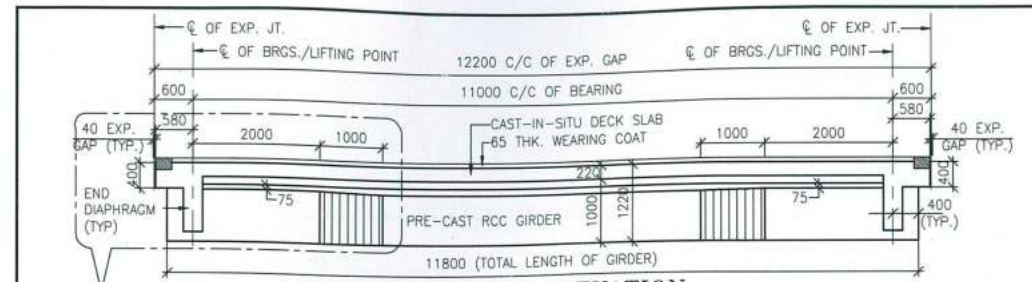
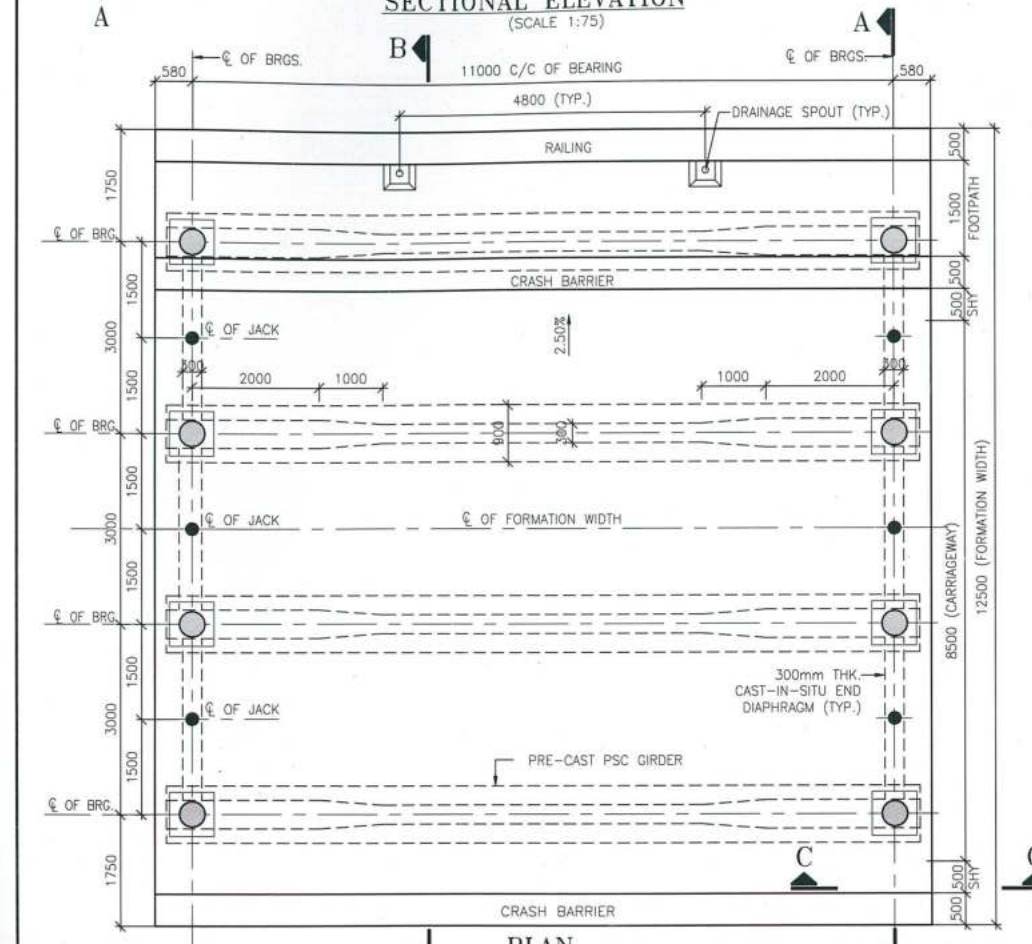


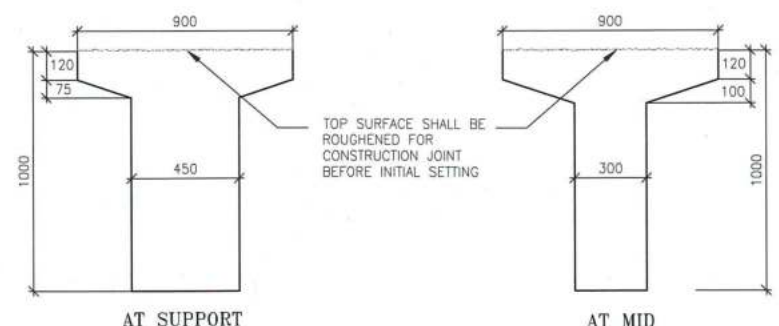
1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE MENTIONED.
2. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED AND NO DIMENSION SHALL BE SCALED.
3. THE PROPOSED FLYOVER IS DESIGNED FOR THE LIVE LOAD COMBINATIONS GIVEN IN IRC 6:2014. THE GOVERNING COMBINATION SHALL BE CONSIDERED FOR DESIGN.
4. CONCRETE SHALL BE DESIGN MIX AND HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES:-
FOR PRECAST RCC GIRDER - 35MPa
FOR CAST-IN-SITU DECK SLAB - 35MPa
FOR END CROSS GIRDER - 35MPa
5. THE REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION Fe 500D) CONFORMING TO IS:1786.
6. CLEAR COVER TO OUTERMOST STEEL IS 40mm.
7. TOP SURFACE OF GIRDER SHALL BE ROUGHENED FOR EFFECTIVE BONDING.
8. ALL THE LENGTHS OF GIRDER & LAYOUT SHALL BE VERIFIED AT SITE BEFORE EXECUTION & ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE CONSULTANT.
9. FOR LIFTING OF THE SUPERSTRUCTURE 1 No. JACKS AT EACH SIDE OF SPAN SHALL BE USED AS SHOWN IN PLAN. THE CAPACITY OF EACH JACK SHALL BE 150 TON.



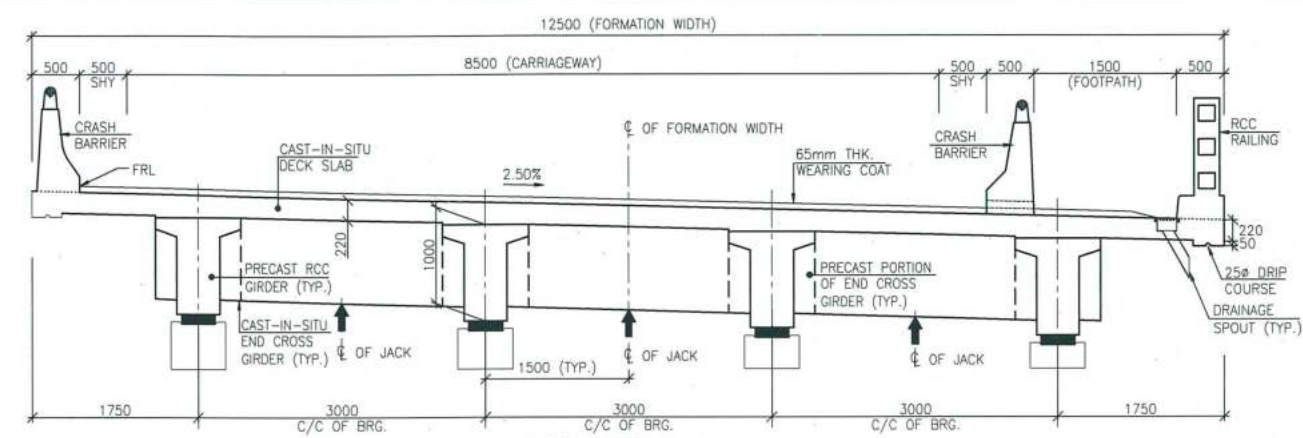
SECTIONAL ELEVATION
(SCALE 1:75)



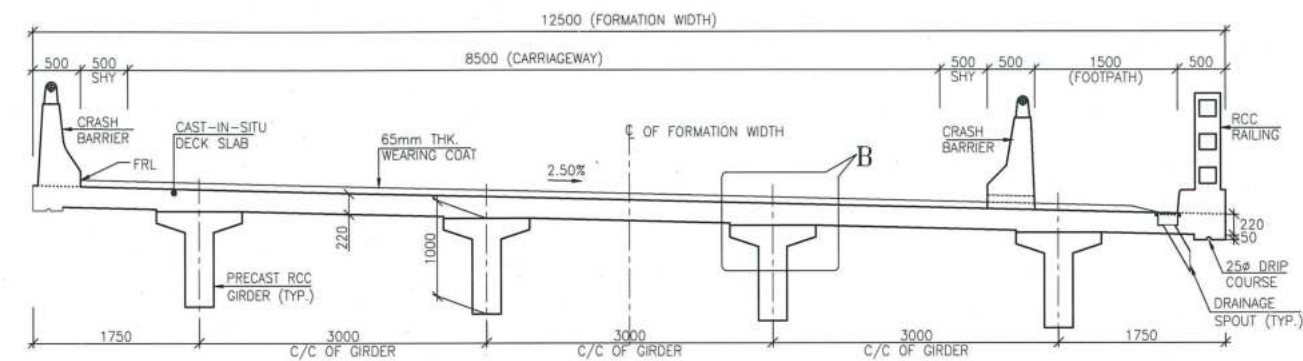
PLAN
(SCALE 1:75)



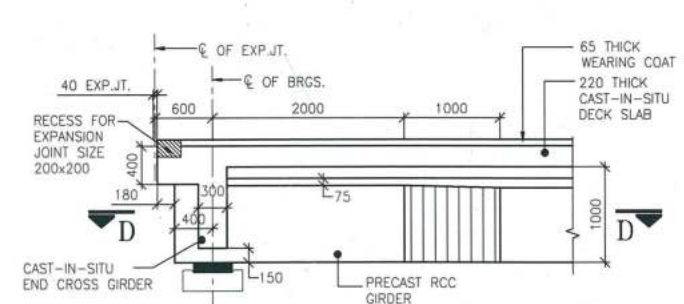
DETAILS OF RCC GIRDER
(SCALE 1:20)



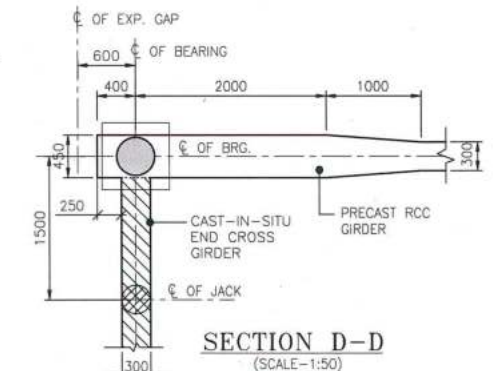
SECTION A-A
(SCALE 1:50)



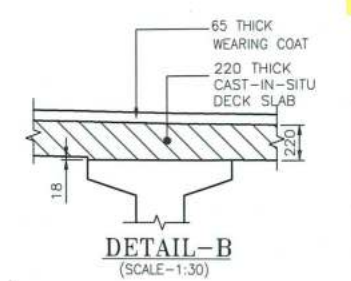
SECTION AT B-B
(SCALE 1:50)



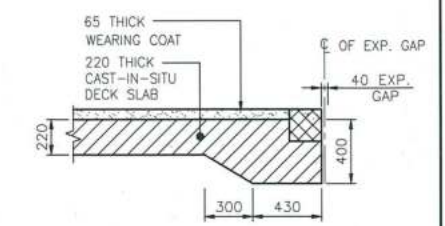
DETAIL-A
(SCALE 1:50)



SECTION D-D
(SCALE 1:50)



DETAIL-B
(SCALE 1:30)



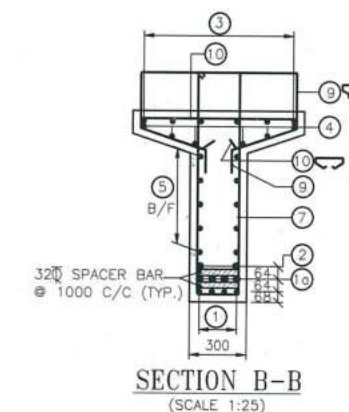
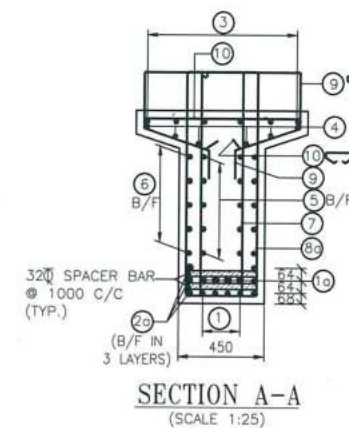
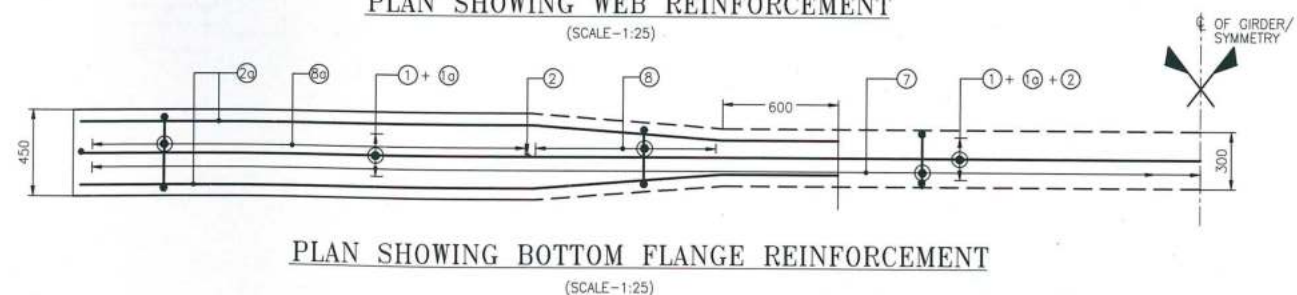
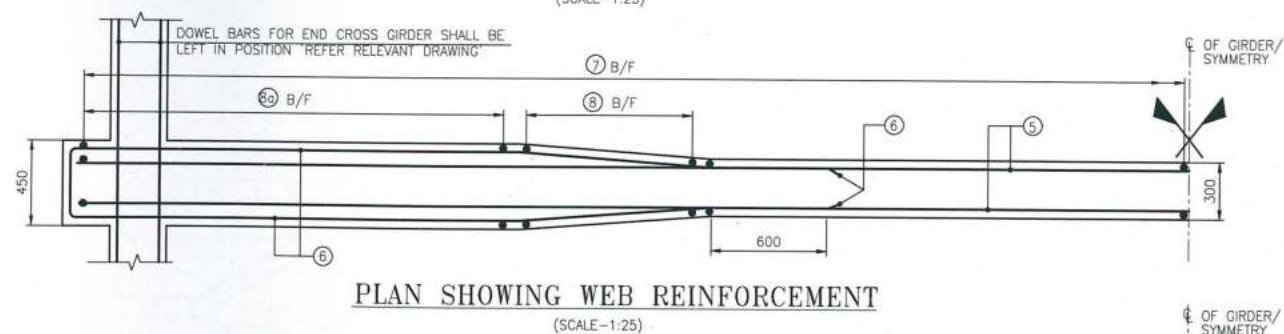
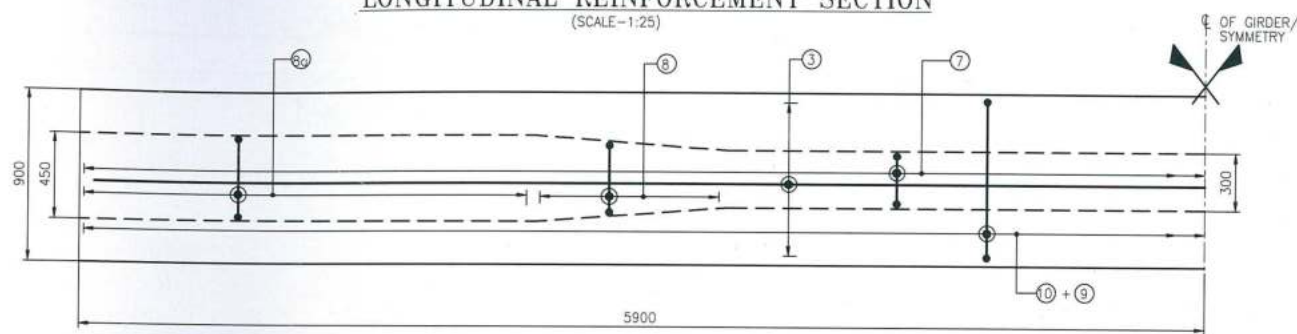
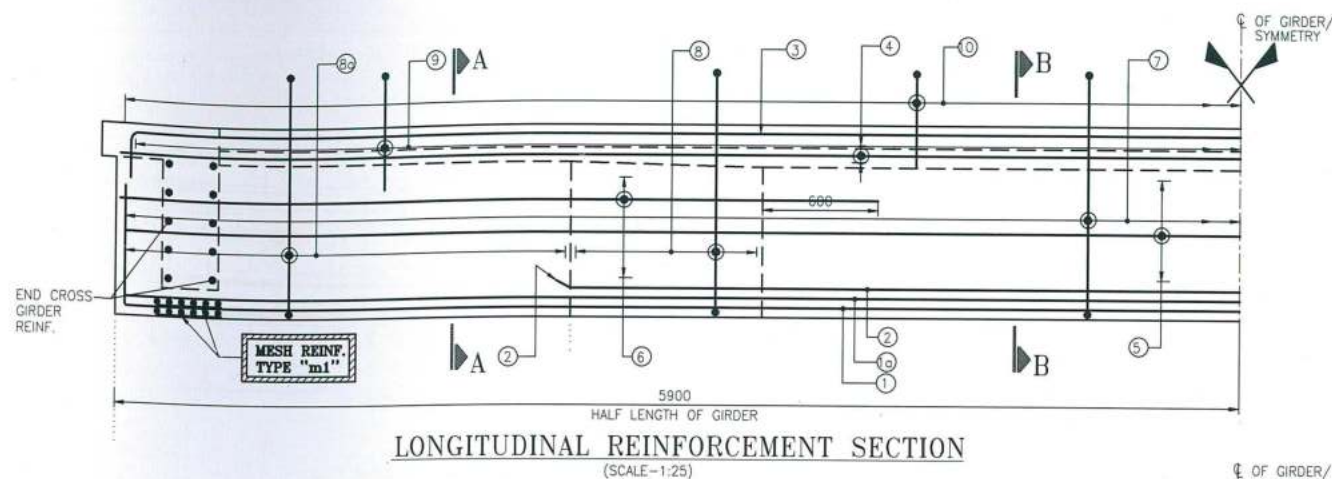
SECTION C-C
(SCALE 1:30)

NOTES:-

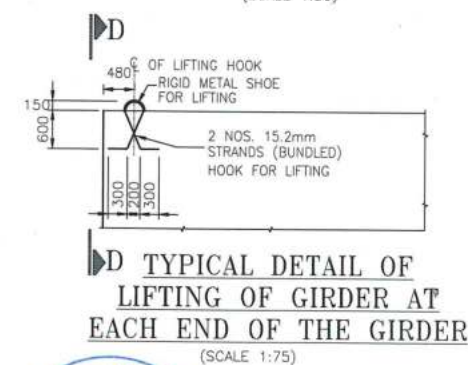
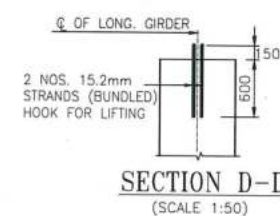
1. ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE MENTIONED.
2. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED AND NO DIMENSION SHALL BE SCALED.
3. THE PROPOSED FLYOVER IS DESIGNED FOR THE LIVE LOAD COMBINATIONS GIVEN IN IRC 6:2014. THE GOVERNING COMBINATION SHALL BE CONSIDERED FOR DESIGN.
4. CONCRETE SHALL BE DESIGN MIX AND HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES:-
FOR PRECAST RCC GIRDER - 35MPa
FOR CAST-IN-SITU DECK SLAB - 35MPa
FOR END CROSS GIRDER - 35MPa
5. THE REINFORCING STEEL SHALL BE OF HYSD BARS (GRADE DESIGNATION Fe 500D) CONFORMING TO IS:1786.
6. CLEAR COVER TO OUTERMOST STEEL IS 40mm.
7. TOP SURFACE OF GIRDER SHALL BE ROUGHENED FOR EFFECTIVE BONDING.
8. ALL THE LENGTHS OF GIRDER & LAYOUT SHALL BE VERIFIED AT SITE BEFORE EXECUTION & ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE CONSULTANT.
9. FOR LIFTING OF THE SUPERSTRUCTURE 1 No. JACKS AT EACH SIDE OF SPAN SHALL BE USED AS SHOWN IN PLAN. THE CAPACITY OF EACH JACK SHALL BE 150 TON.

GOOD FOR CONSTRUCTION

CLIENT:			CONTRACTOR:			DESIGN CONSULTANT:			APPROVED BY:			PROJECT:		
NATIONAL HIGHWAYS INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (3RD FLOOR, PTI BUILDING, 4 PARLIAMENT STREET, NEW DELHI 110001)			GANNON DUNKERLEY & CO. LTD. 86A, TOPSIA ROAD (SOUTH) HAUTE STREET, 7th FLOOR KOLKATA-700046			ECSTATIC ENGINEERING CONSULTANTS PRIVATE LIMITED SCO 103 BUDA SHOPPING CENTRE, GURGOAN, SECTOR 55, GURUGRAM, HARYANA 122003			U.K.			FOUR LANING OF JHANJI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. K 491+050 TO KM 535+250 (DESIGN CH. KM 490+800 TO KM 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.		
AUTHORITY ENGINEER:			SAFTY CONSULTANT:			PROOF CONSULTANT:			CHECKED BY:			TITLE:		
VOYANTS SOLUTIONS PVT. LTD. 403, 4TH FLOOR, BPTP PARK CENTRA, BLOCK A, JAL VAYU VIHAR SECTOR 38, GURGOAN, HARYANA 122001			G-ENG ADVISORY SERVICES PVT. LTD. SCO-102, HUDA SHOPPING CENTER, SECTOR 55, GURGOAN-122002, HARYANA. TEL: +91-124-4295802, 4295803 EMAIL: INFO@G-ENG.IN WEB: WWW.G-ENG.IN			MARC TECHNOCRATS PVT. LTD. Marc House, Sector 47 (Dividing Road), opposite Dev Lal Park, Bahadurgarh, Haryana 124507			N.S.			DIM. DETAILS OF PRECAST RCC GIRDER & CAST-IN-SITU SLAB SUPERSTRUCTURE (12.0m SPAN)		
DATE			BY			SCALE:			DESIGNED BY:			DRG NO.:		
20.03.2020			R0			AS SHOWN			S.S.			EEC-NH-37-JD-SUP-CH.516+938-302		
ISSUED FOR APPROVAL			DESCRIPTION OF REVISIONS			DATE:			MAR. 2020			SHEET NO. 1 OF 4		
												REV. R0		

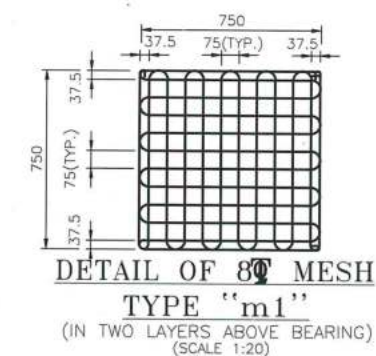


GOOD FOR CONSTRUCTION



REINF. SCHEDULE:-

BAR MKD.	BAR DIA.	NO./SPACING	SHAPE
1	32	4 NOS.	750
1a	32	4 NOS.	750
2	32	2 NOS.	750
2a	32	6 NOS. IN 3 LAYERS	750
3	10	6 NOS.	900
4	10	6 NOS.	
5	10	2x5 NOS.	
6	10	2x5 NOS.	450
7	10	140 C/C	2-LEGGED
8	10	140 C/C	2-LEGGED VARIES
8a	10	140 C/C	2-LEGGED
9	10	140 C/C	100
10	10	140 C/C	

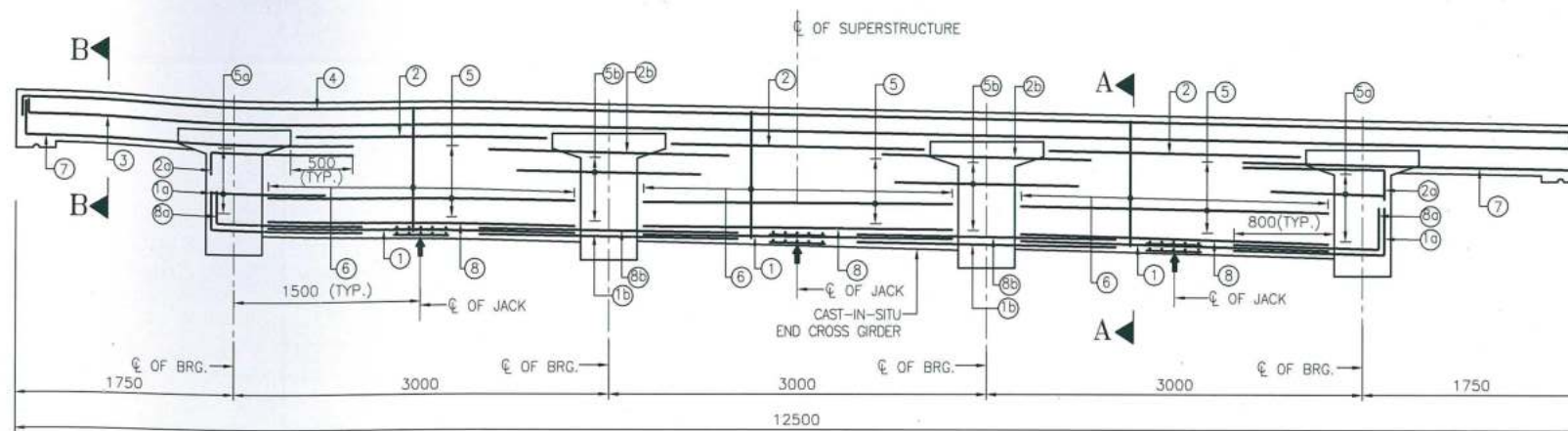


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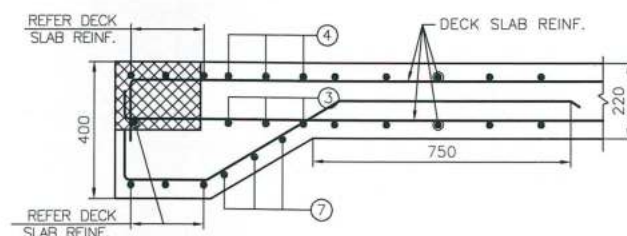
- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- GRADE OF CONCRETE = M35
- MESH TYPE "m1" SHALL BE PROVIDED IN LONGITUDINAL GIRDER ABOVE BEARING LOCATION, IN TWO LAYERS, AT 20mm AND AT 80mm FROM OUTER FACE OF GIRDER.
- SPICES OF REINF. SHALL BE DONE BY LAPS OF BARS WITH STRAIGHT ENDS OR WITH END HOOKS OR WELDING OR MECHANICAL DEVICES AS PER CLAUSE NO 15.2.5 OF IRC:112-2011
- MESH REINFORCEMENT SHALL BE MS BARS (GRADE DESIGNATION S250) CONFORMING TO IS:432 PART-I MILD STEEL.

REFERENCE DRAWINGS:-

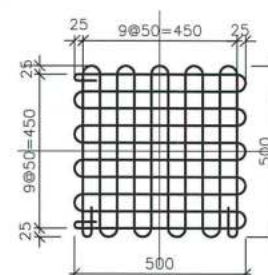
CLIENT: NATIONAL HIGHWAYS INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. 3RD FLOOR, PTI BUILDING, 4 PARLIAMENT STREET, NEW DELHI-110001			CONTRACTOR: GANNON DUNKERLEY & CO. LTD. 86A, TOPSIA ROAD, SOUTH HAUZE STREET, 7TH FLOOR KOLKATA-700046			DESIGN CONSULTANT: ECSTATIC ENGINEERING CONSULTANTS PRIVATE LIMITED SCO 103 HUDA SHOPPING CENTRE, GURGOAN, SECTOR 55, GURUGRAM, HARYANA 122003			APPROVED BY: U.K.			PROJECT: FOUR LANING OF JHANJHI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. K 491+050 TO KM 535+250 (DESIGN CH. KM 490+800 TO KM 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.		
AUTHORITY ENGINEER: VOYANTS SOLUTIONS PVT. LTD. 405, 4TH FLOOR, BPTP PARK CENTRA, BLOCK A, JAL VAYU VIHAR SECTOR 30 GURGOAN, HARYANA 122001			SAFTY CONSULTANT: G-ENG ADVISORY SERVICES PVT. LTD. SCO-302, HUDA SHOPPING CENTER, SECTOR-56 GURGAON-122002, HARYANA. TEL:- +91-124-4295802, 4295803 EMAIL:INFO@G-ENG.IN WEB:WWW.G-ENG.IN			PROOF CONSULTANT: MARC TECHNOCRATS PVT. LTD. Marc House, Sector 57 (Dividing Road), opposite Devi Lal Park, Bahadurgarh, Haryana 124507			CHECKED BY: N.S.			TITLE: REINF. DETAILS OF LONGITUDINAL PRECAST RC GIRDER (12.0m SPAN)		
DATE: 20.03.2020			REV: R0			SCALE: AS SHOWN			DATE: MAR. 2020			DRG NO: EEC-NH-37-JD-SUP-CH.516+938-302		
DESCRIPTION OF REVISIONS			BY			SHEET NO. 2 OF 4			REV. R0					



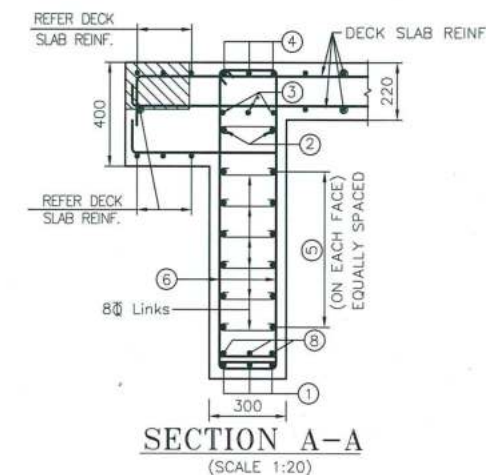
LONGITUDINAL SECTION OF END CROSS GIRDER
(SCALE 1:40)



SECTION B-B
(SCALE 1:15)



MESH TYPE-A
(8# MESH TO BE PLACED UNDER JACK)
(SCALE 1:15)



SECTION A-A
(SCALE 1:20)

REINF. DETAILS

BAR MKD.	BAR DIA.	NO./SPACING	SHAPE
1	20	3X3 NOS.	—
1a	20	2X3 NOS.	650 L
1b	20	2X3 NOS.	—
2	16	3X2 NOS.	—
2a	16	2X2 NOS.	650 L
2b	16	2X2 NOS.	—
3	20	3 NOS.	150 L
4	25	3 NOS.	150 L
5	10	3X6 NOS.	—
5a	10	2X6 NOS.	—
5b	10	2X6 NOS.	—
6	12	200 C/C	2-LEGGED
7	16	2X3 NOS.	200 L
8	20	3X3 NOS.	—
8a	20	2X3 NOS.	650 L
8b	20	2X3 NOS.	—

NOTES:-

- ALL DIMENSIONS ARE IN MM AND LEVELS IN METERS.
- DO NOT SCALE THE DIMENSIONS, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- GRADE OF CONC. FOR R.C.C. WORKS = M-35
- THE REINFORCING STEEL SHALL BE OF TMT BARS (GRADE DESIGNATION Fe 500D) CONFORMING TO IS:1786.
- CLEAR COVER TO REINFORCEMENT SHALL BE 40mm.
- NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT A SECTION AND LAPPING SHALL BE STAGGERED. MINIMUM LAP LENGTH SHALL BE 76 TIMES DIA OF BAR.

REFERENCE DRAWINGS:-

GOOD FOR CONSTRUCTION

CLIENT:		CONTRACTOR:		DESIGN CONSULTANT:		APPROVED BY:		PROJECT:	
NATIONAL HIGHWAYS INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (3RD FLOOR, PTI BUILDING, 4 PARLIAMENT STREET, NEW DELHI-110001)		GANNON DUNKERLEY & CO. LTD. 86A, TOPSIA ROAD (SOUTH) HAUTE STREET, 7th FLOOR KOLKATA-700046		ECSTATIC ENGINEERING CONSULTANTS PRIVATE LIMITED SCO-105 HUDA SHOPPING CENTRE, GURGOAN, SECTOR 55, GURUGRAM, HARYANA 122003		U.K.		FOUR LANING OF JHANJHI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. K 491+050 TO KM 535+250 (DESIGN CH. KM 490+800 TO KM 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.	
AUTHORITY ENGINEER:		SAFTY CONSULTANT:		PROOF CONSULTANT:		CHECKED BY:		TITLE:	
VOYANTS SOLUTIONS PVT. LTD. 403, 4TH FLOOR, BPTP PARK CENTRA, BLOCK A, JAL VAYU VIHAR SECTOR 30 GURGOAN, HARYANA 122001		G-ENG ADVISORY SERVICES PVT. LTD. SCO-105 HUDA SHOPPING CENTRE, SECTOR 55 GURGOAN-122002, HARYANA. TEL:- 191-124-4295802, 4295803 EMAIL:INFO@G-ENG.IN WEB:WWW.G-ENG.IN		MARC TECHNOCRATS PVT. LTD. Marc House, Sector-67 (Dividing Road), opposite Devi Lal Park, Bahadurgarh, Haryana 124507		N.S.		REINF. DETAILS OF END CROSS GIRDER (12.0m SPAN)	
DATE		REV		SCALE:		DATE:		DRG NO.:	
20.03.2020		R0		AS SHOWN		MAR. 2020		EEC-NH-37-JD-SUP-CH.516+938-302	
ISSUED FOR APPROVAL		DESCRIPTION OF REVISIONS		BY		SHEET NO.		REV.	
						3 OF 4		R0	

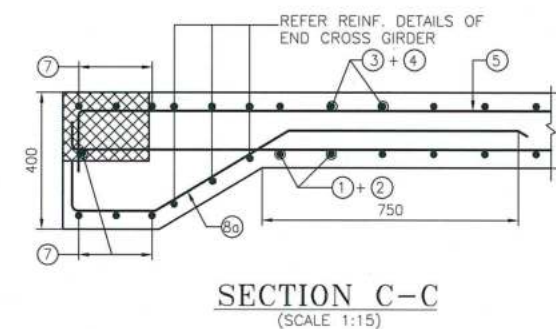
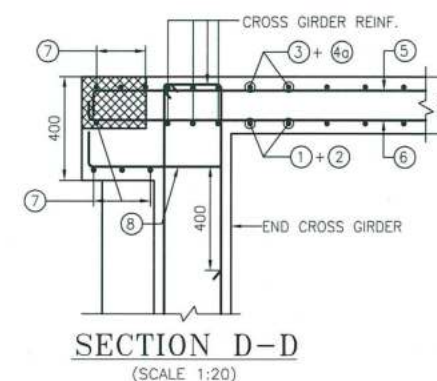
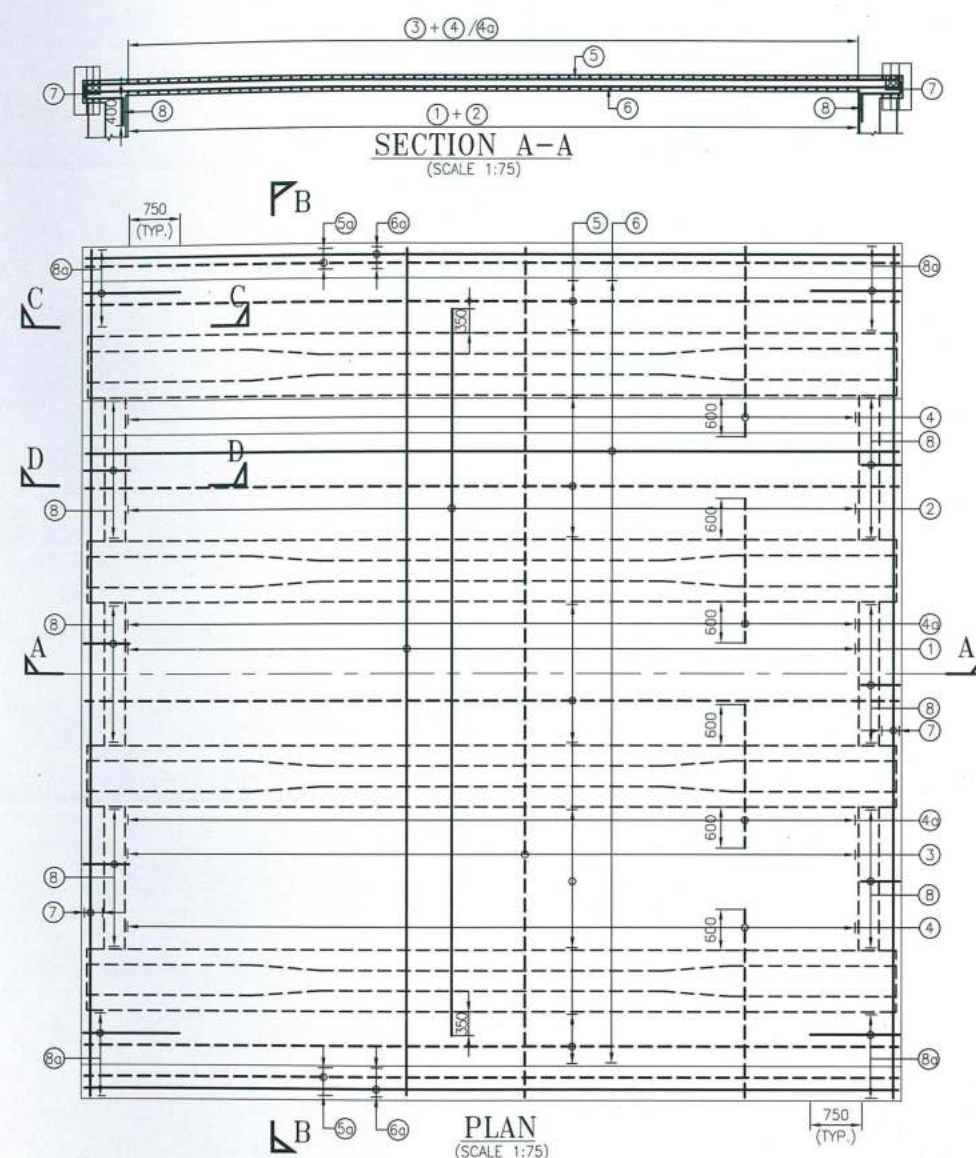
REINFORCEMENT DETAILS

BAR MKD.	BAR DIA.	NO./SPACING	SHAPE	REMARKS
1	12	150 C/C		BAR NOS. ① & ② ARE ALTERNATE BARS
2	12	150 C/C		
3	12	150 C/C		BAR NOS. ③ & ④ ARE ALTERNATE BARS
4	12	150 C/C		
4a	12	150 C/C		
5	10	150 C/C		
5a	16	2x3 NOS.		
6	10	150 C/C		
6a	16	2x3 NOS.		
7	12	2x7 NOS.		
8	12	100 C/C		
8a	10	100 C/C		

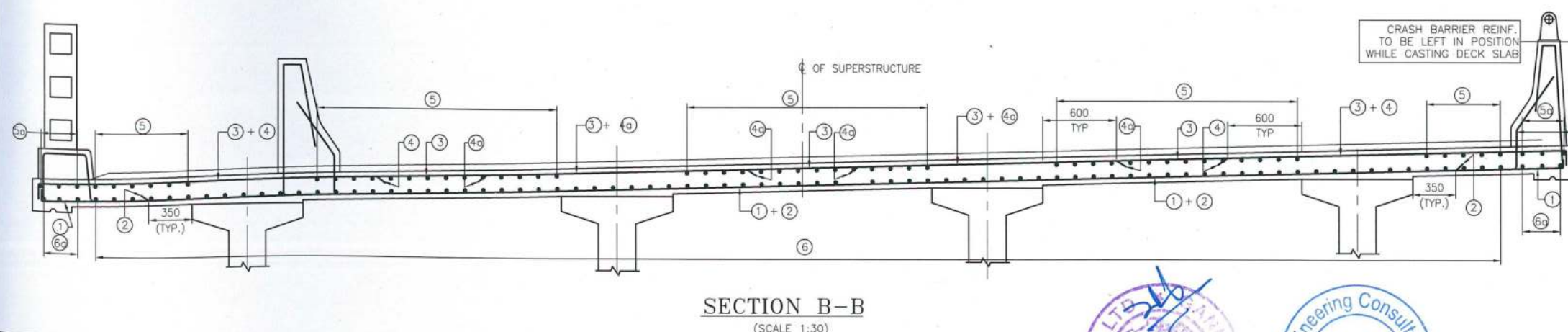
NOTES:-

- ALL DIMENSIONS ARE IN MM AND LEVELS IN METERS.
- DO NOT SCALE THE DIMENSIONS. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- GRADE OF CONCRETE = M35
- THE REINFORCING STEEL SHALL BE OF TMT BARS (GRADE DESIGNATION Fe 500) CONFORMING TO IS:1786.
- CLEAR COVER TO REINFORCEMENT SHALL BE 40mm.
- NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT A SECTION AND LAPPING SHALL BE STAGGERED. MINIMUM LAP LENGTH SHALL BE 76 TIMES DIA OF BAR.

REFERENCE DRAWINGS:-



GOOD FOR CONSTRUCTION



---	TOP REINFORCEMENT
---	BOTTOM REINFORCEMENT

CLIENT:		CONTRACTOR:		DESIGN CONSULTANT:		APPROVED BY:		PROJECT:	
NATIONAL HIGHWAYS INFRASTRUCTURE DEVELOPMENT CORPORATION LTD. (3RD FLOOR, P.T. BUILDING, 4 PARLIAMENT STREET, NEW DELHI-110001)		GANNON DUNKERLEY & CO. LTD. 86A, TOPSIA ROAD (SOUTH) HAUTE STREET, 7th FLOOR KOLKATA-700046		ECSTATIC ENGINEERING CONSULTANTS PRIVATE LIMITED SCO 102, HUDA SHOPPING CENTRE, GURGOAN, SECTOR 55, GURUGRAM, HARYANA 122003		U.K.		FOUR LANING OF JHANJHI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. K 491+050 TO KM 535+250 (DESIGN CH. KM 490+800 TO KM 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.	
AUTHORITY ENGINEER:		SAFETY CONSULTANT:		PROOF CONSULTANT:		CHECKED BY:		TITLE:	
VOYANTS SOLUTIONS PVT. LTD. 403, 4TH FLOOR, BPTP PARK CENTRA, BLOCK A, JAL VAYU HAR SECTOR 30 GURGOAN, HARYANA 122001		G-ENG ADVISORY SERVICES PVT. LTD. SCO 102, HUDA SHOPPING CENTRE, SECTOR 55 GURGOAN-122002, HARYANA. TEL: 011-124-4295802, 4295803 EMAIL: INFO@G-ENG.IN WEB: WWW.G-ENG.IN		MARC TECHNOCRATS PVT. LTD. Marc House, Sector-67, Dividing Road, opposite Devi Lal Park, Bapadurgarh, Haryana 124507		N.S.		REIN. DETAILS OF RCC DECK SLAB (12.0m SPAN)	
DATE		REV		SCALE:		DATE:		DRG NO.:	
20.03.2020		R0		AS SHOWN		MAR. 2020		EEC-NH-37-JD-SUP-CH.516+938-302	
ISSUED FOR APPROVAL		DESCRIPTION OF REVISIONS		BY		SHEET NO.		REV.	
						4 OF 4		R0	