

# Government of Jammu & Kashmir



## JHELUM & TAWI FLOOD RECOVERY PROJECT

Jammu Province

Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir

**(Chiralla Link Road in Doda District)**

**(Length : 10.138 km)**

**(DRAWINGS)**

**(Detailed Project Report)**

**September 2019**

**ep<sup>t</sup>isa**

# *ROAD DRAWINGS*



≡ LIST OF DRAWINGS ≡

## LIST OF DRAWINGS FOR ROAD

Sl. No.	Descriptions	Drawing No.	No.of Sheet
(A)	ROAD WORKS		
1.	List of Drawings	EPTISA/JTFRP/DPR/J&K/LOD-01	01
2.	Legend, Abbreviations & General Notes	EPTISA/JTFRP/DPR/J&K/LEGEND-01	01
3.	Index Map	EPTISA/JTFRP/DPR/J&K/IM-01	01
4.	Typical Cross Section	EPTISA/JTFRP/DPR/J&K/TCS-01 to 03	03
5.	Strip Plan	EPTISA/JTFRP/DPR/J&K/SP-01 to 02	02
6.	Plan and Profile	EPTISA/JTFRP/DPR/J&K/PP-01 to 10	20
7.	Horizontal Alignment Report	EPTISA/JTFRP/DPR/J&K/HAR-01 to 05	05
8.	Vertical Alignment Report	EPTISA/JTFRP/DPR/J&K/VAR-01 to 05	05
9.	Signage Plan	EPTISA/JTFRP/DPR/J&K/SP-01 to 11	11
10.	Utility Relocation Plan-(For Electricity Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 11	11
11.	Utility Relocation Plan-(For Telephone Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 11	11
12.	Utility Relocation Plan-(For Water Department)	EPTISA/JTFRP/DPR/J&K/URP-01 to 11	11
13.	Tree Cutting	EPTISA/JTFRP/DPR/J&K/TC-01 to 11	11
14.	<i>Miscellaneous Drawings</i>		
i.)	Road Signs & Road Delineators - (3 Sheets)	EPTISA/JTFRP/DPR/J&K/MISC-01 to 03	03
ii.)	Typical Details of Distance Stone, Boundary Stone & Guard Post	EPTISA/JTFRP/DPR/J&K/MISC-02	01
iii.)	Typical Details of Metal Beam Crash Barrier	EPTISA/JTFRP/DPR/J&K/MISC-03	01
15.	<i>GIS Mapping</i>		
16.	Details of PCC Retaining Wall	EPTISA/JTFRP/DPR/J&K/RW-01	01
17.	Dimension Detail of Breast Wall	EPTISA/JTFRP/DPR/J&K/BW/01	01
18.	<i>Culvert Drawings</i>		
i.)	Typical General Arrangement Drawing for Single Cell Box Culvert	EPTISA/JTFRP/DPR/J&K/BOX/GAD/01	01
ii.)	Typical General Arrangement Drawing for Single Cell Pipe Culvert	EPTISA/JTFRP/DPR/J&K/PIPE/GAD/01	01

CLIENT:  Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.	PROJECT: Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)	DESIGN CONSULTANT:  <b>Eptisa</b> <i>Servicios de Ingeniería S.L</i> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com		TITLE : LIST OF DRAWING
		DRAWN BY : SD	DESIGNED BY : SCK/MM	APPROVED BY : KG
REV.	DATE	DESCRIPTION	REV.	DATE

≡ LEGEND, ABBREVIATIONS & GENERAL NOTES ≡

**LEGEND**

**A. PLAN**

*a) Existing*

1	Security Room		31	Divider		61	Kancha House Residential	kh-r.	
2	Pump house		32	Dusbin		62	Km Stone	kmp.	
3	Solar		33	Earthen Road		63	Lamp Post	lp.	
4	Rail trac		34	Bitumen Road		64	Semi Pucca House Commercial	sp-c.	
5	Railing		35	Existing Center Line		65	Semi Pucca House Residential	sp-r.	
6	Telephone Pst		36	Shed		66	Survey Station	stn.	
7	Under Construction Building		37	Sign Board		67	Pucca House One Storied Commercial	ph-i-c.	
8	Hoarding Post		38	Bedi		68	Pucca House One Storied Residential	ph-i-r.	
9	Water Tank		39	Canal / River		69	Pucca House Two Storied Commercial	ph-ii-c.	
10	Wire Crossing Details		40	Drain		70	Transformer	tns.	
11	P.c.c Road		41	Alart Post		71	TREE 1 (A?300 TO A?600)	t1	
12	Pucca House One Storied Commercial Residential		42	Compound wall		72	TREE 2 (A?600 TO A?900)	t2	
13	Pucca House Two Storied Residential		43	Fencing		73	TREE 3 (A?900 TO A?1200)	t3	
14	Abandoned Building		44	Gate		74	TREE 4 (A?1200 TO ABOVE)	t4	
15	Damage Culvert		45	GPS Pillar					
16	Damage Pipe Culvert		46	Reference Pillar					
17	Ep Box		47	Electric Post					
18	Hotel		48	Guard Wall					
19	Retaining Wall		49	Temple / Mandir					
20	One		50	Pond / Ditch / Water Logged					
21	Parking		51	Nala / Natural Stream					
22	Shoulder		52	Petrol Pump					
23	Pave Shoulder		53	Height Must Light					
24	Pavement		54	Water Tap					
25	Pipe Culvert		55	Wildlife Sanctuary Sign Board					
26	Seating bench		56	H.F.L					
27	Showroom		57	Toilet					
28	Stair		58	Handpump/Tube well					
29	Chamber		59	OFC					
30	Cover Drain		60	Kancha House Commercial					

**GENERAL NOTES**

**A) General**

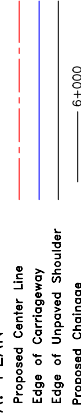
- All angles are in degree (°) – minute (') – second (") format.
- All distances are in kilometres and all levels are in meters unless otherwise specified.
- All the co-ordinates (X, Y) are with respect to GPS values (established for project road at 2 km interval).
- Details shown in the plans are based on topographical survey carried out under the assignment.
- The scale mentioned for all drawings is applicable for A2 sheet.

**B) Geometric Design**

- The pavements have been considered to be related about the Carriageway Center line to obtain requisite amount of superelevation.

*b) Proposed*

**A. PLAN**



**B. PROFILE**



CLIENT :



Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-180 009.

PROJECT :

Consultancy Services for Preparing Detailed Project Report  
for the Road works in Jammu and Kashmir  
(Chiralla Link Road in Doda District)

DESIGN CONSULTANT:

**eptisa**  
Eptisa Servicios de Ingeniería S.L  
Unit 1205, 12th Floor, Tower 1, PS Srijan  
Corporate Park, Plot No. 2, Block EP & GP,  
Sector V, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

TITLE :

LEGEND, ABBREVIATIONS & GENERAL NOTES

DRAWN BY : SD

DESIGNED BY : SCK/MM

APPROVED BY : KG

SCALE : N.T.S

DESCRIPTION

REV

DATE

REV

DATE

DESCRIPTION

REV

DATE

REV

DATE

REV

DATE

REV

DATE

REV

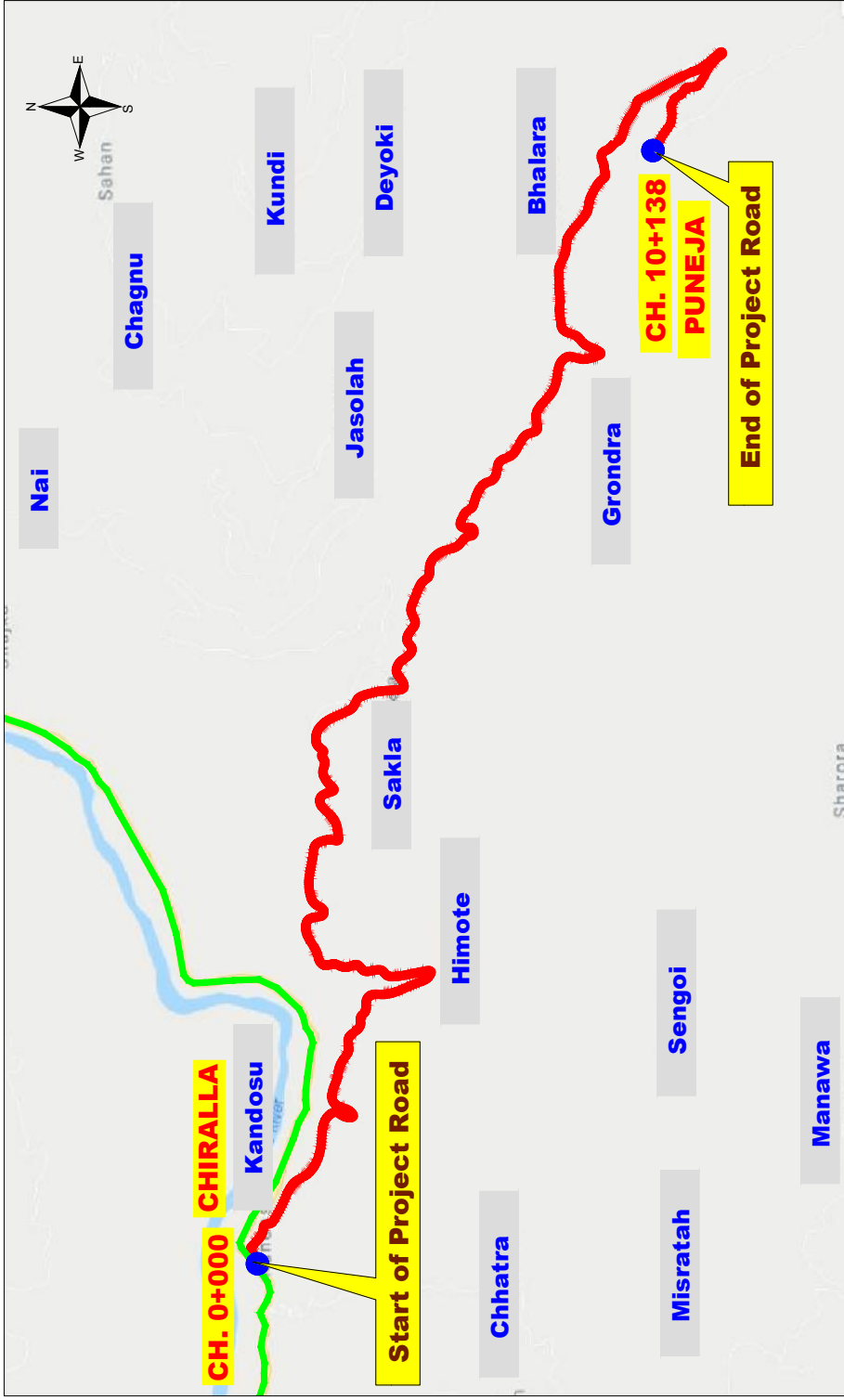
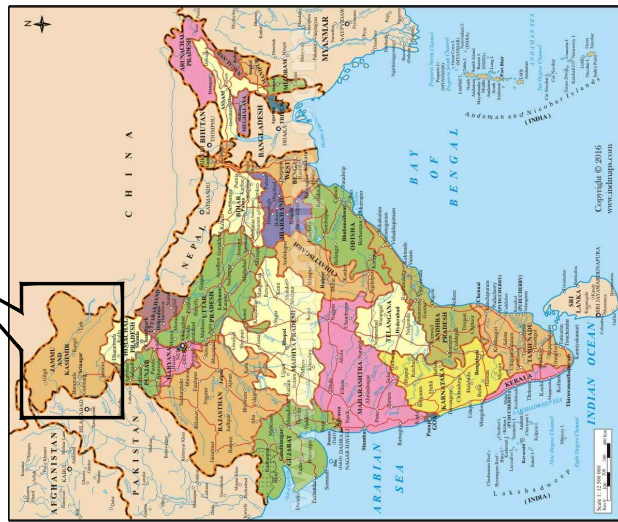
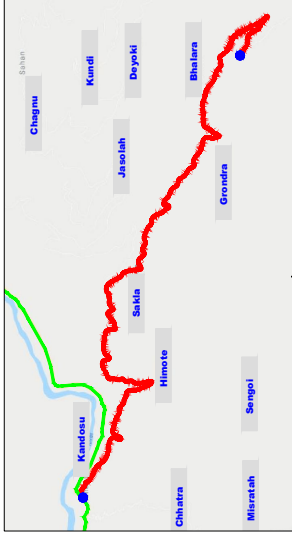
DATE

REVISION : R-1



September 2019



☰ INDEX MAP ☰



Project Road Stretch  
National Highway

CLIENT :	 Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.		PROJECT :	Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)		DESIGN CONSULTANT :	 <b>Eptisa</b> Servicios de Ingenieria S.L. Unit: 1203, 12th floor, Tower 1, PS Srijiang Corporate Park, Plot No. 2, Block EP & GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com	
	DRAWN BY : SD DESIGNED BY : SK/MMM APPROVED BY : KG SCALE : N.T.S	TITLE : <b>Index Map</b>		REV : DATE : DESCRIPTION : N.T.S	DRG. NO. : EPTISA/JTRF/DRP/J&K/M/01 REVISION : R-1 September 2019			

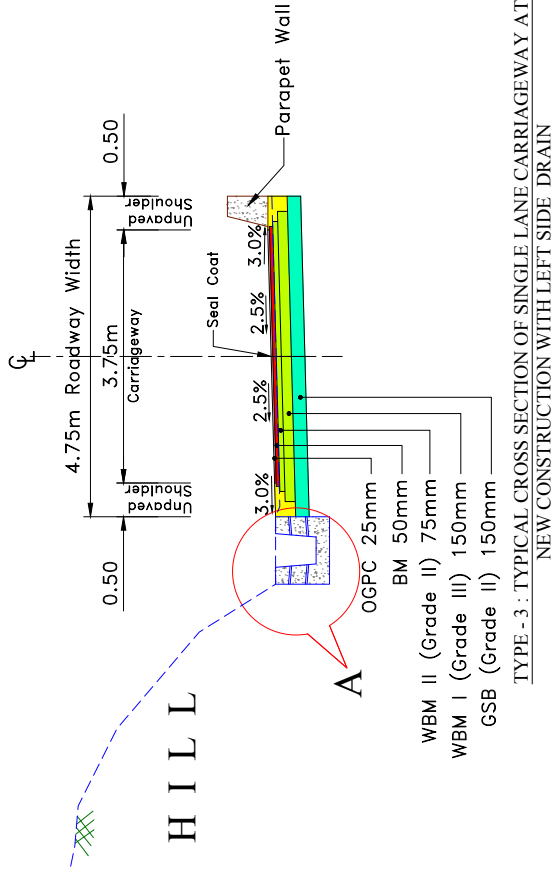
☰ TYPICAL CROSS SECTIONS ☰



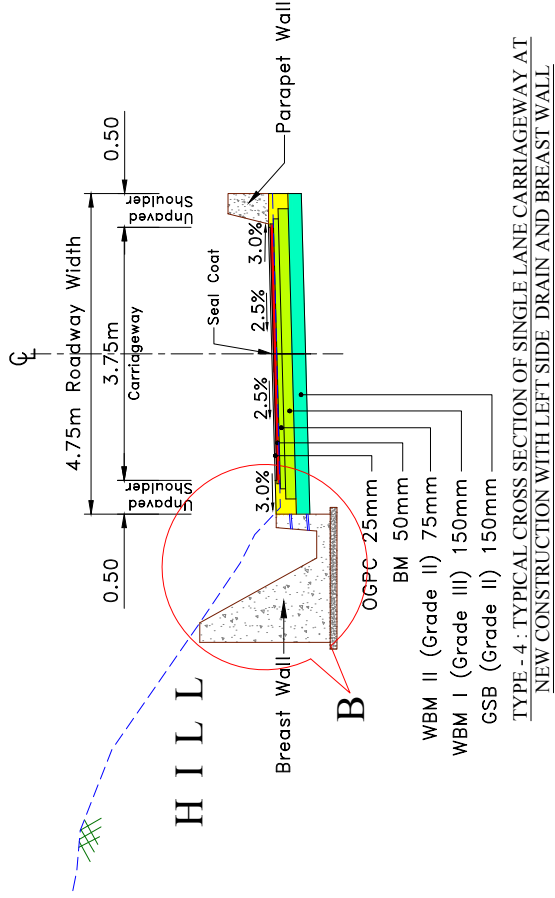


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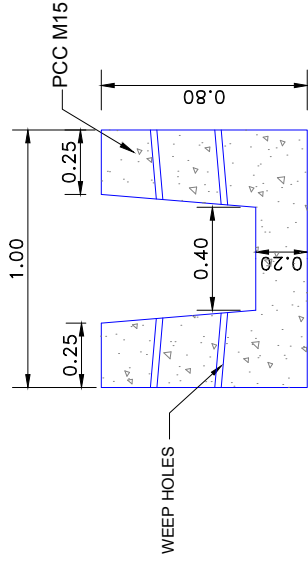
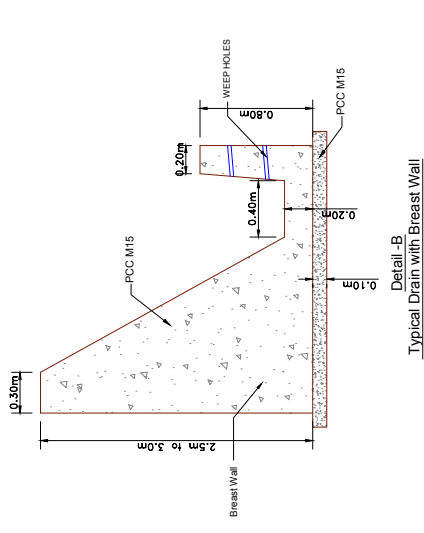
1. PCC upto 75mm thick shall be done by BM.
2. PCC from 75mm to 225mm thick shall be done by WBM after dismantling Existing Bituminous Surface.
3. PCC of thickness more than 225mm shall be done GSB after dismantling Existing Bituminous Surface.
4. PCC shall decided based on difference in level of FRL and existing level and/or level after dismantling and recompaction of Existing Bituminous Surface.



TYPE - 3 : TYPICAL CROSS SECTION OF SINGLE LANE CARRIAGEWAY AT NEW CONSTRUCTION WITH LEFT SIDE DRAIN



TYPE - 4 : TYPICAL CROSS SECTION OF SINGLE LANE CARRIAGEWAY AT NEW CONSTRUCTION WITH LEFT SIDE DRAIN AND BREAST WALL



Detail -A  
Typical Lined Drain

CLIENT :	 Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar - 190 008.		PROJECT :	Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)		DESIGN CONSULTANT:	 Eptisa Servicios de Ingenieria S.L. Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com	
	DRAWN BY: SD DESIGNED BY: SKMM APPROVED BY: KG SCALE: 1:80	TITLE: TYPICAL CROSS SECTION		REV:      DATE      DESCRIPTION	DRG. NO.: EPTISA/JTRP/DRP/U&K/TCS/02 REVISION: R-1 September 2019			

SI No.	Chaichange		Length (m)	Type
	From	To		
1	0+000	3+975	3+975	TCS1
2	3+975	4+670	0+695	TCS 2
3	4+670	5+175	0+505	TCS1
4	5+175	5+625	0+450	TCS2
5	5+625	5+775	0+150	TCS1
6	5+775	6+025	0+250	TCS2
7	6+025	6+595	0+570	TCS1
8	6+595	6+970	0+375	TCS2
9	6+970	7+275	0+305	TCS1
10	7+275	7+935	0+660	TCS2
11	7+935	9+435	1+500	TCS1
12	9+435	9+875	0+440	TCS3
13	9+875	9+925	0+050	TCS4
14	9+925	10+139	0+214	TCS3
			<b>10+139</b>	

Drain/ Drain with Breast wall

Drain

Drain +Breast Wall

Drain

Drain +Breast Wall

Drain

Drain +Breast Wall

Drain

Drain +Breast Wall

Drain


Drain +Breast Wall

Drain

Drain

Drain +Breast Wall

Drain

CLIENT :  
  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar - 190 008.

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

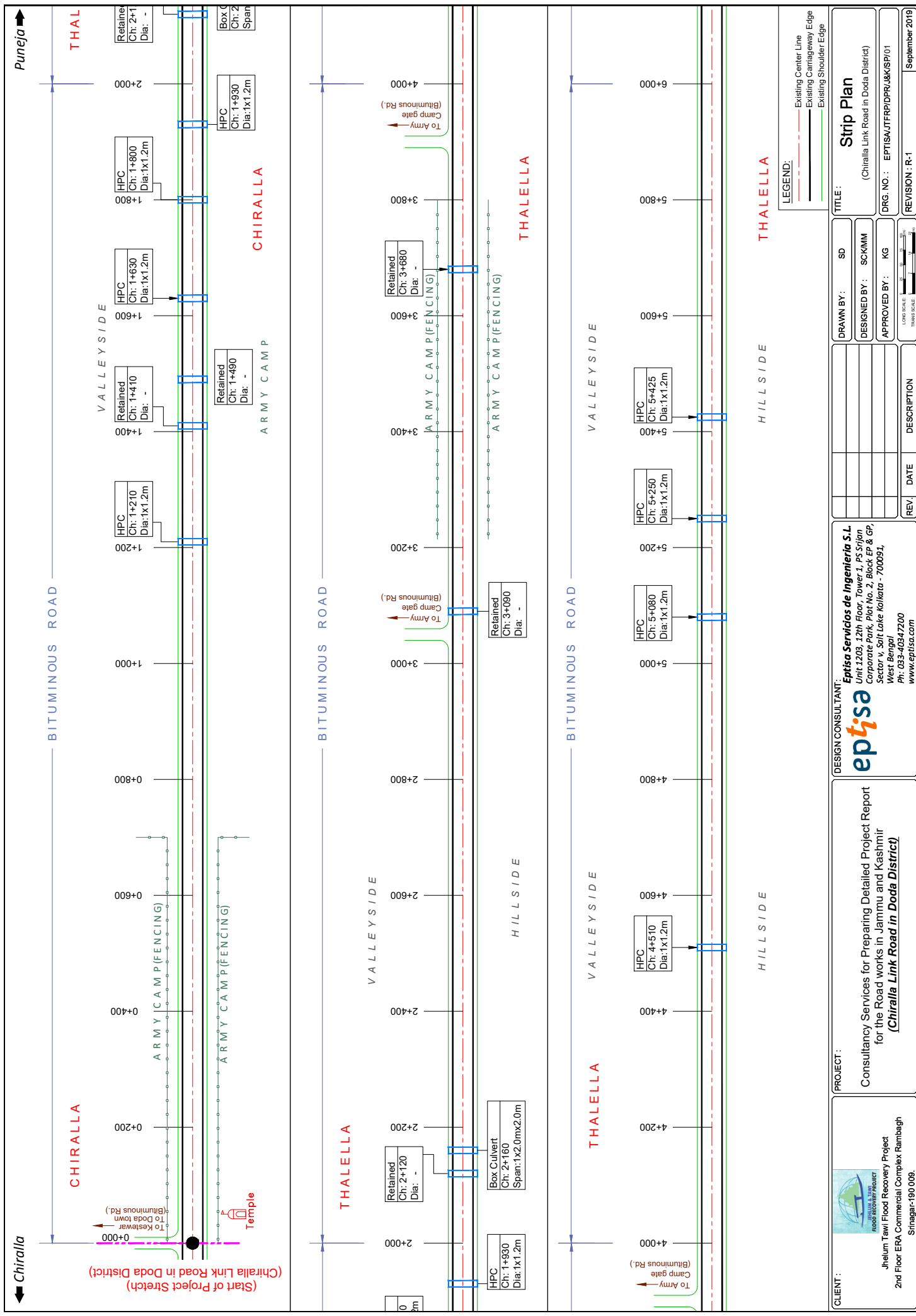
DESIGN CONSULTANT:  
  
**Eptisa Servicios de Ingeniería S.L.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV	DATE	DESCRIPTION

TITLE :  
**SCHEDULE OF CROSS SECTION**  
 DRG. NO. : EPTISA/JTRP/DRP/U&K/TCS/03  
 REVISION : R-1  
 September 2019

DRAWN BY : SD  
 DESIGNED BY : SCKMM  
 APPROVED BY : KG

≡ STRIP PLAN ≡



**LEGEND:**  
 - - - Existing Center Line  
 - - - Existing Carriageway Edge  
 - - - Existing Shoulder Edge

**TITLE:** Strip Plan  
 (Chiralla Link Road in Doda District)  
**DRG. NO.:** EPTISA/JTRP/DRP/U&K/SP/01  
**REVISION:** R-1  
 September 2019

**DESIGNED BY:** SD  
**DESIGNED BY:** SKMM  
**APPROVED BY:** KG  
 SCALE: 1:1000  
 DRAWN BY: SD

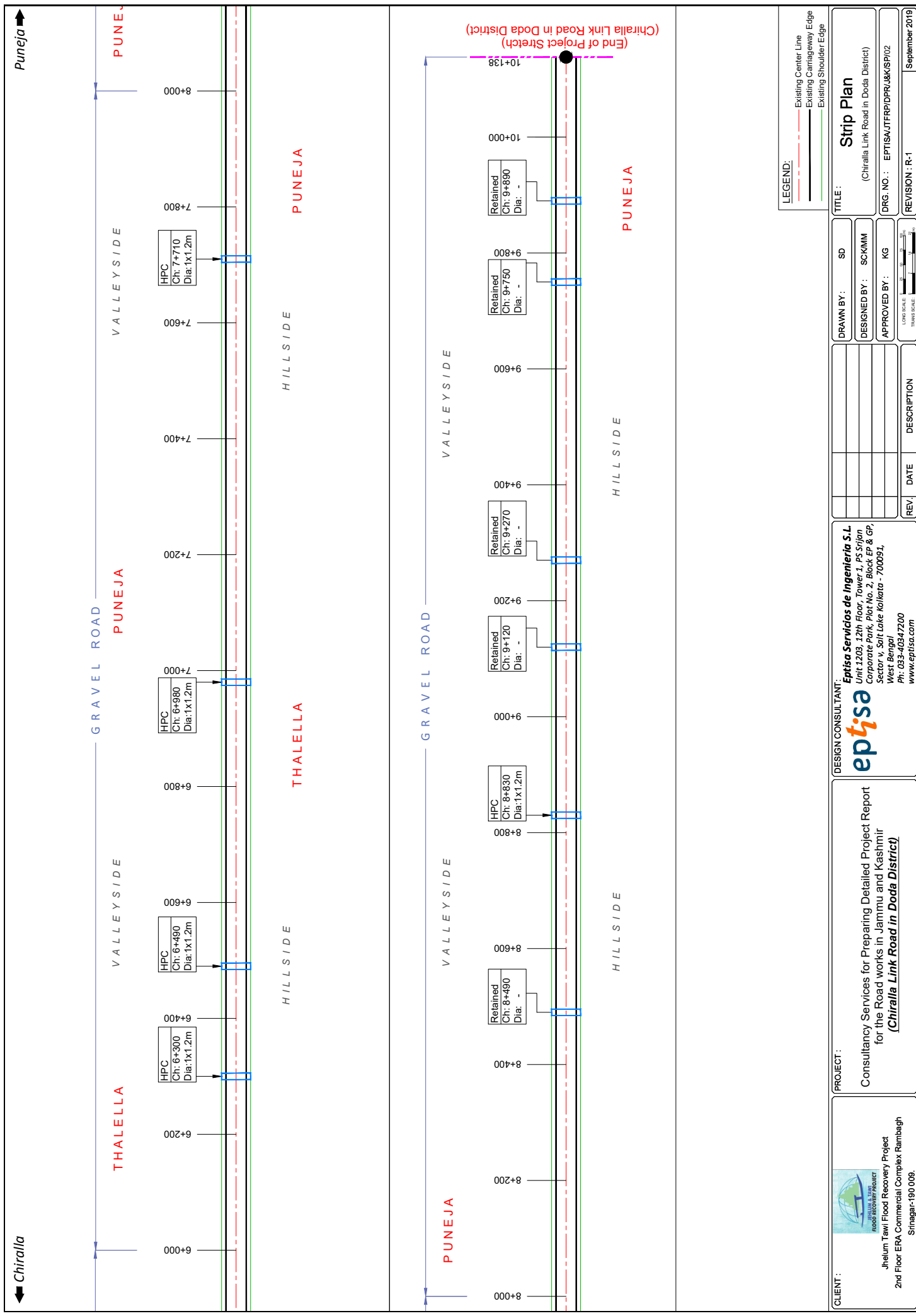
REV	DATE	DESCRIPTION

**DESIGN CONSULTANT:**  
**epitisa**  
 Eptisa Servicios de Ingenieria S.L.  
 Unit 1203, 12th Floor, Tower 1, PS Sriji  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector v, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 03-3-40347200  
 www.epitisa.com

**PROJECT:**  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

**CLIENT:**  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009.





← Chiralla

Puneja →

GRAVEL ROAD  
PUNEJA

VALLEYSIDE

THALELLA

VALLEYSIDE

HILLSIDE

PUNEJA

6+000

6+200

6+400

6+600

6+800

7+000

7+200

7+400

7+600

7+800

8+000

8+000

HPC  
Ch: 7+710  
Dia: 1x1.2m

HPC  
Ch: 6+980  
Dia: 1x1.2m

HPC  
Ch: 6+490  
Dia: 1x1.2m

HPC  
Ch: 6+300  
Dia: 1x1.2m

HPC  
Ch: 6+490  
Dia: 1x1.2m

HPC  
Ch: 8+830  
Dia: 1x1.2m

8+000

8+200

8+400

8+600

8+800

9+000

9+200

9+400

9+600

9+800

10+000

10+138

GRAVEL ROAD  
PUNEJA

VALLEYSIDE

HILLSIDE

PUNEJA

Retained  
Ch: 8+490  
Dia: -

HPC  
Ch: 8+830  
Dia: 1x1.2m

Retained  
Ch: 9+120  
Dia: -

Retained  
Ch: 9+270  
Dia: -

Retained  
Ch: 9+750  
Dia: -

Retained  
Ch: 9+890  
Dia: -

(End of Project Stretch)  
(Chiralla Link Road in Doda District)

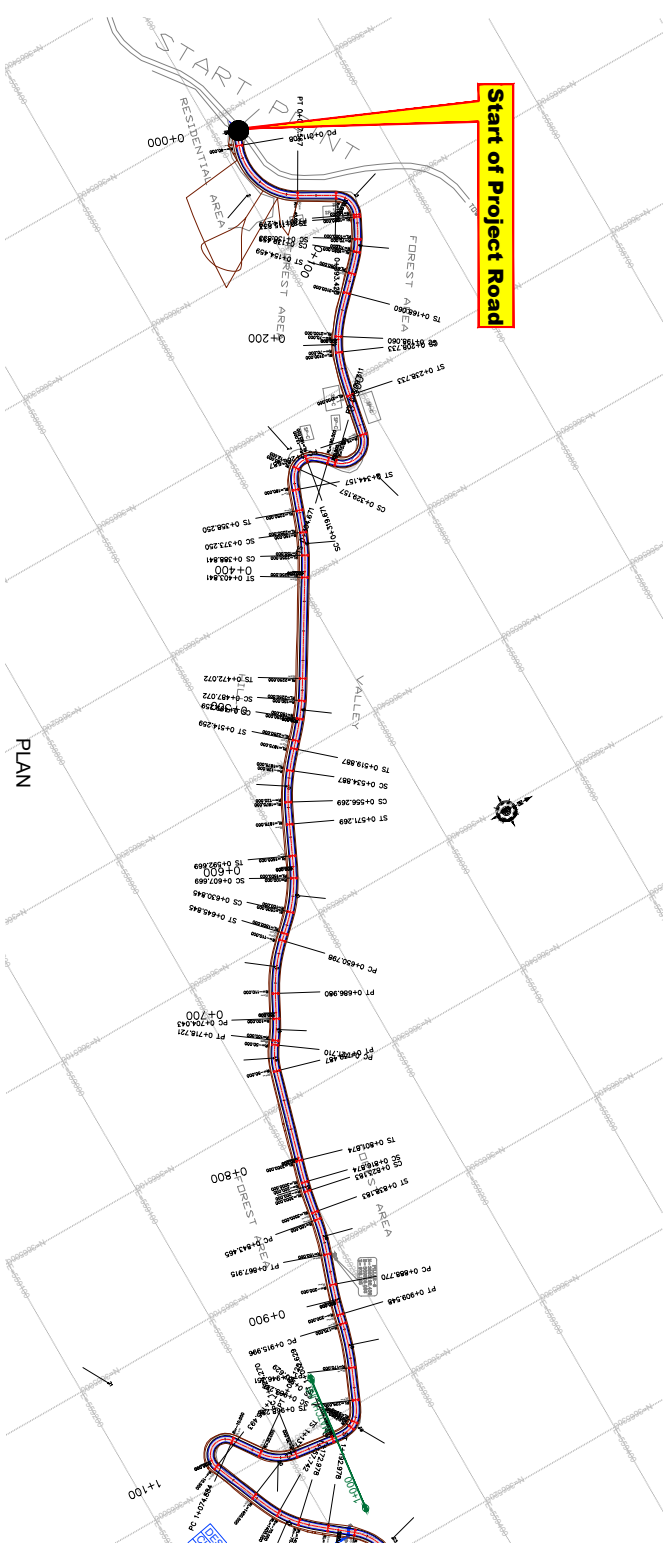
HILLSIDE

HILLSIDE

HILLSIDE

PUNEJA





PLAN

Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JTRP/DP/PR/J&K/HAR/01 to 05

CLIENT :  
  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Shriyaga-190 009

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

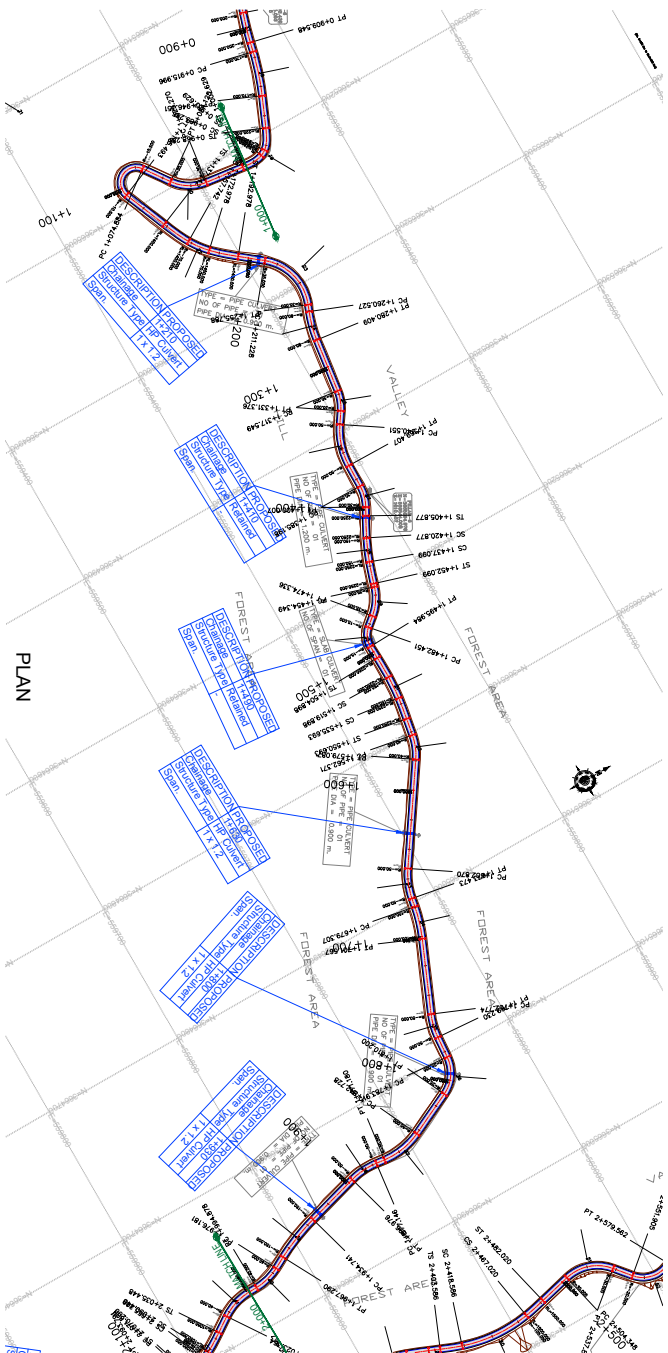
DESIGN CONSULTANT:  
  
**servicios de ingenieros s.l.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD	TITLE : Plan
DESIGNED BY : SCXMM	(Ch. 0+000 Km to Ch. 1+000 Km)
APPROVED BY : KG	DRG. NO. : EPTISA/JTRP/DP/PR/J&K/PP/01
SCALE : HOR 1:2500 VER 1:250	REVISION : R-1
	September 2019







PLAN

Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JTRP/DPR/J&K/HAR/01 to 05

CLIENT :  Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009

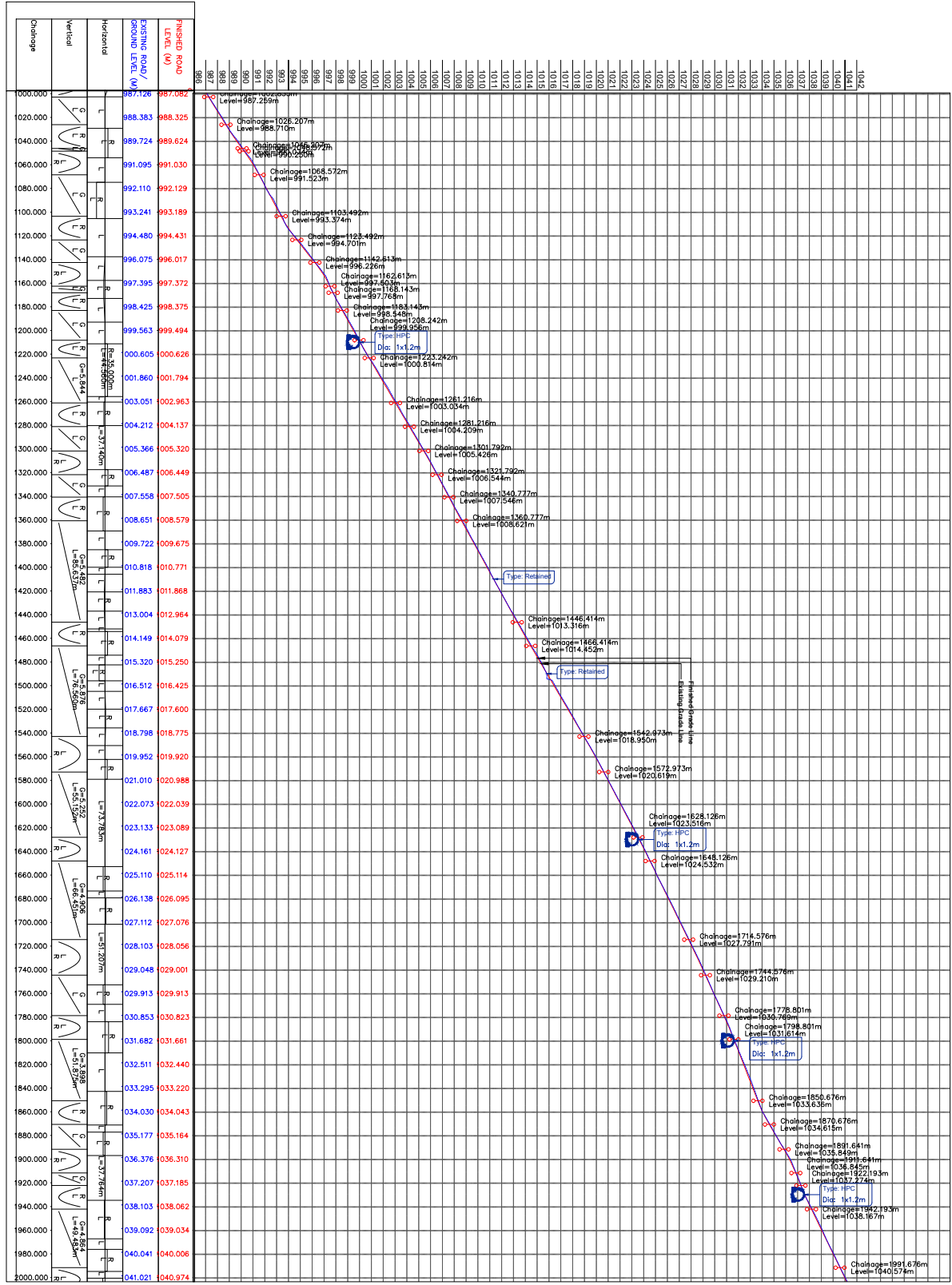
PROJECT : Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)

DESIGN CONSULTANT:  **Servicios de Ingenieros S.L.**  
Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal  
Ph: 033-40347200  
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD  
DESIGNED BY : SKJMM  
APPROVED BY : KG

TITLE : **Plan**  
(Ch. 1+000 Km to Ch.2+000 Km)  
SCALE : HOR 1:2500  
VER 1:250  
REVISION : R-1  
September 2019



PROFILE

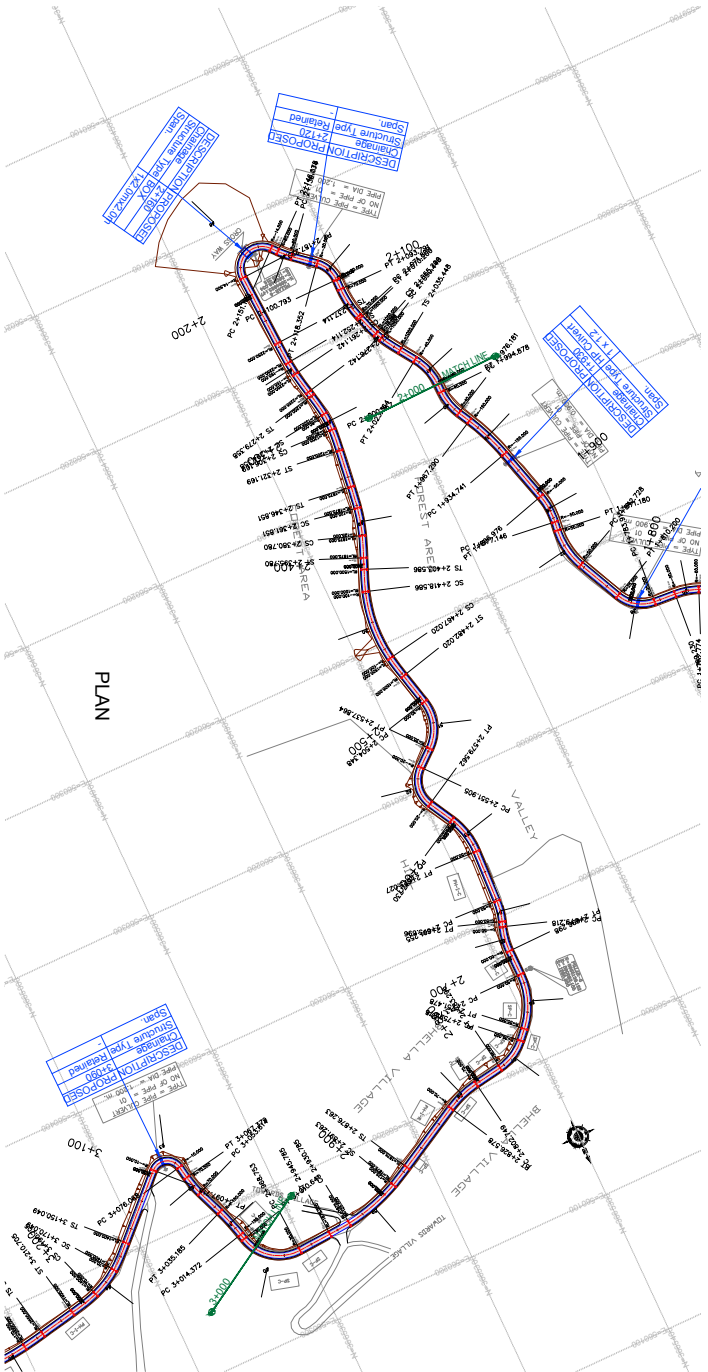
CLIENT :  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Ramnagar  
 Shri Nagar-190 009

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

DESIGN CONSULTANT:  
**epitisa** Servicios de Ingenieria S.L.  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.epitisa.com

REV.	DATE	DESCRIPTION

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 DESIGNED BY : SKMIM  
 APPROVED BY : KG  
 SCALE : HOR 1:2500  
 VER 1:250  
 TITLE : Profile  
 (Ch. 1+000 Km to Ch.2+000 Km)  
 DRG. NO. : EPTSAUTR/DP/RAK/PP/02A  
 REVISION : R-1  
 September 2019



Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JTRP/DP/PR/J&KHAR/01 to 05

CLIENT :   
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009

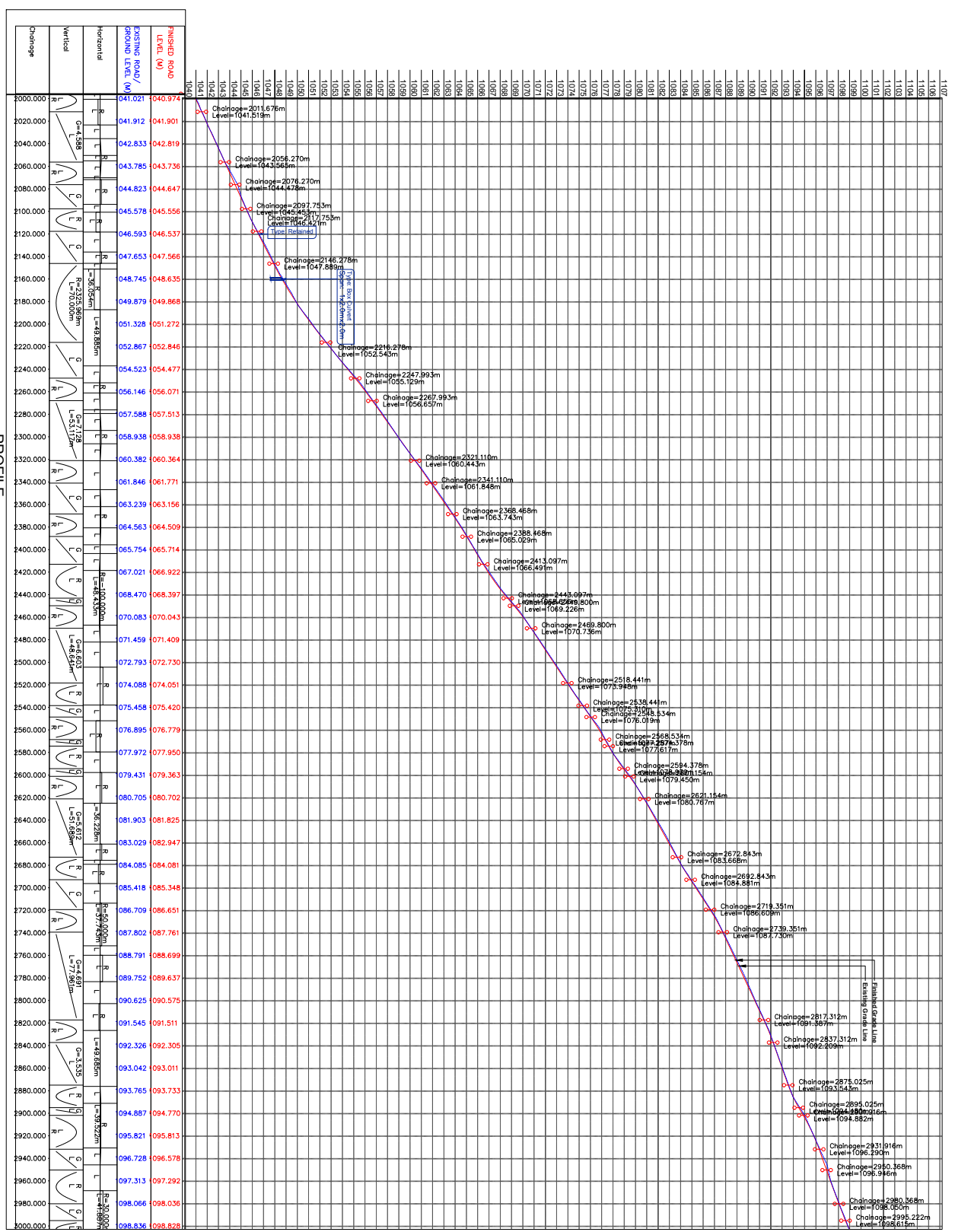
PROJECT :  
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DESIGN CONSULTANT:  
  
**servicios de ingenieria s.l.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD
DESIGNED BY :	SKJMM
APPROVED BY :	KG
SCALE :	HOR 1:2500 VER 1:250

TITLE :	Plan
REG. NO. :	EPTISA/JTRP/DP/PR/J&KHAR/03
REVISION :	R-1
DATE :	September 2019



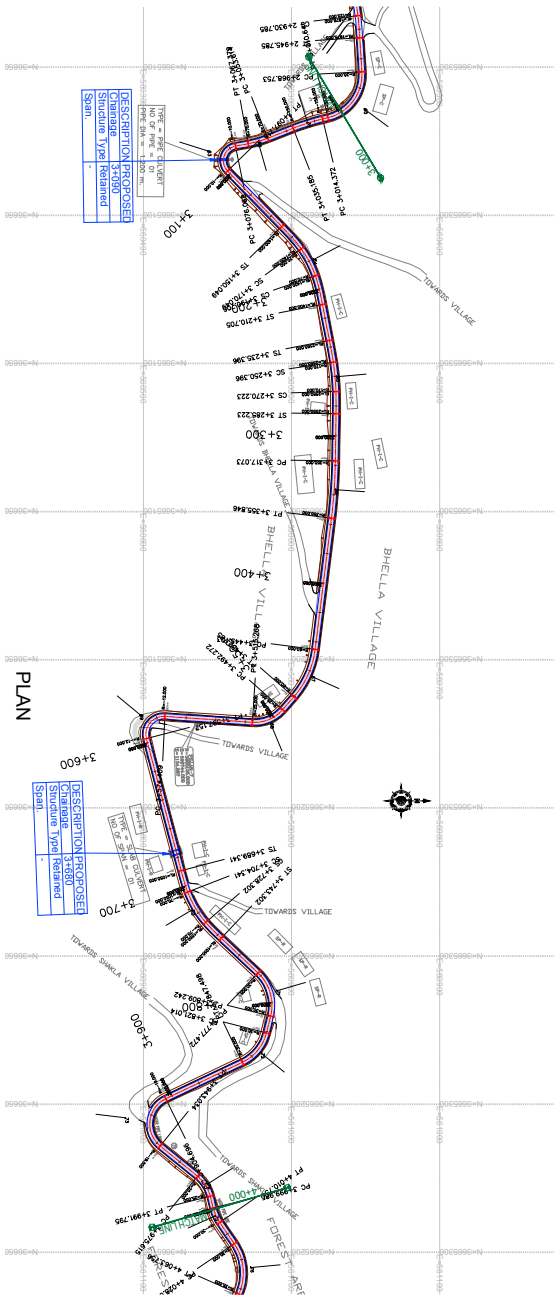
CLIENT :  
Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Shriprag-190 009

PROJECT :  
Consultancy Services for Preparing Detailed Project Report  
for the Road works in Jammu and Kashmir  
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**epitisa** Servicios de Ingenieros S.L.  
Unit 1203, 12th Floor, Tower 1, PS Srijan  
Corporate Park, Plot No. 2, Block EP & GP,  
West Bengal  
Sector V, Salt Lake Kolkata - 700091,  
www.epitisa.com

REV.	DATE	DESCRIPTION

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DESIGNED BY : SKKIM  
APPROVED BY : KG  
SCALE : HOR 1:2500  
VER 1:250  
TITLE : Profile  
(Ch. 2+000 Km to Ch. 3+000 Km)  
DRG. NO. : EPTISAUT/PR/DR/J&K/PP/03A  
REVISION : R-1  
September 2019



PLAN

Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JTRP/DPR/J&K/HAR/01 to 05

CLIENT :



Moadi Recovery & Rebuild  
Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009

PROJECT :

Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir  
**(Chiralla Link Road in Doda District)**

DESIGN CONSULTANT:

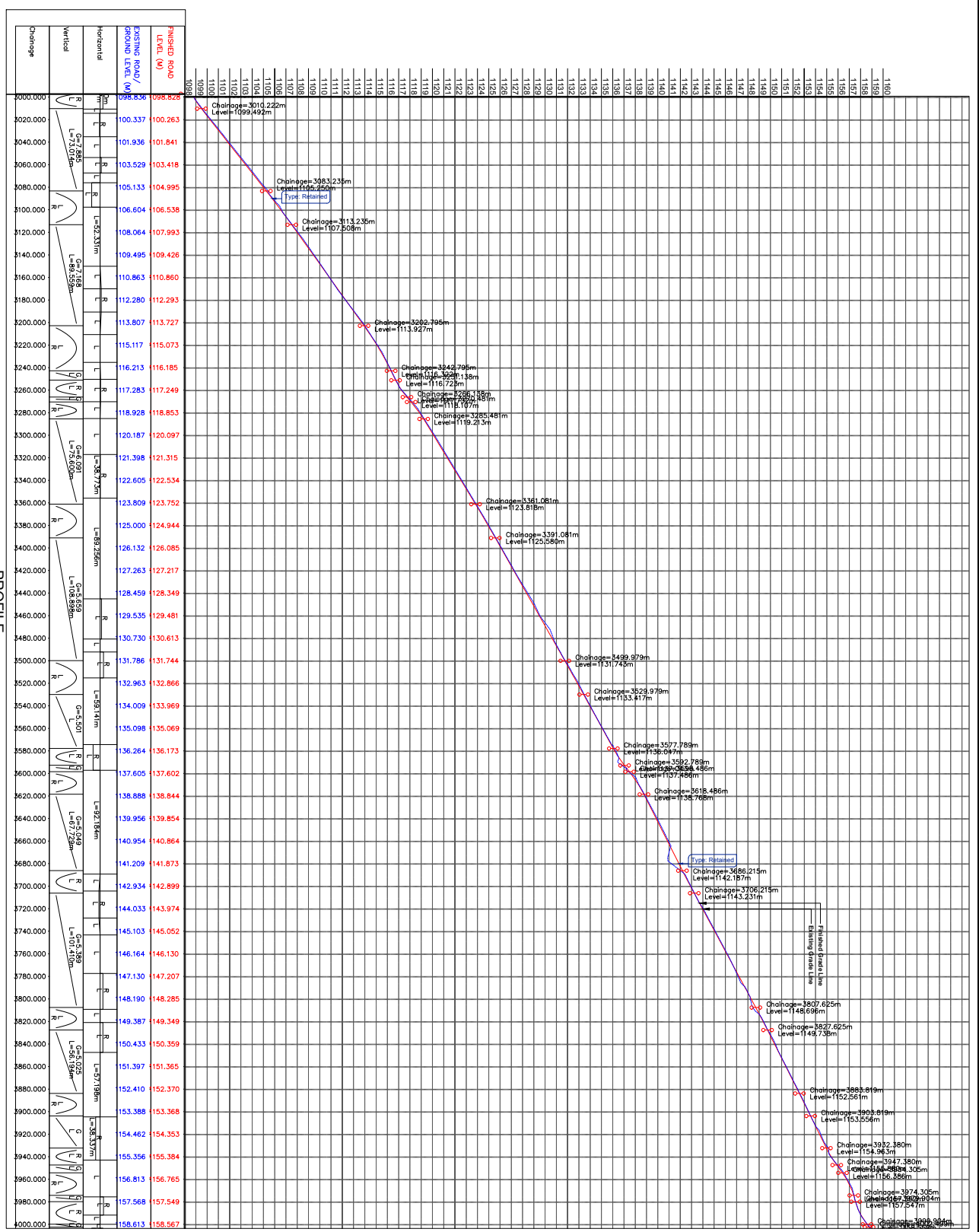


**Services de Ingenieria S.L.**  
Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD	TITLE :	Plan
DESIGNED BY :	SKXMM	(Ch. 3+000 Km to Ch.4+000 Km)	
APPROVED BY :	KG	DRG. NO. :	EPTISA/JTRP/DPR/J&K/PP/04
SCALE :	HOR 1:2500 VER 1:250	REVISION :	R-1
			September 2019





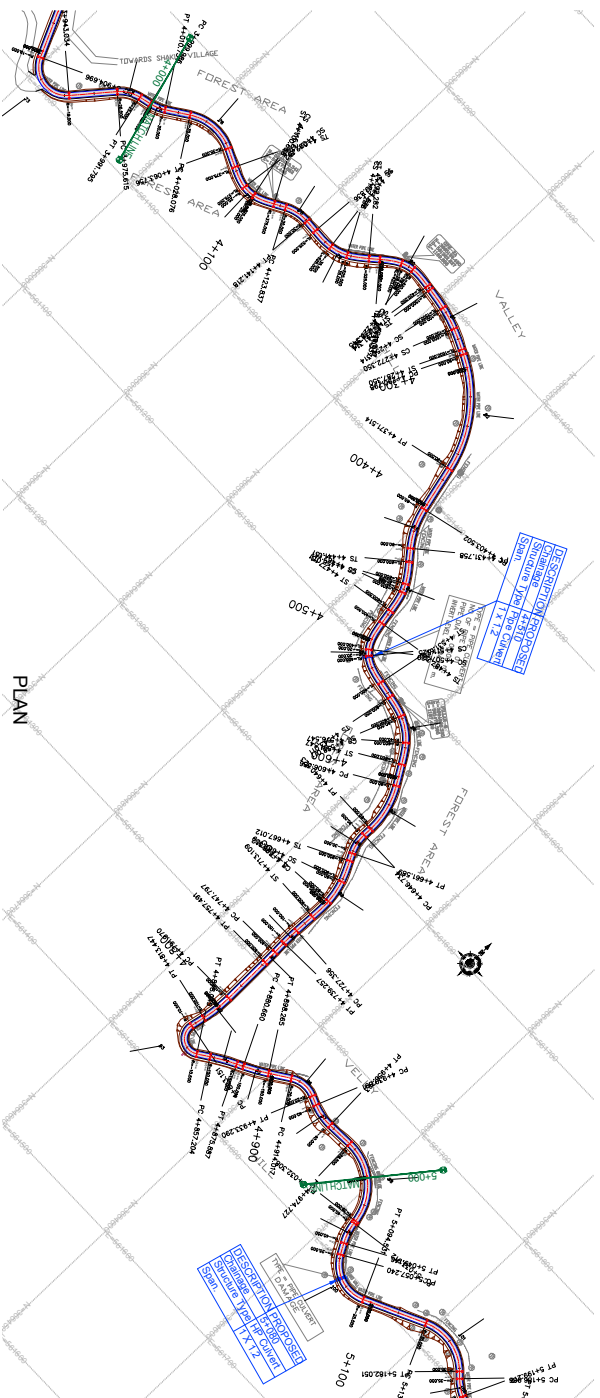
Chainage	Vertical	Horizontal	EXISTING ROAD / PROPOSED LEVEL (M)	FINISHED ROAD LEVEL (M)
3000.000			998.836	998.826
3020.000			100.337	100.263
3040.000			101.936	101.841
3060.000			103.529	103.418
3080.000			105.133	104.996
3100.000			106.604	106.538
3120.000			108.064	107.993
3140.000			109.495	109.426
3160.000			110.863	110.860
3180.000			112.280	112.293
3200.000			113.807	113.727
3220.000			115.117	115.073
3240.000			116.213	116.185
3260.000			117.283	117.249
3280.000			118.928	118.853
3300.000			120.187	120.097
3320.000			121.398	121.315
3340.000			122.605	122.534
3360.000			123.809	123.752
3380.000			125.000	124.944
3400.000			126.132	126.085
3420.000			127.263	127.217
3440.000			128.459	128.349
3460.000			129.535	129.481
3480.000			130.730	130.613
3500.000			131.786	131.744
3520.000			132.963	132.866
3540.000			134.009	133.969
3560.000			135.098	135.069
3580.000			136.264	136.173
3600.000			137.605	137.602
3620.000			138.888	138.844
3640.000			139.956	139.854
3660.000			140.954	140.864
3680.000			141.209	141.873
3700.000			142.934	142.899
3720.000			144.033	143.974
3740.000			145.103	145.052
3760.000			146.164	146.130
3780.000			147.130	147.207
3800.000			148.190	148.285
3820.000			149.387	149.349
3840.000			150.433	150.359
3860.000			151.397	151.365
3880.000			152.410	152.370
3900.000			153.388	153.368
3920.000			154.462	154.353
3940.000			155.356	155.384
3960.000			156.813	156.765
3980.000			157.568	157.549
4000.000			158.613	158.567

CLIENT :  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

DESIGN CONSULTANT:  
**epfisa** Servicios de Ingenieros S.L.  
 Unit 1203, 12th Floor, Tower 1, PS S'Ilhan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 West Bengal  
 Sector V, Salt Lake Kolkata - 700091,  
 www.epfisa.com

REV.	DATE	DESCRIPTION	DRAWN BY :	DESIGNED BY :	APPROVED BY :	SCALE :	TITLE :
			SD	SKMIM	KG	HOR 1:2500 VER 1:250	Profile (Ch. 3+000 Km to Ch.4+000 Km)
							DRG. NO. : EPTS/SAUTR/DP/RA/KK/PP/04A REVISION : R-1 September 2019



PLAN

Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JTRP/DPR/J&K/HAR/01 to 05

CLIENT :  Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009

PROJECT : Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)

DESIGN CONSULTANT:  **ep<sub>t</sub>isa** *Servicios de Ingenieros S.L.*  
Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal  
Ph: 033-40347200  
www.ep<sub>t</sub>isa.com

REV.	DATE	DESCRIPTION

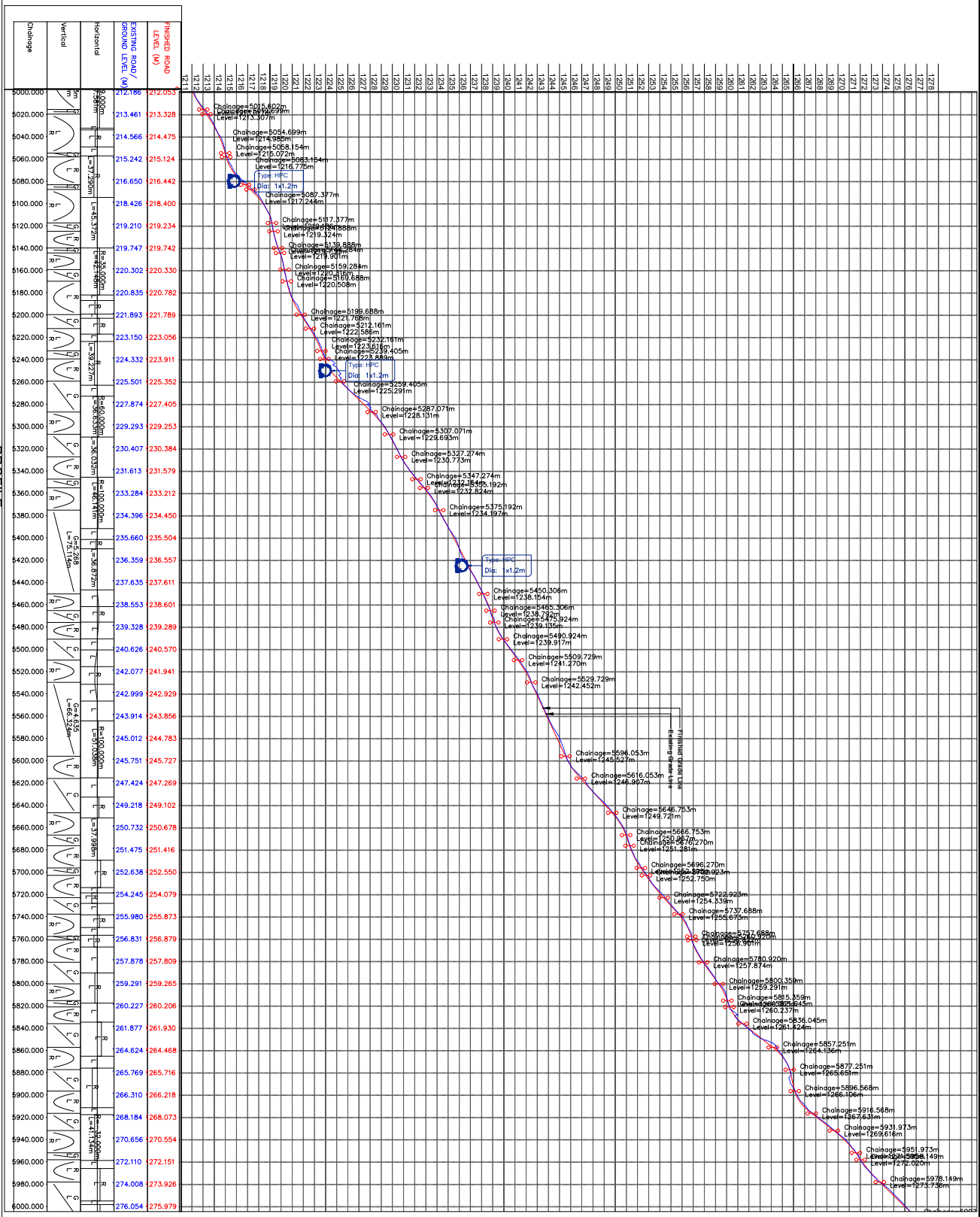
DRAWN BY :	SD
DESIGNED BY :	SKJMM
APPROVED BY :	KG
SCALE :	HOR 1:250 VER 1:250

TITLE :	Plan
(Ch. 4+000 Km to Ch. 5+000 Km)	
DWG. NO. :	EPTISA/JTRP/DPR/J&K/PP/05
REVISION :	R-1
	September 2019









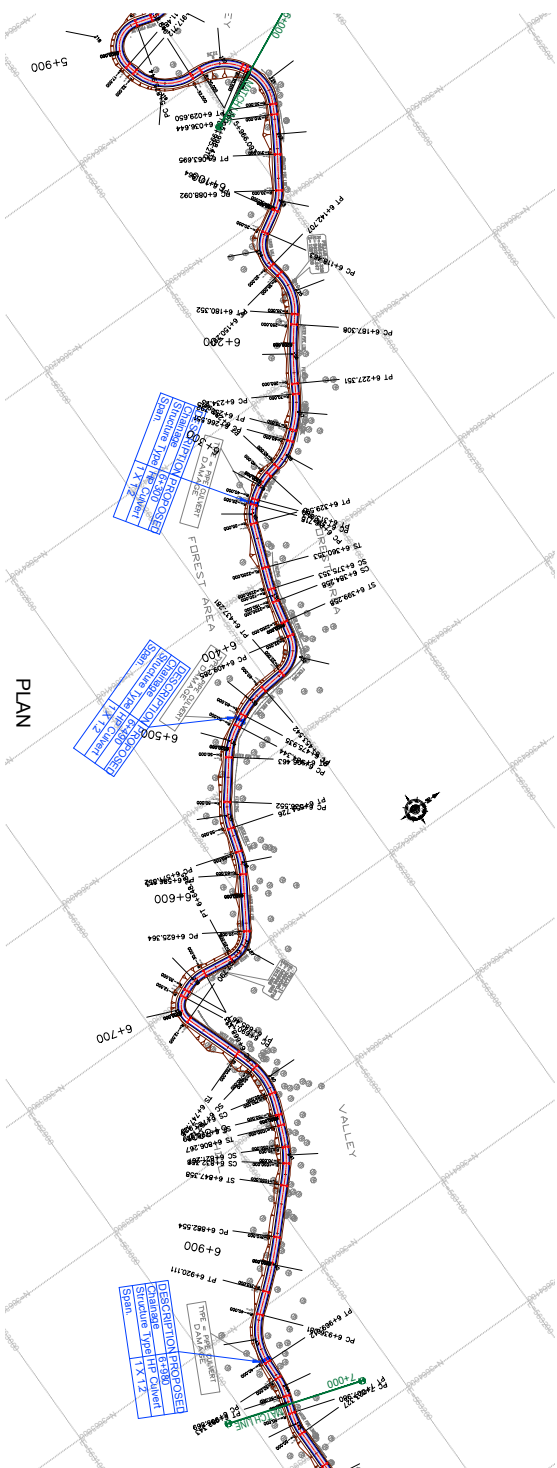
CLIENT :  
Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009

PROJECT :  
Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir  
(Chiralla Link Road in Doda District)

DESIGN CONSULTANT:  
**epitisa** Servicios de Ingenieros S.L.  
Unit 1203, 12th Floor, Tower 1, PS Sifian Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal  
P: 033-40347200  
www.epitisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD  
DESIGNED BY : SKKIM  
APPROVED BY : KG  
SCALE : HOR 1:2500  
REVISION : R-1  
TITLE : Profile  
(Ch. 5+000 Km to Ch. 6+000 Km)DRG. NO. : EPTISAUTR/DR/PR/J&K/PP/06A  
September 2019



PLAN

Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JTFRP/DPR/4&KHAR/01 to 05

CLIENT :  Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009

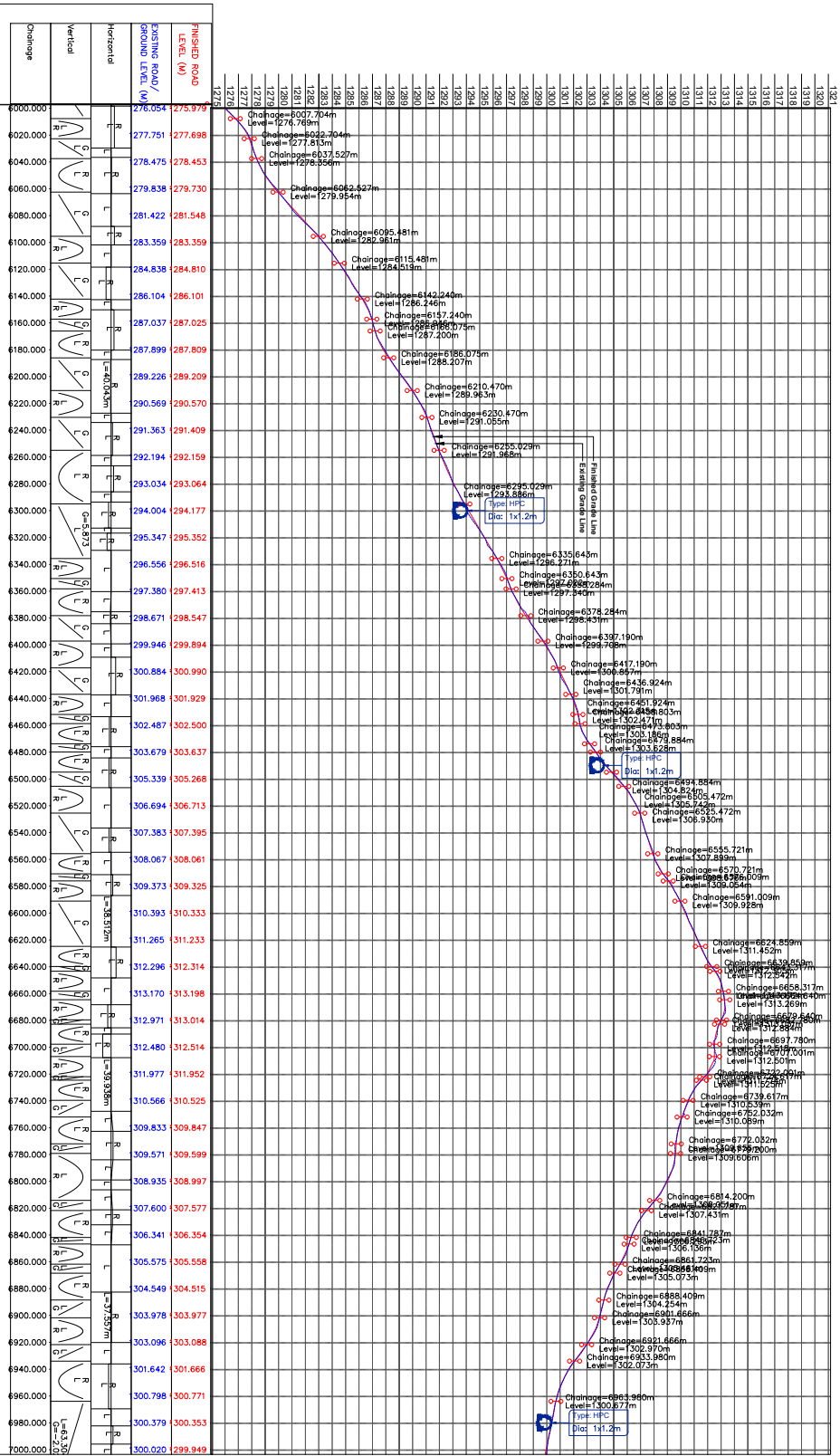
PROJECT : Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)

DESIGN CONSULTANT:  **servicios de ingenieria s.l.**  
Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal  
Ph: 033-40347200  
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD	DESIGNED BY : SKXMM	SCALE : HOR 1:2500 VER 1:250
APPROVED BY : KG	DRG. NO. : EPTISA/JTFRP/DPR/4&KHAR/07	REVISION : R-1

TITLE : **Plan**  
(Ch. 6+000 Km to Ch. 7+000 Km)



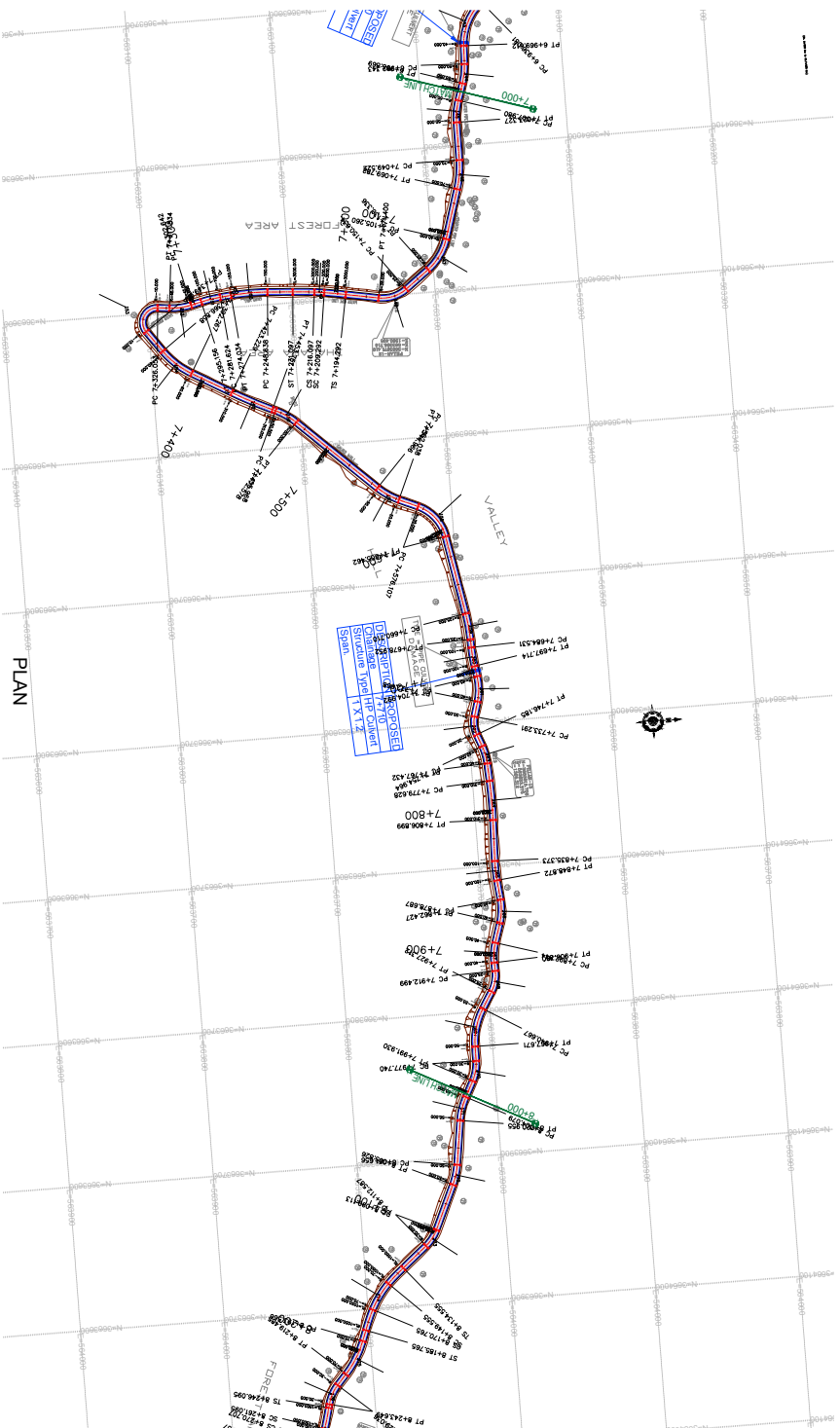
PROFILE

CLIENT :  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambahin  
 Srinagari-190 009

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chirralia Link Road in Doda District)

DESIGN CONSULTANT:  
**eptisa** Servicios de Ingenieros S.L.  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV.	DATE	DESCRIPTION	DRAWN BY :	DESIGNED BY :	APPROVED BY :	SCALE :	TITLE :
			SD	SKJMM	KG	HOR 1:2500 VER 1:250	Profile (Ch. 6+000 Km to Ch. 7+000 Km)
							DRG. NO. : EPTISAUT/PR/DR/J&K/PP/07A REVISION : R-1 September 2019



Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JFRP/DPR/J&K/HAR/01 to 05

CLIENT :




Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009

PROJECT :

Consultancy Services for Preparing Detailed Project Report  
for the Road works in Jammu and Kashmir  
**(Chiralla Link Road in Doda District)**

DESIGN CONSULTANT:

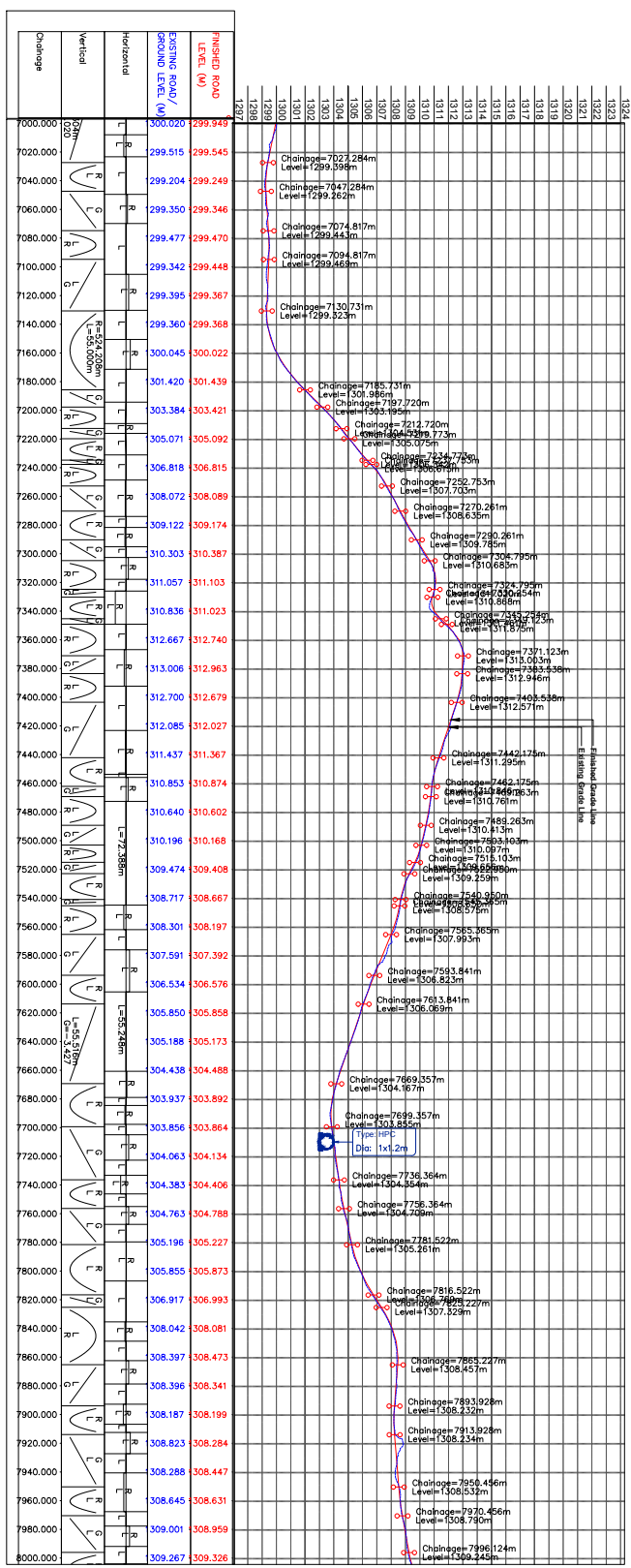


**Services de Ingenieria S.L.**  
Unit 1203, 12th Floor, Tower 1, PS Srijan  
Corporate Park, Plot No. 2, Block EP & GP,  
Sector V, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY :	SD	TITLE :	Plan
DESIGNED BY :	SKJMM	(Ch. 7+000 Km to Ch. 8+000 Km)	
APPROVED BY :	KG	DRG. NO. :	EPTISA/JFRP/DPR/J&K/PP/08
SCALE :	HOR 1:2500 VER 1:250	REVISION :	R-1
			September 2019





PROFILE

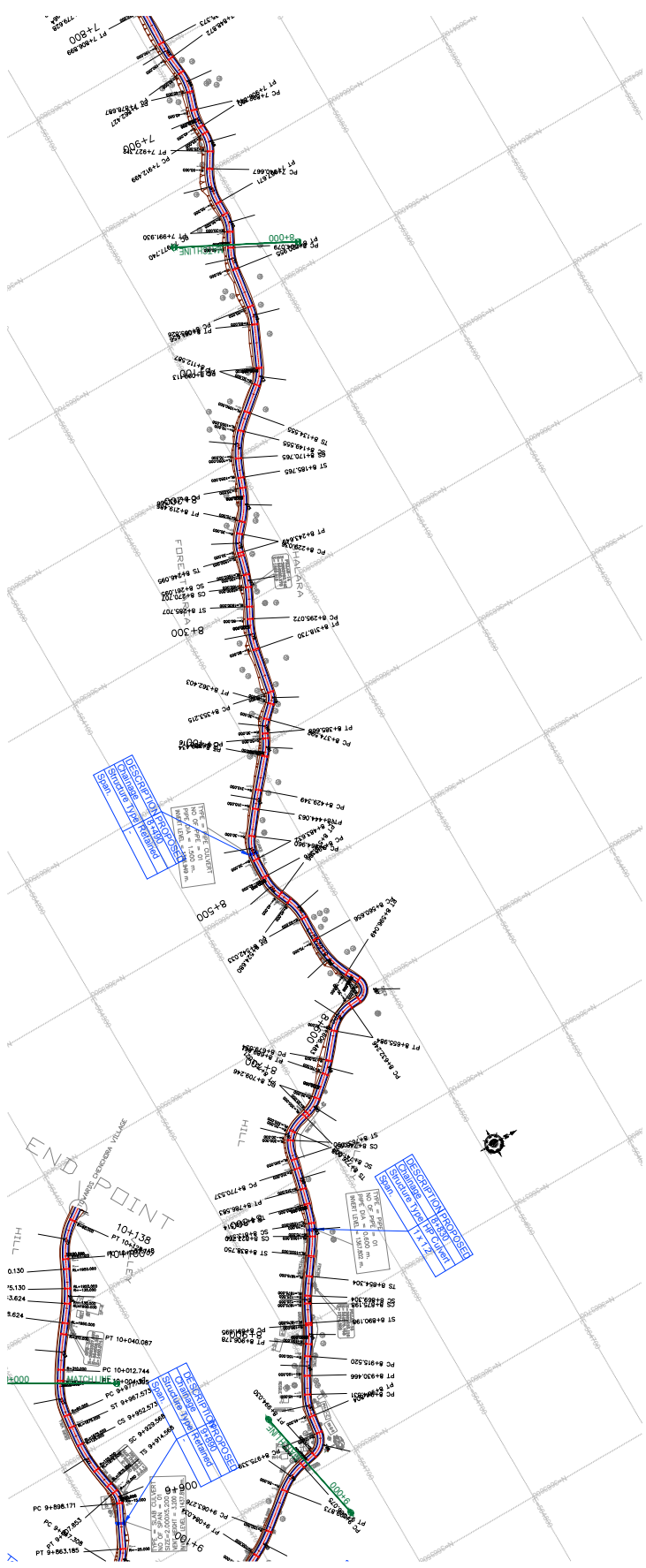
CLIENT :  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Ramnagar  
 Srinagar-190 009

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

DESIGN CONSULTANT:  
**epitisa** Servicios de Ingenieros S.L.  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.epitisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD  
 DESIGNED BY : SKKIM  
 APPROVED BY : KG  
 SCALE : HOR 1:2500  
 VER 1:250  
 TITLE : Profile  
 (Ch. 7+000 Km to Ch.8+000 Km)  
 DRG. NO. : EPTISA/UTR/DR/PR/J&K/PP/08A  
 REVISION : R-1  
 September 2019



PLAN

Note:  
 1. Horizontal Curve Details as referred in dwg no EPTISA/JTRP/DP/PR/J&K/HAR/01 to 05

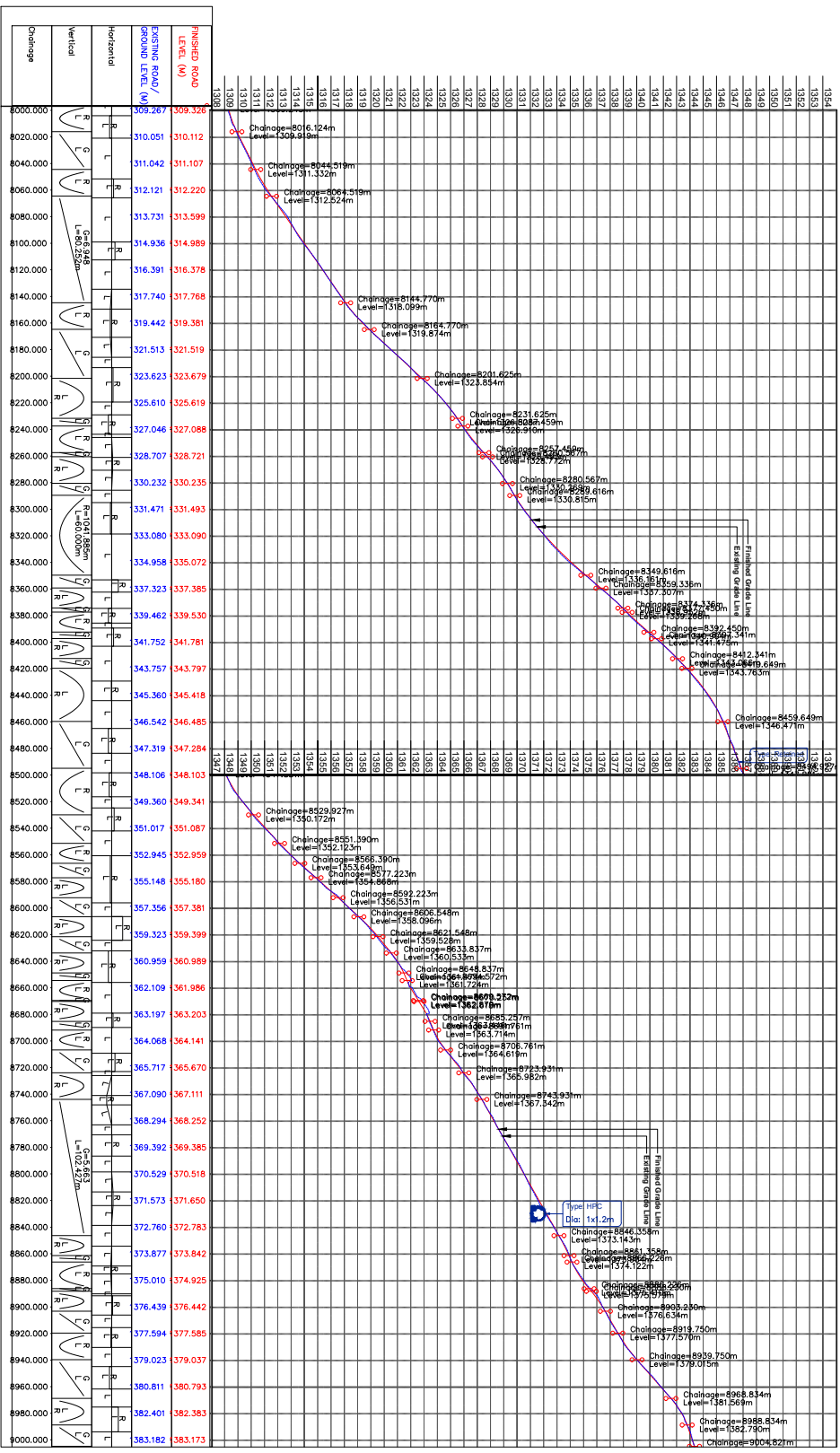
CLIENT :  
  
 Madaan Infrastructure Services  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
**(Chiralla Link Road in Doda District)**

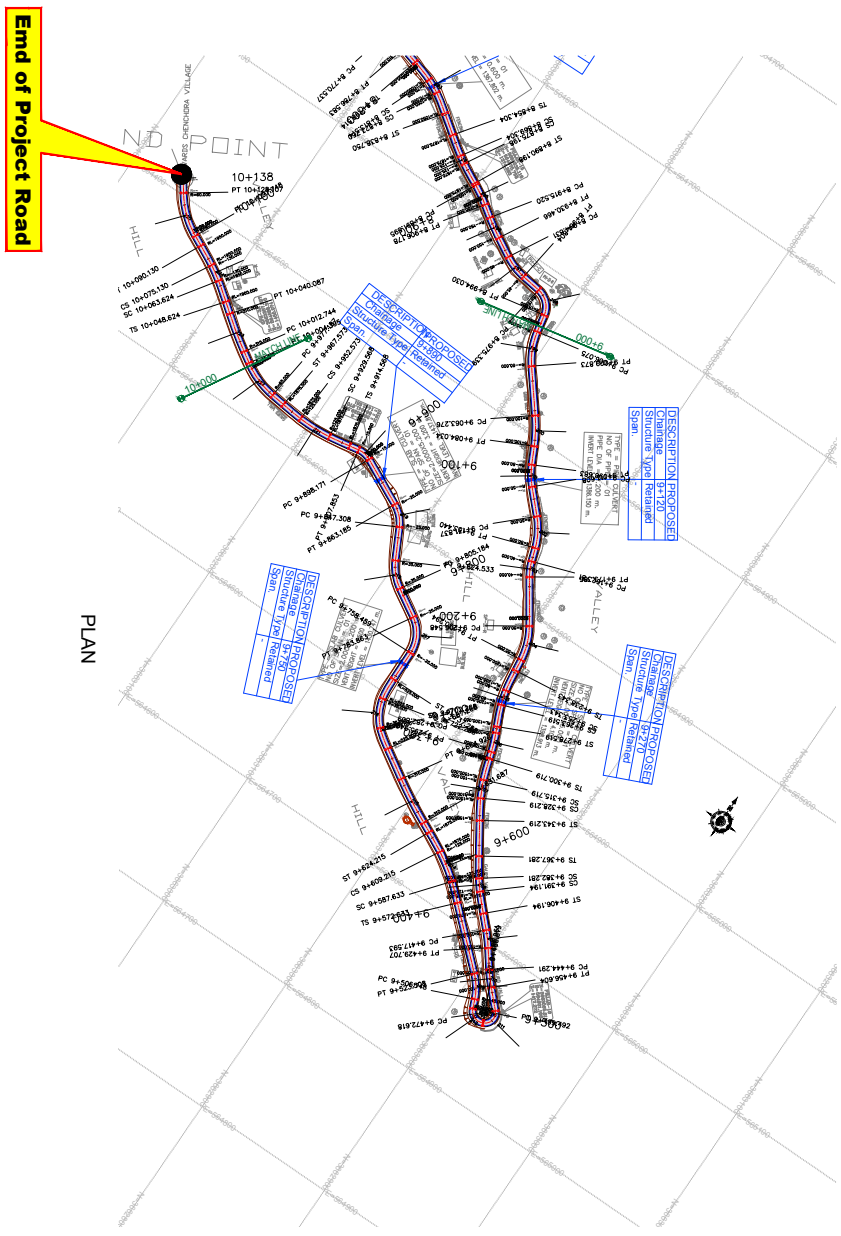
DESIGN CONSULTANT:  
  
**Services de Ingenieria S.L.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD	TITLE : <b>Plan</b>
DESIGNED BY : SKXMM	(Ch. 8+000 Km to Ch. 9+000 Km)
APPROVED BY : KG	DRG. NO. : EPTISA/JTRP/DP/PR/J&K/PP/09
SCALE : HOR 1:2500 VER 1:250	REVISION : R-1 September 2019







PLAN

Note:  
1. Horizontal Curve Details as referred in dwg no EPTISA/JTRP/DP&R/J&K/HAR/01 to 05

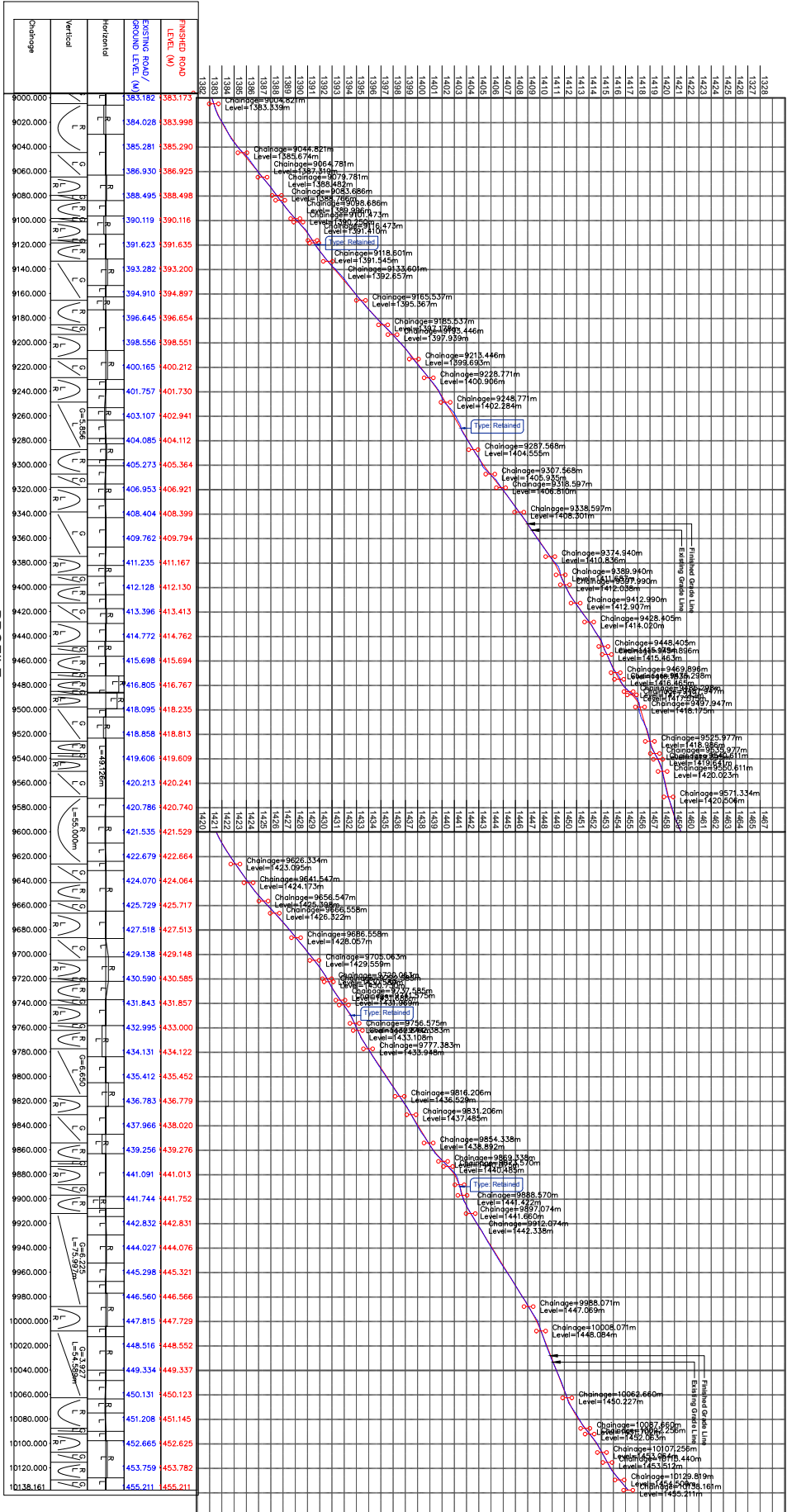
CLIENT :   
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
**(Chiralla Link Road in Doda District)**

DESIGN CONSULTANT:  
  
**Servicios de Ingenieria S.L.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD	TITLE : <b>Plan</b>
DESIGNED BY : SKXMM	(Ch. 9+000 Km to Ch. 10+138.420 Km)
APPROVED BY : KG	DRG. NO. : EPTISA/JTRP/DP&R/J&K/PP/10
SCALE : HOR 1:2500 VER 1:250	REVISION : R-1
	September 2019



PROFILE

CLIENT :  
  
 M. Srinivasulu Reddy  
 Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Ramnagar  
 Srirangapatna-560 099

PROJECT :  
 Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
**(Chiralla Link Road in Doda District)**

DESIGN CONSULTANT:  
  
**epTisa**  
 Servicios de Ingenieros S.L.  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Pk: 033-40347200  
 www.eptisa.com

REV.	DATE	DESCRIPTION

DRAWN BY : SD  
 DESIGNED BY : SKKMM  
 APPROVED BY : KG  
 SCALE : HOR 1:2500  
 VER 1:250  
 TITLE : **Profile**  
 (Ch. 9+000 Km to Ch. 10+138.420 Km)  
 DRG. NO. : EPTISAU/TP/DR/BJK/PP/10A  
 REVISION : R-1  
 September 2019

HORIZONTAL ALIGNMENT REPORT

Horizontal Alignment Report

H/P No.	Start of Transition (TS)	Start of Curve PC / SC	H/P	End of Curve CS / PT	End of Transition (ST)	H/P Coordinates		Radius	Design Speed (V kmph)	Transition Start Length	Transition End Length	Circular Curve Length	Shift (s)		Tangent Length (Ts)		gs (°)	Dc (°)	D (°)	Apex Distance (Es)	Hand of Curve	e%	Extra Widening
						Easting	Northing						Leading	Trailing	Leading	Trailing							
1	0+008.428	0+046.167	0+046.167	0+068.934	0+068.934	558555.170	366595.063	40	25	0.00	0.00	60.51	0.000	0.000	37.74	37.74	0.00	86.67	14.993	Left	6.94	1.5	
2	0+094.544	0+107.695	0+107.695	0+115.660	0+115.660	558592.118	366592.049	14	15	0.00	0.00	21.12	0.000	0.000	13.15	13.15	0.00	86.42	5.208	Right	7.00	1.5	
3	0+169.204	0+136.423	0+136.423	0+140.600	0+140.600	558622.197	366556.728	70	35	15.00	15.00	10.63	0.134	0.134	19.45	19.45	6.14	7.06	1.145	Right	7.00	0.9	
4	0+239.874	0+209.874	0+209.874	0+239.874	0+239.874	558702.011	366592.011	70	35	30.00	30.00	8.67	0.536	0.536	36.09	36.09	12.28	8.74	33.29	Left	7.00	0.9	
5	0+307.728	0+276.728	0+276.728	0+300.452	0+300.452	558762.872	366540.748	15	15	0.00	0.00	32.72	0.000	0.000	28.81	28.81	0.00	125.00	17.483	Right	6.67	1.5	
6	0+305.811	0+334.134	0+334.134	0+330.988	0+330.988	558728.896	366544.079	12	15	0.00	0.00	9.49	0.781	0.781	28.32	28.32	35.81	45.50	116.92	Left	7.00	1.5	
7	0+359.391	0+382.246	0+382.246	0+389.982	0+389.982	558778.912	366515.430	150	35	15.00	15.00	15.59	0.063	0.063	22.86	22.86	2.86	5.96	11.68	Right	3.63	0.6	
8	0+473.213	0+498.213	0+498.213	0+500.399	0+500.399	558874.944	366537.574	150	40	15.00	15.00	12.19	0.063	0.063	21.14	21.14	2.86	4.65	10.38	Right	4.74	0.6	
9	0+521.027	0+546.859	0+546.859	0+557.410	0+557.410	558915.177	366533.971	125	40	15.00	15.00	21.38	0.075	0.075	25.83	25.83	3.44	9.40	16.68	Left	5.69	0.6	
10	0+593.809	0+608.809	0+608.809	0+631.986	0+631.986	558981.141	366529.048	100	40	15.00	15.00	23.18	0.094	0.094	26.84	26.84	4.30	13.28	21.87	Right	7.00	0.9	
11	0+651.939	0+670.195	0+670.195	0+688.121	0+688.121	559016.211	366525.657	110	40	15.00	15.00	36.18	0.000	0.000	18.26	18.26	0.00	18.85	18.85	Left	6.46	0.6	
12	0+705.183	0+715.834	0+715.834	0+719.862	0+719.862	559053.940	366525.724	100	40	0.00	0.00	14.68	0.000	0.000	7.35	7.35	0.00	8.41	8.41	Right	7.00	0.9	
13	0+722.851	0+722.851	0+722.851	0+740.628	0+740.628	559060.522	366524.294	50	30	0.00	0.00	17.78	0.000	0.000	8.98	8.98	0.00	20.37	20.37	Left	7.00	1.2	
14	0+803.015	0+818.015	0+818.015	0+824.324	0+824.324	559155.707	366500.081	200	40	15.00	15.00	6.31	0.047	0.047	18.17	18.17	2.15	1.81	6.10	Right	3.56	0.6	
15	0+844.606	0+844.606	0+844.606	0+869.056	0+869.056	559190.821	366503.716	150	40	0.00	0.00	24.45	0.000	0.000	12.25	12.25	0.00	9.34	9.34	Right	4.74	0.6	
16	0+889.911	0+900.309	0+900.309	0+910.689	0+910.689	559228.483	366517.301	80	35	0.00	0.00	19.88	0.000	0.000	9.99	9.99	0.00	14.24	14.24	Left	6.81	0.9	
17	0+917.137	0+917.137	0+917.137	0+927.492	0+927.492	559263.146	366512.158	170	35	0.00	0.00	30.36	0.000	0.000	15.22	15.22	0.00	26.41	26.41	Right	5.93	1.5	
18	0+969.426	0+988.426	0+988.426	0+988.770	0+988.770	559311.039	366517.614	15	15	15.00	15.00	4.34	0.625	0.625	19.25	19.25	28.65	16.59	73.89	Right	3.20	0.6	
19	1+030.410	1+030.410	1+030.410	1+035.266	1+035.266	559307.364	3665091.245	30	20	0.00	0.00	24.86	0.000	0.000	13.19	13.19	0.00	47.47	47.47	Right	6.67	1.5	
20	1+076.024	1+076.024	1+076.024	1+106.634	1+106.634	559204.200	366518.352	10.5	15	0.00	0.00	30.61	0.000	0.000	92.38	92.38	0.00	167.03	167.03	Left	7.00	1.5	
21	1+138.883	1+138.883	1+138.883	1+174.119	1+174.119	559344.221	366507.907	70	35	20.00	20.00	15.24	0.238	0.238	28.06	28.06	8.19	12.47	28.84	Left	7.00	0.9	
22	1+212.369	1+212.369	1+212.369	1+256.059	1+256.059	559390.790	366512.401	35	25	0.00	0.00	44.56	0.000	0.000	25.87	25.87	0.00	72.95	72.95	Right	7.00	1.5	
23	1+261.668	1+261.668	1+261.668	1+321.516	1+321.516	559428.483	366517.301	80	35	0.00	0.00	19.88	0.000	0.000	9.99	9.99	0.00	14.24	14.24	Left	6.81	0.9	
24	1+318.690	1+318.690	1+318.690	1+332.516	1+332.516	559482.179	366510.144	30	20	0.00	0.00	13.83	0.000	0.000	7.04	7.04	0.00	26.41	26.41	Right	5.93	1.5	
25	1+341.692	1+341.692	1+341.692	1+370.547	1+370.547	559507.926	366502.778	50	30	0.00	0.00	28.86	0.000	0.000	14.84	14.84	0.00	33.07	33.07	Left	7.00	1.2	
26	1+386.338	1+386.338	1+386.338	1+401.147	1+401.147	559546.112	366502.157	30	20	0.00	0.00	14.81	0.000	0.000	7.56	7.56	0.00	28.28	28.28	Right	5.93	1.5	
27	1+407.017	1+422.017	1+422.017	1+438.239	1+438.239	559578.318	3665074.897	150	40	15.00	15.00	16.22	0.063	0.063	23.17	23.17	2.86	6.20	11.93	Left	4.74	0.6	
28	1+455.489	1+455.489	1+455.489	1+475.477	1+475.477	559612.143	3665063.681	35	25	0.00	0.00	19.99	0.000	0.000	10.27	10.27	0.00	32.72	32.72	Right	7.00	1.5	
29	1+483.592	1+483.592	1+483.592	1+497.125	1+497.125	559628.630	3665044.025	15	15	0.00	0.00	13.53	0.000	0.000	7.27	7.27	0.00	51.69	51.69	Left	6.67	0.6	
30	1+506.039	1+521.039	1+521.039	1+536.833	1+536.833	559667.704	3665044.526	150	30	15.00	15.00	15.79	0.063	0.063	22.96	22.96	2.86	6.03	11.76	Right	2.67	0.6	
31	1+563.511	1+563.511	1+563.511	1+580.227	1+580.227	559710.022	3665037.626	40	25	0.00	0.00	16.72	0.000	0.000	8.48	8.48	0.00	23.94	23.94	Right	6.94	1.5	
32	1+654.011	1+664.011	1+664.011	1+674.614	1+674.614	559787.044	3664985.747	50	30	0.00	0.00	20.60	0.000	0.000	10.45	10.45	0.00	23.61	23.61	Left	7.00	1.2	
33	1+680.448	1+680.448	1+680.448	1+702.708	1+702.708	559814.052	3664980.782	100	40	15.00	15.00	22.26	0.000	0.000	11.18	11.18	0.00	12.75	12.75	Right	7.00	0.9	
34	1+753.915	1+753.915	1+753.915	1+770.371	1+770.371	559879.922	3664952.971	100	30	0.00	0.00	16.46	0.000	0.000	8.30	8.30	0.00	18.86	18.86	Left	7.00	1.2	
35	1+883.056	1+883.056	1+883.056	1+883.492	1+883.492	559949.423	3664950.151	25	20	0.00	0.00	26.28	0.000	0.000	14.50	14.50	0.00	62.24	62.24	Right	7.00	1.5	
36	1+878.287	1+878.287	1+878.287	1+872.321	1+872.321	559942.914	3664894.178	50	30	0.00	0.00	28.45	0.000	0.000	10.05	10.05	0.00	32.40	32.40	Right	7.00	1.2	
37	1+935.881	1+935.881	1+935.881	1+988.117	1+988.117	559939.097	3664864.081	50	30	0.00	0.00	19.83	0.000	0.000	10.05	10.05	0.00	22.72	22.72	Left	7.00	1.2	
38	1+977.322	1+977.322	1+977.322	1+996.019	1+996.019	559975.314	3664802.284	150	40	0.00	0.00	32.55	0.000	0.000	16.34	16.34	0.00	12.43	12.43	Left	4.74	0.6	
39	2+001.708	2+001.708	2+001.708	2+024.504	2+024.504	559973.629	3664774.600	40	25	0.00	0.00	18.70	0.000	0.000	9.52	9.52	0.00	26.78	26.78	Right	6.94	1.5	
40	2+036.589	2+051.589	2+051.589	2+056.341	2+056.341	559995.480	3664710.073	70	35	15.00	15.00	22.80	0.000	0.000	11.72	11.72	0.00	32.65	32.65	Left	6.94	1.5	
41	2+072.949	2+072.949	2+072.949	2+094.932	2+094.932	560005.367	3664681.699	70	35	0.00	0.00	21.98	0.000	0.000	11.08	11.08	0.00	17.99	17.99	Right	7.00	0.9	
42	2+101.933	2+101.933	2+101.933	2+119.492	2+119.492	560005.329	3664654.225	20	20	0.00	0.00	17.56	0.000	0.000	9.39	9.39	0.00	50.30	50.30	Right	7.00	0.9	
43	2+137.219	2+137.219	2+137.219	2+147.275	2+147.275	560029.868	3664633.561	60	30	0.00	0.00	10.06	0.000	0.000	5.04	5.04	0.00	9.60	9.60	Left	6.67	1.2	
44	2+152.316	2+152.316	2+152.316	2+188.370	2+188.370	560064.968	3664593.394	14.5	15	0.00	0.00	36.05	0.000	0.000	46.67	46.67	0.00	142.46	142.46	Left	6.90	1.5	
45	2+238.255	2+238.255	2+238.255	2+262.282	2+262.282	560055.293	3664505.293	150	30	15.00	15.00	9.03	0.063	0.063	19.54	19.54	2.86	3.45	9.18	Left	2.67	0.6	
46	2+290.499	2+290.499	2+290.499	2+307.310	2+307.310	560050.325	3664748.244	40	35	15.00	15.00	11.81	0.117	0.117	21.05	21.05	5.37	8.46	19.20	Right	6.81	0.9	
47	2+347.992	2+347.992	2+347.992	2+361.920	2+361.920	560059.008	3664818.730	12.5	40	15.00	15.00	18.93	0.075	0.075	24.58	24.58	3.44	8.68	15.55	Right	5.69	0.6	
48	2+402.727	2+402.727	2+402.727	2+419.727	2+419.727	560083.894	3664886.246	100	40	15.00	15.00	48.43	0.094	0.094	40.36	40.36	4.30	27.75	36.34	Left	7.00	0.9	
49	2+505.489	2+505.489	2+505.489	2+539.005	2+539.005	560067.017	3664965.195	30															

**Horizontal Alignment Report**

HIP No.	Start of Transition (TS)	Start of Curve PC / SC	HIP	End of Curve CS / PT	End of Transition (ST)	HIP Coordinates		Radius	Design Speed (V kmph)	Transition Start Length	Transition End Length	Circular Curve Length	Shift (s)		Tangent Length (Ts)		qs (°)		Dc (°)	D (°)	Apex Distance (Es)	Hand of Curve	e%	Extra Widening
						Easting	Northing						Leading	Trailing	Leading	Trailing	Leading	Trailing						
51	2+533.159	2+551.159	2+569.600	2+580.681	2+580.681	561016.018	3664996.674	20	30	0.00	0.00	27.52	0.00	0.00	16.44	16.44	0.00	0.00	78.84	78.84	5.880	Left	7.00	1.5
52	2+601.548	2+615.548	2+632.992	2+638.373	2+638.373	5608086.672	3665041.584	50	30	0.00	0.00	26.83	0.00	0.00	13.74	13.74	0.00	0.00	30.74	30.74	1.855	Right	7.00	1.2
53	2+638.831	2+652.831	2+684.275	2+690.656	2+690.656	5606991.584	3665096.496	50	30	0.00	0.00	14.21	0.00	0.00	7.16	7.16	0.00	0.00	16.29	16.29	0.509	Right	7.00	1.2
54	2+680.859	2+694.859	2+726.303	2+732.684	2+732.684	5606090.122	3665115.000	50	30	0.00	0.00	16.61	0.00	0.00	8.38	8.38	0.00	0.00	19.03	19.03	0.698	Left	7.00	1.2
55	2+715.358	2+729.358	2+774.802	2+781.183	2+781.183	5605161.030	3665161.030	35	30	0.00	0.00	37.63	0.00	0.00	19.76	19.76	0.00	0.00	43.12	43.12	3.762	Right	7.00	1.2
56	2+761.455	2+775.455	2+820.900	2+827.281	2+827.281	5601709.011	3665192.900	35	25	0.00	0.00	23.42	0.00	0.00	12.17	12.17	0.00	0.00	38.33	38.33	2.054	Right	7.00	1.0
57	2+804.325	2+818.325	2+867.770	2+874.151	2+874.151	5601600.200	3665209.770	35	25	0.00	0.00	23.83	0.00	0.00	12.03	12.03	0.00	0.00	19.50	19.50	1.026	Left	7.00	0.9
58	2+877.839	2+891.839	2+945.284	2+951.665	2+951.665	5602456.784	3665242.416	125	40	15.00	15.00	39.52	0.00	0.00	35.22	35.22	3.44	3.44	18.12	24.99	3.110	Right	5.69	0.6
59	2+970.330	2+984.330	3+037.775	3+044.156	3+044.156	5603236.371	3665299.034	20	20	0.00	0.00	41.89	0.00	0.00	25.17	25.17	0.00	0.00	80.00	80.00	9.162	Right	5.93	1.5
60	3+015.948	3+029.948	3+087.393	3+093.774	3+093.774	5603377.769	3665303.801	150	40	0.00	0.00	20.81	0.00	0.00	10.42	10.42	0.00	0.00	7.95	7.95	0.362	Left	4.74	0.6
61	3+054.854	3+068.854	3+126.398	3+132.779	3+132.779	5603530.868	3665317.530	70	35	0.00	0.00	14.43	0.00	0.00	7.24	7.24	0.00	0.00	11.81	11.81	0.373	Right	7.00	0.9
62	3+077.048	3+091.048	3+158.592	3+164.973	3+164.973	5603536.630	3665343.753	10	15	0.00	0.00	21.84	0.00	0.00	19.26	19.26	0.00	0.00	125.12	125.12	11.701	Left	7.00	1.5
63	3+148.397	3+162.397	3+194.136	3+199.517	3+199.517	5604289.791	3665211.946	70	35	20.00	20.00	21.10	0.238	0.238	31.24	31.24	8.19	8.19	17.27	33.64	3.378	Right	7.00	0.9
64	3+236.326	3+250.326	3+296.065	3+301.446	3+301.446	5605029.350	3665299.668	170	40	15.00	15.00	20.32	0.055	0.055	25.23	25.23	2.53	2.53	6.85	11.90	0.977	Right	4.18	0.6
65	3+318.245	3+332.245	3+381.984	3+387.365	3+387.365	5605856.519	3665299.349	350	40	0.00	0.00	38.77	0.000	0.000	19.41	19.41	0.00	0.00	6.35	6.35	0.538	Right	2.50	0
66	3+446.274	3+460.274	3+504.013	3+509.394	3+509.394	5607153.966	3665213.667	60	30	0.00	0.00	35.68	0.000	0.000	18.39	18.39	0.00	0.00	34.07	34.07	2.754	Right	6.67	1.2
67	3+493.443	3+507.443	3+551.182	3+556.563	3+556.563	5607418.506	3665183.853	25	20	0.00	0.00	23.00	0.000	0.000	12.38	12.38	0.00	0.00	52.70	52.70	2.899	Right	7.00	1.5
68	3+575.581	3+589.581	3+633.320	3+638.701	3+638.701	5607377.457	3665107.824	12	15	0.00	0.00	22.75	0.000	0.000	16.70	16.70	0.00	0.00	108.61	108.61	8.568	Left	7.00	1.5
69	3+690.513	3+704.513	3+748.252	3+753.633	3+753.633	5608684.415	3665134.187	70	35	15.00	15.00	23.96	0.134	0.134	27.54	27.54	6.14	6.14	19.61	31.89	2.940	Left	7.00	0.9
70	3+778.644	3+792.644	3+836.583	3+841.964	3+841.964	5609295.808	3665109.176	30	20	0.00	0.00	31.77	0.000	0.000	17.56	17.56	0.00	0.00	60.67	60.67	4.760	Right	5.93	1.5
71	3+822.186	3+836.186	3+880.125	3+885.506	3+885.506	5609626.013	3665179.623	30	20	0.00	0.00	26.48	0.000	0.000	14.17	14.17	0.00	0.00	50.58	50.58	3.180	Right	5.93	1.5
72	3+905.859	3+919.859	3+967.398	3+972.779	3+972.779	5610099.542	3665087.877	19	15	0.00	0.00	38.34	0.000	0.000	30.18	30.18	0.00	0.00	115.62	115.62	16.667	Left	5.26	1.5
73	3+977.268	3+991.268	4+039.807	4+045.188	4+045.188	5610546.603	3665148.552	25	20	0.00	0.00	16.13	0.000	0.000	8.36	8.36	0.00	0.00	36.97	36.97	1.360	Right	7.00	1.5
74	4+000.909	4+014.909	4+062.348	4+067.729	4+067.729	5610752.242	3665165.074	30	20	0.00	0.00	10.70	0.000	0.000	5.41	5.41	0.00	0.00	20.43	20.43	0.483	Left	5.93	1.5
75	4+029.642	4+043.642	4+091.181	4+096.562	4+096.562	5611100.595	3665172.957	35	25	0.00	0.00	35.49	0.000	0.000	19.44	19.44	0.00	0.00	58.10	58.10	5.036	Right	7.00	1.5
76	4+078.902	4+092.902	4+140.441	4+145.822	4+145.822	5611599.307	3665154.592	25	20	0.00	0.00	8.12	0.375	0.375	20.15	20.15	17.19	17.19	18.61	52.98	3.352	Left	7.00	1.5
77	4+125.608	4+139.608	4+187.147	4+192.528	4+192.528	5612299.104	3665169.941	30	20	0.00	0.00	17.02	0.000	0.000	8.75	8.75	0.00	0.00	32.50	32.50	1.249	Right	5.93	1.5
78	4+150.782	4+164.782	4+212.321	4+217.702	4+217.702	5612929.978	3665170.228	35	25	15.00	15.00	12.09	0.268	0.268	21.88	21.88	12.28	12.28	19.80	44.35	3.085	Left	7.00	1.5
79	4+200.318	4+214.318	4+261.857	4+267.238	4+267.238	5612689.910	3665197.848	28	25	0.00	0.00	8.75	0.335	0.335	20.29	20.29	15.35	15.35	17.90	48.59	3.088	Right	6.35	1.5
80	4+242.767	4+256.767	4+308.306	4+313.687	4+313.687	5613143.302	3665195.520	100	40	15.00	15.00	15.48	0.094	0.094	22.87	22.87	4.30	4.30	8.87	17.46	1.267	Right	7.00	0.9
81	4+291.980	4+305.980	4+357.519	4+362.900	4+362.900	5613780.004	3665165.074	90	40	0.00	0.00	80.72	0.000	0.000	43.30	43.30	0.00	0.00	51.38	9.874	9.874	Right	7.00	0.9
82	4+404.684	4+418.684	4+470.223	4+475.604	4+475.604	5613999.345	3665097.966	60	30	0.00	0.00	28.26	0.000	0.000	14.40	14.40	0.00	0.00	26.98	26.98	1.703	Left	6.67	1.2
83	4+442.192	4+456.192	4+517.731	4+523.112	4+523.112	5614325.368	3665045.454	40	25	15.00	15.00	6.14	0.234	0.234	18.39	18.39	10.74	10.74	8.80	30.28	1.681	Right	6.94	1.5
84	4+488.410	4+502.410	4+563.949	4+569.330	4+569.330	5614400.171	3664997.888	20	20	0.00	0.00	4.30	0.833	0.833	24.48	24.48	28.65	28.65	12.31	69.61	4.691	Left	7.00	1.5
85	4+544.192	4+558.192	4+619.231	4+624.612	4+624.612	5614951.714	3664981.145	40	25	15.00	15.00	18.54	0.234	0.234	25.43	25.43	10.74	10.74	26.55	48.04	4.049	Right	6.94	1.5
86	4+607.568	4+621.568	4+678.107	4+683.488	4+683.488	5615275.507	3664934.452	60	30	0.00	0.00	34.44	0.000	0.000	17.71	17.71	0.00	0.00	32.88	32.88	2.558	Right	6.67	1.2
87	4+647.916	4+661.916	4+718.455	4+723.836	4+723.836	5615627.770	3664903.258	30	20	0.00	0.00	14.85	0.000	0.000	7.58	7.58	0.00	0.00	28.37	28.37	0.943	Left	5.93	1.5
88	4+668.271	4+682.271	4+739.810	4+745.191	4+745.191	5615426.247	3664870.554	60	30	15.00	15.00	15.95	0.156	0.156	23.37	23.37	7.16	7.16	15.23	29.56	2.214	Right	6.67	1.2
89	4+727.239	4+741.239	4+798.778	4+804.159	4+804.159	5615405.044	3664825.644	90	40	0.00	0.00	17.81	0.000	0.000	8.93	8.93	0.00	0.00	11.34	0.442	0.442	Left	7.00	0.9
90	4+748.278	4+762.278	4+819.217	4+824.598	4+824.598	5615455.072	3664808.546	70	35	0.00	0.00	10.30	0.000	0.000	5.16	5.16	0.00	0.00	8.43	8.43	0.190	Right	7.00	0.9
91	4+788.500	4+802.500	4+859.039	4+864.420	4+864.420	5615455.714	3664766.021	70	35	0.00	0.00	15.14	0.000	0.000	7.60	7.60	0.00	0.00	12.29	12.29	0.411	Right	7.00	0.9
92	4+824.544	4+838.544	4+899.083	4+904.464	4+904.464	5615454.782	3664712.425	10.5	15	0.00	0.00	24.94	0.000	0.000	26.04	26.04	0.00	0.00	136.09	136.09	17.881	Left	7.00	1.5
93	4+865.136	4+879.136	4+939.678	4+945.059	4+945.059	5615735.389	3664740.396	150	35	0.00	0.00	15.20	0.000	0.000	7.61	7.61	0.00	0.00	5.81	5.81	0.193	Right	3.63	0.6
94	4+882.925	4+896.925	4+957.464	4+962.845	4+962.845	561595.696	3664750.441	150	40	0.00	0.00	21.34	0.000	0.000	10.69	10.69	0.00	0.00	8.15	8.15	0.380	Left	4.74	0.6
95	4+913.824	4+927.824	4+988.210	4+993.591	4+993.591	5616160.440	3664769.774	20	20	0.00	0.00	21.54	0.000	0.000	11.95	11.95	0.00	0.00	61.71					





Horizontal Alignment Report

HHP No.	Start of Transition (Ts)	Start of Curve PC / SC	HHP	End of Curve CS / PT	End of Transition (ST)	HHP Coordinates		Radius	Design Speed (V kmph)	Shift (s)		Tangent Length (Ts)		qs (°)		Dc (°)	D (°)	Apex Distance (Es)	Hand of Curve	e%	Extra Widening
						Easting	Northing			Leading	Trailing	Leading	Trailing	Leading	Trailing						
101	5+188.915	5+188.915	5+195.116	5+201.190	5+201.190	56184.664	366469.898	35	25	0.000	0.000	6.20	6.20	0.00	0.00	20.09	20.09	0.545	Left	7.00	1.5
102	5+206.042	5+206.042	5+212.018	5+218.018	5+218.018	56187.358	366469.933	40	25	0.000	0.000	6.03	6.03	0.00	0.00	17.15	17.15	0.452	Right	6.94	1.5
103	5+226.530	5+226.530	5+242.268	5+264.153	5+264.153	561884.973	366469.908	30	20	0.000	0.000	21.74	21.74	0.00	0.00	71.85	71.85	7.048	Left	5.93	1.5
104	5+265.745	5+280.745	5+292.577	5+318.057	5+318.057	561928.680	366469.638	60	30	15.000	15.000	26.83	26.83	7.16	7.16	21.31	35.63	3.186	Right	6.67	1.2
105	5+340.069	5+370.775	5+385.633	5+400.633	5+400.633	562006.662	366468.466	100	40	15.000	15.000	30.71	30.71	4.30	4.30	17.51	26.11	2.749	Right	7.00	0.9
106	5+401.215	5+410.976	5+426.103	5+440.976	5+440.976	562038.335	366468.466	100	35	0.000	0.000	4.89	4.89	0.00	0.00	7.99	0.170	0.170	Left	7.00	0.9
107	5+449.119	5+464.421	5+479.336	5+494.421	5+494.421	562096.132	366466.255	50	25	15.000	15.000	20.48	20.48	8.59	8.59	11.81	28.99	1.838	Right	7.00	1.2
108	5+501.887	5+516.887	5+531.914	5+546.914	5+546.914	562134.155	366466.050	35	25	15.000	15.000	24.24	24.24	12.28	12.28	26.34	50.79	4.041	Left	7.00	1.5
109	5+566.043	5+581.043	5+596.043	5+611.043	5+611.043	562200.974	366462.244	100	40	0.000	0.000	50.53	50.53	0.00	0.00	28.95	28.95	3.279	Right	7.00	0.9
110	5+634.101	5+649.101	5+664.101	5+679.101	5+679.101	562267.755	366457.255	50	30	0.000	0.000	9.46	9.46	0.00	0.00	21.42	21.42	0.887	Right	7.00	1.2
111	5+690.793	5+705.793	5+720.793	5+735.793	5+735.793	562334.603	366452.299	25	20	0.000	0.000	13.39	13.39	0.00	0.00	56.34	56.34	3.359	Right	7.00	1.5
112	5+720.154	5+735.154	5+750.154	5+765.154	5+765.154	562388.468	366450.031	15	15	0.000	0.000	4.87	4.87	0.00	0.00	35.96	0.770	0.770	Left	6.67	1.5
113	5+740.191	5+755.191	5+770.191	5+785.191	5+785.191	562432.145	366447.385	25	20	0.000	0.000	5.03	5.03	0.00	0.00	15.17	0.353	0.353	Right	6.94	1.5
114	5+756.387	5+771.387	5+786.387	5+801.387	5+801.387	562476.130	366444.385	35	25	0.000	0.000	9.92	9.92	0.00	0.00	22.74	0.501	0.501	Left	7.00	1.5
115	5+791.021	5+806.021	5+821.021	5+836.021	5+836.021	562520.130	366441.499	35	25	0.000	0.000	14.75	14.75	0.00	0.00	45.69	45.69	2.979	Left	7.00	1.5
116	5+835.451	5+850.451	5+865.451	5+880.451	5+880.451	562564.130	366438.513	30	20	0.000	0.000	13.53	13.53	0.00	0.00	26.30	26.30	0.808	Right	7.00	1.5
117	5+877.291	5+892.291	5+907.291	5+922.291	5+922.291	562608.130	366435.527	17	15	0.000	0.000	30.91	30.91	0.00	0.00	90.09	90.09	8.306	Right	7.00	1.5
118	5+918.527	5+933.527	5+948.527	5+963.527	5+963.527	562652.130	366432.541	32	20	0.000	0.000	22.51	22.51	0.00	0.00	70.25	70.25	7.124	Left	5.88	1.5
119	5+967.197	5+982.197	5+997.197	5+1012.197	5+1012.197	562696.130	366429.555	30	20	0.000	0.000	15.01	15.01	0.00	0.00	53.16	3.546	3.546	Right	5.93	1.5
120	5+999.064	5+1014.064	5+1029.064	5+1044.064	5+1044.064	562740.130	366426.569	30	20	0.000	0.000	17.19	17.19	0.00	0.00	59.62	59.62	4.575	Right	5.93	1.5
121	5+1037.277	5+1052.277	5+1067.277	5+1082.277	5+1082.277	562784.130	366423.583	310	20	0.000	0.000	27.05	27.05	0.00	0.00	5.00	5.00	0.295	Right	2.50	0
122	5+1088.725	5+1103.725	5+1118.725	5+1133.725	5+1133.725	562828.130	366420.597	310	20	0.000	0.000	7.01	7.01	0.00	0.00	26.30	26.30	0.808	Right	5.93	1.5
123	5+119.095	5+134.095	5+149.095	5+164.095	5+164.095	562872.130	366417.611	25	20	0.000	0.000	13.86	13.86	0.00	0.00	69.46	69.46	4.335	Left	7.00	1.5
124	5+150.925	5+165.925	5+180.925	5+195.925	5+195.925	562916.130	366414.625	35	25	0.000	0.000	16.03	16.03	0.00	0.00	49.21	49.21	3.495	Right	7.00	1.5
125	5+187.940	5+202.940	5+217.940	5+232.940	5+232.940	562960.130	366411.639	250	40	0.000	0.000	20.06	20.06	0.00	0.00	9.18	0.804	0.804	Left	2.84	0.6
126	5+234.908	5+249.908	5+264.908	5+279.908	5+279.908	563004.130	366408.653	250	35	0.000	0.000	12.39	12.39	0.00	0.00	20.07	20.07	1.087	Right	7.00	0.9
127	5+267.184	5+282.184	5+297.184	5+312.184	5+312.184	563048.130	366405.667	40	25	0.000	0.000	9.91	9.91	0.00	0.00	27.84	27.84	1.210	Right	6.94	1.5
128	5+294.293	5+309.293	5+324.293	5+339.293	5+339.293	563092.130	366402.681	40	25	0.000	0.000	9.87	9.87	0.00	0.00	27.73	27.73	1.200	Left	6.94	1.5
129	5+317.351	5+332.351	5+347.351	5+362.351	5+362.351	563136.130	366400.695	25	20	0.000	0.000	6.58	6.58	0.00	0.00	29.50	29.50	0.852	Left	7.00	1.5
130	5+409.918	5+424.918	5+439.918	5+454.918	5+454.918	563180.130	366397.709	25	20	15.000	15.000	19.48	19.48	2.86	2.86	3.40	9.13	0.540	Left	7.00	1.5
131	5+464.976	5+479.976	5+494.976	5+509.976	5+509.976	563224.130	366394.723	22	20	0.000	0.000	16.25	16.25	0.00	0.00	72.91	72.91	5.352	Right	7.00	1.5
132	5+537.184	5+552.184	5+567.184	5+582.184	5+582.184	563268.130	366391.737	60	30	0.000	0.000	11.33	11.33	0.00	0.00	21.38	1.060	1.060	Left	6.67	1.2
133	5+604.976	5+619.976	5+634.976	5+649.976	5+649.976	563312.130	366388.751	50	30	0.000	0.000	11.24	11.24	0.00	0.00	25.35	1.249	1.249	Left	7.00	1.2
134	5+657.184	5+672.184	5+687.184	5+702.184	5+702.184	563356.130	366385.765	50	30	0.000	0.000	18.12	18.12	0.00	0.00	20.83	0.837	0.837	Left	7.00	1.2
135	5+717.945	5+732.945	5+747.945	5+762.945	5+762.945	563400.130	366382.779	60	30	0.000	0.000	7.81	7.81	0.00	0.00	14.84	0.507	0.507	Right	6.67	1.2
136	5+762.997	5+777.997	5+792.997	5+807.997	5+807.997	563444.130	366379.793	20	20	0.000	0.000	12.90	12.90	0.00	0.00	65.66	3.802	3.802	Right	7.00	1.5
137	5+837.037	5+852.037	5+867.037	5+882.037	5+882.037	563488.130	366376.807	30	20	0.000	0.000	8.74	8.74	0.00	0.00	32.47	1.246	1.246	Left	5.93	1.5
138	5+887.219	5+902.219	5+917.219	5+932.219	5+932.219	563532.130	366373.821	12	15	0.000	0.000	10.86	10.86	0.00	0.00	84.29	4.184	4.184	Left	7.00	1.5
139	5+942.448	5+957.448	5+972.448	5+987.448	5+987.448	563576.130	366370.835	50	30	15.000	15.000	26.49	26.49	8.59	8.59	24.26	41.45	3.659	Right	7.00	1.2
140	5+1007.664	5+1022.664	5+1037.664	5+1052.664	5+1052.664	563620.130	366367.849	70	35	0.000	0.000	20.61	20.61	6.14	6.14	8.89	21.17	1.348	Right	7.00	0.9
141	5+1082.880	5+1097.880	5+1112.880	5+1127.880	5+1127.880	563664.130	366364.863	310	40	0.000	0.000	18.80	18.80	0.00	0.00	6.94	6.94	0.570	Right	2.50	0
142	5+1168.096	5+1183.096	5+1198.096	5+1213.096	5+1213.096	563708.130	366361.877	50	25	0.000	0.000	17.82	17.82	0.00	0.00	48.03	3.790	3.790	Left	6.94	1.5
143	5+1243.312	5+1258.312	5+1273.312	5+1288.312	5+1288.312	563752.130	366358.891	50	30	0.000	0.000	6.80	6.80	0.00	0.00	15.50	0.461	0.461	Right	7.00	1.2
144	5+1318.528	5+1333.528	5+1348.528	5+1363.528	5+1363.528	563796.130	366355.905	50	30	0.000	0.000	7.73	7.73	0.00	0.00	17.59	0.595	0.595	Left	7.00	1.2
145	5+1393.744	5+1408.744	5+1423.744	5+1438.744	5+1438.744	563840.130	366352.919	70	35	0.000	0.000	10.20	10.20	0.00	0.00	16.58	0.739	0.739	Right	7.00	0.9
146	5+1468.960	5+1483.960	5+1498.960	5+1513.960	5+1513.960	563884.130	366349.933	40	25	0.000	0.000	12.96	12.96	0.00	0.00	35.92	2.049	2.049	Right	6.94	1.5
147	5+1544.176	5+1559.176	5+1574.176	5+1589.176	5+1589.176	563928.130	366346.947	200	40	0.000	0.000	11.02	11.02	0.00	0.00	47.59	2.323	2.323	Right	7.00	1.5
148	5+1619.392	5+1634.392	5+1649.392	5+1664.392	5+1664.392	563972.130	366343.961	200	40	0.000	0.000	19.03	19.03	2.15	2.15	2.30	6.60	0.379	Left	3.56	0.6
149	5+1694.608	5+1709.608	5+1724.608	5+1739.608	5+1739.608	564016.130	366340.975	150	40	0.000	0.000	13.32	13.32	0.00	0.00	10.15	0.591	0.591	Left	4.74	0.6
150	5+1769.824	5+1784.824	5+1799.824	5+1814.824	5+1814.824	564060.130	366337.989	100	40	0.000	0.000	7.97	7.97	0.00	0.00	9.12	0.317	0.317	Left	7.00	0.9

HIP No.	Start of Transition (Ts)	Start of Curve PC / SC	HIP	End of Curve CS / PT	End of Transition (ST)	HIP Coordinates		Radius	Design Speed (V kmph)	Transition		Circular Curve Length	Tangent Length (Ts)		Shift (s)		Dc (°)	D (°)	Apex Distance (Es)	Hand of Curve	e%	Extra Widening		
						Existing	Northing			Start Length	End Length		Leading	Trailing	Leading	Trailing							Leading	Trailing
						Transition	Transition			Transition	Transition		Transition	Transition	Transition	Transition							Transition	Transition
151	7-299.799	7-310.151	7-320.149	7-330.149	7-340.149	7-350.149	7-360.149	7-370.149	7-380.149	7-390.149	7-400.149	7-410.149	7-420.149	7-430.149	7-440.149	7-450.149	7-460.149	7-470.149	7-480.149	7-490.149	7-500.149	7-510.149		
152	7-324.776	7-334.776	7-344.776	7-354.776	7-364.776	7-374.776	7-384.776	7-394.776	7-404.776	7-414.776	7-424.776	7-434.776	7-444.776	7-454.776	7-464.776	7-474.776	7-484.776	7-494.776	7-504.776	7-514.776	7-524.776	7-534.776	7-544.776	
153	7-368.515	7-378.515	7-388.515	7-398.515	7-408.515	7-418.515	7-428.515	7-438.515	7-448.515	7-458.515	7-468.515	7-478.515	7-488.515	7-498.515	7-508.515	7-518.515	7-528.515	7-538.515	7-548.515	7-558.515	7-568.515	7-578.515	7-588.515	
154	7-427.755	7-437.755	7-447.755	7-457.755	7-467.755	7-477.755	7-487.755	7-497.755	7-507.755	7-517.755	7-527.755	7-537.755	7-547.755	7-557.755	7-567.755	7-577.755	7-587.755	7-597.755	7-607.755	7-617.755	7-627.755	7-637.755	7-647.755	
155	7-455.606	7-465.606	7-475.606	7-485.606	7-495.606	7-505.606	7-515.606	7-525.606	7-535.606	7-545.606	7-555.606	7-565.606	7-575.606	7-585.606	7-595.606	7-605.606	7-615.606	7-625.606	7-635.606	7-645.606	7-655.606	7-665.606	7-675.606	
156	7-543.722	7-553.722	7-563.722	7-573.722	7-583.722	7-593.722	7-603.722	7-613.722	7-623.722	7-633.722	7-643.722	7-653.722	7-663.722	7-673.722	7-683.722	7-693.722	7-703.722	7-713.722	7-723.722	7-733.722	7-743.722	7-753.722	7-763.722	
157	7-572.821	7-582.821	7-592.821	7-602.821	7-612.821	7-622.821	7-632.821	7-642.821	7-652.821	7-662.821	7-672.821	7-682.821	7-692.821	7-702.821	7-712.821	7-722.821	7-732.821	7-742.821	7-752.821	7-762.821	7-772.821	7-782.821	7-792.821	
158	7-600.578	7-610.578	7-620.578	7-630.578	7-640.578	7-650.578	7-660.578	7-670.578	7-680.578	7-690.578	7-700.578	7-710.578	7-720.578	7-730.578	7-740.578	7-750.578	7-760.578	7-770.578	7-780.578	7-790.578	7-800.578	7-810.578	7-820.578	
159	7-684.112	7-694.112	7-704.112	7-714.112	7-724.112	7-734.112	7-744.112	7-754.112	7-764.112	7-774.112	7-784.112	7-794.112	7-804.112	7-814.112	7-824.112	7-834.112	7-844.112	7-854.112	7-864.112	7-874.112	7-884.112	7-894.112	7-904.112	
160	7-705.866	7-715.866	7-725.866	7-735.866	7-745.866	7-755.866	7-765.866	7-775.866	7-785.866	7-795.866	7-805.866	7-815.866	7-825.866	7-835.866	7-845.866	7-855.866	7-865.866	7-875.866	7-885.866	7-895.866	7-905.866	7-915.866	7-925.866	
161	7-753.489	7-763.489	7-773.489	7-783.489	7-793.489	7-803.489	7-813.489	7-823.489	7-833.489	7-843.489	7-853.489	7-863.489	7-873.489	7-883.489	7-893.489	7-903.489	7-913.489	7-923.489	7-933.489	7-943.489	7-953.489	7-963.489	7-973.489	
162	7-779.934	7-789.934	7-799.934	7-809.934	7-819.934	7-829.934	7-839.934	7-849.934	7-859.934	7-869.934	7-879.934	7-889.934	7-899.934	7-909.934	7-919.934	7-929.934	7-939.934	7-949.934	7-959.934	7-969.934	7-979.934	7-989.934	7-999.934	
163	7-836.446	7-846.446	7-856.446	7-866.446	7-876.446	7-886.446	7-896.446	7-906.446	7-916.446	7-926.446	7-936.446	7-946.446	7-956.446	7-966.446	7-976.446	7-986.446	7-996.446	7-1006.446	7-1016.446	7-1026.446	7-1036.446	7-1046.446	7-1056.446	
164	7-861.541	7-871.541	7-881.541	7-891.541	7-901.541	7-911.541	7-921.541	7-931.541	7-941.541	7-951.541	7-961.541	7-971.541	7-981.541	7-991.541	7-1001.541	7-1011.541	7-1021.541	7-1031.541	7-1041.541	7-1051.541	7-1061.541	7-1071.541	7-1081.541	
165	7-894.920	7-904.920	7-914.920	7-924.920	7-934.920	7-944.920	7-954.920	7-964.920	7-974.920	7-984.920	7-994.920	7-1004.920	7-1014.920	7-1024.920	7-1034.920	7-1044.920	7-1054.920	7-1064.920	7-1074.920	7-1084.920	7-1094.920	7-1104.920	7-1114.920	
166	7-914.364	7-924.364	7-934.364	7-944.364	7-954.364	7-964.364	7-974.364	7-984.364	7-994.364	7-1004.364	7-1014.364	7-1024.364	7-1034.364	7-1044.364	7-1054.364	7-1064.364	7-1074.364	7-1084.364	7-1094.364	7-1104.364	7-1114.364	7-1124.364	7-1134.364	
167	7-938.903	7-948.903	7-958.903	7-968.903	7-978.903	7-988.903	7-998.903	7-1008.903	7-1018.903	7-1028.903	7-1038.903	7-1048.903	7-1058.903	7-1068.903	7-1078.903	7-1088.903	7-1098.903	7-1108.903	7-1118.903	7-1128.903	7-1138.903	7-1148.903	7-1158.903	
168	7-978.205	7-988.205	7-998.205	7-1008.205	7-1018.205	7-1028.205	7-1038.205	7-1048.205	7-1058.205	7-1068.205	7-1078.205	7-1088.205	7-1098.205	7-1108.205	7-1118.205	7-1128.205	7-1138.205	7-1148.205	7-1158.205	7-1168.205	7-1178.205	7-1188.205	7-1198.205	
169	7-1002.771	7-1012.771	7-1022.771	7-1032.771	7-1042.771	7-1052.771	7-1062.771	7-1072.771	7-1082.771	7-1092.771	7-1102.771	7-1112.771	7-1122.771	7-1132.771	7-1142.771	7-1152.771	7-1162.771	7-1172.771	7-1182.771	7-1192.771	7-1202.771	7-1212.771	7-1222.771	
170	7-1052.104	7-1062.104	7-1072.104	7-1082.104	7-1092.104	7-1102.104	7-1112.104	7-1122.104	7-1132.104	7-1142.104	7-1152.104	7-1162.104	7-1172.104	7-1182.104	7-1192.104	7-1202.104	7-1212.104	7-1222.104	7-1232.104	7-1242.104	7-1252.104	7-1262.104	7-1272.104	
171	7-1092.374	7-1102.374	7-1112.374	7-1122.374	7-1132.374	7-1142.374	7-1152.374	7-1162.374	7-1172.374	7-1182.374	7-1192.374	7-1202.374	7-1212.374	7-1222.374	7-1232.374	7-1242.374	7-1252.374	7-1262.374	7-1272.374	7-1282.374	7-1292.374	7-1302.374	7-1312.374	
172	7-1134.571	7-1144.571	7-1154.571	7-1164.571	7-1174.571	7-1184.571	7-1194.571	7-1204.571	7-1214.571	7-1224.571	7-1234.571	7-1244.571	7-1254.571	7-1264.571	7-1274.571	7-1284.571	7-1294.571	7-1304.571	7-1314.571	7-1324.571	7-1334.571	7-1344.571	7-1354.571	
173	7-1169.920	7-1179.920	7-1189.920	7-1199.920	7-1209.920	7-1219.920	7-1229.920	7-1239.920	7-1249.920	7-1259.920	7-1269.920	7-1279.920	7-1289.920	7-1299.920	7-1309.920	7-1319.920	7-1329.920	7-1339.920	7-1349.920	7-1359.920	7-1369.920	7-1379.920	7-1389.920	
174	7-1205.583	7-1215.583	7-1225.583	7-1235.583	7-1245.583	7-1255.583	7-1265.583	7-1275.583	7-1285.583	7-1295.583	7-1305.583	7-1315.583	7-1325.583	7-1335.583	7-1345.583	7-1355.583	7-1365.583	7-1375.583	7-1385.583	7-1395.583	7-1405.583	7-1415.583	7-1425.583	
175	7-1229.052	7-1239.052	7-1249.052	7-1259.052	7-1269.052	7-1279.052	7-1289.052	7-1299.052	7-1309.052	7-1319.052	7-1329.052	7-1339.052	7-1349.052	7-1359.052	7-1369.052	7-1379.052	7-1389.052	7-1399.052	7-1409.052	7-1419.052	7-1429.052	7-1439.052	7-1449.052	
176	7-1246.892	7-1256.892	7-1266.892	7-1276.892	7-1286.892	7-1296.892	7-1306.892	7-1316.892	7-1326.892	7-1336.892	7-1346.892	7-1356.892	7-1366.892	7-1376.892	7-1386.892	7-1396.892	7-1406.892	7-1416.892	7-1426.892	7-1436.892	7-1446.892	7-1456.892	7-1466.892	
177	7-1296.471	7-1306.471	7-1316.471	7-1326.471	7-1336.471	7-1346.471	7-1356.471	7-1366.471	7-1376.471	7-1386.471	7-1396.471	7-1406.471	7-1416.471	7-1426.471	7-1436.471	7-1446.471	7-1456.471	7-1466.471	7-1476.471	7-1486.471	7-1496.471	7-1506.471	7-1516.471	
178	7-1352.216	7-1362.216	7-1372.216	7-1382.216	7-1392.216	7-1402.216	7-1412.216	7-1422.216	7-1432.216	7-1442.216	7-1452.216	7-1462.216	7-1472.216	7-1482.216	7-1492.216	7-1502.216	7-1512.216	7-1522.216	7-1532.216	7-1542.216	7-1552.216	7-1562.216	7-1572.216	
179	7-1374.523	7-1384.523	7-1394.523	7-1404.523	7-1414.523	7-1424.523	7-1434.523	7-1444.523	7-1454.523	7-1464.523	7-1474.523	7-1484.523	7-1494.523	7-1504.523	7-1514.523	7-1524.523	7-1534.523	7-1544.523	7-1554.523	7-1564.523	7-1574.523	7-1584.523	7-1594.523	
180	7-1389.366	7-1399.366	7-1409.366	7-1419.366	7-1429.366	7-1439.366	7-1449.366	7-1459.366	7-1469.366	7-1479.366	7-1489.366	7-1499.366	7-1509.366	7-1519.366	7-1529.366	7-1539.366	7-1549.366	7-1559.366	7-1569.366	7-1579.366	7-1589.366	7-1599.366	7-1609.366	
181	7-1429.280	7-1439.280	7-1449.280	7-1459.280	7-1469.280	7-1479.280	7-1489.280	7-1499.280	7-1509.280	7-1519.280	7-1529.280	7-1539.280	7-1549.280	7-1559.280	7-1569.280	7-1579.280	7-1589.280	7-1599.280	7-1609.280	7-1619.280	7-1629.280	7-1639.280	7-1649.280	
182	7-1464.892	7-1474.892	7-1484.892	7-1494.892	7-1504.892	7-1514.892	7-1524.892	7-1534.892	7-1544.892	7-1554.892	7-1564.892	7-1574.892	7-1584.892	7-1594.892	7-1604.892	7-1614.892	7-1624.892	7-1634.892	7-1644.892	7-1654.892	7-1664.892	7-1674.892	7-1684.892	
183	7-1498.247	7-1508.247	7-1518.247	7-1528.247	7-1538.247	7-1548.247	7-1558.247	7-1568.247	7-1578.247	7-1588.247	7-1598.247	7-1608.247	7-1618.247	7-1628.247	7-1638.247	7-1648.247	7-1658.247	7-1668.247	7-1678.247	7-1688.247	7-1698.247	7-1708.247	7-1718.247	
184	7-1524.612	7-1534.612	7-1544.612	7-1554.612	7-1564.612	7-1574.612	7-1584.612	7-1594.612	7-1604.612	7-1614.612	7-1624.612	7-1634.612	7-1644.612	7-1654.612	7-1664.612	7-1674.612	7-1684.612	7-1694.612	7-1704.612	7-1714.612	7-1724.612	7-1734.612	7-1744.612	
185	7-1560.587	7-1570.587	7-1580.587	7-1590.587	7-1600.587	7-1610.587	7-1620.587																	

HIP No.	Start of Transition (Ts)	Start of Curve PC / SC	HIP	End of Curve CS / PT	End of Transition (ST)	HIP Coordinates		Radius	Design Speed (V kmph)	Transition Start Length	Transition End Length	Circular Curve Length	Shift (s)		Tangent Length (Ts)		qs (°)		Dc (°)	D (°)	Apex Distances (Es)	Hand of Curve	e%	Extra Widening
						Existing	Northing						Leading	Trailing	Leading	Trailing	Leading	Trailing						
201	9+132.191	9+132.191	9+143.164	9+153.794	9+153.794	564768.723	3663348.226	50	30	0.00	0.00	21.60	0.00	0.00	10.97	10.97	0.00	24.76	24.76	1.190	Right	7.00	1.2	
202	9+163.134	9+163.134	9+168.468	9+173.739	9+173.739	564777.110	3663323.990	40	25	0.00	0.00	10.60	0.00	0.00	5.33	5.33	0.00	15.19	15.19	0.354	Left	6.94	1.5	
203	9+206.901	9+206.901	9+219.003	9+230.648	9+230.648	564805.608	3663282.181	50	30	0.00	0.00	23.75	0.00	0.00	12.10	12.10	0.00	27.21	27.21	1.444	Right	7.00	1.2	
204	9+238.696	9+238.696	9+258.908	9+263.872	9+278.872	564811.494	3663242.393	80	35	15.00	15.00	10.18	0.117	0.117	20.21	20.21	5.37	7.29	18.03	1.119	Left	6.81	0.9	
205	9+283.163	9+283.163	9+289.737	9+296.293	9+296.293	564823.755	3663215.988	100	40	0.00	0.00	13.13	0.00	0.00	6.57	6.57	0.00	7.52	7.52	0.216	Right	7.00	0.9	
206	9+301.073	9+316.073	9+322.423	9+328.573	9+343.573	564834.399	3663183.177	100	40	15.00	15.00	12.50	0.094	0.094	21.35	21.35	4.30	7.16	15.76	1.047	Left	7.00	0.9	
207	9+367.635	9+382.635	9+387.135	9+391.547	9+406.547	564869.741	3663128.936	125	40	15.00	15.00	8.91	0.075	0.075	19.50	19.50	3.44	4.08	10.96	0.649	Left	5.69	0.6	
208	9+417.947	9+417.947	9+424.011	9+430.061	9+430.061	564895.109	3663102.121	100	30	0.00	0.00	12.11	0.00	0.00	6.16	6.16	0.00	6.94	6.94	0.184	Right	7.00	0.9	
209	9+444.645	9+444.645	9+450.809	9+456.958	9+456.958	564911.376	3663080.806	100	30	0.00	0.00	13.31	0.00	0.00	9.85	9.85	0.00	7.05	7.05	0.190	Left	4.00	0.9	
210	9+472.972	9+472.972	9+482.824	9+486.315	9+486.315	564933.790	3663057.923	7	15	0.00	0.00	13.34	0.00	0.00	8.67	8.67	0.00	109.21	109.21	5.086	Right	7.00	1.5	
211	9+486.612	9+486.612	9+495.285	9+499.824	9+499.824	564916.757	3663049.912	8	10	0.00	0.00	13.21	0.00	0.00	9.69	9.69	0.00	94.62	94.62	3.799	Right	5.56	1.5	
212	9+504.092	9+504.092	9+513.782	9+523.105	9+523.105	564908.808	3663071.101	40	25	0.00	0.00	19.01	0.00	0.00	25.93	25.93	3.44	8.89	27.23	1.157	Left	6.94	1.5	
213	9+571.040	9+586.040	9+596.968	9+607.610	9+622.610	564846.382	3663126.431	125	40	15.00	15.00	21.57	0.075	0.075	16.44	16.44	0.00	6.07	16.76	1.425	Left	5.69	0.6	
214	9+632.140	9+632.140	9+648.581	9+664.991	9+664.991	564800.051	3663149.522	310	40	0.00	0.00	32.85	0.00	0.00	26.78	26.78	0.00	12.28	6.07	0.436	Right	2.50	0	
215	9+687.527	9+702.527	9+714.308	9+722.548	9+737.548	564747.221	3663185.732	35	25	15.00	15.00	20.02	0.268	0.268	13.92	13.92	0.00	58.22	57.33	5.194	Right	7.00	1.5	
216	9+758.718	9+758.718	9+772.640	9+784.123	9+784.123	564742.750	3663245.734	25	20	0.00	0.00	25.40	0.00	0.00	9.93	9.93	0.00	31.67	31.67	1.381	Left	7.00	1.5	
217	9+805.443	9+805.443	9+815.372	9+824.792	9+824.792	564703.877	3663268.740	35	25	0.00	0.00	19.35	0.00	0.00	8.22	8.22	0.00	36.39	36.39	1.316	Left	7.00	1.5	
218	9+847.567	9+847.567	9+855.784	9+863.444	9+863.444	564684.851	3663304.968	25	20	0.00	0.00	15.88	0.00	0.00	5.02	5.02	0.00	36.98	36.98	0.817	Left	6.67	1.5	
219	9+898.430	9+898.430	9+903.446	9+908.112	9+908.112	564641.478	3663326.034	15	15	0.00	0.00	9.68	0.00	0.00	26.66	26.66	3.44	10.55	17.42	1.534	Right	4.36	0.6	
220	9+914.837	9+929.837	9+941.489	9+952.833	9+967.833	564603.759	3663319.661	125	35	15.00	15.00	23.01	0.075	0.075	13.84	13.84	0.00	25.98	25.98	1.576	Right	6.67	1.2	
221	9+977.447	9+977.447	9+991.289	10+004.655	10+004.655	564553.990	3663324.198	60	30	0.00	0.00	27.21	0.00	0.00	13.68	13.68	0.00	5.05	5.05	0.302	Right	2.50	0	
222	10+013.003	10+013.003	10+026.683	10+040.346	10+040.346	564523.679	3663343.379	310	40	0.00	0.00	27.34	0.00	0.00	20.81	20.81	3.31	5.07	11.68	0.751	Left	5.47	0.6	
223	10+048.883	10+063.883	10+069.689	10+075.389	10+090.389	564489.166	3663368.967	130	40	15.00	15.00	11.51	0.072	0.072	15.51	15.51	0.00	28.99	28.99	1.973	Right	6.67	1.2	
224	10+098.008	10+098.008	10+113.519	10+128.366	10+128.366	564449.902	3663388.550	60	30	0.00	0.00	30.36	0.00	0.00	15.51	15.51	0.00	28.99	28.99	1.973	Right	6.67	1.2	

**Horizontal Alignment Report**

<p><b>CLIENT :</b></p>  <p>Jhelum Tariq Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p>	<p><b>PROJECT :</b></p> <p align="center"><b>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)</b></p>	<p><b>DESIGN CONSULTANT:</b></p>  <p><b>Eptisa Servicios de Ingeniería S.L</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</p>
<p><b>TITLE :</b></p> <p align="center"><b>Horizontal Alignment Report</b></p>	<p><b>DRAWN BY :</b> SD</p> <p><b>DESIGNED BY :</b> SK/M/M</p> <p><b>APPROVED BY :</b> KG</p> <p><b>SCALE :</b> N.T.S</p>	<p><b>DRG. NO. :</b> EPTISA/JTR/PPDR/08/KHAR05</p> <p><b>REVISION :</b> R-1</p>
<p><b>REV. DATE DESCRIPTION</b></p>	<p><b>REV. DATE DESCRIPTION</b></p>	<p><b>REV. DATE DESCRIPTION</b></p>
<p><b>SEPTEMBER 2019</b></p>	<p><b>SEPTEMBER 2019</b></p>	<p><b>SEPTEMBER 2019</b></p>



≡ VERTICAL ALIGNMENT REPORT ≡

**Vertical Alignment Report**

PVI No.	Start		PVI Details		End		Gradient (%)		Type of Curve	Curve Length (m)	K-Value
	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	IN	OUT			
1	0+030.853	927.121	0+038.353	927.631	0+045.853	928.023	6.803	5.224	Hog	15	9.50
2	0+085.596	930.099	0+093.096	930.491	0+100.596	931.022	5.224	7.083	Sag	15	8.07
3	0+102.736	931.174	0+110.236	931.705	0+117.736	931.979	7.083	3.647	Hog	15	4.37
4	0+120.148	932.067	0+125.148	932.249	0+130.148	932.527	3.647	5.557	Sag	10	5.24
5	0+142.466	933.211	0+149.966	933.628	0+157.466	933.994	5.557	4.874	Hog	15	21.96
6	0+185.390	935.355	0+195.390	935.842	0+205.390	936.310	4.874	4.681	Hog	20	103.43
7	0+215.517	936.784	0+223.017	937.135	0+230.517	937.521	4.681	5.153	Sag	15	31.73
8	0+279.053	940.023	0+289.053	940.538	0+299.053	941.170	5.153	6.321	Sag	20	17.13
9	0+325.232	942.825	0+332.732	943.299	0+340.232	943.838	6.321	7.182	Sag	15	17.42
10	0+373.949	946.259	0+381.449	946.798	0+388.949	947.093	7.182	3.936	Hog	15	4.62
11	0+395.702	947.359	0+403.202	947.654	0+410.702	948.085	3.936	5.745	Sag	15	8.29
12	0+506.737	953.602	0+521.737	954.464	0+536.737	955.504	5.745	6.932	Sag	30	25.28
13	0+609.062	960.517	0+616.562	961.037	0+624.062	961.574	6.932	7.156	Sag	15	66.98
14	0+643.945	962.996	0+653.945	963.712	0+663.945	964.396	7.156	6.839	Hog	20	63.09
15	0+775.555	972.029	0+785.555	972.712	0+795.555	973.223	6.839	5.102	Hog	20	11.52
16	0+811.462	974.034	0+818.962	974.417	0+826.462	975.120	5.102	9.380	Sag	15	3.51
17	0+830.177	975.469	0+837.677	976.172	0+845.177	976.675	9.380	6.709	Hog	15	5.61
18	0+888.550	979.585	0+898.550	980.256	0+908.550	980.931	6.709	6.751	Sag	20	469.77
19	0+983.094	985.964	0+993.094	986.639	1+003.094	987.259	6.751	6.205	Hog	20	36.64
20	1+026.467	988.710	1+036.467	989.330	1+046.467	990.074	6.205	7.437	Sag	20	16.24
21	1+048.832	990.250	1+058.832	990.994	1+068.832	991.523	7.437	5.299	Hog	20	9.35
22	1+103.752	993.374	1+113.752	993.904	1+123.752	994.701	5.299	7.974	Sag	20	7.48
23	1+142.873	996.226	1+152.873	997.023	1+162.873	997.503	7.974	4.798	Hog	20	6.30
24	1+168.402	997.768	1+175.902	998.128	1+183.402	998.548	4.798	5.606	Sag	15	18.57
25	1+208.501	999.956	1+216.001	1000.376	1+223.501	1000.814	5.606	5.844	Sag	15	63.01
26	1+261.475	1003.034	1+271.475	1003.618	1+281.475	1004.209	5.844	5.912	Sag	20	293.33
27	1+302.051	1005.426	1+312.051	1006.017	1+322.051	1006.544	5.912	5.274	Hog	20	31.32
28	1+341.036	1007.546	1+351.036	1008.073	1+361.036	1008.621	5.274	5.482	Sag	20	96.08
29	1+446.673	1013.316	1+456.673	1013.864	1+466.673	1014.452	5.482	5.876	Sag	20	50.77
30	1+543.233	1018.950	1+558.233	1019.832	1+573.233	1020.619	5.876	5.252	Hog	30	48.07
31	1+628.385	1023.516	1+638.385	1024.041	1+648.385	1024.532	5.252	4.906	Hog	20	57.75
32	1+714.836	1027.791	1+729.836	1028.527	1+744.836	1029.210	4.906	4.554	Hog	30	85.26
33	1+779.060	1030.769	1+789.060	1031.224	1+799.060	1031.614	4.554	3.898	Hog	20	30.52
34	1+850.935	1033.636	1+860.935	1034.026	1+870.935	1034.615	3.898	5.888	Sag	20	10.05
35	1+891.900	1035.849	1+901.900	1036.438	1+911.900	1036.845	5.888	4.068	Hog	20	10.99
36	1+922.452	1037.274	1+932.452	1037.681	1+942.452	1038.167	4.068	4.864	Sag	20	25.15
37	1+991.935	1040.574	2+001.935	1041.061	2+011.935	1041.519	4.864	4.588	Hog	20	72.41
38	2+056.529	1043.565	2+066.529	1044.024	2+076.529	1044.478	4.588	4.540	Hog	20	416.20
39	2+098.012	1045.453	2+108.012	1045.907	2+118.012	1046.421	4.540	5.144	Sag	20	33.10
40	2+146.537	1047.889	2+181.537	1049.689	2+216.537	1052.543	5.144	8.153	Sag	70	23.26
41	2+248.253	1055.129	2+258.253	1055.944	2+268.253	1056.657	8.153	7.128	Hog	20	19.51
42	2+321.369	1060.443	2+331.369	1061.156	2+341.369	1061.848	7.128	6.925	Hog	20	98.18
43	2+368.728	1063.743	2+378.728	1064.435	2+388.728	1065.029	6.925	5.938	Hog	20	20.26
44	2+413.356	1066.491	2+428.356	1067.382	2+443.356	1068.656	5.938	8.496	Sag	30	11.72
45	2+450.059	1069.226	2+460.059	1070.076	2+470.059	1070.736	8.496	6.603	Hog	20	10.56
46	2+518.700	1073.948	2+528.700	1074.608	2+538.700	1075.310	6.603	7.022	Sag	20	47.79
47	2+548.793	1076.019	2+558.793	1076.721	2+568.793	1077.287	7.022	5.657	Hog	20	14.66
48	2+574.637	1077.617	2+584.637	1078.183	2+594.637	1078.939	5.657	7.555	Sag	20	10.54
49	2+601.413	1079.450	2+611.413	1080.206	2+621.413	1080.767	7.555	5.612	Hog	20	10.29
50	2+673.102	1083.668	2+683.102	1084.229	2+693.102	1084.881	5.612	6.519	Sag	20	22.04

<p><b>CLIENT:</b></p> <p>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p>	<p><b>PROJECT:</b></p> <p style="text-align: center;"><b>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)</b></p>	<p><b>DESIGN CONSULTANT:</b></p> <p><b>Eptisa Servicios de Ingeniería S.L</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector v, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</p>
<p><b>DRAWN BY:</b> SD</p> <p><b>DESIGNED BY:</b> SK/MM</p> <p><b>APPROVED BY:</b> KG</p> <p><b>SCALE:</b> N.T.S</p>	<p><b>REV:</b>    <b>DATE:</b>    <b>DESCRIPTION:</b></p>	<p><b>TITLE:</b></p> <p style="text-align: center;"><b>Vertical Alignment Report</b></p> <p><b>DRG. NO.:</b> EPTISAJUTFRDPRJ08KVAR01 <b>REVISION:</b> R-1</p>
<p>September 2019</p>		

**Vertical Alignment Report**

PVI No.	Start		PVI Details		End		Gradient (%)		Type of Curve	Curve Length (m)	K-Value
	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	IN	OUT			
51	2+719.610	1086.609	2+719.610	1087.261	2+739.610	1087.730	6.519	4.691	Hog	20	10.94
52	2+817.571	1091.387	2+827.571	1091.856	2+837.571	1092.209	4.691	3.535	Hog	20	17.30
53	2+875.284	1093.543	2+885.284	1093.896	2+895.284	1094.480	5.837	5.837	Sag	20	8.69
54	2+902.175	1094.882	2+917.175	1095.758	2+932.175	1096.290	5.837	3.553	Hog	30	13.13
55	2+950.628	1096.946	2+965.628	1097.479	2+980.628	1098.050	3.553	3.807	Sag	30	117.92
56	2+995.481	1098.615	3+002.981	1098.901	3+010.481	1099.492	3.807	7.885	Sag	15	3.68
57	3+083.495	1105.250	3+098.495	1106.433	3+113.495	1107.508	7.885	7.168	Hog	30	41.83
58	3+203.054	1113.927	3+223.054	1115.361	3+243.054	1116.322	7.168	4.804	Hog	40	16.92
59	3+251.397	1116.723	3+258.897	1117.083	3+266.397	1117.732	4.804	8.649	Sag	15	3.90
60	3+270.740	1118.107	3+278.240	1118.756	3+285.740	1119.213	8.649	6.091	Hog	15	5.86
61	3+361.340	1123.818	3+376.340	1124.731	3+391.340	1125.580	6.091	5.659	Hog	30	69.48
62	3+500.238	1131.743	3+515.238	1132.592	3+530.238	1133.417	5.659	5.501	Hog	30	189.56
63	3+578.048	1136.047	3+585.548	1136.460	3+593.048	1137.043	5.501	7.773	Sag	15	6.60
64	3+598.745	1137.486	3+608.745	1138.263	3+618.745	1138.768	7.773	5.049	Hog	20	7.34
65	3+686.474	1142.187	3+696.474	1142.692	3+706.474	1143.231	5.049	5.389	Sag	20	58.71
66	3+807.884	1148.696	3+817.884	1149.235	3+827.884	1149.738	5.389	5.025	Hog	20	54.97
67	3+884.078	1152.561	3+894.078	1153.064	3+904.078	1153.556	5.025	4.924	Hog	20	197.19
68	3+932.639	1154.963	3+940.139	1155.332	3+947.639	1155.880	4.924	7.308	Sag	15	6.29
69	3+954.564	1156.386	3+964.564	1157.117	3+974.564	1157.392	7.308	2.754	Hog	20	4.39
70	3+982.663	1157.616	3+990.163	1157.822	3+997.663	1158.375	2.754	7.373	Sag	15	3.25
71	4+002.758	1158.751	4+012.758	1159.488	4+022.758	1159.885	7.373	3.968	Hog	20	5.87
72	4+037.686	1160.477	4+047.686	1160.874	4+057.686	1161.431	3.968	5.568	Sag	20	12.50
73	4+079.038	1162.620	4+094.038	1163.455	4+109.038	1164.008	5.568	3.688	Hog	30	15.95
74	4+120.788	1164.441	4+128.288	1164.718	4+135.788	1165.148	3.688	5.733	Sag	15	7.34
75	4+142.349	1165.524	4+149.849	1165.954	4+157.349	1166.223	5.733	3.591	Hog	15	7.00
76	4+170.022	1166.678	4+180.022	1167.037	4+190.022	1167.604	3.591	5.669	Sag	20	9.62
77	4+268.758	1172.068	4+278.758	1172.635	4+288.758	1173.301	5.669	6.658	Sag	20	20.22
78	4+292.039	1173.519	4+307.039	1174.518	4+322.039	1175.203	6.658	4.565	Hog	30	14.34
79	4+329.933	1175.563	4+344.933	1176.248	4+359.933	1177.133	4.565	5.898	Sag	30	22.51
80	4+403.401	1179.697	4+410.901	1180.139	4+418.401	1180.498	5.898	4.781	Hog	15	13.43
81	4+423.066	1180.721	4+430.566	1181.079	4+438.066	1181.547	4.781	6.239	Sag	15	10.29
82	4+441.591	1181.767	4+449.091	1182.235	4+456.591	1182.657	6.239	5.626	Hog	15	24.47
83	4+463.403	1183.040	4+470.903	1183.462	4+478.403	1184.004	5.626	7.225	Sag	15	9.38
84	4+500.456	1185.597	4+510.456	1186.320	4+520.456	1186.558	7.225	2.382	Hog	20	4.13
85	4+594.219	1188.316	4+614.219	1188.792	4+634.219	1190.527	2.382	8.675	Sag	40	6.36
86	4+642.790	1191.271	4+642.790	1191.921	4+657.790	1192.392	8.675	6.281	Hog	15	6.26
87	4+659.611	1192.507	4+667.111	1192.978	4+674.611	1193.632	6.281	8.717	Sag	15	6.16
88	4+676.433	1193.790	4+683.933	1194.444	4+691.433	1194.833	8.717	5.186	Hog	15	4.25
89	4+705.609	1195.568	4+715.609	1196.087	4+725.609	1197.095	5.186	10.083	Sag	20	4.09
90	4+746.125	1199.164	4+753.625	1199.920	4+761.125	1200.381	10.083	6.140	Hog	15	3.81
91	4+769.903	1200.919	4+777.403	1201.380	4+784.903	1202.172	6.140	10.558	Sag	15	3.40
92	4+805.795	1204.378	4+815.795	1205.434	4+825.795	1205.910	10.558	4.765	Hog	20	3.45
93	4+843.528	1206.755	4+851.028	1207.112	4+858.528	1207.579	4.765	6.225	Sag	15	10.28
94	4+864.304	1207.939	4+871.804	1208.406	4+879.304	1208.705	6.225	3.988	Hog	15	6.71
95	4+889.764	1209.122	4+897.264	1209.421	4+904.764	1210.032	3.988	8.141	Sag	15	3.61
96	4+910.245	1210.478	4+916.245	1210.966	4+922.245	1210.677	8.141	-4.817	Hog	12	0.93
97	4+923.156	1210.633	4+928.156	1210.392	4+933.156	1210.506	-4.817	2.263	Sag	10	1.41
98	4+935.750	1210.564	4+943.250	1210.734	4+950.750	1210.790	2.263	0.745	Hog	15	9.88
99	4+960.861	1210.865	4+988.361	1211.070	5+015.861	1213.017	0.745	7.080	Sag	55	8.68
100	5+019.958	1213.307	5+037.458	1214.546	5+054.958	1214.985	7.080	2.511	Hog	35	7.66

<p><b>CLIENT:</b></p>  <p>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p>	<p><b>PROJECT:</b></p> <p style="text-align: center;"><b>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)</b></p>	<p><b>DESIGN CONSULTANT:</b></p>  <p><b>Eptisa Servicios de Ingeniería S.L</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</p>
<p><b>REV:</b>    <b>DATE:</b>    <b>DESCRIPTION:</b></p>	<p><b>SCALE:</b>    <b>N.T.S</b></p>	<p><b>TITLE:</b></p> <p style="text-align: center;"><b>Vertical Alignment Report</b></p>
<p><b>DRAWN BY:</b>    <b>SD</b></p> <p><b>DESIGNED BY:</b>    <b>SK/MM</b></p> <p><b>APPROVED BY:</b>    <b>KG</b></p>	<p><b>DRG. NO.:</b>    <b>EPTISAJTRPDRJ8KVAR02</b></p>	<p><b>REVISION:</b>    <b>R-1</b></p>
<p>September 2019</p>		

**Vertical Alignment Report**

PVI No.	Start		PVI Details		End		Gradient (%)		Type of Curve	Curve Length (m)	K-Value
	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	IN	OUT			
101	5+058.413	1215.072	5+070.913	1215.386	5+083.413	1216.775	2.511	11.112	Sag	25	2.91
102	5+087.636	1217.244	5+102.636	1218.911	5+117.636	1219.186	11.112	1.833	Hog	30	3.23
103	5+125.147	1219.324	5+132.647	1219.324	5+140.147	1219.738	1.833	3.697	Sag	15	8.05
104	5+144.543	1219.901	5+152.043	1220.178	5+159.543	1220.316	3.697	1.845	Hog	15	8.10
105	5+169.947	1220.508	5+184.947	1220.785	5+199.947	1221.768	1.845	6.554	Sag	30	6.37
106	5+212.420	1222.586	5+222.420	1223.241	5+232.420	1223.616	6.554	3.755	Hog	20	7.15
107	5+237.330	1223.889	5+249.664	1224.264	5+259.664	1225.291	3.755	5.346	Sag	20	3.07
108	5+287.330	1228.131	5+297.330	1229.158	5+307.330	1229.693	10.267	5.346	Hog	20	4.06
109	5+327.533	1230.773	5+337.533	1231.307	5+347.533	1232.154	5.346	8.463	Sag	20	6.42
110	5+355.451	1232.824	5+365.451	1233.670	5+375.451	1234.197	8.463	5.268	Hog	20	6.26
111	5+450.565	1238.154	5+458.065	1238.549	5+465.565	1238.792	5.268	3.236	Hog	15	7.38
112	5+476.183	1239.135	5+483.683	1239.378	5+491.183	1239.917	3.236	7.192	Sag	15	3.79
113	5+509.988	1241.270	5+519.988	1241.989	5+529.988	1242.452	7.192	4.635	Hog	20	7.82
114	5+596.312	1245.527	5+606.312	1245.990	5+616.312	1246.907	4.635	9.168	Sag	20	4.41
115	5+647.012	1249.721	5+657.012	1250.638	5+667.012	1250.967	9.168	3.293	Hog	20	3.40
116	5+676.529	1251.281	5+686.529	1251.610	5+696.529	1252.295	3.293	6.847	Sag	20	5.63
117	5+703.182	1252.750	5+713.182	1253.435	5+723.182	1254.339	6.847	9.038	Sag	20	9.13
118	5+737.947	1255.673	5+747.947	1256.577	5+757.947	1256.822	9.038	2.449	Hog	20	3.04
119	5+761.179	1256.901	5+771.179	1257.146	5+781.179	1257.874	2.449	7.285	Sag	20	4.14
120	5+800.618	1259.291	5+808.118	1259.837	5+815.618	1260.065	7.285	3.036	Hog	15	3.53
121	5+821.304	1260.237	5+828.804	1260.465	5+836.304	1261.424	3.036	12.789	Sag	15	1.54
122	5+857.510	1264.136	5+867.510	1265.415	5+877.510	1265.651	12.789	2.358	Hog	20	1.92
123	5+896.827	1266.106	5+906.827	1266.342	5+916.827	1267.631	2.358	12.888	Sag	20	1.90
124	5+932.232	1269.616	5+942.232	1270.905	5+952.232	1271.595	12.888	6.896	Hog	20	3.34
125	5+958.408	1272.020	5+968.408	1272.710	5+978.408	1273.736	6.896	10.262	Sag	20	5.94
126	6+007.964	1276.769	6+015.464	1277.539	6+022.964	1277.813	10.262	3.659	Hog	15	2.27
127	6+037.786	1278.356	6+050.286	1278.813	6+062.786	1279.954	3.659	9.125	Sag	25	4.57
128	6+095.740	1282.961	6+105.740	1283.873	6+115.740	1284.519	9.125	6.455	Hog	15	7.49
129	6+142.499	1286.246	6+149.999	1286.730	6+157.499	1286.946	6.455	2.875	Hog	15	4.19
130	6+166.334	1287.200	6+176.334	1287.487	6+186.334	1288.207	2.875	7.199	Sag	20	4.63
131	6+210.729	1289.963	6+220.729	1290.683	6+230.729	1291.055	7.199	3.717	Hog	20	5.74
132	6+255.288	1291.968	6+275.288	1292.711	6+295.288	1293.886	3.717	5.873	Sag	40	18.56
133	6+335.902	1296.271	6+343.402	1296.711	6+350.902	1297.022	5.873	4.153	Hog	15	8.72
134	6+358.543	1297.340	6+368.543	1297.755	6+378.543	1298.431	4.153	6.757	Sag	20	7.68
135	6+397.449	1299.708	6+407.449	1300.384	6+417.449	1300.857	6.757	4.732	Hog	20	9.88
136	6+437.183	1301.791	6+444.683	1302.146	6+452.183	1302.315	4.732	2.258	Hog	15	6.06
137	6+459.062	1302.471	6+466.562	1302.640	6+474.062	1303.186	2.258	7.277	Sag	15	2.99
138	6+480.143	1303.628	6+487.643	1304.174	6+495.143	1304.824	7.277	8.669	Sag	15	10.77
139	6+505.731	1305.742	6+515.731	1306.609	6+525.731	1306.930	8.669	3.206	Hog	20	3.66
140	6+555.980	1307.899	6+563.480	1308.140	6+570.980	1308.676	3.206	7.149	Sag	15	3.80
141	6+576.268	1309.054	6+583.768	1309.590	6+591.268	1309.928	7.149	4.503	Hog	15	5.67
142	6+625.119	1311.452	6+632.619	1311.790	6+640.119	1312.305	4.503	6.865	Sag	15	6.35
143	6+643.577	1312.542	6+651.077	1313.057	6+658.577	1313.172	6.865	1.532	Hog	15	2.81
144	6+664.899	1313.269	6+672.399	1313.384	6+679.899	1313.031	1.532	-4.701	Hog	15	2.41
145	6+683.039	1312.884	6+690.539	1312.531	6+698.039	1312.518	-4.701	-0.178	Sag	15	3.32
146	6+707.260	1312.501	6+714.760	1312.488	6+722.260	1311.774	-0.178	-9.520	Hog	15	1.61
147	6+724.876	1311.525	6+732.376	1310.811	6+739.876	1310.539	-9.520	-3.624	Sag	15	2.54
148	6+752.291	1310.089	6+762.291	1309.727	6+772.291	1309.656	-3.624	-0.707	Sag	20	6.86
149	6+779.459	1309.606	6+796.959	1309.482	6+814.459	1308.051	-0.707	-8.177	Hog	35	4.69
150	6+822.046	1307.431	6+832.046	1306.613	6+842.046	1306.293	-8.177	-3.196	Sag	20	4.02

<p><b>CLIENT:</b></p>  <p>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p>	<p><b>PROJECT:</b></p> <p style="text-align: center;"><b>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)</b></p>	<p><b>DESIGN CONSULTANT:</b></p>  <p><b>Eptisa Servicios de Ingeniería S.L</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 03-40347200 www.eptisa.com</p>
<p><b>TITLE:</b></p> <p style="text-align: center;"><b>Vertical Alignment Report</b></p>		
<p><b>DRAWN BY:</b> SD</p>	<p><b>DESIGNED BY:</b> SKMM</p>	<p><b>APPROVED BY:</b> KG</p>
<p><b>REV:</b>      <b>DATE:</b>      <b>DESCRIPTION:</b></p>	<p><b>SCALE:</b> N:1 S</p>	<p><b>DRG. NO.:</b> EPTISAJUTFRDPRJ08KVAR03</p>
		<p><b>REVISION:</b> R-1</p>
<p>September 2019</p>		

**Vertical Alignment Report**



PVI No.	Start		PVI Details		End		Gradient (%)		Type of Curve	Curve Length (m)	K-Value
	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	Chainage (Km)	Level (m)	IN	OUT			
151	6+846.982	1306.136	6+854.482	1305.896	6+861.982	1305.461	-3.196	-5.801	Hog	15	5.76
152	6+868.668	1305.073	6+878.668	1304.493	6+888.668	1304.254	-5.801	-2.390	Sag	20	5.86
153	6+901.925	1303.937	6+911.925	1303.698	6+921.925	1302.970	-2.390	-7.284	Hog	20	4.09
154	6+934.239	1302.073	6+944.239	1300.980	6+954.239	1300.677	-7.284	-2.020	Sag	30	5.70
155	7+027.543	1299.398	7+037.543	1299.196	7+047.543	1299.262	-2.020	0.658	Sag	20	7.47
156	7+075.076	1299.443	7+085.076	1299.509	7+095.076	1299.469	0.658	-0.405	Hog	20	18.81
157	7+130.990	1299.323	7+140.990	1299.212	7+150.990	1301.986	-0.405	10.087	Sag	55	5.24
158	7+197.979	1303.195	7+207.979	1303.952	7+217.979	1304.531	10.087	7.716	Hog	15	6.33
159	7+220.032	1305.075	7+230.032	1305.654	7+240.032	1306.342	7.716	9.175	Sag	15	10.28
160	7+238.013	1306.615	7+248.013	1307.303	7+258.013	1307.703	9.175	6.173	Hog	15	3.90
161	7+270.520	1308.635	7+280.520	1309.168	7+290.520	1309.785	5.327	6.173	Sag	20	23.63
162	7+305.055	1310.683	7+315.055	1311.300	7+325.055	1311.020	6.173	-2.797	Hog	20	2.23
163	7+330.514	1310.868	7+340.514	1310.658	7+350.514	1311.461	-2.797	10.708	Sag	15	1.11
164	7+349.382	1311.875	7+359.382	1313.053	7+369.382	1313.003	10.708	-0.455	Hog	22	1.97
165	7+383.797	1312.946	7+393.797	1312.901	7+403.797	1312.571	-0.455	-3.302	Hog	20	7.03
166	7+442.434	1311.295	7+452.434	1310.965	7+462.434	1310.846	-3.302	-1.192	Sag	20	9.48
167	7+469.522	1310.761	7+479.522	1310.642	7+489.522	1310.413	-1.192	-2.286	Hog	20	18.30
168	7+503.362	1310.097	7+513.362	1309.960	7+523.362	1309.656	-2.286	-5.065	Hog	12	4.32
169	7+523.210	1309.259	7+533.210	1308.803	7+543.210	1308.650	-5.065	-1.701	Sag	18	5.35
170	7+545.624	1308.575	7+555.624	1308.404	7+565.624	1307.993	-1.701	-4.110	Hog	20	8.30
171	7+594.100	1306.823	7+604.100	1306.412	7+614.100	1306.069	-4.110	-3.427	Sag	20	29.26
172	7+669.616	1304.167	7+679.616	1303.653	7+689.616	1303.855	-3.427	1.348	Sag	30	6.28
173	7+736.623	1304.354	7+746.623	1304.489	7+756.623	1304.709	1.348	2.195	Sag	20	23.61
174	7+781.781	1305.261	7+791.781	1305.645	7+801.781	1306.769	2.195	6.426	Sag	35	8.27
175	7+825.486	1307.329	7+835.486	1308.614	7+845.486	1308.457	6.426	-0.785	Hog	40	5.55
176	7+894.187	1308.232	7+904.187	1308.153	7+914.187	1308.234	-0.785	0.814	Sag	20	12.51
177	7+950.715	1308.532	7+960.715	1308.613	7+970.715	1308.790	0.814	1.771	Sag	20	20.88
178	7+996.383	1309.245	8+006.383	1309.422	8+016.383	1309.919	1.771	4.974	Sag	20	6.25
179	8+044.778	1311.332	8+054.778	1311.829	8+064.778	1312.524	4.974	6.948	Sag	20	10.13
180	8+145.030	1318.099	8+155.030	1318.794	8+165.030	1319.874	6.948	10.800	Sag	20	5.19
181	8+201.884	1323.854	8+211.884	1325.474	8+221.884	1326.508	10.800	6.892	Hog	30	7.68
182	8+237.718	1326.910	8+247.718	1327.599	8+257.718	1328.493	6.892	8.945	Hog	20	9.74
183	8+260.826	1328.772	8+270.826	1329.666	8+280.826	1330.269	8.945	6.031	Hog	20	6.86
184	8+289.875	1330.815	8+299.875	1332.624	8+309.875	1336.161	6.031	11.789	Sag	60	10.42
185	8+359.595	1337.307	8+369.595	1338.191	8+379.595	1338.952	11.789	10.143	Hog	15	9.11
186	8+377.710	1339.268	8+387.710	1340.028	8+397.710	1340.904	10.143	11.677	Sag	15	9.78
187	8+397.600	1341.475	8+407.600	1342.351	8+417.600	1343.066	11.677	9.538	Hog	15	7.01
188	8+419.908	1343.763	8+429.908	1345.671	8+439.908	1346.471	9.538	3.998	Hog	40	7.22
189	8+495.186	1347.881	8+505.186	1348.581	8+515.186	1350.172	3.998	9.091	Sag	35	6.87
190	8+551.650	1352.123	8+561.650	1352.805	8+571.650	1353.649	9.091	11.255	Sag	15	6.93
191	8+577.482	1354.868	8+587.482	1355.712	8+597.482	1356.531	11.255	10.922	Hog	15	45.07
192	8+606.807	1358.096	8+616.807	1358.915	8+626.807	1359.528	10.922	8.175	Hog	15	5.46
193	8+634.096	1360.533	8+644.096	1361.146	8+654.096	1361.474	8.175	4.369	Hog	15	3.94
194	8+654.831	1361.724	8+664.831	1362.052	8+674.831	1362.570	4.369	6.911	Sag	15	5.90
195	8+670.516	1362.618	8+680.516	1363.136	8+690.516	1363.446	6.911	4.129	Hog	15	5.39
196	8+692.020	1363.714	8+702.020	1364.024	8+712.020	1364.619	4.129	7.938	Sag	15	3.94
197	8+724.190	1365.982	8+734.190	1366.776	8+744.190	1367.342	7.938	5.663	Hog	20	8.79
198	8+846.617	1373.143	8+856.617	1373.568	8+866.617	1373.904	5.663	4.481	Hog	15	12.69
199	8+866.485	1374.122	8+876.485	1374.570	8+886.485	1375.410	4.481	8.403	Sag	20	5.10
200	8+888.489	1375.579	8+898.489	1376.209	8+908.489	1376.634	8.403	5.667	Hog	15	5.48

<p><b>CLIENT:</b></p> <p>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p>	<p><b>PROJECT:</b></p> <p style="text-align: center;"><b>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)</b></p>	<p><b>DESIGN CONSULTANT:</b></p> <p><b>Eptisa Servicios de Ingeniería S.L</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 03-40347200 www.eptisa.com</p>												
<p><b>REVISION:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>REV</th><th>DATE</th><th>DESCRIPTION</th></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	REV	DATE	DESCRIPTION										<p><b>SCALE:</b> N.T.S</p> <p><b>APPROVED BY:</b> KG</p> <p><b>DESIGNED BY:</b> SK/MM</p> <p><b>DRAWN BY:</b> SD</p>	<p><b>TITLE:</b></p> <p style="text-align: center;"><b>Vertical Alignment Report</b></p> <p>DRG. NO.: EPTISAJTRPDR08KVAR04 REVISION: R-1 September 2019</p>
REV	DATE	DESCRIPTION												



**Vertical Alignment Report**

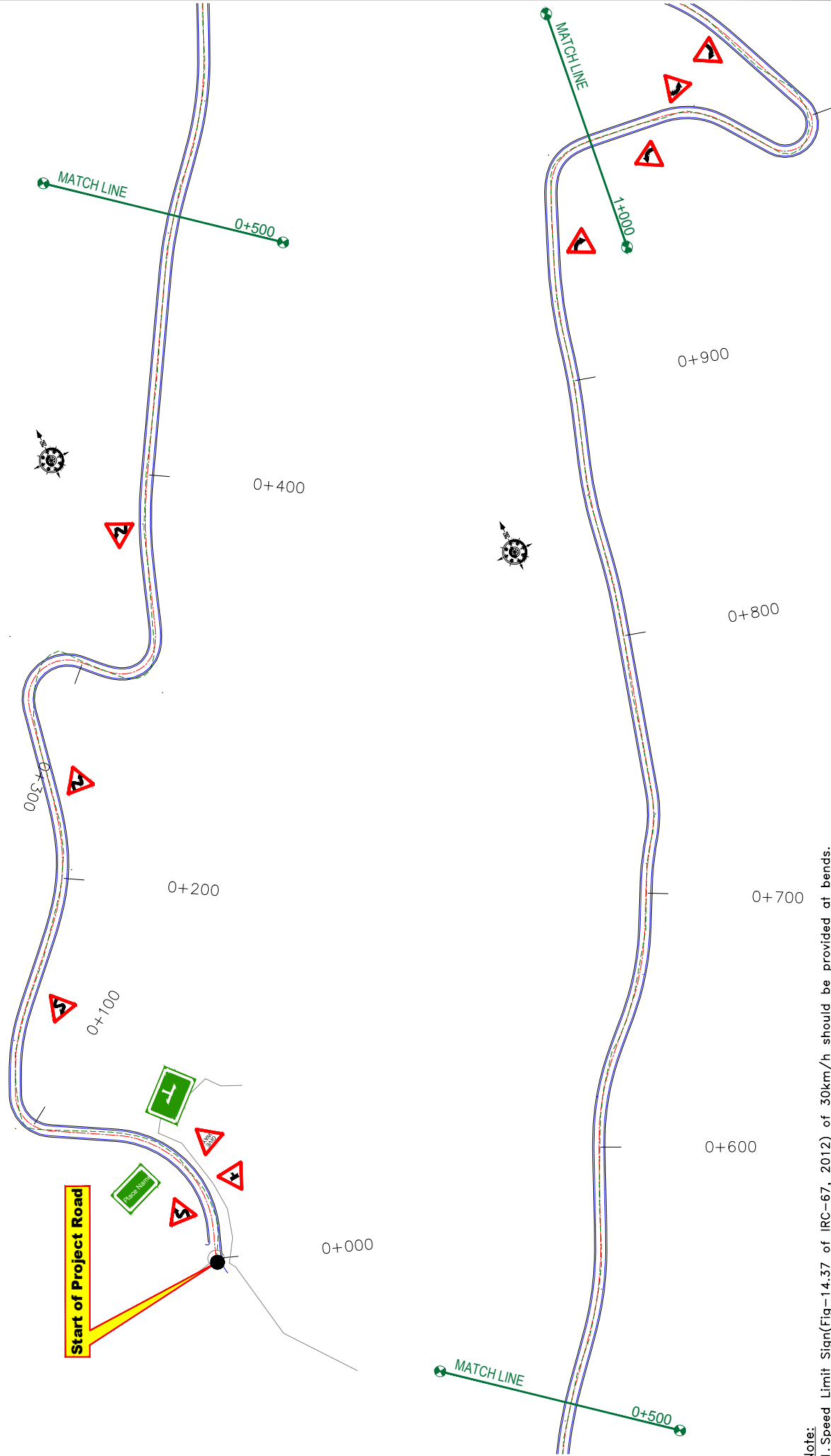
PVI No.	Start		PVI Details		End		Gradient (%)		Type of Curve	Curve Length (m)	K-Value
	Chainage (Km)	Level(m)	Chainage (Km)	Level(m)	Chainage (Km)	Level(m)	IN	OUT			
201	8+920.009	1377.570	8+930.009	1378.137	8+940.009	1379.015	5.667	8.781	Sag	20	6.42
202	8+969.093	1381.569	8+979.093	1382.447	8+989.093	1382.790	8.781	3.431	Hog	20	3.74
203	9+005.080	1383.339	9+025.080	1384.025	9+045.080	1385.674	3.431	8.243	Sag	40	8.31
204	9+065.040	1387.319	9+072.540	1387.937	9+080.040	1388.482	8.243	7.272	Hog	15	15.46
205	9+083.945	1388.766	9+091.445	1389.312	9+098.945	1389.996	7.272	9.121	Sag	15	8.12
206	9+101.733	1390.250	9+109.233	1390.934	9+116.733	1391.410	9.121	6.340	Hog	15	5.39
207	9+118.860	1391.545	9+126.360	1392.020	9+133.860	1392.657	6.340	8.488	Sag	15	6.98
208	9+165.796	1395.367	9+175.796	1396.216	9+185.796	1397.178	8.488	9.621	Sag	20	17.66
209	9+193.705	1397.939	9+203.705	1398.901	9+213.705	1399.693	9.621	7.918	Hog	20	11.75
210	9+229.030	1400.906	9+239.030	1401.698	9+249.030	1402.284	7.918	5.856	Hog	20	9.70
211	9+287.827	1404.555	9+297.827	1405.141	9+307.827	1405.935	5.856	7.938	Sag	20	9.61
212	9+318.856	1406.810	9+328.856	1407.604	9+338.856	1408.301	7.938	6.974	Hog	20	20.75
213	9+375.199	1410.836	9+382.699	1411.359	9+390.199	1411.687	6.974	4.369	Hog	15	5.76
214	9+398.249	1412.038	9+405.749	1412.366	9+413.249	1412.907	4.369	7.219	Sag	15	5.26
215	9+428.664	1414.020	9+438.664	1414.742	9+448.664	1415.179	7.219	4.372	Hog	20	7.03
216	9+455.155	1415.463	9+462.655	1415.791	9+470.155	1416.183	4.372	5.226	Sag	15	17.58
217	9+475.558	1416.465	9+480.558	1416.727	9+485.558	1417.242	5.226	10.311	Sag	10	1.97
218	9+488.206	1417.515	9+493.206	1418.031	9+498.206	1418.175	10.311	2.892	Hog	10	1.35
219	9+526.236	1418.986	9+531.236	1419.131	9+536.236	1419.395	2.892	5.299	Sag	10	4.15
220	9+540.870	1419.641	9+545.870	1419.906	9+550.870	1420.023	5.299	2.331	Hog	10	3.37
221	9+571.594	1420.506	9+599.094	1421.147	9+626.594	1423.095	2.331	7.087	Sag	55	11.57
222	9+641.806	1424.173	9+649.306	1424.705	9+656.806	1425.398	7.087	9.236	Sag	15	6.98
223	9+666.817	1426.322	9+676.817	1427.246	9+686.817	1428.057	9.236	8.113	Hog	20	17.80
224	9+705.322	1429.559	9+712.822	1430.167	9+720.322	1430.589	8.113	5.622	Hog	15	6.02
225	9+722.844	1430.730	9+730.344	1431.152	9+737.844	1431.686	5.622	7.114	Sag	15	10.05
226	9+741.834	1431.969	9+749.334	1432.503	9+756.834	1432.844	7.114	4.546	Hog	15	5.84
227	9+762.642	1433.108	9+770.142	1433.449	9+777.642	1433.948	4.546	6.650	Sag	15	7.13
228	9+816.465	1436.529	9+823.965	1437.028	9+831.465	1437.485	6.650	6.087	Hog	15	26.65
229	9+854.597	1438.892	9+862.097	1439.349	9+869.597	1440.075	6.087	9.682	Sag	15	4.17
230	9+873.829	1440.485	9+881.329	1441.211	9+888.829	1441.422	9.682	2.808	Hog	15	2.18
231	9+897.333	1441.660	9+904.833	1441.871	9+912.333	1442.338	2.808	6.225	Sag	15	4.39
232	9+988.330	1447.069	9+998.330	1447.691	10+008.330	1448.084	6.225	3.927	Hog	20	8.70
233	10+062.919	1450.227	10+075.419	1450.718	10+087.919	1451.702	3.927	7.869	Sag	25	6.34
234	10+092.515	1452.063	10+100.015	1452.654	10+107.515	1453.064	7.869	5.471	Hog	15	6.26
235	10+115.389	1453.495	10+122.889	1453.905	10+130.389	1454.545	5.471	8.533	Sag	15	4.90

CLIENT:	 <p>Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p>	PROJECT:	<p align="center"><b>Consultancy Services for Preparing Detailed Project Report</b> for the Road works in Jammu and Kashmir <b>(Chiralla Link Road in Doda District)</b></p>		DESIGN CONSULTANT:	 <p align="center"><b>Eptisa Servicios de Ingeniería S.L</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com</p>		TITLE:	<p align="center"><b>Vertical Alignment Report</b></p>	
			<p>DRAWN BY: SD</p> <p>DESIGNED BY: SCKMM</p> <p>APPROVED BY: KG</p> <p>SCALE: N.T.S</p>	<p>REV: _____</p> <p>DATE: _____</p> <p>DESCRIPTION: _____</p>		<p>REVISION: R-1</p> <p>September 2019</p>				

☰ SCHEDULE OF SIGNAGE ☰

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**Note:**

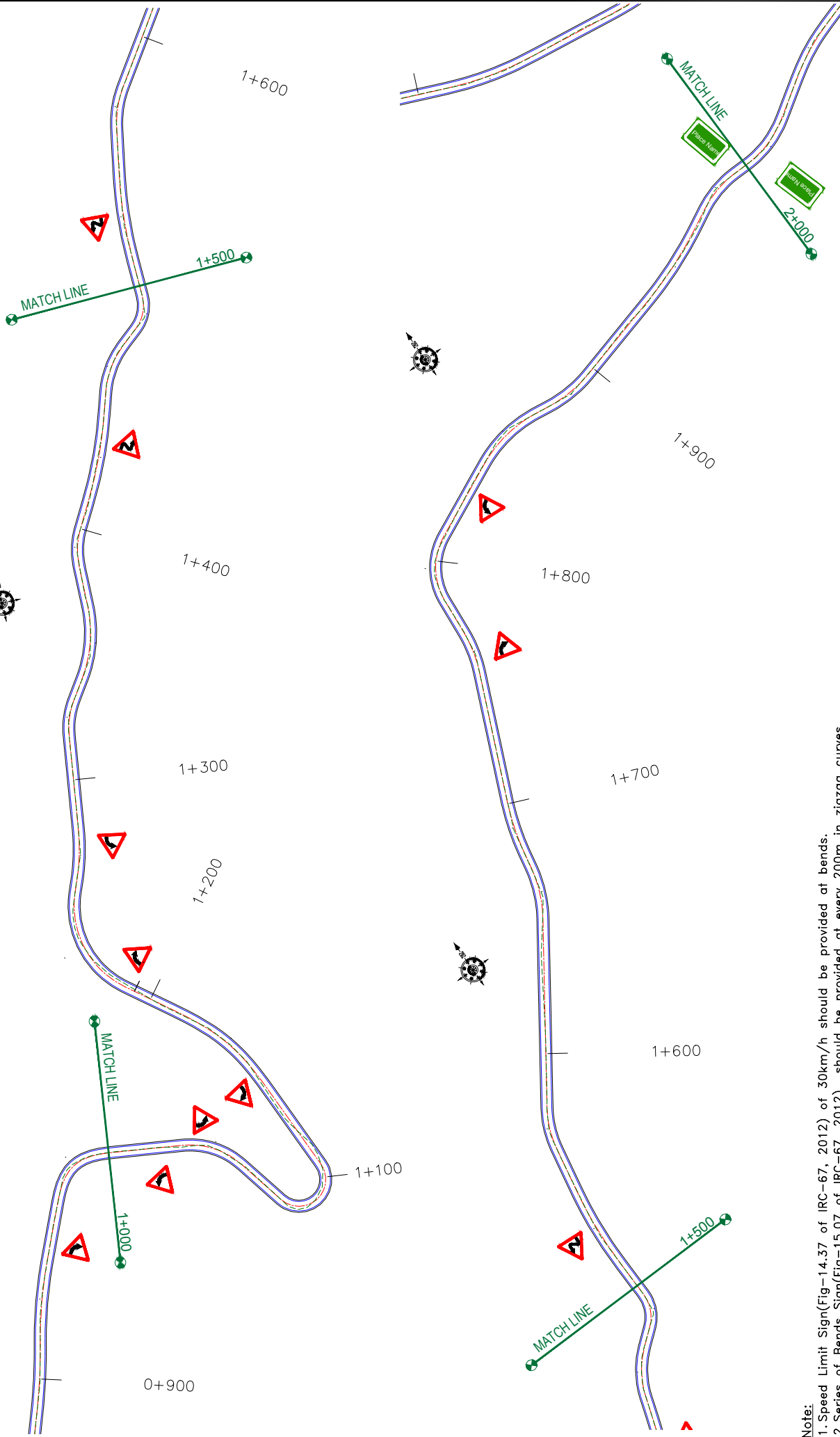
- 1. Speed Limit Sign(Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.
- 2. Series of Bends Sign(Fig-15.07 of IRC-67, 2012) should be provided at every 200m in zigzag curves.

 Jhelum Talvi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.	PROJECT: Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)		DESIGN CONSULTANT: <b>epitisa</b> <i>servicios de ingenieria S.L.</i> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.epitisa.com	
	CLIENT:	TITLE: Signage Plan (Ch. 0+000 to Ch. 1+000)	DRAWN BY: SD	SCALE: 1:1000
		DESIGNED BY: SCK/MM	REV:	DESCRIPTION:
		APPROVED BY: KG	DATE:	DATE:
		DRG. NO.: EPTISAJTRPRDPRJ08KSP101	REVISION: R-1	DATE:
				(September 2019)



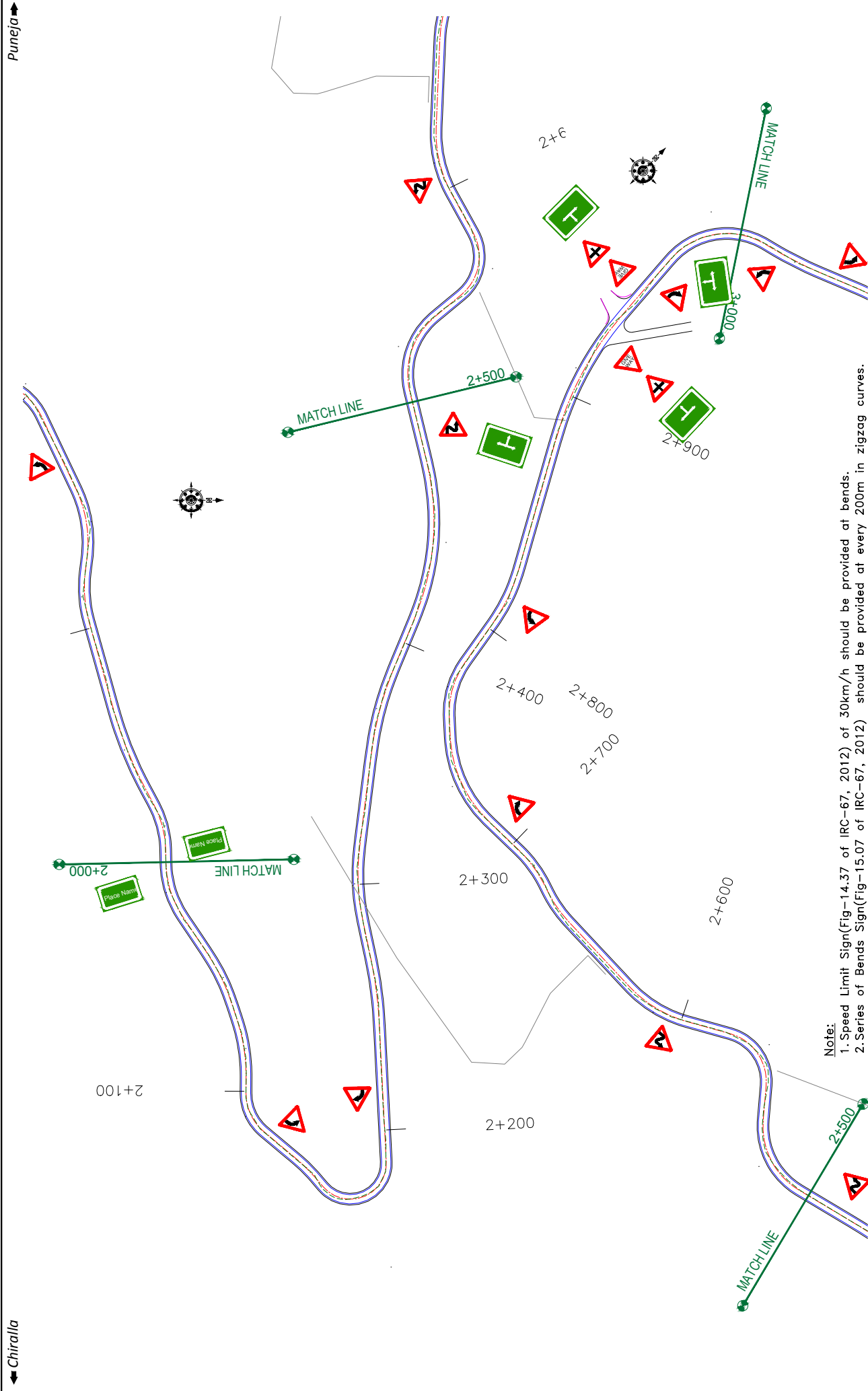
Chiralla

Puneja



**Note:**  
 1. Speed Limit Sign(Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.  
 2. Series of Bends Sign(Fig-15.07 of IRC-67, 2012) should be provided at every 200m in zigzag curves.

CLIENT:  Jhelum Tarai Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.	PROJECT: Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)	DESIGN CONSULTANT:  <b>servicios de Ingenieria S.L.</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com	DRAWN BY: SD	TITLE: Signage Plan
			DESIGNED BY: SCK/MM	(Ch. 1+000 to Ch. 2+000)
			APPROVED BY: KG	DRG. NO.: EPTISAJTRFPDPRJ&KSP102
			SCALE: 1:1000	REVISION: R-1
			REV: DATE DESCRIPTION	September 2019

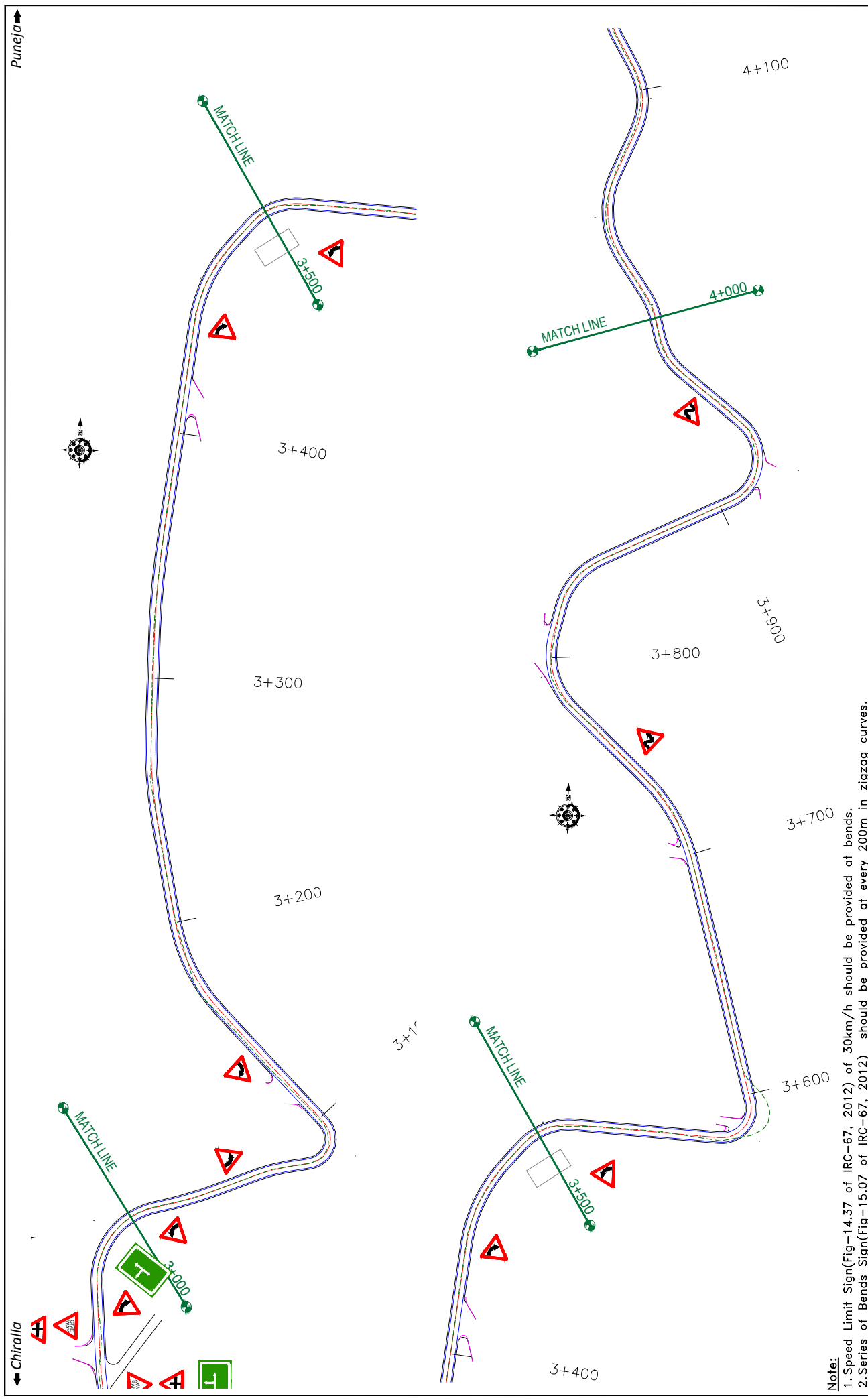


Note:  
 1. Speed Limit Sign(Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.  
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← Chiralla

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CLIENT:	 Jhelum Talvi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.		PROJECT:	Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)	
	DESIGN CONSULTANT: <b>epitisa</b> <i>servicios de ingeniería S.L.</i> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.epitisa.com			TITLE: <b>Signage Plan</b> (Ch. 2+000 to Ch. 3+000) DRG. NO.: EPTISAJTRPRDPRJ08KSP103 REVISION: R-1	
DRAWN BY: SD		DESIGNED BY: SCK/MM		APPROVED BY: KG	
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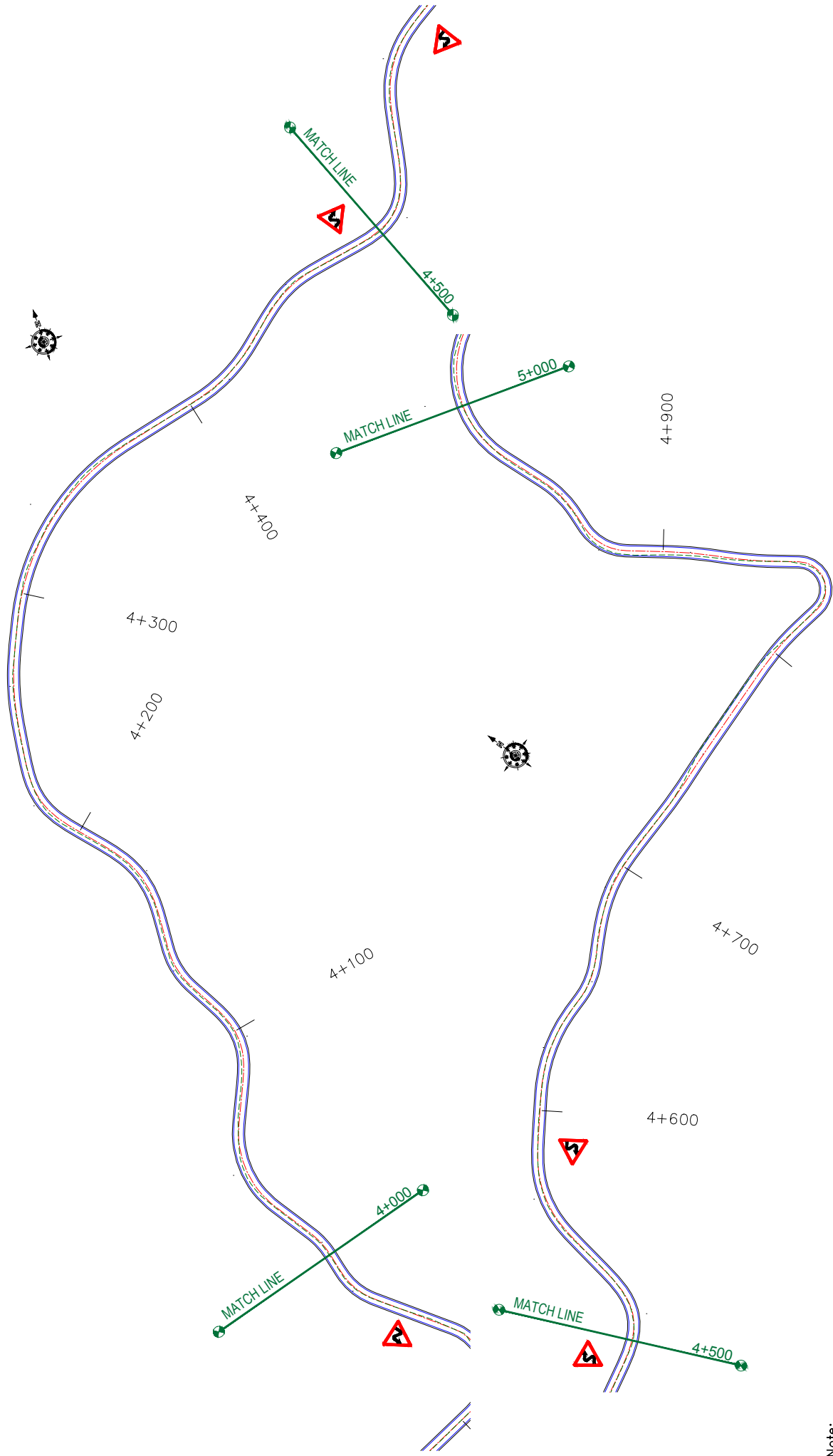


**Note:**  
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			DESIGNED BY: SCK/MM	DRG. NO.: EPTISAJTRPRDPRJ08KSP104
			APPROVED BY: KG	REVISION: R-1
			SCALE: 1:1000	DATE:
REV:	DESCRIPTION:	DATE:	DATE:	DATE:

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**Note:**

1. Speed Limit Sign(Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.
2. Series of Bends Sign(Fig-15.07 of IRC-67, 2012) should be provided at every 200m in zigzag curves.

CLIENT:



Jhelum Tarai Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009.

PROJECT:

Consultancy Services for Preparing Detailed Project Report  
for the Road works in Jammu and Kashmir  
(Chiralla Link Road in Doda District)

DESIGN CONSULTANT:

**eptisa** *servicios de ingenieria S.L.*  
Unit 1203, 12th Floor, Tower 1, PS Srijan  
Corporate Park, Plot No. 2, Block EP & GP,  
Sector V, Salt Lake Kolkata - 700091,  
West Bengal  
Ph: 033-40347200  
www.eptisa.com

TITLE:

**Signage Plan**  
(Ch. 4+000 to Ch. 5+000)

DRAWN BY: SD

DESIGNED BY: SCK/MM

APPROVED BY: KG

SCALE: 1:1000

REVISION: R-1

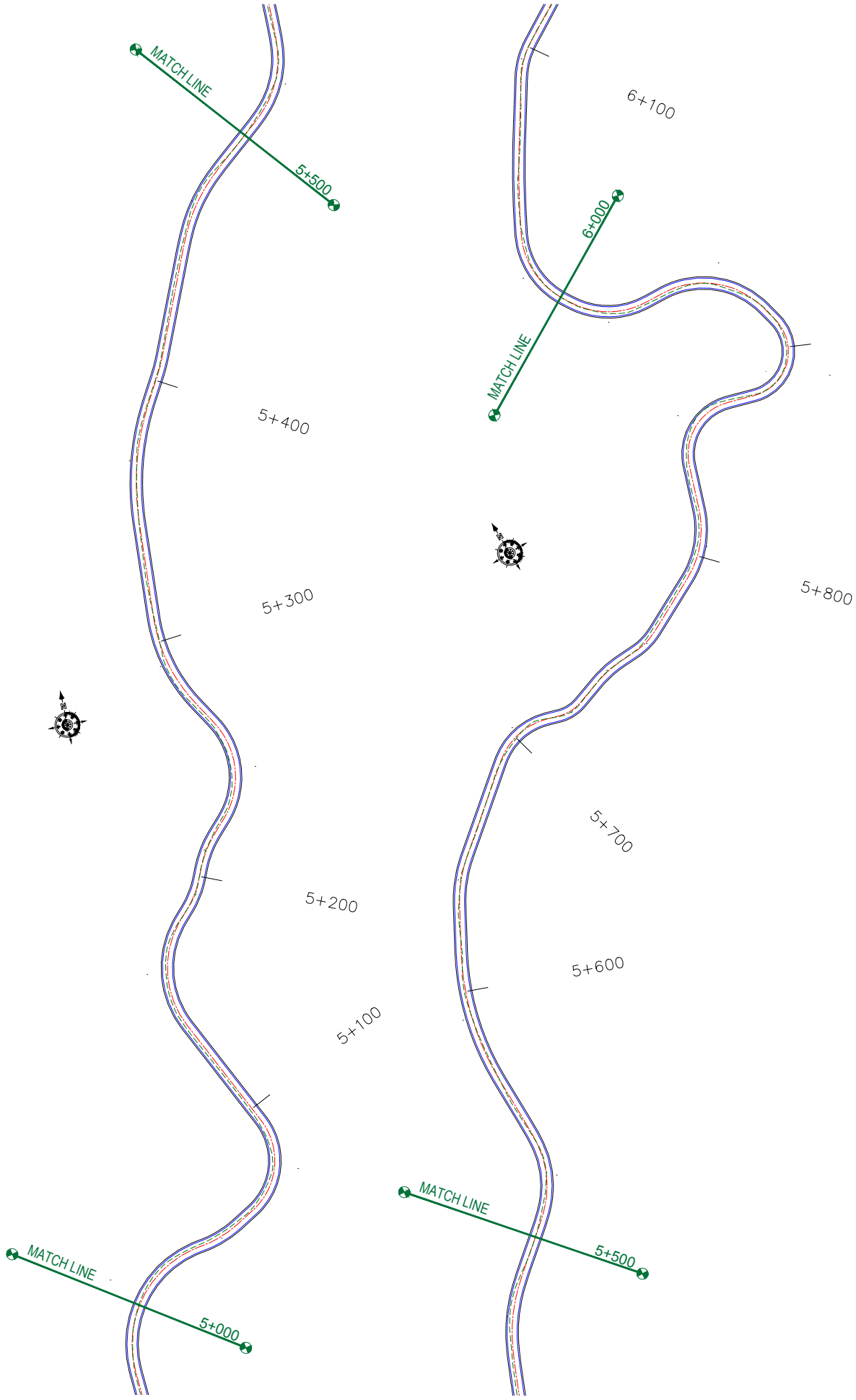
September 2019

REV. DATE DESCRIPTION

REV.	DATE	DESCRIPTION

Chiralla

Puneja



**Note:**  
 1. Speed Limit Sign (Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.  
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**CLIENT:**



Jhelum Talavi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009.

**PROJECT:**

Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

**DESIGN CONSULTANT:**



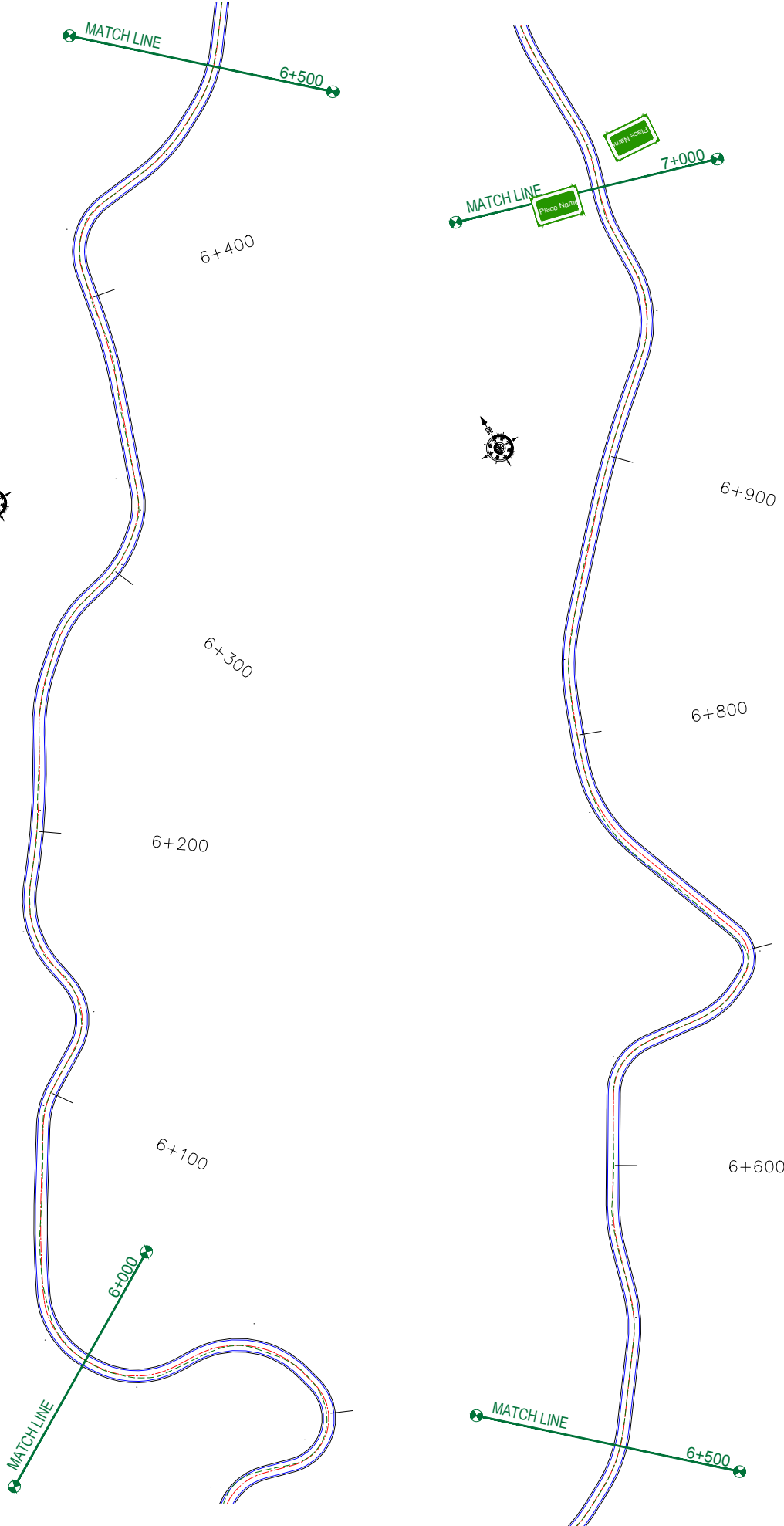
**servicios de Ingenieria S.L.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV	DATE	DESCRIPTION	SCALE	TITLE
			1:1000	<b>Signage Plan</b> (Ch. 5+000 to Ch. 6+000) DRG. NO. : EPTISAJTRPRDPRJ08KSP106 REVISION : R-1

September 2019

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**Note:**  
 1. Speed Limit Sign (Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.  
 2. Series of Bends Sign (Fig-15.07 of IRC-67, 2012) should be provided at every 200m in zigzag curves.

**CLIENT:**



Jhelum Talvi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009.

**PROJECT:**

Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
 (Chiralla Link Road in Doda District)

**DESIGN CONSULTANT:**



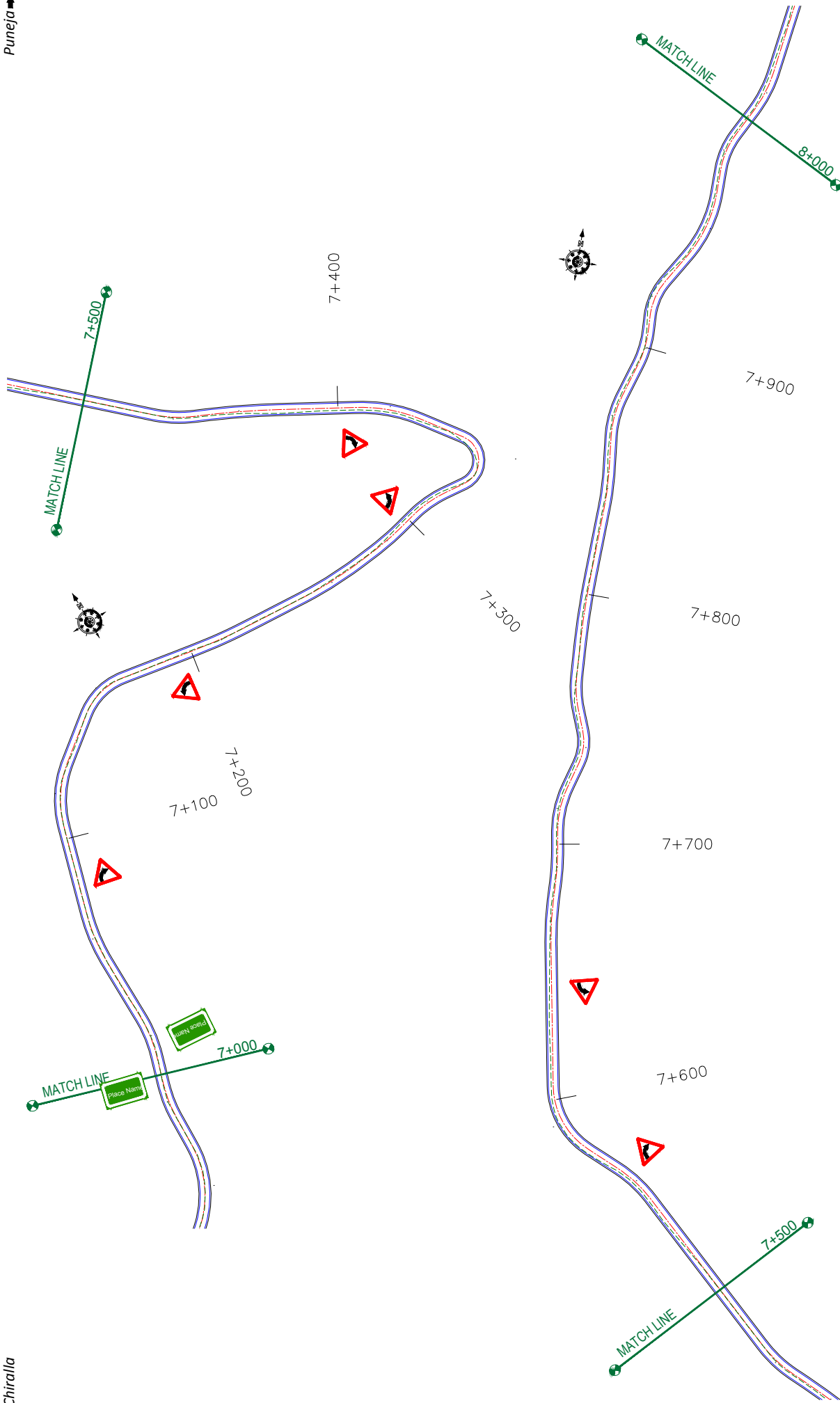
**servicios de Ingenieria S.L.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV	DATE	DESCRIPTION	SCALE	TITLE
			1:1000	<b>Signage Plan</b> (Ch. 6+000 to Ch. 7+000) DRG. NO. : EPTISAJTRFRPDRJ8KSP107 REVISION : R-1 September 2019

**DRAWN BY:** SD  
**DESIGNED BY:** SCK/MM  
**APPROVED BY:** KG

Chiralla

Puneja



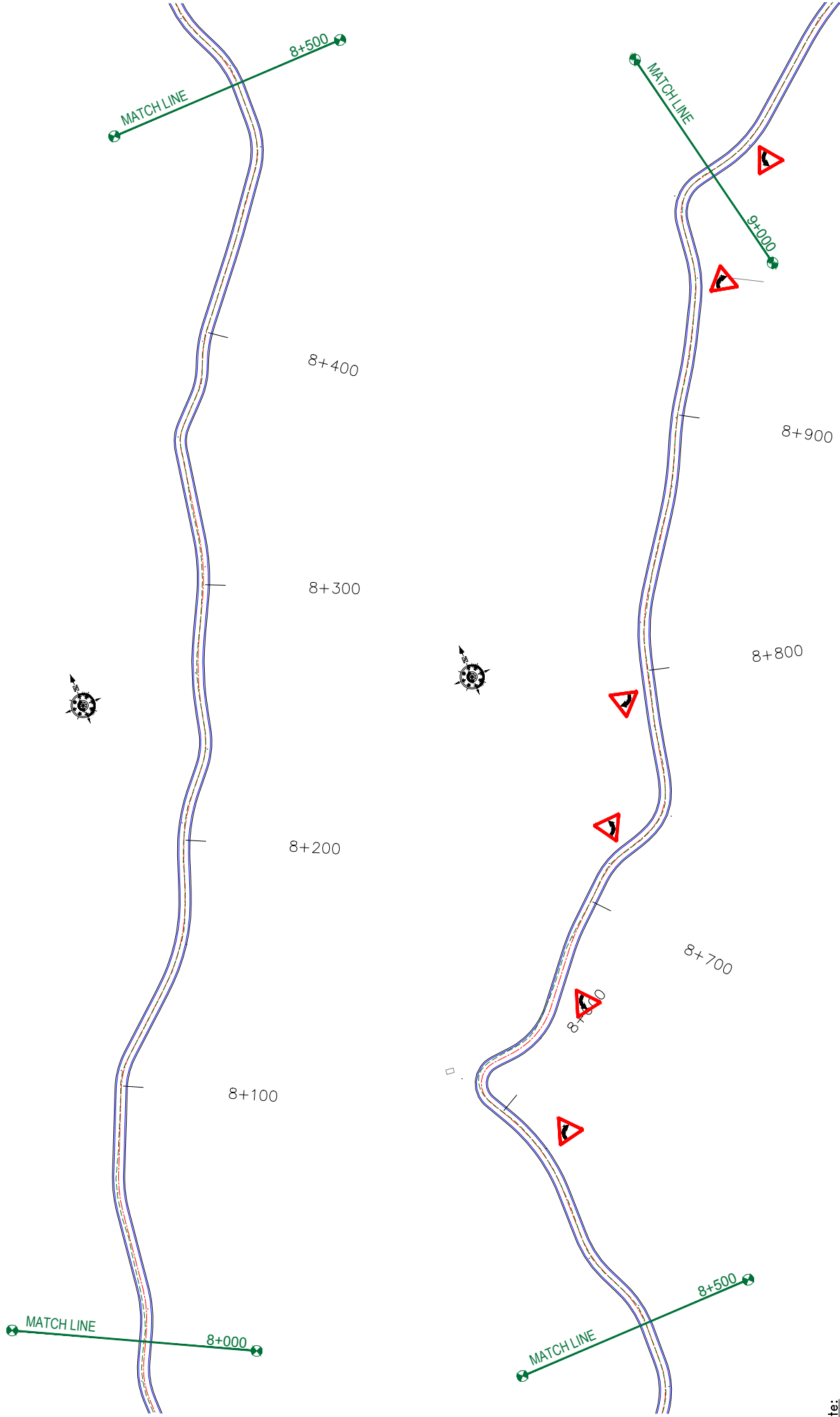
**Note:**  
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CLIENT:	 Jhelum Talvi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.		PROJECT:	Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir <b>(Chiralla Link Road in Doda District)</b>	
	DESIGN CONSULTANT: <b>epitisa</b> servicios de Ingenieria S.L. Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.epitisa.com			TITLE: <b>Signage Plan</b> (Ch. 7+000 to Ch. 8+000) DRG. NO.: EPTISAJTRPRDPRJ8KSP108 REVISION: R-1	
DRAWN BY: SD		SCALE: 1:1000		REVISION: R-1	
DESIGNED BY: SCK/MM		DATE		DESCRIPTION	
APPROVED BY: KG		REV		DATE	



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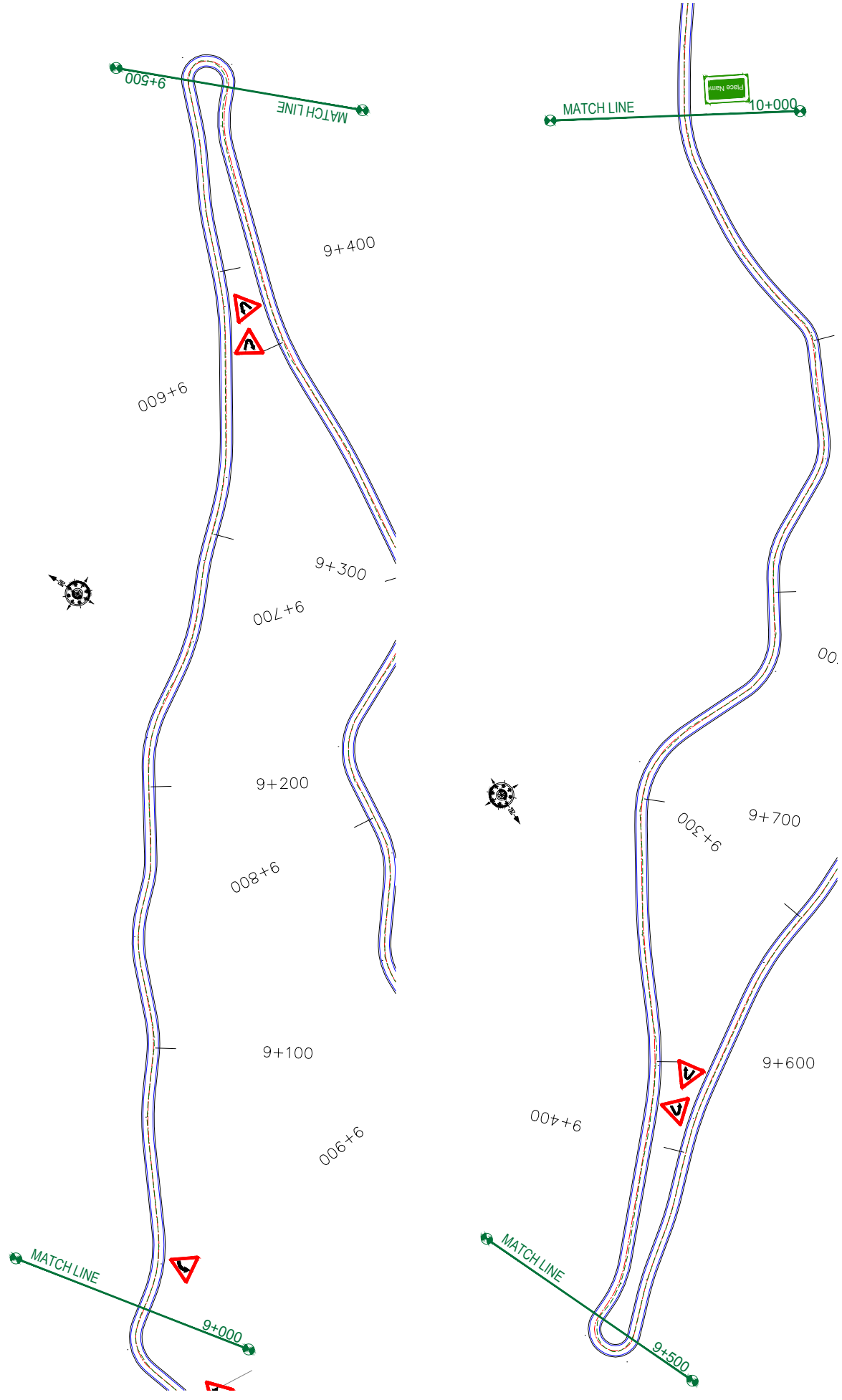


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CLIENT:  Jhelum Tarvi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.	PROJECT: Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)	DESIGN CONSULTANT:  <b>servicios de Ingenieria S.L.</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com	DRAWN BY: SD	TITLE: Signage Plan (Ch. 8+000 to Ch. 9+000)
			DESIGNED BY: SCK/MM	DRG. NO.: EPTISAJTRFRDPRJ08KSP109
APPROVED BY: KG	SCALE: 1:1000	REVISION: R-1	DATE:	DESCRIPTION:
REV:	DATE:	DESCRIPTION:	SCALE:	REVISION:

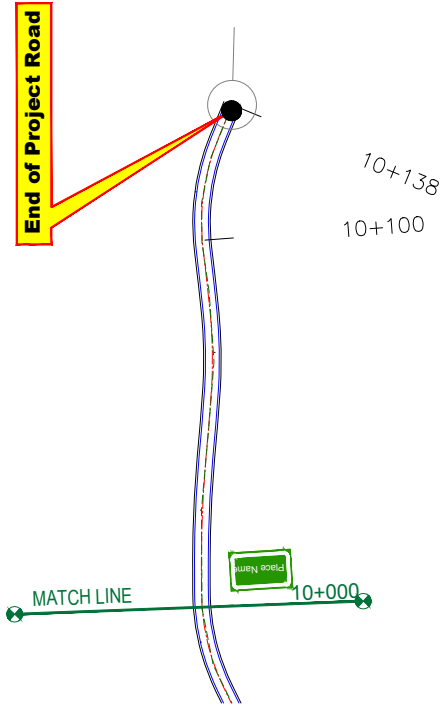
Chiralla

Puneja



**Note:**  
 1. Speed Limit Sign(Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.  
 2. Series of Bends Sign(Fig-15.07 of IRC-67, 2012) should be provided at every 200m in zigzag curves.

 Jhelum Talvi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.	PROJECT:	DESIGN CONSULTANT: <b>epi</b> sa servicios de Ingenieria S.L. Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.epiisa.com	TITLE:	
	CLIENT:	Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)	SIGNAGE PLAN (Ch. 9+000 to Ch. 10+000)	
	DRAWN BY:	SD	SCALE:	1:1000
	DESIGNED BY:	SCK/MM	APPROVED BY:	KG
DATE:	DESCRIPTION:	DRG. NO.:	EPTISAJTRPRDPRJ08KSP10	
REV:	REVISION:	R-1	DATE:	September 2019



**Note:**  
 1. Speed Limit Sign(Fig-14.37 of IRC-67, 2012) of 30km/h should be provided at bends.  
 2. Series of Bends Sign(Fig-15.07 of IRC-67, 2012) should be provided at every 200m in zigzag curves.

CLIENT:



Jhelum Tawi Flood Recovery Project  
 2nd Floor ERA Commercial Complex Rambagh  
 Srinagar-190 009.

PROJECT:

Consultancy Services for Preparing Detailed Project Report  
 for the Road works in Jammu and Kashmir  
**(Chiralla Link Road in Doda District)**

DESIGN CONSULTANT:



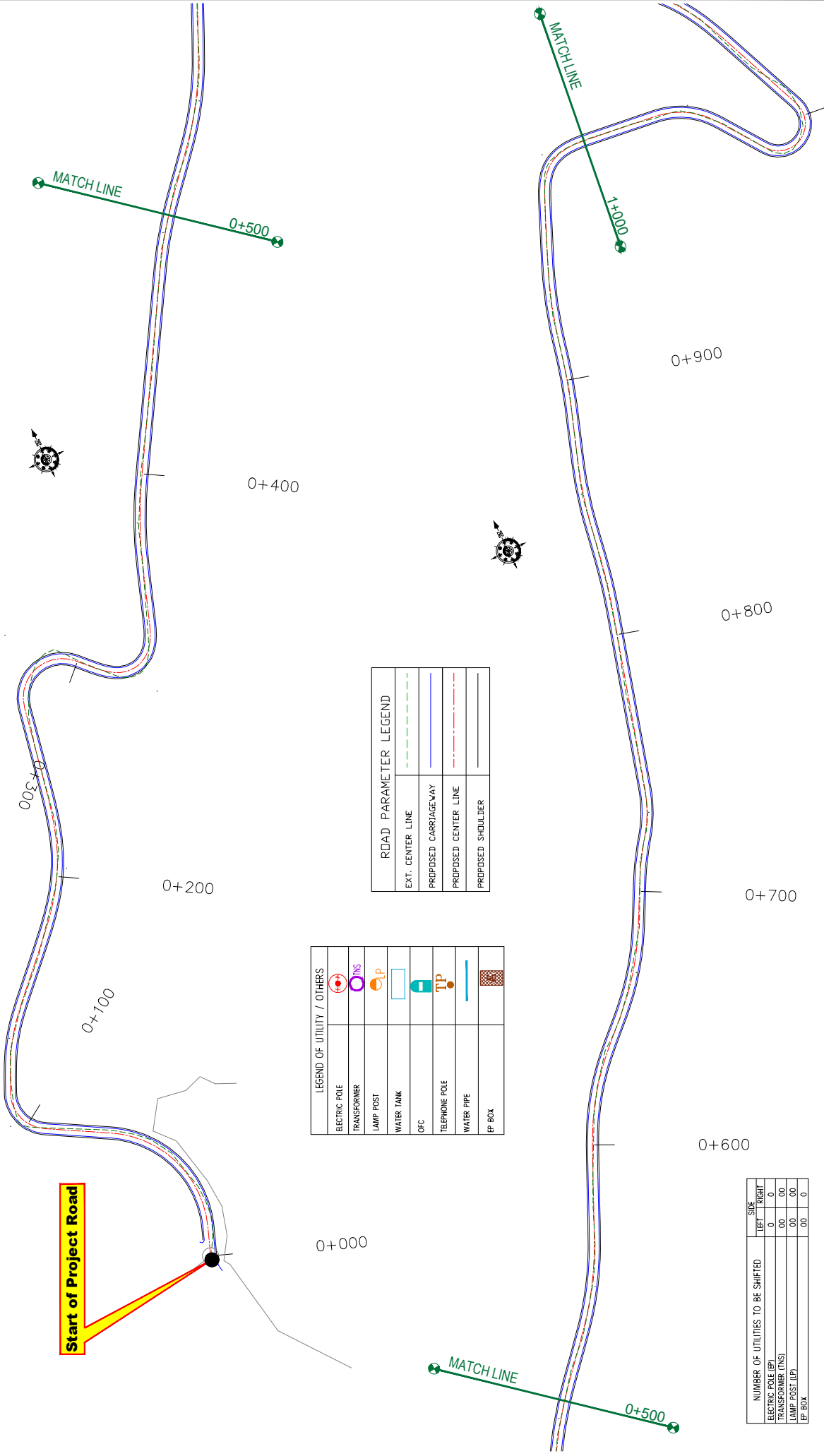
**servicios de Ingenieria S.L.**  
 Unit 1203, 12th Floor, Tower 1, PS Srijan  
 Corporate Park, Plot No. 2, Block EP & GP,  
 Sector V, Salt Lake Kolkata - 700091,  
 West Bengal  
 Ph: 033-40347200  
 www.eptisa.com

REV	DATE	DESCRIPTION	DRAWN BY :	SD	TITLE :	
			DESIGNED BY :	SCK/MM	<b>Signage Plan</b> (Ch. 10+000 to Ch. 10+138)	
			APPROVED BY :	KG		DRG. NO. : EPTISAJTRPRDPRJ08KISPI11
			SCALE :	1:1000		REVISION : R-1

UTILITY RELOCATION PLAN FOR MAIN ROAD (ELECTRICITY DEPARTMENT)

← Chiralla

Puneja →



**Start of Project Road**

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	0	0
TRANSFORMER (INS)	00	00
LAMP POST (LP)	00	00
EP BOX	00	0



Jhelum Tawi Flood Recovery Project  
2nd Floor ERA Commercial Complex Rambagh  
Srinagar-190 009.

PROJECT: Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir  
**(Chiralla Link Road in Doda District)**

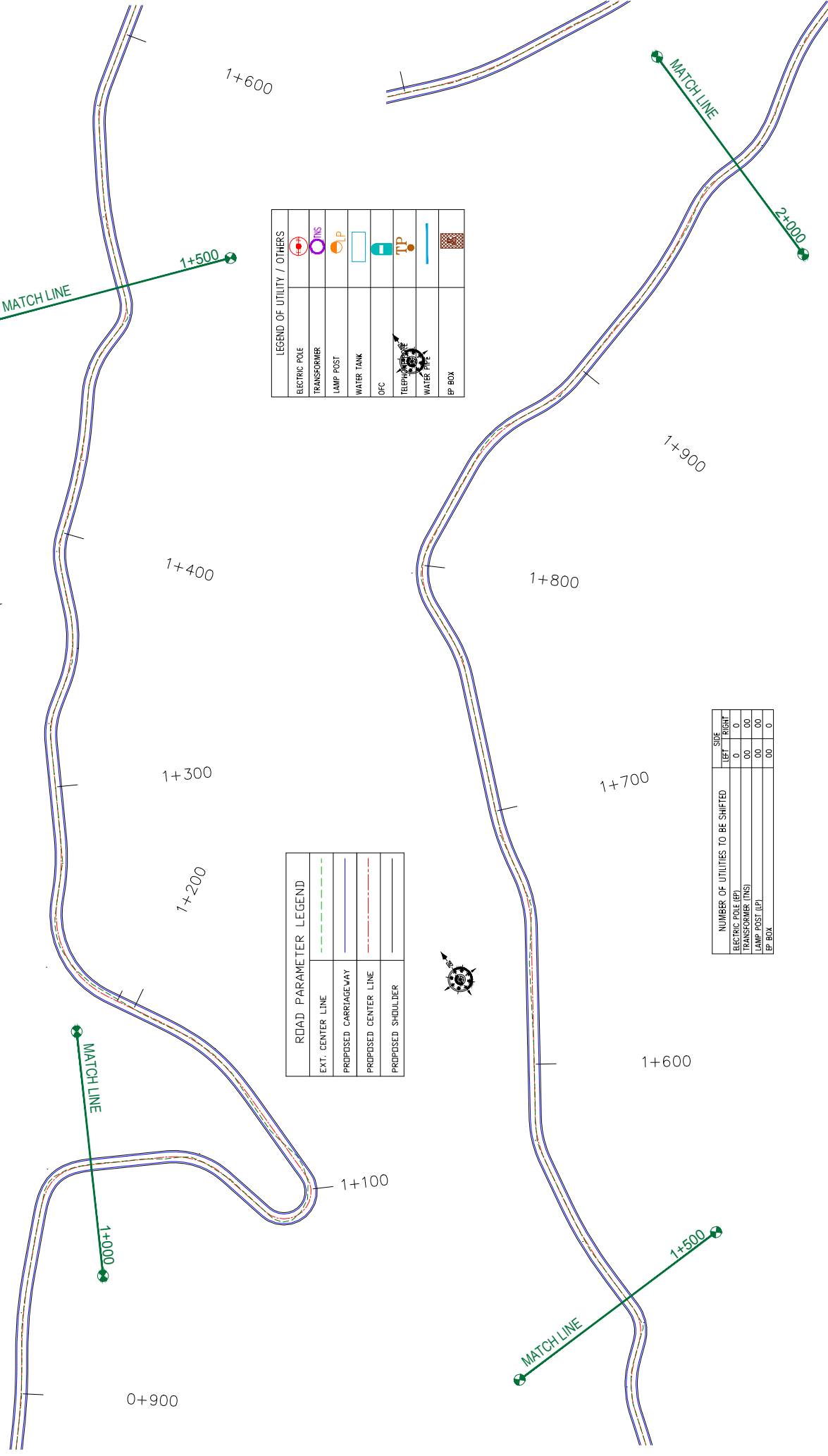
DESIGN CONSULTANT: **ep-tisa** *servicios de Ingenieria S.L.*  
Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal  
Ph: 033-40347200  
www.ep-tisa.com

REV	DATE	DESCRIPTION

DRAWN BY :	SD	TITLE :	Utility Relocation Plan (For Electricity Department) (Ch. 0+000 to Ch. 1+000)
DESIGNED BY :	SCK/MM	DRG. NO. :	EPTISAJTRPRDPRJ08KURP/01
APPROVED BY :	KG	REVISION :	R-1
SCALE :	1:1000	DATE :	September 2019

Chiralla

Puneja

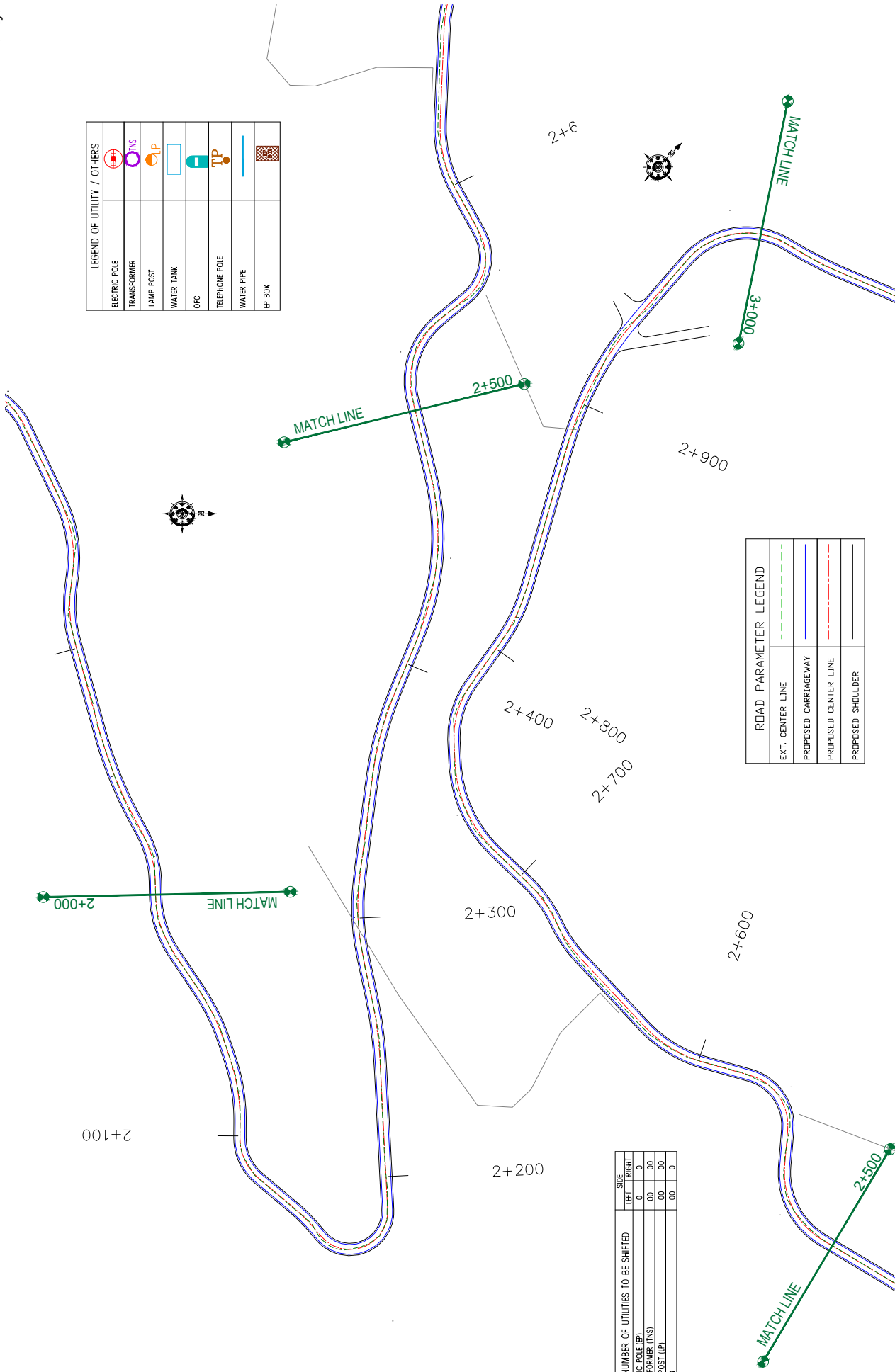


ROAD PARAMETER LEGEND	
EXT. CENTER LINE	--- (dashed green line)
PROPOSED CARRIAGEWAY	--- (dashed blue line)
PROPOSED CENTER LINE	--- (dashed red line)
PROPOSED SHOULDER	--- (dashed black line)

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	0	0
TRANSFORMER (TNS)	00	00
LAMP POST (LP)	00	00
EP BOX	00	0

<b>CLIENT:</b>  Jhelum Tawi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.	<b>PROJECT:</b> Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)	<b>DESIGN CONSULTANT:</b>  <b>servicios de Ingenieria S.L.</b> Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com	<b>REV:</b>	<b>DATE</b>	<b>DESCRIPTION</b>
			<b>DRAWN BY:</b> SD	<b>DESIGNED BY:</b> SCK/MM	<b>APPROVED BY:</b> KG
<b>TITLE:</b> Utility Relocation Plan (For Electricity Department) (Ch. 1+000 to Ch. 2+000)			<b>DRG. NO.:</b> EPTISAJTRPPDRJ8KURP/02	<b>SEPTEMBER 2019</b>	



LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OFC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	
PROPOSED CARRIAGEWAY	
PROPOSED CENTER LINE	
PROPOSED SHOULDER	

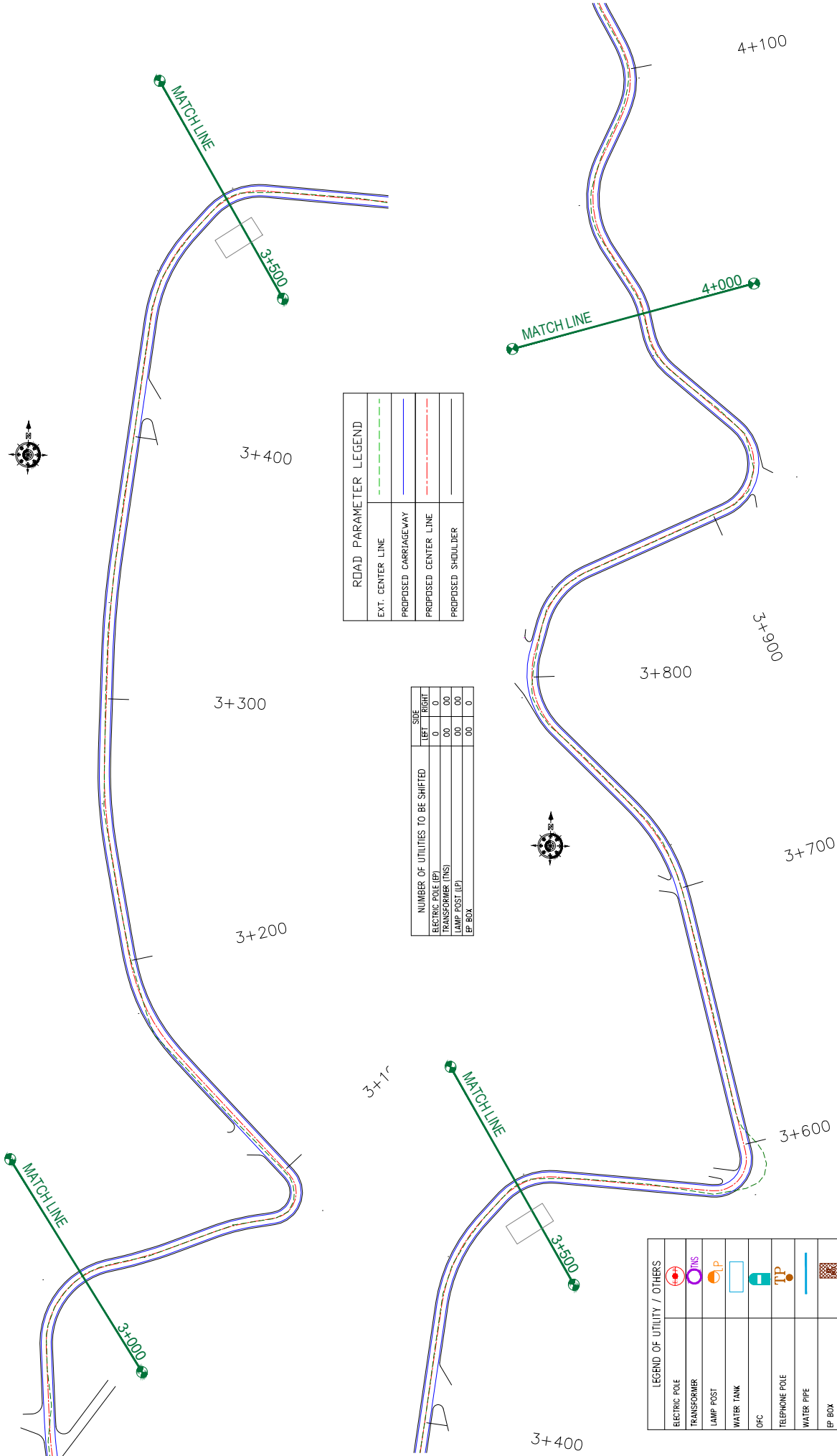
NUMBER OF UTILITIES TO BE SHIFTED	SIDE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	0	0
TRANSFORMER (TNS)	00	00
LAMP POST (LP)	00	00
EP BOX	00	0

<b>CLIENT:</b>  Jhelum Tarai Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.	<b>PROJECT:</b> Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir (Chiralla Link Road in Doda District)	<b>DESIGN CONSULTANT:</b>  eptisa servicios de Ingenieria S.L. Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP & GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.eptisa.com		<b>TITLE:</b> Utility Relocation Plan (For Electricity Department) (Ch. 2+000 to Ch. 3+000)	
		<b>DRAWN BY:</b> SD	<b>DESIGNED BY:</b> SCK/MM	<b>APPROVED BY:</b> KG	<b>DRG. NO.:</b> EPTISAJTRFRPDRJ8KURP/03
		<b>REV.</b>	<b>DATE</b>	<b>DESCRIPTION</b>	<b>REVISION:</b> R-1
		<b>SCALE:</b> 1:1000	<b>SEPTEMBER 2019</b>		



Chiralla

Puneja



ROAD PARAMETER LEGEND	
EXT. CENTER LINE	---
PROPOSED CARRIAGEWAY	---
PROPOSED CENTER LINE	---
PROPOSED SHOULDER	---

NUMBER OF UTILITIES TO BE SHIFTED	SIZE	
	LEFT	RIGHT
ELECTRIC POLE (EP)	0	0
TRANSFORMER (TNS)	00	00
LAMP POST (LP)	00	00
EP BOX	00	0

LEGEND OF UTILITY / OTHERS	
ELECTRIC POLE	
TRANSFORMER	
LAMP POST	
WATER TANK	
OPC	
TELEPHONE POLE	
WATER PIPE	
EP BOX	

<p><b>CLIENT:</b></p> <p>Jhelum Talavi Flood Recovery Project 2nd Floor ERA Commercial Complex Rambagh Srinagar-190 009.</p>	<p><b>PROJECT:</b></p> <p>Consultancy Services for Preparing Detailed Project Report for the Road works in Jammu and Kashmir <b>(Chiralla Link Road in Doda District)</b></p>	<p><b>DESIGN CONSULTANT:</b></p> <p><b>epitisa</b> servicios de Ingenieria S.L. Unit 1203, 12th Floor, Tower 1, PS Srijan Corporate Park, Plot No. 2, Block EP &amp; GP, Sector V, Salt Lake Kolkata - 700091, West Bengal Ph: 033-40347200 www.epitisa.com</p>						
<p><b>REV:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DATE	DESCRIPTION				<p><b>SCALE:</b> 1:1000</p> <p><b>REVISION:</b> R-1</p>	<p><b>TITLE:</b> Utility Relocation Plan (For Electricity Department) (Ch. 3+000 to Ch. 4+000)</p> <p><b>DRG. NO.:</b> EPTISAJTRPRDPRJ8KURP/04</p> <p style="text-align: right;">September 2019</p>
REV	DATE	DESCRIPTION						
<p><b>DRAWN BY:</b> SD</p> <p><b>DESIGNED BY:</b> SCK/MM</p> <p><b>APPROVED BY:</b> KG</p>	<p><b>DESCRIPTION:</b></p>							