

12 # 21 Nos. @ 220 = 4400

BAR # 12 & 10

p & q

SHEAR STIRRUP # 10

(S) BAR # 10

(r) BAR # 16

10 DRIP GROOVE

300

1800

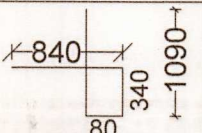
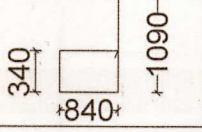
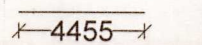
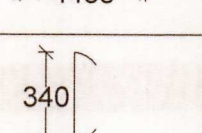
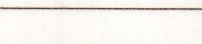
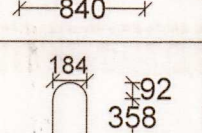
4003 (EFFECTIVE SPAN)

3660 (CLEAR SPAN)

ELEVATION

ELEVATION

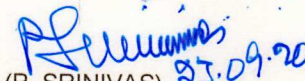
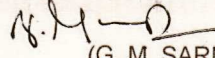
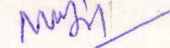


BAR BENDING SCHEDULE FOR BALLAST RETAINER						
BAR MARK	DIA OF BAR	LENGTH mm	TOTAL NOS. REQUIRED	BENDING SHAPE DIMENSION SHOWN ARE OVER OUTER EDGES	WEIGHT PER METER IN Kg.	TOTAL WEIGHT IN Kgs
p	12	2350	21		0.888	43.82
q	10	3170	21		0.617	41.07
r	16	4455	14		1.58	98.55
s	10	4455	14		0.617	38.48
t	10	490	63		0.617	19.05
u	16	840	6		1.58	7.96
h1	32	1305	2		6.31	16.47

1. **All Dimensions are IN Millimeters.**
2. Drawing **Not to be Scaled**, only written Dimensions to be followed.
3. All corners shall have **chamfer of 25mm.**
4. Concrete for Ballast Retainer shall be of **Grade M-35.**
5. Steel shall be of High Strength Deformed (**HSD/TMT Bars, Fe-415 OR** Higher Grade Confirming to **IS 1786:2008** shall be used.
6. Units shall be provided with a **Uniform Bedding** by placing it over a layer of cement and cast iron borings in 1:1 proportions the paste should be of uniform consistency.
7. A layer of suitable **Water Proofing** treatment may be provided over ballast retainer.
8. All **Bends and Hooks** should be of standard confirming to **IS:2502-1963.**
9. For 3.66m Span Post Tensioned PSC Slab refer: **RDSO/B-10278.**
10. Weight of Ballast Retainer unit is 5.81 t.

1. **I.R.S Concrete Bridge Code 2014** (Revised) including latest ACS read in conjunction with relevant I.S Specifications mentioned therein.
2. **I.R.S Bridge Rules - 2014** including latest ACS.
3. Indian Railways Unified Standards Specification for materials and work 2019.
4. Engineering Standing Order No: 87 Dated 21.05.2020.

1. RCC Footpath shall be provided adjacent to the Ballast Retainer.
2. For 'h' Type Footpath (to be cast separately) refer to Drg.No: GM(W)SC/BR/TR/RCC/STD/148/2020.

<u>SOUTH CENTRAL RAILWAY</u>	
<u>DRG. NO.</u>	GM(W)SC/BR/TR/RCC/STD/ 154 /2020
(DRAWING NOT TO SCALE)	
DETAILS OF ARRANGEMENT FOR REVISED BALLAST RETAINER FOR POST-TENSIONED PSC SLAB WITH 2-UNITS SPAN - 3.66 m (RDSO/B-10278) FOR 25t-200t LOADING STD.	
CBE/SC	 (K. RAMAKRISHNA)
DY.CE/BR/D/SC	 (P. RAJAGOPAL RAO)
AXEN/BR.D/SC	 (P. SRINIVAS)
SSE/W/BR.D/HQ/SC	 (G. M. SARMA)
SSE/DESIGNS/BR.D/HQ/SC	 (MITHUN KUMAR SINGH)
SSE/DRG/BR.D/HQ/SC	 (V. M. DANIEL TENET)

DATE NO. 24 (M) 25/38/85/124/5050