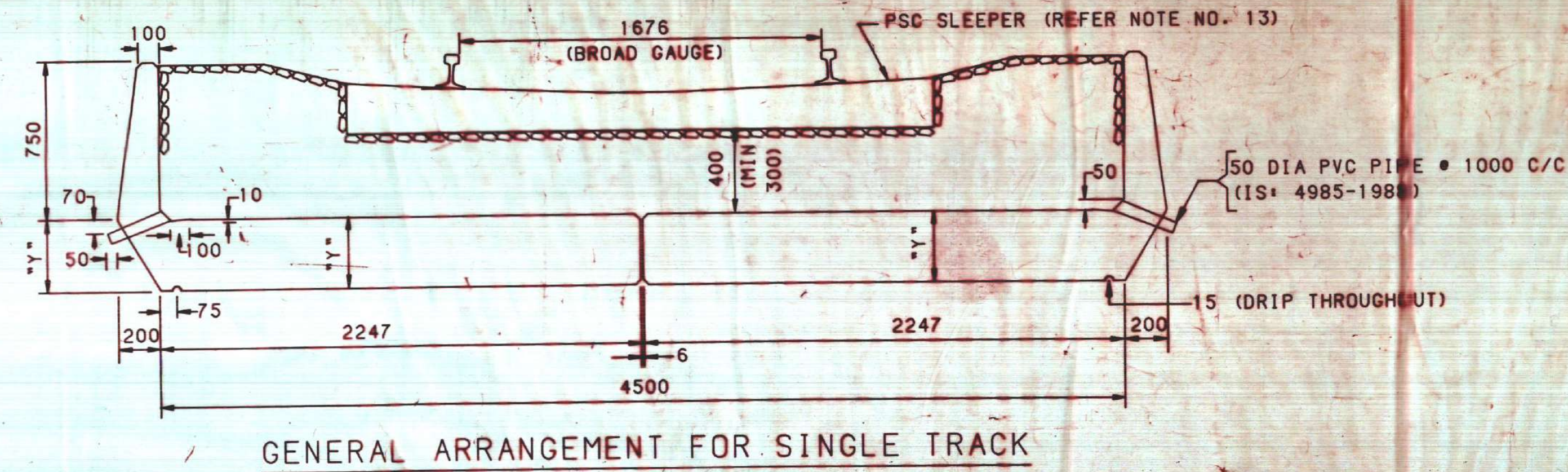
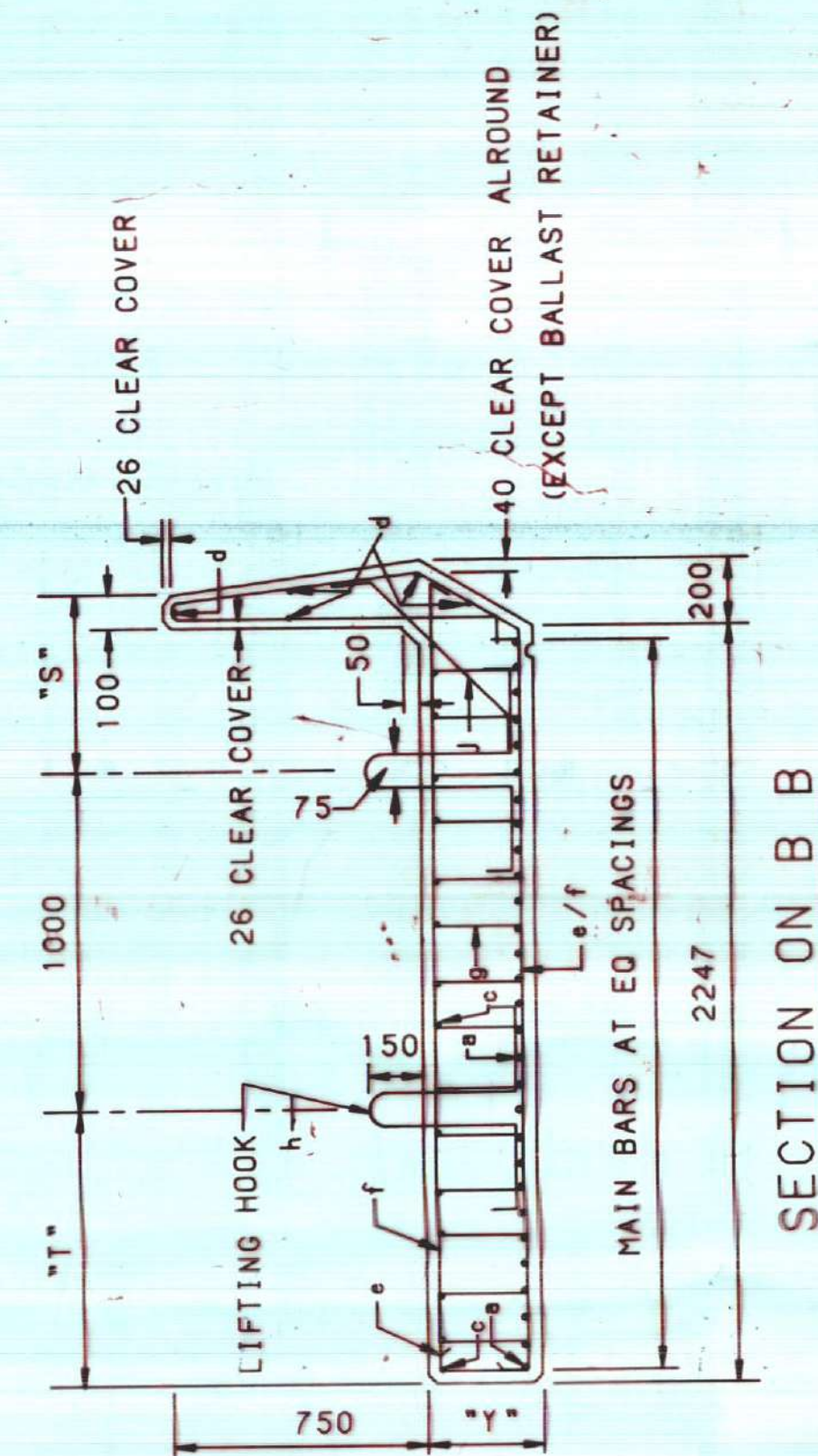
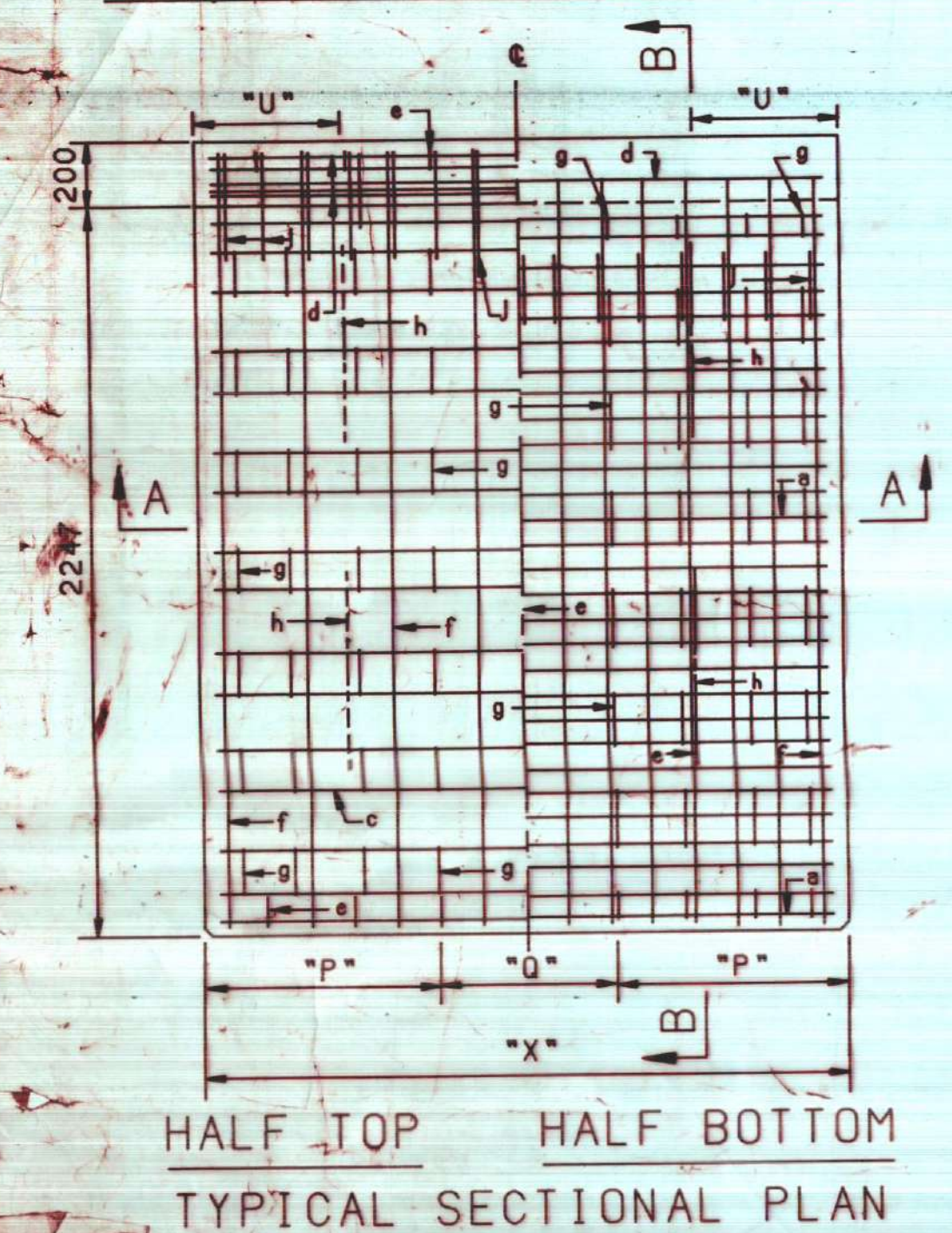
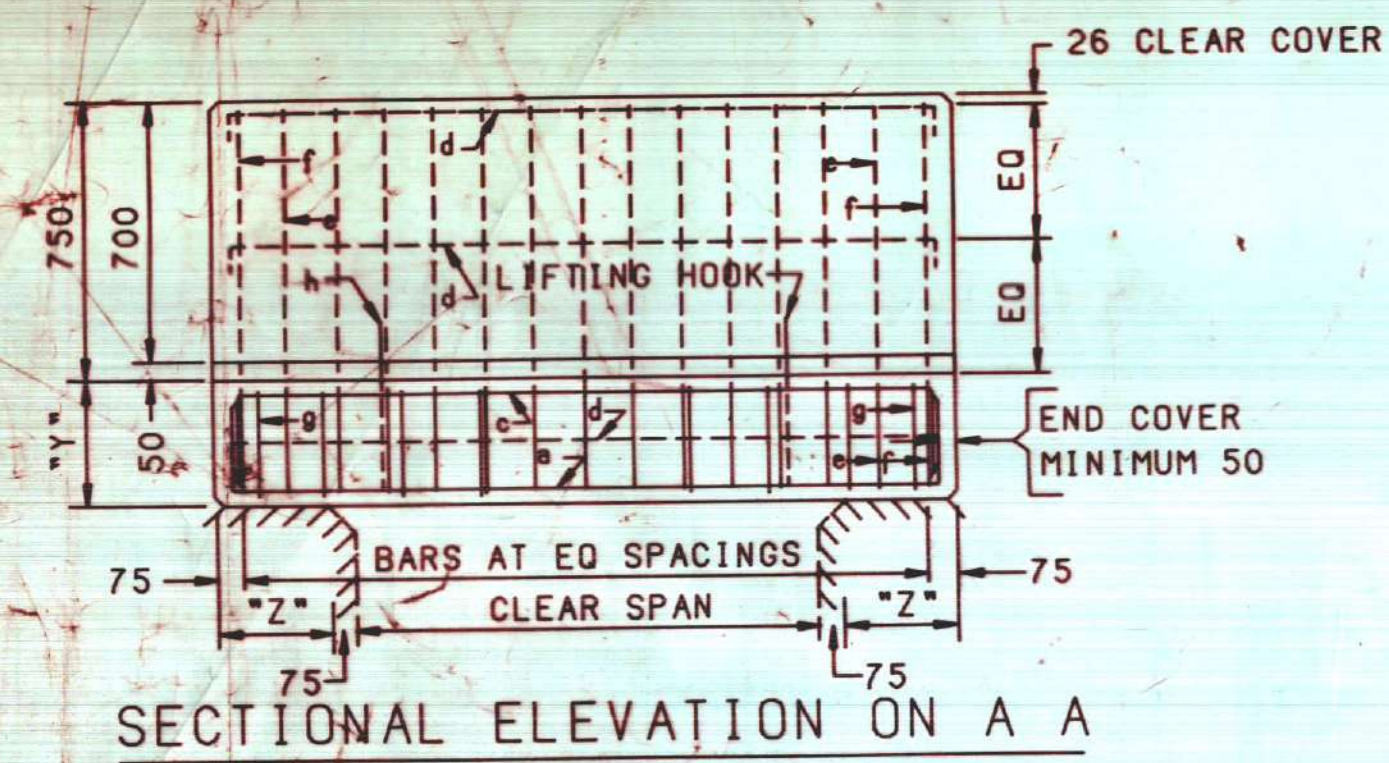


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DESCRIPTION FOR EACH UNIT

DIMENSION OF SLAB			POSITION OF LIFTING HOOK		
CLEAR SPAN (m)	LENGTH "X" (mm)	DEPTH "Y" (mm)	"S"	"T"	"U"
0.610	1210	280	503	844	375
0.915	1515	305	515	832	375
1.220	1970	335	527	820	450
1.830	2580	375	541	806	450
2.440	3290	405	549	798	500

BEARING PRESSURE

BEARING PRESSURE AT SUPPORTS		
CLEAR SPAN (m)	SUPPORT "Z" (mm)	kN/m ²
0.610	225	440
0.915	225	415
1.220	300	302
1.830	300	316
2.440	350	300

QUANTITY SCHEDULE FOR EACH UNIT

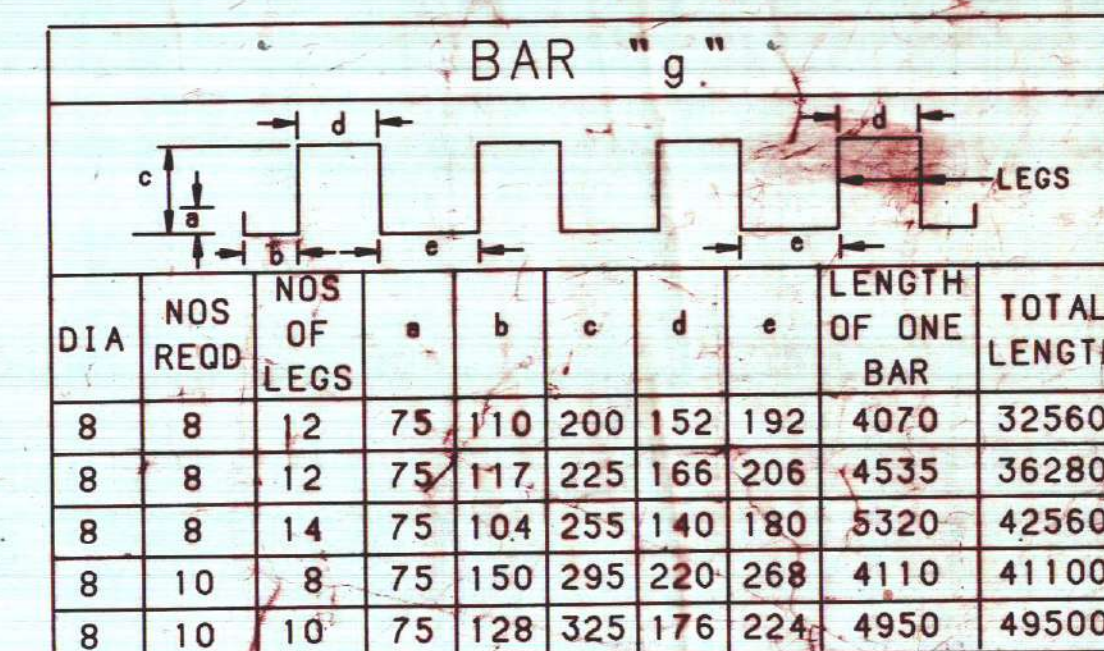
DESCRIPTION	CLEAR SPAN				
	0.61m	0.915m	1.22m	1.83m	2.44m
WEIGHT (kN)	23.200	31.300	44.200	63.900	87.300
CUBICAL QUANTITY (cum)	0.928	1.251	1.767	2.558	3.494
NET WEIGHT OF BARS # 8 (kg)	40.580	52.230	73.630	16.100	19.400
NET WEIGHT OF BARS # 10 (kg)	-	-	-	81.320	119.850
NET WEIGHT OF BARS # 12 (kg)	38.230	43.830	63.550	-	-
NET WEIGHT OF BARS # 16 (kg)	-	-	-	97.300	144.090
NET WEIGHT OF STEEL + 10% WASTAGE (kg)	86.690	105.670	150.900	214.190	311.120
NET WEIGHT OF STEEL + 10% WASTAGE (kN)	0.850	1.036	1.480	2.101	3.051

BAR BENDING SCHEDULE FOR EACH UNIT

CLEAR SPAN (m)	DEPTH "Y" (mm)	BAR "a"					BAR "c"					BAR "d"					BAR "e"										BAR "f"										BAR "h"					BAR "j"																																
		DIA	NOS REQD	k	l	LENGTH OF ONE BAR	TOTAL LENGTH	DIA	NOS REQD	k	l	LENGTH OF ONE BAR	TOTAL LENGTH	DIA	NOS REQD	k	l	LENGTH OF ONE BAR	TOTAL LENGTH	DIA	NOS REQD	k	l	m	n	p	q	r	s	t	u	v	w	x	y	z	LENGTH OF ONE BAR	TOTAL LENGTH	DIA	NOS REQD	k	l	m	n	p	q	r	s	t	u	v	w	x	y	z	LENGTH OF ONE BAR	TOTAL LENGTH	DIA	NOS REQD	k	l	m	n	p	q	r	s	t	u	v	w	x	y	z
0.610	280	12	27	1110	176	1390	37530	8	14	1086	172	1385	19390	8	5	1110	75	1260	6300	8	3	2167	935	200	280	75	48	727	4485	13455	8	4	2167	935	200	280	75	48	727	2352	6815	27260	12	4	370	75	250	99	1355	5420	8	7	525	100	725	5075																		
0.915	305	12	25	1415	201	1745	43625	8	14	1391	197	1740	24360	8	5	1415	75	1565	7825	8	5	2167	950	225	302	75	48	727	4545	22725	8	5	2167	950	225	302	75	48	727	2352	6875	34375	12	4	395	75	250	99	1405	5620	8	11	560	100	760	8360																		
1.220	335	12	29	1870	231	2260	65540	8	16	1846	227	2255	36080	8	5	1870	75	2020	10100	8	7	2167	975	255	329	75	48	727	4630	32410	8	8	2167	975	255	329	75	48	727	2352	6955	55640	12	4	425	75	250	99	1465	5860	8	15	600	100	800	12000																		
1.830	375	16	19	2480	265	2915	55385	10	10	2448	259	2910	29100	10	5	2480	75	2630	13150	10	6	2167	1005	295	365	75	48	727	4730	28380	10	7	2167	1005	295	365	75	48	727	2352	7050	49350	16	4	459	95	250	107	1550	6200	10	13	660	100	860	11180																		
2.440	405	16	23	3190	295																																																																					

- ALL DIMENSIONS ARE IN MILLIMETRES EXCEPT OTHERWISE SHOWN.
- ALL REINFORCEMENT SHALL BE OF HIGH STRENGTH DEFORMED BARS CONFORMING TO IS:1786-1985.
- SPACING OF REINFORCEMENT ARE WITH REFERENCE TO THE CENTRE LINES OF BARS.
- TO FACILITATE THE WORKING OF BALLAST CLEANING MACHINE, LIFTING HOOKS SHALL BE CUT AFTER THE PLACEMENT OF THE SLAB AND SUITABLE WATER PROOFING COAT SHALL BE APPLIED ON THE CUT.
- DEN/SR.DEN OR OFFICER IN CHARGE OF THE CONCRETE DEPOT SHALL ENSURE QUALITY CONTROL, MINIMUM CHARACTERISTIC STRENGTH OF CONCRETE AND CORRECT PLACEMENT OF BARS TO ENSURE CLEAR COVER.
- CONTROLLED CONCRETE GRADE M-20 SHALL BE USED. THE LETTER "M" REFERS TO THE MIX AND NUMBER INDICATES THE CHARACTERISTIC CUBE STRENGTH AT 28 DAYS IN N/sq mm.
- MAXIMUM SIZE OF AGGREGATE TO BE USED IS 20 mm.
- WEIGHT OF REINFORCED CONCRETE IS ASSUMED TO BE 25 kN/cu m.
- SLAB HAS BEEN DESIGNED FOR 400 mm CUSHION AND CHECKED FOR 300 mm VIDE CLAUSE 2.2.2 OF BRIDGE RULES.
- ALL CORNERS OF SLAB SHALL HAVE A CHAMFER OF 25 mm UNLESS OTHERWISE SHOWN. HOWEVER ABUTMENT WILL HAVE A CHAMFER OF 75 mm.
- BAR BENDING DIMENSIONS ARE OVER OUTER EDGES. ALL BARS SHOULD BE PLACED IN ACCORDANCE WITH THE TABLE SHOWN ABOVE FOR EACH SPAN.
- TOP SURFACE OF SLAB SHOULD BE GIVEN A FEW COATS OF COALTAR/BITUMEN OR ANY OTHER SUITABLE WATER-PROOFING TREATMENT BEFORE THE TRACK IS LAID ON THEM.
- ANY TYPE OF SLEEPER MAY BE USED.
- UNITS SHOULD BE PROVIDED WITH A UNIFORM BEDDING BY PLACING IT OVER A LAYER OF CEMENT AND CAST IRON BORINGS IN 1:1 PROPORTION. THE PASTE SHOULD BE OF STIFF CONSISTENCY.
- THESE SLABS ARE SUITABLE FOR CURVED TRACK UP TO 10° WITH MAXIMUM PERMISSIBLE SPEED SUBJECT TO LIMITATION FOR CURVATURE OR 160 km/hr, WHICHEVER IS LESS.
- THESE SLABS CAN ALSO BE USED FOR REPLACEMENT OF EXISTING SLABS IF CLEAR SPAN OF EXISTING SLAB IS LESS THAN THAT OF PROPOSED SLABS.
- SUBJECT TO AVAILABILITY OF BEARING ON ABUTMENT/PIER.
- BALLAST CUSHION MAY BE ADJUSTED TO CATER FOR SUPER ELEVATION WHILE PLACING THE SLABS ON CURVES.
- DATE OF CASTING AND NAME OF CASTING DEPOT SHOULD BE ENGRAVED ON EACH UNIT.
- THESE SLABS CAN BE USED IN YARDS, CARRYING TURNOUT OR MULTIPLE LINE SECTIONS, ELIMINATING BALLAST RETAINER PORTION AND SHAPE OF BAR "a" AND "f" MAY BE MODIFIED. BAR "j" MAY BE REMOVED, IF NECESSARY.
- FOR DETAILS OF 2-UNIT SLABS WITH CONCRETE MIX M-25 AND M-30 REFER TO DRAWING NO. RDSO/B-1598 AND 1599 RESPECTIVELY.
- FOR DETAILS OF SLABS REQUIRED IN CASE OF CONVERSION OF MG TO BG REFER TO DRAWING NO. RDSO/B-1600.
- FOR NEW CONSTRUCTION, MINIMUM SPAN SHALL NOT BE LESS THAN 1.0 m.

NOTE



ARRANGEMENT FOR SHEAR REINFORCEMENT

SPAN (m)	PORTION "P"		PORTION "Q"		TOTAL NOS OF STIRRUPS	MARK OF BAR
	LENGTH (mm)	NOS OF STIRRUPS	LENGTH (mm)	NOS OF STIRRUPS		
0.610	480	4	240	-	8	g
0.915	510	4	255	-	8	g
1.220	705	4	350	-	8	g
1.830	695	5	345	-	10	g
2.440	815	5	405	-	10	g

CONVERSION FACTOR	
1kN/m ²	= 0.102t/m ²
1kN	= 0.102t

R D S O

PRECAST R C BRIDGE SLAB
STANDARD SPANS
0.61, 0.915, 1.22, 1.83 & 2.44m
MBG LOADING-1987
(CONCRETE GRADE M-20)
PROVISIONAL
RDSO/B-1597

IS: 1786-1985
BRIDGE RULES
IRS CONCRETE BRIDGE CODE



SPECIFICATION SCALE ALI DESCRIPTION DATE

BY COMPUTER PROGRAMME
BY: K.C. JAIN
H. GOYAL
TECHNICAL BY: ABIDASHUKLA
SCRUTINISED & CHECKED BY:
ADE (B&S) CS-11 (S.K. SAXENA)
JDS (B&S) CB-1 (A.K. MITTAL)
APPROVED BY:
DS (B&S) ARVIND KUMAR
FILE NO.:
NOTIFICATION NO.: