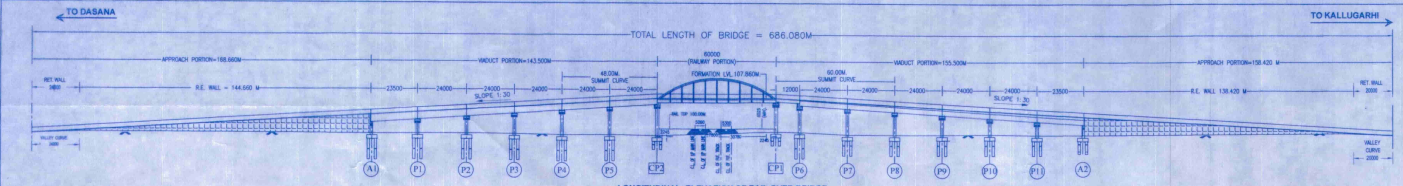
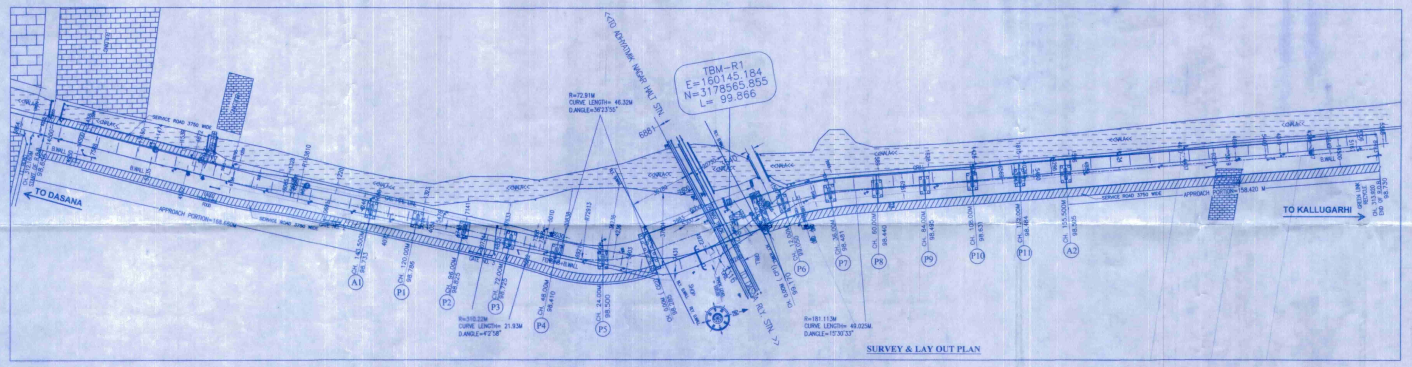


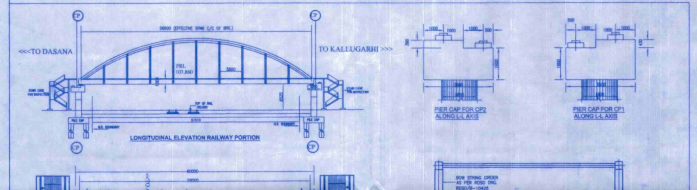
LONGITUDINAL ELEVATION OF RAIL OVER BRIDGE

98.655	99.055	FORMATION LEVEL(M)	103.877	104.660	105.450	106.260	107.060	107.660	107.860	107.860	107.820	107.500	106.860	106.060	105.260	104.460	103.677	99.063	98.730
98.655	98.660	GROUND LEVEL (M)	98.733	98.786	98.825	98.725	98.410	98.500	98.285	99.170	99.050	98.481	98.440	98.495	98.611	98.484	98.505	98.648	98.730
312.160	288.160	CHAINAGE (M)	143.500	143.00	120.00	96.00	72.000	48.000	24.000	0.000	12.000	36.000	60.000	84.000	108.00	132.00	155.000	155.500	293.920	313.920
			Y=x²/1440	SLOPE 1:30			Y=x²/2880		STRAIGHT PORTION		Y=x²/3600		SLOPE 1:30					Y=x²/1200		

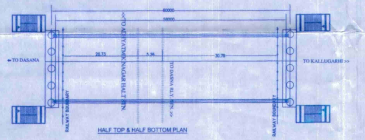
GENERAL ELEVATION



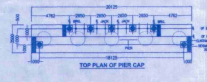
SURVEY & LAY OUT PLAN



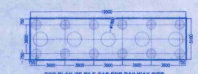
LONGITUDINAL ELEVATION RAILWAY PORTION



HALF TOP & HALF BOTTOM PLAN



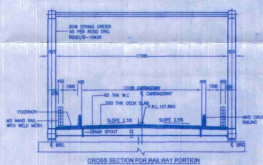
TOP PLAN OF PIER CAP



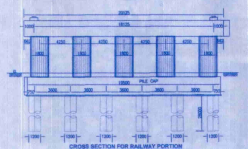
TOP PLAN OF PILE CAP FOR RAILWAY PIER

PIER CAP FOR CP2 ALONG L-L AXIS

PIER CAP FOR CP1 ALONG L-L AXIS

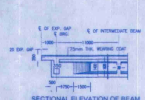


CROSS SECTION FOR RAILWAY PORTION

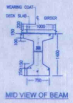


CROSS SECTION FOR RAILWAY PORTION

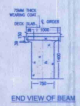
RAILWAY PROFILE SKETCH NO. N.R.DIVISIONAL PLAN NO.--ROB--15--2025



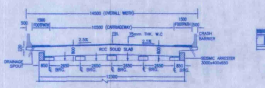
SECTIONAL ELEVATION OF BEAM



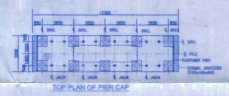
MID VIEW OF BEAM



END VIEW OF BEAM

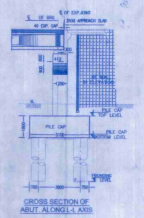


TYPICAL CROSS SECTION FOR 12M SPAN ALONG T-T AXIS

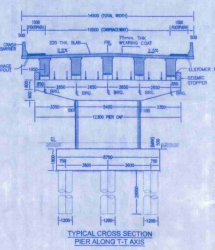


TOP PLAN OF PIER CAP

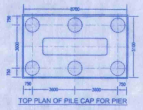
TOP PLAN OF ABUTMENT CAP



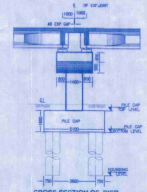
CROSS SECTION OF ABUT. ALONG L-L AXIS



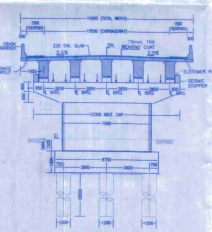
TYPICAL CROSS SECTION PIER ALONG T-T AXIS



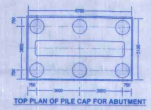
TOP PLAN OF PILE CAP FOR PIER



CROSS SECTION OF PIER ALONG L-L AXIS



TYPICAL CROSS SECTION ABUT. ALONG T-T AXIS



TOP PLAN OF PILE CAP FOR ABUTMENT

NOTES AND CONDITIONS:-

1--THIS PROJECT HAS BEEN SANCTIONED VIDE G.O. NO. 140/2026/1/1282583/2026/23--11099(099)/ 542/2025, DATED:--28--3--2026.
SANCTIONED COST.....8212.14 LAC.
SANCTIONED LENGTH OF PROJECT.....685.950M

2--ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED. R.L's ARE IN METRE.

3--DIMENSION SHOWN IN G.A.D. ARE TENTATIVE AND SUBJECT TO MODIFICATION AT THE TIME OF DETAILED DESIGN.

4--GRADE OF CONC. SHOWN BELOW :--
(A) FOUNDATION
(i) LEVELING COURSE.....M15 (LEAN CONCRETE)
(ii) PILE.....M35
(iii) PILE CAP.....M30

(B) SUB STRUCTURE
(i)--PIER / ABUTMENT M30
(ii)--PIER CAP M35
(iii)--ABUTMENT TOP BEAM M35
(iv)--BEARING.....POT CUM P.T.F.E. BEARING

(C) SUPER STRUCTURE
(i)-- P.S.C. BEAM M45
(ii)-- CROSS BEAM M40
(iii)-- DECK SLAB M40
(iv)--CRASH BARRIER.....M40
(v)--WEARING COAT.....50mm BITUMINOUS CONCRETE/S.M.A.
(vi)--EXPANSION JOINT.....COMPRESSION SEAL TYPE

5--ALL THE WORK SHALL BE CARRIED OUT AS PER RELEVANT I.R.C./ I.S. CODES STANDARD SPECIFICATIONS.

6--LENGTH OF VIADUCT AND R.E. WALL HAS BEEN SHOWN ALONG THE CENTER LINE OF CARRIAGEWAY OF R.O.B.

7--THE DESIGN OF FOUNDATION IS BASED ON DETAILED S.S.I. REPORT SUBMITTED BY DY.P.M., B.C.U.--GHAZIABAD VIDE LETTER. NO. 135/ROB/93/DASANA/B.C.U.--GHAZIABAD/2026--27, DATED:--16.04.2026 AND APPROVED BY C.P.M. (GHAZIABAD) VIDE LETTER NO. 343/59 C.P.M.(GHAZIABAD)/2026, DATED:--18--04--2026.

8--THE SAFE VERTICAL LOAD CARRYING CAPACITY OF 1.20M # PILE, 28.00M DEPTH IS TAKEN AS 400.00 T AND LATERAL LOAD-CAPACITY AS 28.00T. IN ABSENCE OF INITIAL LOAD TEST REPORT SAME TO BE VERIFIED BY ACTUAL LOAD TEST ON PILE. FOR LOAD TESTING OF PILES REFERENCE MAY BE MADE TO IS :- 2911 (PART--IV), IRC:78--2014 AND OTHER RELEVENT CODES AND WORTH SPECIFICATIONS.

9--CAMBER SHALL BE PROVIDED IN STRAIGHT PORTIONS OF THE R.O.B., SUPER ELEVATION AND EXTRA WIDENING SHALL BE PROVIDED IN CURVED PORTION AS PER THE CODAL REQUIREMENTS.

10--THE LENGTH OF APPROACHES ON BOTH SIDE OF RAILWAY PORTION HAS BEEN CALCULATED TAKING FORMATION LEVEL OF RAILWAY SPAN HAS BEEN KEPT AT 107.860M. AND GROUND LEVEL AS SHOWN IN LAYOUT PLAN PROVIDED BY DY.P.M. BCU--I/GHAZIABAD.

11--FORMATION LEVEL HAS BEEN KEPT AS 107.860M., RAIL TOP AS 100.00M AS PER PLAN OF (NORTHERN CENTRAL RAILWAY) N.C.R.H.Q.(CP) PLAN NO. NCR/ENGG./ GAD/ROB/10--2018 AND SPAN ARRANGEMENT AS PER SITE PLAN SIGNED BY JOINT SITE SELECTION COMMITTEE .

12--SLOPE OF R.O.B. SHALL BE PROVIDED 1:30 IN BOTH SIDE OF R.O.B.

13--LAYOUT OF ROB HAS BEEN FINALIZED BY B.C.U.--GHAZIABAD ALONG WITH ALL GEOMETRY OF HORIZONTAL CURVES, APPROVED BY SITE SELECTION COMMITTEE.

14--FOLLOWING SEISMIC PARAMETER HAS BEEN TAKEN IN DESIGN.
(i) SEISMIC ZONE----------IV
(ii) IMPORTANCE FACTOR----------1.20
(iii) Sa/g----------2.50

15--MAX. VEHICULAR SPEED LIMIT ----------40.0Km/HR. CAUTION BOARD MUST BE PROVIDED FOR SPEED LIMIT AS PER SITE REQUIREMENT.

16--BEFORE START OF WORK NECESSARY PERMISSIONS MUST BE OBTAIN FROM DISTRICT ADMINISTRATION, RAILWAYS AND OTHER CONCERNING DEPARTMENT.

17--LAY OUT IS TO BE VERIFIED AS PER SURVEY SHEET AT SITE BY UNIT IN CHARGE, ANY DISCREPANCY/ MODIFICATION IN RESPECT OF LAY OUT,FORMATION LEVEL OR DUE TO ANY OTHER REASON MUST BE REFERRED TO HEAD OFFICE BEFORE START OF WORK.

18--ALL GROUND LEVELS AND FORMATION LEVELS SHALL BE VERIFIED AT SITE AND IF ANY DISCREPANCY IS FOUND REFER TO HEAD OFFICE BEFORE START OF WORK.

19--CONSTRUCTION OF APPROACH ROAD AND ITS CRUST WILL BE AS PER PROMISIONS OF I.R.C.37.DUE PRECAUTION SHOULD BE TAKEN IN EMBANKMENT CONSTRUCTION OF APPROACH ROAD.

20--IT IS RESPONSIBILITY OF FIELD UNIT AND CONCERNING C.P.M./G.M. TO ACQUIRE SUFFICIENT LAND FOR BRIDGE AND SERVICE ROAD BEFORE START OF WORK.

21--IT IS RESPONSIBILITY OF FIELD UNIT AND CONCERNING C.P.M. / G.M. TO GET CONSENT FROM RAILWAY AUTHORITY ON THIS G.A.D. AND FIX COMMON PIERS ALONGWITH P.W.D. AND RAILWAY AUTHORITY BEFORE START OF WORK.

22--IT IS RESPONSIBILITIES OF FIELD UNIT TO FULLFILL ALL CONDITIONS OF G.O. NO. 140/2026/1/1282583/2026/23--11099(099)/542/2025, DATED:--28--3--2026. BEFORE START OF WORK.

23--DRAINAGE PIPE SHALL BE PROVIDED AS PER SITE REQUIREMENT TO PROTECT FOUNDATION FROM SEEPAGE OF WATER.

24--IT IS RESPOSIBILITY OF CONSTRUCTION UNIT AND CONCERNING C.P.M./G.M. TO COMPLY THE INSTRUCTION REGARDING TRAFFIC MOVEMENT PLAN AND AVAILBILITY OF LAND FOR DIVERSION OF TRAFFIC ISSUED VIDE M.O. U.P.S.R.C. ORDER NO. 107/M.O. CAMP /2018, DATED:-- 24.07.2018 BEFORE STARTING OF WORK.

25--BEFORE START OF WORK, THIS GAD MUST BE SIGNED BY COMPETENT AUTHORITY OF RAILWAY DEPARTMENT & P.W.D.

THIS DRG. IS PROPERTY OF U.P.STATE BRIDGE CORPN. LTD. AND CAN NOT BE USED WITHOUT PERMISSION

	U.P.STATE BRIDGE CORPORATION LTD. 16-MADAN MOHAN MALVIYA MARG LUCKNOW. - 226001	
PROJECT	R.O.B. AT LEVEL CROSSING NO. 93C LOCATED BETWEEN KM.129/25 - 27 AND 26 - 28 ON GHAZIABAD -- MORADABAD RAILWAY LINE IN DISTRICT GHAZIABAD.	
TITLE	GENERAL ARRANGEMENT DRAWING	
SPAN	R.E. WALL-168.660M+13X21.500M+5X24.000M+ (1X60.000 M RS-SPAN) +1X12.000M+ 5X24.000M+13X21.500 M + 158.420 M R.E. WALL	
CARRIAGEWAY	10.50 M. CLEAR CARRIAGEWAY WITH BOTH SIDE FOOT PATH	
LIVE LOAD	SAFE FOR 2 LANES OF I.R.C. CLASS 'A' / ONE LANE OF IRC. "70R"	

RECOMMENDED	APPROVED	DRAWN	CHECKED	DESIGNED
14/05/2026 (FARHAN BASIT) C.P.M. (DESIGN)	14/05/2026 (MITHILESH KUMAR) FE MANAGER(DIRECTOR)	(KAMAL NARAYAN) DRG DRAW	(U.S. SHARMA) CHIEF ENGR.	(AMIT SINGH) P.M. (B.S.U.-I)

B.S.U.-I | DRG. NO. 01/B.S.U.--I/C--ING NO. 93C/0226.--MORADABAD/GHAZIABAD/2026