



National Highways Authority of India
(Ministry of Road Transport & Highways)
Government of India

**CONSTRUCTION OF EIGHT LANE DIVIDED
CARRIAGEWAY STARTING AT SOHNA-GURUGRAM
ROAD (NH-248A) NEAR ALIPUR VILLAGE AND ENDS
AT CH. 18+461 BEFORE KMP EXPRESSWAY (CH. 0+000
TO CH. 18+461) SECTION OF DELHI – VADODARA
GREENFIELD ALIGNMENT (NH-148N) ON EPC MODE
UNDER BHARATMALA, PARIYOJANA IN THE STATE
OF HARYANA**

CONTRACT AGREEMENT

between

National Highways Authority of India
G-5&6, Sector-10, Dwarka, New Delhi-110075

and

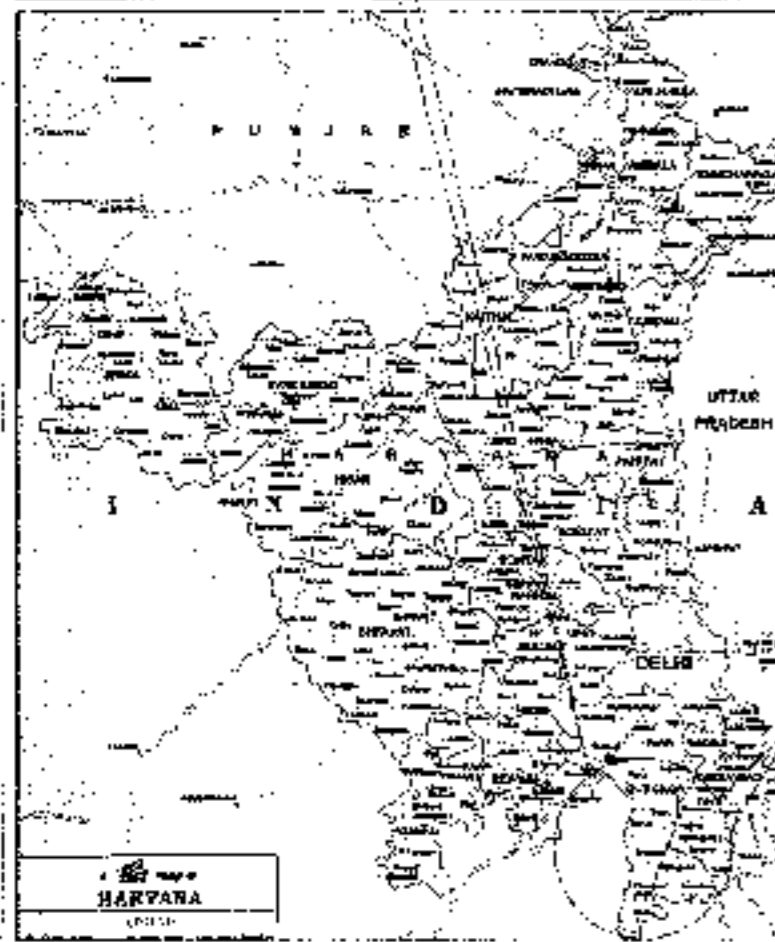
APCO Infratech Private Limited
4th Floor, Universal Trade Tower, Sohna Road, Sector — 49, Gurugram — 122 101 (Haryana)

VOLUME – III
(Drawings)

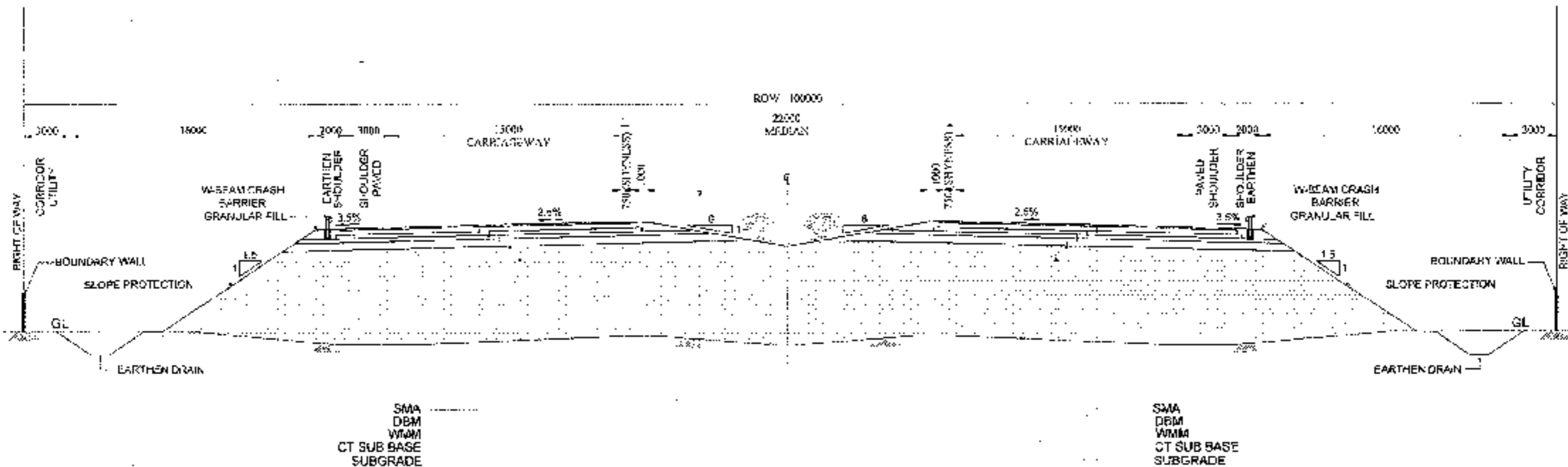
July, 2019



PLAN & PROFILE





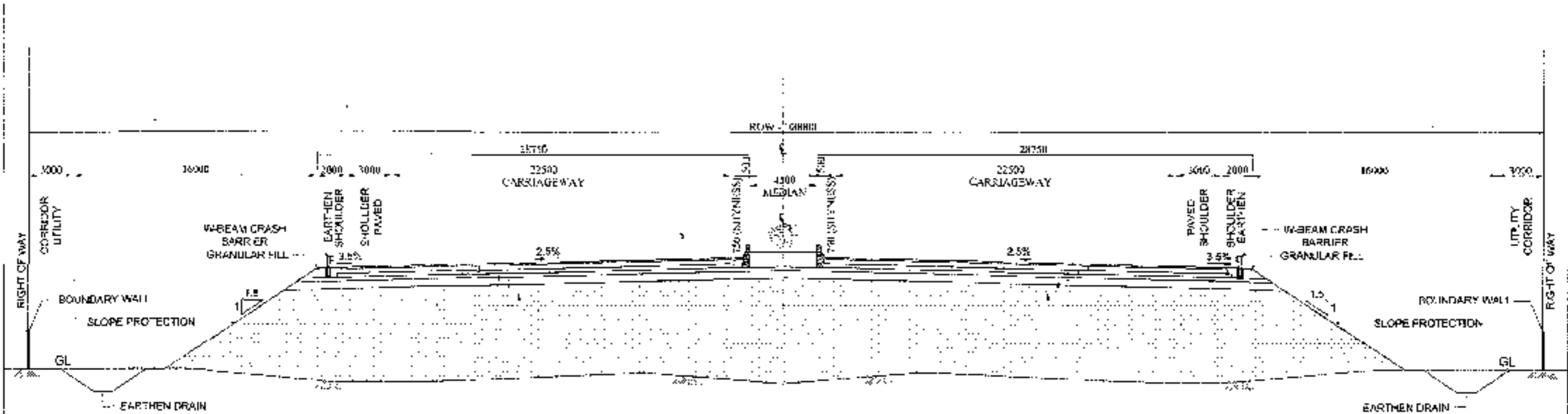
CLIENT - National Highways Authority of India <small>Ministry of Road Transport & Highways, Govt. of India</small>	CONSULTANT - Chaitanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, R.K.TOWER PLOT NO.- 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH : 0120-3223413, 4120472, FAX- 0120-4119472	PROJECT - Consultancy Services for the Preparation for Feasibility Report/PPR for development of Economic Corridor, Inter Corridors and Feeder Roads to improve the efficiency of freight movement in India under Bharatmala Pariyojana II (Package-4) (Sector - Ferozpur Jirka section of Delhi-Vadodra Expressway) (Pkg 1, Ch. 0+000 to 18+401)	SCALE - 1:25000	DWG TITLE - INDEX PLAN SOHINA - FEROZPUR JIRKA	DRAWING No. - CRCP/1307/CH/02/02-1/INDEX PLAN/01
					DATE: 18/08/2016 REVISION: NO. DATE BY FOR



TYPE-I (STAGE-I)
TYPICAL CROSS SECTION FOR 8 LANE (2x4) IN PLAIN & ROLLING TERRAIN
WITH DEPRESSED MEDIAN



CLIENT-  National Highways Authority of India	CONSULTANT-  Chalanya Projects Consultancy Pvt. Ltd. C-6, 2ND FLOOR, R.K. TOWER, PLOT NO. 21-22, SECTOR-4, VAISHALI, SHAZIBAD PH.: 0126-3223419, 4120472, FAX: 0126-4110472	PROJECT- Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) [Solani - Firozpur Jhirsa section of Delhi-Vadodra Expressway] (Fig-1_Ch_0+000 to 13+481)	SCALE - NTS	DWG TITLE - TYPICAL CROSS SECTION FOR EXPRESSWAY	DRAWING No - LKCA-150/04/SHP/ENG-INFRA/0011 DATE: SEPTEMBER 2018 DESIGNED BY: [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]
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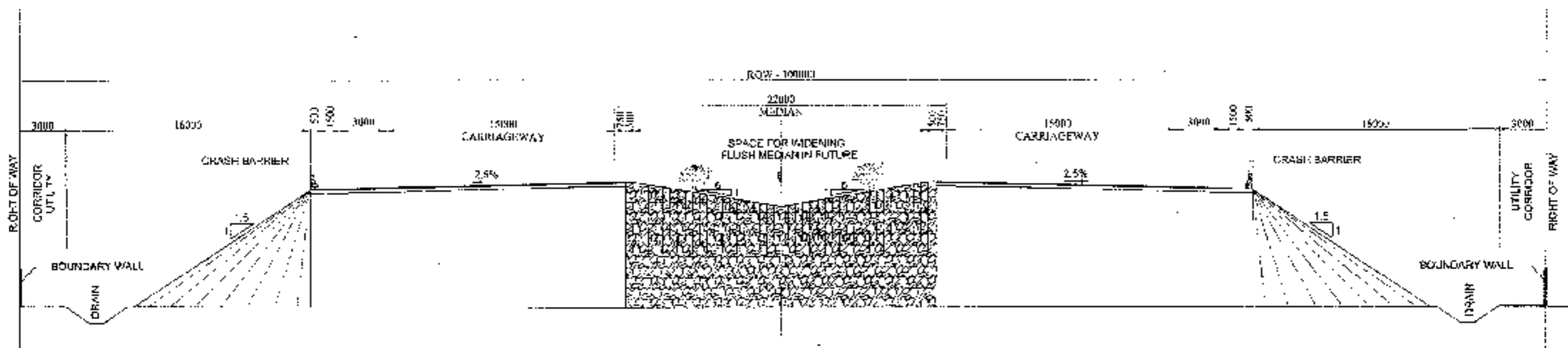
SMA
DBM
WMM
CT SUB BASE
SUBGRADE

SMA
DBM
WMM
CT SUB BASE
SUBGRADE

TYPE-IA
TYPICAL CROSS SECTION FOR 12 LANE (2x6) IN PLAIN & ROLLING TERRAIN
WITH RAISED MEDIAN



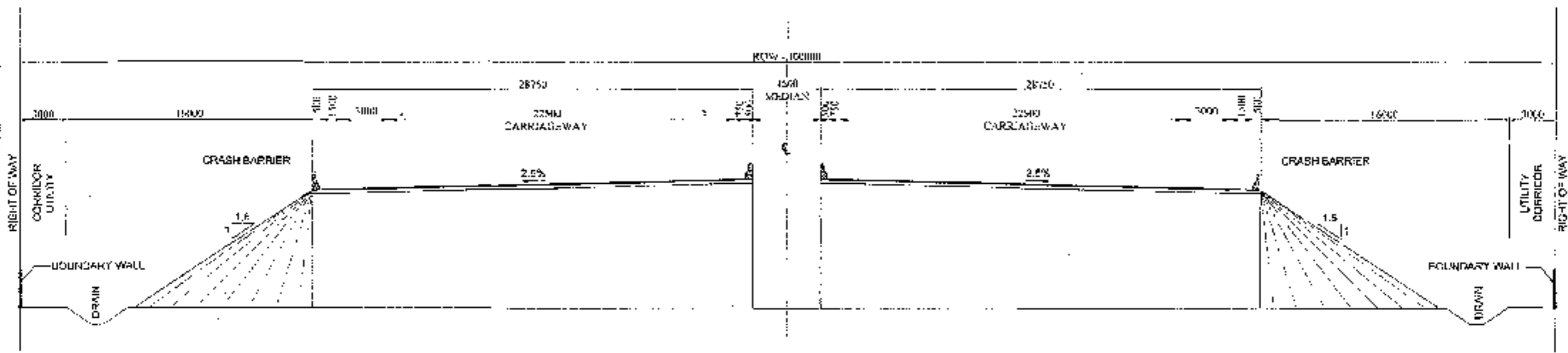
CLIENT: 	CONSULTANT: 	PROJECT: Consultancy Service for the Preparation for Feasibility Report (DPR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-07Package-4) (Borani - Firuzpur Jhikha section of Delhi-Vadodra Expressway) (Fig-1, Ch. 0+000 to 18+481)	SCALE: NTS	DRWG TITLE: 03 TYPICAL CROSS SECTION FOR EXPRESSWAY	FORMING No.: CPCR-1524/2018-19/1000000
					DATE: SEPTEMBER 2018 REVISION: RU



TYPE-II (STAGE-I)
TYPICAL CROSS SECTION FOR 8 LANE (2x4) FOR VUP, SVUP, L.VLP, FLYOVER





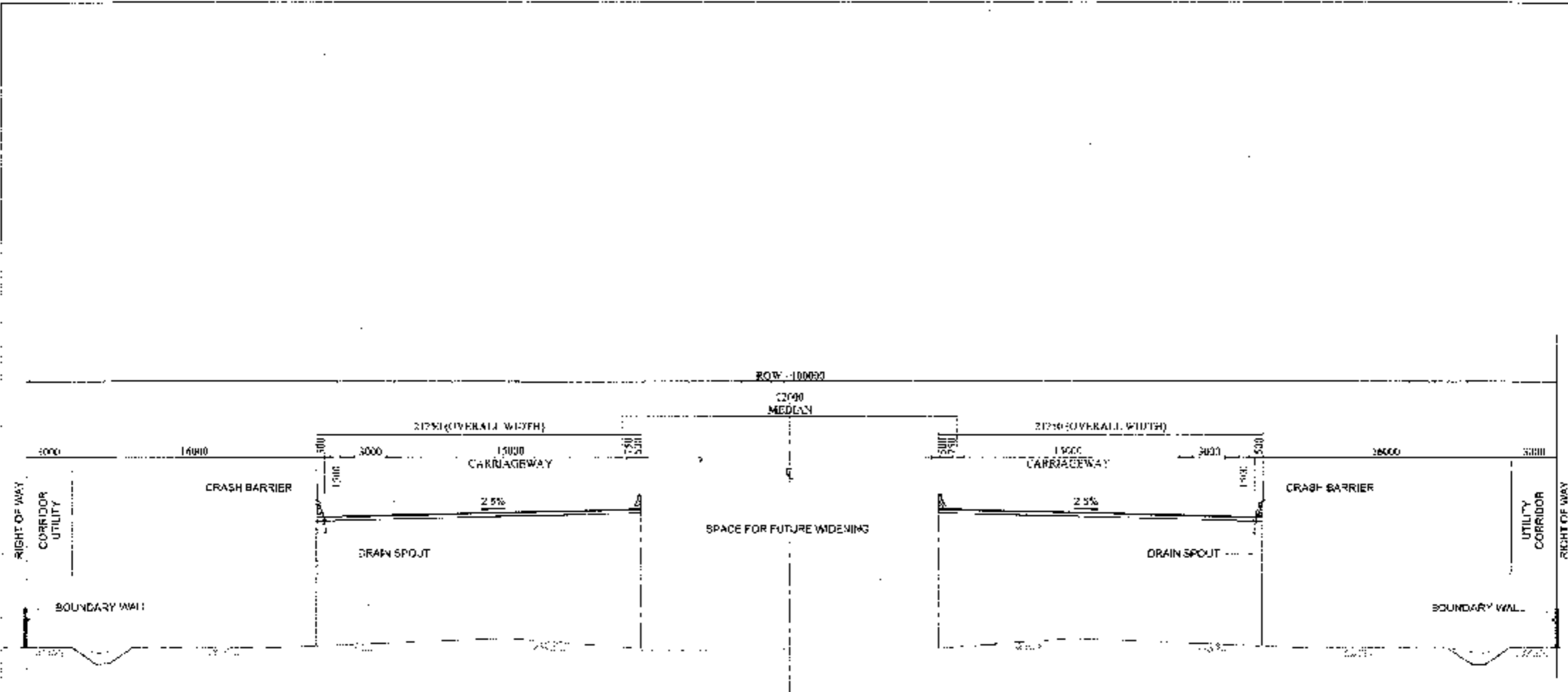
CLIENT: National Highway Authority of India	CONSULTANT: Chakanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, R.K. TOWER PLOT NO - 21-22, SECTOR-4, VAISHALI, GHAZIABAD PHL: 0120-3223419, 4120472, FAX: 9120-4110472	PROJECT: Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sahra - Farazpur Jhriya section of Delhi-Mumbai Expressway) (Fig-1_Ch. 0+000 to 18+251)	SCALE: NTS	DWG TITLE: 04 TYPICAL CROSS SECTION FOR EXPRESSWAY	DRAWN BY: CPDR-INDRA/CE/2018/01/02/03/04
					DATE: SEPTEMBER 2018 REVISION: 01



TYPE-II A
TYPICAL CROSS SECTION FOR 12 LANE (2x6) FOR VUP, SVUP, LVLP, FLYOVER



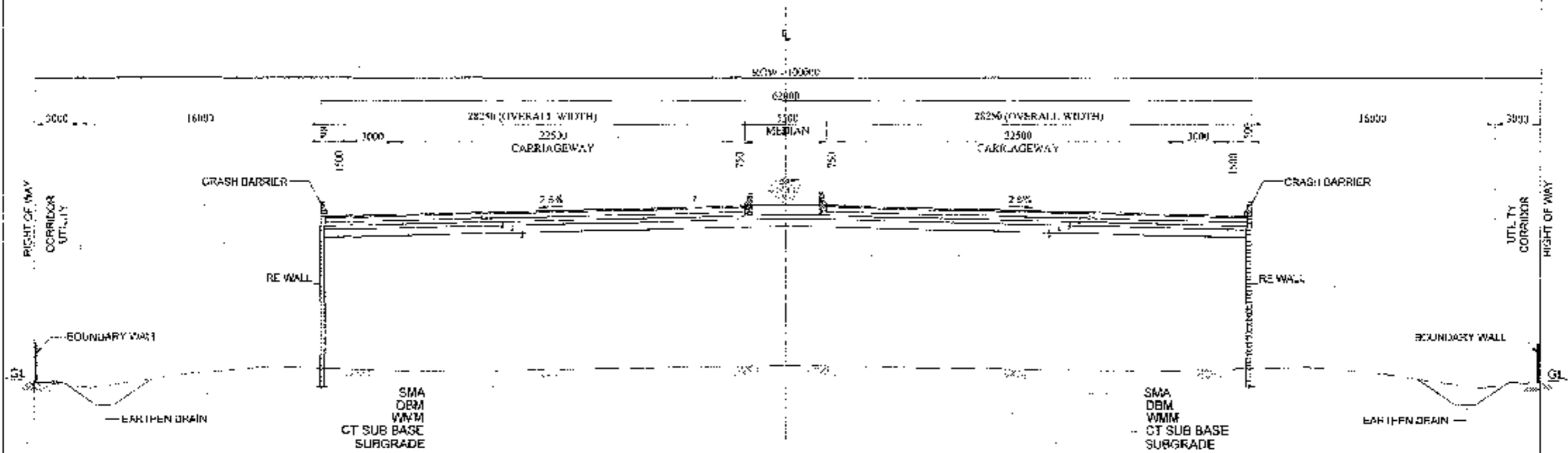
<p>CLIENT -</p>  <p>National Highways Authority of India</p>	<p>CONSULTANT -</p>  <p>Chaitanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, R.K. TOWER PLOT NO.- 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH.: 0120-3223419, 4320472, FAX: 0120-4110472</p>	<p>PROJECT -</p> <p>Consultancy Services for the Preparation of Feasibility Report (DPR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jirka section of Delhi-Vadodra Expressway)</p> <p>(Pkg. 4, Ch. 0e000 to 13+451)</p>	<p>SCALE -</p> <p>NTS</p>	<p>DWG TITLE -</p> <p>05 TYPICAL CROSS SECTION FOR EXPRESSWAY</p>	<p>DRWING NO. -</p> <p>GPR-1520NS-SPK-IFR/C904</p> <p>DATE: 04/11/2015</p> <p>DESIGNED BY: [Signature] CHECKED BY: [Signature]</p> <p>APPROVED BY: [Signature]</p>
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TYPE-III (STAGE-I)
TYPICAL CROSS SECTION FOR 8 LANE (2x4) FOR MJB, MNB WITH DEPRESSED MEDIAN



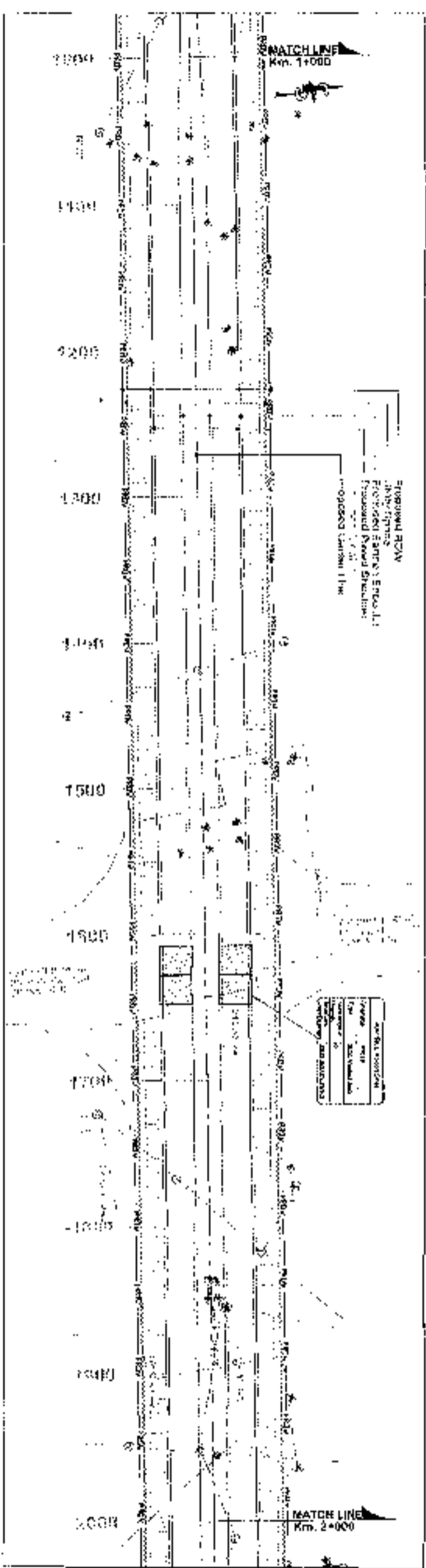
CLIENT: National Highways Authority of India	CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, R.K. TOWER PLOT NO.-24-22, SECTOR-4, VAISHALI, CHHATRAKHAN PH: 0121-3223478, 4120472. FAX: 0120-4110472	PROJECT: Consultancy Service for the Preparation for Feasibility Report (RFR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Loe-B Package-4) (Sohna - Noidapur, Pakhal section of Delhi-Vadodra Expressway) (PKR-I, Ch. 0+000 to 15+451)	SCALE: NTS	DWG TITLE: 07 TYPICAL CROSS SECTION FOR EXPRESSWAY	DRAWN TO: GROUP: TECHNICAL DRAWING DIVISION DATE: SEPTEMBER 2018 PREPARED BY: S. K. SINGH CHECKED BY: S. K. SINGH APPROVED BY: S. K. SINGH
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TYPE-IV
TYPICAL CROSS SECTION FOR 12 LANE (2x6) WITH RE WALL IN PLAIN & ROLLING TERRAIN



<p>CLIENT - National Highways Authority of India</p>	<p>CONSULTANT - Chaitanya Projects Consultancy Pvt. Ltd. G.S. 2ND FLOOR, K.K.TOWER PLOT NO.- 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH : 0120-3225419, 4124472, FAX: 0120-4110472</p>	<p>PROJECT - Consultancy Service for the Preparation for Feasibility Report (PPR) for development of Economic Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sulima - Fazpur Jharkh section of Delhi-Vadodra Expressway) (Pkg1_Ch. 0+000 to 18+461)</p>	<p>SCALE - N.T.S.</p>	<p>DWG TITLE - 08 TYPICAL CROSS SECTION FOR EXPRESSWAY</p>	<p>Drawing No - COPR-1011202-15PR0-11PR102407 DATE - SEP 2018 PROJECT NO - SHEET NO - SCALE -</p>
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Station	Proposed Road	Existing Road	Proposed Road	Existing Road
1000	12.00	12.00	12.00	12.00
1050	12.00	12.00	12.00	12.00
1100	12.00	12.00	12.00	12.00
1150	12.00	12.00	12.00	12.00
1200	12.00	12.00	12.00	12.00
1250	12.00	12.00	12.00	12.00
1300	12.00	12.00	12.00	12.00
1350	12.00	12.00	12.00	12.00
1400	12.00	12.00	12.00	12.00
1450	12.00	12.00	12.00	12.00
1500	12.00	12.00	12.00	12.00
1550	12.00	12.00	12.00	12.00
1600	12.00	12.00	12.00	12.00
1650	12.00	12.00	12.00	12.00
1700	12.00	12.00	12.00	12.00
1750	12.00	12.00	12.00	12.00
1800	12.00	12.00	12.00	12.00
1850	12.00	12.00	12.00	12.00
1900	12.00	12.00	12.00	12.00
1950	12.00	12.00	12.00	12.00
2000	12.00	12.00	12.00	12.00

Station	Proposed Road	Existing Road	Proposed Road	Existing Road
1000	12.00	12.00	12.00	12.00
1050	12.00	12.00	12.00	12.00
1100	12.00	12.00	12.00	12.00
1150	12.00	12.00	12.00	12.00
1200	12.00	12.00	12.00	12.00
1250	12.00	12.00	12.00	12.00
1300	12.00	12.00	12.00	12.00
1350	12.00	12.00	12.00	12.00
1400	12.00	12.00	12.00	12.00
1450	12.00	12.00	12.00	12.00
1500	12.00	12.00	12.00	12.00
1550	12.00	12.00	12.00	12.00
1600	12.00	12.00	12.00	12.00
1650	12.00	12.00	12.00	12.00
1700	12.00	12.00	12.00	12.00
1750	12.00	12.00	12.00	12.00
1800	12.00	12.00	12.00	12.00
1850	12.00	12.00	12.00	12.00
1900	12.00	12.00	12.00	12.00
1950	12.00	12.00	12.00	12.00
2000	12.00	12.00	12.00	12.00

PROPOSED LEGEND

PROPOSED ROAD	---
EXISTING ROAD	---
PROPOSED SIDEWALK	---
EXISTING SIDEWALK	---
PROPOSED SHOULDER	---
EXISTING SHOULDER	---
PROPOSED VERGE	---
EXISTING VERGE	---
PROPOSED DRAINAGE	---
EXISTING DRAINAGE	---
PROPOSED UTILITY	---
EXISTING UTILITY	---

FASTING LEGEND

PROPOSED ROAD	---
EXISTING ROAD	---
PROPOSED SIDEWALK	---
EXISTING SIDEWALK	---
PROPOSED SHOULDER	---
EXISTING SHOULDER	---
PROPOSED VERGE	---
EXISTING VERGE	---
PROPOSED DRAINAGE	---
EXISTING DRAINAGE	---
PROPOSED UTILITY	---
EXISTING UTILITY	---

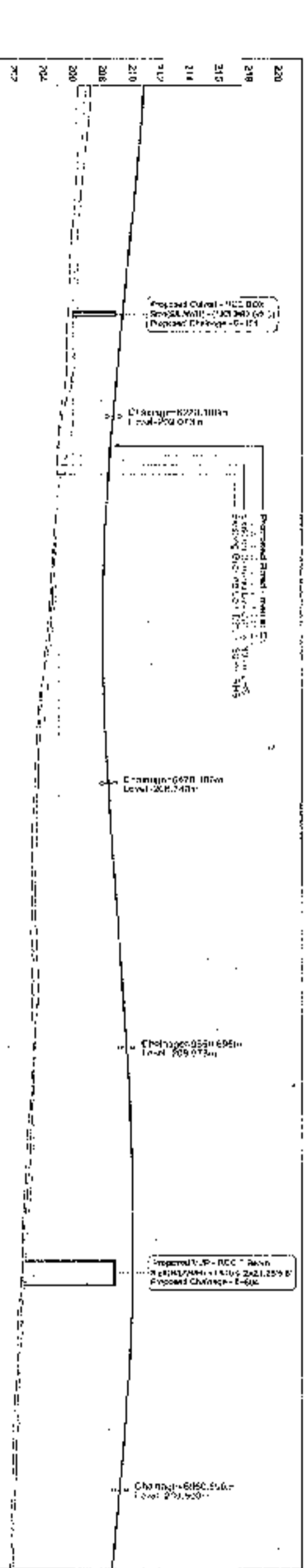
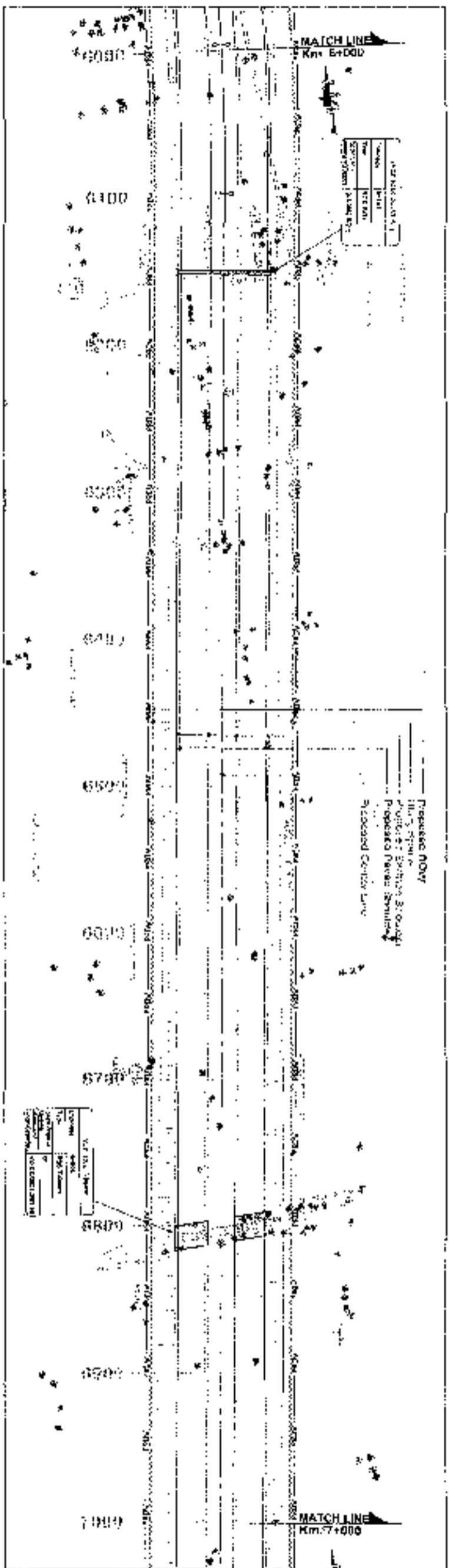
SCALE

DATE 10/10/2000

BY [Signature]

CHECKED [Signature]

APPROVED [Signature]



Station	Proposed Road Level (m)	Existing Ground Level (m)	Vertical Curve
220	229.52	229.52	
219	229.52	229.52	
218	229.52	229.52	
217	229.52	229.52	
216	229.52	229.52	
215	229.52	229.52	
214	229.52	229.52	
213	229.52	229.52	
212	229.52	229.52	
211	229.52	229.52	
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208	229.52	229.52	
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12	229.52	229.52	
11	229.52	229.52	
10	229.52	229.52	
9	229.52	229.52	
8	229.52	229.52	
7	229.52	229.52	
6	229.52	229.52	
5	229.52	229.52	
4	229.52	229.52	
3	229.52	229.52	
2	229.52	229.52	
1	229.52	229.52	

PROPOSED LEGEND

LINE	PROPOSED ROAD
PIPE	PROPOSED DRAINAGE
WALL	PROPOSED WALL
BRIDGE	PROPOSED BRIDGE
RAIL	EXISTING RAIL
ROAD	EXISTING ROAD
UTILITY	EXISTING UTILITY
OBSTACLE	EXISTING OBSTACLE
GRD	EXISTING GROUND LEVEL

EXISTING LEGEND

BRIDGE	EXISTING BRIDGE
RAIL	EXISTING RAIL
ROAD	EXISTING ROAD
UTILITY	EXISTING UTILITY
OBSTACLE	EXISTING OBSTACLE
GRD	EXISTING GROUND LEVEL

CLIENT: National Highways Authority of India

CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd.

PROJECT: Construction work for the Preparation for Feasibility Report/Work for development of Economic Corridor, Inner Corridor and Outer Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Work Package - 1)

SCALE: Horizontal - 1:2000, Vertical - 1:200

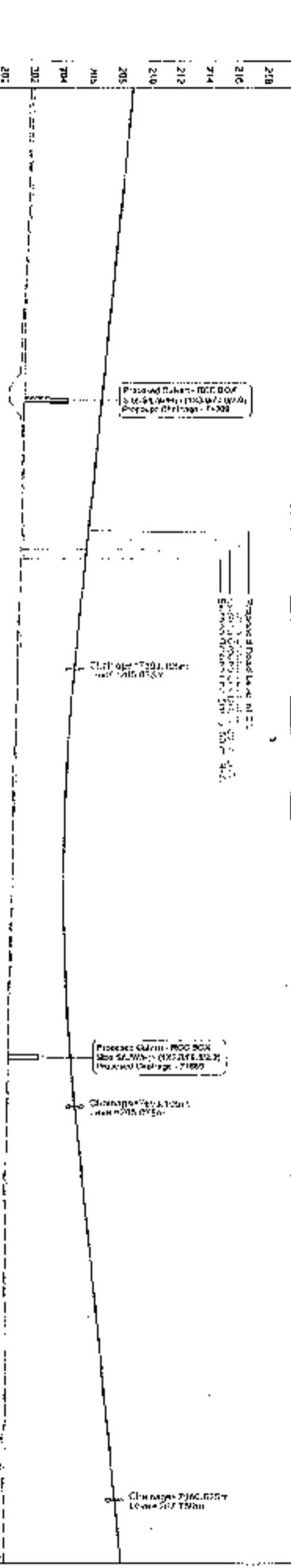
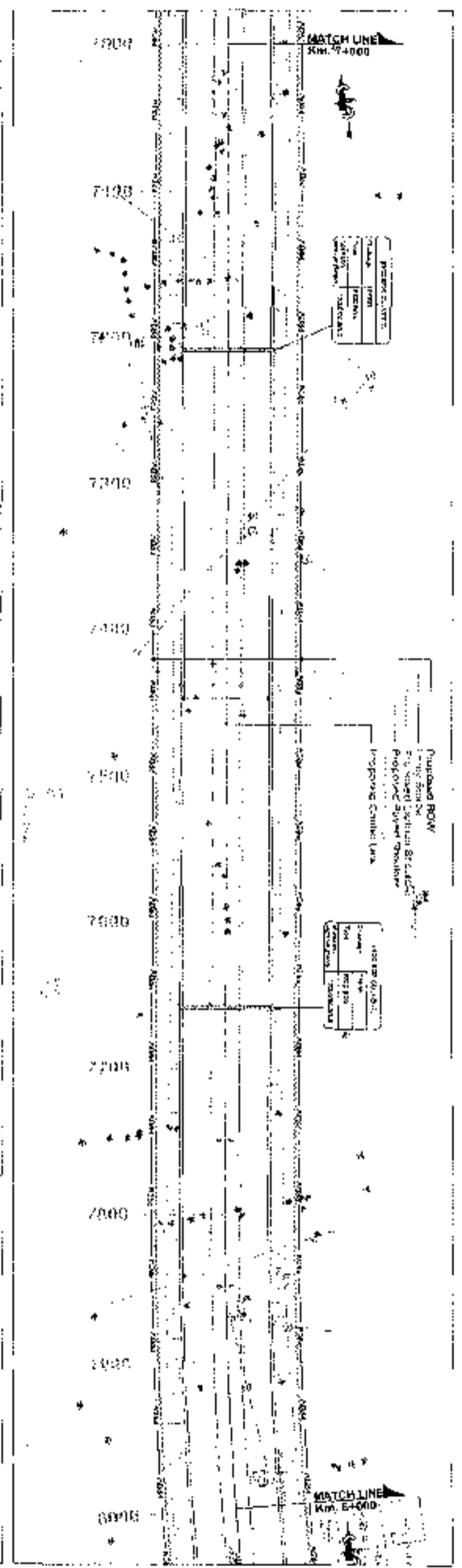
DWG TITLE: PLAN & PROFILE, TOWER, BRIDGE, ROAD, UTILITY, OBSTACLE, GRD, CHAINAGE, LEVEL, ELEVATION, DISTANCE, AREA, VOLUME, QUANTITY, etc.

DATE: 15/11/2023

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

APPROVED BY: [Signature]



Stationing	Proposed Right-of-Way	Proposed Center Line	Proposed Right-of-Way	Proposed Center Line
200	100.00	50.00	100.00	50.00
201	100.00	50.00	100.00	50.00
202	100.00	50.00	100.00	50.00
203	100.00	50.00	100.00	50.00
204	100.00	50.00	100.00	50.00
205	100.00	50.00	100.00	50.00
206	100.00	50.00	100.00	50.00
207	100.00	50.00	100.00	50.00
208	100.00	50.00	100.00	50.00
209	100.00	50.00	100.00	50.00
210	100.00	50.00	100.00	50.00
211	100.00	50.00	100.00	50.00
212	100.00	50.00	100.00	50.00
213	100.00	50.00	100.00	50.00
214	100.00	50.00	100.00	50.00
215	100.00	50.00	100.00	50.00
216	100.00	50.00	100.00	50.00
217	100.00	50.00	100.00	50.00
218	100.00	50.00	100.00	50.00

Client: National Highways Authority of India

Project: Chalky's Projects Consultancy Pvt. Ltd.

Address: C-4, 2ND FLOOR, RASTOOR PLD NO. 71-52, SECTOR-4, WAHGAJI, GHAZIABAD

Phone: 011-0110-322419, 4428871, FAX: 011-0110-322419

Scale: Horizontal = 1:2000, Vertical = 1:200

Drawings: PLAN & PROFILE (P.L. 1), IS: 1111 - PROZEPUR (R.O.W.), (S.M. 7.1) (R.O.W. 5.00)

Author: P. K. SINGH

Checked: P. K. SINGH

Approved: P. K. SINGH

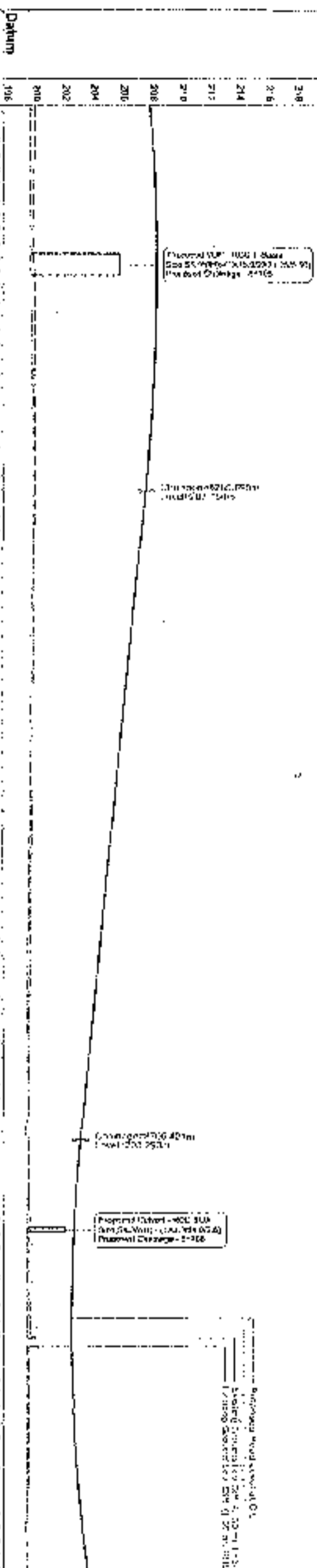
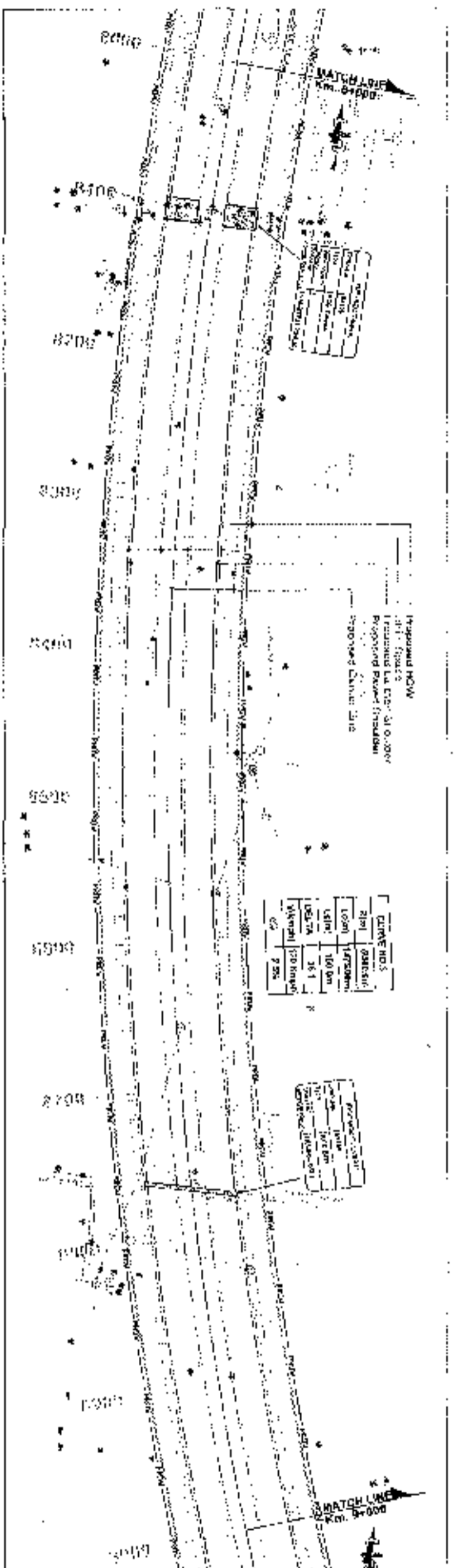
Date: 10/10/2010

PROPOSED LEGEND

HE LINE	PROPOSED
PROP. 2L	PROPOSED
PROP. 1L	PROPOSED
PROP. 0L	PROPOSED
PROP. 1R	PROPOSED
PROP. 2R	PROPOSED
PROP. 3R	PROPOSED
PROP. 4R	PROPOSED
PROP. 5R	PROPOSED
PROP. 6R	PROPOSED
PROP. 7R	PROPOSED
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PROP. 97R	PROPOSED
PROP. 98R	PROPOSED
PROP. 99R	PROPOSED
PROP. 100R	PROPOSED

EXISTING LEGEND

EXISTING	EXISTING
EXISTING 2L	EXISTING
EXISTING 1L	EXISTING
EXISTING 0L	EXISTING
EXISTING 1R	EXISTING
EXISTING 2R	EXISTING
EXISTING 3R	EXISTING
EXISTING 4R	EXISTING
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EXISTING 97R	EXISTING
EXISTING 98R	EXISTING
EXISTING 99R	EXISTING
EXISTING 100R	EXISTING



STATIONING	PROPOSED ELEVATION	EXISTING ELEVATION	GRADE	WIDTH	AREA
0+00	200.00	198.00	1:2	10.0	100.00
0+10	200.00	198.00	1:2	10.0	100.00
0+20	200.00	198.00	1:2	10.0	100.00
0+30	200.00	198.00	1:2	10.0	100.00
0+40	200.00	198.00	1:2	10.0	100.00
0+50	200.00	198.00	1:2	10.0	100.00
0+60	200.00	198.00	1:2	10.0	100.00
0+70	200.00	198.00	1:2	10.0	100.00
0+80	200.00	198.00	1:2	10.0	100.00
0+90	200.00	198.00	1:2	10.0	100.00
1+00	200.00	198.00	1:2	10.0	100.00
1+10	200.00	198.00	1:2	10.0	100.00
1+20	200.00	198.00	1:2	10.0	100.00
1+30	200.00	198.00	1:2	10.0	100.00
1+40	200.00	198.00	1:2	10.0	100.00
1+50	200.00	198.00	1:2	10.0	100.00
1+60	200.00	198.00	1:2	10.0	100.00
1+70	200.00	198.00	1:2	10.0	100.00
1+80	200.00	198.00	1:2	10.0	100.00
1+90	200.00	198.00	1:2	10.0	100.00
2+00	200.00	198.00	1:2	10.0	100.00
2+10	200.00	198.00	1:2	10.0	100.00
2+20	200.00	198.00	1:2	10.0	100.00
2+30	200.00	198.00	1:2	10.0	100.00
2+40	200.00	198.00	1:2	10.0	100.00
2+50	200.00	198.00	1:2	10.0	100.00
2+60	200.00	198.00	1:2	10.0	100.00
2+70	200.00	198.00	1:2	10.0	100.00
2+80	200.00	198.00	1:2	10.0	100.00
2+90	200.00	198.00	1:2	10.0	100.00
3+00	200.00	198.00	1:2	10.0	100.00
3+10	200.00	198.00	1:2	10.0	100.00
3+20	200.00	198.00	1:2	10.0	100.00
3+30	200.00	198.00	1:2	10.0	100.00
3+40	200.00	198.00	1:2	10.0	100.00
3+50	200.00	198.00	1:2	10.0	100.00
3+60	200.00	198.00	1:2	10.0	100.00
3+70	200.00	198.00	1:2	10.0	100.00
3+80	200.00	198.00	1:2	10.0	100.00
3+90	200.00	198.00	1:2	10.0	100.00
4+00	200.00	198.00	1:2	10.0	100.00
4+10	200.00	198.00	1:2	10.0	100.00
4+20	200.00	198.00	1:2	10.0	100.00
4+30	200.00	198.00	1:2	10.0	100.00
4+40	200.00	198.00	1:2	10.0	100.00
4+50	200.00	198.00	1:2	10.0	100.00
4+60	200.00	198.00	1:2	10.0	100.00
4+70	200.00	198.00	1:2	10.0	100.00
4+80	200.00	198.00	1:2	10.0	100.00
4+90	200.00	198.00	1:2	10.0	100.00
5+00	200.00	198.00	1:2	10.0	100.00
5+10	200.00	198.00	1:2	10.0	100.00
5+20	200.00	198.00	1:2	10.0	100.00
5+30	200.00	198.00	1:2	10.0	100.00
5+40	200.00	198.00	1:2	10.0	100.00
5+50	200.00	198.00	1:2	10.0	100.00
5+60	200.00	198.00	1:2	10.0	100.00
5+70	200.00	198.00	1:2	10.0	100.00
5+80	200.00	198.00	1:2	10.0	100.00
5+90	200.00	198.00	1:2	10.0	100.00
6+00	200.00	198.00	1:2	10.0	100.00
6+10	200.00	198.00	1:2	10.0	100.00
6+20	200.00	198.00	1:2	10.0	100.00
6+30	200.00	198.00	1:2	10.0	100.00
6+40	200.00	198.00	1:2	10.0	100.00
6+50	200.00	198.00	1:2	10.0	100.00
6+60	200.00	198.00	1:2	10.0	100.00
6+70	200.00	198.00	1:2	10.0	100.00
6+80	200.00	198.00	1:2	10.0	100.00
6+90	200.00	198.00	1:2	10.0	100.00
7+00	200.00	198.00	1:2	10.0	100.00
7+10	200.00	198.00	1:2	10.0	100.00
7+20	200.00	198.00	1:2	10.0	100.00
7+30	200.00	198.00	1:2	10.0	100.00
7+40	200.00	198.00	1:2	10.0	100.00
7+50	200.00	198.00	1:2	10.0	100.00
7+60	200.00	198.00	1:2	10.0	100.00
7+70	200.00	198.00	1:2	10.0	100.00
7+80	200.00	198.00	1:2	10.0	100.00
7+90	200.00	198.00	1:2	10.0	100.00
8+00	200.00	198.00	1:2	10.0	100.00
8+10	200.00	198.00	1:2	10.0	100.00
8+20	200.00	198.00	1:2	10.0	100.00
8+30	200.00	198.00	1:2	10.0	100.00
8+40	200.00	198.00	1:2	10.0	100.00
8+50	200.00	198.00	1:2	10.0	100.00
8+60	200.00	198.00	1:2	10.0	100.00
8+70	200.00	198.00	1:2	10.0	100.00
8+80	200.00	198.00	1:2	10.0	100.00
8+90	200.00	198.00	1:2	10.0	100.00
9+00	200.00	198.00	1:2	10.0	100.00
9+10	200.00	198.00	1:2	10.0	100.00
9+20	200.00	198.00	1:2	10.0	100.00
9+30	200.00	198.00	1:2	10.0	100.00
9+40	200.00	198.00	1:2	10.0	100.00
9+50	200.00	198.00	1:2	10.0	100.00
9+60	200.00	198.00	1:2	10.0	100.00
9+70	200.00	198.00	1:2	10.0	100.00
9+80	200.00	198.00	1:2	10.0	100.00
9+90	200.00	198.00	1:2	10.0	100.00
10+00	200.00	198.00	1:2	10.0	100.00

PROPOSED LEGEND

- PROPOSED ROAD
- EXISTING ROAD
- RAILWAY TRACK
- WATER CHANNEL
- ...

EXISTING LEGEND

- RAILWAY TRACK
- WATER CHANNEL
- ...

CLIENT: National Highways Authority of India

CONSULTANT: Chhatanya Projects Consultancy Pvt. Ltd.

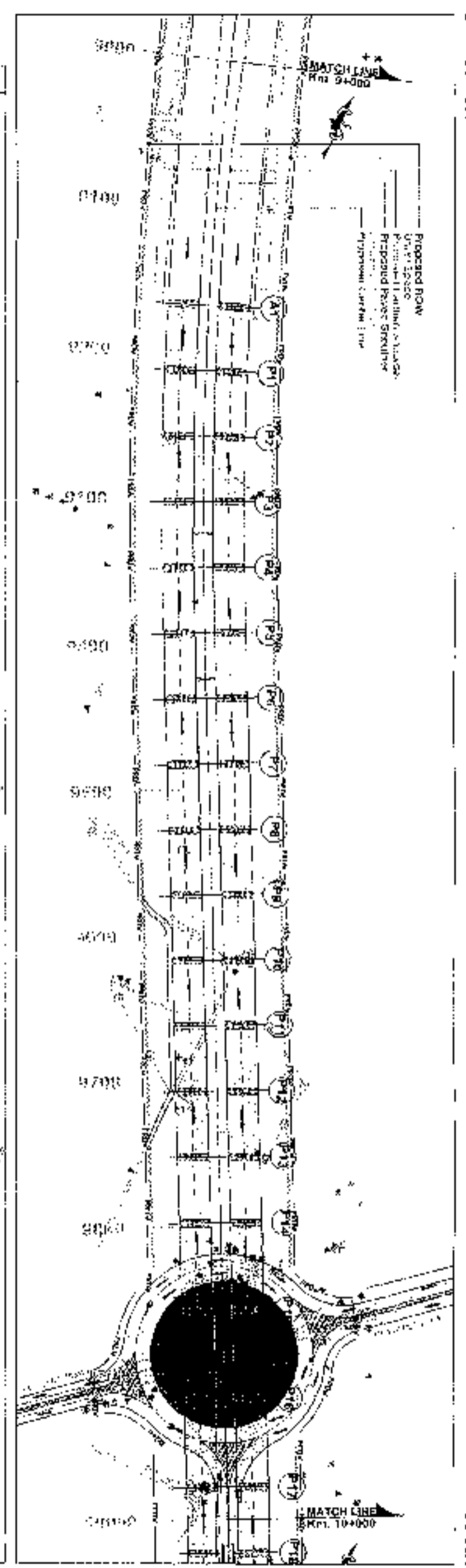
PROJECTS: Consultant's Service for the Preparation of Feasibility Report/RRR for development of ...

DATE: ...

SCALE: ...

DRAWN BY: ...

CHECKED BY: ...



STATION	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	
PROPOSED FLOOR LEVEL (M)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
EXISTING FLOOR LEVEL (M)	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	101.50	
PROPOSED ROAD WIDTH (M)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	
PROPOSED ROAD GRADE (%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PROPOSED ROAD SURFACE TYPE	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
PROPOSED ROAD MATERIAL	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
PROPOSED ROAD DRAINAGE	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
PROPOSED ROAD STRUCTURE	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
PROPOSED ROAD SIGNAGE	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
PROPOSED ROAD LIGHTING	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
PROPOSED ROAD MAINTENANCE	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
PROPOSED ROAD SAFETY	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	
PROPOSED ROAD LANDSCAPING	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	
PROPOSED ROAD ENVIRONMENTAL	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	
PROPOSED ROAD SOCIAL	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	
PROPOSED ROAD ECONOMIC	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	
PROPOSED ROAD POLITICAL	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
PROPOSED ROAD CULTURAL	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	
PROPOSED ROAD HISTORICAL	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
PROPOSED ROAD SCIENTIFIC	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
PROPOSED ROAD TECHNICAL	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
PROPOSED ROAD LEGAL	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	
PROPOSED ROAD ETHICAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
PROPOSED ROAD ENVIRONMENTAL	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
PROPOSED ROAD SOCIAL	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
PROPOSED ROAD ECONOMIC	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
PROPOSED ROAD POLITICAL	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
PROPOSED ROAD CULTURAL	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
PROPOSED ROAD HISTORICAL	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PROPOSED ROAD SCIENTIFIC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PROPOSED ROAD TECHNICAL	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z

PROJECT LEGEND

PROPOSED ROAD

PROPOSED ROAD STRUCTURE

PROPOSED ROAD SIGNAGE

PROPOSED ROAD LIGHTING

PROPOSED ROAD MAINTENANCE

PROPOSED ROAD SAFETY

PROPOSED ROAD LANDSCAPING

PROPOSED ROAD ENVIRONMENTAL

PROPOSED ROAD SOCIAL

PROPOSED ROAD ECONOMIC

PROPOSED ROAD POLITICAL

PROPOSED ROAD CULTURAL

PROPOSED ROAD HISTORICAL

PROPOSED ROAD SCIENTIFIC

PROPOSED ROAD TECHNICAL

PROPOSED ROAD LEGAL

PROPOSED ROAD ETHICAL

PROPOSED ROAD ENVIRONMENTAL

PROPOSED ROAD SOCIAL

PROPOSED ROAD ECONOMIC

PROPOSED ROAD POLITICAL

PROPOSED ROAD CULTURAL

PROPOSED ROAD HISTORICAL

PROPOSED ROAD SCIENTIFIC

PROPOSED ROAD TECHNICAL

PROPOSED ROAD LEGAL

PROPOSED ROAD ETHICAL

National Highways Authority
of India

Chaityanya Projects Consultancy Pvt. Ltd.
20/22/2020/2021/2022/2023/2024/2025/2026/2027/2028/2029/2030/2031/2032/2033/2034/2035/2036/2037/2038/2039/2040/2041/2042/2043/2044/2045/2046/2047/2048/2049/2050/2051/2052/2053/2054/2055/2056/2057/2058/2059/2060/2061/2062/2063/2064/2065/2066/2067/2068/2069/2070/2071/2072/2073/2074/2075/2076/2077/2078/2079/2080/2081/2082/2083/2084/2085/2086/2087/2088/2089/2090/2091/2092/2093/2094/2095/2096/2097/2098/2099/2100

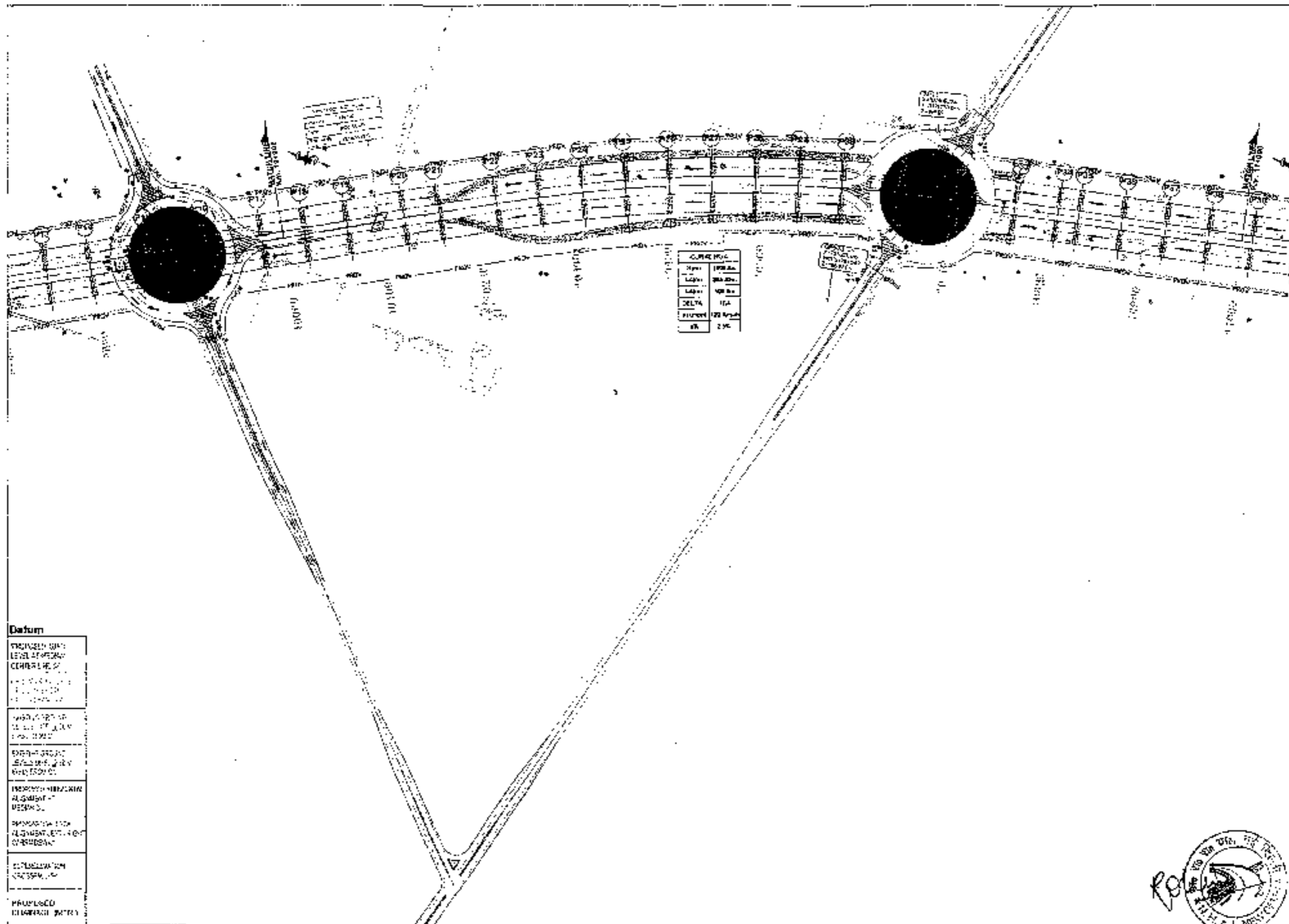
Project Title: **19**

Scale: 1:1000

Author: K. Srinivasa Murthy

Checked: K. Srinivasa Murthy

Date: 10/10/2023



PROPOSED LEGEND

HPI LINE	
PHOS. CA.	
FIELD	
TREE	
PROP. CIV.	
PROP. RR	
UTILITY RACE	
PROF.	
PROP. TM	
MATCH LINE	
PRO. ROAD LEVEL AT 10' OF CIV.	
PRO. ROAD LEVEL AT 10' OF RR	
PRO. ROAD LEVEL AT 10' OF CANAL	
PRO. ROAD LEVEL AT 10' OF W. CANAL	
PRO. ROAD LEVEL AT 10' OF W. CANAL	
PRO. ROAD LEVEL AT 10' OF W. CANAL	
PRO. ROAD LEVEL AT 10' OF W. CANAL	
PRO. ROAD LEVEL AT 10' OF W. CANAL	
PRO. ROAD LEVEL AT 10' OF W. CANAL	
GRADIENT	
LOG	

EXISTING LEGEND

BRIDGE	
BRANCH ROAD	
R. OFF. FROM STREET	
BUS STOP	
BORDER WALL	
CENTRE LINE	
CANAL	
URBAN	
ELECTRIC POLE	
EXISTING ROAD	
GATE	
WATER PILE	
HUT	
PLANTER	
STONE	
LAKE	
NET	
OTC	
M.L.R.	
INDUC. PIPE	
RIVER/NAVA	
RAILWAY TRACK	
BOILER	
WATER TOWER	
TELEPHONE POLE	
TEMPLE	
TRANSFORMER	
WELL	
TOWER	
WATER HOUSE	
TREE	

Datum

PROPOSED GRADE LEVEL AT ROAD CENTRE LINE
PROPOSED GRADE LEVEL AT RAILWAY CENTRE LINE
PROPOSED GRADE LEVEL AT CANAL CENTRE LINE
PROPOSED GRADE LEVEL AT TOWER CENTRE LINE
PROPOSED GRADE LEVEL AT TEMPLE CENTRE LINE
PROPOSED GRADE LEVEL AT W. CANAL CENTRE LINE

PROPOSED ELEVATION DATA

CLIENT -
National Highways Authority of India
 Ministry of Road, Transport & Highways, Govt. of India

CONSULTANT -

 Chaitanya Projects Consultancy Pvt. Ltd.
 C-5, 2ND FLOOR, R.K TOWER PLOT NO. - 21-22,
 SECTOR-4, VARSHALI, CHAZIABAD
 PH: 0122-3223410, 4106477 FAX: 0120-4100677

PROJECT -
 Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and F feeder Routes to improve the efficiency of freight movement in India under Bharatmats Pariyojana (Lot-6/Package-4) (Sohna - Fizopur Jhirka section of Delhi-Vadodra Expressway)
 (Plg-1, Ch. 0+000 to 15+451)

SCALE -
 Horizontal- 1:2000
 Vertical- 1:200

DWG TITLE -
 20
 PLAN & PROFILE (PC-1)
 SOHNA - FIZOPUR JHIRKA
 (KM. 0+000 TO KM. 15+000)

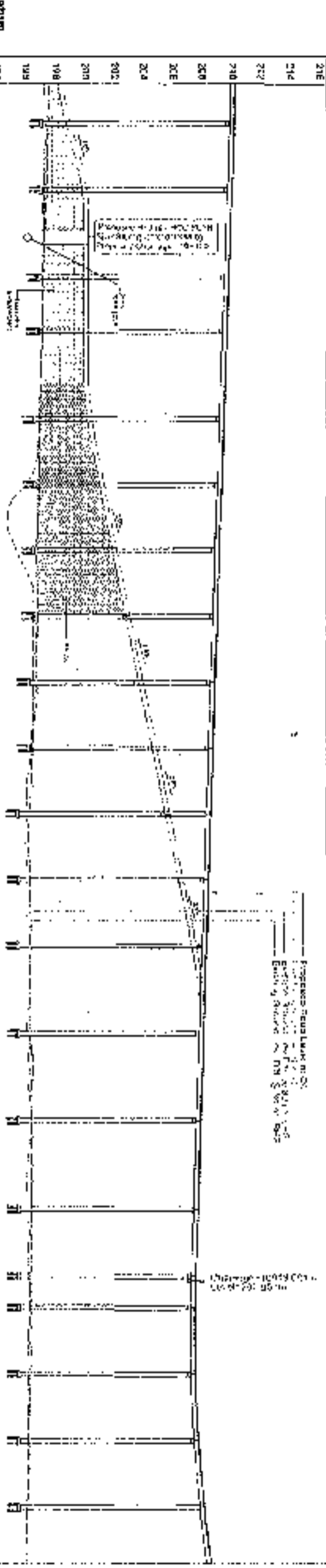
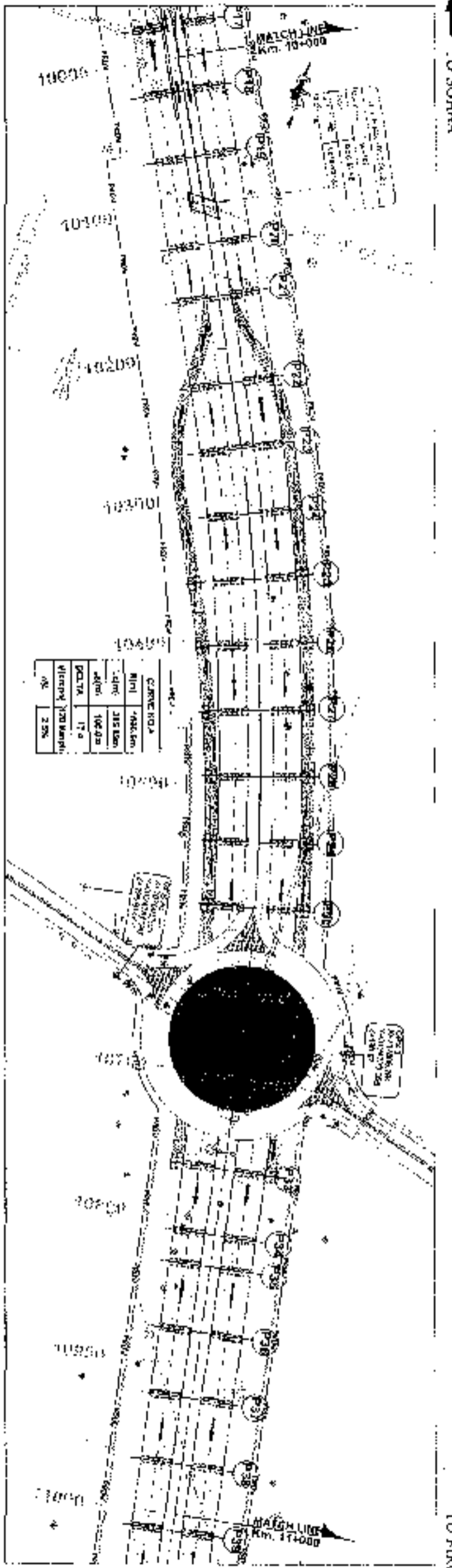
APPROVALS

SEAL:

DATE: 20/07/2018
PROJECT: SOHNA - FIZOPUR JHIRKA
DESIGNER: [Name]
CHECKER: [Name]
APPROVER: [Name]

TO SOHNA

TO FIROZPUR JHIRKA



STATIONING	EXISTING ELEVATION (m)	PROPOSED ROAD LEVEL (m)	FINISH ELEVATION (m)
198	220.50	220.50	220.50
199	220.50	220.50	220.50
200	220.50	220.50	220.50
201	220.50	220.50	220.50
202	220.50	220.50	220.50
203	220.50	220.50	220.50
204	220.50	220.50	220.50
205	220.50	220.50	220.50
206	220.50	220.50	220.50
207	220.50	220.50	220.50
208	220.50	220.50	220.50
209	220.50	220.50	220.50
210	220.50	220.50	220.50
211	220.50	220.50	220.50
212	220.50	220.50	220.50
213	220.50	220.50	220.50
214	220.50	220.50	220.50
215	220.50	220.50	220.50
216	220.50	220.50	220.50
217	220.50	220.50	220.50
218	220.50	220.50	220.50

PROPOSED LEGEND	
1.0	Proposed Road
2.0	Proposed Footpath
3.0	Proposed Drainage
4.0	Proposed Utility
5.0	Proposed Boundary
6.0	Proposed Structure
7.0	Proposed Wall
8.0	Proposed Gate
9.0	Proposed Fence
10.0	Proposed Sign
11.0	Proposed Tree
12.0	Proposed Plant

PROJECT TITLE: Road layout for the roundabout at Jhirka, National Highway 100, Haryana.

SCALE: Horizontal: 1:500, Vertical: 1:200

DATE: 10/10/2024

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

APPROVED BY: [Signature]

PROJECT NO.: 100/JH/2024/01

CLIENT: National Highways Authority of India

CONSULTANT: Chalanya Projects Consultancy Pvt. Ltd.

ADDRESS: G-8, 2ND FLOOR, R.K. TOWER P-07 NO. 27-22, SECTOR-4, VAISHALI, SHARDAHAD, DELHI-110017.

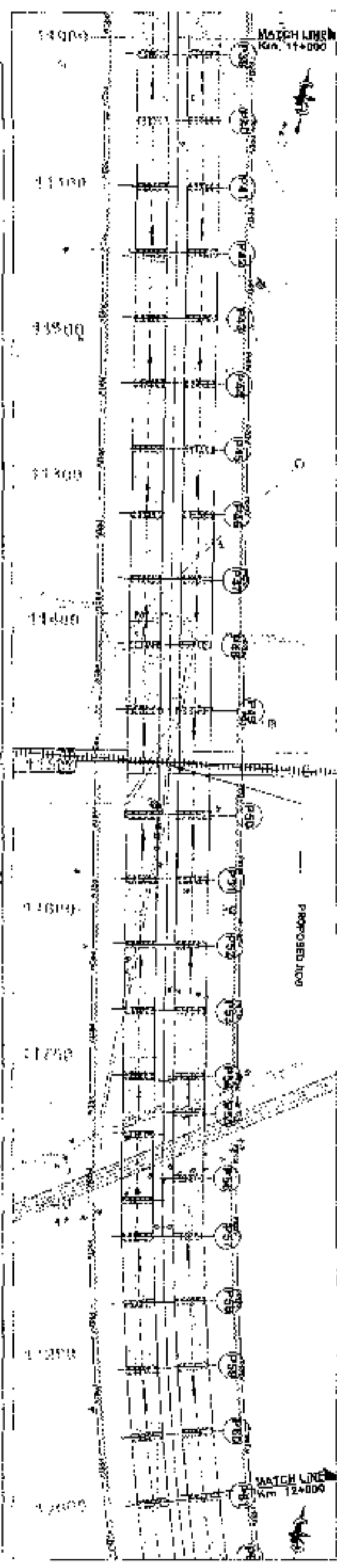
PHONE: 91-8860223419, 4100492, FAX: 91-88604110077

WEBSITE: www.chalanya.com

REGISTRATION NO.: [Stamp]

TO SOHNA

TO PIRAZPUR, JHARKHA



Stationing	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road	Proposed Road
700																			
200																			
100																			
0																			
-100																			
-200																			
-300																			
-400																			
-500																			
-600																			
-700																			
-800																			
-900																			
-1000																			
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-1600																			
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-2100																			
-2200																			
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-2500																			
-2600																			
-2700																			
-2800																			
-2900																			
-3000																			
-3100																			
-3200																			
-3300																			
-3400																			
-3500																			
-3600																			
-3700																			
-3800																			
-3900																			
-4000																			
-4100																			
-4200																			
-4300																			
-4400																			
-4500																			
-4600																			
-4700																			
-4800																			
-4900																			
-5000																			
-5100																			
-5200																			
-5300																			
-5400																			
-5500																			
-5600																			
-5700																			
-5800																			
-5900																			
-6000																			

PROPOSED LEGEND

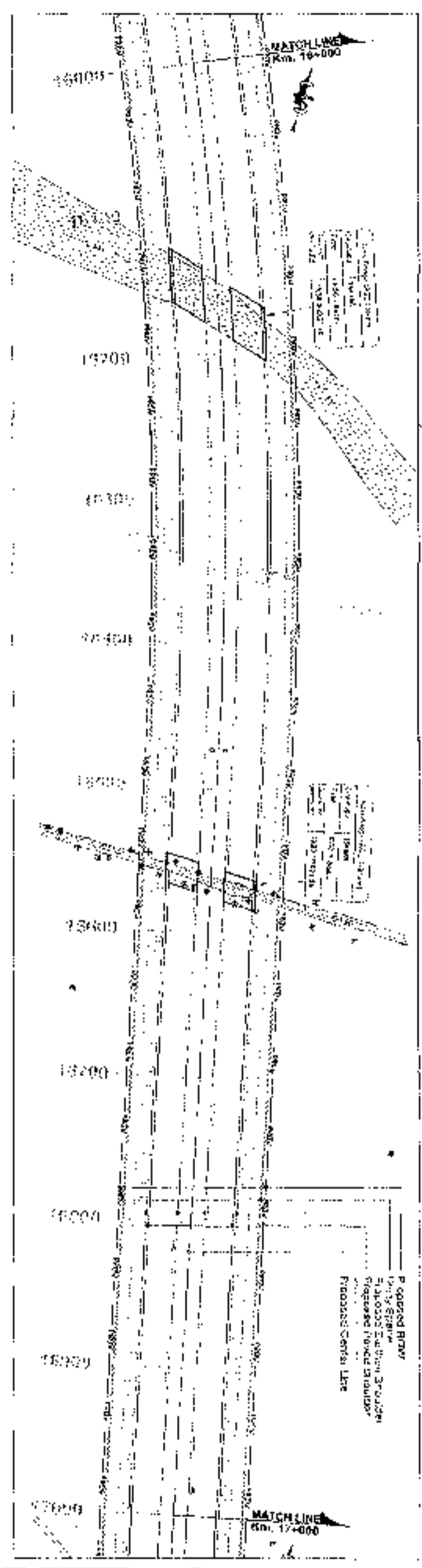
- Proposed Road
- Proposed Drain
- Proposed Footpath
- Proposed Utility
- Proposed Structure
- Proposed Landmark
- Proposed Boundary
- Proposed Elevation
- Proposed Slope
- Proposed Curve
- Proposed Stationing
- Proposed Scale
- Proposed Orientation
- Proposed Date
- Proposed Author
- Proposed Reviewer
- Proposed Approver
- Proposed Signatory
- Proposed Seal
- Proposed Stamp
- Proposed Markings
- Proposed Symbols
- Proposed Colors
- Proposed Text
- Proposed Lines
- Proposed Shapes
- Proposed Patterns
- Proposed Hatching
- Proposed Dotted Lines
- Proposed Solid Lines
- Proposed Dashed Lines
- Proposed Dash-dot Lines
- Proposed Double Lines
- Proposed Single Lines
- Proposed Thin Lines
- Proposed Thick Lines
- Proposed Light Lines
- Proposed Dark Lines
- Proposed Gray Lines
- Proposed Black Lines
- Proposed White Lines
- Proposed Colored Lines
- Proposed Patterned Lines
- Proposed Dotted Patterns
- Proposed Solid Patterns
- Proposed Dashed Patterns
- Proposed Dash-dot Patterns
- Proposed Double Patterns
- Proposed Single Patterns
- Proposed Thin Patterns
- Proposed Thick Patterns
- Proposed Light Patterns
- Proposed Dark Patterns
- Proposed Gray Patterns
- Proposed Black Patterns
- Proposed Colored Patterns
- Proposed Patterned Patterns
- Proposed Dotted Colors
- Proposed Solid Colors
- Proposed Dashed Colors
- Proposed Dash-dot Colors
- Proposed Double Colors
- Proposed Single Colors
- Proposed Thin Colors
- Proposed Thick Colors
- Proposed Light Colors
- Proposed Dark Colors
- Proposed Gray Colors
- Proposed Black Colors
- Proposed Colored Colors
- Proposed Patterned Colors
- Proposed Dotted Shapes
- Proposed Solid Shapes
- Proposed Dashed Shapes
- Proposed Dash-dot Shapes
- Proposed Double Shapes
- Proposed Single Shapes
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- Proposed Colored Shapes
- Proposed Patterned Shapes
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- Proposed Thin Lines
- Proposed Thick Lines
- Proposed Light Lines
- Proposed Dark Lines
- Proposed Gray Lines
- Proposed Black Lines
- Proposed Colored Lines
- Proposed Patterned Lines

EXISTING LEGEND

- Existing Road
- Existing Drain
- Existing Footpath
- Existing Utility
- Existing Structure
- Existing Landmark
- Existing Boundary
- Existing Elevation
- Existing Slope
- Existing Curve
- Existing Stationing
- Existing Scale
- Existing Orientation
- Existing Date
- Existing Author
- Existing Reviewer
- Existing Approver
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- Existing Hatching
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- Existing Thick Colors
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- Existing Patterned Colors
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- Existing Dash-dot Lines
- Existing Double Lines
- Existing Single Lines
- Existing Thin Lines
- Existing Thick Lines
- Existing Light Lines
- Existing Dark Lines
- Existing Gray Lines
- Existing Black Lines
- Existing Colored Lines
- Existing Patterned Lines

TO SOHNA

TO FIROZPUR JIRKA



PROPOSED LEGEND	
PROPOSED ROAD	---
PROPOSED DRAINAGE CHANNEL	---
PROPOSED CENTER LINE	---
EXISTING ROAD	---
EXISTING DRAINAGE CHANNEL	---
EXISTING CENTER LINE	---
PROPOSED GRADE	---
PROPOSED ELEVATION	---
PROPOSED ROAD WIDTH	---
PROPOSED ROAD LENGTH	---
PROPOSED ROAD AREA	---
PROPOSED ROAD VOLUME	---
PROPOSED ROAD COST	---
PROPOSED ROAD BENEFIT	---
PROPOSED ROAD IRRIGATION	---
PROPOSED ROAD FLOODING	---
PROPOSED ROAD POLLUTION	---
PROPOSED ROAD NOISE	---
PROPOSED ROAD AIR QUALITY	---
PROPOSED ROAD CLIMATE	---
PROPOSED ROAD SOIL	---
PROPOSED ROAD WATER	---
PROPOSED ROAD ENERGY	---
PROPOSED ROAD MATERIALS	---
PROPOSED ROAD LABOR	---
PROPOSED ROAD EQUIPMENT	---
PROPOSED ROAD SAFETY	---
PROPOSED ROAD SECURITY	---
PROPOSED ROAD HEALTH	---
PROPOSED ROAD EDUCATION	---
PROPOSED ROAD RECREATION	---
PROPOSED ROAD CULTURE	---
PROPOSED ROAD HISTORY	---
PROPOSED ROAD FUTURE	---

Dakota	190	195	200	205	210
PROPOSED ROAD	190.00	195.00	200.00	205.00	210.00
PROPOSED DRAINAGE CHANNEL	190.00	195.00	200.00	205.00	210.00
PROPOSED CENTER LINE	190.00	195.00	200.00	205.00	210.00
EXISTING ROAD	190.00	195.00	200.00	205.00	210.00
EXISTING DRAINAGE CHANNEL	190.00	195.00	200.00	205.00	210.00
EXISTING CENTER LINE	190.00	195.00	200.00	205.00	210.00
PROPOSED GRADE	190.00	195.00	200.00	205.00	210.00
PROPOSED ELEVATION	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD WIDTH	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD LENGTH	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD AREA	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD VOLUME	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD COST	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD BENEFIT	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD IRRIGATION	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD FLOODING	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD POLLUTION	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD NOISE	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD AIR QUALITY	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD CLIMATE	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD SOIL	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD WATER	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD ENERGY	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD MATERIALS	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD LABOR	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD EQUIPMENT	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD SAFETY	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD SECURITY	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD HEALTH	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD EDUCATION	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD RECREATION	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD CULTURE	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD HISTORY	190.00	195.00	200.00	205.00	210.00
PROPOSED ROAD FUTURE	190.00	195.00	200.00	205.00	210.00

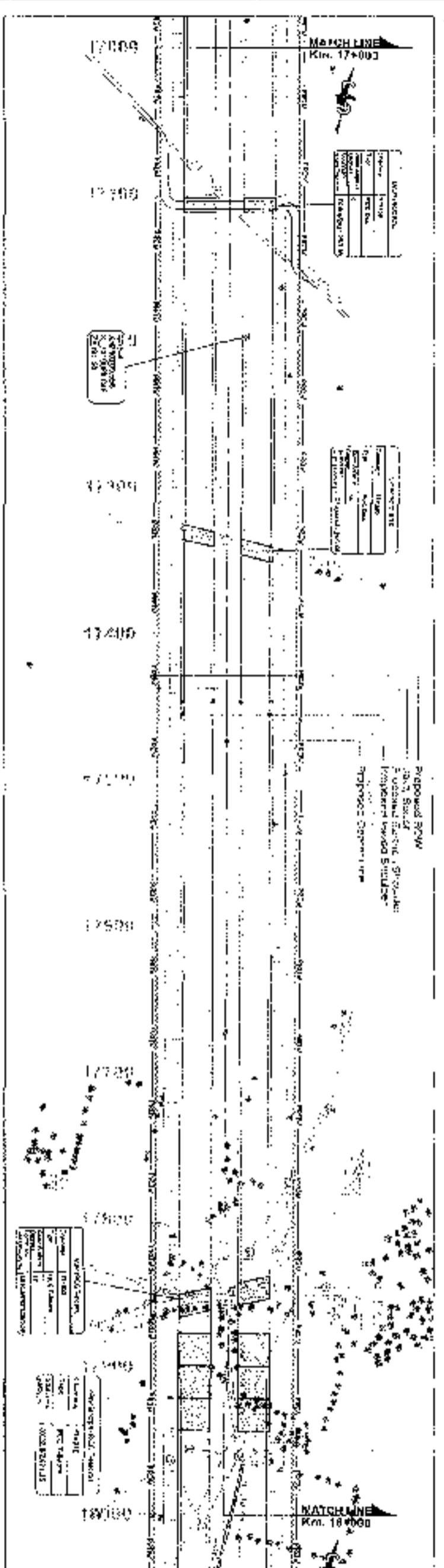
CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. 5/5, 2ND FLOOR, 6X-TOWER ROAD NO. 21-22, SECTOR-4, WATSHALL SHIKHARAD, P.O. 0120-5123419, 112042, FAX: 0120-4110722

PROJECT: Consultancy Service for the Preparation for Feasibility Report for development of Economic Corridor, Inner Corridor, and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lucknow-Bikaner-1) (Section - Sohna - Firozpur - Jirka section of Delhi-Meerut Expressway) (Fig. 1, Ch. 1-400 to 18+451)

DATE: 15/08/2024

SCALE: Vertical - 1:500

DESIGNER: TEAM 6 PROJECT (MKS-1) 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000



Station	Proposed Road Level	Proposed Levelled Shoulder	Ground Level	Super Elevation
210	186.22	186.22	186.22	0.00
209	186.22	186.22	186.22	0.00
208	186.22	186.22	186.22	0.00
207	186.22	186.22	186.22	0.00
206	186.22	186.22	186.22	0.00
205	186.22	186.22	186.22	0.00
204	186.22	186.22	186.22	0.00
203	186.22	186.22	186.22	0.00
202	186.22	186.22	186.22	0.00
201	186.22	186.22	186.22	0.00
200	186.22	186.22	186.22	0.00
199	186.22	186.22	186.22	0.00
198	186.22	186.22	186.22	0.00
197	186.22	186.22	186.22	0.00
196	186.22	186.22	186.22	0.00
195	186.22	186.22	186.22	0.00
194	186.22	186.22	186.22	0.00
193	186.22	186.22	186.22	0.00
192	186.22	186.22	186.22	0.00
191	186.22	186.22	186.22	0.00
190	186.22	186.22	186.22	0.00
189	186.22	186.22	186.22	0.00
188	186.22	186.22	186.22	0.00
187	186.22	186.22	186.22	0.00
186	186.22	186.22	186.22	0.00
185	186.22	186.22	186.22	0.00
184	186.22	186.22	186.22	0.00
183	186.22	186.22	186.22	0.00
182	186.22	186.22	186.22	0.00
181	186.22	186.22	186.22	0.00
180	186.22	186.22	186.22	0.00

Station	Proposed Road Level	Proposed Levelled Shoulder	Ground Level	Super Elevation
179	186.22	186.22	186.22	0.00
178	186.22	186.22	186.22	0.00
177	186.22	186.22	186.22	0.00
176	186.22	186.22	186.22	0.00
175	186.22	186.22	186.22	0.00
174	186.22	186.22	186.22	0.00
173	186.22	186.22	186.22	0.00
172	186.22	186.22	186.22	0.00
171	186.22	186.22	186.22	0.00
170	186.22	186.22	186.22	0.00
169	186.22	186.22	186.22	0.00
168	186.22	186.22	186.22	0.00
167	186.22	186.22	186.22	0.00
166	186.22	186.22	186.22	0.00
165	186.22	186.22	186.22	0.00
164	186.22	186.22	186.22	0.00
163	186.22	186.22	186.22	0.00
162	186.22	186.22	186.22	0.00
161	186.22	186.22	186.22	0.00
160	186.22	186.22	186.22	0.00
159	186.22	186.22	186.22	0.00
158	186.22	186.22	186.22	0.00
157	186.22	186.22	186.22	0.00
156	186.22	186.22	186.22	0.00
155	186.22	186.22	186.22	0.00
154	186.22	186.22	186.22	0.00
153	186.22	186.22	186.22	0.00
152	186.22	186.22	186.22	0.00
151	186.22	186.22	186.22	0.00
150	186.22	186.22	186.22	0.00
149	186.22	186.22	186.22	0.00
148	186.22	186.22	186.22	0.00
147	186.22	186.22	186.22	0.00
146	186.22	186.22	186.22	0.00
145	186.22	186.22	186.22	0.00
144	186.22	186.22	186.22	0.00
143	186.22	186.22	186.22	0.00
142	186.22	186.22	186.22	0.00
141	186.22	186.22	186.22	0.00
140	186.22	186.22	186.22	0.00

PROPOSED LEGEND

- Proposed Road
- Proposed Levelled Shoulder
- Proposed Drainage

EXISTING LEGEND

- Existing Road
- Existing Drainage
- Existing Structure
- Existing Boundary
- Existing Survey
- Existing Utility
- Existing Tree
- Existing Other

CLIENT: National Highways Authority of India

CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd.

PROJECT: Consultancy Services for the Preparation of Feasibility Report for development of Economic Corridor, Inter Corridor and Feeder Routes to improve the connectivity of the region.

SCALE: Horizontal - 1:2000, Vertical - 200

DATE OF DRAWING: 28/08/2024

PROJECT NO.: CHA/11/2024

PROJECT TITLE: ROAD NO. 100

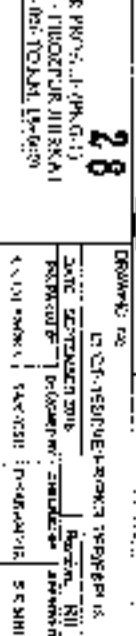
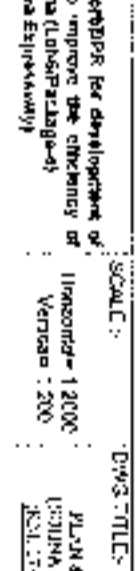
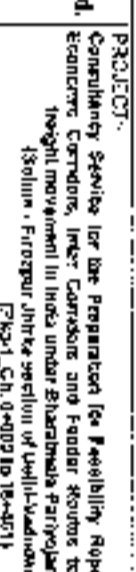
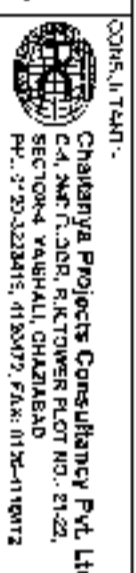
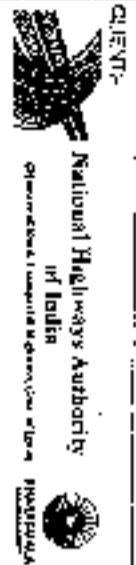
PROJECT LOCATION: ROAD NO. 100, DISTRICT, STATE

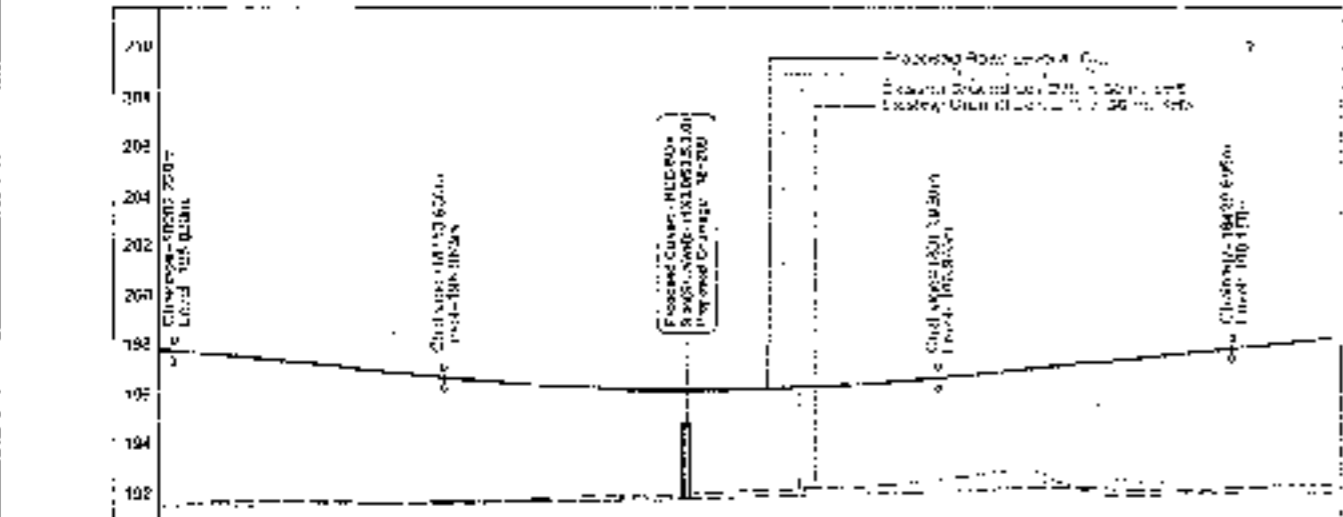
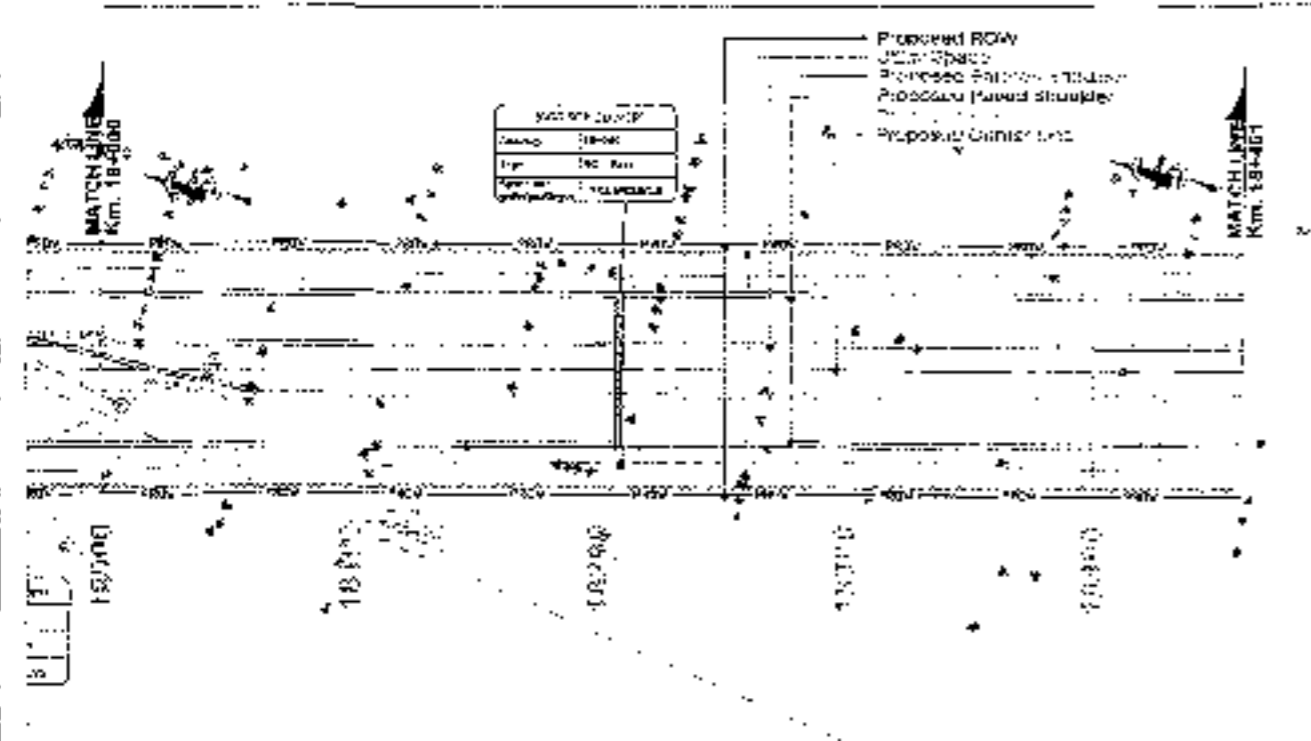
DRAWN BY: [Signature]

CHECKED BY: [Signature]

APPROVED BY: [Signature]

SCALE: 28





Station	Proposed Road Level	Existing Ground Level	Proposed Vertical Curve Data
18+000	194.20	191.50	+0.30 +0.40 +0.50 +0.60 +0.70 +0.80 +0.90 +1.00 +1.10 +1.20
18+200	195.50	192.80	
18+400	197.00	194.20	
18+600	198.50	195.80	
18+800	200.00	197.50	
19+000	201.50	199.30	
19+200	203.00	201.20	
19+400	204.50	203.20	
19+600	206.00	205.30	
19+800	207.50	207.50	
20+000	209.00	209.80	-0.30 -0.40 -0.50 -0.60 -0.70 -0.80 -0.90 -1.00 -1.10 -1.20
20+200	210.50	212.20	
20+400	212.00	214.80	
20+600	213.50	217.50	
20+800	215.00	220.30	
21+000	216.50	223.20	
21+200	218.00	226.20	
21+400	219.50	229.30	
21+600	221.00	232.50	
21+800	222.50	235.80	
22+000	224.00	239.20	

PROPOSED LEGEND

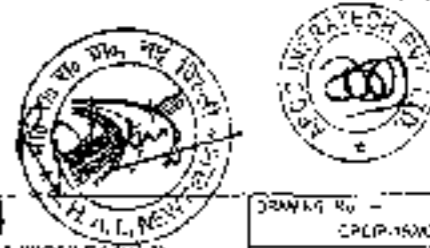
HP LINE	
PROP. CL.	
MATCH	
BOOK STOP	
PROP. ST.	
PROP. SW.	
UTILITY POLES	
PROP. PA.	
PROP. CH.	
MATCH LINE	

EXISTING LEGEND

PROCT	
GRADE - ROAD	
BOUNDARY WALL	
BOUNDARY WALL	
CENTER LINE	
DRAIN	
DRAIN	
ELECTRIC POLE	
EXISTING ROAD	
DATE	
ROAD NAME	
TRIP	
TEMPERATURE	
WIND SPEED	
WIND DIRECTION	
WIND VELOCITY	
RAILWAY TRACK	
LOW WALL	
HEIGHT MARK	
TRELLIS POLE	
TEMPLE	
TRANSFORMER	
TOWER	
TOUR	
WAREHOUSE	
TRIP	

CLIENT: National Highways Authority of India
 CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd.
 PROJECT: Consultancy Services for the Preparation for Feasibility Report (DFR) for development of Economic Corridors, Inter-Corridors and Feeder Routes to improve the connectivity of Haryana in India under Bharatmala Pariyojana (Lot-4/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodra Expressway)
 (Pkg-1, Ch. 0+000 to 18+451)

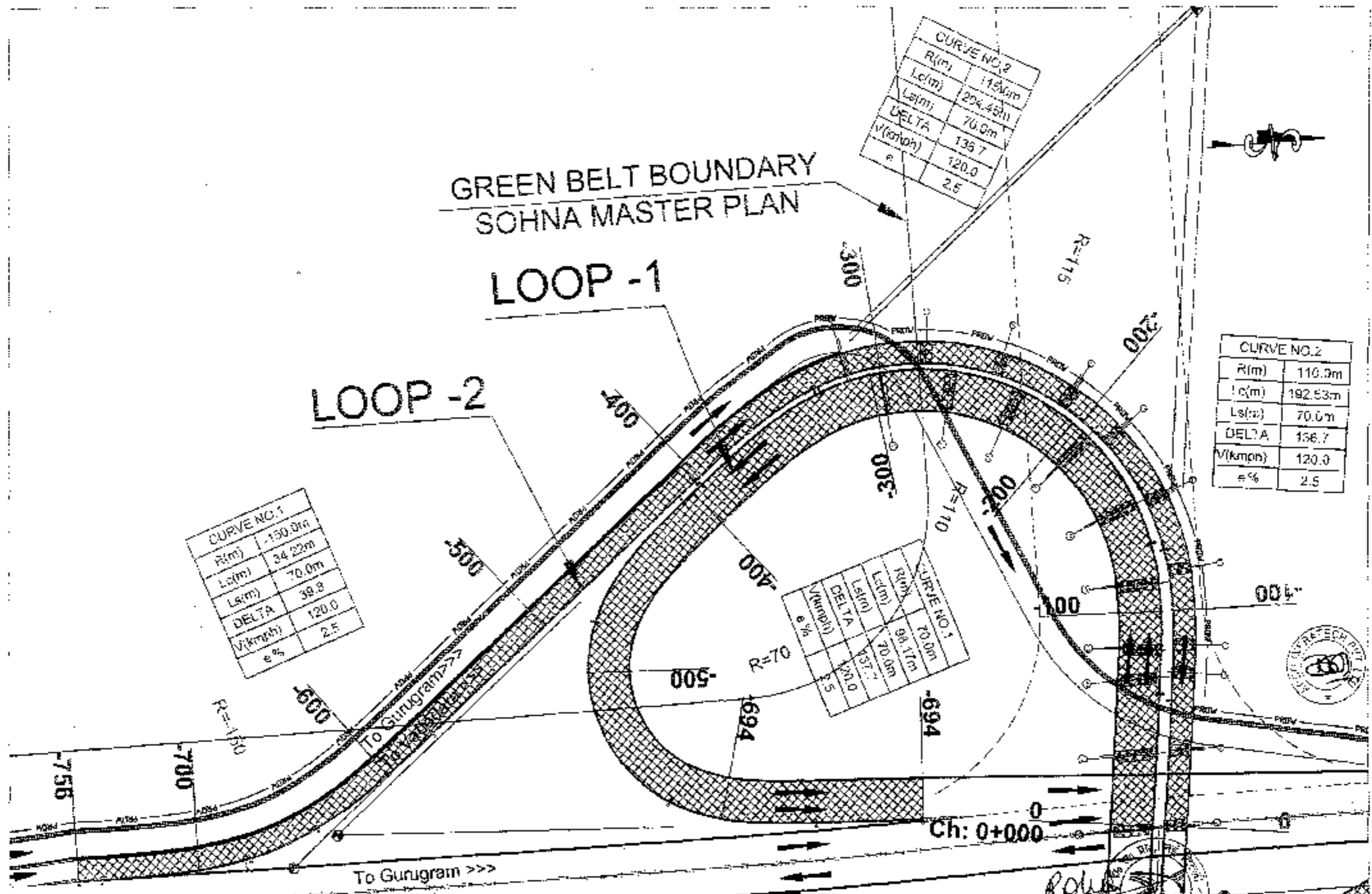
SCALE: Horizontal = 1:5000, Vertical = 1:200
 DRAWING TITLE: PLAN & PROFILE (S&P-1) (SOHNA - FIROZPUR JHIRKA) (L.N. 10/2023/K.M. 18-21)
 DRAWING NO.: CRP/1600/VEH/1000/10000/1000/1000
 DATE: SEPTEMBER 2023
 PROJECT: CRP/1600/VEH/1000/1000/1000/1000
 REVISION: 01



GREEN BELT BOUNDARY SOHNA MASTER PLAN

LOOP - 1

LOOP - 2

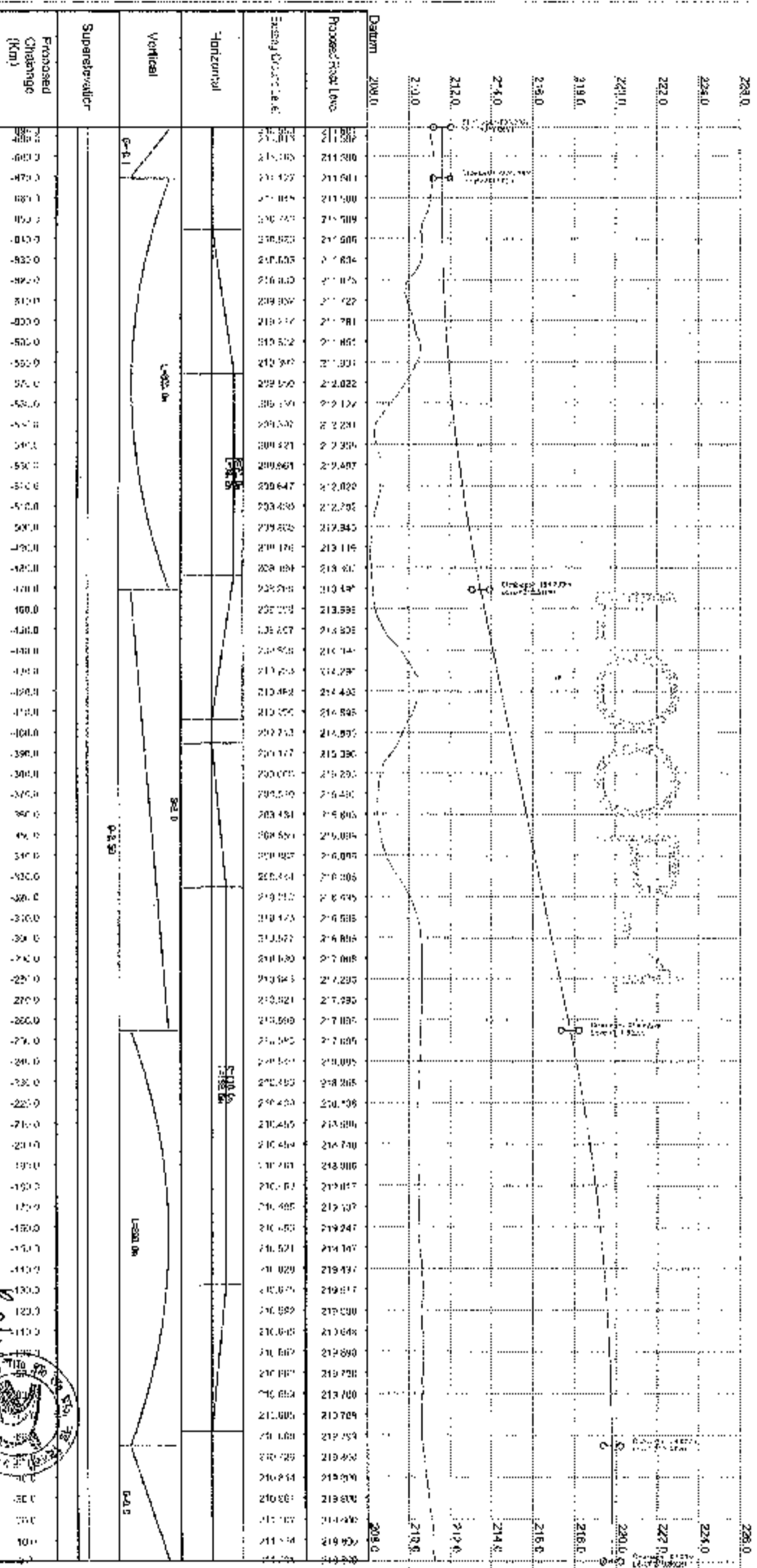


CURVE NO. 2	
R(m)	115.0m
Lc(m)	294.43m
Ls(m)	70.0m
DELTA	135.7
V(kmph)	120.0
e%	2.5

CURVE NO. 2	
R(m)	110.0m
Lc(m)	192.53m
Ls(m)	70.0m
DELTA	156.7
V(kmph)	120.0
e%	2.5

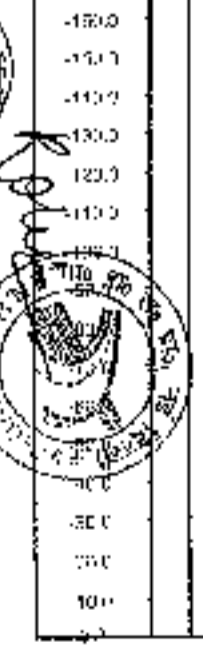
CURVE NO. 1	
R(m)	150.0m
Lc(m)	34.22m
Ls(m)	70.0m
DELTA	39.9
V(kmph)	120.0
e%	2.5

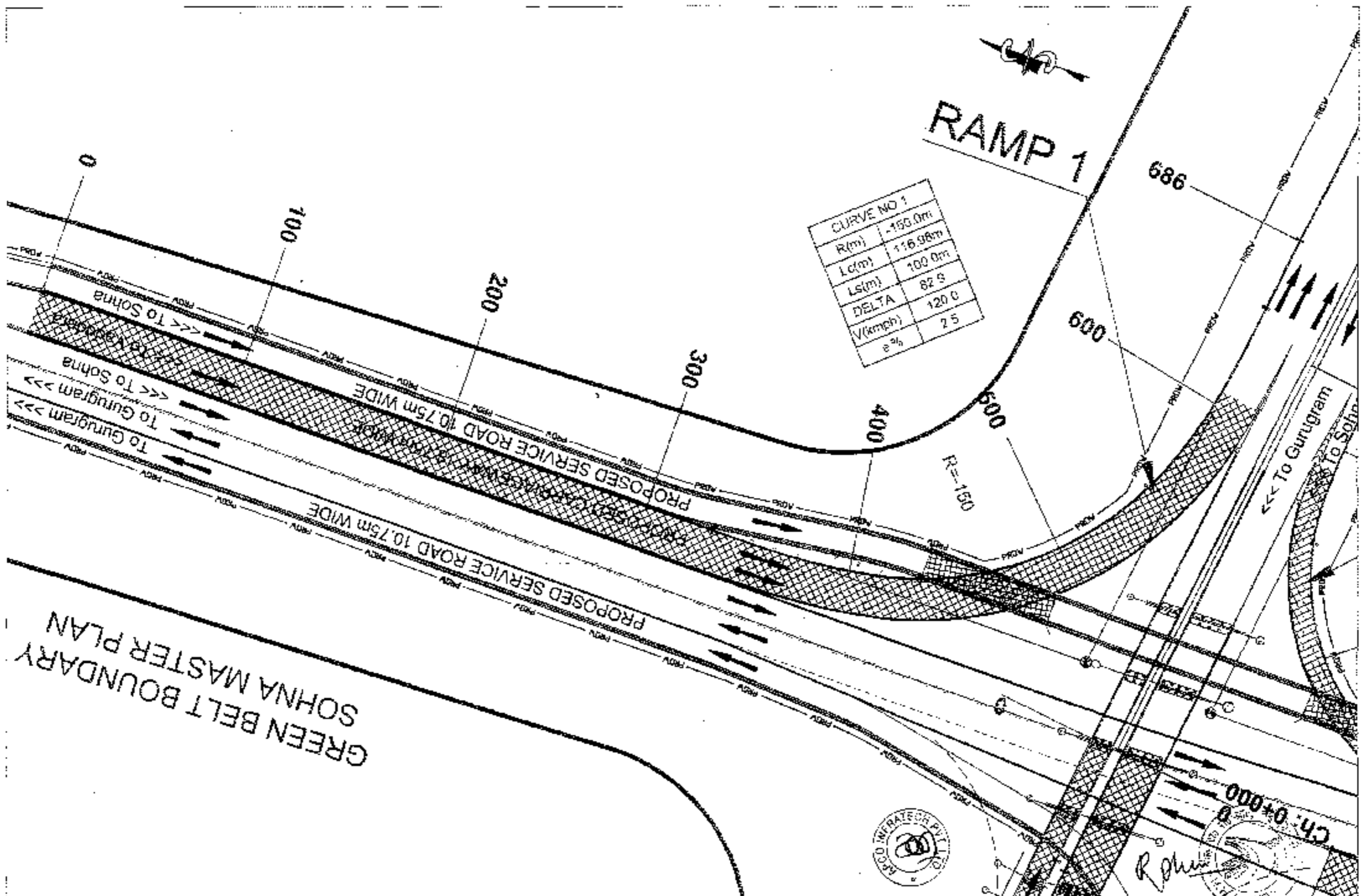
CURVE NO. 1	
R(m)	70.0m
Lc(m)	88.11m
Ls(m)	70.0m
DELTA	43.7
V(kmph)	120.0
e%	2.5

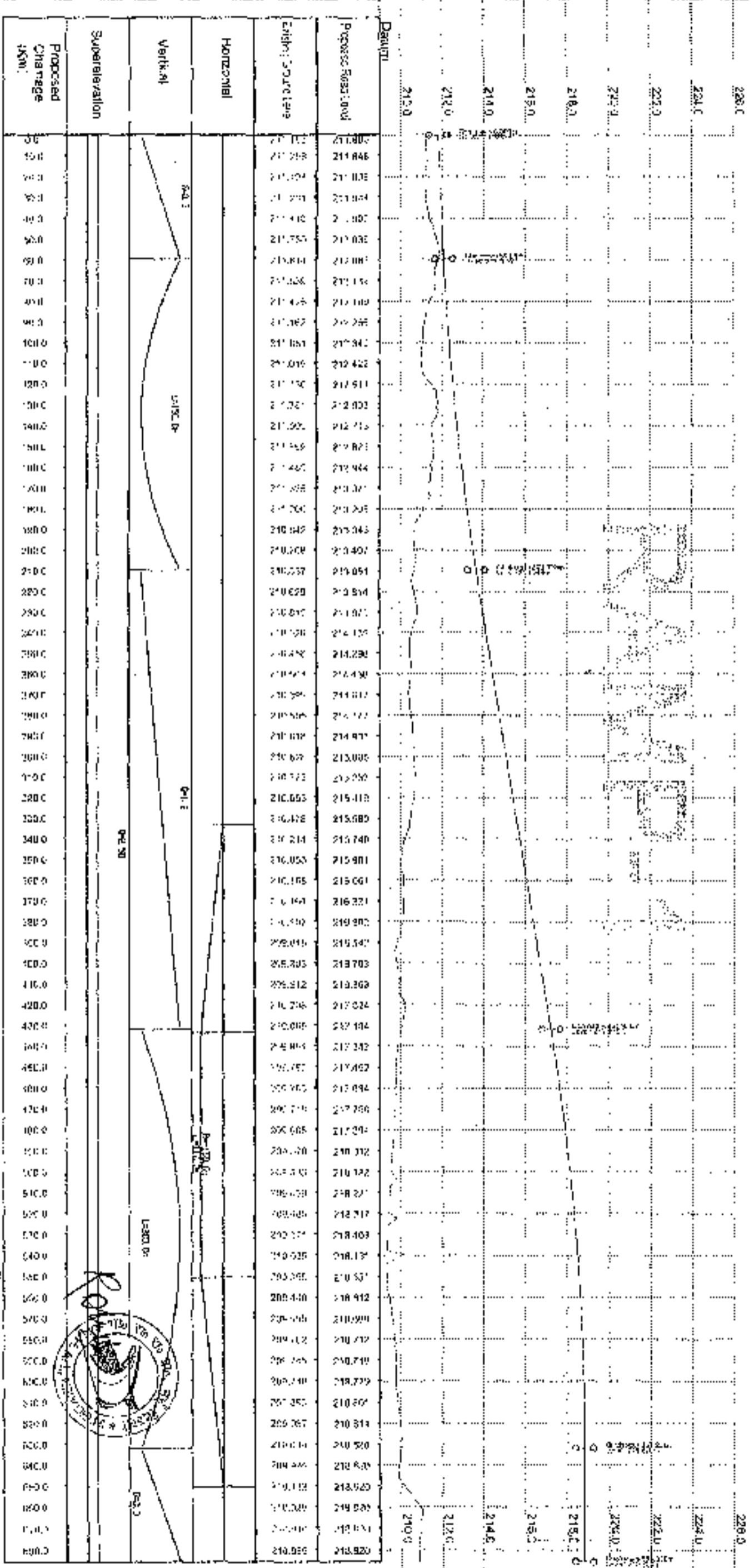


CLIENT: National Highways Authority of India
CONSULTANT: Chalantya Projects Consultancy Pvt. Ltd.
PROJECT: Consultancy Service for the Preparation for Feasibility Report for development of Economic Corridor, Inter Corridor and Feeder Road to improve the efficiency of the Government in India under Bharatmala Parikraman (Under Bharatmala) (Phase - I) under Jharkhand section of Chhatisgarh Expressway (Phase-1) Ch. 0+00 to 18+450

SCALE: 1:2000
DATE: 31/07/2024
PROJECT NO.: CH/2024/001
DRAWING NO.: 11/001







Station	Proposed Road Elevation (ft)	Existing Source Lane Elevation (ft)	Horizontal Elevation (ft)	Vertical Elevation (ft)	Subelevation (ft)
2120+00	2118.00	2118.00	2118.00	2118.00	2118.00
2121+00	2118.46	2118.46	2118.46	2118.46	2118.46
2122+00	2118.92	2118.92	2118.92	2118.92	2118.92
2123+00	2119.38	2119.38	2119.38	2119.38	2119.38
2124+00	2119.84	2119.84	2119.84	2119.84	2119.84
2125+00	2120.30	2120.30	2120.30	2120.30	2120.30
2126+00	2120.76	2120.76	2120.76	2120.76	2120.76
2127+00	2121.22	2121.22	2121.22	2121.22	2121.22
2128+00	2121.68	2121.68	2121.68	2121.68	2121.68
2129+00	2122.14	2122.14	2122.14	2122.14	2122.14
2130+00	2122.60	2122.60	2122.60	2122.60	2122.60
2131+00	2123.06	2123.06	2123.06	2123.06	2123.06
2132+00	2123.52	2123.52	2123.52	2123.52	2123.52
2133+00	2123.98	2123.98	2123.98	2123.98	2123.98
2134+00	2124.44	2124.44	2124.44	2124.44	2124.44
2135+00	2124.90	2124.90	2124.90	2124.90	2124.90
2136+00	2125.36	2125.36	2125.36	2125.36	2125.36
2137+00	2125.82	2125.82	2125.82	2125.82	2125.82
2138+00	2126.28	2126.28	2126.28	2126.28	2126.28
2139+00	2126.74	2126.74	2126.74	2126.74	2126.74
2140+00	2127.20	2127.20	2127.20	2127.20	2127.20
2141+00	2127.66	2127.66	2127.66	2127.66	2127.66
2142+00	2128.12	2128.12	2128.12	2128.12	2128.12
2143+00	2128.58	2128.58	2128.58	2128.58	2128.58
2144+00	2129.04	2129.04	2129.04	2129.04	2129.04
2145+00	2129.50	2129.50	2129.50	2129.50	2129.50
2146+00	2129.96	2129.96	2129.96	2129.96	2129.96
2147+00	2130.42	2130.42	2130.42	2130.42	2130.42
2148+00	2130.88	2130.88	2130.88	2130.88	2130.88
2149+00	2131.34	2131.34	2131.34	2131.34	2131.34
2150+00	2131.80	2131.80	2131.80	2131.80	2131.80
2151+00	2132.26	2132.26	2132.26	2132.26	2132.26
2152+00	2132.72	2132.72	2132.72	2132.72	2132.72
2153+00	2133.18	2133.18	2133.18	2133.18	2133.18
2154+00	2133.64	2133.64	2133.64	2133.64	2133.64
2155+00	2134.10	2134.10	2134.10	2134.10	2134.10
2156+00	2134.56	2134.56	2134.56	2134.56	2134.56
2157+00	2135.02	2135.02	2135.02	2135.02	2135.02
2158+00	2135.48	2135.48	2135.48	2135.48	2135.48
2159+00	2135.94	2135.94	2135.94	2135.94	2135.94
2160+00	2136.40	2136.40	2136.40	2136.40	2136.40
2161+00	2136.86	2136.86	2136.86	2136.86	2136.86
2162+00	2137.32	2137.32	2137.32	2137.32	2137.32
2163+00	2137.78	2137.78	2137.78	2137.78	2137.78
2164+00	2138.24	2138.24	2138.24	2138.24	2138.24
2165+00	2138.70	2138.70	2138.70	2138.70	2138.70
2166+00	2139.16	2139.16	2139.16	2139.16	2139.16
2167+00	2139.62	2139.62	2139.62	2139.62	2139.62
2168+00	2140.08	2140.08	2140.08	2140.08	2140.08
2169+00	2140.54	2140.54	2140.54	2140.54	2140.54
2170+00	2141.00	2141.00	2141.00	2141.00	2141.00
2171+00	2141.46	2141.46	2141.46	2141.46	2141.46
2172+00	2141.92	2141.92	2141.92	2141.92	2141.92
2173+00	2142.38	2142.38	2142.38	2142.38	2142.38
2174+00	2142.84	2142.84	2142.84	2142.84	2142.84
2175+00	2143.30	2143.30	2143.30	2143.30	2143.30
2176+00	2143.76	2143.76	2143.76	2143.76	2143.76
2177+00	2144.22	2144.22	2144.22	2144.22	2144.22
2178+00	2144.68	2144.68	2144.68	2144.68	2144.68
2179+00	2145.14	2145.14	2145.14	2145.14	2145.14
2180+00	2145.60	2145.60	2145.60	2145.60	2145.60
2181+00	2146.06	2146.06	2146.06	2146.06	2146.06
2182+00	2146.52	2146.52	2146.52	2146.52	2146.52
2183+00	2146.98	2146.98	2146.98	2146.98	2146.98
2184+00	2147.44	2147.44	2147.44	2147.44	2147.44
2185+00	2147.90	2147.90	2147.90	2147.90	2147.90

CLIENT: National Highways Authority of India
 National Highways Authority of India
 Plot No. 10, Connaught Place, New Delhi - 110028

PROJECT: Chandigarh Projects Consultancy Pvt. Ltd.
 Chandigarh Projects Consultancy Pvt. Ltd.
 Plot No. 10, Connaught Place, New Delhi - 110028

SCALE: 1:500
 1:500

DATE: 30/06/2015
 30/06/2015

DESIGNED BY: S. S. SINGH
 S. S. SINGH

CHECKED BY: S. S. SINGH
 S. S. SINGH

APPROVED BY: S. S. SINGH
 S. S. SINGH

GREEN BELT BOUNDARY SOHNA MASTER PLAN

LOOP -1

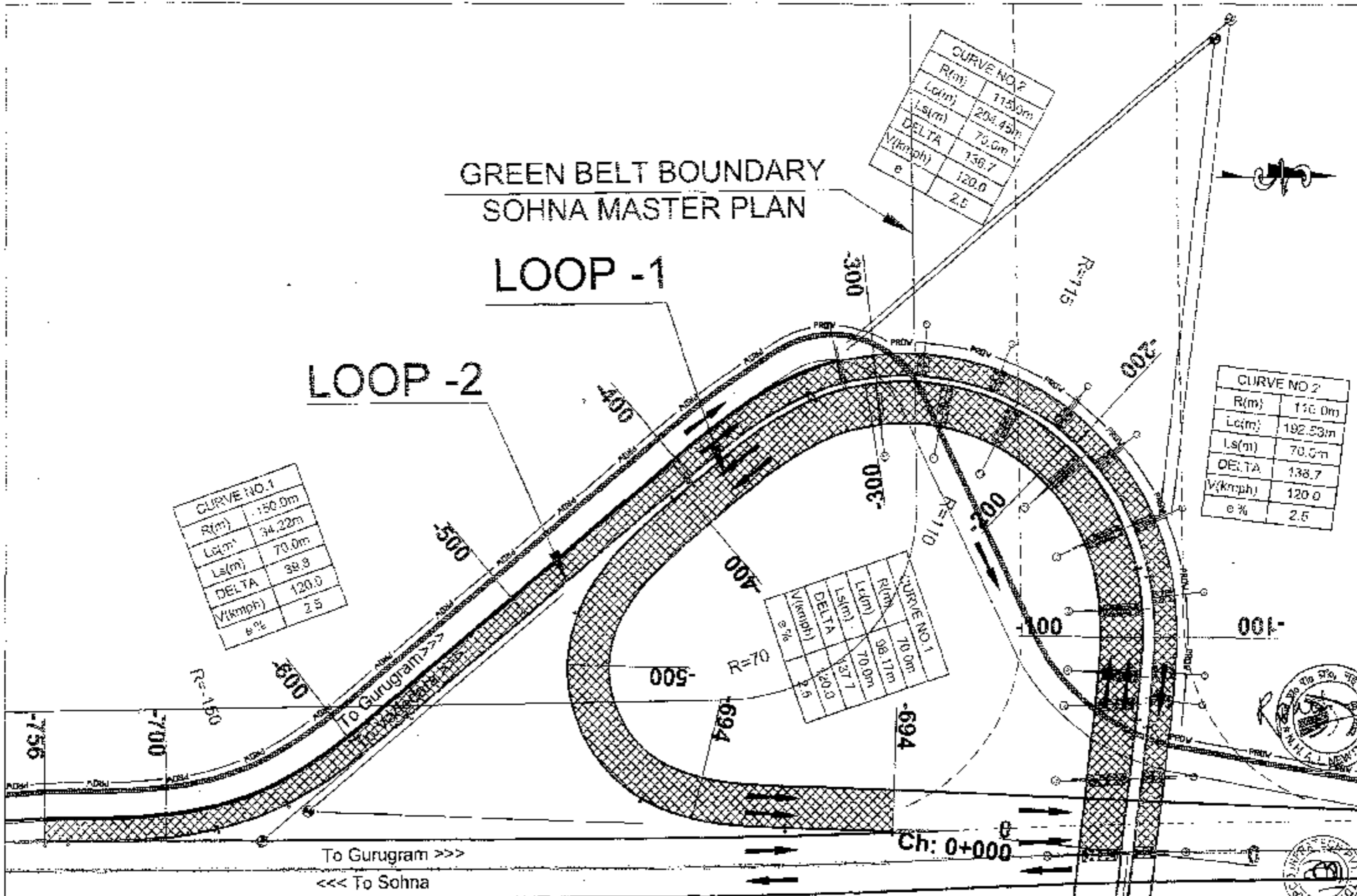
LOOP -2

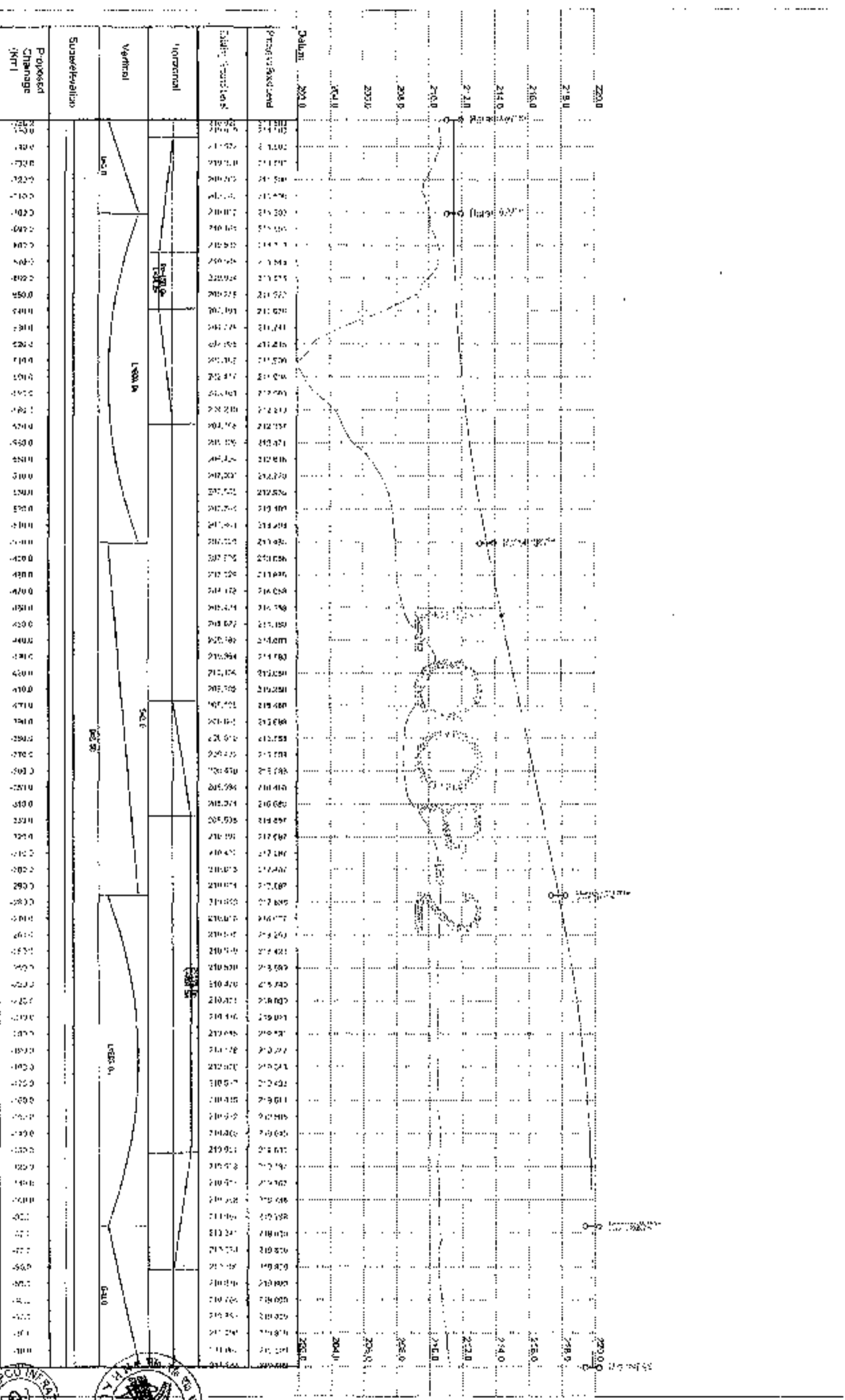
CURVE NO.2	
R(m)	1150m
Lc(m)	209.45m
Ls(m)	70.0m
DELTA	138.7
V(kmph)	120.0
e	2.5

CURVE NO.2	
R(m)	1150m
Lc(m)	192.53m
Ls(m)	70.0m
DELTA	138.7
V(kmph)	120.0
e %	2.5

CURVE NO.1	
R(m)	150.0m
Lc(m)	34.22m
Ls(m)	70.0m
DELTA	38.8
V(kmph)	120.0
e %	2.5

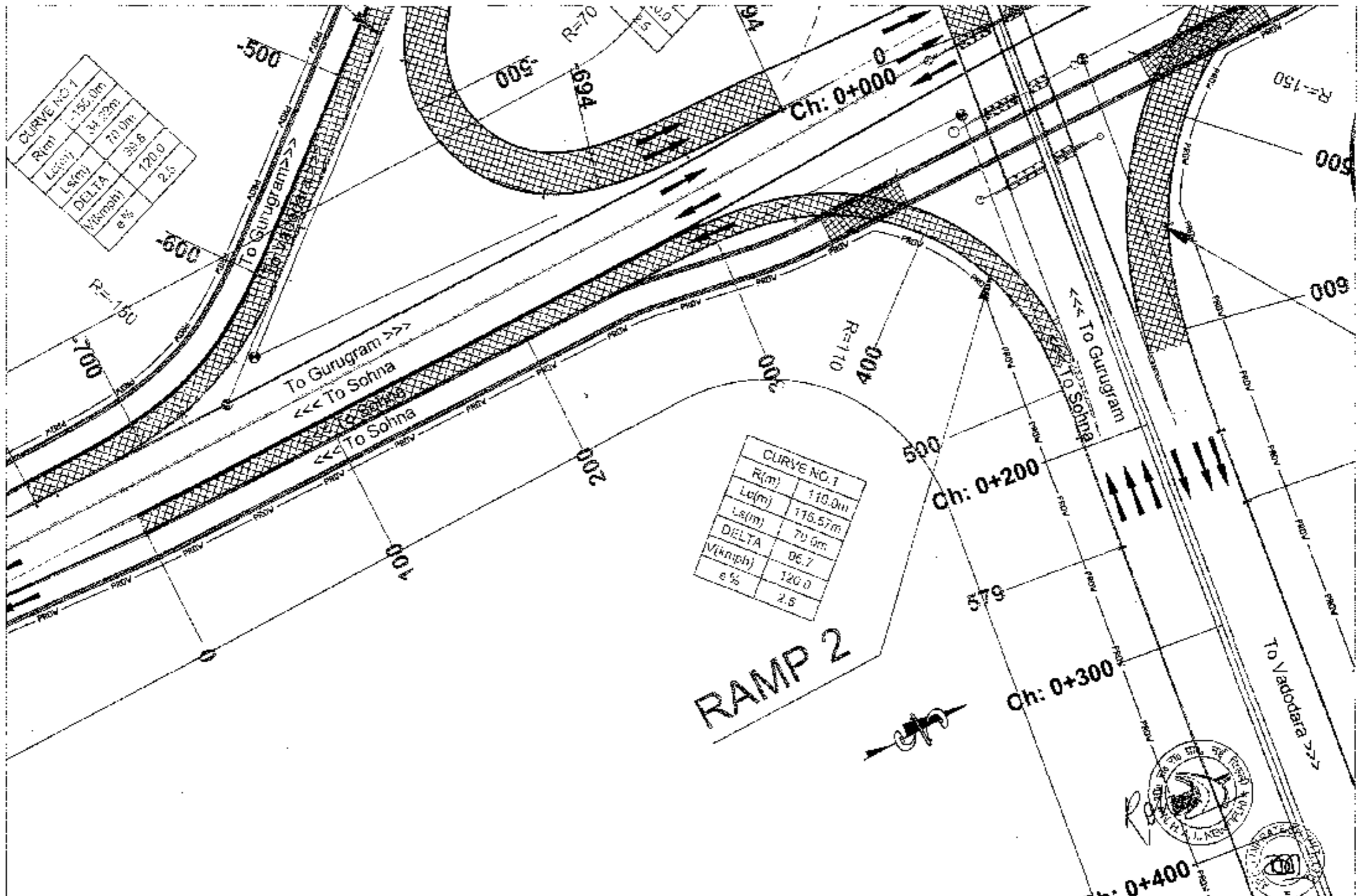
CURVE NO.1	
R(m)	70.0m
Lc(m)	98.17m
Ls(m)	10.00m
DELTA	20.0
V(kmph)	120.0
e %	2.5

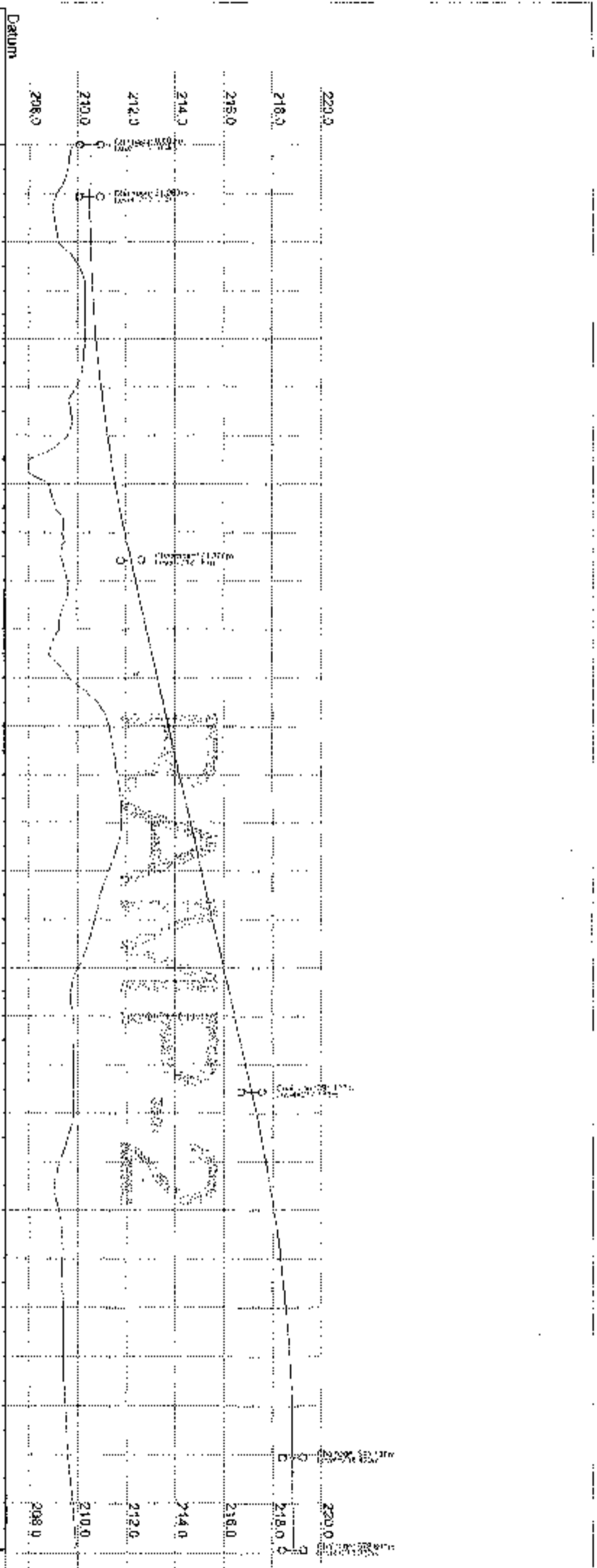




CLIENT: National Highways Authority of India
PROJECT: Charanya Project Consultancy Pvt. Ltd.
SCALE: 1:2000
DRAWN BY: [Name]
CHECKED BY: [Name]
DATE: [Date]







Distance (Km)	Existing Ground Level	Proposed Road Level
0.0	217.390	217.390
10.0	217.390	217.390
20.0	217.390	217.390
30.0	217.390	217.390
40.0	217.390	217.390
50.0	217.390	217.390
60.0	217.390	217.390
70.0	217.390	217.390
80.0	217.390	217.390
90.0	217.390	217.390
100.0	217.390	217.390
110.0	217.390	217.390
120.0	217.390	217.390
130.0	217.390	217.390
140.0	217.390	217.390
150.0	217.390	217.390
160.0	217.390	217.390
170.0	217.390	217.390
180.0	217.390	217.390
190.0	217.390	217.390

CLIENT: National Highways Authority of India

CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd.
 C/o. JND FLOOR, K.K. ROAD, PLOT NO. 37-32, Sector-4, Vasant Vihar, GHAZIABAD
 Ph: 0120-2820415, 4120472, FAX: 01204110472

PROJECT: Engineering Services for the preparation of Feasibility Report for development of Economic Corridor, Inter Corridors and feeder Routes to improve the efficiency of Inland movement in India under Bharatmala Pariyojana (I & II) (EOP&R-4)

SCALE: 1:1500

DWG TITLE: L&M & Profile at Ch. 0+000 to 190+000

DATE: 15/08/2023

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

DATE: 15/08/2023

PROJECT NO.: [Number]

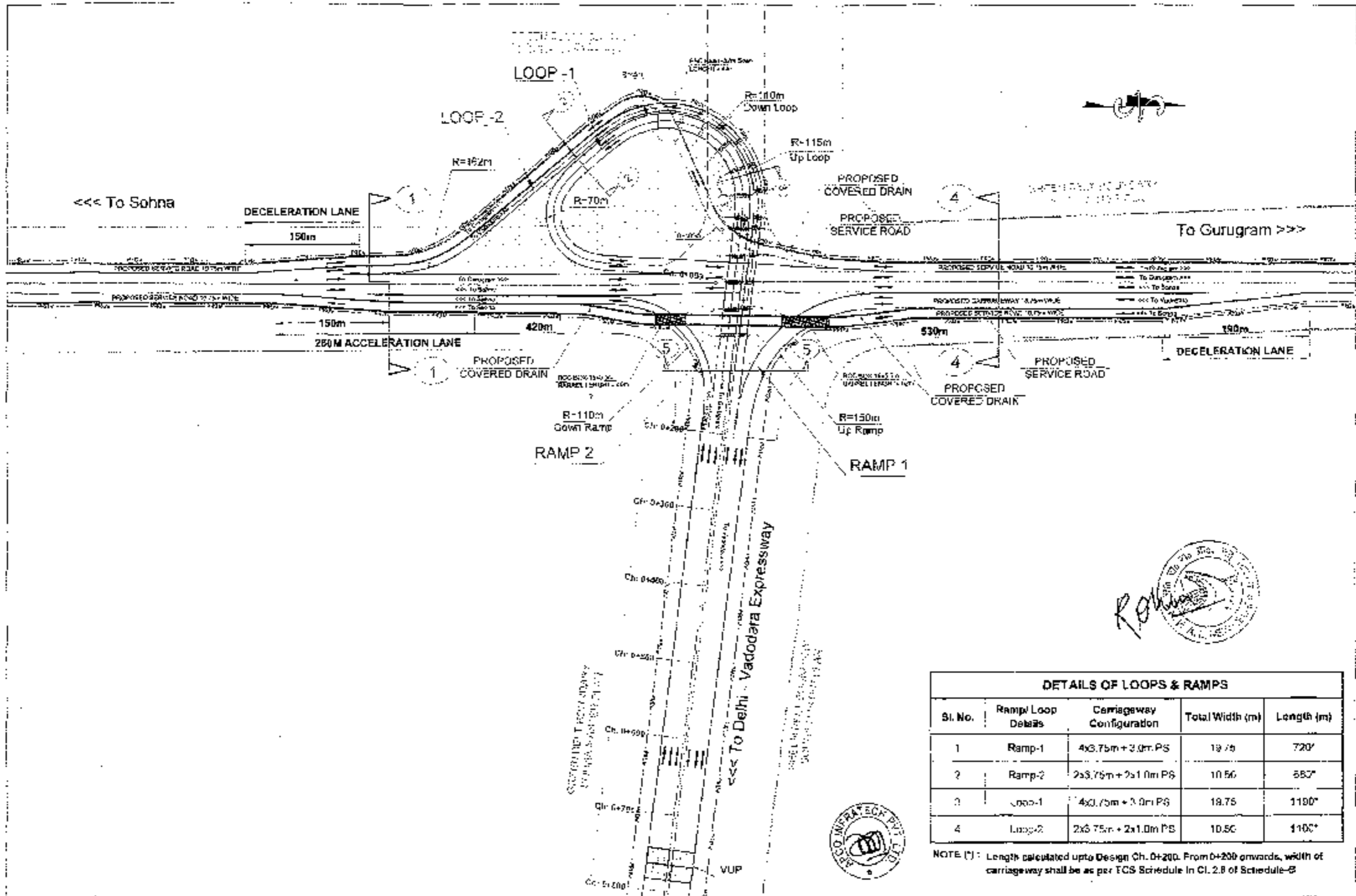
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DATE: [Date]

PROJECT NO.: [Number]

SCALE: [Scale]

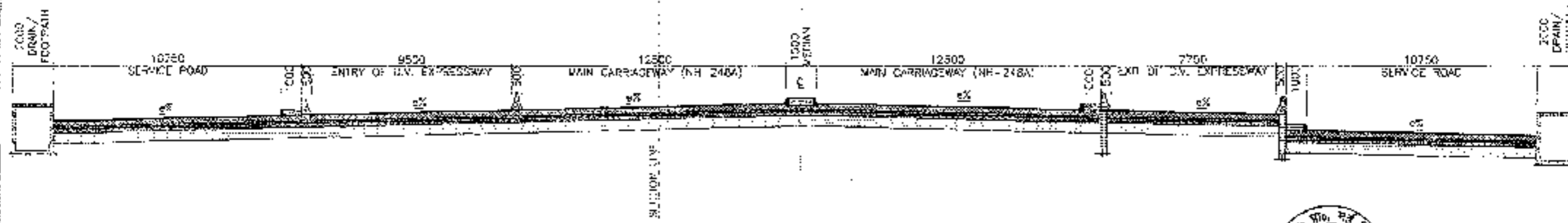
DATE: [Date]



R. K. Sharma

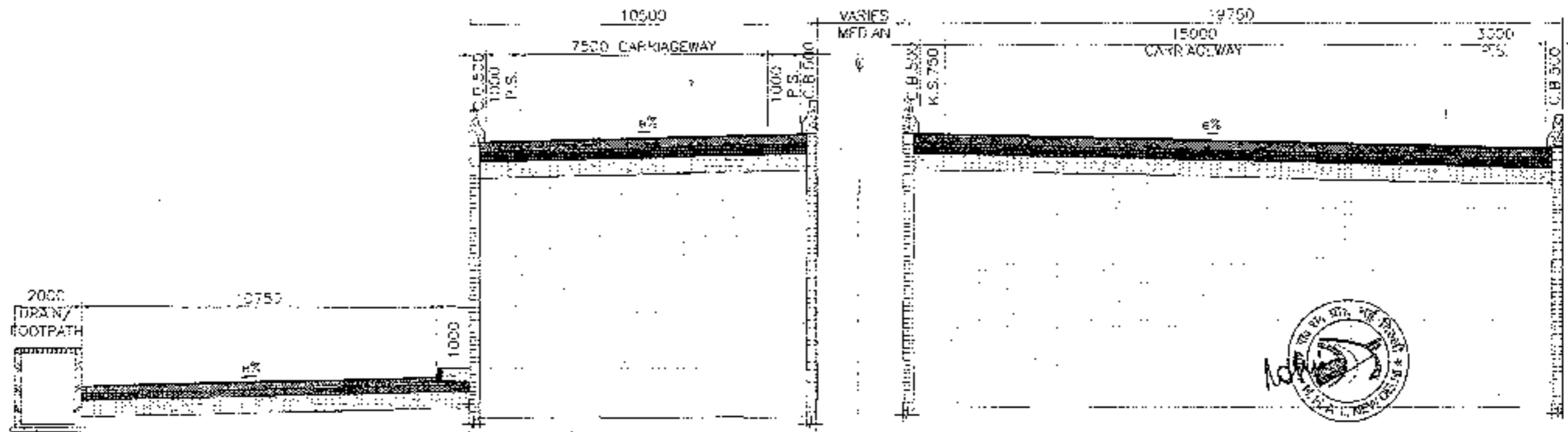
DETAILS OF LOOPS & RAMPS				
Sl. No.	Ramp/ Loop Details	Carriageway Configuration	Total Width (m)	Length (m)
1	Ramp-1	4x3.75m + 3.0m PS	19.75	720'
2	Ramp-2	2x3.75m + 2x1.0m PS	10.50	550'
3	Loop-1	4x3.75m + 3.0m PS	19.75	1190'
4	Loop-2	2x3.75m + 2x1.0m PS	10.50	1100'

NOTE (1) : Length calculated upto Design Ch. 0+200. From 0+200 onwards, width of carriageway shall be as per ECS Schedule In Cl. 2.8 of Schedule-B



Typical Cross Section Along 1-1 of Appendix B-1, Schedule-B



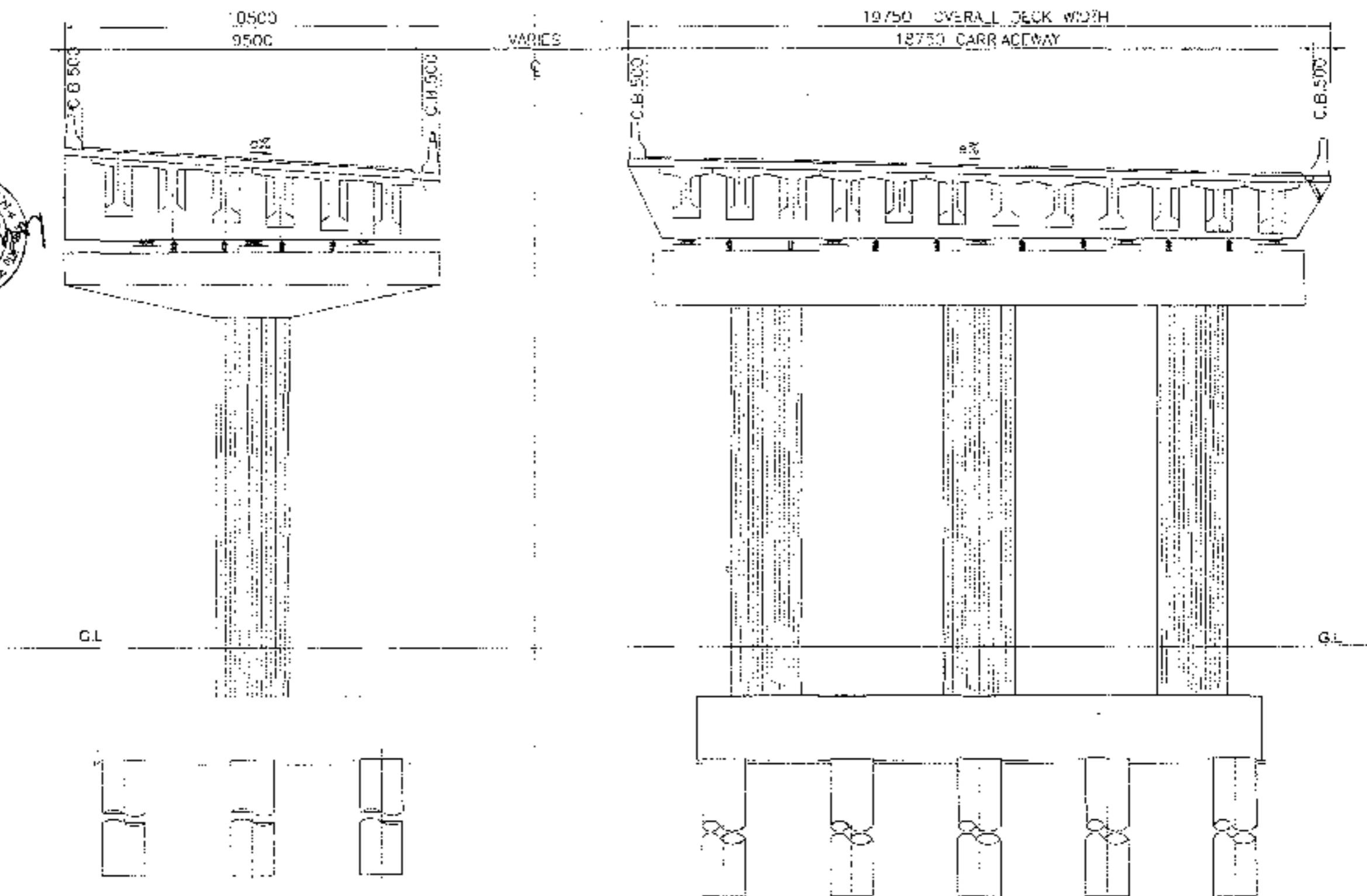


Typical Cross Section Along 2-2 of Appendix B-1, Schedule-B





18

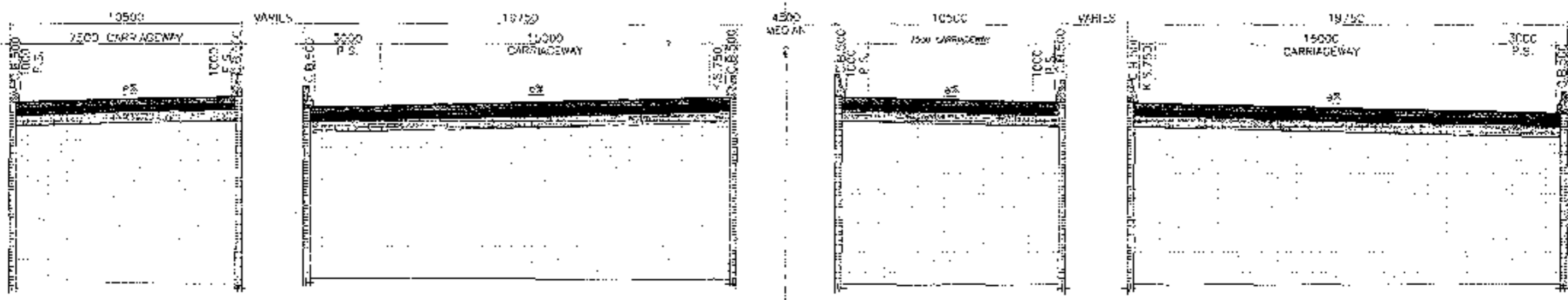


Typical Cross Section Along 3-3 of Appendix B-1, Schedule-B



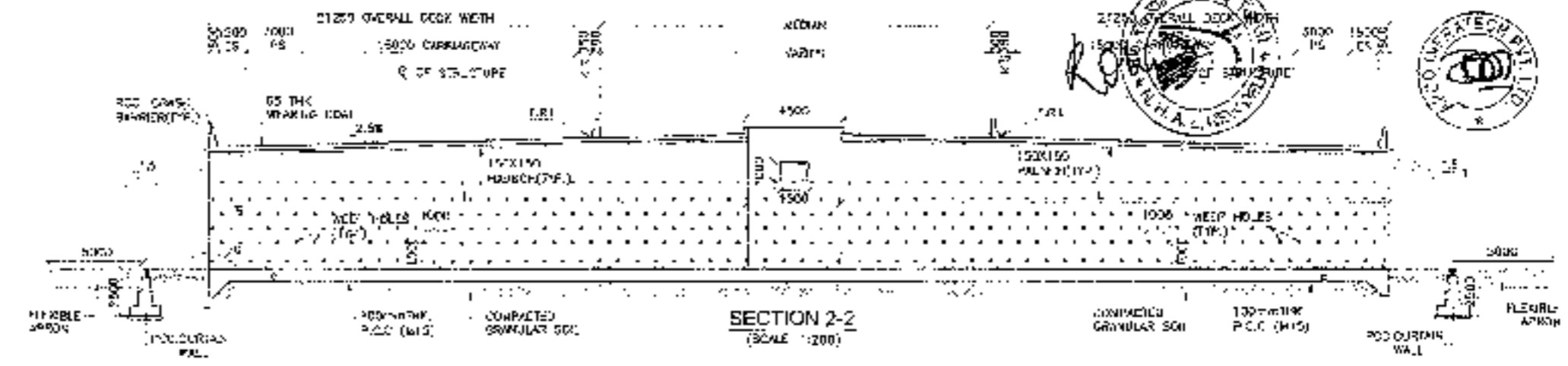
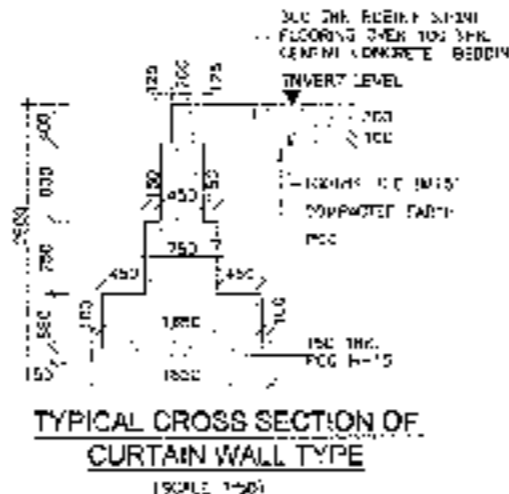
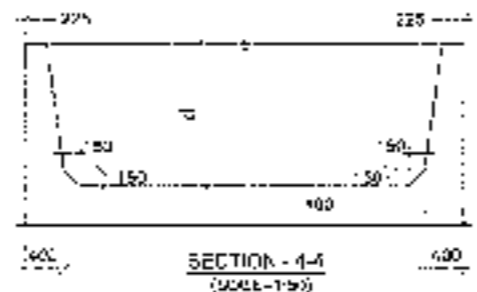
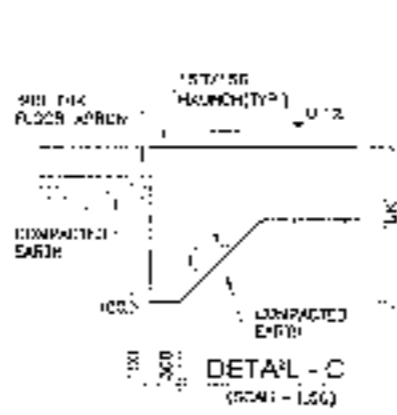
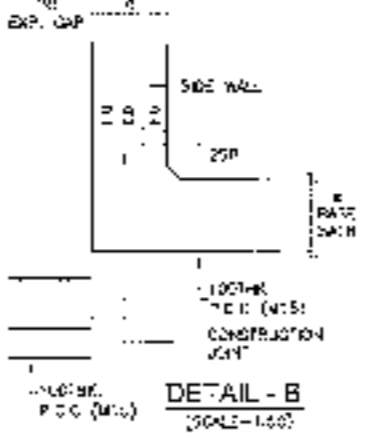
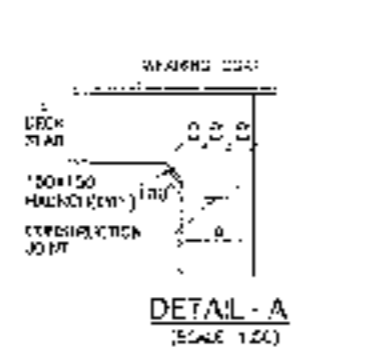
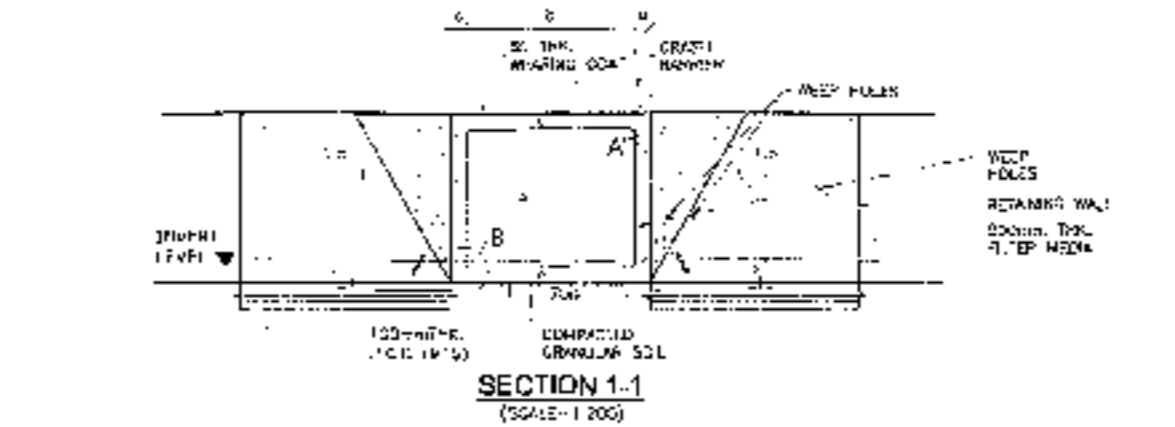
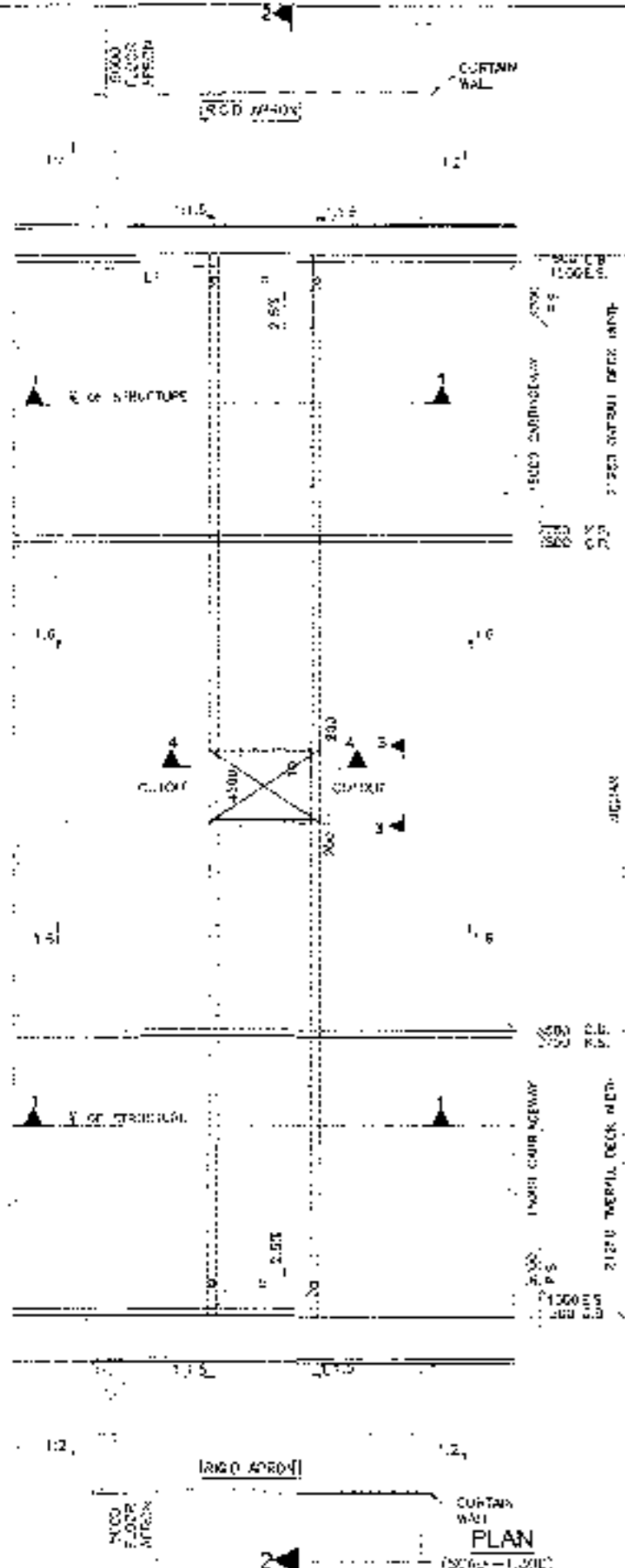
Typical Cross Section Along 1-4 of Appendix B-1, Schedule-B





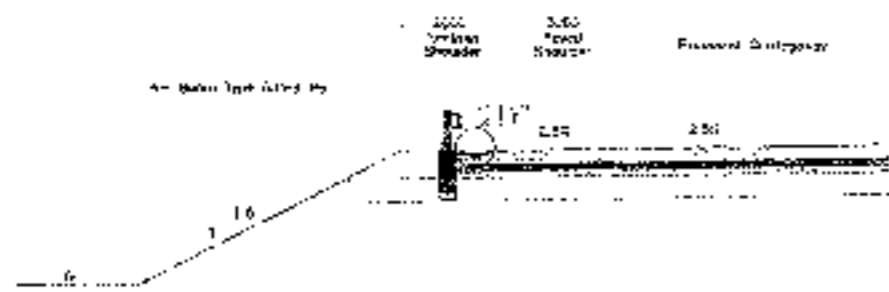
Typical Cross Section Along 5-5 of Appendix B-1 Schedule-B





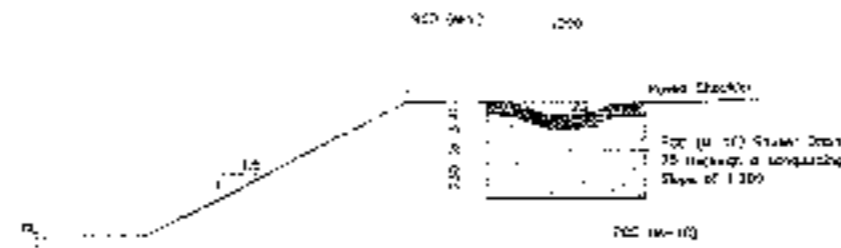
- NOTES:-**
1. ALL DIMENSIONS ARE IN MILLIMETERS. LEVELS ARE IN METERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
 2. CHANGING & LEVEL SHALL BE VERIFIED WITH THE RELEVANT PLAN & PROFILE DRAWINGS. VARIATION (IF ANY) SHALL BE REPORTED TO ENGINEER FOR MODIFICATION.
 3. PROPERTIES OF SUBJECTED BACK FILL BEHIND RETAINING WALL SHALL BE AS FOLLOWS:-
C-10, $\phi > 30\phi$ = 2.0 (min)
 4. EXPANSION GAP (20mm) WILL BE FILLED UP BY ASPHALTIC FLUX EXPANSION JOINT.
 5. GRADE OF CONCRETE IN VARIOUS PARTS SHALL BE AS FOLLOWS:-
RET. CURTAIN WALL : M20
CRASH BARRIER : M25
RETAINING WALL : M20
 6. NET SAFE BEARING CAPACITY AT FOUNDING LEVEL FOR DESIGN IS AS FOLLOWS:-
SOFT : 10 t/m²
 7. WEEP HOLES SHALL BE PROVIDED @ 1000 MM H/3 STAGGERED HORIZONTALLY AND VERTICALLY IN RETAINING WALL WITH DRAINING LEVEL TO HIGH FLOOD LEVEL.
 8. BACKFILLING DETAIL BOX SHALL BE CARRIED OUT SIMULTANEOUSLY.
 9. GRADE D SHALL BE IN ACCORDANCE TO STATE ZONES.
 10. 60MM THICK WEARING COAT SHALL CONSIST OF LAYER OF OF WASTE ASPHALT OF 25MM THK OVER 40MM REINFORCED CONCRETE.
 11. F.O.C. IS GIVEN IN ANY AT RAMP SLAB
FOR BASE SLAB THICKNESS : VALUE OF F.O.C.
UP TO 300mm : 1200mm
GREATER THAN 300mm : $\phi=300$ mm
 ϕ = BASE SLAB THICKNESS
 12. P.C.C. 1:4:10 FILTER MEDIA SHALL BE PROVIDED BEHIND RETAINING WALL.
 13. FOR DETAILS OF RETAINING WALL & FLOOR PROTECTION WORKS REFER SEPARATE DRAWINGS.
 14. THIS STRUCTURE LIES IN SEISMIC ZONE I.
 15. F.F.L IS TAKEN AT MEDIAN EDGE.
 16. CONDITION OF EXPOSURE IS MODERATE.
 17. REFER SHEET 2 OF 2 FOR RETAINING WALL DETAILS.

Span/Cell Arrangement	Span (b)	Clear opening (d)	Top slab (c)	Bottom Slab (e)	Side wall (a)
1x2.0x2.0	2.0	2.0	0.225	0.225	0.225
1x3.0x2.5	3.0	2.5	0.225	0.250	0.250
1x3.0x3.0	3.0	3.0	0.225	0.250	0.250
1x4.0x2.0	4.0	2.0	0.250	0.275	0.275



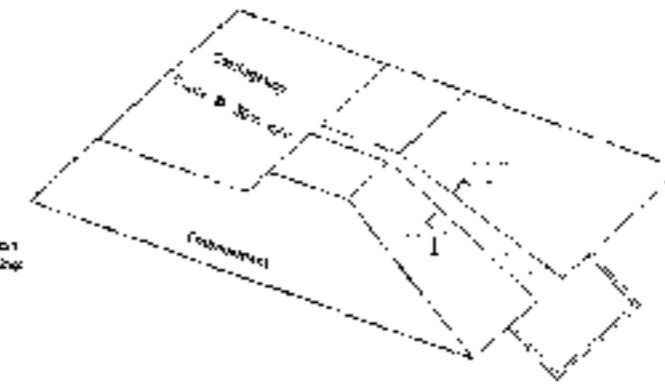
Road Side Drain in High Embankment for Smooth Water Flow to Chute

(Scale: 1:100)



Detail at "D"

(Scale: 1:20)



Aerial View of Chute & Basin

(not to scale)



Chute Cross Section at "A-A"

(Scale: 1:20)



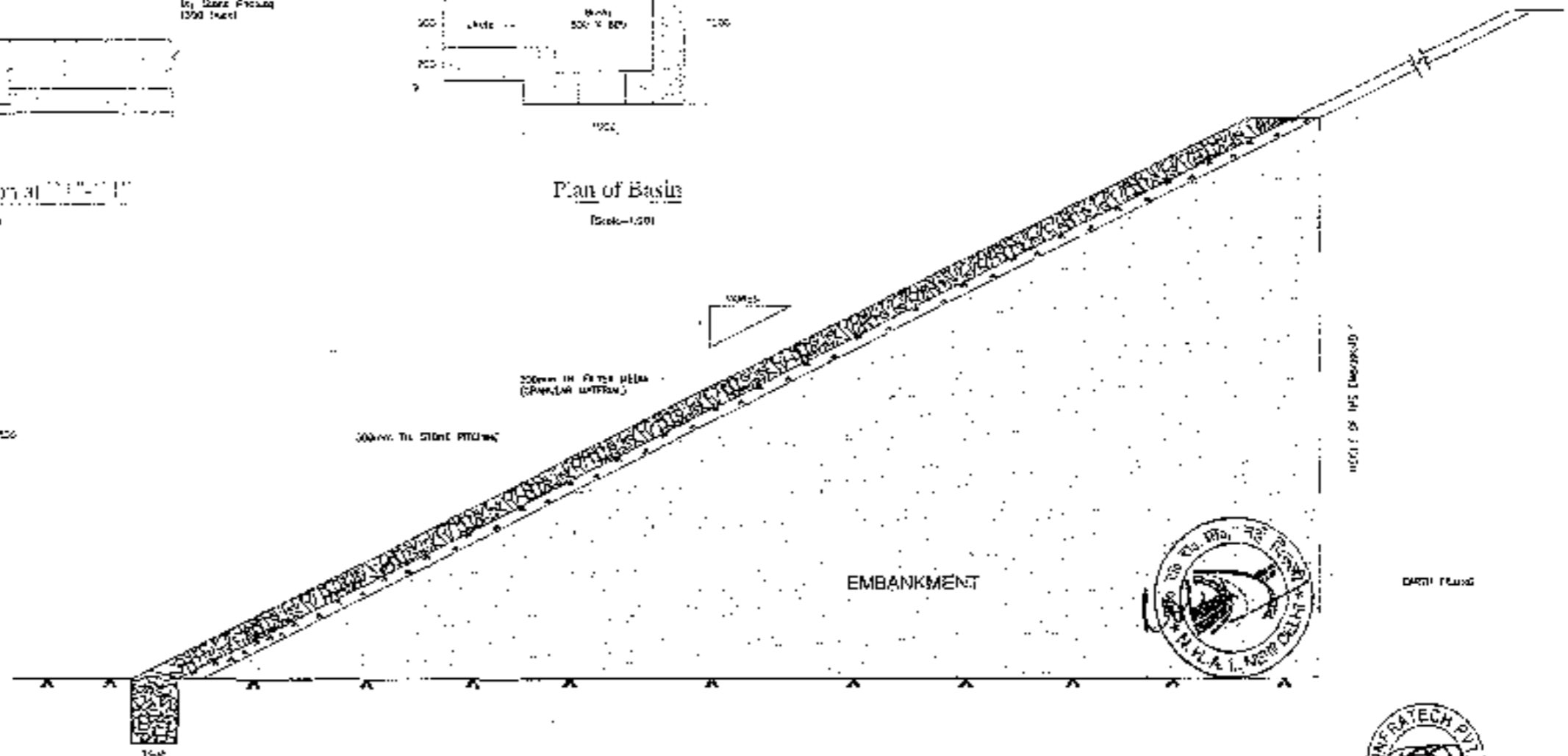
Plan of Basin

(Scale: 1:20)



Side View of Basin

(Scale: 1:20)




TYPICAL DETAIL OF STONE PITCHING

Notes:-

1. All dimensions are in millimetres unless otherwise specified.
2. For Pitching / Filler Media is to be carried out as per the clause No. 2504 of MORTH Specification.

CLIENT:

National Highways Authority of India
(National Highways, Transport & Logistics Development Corporation)

CONSULTANT:

Chaitanya Projects Consultancy Pvt. Ltd.
 G-5, 2ND FLOOR, P.K. TOWER PLOT NO.- 21-22,
 SECTOR-4, VAISHALI, GHAZIABAD
 Ph.: 0123-3220419, 9120412 FAX: 0123-4110677

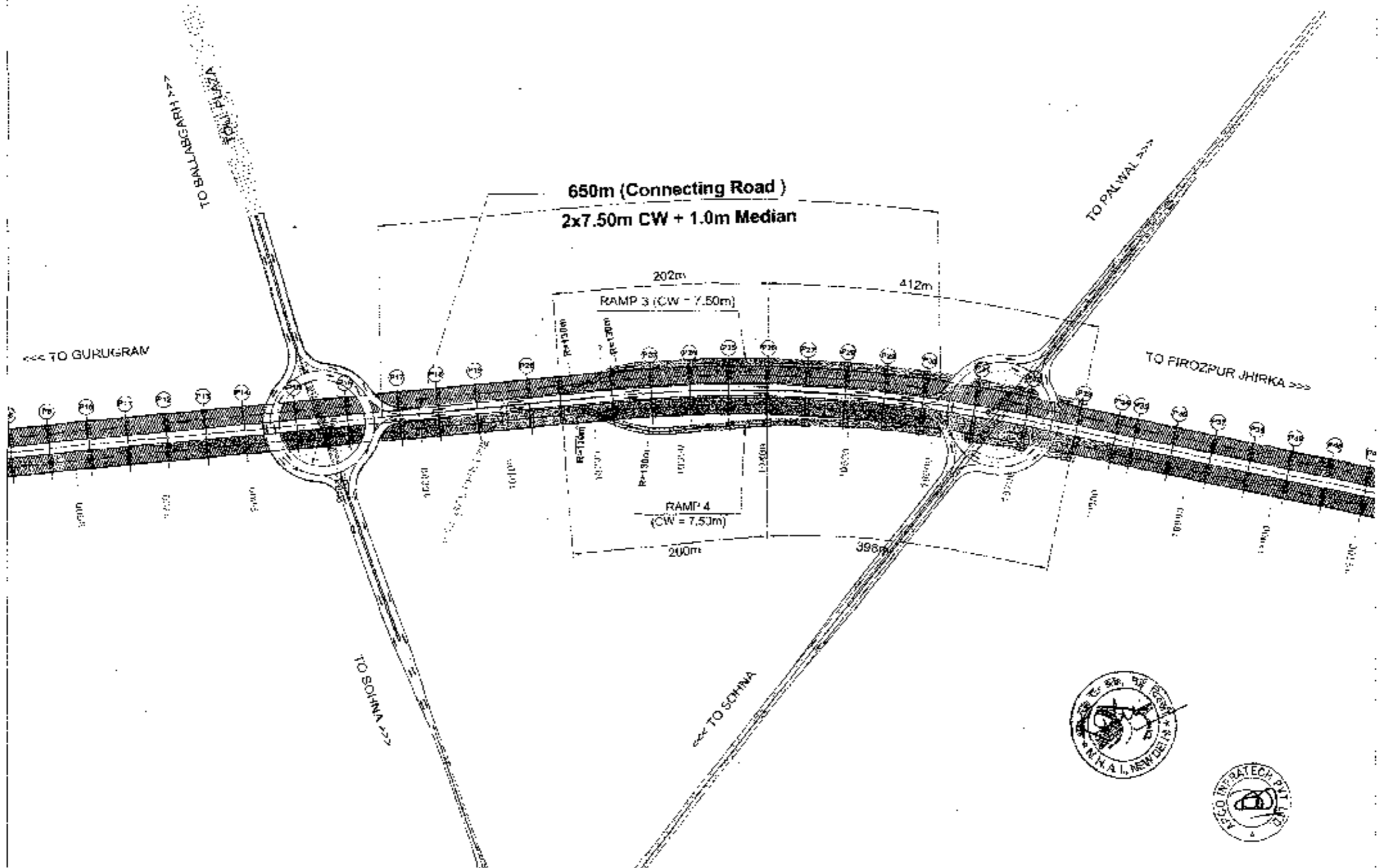
PROJECT:
 Consultancy Service for the Preparation for Feasibility Report/IDPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Loc-6/Package-4: Sahna - Ferozpur Jhirka)

SCALE:
 AS SHOWN

DWG TITLE:
 TYPICAL DETAIL OF CHUTE DRAIN AND OTHER RELATED WORKS

DRAWING No.:
 C/CP/SG/MS/SP/FEAS/01/01
 DATE: AUGUST 2014
 PREPARED BY: [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]
 SCALE: [Blank] SHEET: [Blank] OF: [Blank]





CLIENT:
National Highways Authority of India
National Highway & Road Development Corporation

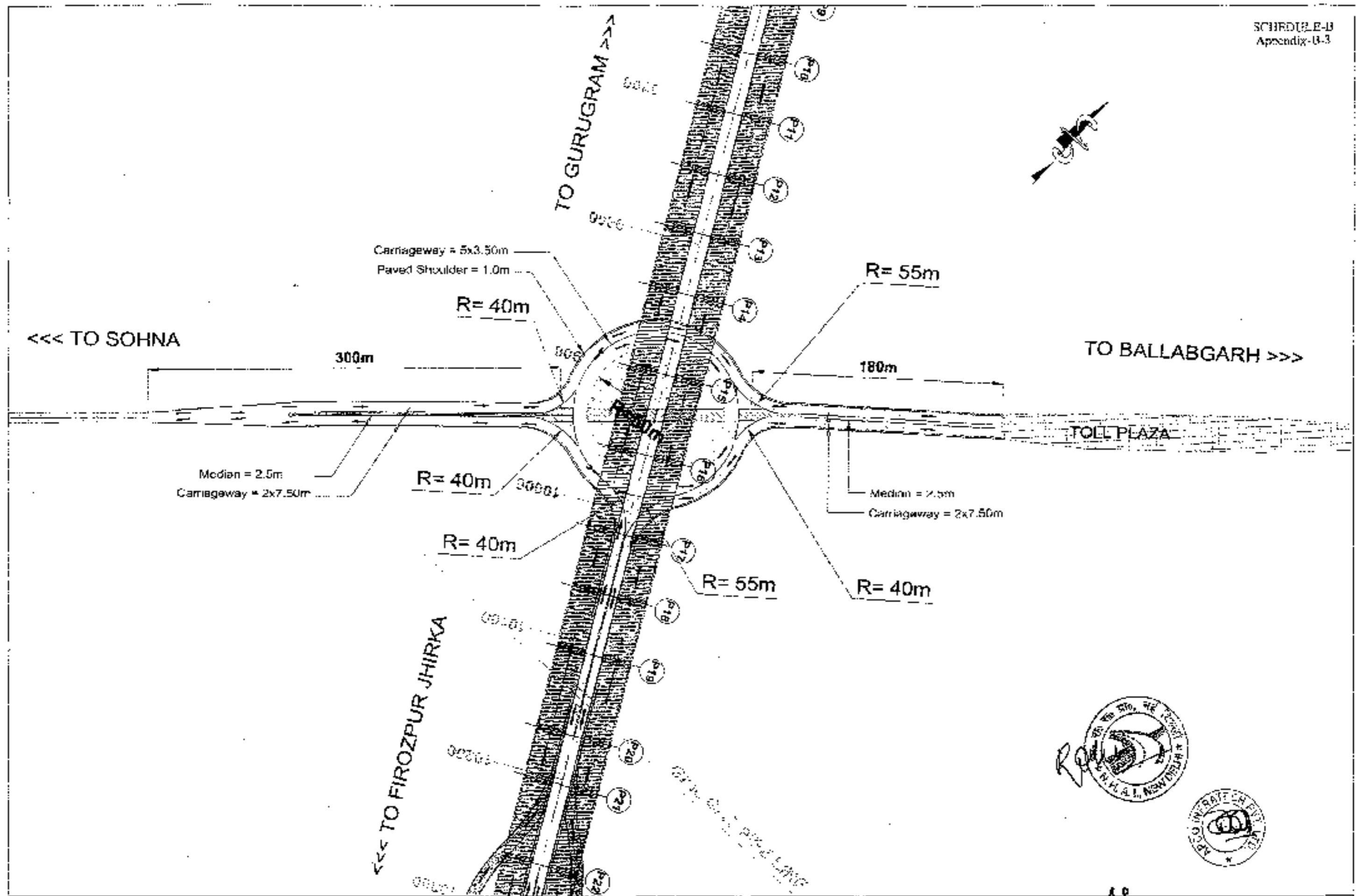
CONSULTANT:
Chaitanya Projects Consultancy Pvt. Ltd.
C-5, 2ND FLOOR, B.K. TOWER, PLOT NO. 21-22,
SECTOR-4, VAISHALI, GHAZIABAD
PH: 0120-3223419, 4120472, FAX: 4120-4110472



PROJECT:
Consultancy Services for the Preparation for Feasibility Report/DPR for development of Economic Corridor, Inter Corridor and Feeder Roads to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) [Scheme - Firozpur Jhirka section of Delhi-Vadodara Expressway] [Phg-1_Ch. 0+000 to 13+444]

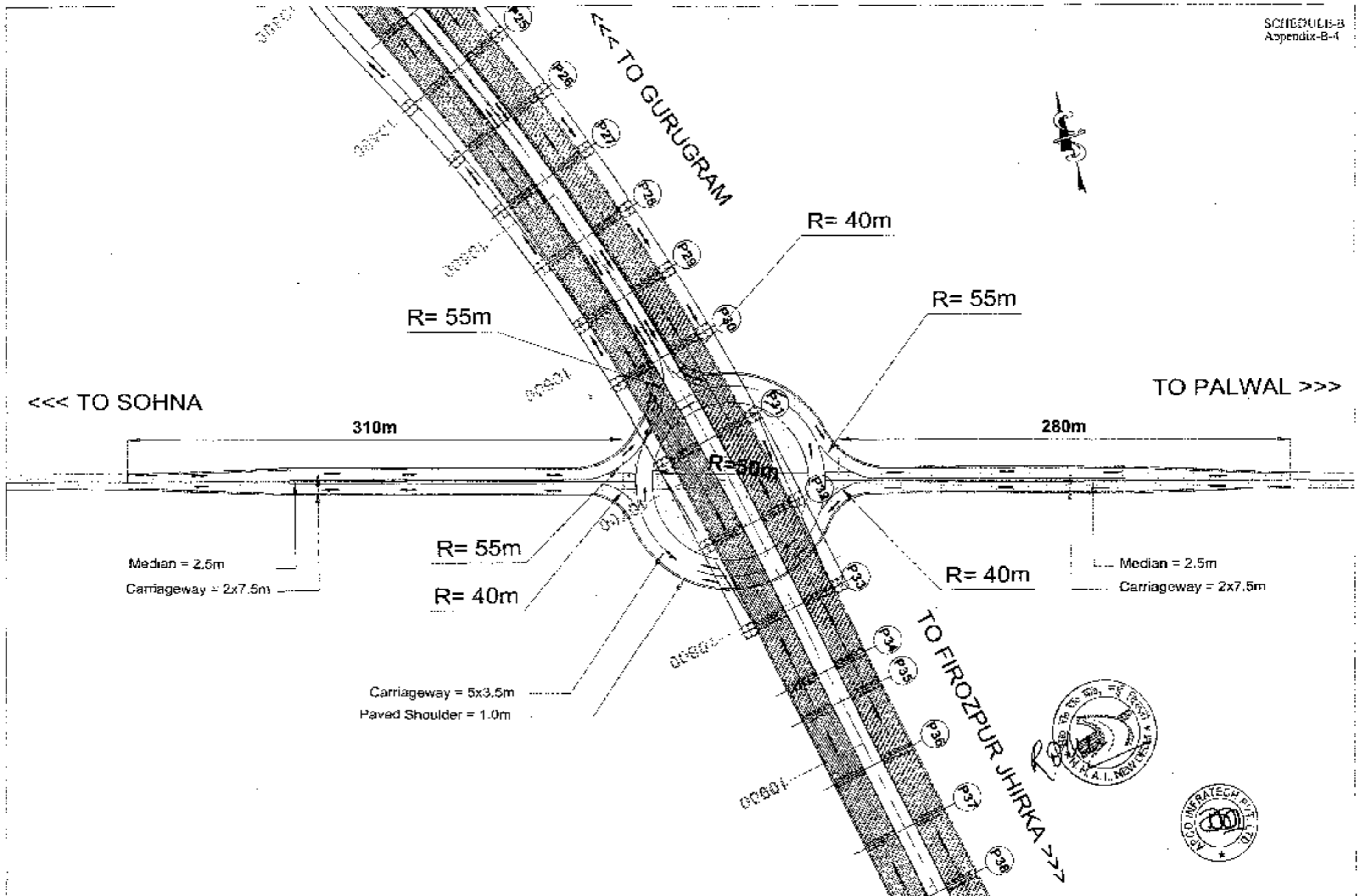
SCALE:
NTS

DWG TITLE:
47
INTERCHANGING IMPROVEMENT PLAN
A 100' WIND TO 10+400 KM

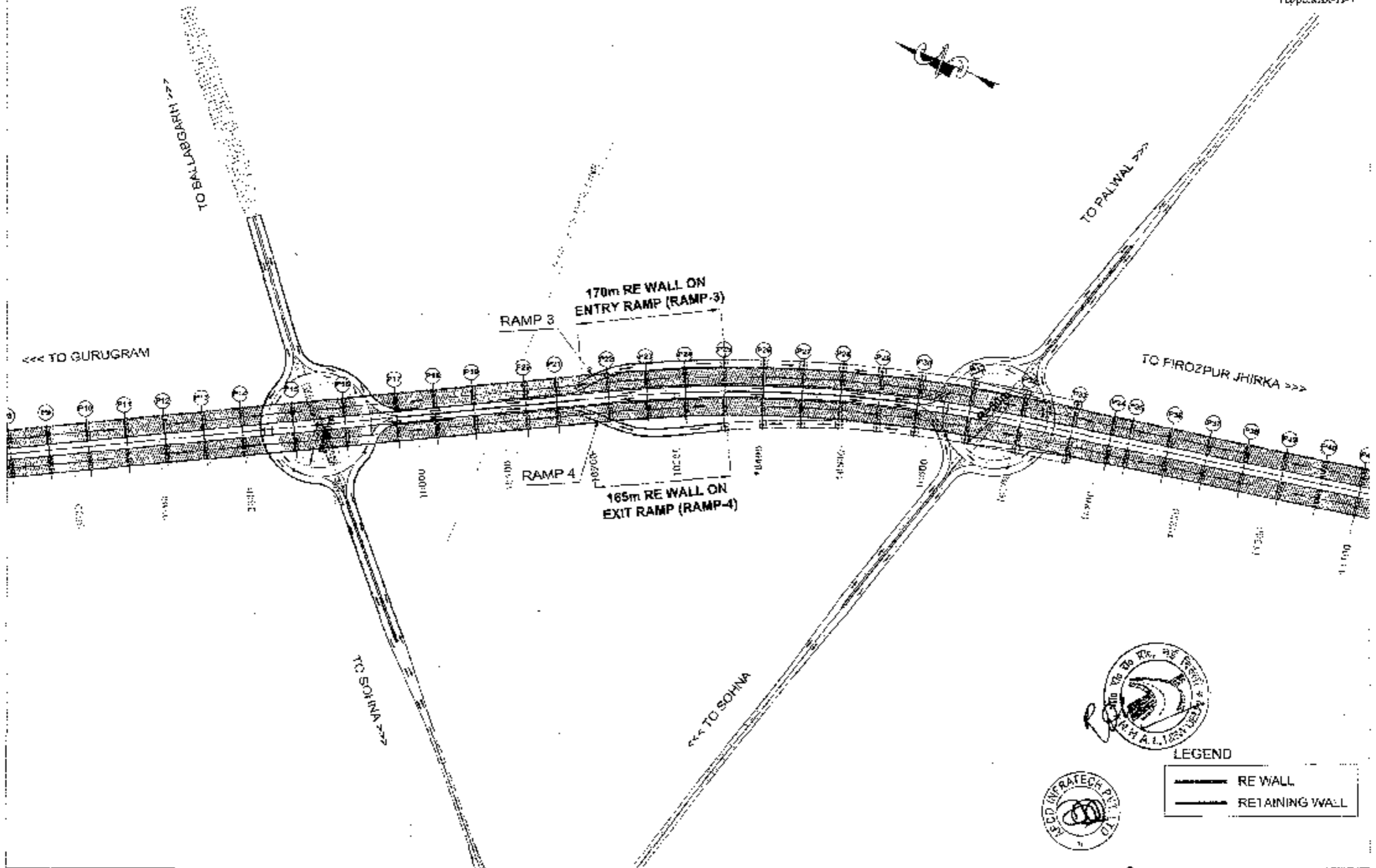
DESIGNING No. -
GROUP - ENGINEER IN CHARGE - OFFICIAL - 0001
DATE: SEPTEMBER 2015
PROJECT NO. / SHEET NO. / DRAWING NO.
K. JALANDESA / P. SINGH / S. SINGH



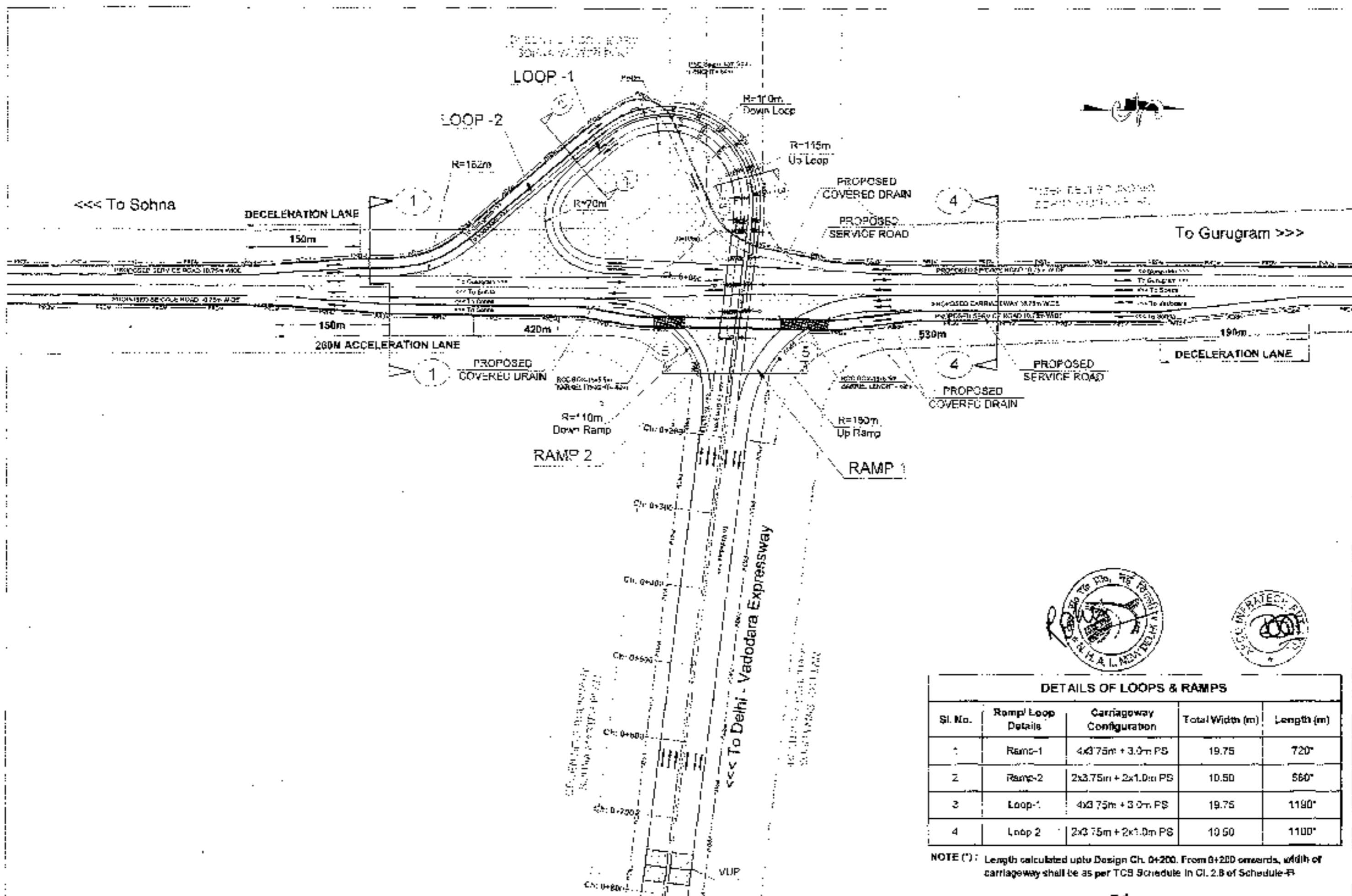
<p>CLIENT:</p>  <p>National Highways Authority of India Ministry of Road Transport & Highways, Govt. of India</p>	<p>CONSULTANT:</p>  <p>Chaitanya Projects Consultancy Pvt Ltd. G-3, 2ND FLOOR, R.K. TOWNSHIP PLOT NO- 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH: 0120 3223418, 4920472, FAX: 0120-4110472</p>	<p>PROJECT:</p> <p>Consultancy Service for the Preparation for Feasibility Report/Study for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot 6/Package-4) (Salina - Firozpur Jhirka section of D.P. Vadodra Expressway) (Pkg-1, Ch. D-000 to 19+464)</p> <p>SCALE: NTS</p>	<p>WORK TITLE -</p> <p>INTERCHANGE DEVELOPMENT PLAN AT CH 9+250</p>	<p>DRAWING No - 48</p> <p>DATE: SEPTEMBER 2015</p> <p>PREPARED BY: R.K. JACOB</p> <p>CHECKED BY: [Signature]</p> <p>DESIGNED BY: [Signature]</p> <p>APPROVED BY: [Signature]</p>
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<p>CLIENT: National Highways Authority of India</p>	<p>CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. C-4, 2ND FLOOR, R.K. TOWER PLOT NO. 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH.: 0126-322419, 4120472, FAX: 0120-4110472</p>	<p>PROJECT: Consultancy Service for the Preparation for Feasibility Report/UPM for development of Economic Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-5 Package-4) [Sohna - Ferozpur Jhirka section of Delhi-Varekhan Expressway] (Pkg-1, CA. 0+000 to 12+481)</p>	<p>SCALE - NTS</p>	<p>DWG TITLE: INTERCHANGE IMPROVEMENT PLAN AT 12+300</p>	<p>DRAWING No. - ENR/CA/52/DVZ/RI/45/UPM/INT/0015 DATE: SEPTEMBER 2016 PREPARED BY: [Signature] CHECKED BY: [Signature] REVISIONS: [Table with 3 columns: No., Description, Date]</p>
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<p>CLIENT:- National Highway Authority of India</p>	<p>CONSULTANT:- Challaniya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, R.K. TOWER PLOT NO.-21/22, SECTOR-4, VAISHALI, GHAZIABAD P.O. CT-20-3223418, #120472 FAX: 0120-4310472</p>	<p>PROJECT:- Consultancy Service for the Preparation for Feasibility Report/RUPM for development of Economic Corridors Inner Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Unit-4/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1, Ch. 0+000 to 18+661)</p>	<p>SCALE:- N.T.S.</p>	<p>DWG TITLE: 50 INTERCHANGE IMPROVEMENT PLAN AT CH. 11+000 TO 12+000/334</p>	<p>DRAWING No. - CHOP/15/01/VI/000004/1/000/04 DATE - SEPTEMBER 2018 PREPARED BY: [Signature] CHECKED BY: [Signature] K. D. INFRATECH PVT. LTD. SOHNA</p>
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DETAILS OF LOOPS & RAMPS				
Sl. No.	Ramp/ Loop Details	Carriageway Configuration	Total Width (m)	Length (m)
1	Ramp-1	4x3.75m + 3.0m PS	19.75	720*
2	Ramp-2	2x3.75m + 2x1.0m PS	10.50	560*
3	Loop-1	4x3.75m + 3.0m PS	19.75	1190*
4	Loop 2	2x3.75m + 2x1.0m PS	10.50	1100*

NOTE (*): Length calculated upto Design Ch. 0+200. From 0+200 onwards, width of carriageway shall be as per TCS Schedule in Cl. 2.B of Schedule-F

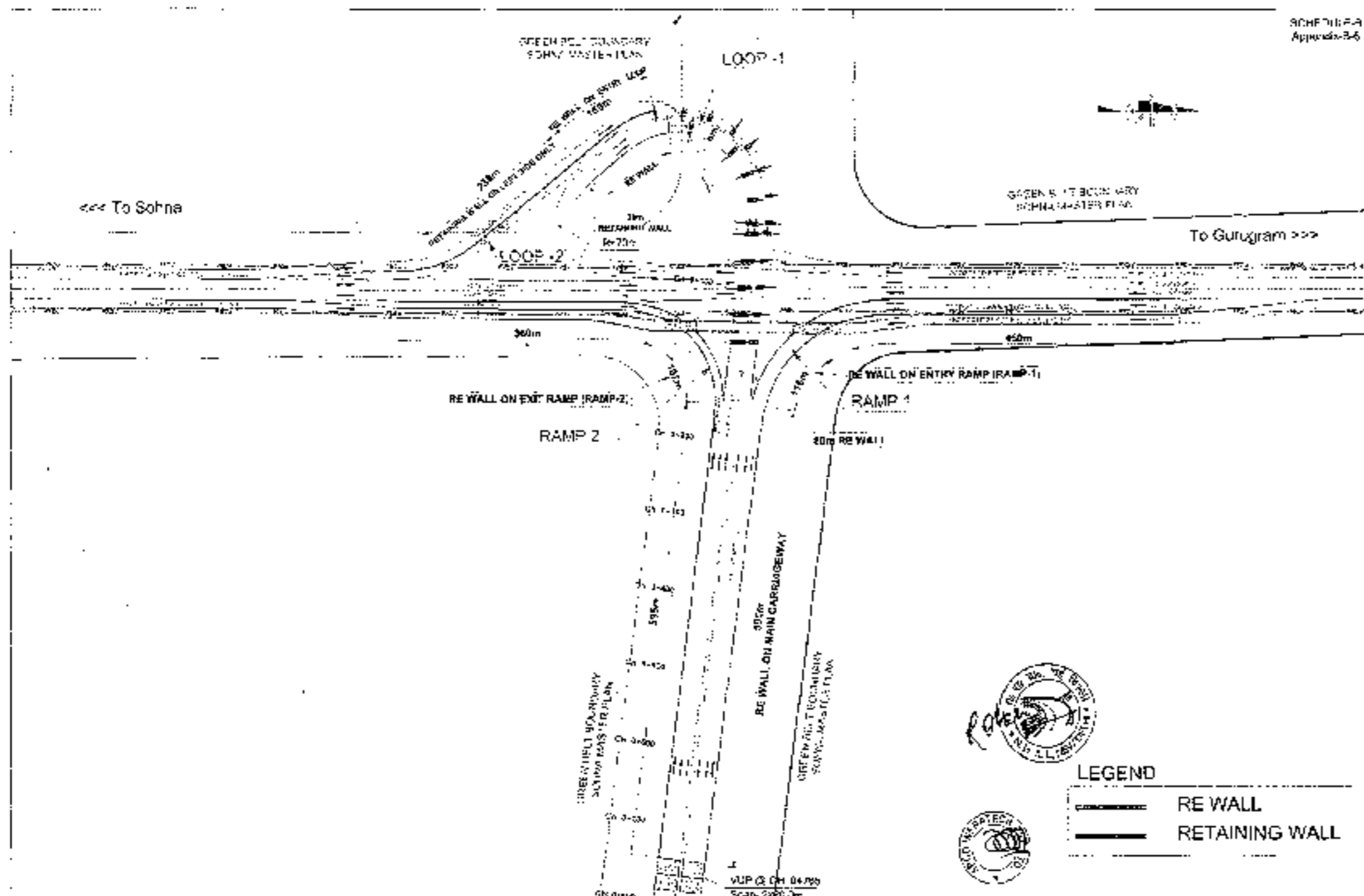
CLIENT -
National Highway Authority of India
 Headquarters: Transport Bhawan, New Delhi

CONSULTANT:
Chaitanya Projects Consultancy Pvt. Ltd.
 G-4, 2ND FLOOR, R.K. TOWER FLOOR NO. 21-22,
 SECTOR-4, VAISHALI, GHAZIABAD
 PHL: 0120-3223418, 4120475, FAX: 0120-4110477

PROJECT -
 Consultancy Service for the Preparation for Feasibility Report (FFR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India (under Bharatmala Pariyojana) (Lot-6) (Phase-4) (Sohna - Ferozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1, Ch. 0+000 to 16+481)

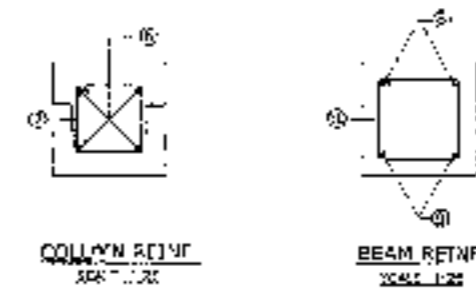
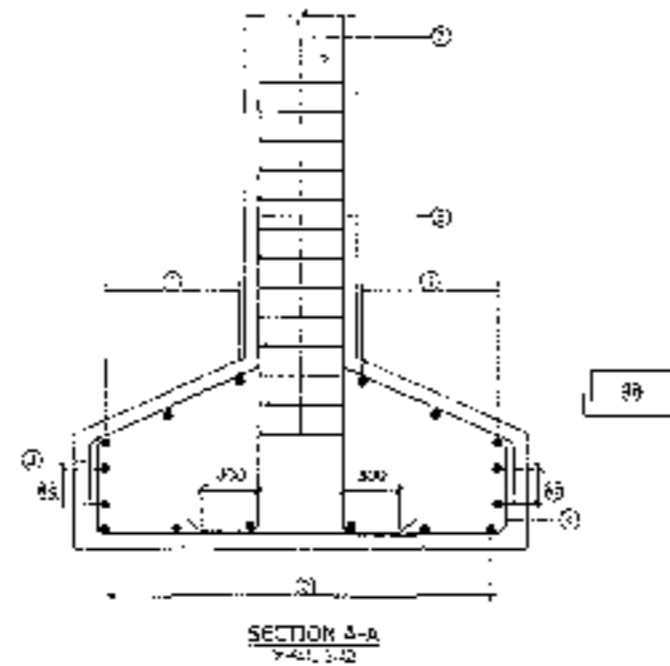
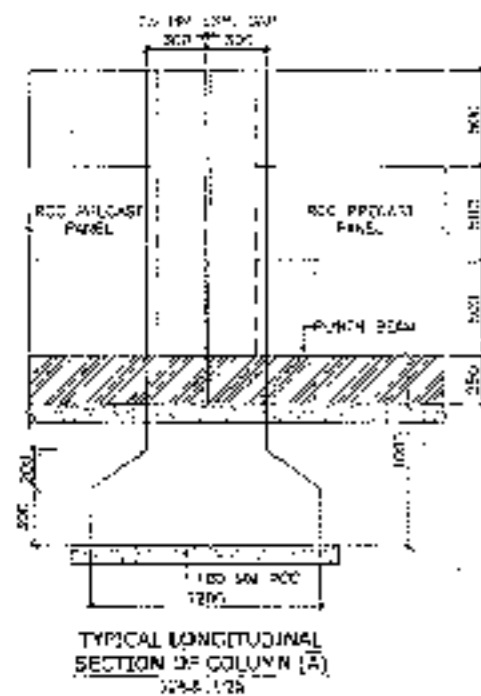
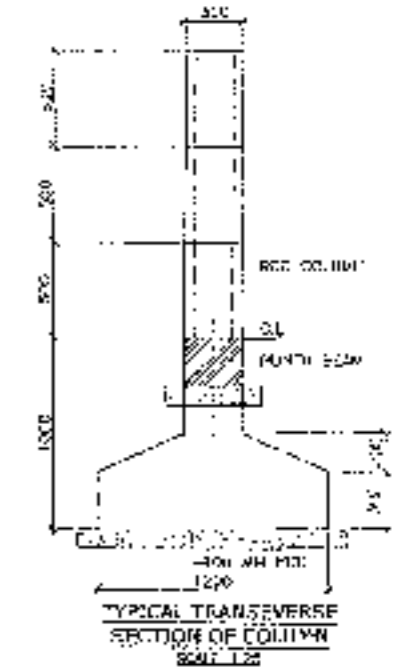
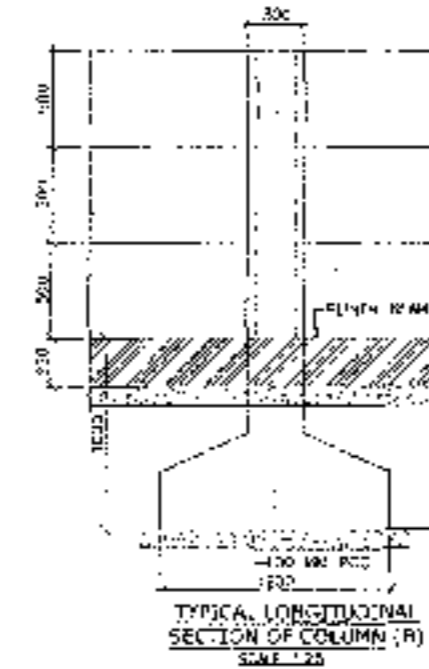
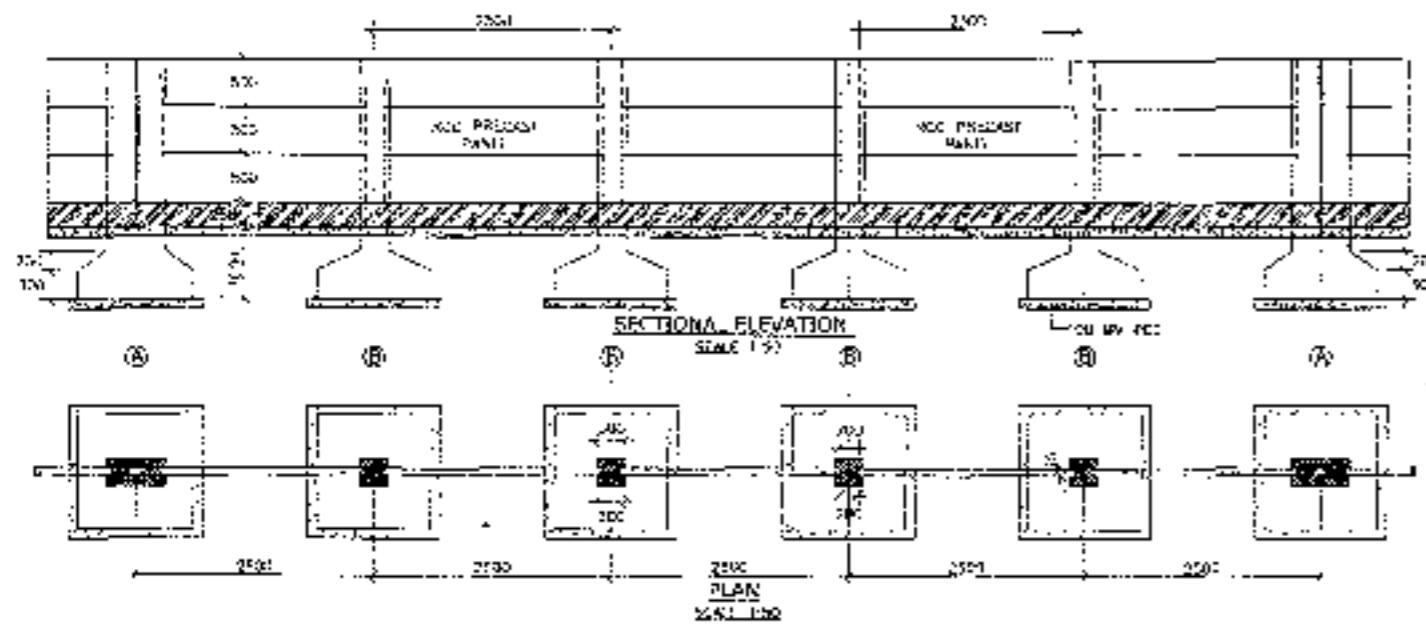
SCALE -
 NTS
 DWG TITLE -
51
 INTERCHANGE IMPROVEMENT PLAN AT CH. 0+000

DATE: SEPTEMBER 2014
 PREPARED BY: [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]



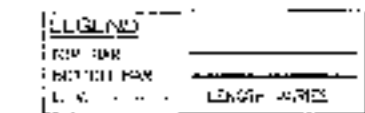
LEGEND

- RE WALL
- RETAINING WALL



REINFORCEMENT SCHEDULE

BAR MARK	BAR DIA (mm)	SPACING (mm)	NUMBER	REMARK
1	10	200 c/c		
2	10	200 c/c		
3	10	200 c/c		
4	10	200 c/c		
5	10	200 c/c		
6	10	200 c/c		
7	10	200 c/c		
8	10	200 c/c		
9	10	200 c/c		
10	8	200 c/c		



- NOTES**
- ALL DIMENSIONS ARE IN MM.
 - ONLY BRICKS AND MORTAR TO BE USED.
 - CONCRETE SHALL BE DESIGN M20 AND SHALL BE OF QUALITY AS PRECASTED.
 - RCC JOINTING TO BE : M-15
M-20
M-20
 - GRADE OF JACO SHALL BE Fe-500S CONFORMING TO IS 1786
 - CLEAR COVER TO OUTER STEEL SHALL BE AS FOLLOWS -
a. BEAM & COLUMN : 25mm
b. FOUNDATION : 50mm



CLIENT:
National Highway Authority of India

CONSULTANT:
Chaitanya Projects Consultancy Pvt. Ltd.
C-5, 2ND FLOOR, R.K. TOWER 91 DY NH, 21-22, SECTOR-4, VAISHALI GHAT, RAIPUR
PH.: 0120-3223418, 4120672, FAX: 0120-4110472

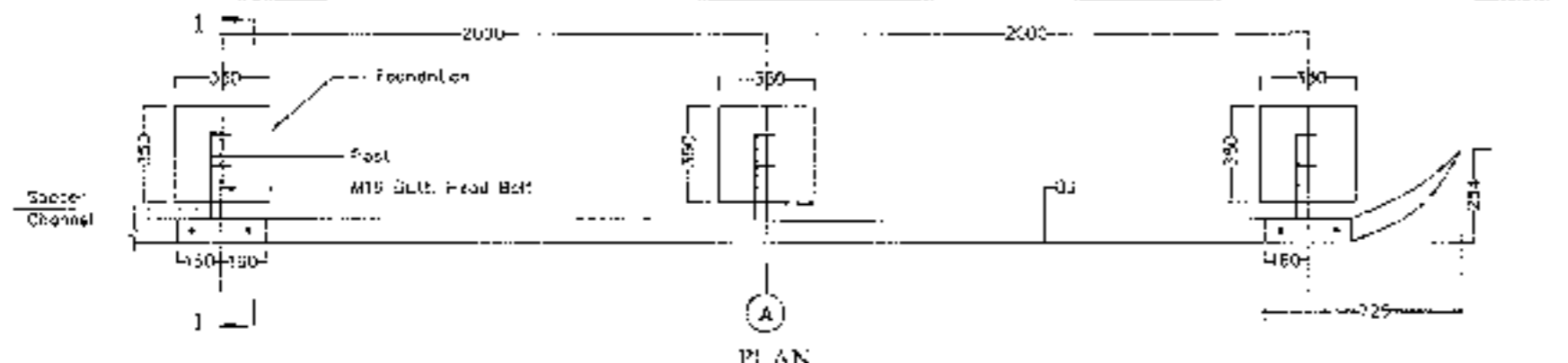
PROJECT:
Consultancy Service for the Preparation for Feasibility Report (DFR) for development of Economic Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatnala Pariyojana (Lot-6/Package-4) of Sohra - Firozpur Jhark

SCALE:
AS SHOWN

DWG TITLE:
TYPICAL DETAIL & REINFORCEMENT DRAWING OF PRECAST BOUNDARY WALL PACKAGE-1

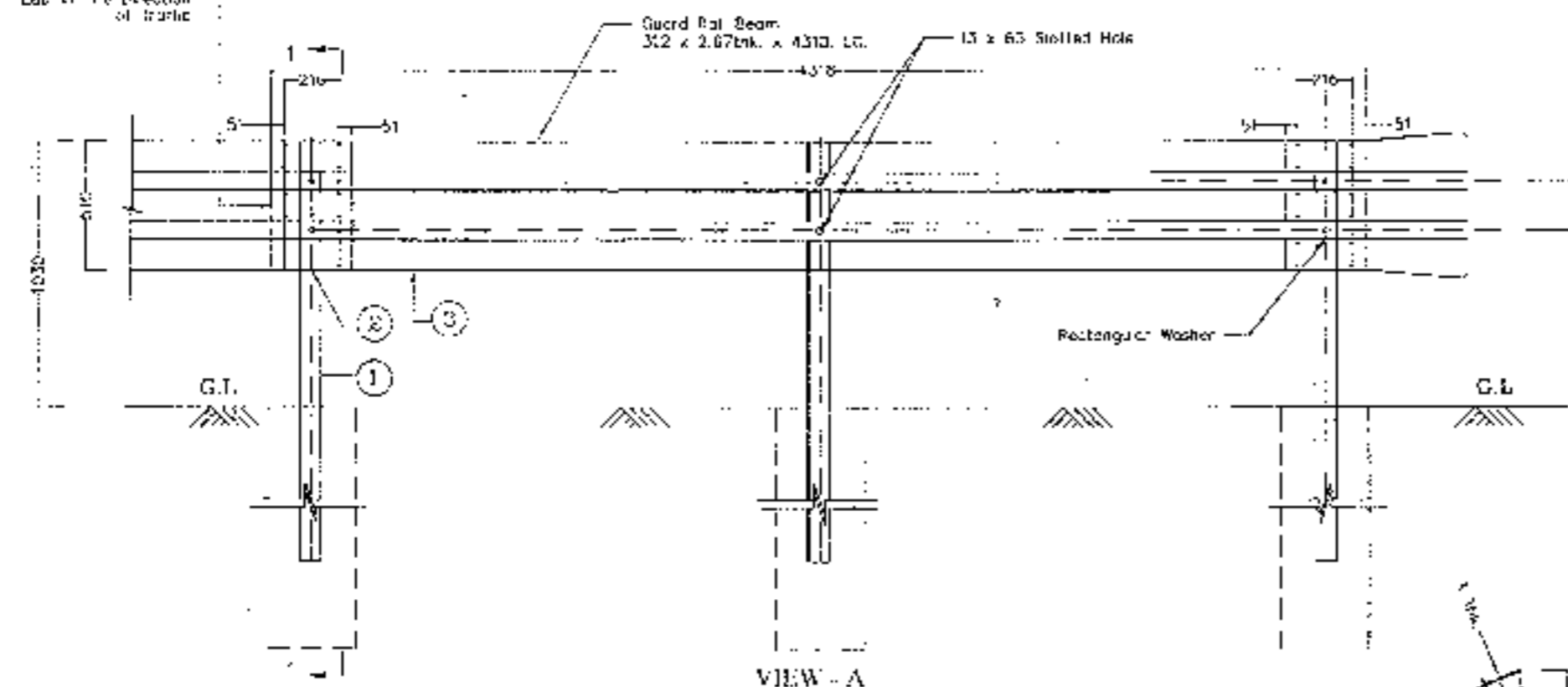
58

DRAWING NO.: LSP/CP/52/3/W/S-100
DATE: OCTOBER 2011
PREPARED BY: P.K.K.
CHECKED BY: M.T.
APPROVED BY: A.C.

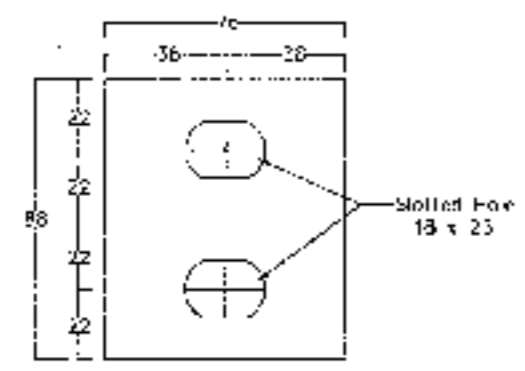


PLAN

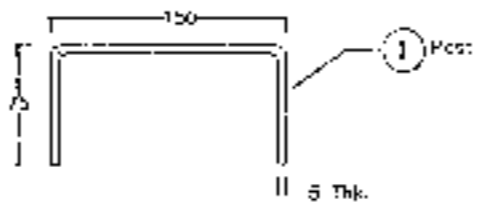
Look in The Direction of traffic



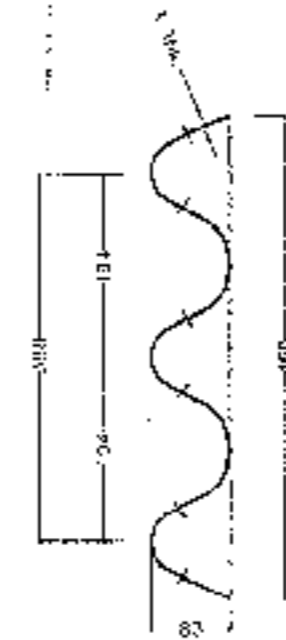
VIEW - A



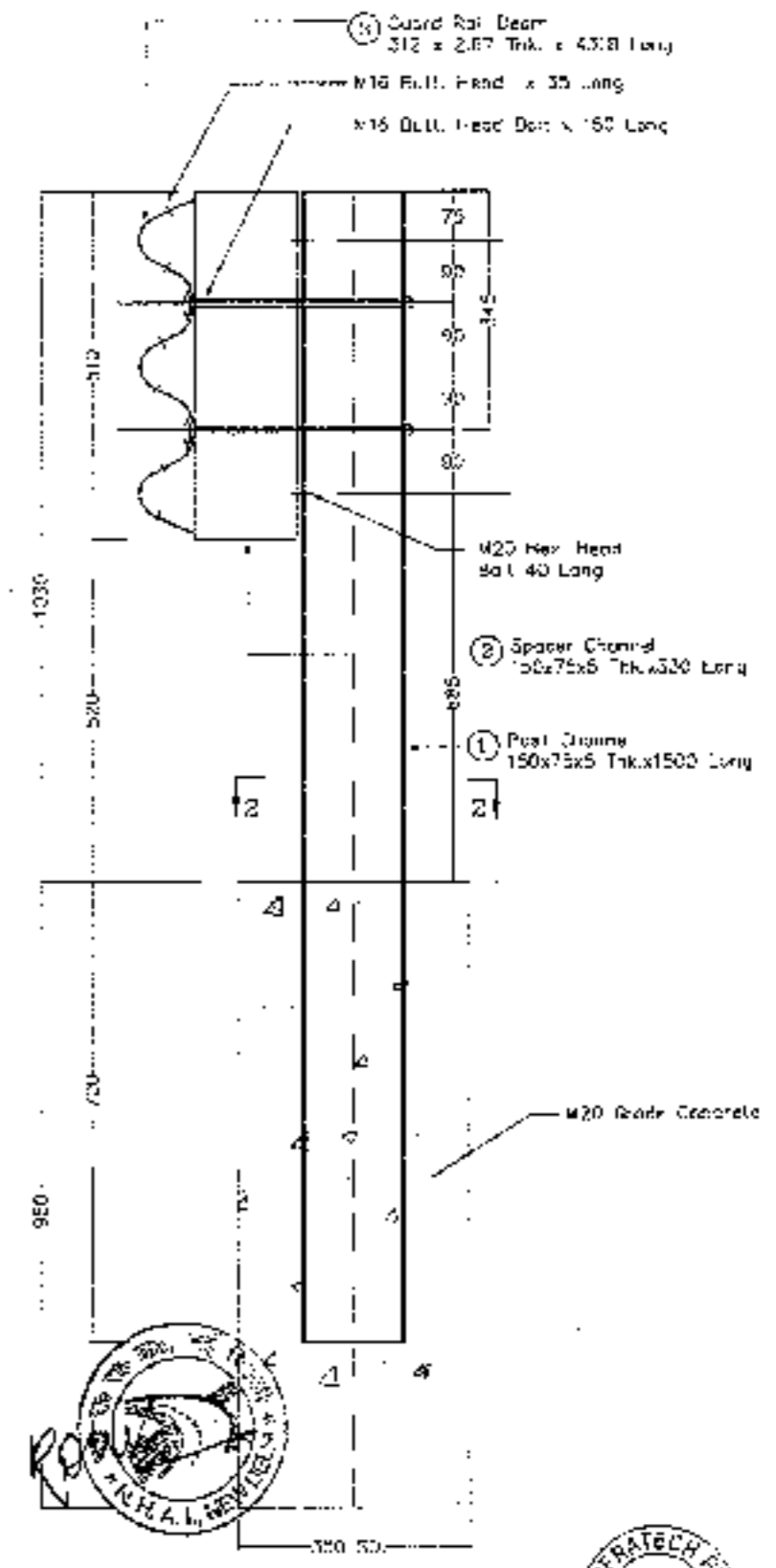
RECTANGULAR WASHER DETAILS



SECTION 2-2



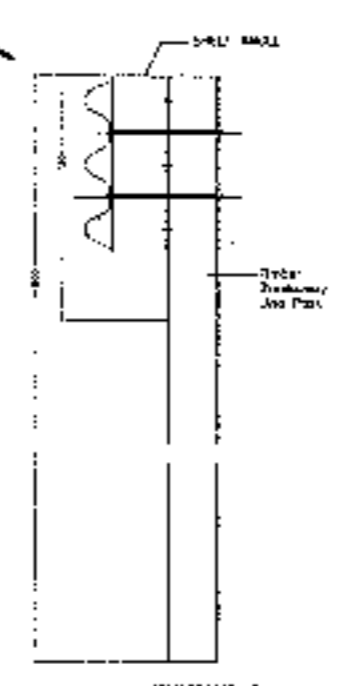
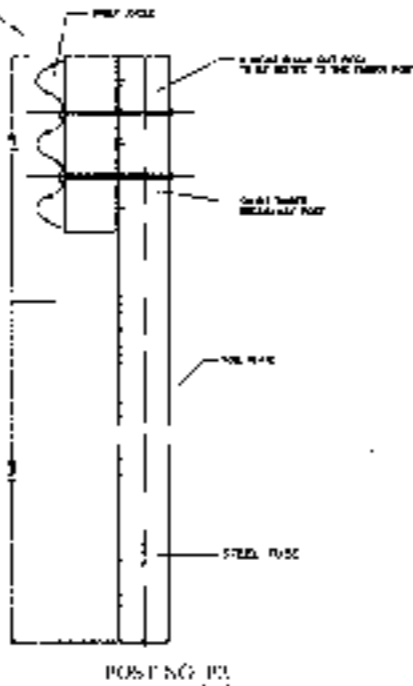
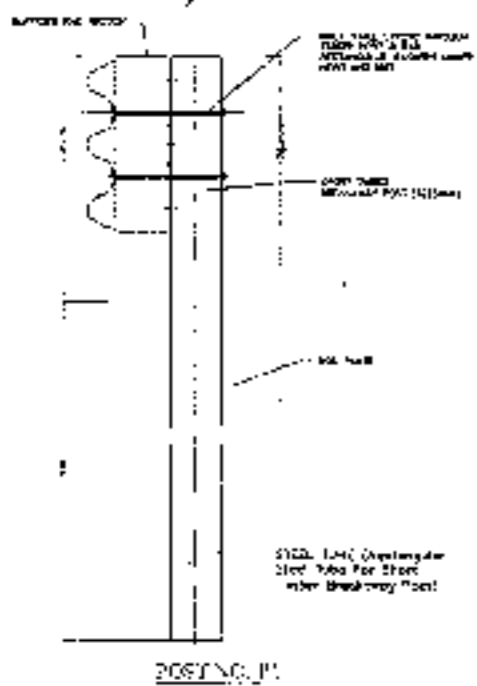
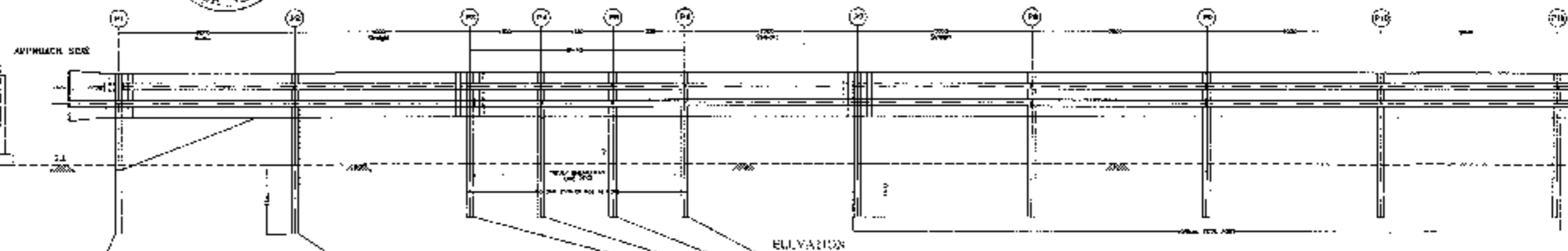
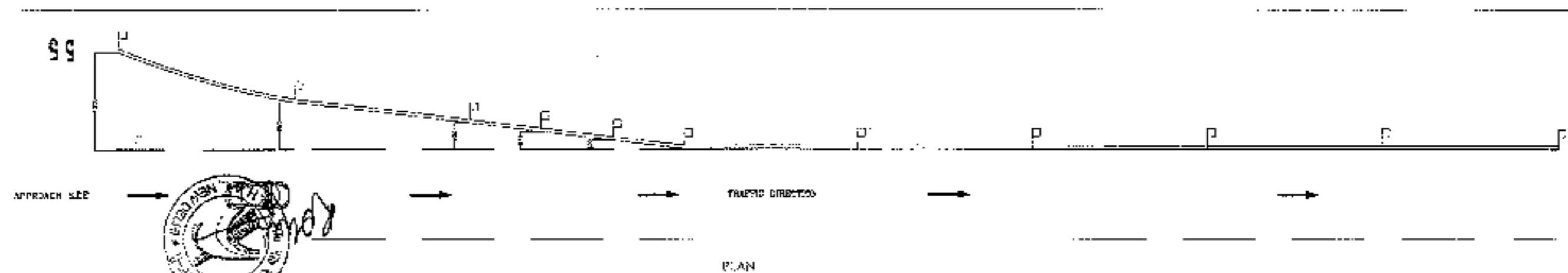
GUARD RAIL BEAM



SECTION 1-1

Note:-
1) All dimensions are in millimetres

<p>CLIENT: National Highways Authority of India</p>	<p>CONSULTANT: Chhatrapati Projects Consultancy Pvt. Ltd. 104, 2ND FLOOR, PLAZA TOWER FLOOR - 21-22, SECTOR-44, VASARI, CHANDRAPUR, PIN: 432003, DISTRICT: 432002, M.S. 020-24110472</p>	<p>PROJECT:- Consultancy Service for the Preparation for Feasibility Report/GPR for development of 6-lane wide Corridor, Inter-Connectivity and Feeder Roads to improve the efficiency of freight movement in zone under Shyamprata Paragana (L&D) Package - 03/04 - Praspur Chikol</p>	<p>SCALE - AS SHOWN</p>	<p>DWG TITLE 54 CRASH BARRIER DETAILS</p>	<p>DRAWING No. - CHPR/1402/W&P/FR/1402/JUP DATE: AUGUST 2016 Prepared by: [Signature] Checked by: [Signature]</p>
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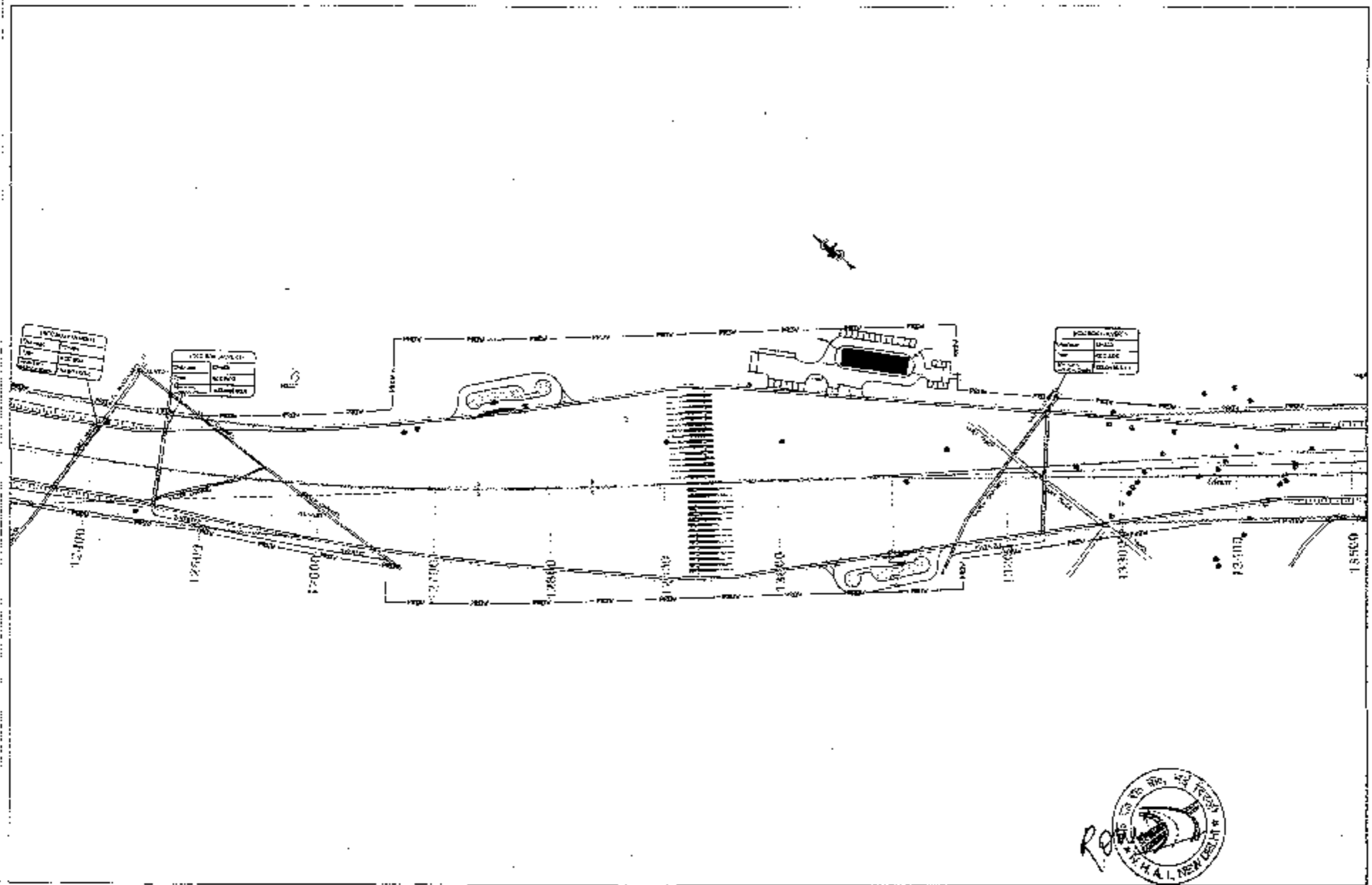


Note:-
 1) All dimensions are in millimetres

 National Highways Authority of India <small>Ministry of Road Transport and Highways, Government of India</small>	 CONSULTANTS: Shri Lakshmi Engineering Consultancy Pvt. Ltd. G-2, 2ND FLOOR, TOWER PLOT NO. 47, SECTOR-4, WAZIRPUR, NEW DELHI TEL: 011-26060419, 4110475, FAX: 011-26110172	PROJECT: Feasibility Study for the Preparation of Feasibility Report for development of Economic Corridor, Inter Corridor and Link Road to improve the efficiency of traffic movement in the upper Shyamliya Division (Dist of Panchajanya, S. Gangra - P. Ganga)	SCALE: AS SHOWN	DWG TITLE: BRIDGE PIER DESIGN	DRAWING NO.: CPCT/SH/IND/CP/TA/SC/7/3
					DATE: 15/08/2019 DESIGNED: S. K. SINGH CHECKED: S. K. SINGH APPROVED: S. K. SINGH

← TO SOHNA

TO PIROZPUR JHINKA →



PROPOSED LEGEND	
HP LINE	[Symbol]
TRUCK LANE	[Symbol]
MEDIAN	[Symbol]
EDGE STRIP	[Symbol]
PROP. CAN.	[Symbol]
PROP. GR.	[Symbol]
UTILITY SERVICE	
POWER	[Symbol]
PROP. CH.	[Symbol]
MATCH LINE	[Symbol]
PRO. ROADWAY AT Cr. OF Can.	[Symbol]
PROPOSED LOW AL. Cr. OF Can. RESURGENTLY CROWNED FOR PROPOSED	[Symbol]
EX. CROWNED LOW AL. Cr. OF Can. PROPOSED	[Symbol]
SUPERS. / EX. CAN.	C
PROJECT	S
GRID	[Symbol]
EXISTING LEGEND	
BRIDGE	[Symbol]
BRANCH ROAD	[Symbol]
BUILDING STRUCTURE	[Symbol]
BUS STOP	[Symbol]
BOUNDARY WALL	[Symbol]
CANAL LINE	[Symbol]
COACH	[Symbol]
CROWD	[Symbol]
ELECTRIC POLE	[Symbol]
EXISTING ROAD	[Symbol]
GATE	[Symbol]
HAND PUMP	[Symbol]
HILL	[Symbol]
SHOWSTOPPING LAMP POST	[Symbol]
MO/VA	[Symbol]
DPC	[Symbol]
PILAR	[Symbol]
ELECTRIC PUMP	[Symbol]
EQUIPMENT	
RAIWAY TRACK	[Symbol]
ROAD PAVILION	[Symbol]
SHED	[Symbol]
TELEPHONE POLE	[Symbol]
TOWER	[Symbol]
TRASH BIN	[Symbol]
WATER TOWER	[Symbol]
WELL	[Symbol]

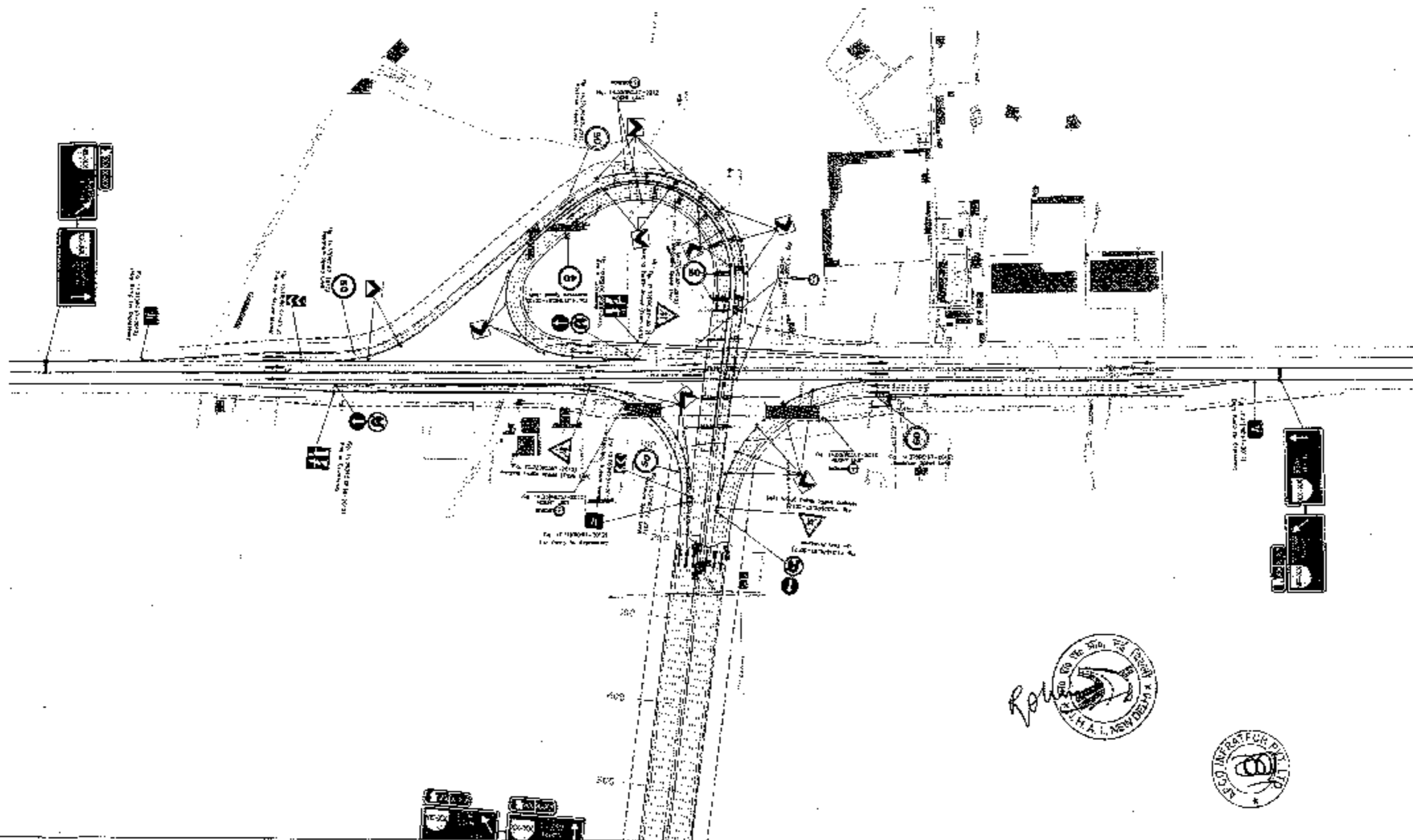
TOLL PLAZA AT CH: 12+930



CLIENT: National Highways Authority of India 14th Floor, 5th Cross, 1st Stage, 1st Mile, Bellandur, Bangalore-560075	CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. 2-5, 2ND FLOOR, R.K. ROAD, PLOT NO. 21-22, SECTOR-4, VAISHALI, CHHATRAPATI CR. CHANDRAPUR, PUNE-411007 PH: 0120-1221419, 4120472 FAX: 0120-4110472	PROJECT: Consultancy Services for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Intra Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-1) of Sohna - Pirozpur Jhinka	SCALE: Horizontal: 1:2000	DWG. TITLE: 56 TOLL PLAZA (PRO-1) (SOHNA - PIROZPUR JHINKA)	DRAWN BY: [Blank] DATE: NOVEMBER 2018 PROJECT NO.: [Blank] REVISIONS: [Blank]
---	---	---	-------------------------------------	--	--

← TO SOHNA

TO FIROZPUR JIRKA →



CLIENT:

National Highways Authority of India
Ministry of Road Transport and Highways, Government of India

CONSULTANT:

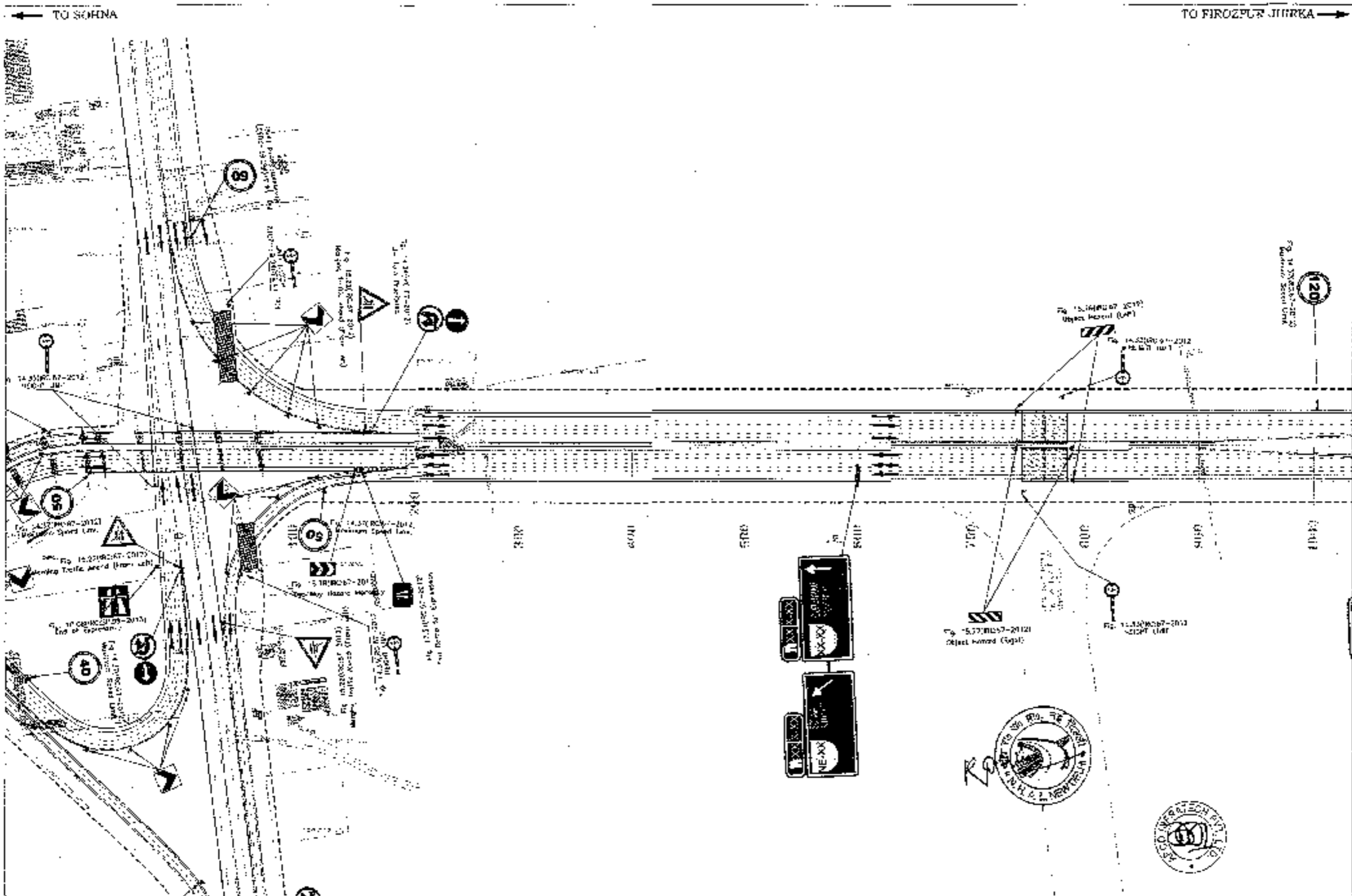
Chaitanya Projects Consultancy Pvt. Ltd.
 C-8, 2ND FLOOR, R.K. TOWER, PLOT NO. - 21-22,
 SECTOR-4, VAISHALI, GURGAON
 PH.: 0120-2993419, 4120472, FAX: 0120-4113472



PROJECT:
 Consultancy Service for the Preparation for Feasibility Report/PPN for development of Economic Corridor, (near Corridor and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (LoI-BIPassage-4) (Sohna - Firozpur Jirka section of Delhi-Vadodra Expressway) (PK-1, Ch 0+000 to 14+281)

SCALE:
 1:2000

DWG TITLE:
 PROJ- 57
 ROAD SCHEME & MARKING PLAN
 (SOHNA - FIROZPUR JIRKA)
 INTERCHANGE AT CH-2+800

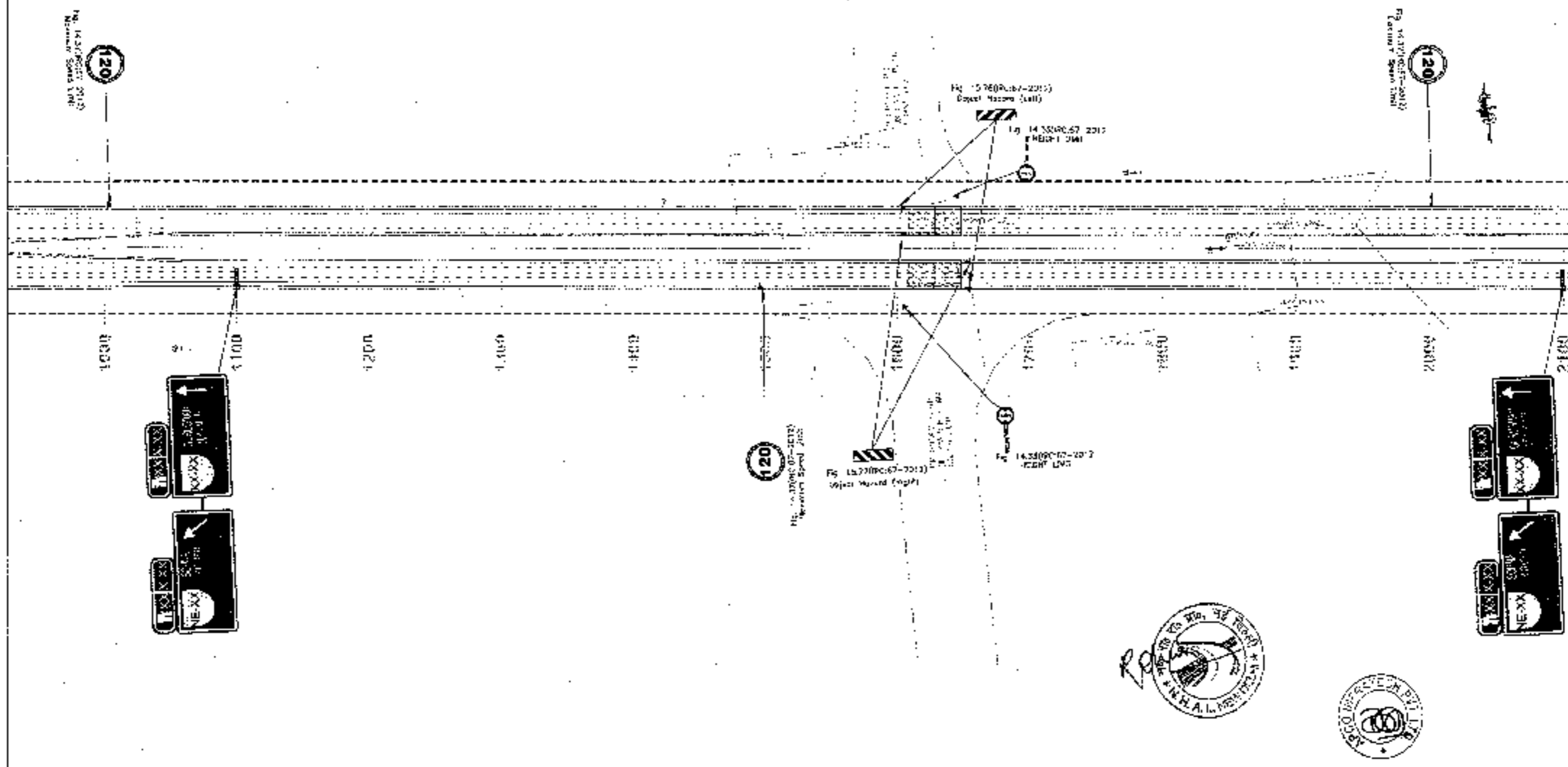
DRAWING No.:
 CPCIP 1502010010000-10FRPSAMP1 01
 DATE: 28 FEBRUARY 2015
 PREPARED BY: KUNJ
 CHECKED BY: SANTOSH CHHABRA
 APPROVED BY: S. K. SHARMA





<p>CLIENT -</p>  <p>National Highways Authority of India</p>	<p>CONSULTANT -</p>  <p>Chaitanya Projects Consultancy Pvt. Ltd. C-3, 2ND FLOOR, R.K. TOWER FLOT NO.- 21-22, SECTION-4, VAJSHALI, GHANAMAN PH. 0110-5229410, 4170472, FAX: 0110-4110472</p>	<p>PROJECT -</p> <p>Consultancy Service for the Preparation for Feasibility Study/UPR for development of Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (L1-L2 Package-4) (Sahni - Firozpur Jirka section of Delhi-Vadodra Expressway) (Pkg. No. D-000 to 13464)</p>	<p>SCALE -</p> <p>1:2000</p> <p>DWG TITLE -</p> <p>58</p> <p>ROAD SIGNAGE & MARKING PLAN (SOHNA - FIROZPUR JIRKA) (KM 0+00 TO KM 1+00)</p>	<p>DRAWING NO -</p> <p>0000-2200000000-UPR/ISSN/01-D/A</p> <p>DATE - SEPTEMBER 2012</p> <p>DESIGNED BY -</p> <p>CHECKED BY -</p> <p>APPROVED BY -</p> <p>SCALE -</p> <p>DATE -</p>
---	--	--	--	--

← TO SOHNA

TO FIROZPUR JHIRKA →



CLIENT:

National Highways Authority of India
 100, Connaught Place, New Delhi, India
 Tel: 011-26104100, 26104101, 26104102, 26104103, 26104104, 26104105, 26104106, 26104107, 26104108, 26104109, 26104110, 26104111, 26104112, 26104113, 26104114, 26104115, 26104116, 26104117, 26104118, 26104119, 26104120, 26104121, 26104122, 26104123, 26104124, 26104125, 26104126, 26104127, 26104128, 26104129, 26104130, 26104131, 26104132, 26104133, 26104134, 26104135, 26104136, 26104137, 26104138, 26104139, 26104140, 26104141, 26104142, 26104143, 26104144, 26104145, 26104146, 26104147, 26104148, 26104149, 26104150, 26104151, 26104152, 26104153, 26104154, 26104155, 26104156, 26104157, 26104158, 26104159, 26104160, 26104161, 26104162, 26104163, 26104164, 26104165, 26104166, 26104167, 26104168, 26104169, 26104170, 26104171, 26104172, 26104173, 26104174, 26104175, 26104176, 26104177, 26104178, 26104179, 26104180, 26104181, 26104182, 26104183, 26104184, 26104185, 26104186, 26104187, 26104188, 26104189, 26104190, 26104191, 26104192, 26104193, 26104194, 26104195, 26104196, 26104197, 26104198, 26104199, 26104200

CONSULTANT:

Chaitanya Projects Consultancy Pvt. Ltd.
 G-5, 2ND FLOOR, R.K. TOWER, PLOT NO - 24-22,
 SECTOR-4, VAISHALI, GHAZIABAD
 Ph: 0120-3275618, 3120472, FAX: 0120-4110472

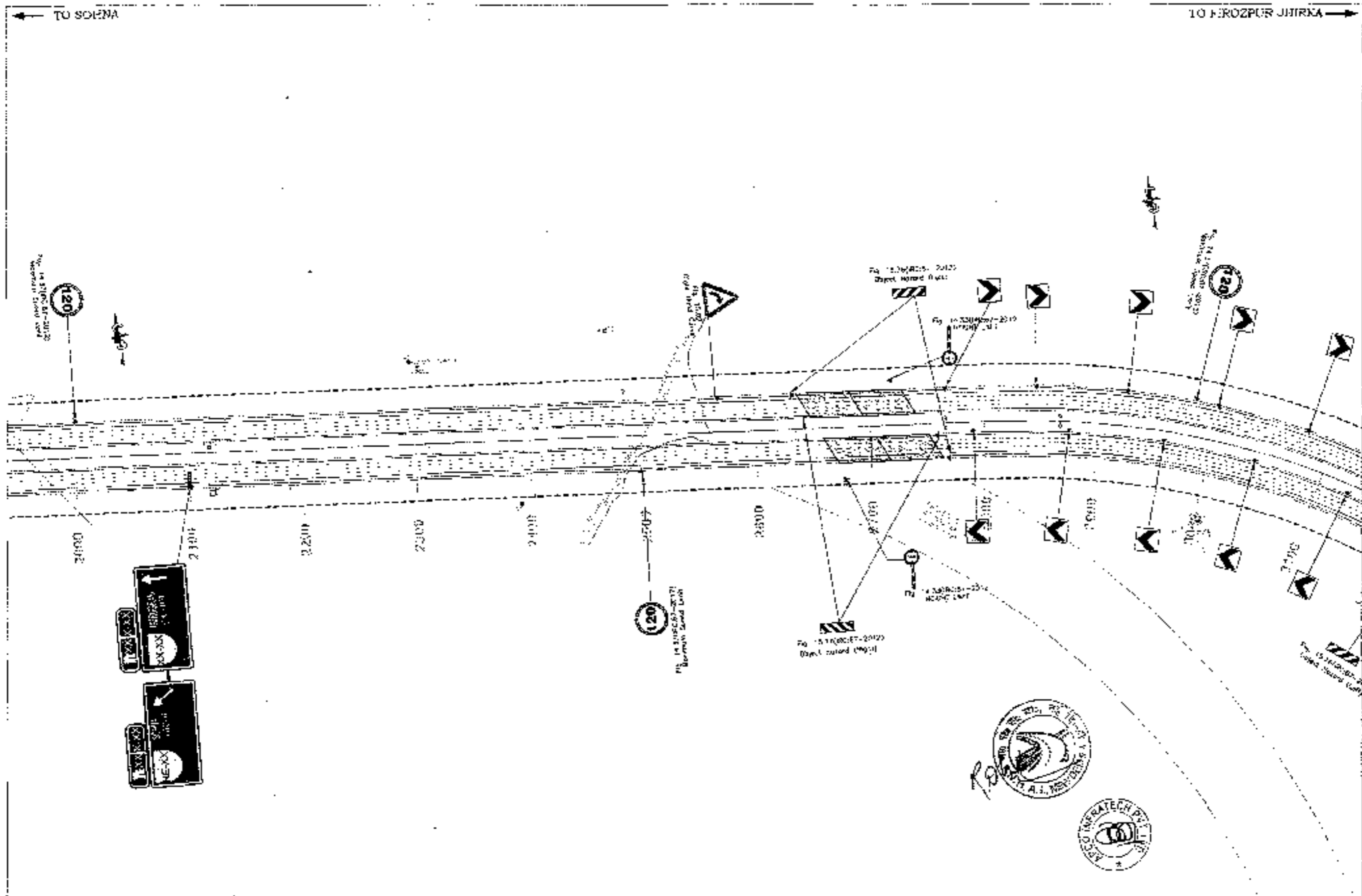
PROJECT:
 Consultancy Service for the Preparation for Feasibility Report/ DPR for development of Economic Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-BIPackage-4) (Sector - Firozpur-Jharkh section of Delhi-Vadodra Expressway) (Pkg-1, (2) 0+000 to 14+461)



SCALE :-
 1:2000

DWG TITLE:
59
 ROAD SIGNAGE & MARKING PLAN
 (SOHNA - FIROZPUR-JHIRKA)
 (SK: 1+500 TO KM 2+000)

DRAWING No. -
 CPQP 1002NEP-RP-60 (FRS)SAP. 02

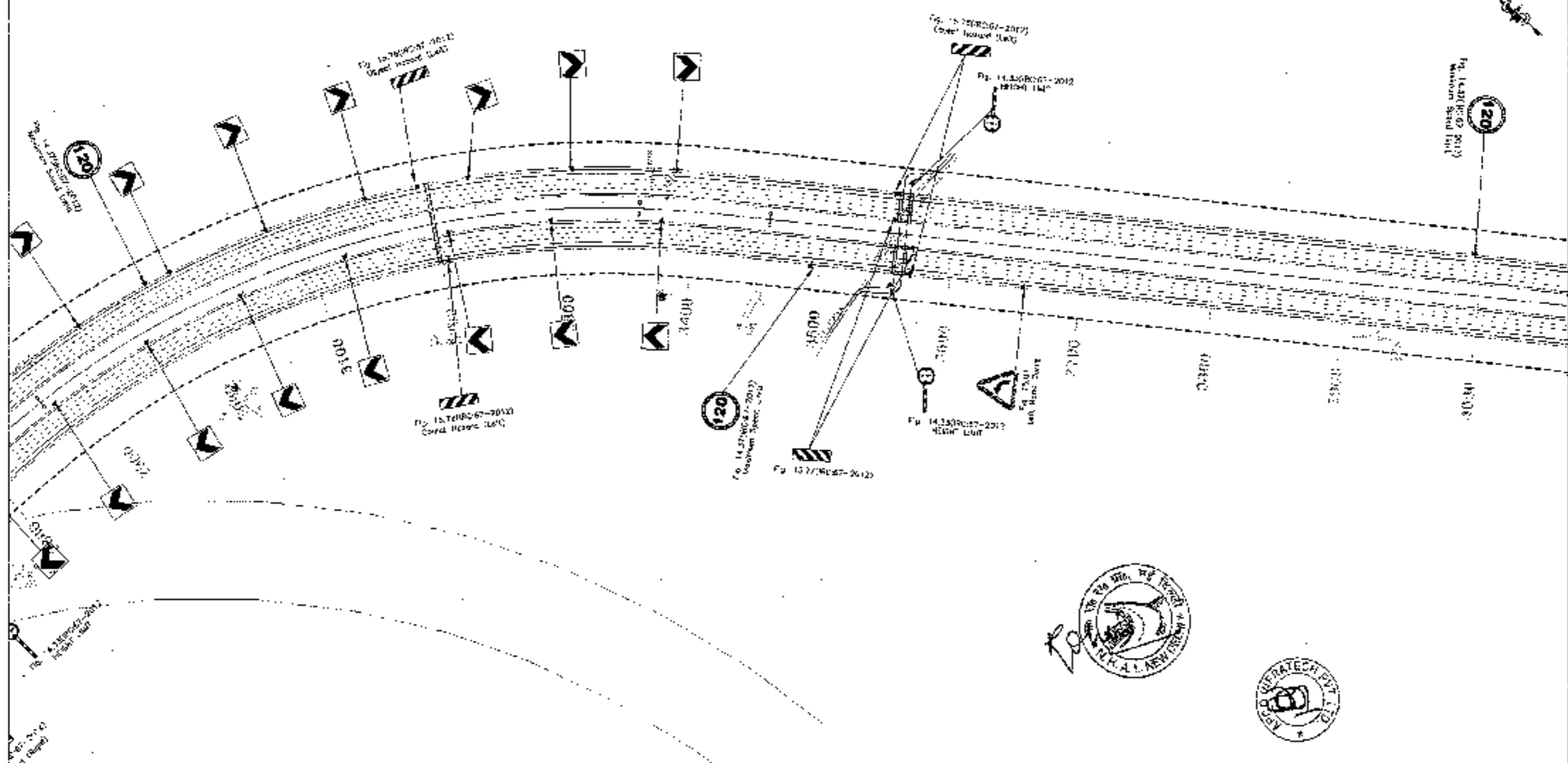
DATE: SEPTEMBER 2018	SCALE: 1:2000
PREPARED BY: RAVUL	CHECKED BY: S. S. SINGH
DESIGNED BY: S. S. SINGH	APPROVED BY: S. S. SINGH
DATE: 14/09/2018	SCALE: 1:2000



CLIENT:  National Highway Authority of India <small>Ministry of Transport & Highways, Govt. of India</small>	CONSULTANT:  Chaitanya Projects Consultancy Pvt. Ltd. C-6, 2ND FLOOR, RAJ TOWER PLOT NO.-21-22, SECTOR-4, VASPALE, GHAZIABAD Ph: 0120-3221409, 4126472, FAX: 91-20-4110672	PROJECT: Consultancy Services for the Preparation for Feasibility Report/IDPR for development of Economic Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojaya (Lot-6/Package-4) (Sohna - Ferozpur Jhirka section of Delhi-Vadodra Expressway) (Fig-1, Ch. 0+403 to 16+451)	SCALE: 1:2000	DWG TITLE: 60 P.S.U-1 ROAD SIGNAGE & MARKING PLAN (SOHNA - FEROZPUR JHIRKA) (KM 2+00 TO KM 3+00)	DRAWING No.: UP/01/2012/1100000-1/0000000-01
					DATE: SEPTEMBER 2012 DRAWN BY: KUSHI CHECKED BY: KANISHK APPROVED BY: S. S. SINGH


← TO SOFNA

TO FIRZPUR JHIRKA →



CLIENT -

National Highways Authority of India
 National Highway Development Corporation
 Plot No. 27 & 28, Connaught Place, New Delhi - 110029

CONSULTANT -

Challanya Projects Consultancy Pvt. Ltd.
 G-9, 2ND FLOOR, N.K. TOWER, PLOT NO - 71-22,
 SECTOR-1, MARSHALL GHAZIABAD
 PH: 0120-2223449, 4120472, FAX: 0120-4110472

PROJECT -
 Consultancy Service for the Preparation for Feasibility Report/ DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firzpur Jhirka section of Delhi-Vadodra Expressway)
 (Pag-7, Ch. 6+000 to 18+487)

SCALE -
 1:2000

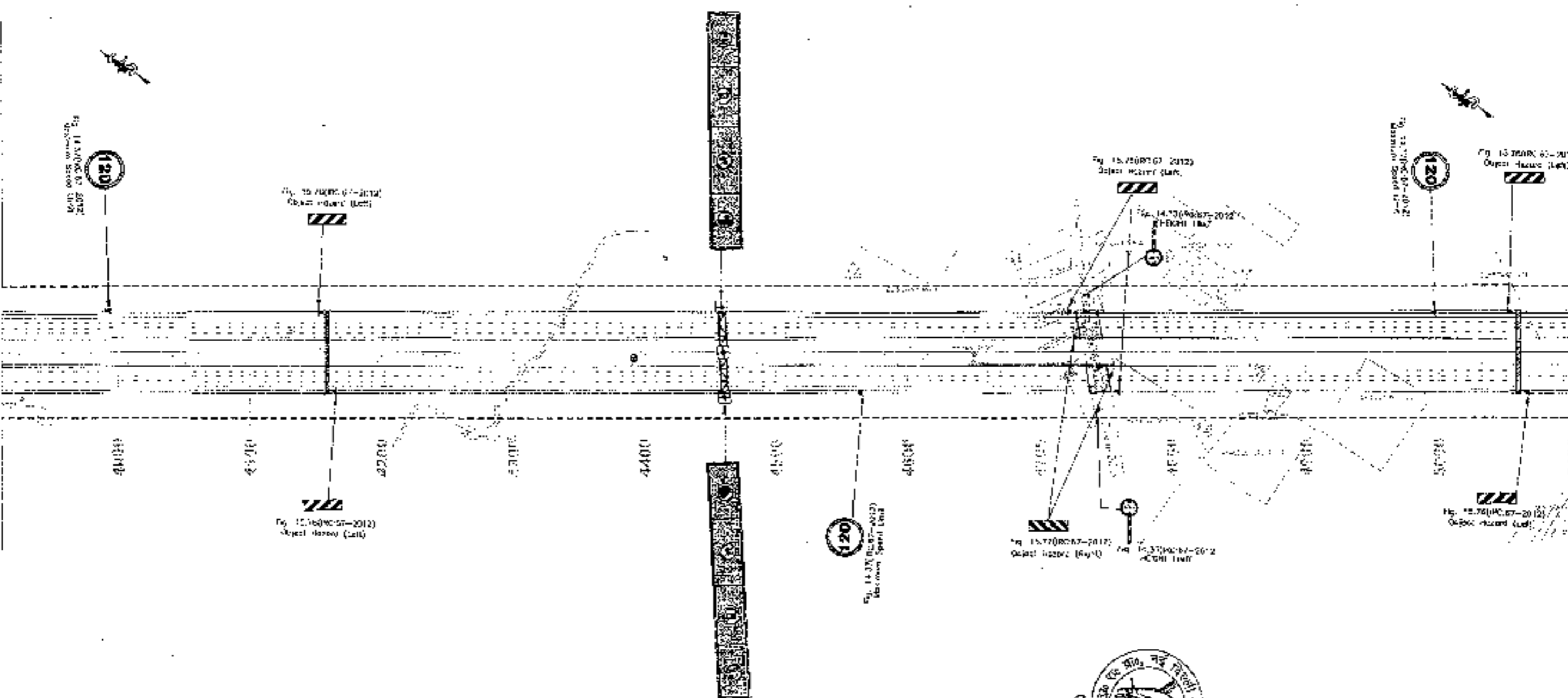
DWG TITLE -
 ROAD MARKING & MARKING PLAN
 (SOHNA - FIRZPUR JHIRKA)
 (KM 3+000 TO KM 6+000)

DRAWING NO -
 CNP/102/2011/1370-14/FIRZPUR/01
 DATE: SEPTEMBER 2011
 PREPARED BY: RAJESH K. SHARMA
 CHECKED BY: RAJESH K. SHARMA
 APPROVED BY: RAJESH K. SHARMA
 SCALE: 1:2000



← TO SOJINA

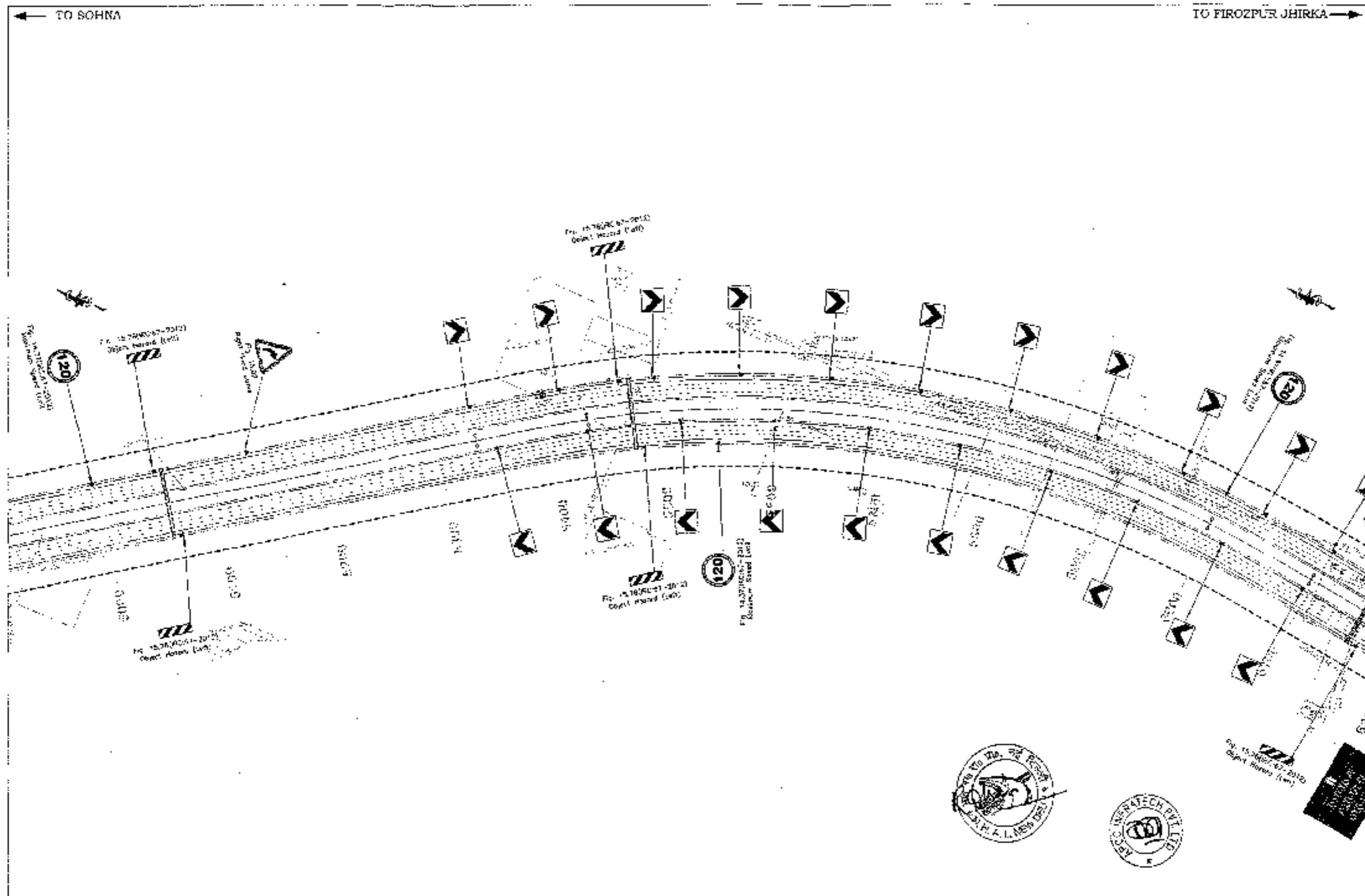
TO FEROZPUR JIRKA →



<p>CLIENT:- National Highways Authority of India (Ministry of Road Transport & Highways, Govt. of India)</p>	<p>CONSULTANT:- Chaitanya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, R.K. TOWER PLOT NO- 21-22, SECTOR-4, VAISHALI GHAZIABAD PK. 0120-3223419 4185472 FAX: 0120-4116472</p>	<p>PROJECT:- Consultancy Service for the Preparation for Feasibility Report/ODR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of Freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Ferozpur Jirka section of Delhi-Vadodra Expressway) (Prj-1_Ch. 0+000 to 10+461)</p>	<p>SCALE - 1:2000</p>	<p>DWG TITLE - SEC-4 ROAD SIGNAGE & MARKING PLAN (SOJINA - FEROZPUR JIRKA) REV. 4/10/2015: KSL 5-050</p>	<p>DRAWING No:- 0204-2015/10-10/MS (PRJ/SSMP) 05 DATE: SEPTEMBER 2015 DESIGNED BY: [Signature] CHECKED BY: [Signature] DRAWN BY: [Signature] APPROVED BY: [Signature]</p>
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← TO SOHNA

TO FIROZPUR JHIRKA →



CLIENT:
National Highways Authority of India
 Ministry of Road Transport and Highways, Government of India

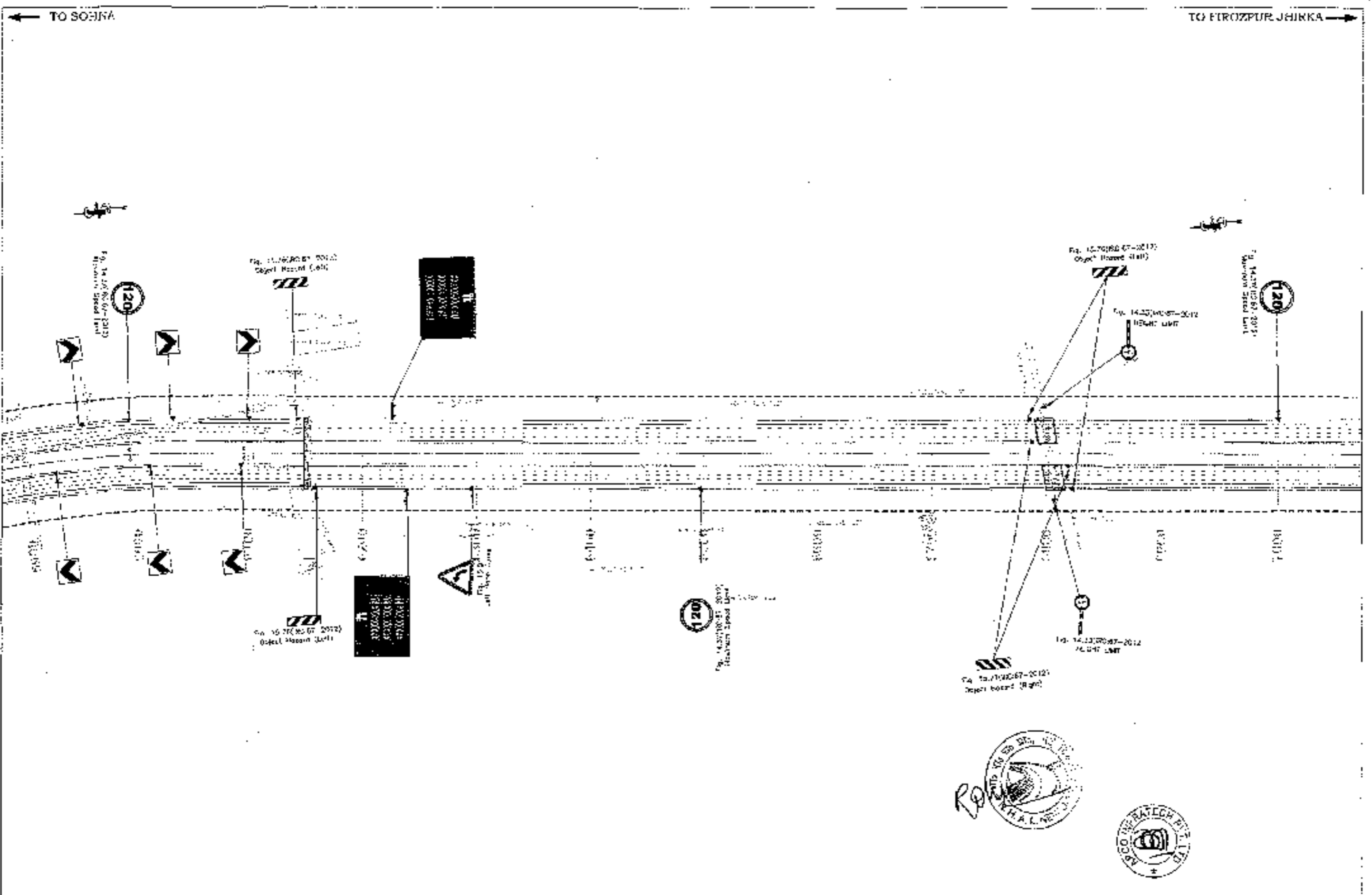
CONSULTANT:
Chaitanya Projects Consultancy Pvt. Ltd.
 C-5, 2ND FLOOR, R.K. TOWER PLOT NO.- 21-22, SECTOR-6, VAISHALI, GHAZIABAD
 PH: 0120-3223419, 4120472, FAX: 0120-4110472


PROJECT:
 Consultancy Service for the Preparation for Feasibility Report/DPR for development of Feeder Corridors, Inner Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-4/Package-c) (Sohna - Firozpur Jhirka section of Delhi-Vadodara Expressway)
 (Pag-1, Cn. 0+000 to 15+481)

SCALE:
 1:2000

DWG TITLE:
 PCC-1
ROAD SIGNAGE & MARKING PLAN
 (SOHNA - FIROZPUR JHIRKA)
 (KM 0+000 TO KM 6+000)

DRAWING No. -
 CPCS/ROADWAY/RC-10-24/RPSS/04-15
 DATE: SEPTEMBER 2018
 DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]



CLIENT

National Highways Authority of India
 Ministry of Road Transport & Highways, Govt. of India

CONSULTANT

Charanya Projects Consultancy Pvt. Ltd.
 D-5, 2ND FLOOR, P.K. TOWER PLOT NO.- 21-22,
 SECTOR-4, VAISHALI, GHRDABAD
 PH.: 0120-3223419, 4120472, FAX: 0120-4115472

PROJECT
 Consultancy Service for the Preparation for Feasibility Report/ DPR for development of Economic Corridors, Intra Corridors and Feeder Routes to improve the efficiency of freight movements in India under Bharatmala Pariyojana (Lot-6/Package-4)
 (Sobha - Firozpur Jhirka section of Delhi-Vadodra Expressway)
 (Pay-3, DS, D-000 to 13+494)

SCALE
 1:5000

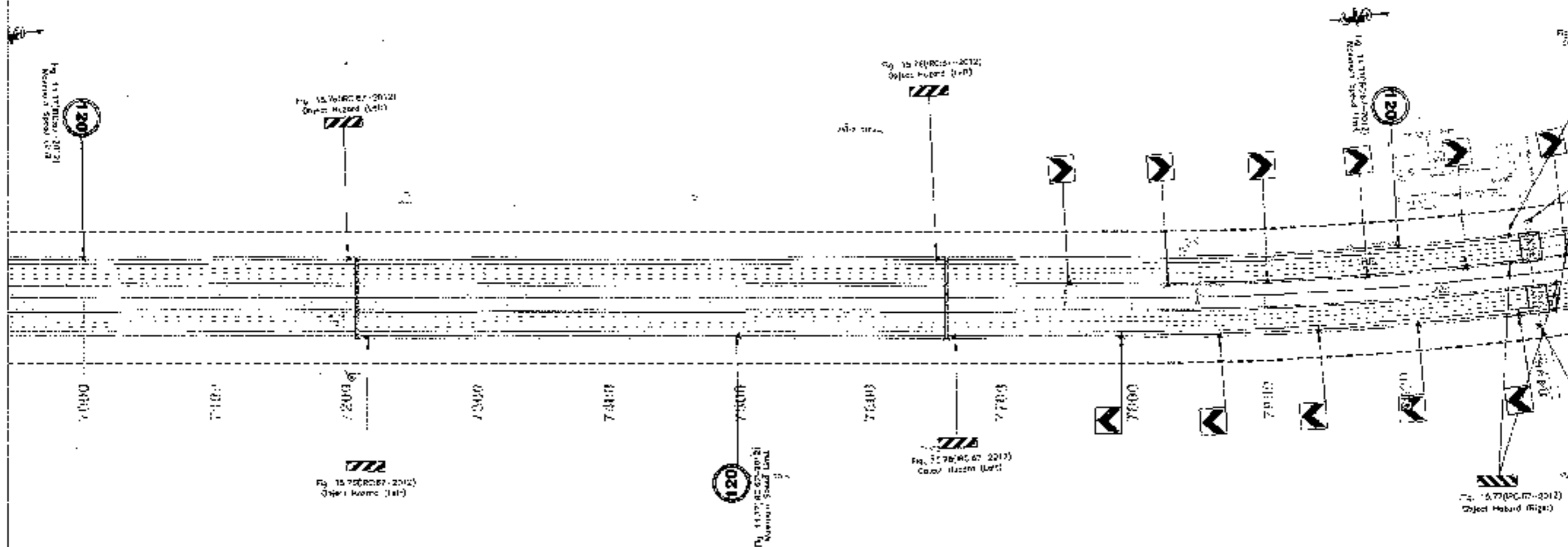
DWG TITLE
 ROAD SIGNAGE AT 14+300 (L&T)
 (SOBHA - FIROZPUR JHIRKA)
 (EM. G. INDIA/LEA/14026)

DRAWING No.
 CORR-SPV-0533-EMG-FR/SS/MS-01
 DATE SEPTEMBER 2018
 PROJECT: BHARATMALA
 SHT: 15070126-07-2012
 SCALE: TO SCALE



← TO SOHNA

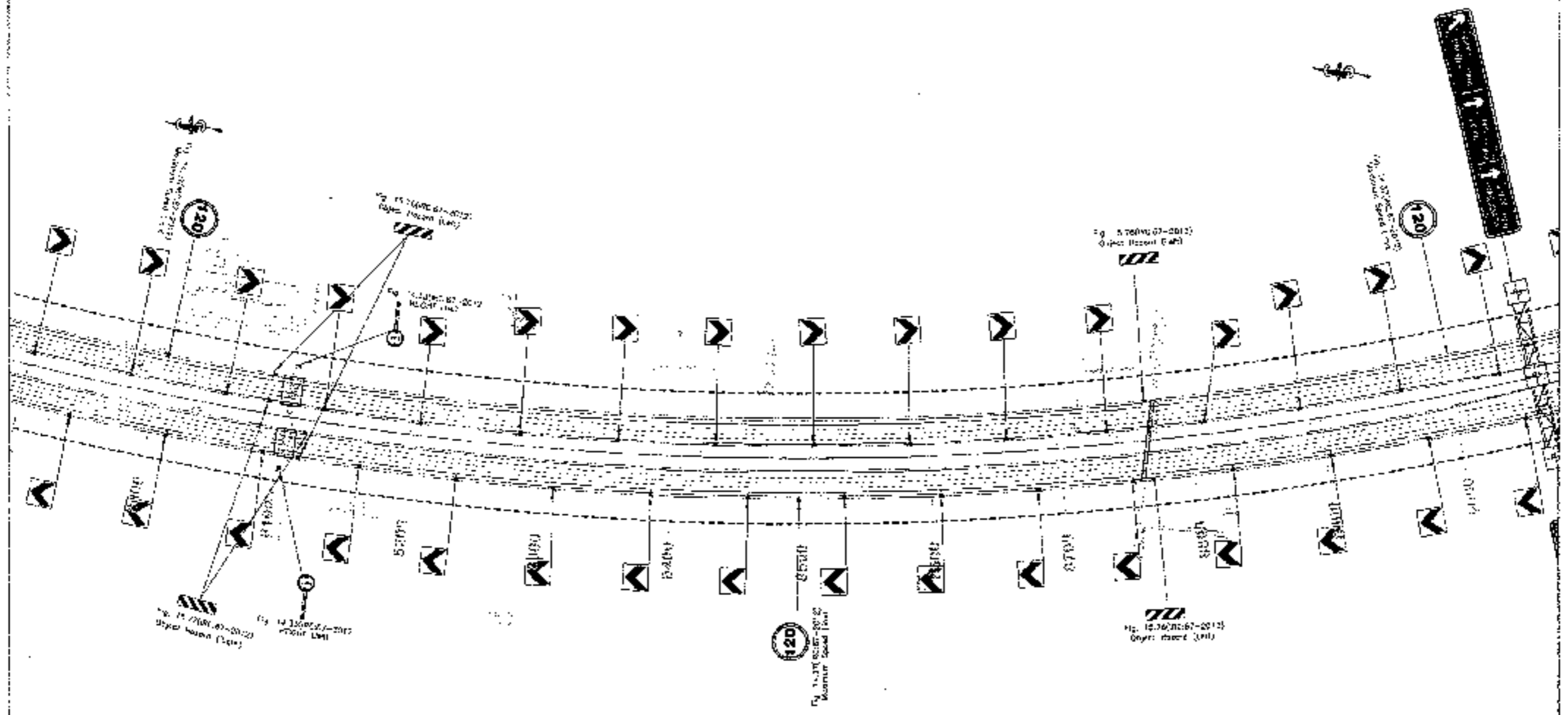
TO FROZPUR JHIRKA →





<p>CLIENT - National Highways Authority of India</p>	<p>CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, R.K. TOWER, PLOT NO.-21-22, SECTOR-4 VAISHALI, SHAZIABAD Ph. 0120-3723118, 3120472, FAX: 0120-4110672</p>	<p>PROJECT - Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Delhi - Ferozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1, Ch. 0+000 to 58+481)</p>	<p>SCALE :- 1:2000</p>	<p>DWG TITLE - 65 ROAD SIGNAGE & MARKING PLAN (SOHNA - FROZPUR JHIRKA) (S.M. 7-CONTR-REC-4/2007)</p>	<p>DRAWING No. - GROUP-45000A/WH/4000-STR/000P-04 DATE: SEPTEMBER 2015 Author: [Signature] Checked: [Signature] Approved: [Signature]</p>
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← TO SOJANA

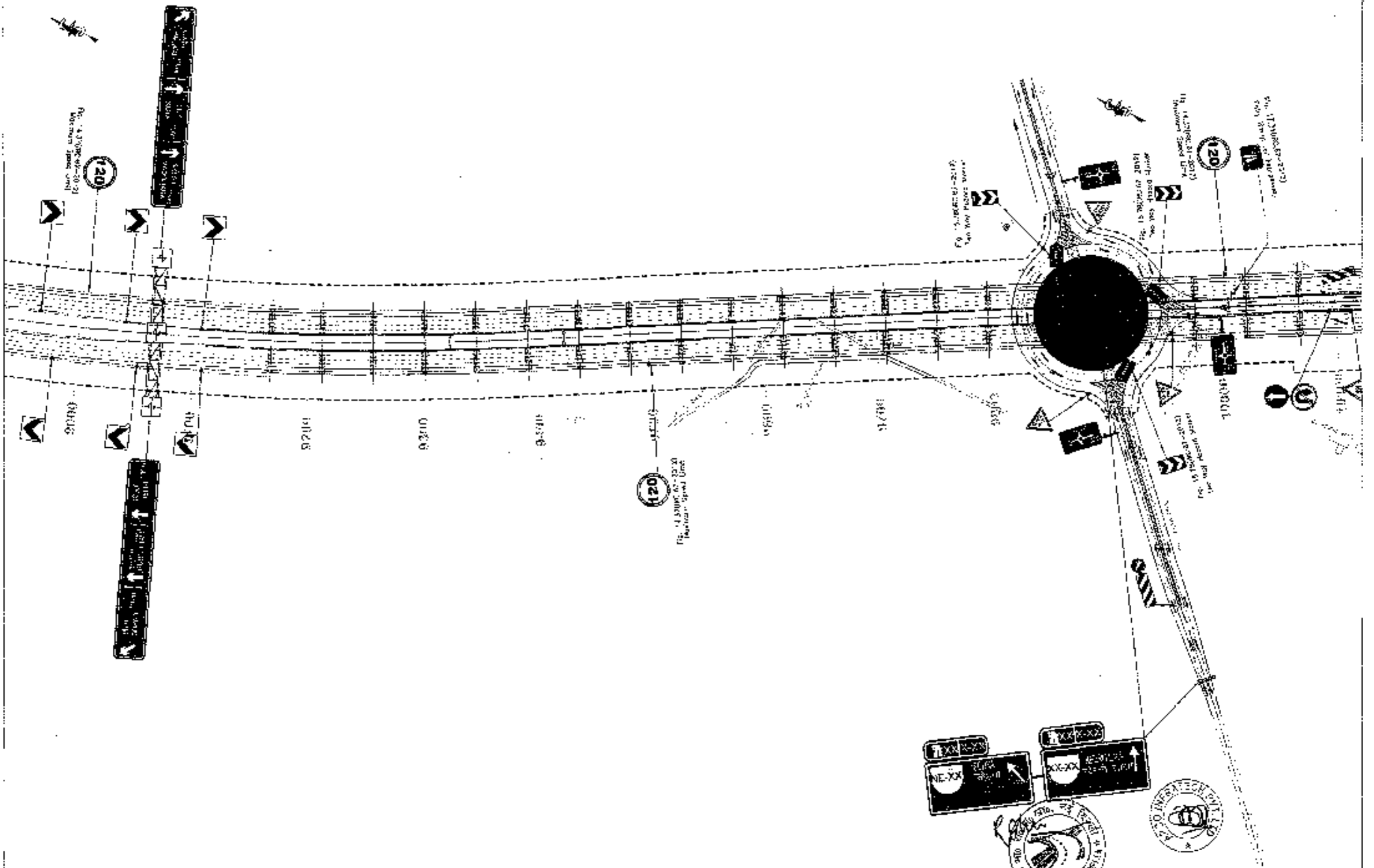
TO FIROZPUR JHIRKA →





<p>CLIENT:-  National Highway Authority of India <small>General and Technical Services for NH</small></p>	<p>CONSULTANT:  Chaitanya Projects Consultancy Pvt. Ltd. C-6 2ND FLOOR, RLK TOWER PLOT NO.- 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH: 0120-3223419, 4120472 FAX: 0120-4116472</p>	<p>PROJECT:- Consultancy Service for the Preparation for Feasibility Report/DRR for development of Economic Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (L-4/Package-4) (Sohna - Ferozpur Jhirka section of Delhi-Mumbai Expressway) (Fig-1, Ids 04002 to 124451)</p>	<p>SCALE:- 1:2000</p>	<p>DWG'S TITLE:- PROJ-1 ROAD SIGNAGE & MARKING PLAN (SOHNA - FIROZPUR JHIRKA) (KM 8+000 TO KM 9+000)</p>	<p>DRAWING No. - 66 01/09/2016 02/09/2016 03/09/2016 04/09/2016 05/09/2016 06/09/2016 07/09/2016 08/09/2016 09/09/2016 10/09/2016 11/09/2016 12/09/2016 13/09/2016 14/09/2016 15/09/2016 16/09/2016 17/09/2016 18/09/2016 19/09/2016 20/09/2016 21/09/2016 22/09/2016 23/09/2016 24/09/2016 25/09/2016 26/09/2016 27/09/2016 28/09/2016 29/09/2016 30/09/2016 01/10/2016 02/10/2016 03/10/2016 04/10/2016 05/10/2016 06/10/2016 07/10/2016 08/10/2016 09/10/2016 10/10/2016 11/10/2016 12/10/2016 13/10/2016 14/10/2016 15/10/2016 16/10/2016 17/10/2016 18/10/2016 19/10/2016 20/10/2016 21/10/2016 22/10/2016 23/10/2016 24/10/2016 25/10/2016 26/10/2016 27/10/2016 28/10/2016 29/10/2016 30/10/2016 31/10/2016 01/11/2016 02/11/2016 03/11/2016 04/11/2016 05/11/2016 06/11/2016 07/11/2016 08/11/2016 09/11/2016 10/11/2016 11/11/2016 12/11/2016 13/11/2016 14/11/2016 15/11/2016 16/11/2016 17/11/2016 18/11/2016 19/11/2016 20/11/2016 21/11/2016 22/11/2016 23/11/2016 24/11/2016 25/11/2016 26/11/2016 27/11/2016 28/11/2016 29/11/2016 30/11/2016 01/12/2016 02/12/2016 03/12/2016 04/12/2016 05/12/2016 06/12/2016 07/12/2016 08/12/2016 09/12/2016 10/12/2016 11/12/2016 12/12/2016 13/12/2016 14/12/2016 15/12/2016 16/12/2016 17/12/2016 18/12/2016 19/12/2016 20/12/2016 21/12/2016 22/12/2016 23/12/2016 24/12/2016 25/12/2016 26/12/2016 27/12/2016 28/12/2016 29/12/2016 30/12/2016 31/12/2016</p>
---	--	---	------------------------------------	--	--

← TO SOHNA

TO FIROZPUR JHERKA →



CLIENT:

National Highways Authority of India
 Ministry of Road Transport & Highways, Govt. of India

CONSULTANT:

Chaitanya Projects Consultancy Pvt. Ltd.
 C-5, 2ND FLOOR, R.K. TOWER PLOT NO.- 21-22, SECTOR-4, VAISHALI, GHAZIABAD
 Ph: 0120-3213410, 4120472, FAX: 0120-4110472

PROJECT:
 Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridor, Feeder Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-01/Package-4) (Sohna - Firozpur Jherka section of Delhi-Vadodara Expressway)
 (Pkg1_Ch. 0+000 to 18+451)

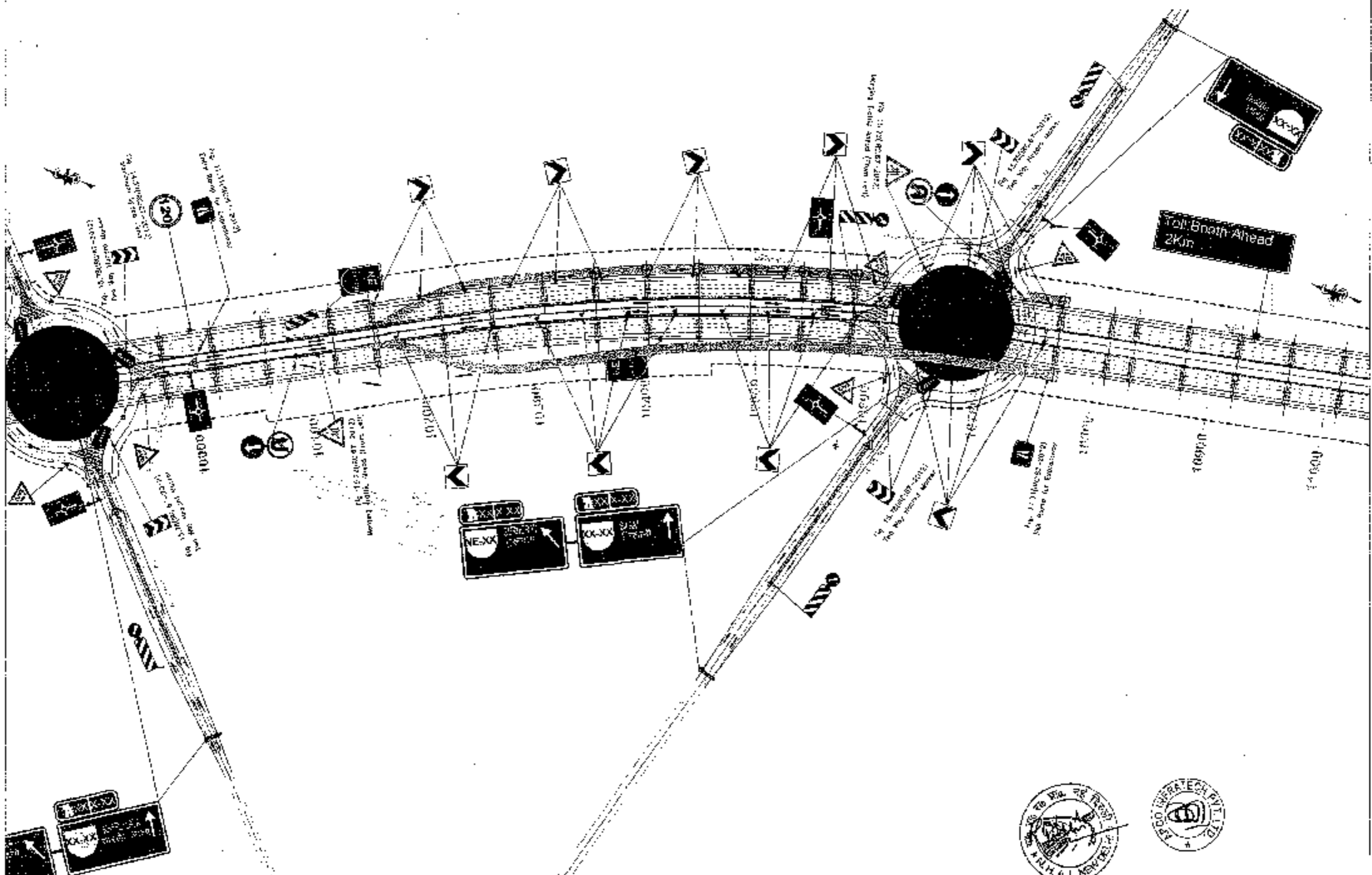
SCALE:
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DATE: 06/11/2016
 ROAD SIGNAGE & MARKING PLAN
 (SOHNA - FIROZPUR JHERKA)
 (S/N: 18451/00001/00001)

DRAWING NO. -
 EPC-INT-0001-RS-01-00001-00001-00001
 DATE: SEPTEMBER 2016
 PROJECT NO. 18451/00001/00001
 SHEET NO. 01 OF 01
 KUNB
 SANJAY KUMAR
 S. K. SINGH


← TO SOHNA

TO FIROZPUR JHINKA →



CLIENT -



National Highways Authority of India
 Plot No. 1, Sector 10, Connaught Place, New Delhi - 110028

CONSULTANT -

Chaitanya Projects Consultancy Pvt. Ltd.
 G-5, 2ND FLOOR, AKTOWER PL 07, W-21-22, Sector 10B-4, VASHTA, GHAZIABAD
 Ph: 0120-3223419, 4729472, FAX: 0120-4110472

PROJECT -
 Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Connectors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-8/Package-4) (Sohna - Firozpur Jhinka section of Delhi-Mumbai Expressway) (Rkg-05 0+000 to 10+461)

SCALE -
 1:2000

DWG TITLE -
 ROAD SIGNAGE & MARKING PLAN
 (SOHNA - FIROZPUR JHINKA)
 (KM 0+000 TO KM 10+461)

EXAMINER'S -


 DATE: SEPTEMBER 2016
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]

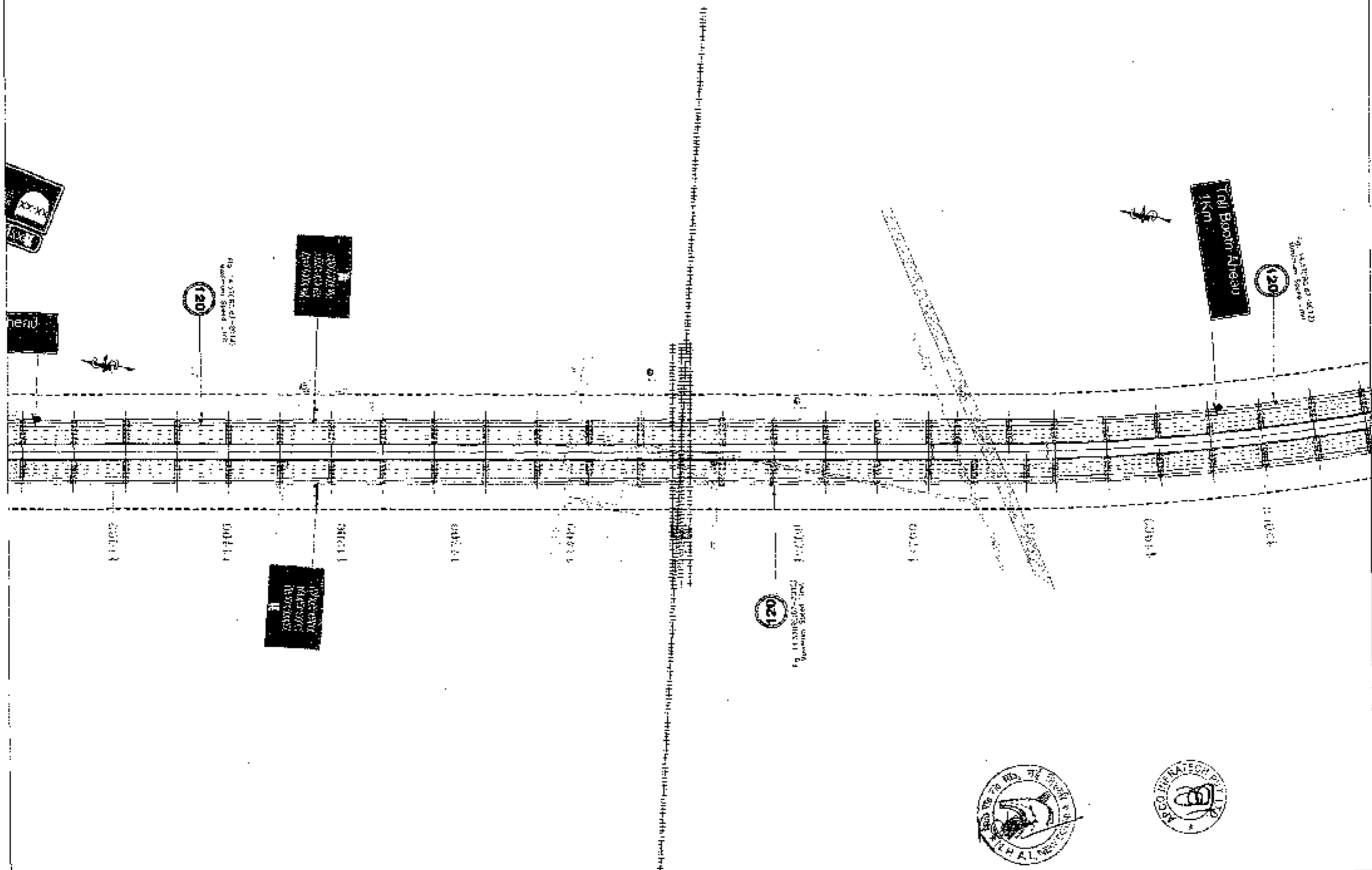



Fig. 11.2011.06-2112
Minimum Speed 120



CLIENT -  **National Highways Authority of India**
Ministry of Road Transport & Highways, Govt. of India

CONSULTANT -  **Chaitanya Projects Consultancy Pvt. Ltd.**
G-2, 2ND FLOOR, R.K.TOWER, PLOT NO.- 21-22,
SECTION-4, VAISHALI, GHAZIABAD
PH - 0120-3223419, 4120472, FAX: 0120-4110472

PROJECT - Consultancy Service for the Preparation for Feasibility Report (PR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in lands under Bawana (Lot-5) (Scheme-4) (Sohna - Firozpur Jharka section of Delhi-Vadodra Expressway) (Pkg-1, Ss. 0+000 to 10+461)

SCALE - 1:2000

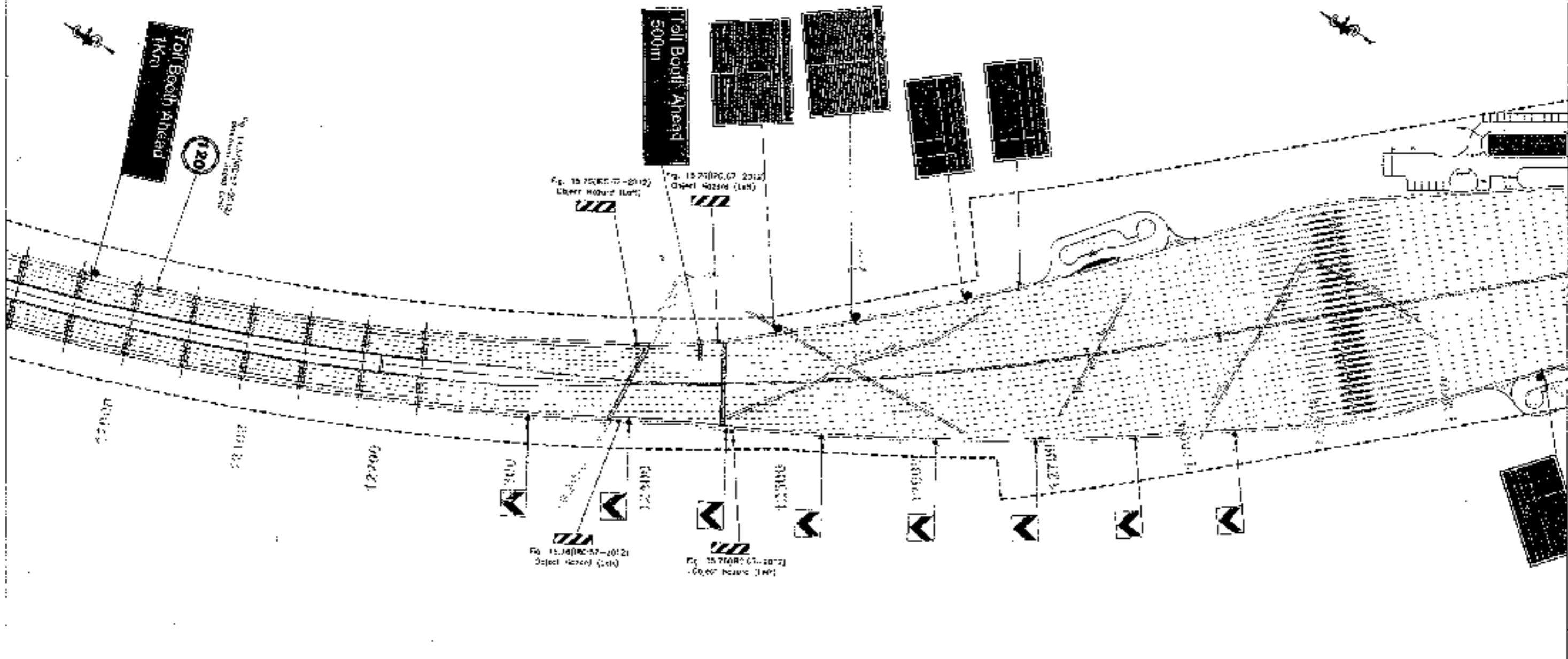
DRAWING TITLE - **69**
ROAD SIGNAGE & MARKING PLAN
SOHNA - FIROZPUR JHARKA
Ss. 11+800 TO 12+000


DRAWING No. - CHOP - SD/VE/AM/NO. - FEBRUARY 17


DATE: 04/02/2016	SCALE: 1:2000
PROJECT: CHOP/SD/VE/AM/NO. - FEBRUARY 17	DESIGNED BY: S.K. SINGH
CHECKED BY: S.K. SINGH	DATE: 04/02/2016

← TO SOJINA

TO FIROZPUR JIRKA →



CLIENT -

National Highways Authority of India
 Plot No. 14, Sector 4, Phase I, Connaught Place, New Delhi - 110028

CONSULTANT -

Chaitanya Projects Consultancy Pvt. Ltd.
 G-5, 2ND FLOOR, R.K. TOWER, PLOT NO. - 21-22, SECTOR-4, VAISHALI, CHAZIABAD
 Ph: 0120-3233419, 4120472 FAX: 0120-4110472

PROJECT -
 Consultancy Service for the Preparation for Feasibility Report/DPR for development of E-bayage, Cones, Inlet Cones and Facility Routes to Improve the efficiency of freight movement in India under Charitable Partnership (Lot-6/Package-4) [Sohna - Firozpur Jirka section of Delhi-Vadodara Expressway] (Pkg-7, Ch. 0+000 to 18+483)

SCALE -
 1:2000

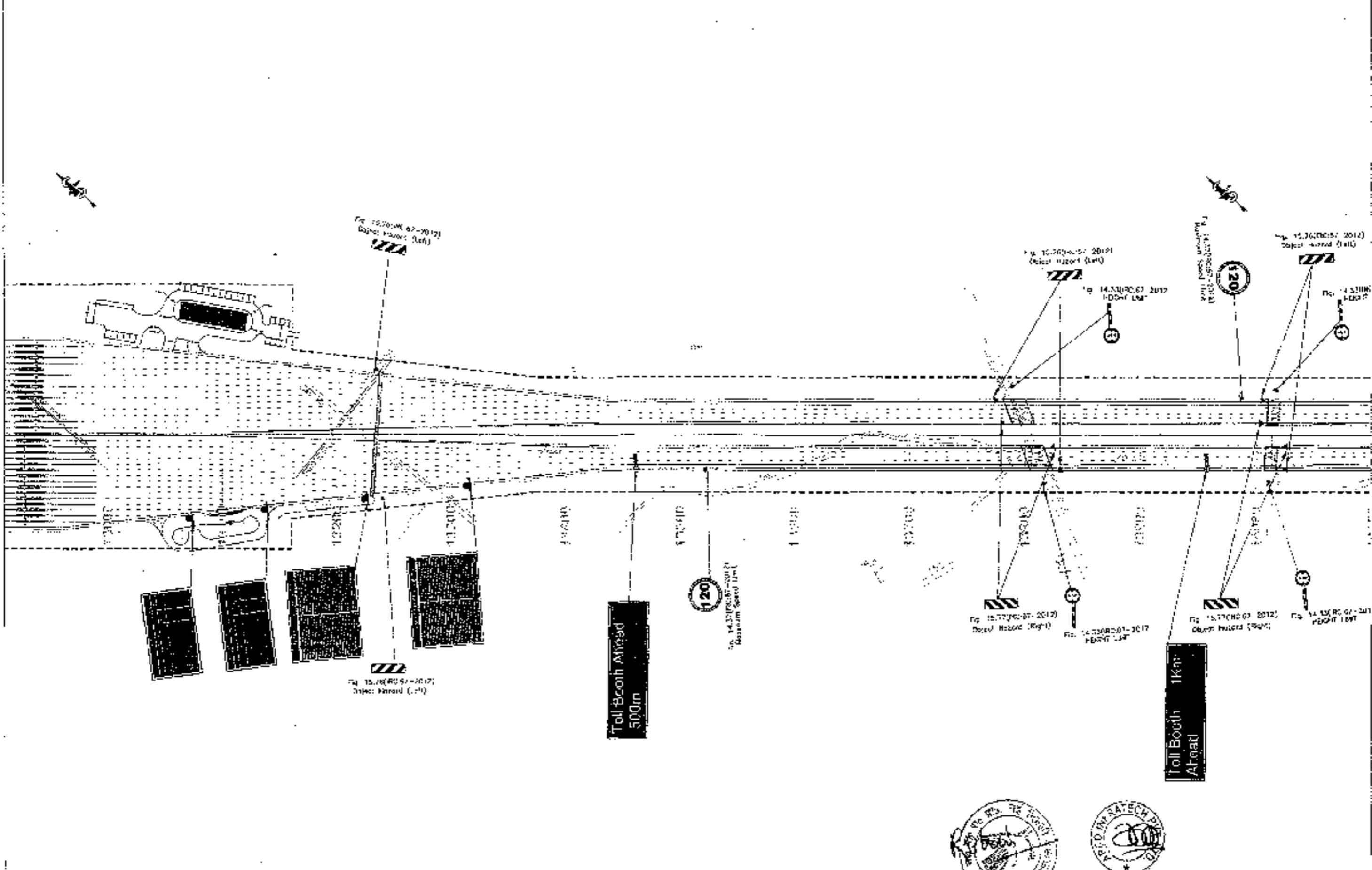
DATE - 7/9
 ROAD SIGNAGE & MARKING PLAN
 (SOJINA - FIROZPUR JIRKA)
 (KM 12+000 TO 12+300)


DRAWING No -
 CPCL/143/2017/HR/2-INTERSECTION 15
 DATE - SEPTEMBER 2017
 DRAWN BY: S.K. SHARMA
 CHECKED BY: S.K. SHARMA
 APPROVED BY: S.K. SHARMA




← TO SOHNA

TO FIROZPUR JIRKA →



CLIENT -

National Highways Authority of India
 Plot No. 10, Sector 10, Connaught Place, New Delhi - 110028

CONSULTANT -

Chaitanya Projects Consultancy Pvt. Ltd.
 C-5, 2ND FLOOR, R.K. TOWER PLOT NO - 21-02, SECTOR-4, VAISHALI, GHAZIABAD
 PCL: 0120-3223419, 4120472, FAX: 0120-4110472

PROJECT -
 Consultancy Service for the Preparation of Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jirka section of Delhi-Vadodra Expressway)
 (IPRy-1_Ch. 0-400 to 10+461)

SCALE -
 1:2000

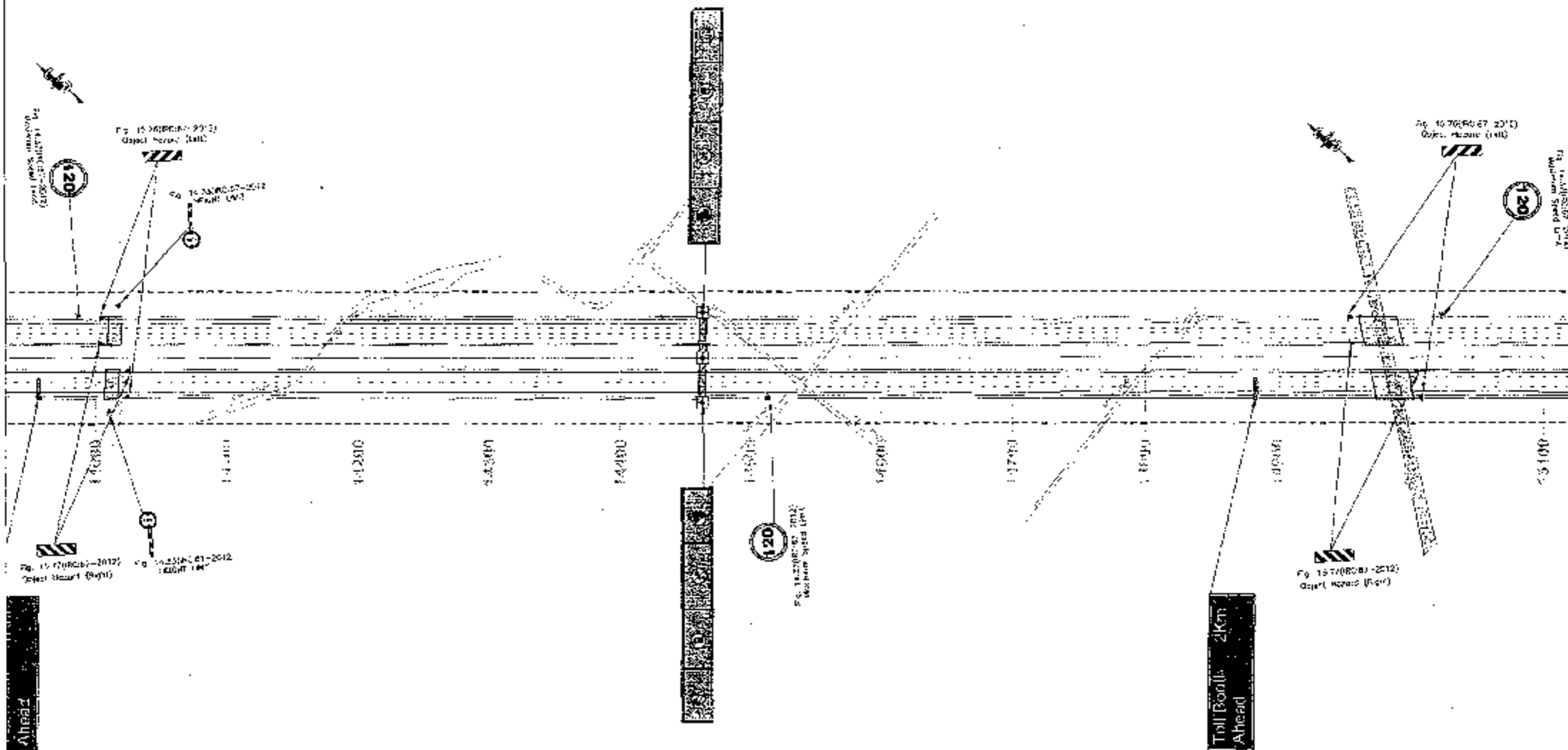




ROAD SIGNS & MARKING PLAN
 SOHNA - FIROZPUR JIRKA
 (K.M. 0+000 TO 10+400)

DRAWING NO -
 CPCE 1020454477/14/10/001/11
 DATE OF TENDER 2013
 DRAWN BY: SANKU
 CHECKED BY: SANKU
 APPROVED BY: SANKU
 THIRUVA

← TO SOHNA

TO FIROZPUR JHIRKA →

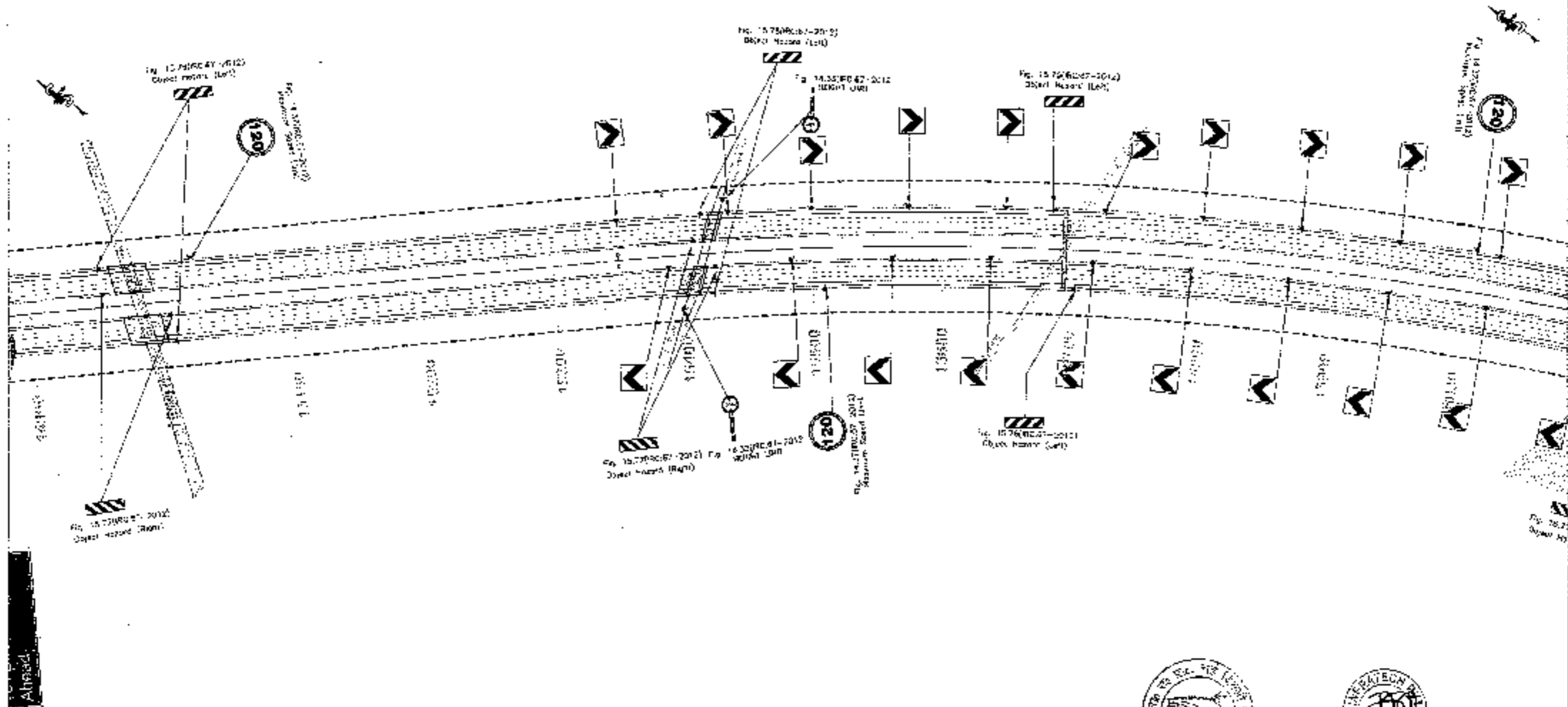



<p>CLIENT:-</p>  <p>National Highways Authority of India Ministry of Road Transport & Highways, Govt. of India</p>	<p>CONSULTANT:-</p>  <p>Chaitanya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, B.K. TOWER PLOT NO.-21-22, SECTOR-4, VAISHALI, GHAZIABAD PH.: 0120-3223479, 4120472, FAX: 0120-4110472</p>	<p>PROJECT:-</p> <p>Consultancy Service for the Preparation for Feasibility Report/PPR for Development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodra Expressway) (Pkg-1, Ch. 6+005 to 18+451)</p>	<p>SCALE:-</p> <p>1:2000</p>	<p>DATE:-</p> <p>72 ROAD SIGNAGE & MARKING PLAN (SOHNA - FIROZPUR JHIRKA) (K.M. 14+000 TO 15+400)</p>	<p>DRAWING NO.:-</p> <p>GROUP - ROAD SIGNAGE & MARKING PLAN - 14 DATE: SEPTEMBER 2018 SHEET NO. 60</p>
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← TO SOHNA

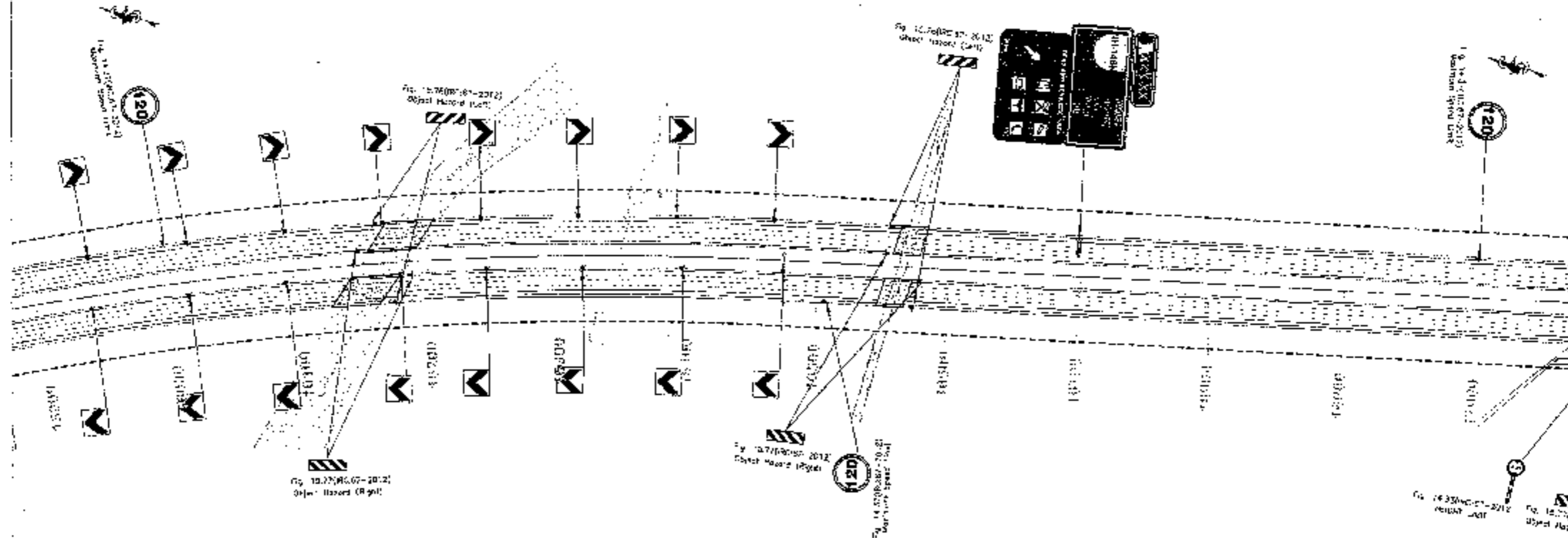
TO FIROZPUR JHIRKA →





<p>CLIENT:</p>  <p>National Highways Authority of India</p>	<p>CONSULTANT</p> <p>Chaitanya Projects Consultancy Pvt. Ltd. G-6, 2ND FLOOR, B.K. TOWER PLOT NO. 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH.: 0120-3223419, 4120472, FAX: 0120-4110472</p>	<p>PROJECT:</p> <p>Consultancy Service for the Preparation of Feasibility Report (DPR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodra Expressway) (Pkg-5, Ch. 04000 to 13-001)</p>	<p>SCALE -</p> <p>1:2000</p>	<p>DRAWING NO. -</p> <p>7/01</p> <p>ROAD SIGNAGE & MARKING PLAN (SOHNA - FIROZPUR JHIRKA) (KM. 14+00 TO KM. 16+00)</p>	<p>DATE: SEPTEMBER 2013</p> <p>MAPPER: SANTON</p> <p>DATE: SEPTEMBER 2013</p> <p>SCALE: 1:2000</p>
--	---	---	------------------------------	--	--

← TO SOHNA

TO FIROZPUR JHIRKA →



G.LIN -
National Highways Authority of India
 Department of Road Transport & Highways, Govt. of India


CONSULTANT -
Chaitanya Projects Consultancy Pvt. Ltd.
 C-5, 2ND FLOOR, P.K. TOWER PLOT NO.- 21-22
 SECTOR-4, VAISHALI, GHAZIABAD
 PH.: 0120-3223419, 4129472, FAX: 0120-4110472


PROJECT -
 Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Solina - Firozpur Jhirka section of Delhi-Vadodara Expressway)
 (Pkg-1, Cn, Section in 16-481)

SCALE -
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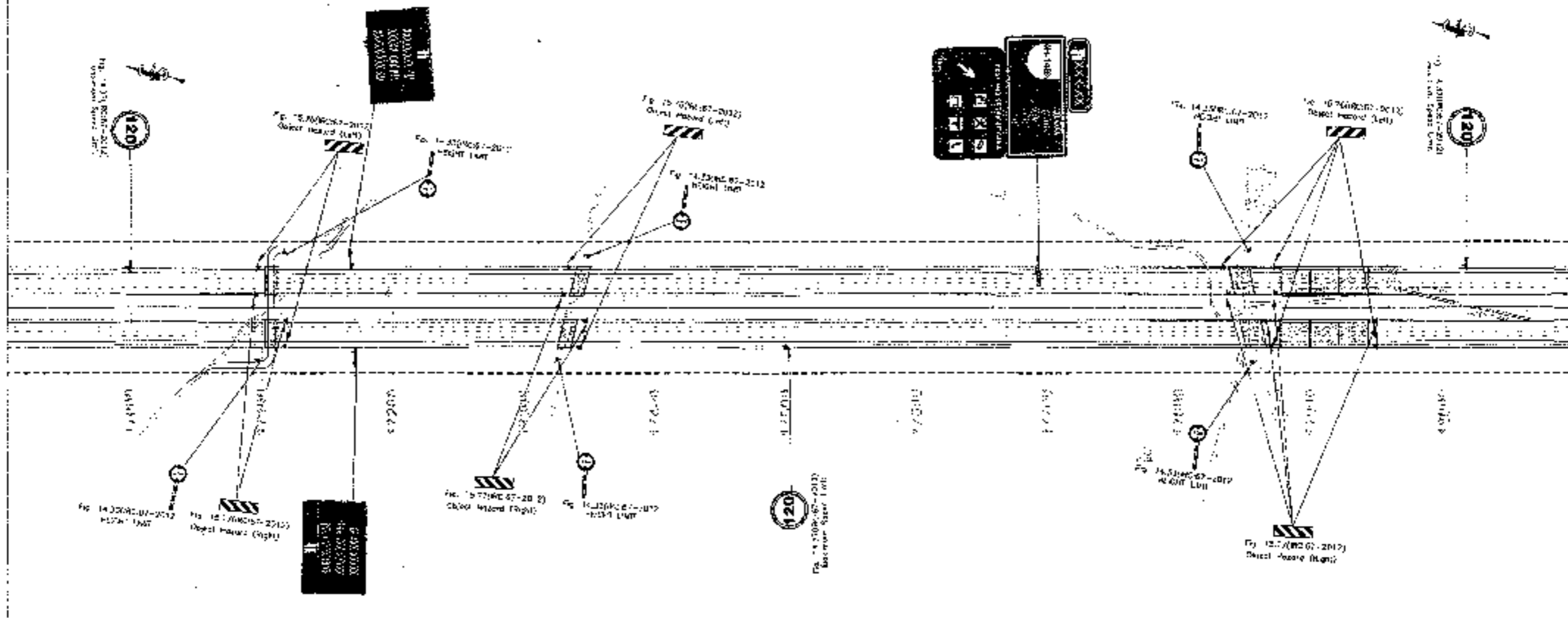




DWG. TITLE -
 ROAD SIGNAGE MARKING PLAN
 (SOHNA - FIROZPUR JHIRKA)
 (KM 16+000 TO KM 17+000)

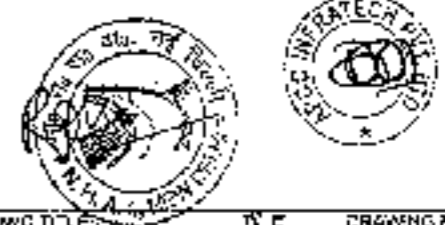
DRAWING NO. -
 PFGP/INT/WH/PROJ/DT/MS/01/17
DATE SEPTEMBER 2016 **Rev. No.** 00
DESIGNED BY **CHECKED BY**
APPR. **SUPERVISED** **APPROVED**
 19/4554

← TO SOHNA

TO FIROZPUR JHIRKA →

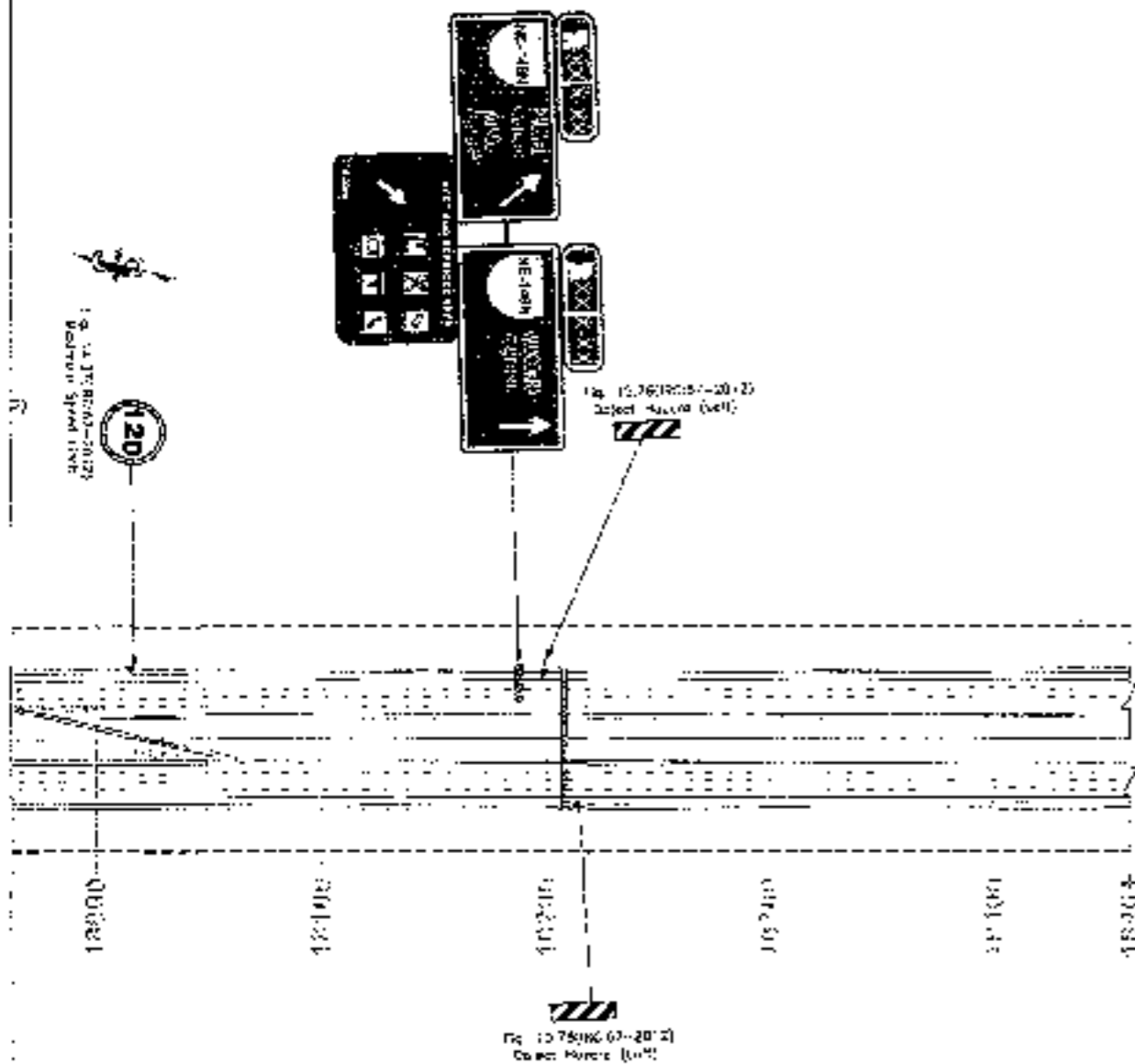


<p>CLIENT -</p>  <p>National Highways Authority of India Ministry of Road Transport & Highways, Govt. of India</p>	<p>CONSULTANT -</p>  <p>Chaitanya Projects Consultancy Pvt. Ltd. G 5, 2ND FLOOR, R.K. JAIN PLOT NO.- 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH.: 0120-3223419, 4120472, FAX: 0120-4110472</p>	<p>PROJECT -</p> <p>Consultancy Service for the Preparation for Feasibility Report & DPR for development of Economic Corridors, Intra Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Meerut Expressway) (Pkg-1, GD. 0-400 to 45-451)</p>	<p>SCALE -</p> <p>1:2000</p>	<p>DWG TITLE -</p> <p>PK12-1 ROAD SIGNAGE & MARKING PLAN [SOHNA - FIROZPUR JHIRKA, (K.M. 11-00 TO K.M. 18-00)]</p>	<p>DRAWING No. -</p> <p>CPUP-150/EVEN/400-1/RR/FAME-13</p> <p>DATE - SEPTEMBER 2013</p> <p>PROJECT OFFICER: [Signature]</p> <p>DESIGNER: [Signature]</p> <p>CHECKER: [Signature]</p> <p>APPROVER: [Signature]</p>
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TO SOHNA

TO FROZPUR JHIRKA



CLIENT



National Highways Authority of India



CONSULTANT



Chaitanya Projects Consultancy Pvt. Ltd.
G-5, 2ND FLOOR, P.K. TOWER PLOT NO- 21-22,
SECTOR-4 VAISHALI GHAZIABAD
PH.: 0120-4223410, 4120472, FAX: 0120-4110677

PROJECT

Consultancy Service for the Preparation for Feasibility Report (DPM) for development of Economic Corridor, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in High under Bharatmuktik Paryay (I.O.S-B'Package-4) (Sohna - Ferozpur Jhirka section of Delhi-Vadodara Expressway)
(Page: Ch. 0+000 to 18+467)

SCALE

1:2000



DWG TITLE: ROAD SIGNAGE & MARKING PLAN
(Sohna - Ferozpur Jhirka section of Delhi-Vadodara Expressway)
(Page: Ch. 0+000 to 18+467)

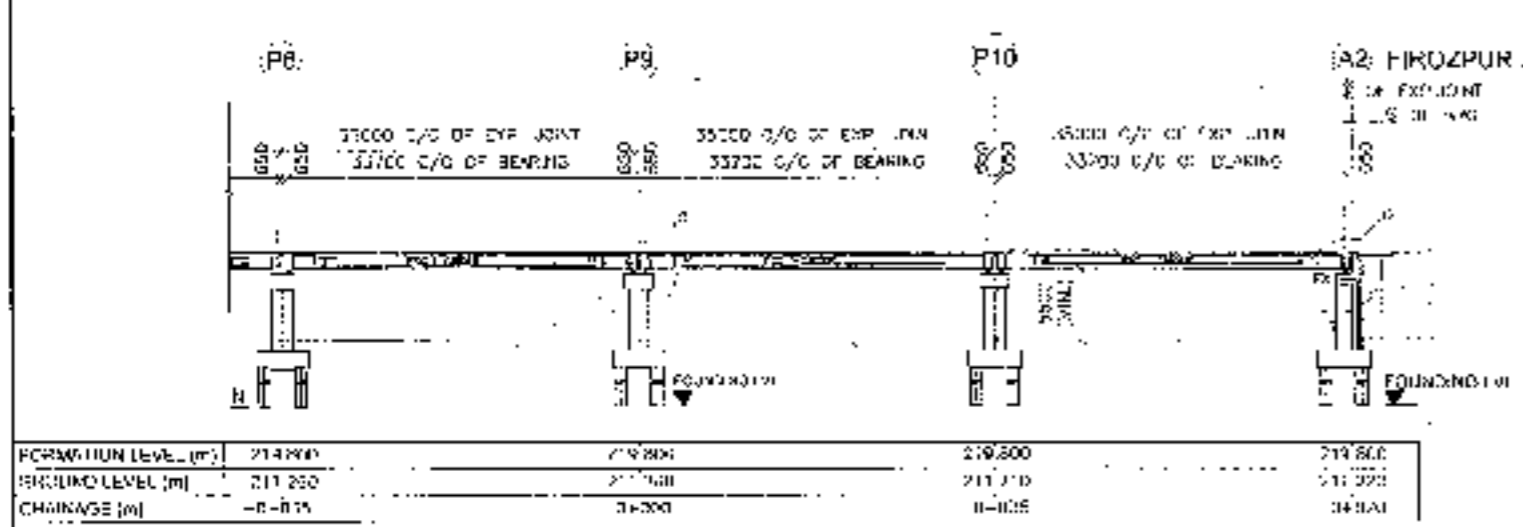
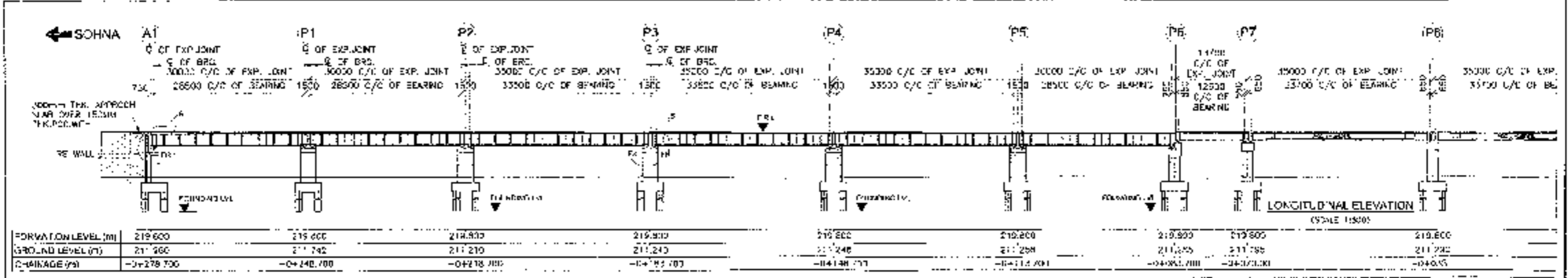


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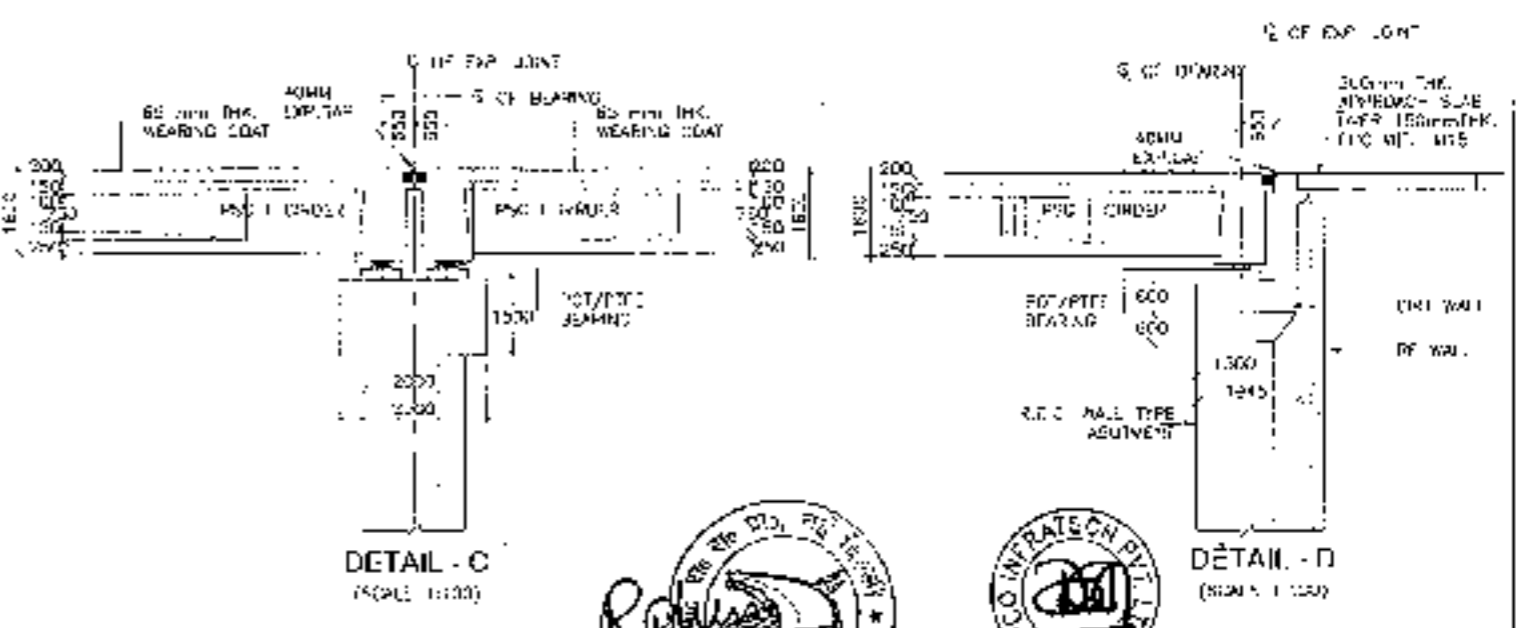
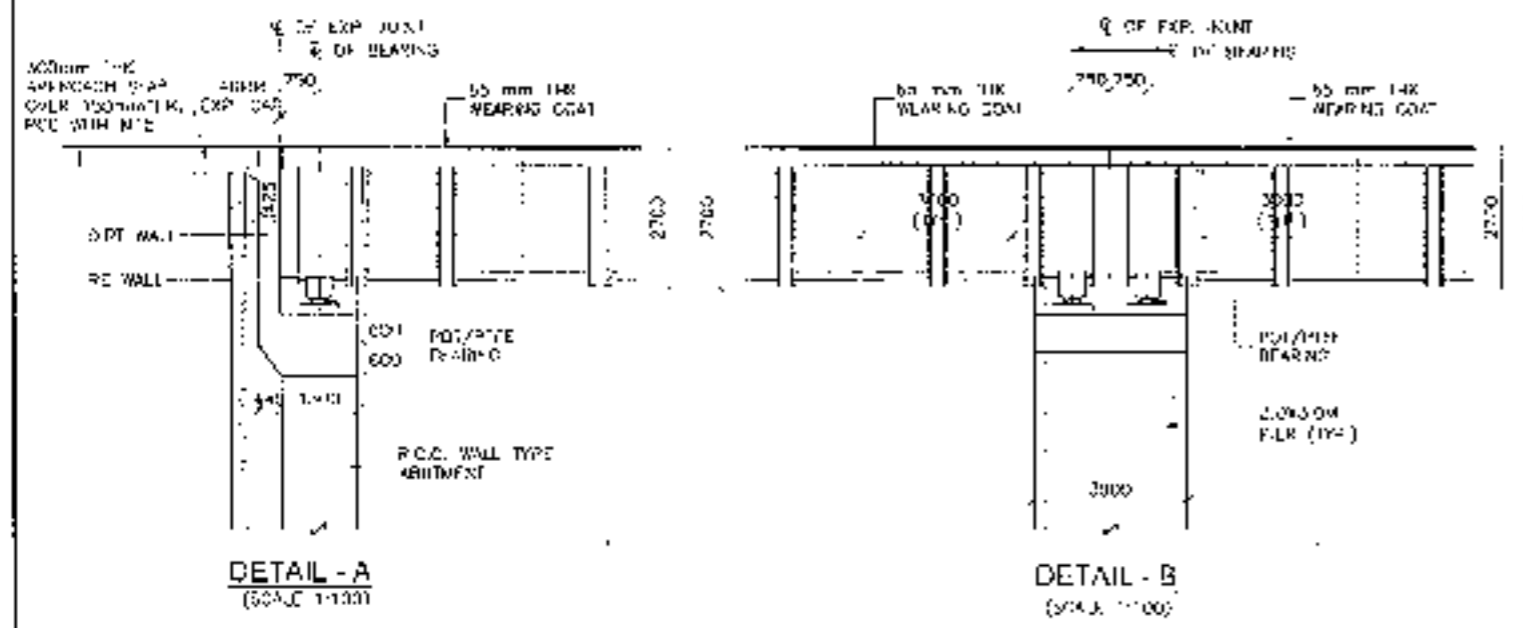
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DRAWN BY: [Signature] APPROVED BY: [Signature]

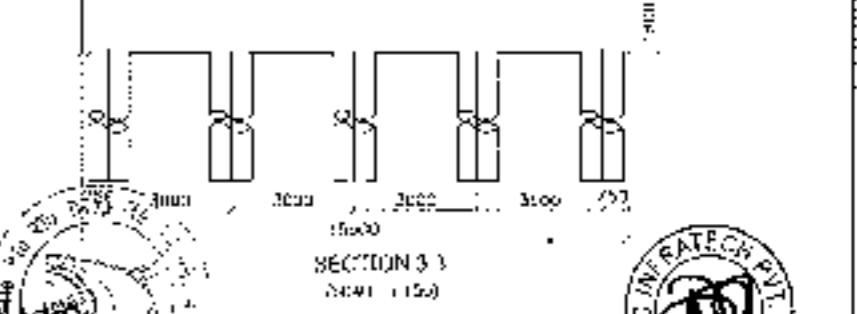
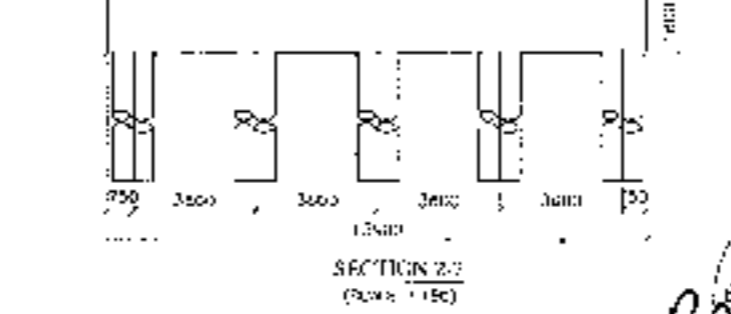
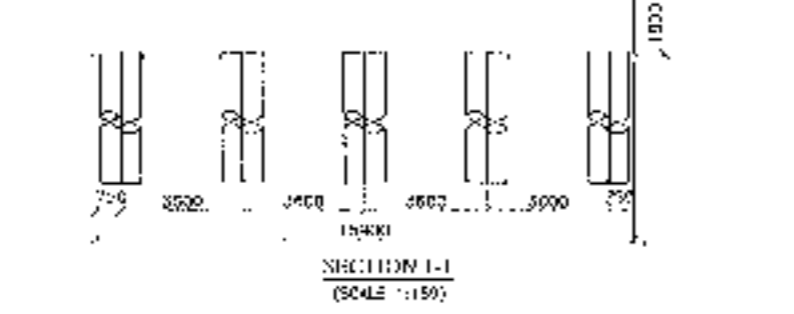
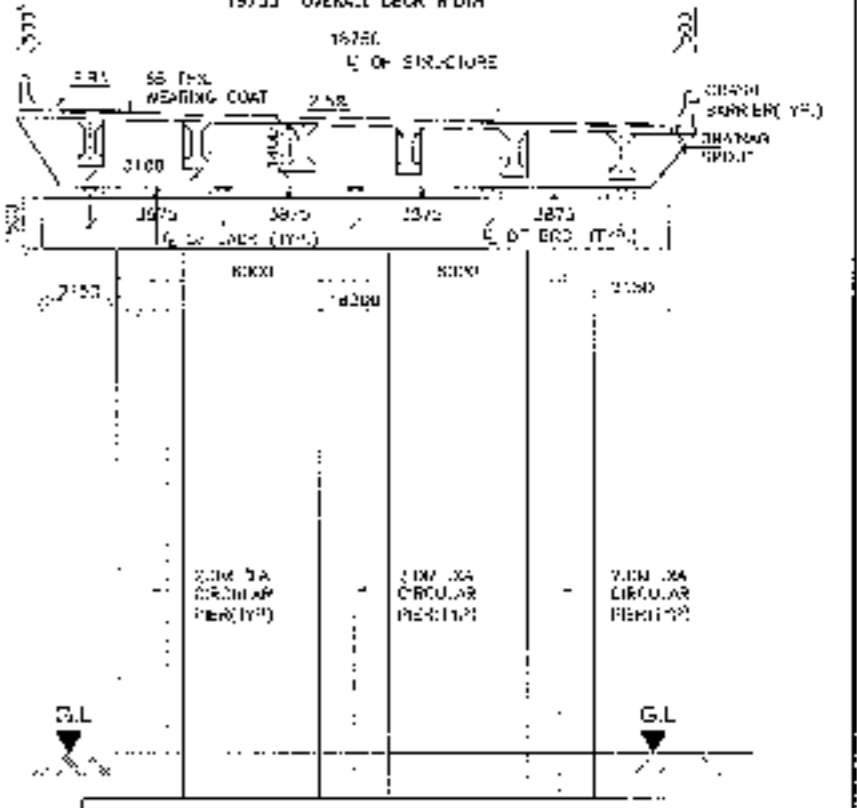
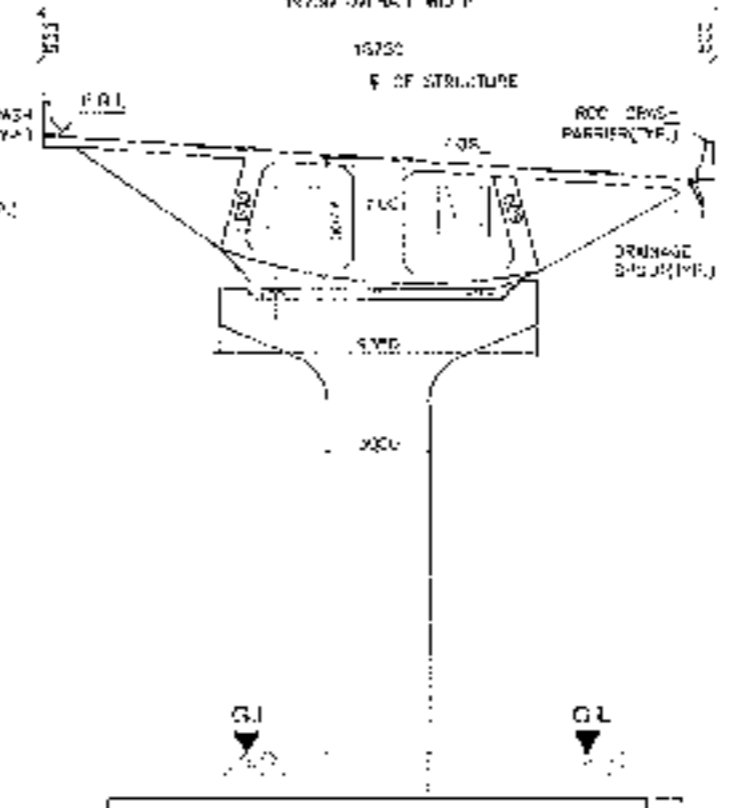
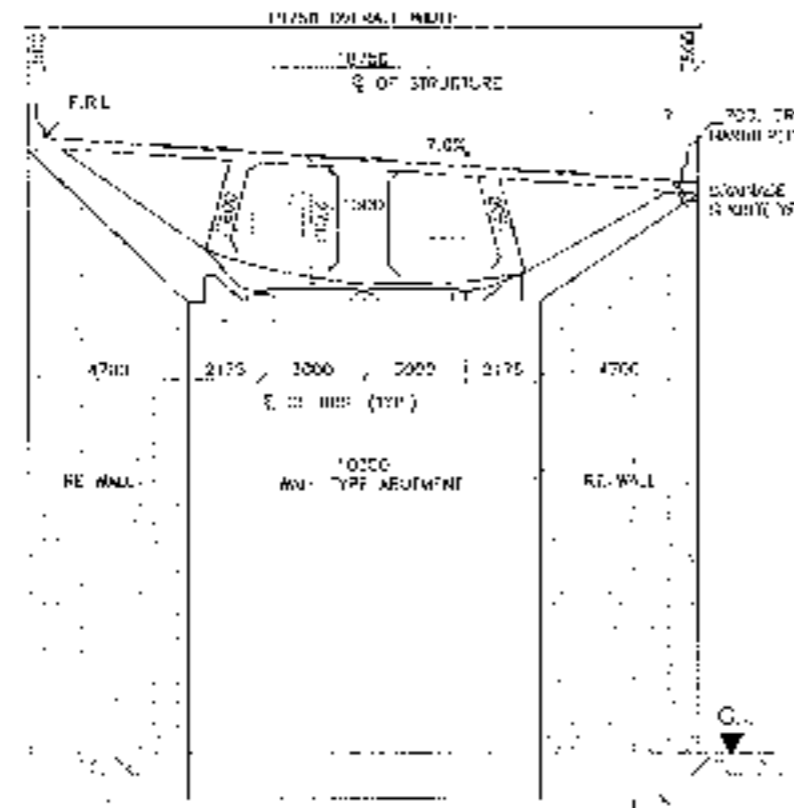
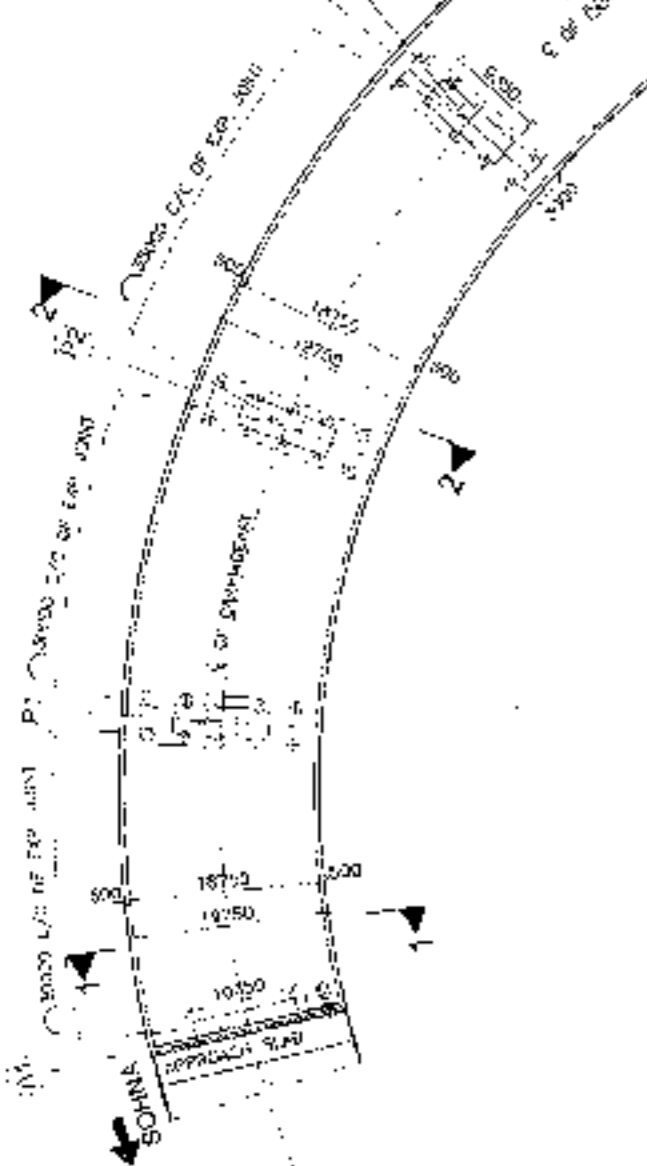
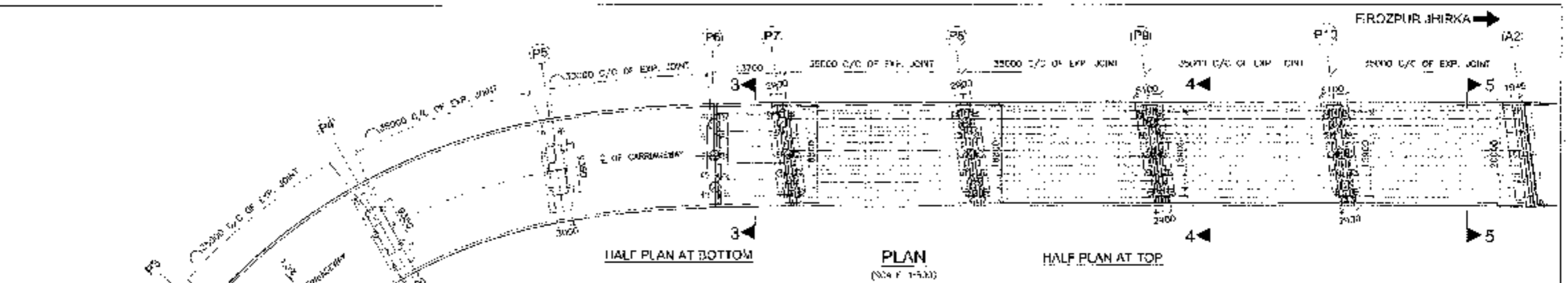
STRUCTURES DRAWINGS

INTERCHANGE





- NOTES:**
- ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED AND DIMENSION SHALL BE SHOWN.
 - PROPOSED STRUCTURE SHALL BE DESIGNED FOR 5 LANE 4X4 IRC-A TYPE STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF ALL LIVE AND DEAD LOADS AS SPECIFIED IN THE DRAWING. IT SHALL BE CHECKED FOR SPECIAL VEHICLES.
 - CONCRETE SHALL BE OF GRADE M30 AND SHALL BE OF GRADE AS MENTIONED BELOW:
 FLOOR LEVEL COURSE : M-25
 SUBSTRUCTURE, P.C.C. : M-25
 SUPERSTRUCTURE AND BRIDGE : M-30
 SUBSTRUCTURE, P.C.C. & P.C. : M-25
 CRACK RESISTANT : M-30
 APPROACH SLAB : M-25
 R.C. WALL : M-25
 - GRADE OF SITE SHALL BE AS SHOWN ACCORDING TO IS 750.
 - CLEAR COVER TO REINFORCE SHALL BE AS FOLLOWS:
 a. TOP SLAB : 40MM
 b. WALL (DEPTH FACTOR) : 50MM
 c. WALL (OVER LAP LENGTH) : 50MM
 d. BOTTOM SLAB : 75MM
 - STEEL TIE UPON REINFORCE SHALL CONSIST OF LAYERS OF MISTO ASPHALT CONCRETE OF 25MM THICK OVER 20MM STAINLESS STEEL COURSE.
 - DIMENSIONS AND LEVELS SHALL BE VERIFIED WITH THE RELEVANT P.L.S. & PROFILE DRAWINGS AND VARIATION (IF ANY) SHALL BE REFERRED TO ENGINEER FOR MODIFICATION.
 - THIS STRUCTURE HAS A DESIGN LIFE OF 75 YEARS.
 - ALL DIMENSIONS AND TREATMENT SHALL BE CHANGED AFTER CONSULTATION WITH THE DESIGNER ON CONDITION OF EXPOSURE IS MODERATE.





79

CLIENT:-
 National Highways Authority of India
 Ministry of Road Transport & Highways, Government of India

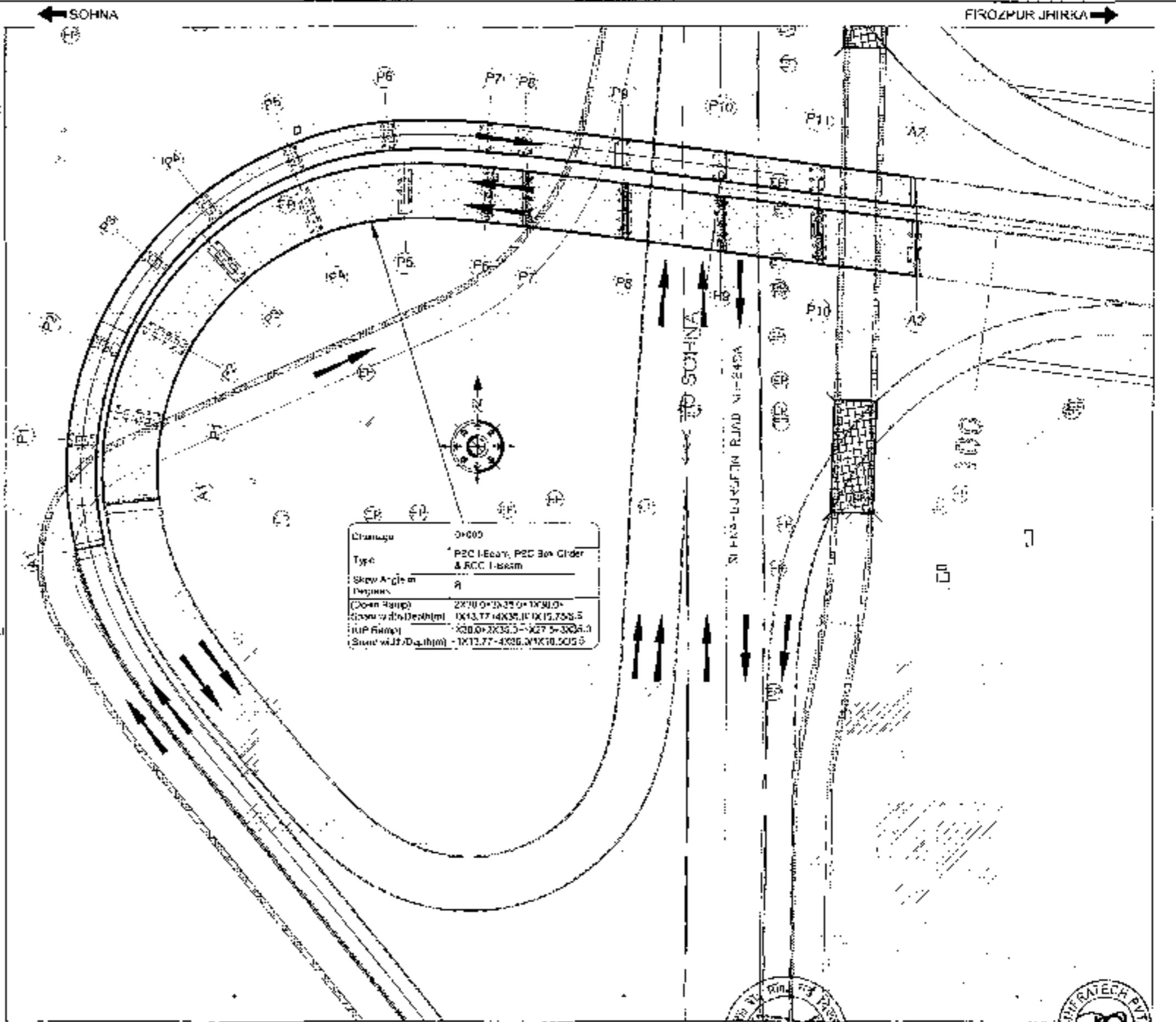
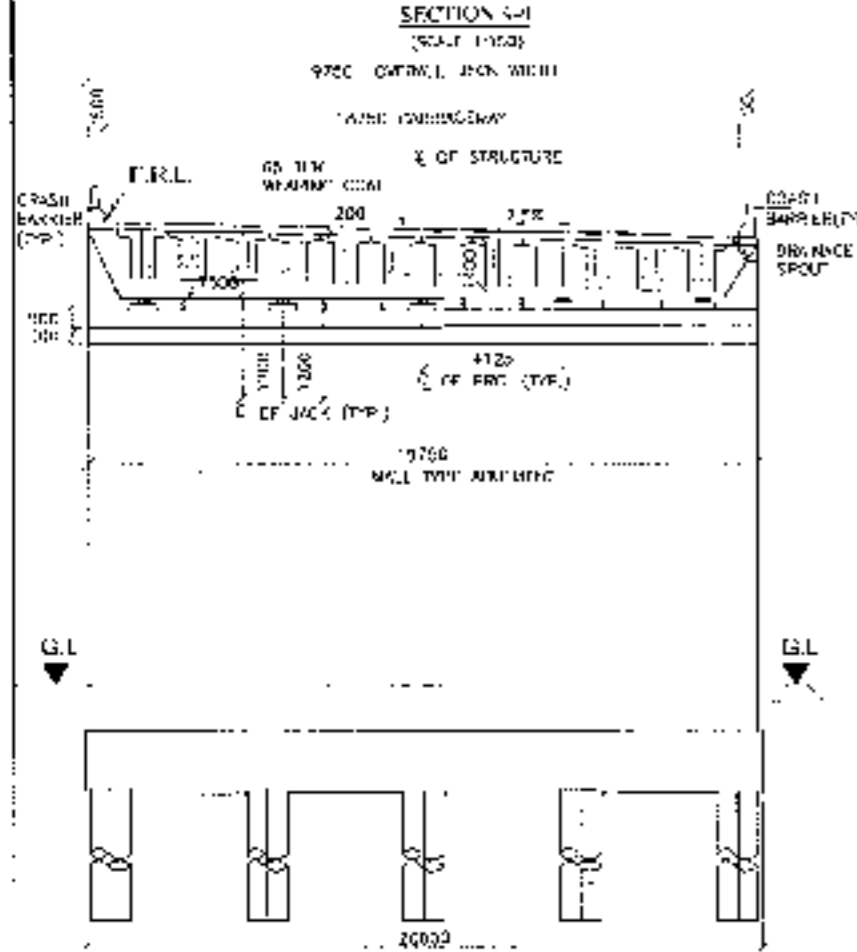
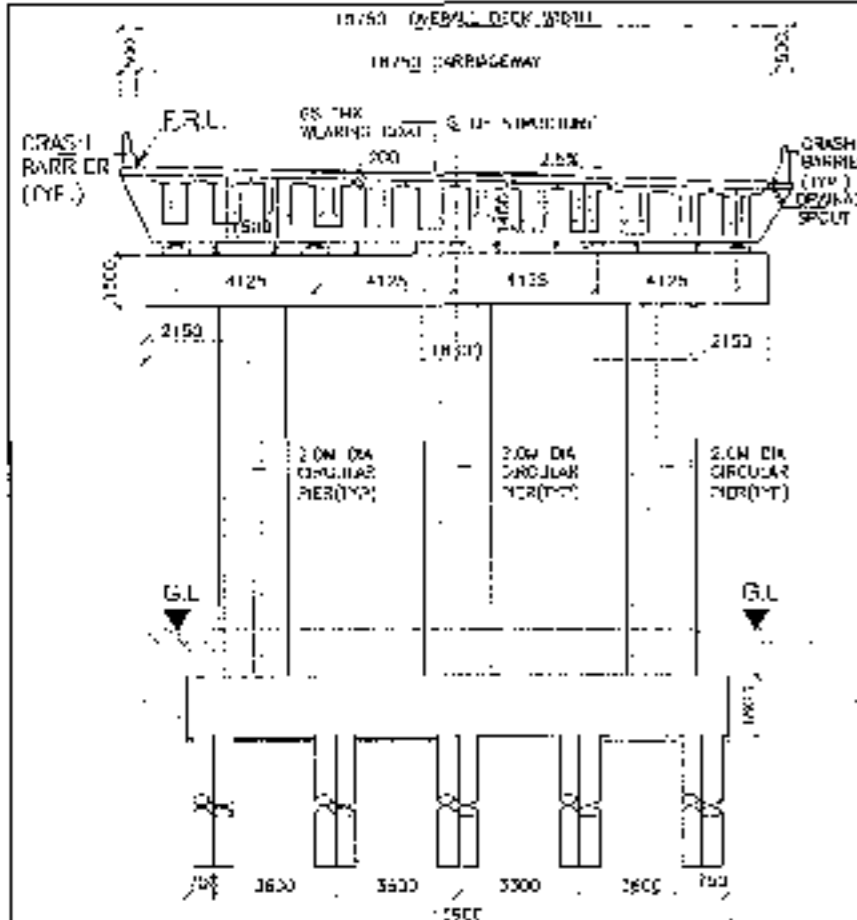
CONSULTANT:-
 Chaitanya Projects Consultancy Pvt. Ltd.
 C-5, 2ND FLOOR, R K TOWER PLOT NO - 21-02, SECTOR-4, VAISHALI, GHAZIABAD
 PH.: 0120-3223018, 4120472. FAX: 0120-4180472

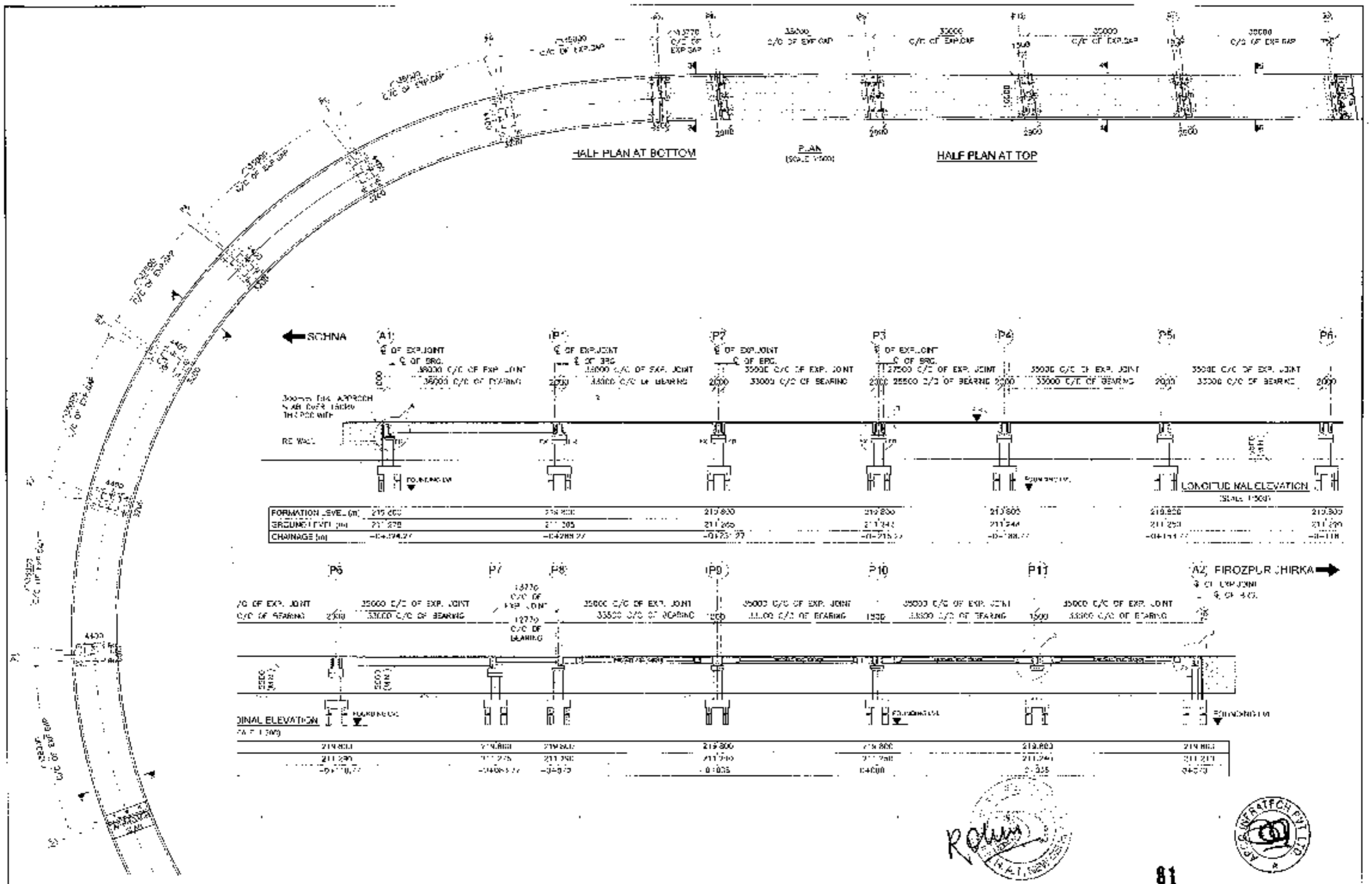
PROJECT:-
 Consultancy Service for the Preparation for Feasibility Report/SPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Solna - Firozpur Jharka section of Delhi-Vadodara Expressway) (Pkg-1_Ch. 0-000 to 18+464)

SCALE:-
 AS SHOWN

DWG TITLE:-
 GENERAL ARRANGEMENT DRAWING FOR DOWN RAMP (FROM EXPRESSWAY TO NH-248A)
 SOLNA - FIROZPUR JHARKA

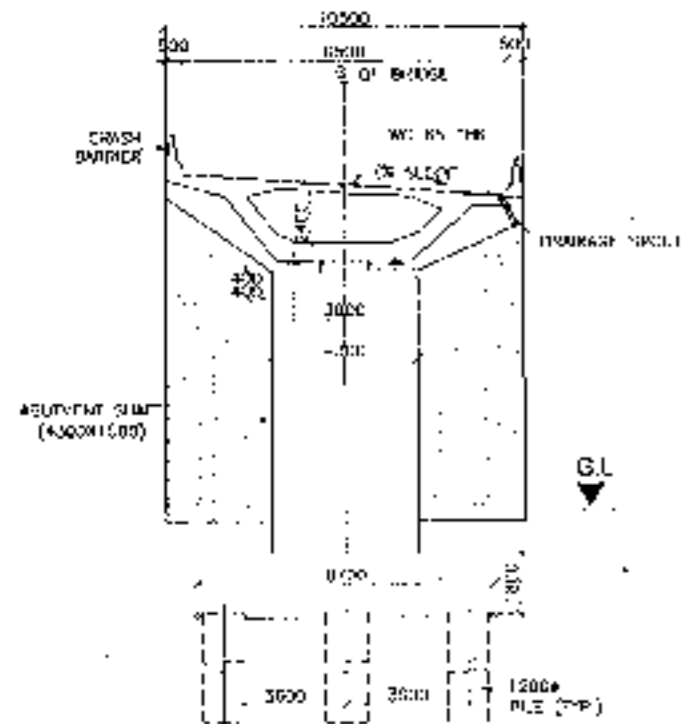
DRAWING No.:- (SHEET 2 OF 3)
 GPOIP 1520V5RFRFG-ND10-00000 2000005-10E
 DATE: AUGUST 2018 Revision: R0
 PREPARED BY: PKL CHECKED BY: M.E. APPROVED BY: A.G.



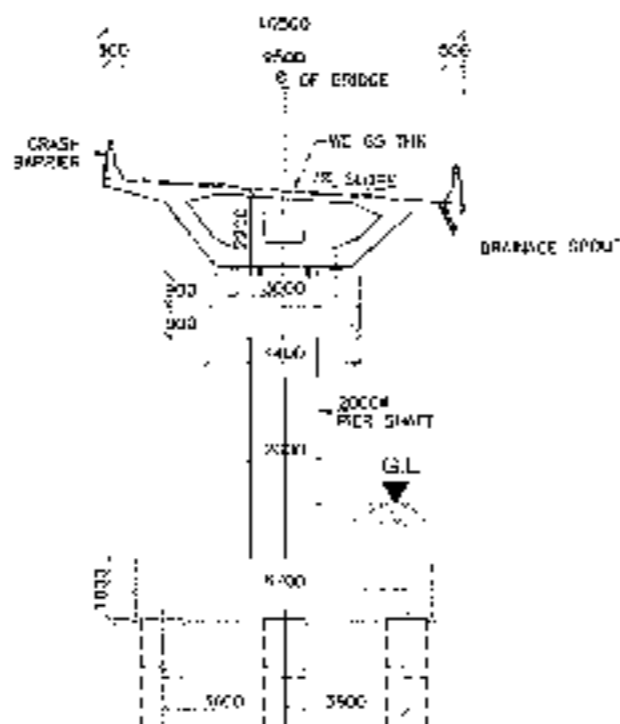


81

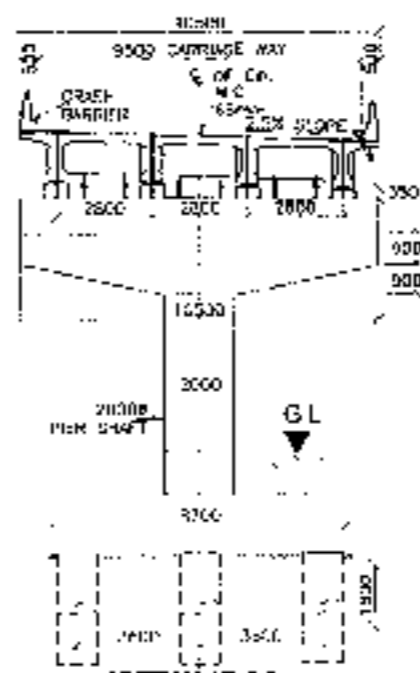
<p>CLIENT:-</p> <p>National Highways Authority of India</p>	<p>CONSULTANT:-</p> <p>Chalanya Projects Consultancy Pvt. Ltd.</p> <p>C-5, 2ND FLOOR, B.K. TOWER PLOT NO.- 21-22, SECTOR-4, VAISHALI, GHAZIABAD</p> <p>PH : 0120-3223419, 4120472 FAX 0120-4110477</p>	<p>PROJECT:-</p> <p>Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Intra Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-01/Package-4) (Solna - Firozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1_Ch. 0+000 to 18+481)</p>	<p>SCALE:-</p> <p>AS SHOWN</p>	<p>DWG TITLE:-</p> <p>GENERAL ARRANGEMENT DRAWING OF BRIDGE (FROM EXPRESSWAY I.C. NO-2464) (SOLNA - FIROZPUR JHIRKA)</p>	<p>DRAWING No.:- SPC/103/ENR/419/1 (REVISED) (REVISED)</p> <p>DATE: AUGUST 2018</p> <p>PREPARED BY: P.C.</p> <p>CHECKED BY: M.E.</p> <p>APPROVED BY: A.C.</p>
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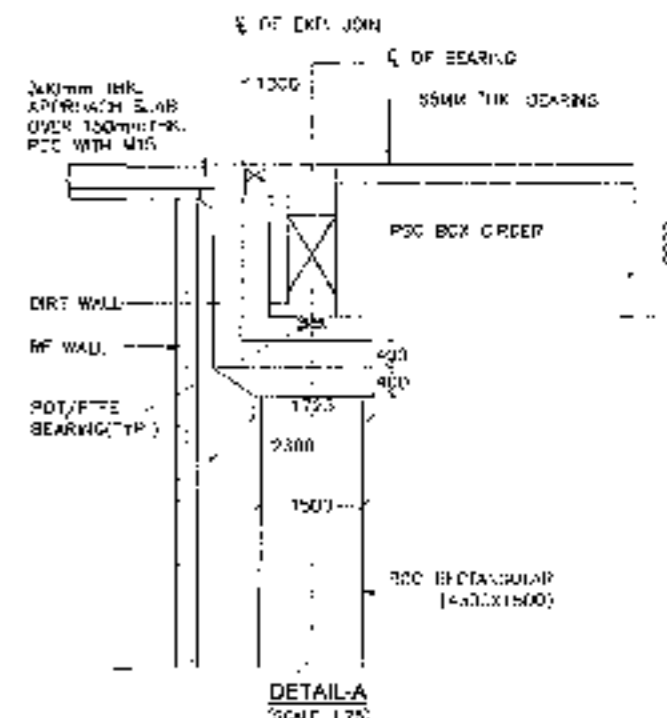
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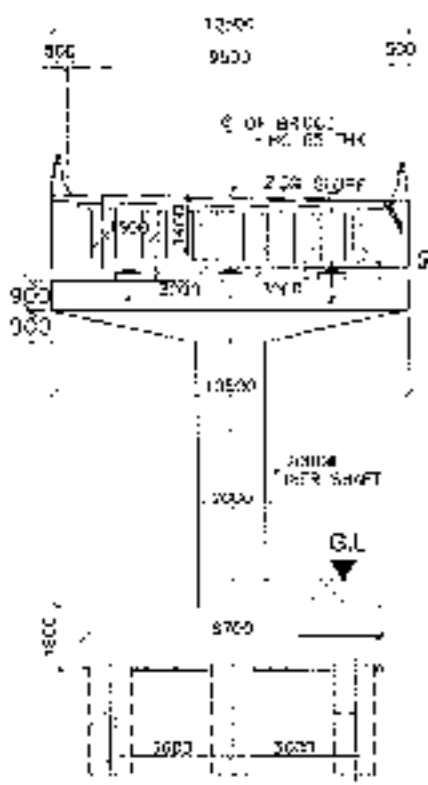
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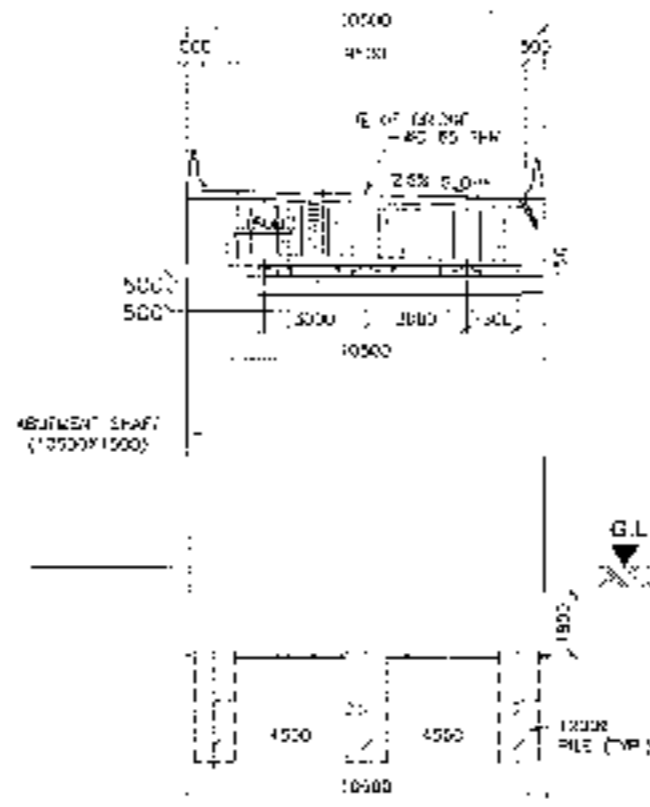
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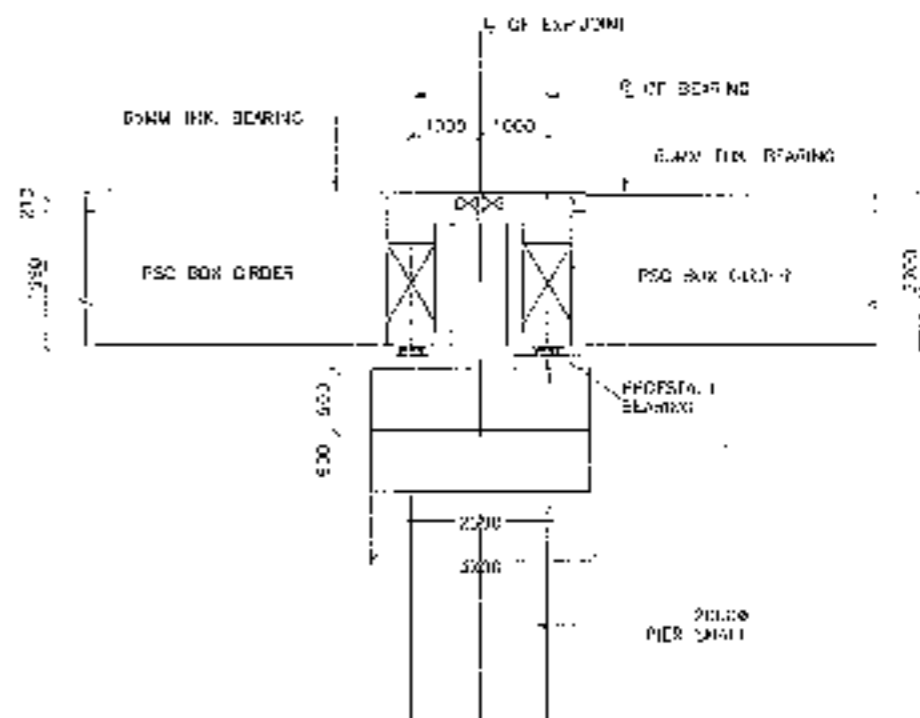
DETAIL-A
(SCALE-1:75)



SECTION AT 4-4
(SCALE-1:100)



SECTION AT 5-5
(SCALE-1:100)



DETAIL-B
(SCALE-1:75)



CLIENT:-
National Highways Authority of India

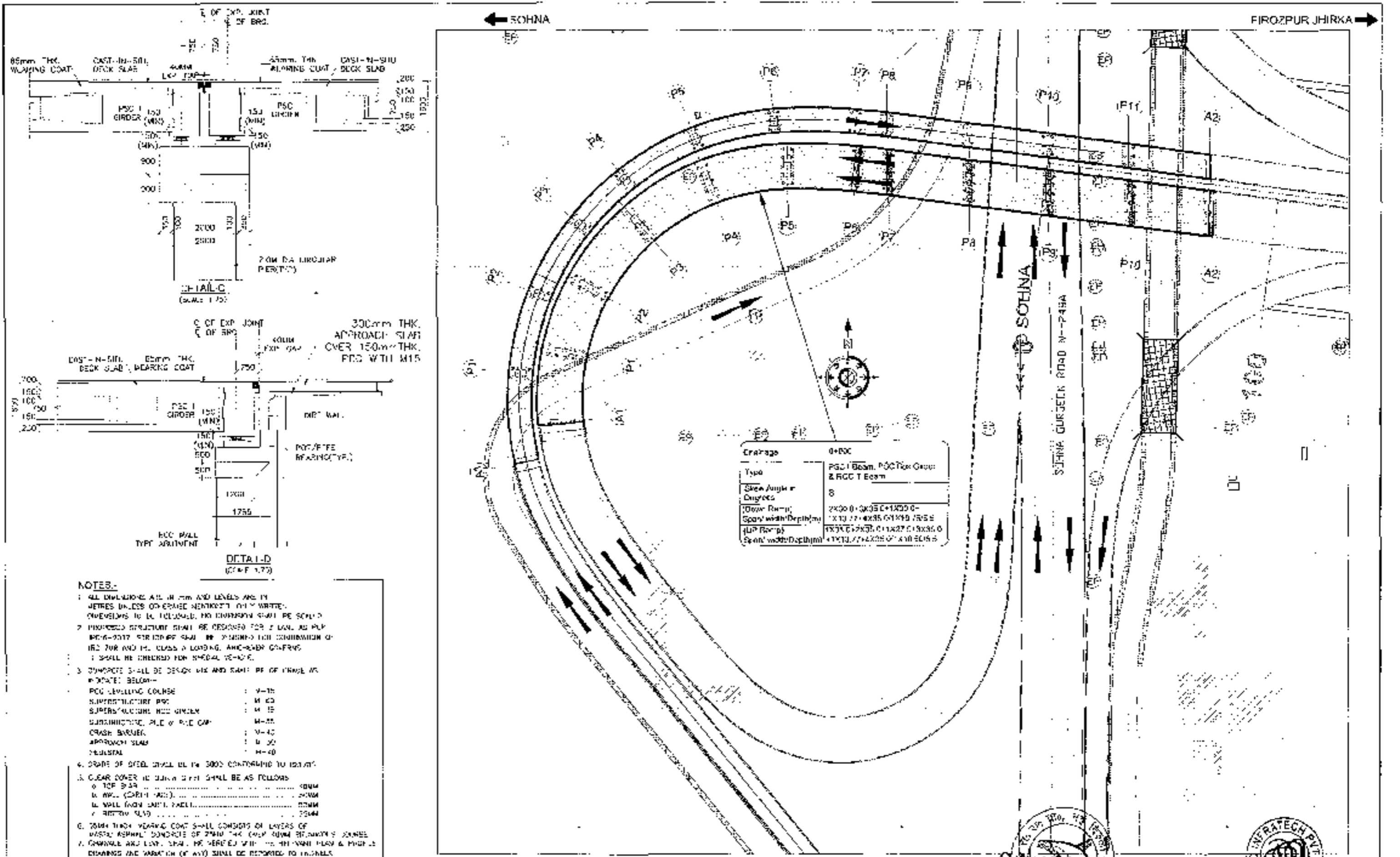
CONSULTANT:-
Challanya Projects Consultancy Pvt. Ltd.
C-5 2ND FLOOR, R.K. TOWER PLOT NO.- 21-22,
SECTOR-4, VAISHALI, GHAZIABAD
PH - 0120-3223419, 4120472, FAX 0120-4110472

PROJECT:-
Consultancy Service for the Preparation for Feasibility Report/DPR for
Development of Economic Corridors, Inter Corridors and Feeder Routes to
improve the efficiency of freight movement in India under Bharatmala
Parityojana (Lot-6/Package-4) (Solana - Ferozpur Jharkh section) of
Delhi-Vadodra Expressway) (Phy-1_Ch. 0+00 to 13+61)

SCALE:-
AS SHOWN

DRAWING No.:-
GENERAL ARRANGEMENT DRAWING
FOR OF RAMP
(FROM EXPRESSWAY TO NH-2404)
(S. HINA - SIRDAR JHARKH)

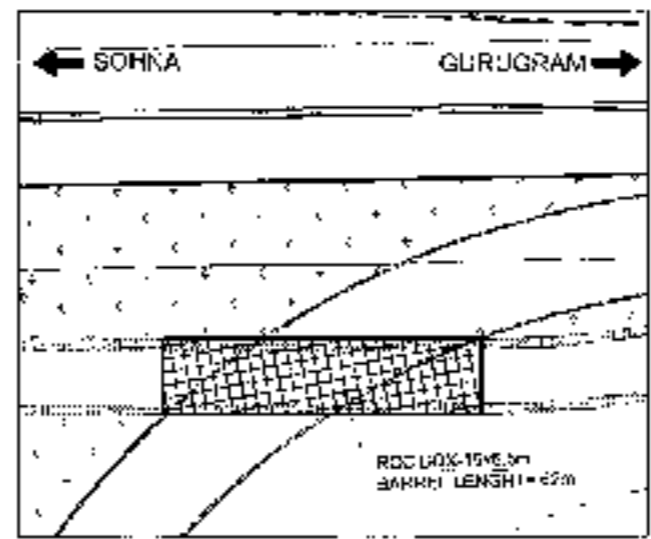
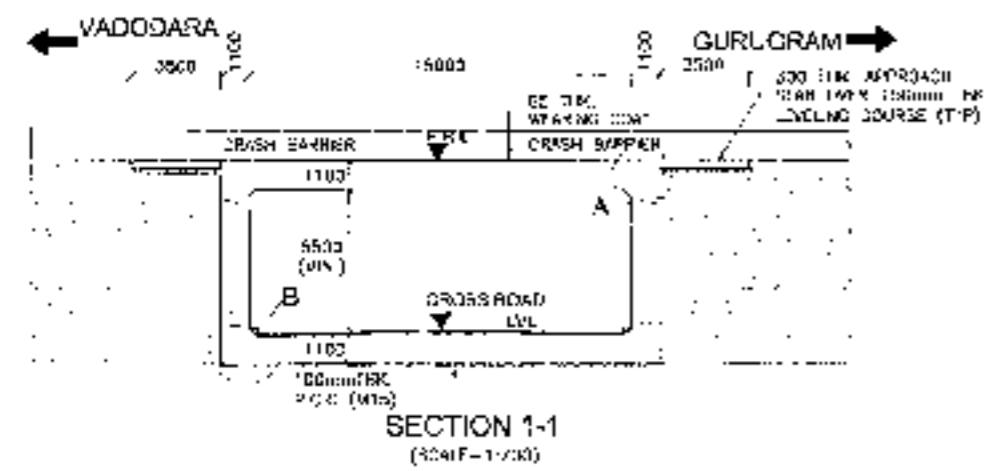
(SHEET 2 OF 3)
DATE: AUGUST 2018
PREPARED BY: PK. CHECKED BY: N.S. APPROVED BY: A.C.



- NOTES:-**
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED OR OTHERWISE NOTED.
 - PROPOSED STRUCTURE SHALL BE DESIGNED FOR 2 LANE AS PER IRC-80/2017 STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF IRC 70B AND 10. CLASS A LOADING AND ROAD GRADING SHALL BE CHECKED FOR SPECIAL VEHICLE.
 - SUPPORTS SHALL BE DESIGN MIX AND SAME OF CRANE AS INDICATED BELOW:-

PCC LEVELLING COURSE	M-15
SUBSTRUCTURE PCC	M-20
SUBSTRUCTURE RCC GIRDER	M-25
SUBSTRUCTURE PILE & PILE CAP	M-25
CRASH BARREL	M-20
APPROACH SLAB	M-20
WEARSLAB	M-20
 - GRADE OF STEEL RAIL IN 3000 CONTINUING TO 150M.
 - CLEARANCE TO MAIN GIRDERS SHALL BE AS FOLLOWS

TO TOP CHORD	400MM
TO WALL (OVERHEAD)	200MM
TO WALL (NON-OVERHEAD)	200MM
TO BOTTOM CHORD	200MM
 - 80MM THICK WEARING COAT SHALL CONSIST OF LAYERS OF WASTE ASPHALT CONCRETE OF 20MM THK OVER 100MM STRENGTH CONCRETE.
 - CHANNEL AND LAYERS SHALL BE VERIFIED WITH THE MAIN PLAN & MUST BE DRAWING AND VARIATION (IF ANY) SHALL BE REPORTED TO ENGINEER FOR APPROVAL.
 - THIS STRUCTURE IS IN DESIGN STAGE.
 - ALL DIMENSIONS ARE TENTATIVE MAY BE CHANGED AFTER DETAIL DESIGN TO COMPLY WITH ENDSURE IS MODERATE.

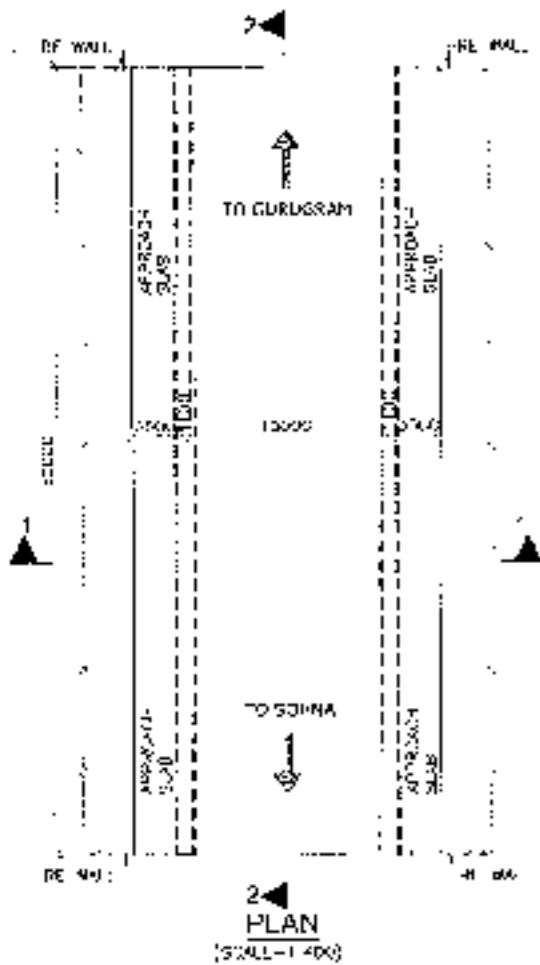


KEY PLAN

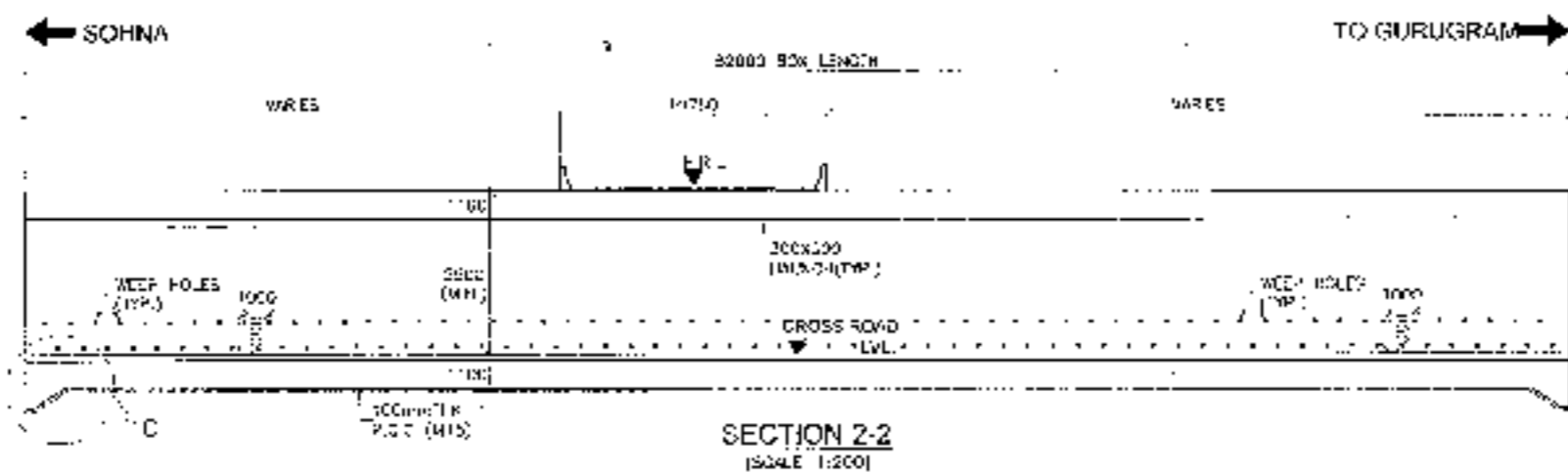
- NOTES:-**
1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED. ONLY WHOLE DIMENSIONS TO BE FOLLOWED. NO DIMENSION SHALL BE SHOWN.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED AS PER IRC-8-2017 STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF IRC TOP AND IRC CLASS A LOADING, ATICHER'S COEFFICIENTS. IT SHALL ALSO BE CHECKED FOR SPECIAL VEHICLE.
 3. CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS INDICATED BELOW:

CC FOR SLAB	M-20
SUBSTRUCTURE	M-25
CRASH BARRIER	M-40
APPROACH SLAB	M-20
RETAINING WALLS	M-25
RETAIN WALL	M-25
 4. CURB U-GUT, GUT & DRAIN CONFORMING TO RITES
 5. GEAR COVER TO CURB SIDE SHALL BE AS FOLLOWS -

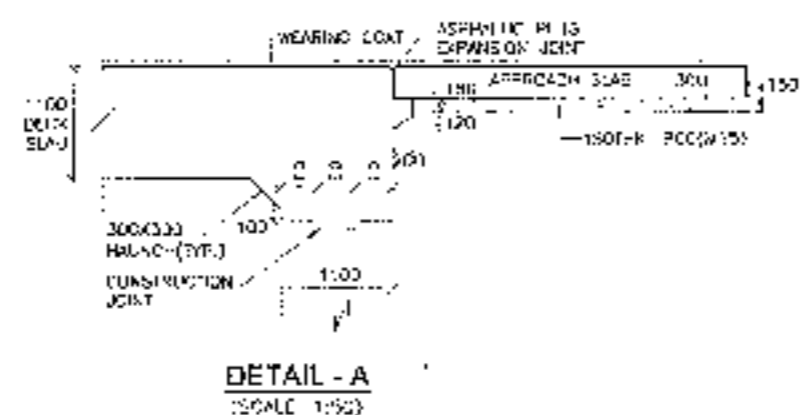
1. SUPERSTRUCTURE	60MM
2. SUBSTRUCTURE	60MM
3. FOUNDATION	75MM
 6. ONLY FINEST BEST QUALITY WARES AND RETAIN WALLS SHALL BE USED. ALL SELECTED WARES CONFORMING TO APPROXIMATELY 10% OF THE AREA SHALL HAVE PROPERTIES $E=20,000$ N/mm² & $\sigma_c = 20$ N/mm²
 7. LAYING COMPLETION AND EXTENT OF BACKFILL BEING ASSIGNED AND OTHERS SHALL CONFORM TO SPECIFICATIONS IN ANNEXURE 'B' OF IRC-8-2017
 8. EVERY THICK WEARING COURSE SHALL CONSIST OF LAYERS OF MIXED ASPHALT CONCRETE OF 25MM THK. OVER 40MM BITUMINOUS COURSE
 9. CURB TYPE AND STRIP SEAL TYPE APPROXIMATELY SHALL BE PROVIDED AS PER PROVISIONS OF R.C. SP-60.
 10. ALL DIMENSIONS SHALL BE CONFIRMED AT SITE PRIOR TO CONSTRUCTION.
 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN.
 12. ALL DIMENSIONS ARE INDICATIVE AND CAN BE CHANGED AFTER DETAILED DESIGN.



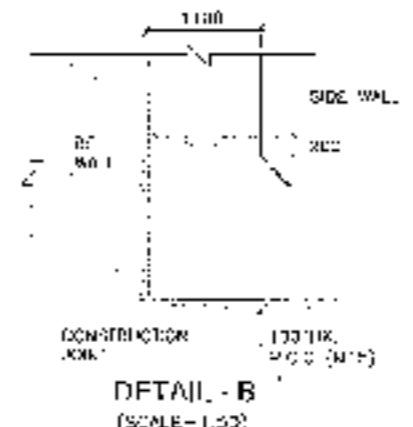
2 PLAN (SCALE 1:400)



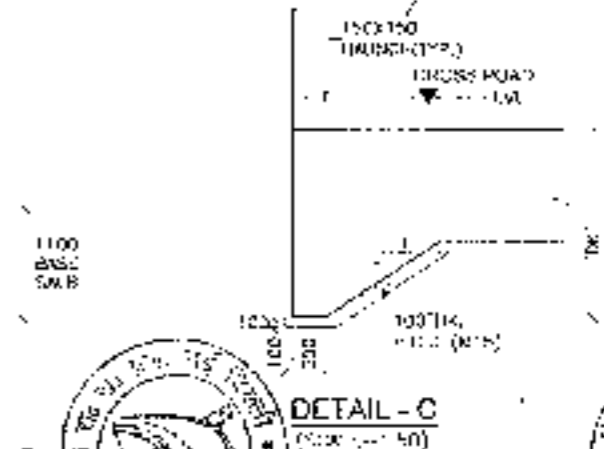
SECTION 2-2 (SCALE 1:200)



DETAIL - A (SCALE 1:50)



DETAIL - B (SCALE 1:50)



DETAIL - C (SCALE 1:50)

CLIENT:
National Highways Authority of India
Ministry of Road, Transport & Highways, Govt of India

CONSULTANT:
Chaitanya Projects Consultancy Pvt. Ltd.
G-5, 2ND FLOOR, R.K. TOWER PLOT NO. 21-22, SECTOR-4, VASHTI, BHAZIYARAB
PH: 0120-3223419, 4120472, FAX: 0120-4110472

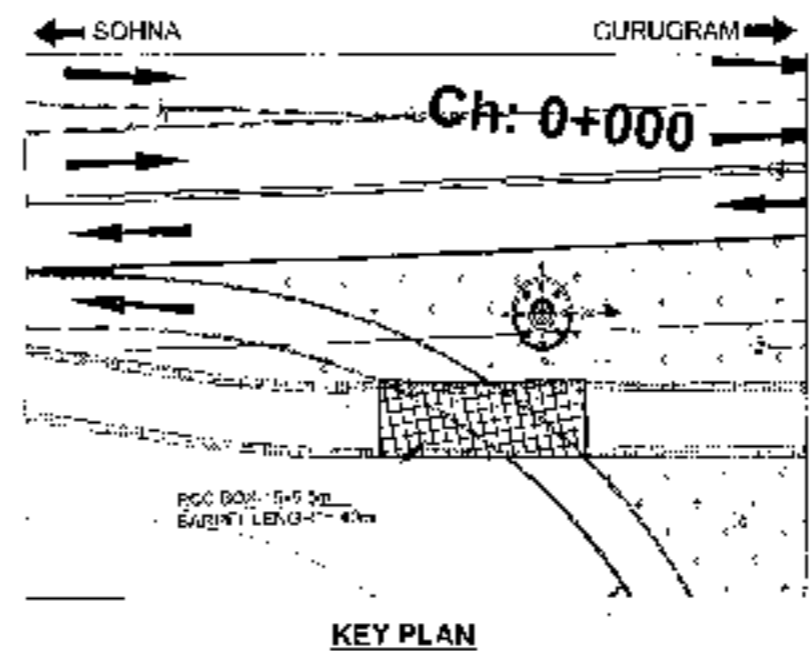
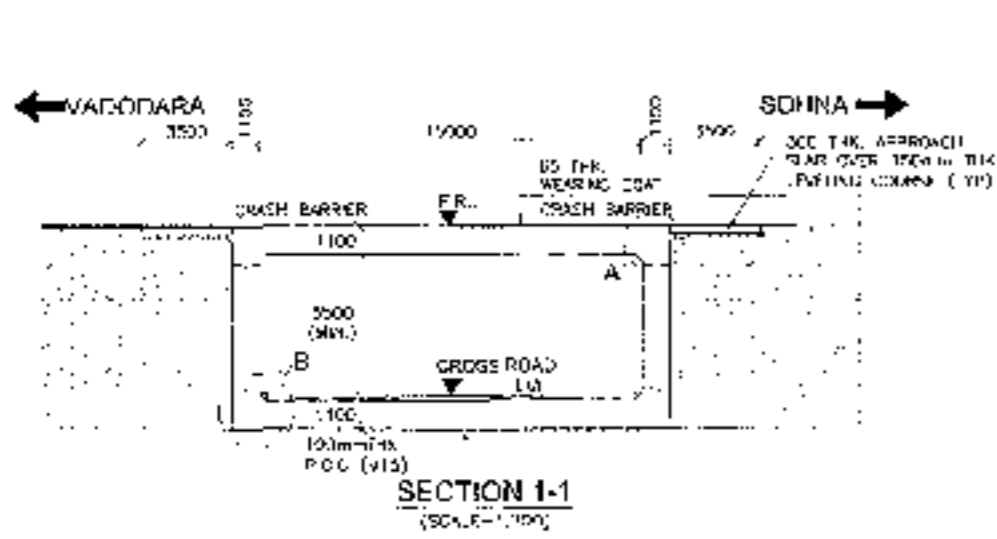
PROJECT:
Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (I) at R/P Package-4 (Sohna - Firozpur Jhirka section of Delhi-Vadodara Expressway) [Pkg-1_Ch. 0+000 to 18+461]

SCALE:
AS SHOWN

DWG TITLE:-
GENERAL ARRANGEMENT DRAWING
RCC BOX (1 X 15) X 5.50M
FOR ENTRY RAMP
(FROM NH-48A TO EXPRESSWAY)

DRAWING No: D/CP/152/04/ENR/10/1/SCALE (0-COUNTRY RAMP) (1)
DATE: AUGUST 2018
PREPARED BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

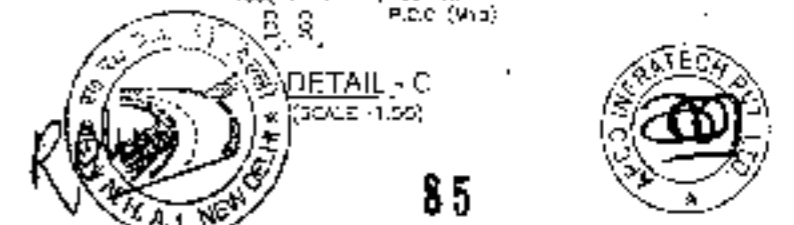
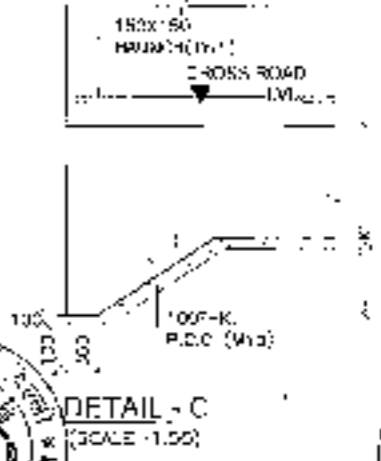
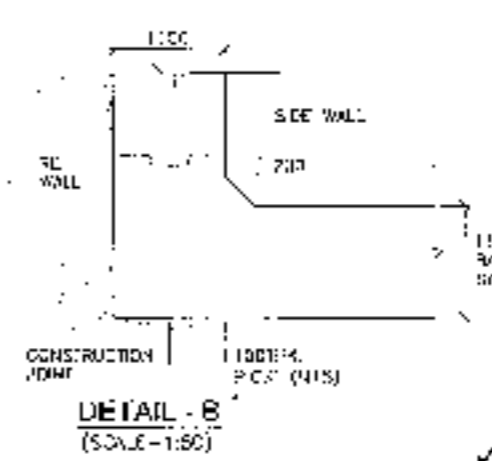
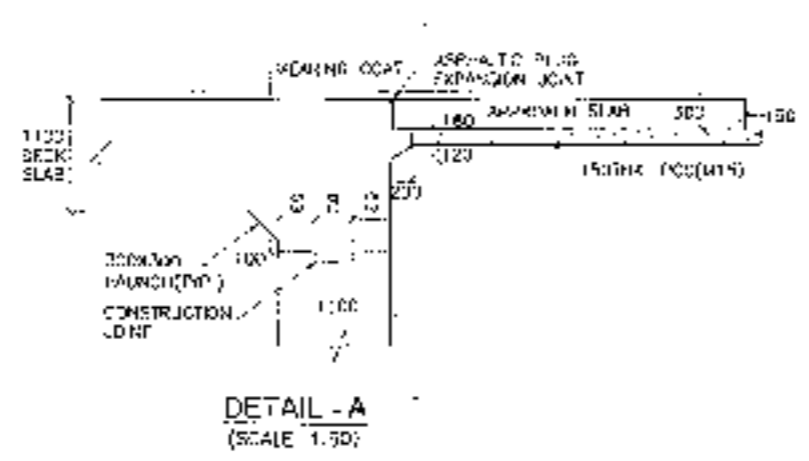
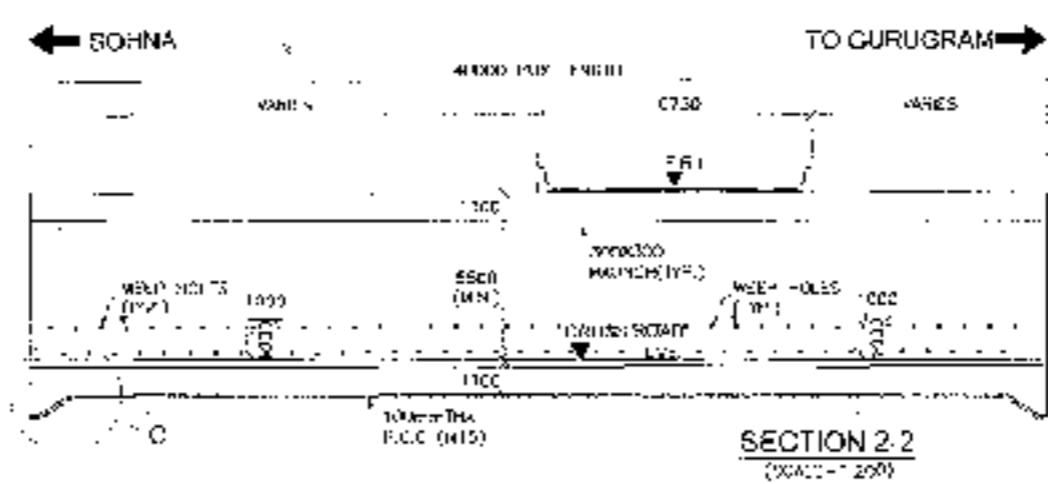
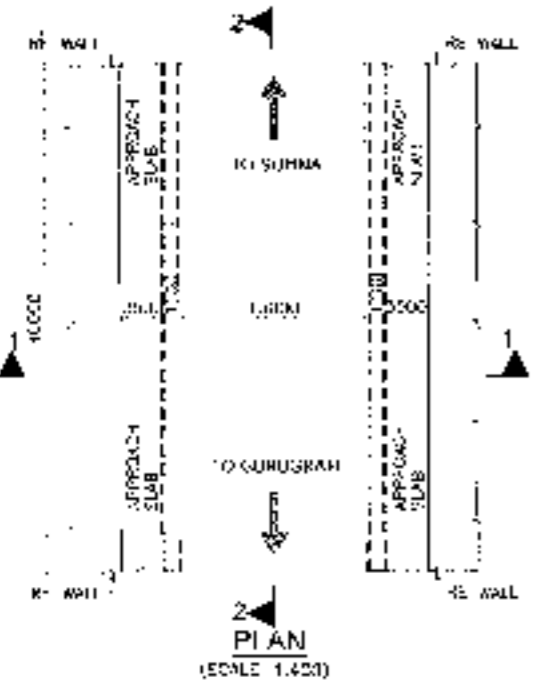




- NOTES:-**
1. ALL DIMENSIONS IN M UNLESS OTHERWISE SPECIFIED IN METRES UNLESS OTHERWISE MENTIONED ONLY METRIC DIMENSIONS TO BE FOLLOWED AND DIMENSIONS SHALL BE SCALED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR 6 LANE AS PER IRC-2017. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF IMC FOR AND IMC OVER A LOADING, WHICHEVER GOVERNS. IT SHALL ALSO BE CHECKED FOR SPECIAL VEHICLE.
 3. CONTRACTOR SHALL BE RESPONSIBLE AND SHALL RT OF GPWD AS MENTIONED BELOW:-

FOR LANDING SLAB	4-15
SUBSTRUCTURE	4-35
SUBSTRUCTURE	4-35
CRASH BARRIER	4-40
APPROACH SLAB	4-30
RETAINING WALLS	4-35
PIERS	4-40
RETAINING WALL	4-35
 4. LEVEL OF SILL SHALL BE AS SHOWN CONTINUING TO SLAB.
 5. CLEAR COVER TO OUTER STEEL SHALL BE AS FOLLOWS:

A. SUPERSTRUCTURE	40MM
B. SUBSTRUCTURE	50MM
C. FOUNDATION	75MM
 6. WORK PLANS BEING RETURNED AND RETURN WALLS SHALL CONSIST OF SELECTED BARS CONTINUING TO APPROACH SLAB OF RETAINING WALLS PROPERLY C-3, S-30, S-30 & S-30 PER M².
 7. DURING CONSTRUCTION AND DESIGN OF BRIDGE PILING, RETURN AND RETURN WALL SHALL CONFORM TO SPECIFICATIONS IN VARIOUS PARTS OF IRC-2017.
 8. SILL BILD WEARING COAT SHALL CONSIST OF LAYERS OF M30 CONCRETE 150MM THK OVER 150MM RETAINING WALLS.
 9. TIEP PILE AND SILL PILE WITH EXPANSION JOINTS SHALL BE PROVIDED AS PER APPROACH IN RT SP-55.
 10. ALL CHANGES, ETC. SHALL BE CONFIRMED AT THE TIME OF EXECUTION.
 11. THIS STRUCTURE USES IN RETAINING WALL.
 12. ALL DIMENSIONS ARE IN METRE UNLESS OTHERWISE MENTIONED.



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BRIDGES

LIST OF DRAWINGS (PKG.-I (0+000 TO 18+461))

S.NO	DRAWING TITLE	DRAWING NO.	
GENERAL ARRANGEMENT DRAWING FOR BRIDGES			
1	GENERAL ARRANGEMENT DRAWING SPAN (1 X 28.00 M C/C EXP. JOINT) AT CH.-14+983	CPC/P-152/DVE/HR/PKG-1/FR/CH-14+983/S-100	SHEET 1 OF 2
2	GENERAL ARRANGEMENT DRAWING SPAN (1 X 28.00 M C/C EXP. JOINT) AT CH.-14+983	CPC/P-152/DVE/HR/PKG-1/FR/CH-14+983/S-100	SHEET 2 OF 2
3	GENERAL ARRANGEMENT DRAWING (SPAN 1 X 30.00 M C/C EXP. JOINT) AT CH.- 16+166	CPC/P-152/DVE/HR/PKG-1/FR/CH-16+166/S-100	SHEET 1 OF 2
4	GENERAL ARRANGEMENT DRAWING (SPAN 1 X 30.00 M C/C EXP. JOINT) AT CH.- 16+166	CPC/P-152/DVE/HR/PKG-1/FR/CH-16+166/S-100	SHEET 2 OF 2
5	GENERAL ARRANGEMENT DRAWING SPAN (1 X 20.00 M C/C EXP. JOINT) AT CH.-16+565	CPC/P-152/DVE/HR/PKG-1/FR/CH-16+565/S-100	SHEET 1 OF 2
6	GENERAL ARRANGEMENT DRAWING SPAN (1 X 20.00 M C/C EXP. JOINT) AT CH.-16+565	CPC/P-152/DVE/HR/PKG-1/FR/CH-16+565/S-100	SHEET 2 OF 2
7	GENERAL ARRANGEMENT DRAWING SPAN (3 X 22.00 M C/C EXP. JOINT) AT CH.-17+910	CPC/P-152/DVE/HR/PKG-1/FR/CH-17+910/S-100	SHEET 1 OF 2
8	GENERAL ARRANGEMENT DRAWING SPAN (3 X 22.00 M C/C EXP. JOINT) AT CH.-17+910	CPC/P-152/DVE/HR/PKG-1/FR/CH-17+910/S-100	SHEET 2 OF 2
GENERAL ARRANGEMENT DRAWING OF BRIDGES FOR GAS PIPE LINE			
9	GENERAL ARRANGEMENT DRAWING SOLID SLAB AT CH.- 5+590 FOR GAS PIPE LINE	CPC/P-152/DVE/HR/PKG-1/FR/CH-5+590/S-100	SHEET 1 OF 2
10	GENERAL ARRANGEMENT DRAWING SOLID SLAB AT CH.- 5+590 FOR GAS PIPE LINE	CPC/P-152/DVE/HR/PKG-1/FR/CH-5+590/S-100	SHEET 2 OF 2
11	GENERAL ARRANGEMENT DRAWING SOLID SLAB AT CH.- 10+100 FOR GAS PIPE LINE	CPC/P-152/DVE/HR/PKG-1/FR/CH-10+100/S-100	SHEET 1 OF 2
12	GENERAL ARRANGEMENT DRAWING SOLID SLAB AT CH.- 10+100 FOR GAS PIPE LINE	CPC/P-152/DVE/HR/PKG-1/FR/CH-10+100/S-100	SHEET 2 OF 2

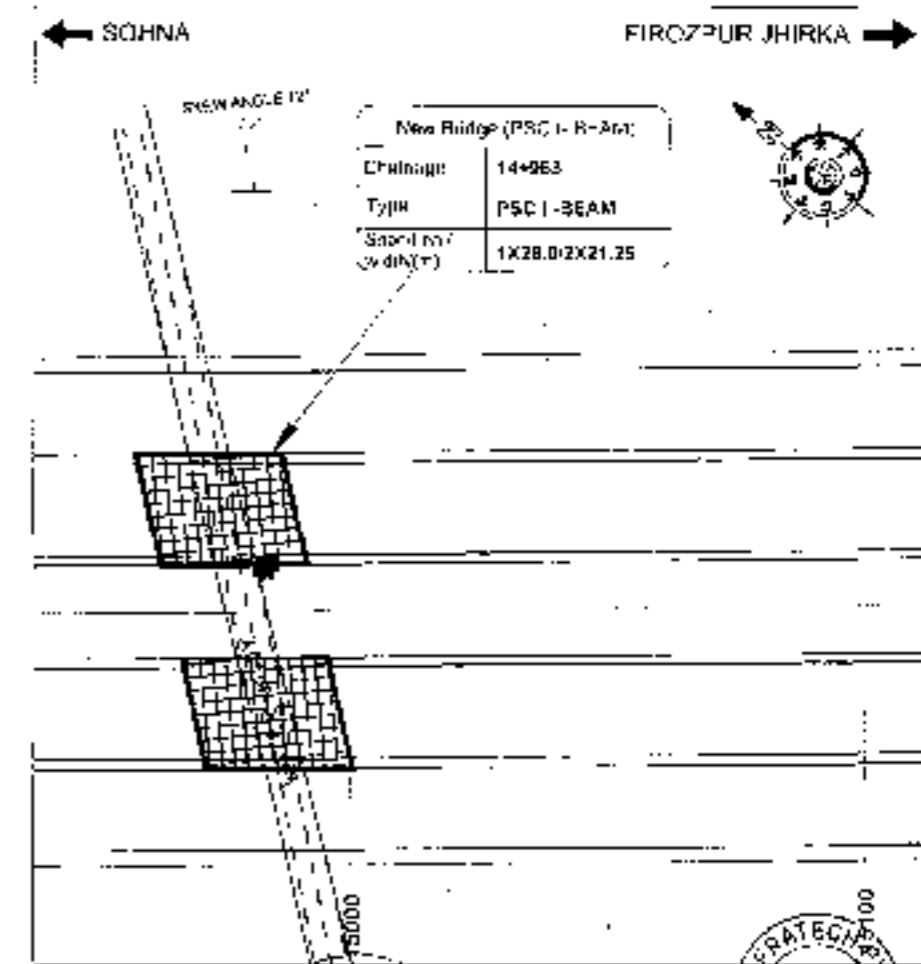
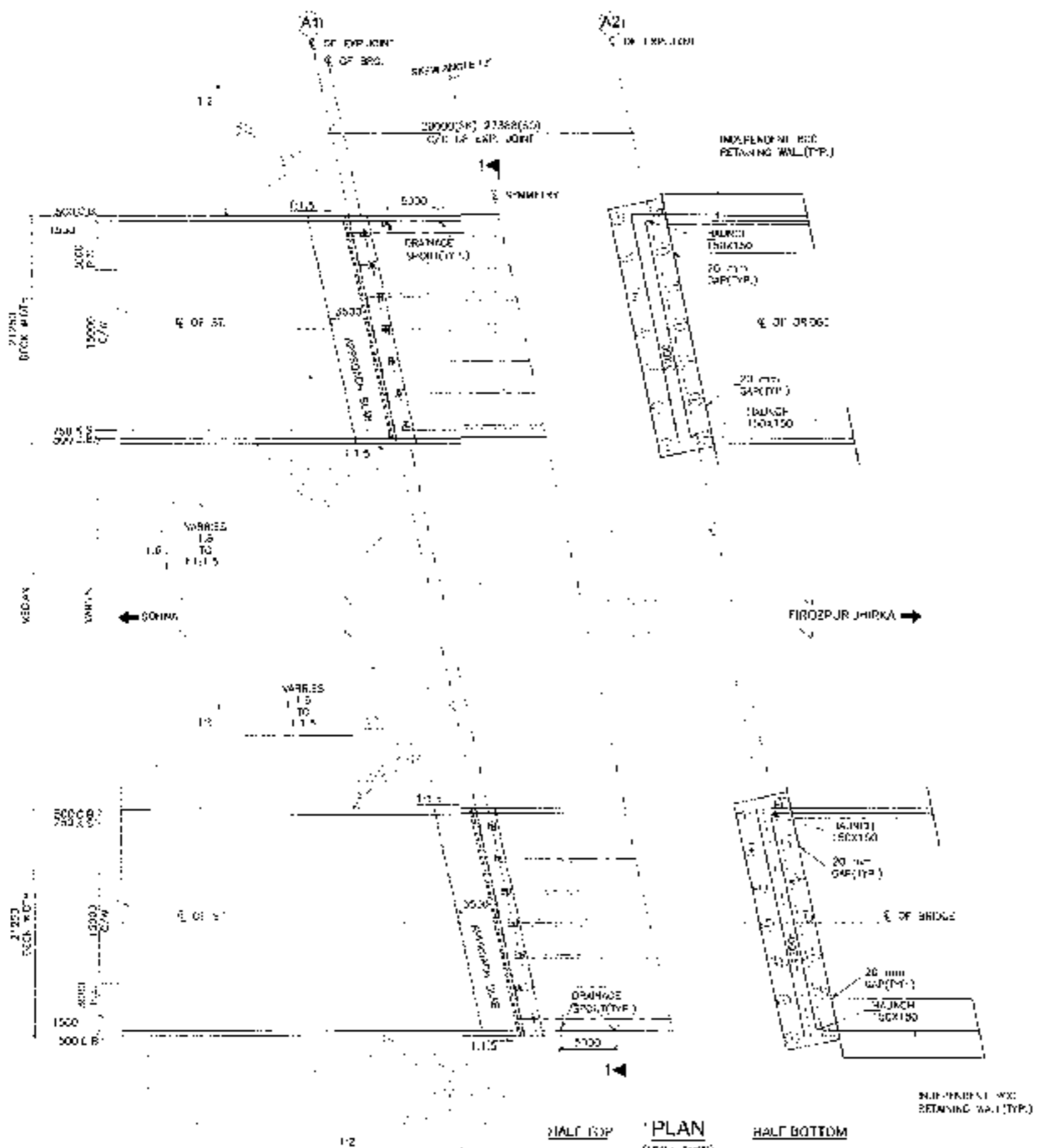


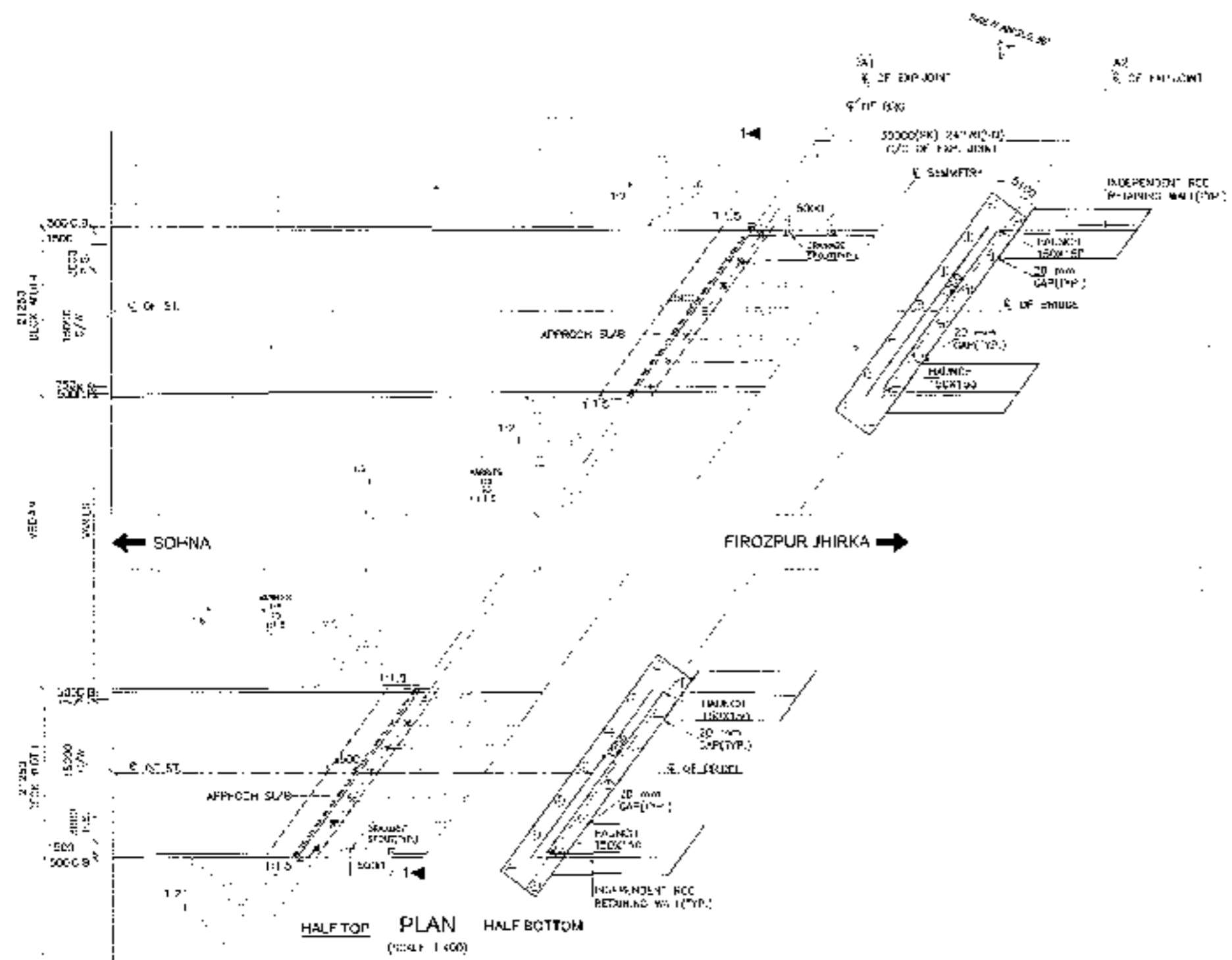
- NOTES -**
1. ALL DIMENSIONS ARE IN METERS AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED. THEY SHOULD BE FOLLOWED. NO DIMENSIONS SHALL BE SCALE.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF WL, TRS AND WIND LOADS AS UNDER: APPROVED COMBINATION SHALL BE USED FOR DESIGN FOR SPECIAL VEHICLE.
 3. CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS INDICATED BELOW -

PGC LEVELING COURSE	M 15
PGC GRADE SLAB & INCH SLAB	M 40
GRANITE FINISH	M 40
APPROACH SLAB	M 20
W/FLOOR	M 40
RETAINING WALL	M 35
 4. GRADE OF STEEL SHALL BE Fe 250D ESW CONFORM TO IS:1786
 5. CLEAR COVER TO REINFORCE SHALL BE AS FOLLOWS:

a. SUPERSTRUCTURE	40MM
b. SUBSTRUCTURE	50MM
c. FOUNDATION	75MM
 6. BACK FILLING BEHIND ABUTMENTS AND RETAINING WALLS SHALL CONFORM TO SPECIFICATION AS UNDER: TO APPROXIMATE 10% OF VOLUME SHALL BE COMPACTED TO APPROXIMATE 95% OF PROVE 2000 HAVAS PROPERTIES CAN BE USED.

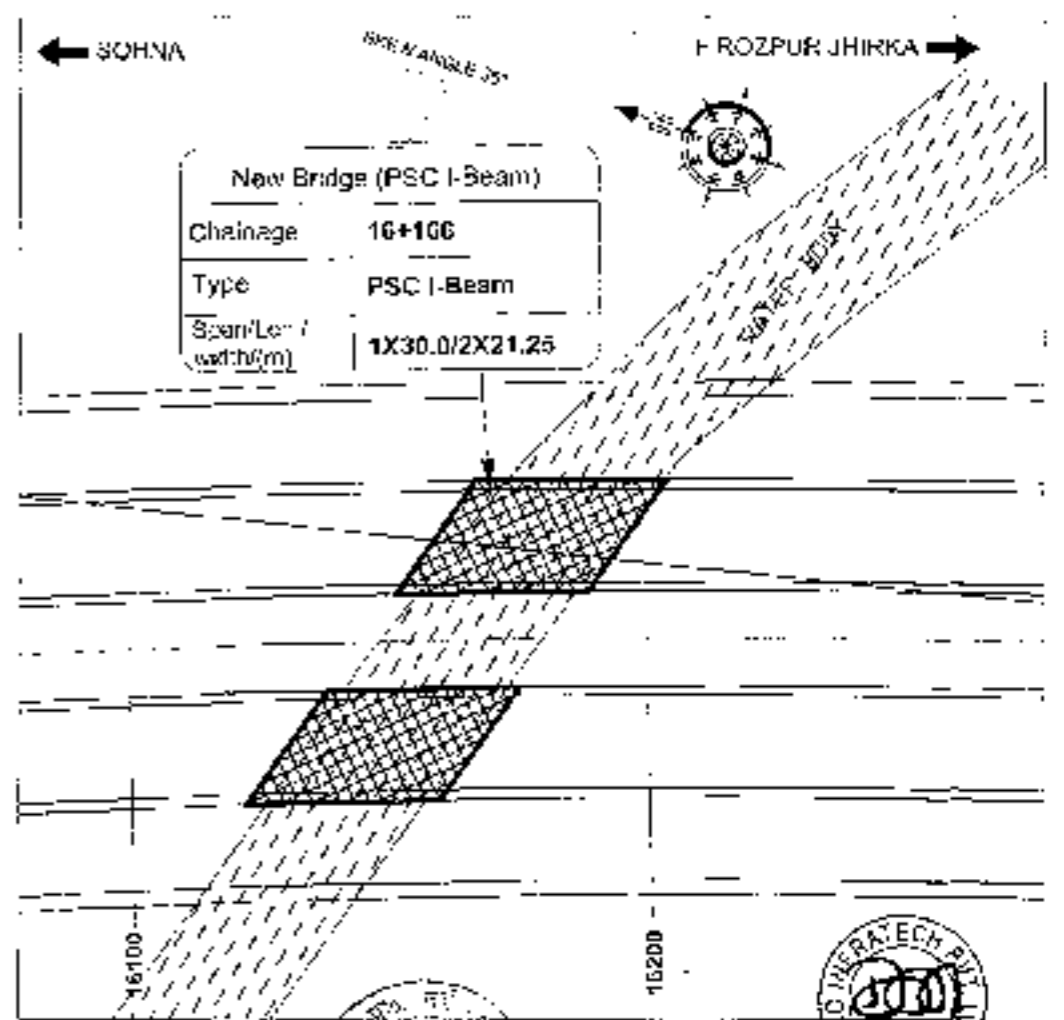
1.30 & 2.00	95%
-------------	-----
 7. LAYING, COMPACTING AND STRENGTH OF BACKFILL SHALL APPROXIMATE TO MINIMUM SHALL CONFORM TO SPECIFICATIONS IN SPECIFICATION: IS: 10134
 8. REINFORCEMENT SHALL BE PROVIDED IN A STAIRCASE WALLS & RETAINING WALLS SHALL BE PROVIDED TO BE AT LEAST 200MM THICK. REINFORCEMENT SHALL BE PROVIDED IN LAYERS OF WASTE AGGREGATE CONCRETE OF 200MM MIN. CLEARANCE BETWEEN COURSE. WASTEMATERIAL AND WASTE SHALL BE TYPED WITH THE RELEVANT PLAN & PROFILE DRAWING AND LOCATION OF WASTE SHALL BE REPORTED TO CLIENT FOR INFORMATION.
 9. LIPS OF CURB SHALL BE 100MM HIGH & 100MM WIDE.
 10. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
 11. DIMENSIONS OF RETAINING WALL SHALL BE AS UNDER:



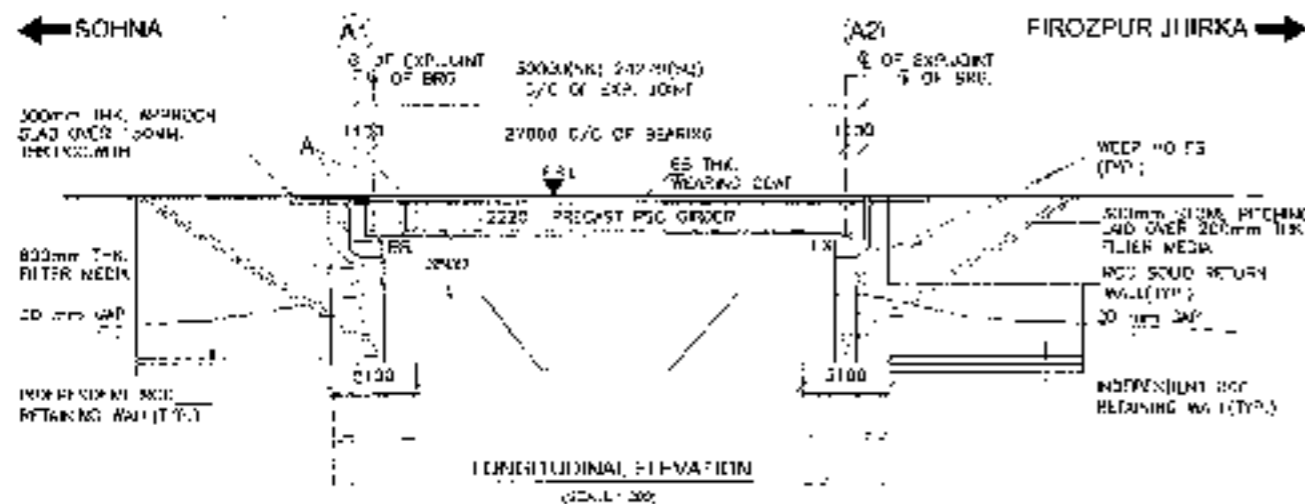


HALF TOP PLAN HALF BOTTOM
(SCALE 1:100)

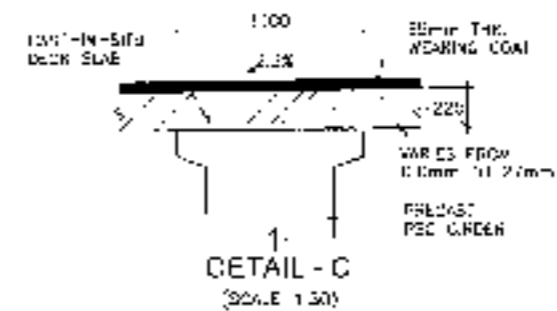
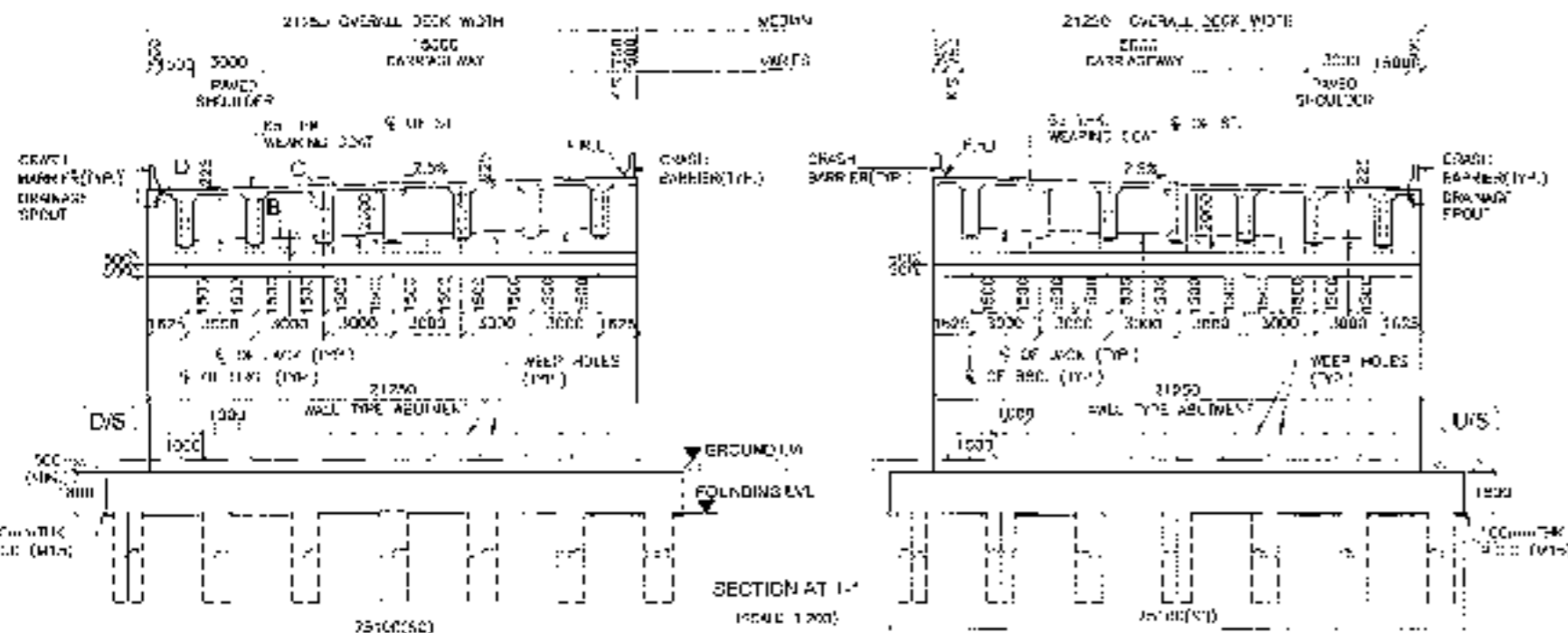
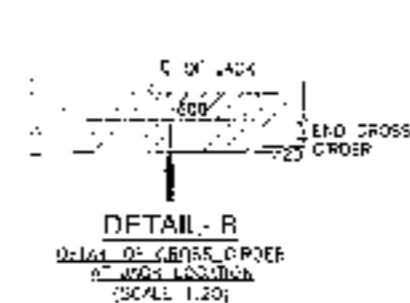
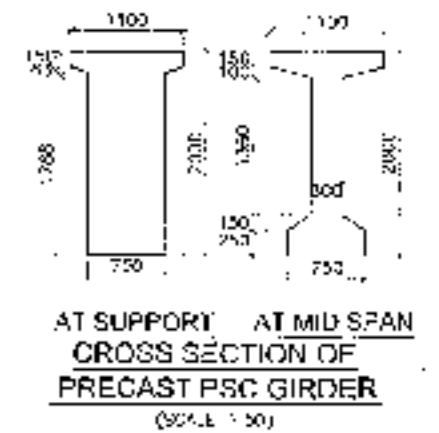
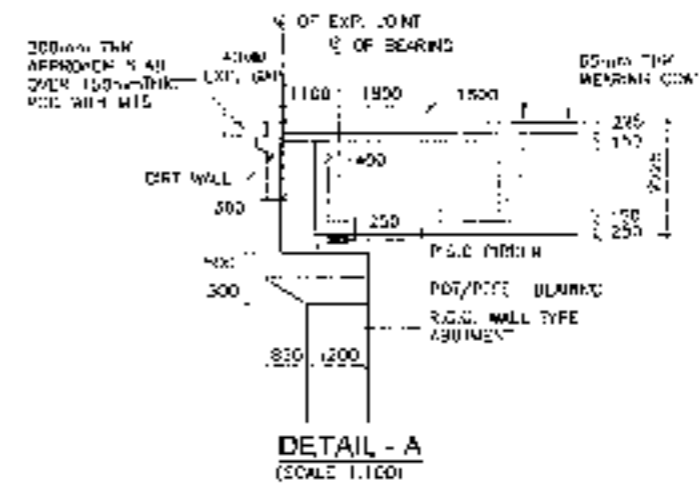
- NOTES:**
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS TO BE FOLLOWED UNLESS OTHERWISE SPECIFIED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR 5 LANE AS PER IRC-2017. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF WIND AND 100 CLASS A COSEISM. AUTOMATIC GATEWAYS SHALL ALSO BE PROVIDED FOR SPECIAL VEHICLES.
 3. CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS INDICATED BELOW:-
 RCC LEVELING COURSE M-10
 RCC RETAINING WALL & CURB WALL M-40
 CRACK SLAGGERS M-40
 APPROACH SLAB M-25
 FOOTING M-40
 RETAINING WALL M-35
 4. GRADE OF SITE SHALL BE IN-5000 EQUIVALENT TO G 1750.
 5. CLEAR UNDER TO CURB WALL SHALL BE AS FOLLOWS:-
 a. SUPERSTRACTION 40MM
 b. SUBSTRUCTURE 50MM
 c. CURB WALL 25MM
 6. ROCK PILING BEING ALIGNED AND RETURN WALL SHALL CONFORM TO SELECTED CURB CONFORMING TO APPENDIX 'G' OF IRC-2017 (WORK) PROVISIONS. 2-0.3 TO 1-0.3 & 1-20 K/m².
 7. UNDER CONSTRUCTION AND TOP OF WALLS, FINISH WITHIN 100 MM FROM WALL SHALL BE FINISHED TO SPECIFICATION IN APPENDIX 'G' OF IRC-2017.
 8. ALL JOINTS SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED WITH A SUFFICIENT NUMBER OF ANCHORS AND WELLS SHALL BE 150 MM FROM CORNER JOINT.
 9. JOINTS SHALL BE MADE UP OF LAYERS OF ASPHALT CONCRETE OF 25MM THK OVER 40MM STRENGTH COURSE. JOINTS AND JOINTS SHALL BE SETTING WITH THE RESPECTIVE PLAN & PROFILE DRAWING AND DIMENSIONS (IF ANY) SHALL BE PROVIDED TO MAINTAIN FOR MONITORING.
 10. THIS STRUCTURE IS AS SHOWN AND ALL DIMENSIONS AND MATERIALS TO BE CHANGED AFTER DETAILED DESIGN CONSULTATION OF ENGINEER'S OFFICE.



90

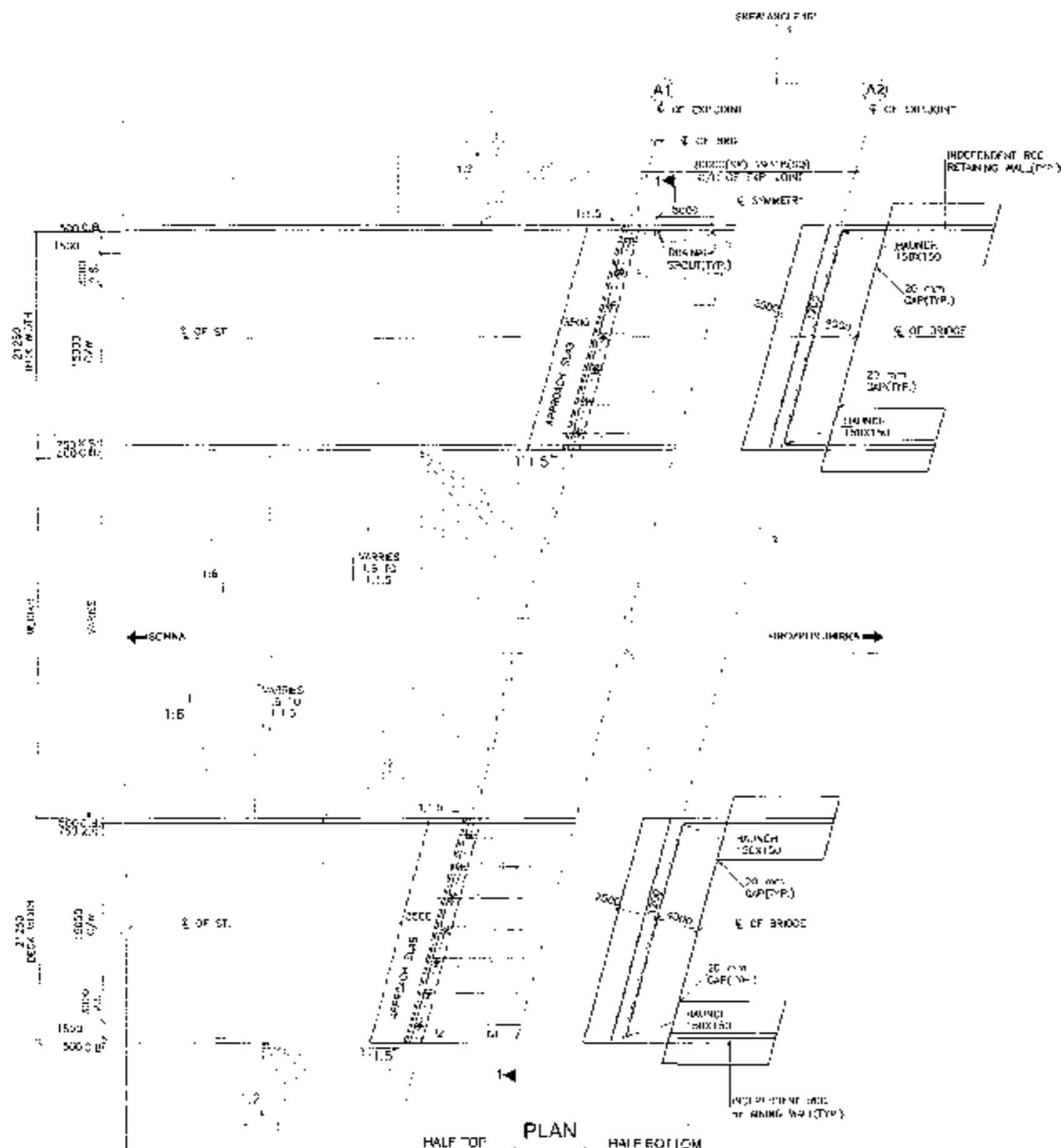


FORMER GROUND LVL (m)	190.661	190.663
GROUND LEVEL (m)	190.646	190.777
CHAINAGE (m)	16+51	16+181



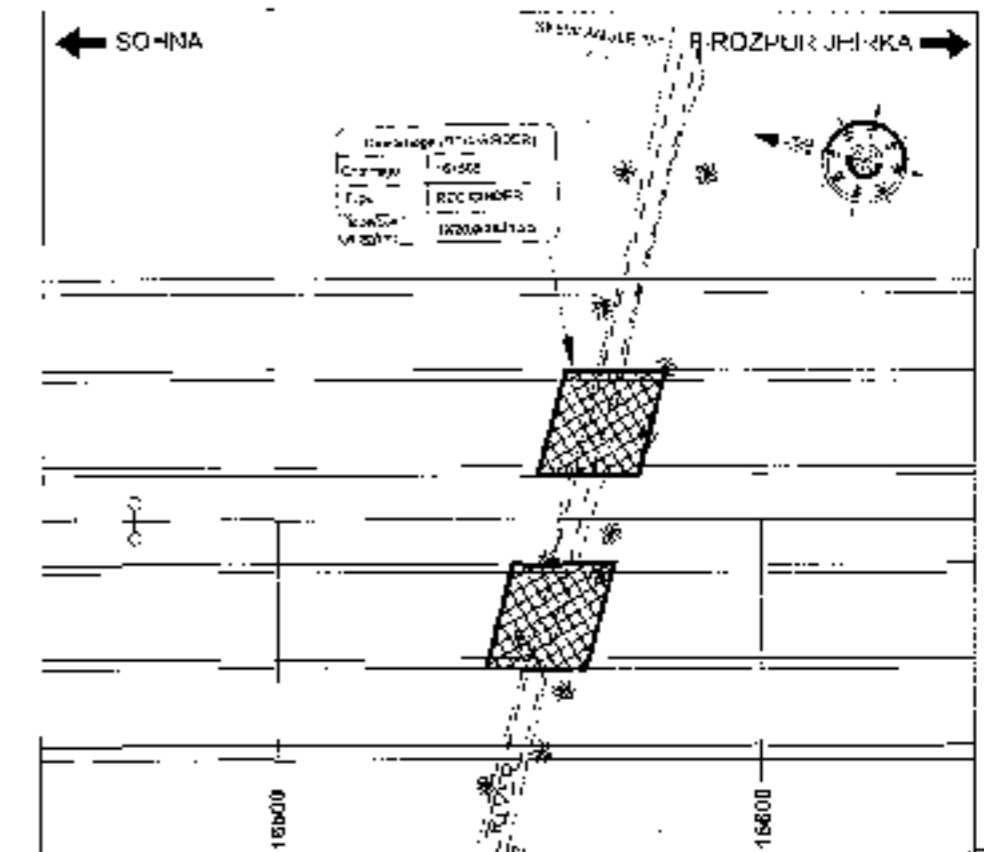
91

<p>National Highways Authority of India Ministry of Road Transport and Highways, Government of India</p>	<p>CONSULTANT:- Chaitanya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, R.K. TOWER PLOT NO. 21-22, SECTOR 4, VAISHALI, GHAZIABAD PH. 0120-3223419, 4126472, FAX: 0120-4150472</p>	<p>PROJECT:- Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Paayojana (Lot-6/Package-4) (Sohna - Firozpur Jirka section of Delhi-Vadodhra Expressway) (PAU-1, Clr. 0+200 to 18+351)</p>	<p>SCALE - AS SHOWN</p>	<p>DWG TITLE:- GENERAL ARRANGEMENT DRAWING (SPAN X 20.00 M C/C EXP. JOINT) AT CH - 16+186 SOHNA - FIROZPUR JIRKA</p>	<p>DRAWING No. CHOP/2010/VAISHALI/PHNCH/INT/545/1/1</p>	<p>(SHEET 3 OF 2)</p>
					<p>DATE: AUGUST 2010</p>	<p>Revision: R6</p>
<p>PREPARED BY: P.K.R.</p>	<p>CHECKED BY: M.K.</p>	<p>APPROVED BY: A.P.</p>				

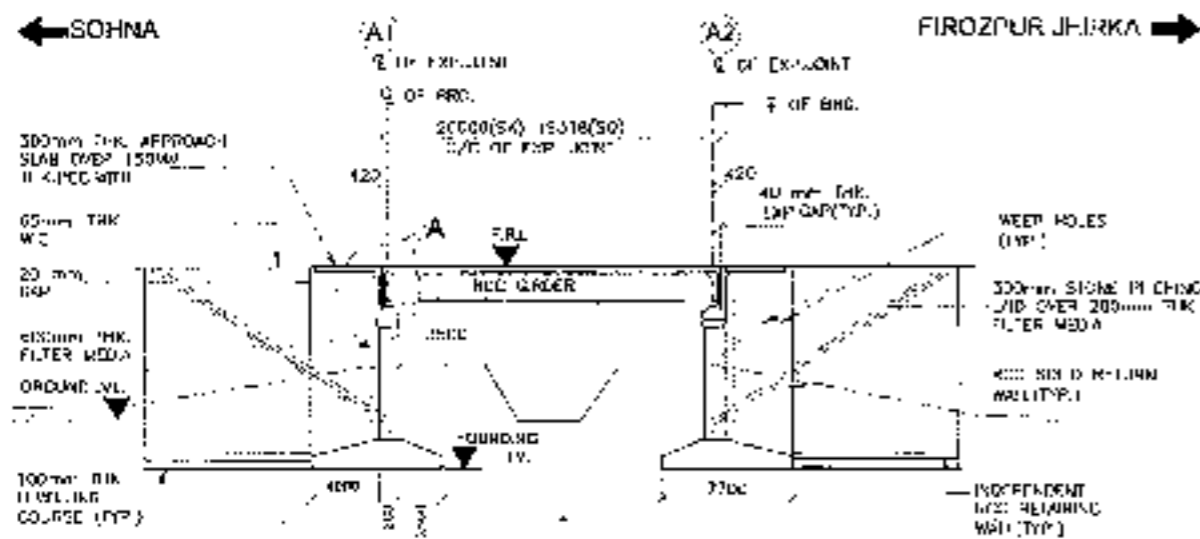


- NOTES:**
1. ALL DIMENSIONS AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS SHALL BE TO FACE UNLESS SPECIFIED OTHERWISE.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR 6 LANE AS PER IS: 4622-2011. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF DEAD AND LIVE LOADS AS PER IS: 4622-2011. CONCRETE SHALL BE OF GRADE M25 AND REINFORCEMENT SHALL BE OF GRADE Fe 415.
 3. CONCRETE SHALL BE DESIGN M25 AND SHALL BE OF GRADE AS MENTIONED BELOW:-
 PCC LEVELING CONCRETE : M-10
 RCC 1 BEAM SLAB & DECK SLAB : M-25
 GRADE MASONRY : M-10
 APPROACH SLAB : M-20
 RETAINING WALL : M-25
 4. GRADE OF STEEL SHALL BE 16-350 CONFORMING TO IS: 1786.
 5. GRADE OF STEEL SHALL BE AS FOLLOWS:-
 a. SUBSTRUCTURE : M-20
 b. SUPERSTRUCTURE : M-25
 c. PAVEMENT : M-20
 6. FACE FINISH SHALL BE AS PER IS: 4622-2011. ALL FINISH SHALL BE IN ACCORDANCE WITH IS: 4622-2011. FINISH SHALL BE AS PER IS: 4622-2011. FINISH SHALL BE AS PER IS: 4622-2011.
 7. FINISH SPECIFICATION AND EXTENT OF FINISH SHALL BE AS PER IS: 4622-2011. FINISH SHALL BE AS PER IS: 4622-2011.
 8. ALL STRUCTURAL MEMBERS SHALL BE REINFORCED WITH REINFORCEMENT AS PER IS: 4622-2011. REINFORCEMENT SHALL BE AS PER IS: 4622-2011.
 9. ALL DIMENSIONS AND LEVELS SHALL BE IN ACCORDANCE WITH IS: 4622-2011. ALL DIMENSIONS AND LEVELS SHALL BE IN ACCORDANCE WITH IS: 4622-2011.
 10. ALL DIMENSIONS AND LEVELS SHALL BE IN ACCORDANCE WITH IS: 4622-2011. ALL DIMENSIONS AND LEVELS SHALL BE IN ACCORDANCE WITH IS: 4622-2011.
 11. THIS DRAWING IS FOR REFERENCE ONLY. ALL DIMENSIONS AND LEVELS SHALL BE IN ACCORDANCE WITH IS: 4622-2011. ALL DIMENSIONS AND LEVELS SHALL BE IN ACCORDANCE WITH IS: 4622-2011.

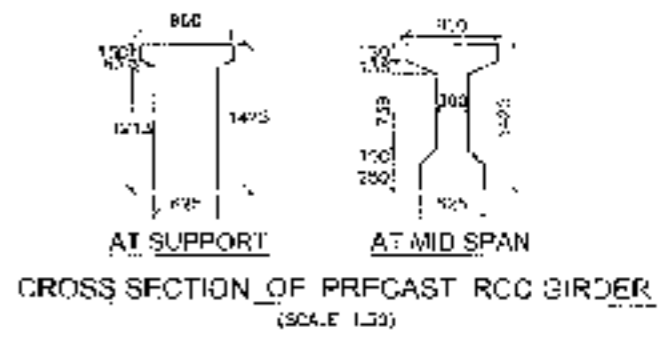
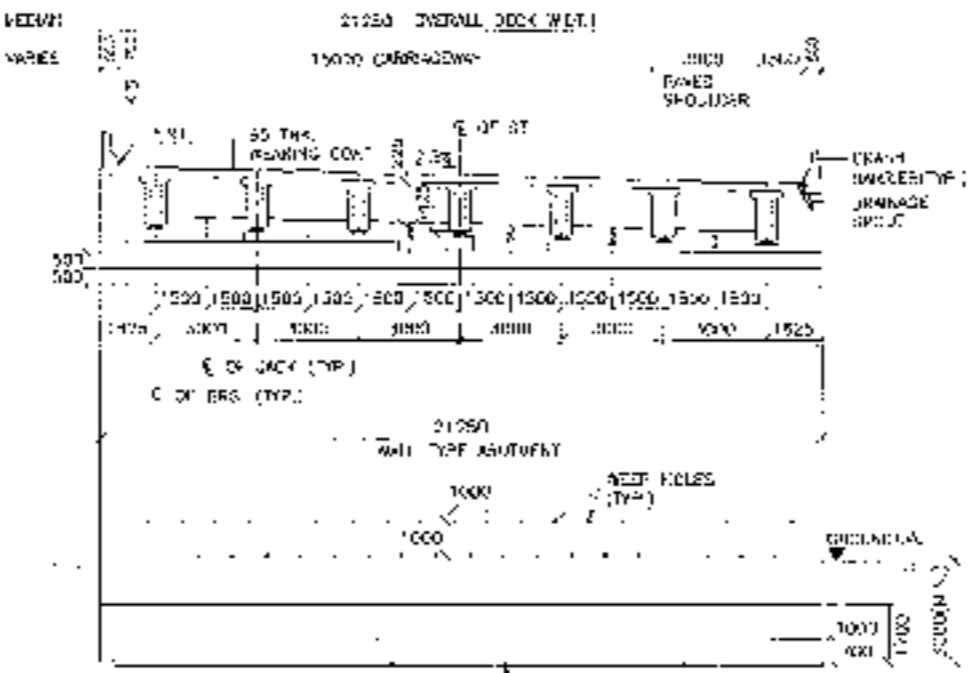
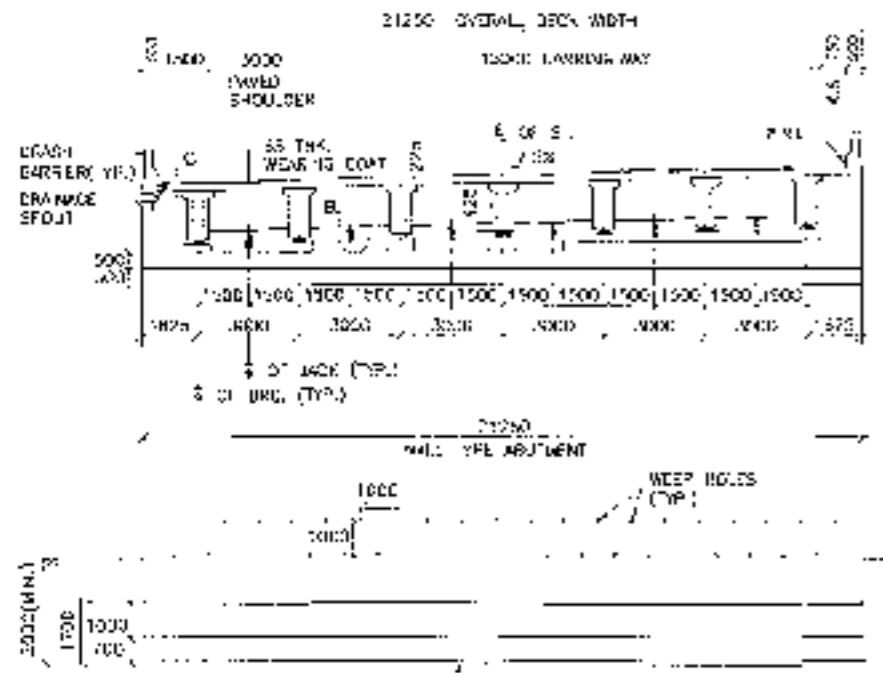
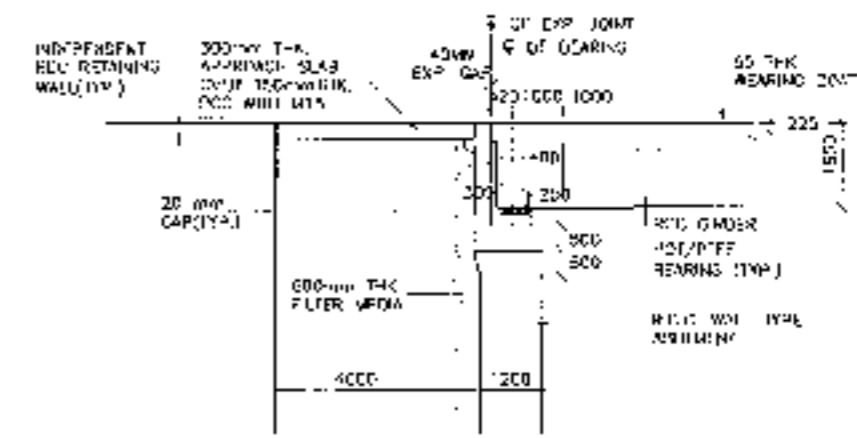
PLAN
 (SCALE: 1:500)
 HALF TOP HALF BOTTOM



92



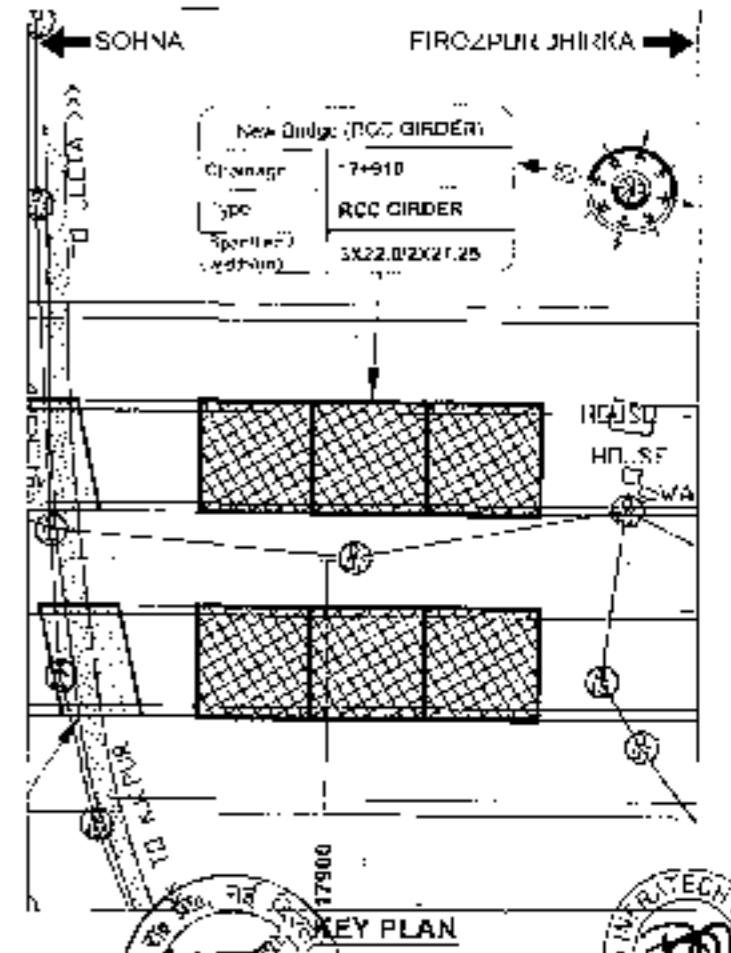
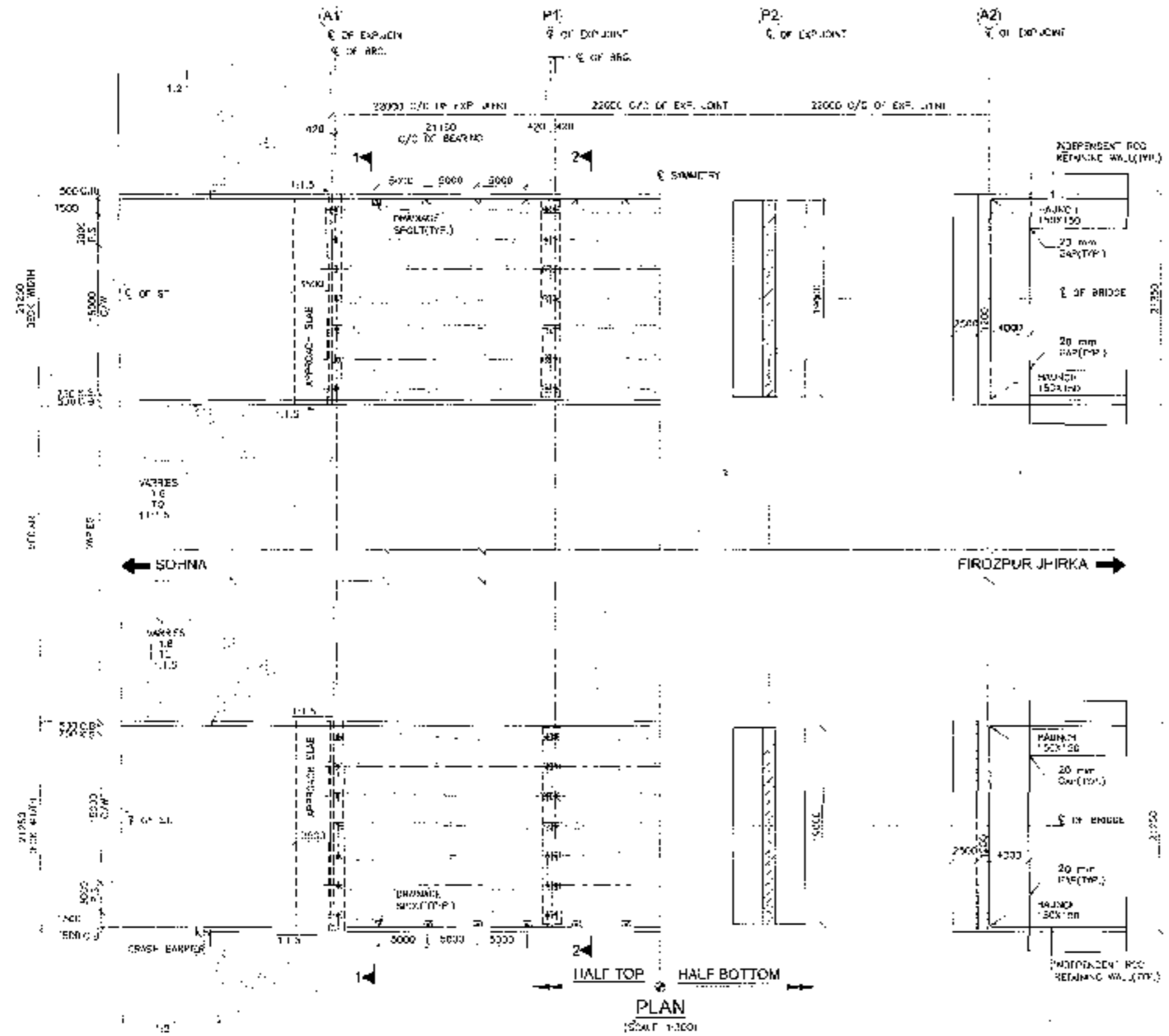
FINISHING LEVEL (M)	99.143	99.144
GROUND LEVEL (M)	92.322	92.261
DRAINAGE (M)	64.203	61.266
	18+275	18+275



93

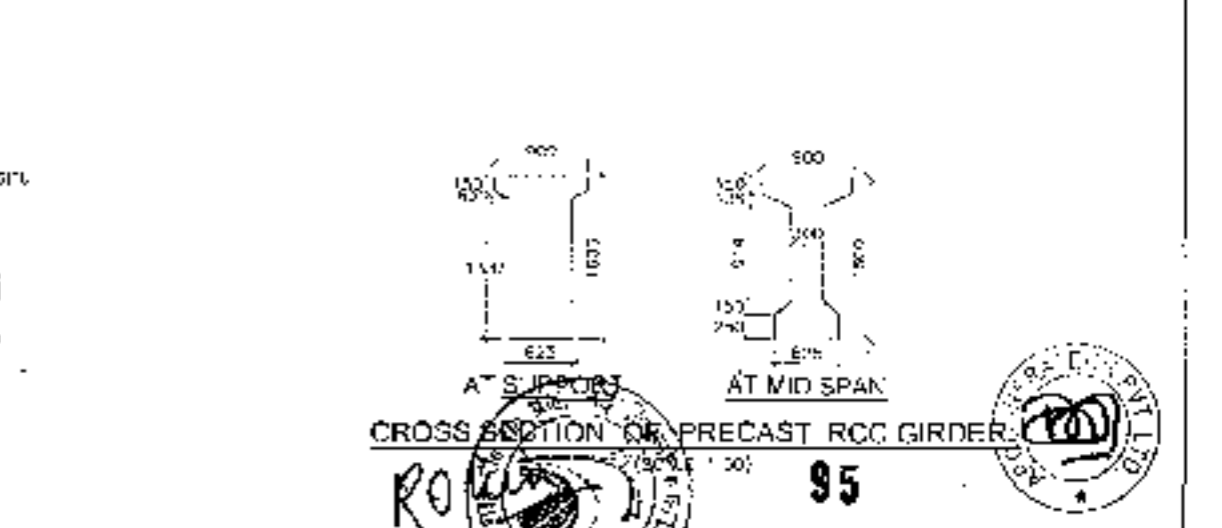
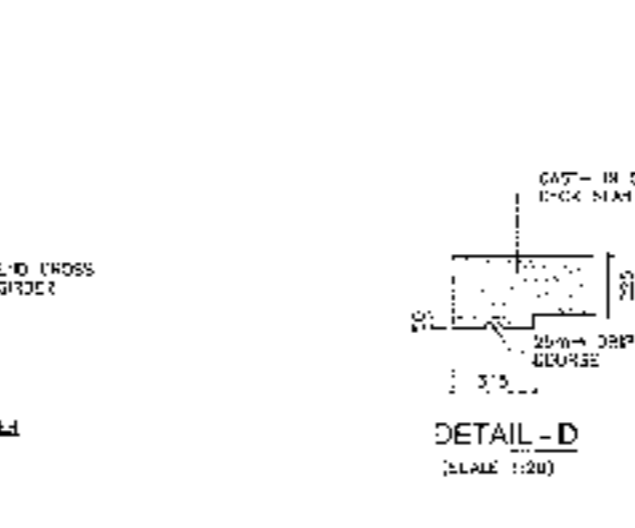
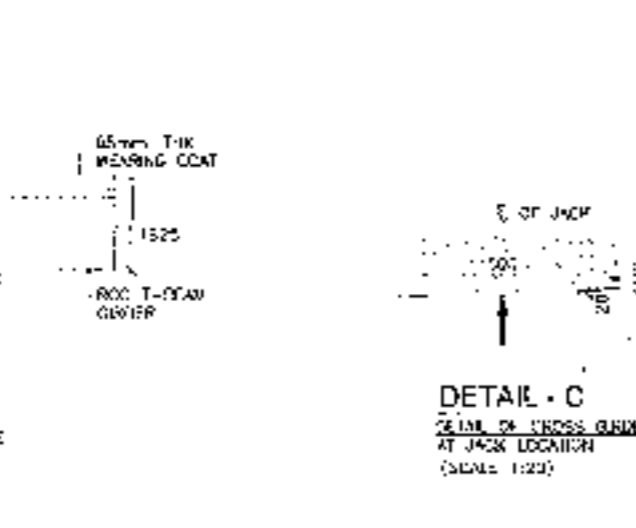
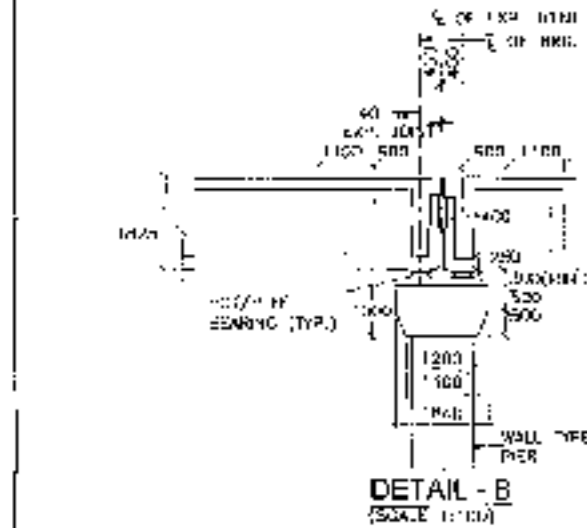
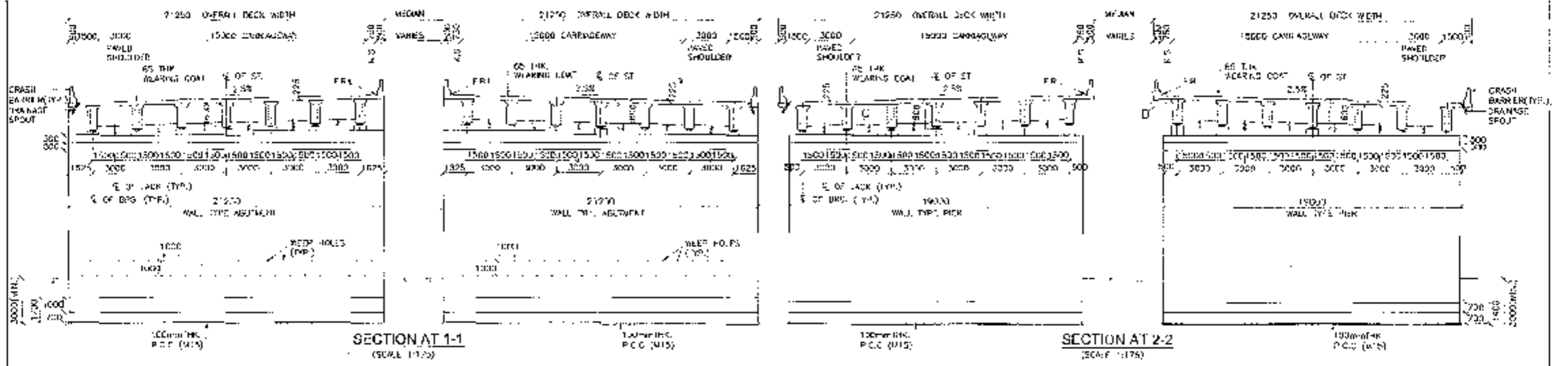
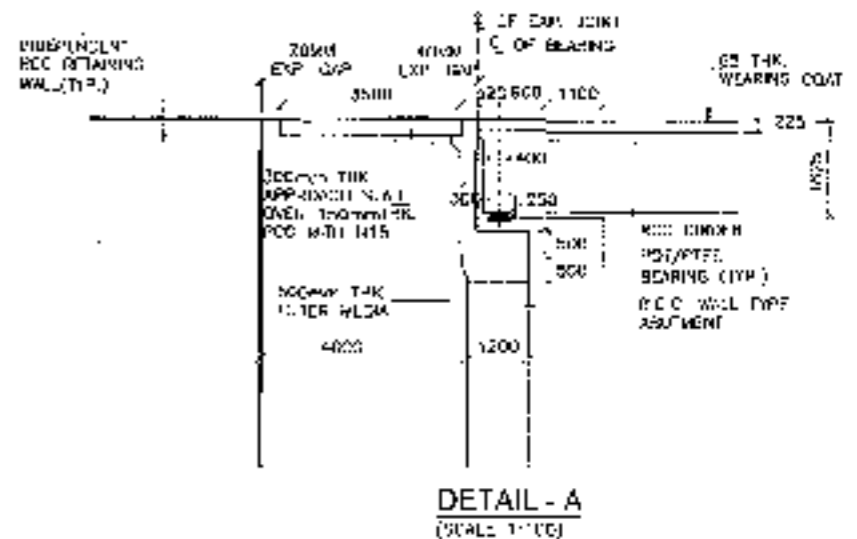
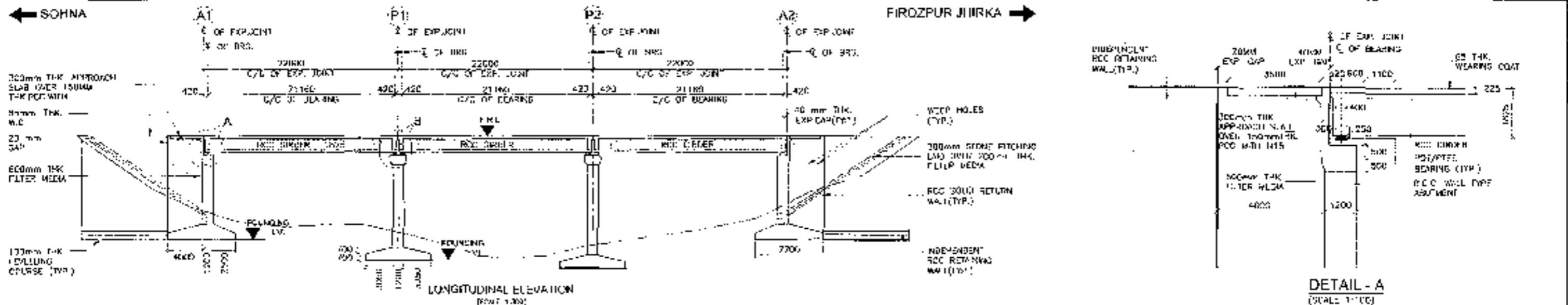
CLIENT:- 	CONSULTANT:- 	PROJECT:- Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-4/Package-4) (Sohna - Firozpur Jhirka sector of Delhi-Vadodara Expressway) (Pkg-1, Cl. 01000 to 181481)	SCALE:- AS SHOWN	DWG TITLE:- GENERAL ARRANGEMENT DRAWING SPAN (1 X 20.00 M) @ EXP. JOINT AT CH 18+505 (SOHNA - FIROZPUR JHIRKA)	DRAWING No.: CH/18505/HR/PCB/HR/CH-18+505-100
					DATE: SEPTEMBER 2010 PREPARED BY: R.S. CHECKED BY: H.S. APPROVED BY: P.C.

- NOTES:**
1. ALL DIMENSIONS ARE IN THE METRIC SYSTEM UNLESS OTHERWISE SPECIFIED. DIMENSIONS TO BE FOLLOWED IN DIMENSIONS SHALL BE GIVEN IN PARENTHESES TO BE FOLLOWED NO DIMENSION SHALL BE GIVEN IN PARENTHESES.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR A LOAD AS PER IRC-81(2007). STRUCTURE SHALL BE DESIGNED FOR CONSTRUCTION OF 100 TONS AND TO BE A LIGHT AND RIGID STRUCTURE. ALL DIMENSIONS SHALL ALSO BE CHECKED FOR SPECIAL VEHICLES.
 3. CONCRETE SHALL BE DESIGN MIXTURE SHALL BE OF GRADE AS INDICATED IN THE DRAWING.
 RCC LEVELLING COURSE : M-20
 RCC TOP SLAB & DECK SLAB : M-25
 CRUSH SANDS : M-10
 APPROACH SLAB : M-20
 FILLING : M 10
 RETAINING WALL : M-25
 4. GRADE OF PAVEMENT SHALL BE TO BE 0.000 CORRECTIVE TO 15%.
 5. DRAIN COVER TO FILTER NET SHALL BE AS FOLLOWS:-
 a. SUBSTRUCTURE : 400MM
 b. SUBSTRUCTURE : 400MM
 c. ISOLATION : 20MM
 6. BACK FILLING BEHIND ABUTMENTS AND RETAINING WALLS SHALL CONSIST OF 20-40% FINE SANDS AND 60-80% OF 20-60MM SANDS PROPORTION 1:1.5:3.0
 1:1.5:3.0 & 1:1.5:3.0
 7. LAYING CONSTRUCTION AND HEIGHT OF DRAINAGE BEING ADJUSTED AND RELIANT WITH THE GRADE TO SATISFACTORILY APPROXIMATE TO 1:1.5:3.0
 8. PAVEMENT SHALL BE 100MM OF 100MM THICKNESS AND 100MM OF 100MM THICKNESS SHALL BE PROVIDED IN A STAGGERED MANNER IN ALL TURNS AND RETAIN WALL SHALL BE 100MM ABOVE GROUND LEVEL.
 9. JOINTS SHALL BE PROVIDED AT 200M INTERVALS OF LAYERS OF BEST ASPHALT CONCRETE OF 25MM THE OVER LAYER INTERLOCK COURSE. JOINTS SHALL BE PROVIDED WITH THE RELEASE FROM A PROPER BEHAVIOUR AND HEIGHT OF JOINT SHALL BE CHECKED TO SLOTTING FOR THE JOINTS.
 10. THE STRUCTURE LIES IN SECOND ZONE IN ALL DIMENSIONS AND THEREAS MAY BE CHECKED AFTER FINAL DESIGN ESTIMATION OF EXPOSURE & VENTILATION.



PLAN
(SCALE: 1:100)

KEY PLAN

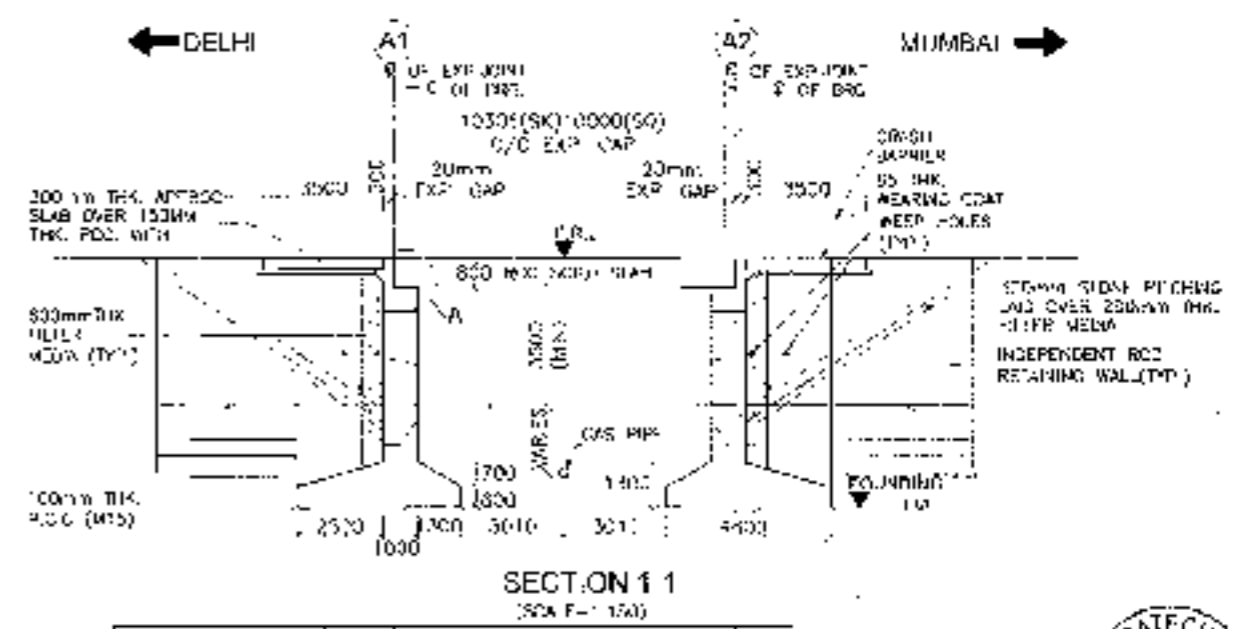
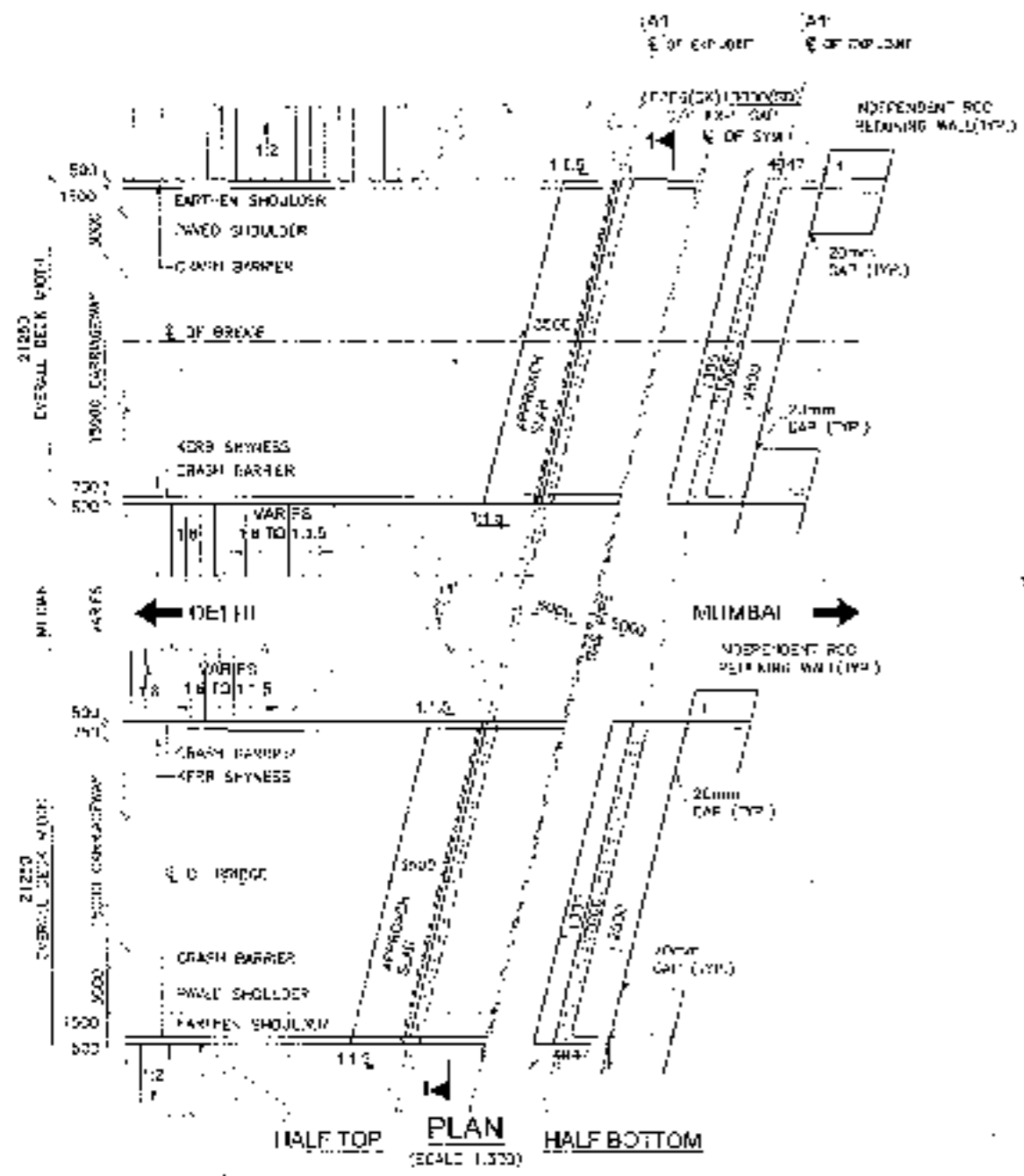


CLIENT - National Highways Authority of India Ministry of Road Transport & Highways, Govt. of India	CONSULTANT - Chaitanya Projects Constancy Pvt. Ltd. C-5, 2ND FLOOR, R.K. TOWER PLOT NO - 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH: 0120-3223419, 4120472, FAX: 0120-4113472	PROJECT - Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Shikharafat Pariyojana (Lot-6/Package-4) (Solana - Firozpur Jirka section of Delhi-Vadodara Expressway) (Pkg-1 Ch. 0+000 to 10+481)	SCALE - AS SHOWN	DWG TITLE - GENERAL ARRANGEMENT DRAWING SPAN (3 X 22.00 M C/C EXP JOINT) AT CH-17-313 (SOHNA - FIROZPUR JIRKA)	DRAWING No. CHN/1520/2011-2012/PRO-APP/03/17-313-100 DATE - SEPTEMBER 2011 PREPARED BY P.S. CHECKED BY M.S. APPROVED BY A.C.	(SHEET 1 OF 2) Revision: RD 95
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- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED. DIMENSIONS TO BE PROVIDED AND DIMENSIONS SHALL BE SCALED.
 - PROPOSED STRUCTURE SHALL BE DESIGNED FOR 6 LANE AS PER IRC-81(17) STRUCTURE SHALL BE DESIGNED FOR OCCUPATION OF R/C FOR AND R/C CLASS A LOADING. WEIGHTS COVERS T SHALL ALSO BE CHECKED FOR SPECIAL VEHICLE.
 - CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS INDICATED BELOW -

R/C UNWEIGHTED CONCRETE	M-35
SUBSTRUCTURE	M-35
STRUCTURE	M-35
CRASH BARRIER	M-40
APPROACH SLAB	M-35
RETAINING WALLS	M-35
PEDESTAL	M-40
PLANKING WALL	M-35
 - GRADE OF STEEL SHALL BE Fe 500 CONFORMING TO IS:1786.
 - CLEAR COVER TO REINFORCING BARS SHALL BE AS FOLLOWS -

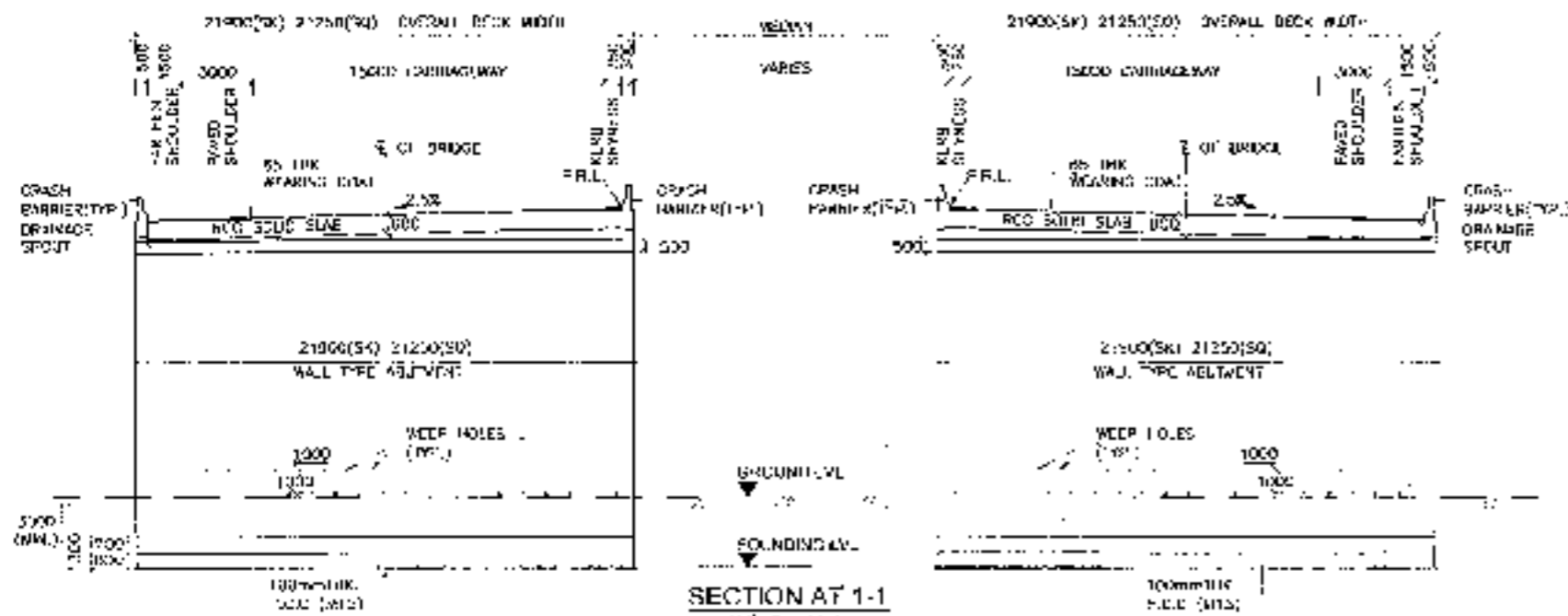
IN SUBSTRUCTURE	40MM
IN STRUCTURE	40MM
IN FOUNDATION	75MM
 - BACK FILLING BEHIND RETAINING AND PLANKING WALLS SHALL CONSIST OF SELECTED FORTH CONFORMING TO APPROX. G OF IRC-81(17) USING PROPORTION C=0.8, S=0.2, W=20, A=1, F=0.45/0.5.
 - LAYER COMPACTION AND EXTENT OF BACKFILL PLACING METHOD AND PATTERN SHALL COMPLY TO SPECIFICATIONS IN APPENDIX 5 OF IRC-81(17).
 - WALL HOLES SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A SUFFICIENT NUMBER IN ALTERNATE AND PLACING WITH 100mm ABOVE GROUND LEVEL.
 - BEHIND BACK FILLING CONCRETE CURB SHALL BE PROVIDED IN LENGTH OF 2000mm OVER GROUND BEHIND WALL CURB.
 - PILE TIP AND STRUT END SHALL BE PROVIDED WITH 100mm CLEARANCE AS PER PROVISION OF IRC OF IS.
 - ALL DIMENSIONS TO BE GIVEN IN METERS AT SITE FROM TO CENTER LINE.
 - THIS DRAWING IS A PART OF CONTRACT.
 - ALL DIMENSIONS AND NOTES ARE IN METERS UNLESS OTHERWISE SPECIFIED.



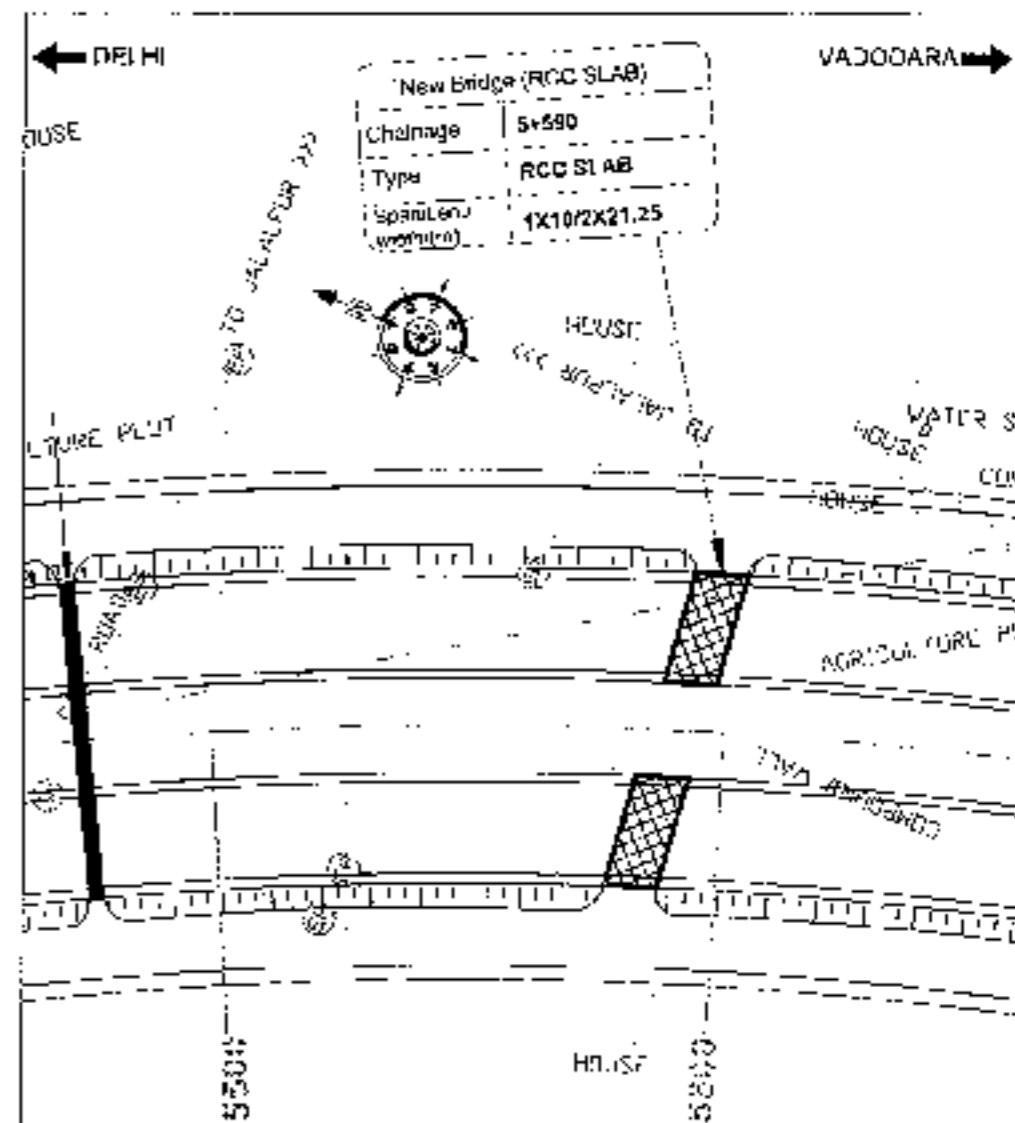
FORMAT (A1) (V)H (m)	60.000
GROUND LEVEL (m)	60.000
CHAINAGE (m)	5+535

SECTION 1-1
(SCALE = 1:100)

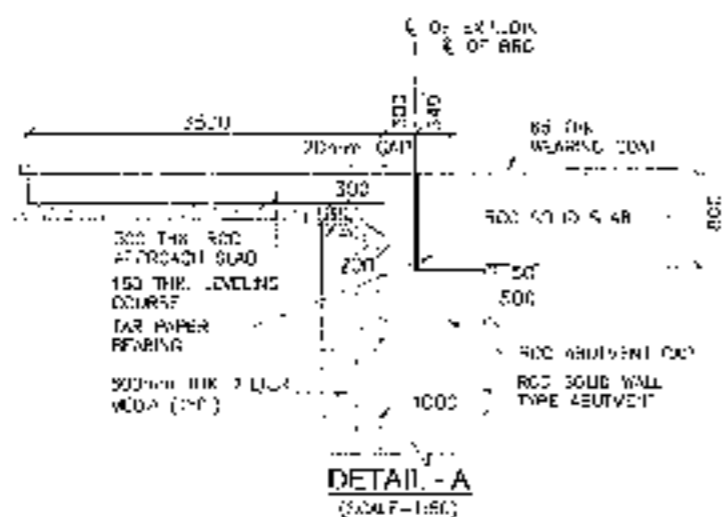
CLIENT - National Highways Authority of India Ministry of Road Transport & Highways, Govt. of India	CONSULTANT - Chaitanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, R.K. TOWER PLOT NO.-21-22, SECTOR-4, VAISHALI, GHAZIABAD PH: 0120-9221410, 1120472, FAX: 0120-4110472	PROJECT - Consultancy Service for the Preparation of Feasibility Report/DPR for development of Economic Corridors, Inter-Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Ferozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1 Ch. 0+000 to 12+451)	SCALE - AS SHOWN	DWG TITLE - GENERAL ARRANGEMENT OF BRIDGE SLAB AT CH. - 5+590 FOR GAS P. PIPE LINE (SOHNA - FEROPUR JHIRKA)	DRAWING No. CHOP/130/06/00/004-01/004-SP/MS-100	SHEET No. 96
					DATE: AUGUST 2018	Revised: R0
PREPARED BY: 664		CHECKED BY: MR		APPROVED BY: A.C.		



SECTION AT 1-1
(SCALE 1:200)



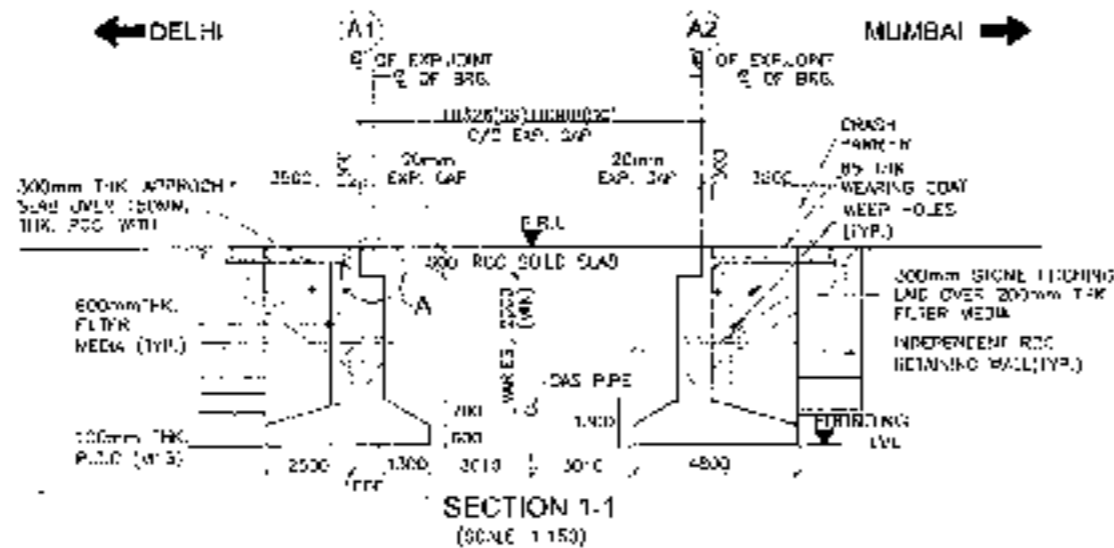
KEY PLAN



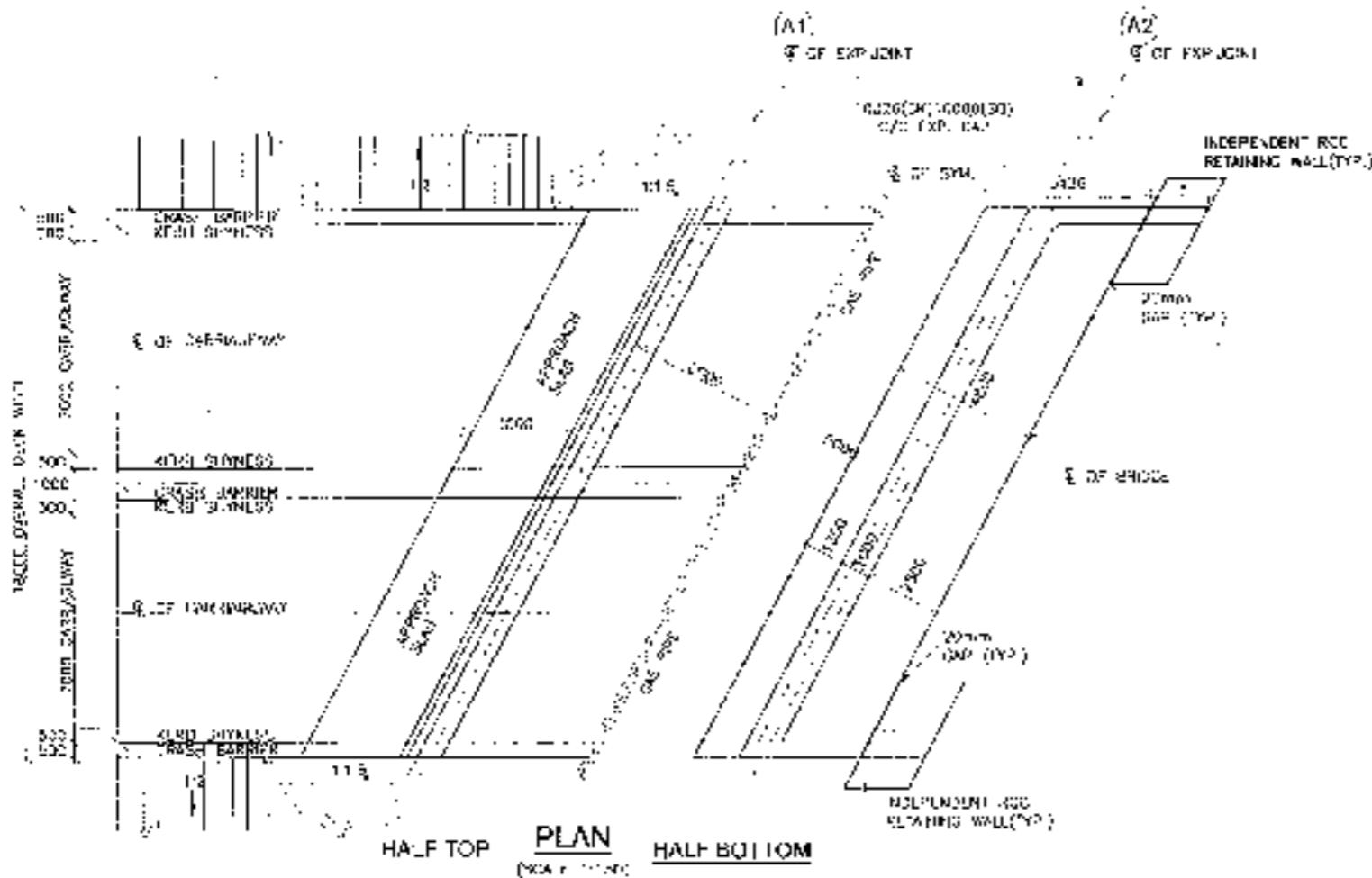
DETAIL - A
(SCALE 1:50)

<p>CLIENT:- National Highways Authority of India</p>	<p>CONSULTANT:- Chaitanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, K. TOWER PLOT NO. 21-22, SECTOR-4, VAISHALI, CHATTAJARAD PH: 0120-3223419, 4120472, FAX: 0120-4110472</p>	<p>PROJECT:- Consultancy Service for the Preparation for Feasibility Report/JCR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Solana - Ferozpur Jharkha section of Delhi-Vadodra Expressway) (Phg-1_Ch 0+000 to 13+451)</p>	<p>SCALE:- AS SHOWN</p>	<p>DWG TITLE:- GENERAL ARRANGEMENT DRAWING SOLID SLAB AT CH - 5-590 FOR GAS PIPE LINE (SOENA - BRDZ PLE JHARKA)</p>	<p>DRAWING NO. : SPON-1520VB-101K0-1-PRC1-G-5105-100 (SHEET 2 OF 2) DATE : AUGUST 2014 Prepared By: RC Checked By: MS Approved By: AG</p>
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FORMATION LEVEL (m)	10+000	10+100	10+105
GROUND LEVEL (m)	10+000	10+100	10+105
CHANNEL (m)	10+000	10+100	10+105



NOTES:

- ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METRES UNLESS OTHERWISE MENTIONED. UNITS MUST BE FOLLOWED. NO DIMENSIONS SHALL BE SCALLED.
- PROPOSED STRUCTURE SHALL BE DESIGNED FOR 6 LANE AS PER IRC-8-2017. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF M₁ AND IRC CLASS A LOADING. WHEREVER CONCERNED, IT SHALL ALSO BE CHECKED FOR WIND LOADS.
- CONCRETE SHALL BE M20 AND SHALL BE OF GRADE AS INDICATED BELOW:-

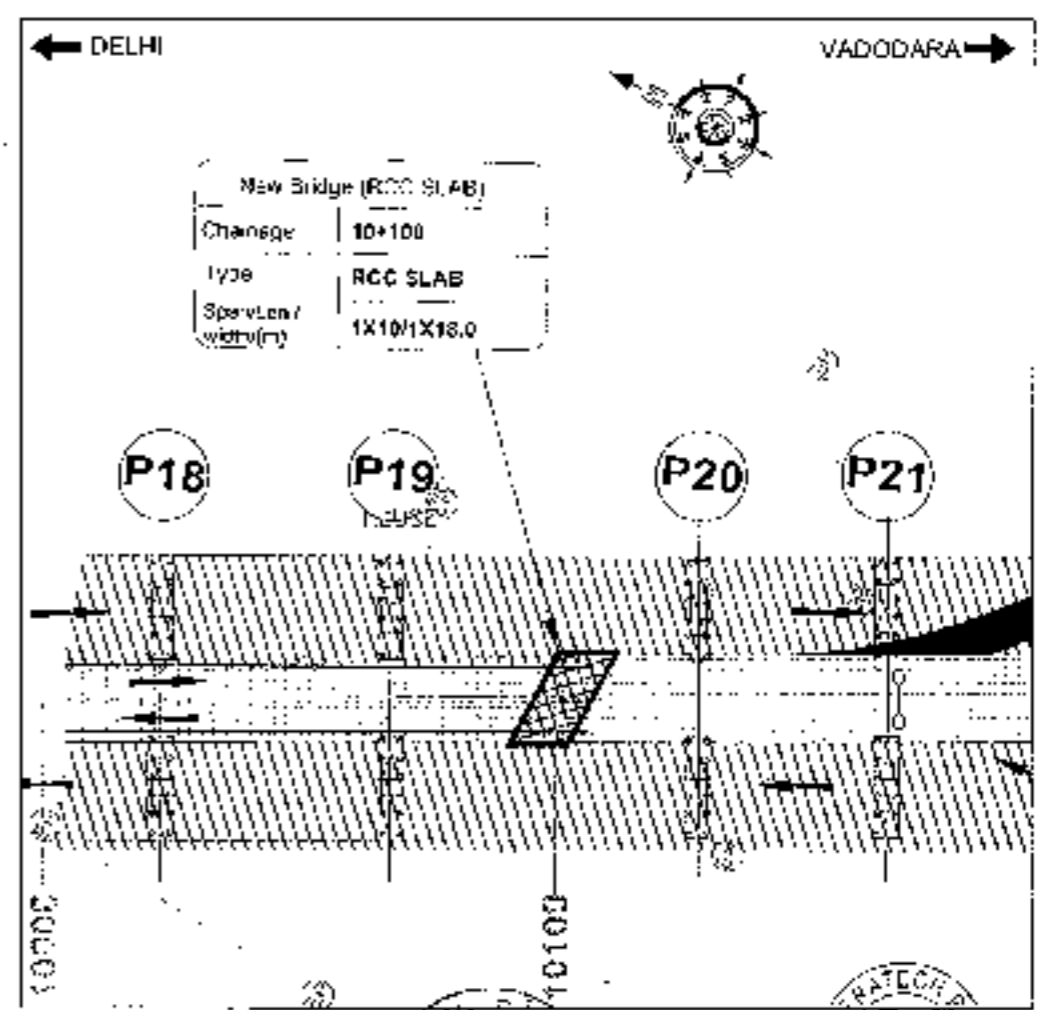
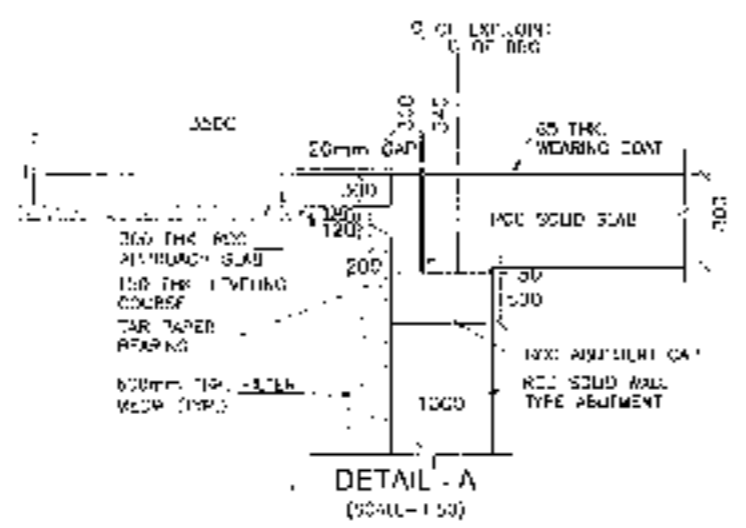
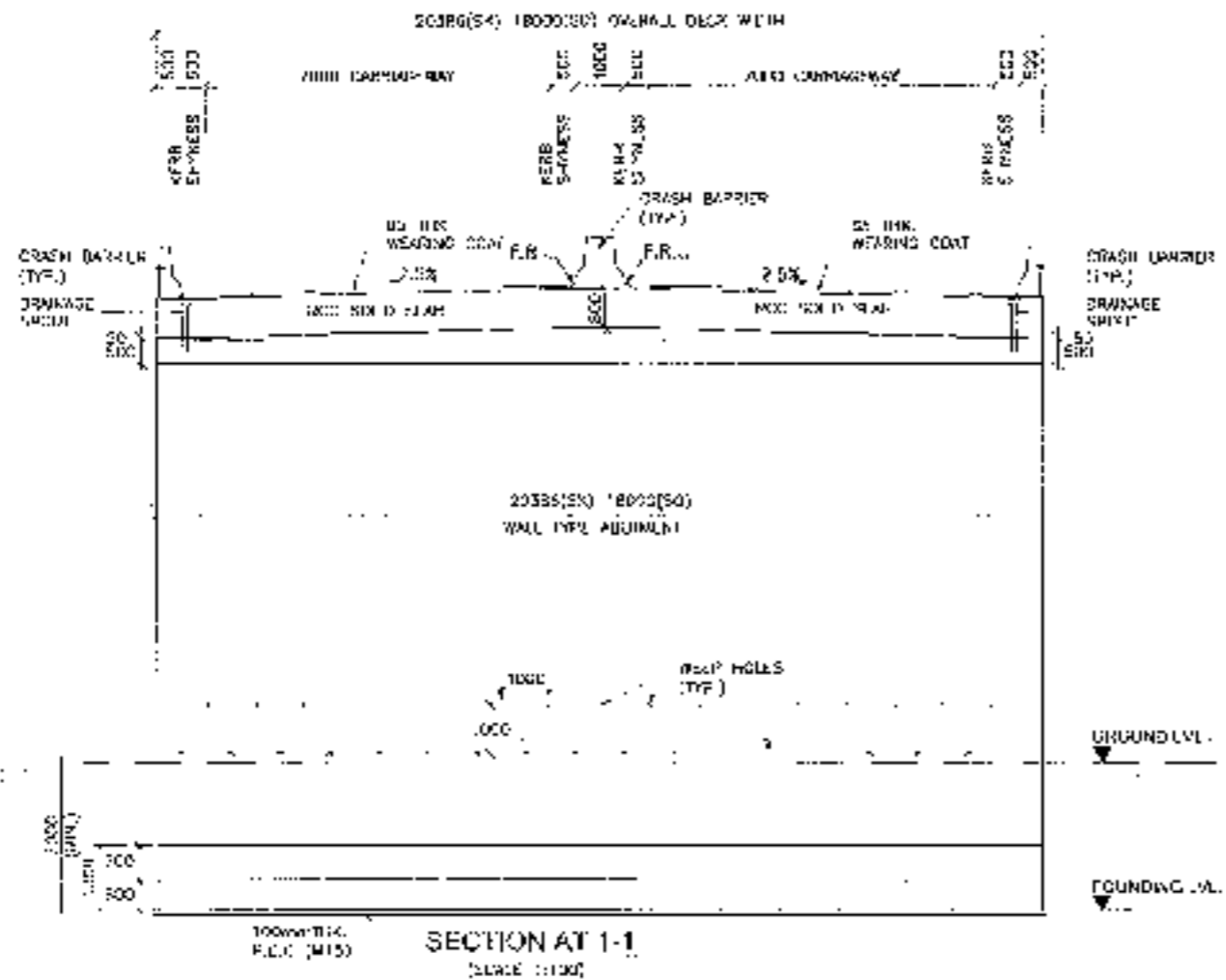
REG. LEVELING COURSE	M-15
SUBSTRUCTURE	M-25
STRUCTURE	M-25
CHWAL SLAB	M-40
APPROACH SLAB	M-20
RETAINING WALLS	M-25
PIEDRAL	M-40
RETAINING WALL	M-25
- GRADE OF STEEL SHALL BE Fe-250D conforming to IS:1786.
- STEEL GRADE TO OTHER STEEL SHALL BE AS FOLLOWS:-

a. SUPERSTRUCTURE	Fe-250D
b. SUBSTRUCTURE	Fe-410
c. FOUNDATION	Fe-250D
- SAFE TILLER BEARING ALLOWANCES AND RETURN WALLS SHALL CONSIST OF SELECTED LIGHT CHANNELS TO A MAXIMUM OF 6 TO RC-25-2014 (WIND PROVISIONS 5.3.2, 5.3.3, 5.3.4 & 5.3.5).
- LOADING DIMENSION AND EXIST OF CHANNEL BEARING ALLOWANCE AND RETURN WALL SHALL CONFORM TO SPECIFICATIONS IN APPROPRIATE OF IRC-8-2017.
- WIND LOADS, WIND SPEED AT 10M & 30M HEIGHTS AND VERTICALLY SHALL BE PROVIDED BY A STYCOBER NUMBER IN ASSUMPTIONS AND RETURN WALL SHALL BE 10% ABOVE GROUND LEVEL.
- 200mm THICK WEARING COAT SHALL CONSIST OF LAYERS OF 100mm ASPHALT CONCRETE OF 20mm THICK OVER 40mm AT LEAST COURSE.
- ROLLER TIRE AND STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER PROVISION OF IRC-8-2017.
- ALL CHANNELS, BRG. OR SHALL BE CONFINED AT SOIL FROM 10% TO 1:1.50.
- THIS STRUCTURE LIES IN SEISMIC ZONE IV.
- ALL DIMENSIONS ARE TENTATIVE AND TO BE CHECKED AFTER FINAL DESIGN.



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LVUP & VUP



100

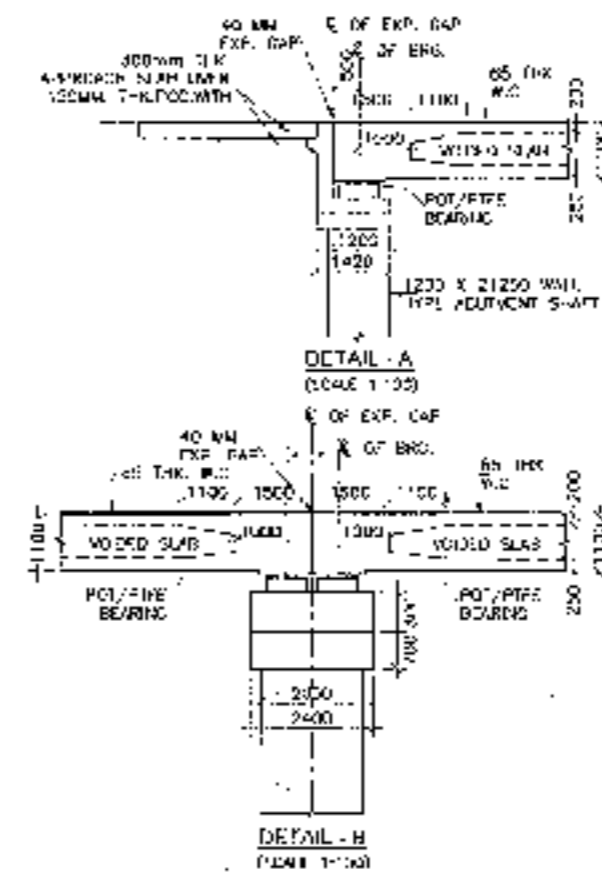
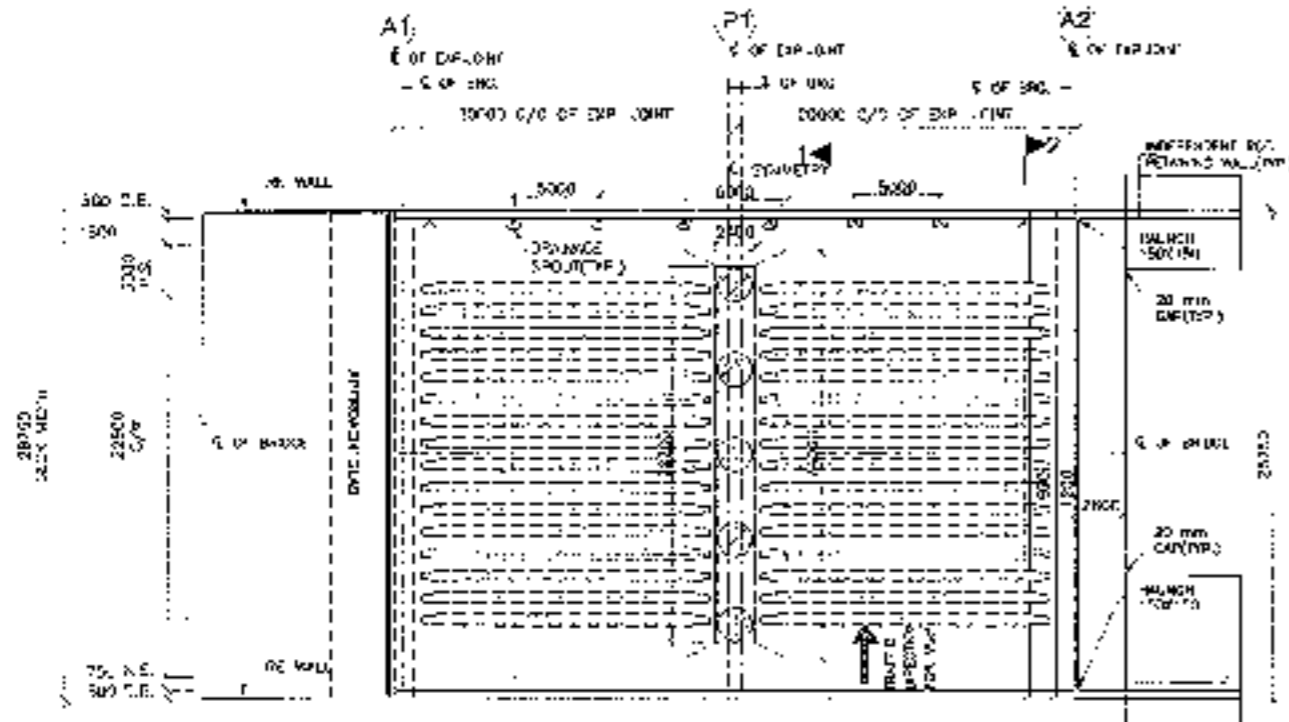


LIST OF DRAWINGS (PKG.-I (0+000 TO 461))

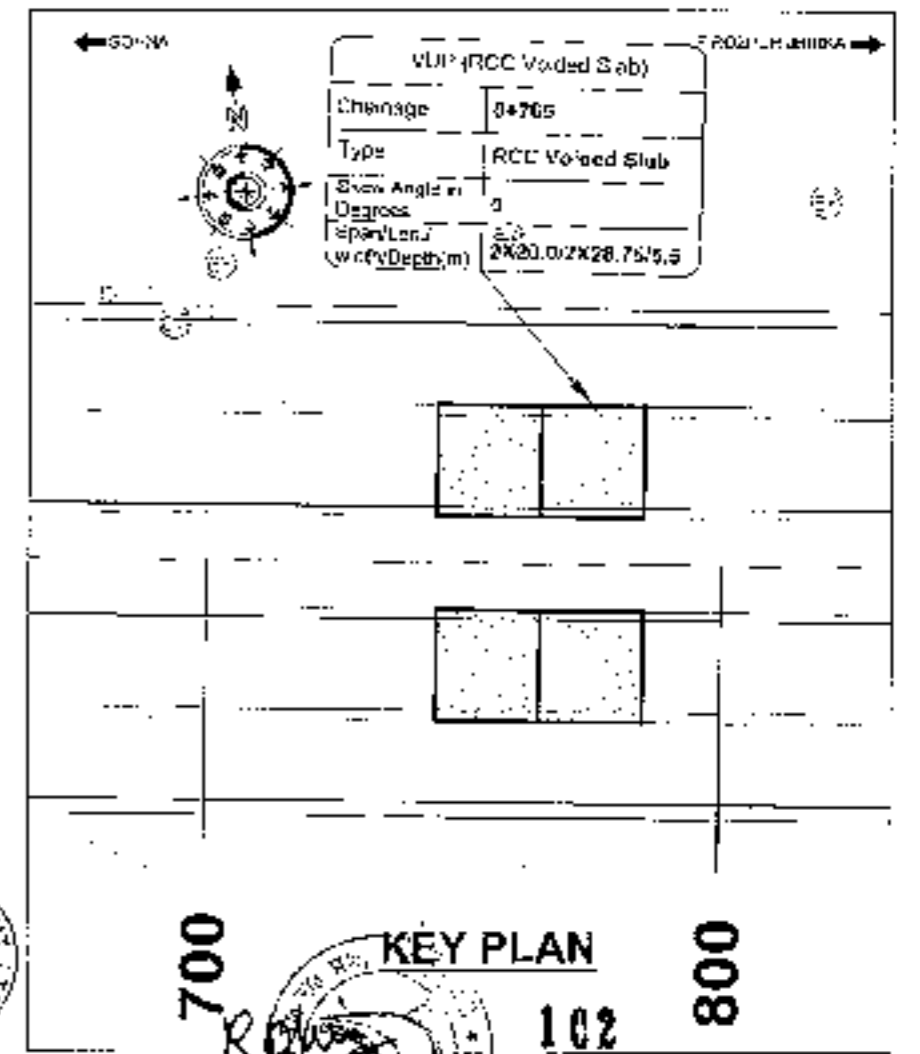
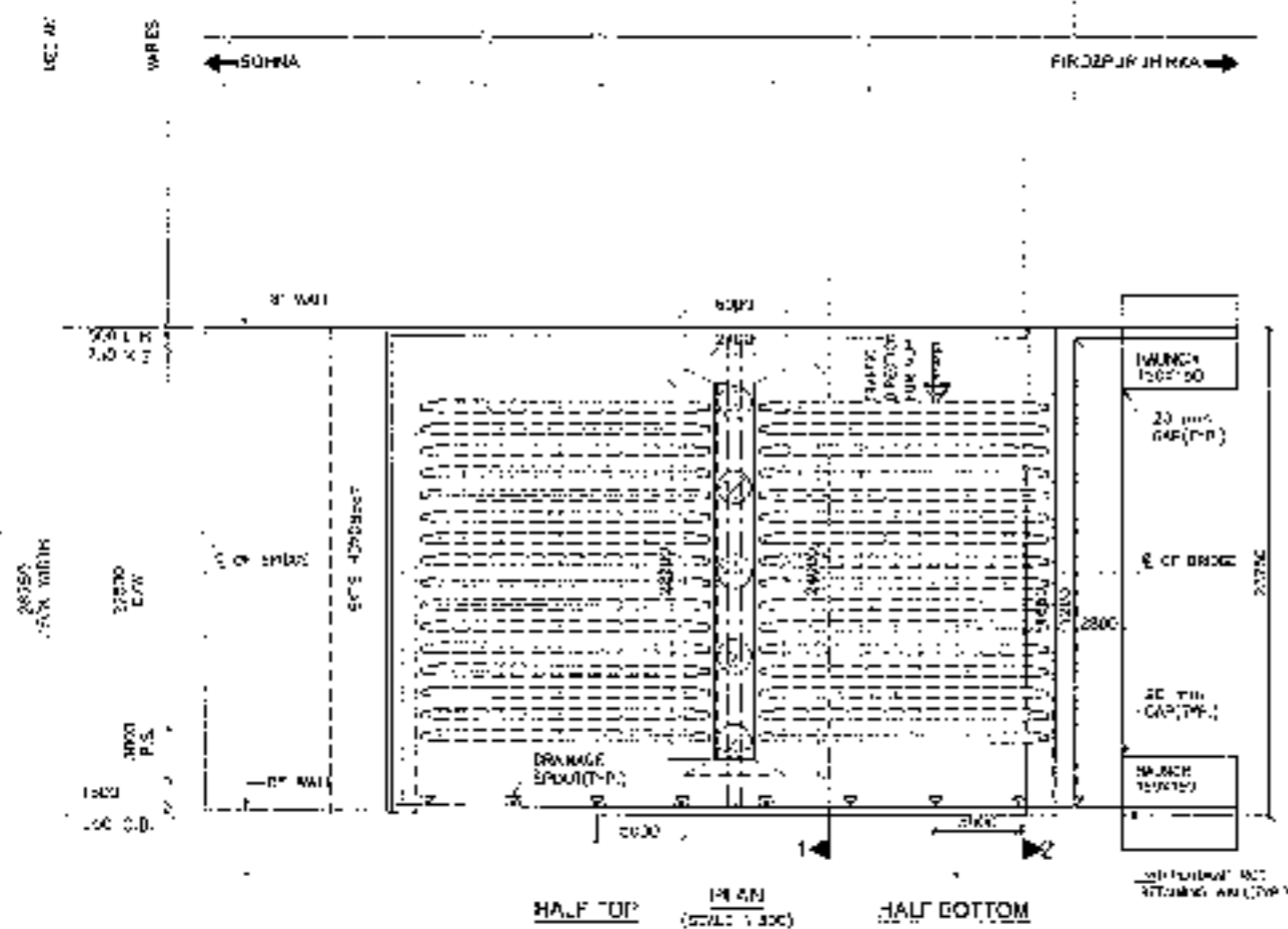
S.NO	DRAWING TITLE	DRAWING NO.
GENERAL ARRANGEMENT DRAWING FOR LVUP&VUP		
1	GENERAL ARRANGEMENT DRAWING VUP (SPAN 2 X 20.00M C/C EXP. JOINT) AT CH.-0+765	CPC/P-152/DVE/HR/PKG-1/FR/CH-0+765/S-100 SHEET 1 OF 2
2	GENERAL ARRANGEMENT DRAWING VUP (SPAN 2 X 20.00M C/C EXP. JOINT) AT CH.-0+765	CPC/P-152/DVE/HR/PKG-1/FR/CH-0+765/S-100 SHEET 2 OF 2
3	GENERAL ARRANGEMENT DRAWING VUP (SPAN 2 X 20.00M C/C EXP. JOINT) AT CH.-1+628	CPC/P-152/DVE/HR/PKG-1/FR/CH-1+628/S-100 SHEET 1 OF 2
4	GENERAL ARRANGEMENT DRAWING VUP (SPAN 2 X 20.00M C/C EXP. JOINT) AT CH.-1+628	CPC/P-152/DVE/HR/PKG-1/FR/CH-1+628/S-100 SHEET 2 OF 2
5	GENERAL ARRANGEMENT DRAWING VUP (SPAN 2 X 40.00M C/C EXP. JOINT) AT CH.-2+700	CPC/P-152/DVE/HR/PKG-1/FR/CH-2+700/S-100 SHEET 1 OF 3
6	GENERAL ARRANGEMENT DRAWING VUP (SPAN 2 X 40.00M C/C EXP. JOINT) AT CH.-2+700	CPC/P-152/DVE/HR/PKG-1/FR/CH-2+700/S-100 SHEET 2 OF 3
7	GENERAL ARRANGEMENT DRAWING VUP (SPAN 2 X 40.00M C/C EXP. JOINT) AT CH.-2+700	CPC/P-152/DVE/HR/PKG-1/FR/CH-2+700/S-100 SHEET 3 OF 3
8	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 16.00M C/C EXP. JOINT) AT CH.-4+741	CPC/P-152/DVE/HR/PKG-1/FR/CH-4+741/S-100 SHEET 1 OF 2
9	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 16.00M C/C EXP. JOINT) AT CH.-4+741	CPC/P-152/DVE/HR/PKG-1/FR/CH-4+741/S-100 SHEET 2 OF 2
10	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 16.00M C/C EXP. JOINT) AT CH.-6+804	CPC/P-152/DVE/HR/PKG-1/FR/CH-6+804/S-100 SHEET 1 OF 2
11	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 16.00M C/C EXP. JOINT) AT CH.-6+804	CPC/P-152/DVE/HR/PKG-1/FR/CH-6+804/S-100 SHEET 2 OF 2
12	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 15.00 M C/C EXP. JOINT) AT CH.- 8+105	CPC/P-152/DVE/HR/PKG-1/FR/CH-8+105/S-100 SHEET 1 OF 2
13	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 15.00 M C/C EXP. JOINT) AT CH.- 8+105	CPC/P-152/DVE/HR/PKG-1/FR/CH-8+105/S-100 SHEET 2 OF 2
14	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 18.00 M C/C EXP. JOINT) AT CH.-13+803	CPC/P-152/DVE/HR/PKG-1/FR/CH-13+803/S-100 SHEET 1 OF 2
15	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 18.00 M C/C EXP. JOINT) AT CH.-13+803	CPC/P-152/DVE/HR/PKG-1/FR/CH-13+803/S-100 SHEET 2 OF 2
16	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 16.00M C/C EXP. JOINT) AT CH.-17+852	CPC/P-152/DVE/HR/PKG-1/FR/CH-17+852/S-100 SHEET 1 OF 2
17	GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 16.00M C/C EXP. JOINT) AT CH.-17+852	CPC/P-152/DVE/HR/PKG-1/FR/CH-17+852/S-100 SHEET 2 OF 2

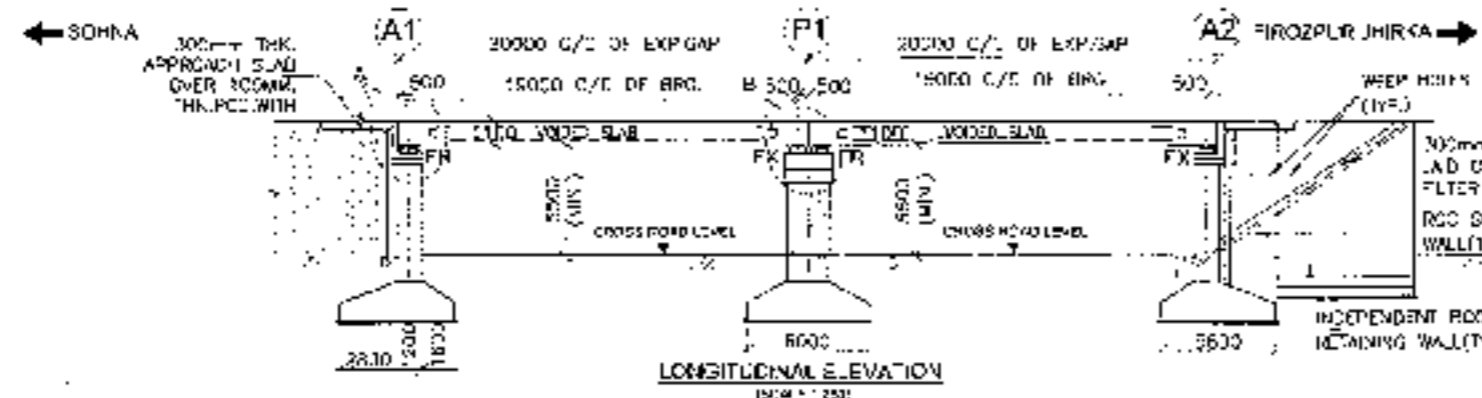


101

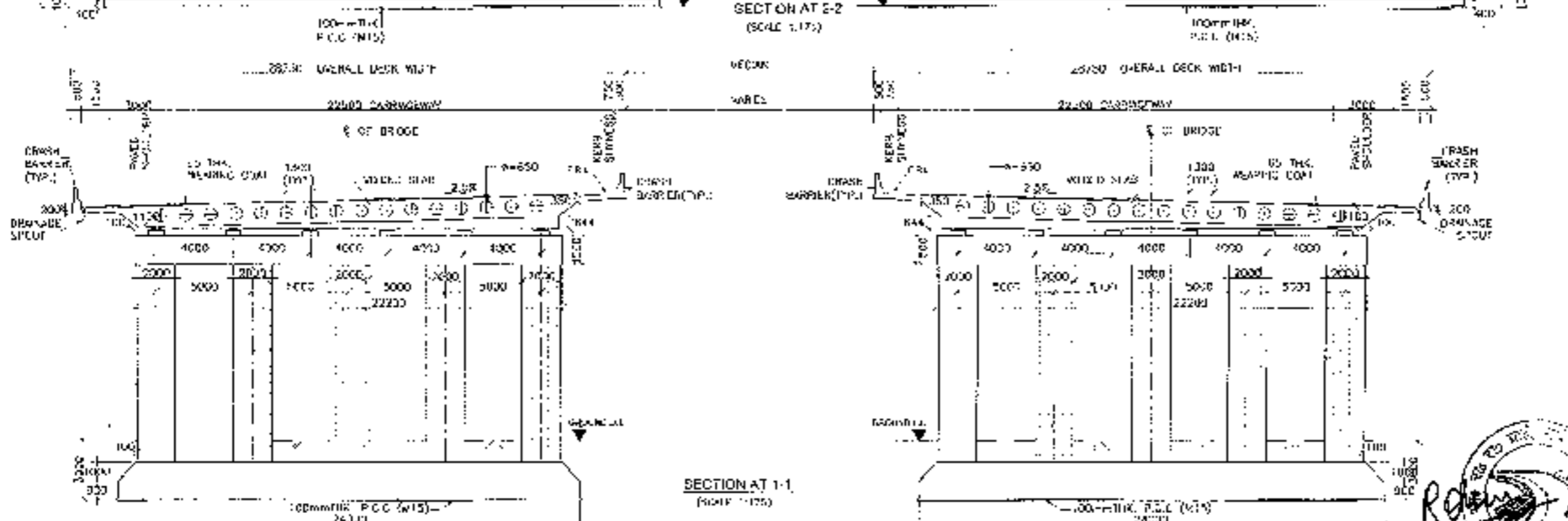
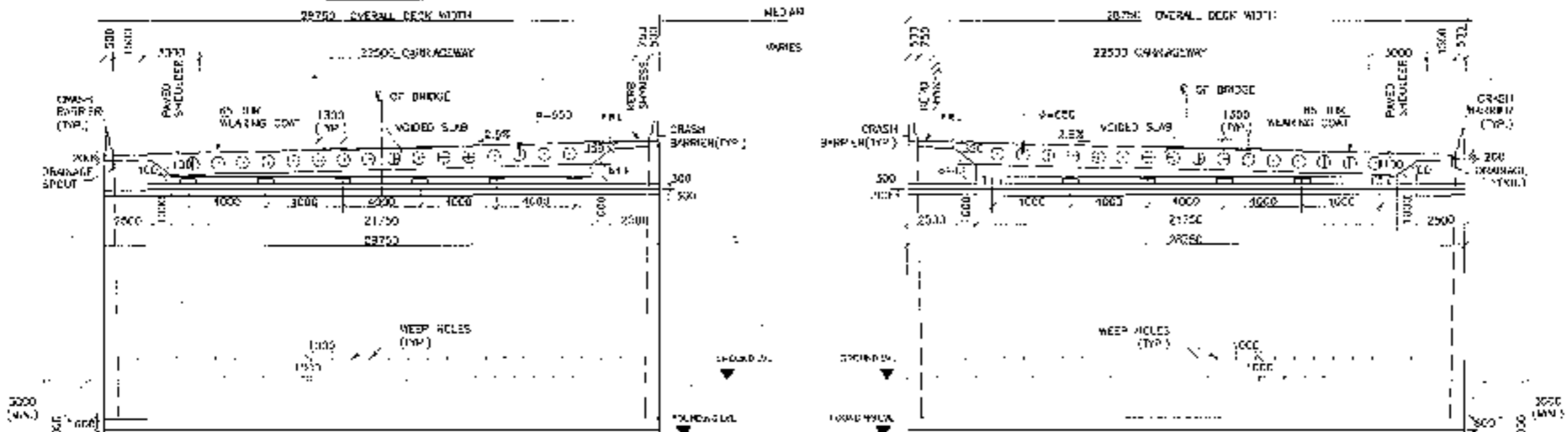




- NOTES:**
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR A LIVE LOAD AS PER IS: 8007. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF WIND AND ICE LOADS AS PER IS: 8007. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF WIND AND ICE LOADS AS PER IS: 8007.
 3. CONCRETE SHALL BE DESIGN M30 AND SHALL BE OF GRADE AS INDICATED BELOW.
 4. REINFORCEMENT SHALL BE AS PER IS: 4463.
 5. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.
 6. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.
 7. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.
 8. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.
 9. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.
 10. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.
 11. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.
 12. CONCRETE SHALL BE OF GRADE AS INDICATED BELOW.

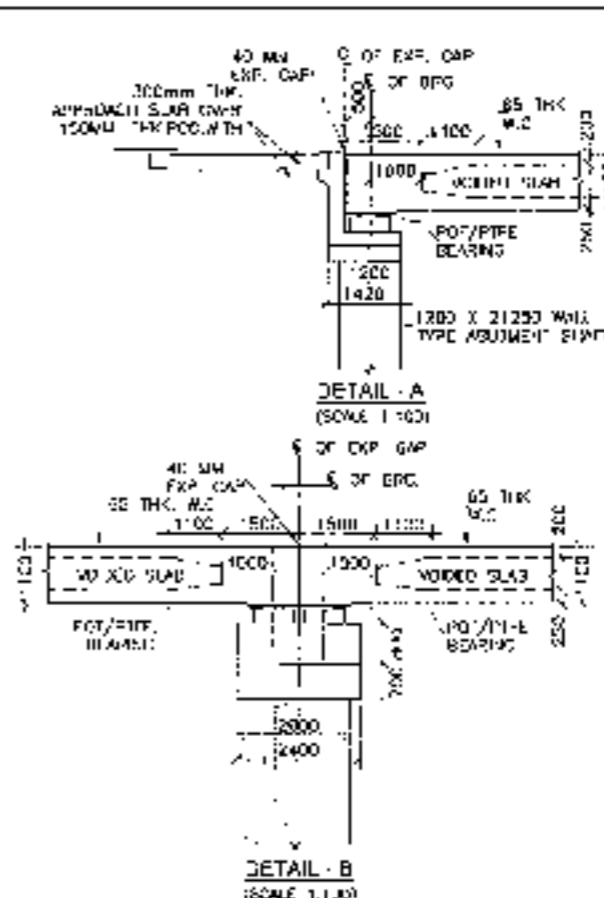
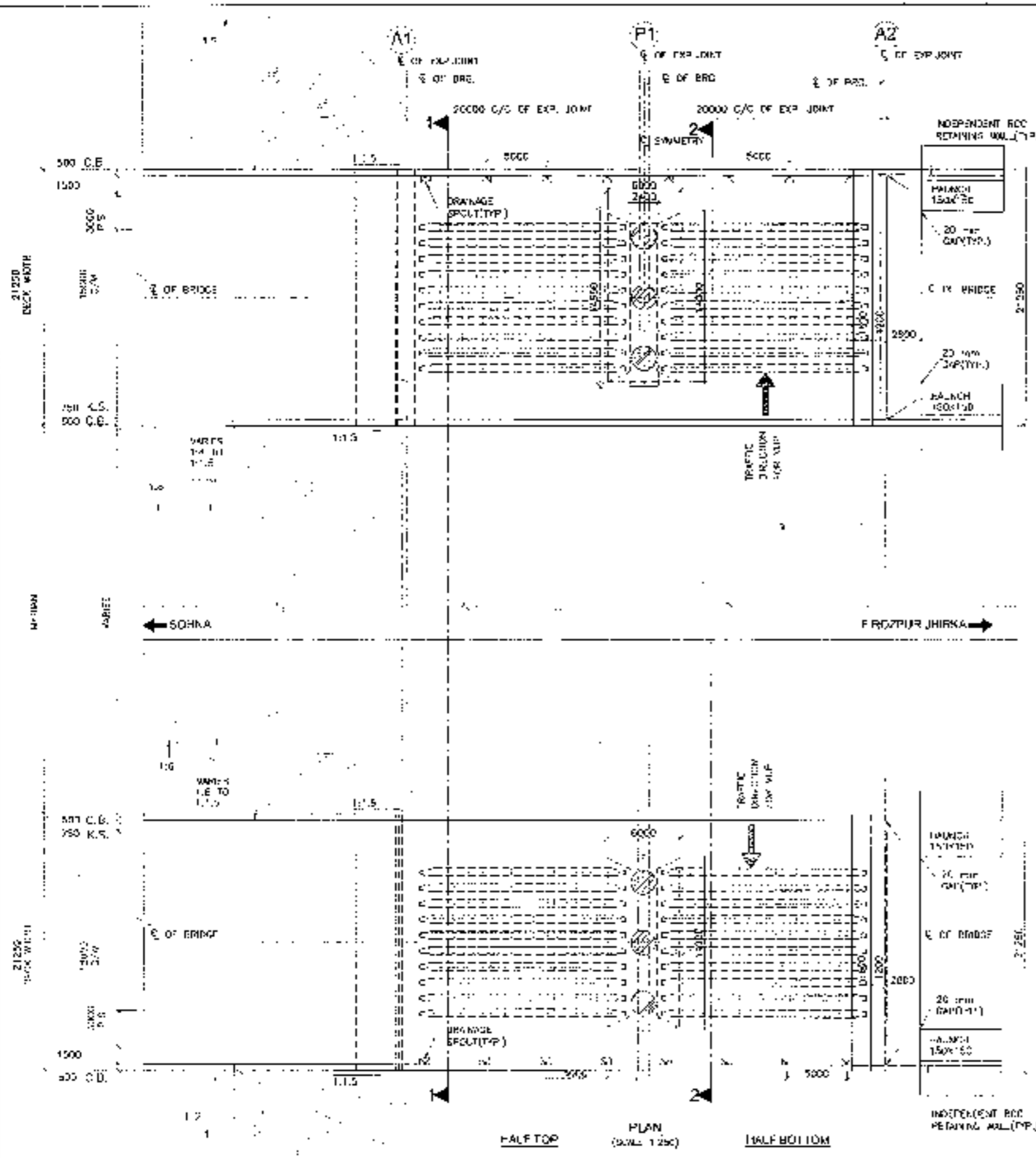




FORMATION LEVEL (m)	213.811	213.811	217.811
GROUND LEVEL (m)	210.500	210.100	210.840
CHINNAISE (m)	0+715	0+785	0+785



CLIENT:-  National Highways Authority of India <small>(Ministry of Road, Transport & Highways, Govt. of India)</small>	CONSULTANT:-  Chaityanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, R.K.TOWER PLOT NO. 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH: 0120-3223449, 4120672, FAX: 0120-4110472	PROJECT:- Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-5/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodra Expressway); (Pkg-1_Ch 0+000 to 18+611)	SCALE:- AS SHOWN	DWG TITLE:- GENERAL ARRANGEMENT DRAWINGS (SPAN 2 X 23.00 M C/C EXP. JOINT); AT CH-D+765 (SOHNA - FIROZPUR JHIRKA)	DRAWING No: - CPCIR-162/2018-46-16/2018-D/MSR-101	DATE: AUGUST 2018	Revision: R2
					PREPARED BY: P.K.S.	CHECKED BY: M.S.	APPROVED BY: A.C.

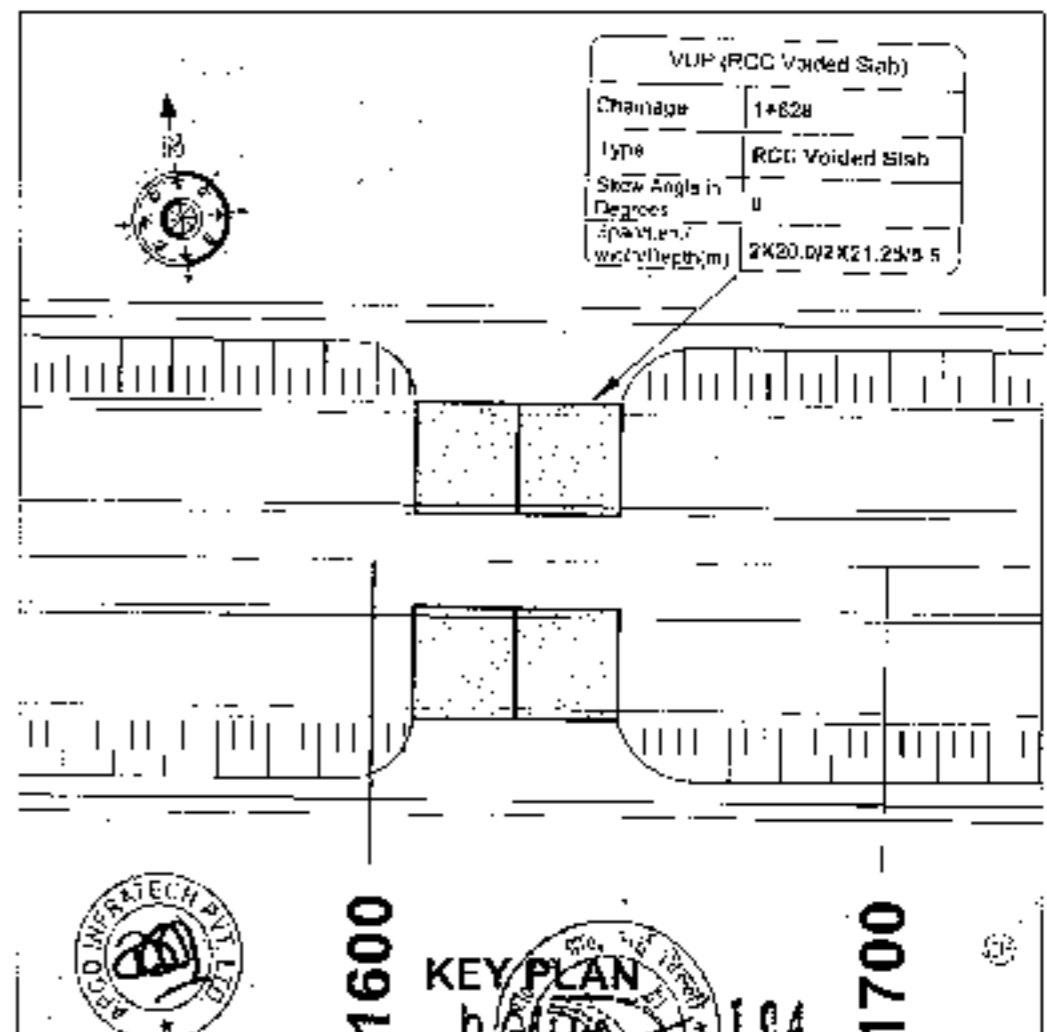


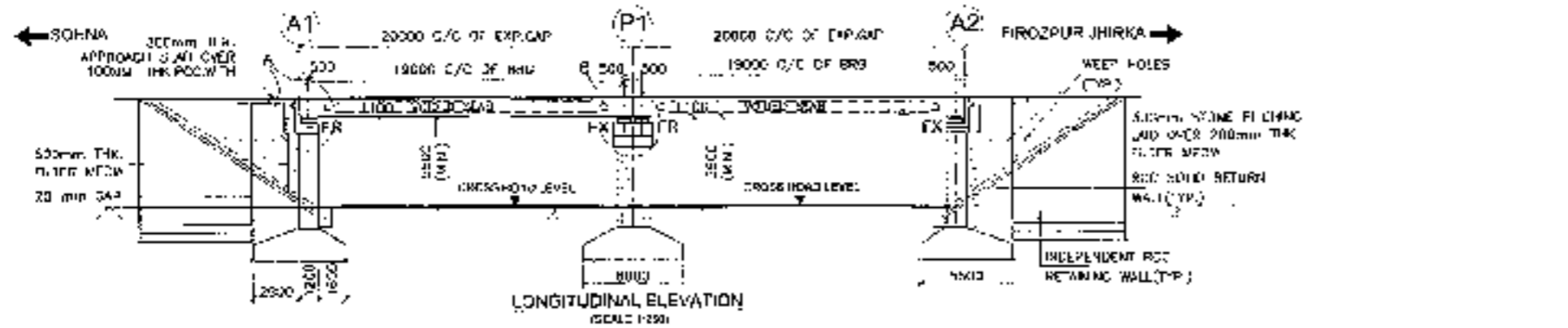
- NOTES:**
1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METER UNLESS OTHERWISE NOTICED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSION SHALL BE SOLED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR A LANE AS PER IRC 2017. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF RC 100 AND 10% CLASS A LOADING. WIND-SWIFT CURRENTS SHALL ALSO BE CONSIDERED FOR SPECIAL VEHICLES.
 3. CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS NOTICED IN DRAWING.

RCC LEVELING COURSE	M-15
RCC VOIDED SLAB	M-40
CONCRETE BARRIER	M-40
APPROACH SLAB	M-20
RETAINING WALL	M-30
 4. GRADE OF STAIR SHALL BE 1:30:300 CORRESPONDING TO IS:12005.
 5. ALL DIMENSIONS IN OTHER DIRECTIONS SHALL BE AS PROVIDED -

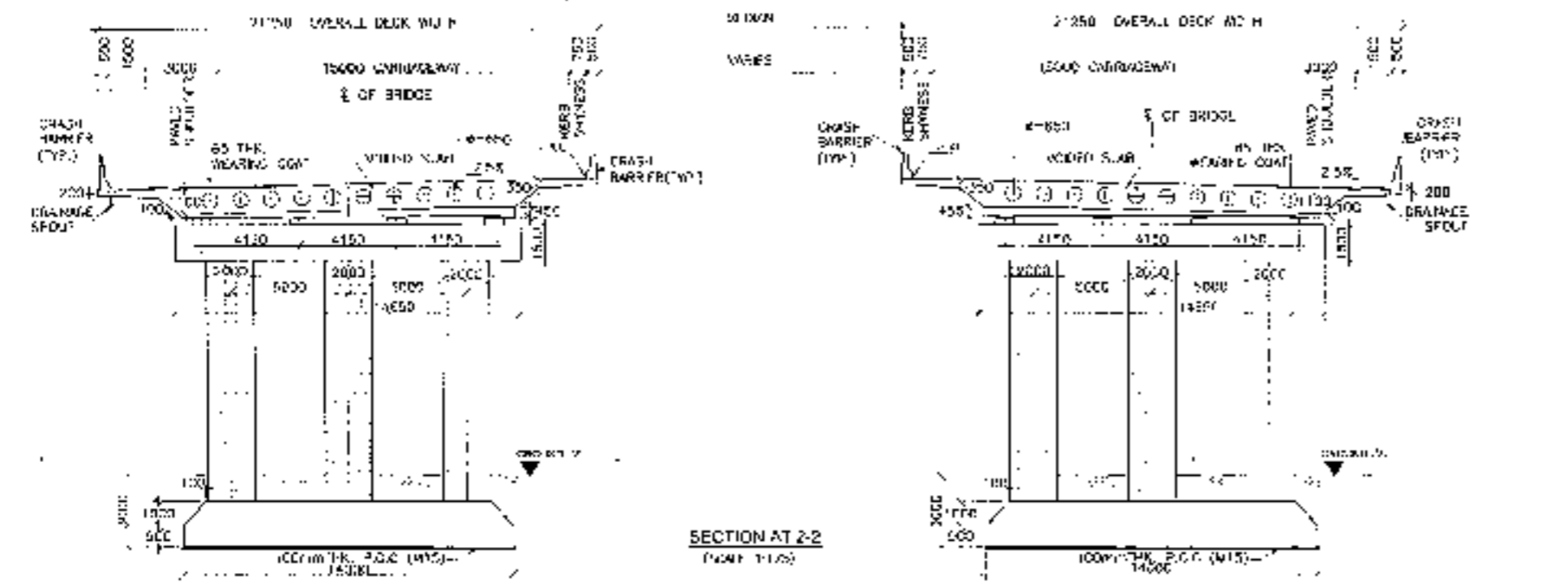
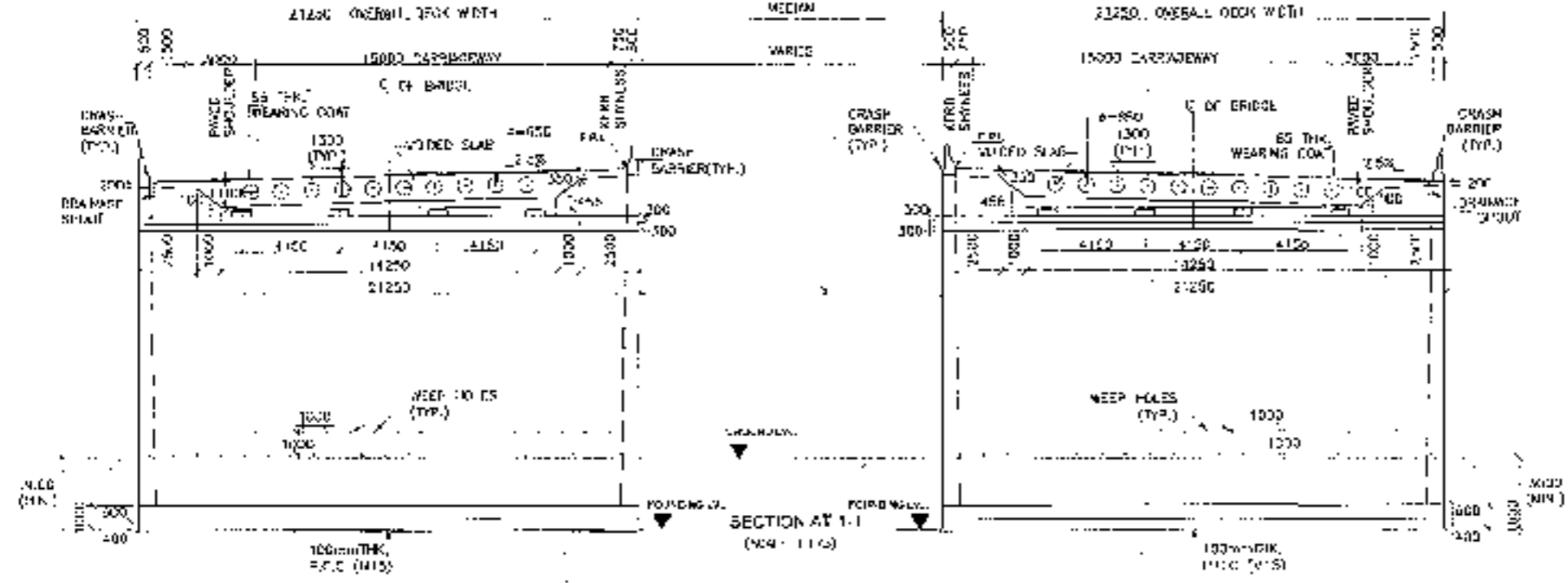
MINIMUM CLEARANCE	4000
MINIMUM CLEARANCE	2000
MINIMUM CLEARANCE	2500
 6. RAILS FENCED REINFORCING AND RETAINING WALLS SHALL CONSIST OF REINFORCING BARS CONFORMING TO APPENDIX B OF IS:10263-2000 UNLESS SPECIFIED OTHERWISE.

RAILS	20 mm
REINFORCING BARS	12 mm
 7. EXACT DIMENSIONS AND LEVELS OF APPROACH, SKINNY ABUTMENT AND RETAINING WALLS, GRADES AND PROFILES SHALL BE PROVIDED IN APPENDIX B OF IS:10263-2000.
 8. ALL REINFORCING BARS SHALL BE PROVIDED IN A STANDARD MANNER IN APPROACHES AND RETAINING WALLS. 100 mm ABOVE GRADE SHALL BE MAINTAINED.
 9. CONCRETE PAVING SHALL CONSIST OF LAYERS OF BASED ASPHALT CONCRETE BY 2000 mm OVER SHALL BE MAINTAINED. COURSE THICKNESS AND LEVEL SHALL BE ADVISED WITH THE HELPING MAP & PROFILES DRAWINGS AND SECTION (S AND) SHALL BE REFERRED TO DRAWINGS FOR DIMENSIONS.
 10. THIS STRUCTURE LIES IN DESIGN ZONE V.
 11. ALL DIMENSIONS ARE SUBJECTIVE AND TO BE CHANGED AFTER DETAIL DESIGN. VERIFICATION OF DIMENSIONS TO BE CONFIRMED.



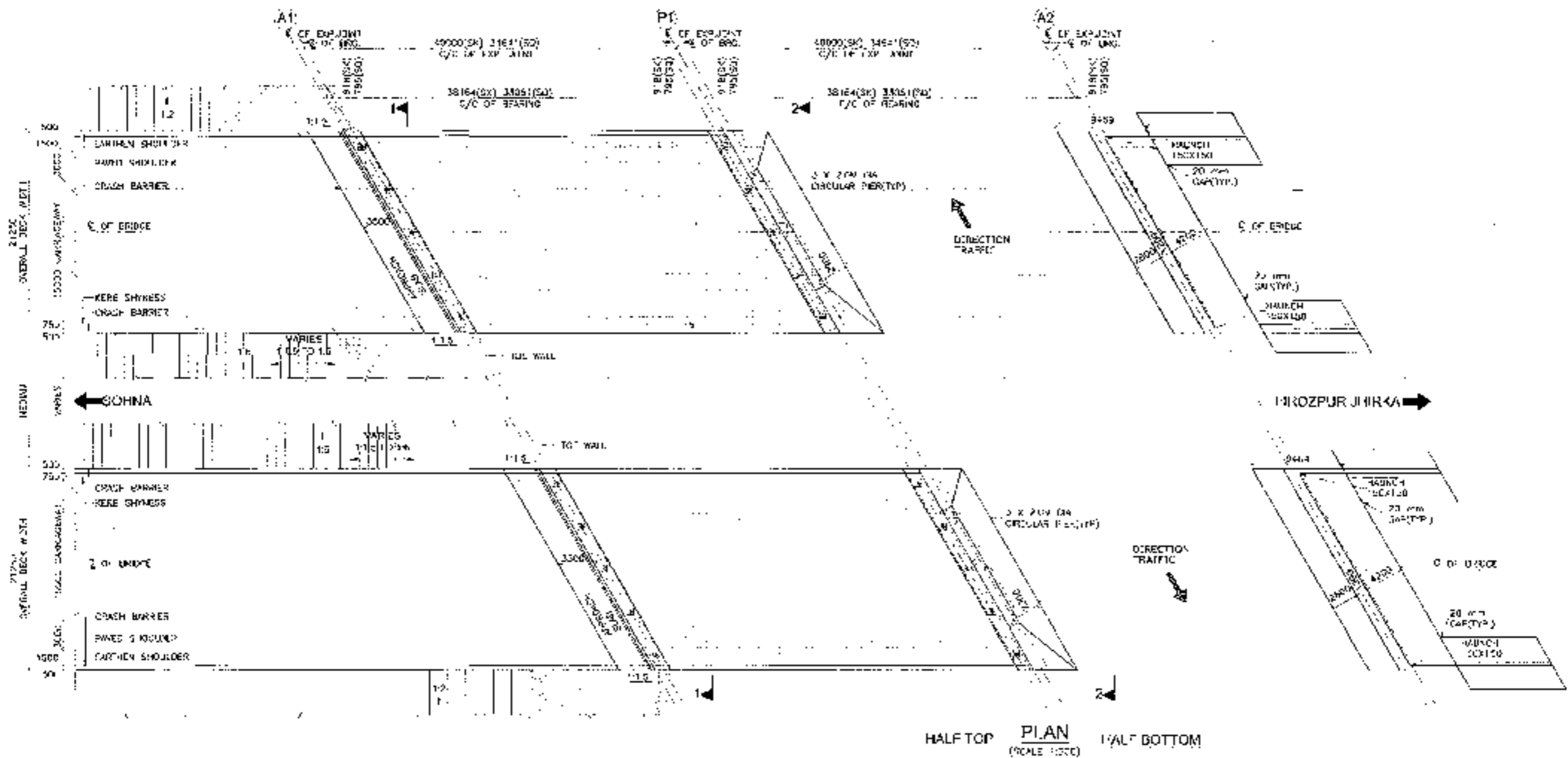


FORMATION LEVEL (m)	217.288	217.288	217.295
GROUND LEVEL (m)	208.704	204.710	200.790
CHANGAGE (m)	+808	+628	+546



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<p>National Highways Authority of India</p>	<p>Chaitanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, R.K. TOWER PLDT NO.-21-22, SECTION-4, VAISHALI, GHAZIABAD P.H. 0120-3223419, 4120472. FAX: 0120-4110472</p>	<p>PROJECT: Consultancy Services for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Long Package-4) (Sohna - Ferozpur Jhirka section of Delhi-Vadodra Expressway) (Pkg-1 Ch. 0+000 to 18+401)</p>	<p>SCALE - AS SHOWN</p>	<p>DWG TITLE: GENERAL ARRANGEMENT DRAWING (SPAN 2 X 21.00 M C/C EXP JOINT) AT CH. 1+628 SOHNA - FIROZPUR JHIRKA</p>	<p>DRAWING No. - (SHEET 2 OF 2) CPDR-1520V07010PKR-III-IND-1-1020-107</p>	<p>DATE - AUGUST 2013</p>	<p>Revision No</p>
					<p>PREPARED BY - P.S.A.</p>	<p>CHECKED BY - V.A.</p>	<p>APPROVED BY - G.G.</p>

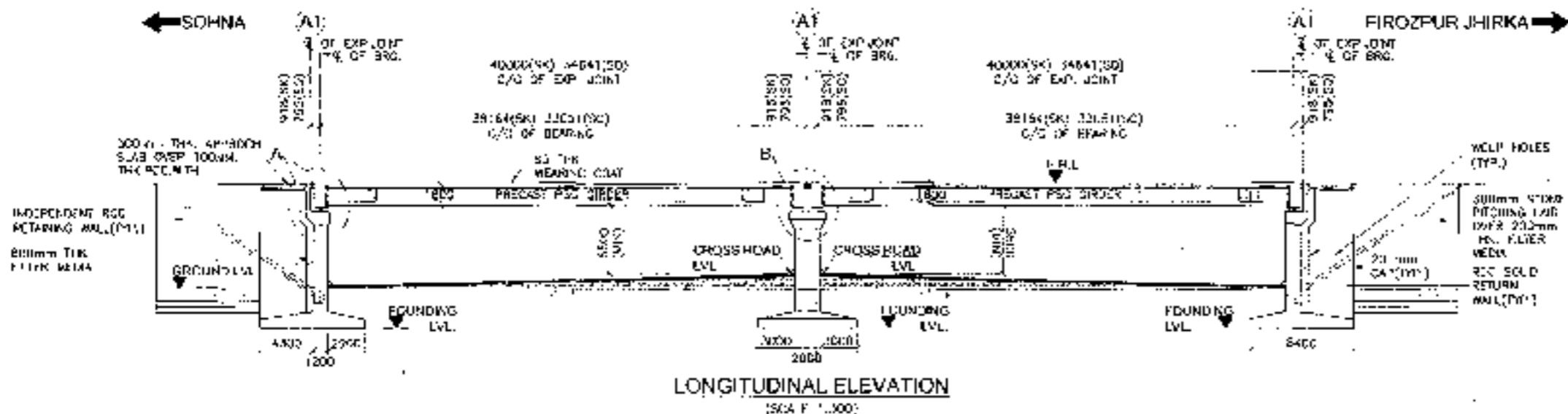


HALF TOP PLAN (SCALE: 1:500) HALF BOTTOM



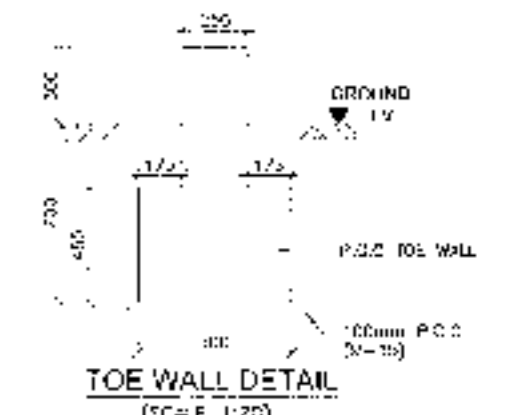
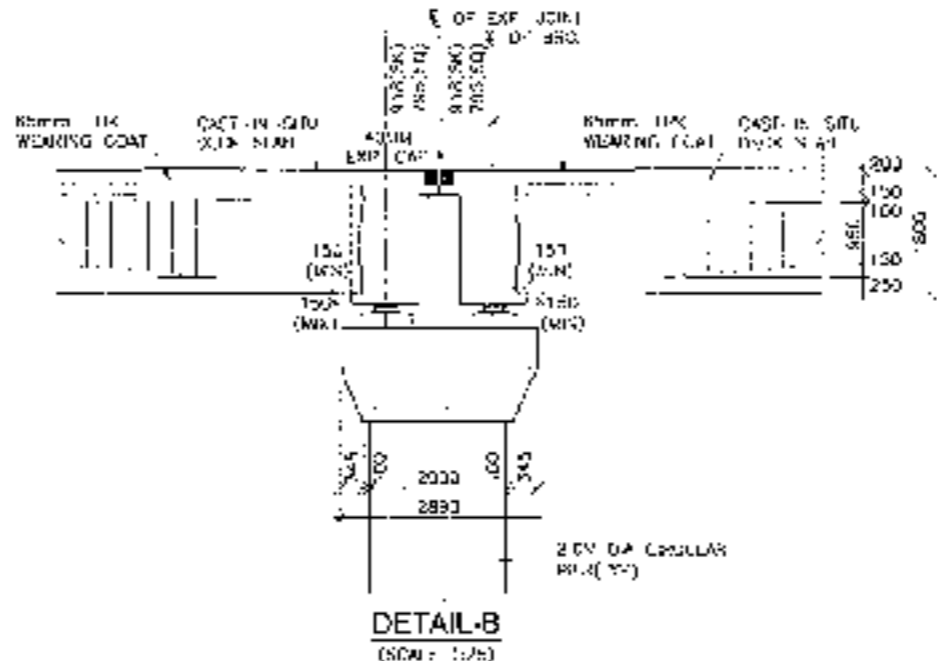
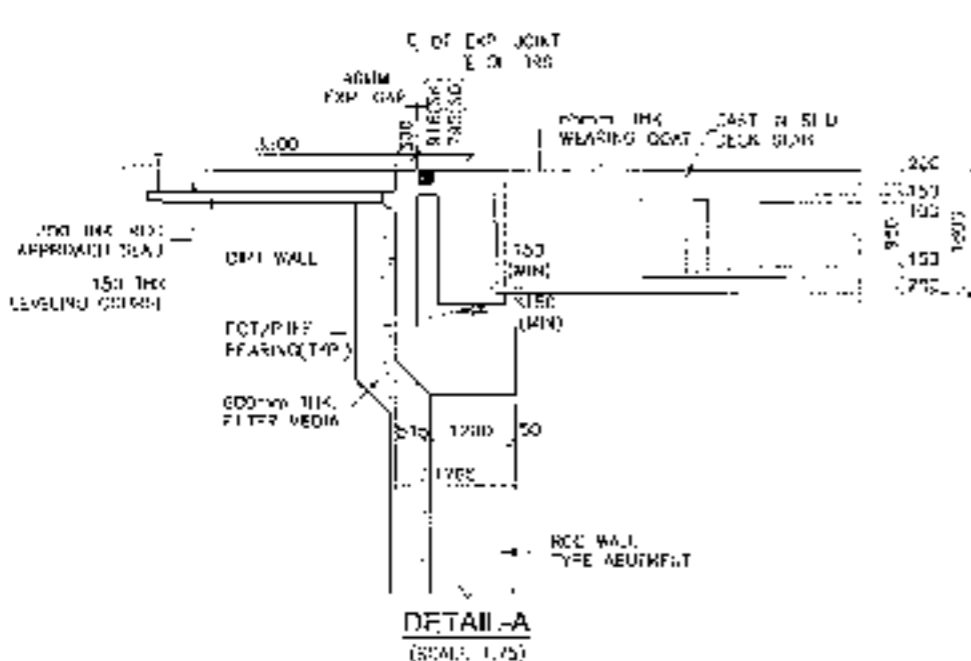
106

<p>CLIENT -</p>  <p>National Highways Authority of India</p>	<p>CONSULTANT -</p>  <p>Chaitanya Projects Consultancy Pvt. Ltd. D-5, 2ND FLOOR, R.K. TOWER PLOT NO. 21-22, SEC 10R-4, VAISHALI, GHAZIABAD PH: 0120-9223418, 4120472, FAX: 0120-4110472</p>	<p>PROJECT -</p> <p>Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Ferozpur Jhirka section of Delhi-Vadodara Expressway) (PK-1_Ch 0+000 to 18+461)</p>	<p>SCALE :</p> <p>AS SHOWN</p>	<p>DWG TITLE -</p> <p>GENERAL ARRANGEMENT DRAWING (SHANU 2 X 40.00 M G.C EXP. JOINT) AT C.M. 24/00 (S.D. 174 - HIROZPUR JIHRKA)</p> <p>DRAWING No -</p> <p>9-667 1 OF 3</p> <p>DATE: AUGUST 2022</p> <p>PREPARED BY: MS</p> <p>CHECKED BY: MS</p> <p>APPROVED BY: AC</p>
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FORMATION LEVEL (m)	210.538	210.235	210.236
GROUND LEVEL (m)	208.891	211.700	209.046
CHANNEL (m)	216.50	211.700	211.740

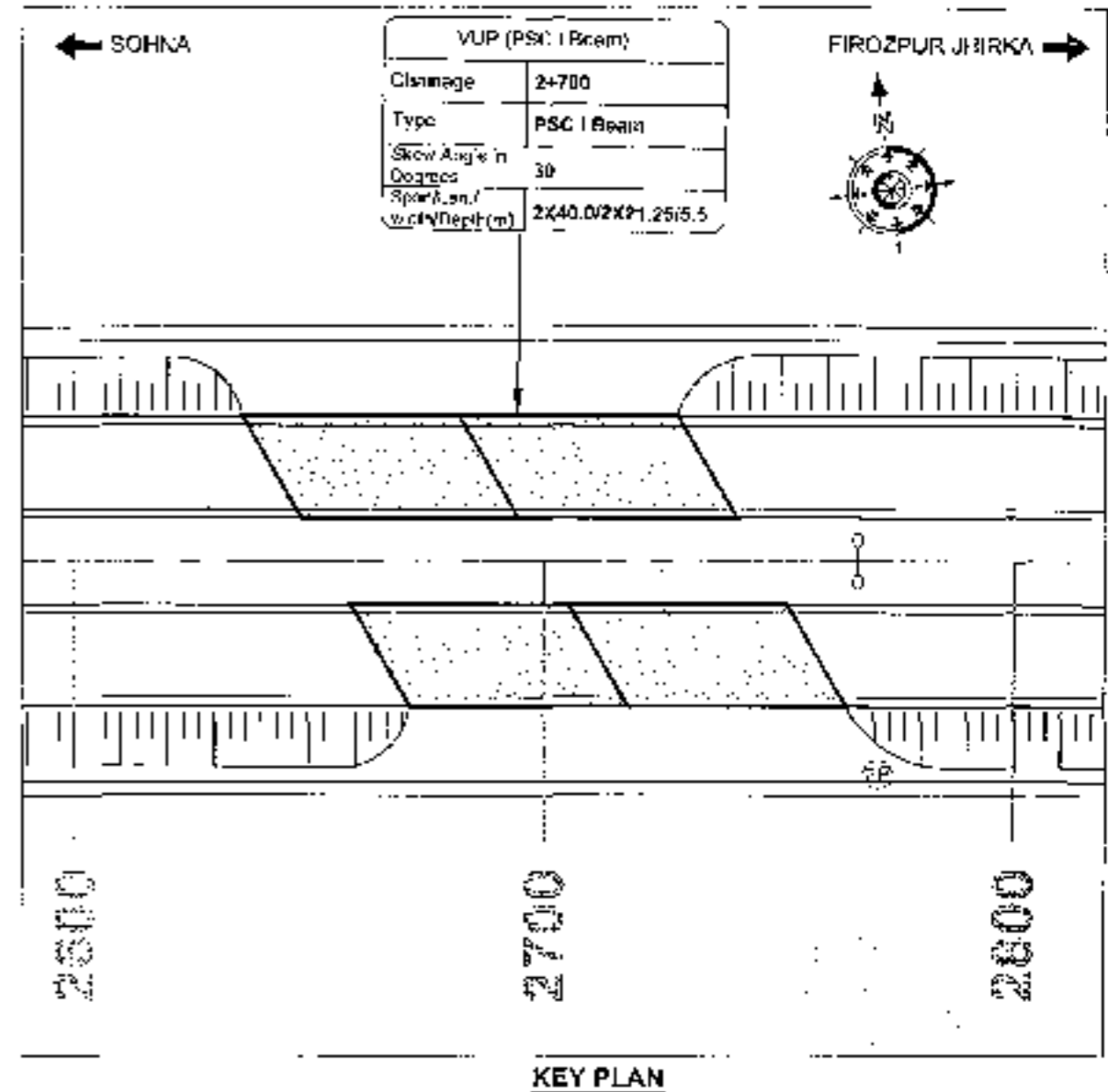
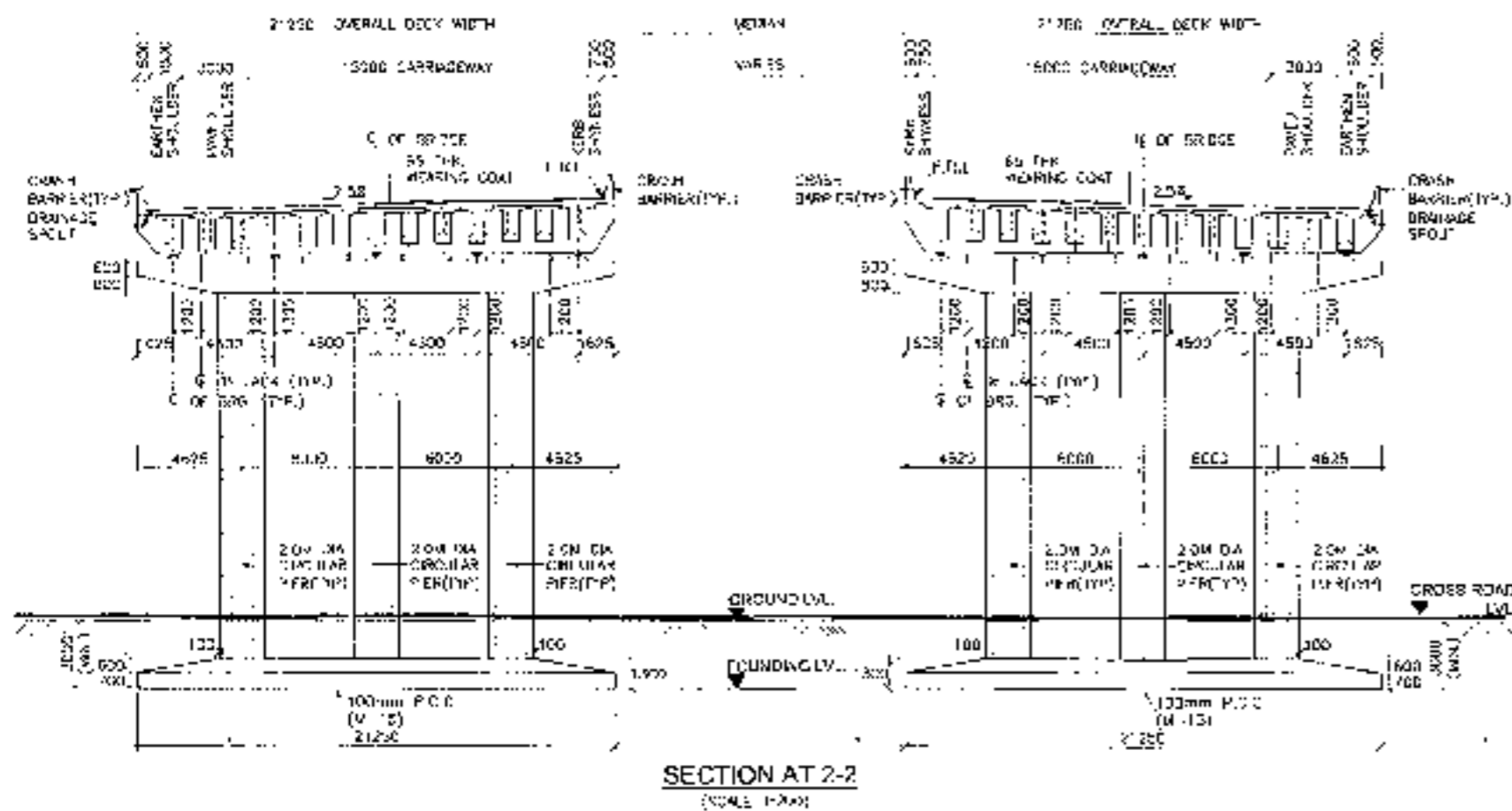
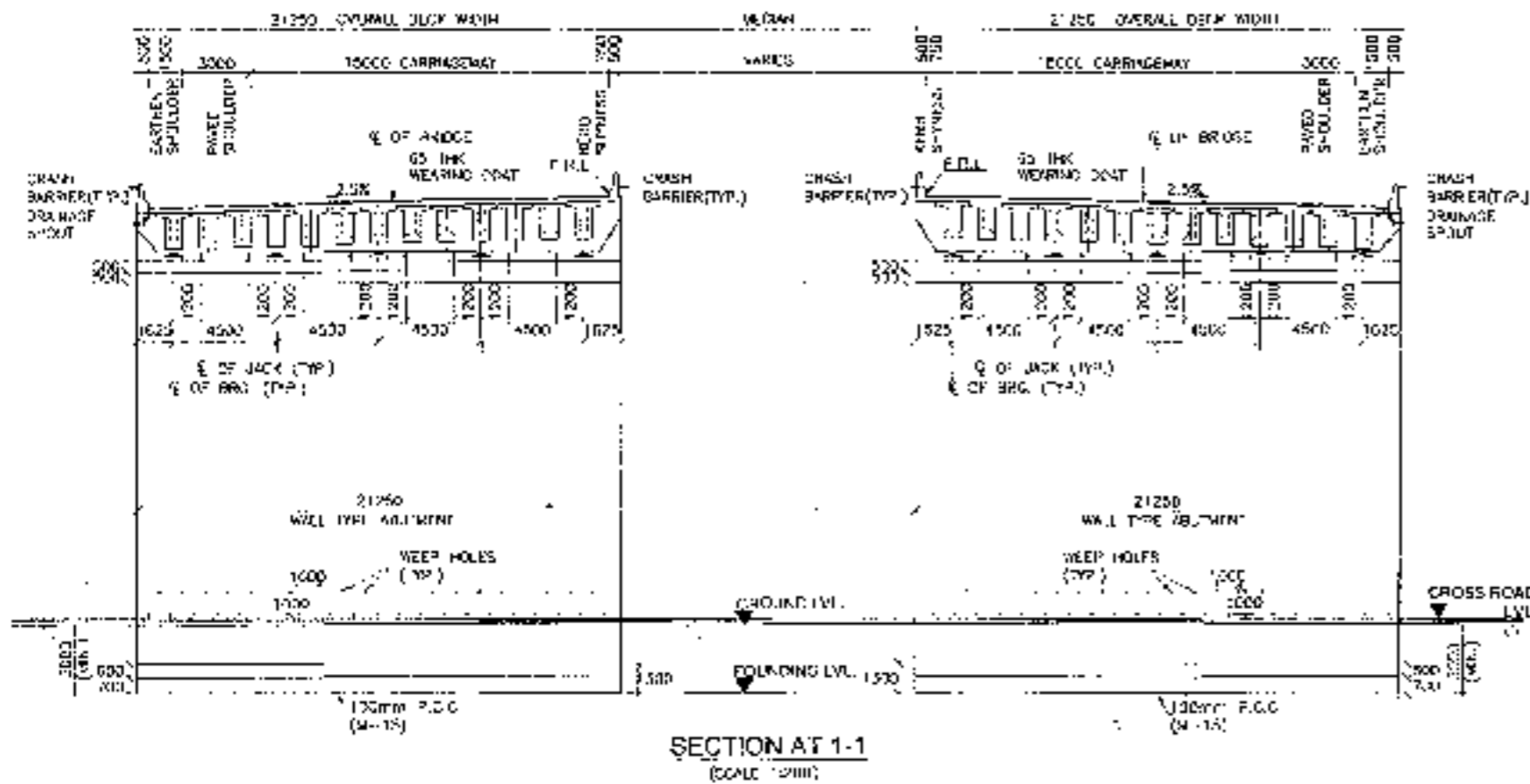
- NOTES:**
- ALL DIMENSIONS ARE IN METRE AND JERKS ARE IN METRES UNLESS OTHERWISE MENTIONED. ONLY APPROXIMATE DIMENSIONS TO BE FOLLOWED NO DIMENSION SHALL BE STATED.
 - APPROVED STRUCTURE SHALL BE INSTALLED FOR 5 LANE 40 TON TRUCKS. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF IRC AND RC CLASS A LOADING, WHICHEVER GOVERN. IT SHALL ALSO BE CHECKED FOR SPECIAL VEHICLE.
 - CONCRETE SHALL BE READY MIX WITH SHALL BE OF GRADE AS MENTIONED BELOW:
 FOR 1ST LANE BRIDGE : M-40
 FOR OTHER BRIDGE : M-45
 FOR BRIDGE : M-40
 FOR BRIDGE : M-40
 FOR BRIDGE : M-40
 FOR BRIDGE : M-40
 - GRADE OF STIFF SHALL BE TO BE CONFORMING TO IS 1726.
 - CLEAR COVER TO OUTER CIRC. SHALL BE AS FOLLOWS:-
 TO SUPERSTRUCTURE : 40MM
 TO REINFORCEMENT : 25MM
 TO CONCRETE : 25MM
 - BACK FILLING WITHIN APPROXIMATE WITHIN WALLS SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPROXIMATE 10% OF IS 2720 HAVING PROPORTION (1:1.5:2) (1:2:1) & (1:1.5:1).
 - LONGITUDINAL AND TRANSVERSE REINFORCEMENT AND WITHIN WALL SHALL CONFORM TO SPECIFICATION IN APPENDIX 5 OF IRC-18:2014
 - WEAP HOLE, SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A CONNECTED MANNER IN JUNCTIONS AND AT 1000 MM FROM ABOVE GROUND LEVEL.
 - FROM THEE ABOVE EARTH SHALL CONSIST OF LAYER OF 150MM THICK CONCRETE OF GRADE M-40 OVER WITHIN APPROXIMATE TO CHANNEL AND LEVEL SHALL BE TO BE WITH THE RELEVANT ROAD PROFILE DRAWING AND VARIATION OF APP. SHALL BE REFERRED TO ENGINEER - IN CHARGE.
 - IF ANY CHANGE IN DESIGN ZONE OR LOCAL DIMENSIONS ARE REQUIRED MAY BE CHANGED AFTER DETAILED ESTIMATION OF PROPOSED STRUCTURE.



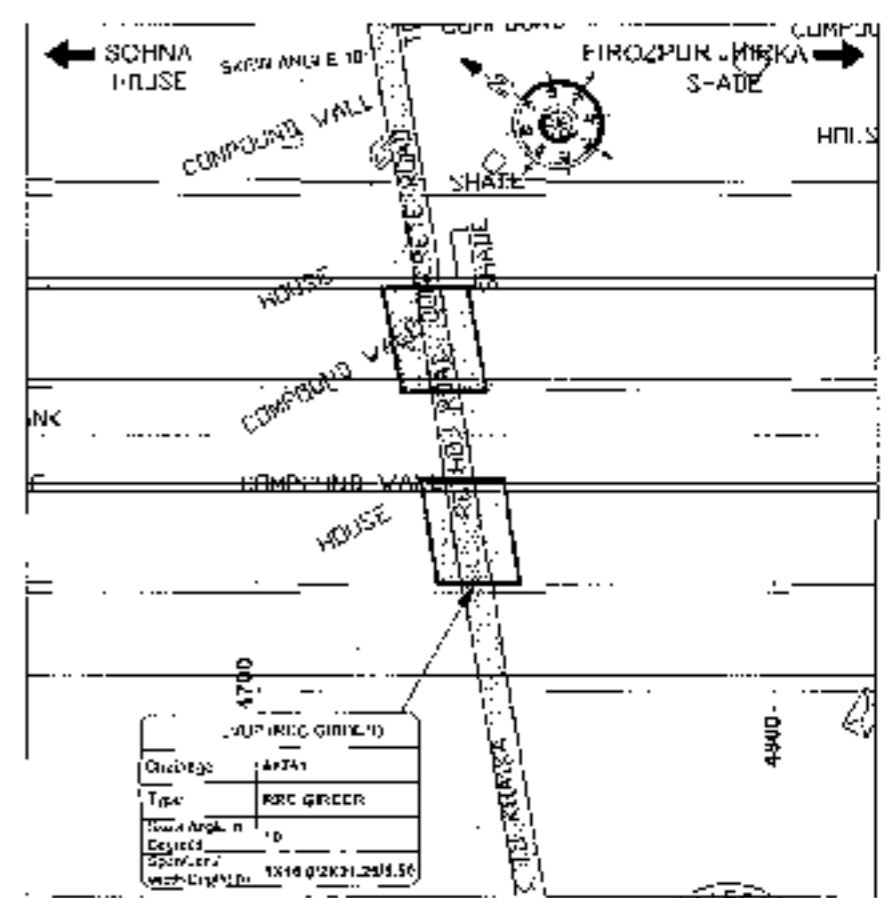
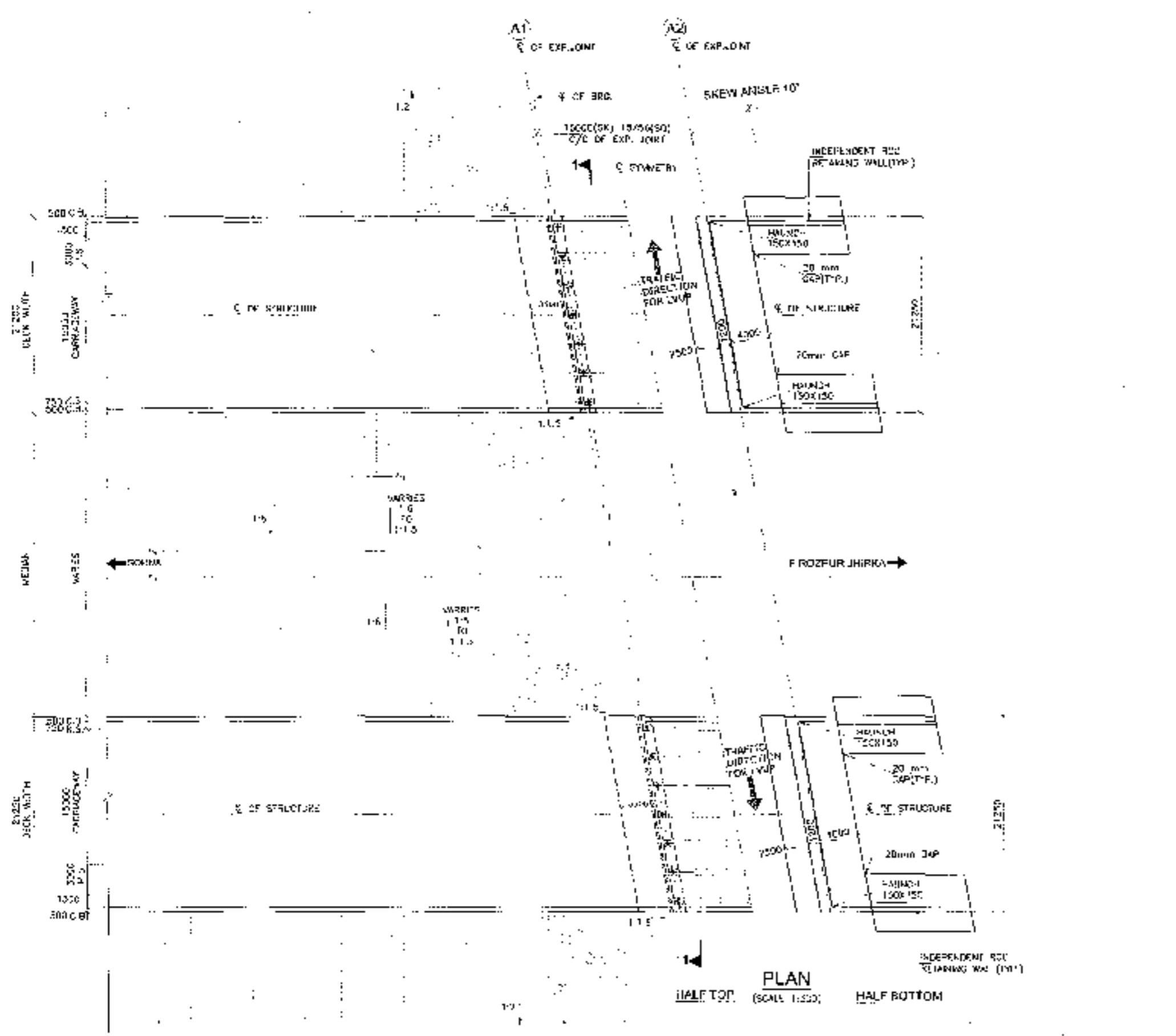
107

ROHINI

INFRA TECH PVT. LTD.



CLIENT: National Highways Authority of India <small>(Ministry of Road Transport & Highways, Govt. of India)</small>	CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. D-5, 2ND FLOOR, R.K. TOWER PLOT NO. 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH. 0126-3273419, 4120472, FAX. 0126-4110472	PROJECT: Consultancy Services for the Preparation for Feasibility Report (PR) for development of Economic Corridors, Intra Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1_Ch. 0+000 to 18+461)	SCALE: AS SHOWN	DWG TITLE: GENERAL ARRANGEMENT DRAWING (SPAN 2 X 40.00 M (C.C. EXP. JOINT)) AT CIL-2+700 (SOHNA - FIROZPUR JHIRKA)	Drawing No. : CILW-1/2018/HR/PR-10/LOT-6/PKG-4/2700S-120
					DATE : AUGUST 2018 PREPARED BY : R.S.

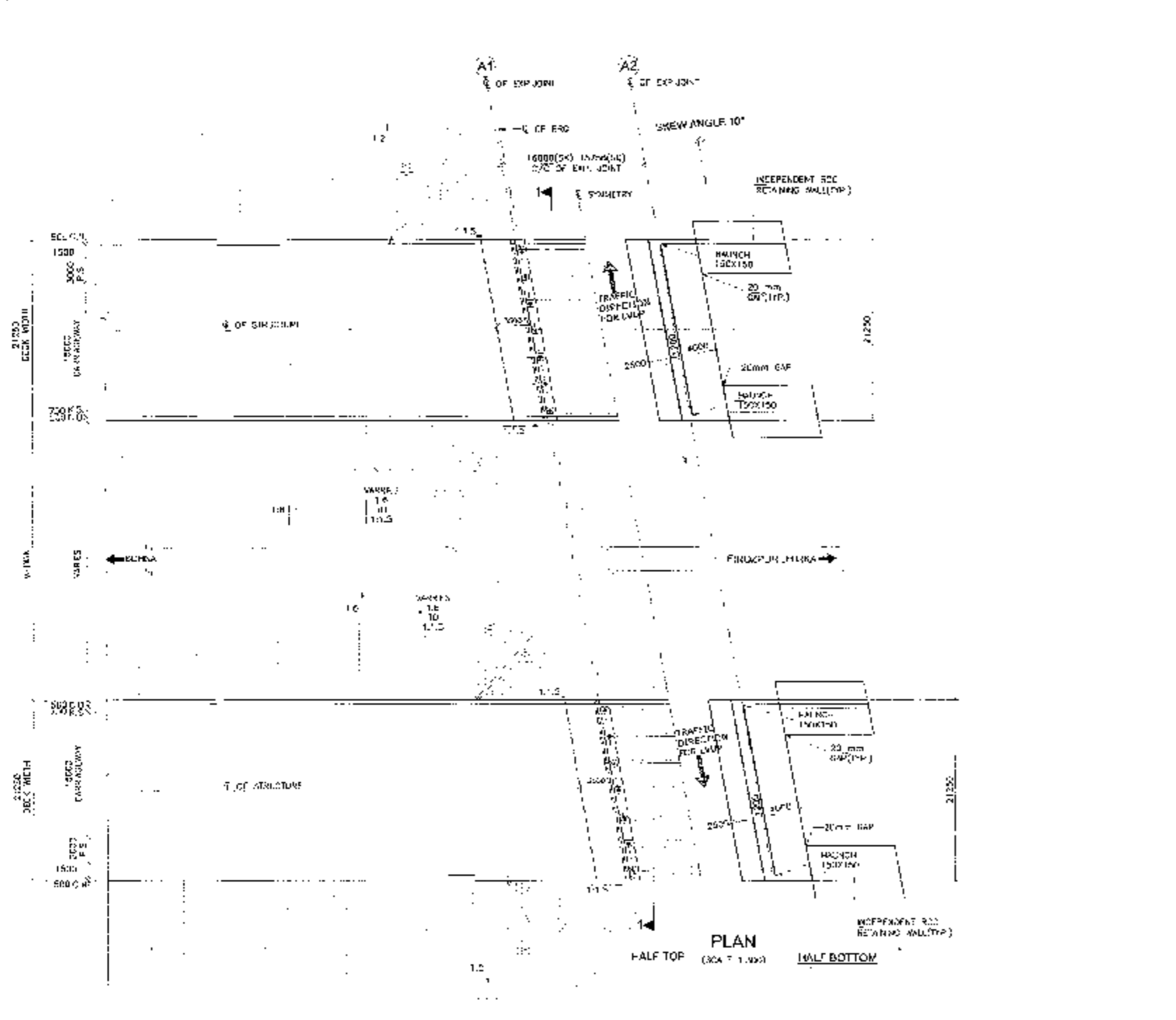


- NOTES:-**
1. ALL DIMENSIONS ARE IN METRE AND LEVELS ARE IN METRE UNLESS OTHERWISE MENTIONED. ANY MENTION OF METRE TO BE FOLLOWED. NO DIMENSION SHALL BE GIVEN IN FEET UNLESS OTHERWISE MENTIONED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR A UNIT AS PER IRC-80/2017 STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF DEAD AND LIVE LOADS & WINDING. WIND SPEED CONSIDERED TO BE 30 M/S. ALSO TO CONSIDER FOR SPECIAL VEHICLE.
 3. TORQUE IS TO BE DESIGN AND SHALL BE OF GRADE AS INDICATED BELOW.
 RCC LEVELING: GRADE : M-15
 RCC 1 BEAM SLAB & DECK SLAB : M-20
 CONCRETE: GRADE : M-20
 APPROACH SLAB : M-20
 PAVEMENT : M-20
 RETAINING WALL : M-20
 4. GRADE OF STEEL SHALL BE TO 5000 (COMPLYING TO IS 1786).
 5. CLEAN WATER TO ENTER SHALL BE AS FOLLOWS:-
 a. SURFACE DRAIN : 50mm
 b. SUBSTRATE DRAIN : 100mm
 c. FLOOR DRAIN : 150mm
 6. SHALL BEING DONE AT THE END OF THE ROAD. SHALL BE CONSIDERED AS PER IS 1786-2006 (MAY BE MODIFIED AS PER IS 1786-2006). SHALL BE CONSIDERED AS PER IS 1786-2006 (MAY BE MODIFIED AS PER IS 1786-2006).
 7. LIVING ORIENTATION AND EXTENT OF BACKFILL TO BE INDICATED AND RETURN WALL SHALL CONSIDERED IN VERTICALLY AS PER IS 1786-2006.
 8. ALL HIGH STRENGTH AT THE END OF THE ROAD SHALL BE VERTICALLY SHALL BE CONSIDERED IN A HORIZONTAL PLANE IN APPROXIMATELY 1:100 TO 1:150 FROM GROUND LEVEL.
 9. SHALL BE CONSIDERED AS PER IS 1786-2006 (MAY BE MODIFIED AS PER IS 1786-2006). SHALL BE CONSIDERED AS PER IS 1786-2006 (MAY BE MODIFIED AS PER IS 1786-2006).

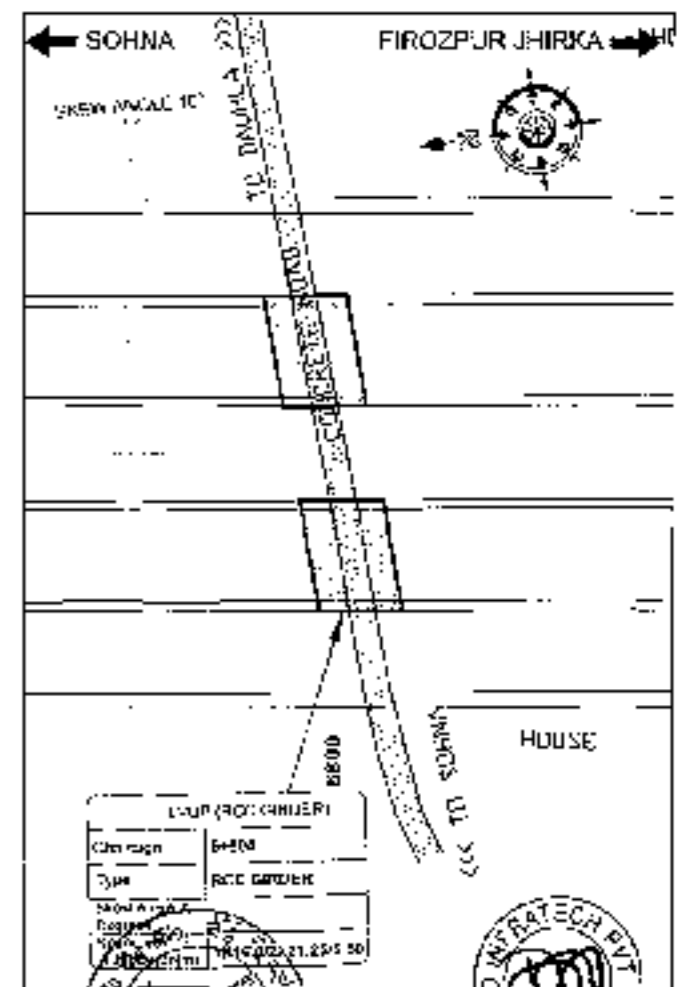
PLAN
 (SCALE: 1:500)
 HALF TOP HALF BOTTOM



CLIENT - National Highways Authority of India Ministry of Road, Transport and Highways, Government of India	CONSULTANT - Chaitanya Projects Consultancy Pvt. Ltd. C-3, 2ND FLOOR, R.K. TOWER PLOT NO - 21-42, SECTOR-4, VAISHALI, OKAZIABAD PH: 0120-3223419, 4120472, FAX: 0120-4110472	PROJECT - Consultancy Service for the Preparation for Feasibility Report (RFR) for Development of Economic Corridors, Inter Corridors and Feeder Routes to Improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-0/Package-04) (Sohna - Firozpur Jhirka section of Delhi-Vadodra Expressway) (Pkg-1_Ch. 0+000 to 15+451)	SCALE - AS SHOWN	DWG TITLE GENERAL ARRANGEMENT OF BRIDGE AT CH. 4+741 (SOHNA - FIROZPUR JHIRKA)		DRAWING No. : FRACH-1741S-ICC	SHEET 10/11
				DATE: AUGUST 2018	Revision: 50	PREPARED BY:	CHECKED BY:

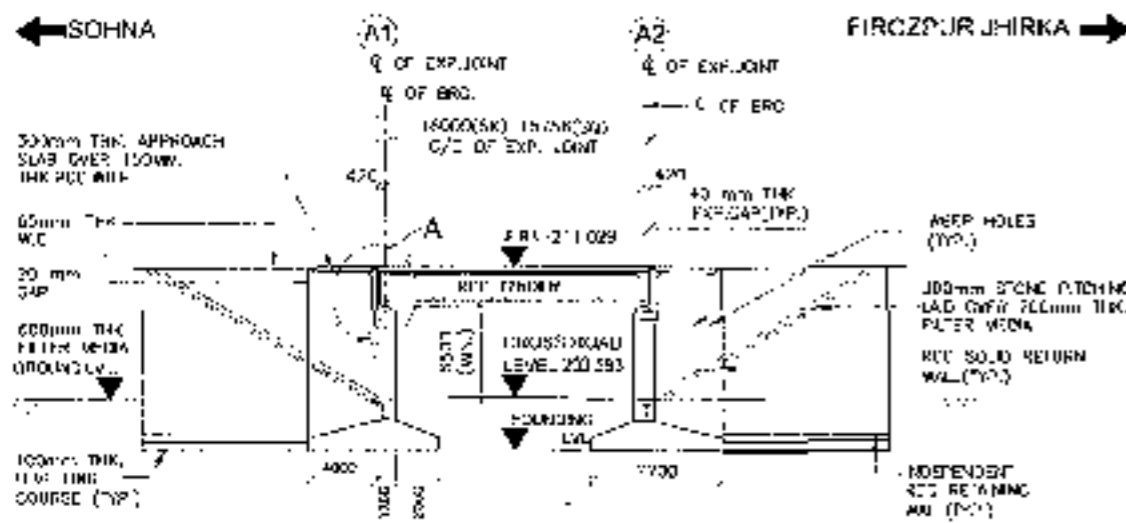


- NOTES:-**
1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE SPECIFIED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR 5 LANE AS PER IRC-81(2). STRUCTURE SHALL BE DESIGNED FOR CEDEMENT OF 20 CM AND 100 CLASS A LOADING WITH OVER COEFFICIENT. THE BRIDGE SHALL BE DESIGNED FOR SPECIAL VEHICLE.
 3. CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS SPECIFIED BELOW -
 RCC STRUCTURE COURSE : M-30
 RCC T BEAM SLAB & DECK SLAB : M-30
 CRACK BARRELS : M-40
 APPROACH SLAB : M-30
 RETAINING WALL : M-40
 INDEPENDENT WALL : M-30
 4. GRADE OF STEEL SHALL BE IS-2002 CONFORMING TO IS 1785.
 5. CLEAR COVER OF REINFORCING STEEL SHALL BE AS FOLLOWS -
 a. SUPERSTRACTION : 25MM
 b. SUBSTRUCTURE : 50MM
 c. RETAINING WALL : 50MM
 6. BACK FILLING SHALL BE TAKEN AS PER REQUIREMENT. BACK FILLING SHALL CONSIST OF SELECTED LUMPY MATERIALS TO ATTAIN A ϕ OF 10-15-20MM MAXIMUM. PROPORTION SHALL BE 30% C & 70% SAND.
 7. LUMPY MATERIALS AND FILLING OF APPROX. 15-20MM APPROXIMATE AND RETURN WALL SHALL BE TAKEN AS SPECIFIED IN APPROACH & 2% OF 20-30-40MM.
 8. AT THE JOINTS, SHALL BE TAKEN AS PER REQUIREMENT AND VERTICALLY SHALL BE PROVIDED IN A PROPER MANNER IN APPROACHES AND RETURN WALLS TO 50 CM ABOVE GRADE LEVEL.
 9. 60MM THICK ASPHALT COAT SHALL CONSIST OF LAYERS OF MASTIC ASPHALT CONCRETE OF 25MM THICK OVER ACUM WITH WORKING DEPTH. TO CHANGE AND LAYER SHALL BE VERTICAL WITH THE RELEVANT PLAN & PROFILE DRAWING AND DIMENSION (IF ANY) SHALL BE REFERRED TO ENGINEER FOR MODIFICATION.
 10. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION.
 11. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 12. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 13. DIMENSION OF APPROACH IS AS SHOWN.



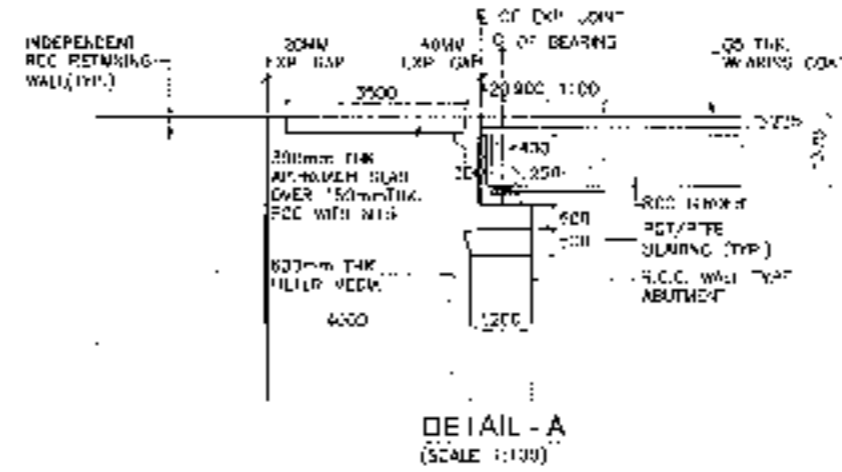
PLAN 111

CLIENT: National Highways Authority of India 	CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. C-5, 9th FLOOR, R K TOWER PLOT NO - 21-22, SECTOR-4, VAISHALI, GHAZIABAD PH: 0120-3223412, 4126472. FAX: 0120-4110472	PROJECT: Consultancy Service for the Preparation for Feasibility Report (DPR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vardolada Expressway) (Pkg-1, CH-0408 to 18+461)	SCALE: AS SHOWN	DWG TITLE: SOHNA - FIROZPUR JHIRKA LVJP (SPAN 1 X 16.00M OVER EXP. JOINT) AT CH-6+004	DRAWING No.: CH/JP-18/2018/LVJP/10-16.00M-01-S-SC05-1111	SHEET No.: 111
					DATE: AUGUST 2018	REVISION: R11
PREPARED BY: N.S.		CHECKED BY: N.S.		APPROVED BY: A.G.		

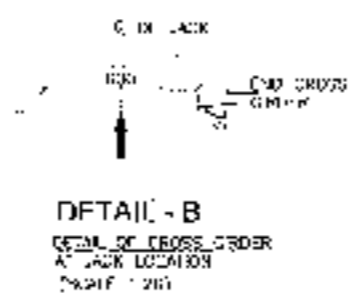


LONGITUDINAL ELEVATION
(SCALE 1:30)

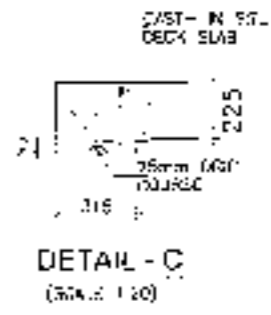
ELEVATION LEVEL (m)	211.029	211.029	
CORONA LEVEL (m)	232.009	232.545	
FINISH LEVEL (m)	61.706	91.334	818.2



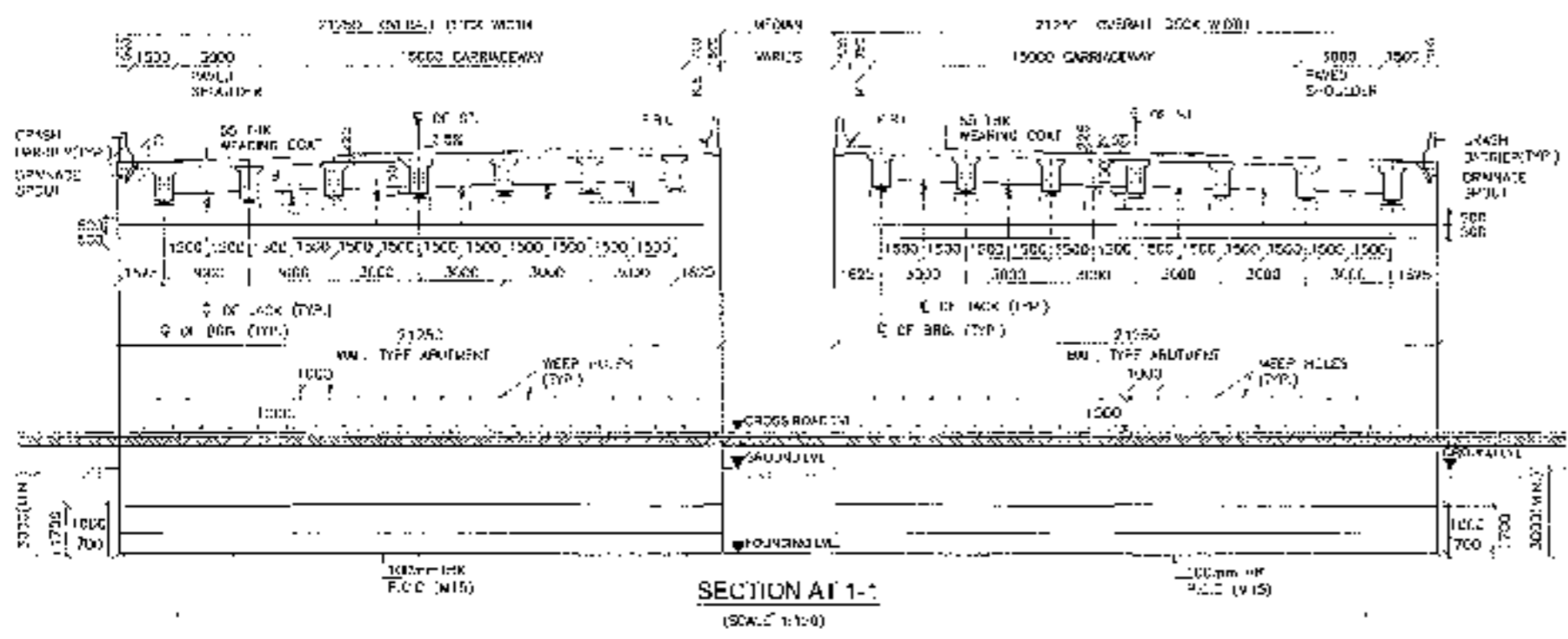
DETAIL - A
(SCALE 1:100)



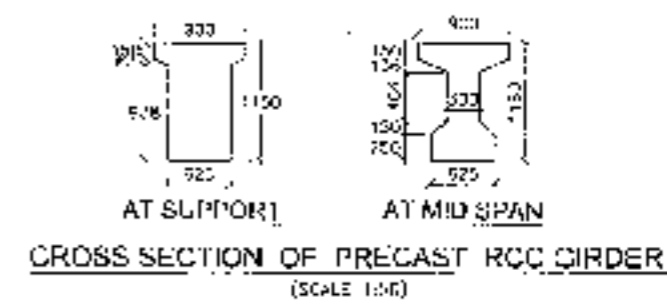
DETAIL - B
DETAIL OF CROSS SECTION
AT JACK LOCATION
(SCALE 1:20)



DETAIL - C
(SCALE 1:20)



SECTION AT 1-1
(SCALE 1:10)



CROSS SECTION OF PRECAST RCC GIRDER
(SCALE 1:30)



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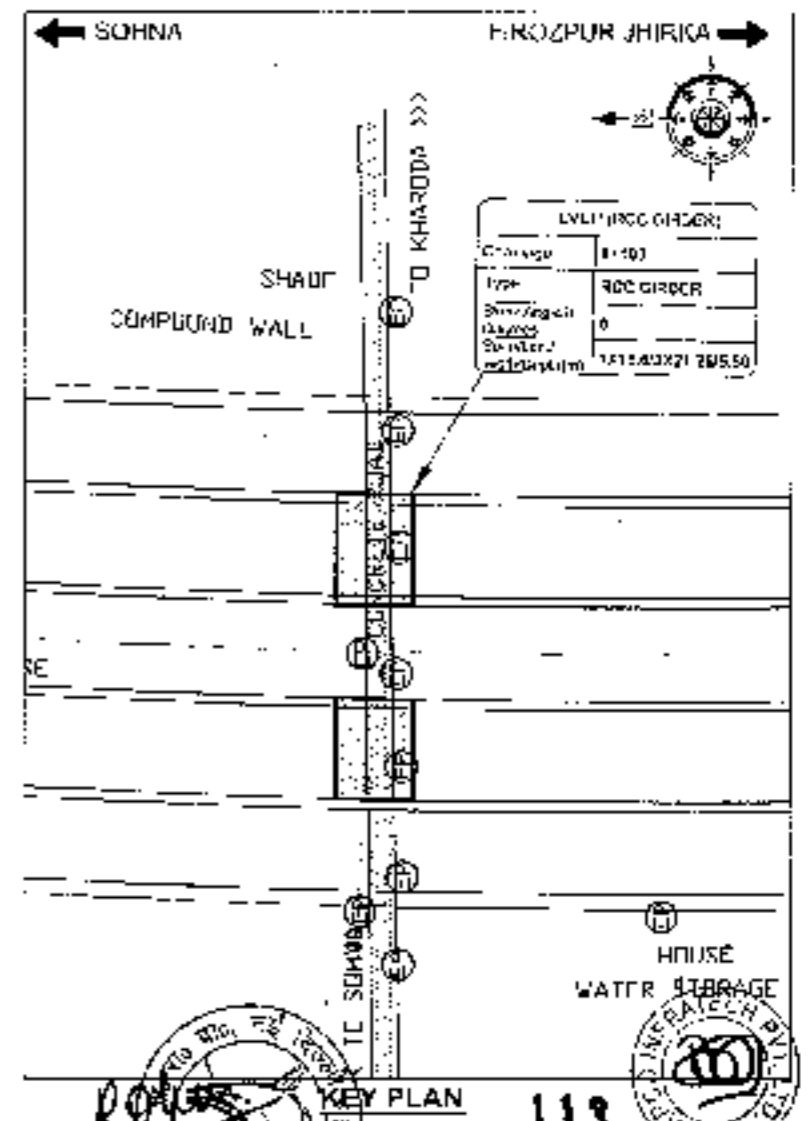
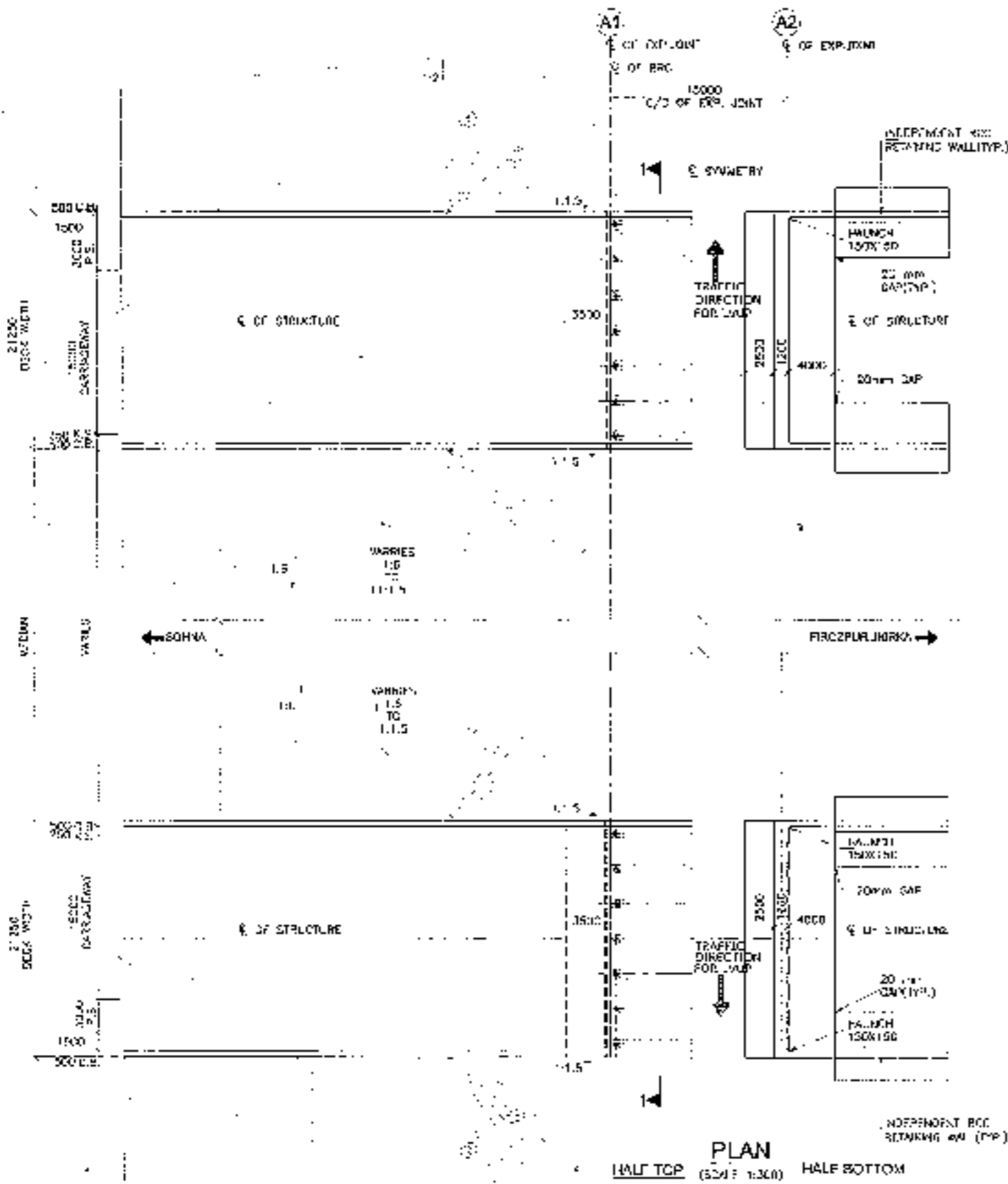
CLIENT National Highways Authority of India 	CONSULTANT Chaitanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, B.L. TOWER PLOT NO.-21-22, SECTOR-4, VASHTALI, CHAZIABAD PH.: 0120-3223419, 4120472, FAX: 0120-4110472	PROJECT Consultancy Services for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to Improve the Efficiency of Freight Movement in India under Bharatmala Parityojana (Lot-8/Package-4) (Sohna - Firazpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1_Ch. 0+000 to 13+481)	SCALE AS SHOWN	DWG TITLE GENERAL ARRANGEMENT DRAWING LVUP (SPAN 'X' 6.00M C/C EXP. JOINT) AT CH 6+804 (SOHNA - FIRAZPUR JHIRKA)	DRAWING No. CHCP-5200V-HIWPKG-117-MCH-E+804S-101	DATE AUGUST 20-8	Rev/On R0
					PREPARED BY H.S.	CHECKED BY M.R.	APPROVED BY A.L.

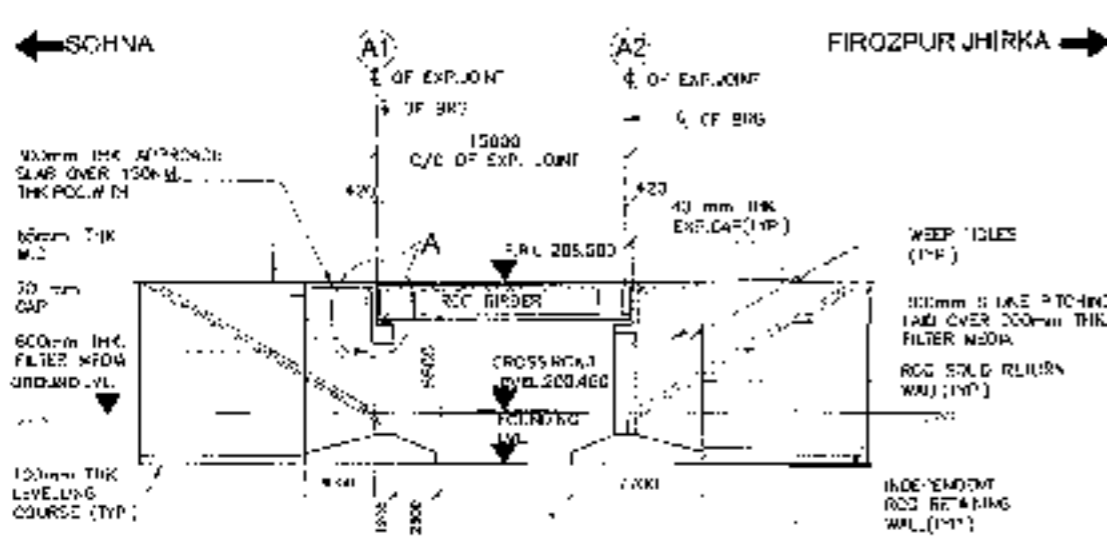
- NOTES-**
1. ALL DIMENSIONS ARE IN METRE UNLESS OTHERWISE SPECIFIED. DIMENSIONS SHOWN IN METRES UNLESS OTHERWISE SPECIFIED. DIMENSIONS TO BE FOLLOWED TO DIMENSION SHALL BE GOVERNED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR B LANE AS PER IRC-804. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF IRC 100 AND IRC CLASS A TRUCK. VIBRATION CRITERIA IS TO BE AS PER IRC CHECKED FOR SPECIAL CASES.
 3. CONCRETE SHALL BE IN ACCORDANCE WITH IS 456 AND SHALL BE OF GRADE AS MENTIONED BELOW.

FOR FLOOR SLAB	M-20
FOR 1 DECK SLAB & DECK SLAB	M-25
GRAVEL BATTERY	M-40
APPROACH SLAB	M-20
RETAINING WALL	M-25
 4. GRADE OF FLOOR SHALL BE IN ACCORDANCE TO IRC-804.
 5. FLOOR COVER TO OUTER STEEL SHALL BE AS FOLLOWS -

a. SUPERSTRUCUTRE	40MM
b. SUBSTRUCUTRE	10MM
c. FOUNDATION	75MM
 6. ALL FLOOR FINISH, ARCHITECTURE AND RETAINING WALLS SHALL COMPLY TO SELECTED DATA CONCERNING TO APPROX : 6 OF DATA TO BE AS PER PROPOSED DATA.

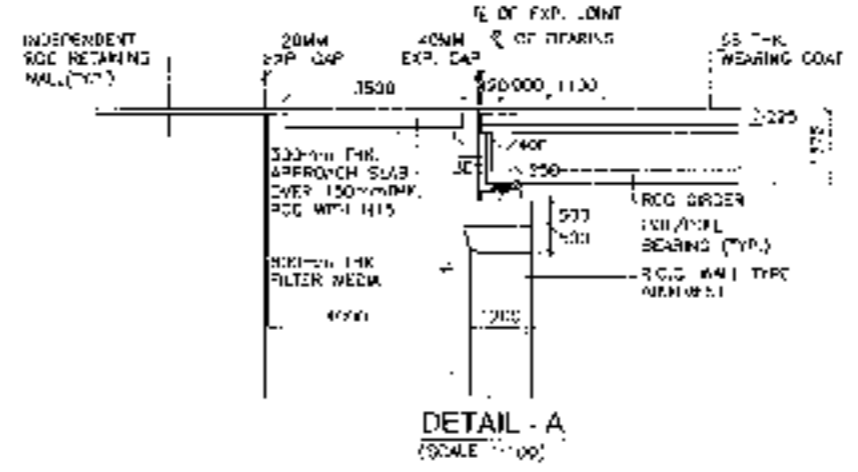
FINISH	M-20
FINISH	M-20
 7. ALL THE FOUNDATION AND FLOOR OF RETAINING WALLS SHALL BE AS PER IS 456 AND SHALL COMPLY TO APPROXIMATELY AS PER IS 456.
 8. ALL THE WALLS SHALL BE 1000 MM WITH HORIZONTAL AND VERTICAL REINFORCEMENT IN A SPACED BARS IN ACCORDANCE WITH IS 456 AND IS 456 PART 2 AND IS 456 PART 3.
 9. SOAK PITS SHALL BE PROVIDED AT 1000 MM WITH HORIZONTAL AND VERTICAL REINFORCEMENT IN A SPACED BARS IN ACCORDANCE WITH IS 456 AND IS 456 PART 2 AND IS 456 PART 3.
 10. SOAK PITS SHALL BE PROVIDED AT 1000 MM WITH HORIZONTAL AND VERTICAL REINFORCEMENT IN A SPACED BARS IN ACCORDANCE WITH IS 456 AND IS 456 PART 2 AND IS 456 PART 3.
 11. THIS STRUCTURE LIES IN ZONE II.
 12. ALL DIMENSIONS AND FINISHES MAY BE CHANGED AFTER DETAIL DESIGN.
 13. PROVISION OF FINISHES IS SUBJECT TO.



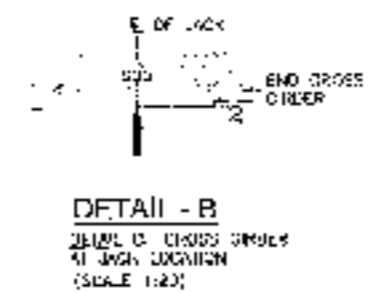


LONGITUDINAL ELEVATION
(SCALE 1:100)

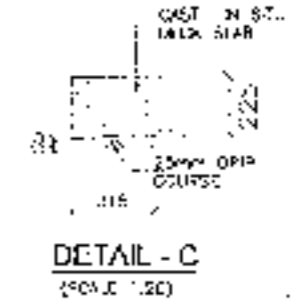
FORMATION LEVEL	202.500	208.573
GROUND LEVEL	+55.960	208.140
CHANGING IN	0-097.5	0+105
		0+112.5



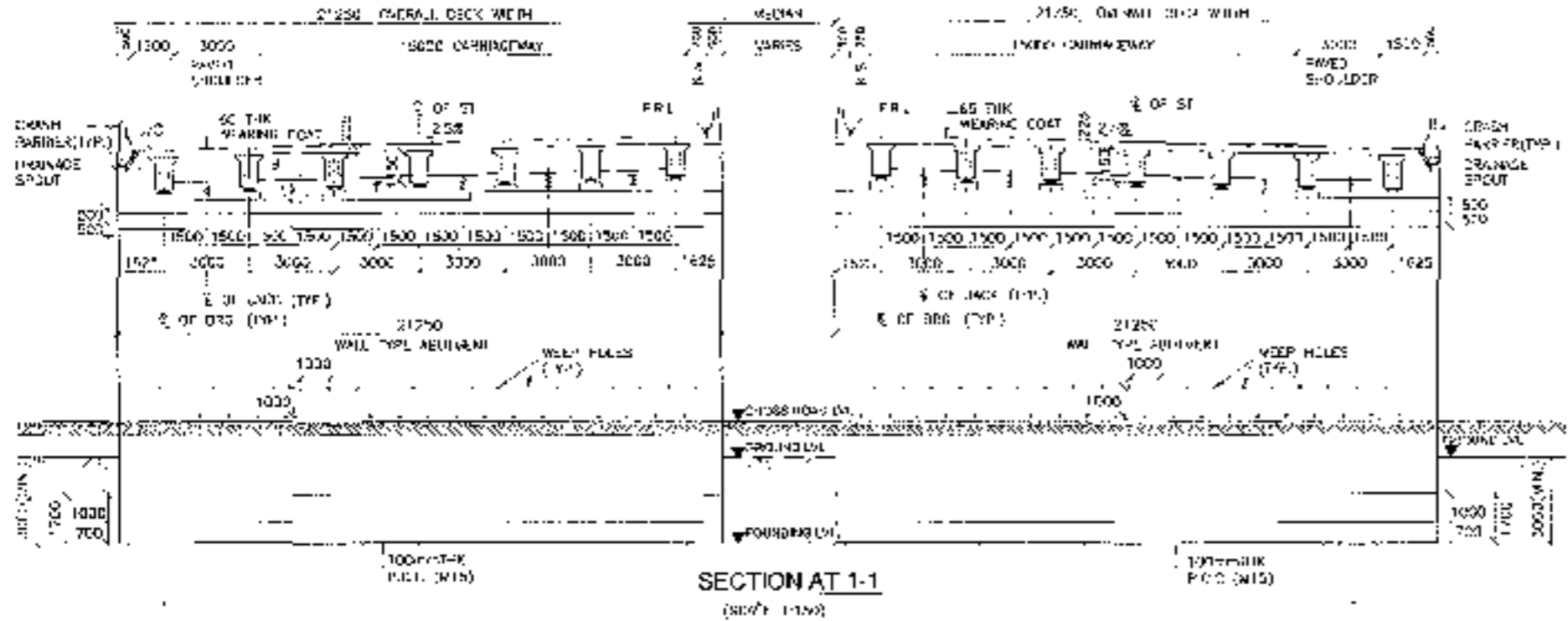
DETAIL - A
(SCALE 1:100)



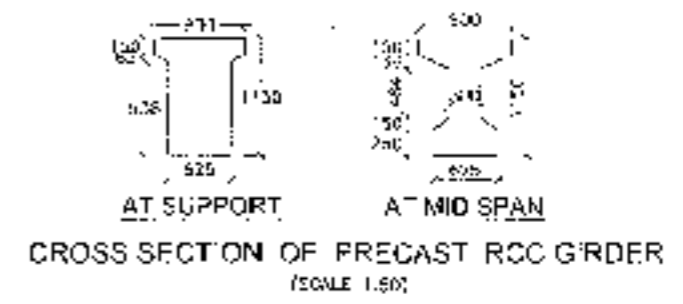
DETAIL - B
DETAIL OF CROSS GIRDERS AT HIGH LOCATION
(SCALE 1:20)



DETAIL - C
(SCALE 1:20)



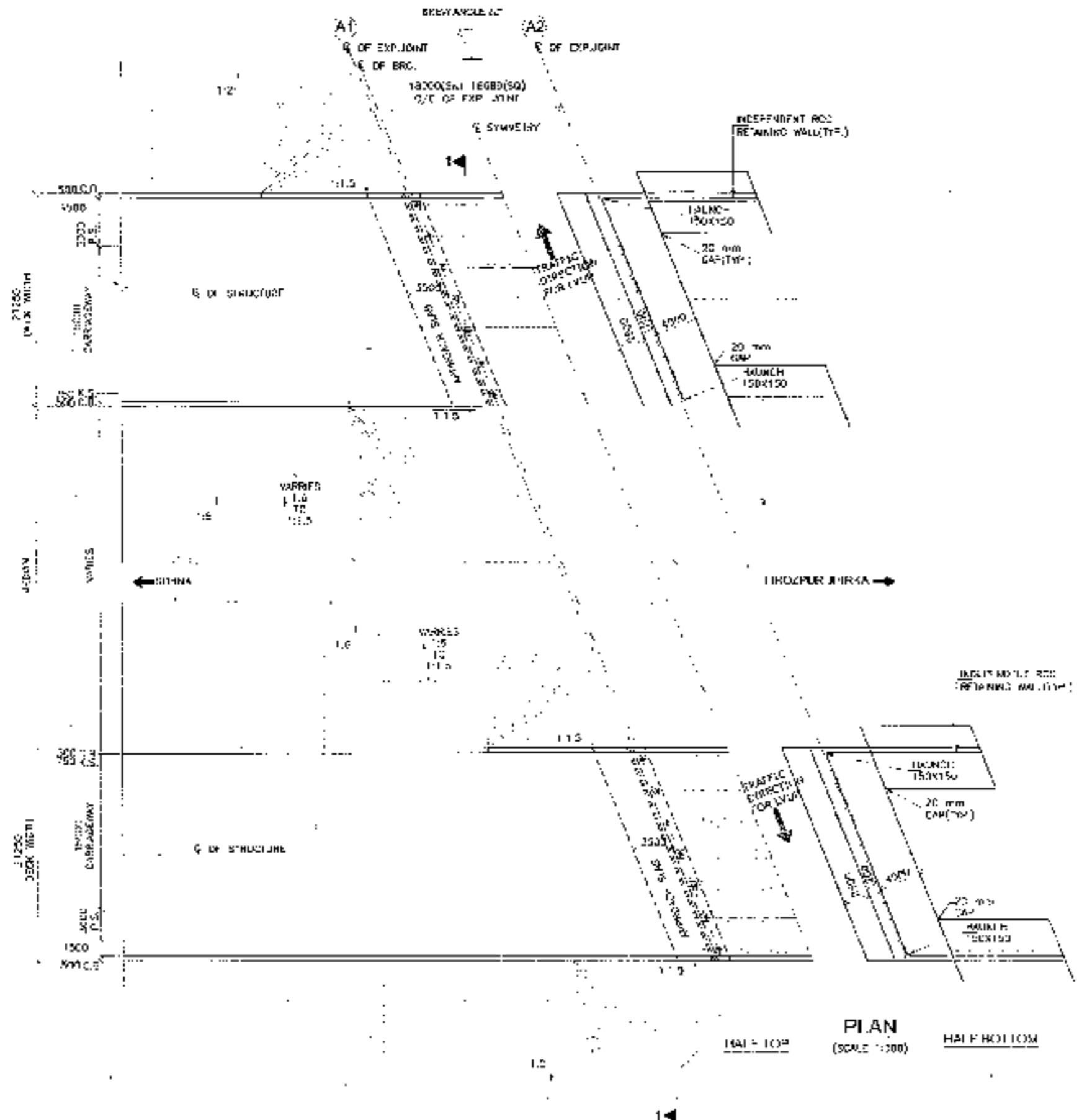
SECTION AT 1-1
(SCALE 1:50)



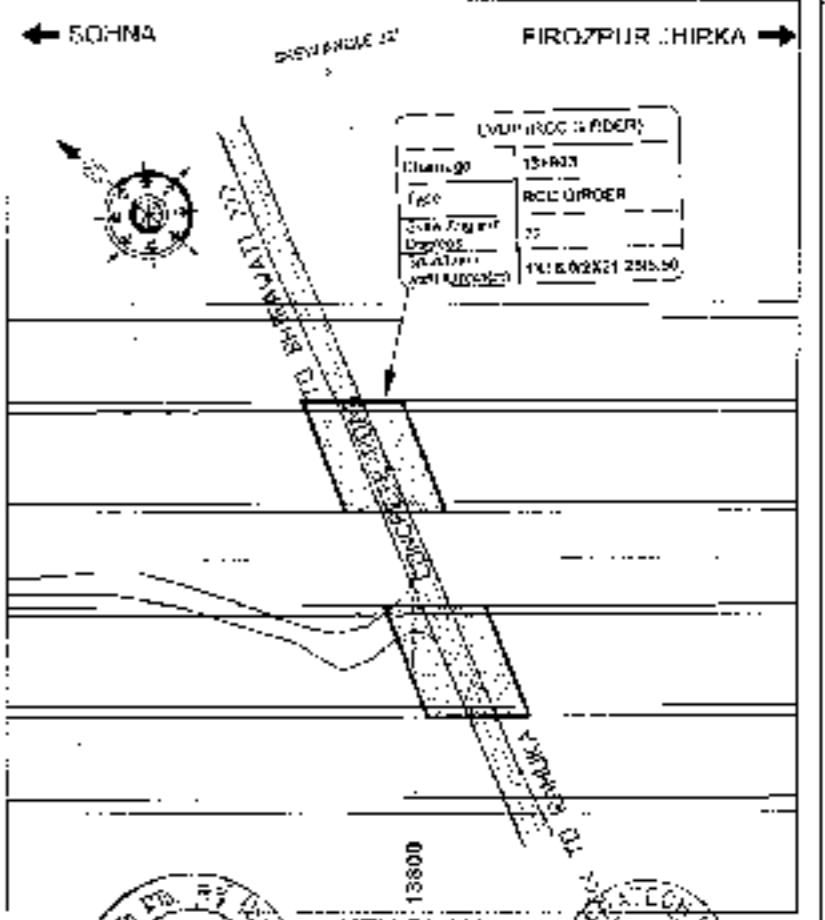
CROSS SECTION OF PRECAST RCC GIRDER
(SCALE 1:50)



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PLAN (SCALE 1:100) HALF TOP HALF BOTTOM



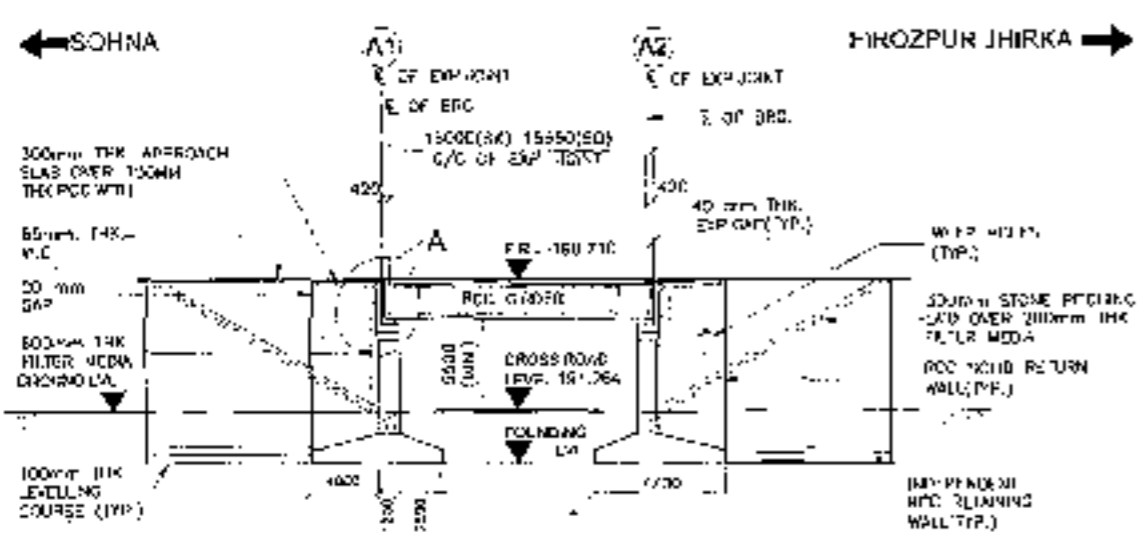
115

REVISIONS

APPROVED BY: [Signature]

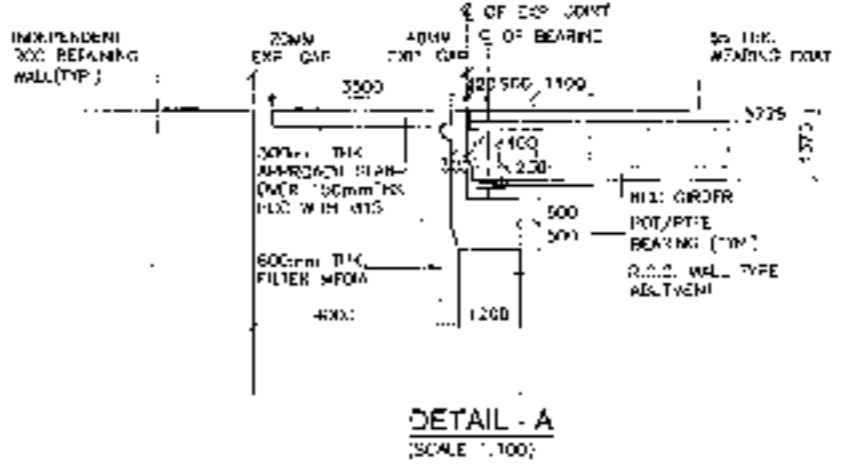
DATE: AUGUST 2018

- NOTES -
- ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METRE UNLESS OTHERWISE INDICATED. DIMENSIONS TO BE FOLLOWED UNLESS OTHERWISE STATED.
 - PROPOSED STRUCTURE SHALL BE DESIGNED FOR U JUNE 2018 AS PER IS 8000-2017. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF WIND AND ROAD LOADS AS GIVEN. VIBRATION DAMPING IT SHALL ALSO BE CHECKED FOR SPECIAL VEHICLE.
 - CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS INDICATED BELOW:-
 RCC MAINS COURSE : M-35
 RCC FLOOR SLAB & DECK SLAB : M-35
 CRACK SAND : M-30
 ASPHALT SLAB : M-30
 FINISH : M-30
 MASONRY : M-30
 - GRADE OF STEEL SHALL BE Fe 500 CONFORMING TO IS 1786.
 - DECK SLAB & OTHER STEEL SHALL BE AS FOLLOWS:-
 A. SUPERSTRUCTURE : IS 8000
 B. SUBSTRUCTURE : IS 8000
 C. FOUNDATION : IS 8000
 - BACK FILLING BEHIND ABUTMENTS AND RETAIN WALLS SHALL CONSIST OF SELECTED SAND CONFORMING TO ATTACHED 'A' & 'B' BODY SPECIFICATION PROPERTIES (S.G., S.W., S.W.P. & S.C.)
 - JANET CONNECTION AND DETAIL OF BARRELS SHALL BE AS PER IS 8000 AND RETAIN WALL SHALL CONFORM TO SPECIFICATIONS IN ATTACHED 'A' & 'B'.
 - WEAP WALLS SPACED AT 1000 C/C BOTH INDIVIDUALLY AND ACTUALLY SHALL BE PROVIDED IN A STANDARD 2 WEAPER IN RETAINING AND RETAIN WALL 150 mm ABOVE FINISH LEVEL.
 - DECK FLOOR FINISH SHALL CONSIST OF LAYERS OF MASTIC ACTUAL CONCRETE OF GRADE M30 OVER 150mm BITUMENOUS COURSE TO CHANNEL AND SHALL BE STARTED WITH 1:1:10 SAND : CEMENT : WATER RATIO AND FINISH SHALL BE FINISHED TO EXACTLY FOR PROTECTION.
 - THIS STRUCTURE IS IN SEISMIC ZONE II.
 - ALL DIMENSIONS AND LEVELS MAY BE CHANGED AFTER CHECKING. LOCATION OF CENTER IS MODERATE.

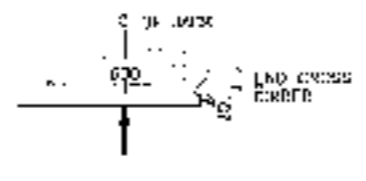


LONGITUDINAL ELEVATION
(SCALE 1:300)

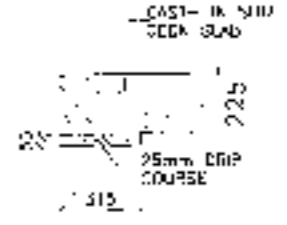
PROJECTIONS LEVEL (m)	158.710	159.710
GROUND LEVEL (m)	159.530	160.030
CHINAFF (m)	17-854	17-852
	17-850	17-850



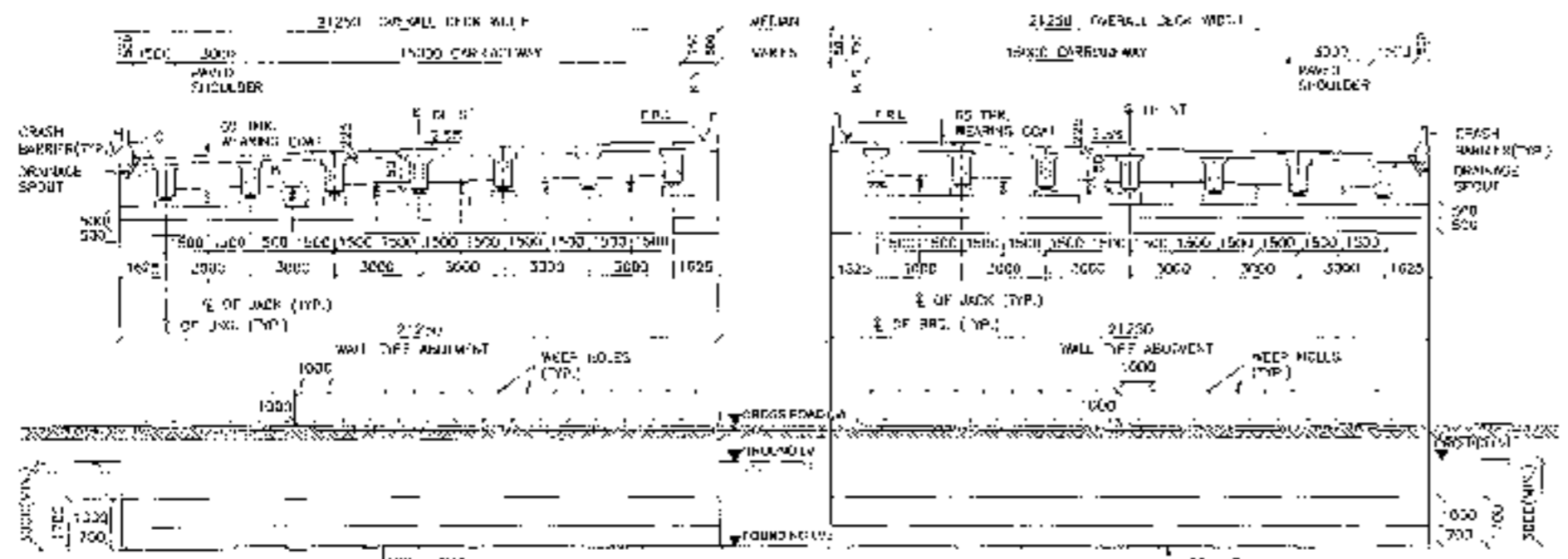
DETAIL - A
(SCALE 1:100)



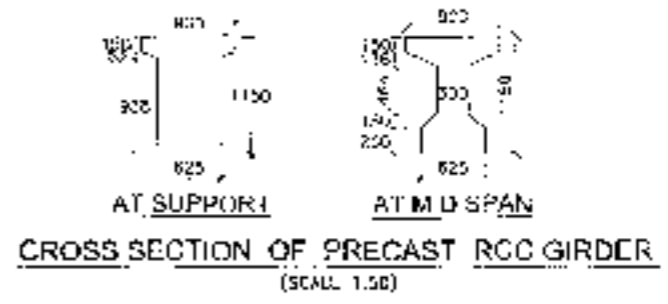
DETAIL - B
DETAIL OF CROSS GIRDER
AT 50% LOCATION
(SCALE 1:20)



DETAIL - C
(SCALE 1:20)



SECTION AT 1-1
(SCALE 1:150)

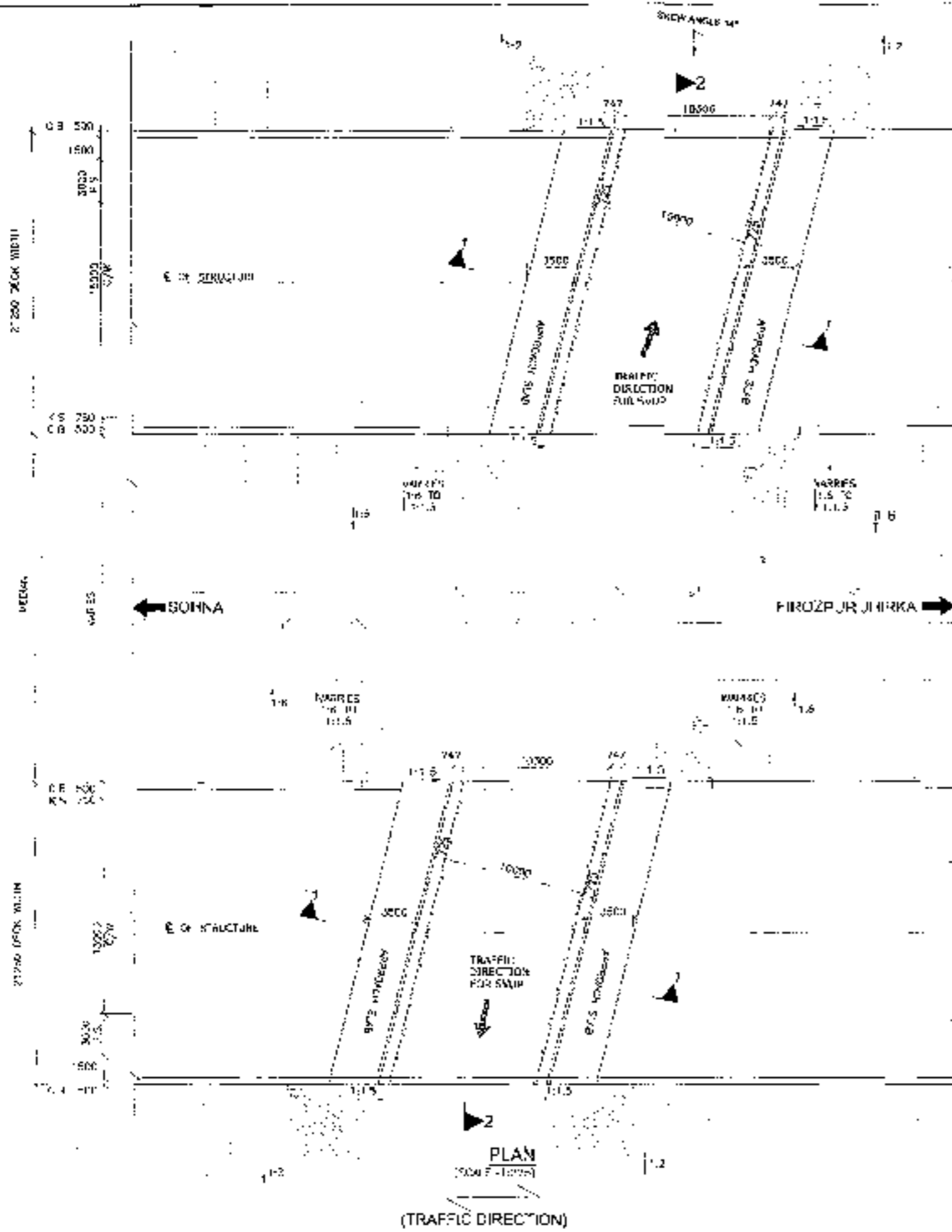


CROSS SECTION OF PRECAST RCC GIRDER
(SCALE 1:50)

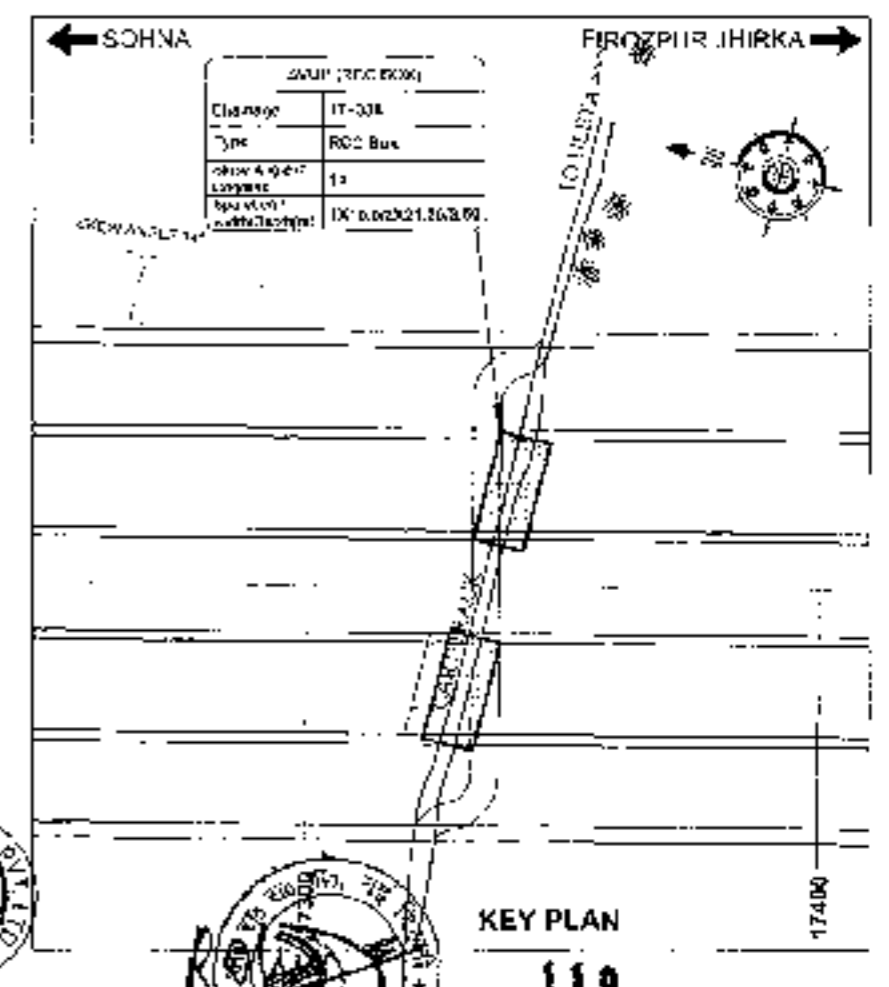


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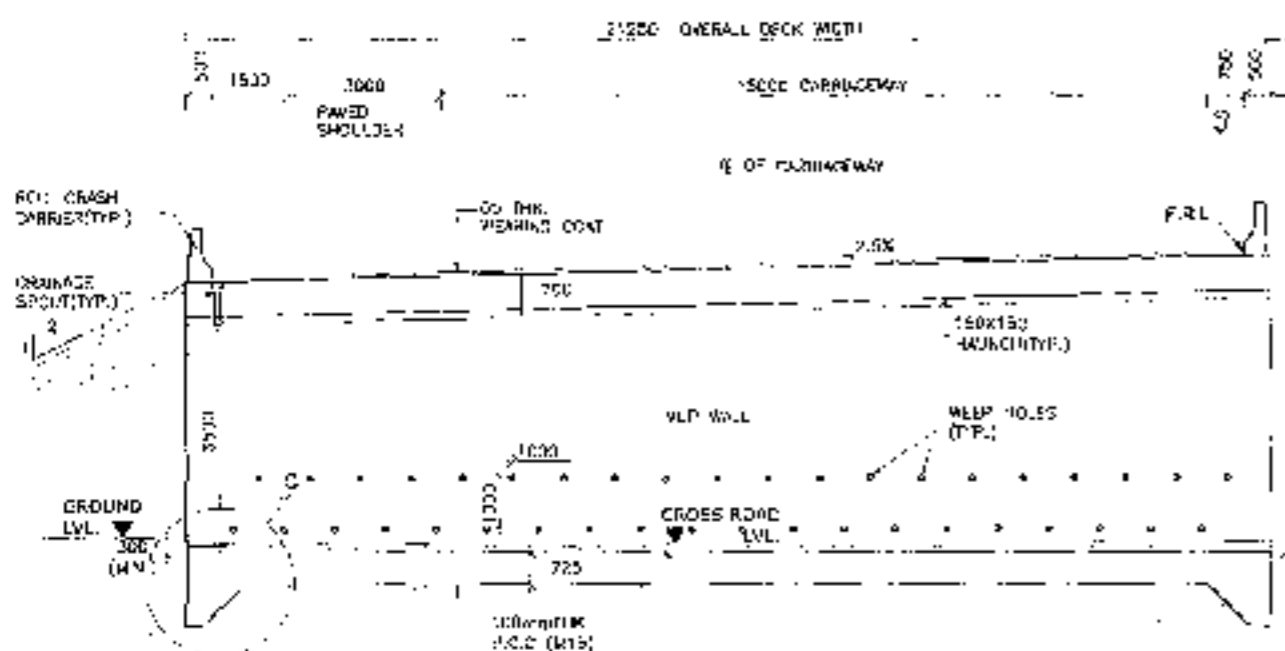
CLIENT 	CONSULTANT 	PROJECT Consultancy Service for the Preparation for Feasibility Report (RPR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-5/Package-4) (SoHna - Firozpur Jirka section of Delhi-Vadodra Expressway) (Pkg-1) (L1 0-000 to 1B-081)	SCALE AS SHOWN	DWG TITLE GENERAL ARRANGEMENT DRAWING LVUP (SPAN 1 X 16.00M C/C EXP. JOINT) AT C-1-17/852 (SOHNA - FIROZPUR JIRKA)	DRAWING No. CPOP-1520V-FH/FKG-1/FRCH-17-852V-101
					DATE AUGUST 2010
		PREPARED BY R.S.	CHECKED BY M.S.	APPROVED BY A.C.	



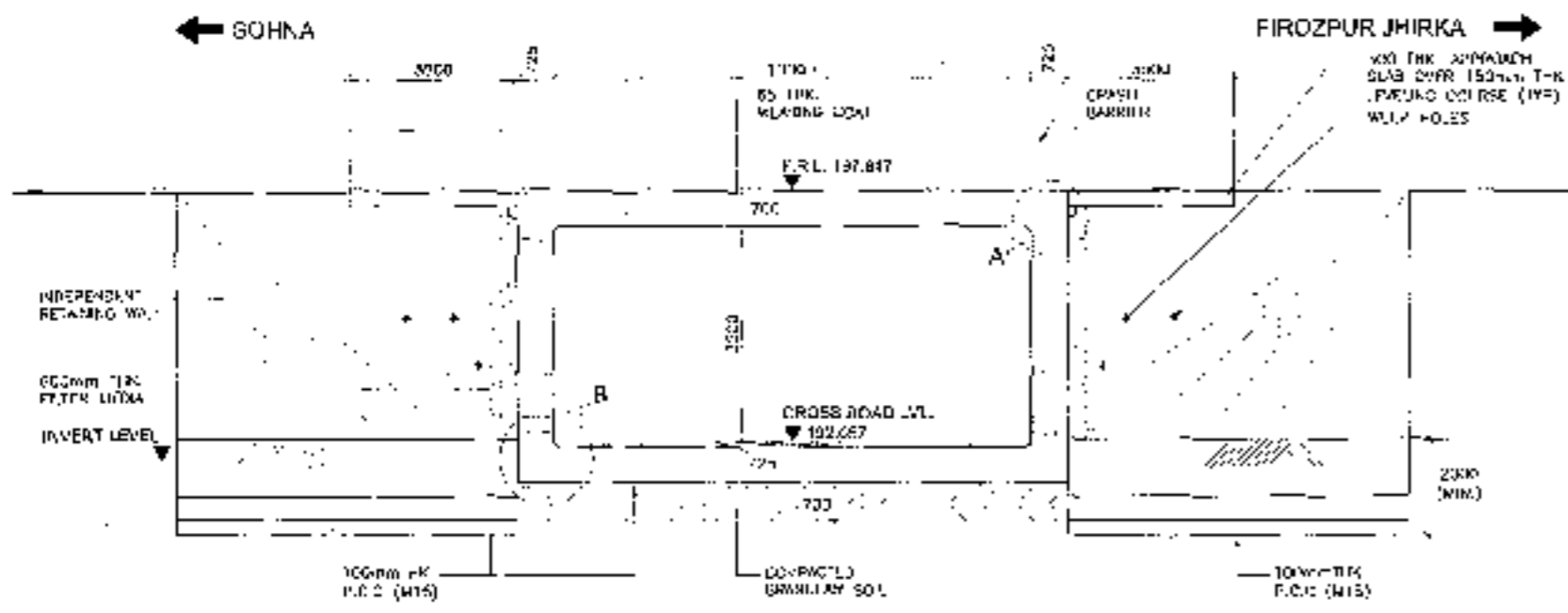
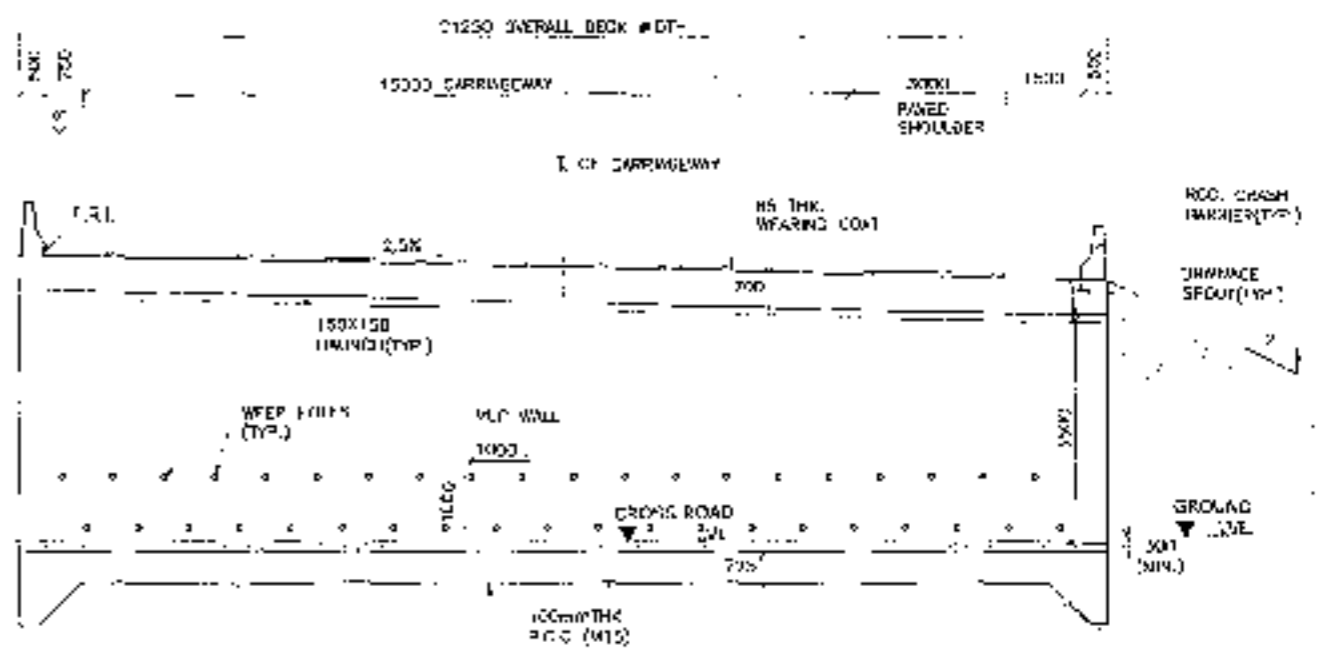
- NOTES:**
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN PARENTHESIS DIMENSION SHALL BE SCALING.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR A JAW AS PER IRC 803. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF BS 204 AND IRC CLASS 2 TRUCKS, WHICHEVER GOVERNS. IT SHALL ALSO BE CAPABLE FOR SPECIAL VEHICLE.
 3. CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS INDICATED BELOW:
 RCC LEVELING COURSE M-15
 RCC SLAB M-30
 CONCRETE CURB M-30
 APPROACH SLAB M-15
 RETAINING WALL M-30
 RETAINING WALL M-30
 4. GRADE OF PAVEMENT AT 183000 COMPARING TO 10% PCC.
 5. CLEAR SPACE TO OUTER SIDE SHALL BE AS FOLLOWS:
 a. TOP SLAB 400MM
 b. WALL (TOP SLAB) 200MM
 c. WALL (BACK BARRIER) 200MM
 d. RETAINING WALL 200MM
 6. BACK FILLING BE-HIND THE WALLS AND RETURN WALLS SHALL BE WITH 10% COMPACTED SAND OR APPROXIMATELY 1:1 OF 300MM-2000 MM SIZES FINE SAND OR P-200 EACH TO 100 MM THICK.
 7. LAYING COMPACTED AND FILLING OF BACKFILL BEHIND RETURN WALL SHALL BE WITH 10% COMPACTED SAND OR APPROXIMATELY 1:1 OF 300MM-2000 MM SIZES FINE SAND OR P-200 EACH TO 100 MM THICK.
 8. KEEP FILLER SPACE AT LEAST 500 MM HORIZONTAL AND VERTICAL SHALL BE PROVIDED IN A STRUCTURE WHICH IS ABUTMENTS AND RETURN WALL TO 100 MM ABOVE GROUND LEVEL.
 9. LEAKY WATER AND RAIN WATER SHALL BE COLLECTED BY LAYERS OF DRAINAGE SYSTEMS OF 200MM OR OVER CURB STRUCTURE ITSELF. COLLECTED AND LEAK SHALL BE DRENCHED WITH THE RETURN WALL & PROFILE DRAINAGE AND RETURN OF ANY WATER IS REPORTED TO EXECUTE FOR MAINTENANCE.
 10. THIS STRUCTURE IS IN SECTOR 4, N. DELHI.
 11. ALL DIMENSIONS AND CONCRETE MIX SHALL BE CHECKED WITH OTHER DESIGNS.
 12. CONSISTENCY OF EXISTING IS VISIBLE.



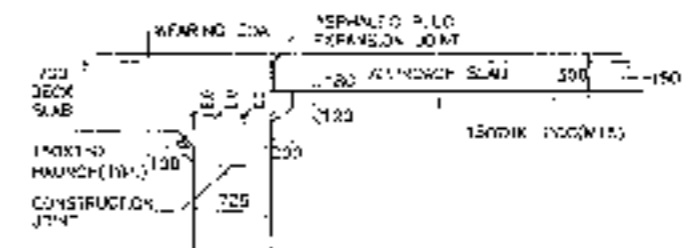
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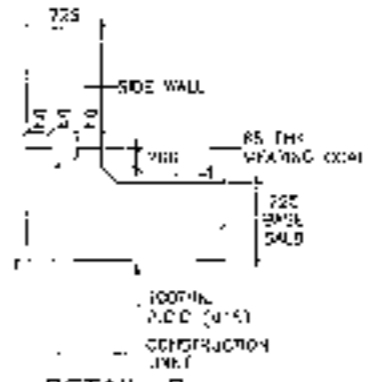
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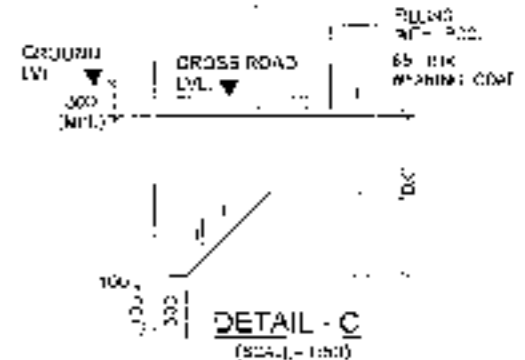
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(SCALE-1:50)





DETAIL - A
(SCALE-1:50)



DETAIL - B
(SCALE-1:50)



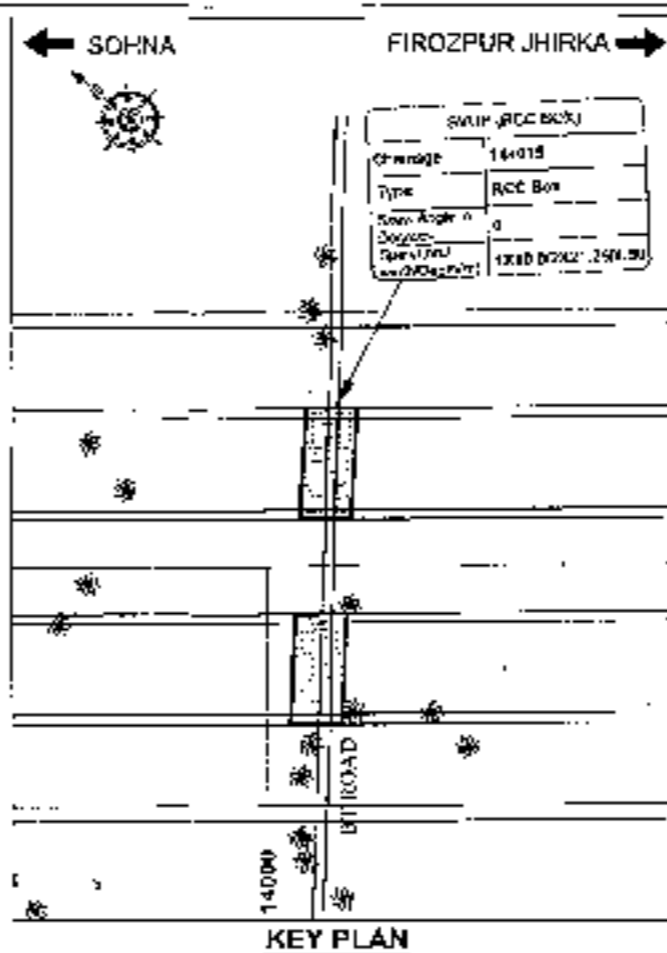
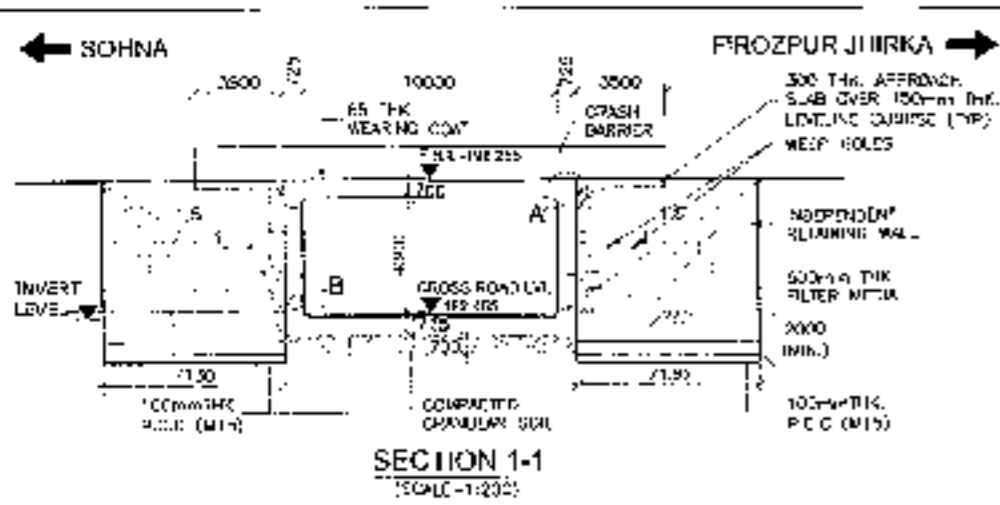
DETAIL - C
(SCALE-1:50)

<p>CLIENT -</p>  <p>National Highways Authority of India</p>	<p>CONSULTANT -</p> <p>Chaitanya Projects Consultancy Pvt. Ltd.</p> <p>G-8, 2ND FLOOR, R.K. TOWER PLOT NO. 21-22, SECTOR-4, VASHTALI, GHAZIABAD</p> <p>PH: 0120-3223413, 4126472, FAX: 0126-4110472</p>	<p>PROJECT -</p> <p>Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-II Package-4) (Solani - Firozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1 Ch. 0+000 to 16+461)</p>	<p>SCALE -</p> <p>AS SHOWN</p> <p>DWD TITLE -</p> <p>GENERAL ARRANGEMENT DRAWING</p> <p>SVUP(SI/1-1X10 0X3 5m) AT CH- 17+239 (SOHNA - FIROZPUR JHIRKA)</p>	<p>DRAWING NO. -</p> <p>CPD-112/DV/SH/PC-1700-17+239-101</p> <p>DATE - SEPTEMBER 2018</p> <p>PREPARED BY -</p> <p>CHECKED BY -</p> <p>APPROVED BY -</p> <p>123</p> 
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LIST OF DRAWINGS (PKG.-I (0+000 TO 18+461))

S.NO	DRAWING TITLE	DRAWING NO.	
GENERAL ARRANGEMENT DRAWING FOR SVUP			
1	GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X4.5m) AT CH.- 3+561	CPC/P-152/DVE/HR/PKG-1/FR/CH-3+561/S-100	
2	GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X4.5m) AT CH.- 14+015	CPC/P-152/DVE/HR/PKG-1/FR/CH-14+015/S-100	
3	GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X3.5m) AT CH.- 15+417	CPC/P-152/DVE/HR/PKG-1/FR/CH-15+417/S-100	SHEET 1 OF 2
4	GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X3.5m) AT CH.- 15+417	CPC/P-152/DVE/HR/PKG-1/FR/CH-15+417/S-100	SHEET 2 OF 2
5	GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X3.5m) AT CH.- 17+108	CPC/P-152/DVE/HR/PKG-1/FR/CH-17+108/S-100	
6	GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X3.5m) AT CH.- 17+338	CPC/P-152/DVE/HR/PKG-1/FR/CH-17+338/S-100	SHEET 1 OF 2
7	GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X3.5m) AT CH.- 17+338	CPC/P-152/DVE/HR/PKG-1/FR/CH-17+338/S-100	SHEET 2 OF 2

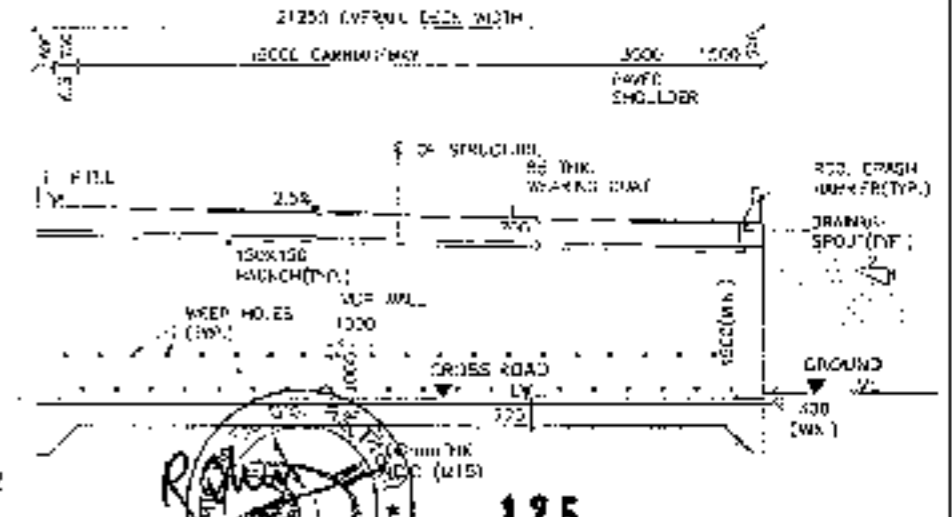
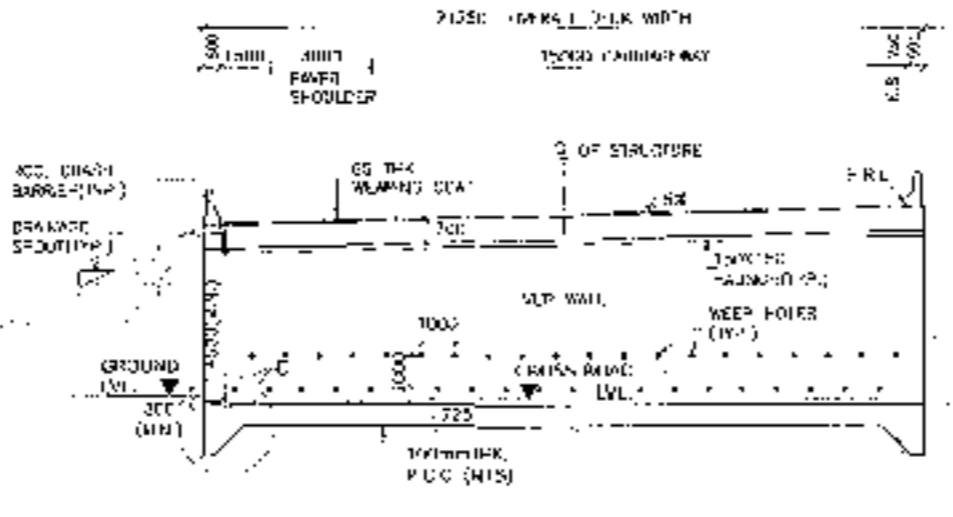
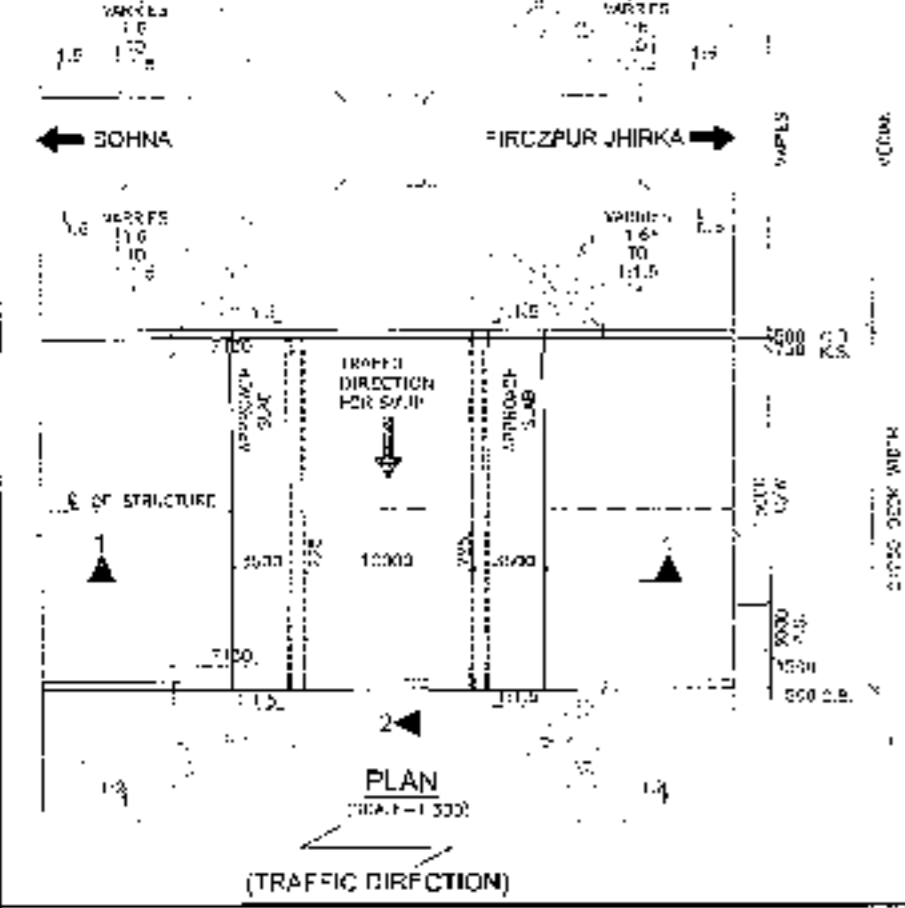
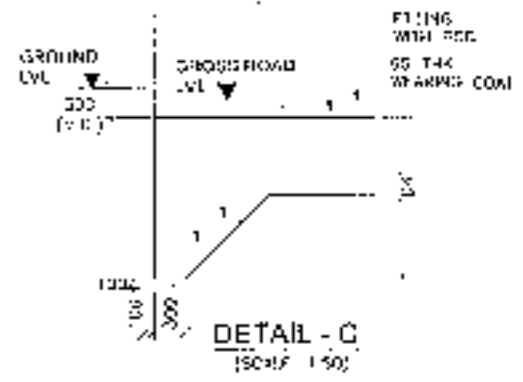
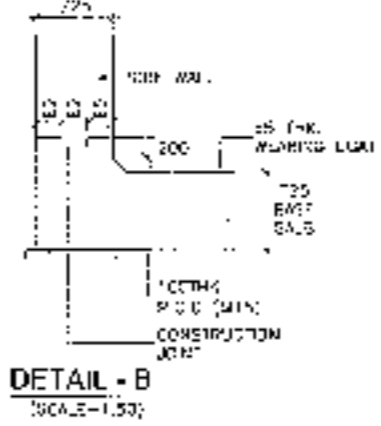
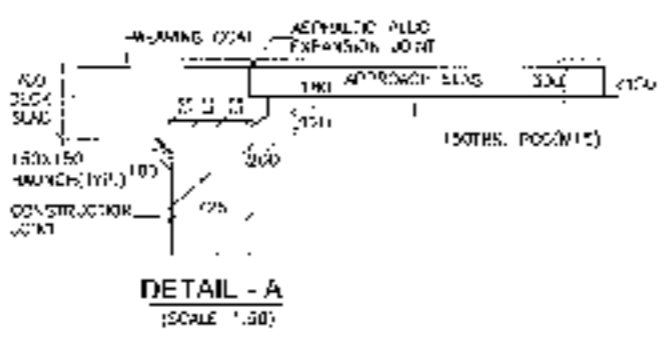
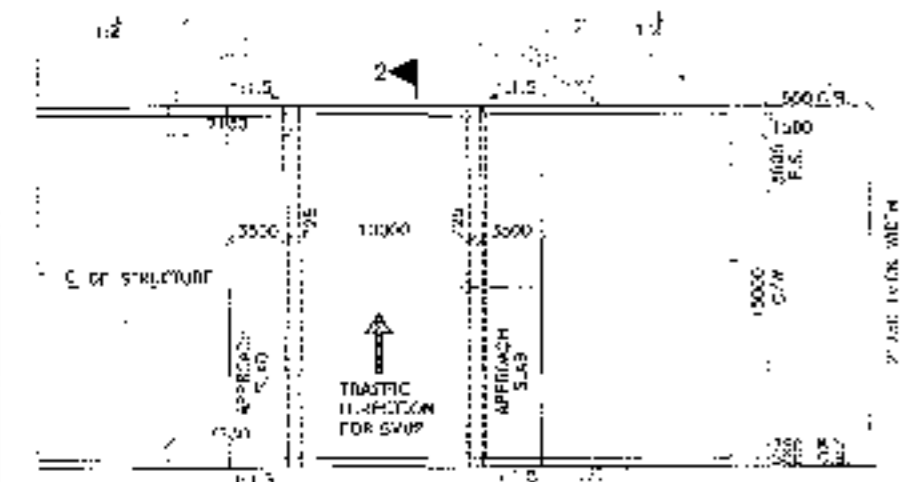




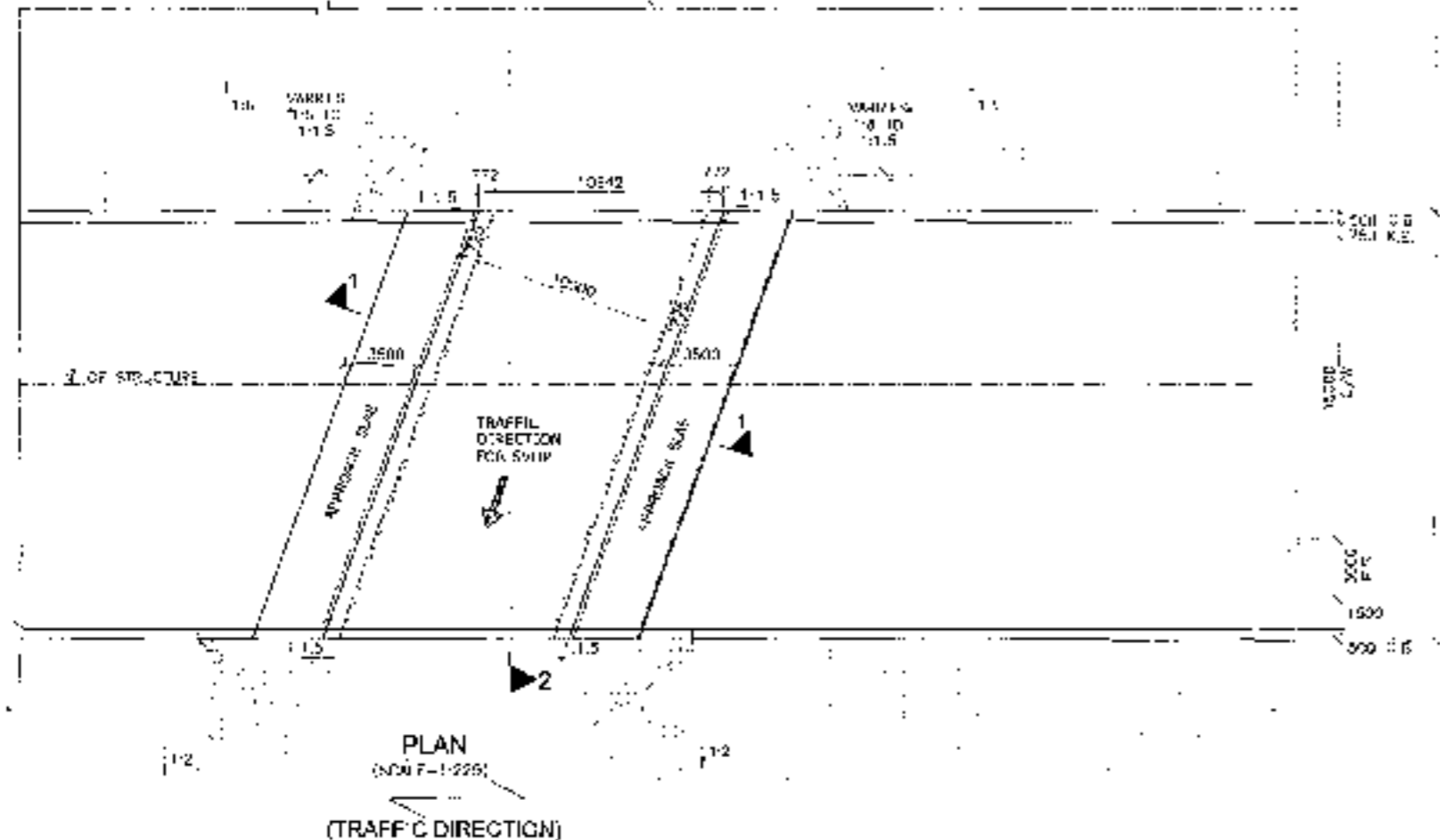
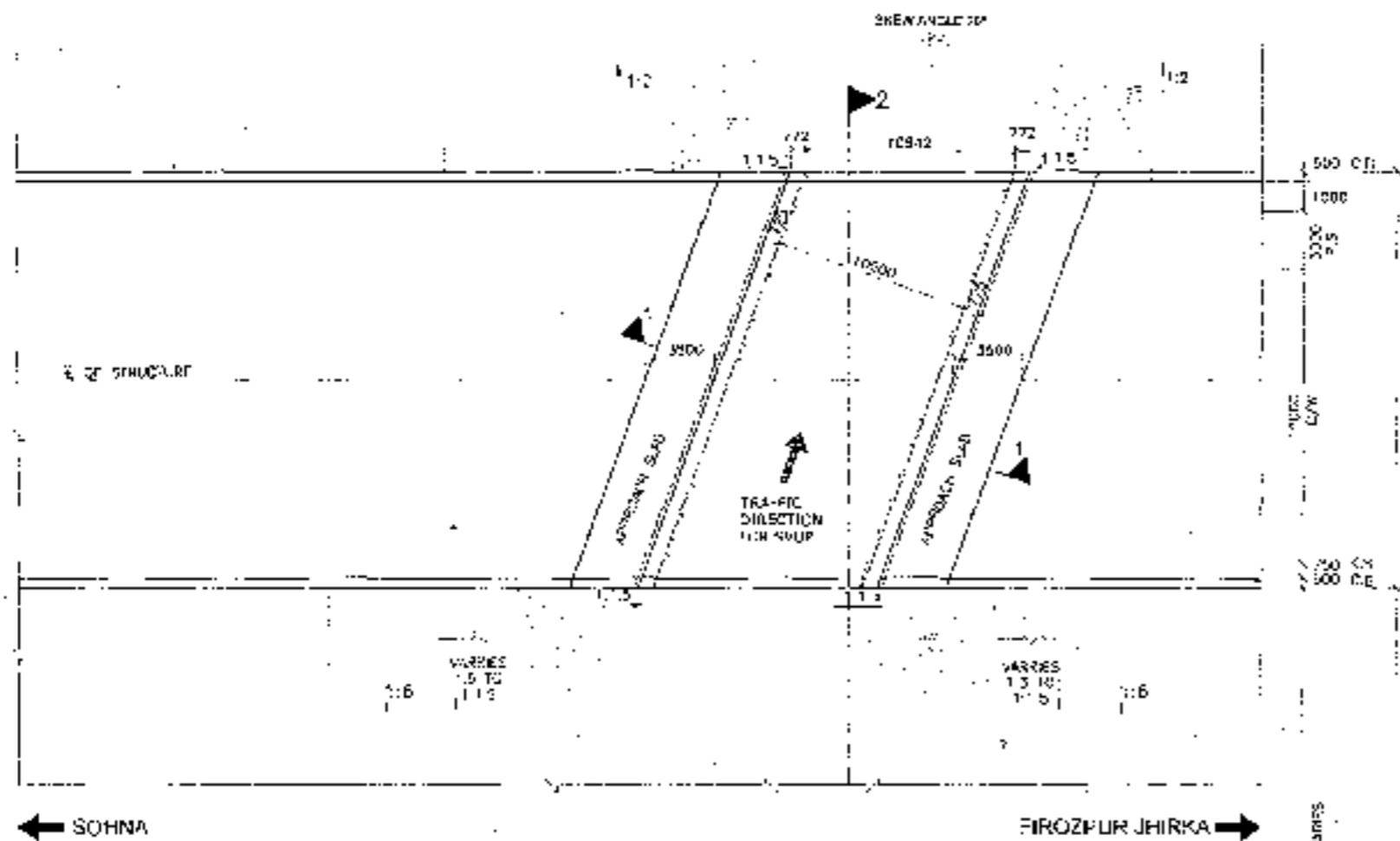
- NOTES:**
1. ALL DIMENSIONS AND LEVELS ARE IN METERS UNLESS OTHERWISE MENTIONED. ONLY VERTICAL DIMENSIONS TO BE FOLLOWED. NO DIMENSION SHALL BE SCALED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR 5 LANE AS PER IRC-2013. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF BS-4 AND IRC CLASS A LOADING. WEAR AND TEAR SURF SHALL ALSO BE CHECKED FOR SMOOTH SURF.
 3. CONCRETE SHALL BE DESIGN AND CURE AS PER IS 456:2000 AS INDICATED BELOW.

MIN. PARTIAL CURING	14-15
RCC BOX	M-30
CRASH BARRIER	M-30
APPROACH SLAB	M-30
RETAINING WALL	M-30
 4. WIDTH OF STEEL SHALL BE 75-100mm CONFORMING TO IS-10263.
 5. CLEAR COVER TO CONCRETE SHALL BE AS FOLLOWS:

A. TOP SLAB	40mm
B. WALL (VERT. PART)	40mm
C. WALL (HORIZ. PART)	40mm
D. BOTTOM SLAB	40mm
 6. ROCK BEHIND RETAINING WALLS AND REINFORCING SHALL BE AS PER IS-10263. CONFORMING TO APPENDIX B OF IS-10263. ROCK SHALL BE PROVED TO BE OF GRADE L-20 & C-20 (M7.5).
 7. DRAIN CONNECTION AND DETAIL OF DRAINAGE BENCHING AND RETURN WALL SHALL CONFORM TO SPECIFICATIONS IN IS-10263. & IS-10264.
 8. ALL REINFORCING SHALL BE SPACED AT 1000 C/C BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A STAGGERED MANNER IN ALL DIRECTIONS AND SHALL BE 150mm ABOVE FINISHED LEVEL.
 9. CONCRETE WEAR SURF SHALL CONSIST OF LAYER OF 40mm ASPHALT CONCRETE OF 100mm THK OVER 100mm STABILIZED FILLING TO CHANNEL OFF WATER. SHALL BE WORKED WITH THE FINISH PLAN & DETAIL DRAWINGS AND WEAR SURF SHALL BE PROVIDED TO PREVENT THE WEAR OF.
 10. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
 11. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
 12. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.



CLIENT National Highways Authority of India New Delhi	CONSULTANT Chaitanya Projects Consultancy Pvt. Ltd. C-8, 2ND FLOOR, R.K. TOWER PLOT NO. 21-22, SECTOR-6, VAISHALI, GHAZIABAD PH: 0120-3223419, 4120472, FAX: 0120-4110472	PROJECT Consultancy Services for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-1) (Solina - Firozpur Jhirka section of Delhi-Vadodra Expressway) (Pkg-1_Ch. 0+000 to 18+461)	SCALE AS SHOWN	DWG TITLE GENERAL ARRANGEMENT DRAWING SOHNA - FIROZPUR JHIRKA AT CH - 14-015 (SOHNA - FIROZPUR JHIRKA)	DRAWING No. CH-14-015-GEN-ARR-11-015/100	
					DATE AUGUST 2024	REVISOR RD
PREPARED BY P.S.		CHECKED BY M.S.		APPROVED BY P.C.		

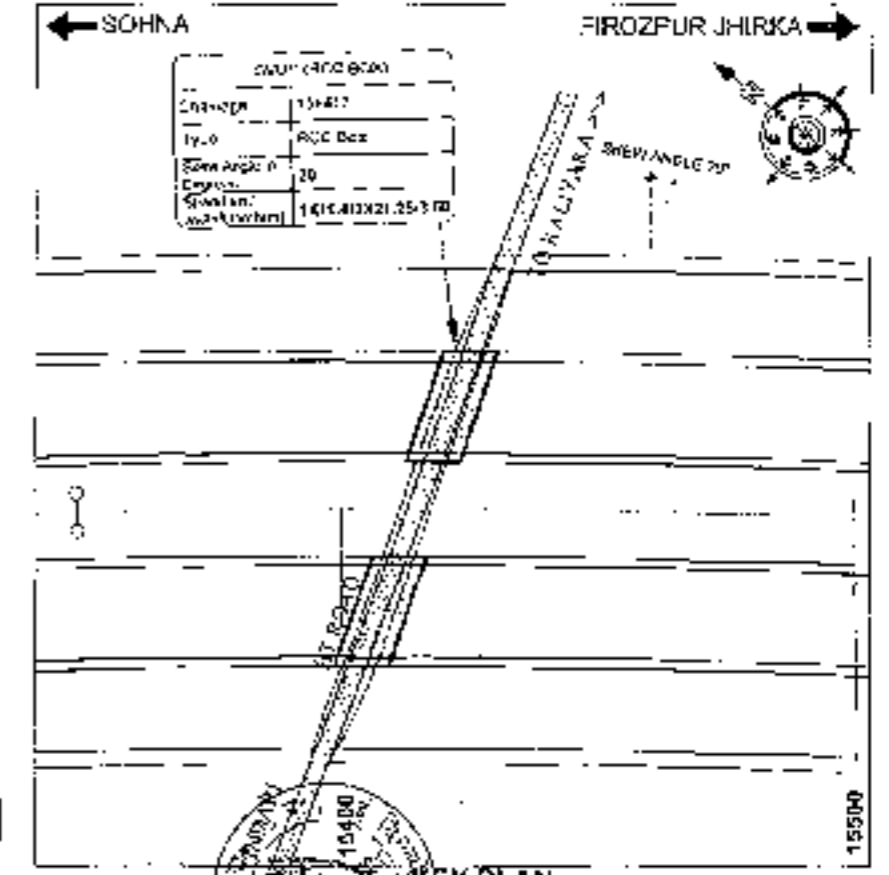


- NOTES:-
1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METERS UNLESS OTHERWISE MENTIONED. OVERSIGHT DRAWINGS TO BE FOLLOWED TO THE EXTENT OF SCALE.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR CLASS AS PER IRC-2011. STRUCTURAL STEEL IS DESIGN FOR COMBINATION OF 20 TOP AND RC CLASS 4 LOADING, AND/OR OVERHEAD. IT SHALL ALSO BE CHECKED FOR SPRAIN UNDER E.
 3. STRUCTURE SHALL BE DESIGN AS AND SHALL BE UP CLASS AS MENTIONED BELOW:-

PIE CEILING BRIDGE	M-15
TOP RAIL	M-30
LONG JAMBER	M-40
APPROACH SLAB	M-30
PIERCES	M-40
RETAINING WALL	M-25
 4. GRADE OF STEEL SHALL BE EN-250D (CORRESPOND TO IS 1785).
 5. LAYER COVER TO CONCRETE SHALL BE AS FOLLOWS:-

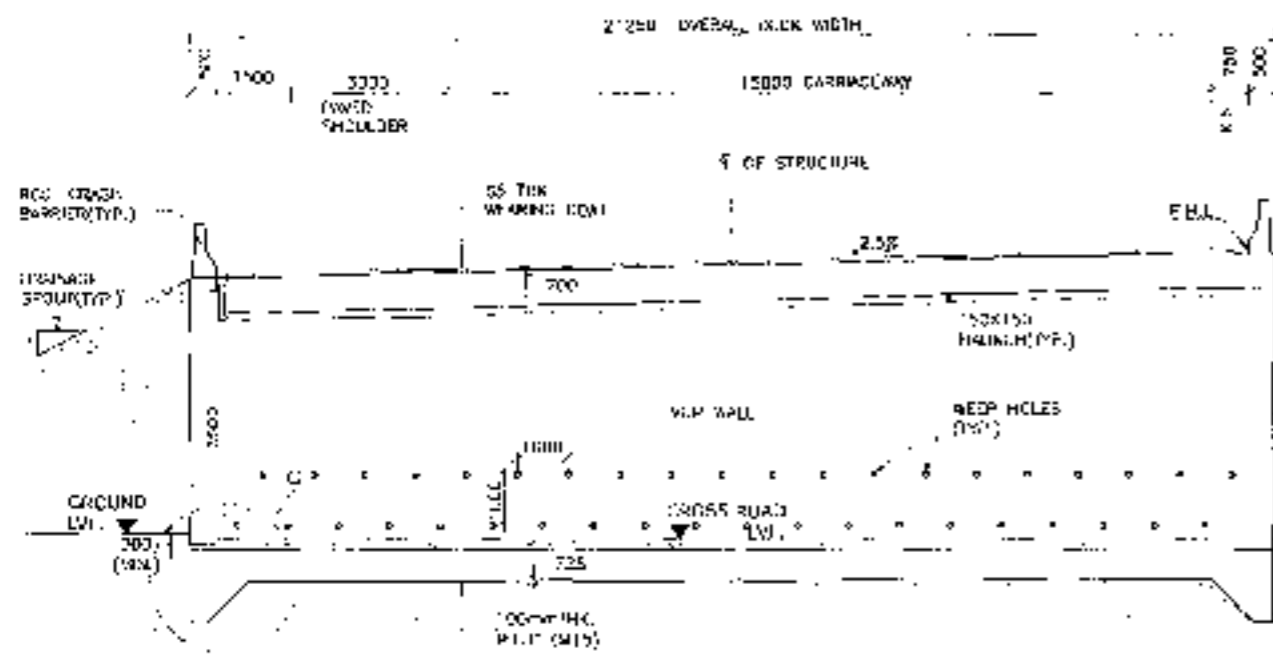
TOP SLAB	40mm
WALL (EARTH FACE)	70mm
WALL (WATER FACE)	50mm
DECK SLAB	75mm
 6. SOIL CLASSIFIED ACCORDING TO IS 14726 SHALL BE AS FOLLOWS:-

GROUP	CLASSIFICATION
1	1
2	2
 7. FOUNDATION AND DESIGN OF BRIDGE SHALL BE AS PER IRC-2011. ALL DESIGN SHALL BE IN ACCORDANCE TO SPECIFICATIONS OF APPROPRIATE CODE OF PRACTICE.
 8. ROAD BUILT SHALL BE AT 1000 R/S WITH APPROXIMATELY 1% SLOPE. ALL DIMENSIONS SHALL BE PROVIDED IN A STANDARD NUMBER OF DIMENSIONS AND DETAILS SHALL BE AS PER APPROPRIATE CODE.
 9. SOIL BUILT SHALL BE AT 1000 R/S WITH APPROXIMATELY 1% SLOPE. ALL DIMENSIONS SHALL BE PROVIDED IN A STANDARD NUMBER OF DIMENSIONS AND DETAILS SHALL BE AS PER APPROPRIATE CODE.
 10. ALL DIMENSIONS AND DETAILS SHALL BE REPORTED TO THE ENGINEER FOR APPROVAL.
 11. THIS STRUCTURE IS TO BE BUILT IN ACCORDANCE TO THE DESIGN AND DETAILS AS SHOWN IN THIS DRAWING.
 12. ALL DIMENSIONS AND DETAILS SHALL BE REPORTED TO THE ENGINEER FOR APPROVAL.

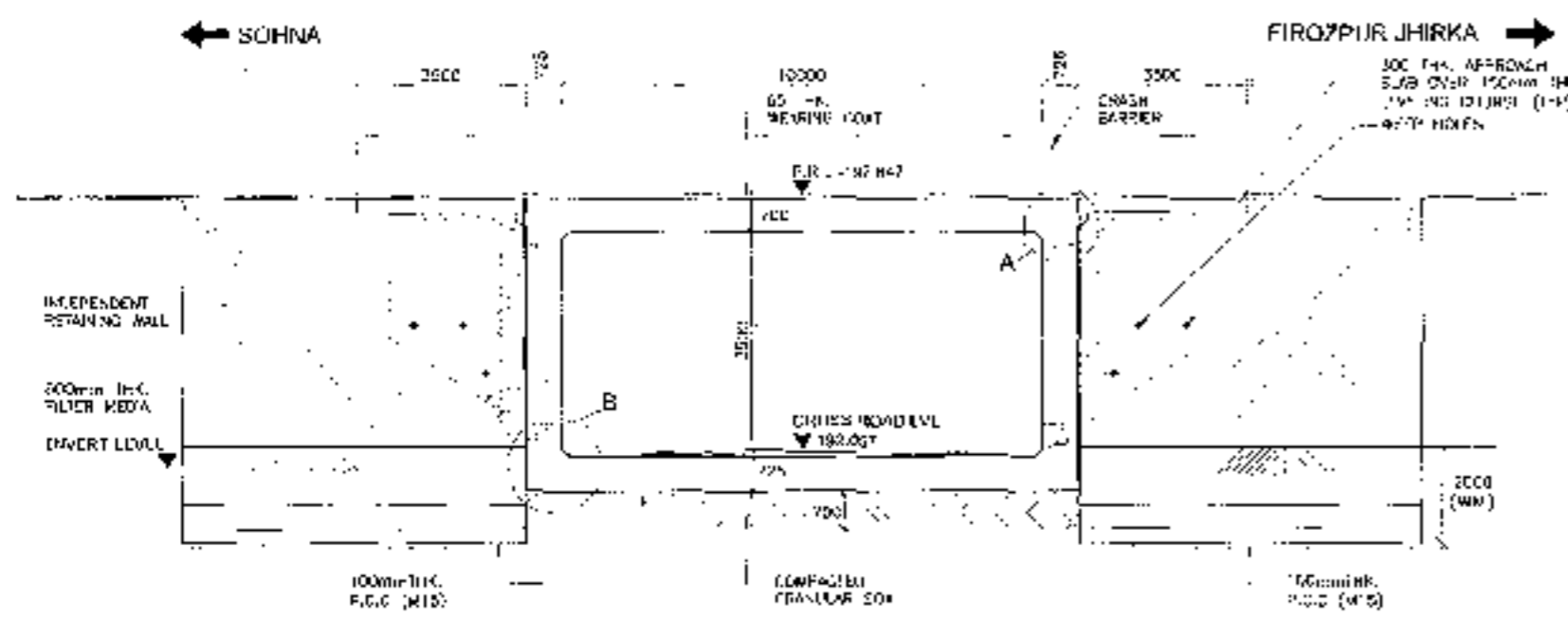
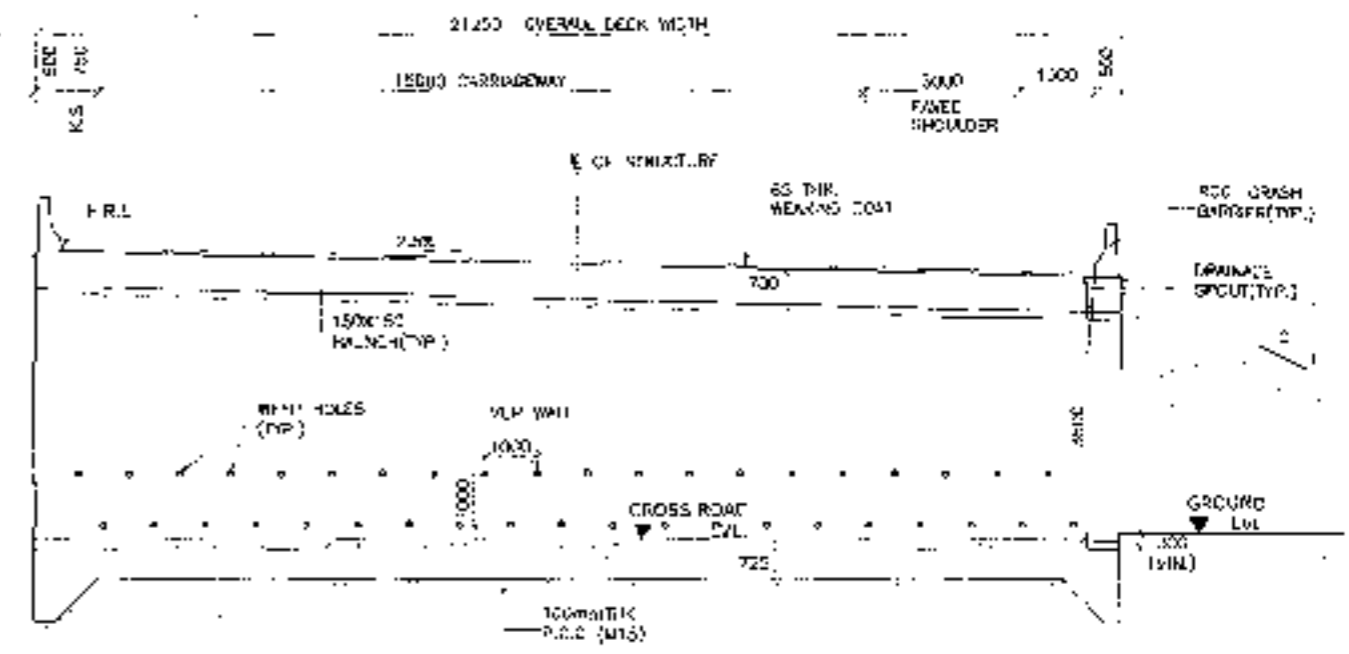


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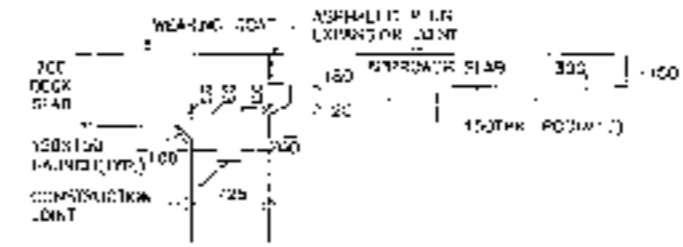
CLIENT: National Highways Authority of India Ministry of Road Transport & Highways, Govt. of India	CONSULTANT: Chaityanya Projects Consultancy Pvt. Ltd. G-5, 2ND FLOOR, R.K. TOWER PLOT NO.- 21-22, SECTOR-4, VASHTALI, GHAZIABAD PH - 0124-5223419, 3120472, FAX: 0120-4110472	PROJECT: Consultancy Service for the Preparation for Feasibility Report/PPR for development of Economic Corridors, Inter Corridor and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1, Ch. 0+000 to 18+451)	SCALE: AS SHOWN	DWG TITLE: GENERAL ARRANGEMENT DRAWING SVUP(SIZE 1X10.0X3.5m) AT CH.- 35+417 (SOHNA - FIROZPUR JHIRKA)	DRAWING No.: CPCL/12/2018-PPR-1A-10-12-1125-110 DATE: AUGUST 2018 PREPARED BY: P.K.S. CHECKED BY: M.S. APPROVED BY: A.G.	SHEET 1 OF 2 Revision: 00 APPROVED BY: A.G.
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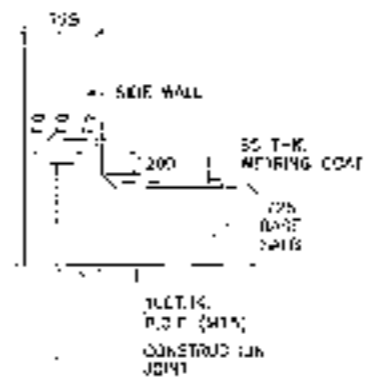
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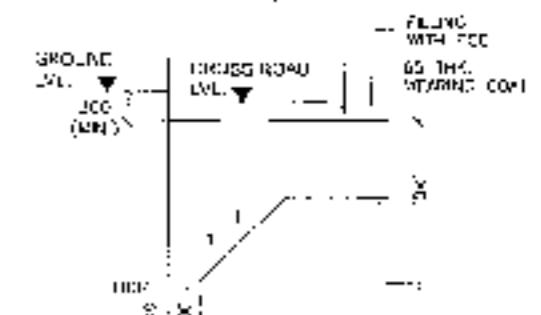
SECTION 1-1
(SCALE 1:100)



DETAIL - A
(SCALE 1:50)



DETAIL - B
(SCALE 1:50)



DETAIL - C
(SCALE 1:50)

CLIENT:-
National Highways Authority of India
 Ministry of Road Transport & Highways, Govt. of India

CONSULTANT:-
Chaitanya Projects Consultancy Pvt. Ltd.
 C-5, 2ND FLOOR, PLK TOWER PLOT NO.- 21-22,
 SECTOR-4, VAISHALI, GHAZIABAD
 PH.: 0120-3225419, 4129472, FAX: 0120-4110477

PROJECT:-
 Consultancy Service for the Preparation for Feasibility Report/ODR for Development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Long Package-4) (Sohna - Ferozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1 Ch. 0+000 to 1B+461)

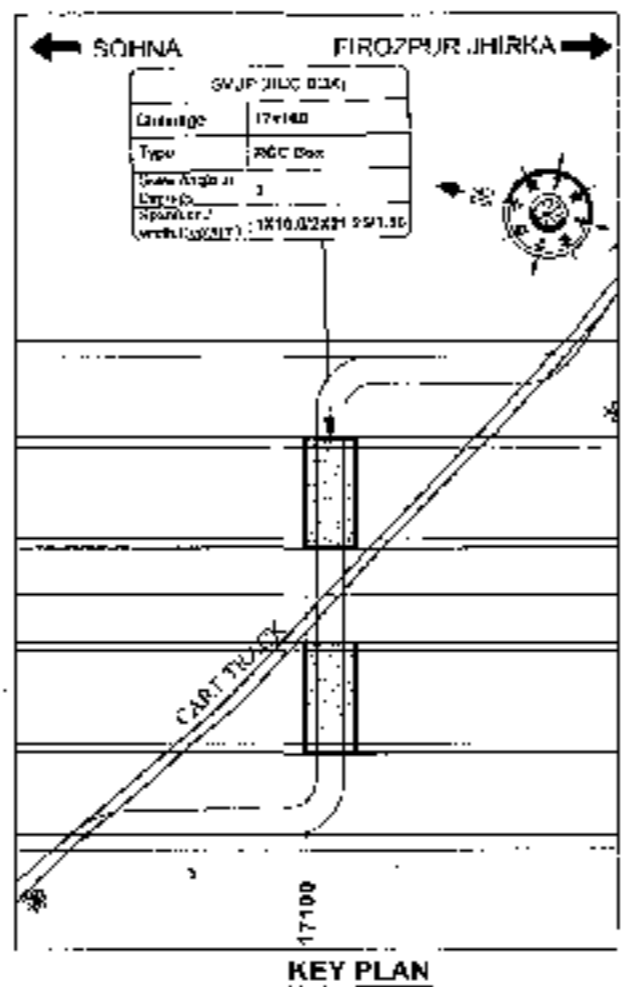
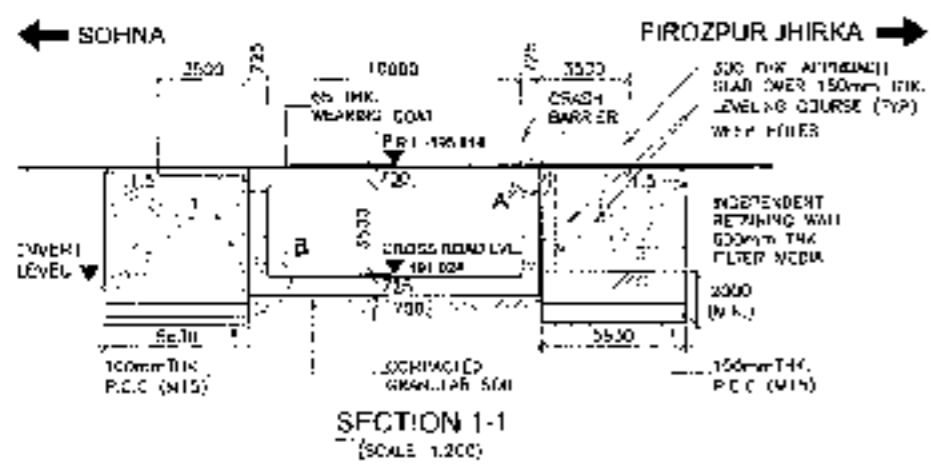
SCALE:-
 AS SHOWN

DWG TITLE:-
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 SVD/SIZE 1X10.0X3.5m
 A1 (CH - 1)+417
 (SOHNA - FEROZPUR JHIRKA)

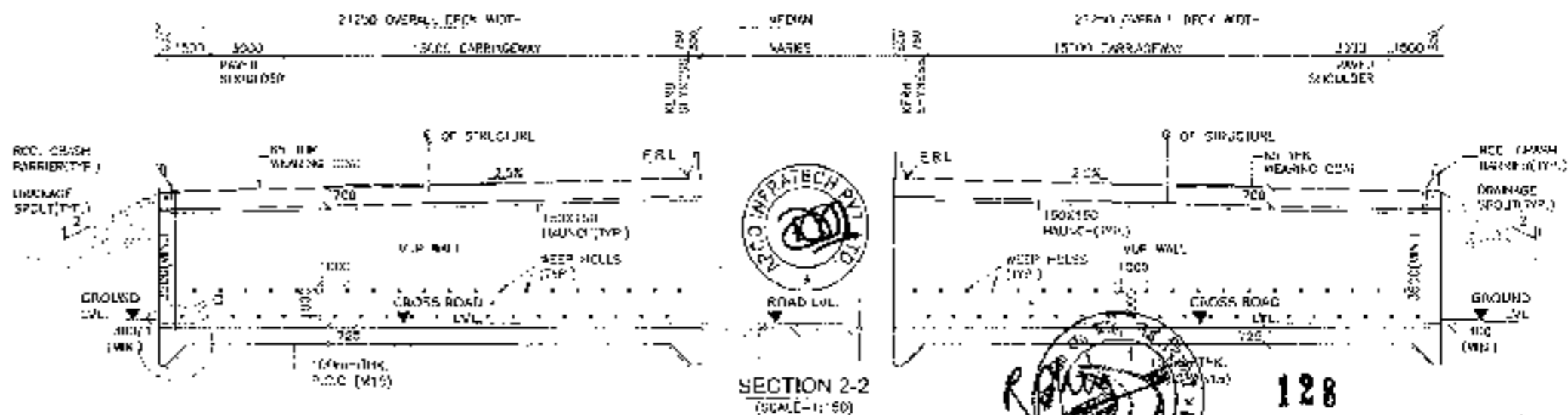
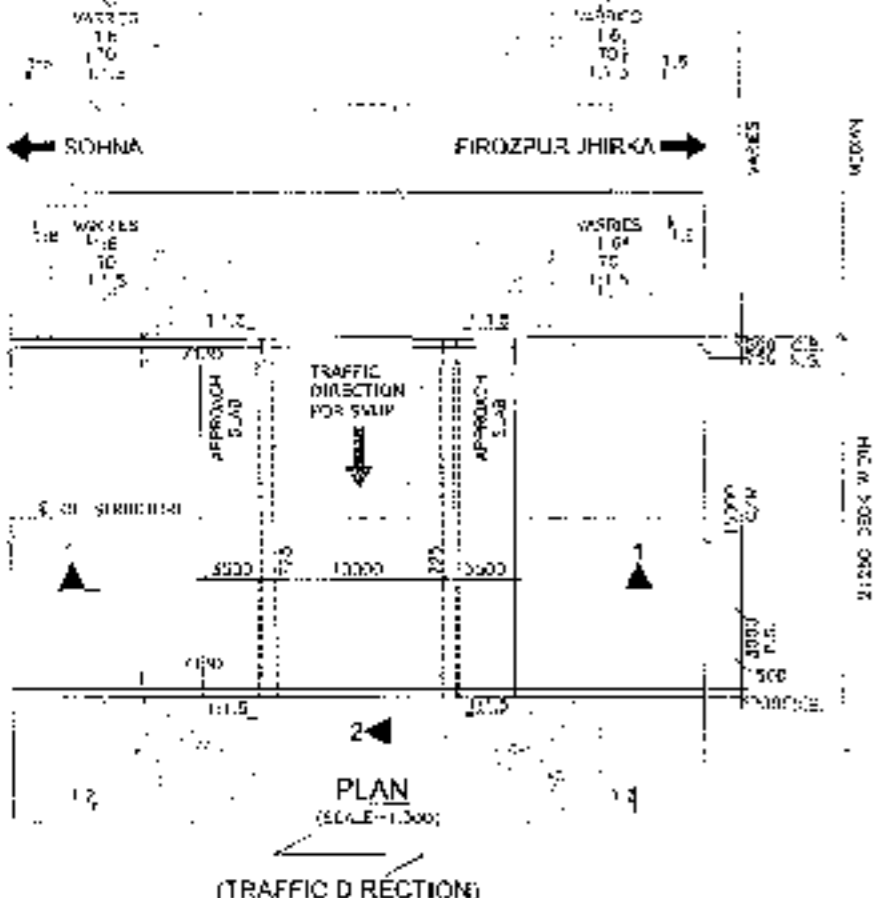
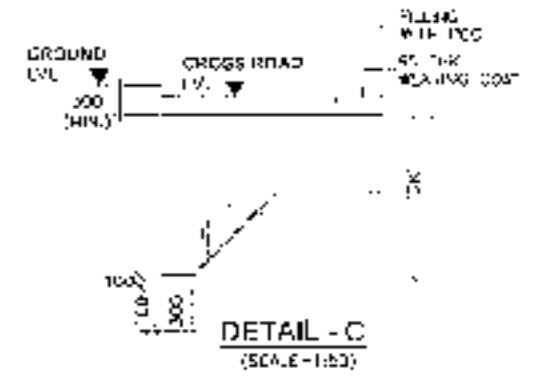
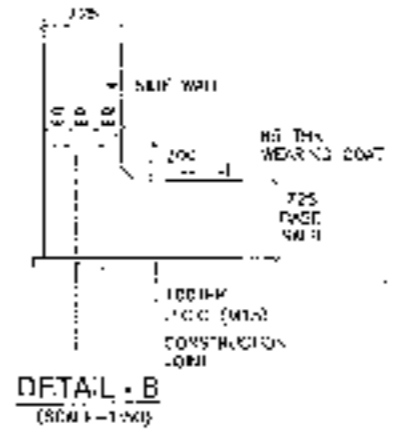
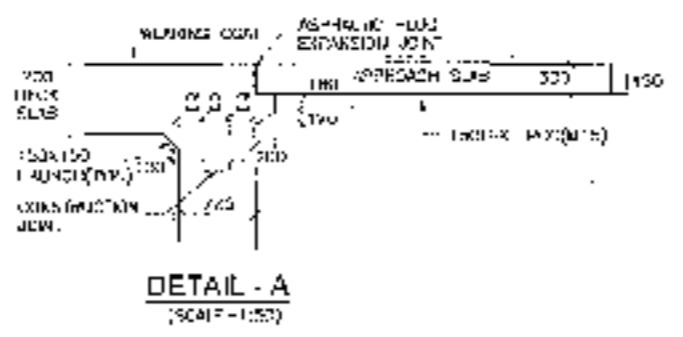
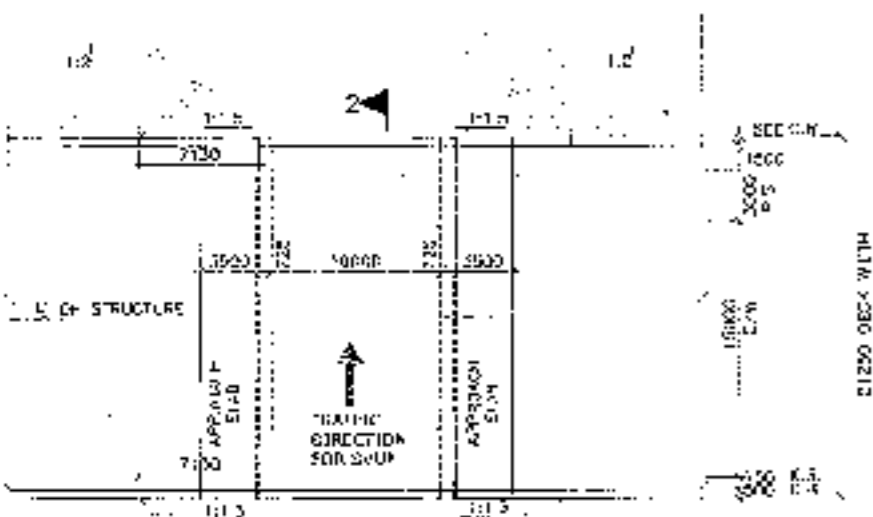
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DRAWING No. 07001/2017/00000-07001/2017/00000-544/AS-100
 DATE AUGUST 2018
 PREPARED BY: PKR
 CHECKED BY: M.E.
 APPROVED BY: P.C.
 SHEET 2 OF 2

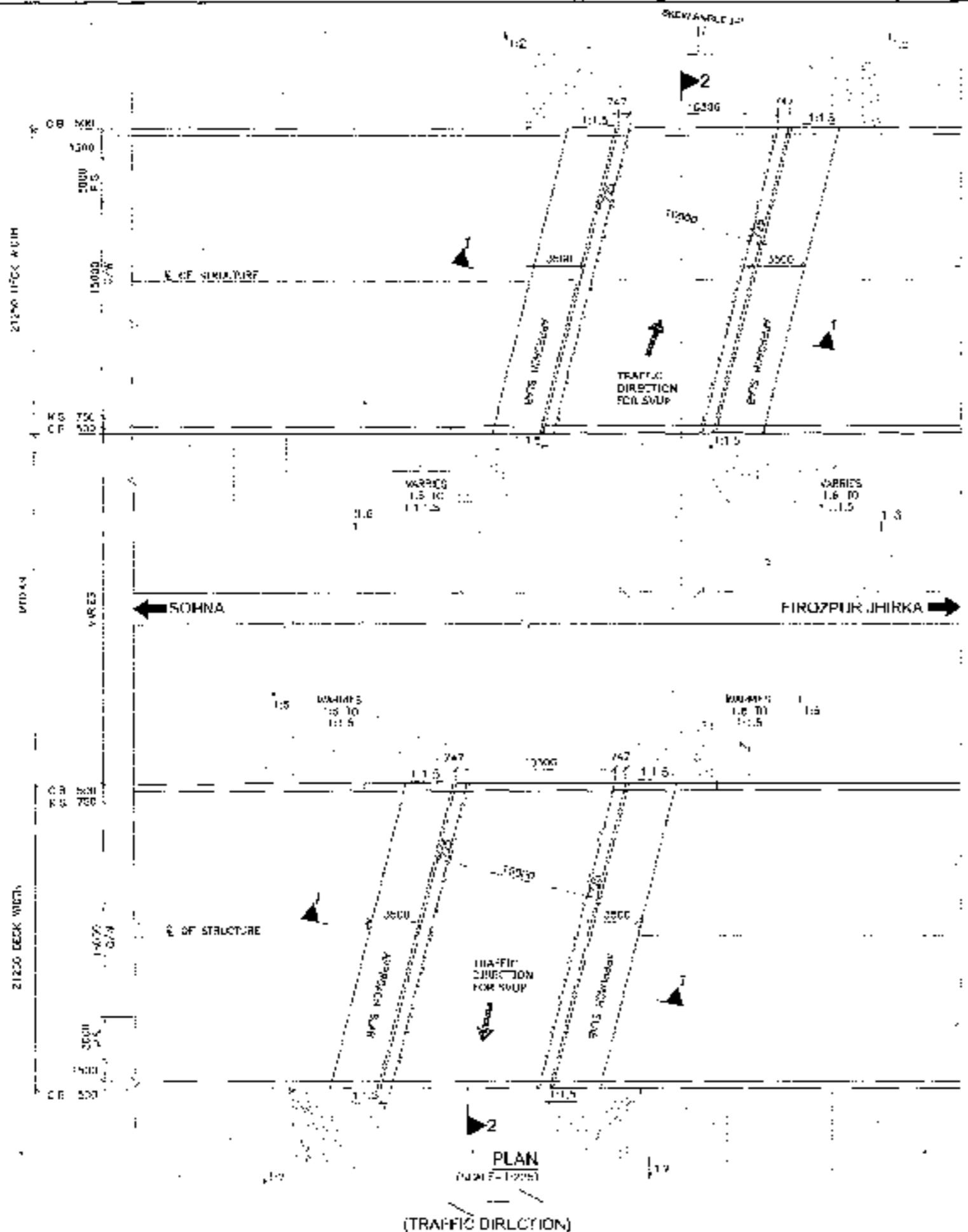




- NOTES:**
- ALL DIMENSIONS ARE IN METRE AND LEVELS ARE IN METRE UNLESS OTHERWISE NOTED. ONLY BENTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSION SHALL BE SCALD.
 - PROPOSED STRUCTURE SHALL BE DESIGNED FOR 6 LANE AS PER IRC-2017. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF MC TOP AND RC SLAB & TOWER, AND FOUNDATION IS TO BE ALSO BE CHECKED FOR SPECIAL VEHICLE.
 - CONCRETE SHALL BE DESIGN M20 AND SHALL BE OF CLASS AS INDICATED BELOW:-
 FOR LEVELING DRAIN: M-15
 FOR RCC: M-20
 FOR CHASE WALL: M-20
 FOR APPROACH SLAB: M-20
 FOR RETAIN: M-20
 FOR FLOOR: M-20
 - GRADE OF FLOOR SHALL BE VERIFIED ACCORDING TO IRC 150.
 - GRADE CORRE TO GROUND SURF SHALL BE AS FOLLOWS -
 1. TOP SOLE: 4000
 2. WALL (BOTH FACE): 5000
 3. WALL (BOTH FACE): 5000
 4. FLOOR: 5000
 - BACK FILLING SHOULD BE PROVIDED AND RETURN WALL SHALL CONSIST OF SEVERED PARTS CONFORMING TO APPROX. 1/3 OF TOTAL DEPTH HAVE PROTECTIVE G.O. 0.250
 $5 \times 2 \times 6 = 22 \text{ kg/m}^3$
 - SAFETY CONNECTION AND EXTENT OF SAFETY WALL SHALL BE AS PER RETAIN WALL SHALL CONFORM TO SPECIFICATION IS APPROX. 5 OF MC 78-2017.
 - WEAP HILLS SHALL BE PROVIDED AT 1000 C/C, BOTH HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN A SANGGED MANNER IN APPROXIMATE WITH RETURN WALL TO THE TOP ABOVE GROUND LEVEL FOR EACH LANE.
 - DOWN DRAIN AT APPROX. 1000 C/C SHALL CONSIST OF 1-1/2" DIA. OF 150MM DIA. OVER 150MM DIA. LAMPED (FRASE) IS PROVIDED AND LEVEL SHALL BE MAINTAINED WITH THE BELOW PLAN & PROFILE DRAWINGS AND VARIATION OF 10% SHALL BE REPORTED TO OWNER FOR APPROVAL.
 - THIS STRUCTURE LIES IN ZONE 200E IN 12-41 DRAWING AND TENTATIVE MAY BE CHANGED AFTER FINAL DESIGN IS COMPLETED BY ENGINEER IS HOUSING.



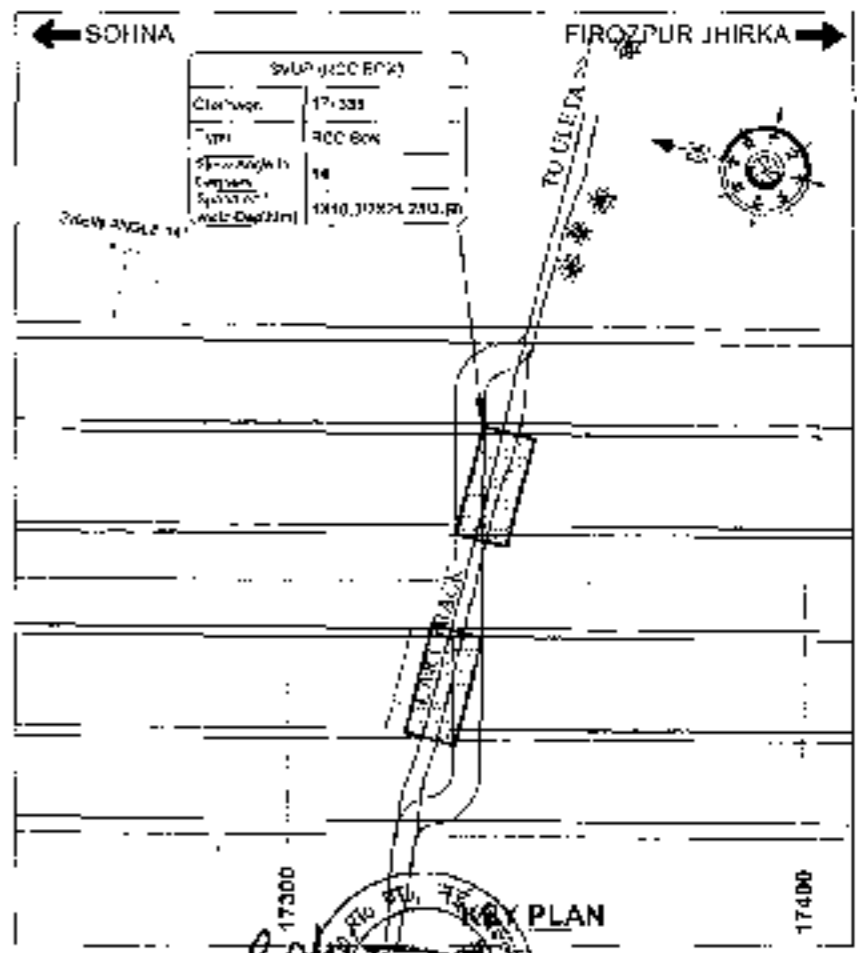
CLIENT: National Highways Authority of India (Ministry of Road Transport & Highways, Govt. of India)	CONSULTANT: Chaitanya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, 2K, TOWER PLOT NO - 21-22, SECTOR-4, VAISHALI, GHATABARA PH: 0120-3223418, 4120472, FAX: 0120-4110472	PROJECT: Consultancy Service for the Preparation for Feasibility Report (RFR) for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-E/Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1, Ch. 0+000 to 18+461)	SCALE: AS SHOWN	DWG TITLE: GENERAL ARRANGEMENT DRAWING SWIP SIZE 1X10.02X3m AT CH. - 17+100 (SOHNA - FIROZPUR JHIRKA)	DRAWING NO.: CHOP-2020/ENR/HR/0-1/PROJ-17-12003-100	
					DATE: AUGUST 2018	Revision: 00
PREPARED BY: ICHICKRISBY		APPROVED BY:		DATE:		



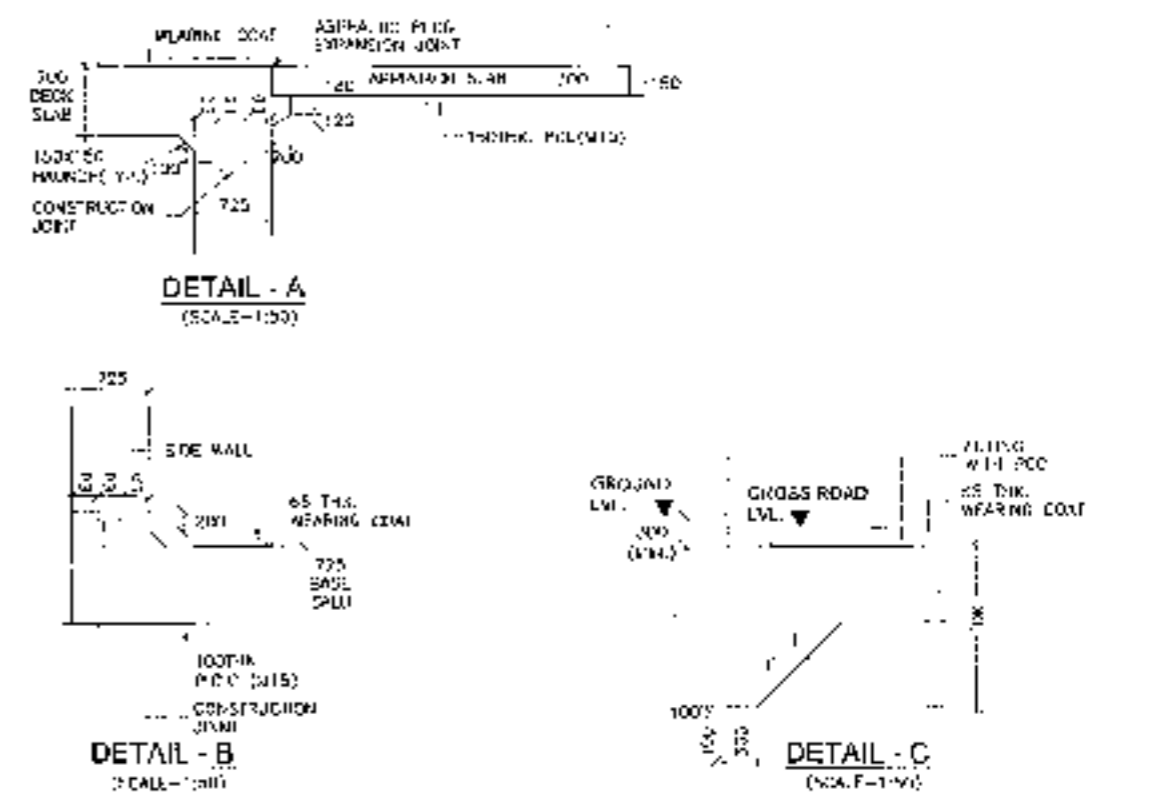
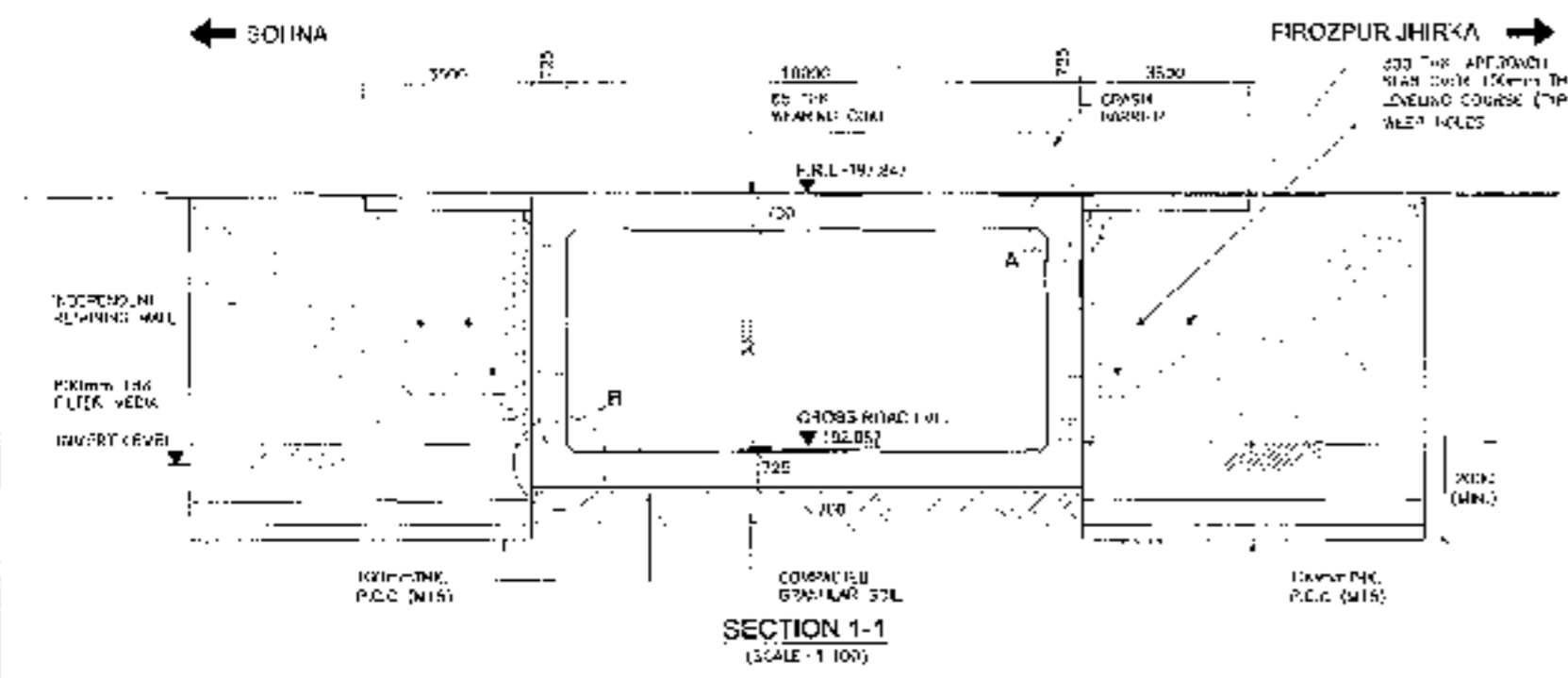
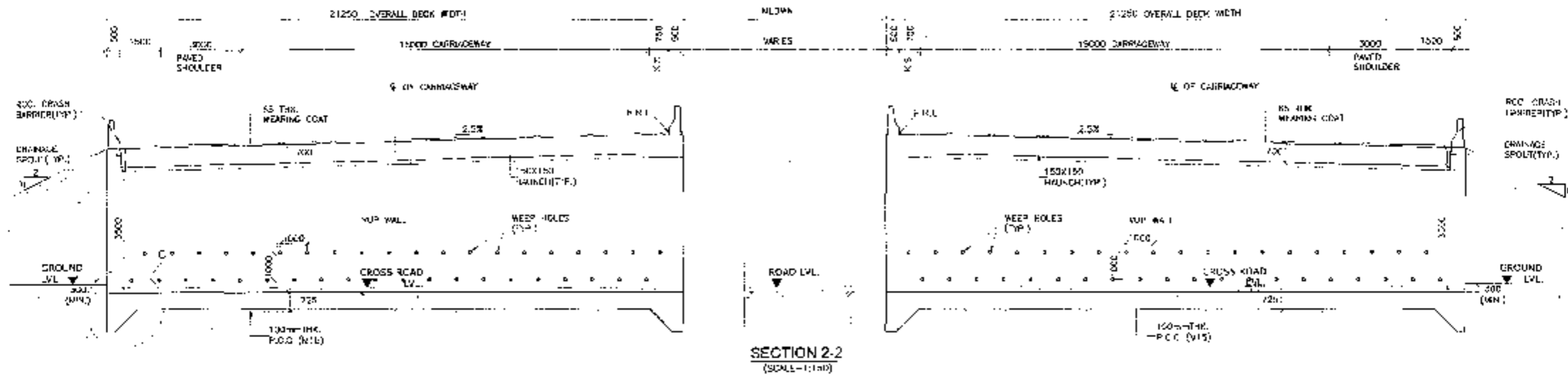
- NOTES:-**
1. ALL DIMENSIONS AND LEVELS ARE IN METERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED. NO DIMENSION SHALL BE SCALED.
 2. PROPOSED STRUCTURE SHALL BE DESIGNED FOR A LIVE LOAD AS PER IS:808-2018. STRUCTURE SHALL BE DESIGNED FOR COMBINATION OF WIND AND EARTH QUAKE LOADS AS PER IS:800-2015. STRUCTURE SHALL BE DESIGNED FOR SEISMIC ZONE IV. IT SHALL ALSO BE CHECKED FOR SPECIM. STRAIN.
 3. CONCRETE SHALL BE DESIGN MIX AND SHALL BE OF GRADE AS MENTIONED BELOW:

RCC JOISTING COURSE	M 25
RCC DECK	M 30
CRASH BARRIER	M 40
APPROACH SLAB	M 30
RETAINING WALL	M 40
FOUNDING WALL	M 30
 4. GRADE OF GROUND SHALL BE F+000 CORRECTIVE TO 60/00.
 5. CLEAN COVER TO OUTER STEEL SHALL BE AS FOLLOWS:

a. TOP SLAB	40MM
b. WALL (EARTH FACE)	50MM
c. WALL (WIND EARTH FACE)	50MM
d. BOTTOM SLAB	75MM
 6. BACK FILLING BEHIND RETAINING AND RETURN WALLS SHALL CONSIST OF SELECTED FINE SANDS TO APPROX. 5% OF UNCRUSHED GRAIN PRESENT IN 75% (200) SIEVE & 25% (75) SIEVE.
 7. JOINT CONNECTION AND DETAIL OF BRIDGE, BEAMS, ABUTMENT AND RETURN WALL SHALL BE AS PER IS:800-2015. DIMENSIONS IN APPROX. 5% OF IS:800-2015.
 8. REEF PILES SPACED AT 1000 C/C TOP HORIZONTALLY AND VERTICALLY SHALL BE PROVIDED IN 1:1 SLOPES. DIMENSIONS IN APPROX. 5% OF IS:800-2015.
 9. GROUND BENEATH DECK SHALL CONSIST OF LAYERS OF MOUND ASPHALT CONCRETE OF 250MM THK OVER SAND STAINLESS GRADE (DRAINAGE AND LEVEL) SHALL BE KEPT WITH THE HIGHWAY PLAN & PROFILE DRAWINGS AND VARIATION (IF ANY) SHALL BE REPORTED TO ENGINEER FOR MODIFICATION.
 10. THIS STRUCTURE IS NOT TO BE USED AS A ROAD. ALL DIMENSIONS AND DIMENSIONS MAY BE CHANGED WITH OTHER DETAILS. LEGENDARY OF EXPOSURE & MODIFICATION.



CLIENT:- National Highways Authority of India Ministry of Road Transport & Highways, Government of India	CONSULTANT:- Chalanya Projects Consultancy Pvt. Ltd. C-6, 2ND FLOOR, K K YAWER PLOT NO-21-22, SECTOR-4, VAISHALI, GHAZIABAD PH: 0120-3223449, 4120472. FAX: 0120-4110472	PROJECT:- Consultancy Service for the Preparation of Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Prayojana (Lot-6 Package-4) (Sohna - Firozpur Jhirka section of Delhi-Vadodara Expressway) (Pkg-1, Ch. 0+000 to 18+461)	SCALE - AS SHOWN	DWG TITLE:- GENERAL ARRANGEMENT OF SVUP SVUP (SIZE 1X10.0X33.33M) AT CH. - 17+333 SOHNA (18022) & JHIRKA	DRAWING No.: C/CP/1/50064/PK/1/FR/01/17+333/170	(SHEET 1 OF 2)
					DATE: SEPTEMBER 2021	Revision: R0
PREPARED BY: PKD.		CHECKED BY: N.A.		APPROVED BY: A.C.		



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<p>CLIENT:- National Highways Authority of India</p>	<p>CONSULTANT:- Chaitanya Projects Consultancy Pvt. Ltd. C-5, 2ND FLOOR, R.K. TOWER PLOT NO.-21-22, SECTOR-4, VAISHALI, GHAZIABAD PH. 0120-3220419, 4120472, FAX 0120-4110472</p>	<p>PROJECT:- Consultancy Service for the Preparation for Feasibility Report/DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-6/Package-4) (Solana - Ferozpur Jhirka section of Delhi-Vadodra Expressway) (Phg-1, Ch. 0+000 to 16+481)</p>	<p>SCALE:- AS SHOWN</p>	<p>DWG TITLE:- GENERAL ARRANGEMENT DRAWING (SCALE SIZE 1X11) (DWS 5m) AT CH - 17+330 (SOHNA - FIROZPUR JHIRKA)</p>	<p>DRAWING No:- CPWD/120/2016/HR/11/330/100 DATE: 15th SEPTEMBER 2016 PREPARED BY: P.K.S. CHECKED BY: M.S. APPROVED BY: A.C.</p>
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