

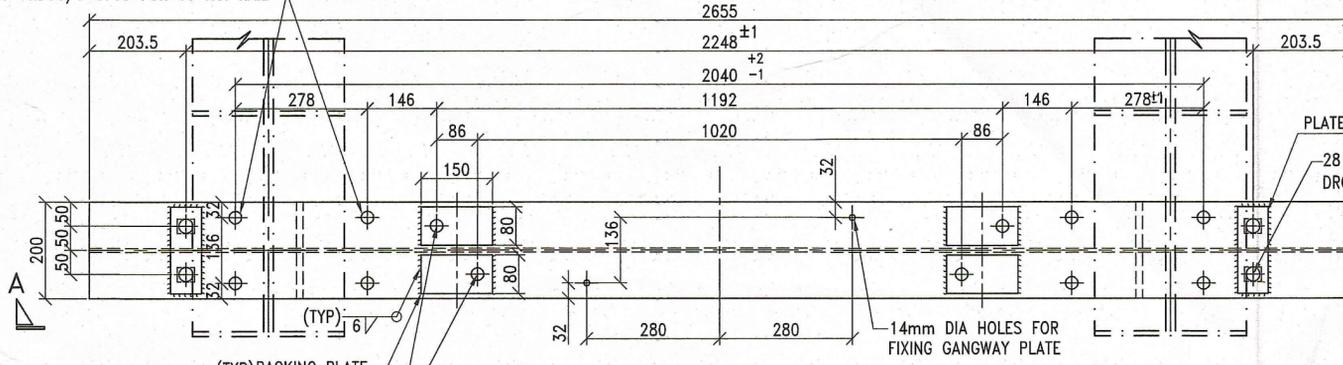
### **Bill Of Quantity**

<b>Sl. No.</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>
1	<p>Supplying, fabricating, transporting galvanized H-Beam sleepers as per BBJ's Drawing No. 2150/HSB/61.0M/20, 2150/HBS/78.8M/34, 2150/HBS/78.8M/34/1 &amp; 2150/HBS/78.8M/34/2 along with other relevant RDSO Drawings to different Bridge Sites i.e. Br. No. 15, 19, 64, 104, 78, 161 &amp; 167 – Bairabi-Sairang stations (all are RDSO standard Girder) in Mizoram as per delivery schedule with RDSO specification no. BS45 thereto complete with all fittings, fixtures and fastening (RDSO Drawing No. T-5155 to 5164) including the cost of all steel sections, all fittings &amp; fixtures and fastening, galvanized MS pad plates, galvanized bolts, nuts washer, spring washer, riveted canted bearing plates as per Railway suitable for 25 Ton axle loading standard.</p> <p>The rate is inclusive of the provision of steel pack plates and short height H-Beam Sleepers as to be required for 61.0M &amp; 78.8 M span and/or other spans as per approved span.</p> <p>The structural steel to be supplied by the Contractor for fabrication of steel H-beam (ISHB) sleepers shall conform to IS-2062-2011, E250, Grade B fully killed from SAIL, TISCO, and Vizag Steel Plant or any other sources approved by N.F. Railway. The source to be declared citing non-availability of material from the aforesaid supplier.</p> <p>The rate is inclusive of inspection and testing charges of all components of sleepers including all fittings &amp; fixtures and fastening, galvanization etc. from the reputed laboratory/ organization.</p> <p>The rate should also be inclusive of all taxes including GST.</p>	Sets	475

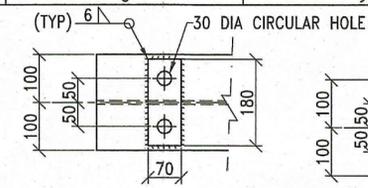




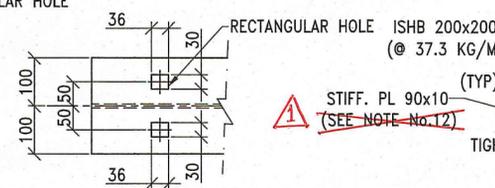
FOR RAIL FASTENING ASSEMBLY AS PER DRG. NO.- RDSO/T-8759 FOR 60 KG. RAIL



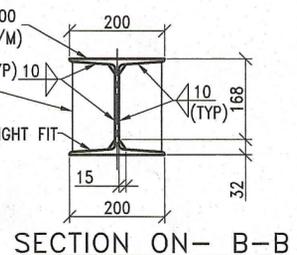
TOP PLAN



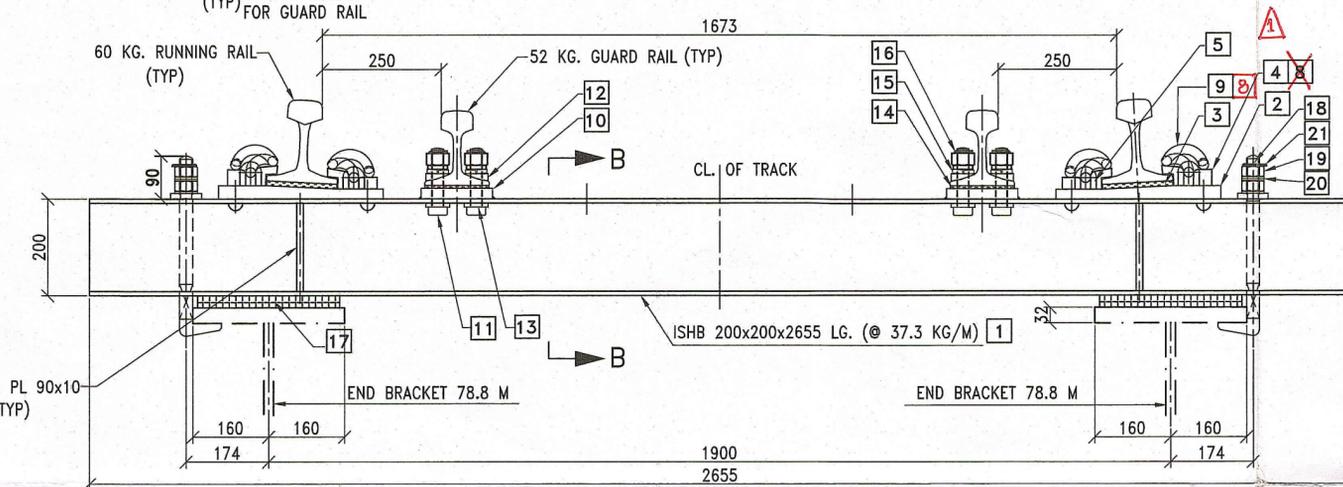
DETAIL AT 'A' TOP FLANGE



DETAIL AT 'A' BOTTOM FLANGE

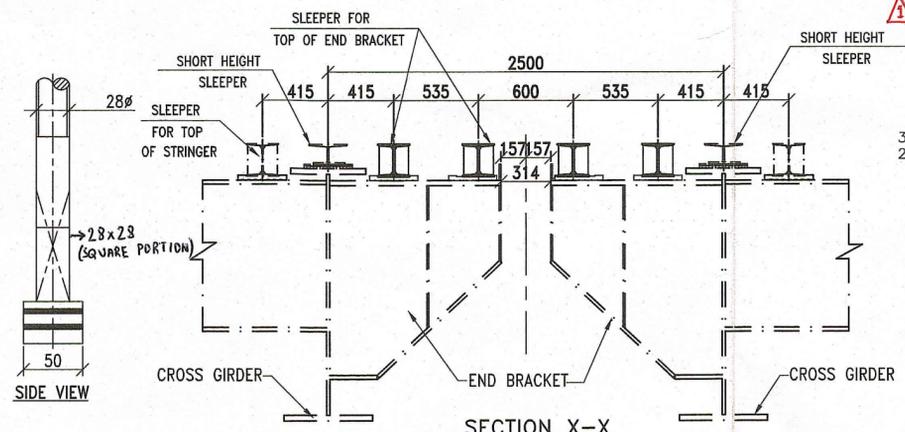
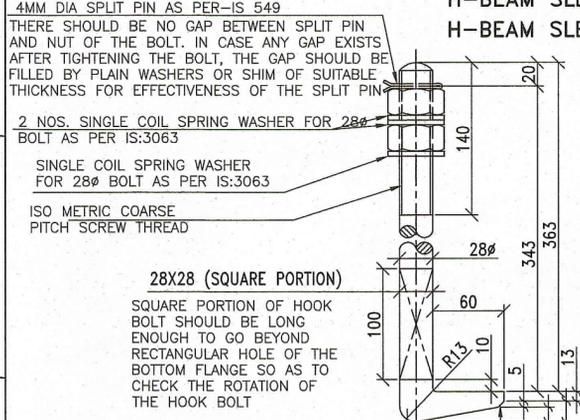


SECTION ON- B-B

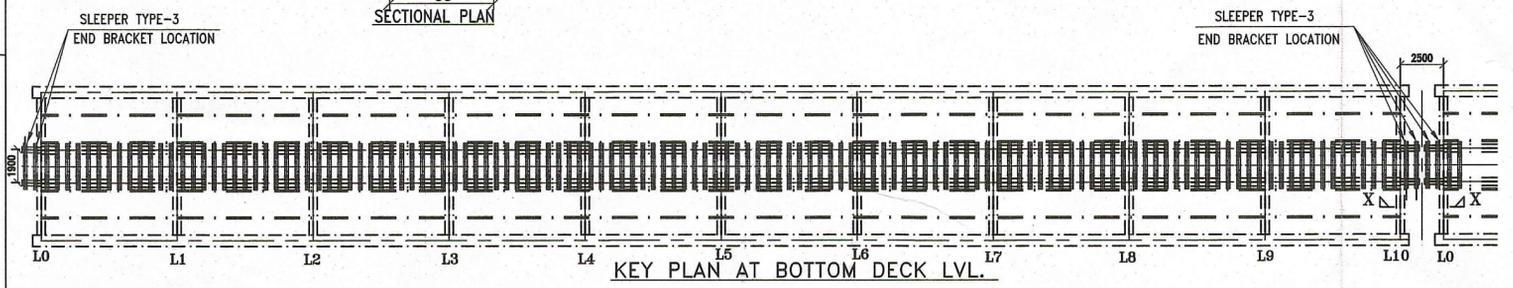


SECTIONAL ELEVATION A-A

H-BEAM SLEEPER TYPE -3 FOR BR. NO.-78 TOTAL NOS (6x78.8M SPAN) = 24 NOS  
H-BEAM SLEEPER TYPE -3 FOR BR. NO.-161-162-163 (8x78.8M SPAN) = 32 NOS  
H-BEAM SLEEPER TYPE -3 FOR BR. NO.-167-168 (6x78.8M SPAN) = 24 NOS.



SECTION X-X SCALE :-1:30

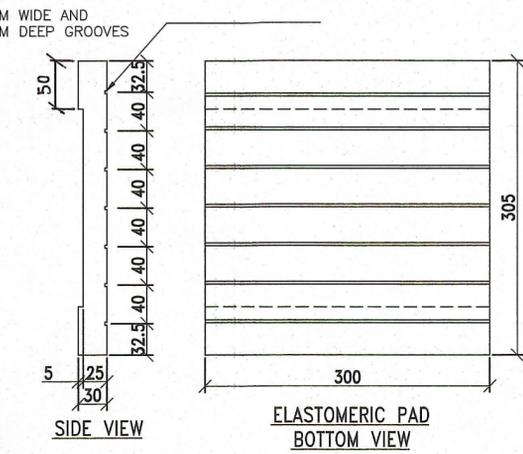


KEY PLAN AT BOTTOM DECK LVL.

SETS H-BEAM SLEEPER REQUIRED PER SPAN				
ITEM NO.	DESCRIPTION	DRAWING NUMBER	SPECIFICATION	QTY PER SLEEPER
1	H-BEAM STEEL SLEEPER 2655 M LENGTH	BASED ON RDSO/B-1636/4	IS:808/809 & IS:2062-2011 Gr. B0	1
2	STEEL BASE PLATE	RDSO/T-8760	IS:2062-2011 Gr. B0	2
3	RAIL PAD WITH EMBEDDED STEEL PLATE	RDSO/T-8761	IRS FOR 12 mm. THICK GROOVED RUBBER PAD (PROVISIONAL)	2
4	SPECIAL CAST LINER (INNER) FOR 60 kg. (UIC) RAIL	RDSO/T-8762	IRS SPECIFICATION FOR SPECIAL CAST LINER (PROVISIONAL-2019)	2
5	SPECIAL CAST LINER (OUTER) FOR 60 kg. (UIC) RAIL	RDSO/T-8763		2
6	<del>SPECIAL CAST LINER (INNER) FOR 52 kg. RAIL</del>	<del>RDSO/T-8764</del>		2
7	<del>SPECIAL CAST LINER (OUTER) FOR 52 kg. RAIL</del>	<del>RDSO/T-8765</del>		2
8	ELASTIC RAIL CLIP MKIII	RDSO/T-3701	<del>I.R.S. T-31-1992</del> IRS T-31-2018	4
9	ELASTIC RAIL CLIP FOR FISH PLATED JOINTS (ERC-J)	RDSO/T-4158	<del>I.R.S. T-31-1992</del> IRS T-31-2018	4
10	PACKING PLATE 80x150x22 (FOR GUARD RAIL)	----	<del>IS:2062-1999 GR. B</del> IS:2062-2011 GR.B0	4
11	BOLT AND NUT (FOR GUARD RAIL)	RDSO/T-5164	IRS T-23-2021	4
12	TAPER WASHER (FOR 52 kg. GUARD RAIL)	RDSO/T-5161	<del>IS:2062-1999 GR. B</del> IS:2062-2011 GR.B0/BR	4
13	TAPER STEEL WASHER (FOR GUARD RAIL)	RDSO/T-5162	<del>IS:2062-1999 GR. B</del> IS:2062-2011 GR.B0/BR	4
14	6 mm. THICK GROOVED RUBBER PAD (FOR GUARD RAIL)	RDSO/T-5163	IRS Specification for 6 mm. Thick GR. Pad (Provisional-1997)	2
15	SINGLE COIL SPRING WASHER (FOR GUARD RAIL)	RDSO/T-10773	<del>IRS T-42-1988</del> IRS T-42-2020	4
16	TAPERED SPLIT PIN FOR GUARD RAIL	SUITABLE	SUITABLE	4
17	ELASTOMERIC PAD 300x305x30/25	RDSO/B-1636/5	RDSO/M & C/RP-197/03	2
18	Ø28 HOOK BOLT x 393 lg.	RDSO/B-1636/5		4
19	NUT FOR Ø28 HOOK BOLT	RDSO/B-1636/5		8
20	SINGLE COIL SPRING WASHER FOR Ø28 HOOK BOLT	RDSO/B-1636/5	IS:3063-1994	12
21	TAPERED SPLIT PIN FOR HOOK BOLT	RDSO/B-1636/5	SUITABLE	4

\* ITEM 6 & 7 TO BE USED FOR 52 KG. RAIL.  
\* ITEM 9 TO BE USED WHERE FISH PLATED JOINTS ARE REQUIRED.

- NOTES:-
- ALL DIMENSION ARE IN MILLIMETERS.
  - THIS DRAWING IS DONE ON THE BASIS OF RDSO'S DRAWING NO.- RDSO/B-1636/4, RDSO/B-1636/5, RDSO/B-1636/8
  - FOR GENERAL NOTES REFER TO RDSO'S DRAWING NO.- RDSO/B-1636/8
  - H-BEAM SLEEPER AND ALL FITTING ITEMS TO BE HOT DIP GALVANISED AS PER IS:4759
  - THIS IS AN INDICATIVE ARRANGEMENT FOR DETAILS REFER TO DRG. NO 3131-SLEEPER ARRAN.BRNO-161-162-163-01,78-02,167-168-03



BBJ-ABCI JV  
CLIENT: N. F. RAILWAY  
PROJECT: 25 Ton. AXLE LOADING STANDARD-2008, OPEN WEB WELDED THROUGH TYPE GIRDER (6+8+6) x 78.8 M. SPAN FOR BR.NO.-78,161-162-163 & 167-168 IN CONNECTION OF NEW BG RAILWAY LINE FROM BAIRABI TO SAIRANG, MIZORAM  
TITLE: H-BEAM STEEL SLEEPER FOR 60 KG. RUNNING RAIL AND 52 KG. GUARD RAIL FOR 78.8M SPAN (FOR END BRACKET LOCATION)

REV.	DATE	DESCRIPTION	BY	CHECKED BY	DATE	DRG. NO.	REV.
1	20.08.22	REVISED AS MKD	A.K.SETHI	S.MAJUMDAR	04.08.22	2150/HBS/78.8M/34/1	0
REVISIONS						SHEET:	A2

Handwritten signatures and dates at the bottom right corner.

