2.1.14 Salient Features of the Proposed Bridge

The salient features of the proposed bridge are as under.

Sr.No.	Parameters of Proposed Bridge	Proposed features
1	Bridge Location	Averagely 110 m downstream and nearly parallel to existing rail bridge on river Ganga near Allahabad.
2	Latitude, Longitude and Levels	14589378E; 2815111N (UTM Zone44R,

Sr.No.	Parameters of Proposed Bridge	Proposed features
		WGS84); Levels are in msl as per SOI GTS bench marks.
3	Name of River	Ganga
4	Type of Bridge	Rail Bridge - 2 lines of BG,
5	Span Arrangement	24nos of 76.20m open web steel girder
6	Total Length	1934.40m between Abutment piers
7	Design Discharge	35000 Cumec
8	HFL	88.48m(msl)
9	Silt Factor	1.0
10	Seismic Zone	Zone-II as per IS code
11	Bottom of foundation level	45.85
12	Basic Wind velocity	47 m/s as per IS code
13	Gauge	Broad Gauge
14	Loading Standard	IRS 25T of 2008
15	Velocity of Flow	2.25 m/s
16	Vertical Clearance	2800 mm from highest flood level
17	Maximum Scour Depth below H.F.L.at Abutment	23.1m
18	Maximum Scour Depth below H.F.L.at Pier	30.8m
19	Type of Foundations	Circular Well Foundation -10.50m for all piers-steining thickness 2.60m, suitably armoured well curb of 5.2m depth. RCC construction as per IRS Bridge Substructure and Foundation Code. Top of well cap will be same as top of well cap of existing rail bridge.
20	Type of Sub-structures	RCC 2.5m twin solid circular piers & 15.00 m x 4.40x 2.0m rectangular RCC pier cap.
21	Type of Superstructure	76.20m clear span shall be of Warren truss configuration with Two rail tracks.
22	Type of Bearings	Spherical bearings as per IRC 83 Part-IV and IRS BS 102 Rev-1 and relevant Euro Codes.
23	Paint Specifications	C-5 Fluoro Resin Finish Paint for Steel Bridge Structure as per Japanese Standards Association guidelines or equivalent for long maintenance free life.