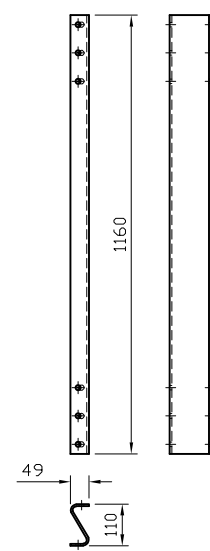
ADDITIONAL MEGARAIL BB POST TYPES AVAILABLE. SEE GA-00 FOR DETAILS



SR619 - SRA18 LONG DRIVEN POST  
OR  
NP533/NP534 - NPSBS A55/A56 POST  
(MEGARAIL BB POST SHOWN)



SR586 - SRA18 DRIVEN POST  
OR  
NP531/NP532 - NPSBS A19/A30 POST  
(MEGARAIL BB POST SHOWN)



SR590 - SRA18 SOCKETED POST  
OR  
NP530 - NPSBS A18 POST  
(MEGARAIL BB POST SHOWN)

REVn	DATE	DETAILS	INITIAL
02	16/10/25	NOTE UPDATED	H.B
01	20/08/25	NOTE UPDATED	H.B
00	21/03/25	DRAWING CREATED	H.B

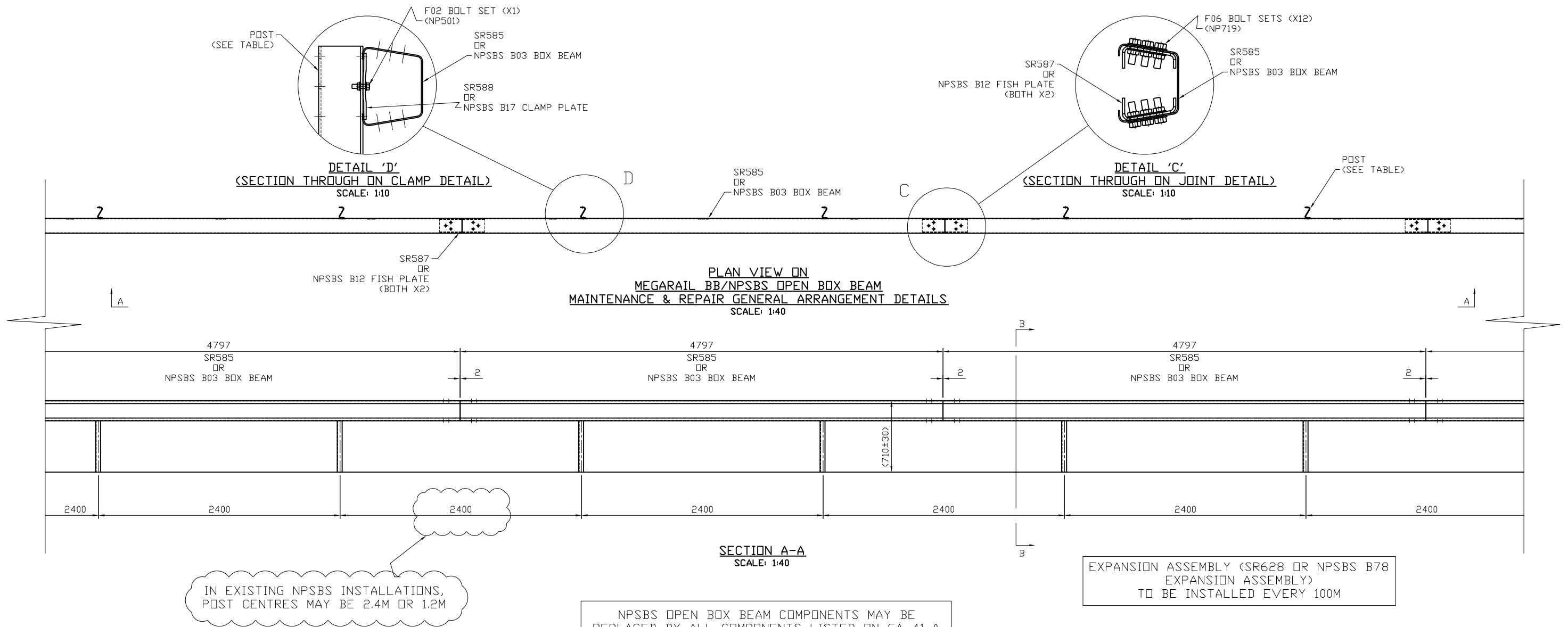
## MEGARAIL BB / NPSBS OBB

MAINTENANCE & REPAIR COMPONENTS SCHEMATIC



CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
T: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

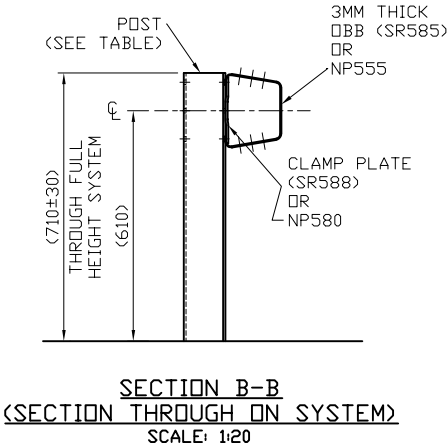
DRAWING NUMBER:	REVn:
MRBB-GA-41	02



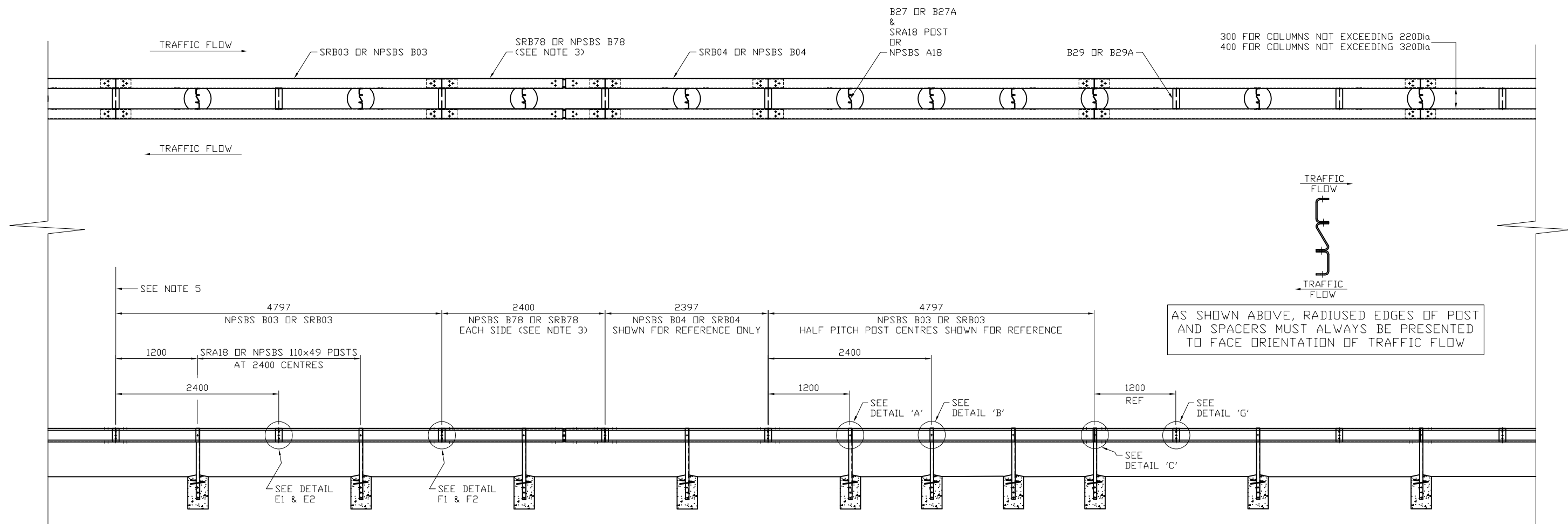
MEGARAIL BB & NPSBS OPEN BOX BEAM POST TYPES		
POST LENGTH	MRBB ITEM REFERENCE	NPSBS OBB ITEM REFERENCE
SURFACE MOUNTED	SRA18 SMP	A37/A54
1160MM	SRA18 SOCKETED	A18
1700MM	SRA18 DRIVEN	A19/A30
2000MM (MRBB) - 1900MM (NPSBS OBB)	SRA18 LONG DRIVEN	A55/A56
2400MM	SRA18 EXTRA LONG DRIVEN	-

SYSTEM COMPONENT SCHEDULE (P/4.797M BEAM) - MRBB OR NPSBS OBB		
MRBB ITEM REFERENCE	NPSBS ITEM REFERENCE	QTY
SRB03 BOX BEAM 4797x3mm THICK	B03 BOX BEAM 4797x5mm THICK	1
POSTS - SEE TABLE	POSTS - SEE TABLE	2
SRB12 FISH PLATES (JOINTS)	B12 FISH PLATES (JOINTS)	2
SRB17 CLAMP PLATES	B17 CLAMP PLATES	2

EXISTING SOCKETS/FOUNDATIONS MAY BE RE-USED IF UN-DAMAGED. IF NEW SOCKETS/FOUNDATIONS ARE REQUIRED, SEE GA-00 FOR COMPONENT DETAILS

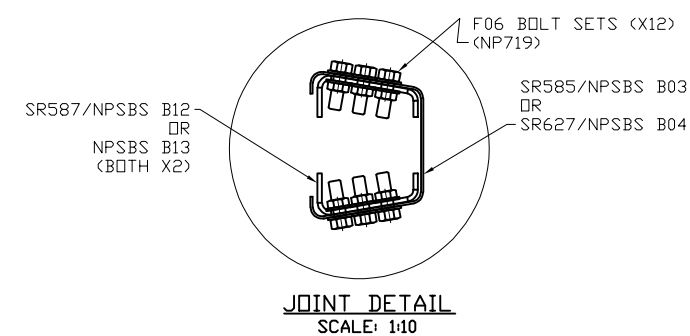


REVn	DATE	DETAILS	INITIAL
03	16/10/25	NOTE UPDATED	H.B
02	28/08/25	TABLE UPDATED	H.B
01	20/08/25	NOTE UPDATED	H.B
00	21/03/25	DRAWING CREATED	H.B
<b>MEGARAIL BB / NPSBS OBB</b> GENERAL ARRANGEMENT DETAILS FOR MAINTENANCE & REPAIR			
<b>SAFEROAD</b>  CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER: MRBB-GA-42			REVn: 03




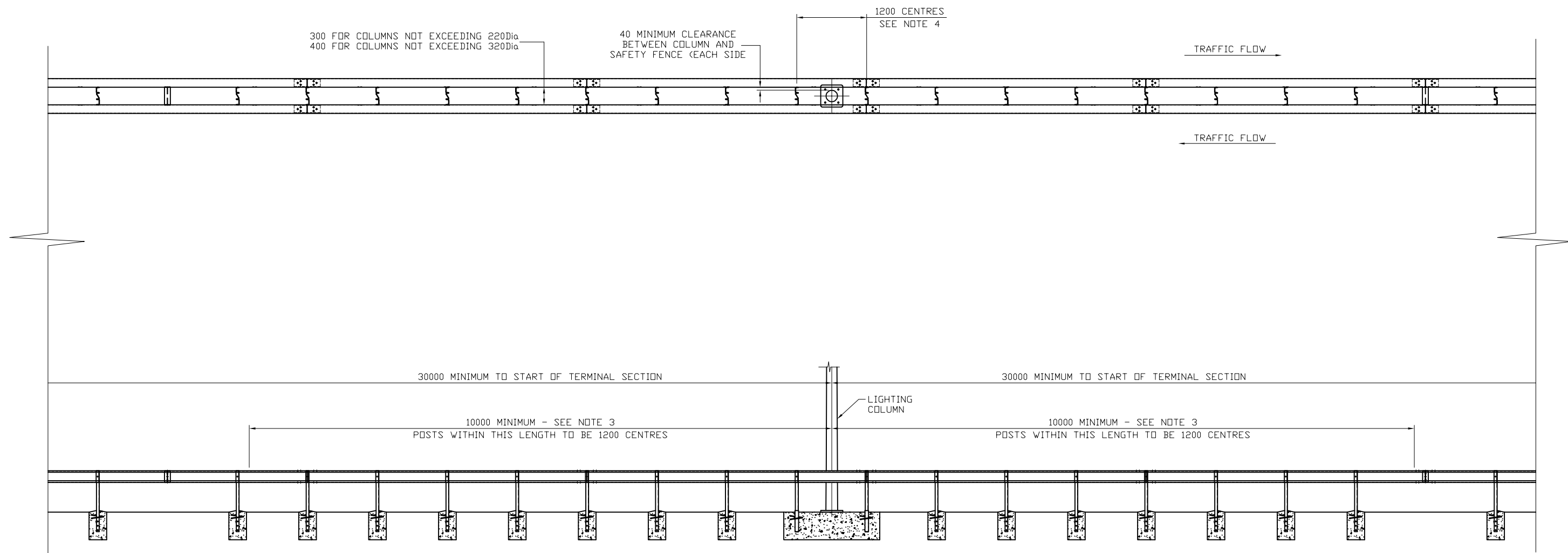
#### GENERAL NOTES:

- THIS TYPE OF SAFETY FENCE MUST NOT BE USED TO ENCLOSE LIGHTING COLUMNS WHERE THE SPEED LIMIT EXCEEDS 50mph
- DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
- EXPANSION BEAM ASSEMBLIES NPSBS B78 OR SRB78 (SHOWN FOR REFERENCE ONLY) MUST ALWAYS BE USED IN PAIRS OPPOSITE EACH OTHER.
- WHERE LARGER DIAMETER LIGHTING COLUMNS ARE INSTALLED, CLEARANCE BETWEEN THE BEAMS IS TO BE INCREASED FROM 300mm TO 400mm. THUS ITEM B27A REPLACES ITEM B27 AND ITEM B29A REPLACES B29.
- SAFETY FENCE TERMINATION (8.98M LONG) MAY COMMENCE AT THIS POINT IF REQUIRED. SEE DRAWINGS MRBB-GA-46 & 47.
- FOR ALTERNATIVE POSTS, FOUNDATIONS AND FIXINGS SEE THIS MANUAL, MEGARAIL MANUAL & NPSBS GA/23
- CONCRETE FOUNDATIONS TO BE MIX C25 OR ST5
- FOR DETAILS A TO G INCLUSIVE, SEE MRBB-GA-45
- WHEN SAFETY FENCES ARE ERECTED ON CURVES, USE ITEMS WITHIN TABLE
- THIS DRAWING TO BE READ IN CONJUNCTION WITH MRBB-GA-44 & 47




RADIUS OF CURVE (M)	BEAM	FISH PLATE
>50 <110	NPSBS B04 OR SRB04	NPSBS B13
>110 <335	NPSBS B03 OR SRB03	NPSBS B13
>335	NPSBS B03 OR SRB03	NPSBS B12 OR SRB12

00	04/09/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
MEGARAIL BB / NPSBS OBB			
NPSBS DSOBB & DSMRBB ENCLOSING LIGHT COLUMNS (50MPH)			
			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-43			00

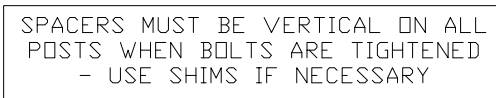


GENERAL NOTES:

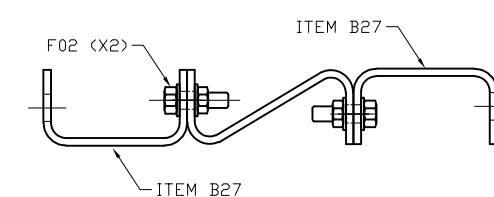
1. THIS TYPE OF SAFETY FENCE MUST NOT BE USED TO ENCLOSE LIGHTING COLUMNS WHERE THE SPEED LIMIT EXCEEDS 50mph
2. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
3. EXPANSION BEAM ASSEMBLIES MUST NOT BE FITTED IN THESE LENGTHS
4. WHERE POSTS IMMEDIATELY ADJACENT TO LIGHTING COLUMNS OCCUR WITHIN THE COLUMN FOUNDATION, POSTS ARE TO BE MOUNTED IN SOCKETS. SEE MEGARAIL MANUAL & GA/23 FOR SOCKETED FOUNDATION DETAILS
5. WHERE SAFETY FENCES ARE ERECTED ON CURVES, USE ITEMS AS TABULATED IN MRBB-GA-43.
6. FOR FOUNDATION TYPE DETAILS, SEE MEGARAIL MANUAL
7. THIS DRAWING TO BE READ IN CONJUNCTION WITH MRBB-GA-43, 45, 46 & 47

00	04/09/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
MEGARAIL BB / NPSBS OBB			
NPSBS DSOBB & DSMRBB			
ENCLOSING LIGHT COLUMNS (50MPH)			
			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-44			00

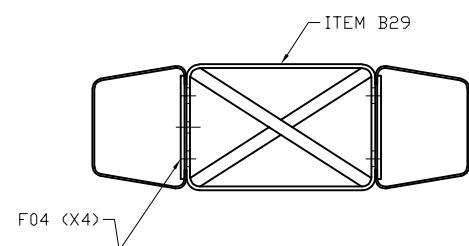




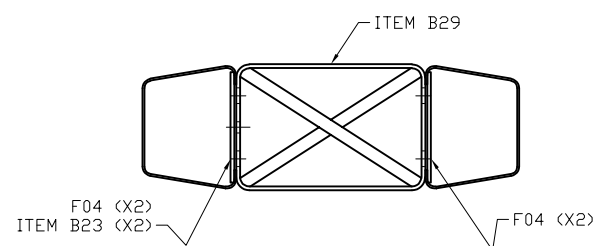
DETAIL 'A'  
POSTS AT INTERMEDIATE POSITION  
SEE NOTES 2 & 3



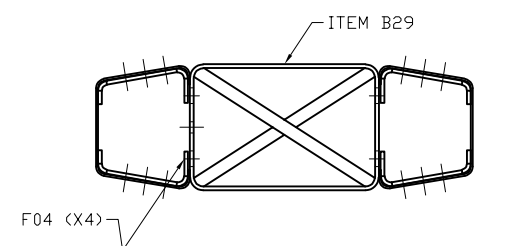
VIEW ON ARROW 'D'  
BEAMS AND CLAMPS OMITTED  
TYPICAL FOR DETAILS A, B & C  
SEE NOTES 2 & 5



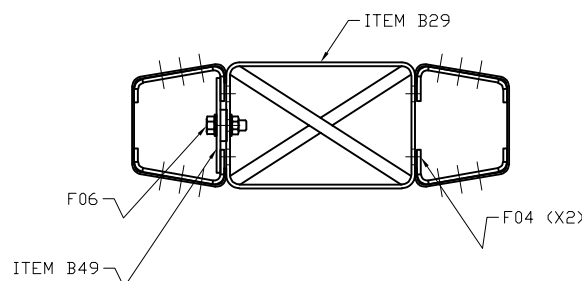
DETAIL 'E1'  
STIFFENER AT MID BEAM POSITION  
BEAM BACKING PLATES ALIGNED  
SEE NOTES 2 & 3



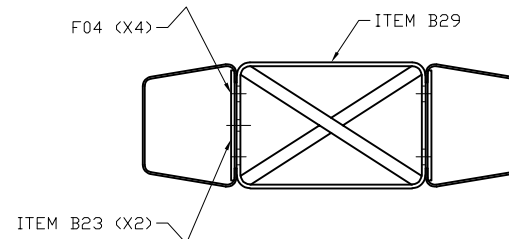
DETAIL 'E2'  
STIFFENER AT MID BEAM POSITION  
BEAM BACKING PLATES NOT ALIGNED  
E.G ON A CURVE  
SEE NOTES 2 & 3



DETAIL 'F1'  
STIFFENER AT BEAM JOINT POSITION  
FISH PLATES ALIGNED  
SEE NOTES 2 & 3



DETAIL 'F2'  
STIFFENER AT BEAM JOINT POSITION  
FISHPLATES NOT ALIGNED  
E.G ON A CURVE  
SEE NOTES 2 & 3



DETAIL 'G'  
STIFFENER AT INTERMEDIATE POSITION  
SEE NOTES 2 & 3

1. THIS TYPE OF SAFETY FENCE MUST NOT BE USED TO ENCLOSE LIGHTING COLUMNS WHERE THE SPEED LIMIT EXCEEDS 50mph
2. WHERE LARGE DIAMETER LIGHTING COLUMNS ARE INSTALLED, CLEARANCE BETWEEN THE BEAMS IS TO BE INCREASED FROM 300mm TO 400mm. THUS ITEM B27A-SF/24 REPLACES ITEM B27-SF/24 AND ITEM B29A-SF/25 REPLACES ITEM B29-SF/25

3. WHERE SAFETY FENCE IS ERECTED ON A CURVE, USE ITEMS AS TABULATED AT NOTE 11, ON DRAWING MRBB-GA-43
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWINGS MRBB-GA-43, 44, 46 AND 47
5. RADIUS EDGES OF POST AND SPACERS MUST ALWAYS BE PRESENTED TO FACE THE DIRECTION OF TRAFFIC FLOW

00	08/09/25	DRAWING CREATED	H.I.
REV'n	DATE	DETAILS	INITIALS

**MEGARAIL BB / NPSBS OBB**

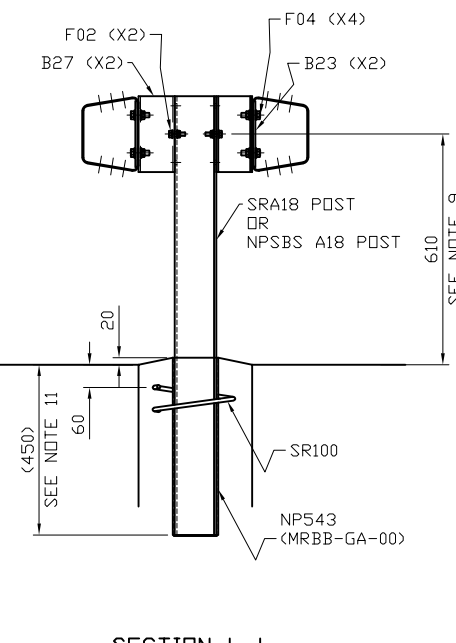
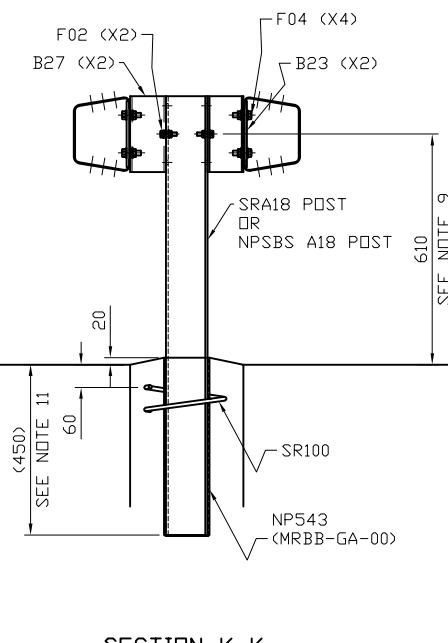
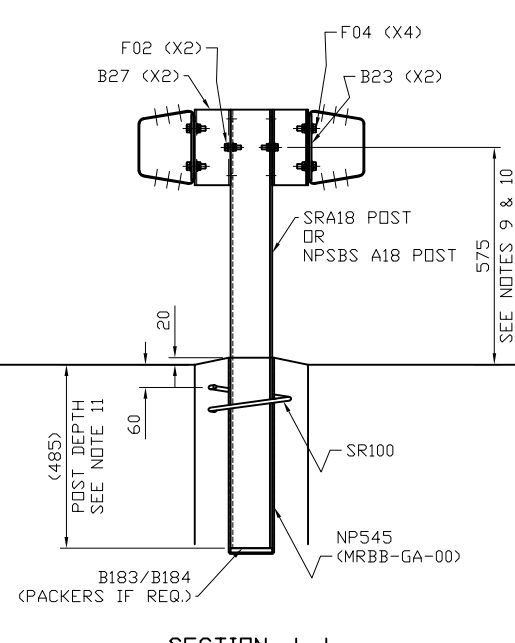
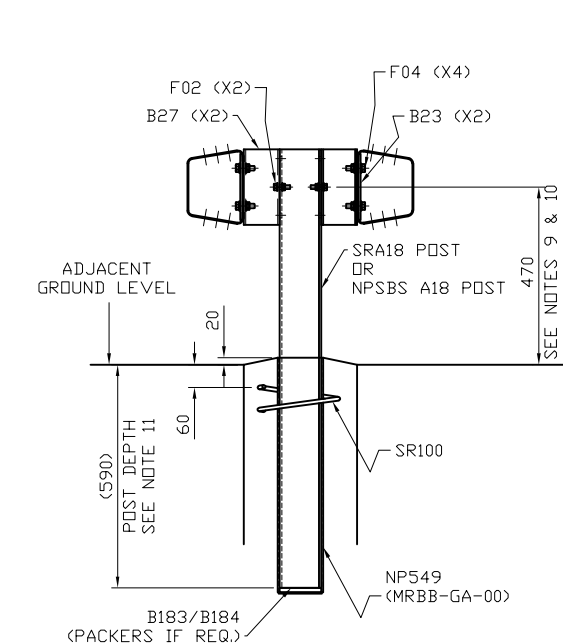
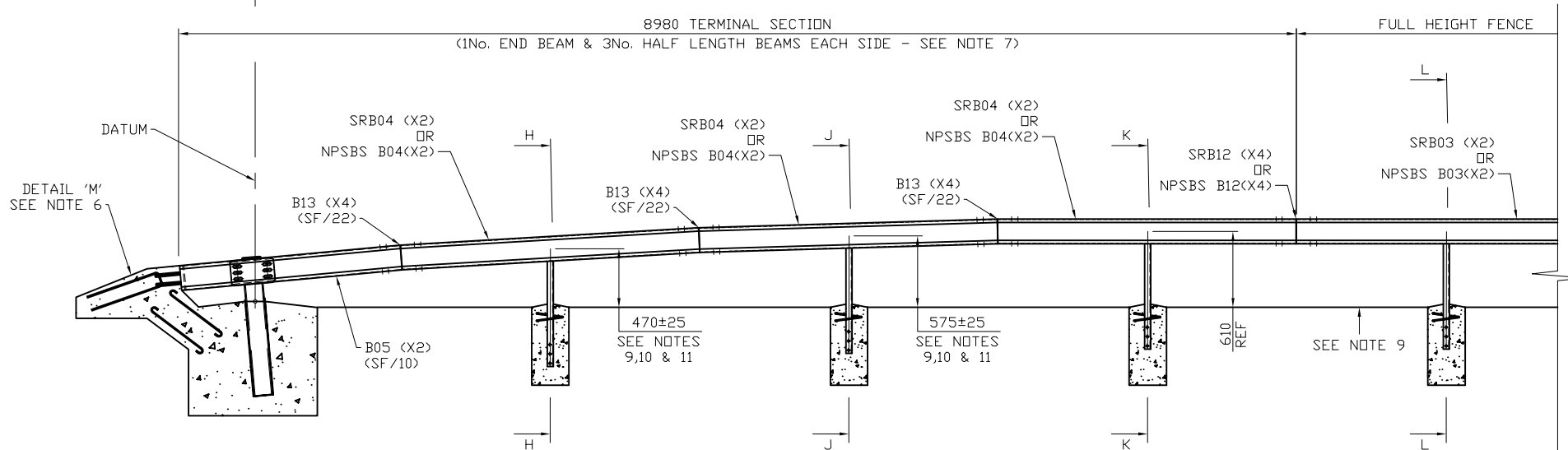
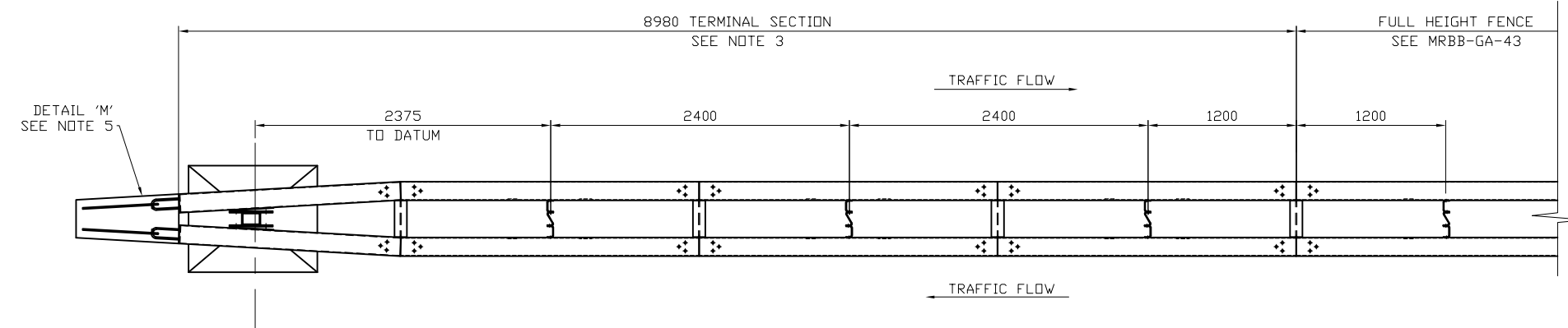
NPSBS DSOBB & DSMRBB  
ENCLOSING LIGHT COLUMNS (50MPH)


**SAFEROAD**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
T: 01724 289119

FOR TECHNICAL ASSISTANCE CONTACT  
[john.cudlipp@saferoad.co.uk](mailto:john.cudlipp@saferoad.co.uk)

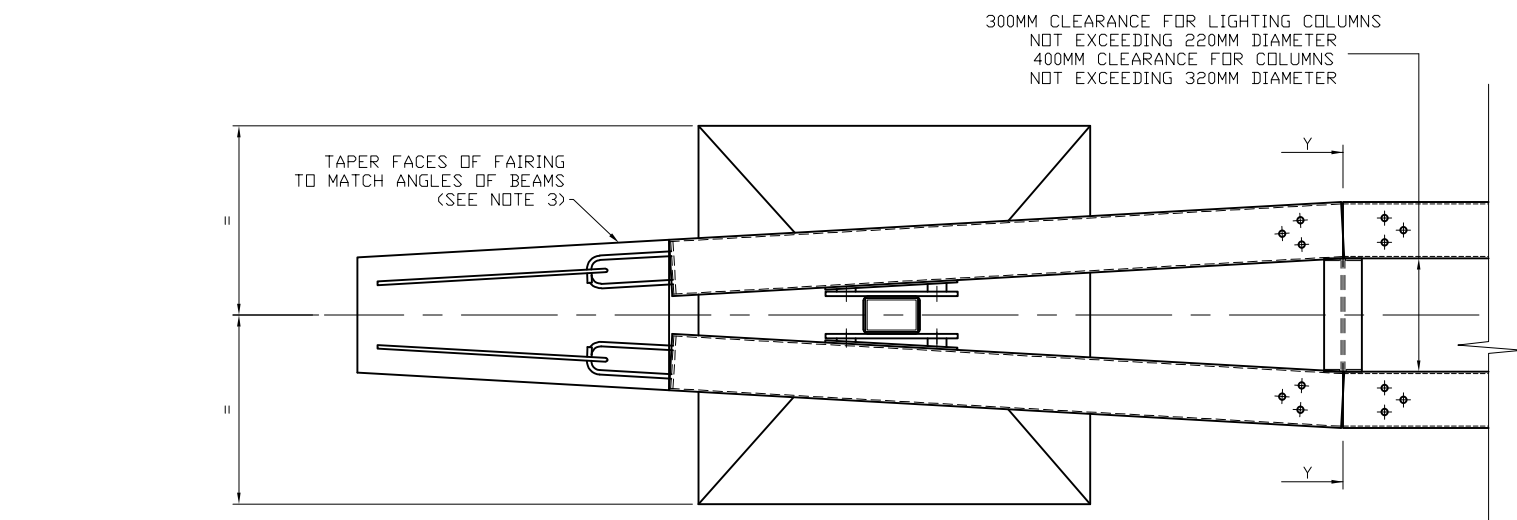
DRAWING NUMBER:	REV'n:
MRBB-GA-45	00



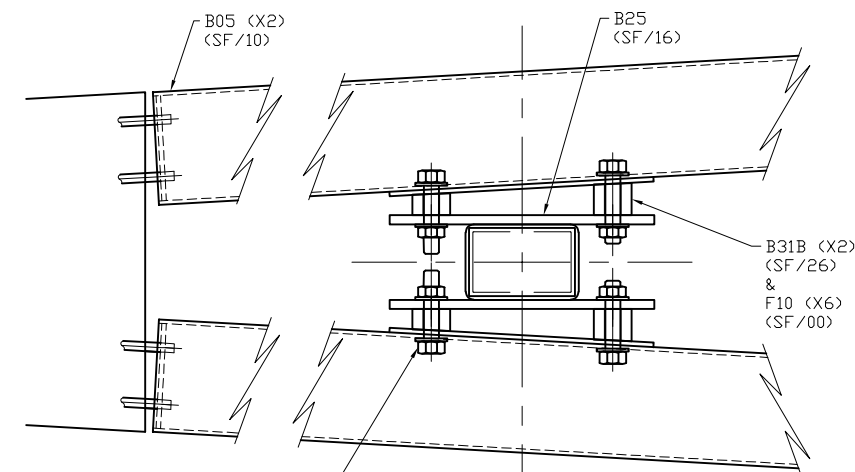
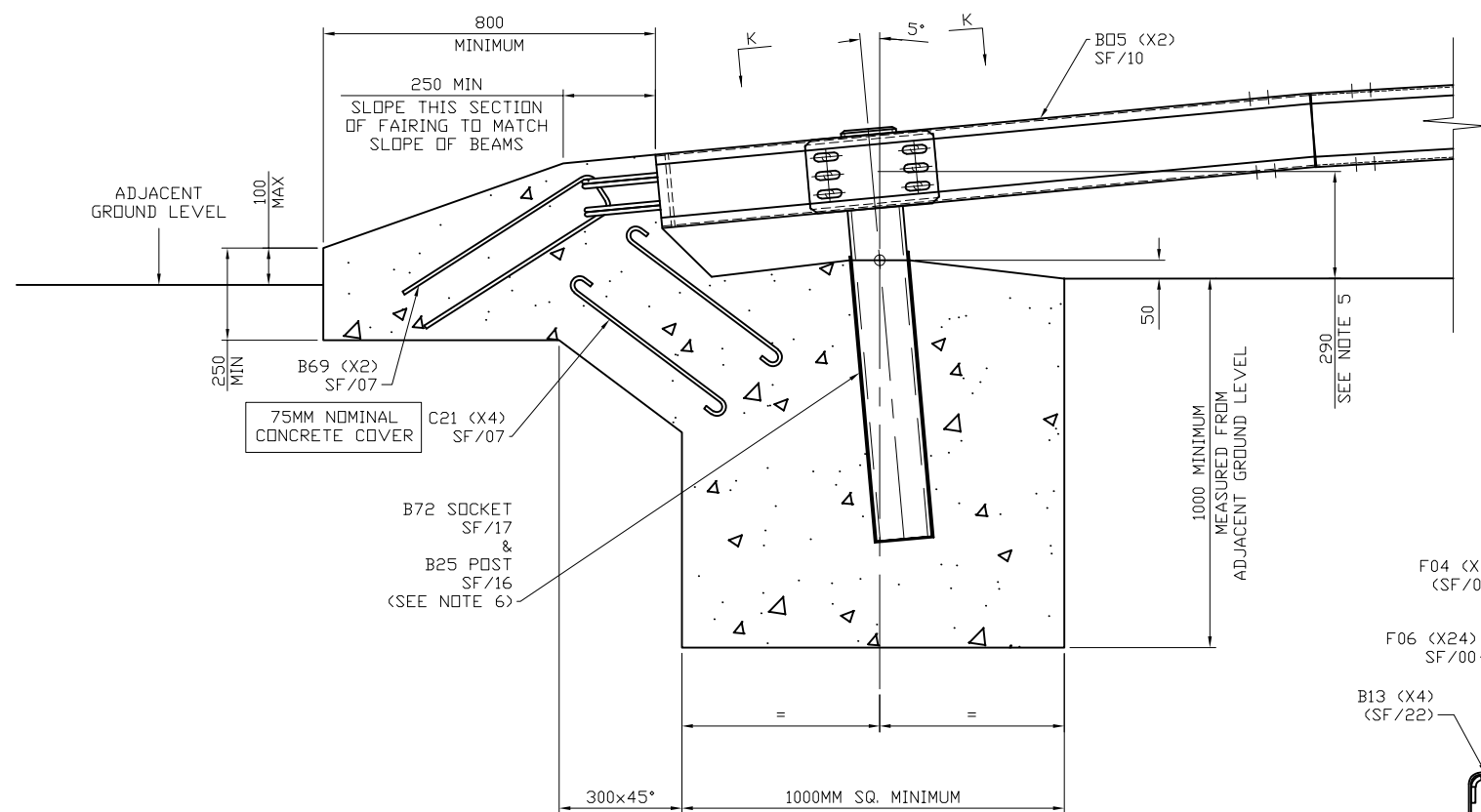
## GENERAL NOTES:

1. THIS TYPE OF SAFETY FENCE MUST NOT BE USED TO ENCLOSE LIGHTING COLUMNS WHERE THE SPEED LIMIT EXCEEDS 50mph
2. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
3. ON CURVED INSTALLATIONS, WHERE BOTH SIDES TERMINATE AT A COMMON ANCHORAGE, A SPECIAL LENGTH FACTORY FABRICATED BEAM MAY BE NECESSARY TO COMPENSATE FOR THE LENGTH DIFFERENCE BETWEEN TWO SIDES
4. WHERE LARGE DIAMETER LIGHTING COLUMNS ARE INSTALLED, CLEARANCE BETWEEN THE BEAMS IS TO BE INCREASED FROM 300mm TO 400mm. THUS ITEM B27A-SF/24 REPLACES ITEM B27-SF/24. ITEM B29A-SF/25 REPLACES ITEM B29-SF/25.
5. FOR ALTERNATIVE POSTS, FOUNDATIONS & FIXINGS SEE MRBB-GA-41 AND MEGARAIL MANUAL & GA/21
6. FOR DETAIL 'M' AND FURTHER CONSTRUCTION NOTES SEE DRAWINGS MRBB-GA-43 & 47
7. THE POSTS IN THE TERMINAL SECTION ARE TO BE SET TO THE LEVELS SHOWN AND THE ANCHORAGE IS TO BE CAST WHILE THE BEAMS ARE ONLY LOOSELY BOLTED TO THE FISH PLATES. WHEN THE CONCRETE HAS REACHED ITS DESIRED STRENGTH, THE FISH PLATE BOLTS ARE TO BE TIGHTENED AS PER SF/00.
8. CONCRETE FAIRING AND FOUNDATIONS TO BE MIX C25 OR ST5
9. SET BEAM CENTRE LINE HEIGHT FROM REFERENCE LEVEL OR ADJACENT GROUND AS SHOWN AT DETAIL 'W' - GA/20.
10. THESE DIMENSIONS MAY NEED TO BE ADJUSTED WHEN MEASURED RELATIVE TO THE CARRIAGEWAY/HARDSHOULDER/HARDSTRIP TO ENSURE THE TOP OF THE FOUNDATIONS REMAIN 20mm-25mm ABOVE THE GENERAL ADJACENT GROUND LEVEL
11. WHERE CONCRETE FOUNDATIONS WITH SOCKETS ARE SPECIFIED AND ADJACENT GROUND LEVEL IS ABOVE/BELOW THE REFERENCE LEVEL IT WILL BE NECESSARY TO SELECT THE MOST APPROPRIATE LENGTH SOCKET FROM THE RANGE SHOWN ON DRAWING MRBB-GA-00 TO ENSURE THE TOP OF THE FOUNDATIONS REMAIN 20mm-25mm ABOVE ADJACENT GROUND LEVEL. THE POST EMBEDMENT DEPTHS, SOCKET DIMENSIONS AND BALLOON IDENTIFICATIONS SHOWN ASSUME THE REFERENCE LEVEL AND ADJACENT GROUND LEVEL COINCIDE,
12. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWINGS MRBB-GA-43,44,45 & 47

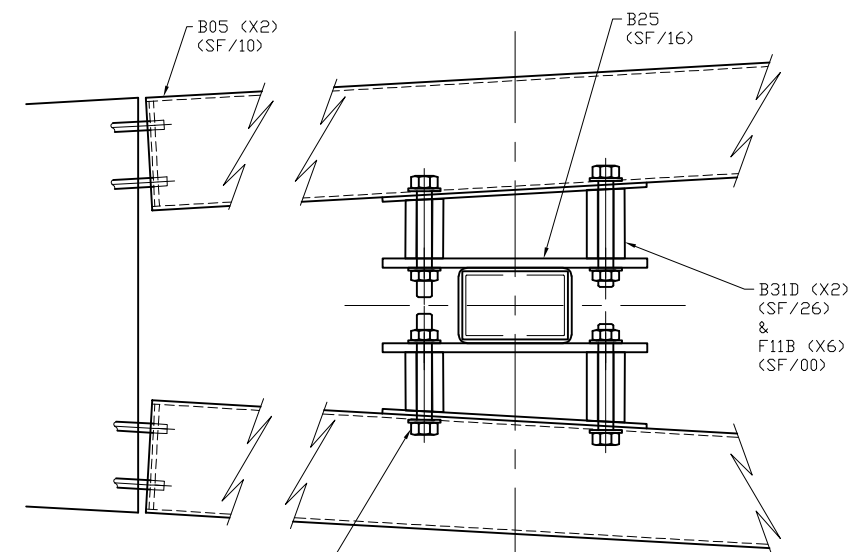
00	08/09/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
MEGARAIL BB / NPSBS OBB			
NPSBS DSOBB & DSMRBB			
ENCLOSING LIGHT COLUMNS (50MPH)			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-46			00



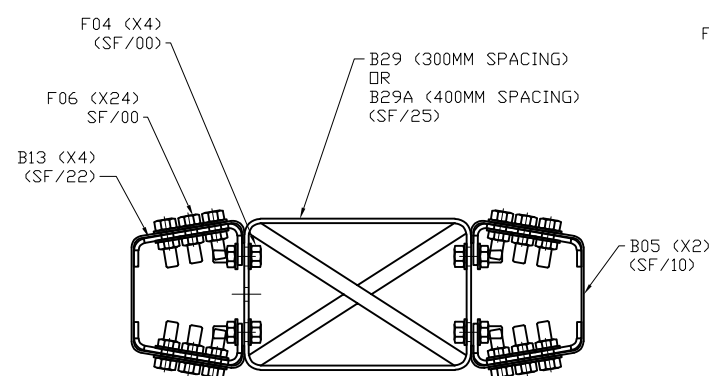
PLAN VIEW ON ANCHORAGE  
(SEE NOTE 4)



SECTION K-K  
300MM CLEARANCE



SECTION K-K  
400MM CLEARANCE

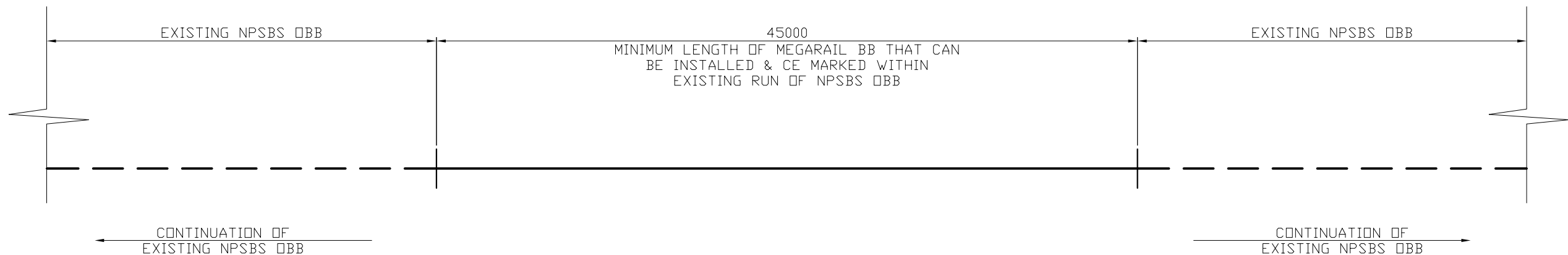


SECTION Y-Y

# GENERAL NOTES:

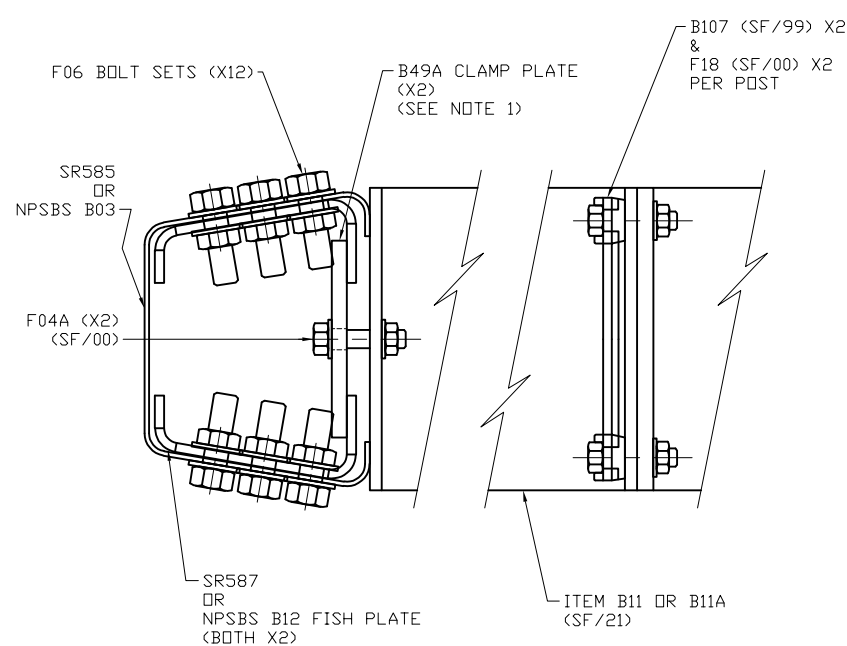
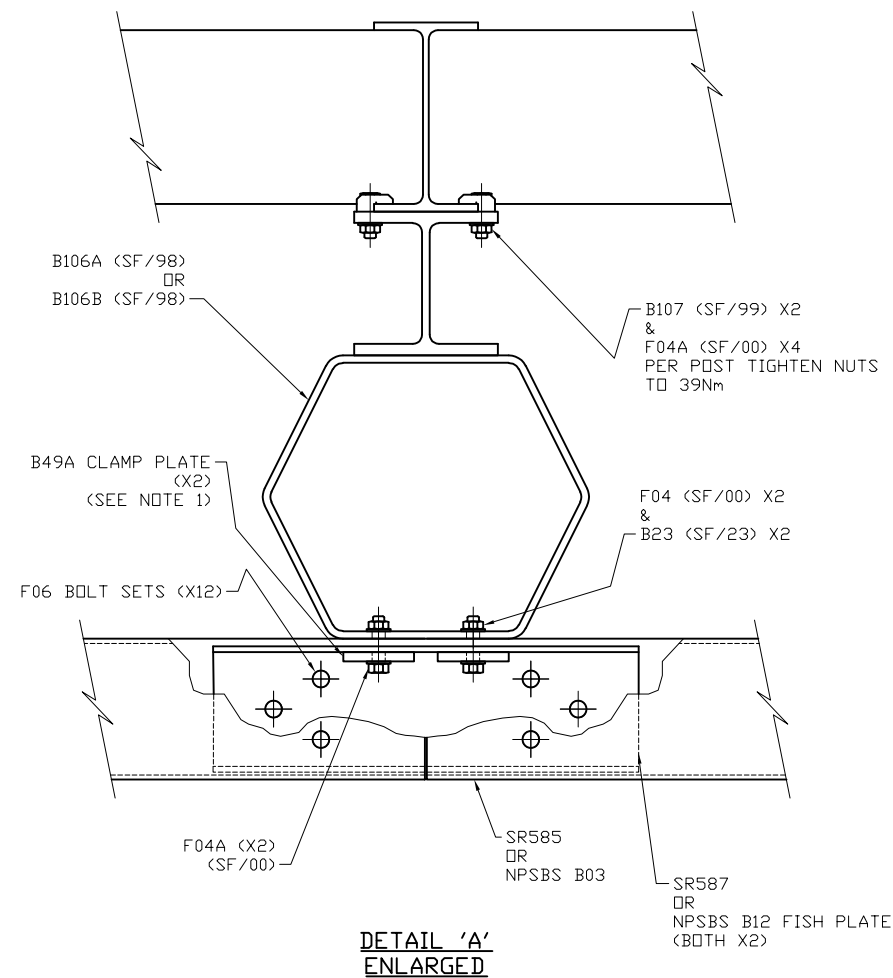
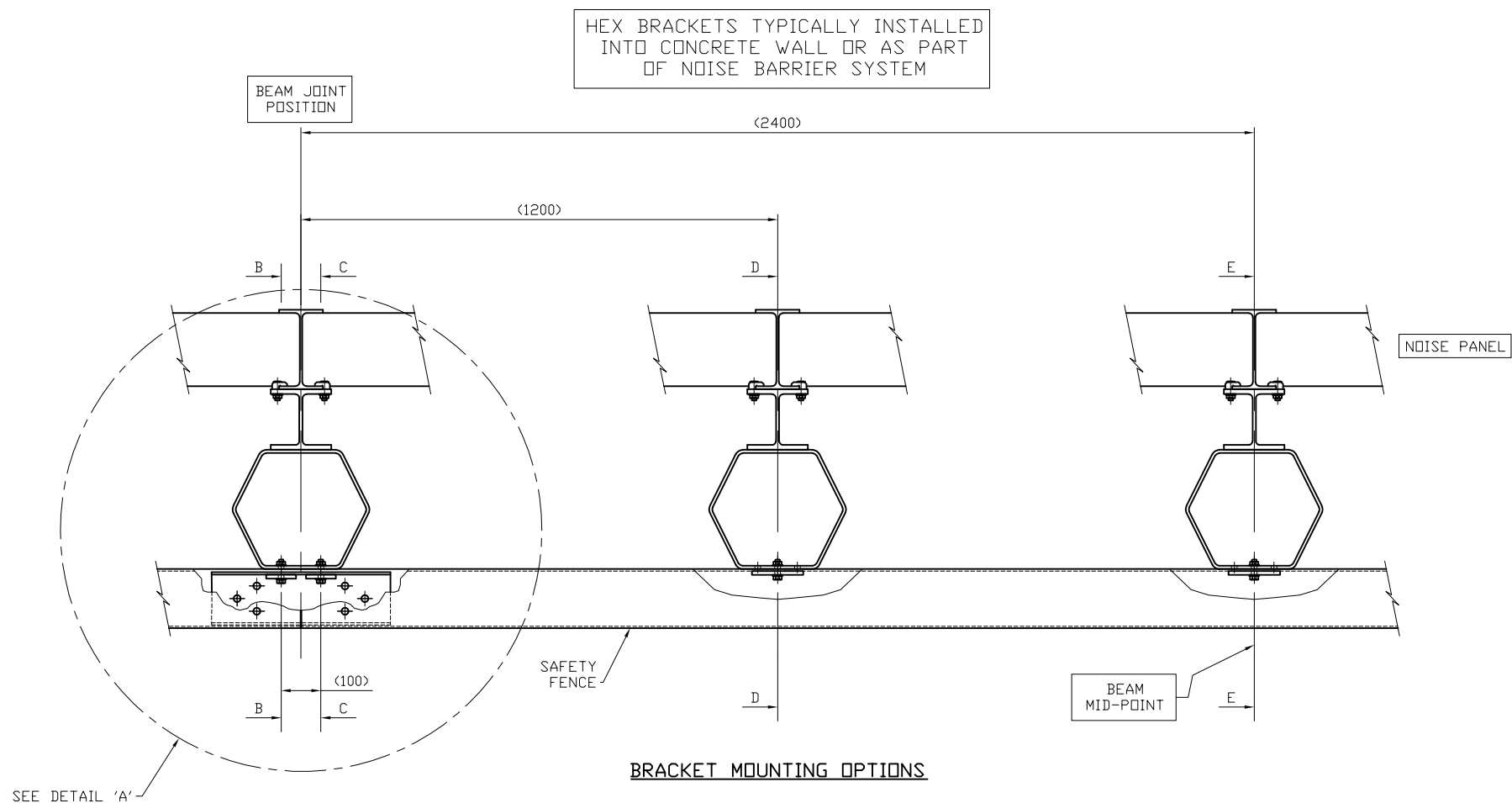
- THIS TYPE OF SAFETY FENCE MUST NOT BE USED TO ENCLOSE LIGHTING COLUMNS WHERE THE SPEED LIMIT EXCEEDS 50mph
- DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
- TRAFFIC FACE OF FAIRING MUST NOT BE BEHIND TRAFFIC FACE OF BEAM AT APPROACH END OF SAFETY FENCE AND MUST NOT PROTRUDE IN FRONT OF TRAFFIC FACE AT DEPARTURE END
- CONCRETE FAIRING AND FOUNDATIONS TO BE MIX C25 OR ST5
- DIMENSION '290' TO BE MEASURED FROM REFERENCE LEVEL OR ADJACENT GROUND LEVEL AS SHOWN AT DETAIL 'W' ON DRAWING GA/20. DIMENSION MAY NEED TO BE ADJUSTED TO ENSURE TOP OF THE FOUNDATION REMAINS 50MM ABOVE THE GENERAL ADJACENT GROUND LEVEL .
- END POST IS TO BE MOUNTED IN SOCKET AS SHOWN. HOWEVER, WHERE THE ADJACENT GROUND LEVEL IS ABOVE OR BELOW THE REFERENCE LEVEL, AN APPROPRIATE LENGTH SOCKET WILL BE REQUIRED TO ENSURE THE TOP OF THE SOCKET AND THE FOUNDATION FLAUNCHING REMAIN 50-60MM ABOVE THE ADJACENT GROUND LEVEL. SOCKET IDENTIFICATION SHOWN ASSUMES THE REFERENCE LEVEL AND THE ADJACENT GROUND LEVEL ARE THE SAME
- THIS DRAWING TO BE READ IN CONJUNCTION WITH MRBB-GA-43,44,45 & 46

00	08/09/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
MEGARAIL BB / NPSBS OBB			
NPSBS DSOBB & DSMRBB ENCLOSING LIGHT COLUMNS (50MPH)			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-47			00

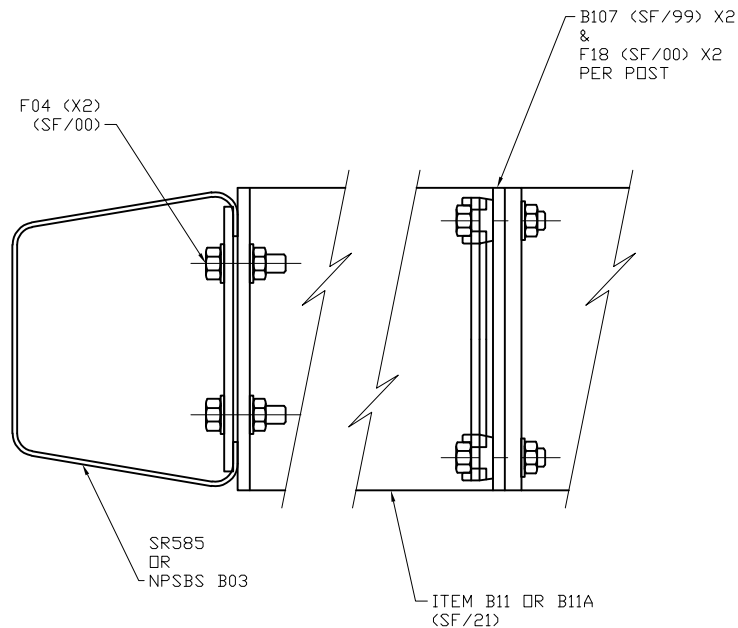


- NPSBS OBB REMAINS A COMPLIANT LEGACY NPSBS SYSTEM WITH MEGARAIL BB COMPONENTS INSTALLED.
- WHEN INSTALLING, MAINTAINING OR REPAIRING MEGARAIL BB, ONLY MEGARAIL BB COMPONENTS MAY BE USED, ENSURING COMPLIANCE WITH THE CE MARKED SYSTEM.
- THE MINIMUM LENGTH OF NEED FOR MEGARAIL BB AS A STAND ALONE CE MARKED SYSTEM IS 20M, EXCLUDING TERMINALS.
- THE MINIMUM LENGTH OF MEGARAIL BB THAT CAN BE INSTALLED & CE MARKED WITHIN AN EXISTING NPSBS OBB FENCE IS 45M.
- MEGARAIL BB COMPONENTS USED WITHIN A NPSBS OBB SYSTEM CONTAINING SPACERS & STIFFENERS CANNOT BE CE MARKED AT ANY LENGTH, THEREFOR MUST BE INSTALLED IN ACCORDANCE WITH NPSBS.
- MEGARAIL BB COMPONENTS USED WITHIN NPSBS DOUBLE SIDED OBB CANNOT BE CE MARKED, THEREFOR MUST BE INSTALLED IN ACCORDANCE WITH NPSBS.
- MEGARAIL BB COMPONENTS USED WITHIN NPSBS DROBB CANNOT BE CE MARKED, THEREFOR MUST BE INSTALLED IN ACCORDANCE WITH NPSBS
- MEGARAIL BB COMPONENTS USED WITHIN NPSBS GA72 & GA74 TRANSITIONS TO LEGACY SYSTEMS OR STRUCTURES CANNOT BE CE MARKED, THEREFOR MUST BE INSTALLED IN ACCORDANCE WITH NPSBS.
- WHEN USING MEGARAIL BB COMPONENTS FOR REPAIR OR RENEWAL, THE INSTALLATION SHOULD COMPLY WITH SAFEROAD DRAWINGS MRBB-GA-41 TO MRBB-GA-51, NPSBS DRAWINGS AND TO BS 7669.
- WHEN CONNECTING TO ANY PROPRIETARY SYSTEM WITH A NPSBS GA72 OR GA74 TRANSITION, MEGARAIL BB COMPONENTS CANNOT BE USED

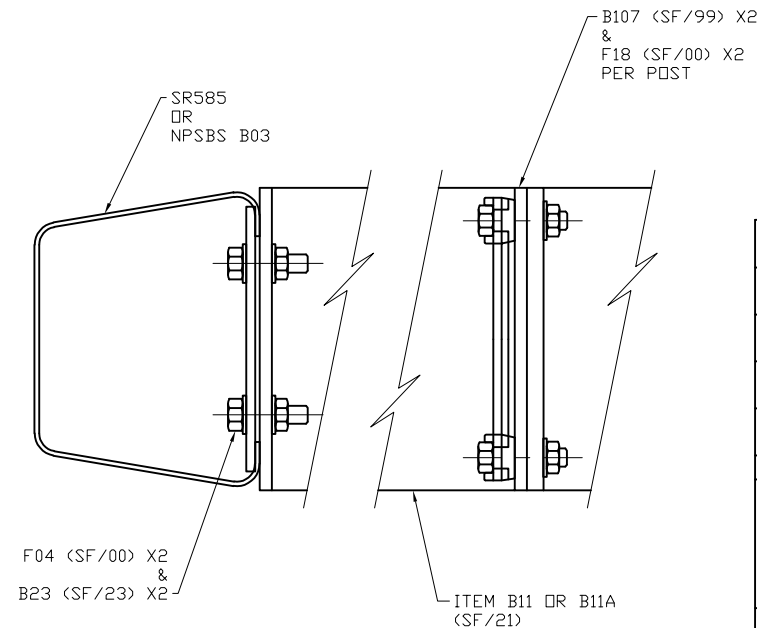
00	10/12/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
MEGARAIL BB/NPSBS OBB			
COMPLIANCE REQUIREMENTS WITHIN REPAIRS & RENEWAL			
<div><div></div><div>SAFEROAD</div></div>			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-48			00



SECTION B-B  
(SECTION C-C SIMILAR)



SECTION D-D

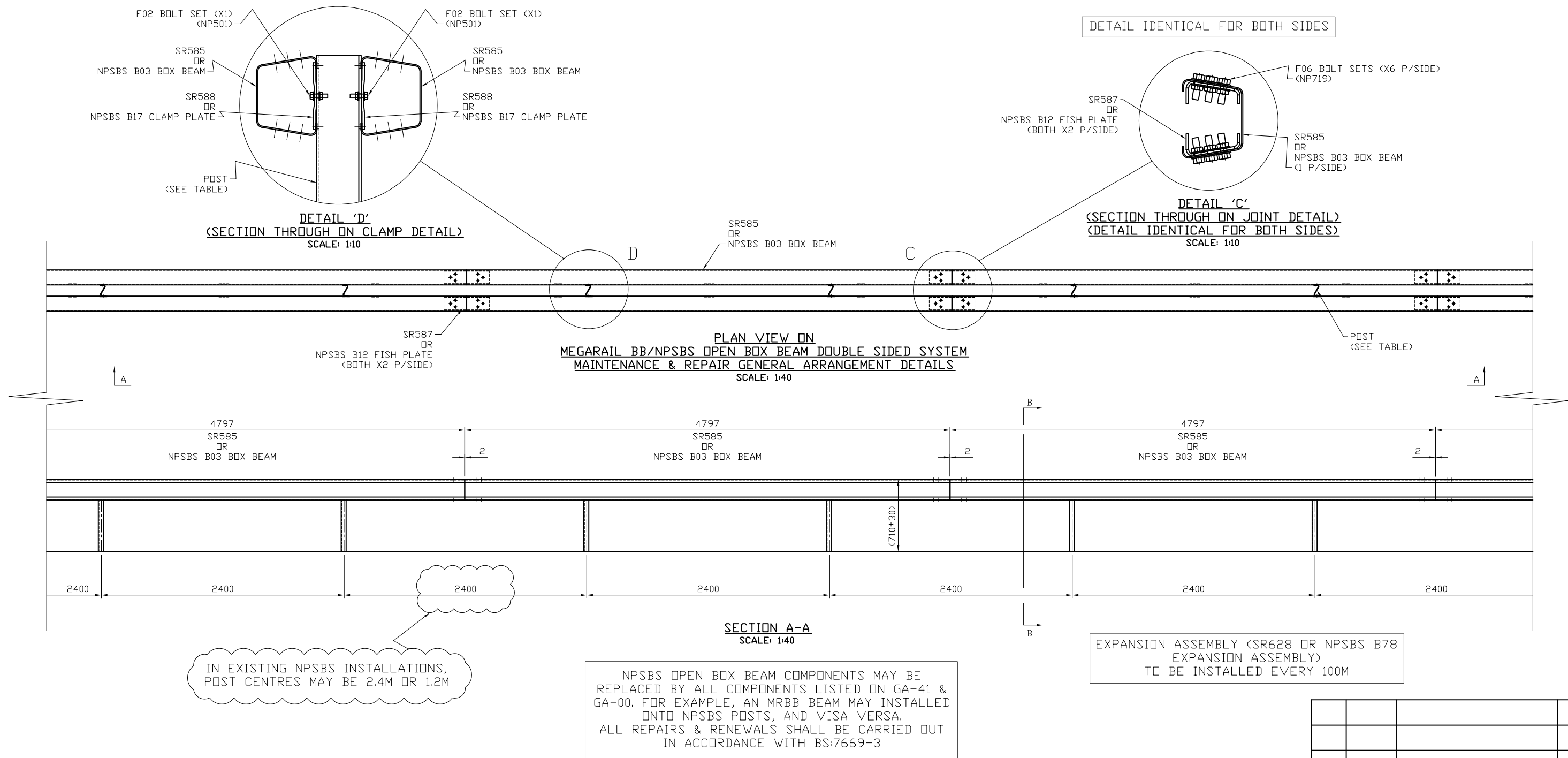


SECTION E-E

# GENERAL NOTES:

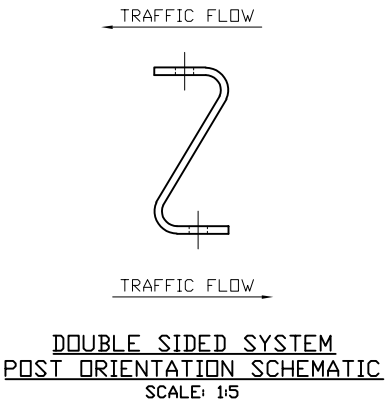
- IN ISOLATED CASES WHERE F06 BOLTS PREVENT BOTH B49A TYPE CLAMPS BEING INSTALLED, ONE ONLY MAY BE OMITTED

00	10/12/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
<b>MEGARAIL BB / NPSBS OBB</b> MEGARAIL BB BEAMS FOR RENEWAL & REPLACEMENT ON HEXAGON BRACKETS			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-49			00

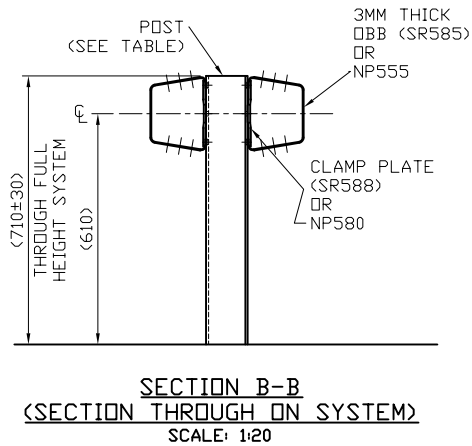


MEGARAIL BB & NPSBS OPEN BOX BEAM POST TYPES		
POST LENGTH	MRBB ITEM REFERENCE	NPSBS OBB ITEM REFERENCE
SURFACE MOUNTED	SRA18 SMP	A37/A54
1160MM	SRA18 SOCKETED	A18
1700MM	SRA18 DRIVEN	A19/A30
2000MM (MRBB) - 1900MM (NPSBS OBB)	SRA18 LONG DRIVEN	A55/A56
2400MM	SRA18 EXTRA LONG DRIVEN	-

SYSTEM COMPONENT SCHEDULE (P/4.797M) - MRBB OR NPSBS OBB		
MRBB ITEM REFERENCE	NPSBS ITEM REFERENCE	QTY
SRB03 BOX BEAM 4797x3mm THICK	B03 BOX BEAM 4797x5mm THICK	2
POSTS - SEE TABLE	POSTS - SEE TABLE	2
SRB12 FISH PLATES (JOINTS)	B12 FISH PLATES (JOINTS)	4
SRB17 CLAMP PLATES	B17 CLAMP PLATES	4



EXISTING SOCKETS/FOUNDATIONS MAY BE RE-USED IF UN-DAMAGED. IF NEW SOCKETS/FOUNDATIONS ARE REQUIRED, SEE GA-00 FOR COMPONENT DETAILS



00	11/12/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL

**MEGARAIL BB / NPSBS OBB**

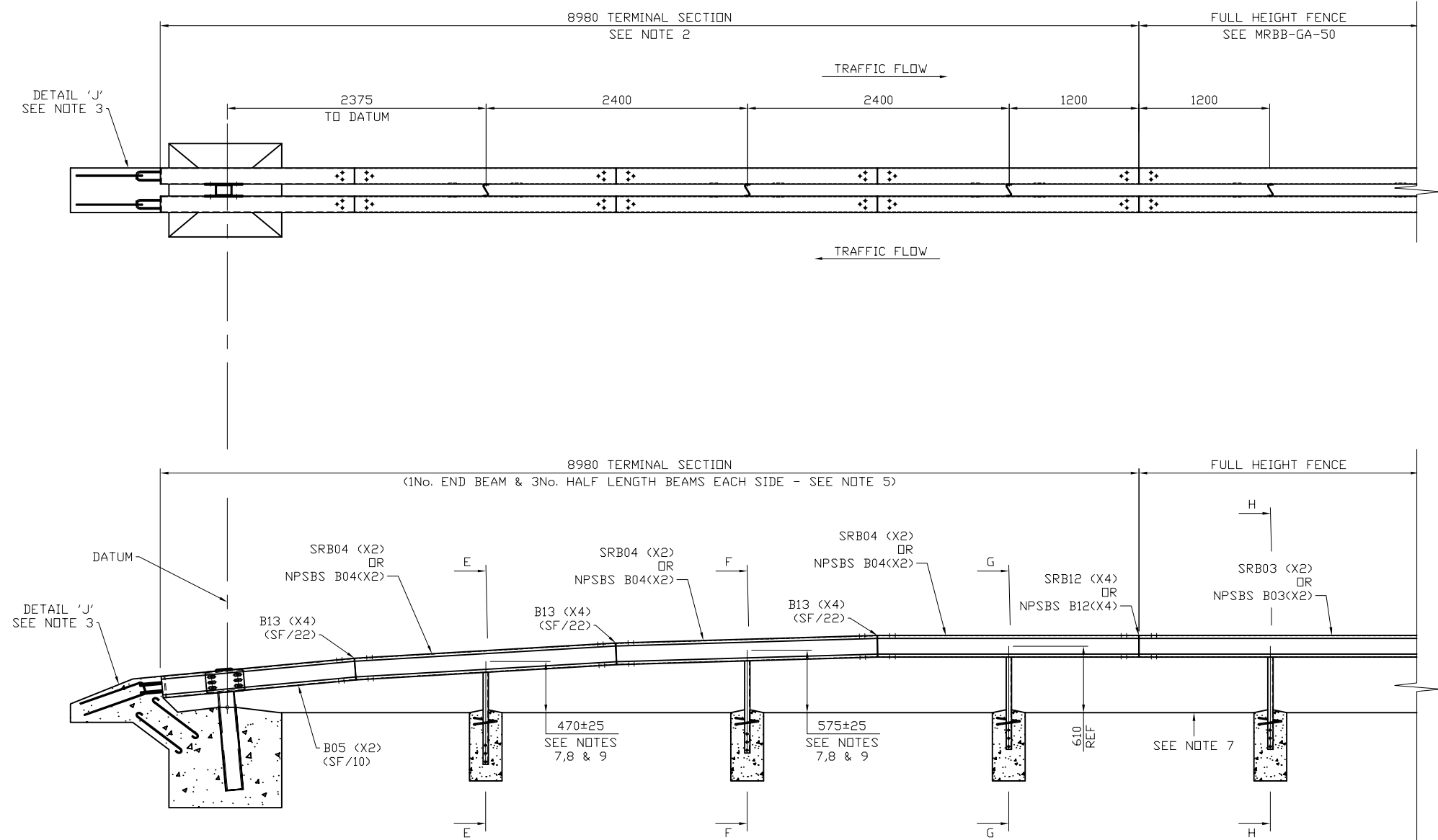
GENERAL ARRANGEMENT DETAILS FOR MAINTENANCE & REPAIR OF DOUBLE SIDED SYSTEM

**SAFEROAD**

CONCORD HOUSE,  
BESSEMER WAY, SCUNTHORPE,  
NORTH LINCOLNSHIRE, DN15 8XE  
T: 01724 289119  
FOR TECHNICAL ASSISTANCE CONTACT  
john.cudlipp@saferoad.co.uk

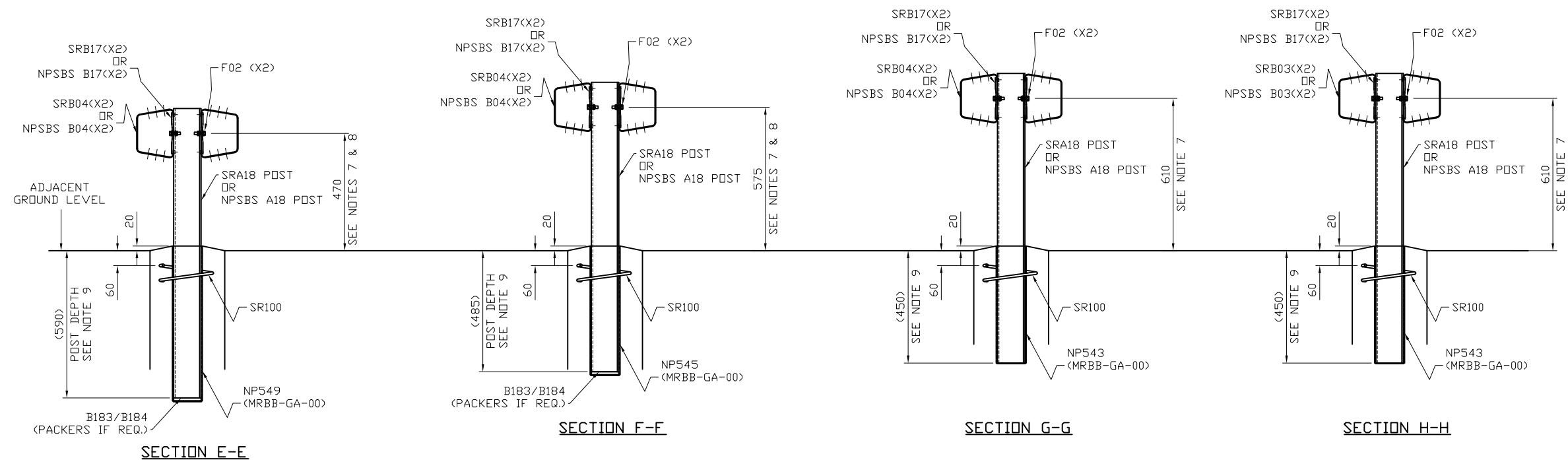
DRAWING NUMBER:	REVn:
MRBB-GA-50	00




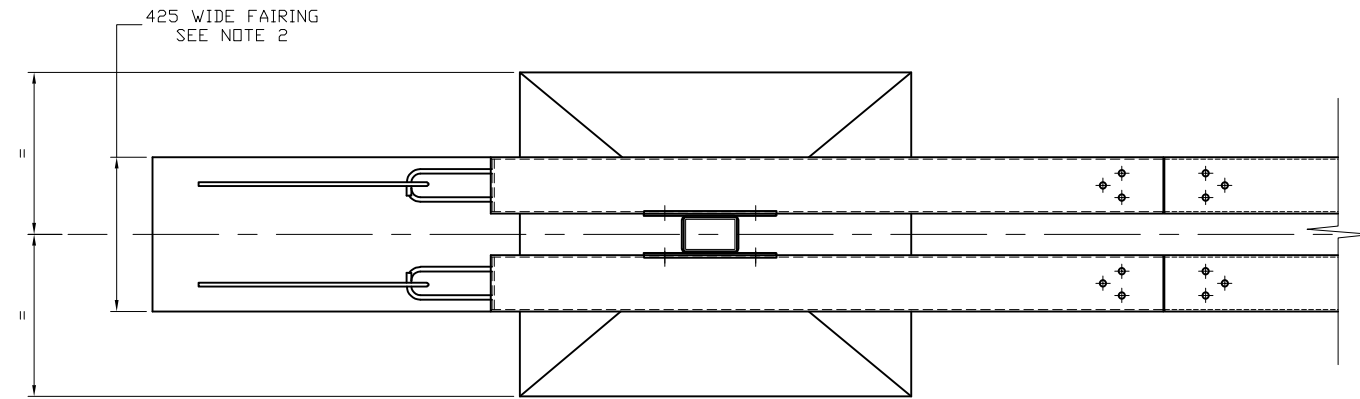


## GENERAL NOTES:

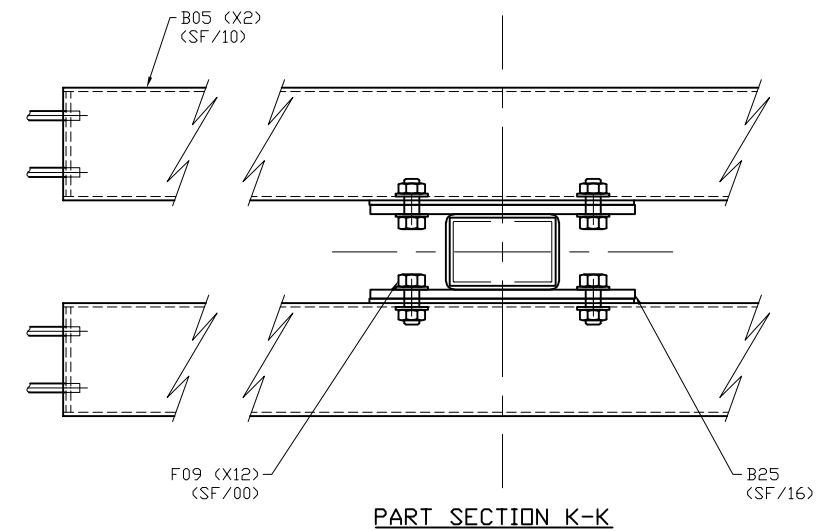
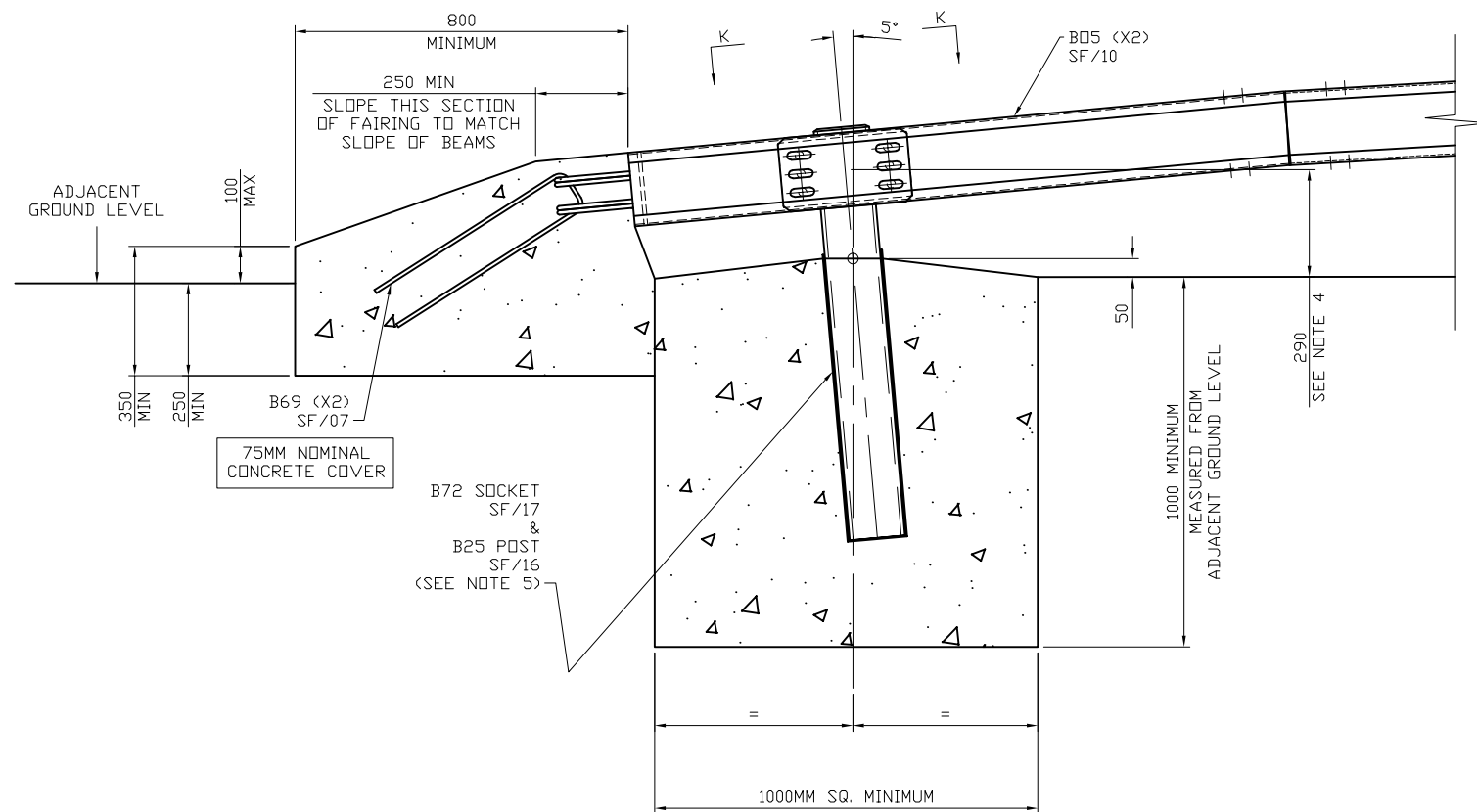
1. DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
2. ON CURVED INSTALLATIONS, WHERE BOTH SIDES TERMINATE AT A COMMON ANCHORAGE, A SPECIAL LENGTH FACTORY FABRICATED BEAM MAY BE NECESSARY TO COMPENSATE FOR THE LENGTH DIFFERENCE BETWEEN TWO SIDES
3. FOR DETAIL 'J' AND FURTHER CONSTRUCTION NOTES SEE DRAWINGS MRBB-GA-50 & 52
4. FOR ALTERNATIVE POSTS, FOUNDATIONS & FIXINGS SEE MRBB-GA-41
5. THE POSTS IN THE TERMINAL SECTION ARE TO BE SET TO THE LEVELS SHOWN AND THE ANCHORAGE IS TO BE CAST WHILE THE BEAMS ARE ONLY LOOSELY BOLTED TO THE FISH PLATES. WHEN THE CONCRETE HAS REACHED ITS DESIRED STRENGTH, THE FISH PLATE BOLTS ARE TO BE TIGHTENED AS PER SF/00.
6. CONCRETE FAIRING AND FOUNDATIONS TO BE MIX C25 OR ST5
7. SET BEAM CENTRE LINE HEIGHT FROM REFERENCE LEVEL OR ADJACENT GROUND AS SHOWN AT DETAIL 'W' - GA/20.
8. THESE DIMENSIONS MAY NEED TO BE ADJUSTED WHEN MEASURED RELATIVE TO THE CARRIAGEWAY/HARDSHOULDER/HARDSTRIP TO ENSURE THE TOP OF THE FOUNDATIONS REMAIN 20mm-25mm ABOVE THE GENERAL ADJACENT GROUND LEVEL
9. WHERE CONCRETE FOUNDATIONS WITH SOCKETS ARE SPECIFIED AND ADJACENT GROUND LEVEL IS ABOVE/BELOW THE REFERENCE LEVEL IT WILL BE NECESSARY TO SELECT THE MOST APPROPRIATE LENGTH SOCKET FROM THE RANGE SHOWN ON DRAWING MRBB-GA-00 TO ENSURE THE TOP OF THE FOUNDATIONS REMAIN 20mm-25mm ABOVE ADJACENT GROUND LEVEL. THE POST EMBEDMENT DEPTHS, SOCKET DIMENSIONS AND BALLOON IDENTIFICATIONS SHOWN ASSUME THE REFERENCE LEVEL AND ADJACENT GROUND LEVEL COINCIDE,
10. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWINGS MRBB-GA-41,50 & 52



00	11/12/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
<b>MEGARAIL BB / NPSBS OBB</b> GENERAL ARRANGEMENT DETAILS FOR MAINTENANCE & REPAIR OF DOUBLE SIDED SYSTEM			
			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-51			00




PLAN VIEW ON ANCHORAGE  
(SEE NOTE 3)



#### GENERAL NOTES:

- DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED
- TRAFFIC FACE OF FAIRING MUST NOT BE BEHIND TRAFFIC FACE OF BEAM AT APPROACH END OF SAFETY FENCE AND MUST NOT PROTRUDE IN FRONT OF TRAFFIC FACE AT DEPARTURE END
- CONCRETE FAIRING AND FOUNDATIONS TO BE MIX C25 OR ST5
- DIMENSION '290' TO BE MEASURED FROM REFERENCE LEVEL OR ADJACENT GROUND LEVEL AS SHOWN AT DETAIL 'W' ON DRAWING GA/20. DIMENSION MAY NEED TO BE ADJUSTED TO ENSURE TOP OF THE FOUNDATION REMAINS 50MM ABOVE THE GENERAL ADJACENT GROUND LEVEL.
- END POST TO BE MOUNTED IN SOCKET AS SHOWN. HOWEVER WHERE THE ADJACENT GROUND LEVEL IS ABOVE OR BELOW THE REFERENCE LEVEL AN APPROPRIATE LENGTH SOCKET WILL BE REQUIRED TO ENSURE THE TOP OF THE SOCKET AND FOUNDATION FLAUNCHING REMAIN 50-60MM ABOVE THE ADJACENT GROUND LEVEL. SOCKET INDENT SHOWN ASSUMES THE REFERENCE LEVEL AND THE ADJACENT GROUND LEVEL ARE THE SAME.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH MRBB-GA-50/51.

00	12/12/25	DRAWING CREATED	H.B
REVn	DATE	DETAILS	INITIAL
<b>MEGARAIL BB / NPSBS OBB</b> GENERAL ARRANGEMENT DETAILS FOR MAINTENANCE & REPAIR OF DOUBLE SIDED SYSTEM			
			
CONCORD HOUSE, BESSEMER WAY, SCUNTHORPE, NORTH LINCOLNSHIRE, DN15 8XE T: 01724 289119 FOR TECHNICAL ASSISTANCE CONTACT john.cudlipp@saferoad.co.uk			
DRAWING NUMBER:			REVn:
MRBB-GA-52			00