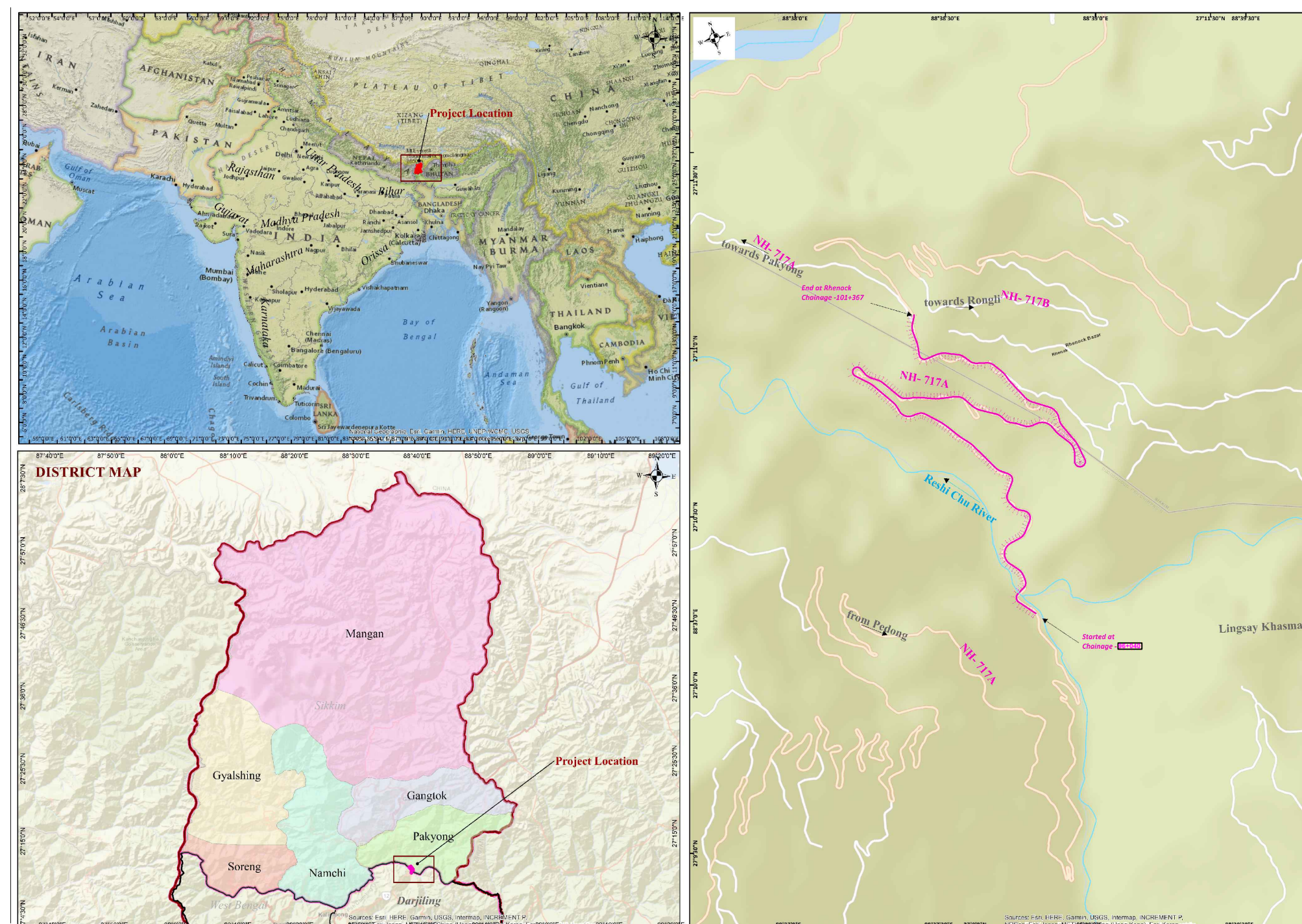




NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED (NHIDCL)

(A fully owned company under Ministry of Road Transport & Highways, Govt of India)

**Consultancy Services For Preparation Of DPR and Providing Services
For Pre-Construction Activities in Respect of “Widening and Up-Gradation of Existing
Carriageway into 2L+PS Configuration from Reshi (km 96.254) to Rhenock (km 101.554)
along NH-717A & from Rhenock (km 0.00) to Rongli Bazaar (km 15.300) along NH-717B
in the states of Sikkim ”.**



CONSULTANT:



Xplorer Consultancy Services Pvt. Ltd.
in joint venture
Dsd Infratech Management Pvt. Ltd.
in Association With
Maverick Mernok & Construction
511, Tower b, ithum, plot-A40
Sector-62, Noida
Uttar Pradesh – 201301

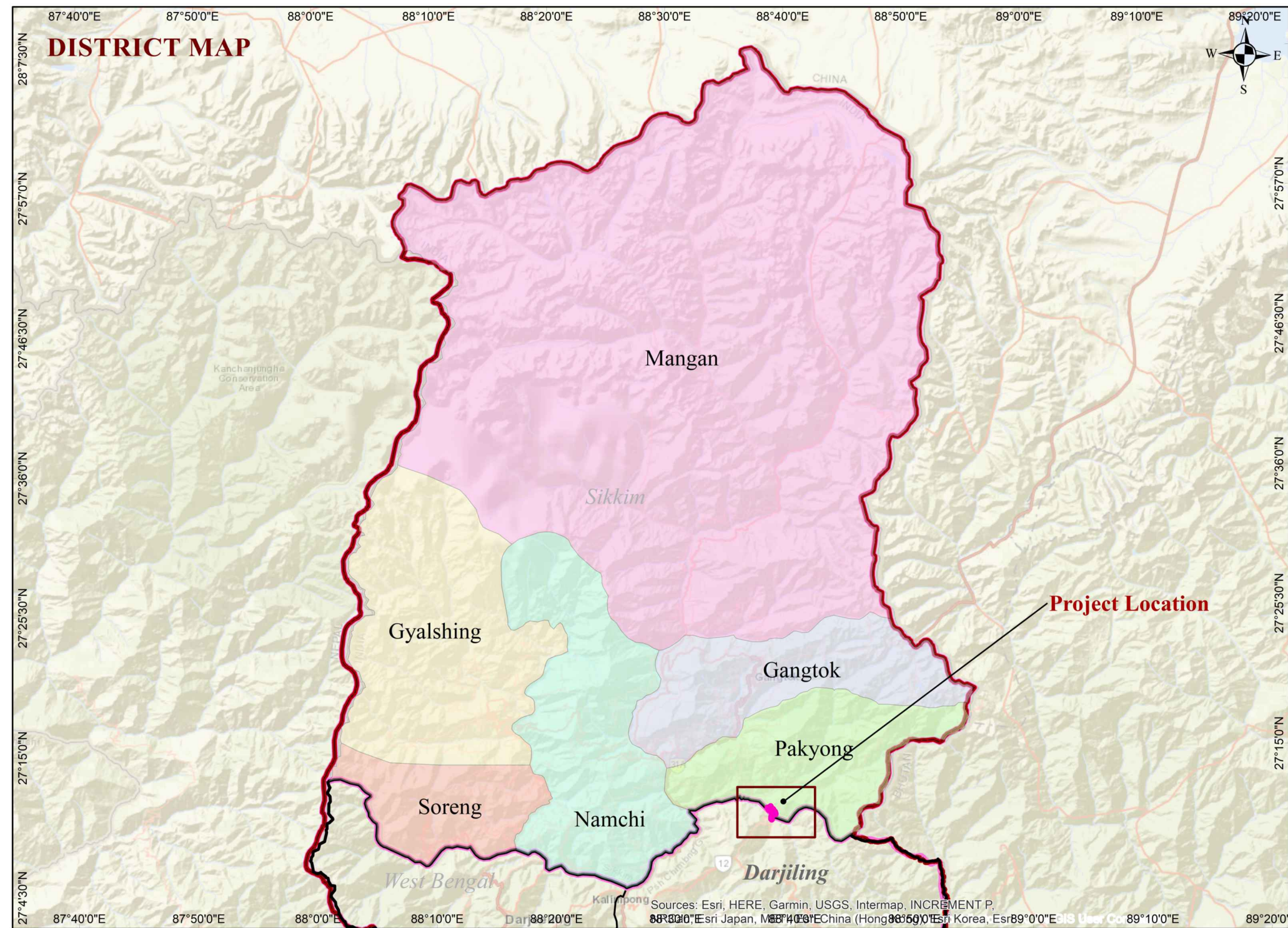
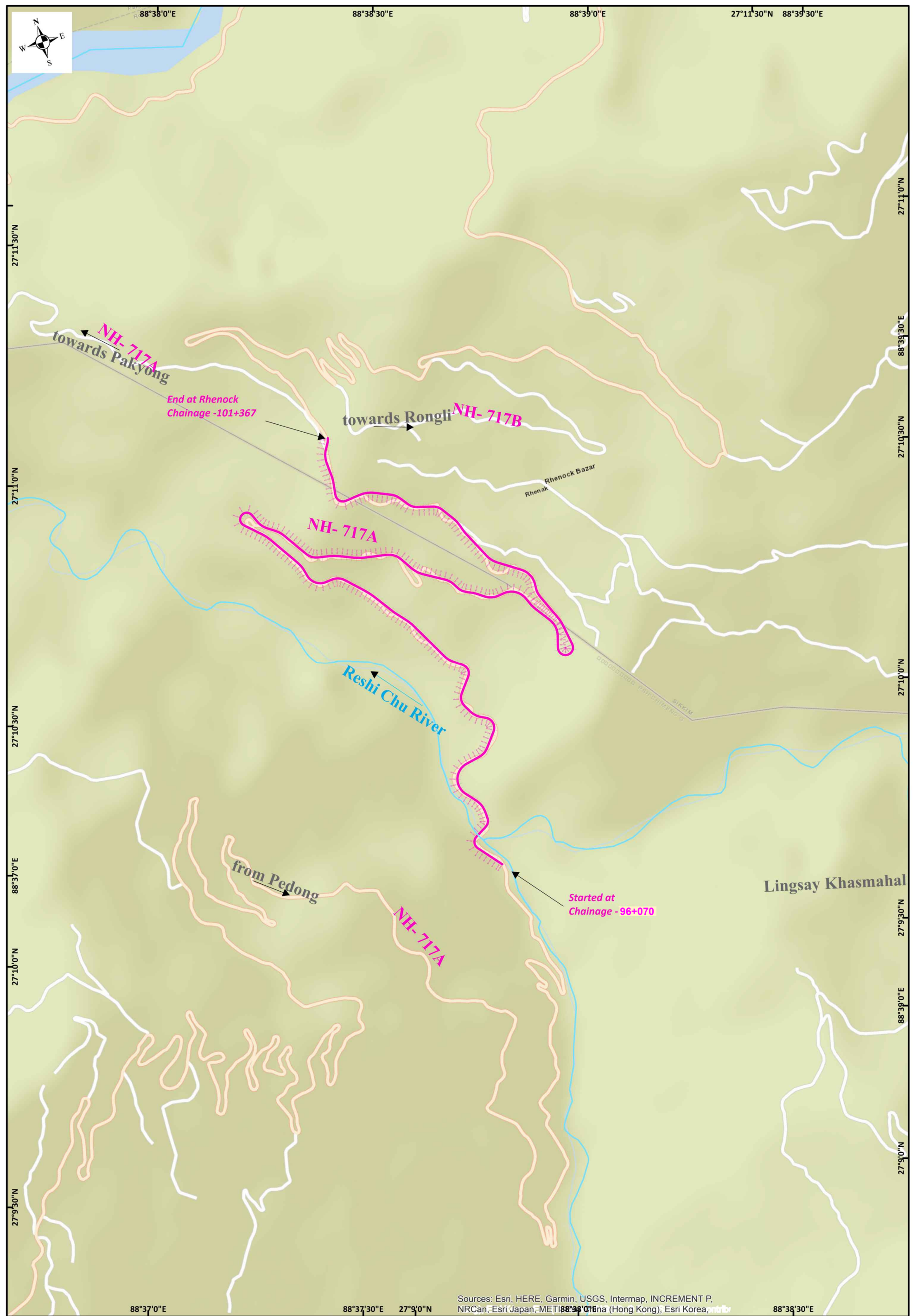
Draft Detailed Project Report Drawings(Volume-IX)

JAN-2025

RESHI TO RHENOCK

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KEY PLAN

TBM & DGPS LIST

TBM Details Of Rishi (96+254) To Rhenock (101+500)						
Sl. No	Nos	Chainage	Location	Easting	Norting	Elevation
1	TS-1	96+254	RHS	662081.865	3005885.583	583.251
2	GPS-1	96+350	LHS	662074.535	3005975.194	582.804
3	TS-2	96+355	RHS	662079.906	3005987.896	582.421
4	TS-3	96+455	LHS	662010.940	3006070.416	579.187
5	P-1	96+450	LHS	662016.047	3006058.284	579.510
6	TS-4	96+520	LHS	662011.130	3006128.760	580.380
7	TS-5	96+575	LHS	662050.823	3006167.145	583.411
8	P-2	96+600	LHS	662076.065	3006172.630	584.116
9	TS-6	96+685	LHS	662155.217	3006192.869	587.328
10	P-3	96+880	LHS	662164.933	3006330.869	598.442
11	TS-7	96+895	LHS	662154.325	3006342.016	599.231
12	TS-8	96+975	LHS	662122.465	3006412.513	602.831
13	P-4	97+105	LHS	662187.316	3006525.871	610.457
14	TS-9	97+105	RHS	662194.475	3006524.544	610.348
15	TS-10	97+195	LHS	662122.440	3006579.514	613.461
16	P-5	97+310	LHS	662061.910	3006673.010	622.841
17	TS-11	97+320	LHS	662055.238	3006680.336	623.287
18	TS-12	97+415	LHS	662021.201	3006767.150	628.044
19	TS-13	97+505	RHS	661960.956	3006834.077	631.326
20	P-6	97+540	RHS	661944.812	3006866.460	632.081
21	OLD GPS-ST1	97+605	RHS	661909.215	3006918.295	636.251
22	TS-14	97+760	RHS	661803.404	3007030.158	648.208
23	P-7	97+755	LHS	661798.806	3007022.342	647.935
24	TS-15	97+855	LHS	661707.376	3007033.270	652.341
25	TS-16	97+905	RHS	661679.228	3007074.432	654.904
26	TS-17	97+950	LHS	661668.478	3007115.395	657.599
27	P-8	97+980	LHS	661648.042	3007136.064	659.524
28	TS-18	98+120	LHS	661574.316	3007259.822	667.455
29	P-9	98+210	LHS	661516.664	3007322.818	672.085
30	TS-19	98+240	LHS	661504.473	3007351.737	672.970
31	TS-20	97+290	RHS	661531.128	3007335.936	675.877
32	TS-21	98+415	LHS	661633.040	3007264.374	681.930
33	P-10	98+585	RHS	661690.770	3007161.290	688.507
34	TS-22	98+560	LHS	661709.918	3007143.440	689.581
35	TS-23	98+640	RHS	661784.885	3007124.184	693.552

TBM Details Of Rishi (96+254) To Rhenock (101+500)						
Sl. No	Nos	Chainage	Location	Easting	Norting	Elevation
36	P-11	98+750	RHS	661887.652	3007083.614	698.982
37	TS-24	98+770	LHS	661910.482	3007087.381	699.616
38	TS-25	98+910	LHS	662045.168	3007048.338	705.086
39	GPS-2	99+005	RHS	662067.437	3006959.988	710.583
40	TS-26	99+050	RHS	662089.690	3006917.752	713.233
41	TS-27	99+120	LHS	662158.968	3006935.721	717.585
42	TS-28	99+225	RHS	662233.325	3006861.905	721.777
43	P-12	99+255	RHS	662244.960	3006832.740	723.973
44	RP-18	99+260	RHS	662252.058	3006828.785	724.323
45	RP-19	99+300	RHS	662289.609	3006816.824	725.505
46	RP-20	99+375	RHS	662353.228	3006777.532	729.613
47	TS-29	99+480	RHS	662456.395	3006778.309	737.005
48	P-13	99+540	RHS	662482.409	3006739.859	739.462
49	TS-30	99+640	RHS	662538.840	3006655.287	745.066
50	P-14	99+780	RHS	662572.778	3006532.727	755.268
51	BM-2	99+815	RHS	662565.640	3006495.728	757.666
52	TS-31	99+945	LHS	662600.728	3006581.824	760.248
53	TS-32	99+995	LHS	662589.133	3006629.777	761.731
54	P-15	100+015	LHS	662580.516	3006645.952	762.870
55	TS-33	100+120	LHS	662542.956	3006746.550	768.403
56	TS-34	100+210	RHS	662531.902	3006830.609	773.276
57	P-16	100+260	LHS	662491.558	3006858.882	776.420
58	OLD DGPS-16	100+350	LHS	662408.638	3006865.678	780.367
59	TS-35	100+450	LHS	662373.971	3006963.237	787.118
60	TS-36	100+620	RHS	662313.540	3007118.691	798.474
61	TS-37	100+655	LHS	662274.489	3007132.306	799.538
62	OLD DGPS-17	100+700	LHS	662268.534	3007176.574	801.210
63	OLD DGPS-18	100+820	LHS	662163.732	3007216.684	808.713
64	TS-38	100+920	RHS	662098.835	3007294.242	813.840
65	P-17	100+990	LHS	662034.247	3007312.228	817.212
66	OLD DGPS-19	100+995	RHS	662031.802	3007323.522	817.967
67	TS-39	101+140	LHS	661882.999	3007320.618	825.924
68	P-18	101+270	LHS	661885.215	3007452.434	833.297
69	TS-40	101+325	LHS	661888.733	3007506.272	836.632

R.No.	Date	DESCRIPTION	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Design By: RK	TITLE: TBM and DGPM List Reshi To Rhenock	
R0	12-09-2024	Draft Detailed Report				Drawn By : M.K		
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH		
						Approved By : VY		
						SCALE-NTS	DWG NO:XPL/DSD/SK/KM5.3/TBM/DGPS/01	
							Sheet : 01 OF 01	DATE:Nov-2024

PROPOSED CENTRELINE CO-ORDINATES

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
1	96+080	662083.489	3005742.374
2	96+100	662071.207	3005758.159
3	96+120	662058.926	3005773.944
4	96+140	662047.056	3005790.011
5	96+160	662044.209	3005809.435
6	96+180	662052.746	3005827.383
7	96+200	662062.913	3005844.606
8	96+220	662073.080	3005861.829
9	96+240	662083.120	3005879.124
10	96+260	662089.687	3005897.923
11	96+280	662090.088	3005917.858
12	96+300	662088.323	3005937.780
13	96+320	662086.255	3005957.670
14	96+340	662082.114	3005977.214
15	96+360	662074.376	3005995.621
16	96+380	662063.306	3006012.251
17	96+400	662050.532	3006027.638
18	96+420	662037.527	3006042.832
19	96+440	662025.230	3006058.583
20	96+460	662016.968	3006076.723
21	96+480	662014.154	3006096.455
22	96+500	662017.014	3006116.181
23	96+520	662025.319	3006134.300
24	96+540	662038.394	3006149.345
25	96+560	662055.178	3006160.094
26	96+580	662074.242	3006166.005
27	96+600	662093.839	3006170.000
28	96+620	662113.440	3006173.972
29	96+640	662132.965	3006178.286
30	96+660	662151.244	3006186.208
31	96+680	662166.162	3006199.425
32	96+700	662178.742	3006214.970

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
33	96+720	662191.159	3006230.648
34	96+740	662203.577	3006246.327
35	96+760	662215.594	3006262.298
36	96+780	662221.514	3006281.186
37	96+800	662217.660	3006300.600
38	96+820	662204.971	3006315.790
39	96+840	662187.458	3006325.403
40	96+860	662170.152	3006335.379
41	96+880	662155.577	3006348.998
42	96+900	662144.625	3006365.691
43	96+920	662135.067	3006383.260
44	96+940	662126.832	3006401.439
45	96+960	662125.714	3006421.243
46	96+980	662133.158	3006439.643
47	97+000	662145.268	3006455.551
48	97+020	662157.680	3006471.233
49	97+040	662170.092	3006486.916
50	97+060	662182.065	3006502.920
51	97+080	662187.700	3006521.845
52	97+100	662182.279	3006540.815
53	97+120	662168.118	3006554.768
54	97+140	662151.977	3006566.577
55	97+160	662135.966	3006578.559
56	97+180	662121.769	3006592.586
57	97+200	662110.945	3006609.375
58	97+220	662101.426	3006626.965
59	97+240	662091.930	3006644.567
60	97+260	662082.434	3006662.168
61	97+280	662072.938	3006679.770
62	97+300	662063.441	3006697.372
63	97+320	662053.945	3006714.974
64	97+340	662044.449	3006732.575

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
65	97+360	662034.953	3006750.177
66	97+380	662025.284	3006767.683
67	97+400	662013.936	3006784.134
68	97+420	662001.031	3006799.412
69	97+440	661987.987	3006814.573
70	97+460	661975.078	3006829.847
71	97+480	661963.144	3006845.891
72	97+500	661951.704	3006862.297
73	97+520	661940.268	3006878.704
74	97+540	661928.832	3006895.112
75	97+560	661917.396	3006911.520
76	97+580	661905.622	3006927.684
77	97+600	661892.851	3006943.071
78	97+620	661879.102	3006957.591
79	97+640	661864.924	3006971.697
80	97+660	661850.739	3006985.797
81	97+680	661836.555	3006999.896
82	97+700	661822.370	3007013.996
83	97+720	661807.047	3007026.772
84	97+740	661788.600	3007034.255
85	97+760	661768.712	3007035.386
86	97+780	661748.818	3007033.334
87	97+800	661728.876	3007033.224
88	97+820	661709.914	3007039.288
89	97+840	661693.980	3007051.222
90	97+860	661682.828	3007067.712
91	97+880	661677.070	3007086.823
92	97+900	661672.418	3007106.272
93	97+920	661665.643	3007125.067
94	97+940	661656.023	3007142.584
95	97+960	661645.202	3007159.404
96	97+980	661634.333	3007176.193

R.No.	Date	DESCRIPTION	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xploror Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Design By : RK	TITLE: Centre Line Co-ordinates List Reshi To Rhenock	
R0	12-09-2024	Draft Detailed Report				Drawn By : M.K		
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH		
R2	21-10-2024	Revised As Per Observation				Approved By : VY	DWG NO: XPL/DSD/SK/KM5.3/CO/01	
						SCALE : NTS	Sheet No: 01 OF 03	Date: Nov-2024

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
97	98+000	661623.465	3007192.982
98	98+020	661612.596	3007209.771
99	98+040	661601.727	3007226.560
100	98+060	661590.859	3007243.349
101	98+080	661579.983	3007260.133
102	98+100	661568.458	3007276.470
103	98+120	661555.034	3007291.277
104	98+140	661540.508	3007305.024
105	98+160	661525.900	3007318.685
106	98+180	661511.293	3007332.346
107	98+200	661496.694	3007346.016
108	98+220	661486.094	3007362.595
109	98+240	661489.287	3007381.842
110	98+260	661504.744	3007393.887
111	98+280	661524.186	3007392.246
112	98+300	661537.302	3007377.684
113	98+320	661545.072	3007359.257
114	98+340	661553.011	3007340.904
115	98+360	661563.982	3007324.243
116	98+380	661578.706	3007310.779
117	98+400	661595.131	3007299.368
118	98+420	661611.512	3007287.895
119	98+440	661626.464	3007274.660
120	98+460	661638.586	3007258.777
121	98+480	661649.561	3007242.057
122	98+500	661660.514	3007225.323
123	98+520	661671.467	3007208.589
124	98+540	661682.420	3007191.855
125	98+560	661693.372	3007175.121
126	98+580	661704.921	3007158.807
127	98+600	661719.898	3007145.686
128	98+620	661738.300	3007138.059

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
129	98+640	661757.909	3007134.146
130	98+660	661777.590	3007130.589
131	98+680	661797.109	3007126.252
132	98+700	661816.224	3007120.388
133	98+720	661834.827	3007113.054
134	98+740	661853.187	3007105.124
135	98+760	661871.553	3007097.204
136	98+780	661890.209	3007090.010
137	98+800	661909.373	3007084.309
138	98+820	661928.928	3007080.136
139	98+840	661948.634	3007076.715
140	98+860	661968.341	3007073.309
141	98+880	661988.049	3007069.903
142	98+900	662007.744	3007066.425
143	98+920	662026.897	3007060.808
144	98+940	662043.868	3007050.353
145	98+960	662057.296	3007035.608
146	98+980	662068.221	3007018.859
147	99+000	662078.912	3007001.957
148	99+020	662089.655	3006985.087
149	99+040	662101.886	3006969.290
150	99+060	662116.551	3006955.725
151	99+080	662133.173	3006944.628
152	99+100	662150.351	3006934.386
153	99+120	662167.531	3006924.145
154	99+140	662184.710	3006913.905
155	99+160	662201.887	3006903.661
156	99+180	662218.145	3006892.071
157	99+200	662231.197	3006876.986
158	99+220	662241.540	3006859.871
159	99+240	662252.807	3006843.391
160	99+260	662268.684	3006831.402

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
161	99+280	662286.612	3006822.539
162	99+300	662304.379	3006813.370
163	99+320	662320.915	3006802.134
164	99+340	662337.169	3006790.481
165	99+360	662354.806	3006781.154
166	99+380	662374.190	3006776.445
167	99+400	662394.142	3006776.630
168	99+420	662413.955	3006779.355
169	99+440	662433.902	3006779.610
170	99+460	662453.222	3006774.676
171	99+480	662470.560	3006764.825
172	99+500	662484.689	3006750.753
173	99+520	662494.668	3006733.482
174	99+540	662502.291	3006714.991
175	99+560	662510.375	3006696.706
176	99+580	662520.914	3006679.728
177	99+600	662532.469	3006663.404
178	99+620	662544.029	3006647.083
179	99+640	662555.589	3006630.763
180	99+660	662566.672	3006614.127
181	99+680	662574.157	3006595.636
182	99+700	662576.834	3006575.868
183	99+720	662574.548	3006556.051
184	99+740	662569.188	3006536.784
185	99+760	662563.667	3006517.561
186	99+780	662559.348	3006498.088
187	99+800	662565.168	3006479.339
188	99+820	662581.336	3006468.203
189	99+840	662600.958	3006469.141
190	99+860	662615.816	3006481.973
191	99+880	662619.681	3006501.253
192	99+900	662616.682	3006521.023

R.No.	Date	DESCRIPTION	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Design By : RK	TITLE: Centre Line Co-ordinates List Reshi To Rhenock	
R0	12-09-2024	Draft Detailed Report				Drawn By : M.K		
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH		
R2	21-10-2024	Revised As Per Observation				Approved By : VY	DWG NO: XPL/DSD/SK/KM5.3/CO/02	
						SCALE : NTS	Sheet No: 02 OF 03	Date: Nov-2024

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
193	99+920	662613.490	3006540.767
194	99+940	662610.299	3006560.510
195	99+960	662607.107	3006580.254
196	99+980	662603.262	3006599.873
197	100+000	662597.044	3006618.867
198	100+020	662589.192	3006637.261
199	100+040	662581.241	3006655.612
200	100+060	662573.290	3006673.964
201	100+080	662565.339	3006692.315
202	100+100	662557.388	3006710.667
203	100+120	662549.842	3006729.181
204	100+140	662545.986	3006748.753
205	100+160	662546.447	3006768.730
206	100+180	662546.808	3006788.708
207	100+200	662542.779	3006808.244
208	100+220	662534.041	3006826.177
209	100+240	662521.138	3006841.390
210	100+260	662505.149	3006853.368
211	100+280	662488.549	3006864.523
212	100+300	662471.948	3006875.678
213	100+320	662455.348	3006886.833
214	100+340	662438.748	3006897.988
215	100+360	662422.350	3006909.430
216	100+380	662407.926	3006923.237
217	100+400	662396.532	3006939.633
218	100+420	662387.508	3006957.479
219	100+440	662378.677	3006975.424

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
220	100+460	662369.846	3006993.369
221	100+480	662361.015	3007011.314
222	100+500	662352.184	3007029.258
223	100+520	662343.355	3007047.204
224	100+540	662335.302	3007065.500
225	100+560	662329.095	3007084.511
226	100+580	662322.477	3007103.376
227	100+600	662313.341	3007121.144
228	100+620	662302.272	3007137.798
229	100+640	662290.952	3007154.287
230	100+660	662279.630	3007170.773
231	100+680	662266.615	3007185.870
232	100+700	662249.314	3007195.686
233	100+720	662230.090	3007201.184
234	100+740	662210.782	3007206.400
235	100+760	662191.474	3007211.615
236	100+780	662172.656	3007218.261
237	100+800	662156.727	3007230.202
238	100+820	662144.423	3007245.950
239	100+840	662132.646	3007262.115
240	100+860	662119.782	3007277.389
241	100+880	662103.741	3007289.247
242	100+900	662085.634	3007297.720
243	100+920	662067.308	3007305.730
244	100+940	662048.981	3007313.739
245	100+960	662030.570	3007321.545
246	100+980	662011.371	3007327.064

RESHI TO RHENOCK			
PROPOSED CENTER LINE CO-ORDINATES			
S.NO	CHAINAGE	X	Y
247	101+000	661991.522	3007329.322
248	101+020	661971.561	3007328.375
249	101+040	661951.677	3007326.220
250	101+060	661931.794	3007324.059
251	101+080	661911.874	3007322.491
252	101+100	661893.541	3007329.522
253	101+120	661883.471	3007346.375
254	101+140	661884.127	3007366.256
255	101+160	661886.830	3007386.073
256	101+180	661889.505	3007405.893
257	101+200	661890.878	3007425.833
258	101+220	661889.983	3007445.808
259	101+240	661888.656	3007465.764
260	101+260	661887.330	3007485.720
261	101+280	661887.280	3007505.696
262	101+300	661891.370	3007525.231
263	101+320	661899.628	3007543.405
264	101+340	661909.948	3007560.537
265	101+360	661918.799	3007578.401

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						SCALE : NTS	Sheet No: 03 OF 03	Date: Nov-2024

ROW CO-ORDINATES LIST

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
1	96+070	662080.158	3005727.113	662089.629	3005734.482	662099.100	3005741.851
2	96+080	662074.018	3005735.006	662083.489	3005742.374	662092.960	3005749.743
3	96+100	662061.736	3005750.791	662071.207	3005758.159	662080.678	3005765.528
4	96+120	662049.455	3005766.576	662058.926	3005773.944	662068.397	3005781.313
5	96+140	662036.114	3005785.084	662047.056	3005790.011	662057.442	3005796.021
6	96+160	662032.317	3005811.029	662044.209	3005809.435	662055.858	3005806.554
7	96+180	662042.420	3005833.497	662052.746	3005827.383	662063.088	3005821.296
8	96+200	662052.587	3005850.720	662062.913	3005844.606	662073.255	3005838.520
9	96+220	662062.754	3005867.943	662073.080	3005861.829	662083.422	3005855.743
10	96+240	662072.472	3005884.657	662083.120	3005879.124	662093.707	3005873.472
11	96+260	662077.806	3005899.609	662089.687	3005897.923	662101.577	3005896.299
12	96+280	662078.130	3005916.840	662090.088	3005917.858	662102.041	3005918.923
13	96+300	662076.366	3005936.764	662088.323	3005937.780	662100.276	3005938.842
14	96+320	662074.370	3005956.019	662086.255	3005957.670	662098.135	3005959.370
15	96+340	662070.717	3005973.427	662082.114	3005977.214	662093.485	3005981.048
16	96+360	662063.921	3005989.730	662074.376	3005995.621	662084.803	3006001.560
17	96+380	662053.962	3006004.722	662063.306	3006012.251	662072.613	3006019.826
18	96+400	662041.317	3006019.951	662050.433	3006027.754	662059.550	3006035.557
19	96+420	662028.312	3006035.145	662037.428	3006042.948	662046.545	3006050.751
20	96+440	662015.025	3006052.269	662025.147	3006058.713	662035.274	3006065.161
21	96+460	662005.291	3006073.937	662016.926	3006076.875	662028.586	3006079.820
22	96+480	662002.165	3006097.077	662014.156	3006096.617	662026.174	3006096.157
23	96+500	662005.689	3006120.160	662017.064	3006116.340	662028.464	3006112.511
24	96+520	662015.576	3006141.314	662025.414	3006134.443	662035.272	3006127.556
25	96+540	662031.026	3006158.823	662038.528	3006149.457	662046.046	3006140.072
26	96+560	662050.847	3006171.291	662055.343	3006160.166	662059.851	3006149.012

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
27	96+580	662071.991	3006177.793	662074.420	3006166.043	662076.850	3006154.290
28	96+600	662091.634	3006181.798	662094.017	3006170.037	662096.401	3006158.276
29	96+620	662111.236	3006185.769	662113.619	3006174.008	662116.002	3006162.247
30	96+640	662129.590	3006189.812	662133.140	3006178.338	662136.688	3006166.874
31	96+660	662144.596	3006196.225	662151.400	3006186.311	662158.191	3006176.418
32	96+680	662157.122	3006207.326	662166.286	3006199.569	662175.445	3006191.816
33	96+700	662169.453	3006222.569	662178.861	3006215.119	662188.268	3006207.669
34	96+720	662181.871	3006238.248	662191.278	3006230.798	662200.685	3006223.347
35	96+740	662194.288	3006253.926	662203.695	3006246.476	662213.102	3006239.026
36	96+760	662205.224	3006268.386	662215.691	3006262.464	662226.136	3006256.556
37	96+780	662209.437	3006281.255	662221.518	3006281.388	662233.517	3006281.519
38	96+800	662207.024	3006294.883	662217.561	3006300.790	662228.028	3006306.658
39	96+820	662198.270	3006305.818	662204.784	3006315.916	662211.290	3006326.000
40	96+840	662181.826	3006314.804	662187.255	3006325.506	662192.683	3006336.208
41	96+860	662162.621	3006326.030	662169.969	3006335.517	662177.328	3006345.018
42	96+880	662146.008	3006341.750	662155.431	3006349.180	662164.863	3006356.617
43	96+900	662133.978	3006360.151	662144.512	3006365.897	662155.047	3006371.643
44	96+920	662124.387	3006377.783	662134.956	3006383.466	662145.524	3006389.150
45	96+940	662115.063	3006399.046	662126.773	3006401.669	662138.537	3006404.304
46	96+960	662114.062	3006424.147	662125.763	3006421.486	662137.521	3006418.812
47	96+980	662123.480	3006446.748	662133.302	3006439.853	662143.133	3006432.952
48	97+000	662136.018	3006463.199	662145.427	3006455.751	662154.837	3006448.304
49	97+020	662148.429	3006478.881	662157.839	3006471.434	662167.249	3006463.987
50	97+040	662160.841	3006494.564	662170.251	3006487.117	662179.660	3006479.670
51	97+060	662171.695	3006509.003	662182.194	3006503.144	662192.671	3006497.295
52	97+080	662175.617	3006521.306	662187.689	3006522.114	662199.662	3006522.916

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						SCALE : NTS		Sheet No: 01 OF 05	Date: Nov-2024

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
53	97+100	662172.238	3006534.141	662182.119	3006541.052	662191.953	3006547.930
54	97+120	662159.990	3006544.191	662167.885	3006554.940	662174.987	3006564.611
55	97+140	662140.059	3006550.278	662151.842	3006566.676	662158.845	3006576.421
56	97+160	662118.945	3006558.974	662135.710	3006578.772	662143.467	3006587.933
57	97+180	662095.449	3006572.471	662121.592	3006592.813	662131.063	3006600.183
58	97+200	662071.494	3006588.740	662110.750	3006609.730	662121.333	3006615.389
59	97+220	662090.726	3006621.526	662101.287	3006627.224	662111.848	3006632.922
60	97+240	662081.229	3006639.128	662091.790	3006644.826	662102.351	3006650.524
61	97+260	662071.733	3006656.730	662082.294	3006662.428	662092.855	3006668.125
62	97+280	662062.237	3006674.332	662072.798	3006680.029	662083.359	3006685.727
63	97+300	662052.740	3006691.933	662063.301	3006697.631	662073.863	3006703.329
64	97+320	662043.244	3006709.535	662053.805	3006715.233	662064.366	3006720.931
65	97+340	662033.748	3006727.137	662044.309	3006732.835	662054.870	3006738.532
66	97+360	662024.252	3006744.739	662034.813	3006750.436	662045.374	3006756.134
67	97+380	662014.848	3006761.752	662025.132	3006767.936	662035.416	3006774.120
68	97+400	662004.515	3006776.698	662013.748	3006784.364	662022.980	3006792.030
69	97+420	661991.740	3006791.811	662000.837	3006799.638	662009.933	3006807.464
70	97+440	661978.696	3006806.972	661987.793	3006814.799	661996.889	3006822.625
71	97+460	661965.399	3006822.748	661974.894	3006830.083	661984.391	3006837.418
72	97+480	661953.134	3006839.266	661962.972	3006846.137	661972.811	3006853.007
73	97+500	661941.688	3006855.681	661951.533	3006862.542	661961.378	3006869.404
74	97+520	661930.252	3006872.088	661940.097	3006878.950	661949.942	3006885.812
75	97+540	661918.816	3006888.496	661928.661	3006895.358	661938.506	3006902.220
76	97+560	661907.431	3006904.827	661917.223	3006911.765	661927.014	3006918.702
77	97+580	661896.078	3006920.407	661905.436	3006927.919	661914.794	3006935.431
78	97+600	661883.813	3006935.175	661892.649	3006943.294	661901.486	3006951.413
79	97+620	661870.417	3006949.305	661878.889	3006957.804	661887.360	3006966.303

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
80	97+640	661856.250	3006963.399	661864.710	3006971.910	661873.170	3006980.420
81	97+660	661842.066	3006977.498	661850.525	3006986.009	661858.985	3006994.520
82	97+680	661827.881	3006991.598	661836.341	3007000.109	661844.801	3007008.620
83	97+700	661813.778	3007005.614	661822.155	3007014.207	661830.531	3007022.799
84	97+720	661800.921	3007016.413	661806.783	3007026.925	661812.627	3007037.405
85	97+740	661786.196	3007022.474	661788.294	3007034.314	661790.388	3007046.130
86	97+760	661769.564	3007023.414	661768.399	3007035.357	661767.233	3007047.300
87	97+780	661749.593	3007021.354	661748.505	3007033.304	661747.416	3007045.255
88	97+800	661726.342	3007021.487	661728.563	3007033.279	661730.787	3007045.087
89	97+820	661703.674	3007029.028	661709.631	3007039.445	661715.600	3007049.881
90	97+840	661684.723	3007043.573	661693.761	3007051.467	661702.815	3007059.376
91	97+860	661671.579	3007063.508	661682.698	3007068.021	661693.837	3007072.543
92	97+880	661665.286	3007084.534	661676.997	3007087.152	661688.708	3007089.770
93	97+900	661660.842	3007103.092	661672.322	3007106.596	661683.799	3007110.100
94	97+920	661654.690	3007120.158	661665.498	3007125.374	661676.305	3007130.590
95	97+940	661645.731	3007136.407	661655.840	3007142.873	661665.949	3007149.338
96	97+960	661634.943	3007153.169	661645.016	3007159.691	661655.090	3007166.212
97	97+980	661618.562	3007167.174	661634.148	3007176.480	661644.221	3007183.001
98	98+000	661600.624	3007179.201	661623.181	3007193.421	661633.333	3007199.820
99	98+020	661585.685	3007193.432	661612.311	3007210.211	661622.464	3007216.610
100	98+040	661571.650	3007207.880	661601.489	3007226.927	661611.604	3007233.384
101	98+060	661565.146	3007227.331	661590.639	3007243.687	661600.740	3007250.167
102	98+080	661569.837	3007253.718	661579.793	3007260.417	661589.748	3007267.116
103	98+100	661559.057	3007269.009	661568.239	3007276.735	661577.422	3007284.460
104	98+120	661546.490	3007282.847	661554.785	3007291.518	661563.081	3007300.188
105	98+140	661532.059	3007296.496	661540.255	3007305.260	661548.452	3007314.025
106	98+160	661517.451	3007310.157	661525.648	3007318.921	661533.844	3007327.686

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ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
107	98+180	661502.844	3007323.818	661511.040	3007332.582	661519.237	3007341.347
108	98+200	661487.982	3007337.753	661496.447	3007346.258	661504.912	3007354.764
109	98+220	661474.172	3007361.127	661486.033	3007362.947	661497.980	3007364.779
110	98+240	661479.866	3007389.297	661489.501	3007382.145	661499.213	3007374.936
111	98+260	661502.356	3007405.660	661505.120	3007393.983	661507.898	3007382.246
112	98+280	661530.671	3007402.358	661524.534	3007392.046	661518.382	3007381.708
113	98+300	661548.478	3007382.081	661537.468	3007377.308	661526.457	3007372.535
114	98+320	661556.308	3007363.491	661545.231	3007358.876	661534.154	3007354.262
115	98+340	661563.874	3007346.016	661553.199	3007340.536	661542.523	3007335.056
116	98+360	661573.127	3007332.024	661564.260	3007323.933	661555.396	3007315.844
117	98+380	661585.949	3007320.354	661579.049	3007310.536	661572.149	3007300.718
118	98+400	661602.284	3007309.012	661595.477	3007299.130	661588.670	3007289.247
119	98+420	661619.170	3007297.145	661611.846	3007287.640	661604.522	3007278.134
120	98+440	661635.693	3007282.343	661626.747	3007274.345	661617.801	3007266.346
121	98+460	661648.838	3007265.029	661638.822	3007258.421	661628.805	3007251.813
122	98+480	661659.836	3007248.272	661649.795	3007241.700	661639.754	3007235.128
123	98+500	661670.788	3007231.538	661660.748	3007224.966	661650.707	3007218.394
124	98+520	661681.741	3007214.803	661671.701	3007208.232	661661.660	3007201.660
125	98+540	661692.694	3007198.069	661682.654	3007191.497	661672.613	3007184.926
126	98+560	661703.647	3007181.335	661693.607	3007174.763	661683.566	3007168.191
127	98+580	661714.069	3007166.590	661705.207	3007158.488	661696.351	3007150.391
128	98+600	661726.149	3007155.949	661720.274	3007145.470	661714.407	3007135.003
129	98+620	661741.468	3007149.639	661738.727	3007137.956	661735.986	3007126.274
130	98+640	661760.465	3007145.879	661758.341	3007134.069	661756.218	3007122.258
131	98+660	661780.351	3007142.276	661778.021	3007130.505	661775.690	3007118.733
132	98+680	661800.827	3007137.672	661797.533	3007126.133	661794.239	3007114.594
133	98+700	661820.844	3007131.474	661816.638	3007120.235	661812.433	3007108.996

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
134	98+720	661839.982	3007123.899	661835.233	3007112.879	661830.484	3007101.859
135	98+740	661858.355	3007115.964	661853.594	3007104.949	661848.833	3007093.934
136	98+760	661876.532	3007108.131	661871.961	3007097.035	661867.391	3007085.940
137	98+780	661894.276	3007101.306	661890.630	3007089.873	661886.984	3007078.441
138	98+800	661912.527	3007095.894	661909.806	3007084.206	661907.085	3007072.519
139	98+820	661931.436	3007091.879	661929.367	3007080.059	661927.299	3007068.239
140	98+840	661951.116	3007088.464	661949.073	3007076.639	661947.029	3007064.815
141	98+860	661970.824	3007085.058	661968.781	3007073.233	661966.737	3007061.409
142	98+880	661990.532	3007081.652	661988.488	3007069.828	661986.445	3007058.003
143	98+900	662010.697	3007078.066	662008.180	3007066.333	662005.664	3007054.600
144	98+920	662032.484	3007071.441	662027.303	3007060.617	662022.121	3007049.790
145	98+940	662052.204	3007059.001	662044.207	3007050.054	662036.208	3007041.104
146	98+960	662067.434	3007042.048	662057.557	3007035.234	662047.679	3007028.420
147	98+980	662078.607	3007024.889	662068.465	3007018.474	662058.323	3007012.059
148	99+000	662089.298	3007007.986	662079.156	3007001.571	662069.014	3006995.157
149	99+020	662099.788	3006991.529	662089.913	3006984.711	662080.039	3006977.892
150	99+040	662110.876	3006977.248	662102.200	3006968.958	662093.525	3006960.667
151	99+060	662124.001	3006965.140	662116.920	3006955.452	662109.839	3006945.764
152	99+080	662139.718	3006954.696	662133.568	3006944.392	662127.419	3006934.088
153	99+100	662156.891	3006944.458	662150.747	3006934.150	662144.603	3006923.842
154	99+120	662174.071	3006934.217	662167.926	3006923.909	662161.782	3006913.602
155	99+140	662191.250	3006923.977	662185.106	3006913.669	662178.962	3006903.361
156	99+160	662208.573	3006913.637	662202.280	3006903.420	662195.988	3006893.202
157	99+180	662226.792	3006900.408	662218.480	3006891.753	662210.168	3006883.098
158	99+200	662241.557	3006883.064	662231.451	3006876.594	662221.344	3006870.125
159	99+220	662252.093	3006865.602	662241.778	3006859.470	662231.463	3006853.338
160	99+240	662261.654	3006851.516	662253.134	3006843.055	662244.620	3006834.599

R.No.	Date	DESCRIPTION	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Design By : RK		TITLE: ROW Co-ordinates List Reshi To Rhenock	
R0	12-09-2024	Draft Detailed Report				Drawn By : M.K			
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH			
R2	21-10-2024	Revised As Per Observation				Approved By : VY		DWG NO: XPL/DSD/SK/KM5.3/ROW/03	
						SCALE : NTS		Sheet No: 03 OF 05	Date: Nov-2024

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
161	99+260	662274.502	3006841.904	662269.106	3006831.186	662263.710	3006820.468
162	99+280	662292.287	3006833.123	662287.039	3006822.331	662281.791	3006811.540
163	99+300	662311.051	3006823.357	662304.786	3006813.123	662298.521	3006802.888
164	99+320	662328.335	3006811.577	662321.301	3006801.854	662314.267	3006792.132
165	99+340	662344.012	3006800.347	662337.570	3006790.223	662331.128	3006780.099
166	99+360	662359.157	3006792.344	662355.259	3006780.995	662351.362	3006769.646
167	99+380	662375.641	3006788.363	662374.672	3006776.403	662373.703	3006764.442
168	99+400	662393.021	3006788.586	662394.624	3006776.693	662396.228	3006764.801
169	99+420	662413.172	3006791.341	662414.439	3006779.408	662415.706	3006767.475
170	99+440	662436.196	3006791.402	662434.386	3006779.539	662432.577	3006767.676
171	99+460	662458.546	3006785.445	662453.675	3006774.479	662448.803	3006763.512
172	99+480	662478.536	3006773.808	662470.947	3006764.513	662463.358	3006755.218
173	99+500	662494.753	3006757.314	662484.982	3006750.348	662475.212	3006743.381
174	99+520	662505.936	3006737.645	662494.864	3006733.017	662483.793	3006728.389
175	99+540	662513.590	3006719.064	662502.481	3006714.524	662491.373	3006709.985
176	99+560	662521.056	3006702.191	662510.621	3006696.265	662500.186	3006690.340
177	99+580	662531.009	3006686.234	662521.207	3006679.313	662511.404	3006672.391
178	99+600	662542.555	3006669.925	662532.763	3006662.989	662522.970	3006656.053
179	99+620	662554.115	3006653.605	662544.323	3006646.669	662534.531	3006639.732
180	99+640	662565.676	3006637.284	662555.883	3006630.348	662546.091	3006623.412
181	99+660	662577.569	3006619.186	662566.909	3006613.676	662556.249	3006608.166
182	99+680	662585.967	3006597.839	662574.275	3006595.138	662562.583	3006592.436
183	99+700	662588.822	3006575.078	662576.825	3006575.353	662564.828	3006575.628
184	99+720	662586.042	3006552.557	662574.421	3006555.548	662562.799	3006558.539
185	99+740	662580.579	3006532.972	662569.045	3006536.285	662557.511	3006539.598
186	99+760	662575.057	3006513.750	662563.523	3006517.062	662551.990	3006520.375
187	99+780	662571.375	3006497.886	662559.356	3006497.566	662547.360	3006497.248

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
188	99+800	662574.754	3006486.611	662565.504	3006478.926	662556.273	3006471.258
189	99+820	662584.626	3006479.762	662581.863	3006468.075	662579.102	3006456.397
190	99+840	662596.362	3006480.260	662601.460	3006469.370	662606.549	3006458.503
191	99+860	662605.334	3006487.877	662616.074	3006482.473	662626.793	3006477.078
192	99+880	662607.702	3006500.394	662619.616	3006501.821	662631.531	3006503.247
193	99+900	662604.744	3006519.673	662616.591	3006521.588	662628.437	3006523.503
194	99+920	662601.553	3006539.417	662613.399	3006541.332	662625.245	3006543.247
195	99+940	662598.361	3006559.160	662610.207	3006561.075	662622.054	3006562.990
196	99+960	662595.184	3006578.785	662607.011	3006580.818	662618.837	3006582.851
197	99+980	662591.585	3006597.063	662603.105	3006600.424	662614.624	3006603.786
198	100+000	662585.762	3006614.743	662596.822	3006619.398	662607.883	3006624.052
199	100+020	662577.953	3006633.018	662588.964	3006637.789	662599.974	3006642.559
200	100+040	662570.001	3006651.370	662581.012	3006656.140	662592.023	3006660.911
201	100+060	662562.050	3006669.721	662573.061	3006674.492	662584.072	3006679.263
202	100+080	662554.099	3006688.073	662565.110	3006692.843	662576.121	3006697.614
203	100+100	662546.148	3006706.424	662557.159	3006711.195	662568.170	3006715.966
204	100+120	662538.152	3006726.361	662549.669	3006729.731	662561.187	3006733.101
205	100+140	662533.970	3006748.751	662545.956	3006749.332	662557.942	3006749.912
206	100+160	662534.510	3006770.092	662546.485	3006769.310	662558.459	3006768.528
207	100+180	662534.821	3006787.959	662546.747	3006789.287	662558.673	3006790.616
208	100+200	662531.348	3006804.557	662542.575	3006808.794	662553.801	3006813.031
209	100+220	662523.876	3006819.778	662533.706	3006826.662	662543.535	3006833.545
210	100+240	662512.840	3006832.705	662520.692	3006841.780	662528.544	3006850.855
211	100+260	662497.963	3006843.740	662504.655	3006853.700	662511.348	3006863.660
212	100+280	662481.362	3006854.895	662488.055	3006864.855	662494.748	3006874.815
213	100+300	662464.762	3006866.049	662471.455	3006876.010	662478.148	3006885.970
214	100+320	662448.162	3006877.204	662454.855	3006887.164	662461.547	3006897.125

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						SCALE : NTS	Sheet No: 04 OF 05	Date: Nov-2024

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
215	100+340	662431.561	3006888.359	662438.254	3006898.319	662444.947	3006908.279
216	100+360	662414.238	3006900.557	662421.886	3006909.803	662429.535	3006919.050
217	100+380	662398.228	3006916.143	662407.548	3006923.699	662416.870	3006931.256
218	100+400	662385.663	3006934.507	662396.247	3006940.162	662406.832	3006945.816
219	100+420	662376.476	3006952.719	662387.243	3006958.018	662398.010	3006963.316
220	100+440	662367.645	3006970.664	662378.412	3006975.963	662389.179	3006981.261
221	100+460	662358.814	3006988.609	662369.581	3006993.907	662380.348	3006999.206
222	100+480	662349.983	3007006.554	662360.750	3007011.852	662371.517	3007017.151
223	100+500	662341.149	3007024.506	662351.900	3007029.836	662376.022	3007041.792
224	100+520	662332.244	3007042.629	662343.083	3007047.778	662364.425	3007057.916
225	100+540	662323.734	3007062.217	662335.100	3007066.066	662354.377	3007072.594
226	100+560	662317.503	3007081.358	662328.915	3007085.068	662346.906	3007090.915
227	100+580	662311.192	3007099.262	662322.242	3007103.933	662333.295	3007108.606
228	100+600	662302.939	3007115.135	662313.013	3007121.655	662323.088	3007128.174
229	100+620	662292.035	3007131.508	662301.928	3007138.300	662311.821	3007145.092
230	100+640	662280.715	3007147.996	662290.608	3007154.788	662300.501	3007161.580
231	100+660	662269.500	3007164.313	662279.279	3007171.269	662289.056	3007178.225
232	100+680	662258.868	3007176.691	662266.132	3007186.243	662273.396	3007195.795
233	100+700	662245.050	3007184.456	662248.727	3007195.878	662252.405	3007207.301
234	100+720	662226.364	3007189.761	662229.493	3007201.346	662232.622	3007212.931
235	100+740	662207.056	3007194.976	662210.185	3007206.561	662213.314	3007218.146
236	100+760	662187.682	3007200.212	662190.877	3007211.779	662194.073	3007223.346
237	100+780	662166.152	3007208.152	662172.114	3007218.566	662178.076	3007228.980
238	100+800	662147.269	3007222.766	662156.303	3007230.664	662165.343	3007238.568
239	100+820	662134.353	3007239.393	662144.053	3007246.458	662153.752	3007253.524
240	100+840	662122.638	3007255.465	662132.272	3007262.620	662141.905	3007269.775
241	100+860	662111.319	3007268.863	662119.313	3007277.813	662127.307	3007286.762

ROW Reshi to Rhenock (NH717A)							
Sl. No	Chainage	LHS ROW Coordinates		Center Line Coordinates		RHS Coordinates	
		Easting	Northing	Easting	Northing	Easting	Northing
242	100+880	662097.654	3007278.901	662103.184	3007289.552	662108.713	3007300.202
243	100+900	662080.246	3007286.979	662085.052	3007297.975	662089.857	3007308.971
244	100+920	662061.920	3007294.988	662066.725	3007305.984	662071.531	3007316.980
245	100+940	662043.594	3007302.998	662048.399	3007313.993	662053.205	3007324.989
246	100+960	662025.794	3007310.519	662029.973	3007321.767	662034.153	3007333.016
247	100+980	662008.653	3007315.360	662010.742	3007327.177	662012.830	3007338.994
248	101+000	661990.981	3007317.321	661990.881	3007329.320	661990.781	3007341.320
249	101+020	661972.200	3007316.375	661970.921	3007328.307	661969.642	3007340.239
250	101+040	661952.334	3007314.221	661951.037	3007326.151	661949.741	3007338.080
251	101+060	661932.451	3007312.060	661931.155	3007323.989	661929.858	3007335.919
252	101+080	661910.123	3007310.598	661911.230	3007322.546	661912.338	3007334.502
253	101+100	661884.812	3007321.253	661893.060	3007329.969	661901.316	3007338.694
254	101+120	661871.512	3007345.142	661883.362	3007347.032	661895.215	3007348.923
255	101+140	661872.328	3007368.543	661884.218	3007366.921	661896.107	3007365.299
256	101+160	661875.031	3007388.359	661886.921	3007386.737	661898.811	3007385.115
257	101+180	661877.646	3007407.838	661889.578	3007406.560	661901.510	3007405.282
258	101+200	661878.875	3007426.426	661890.875	3007426.506	661902.874	3007426.585
259	101+220	661876.637	3007445.605	661889.933	3007446.561	661918.809	3007448.639
260	101+240	661874.066	3007465.467	661888.616	3007466.361	661910.333	3007467.696
261	101+260	661871.480	3007485.450	661887.287	3007486.445	661913.236	3007488.078
262	101+280	661868.467	3007508.734	661887.350	3007506.274	661912.557	3007502.989
263	101+300	661865.524	3007531.481	661891.587	3007525.842	661911.684	3007520.324
264	101+320	661861.959	3007559.025	661899.984	3007544.005	661917.094	3007536.742
265	101+340	661858.638	3007584.692	661910.251	3007561.037	661924.422	3007555.151
266	101+360	661857.069	3007596.817	661920.613	3007585.287	661932.188	3007582.123

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R0	12-09-2024	Draft Detailed Report				Drawn By : M.K		
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH		
R2	21-10-2024	Revised As Per Observation				Approved By : VY	DWG NO: XPL/DSD/SK/KM5.3/ROW/05	
						SCALE : NTS	Sheet No: 05 OF 05	Date: Nov-2024

HORIZONTAL & VERTICAL ALIGNMENT REPORT

HORIZONTAL ALIGNMENT REPORT

HIP No.	HIP Easting	HIP Northing	Radius	Transitio n Length	TS	SC/TC	CS/CT	ST	HIP Chainage	SPEED (V) in KMPH	D	Arc Length	Dc	SHIFT (S)	Ts(Deg)	EXTERN AL DISTANC E (Es)	K	Ts(m)	Super elevation e (%)	Extra Widenin g	Deflection Angle	Direction of curve
0	662089.6294	3005734.482	0	0																		
1	662037.4754	3005801.514	30	0		96134.529	96170.363		96152.446	20	1.1945	35.83	1.1945	0.00	0.0000	6.280	0	20.40	5.93	1.500	68 26 17.223	Right
2	662092.1956	3005894.212	60	15	96230.775	96245.775	96268.09	96283.09	96256.933	30	0.6219	22.32	0.3719	0.16	0.1250	3.191	7.496095	26.83	6.67	1.200	21 18 32.964	Left
3	662083.7893	3005988.783	100	35	96301.567	96336.567	96363.494	96398.494	96350.031	40	0.6193	26.93	0.2693	0.51	0.1750	5.528	17.48215	49.64	7.11	0.900	15 25 41.346	Left
4	661953.0901	3006141.481	70	20	96420.363	96440.363	96565.879	96585.879	96503.121	35	2.0788	125.52	1.7931	0.24	0.1429	68.612	9.993201	129.49	7.78	0.900	102 44 11.849	Right
5	662152.5487	3006181.896	60	25	96625.326	96650.326	96667.388	96692.388	96658.857	35	0.7010	17.06	0.2844	0.43	0.2083	4.342	12.48194	34.58	9.07	1.200	16 17 36.860	Left
6	662243.8242	3006297.145	40	15	96747.868	96762.868	96818.905	96833.905	96790.887	20	1.7759	56.04	1.4009	0.23	0.1875	23.757	7.49122	56.95	4.44	1.500	80 16 00.906	Left
7	662158.6803	3006339.83	80	15	96839.556	96854.556	96888.202	96903.202	96871.379	30	0.6081	33.65	0.4206	0.12	0.0938	3.971	7.497803	32.64	5.00	0.900	24 05 51.142	Right
8	662115.9223	3006418.471	45	20	96920.127	96940.127	96972.665	96992.665	96956.396	30	1.1675	32.54	0.7231	0.37	0.2222	9.374	9.983562	39.95	8.89	1.200	41 25 40.820	Right
9	662203.3911	3006528.991	35	20	97046.827	97066.827	97103.143	97123.143	97084.985	25	1.6090	36.32	1.0376	0.48	0.2857	16.164	9.972851	46.84	7.94	1.500	59 26 59.837	Left
10	662122.302	3006588.271	80	25	97146.106	97171.106	97181.688	97206.688	97176.397	35	0.4448	10.58	0.1323	0.33	0.1563	2.358	12.48983	30.65	6.81	0.900	07 34 44.413	Right
11	662020.7625	3006776.479	150	15	97366.136	97381.136	97398.497	97413.497	97389.817	40	0.2157	17.36	0.1157	0.06	0.0500	0.937	7.499375	23.75	4.74	0.600	06 37 53.000	Left
12	661972.0835	3006833.057	250	15	97444.147	97459.147	97469.596	97484.596	97464.372	50	0.1018	10.45	0.0418	0.04	0.0300	0.364	7.499775	20.24	4.44	0.600	02 23 40.868	Right
13	661899.2029	3006937.623	300	15	97557.286	97572.286	97611.198	97626.198	97591.742	50	0.1797	38.91	0.1297	0.03	0.0250	1.245	7.499844	34.53	3.70	0.600	07 25 53.422	Left
14	661797.6836	3007038.535	60	15	97698.679	97713.679	97751.988	97766.988	97732.834	30	0.8885	38.31	0.6385	0.16	0.1250	6.627	7.496095	36.13	6.67	1.200	36 34 56.381	Left
15	661690.418	3007027.112	60	15	97777.564	97792.564	97864.982	97879.982	97828.773	30	1.457	72.418	1.207	0.160	0.125	20.623	7.496	61.170	6.67	1.200	69 09 11.751	Right
16	661669.096	3007122.494	120	25	97882.516	97907.516	97925.068	97950.068	97916.292	40	0.355	17.552	0.146	0.220	0.104	2.135	12.495	34.037	5.926	0.600	08 22 48.337	Left
17	661566.925	3007280.319	140	25	98074.331	98099.331	98108.540	98133.540	98103.936	40	0.244	9.209	0.066	0.190	0.089	1.243	12.497	29.710	5.079	0.600	03 46 07.832	Left
18	661471.489	3007369.570	26	15	98196.935	98211.935	98249.011	98264.011	98230.473	20	2.003	37.076	1.426	0.360	0.288	22.899	7.479	48.665	6.838	1.500	81 42 16.657	Right
19	661523.445	3007411.174	26	0		98250.255	98290.888		98270.572	20	1.563	40.633	1.563	0.000	0.000	10.624	0.000	25.793	6.838	1.500	89 32 34.334	Right
20	661559.916	3007323.625	80	15	98327.503	98342.503	98373.335	98388.335	98357.919	30	0.573	30.832	0.385	0.120	0.094	3.523	7.498	31.097	5.000	0.900	22 04 54.971	Left
21	661625.940	3007278.146	90	25	98407.177	98432.177	98442.103	98467.103	98437.140	40	0.388	9.926	0.110	0.290	0.139	2.017	12.492	30.234	7.901	0.900	06 19 09.013	Right
22	661715.160	3007141.833	60	25	98561.275	98586.275	98610.076	98635.076	98598.176	35	0.813	23.801	0.397	0.430	0.208	5.796	12.482	38.508	9.074	1.200	22 43 41.961	Left
23	661806.083	3007125.485	250	15	98652.554	98667.554	98710.075	98725.075	98688.815	50	0.230	42.521	0.170	0.040	0.030	1.704	7.500	36.392	4.444	0.600	09 44 42.358	Right
24	661899.115	3007085.273	250	15	98752.784	98767.784	98811.998	98826.998	98789.891	50	0.237	44.214	0.177	0.040	0.030	1.804	7.500	37.251	4.444	0.600	10 07 59.444	Left
25	662041.812	3007060.612	70	25	98890.829	98915.829	98949.327	98974.327	98932.578	35	0.836	33.498	0.479	0.370	0.179	6.994	12.487	43.730	7.778	0.900	27 25 07.979	Right

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R0	12-09-2024	Draft Detailed Report				Drawn By : M.K			
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH			
R2	21-10-2024	Revised As Per Observation				Approved By : VY		DWG NO:XPL/DSD/SK/KM5.3/HAR/01	
						SCALE : NTS		HAR 01 OF 02	Date: Nov-2024

HORIZONTAL ALIGNMENT REPORT

HIP No.	HIP Easting	HIP Northing	Radius	Transitio n Length	TS	SC/TC	CS/CT	ST	HIP Chainage	SPEED (V) in KMPH	D	Arc Length	Dc	SHIFT (S)	Ts(Deg)	EXTERN AL DISTANC E (Es)	K	Ts(m)	Super elevation e (%)	Extra Widenin g	Deflection Angle	Direction of curve
26	662104.281	3006961.848	120	15	99011.255	99026.255	99067.569	99082.569	99046.912	40	0.469	41.314	0.344	0.080	0.063	3.463	7.499	36.204	5.926	0.600	19 43 32.358	Left
27	662223.293	3006890.906	80	15	99156.889	99171.889	99197.028	99212.028	99184.459	30	0.502	25.139	0.314	0.120	0.094	2.709	7.498	28.030	5.000	0.900	18 00 16.547	Right
28	662254.231	3006838.287	50	20	99219.850	99239.850	99249.181	99269.181	99244.516	30	0.587	9.331	0.187	0.330	0.200	2.575	9.987	25.187	8.000	1.200	10 41 33.802	Left
29	662305.218	3006813.490	120	15	99282.739	99297.739	99303.578	99318.578	99300.659	40	0.174	5.839	0.049	0.080	0.063	0.534	7.499	17.952	5.926	0.600	02 47 16.102	Right
30	662362.540	3006772.019	80	15	99331.461	99346.461	99392.981	99407.981	99369.721	30	0.769	46.520	0.582	0.120	0.094	6.431	7.498	39.918	5.000	0.900	33 19 03.197	Left
31	662472.530	3006787.820	75	15	99413.046	99428.046	99512.463	99527.463	99470.255	30	1.326	84.417	1.126	0.130	0.100	20.308	7.498	66.142	5.333	0.900	64 29 22.984	Right
32	662510.966	3006693.761	120	15	99541.664	99556.664	99569.069	99584.069	99562.867	40	0.228	12.405	0.103	0.080	0.063	0.867	7.499	21.271	5.926	0.600	05 55 21.544	Left
33	662584.471	3006589.989	80	15	99643.965	99658.965	99715.645	99730.645	99687.305	30	0.896	56.680	0.709	0.120	0.094	8.892	7.498	46.003	5.000	0.900	40 35 38.949	Right
34	662551.201	3006474.163	30	15	99765.079	99780.079	99822.160	99837.160	99801.120	20	1.903	42.081	1.403	0.310	0.250	22.206	7.484	49.991	5.926	1.500	80 22 10.145	Left
35	662626.703	3006459.032	30	0		99822.697	99873.062		99847.880	20	1.679	50.365	1.679	0.000	0.000	14.917	0.000	33.430	5.926	1.500	96 11 29.095	Left
36	662603.069	3006605.233	150	15	99959.055	99974.055	99996.343	100011.343	99985.199	40	0.249	22.288	0.149	0.060	0.050	1.227	7.499	26.247	4.741	0.600	08 30 47.357	Left
37	662544.585	3006740.217	80	15	100105.353	100120.353	100143.278	100158.278	100131.816	30	0.474	22.925	0.287	0.120	0.094	2.425	7.498	26.853	5.000	0.900	16 25 08.215	Right
38	662550.005	3006823.226	80	15	100161.011	100176.011	100244.558	100259.558	100210.285	30	1.044	68.547	0.857	0.120	0.094	12.438	7.498	53.602	5.000	0.900	49 05 37.286	Left
39	662405.933	3006920.038	100	15	100345.312	100360.312	100397.493	100412.493	100378.903	35	0.522	37.181	0.372	0.090	0.075	3.596	7.499	34.222	5.444	0.900	21 18 12.231	Right
40	662336.177	3007061.786	150	15	100517.075	100532.075	100540.374	100555.374	100536.225	40	0.155	8.299	0.055	0.060	0.050	0.514	7.499	19.177	4.741	0.600	03 10 12.073	Right
41	662320.992	3007110.532	120	25	100556.612	100581.612	100592.568	100617.568	100587.090	40	0.300	10.956	0.091	0.220	0.104	1.582	12.495	30.642	5.926	0.600	05 13 53.597	Left
42	662265.281	3007191.680	55	15	100657.555	100672.555	100696.350	100711.350	100684.453	25	0.705	23.795	0.433	0.170	0.136	3.788	7.495	27.802	5.051	1.200	24 47 16.714	Left
43	662164.037	3007219.025	60	15	100759.732	100774.732	100800.376	100815.376	100787.554	30	0.677	25.644	0.427	0.160	0.125	3.784	7.496	28.689	6.667	1.200	24 29 17.935	Right
44	662116.553	3007284.208	80	15	100838.128	100853.128	100880.463	100895.463	100866.796	30	0.529	27.335	0.342	0.120	0.094	3.009	7.498	29.206	5.000	0.900	19 34 37.209	Left
45	662006.730	3007332.204	120	15	100946.649	100961.649	101009.085	101024.085	100985.367	40	0.520	47.436	0.395	0.080	0.063	4.261	7.499	39.462	5.926	0.600	22 38 56.463	Left
46	661877.567	3007318.164	30	15	101068.285	101083.285	101122.724	101137.724	101103.005	20	1.815	39.439	1.315	0.310	0.250	19.216	7.484	46.259	5.926	1.500	75 19 23.902	Right
47	661891.620	3007421.188	150	15	101172.736	101187.736	101203.031	101218.031	101195.384	40	0.202	15.295	0.102	0.060	0.050	0.828	7.499	22.705	4.741	0.600	05 50 31.898	Left
48	661885.079	3007519.550	90	15	101257.952	101272.952	101313.012	101328.012	101292.982	35	0.612	40.060	0.445	0.100	0.083	4.486	7.498	35.952	6.049	0.900	25 30 10.937	Right
49	661917.045	3007572.232	60	0		101345.682	101361.585		101353.634	30	0.265	15.903	0.265	0.000	0.000	0.531	0.000	7.998	6.667	1.200	15 11 08.139	Left
50	661920.793	3007585.250	0	0																		

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R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH			
R2	21-10-2024	Revised As Per Observation				Approved By : VY		DWG NO:XPL/DSD/SK/KM5.3/HAR/02	
						SCALE : NTS		HAR 02 OF 02	Date: Nov-2024

VERTICAL ALIGNMENT REPORT											
S.NO	VIP CHAINAGE	VIP LEVEL	CURVE START CHAINAGE	CURVE END CHAINAGE	Gradient Start Chainage	Gradient End Chainage	CURVE LENGTH	IN GRADE(%)	OUT GRADE (%)	CURVE TYPE	K Value
1	96111.776	587.000	96071.776	96151.776	96070.000	96071.776	80	1.336	0.000	Hog	59.869
2	96280.834	587.000	96240.834	96320.834	96151.776	96240.834	80	0.000	-4.718	Hog	16.955
3	96446.804	579.169	96376.804	96516.804	96320.834	96376.804	140	-4.718	3.905	Sag	16.235
4	96671.270	587.935	96621.270	96721.270	96516.804	96621.270	100	3.905	5.669	Sag	56.714
5	96892.215	600.459	96828.114	96956.316	96721.270	96828.114	128	5.669	3.665	Hog	64
6	97023.258	605.262	97005.925	97040.590	96956.316	97005.925	35	3.665	5.832	Sag	16
7	97112.794	610.484	97072.794	97152.794	97040.590	97072.794	80	5.832	5.936	Sag	768.406
8	97212.217	616.386	97172.217	97252.217	97152.794	97172.217	80	5.936	5.975	Sag	2043.577
9	97388.829	626.939	97359.316	97418.342	97252.217	97359.316	59	5.975	5.053	Hog	64
10	97571.196	636.154	97521.196	97621.196	97418.342	97521.196	100	5.053	5.961	Sag	110.147
11	98129.331	669.423	98069.331	98189.331	97621.196	98069.331	120	5.961	2.46	Hog	34.282
12	98273.716	672.975	98233.716	98313.716	98189.331	98233.716	80	2.46	5.454	Sag	26.722
13	98391.27	679.387	98351.27	98431.27	98313.716	98351.27	80	5.454	5.558	Sag	768.998
14	98549.144	688.162	98509.144	98589.144	98431.27	98509.144	80	5.558	4.671	Hog	90.144
15	98682.848	694.407	98642.848	98722.848	98589.144	98642.848	80	4.671	5.09	Sag	190.842
16	98784.892	699.601	98744.892	98824.892	98722.848	98744.892	80	5.09	4.052	Hog	77.096
17	98963.601	706.843	98913.601	99013.601	98824.892	98913.601	100	4.052	5.961	Sag	52.383
18	99140.931	717.414	99090.931	99190.931	99013.601	99090.931	100	5.961	5.134	Hog	120.909
19	99426.231	732.062	99376.231	99476.231	99190.931	99376.231	100	5.134	5.352	Sag	459.333
20	99579.988	740.291	99529.988	99629.988	99476.231	99529.988	100	5.352	5.979	Sag	159.43
21	99790	752.848	99730	99850	99629.988	99730	120	5.979	2.482	Hog	34.312
22	99942.38	756.63	99882.38	100002.38	99850	99882.38	120	2.482	5.838	Sag	35.76
23	100276.27	776.121	100226.27	100326.27	100002.38	100226.27	100	5.838	5.988	Sag	666.898
24	100671.425	799.781	100601.425	100741.425	100326.27	100601.425	140	5.988	6.004	Sag	8334.088
25	100983.767	818.535	100933.767	101033.767	100741.425	100933.767	100	6.004	5.946	Hog	1703.58
26	101203.933	831.625	101169.979	101237.888	101033.767	101169.979	68	5.946	4.885	Hog	64

REV. No.	DESCRIPTION	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Design By: RK	TITLE: Vertical Alignment Report Reshi To Rhenock
					Drawn By : M.K	
					Checked By : AH	
					Approved By : VY	
					SCALE-NTS	DWG NO:XPL/DSD/SK/KM5.3/VAR/01
						VAR: 01 OF 01
						DATE: Dec-2024

TYPICAL CROSS SECTION

RESHI TO RHENOCK TCS SCHEDULE					
S.No.	Chainage		Length(m)	Type of TCS	Description
	From	To			
1	96+070	96+160	90	TCS-3	Typical Cross Section -3, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Retaining Wall (RHS)
2	96+160	96+240	0+080	MJB	New Construction (Realignment)
3	96+240	96+400	160	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
4	96+400	96+420	20	TCS-3A	Typical Cross Section -3A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Breast Wall (RHS)
5	96+420	96+520	100	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
6	96+520	96+540	20	TCS-3A	Typical Cross Section -3A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Breast Wall (RHS)
7	96+540	96+680	140	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
8	96+680	96+760	80	TCS-3A	Typical Cross Section -3A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Breast Wall (RHS)
9	96+760	96+800	40	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
10	96+800	96+820	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
11	96+820	96+840	20	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
12	96+840	96+900	60	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
13	96+900	96+960	60	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)

RESHI TO RHENOCK TCS SCHEDULE					
S.No.	Chainage		Length(m)	Type of TCS	Description
	From	To			
14	96+960	97+040	80	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
15	97+040	97+070	30	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
16	97+070	97+100	30	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
17	97+100	97+120	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
18	97+120	97+250	130	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
19	97+250	97+420	170	TCS-5	Typical Cross Section -5, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Breast Wall (RHS)
21	97+420	97+500	80	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
22	97+500	97+670	170	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
23	97+670	97+840	170	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
24	97+840	97+860	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
25	97+860	97+900	40	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
26	97+900	97+940	40	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
27	97+940	98+120	180	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)

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						SCALE: NTS	SHEET: 01 OF 03	DATE:Dec-2024

RESHI TO RHENOCK TCS SCHEDULE					
S.No.	Chainage		Length(m)	Type of TCS	Description
	From	To			
28	98+120	98+140	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
29	98+140	98+160	20	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
30	98+160	98+200	40	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
31	98+200	98+250	50	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
32	98+250	98+540	290	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
33	98+540	98+560	20	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
34	98+560	98+640	80	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
35	98+640	98+660	20	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
36	98+660	98+800	140	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
37	98+800	98+860	60	TCS-2	Typical Cross Section -2, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Retaining Wall (RHS)
38	98+860	98+900	40	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
39	98+900	98+920	20	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
40	98+920	99+000	80	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)

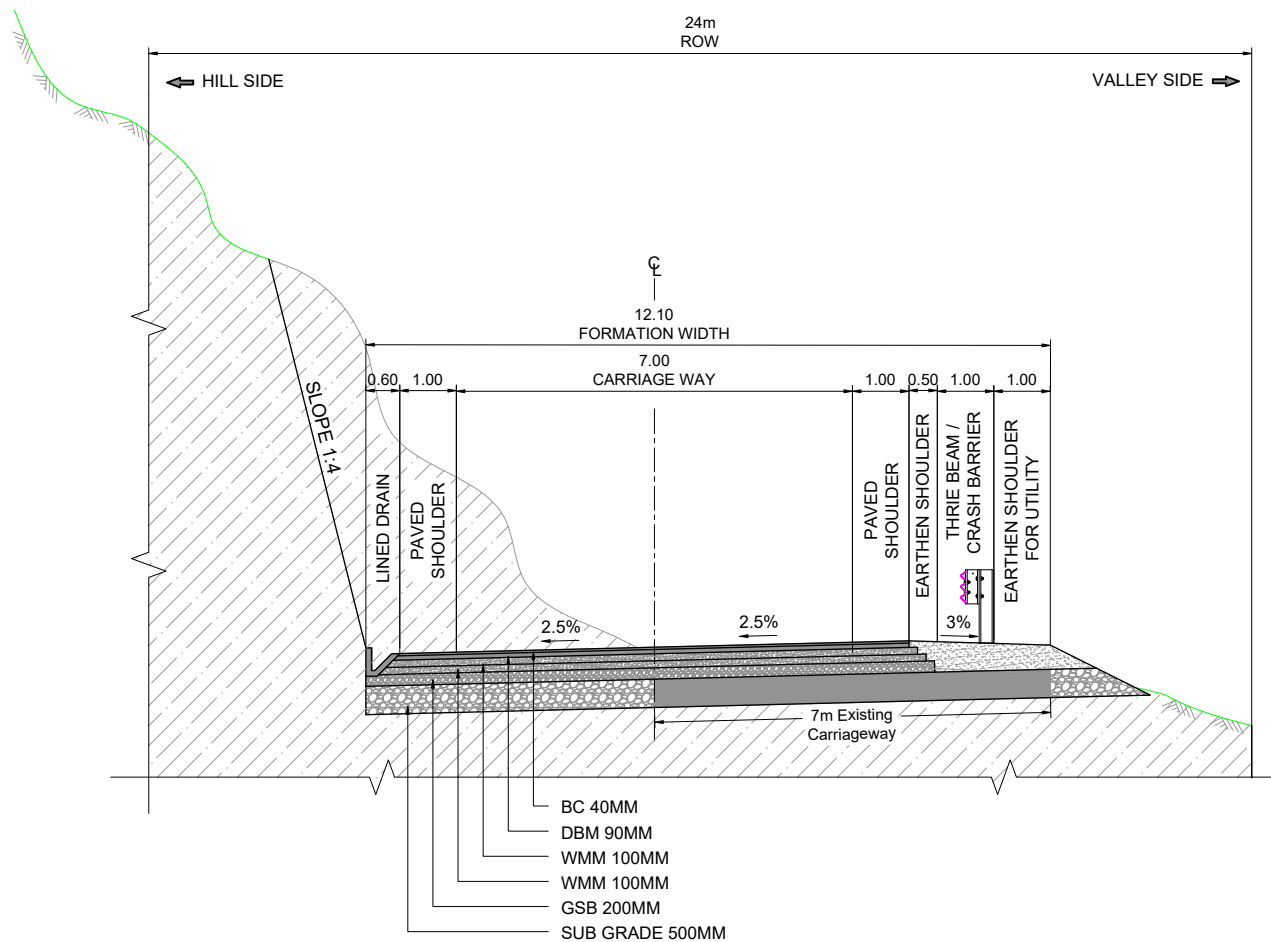
RESHI TO RHENOCK TCS SCHEDULE					
S.No.	Chainage		Length(m)	Type of TCS	Description
	From	To			
41	99+000	99+020	20	TCS-1B	Typical Cross Section -1B, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS) (New Consruction)
42	99+020	99+040	20	TCS-4B	Typical Cross Section -4B, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS) (New Construction)
43	99+040	99+060	20	TCS-1B	Typical Cross Section -1B, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS) (New Consruction)
44	99+060	99+120	60	TCS-4B	Typical Cross Section -4B, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS) (New Construction)
45	99+120	99+160	40	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
46	99+160	99+200	40	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
47	99+200	99+240	40	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
48	99+240	99+300	60	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
49	99+300	99+320	20	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
50	99+320	99+400	80	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
51	99+400	99+420	20	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
52	99+420	99+450	30	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
53	99+450	99+500	50	MNB	New Construction (Realignment)
54	99+500	99+520	20	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)

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							SCALE: NTS	SHEET: 02 OF 03	DATE:Dec-2024

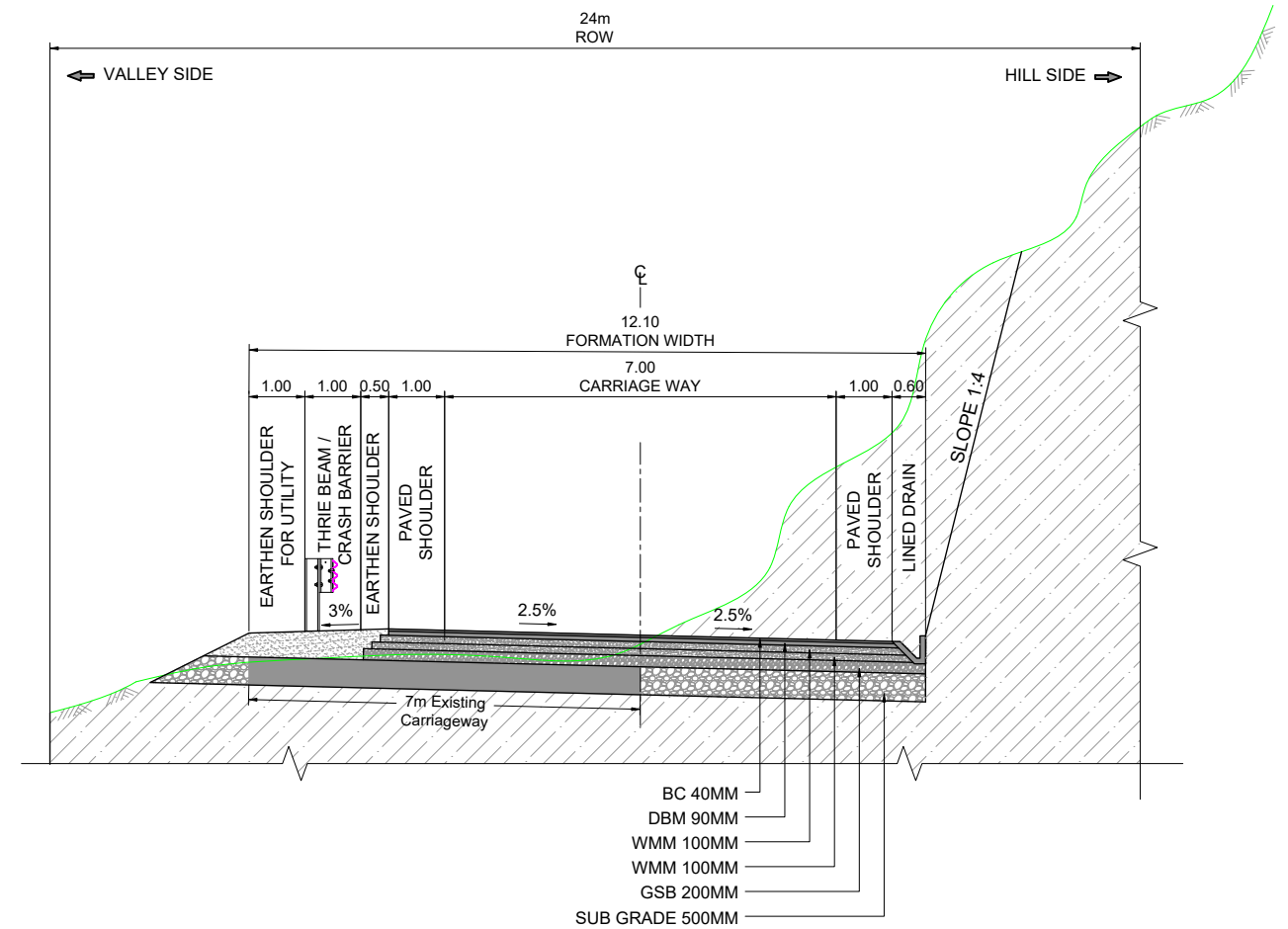
RESHI TO RHENOCK TCS SCHEDULE					
S.No.	Chainage		Length(m)	Type of TCS	Description
	From	To			
55	99+520	99+640	120	TCS-4	Typical Cross Section -4, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Breast Wall (LHS) And Valley Side Slope (RHS)
56	99+640	99+660	20	TCS-1	Typical Cross Section -1, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Slope (RHS)
57	99+660	99+830	170	TCS-2	Typical Cross Section -2, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Hill Side Slope (LHS) And Valley Side Retaining Wall (RHS)
58	99+830	99+980	150	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
59	99+980	100+040	60	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
60	100+040	100+080	40	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
61	100+080	100+140	60	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
62	100+140	100+160	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
63	100+160	100+180	20	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
64	100+180	100+200	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
65	100+200	100+220	20	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
66	100+220	100+260	40	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
67	100+260	100+280	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)

RESHI TO RHENOCK TCS SCHEDULE					
S.No.	Chainage		Length(m)	Type of TCS	Description
	From	To			
68	100+280	100+300	20	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
69	100+300	100+400	100	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
70	100+400	100+420	20	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
71	100+420	100+500	80	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
72	100+500	100+540	40	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
73	100+540	100+900	360	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
74	100+900	100+940	40	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
75	100+940	100+960	20	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
76	100+960	101+000	40	TCS-1A	Typical Cross Section -1A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Slope (RHS)
77	101+000	101+100	100	TCS-3A	Typical Cross Section -3A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Breast Wall (RHS)
78	101+100	101+180	80	TCS-4A	Typical Cross Section -4A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Slope (LHS) And Hill Side Breast Wall (RHS)
79	101+180	101+200	20	TCS-2A	Typical Cross Section -2A, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Slope (RHS)
80	101+200	101+367	167	TCS-5	Typical Cross Section -5, 2 Lane Highway (Open Country Mountainous/Steep Terrain) Valley Side Retaining Wall (LHS) And Hill Side Breast Wall (RHS)

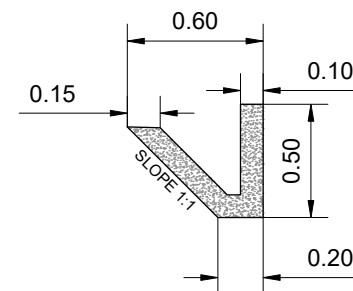
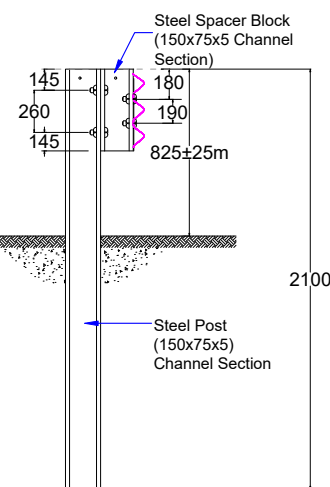
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TYPICAL CROSS SECTION-1
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) HILL SIDE SLOPE(LHS)
AND VALLEY SIDE SLOPE(RHS)



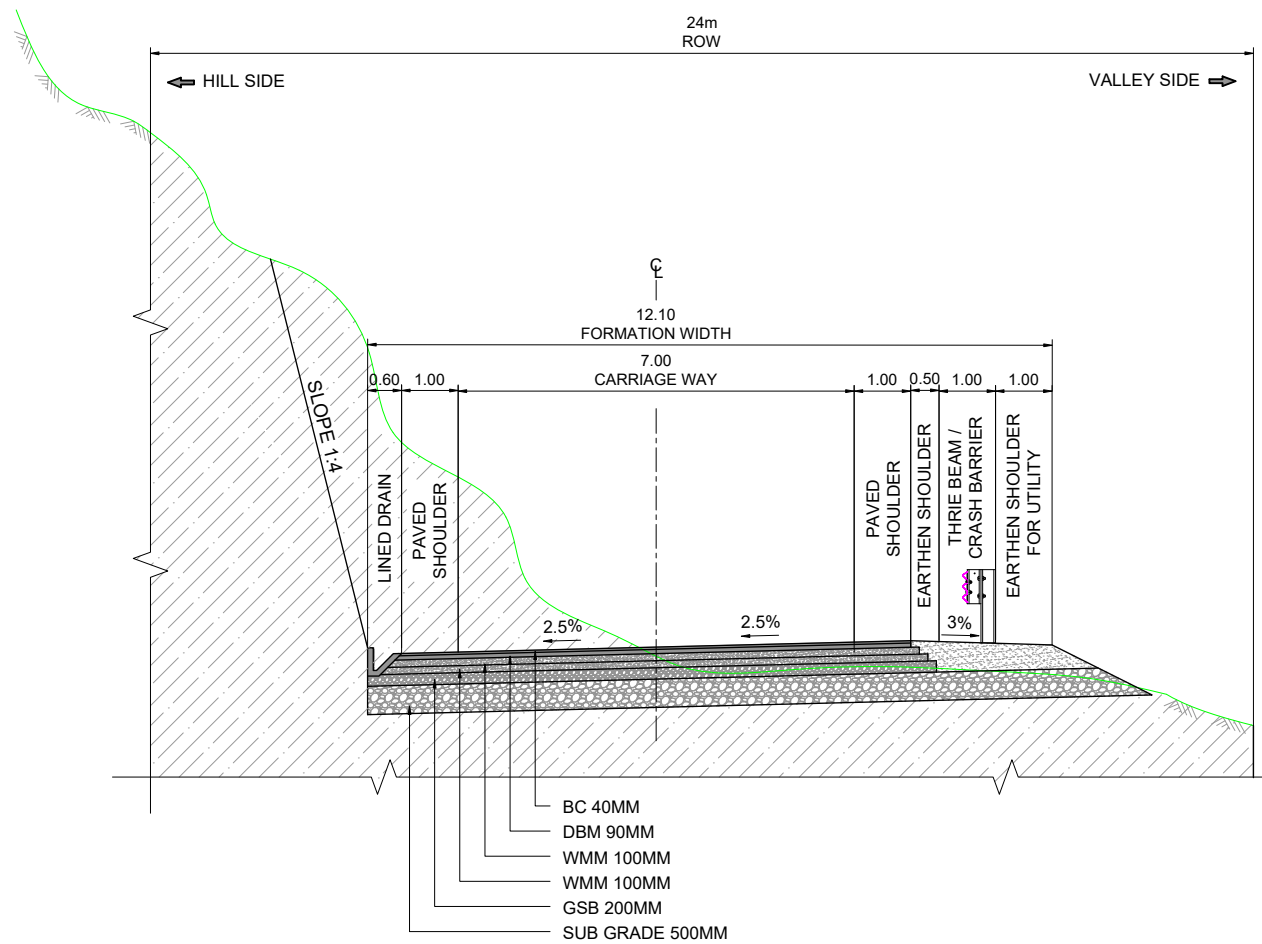
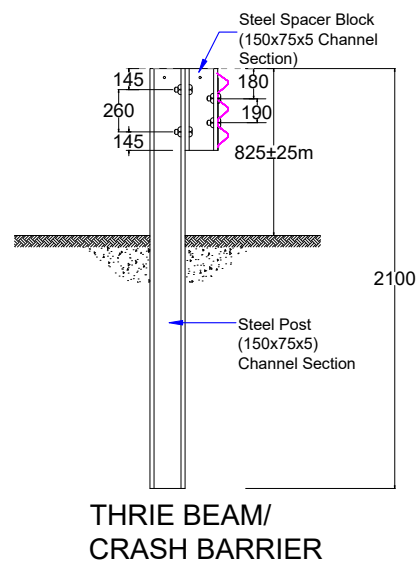
TYPICAL CROSS SECTION-1A
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) VALLEY SIDE SLOPE(LHS)
AND HILL SIDE SLOPE(RHS)



LINED DRAIN

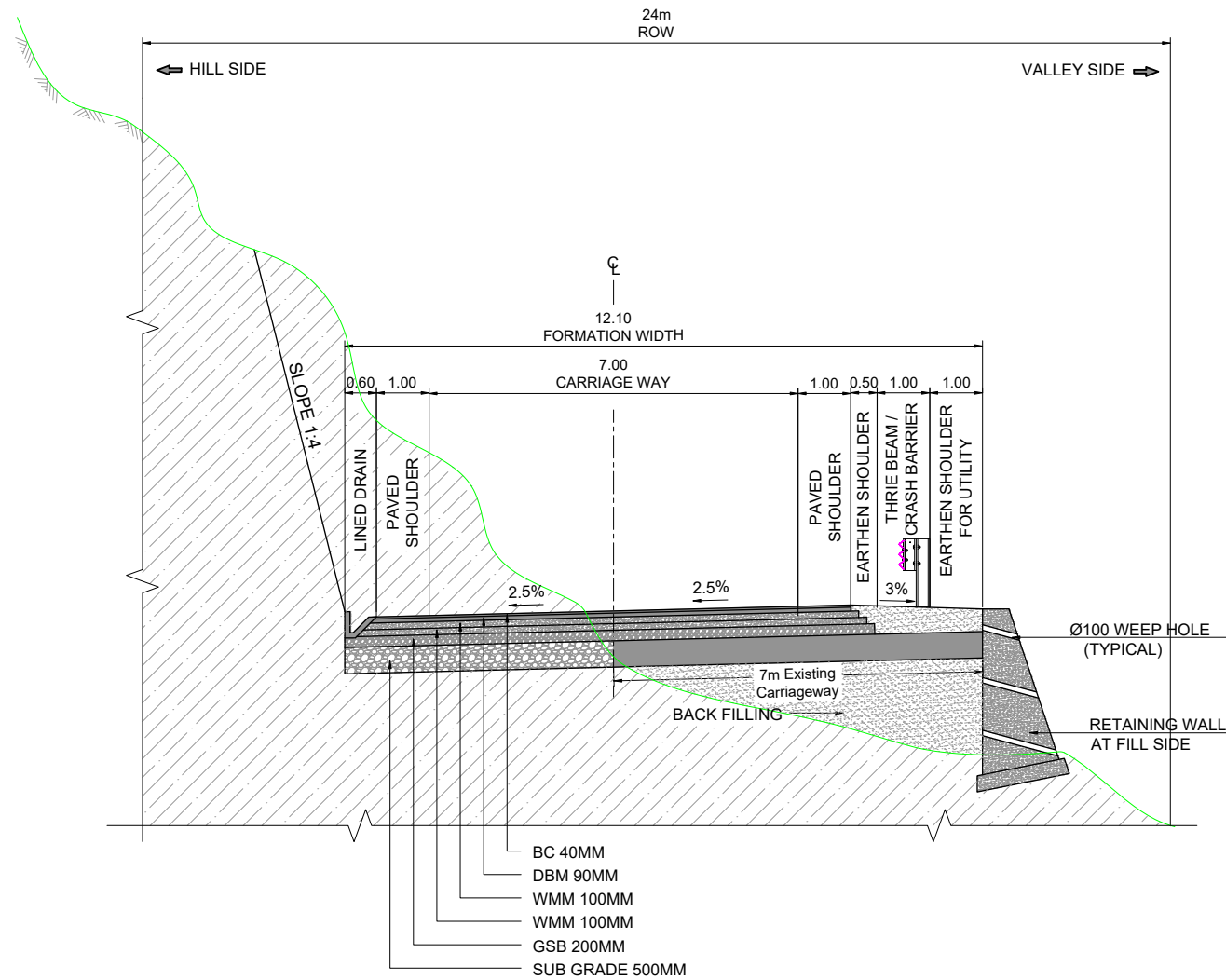
THRIE BEAM/
CRASH BARRIER

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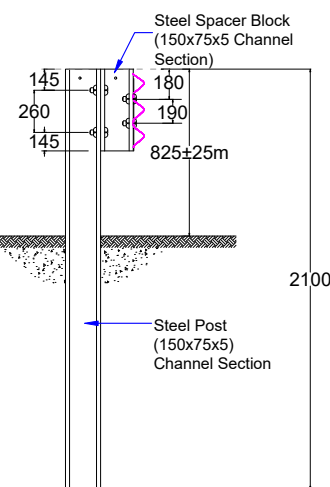


TYPICAL CROSS SECTION-1B
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) HILL SIDE SLOPE(LHS)
AND VALLEY SIDE SLOPE(RHS)
NEW CONSTRUCTION

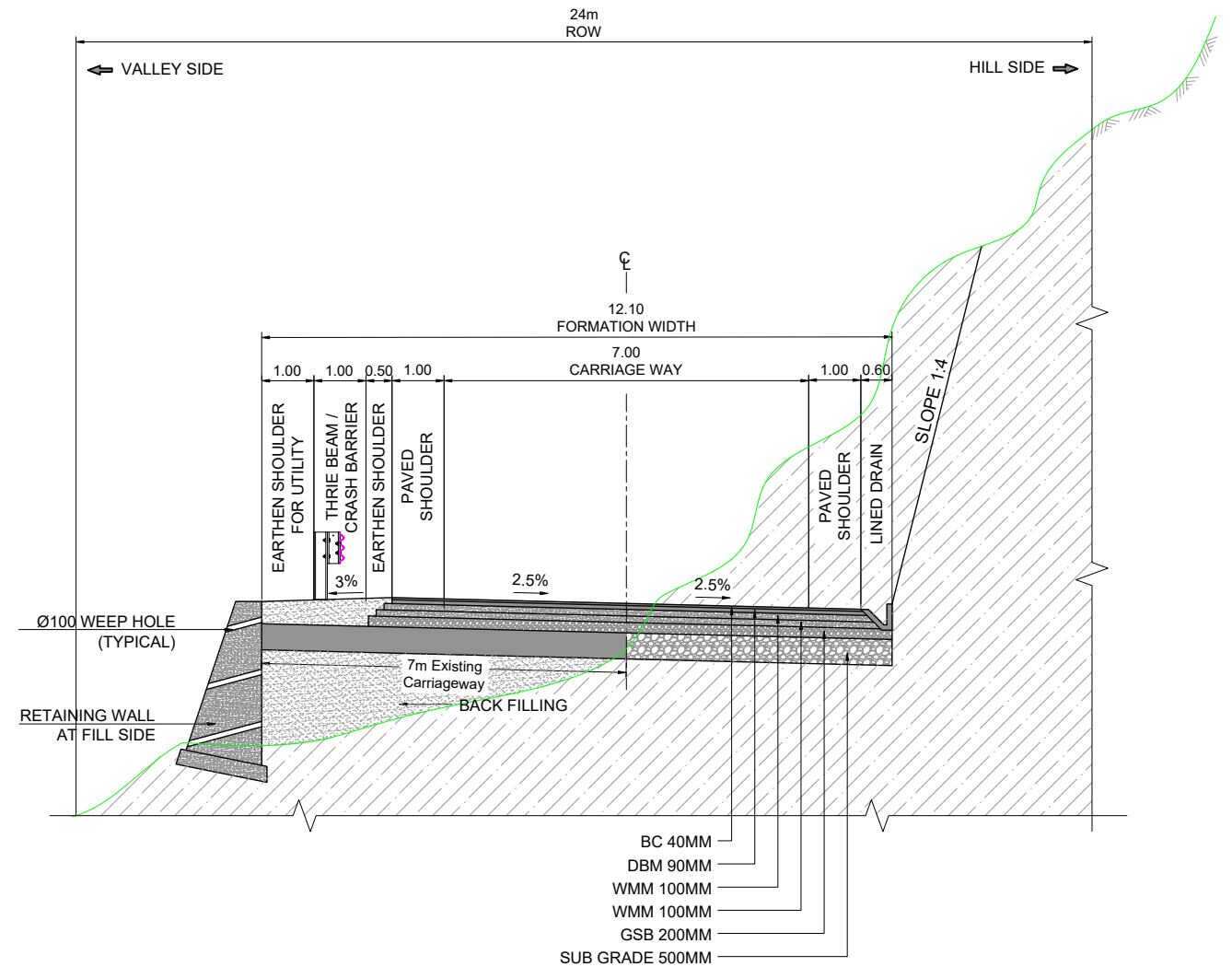
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TYPICAL CROSS SECTION-2
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) HILL SIDE SLOPE(LHS)
AND VALLEY SIDE RETAINING WALL(RHS)

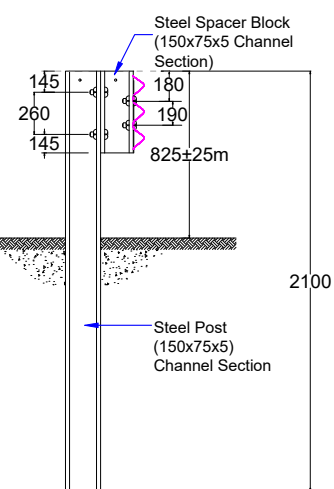
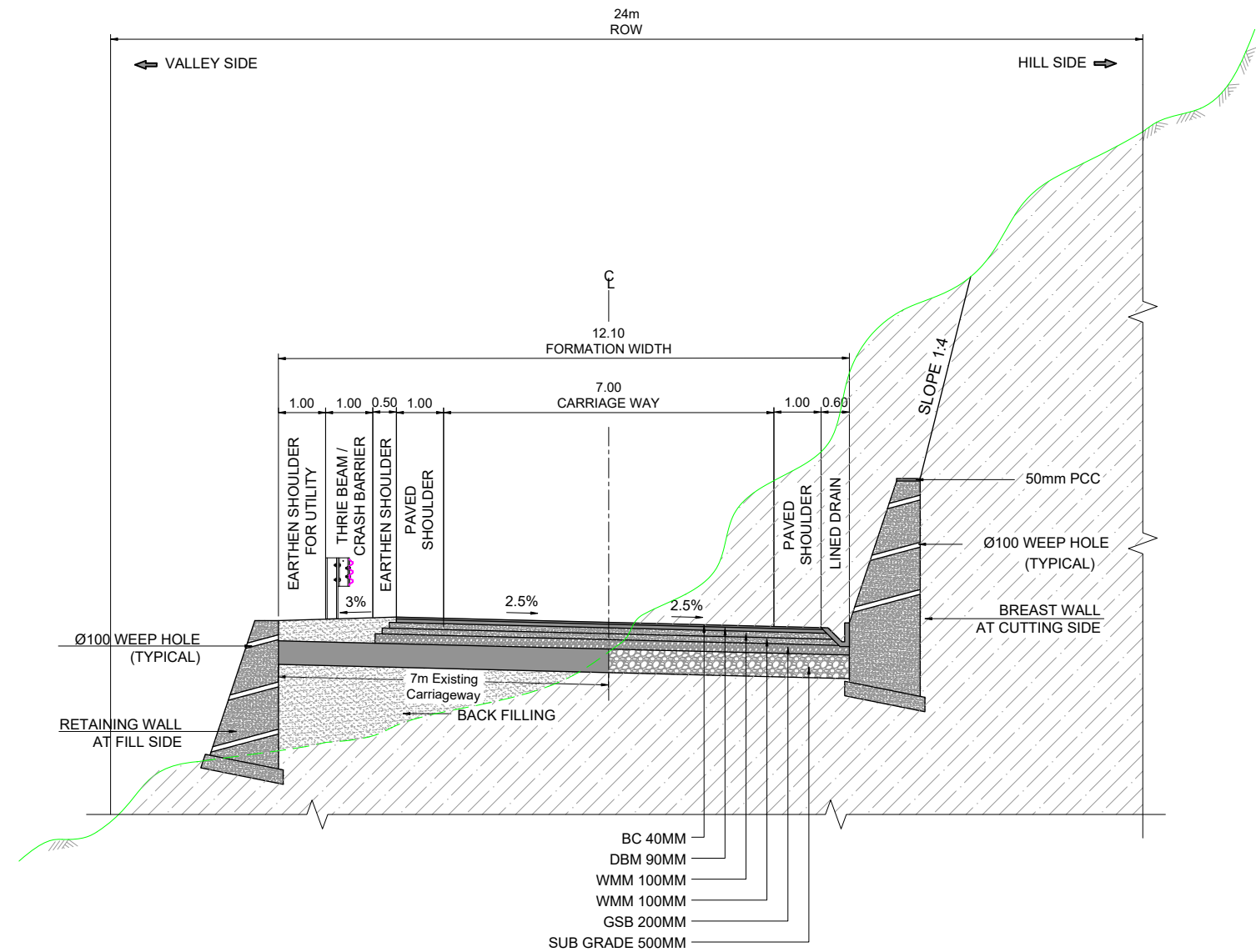
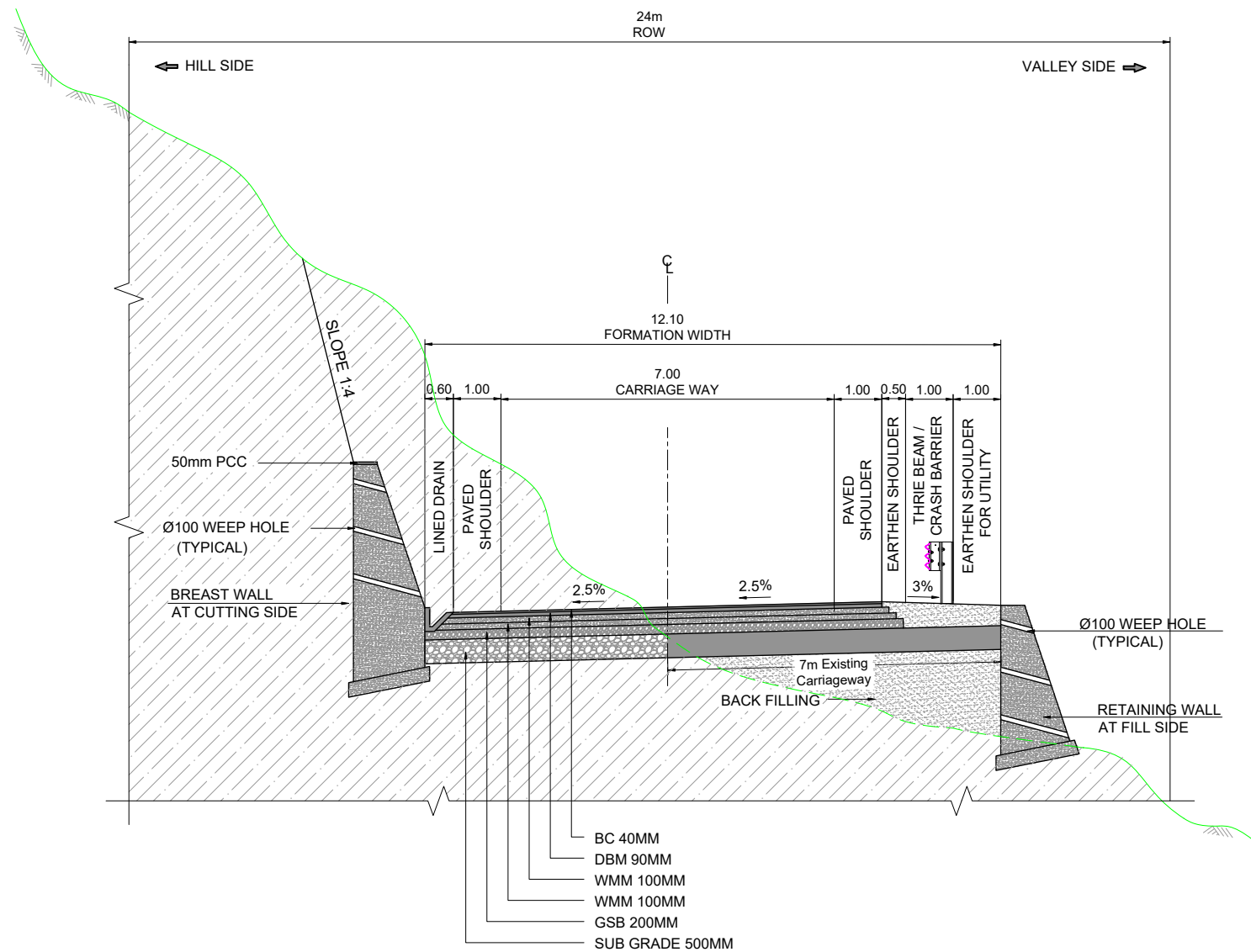


THRIE BEAM/
CRASH BARRIER

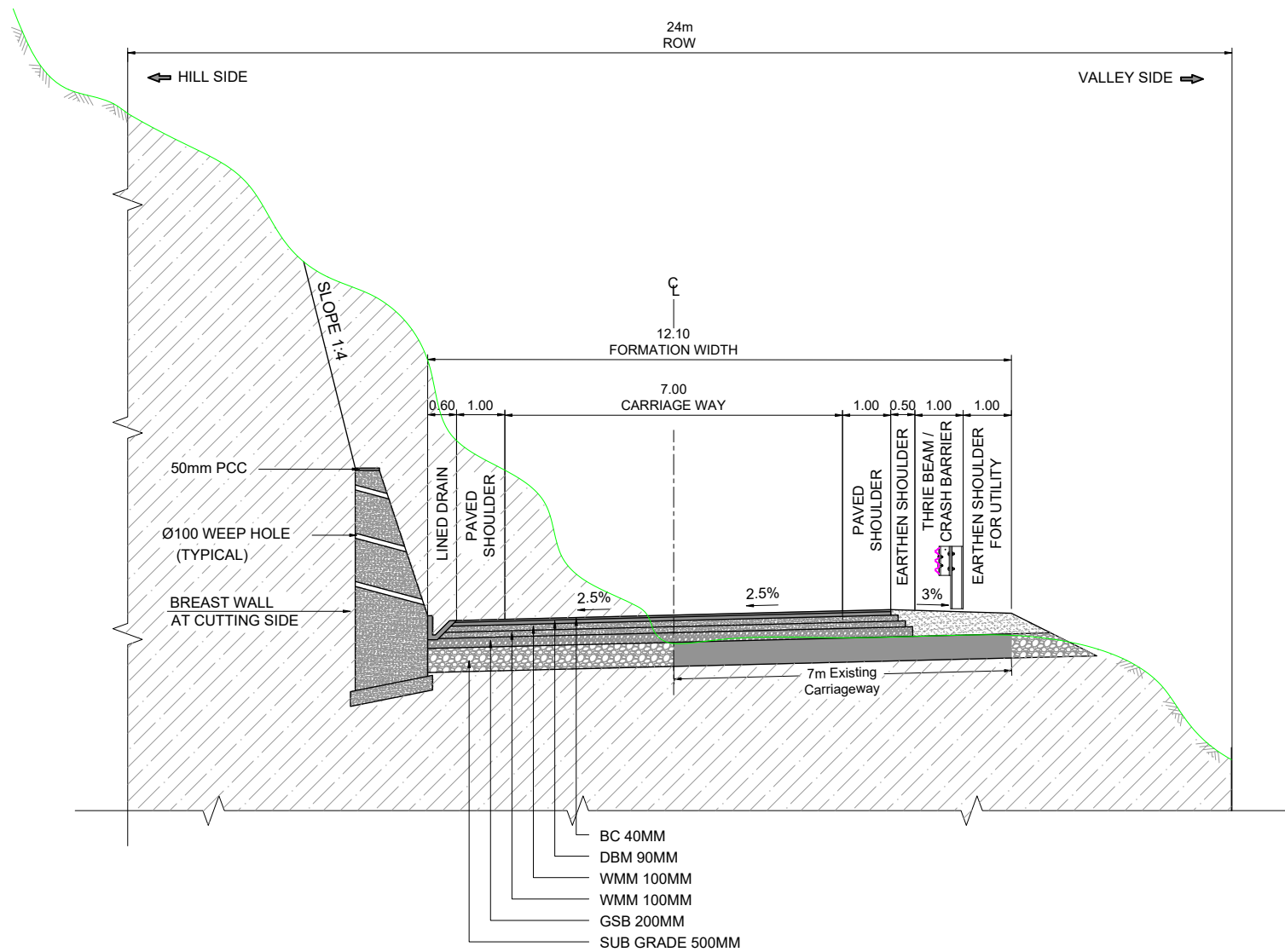


TYPICAL CROSS SECTION-2A
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) VALLEY SIDE RETAINING WALL(LHS)
AND HILL SIDE SLOPE(RHS)

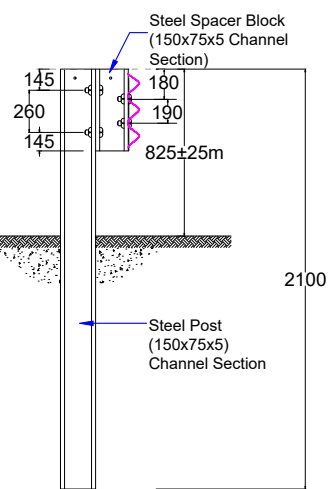
Rev. No	Date	Revision Details	CLIENT:	DESIGN CONSULTANT:	PROJECT :	DGN BY: RK	TITLE: Typical Cross Section (TCS) Reshi to Rhenock, Sikkim (SKM)	
R0	12-09-2024	Draft Detailed Project Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR and Providing Services For Pre-Construction Activities in Respect of "Widening and Up-Gradation of Existing Carriageway into 2L+PS Configuration from Reshi (km 96.254) to Rhenock (km 101.554) along NH-717A & from Rhenock (km 0.00) toRongli Bazaar (km 15.300) along NH-717B in the states of Sikkim ".	DRN BY: MK		
R1	21-09-2024	Revised Draft Detailed Project Report				CHK BY: AH		
R2	21-10-2024	Revised As Per Observation				APR BY: VY		
						SCALE: NTS	SHEET: 03 OF 07	DATE: Dec-2024



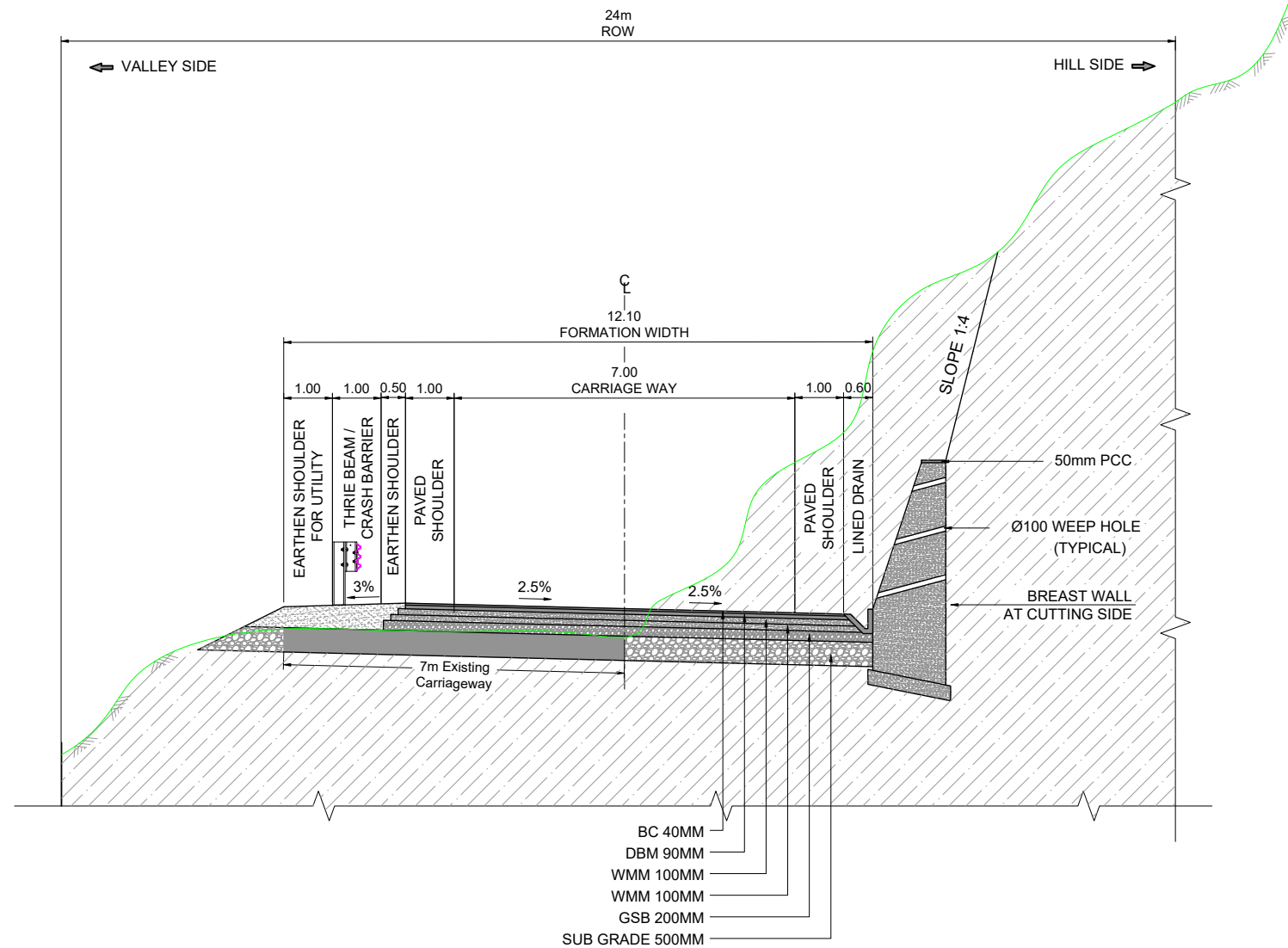
Rev. No	Date	Revision Details	CLIENT:	DESIGN CONSULTANT:	PROJECT :	DGN BY: RK	TITLE:	
R0	12-09-2024	Draft Detailed Project Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, itum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR and Providing Services For Pre-Construction Activities in Respect of “Widening and Up-Gradaation of Existing Carriageway into 2L+PS Configuration from Reshi (km 96.254) to Rhenock (km 101.554) along NH-717A & from Rhenock (km 0.00) toRongli Bazaar (km 15.300) along NH-717B in the states of Sikkim ”.	DRN BY: MK	Typical Cross Section (TCS) Reshi to Rhenock, Sikkim (SKM)	
R1	21-09-2024	Revised Draft Detailed Project Report				CHK BY: AH		
R2	21-10-2024	Revised As Per Observation				APR BY: VY	DWG NO: XPL/DSD/SK/KM5.3/TCS/04	
						SCALE: NTS	SHEET: 04 OF 07	DATE: Dec-2024



TYPICAL CROSS SECTION-4
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) HILL SIDE BREAST WALL(LHS)
AND VALLEY SIDE SLOPE(RHS)

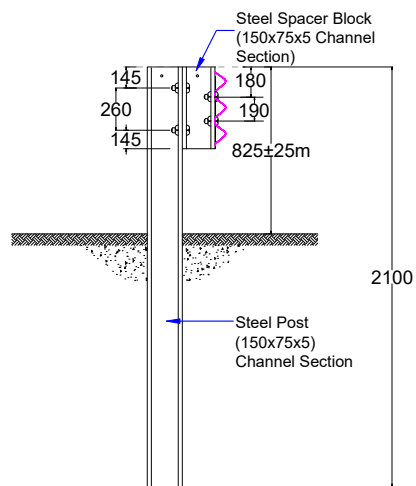


THRIE BEAM/
CRASH BARRIER

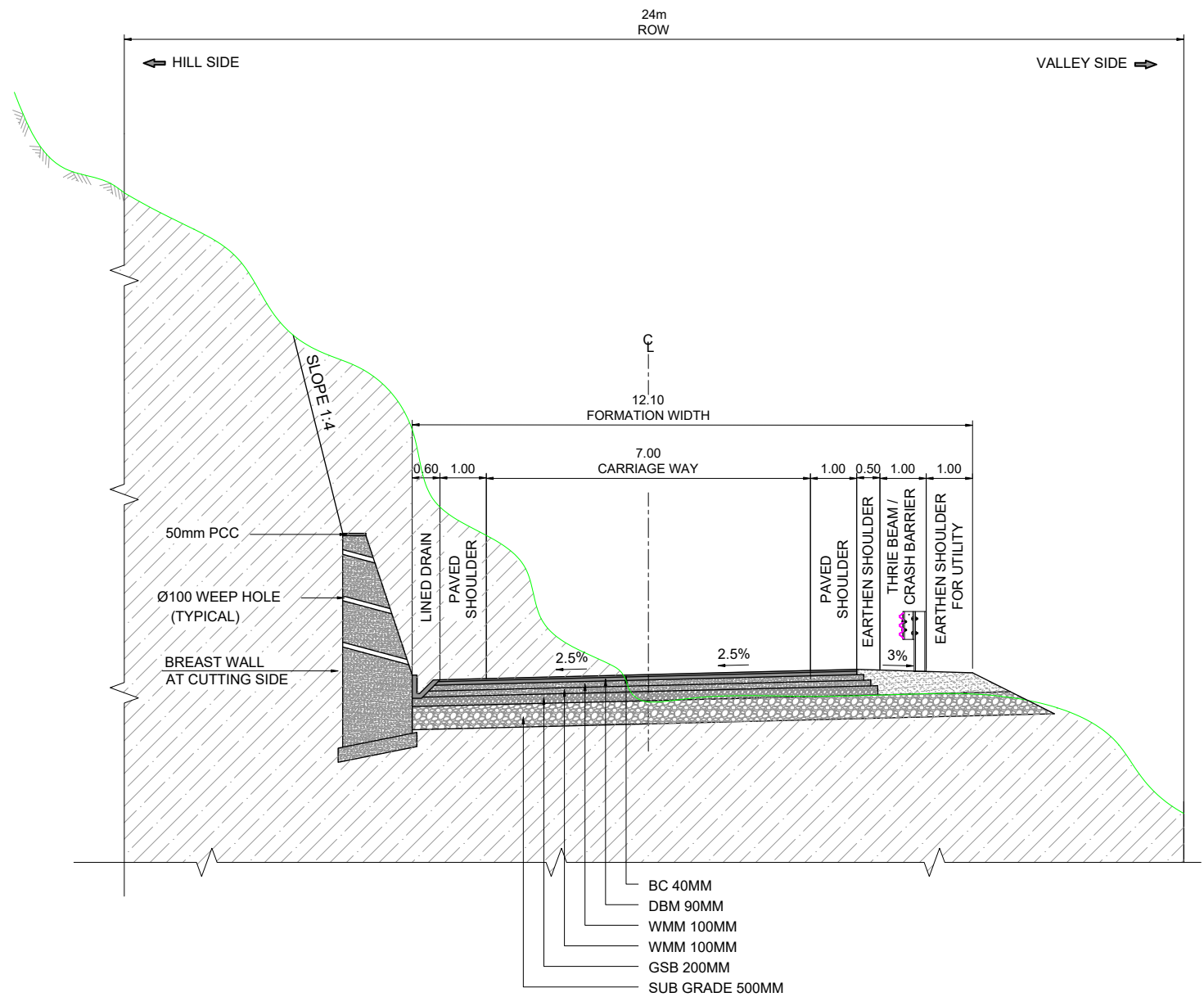


TYPICAL CROSS SECTION-4A
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) VALLEY SIDE SLOPE(LHS)
AND HILL SIDE BREAST WALL(RHS)

Rev. No	Date	Revision Details	CLIENT:	DESIGN CONSULTANT:	PROJECT :	DGN BY: RK	TITLE: Typical Cross Section (TCS) Reshi to Rhenock, Sikkim (SKM)	
R0	12-09-2024	Draft Detailed Project Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR and Providing Services For Pre-Construction Activities in Respect of "Widening and Up-Gradaation of Existing Carriageway into 2L+PS Configuration from Reshi (km 96.254) to Rhenock (km 101.554) along NH-717A & from Rhenock (km 0.00) toRongli Bazaar (km 15.300) along NH-717B in the states of Sikkim ".	DRN BY: MK		
R1	21-09-2024	Revised Draft Detailed Project Report				CHK BY: AH		
R2	21-10-2024	Revised As Per Observation				APR BY: VY		
						SCALE: NTS	SHEET: 05 OF 07	DATE: Dec-2024

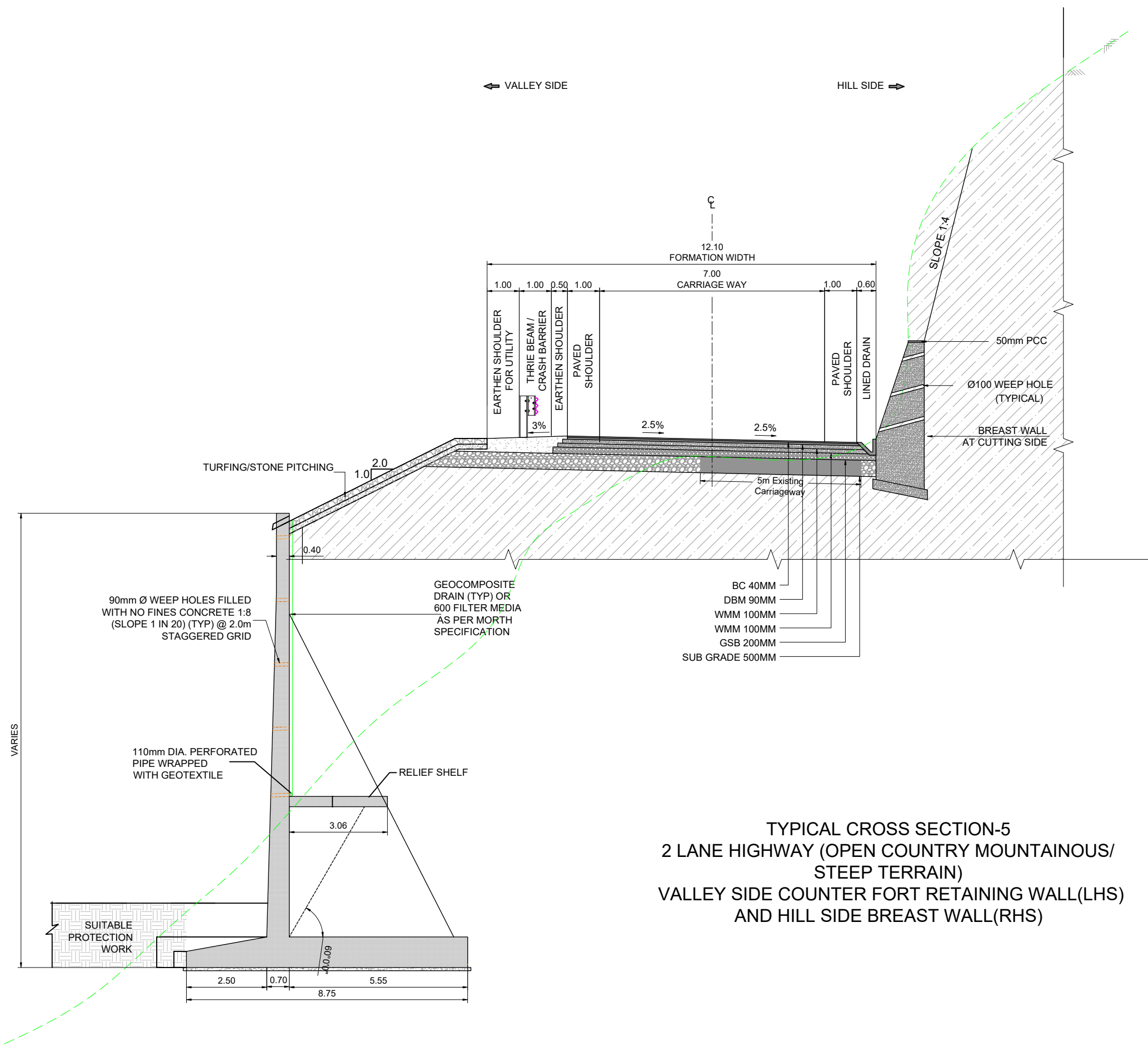


THRIE BEAM/
CRASH BARRIER



TYPICAL CROSS SECTION-4B
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN) HILL SIDE BREAST WALL(LHS)
AND VALLEY SIDE SLOPE(RHS)
NEW CONSTRUCTION

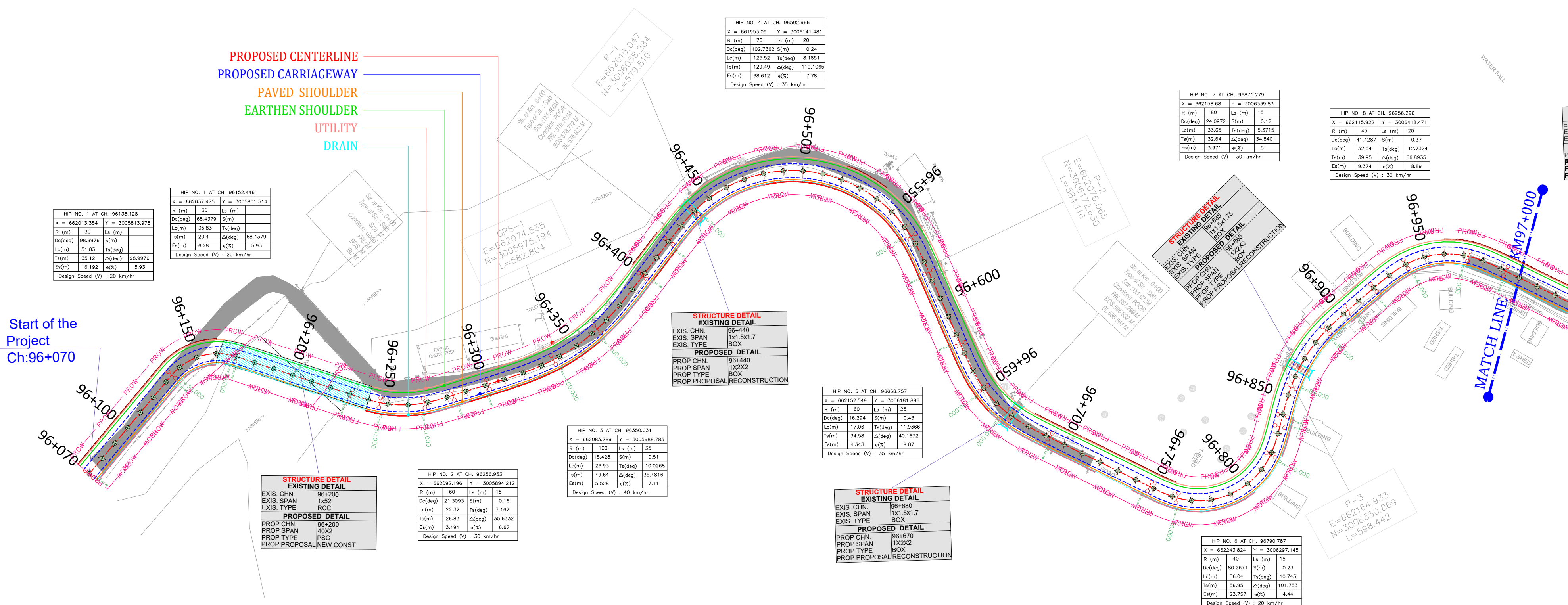
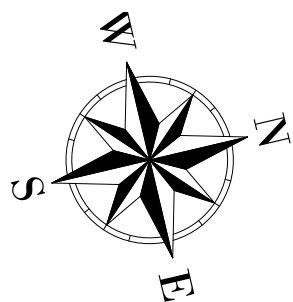
Rev. No	Date	Revision Details	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR and Providing Services For Pre-Construction Activities in Respect of "Widening and Up-Gradation of Existing Carriageway into 2L+PS Configuration from Reshi (km 96.254) to Rhenock (km 101.554) along NH-717A & from Rhenock (km 0.00) toRongli Bazaar (km 15.300) along NH-717B in the states of Sikkim ".	DGN BY: RK		TITLE: Typical Cross Section (TCS) Reshi to Rhenock, Sikkim (SKM)
						DRN BY: MK		
						CHK BY: AH		
						APR BY: VY		DWG NO: XPL/DSD/SK/KM5.3/TCS/06
						SCALE: NTS		SHEET: 06 OF 07



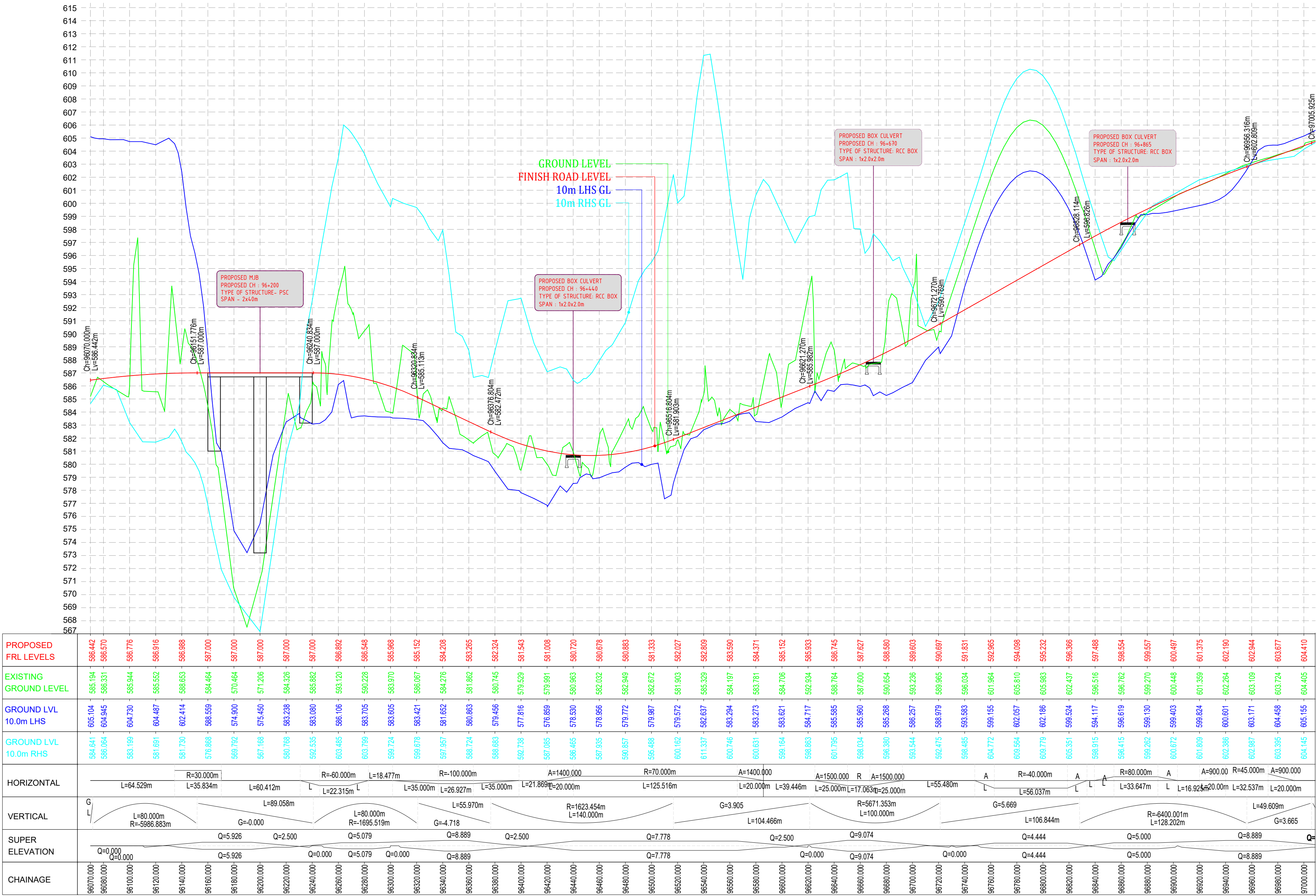
TYPICAL CROSS SECTION-5
2 LANE HIGHWAY (OPEN COUNTRY MOUNTAINOUS/
STEEP TERRAIN)
VALLEY SIDE COUNTER FORT RETAINING WALL(LHS)
AND HILL SIDE BREAST WALL(RHS)

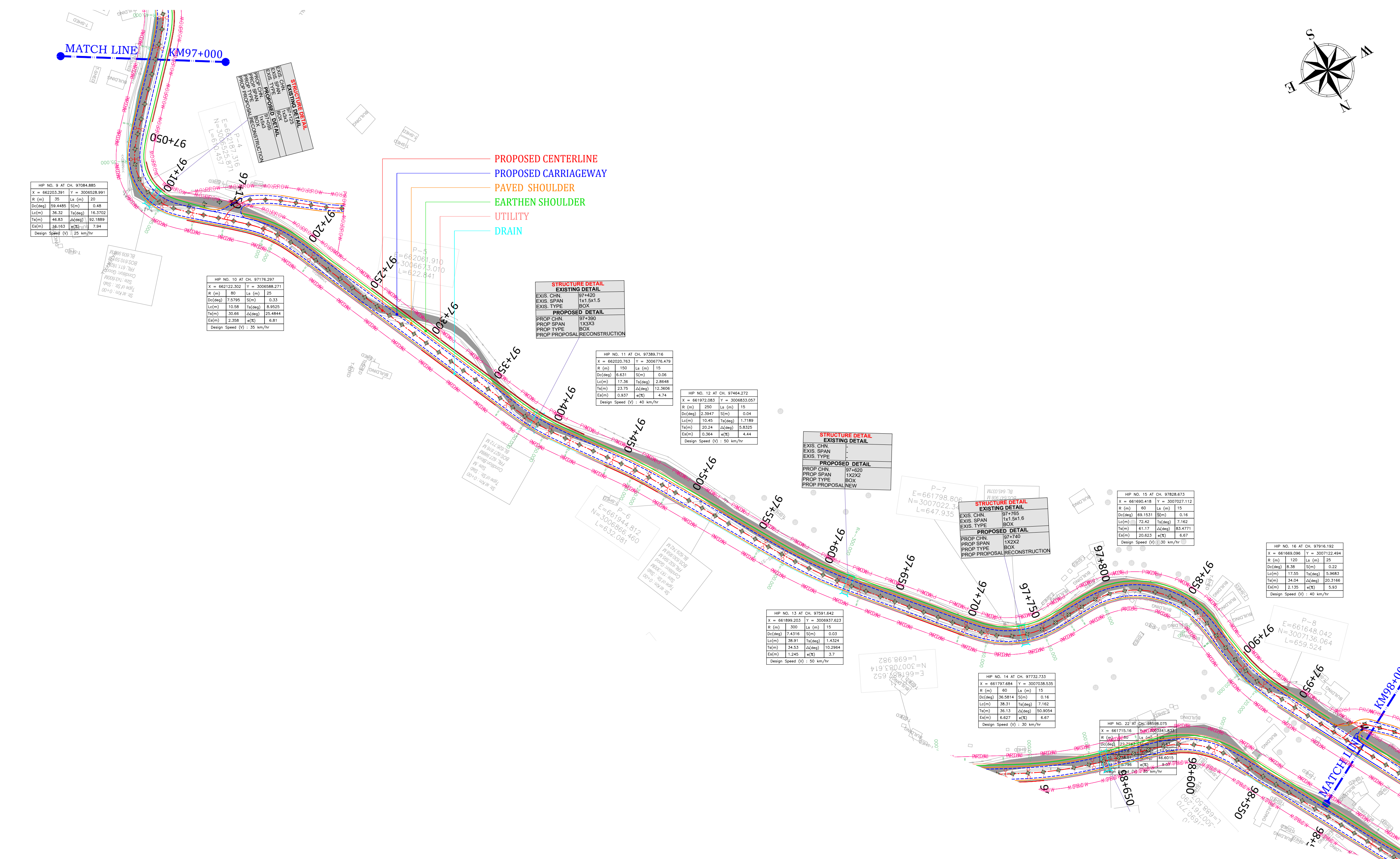
Rev. No	Date	Revision Details	CLIENT:	DESIGN CONSULTANT:	PROJECT :	DGN BY: RK	TITLE: Typical Cross Section (TCS) Reshi to Rhenock, Sikkim (SKM)	
R0	12-09-2024	Draft Detailed Project Report	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	XPLORER In JV with DSD In Association with	Consultancy Services For Preparation Of DPR and Providing Services For Pre-Construction Activities in Respect of "Widening and Up-Gratation of Existing Carriageway into 2L+PS Configuration from Reshi (km 96.254) to Rhenock (km 101.554) along NH-717A & from Rhenock (km 0.00) toRongli Bazaar (km 15.300) along NH-717B in the states of Sikkim ".	DRN BY: MK		
R1	21-09-2024	Revised Draft Detailed Project Report				CHK BY: AH		
R2	21-10-2024	Revised As Per Observation				APR BY: VY		
						SCALE: NTS	SHEET: 07 OF 07	DATE: Dec-2024

PLAN & PROFILE RESHI TO RHENOCK

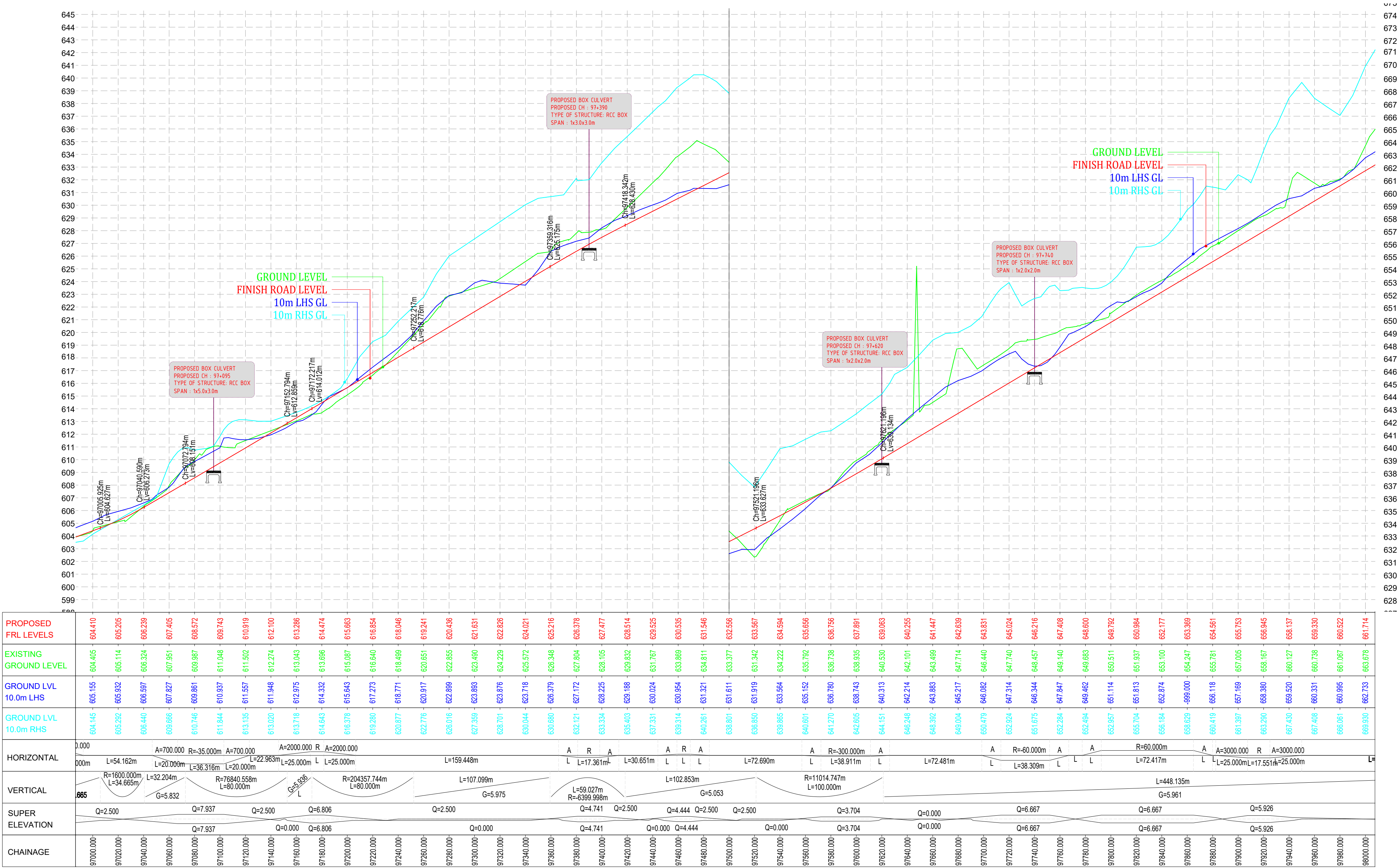


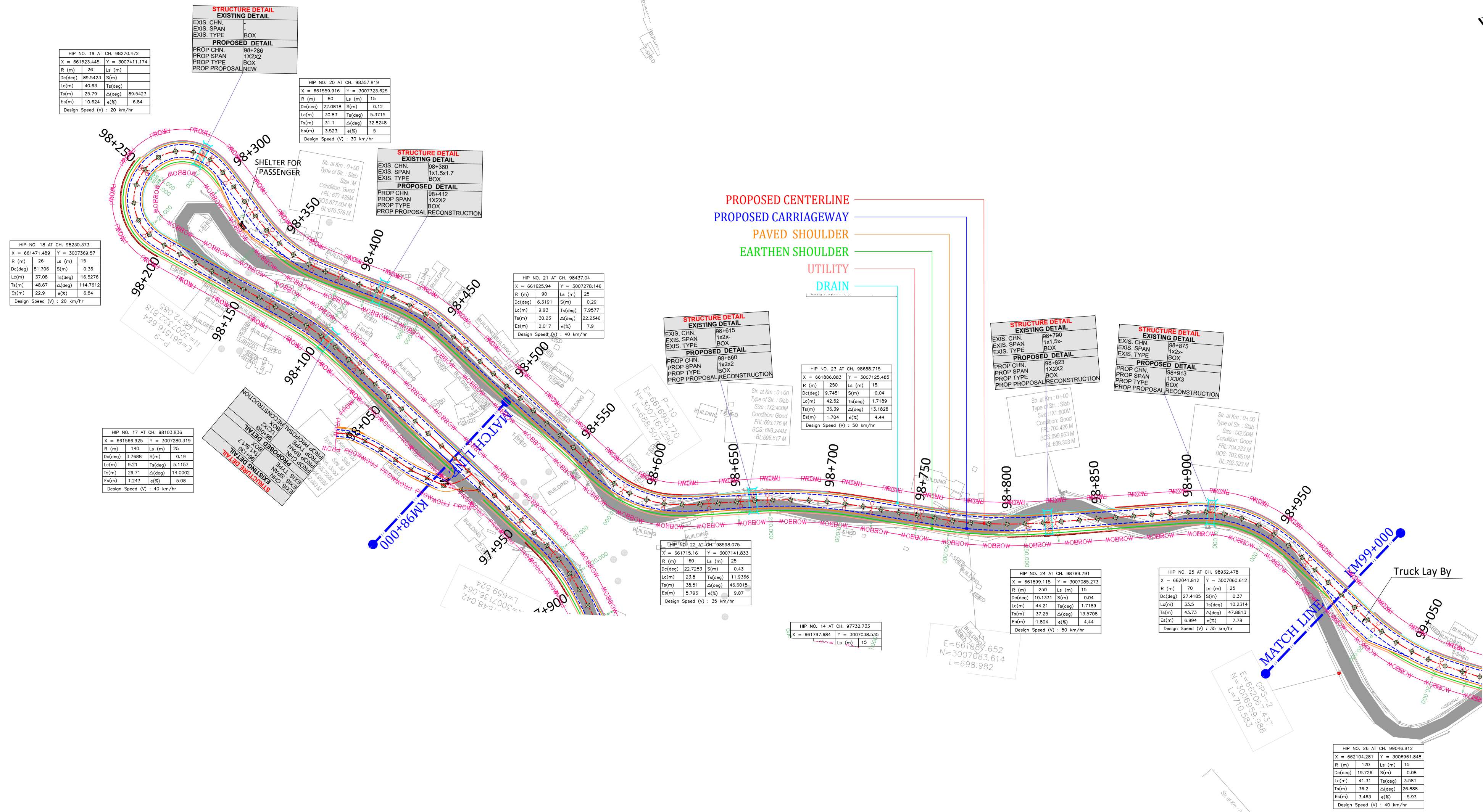
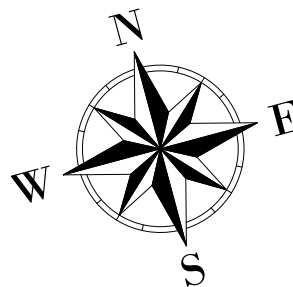
Rev.No	Date	Checked By	Revision Details	Color Code	Abbreviation	Client: National Highway & Infrastructure Development Corp. Ltd. (NHIDCL)  1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Design Consultant:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Project : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Design By : RK	Title: Reshi To Rhenock Plan From Km-96+070 To Km-97+000		
R0	12-09-2024	Amjad Hussain	Draft Detailed Project Report		Proposed Center line				Drawn By : MK			
R1	21-09-2024	Amjad Hussain	Revised Draft Detailed Project Report		Proposed Carriageway				Checked By : AH	Approved By : VY	Dwg No: XPL/DSD/SKM/P&P/KM5.3/01	
R2	21-10-2024	Amjad Hussain	Revised As Per Observation		Proposed Paved Shoulder				Scale : 1/2000(H)	Sheet : 01 OF 02	Date : Dec-2024	
					Proposed Earthen Shoulder							
					Utility							
					Drain							
					Retaining Wall							
					Breast wall							
					Slope Protection							





Rev.No	Date	Checked By	Revision Details	Color Code	Abbreviation	Client: National Highway & Infrastructure Development Corp. Ltd. (NHIDCL)  1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Design Consultant:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Project : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Design By : RK	Title: Reshi To Rhenock Plan From Km-97+000To Km-98+000			
R0	12-09-2024	Amjad Hussain	Draft Detailed Project Report		Proposed Center line				Drawn By : MK				
R1	21-09-2024	Amjad Hussain	Revised Draft Detailed Project Report		Proposed Carriageway				Checked By : AH				
R2	21-10-2024	Amjad Hussain	Revised As Per Observation		Proposed Paved Shoulder							Approved By : VY	Dwg No: XPL/DSD/SKM/P&P/KM5.3/03
					Proposed Earthen Shoulder							Scale : 1/2000(H)	Sheet : 01 OF 02
					Utility								
					Drain								
					Retaining Wall								
					Breast wall								
					Slope Protection								





HIP NO. 19 AT CH. 98270.472

X = 661523.445	Y = 3007411.174
R (m)	26
Ls (m)	15
Dc(deg)	89.5423
S(m)	
Lc(m)	40.63
Ts(deg)	
Ts(m)	25.79
Δ(deg)	89.5423
Ex(m)	10.624
e(%)	6.84
Design Speed (V)	20 km/hr

HIP NO. 20 AT CH. 98357.819

X = 661559.816	Y = 3007323.625
R (m)	20
Ls (m)	15
Dc(deg)	22.0818
S(m)	0.12
Lc(m)	30.83
Ts(deg)	5.3715
Ts(m)	31.1
Δ(deg)	32.8248
Ex(m)	3.523
e(%)	5
Design Speed (V)	30 km/hr

STRUCTURE DETAIL
EXISTING DETAIL
EXIS. CHN. 98+360
EXIS. SPAN 1x1.5x1.7
EXIS. TYPE BOX
PROPOSED DETAIL
PROP CHN. 98+286
PROP SPAN 1X2X2
PROP TYPE BOX
PROP PROPOSAL NEW

HIP NO. 18 AT CH. 98230.373

X = 661471.489	Y = 3007369.57
R (m)	26
Ls (m)	15
Dc(deg)	81.706
S(m)	0.36
Lc(m)	37.08
Ts(deg)	16.5276
Ts(m)	48.67
Δ(deg)	114.7612
Ex(m)	22.9
e(%)	6.84
Design Speed (V)	20 km/hr

HIP NO. 21 AT CH. 98437.04

X = 661625.94	Y = 3007278.146
R (m)	30
Ls (m)	25
Dc(deg)	6.3191
S(m)	0.29
Lc(m)	9.93
Ts(deg)	7.9577
Ts(m)	30.23
Δ(deg)	22.2346
Ex(m)	2.017
e(%)	7.9
Design Speed (V)	40 km/hr

STRUCTURE DETAIL
EXISTING DETAIL
EXIS. CHN. 98+615
EXIS. SPAN 1x2x-
EXIS. TYPE BOX
PROPOSED DETAIL
PROP CHN. 98+600
PROP SPAN 1x2x2
PROP TYPE BOX
PROP PROPOSAL RECONSTRUCTION

HIP NO. 23 AT CH. 98688.715

X = 661806.083	Y = 3007125.485
R (m)	250
Ls (m)	15
Dc(deg)	9.7451
S(m)	0.04
Lc(m)	42.52
Ts(deg)	1.7189
Ts(m)	36.39
Δ(deg)	13.1828
Ex(m)	1.704
e(%)	4.44
Design Speed (V)	50 km/hr

STRUCTURE DETAIL
EXISTING DETAIL
EXIS. CHN. 98+790
EXIS. SPAN 1x1.5x-
EXIS. TYPE BOX
PROPOSED DETAIL
PROP CHN. 98+823
PROP SPAN 1X2X2
PROP TYPE BOX
PROP PROPOSAL RECONSTRUCTION

STRUCTURE DETAIL
EXISTING DETAIL
EXIS. CHN. 98+875
EXIS. SPAN 1x2x-
EXIS. TYPE BOX
PROPOSED DETAIL
PROP CHN. 98+913
PROP SPAN 1X3X3
PROP TYPE BOX
PROP PROPOSAL RECONSTRUCTION

HIP NO. 17 AT CH. 98103.836

X = 661566.925	Y = 3007280.319
R (m)	140
Ls (m)	25
Dc(deg)	3.7688
S(m)	0.19
Lc(m)	9.21
Ts(deg)	5.1157
Ts(m)	29.71
Δ(deg)	14.0002
Ex(m)	1.243
e(%)	5.08
Design Speed (V)	40 km/hr

HIP NO. 22 AT CH. 98598.075

X = 661715.16	Y = 3007141.833
R (m)	60
Ls (m)	25
Dc(deg)	22.7283
S(m)	0.43
Lc(m)	23.5
Ts(deg)	11.9386
Ts(m)	38.51
Δ(deg)	46.6015
Ex(m)	5.796
e(%)	9.07
Design Speed (V)	35 km/hr

HIP NO. 14 AT CH. 97732.733

X = 661797.684	Y = 3007038.535
R (m)	15
Ls (m)	15
Dc(deg)	
S(m)	
Lc(m)	
Ts(deg)	
Ts(m)	
Δ(deg)	
Ex(m)	
e(%)	
Design Speed (V)	

HIP NO. 24 AT CH. 98789.791

X = 661899.115	Y = 3007085.273
R (m)	250
Ls (m)	15
Dc(deg)	10.1331
S(m)	0.04
Lc(m)	44.21
Ts(deg)	1.7189
Ts(m)	37.25
Δ(deg)	13.5708
Ex(m)	1.804
e(%)	4.44
Design Speed (V)	50 km/hr

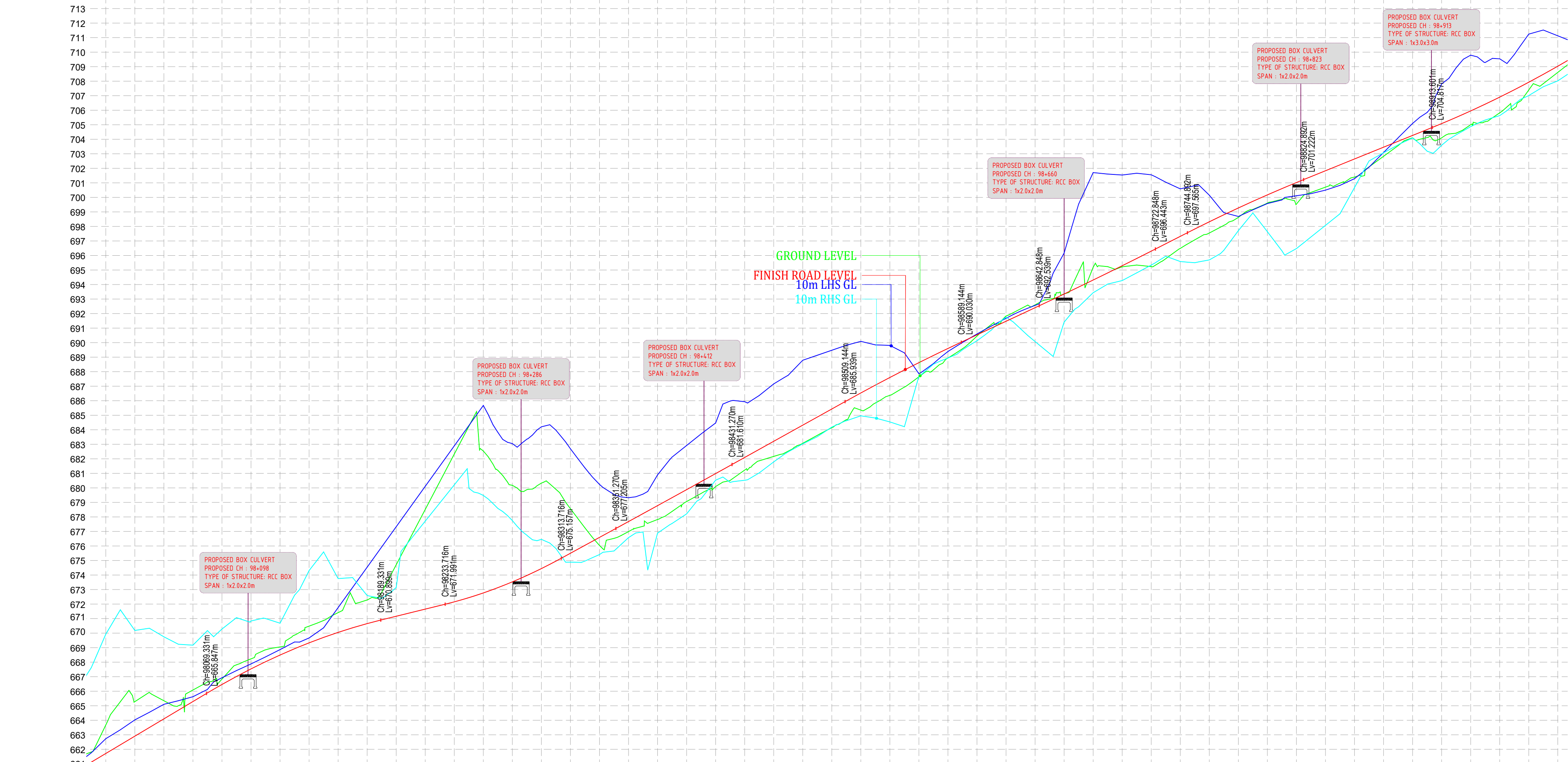
HIP NO. 25 AT CH. 98932.478

X = 662041.812	Y = 3007060.612
R (m)	70
Ls (m)	25
Dc(deg)	27.4185
S(m)	0.37
Lc(m)	33.5
Ts(deg)	10.2314
Ts(m)	43.73
Δ(deg)	47.8813
Ex(m)	6.994
e(%)	7.78
Design Speed (V)	35 km/hr

HIP NO. 26 AT CH. 99046.812

X = 662104.281	Y = 3006961.848
R (m)	120
Ls (m)	15
Dc(deg)	19.726
S(m)	0.08
Lc(m)	41.31
Ts(deg)	3.581
Ts(m)	36.2
Δ(deg)	26.888
Ex(m)	3.463
e(%)	5.93
Design Speed (V)	40 km/hr

Rev.No	Date	Checked By	Revision Details	Color Code	Abbreviation	Client:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Design Consultant:	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Project :	Design By : RK	Title: Reshi To Rhenock Plan From Km-98+000 To Km-99+000			
R0	12-09-2024	Amjad Hussain	Draft Detailed Project Report		Proposed Center line				Consultancy Services For Pxpparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK				
R1	21-09-2024	Amjad Hussain	Revised Draft Detailed Project Report		Proposed Carriageway					Checked By : AH				
R2	21-10-2024	Amjad Hussain	Revised As Per Observation		Proposed Paved Shoulder						Approved By : VY	Dwg No: XPL/DSD/SKM/P&P/KM5.3/05		
					Proposed Earthen Shoulder							Scale : 1/2000(H)	Sheet : 01 OF 02	Date : Dec-2024
					Utility									
					Drain									
					Retaining Wall									
					Breast wall									
					Slope Protection									



PROPOSED FRL LEVELS	661.714	662.906	664.098	665.290	666.466	667.537	668.492	669.331	670.052	670.657	671.162	671.654	672.153	672.767	673.531	674.444	675.500	676.591	677.682	678.778	679.879	680.985	682.096	683.207	684.319	685.430	686.536	687.601	688.622	689.599	690.537	691.472	692.406	693.346	694.310	695.294	696.298	697.316	698.319	699.272	700.173	701.022	701.834	702.645	703.455	704.266	705.080	705.953	706.902	707.928	709.030																																																																																																																																																																																																																																																																																																																																																																									
EXISTING GROUND LEVEL	663.678	665.284	665.346	666.082	666.834	668.229	669.051	670.482	671.412	672.285	-999.000	-999.000	-999.000	682.540	680.177	680.330	678.567	676.037	676.989	677.822	679.059	680.094	681.225	682.167	683.069	684.144	685.355	686.369	687.649	688.939	690.450	691.831	692.601	693.351	694.185	695.222	696.236	696.488	697.547	698.623	699.610	699.541	700.704	701.399	702.645	703.829	704.103	705.002	705.821	707.394	708.605																																																																																																																																																																																																																																																																																																																																																																									
GROUND LVL 10.0m LHS	662.733	664.029	665.100	665.821	666.928	667.880	668.866	669.668	-999.000	-999.000	-999.000	-999.000	-999.000	685.677	683.049	684.205	682.891	680.240	679.322	680.895	682.917	684.469	685.933	687.159	688.787	689.475	690.088	689.809	687.860	689.390	690.596	691.674	692.563	696.168	701.707	701.556	701.556	700.587	700.153	699.575	700.112	700.500	701.286	703.090	705.090	707.810	709.792	709.540	711.240	711.124																																																																																																																																																																																																																																																																																																																																																																										
GROUND LVL 10.0m RHS	669.930	670.183	669.747	669.171	670.280	670.833	670.683	674.308	673.756	672.586	673.143	-999.000	-999.000	679.476	677.750	676.456	674.888	675.409	676.576	676.884	678.209	680.530	680.524	681.786	683.031	684.165	684.962	684.541	687.686	688.942	690.130	691.758	690.076	691.411	693.435	694.274	695.340	695.595	695.693	697.708	697.637	696.476	696.073	700.677	703.073	704.089	703.591	704.870	705.629	707.011	708.023																																																																																																																																																																																																																																																																																																																																																																									
HORIZONTAL			A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=3500.000 R=3500.000		A=350	

Rev.No

Date

Checked By

R0

12-09-2024

Amjad Hussain

R1

21-09-2024

Amjad Hussain

R2

21-10-2024

Amjad Hussain

Revision Details

Draft Detailed Project Report

Revised Draft Detailed Project Report

Revised As Per Observation

Color Code

Proposed Center line

Proposed Carriageway

Proposed Paved Shoulder

Proposed Earthen Shoulder

Utility

Drain

Retaining Wall

Breast wall

Slope Protection

Abbreviation

Proposed Center line

Proposed Carriageway

Proposed Paved Shoulder

Proposed Earthen Shoulder

Utility

Drain

Retaining Wall

Breast wall

Slope Protection

Client:

National Highway & Infrastructure Development Corp. Ltd. (NHIDCL)

1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029

Design Consultant:

Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction

511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301

Project :

Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gratation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".

Design By : RK

Drawn By : MK

Checked By : AH

Approved By : VY

Title:

Reshi To Rhenock Profile From Km-98+000 To Km-99+000

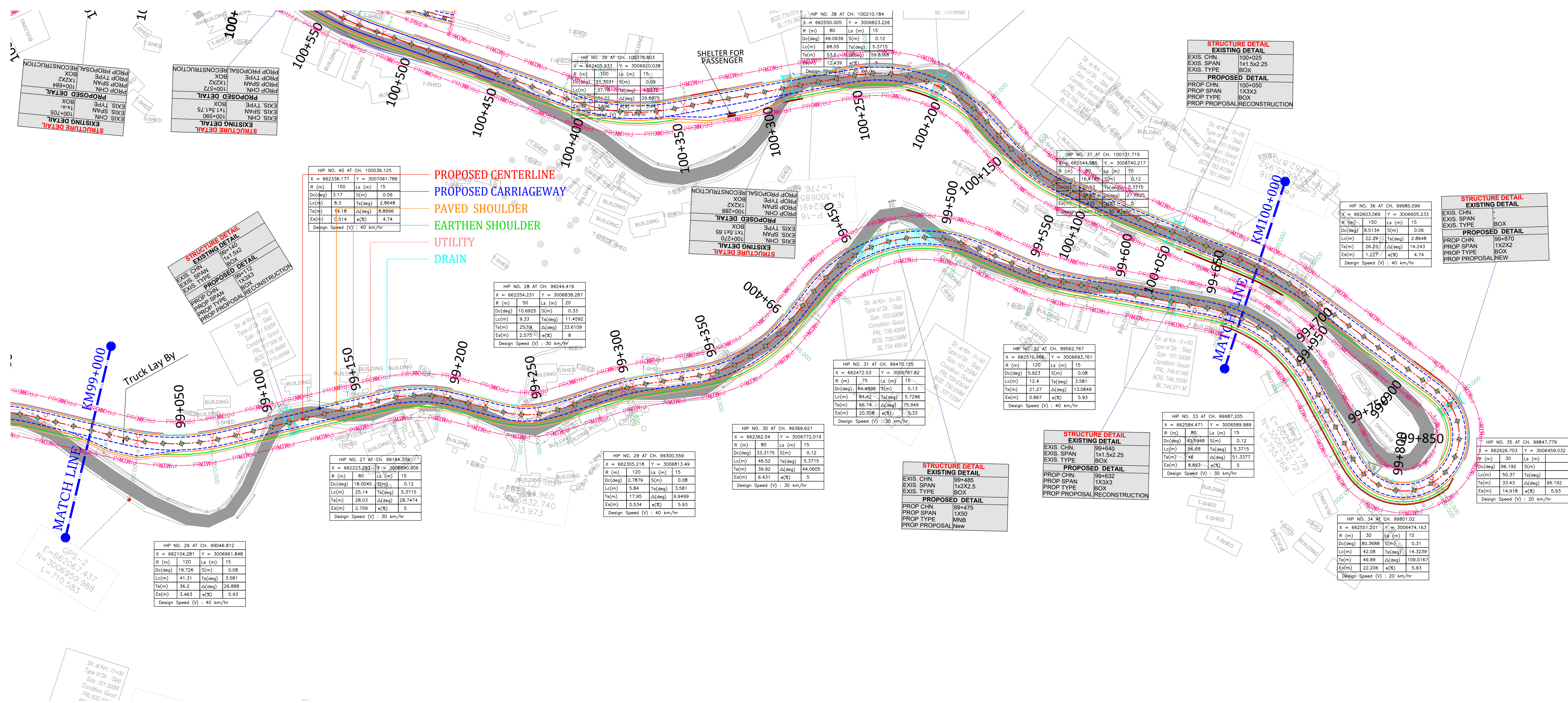
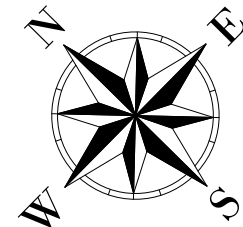
Dwg No:

XPL/DSD/SKM/P&P/KM5.3/06

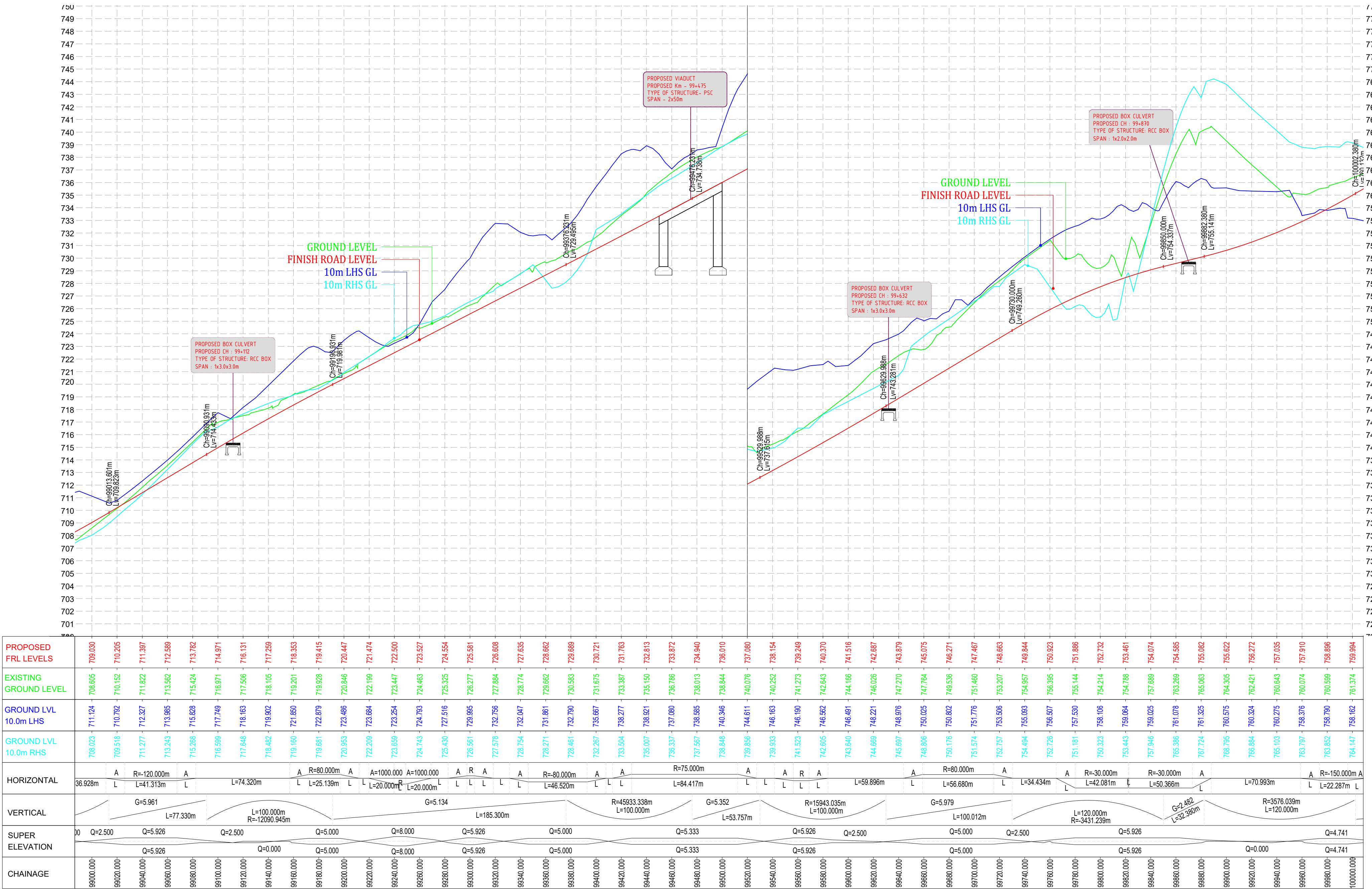
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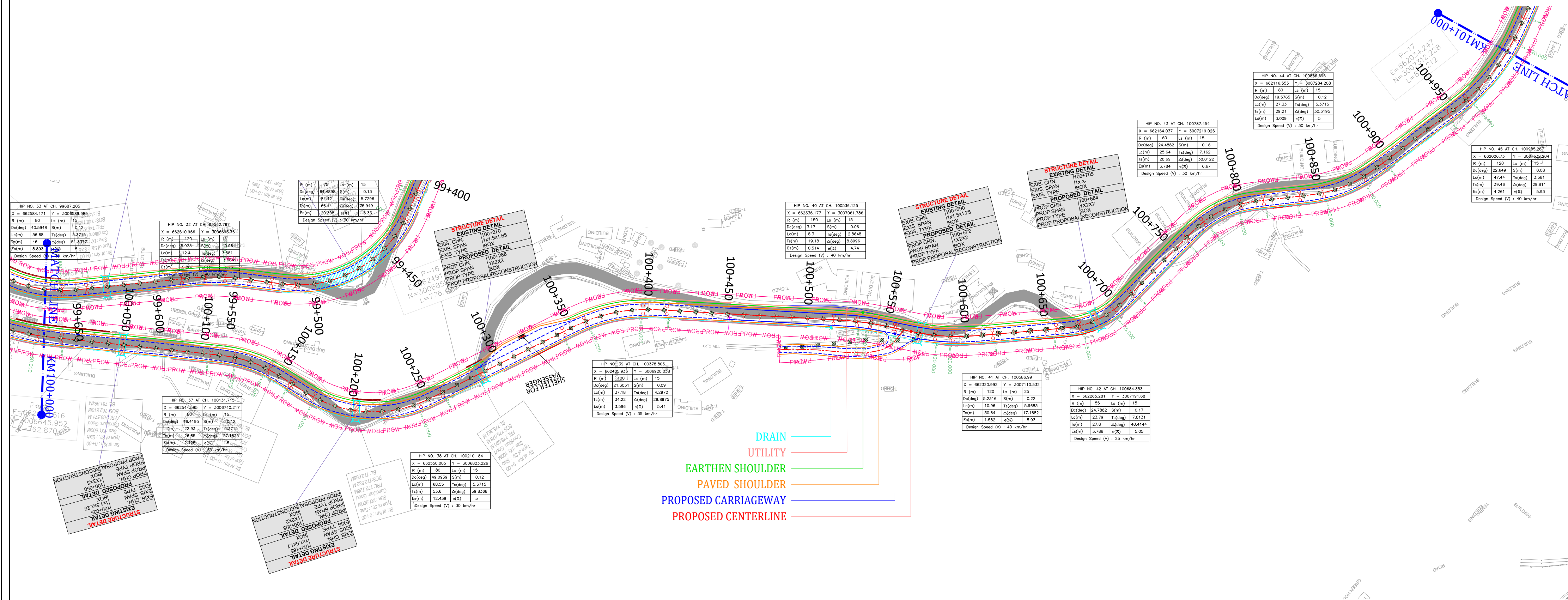
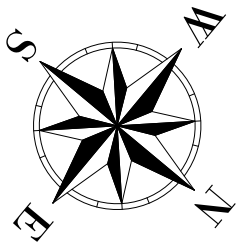
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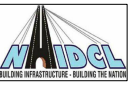
Date : Dec-2024

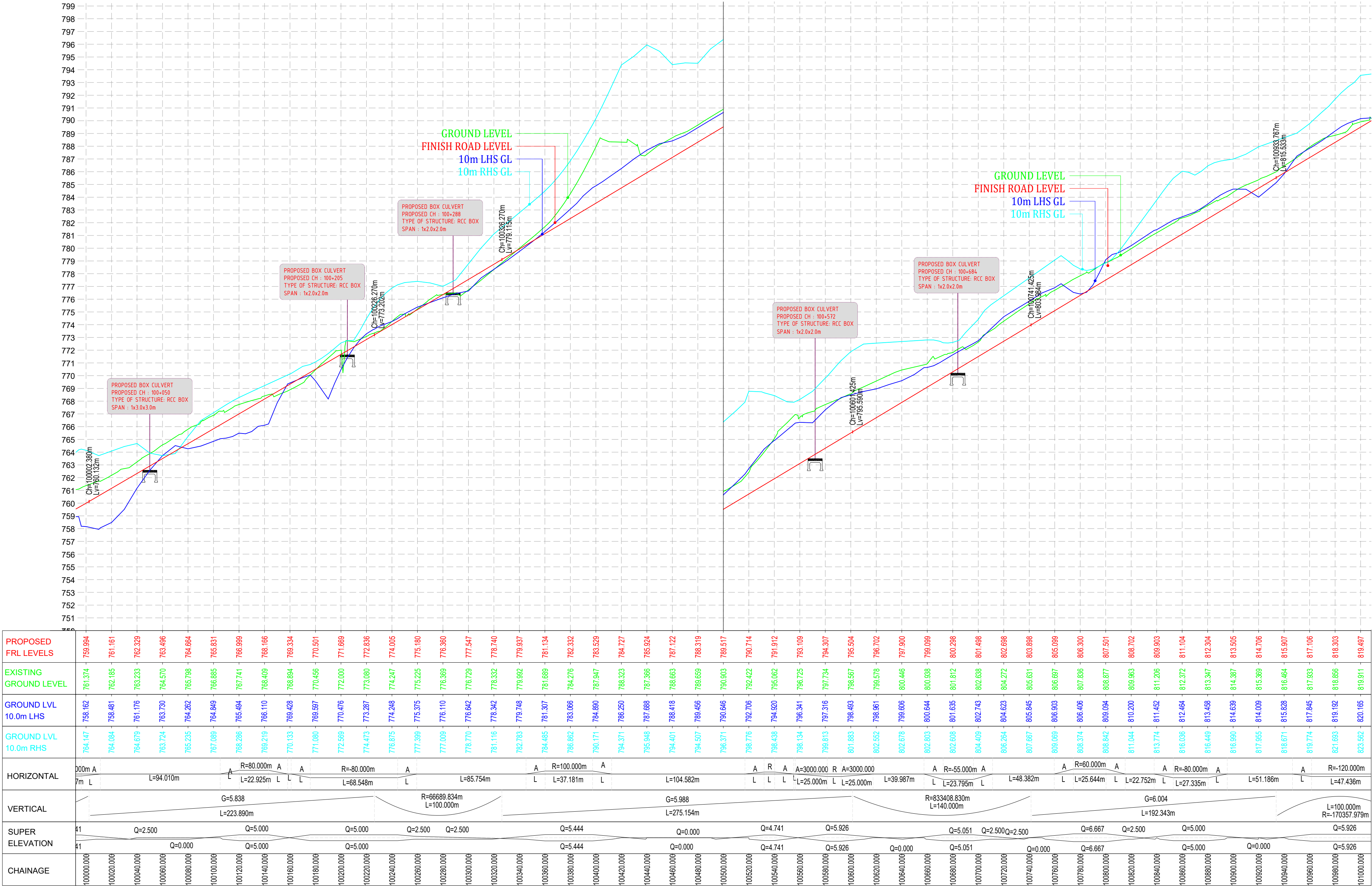


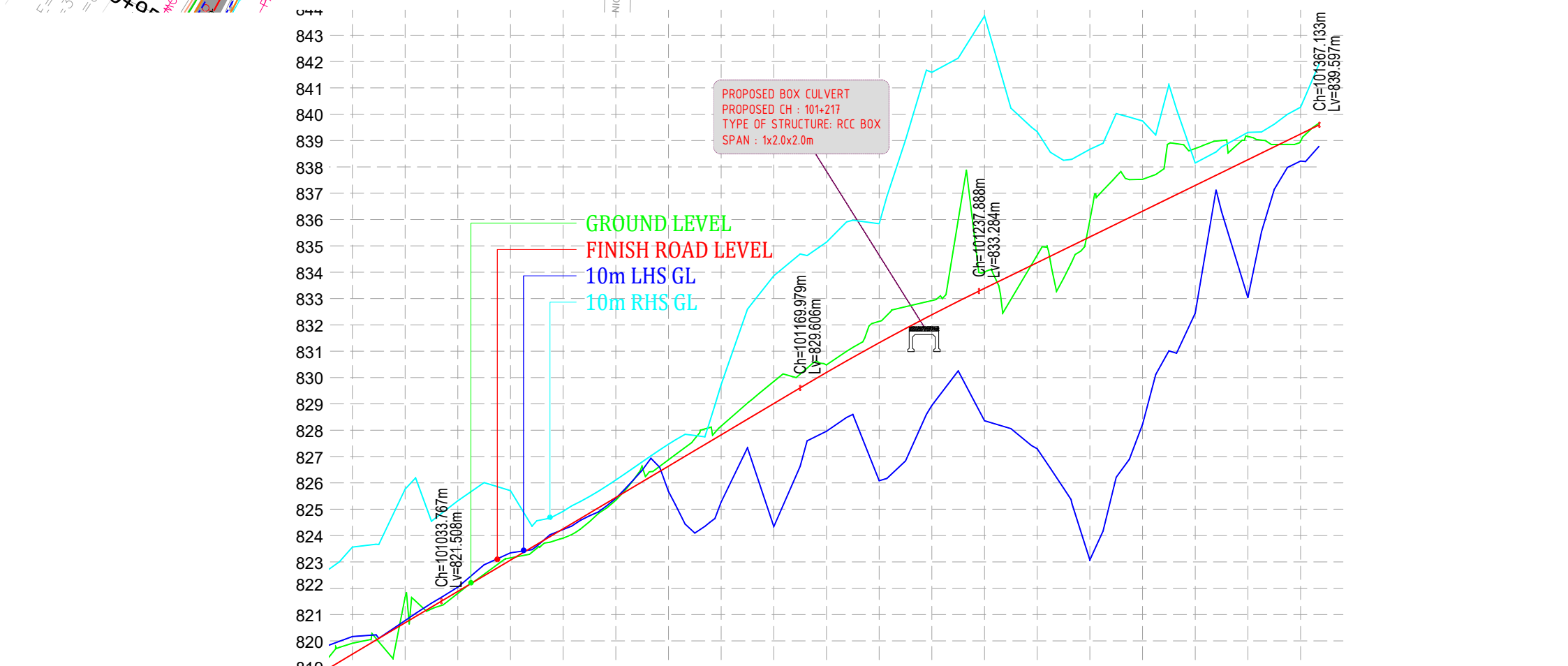
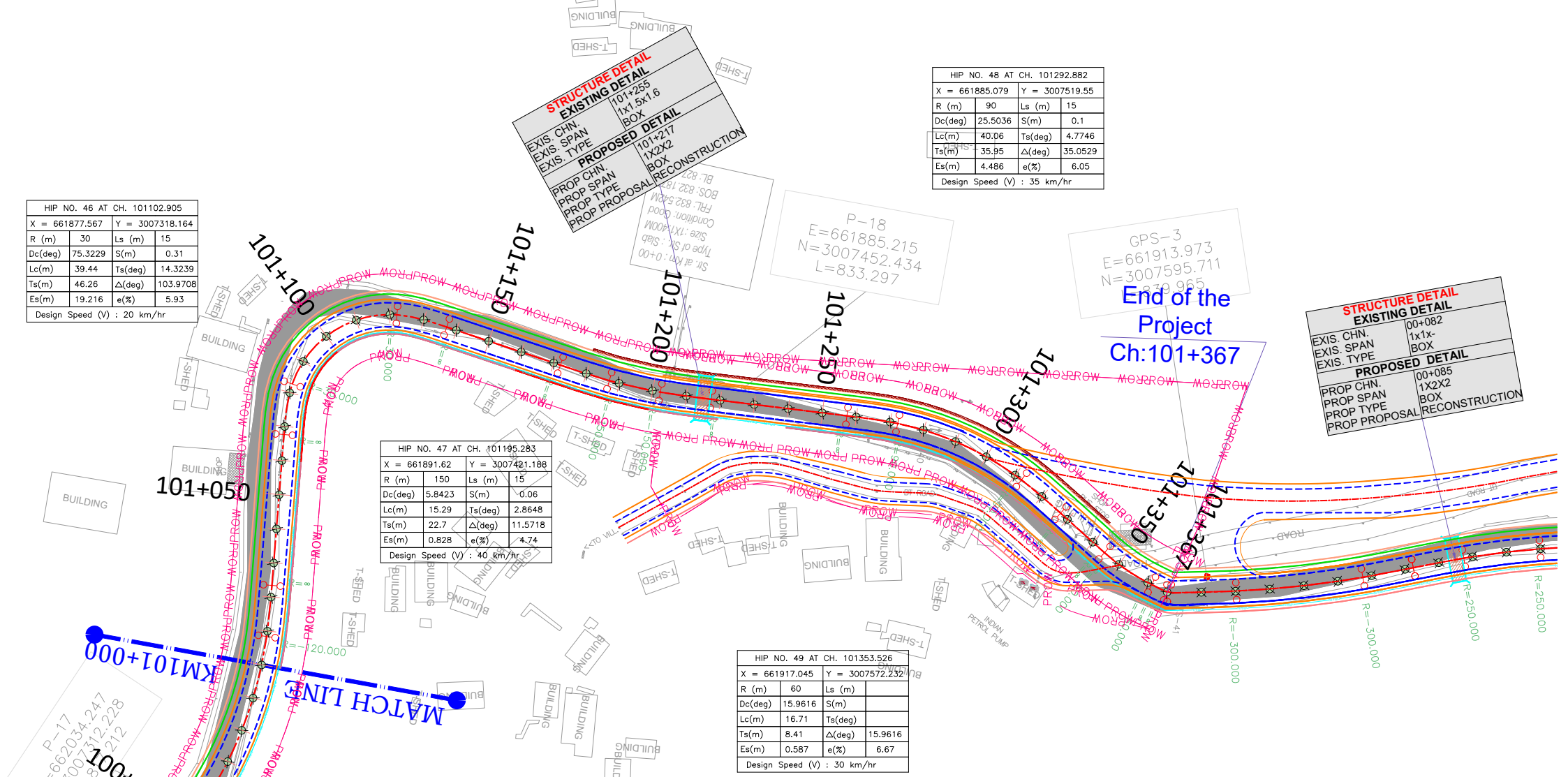
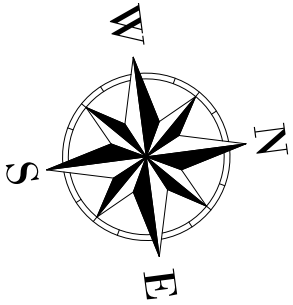
Rev.No	Date	Checked By	Revision Details	Color Code	Abbreviation	Client: National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Design Consultant: Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Project : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Design By : RK	Title: Reshi To Rhenock Plan From Km-99+000 To Km-100+000		
R0	12-09-2024	Amjad Hussain	Draft Detailed Project Report		Proposed Center line				Drawn By : MK			
R1	21-09-2024	Amjad Hussain	Revised Draft Detailed Project Report		Proposed Carriageway					Checked By : AH		
R2	21-10-2024	Amjad Hussain	Revised As Per Observation		Proposed Paved Shoulder					Approved By : VY	Dwg No: XPL/DSD/SKM/P&P/KM5.3/07	
					Proposed Earthen Shoulder					Scale : 1/2000(H)	Sheet : 01 OF 02	Date : Dec-2024
					Utility							
					Drain							
					Retaining Wall							
					Breast wall							
					Slope Protection							





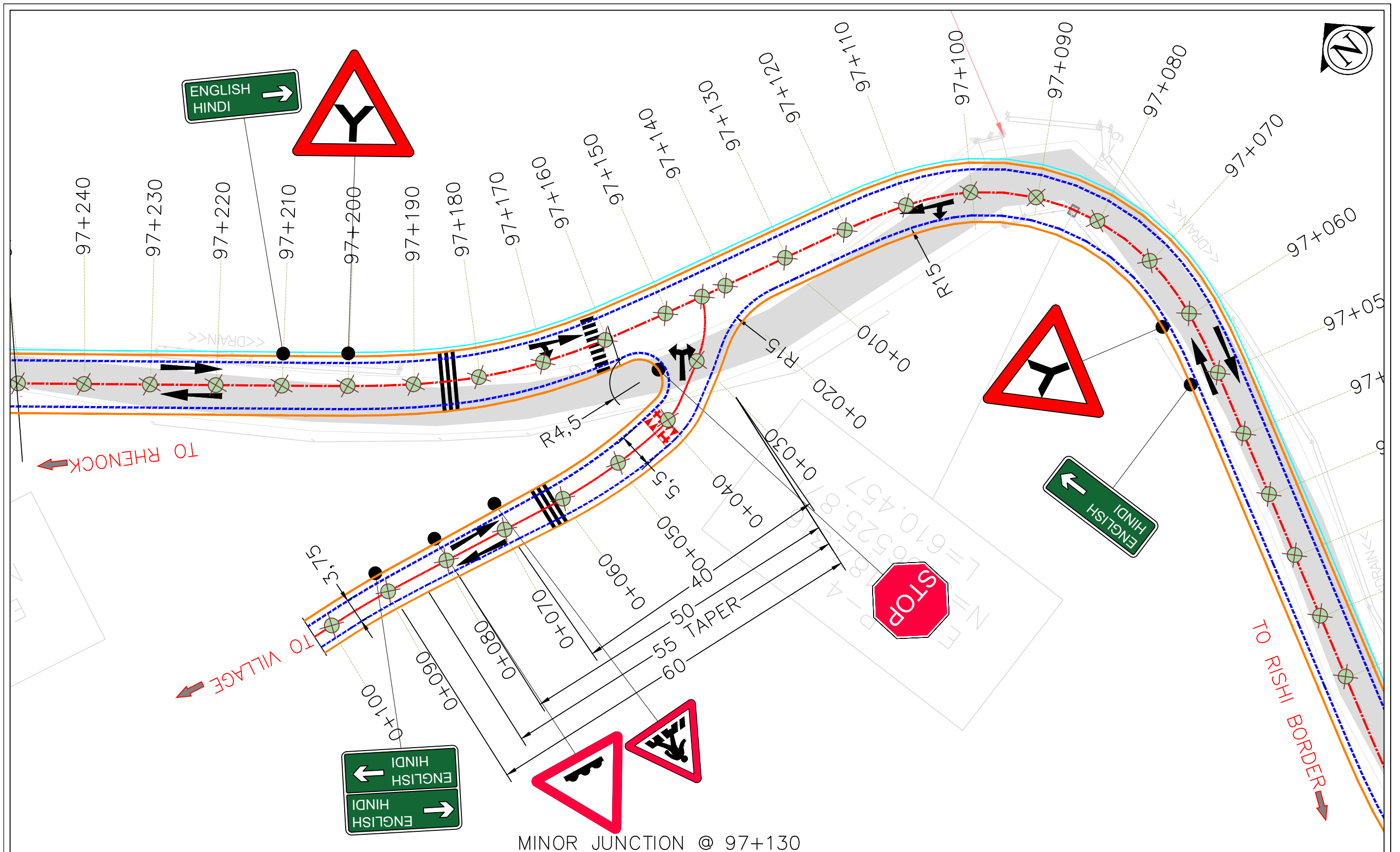
Rev.No	Date	Checked By	Revision Details	Color Code	Abbreviation	Client:	Design Consultant:	Project :	Design By : RK	Title:
R0	12-09-2024	Amjad Hussain	Draft Detailed Project Report	---	Proposed Center line				Drawn By : MK	
R1	21-09-2024	Amjad Hussain	Revised Draft Detailed Project Report	---	Proposed Carriageway	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Checked By : AH	Reshi To Rhenock Plan From Km-100+000 To Km-101+000
R2	21-10-2024	Amjad Hussain	Revised As Per Observation	---	Proposed Paved Shoulder				Approved By : VY	
				---	Proposed Earthen Shoulder				Scale : 1/2000(H)	Dwg No: XPL/DSD/SKM/P&P/KM5.3/09
				---	Utility				Sheet : 01 OF 02	
				---	Drain				Date : Dec-2024	
				---	Retaining Wall					
				---	Breast wall					
				---	Slope Protection					





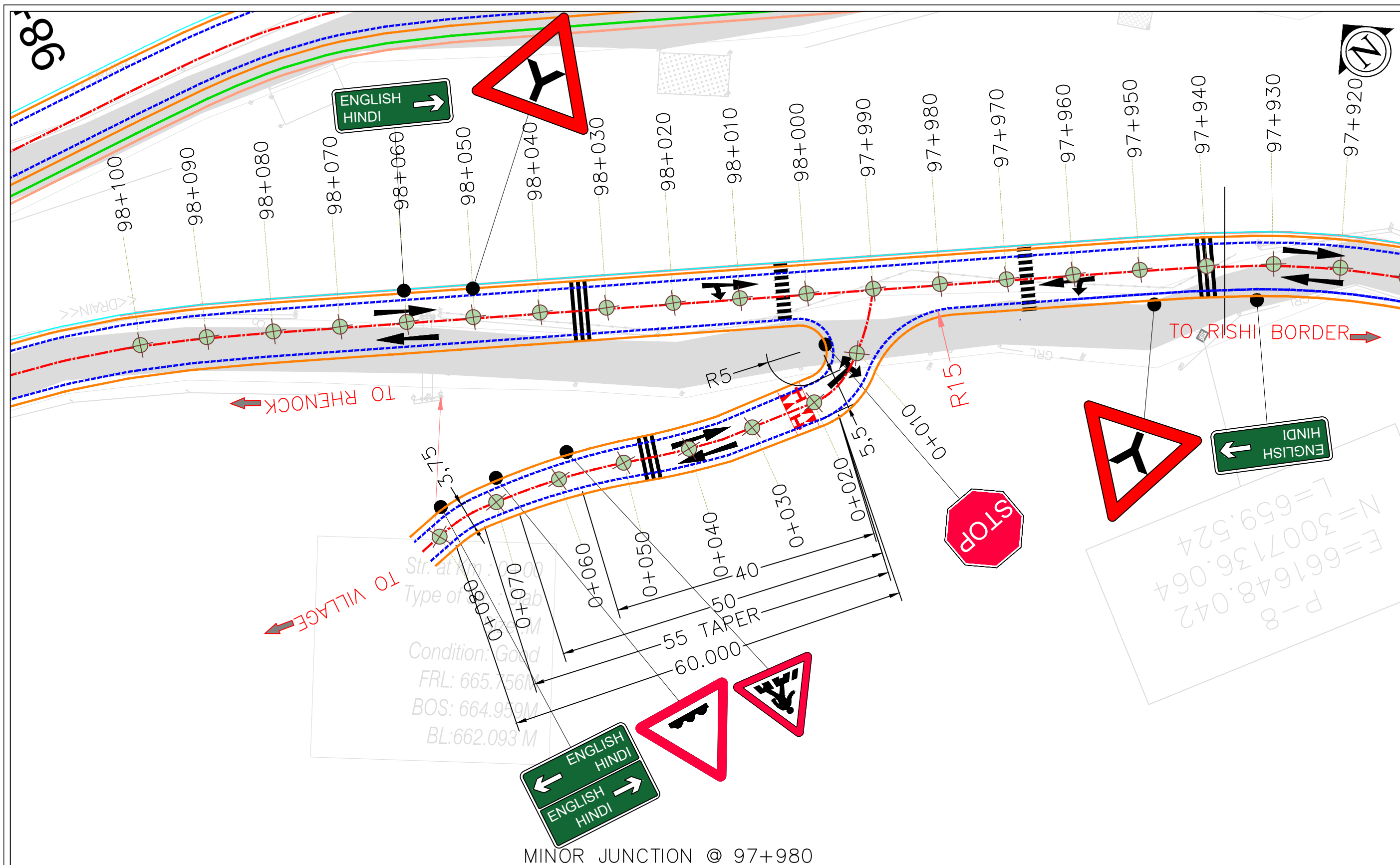
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EXISTING GROUND LEVEL	819.911	821.656	821.803	823.162	823.901	825.342	826.877	828.156	829.653	830.483	832.133	832.924	834.012	834.646	835.977	837.327	838.698	839.155	838.976	839.661
GROUND LVL 10.0m LHS	820.165	820.771	822.040	823.343	824.229	825.413	825.677	825.273	824.342	827.962	826.082	828.940	828.360	827.297	823.073	828.225	832.445	833.033	838.223	838.782
GROUND LVL 10.0m RHS	823.560	825.762	825.319	825.705	824.921	826.110	827.469	829.735	833.886	835.140	835.841	841.591	843.729	839.337	838.668	839.743	838.148	839.310	840.265	841.906
HORIZONTAL																				
VERTICAL																				
SUPER ELEVATION																				
CHAINAGE	101000.000	101020.000	101040.000	101060.000	101080.000	101100.000	101120.000	101140.000	101160.000	101180.000	101200.000	101220.000	101240.000	101260.000	101280.000	101300.000	101320.000	101340.000	101360.000	101367.000

**Junction Detail Of Rishi (NH717A) To
Rhenock (NH717A)
(96+070 To 101+367)**



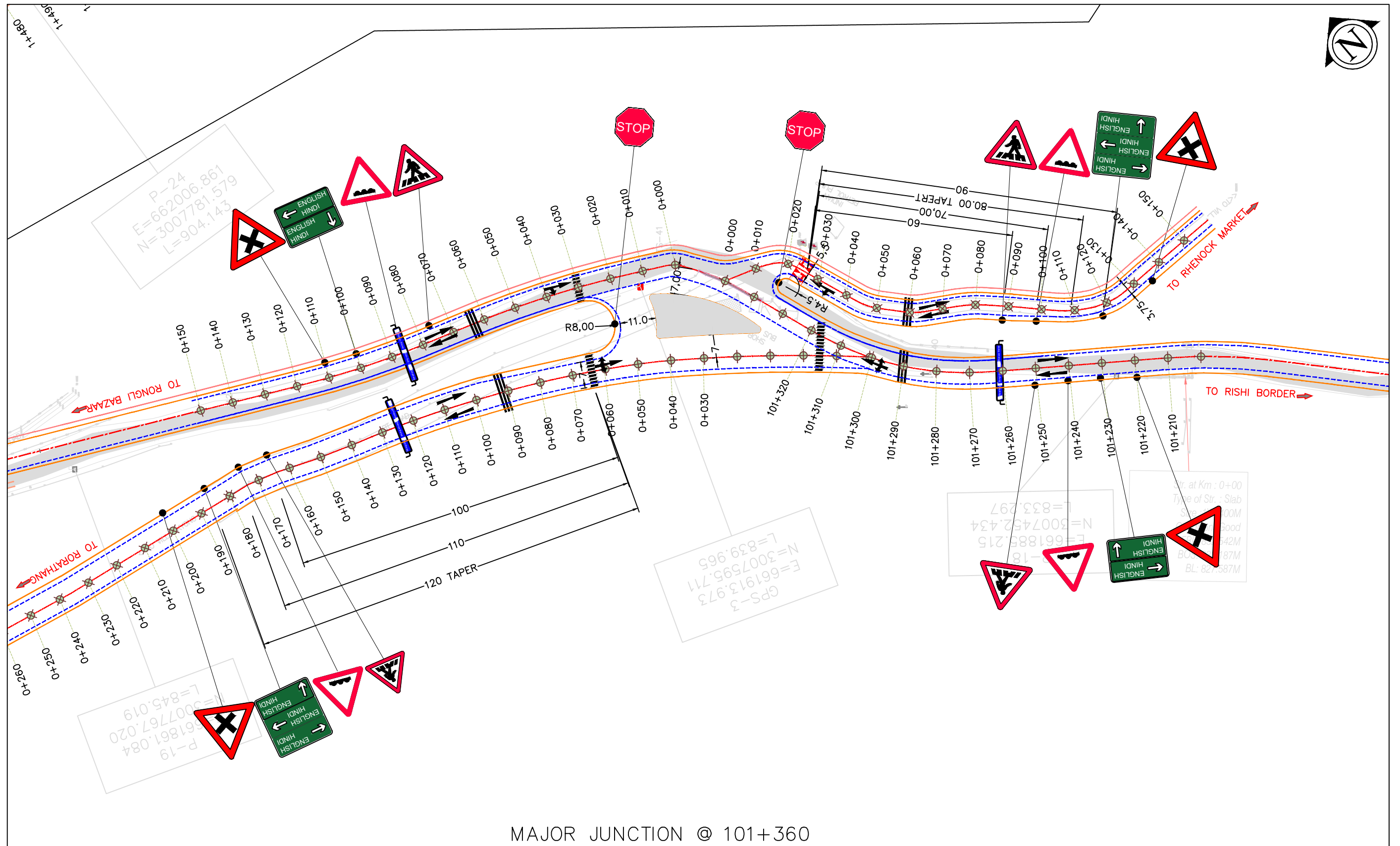
MINOR JUNCTION @ 97+130

Rev. No.	Date	Description For Revision.	Client:	Design Consultant:	Project :	Design By : RK	Title:	
R0	12/09/2024	Draft Detailed Project Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : VR	Junction Detail Of Rishi (NH717A) To Rhenock (NH717A) Minor Junction at CH: 97+130	
R1	21/09/2024	Revised Draft Detailed Project Report				Checked By : AH		
R2	21/10/2024	Revised as per the Observations				Approved By : SS	Dwg No: XPL/DSD/SK/KM20.6/JCN-01	
						Scale : NTS	Sheet: 01 OF 04	Date : DEC-2024



MINOR JUNCTION @ 97+980

Rev. No.	Date	Description For Revision.	Client:	Design Consultant:	Project :	Design By : RK	Title: Junction Detail Of Rishi (NH717A) To Rhenock (NH717A) Minor Junction at CH: 97+980	
R0	12/09/2024	Draft Detailed Project Report	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : VR		
R1	21/09/2024	Revised Draft Detailed Project Report				Checked By : AH		
R2	21/10/2024	Revised as per the Observations				Approved By : SS		
						Scale : NTS	Sheet: 02 OF 04	Date : DEC-2024

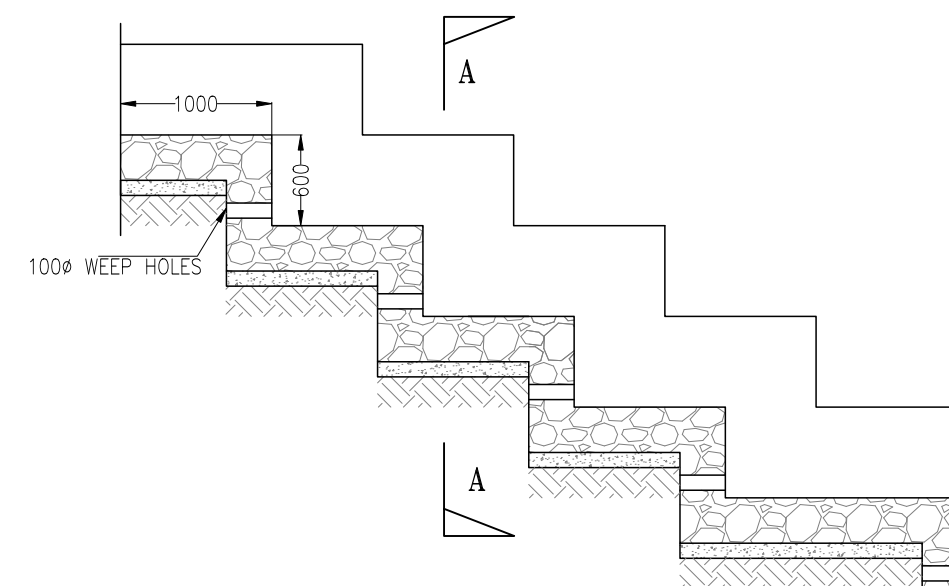
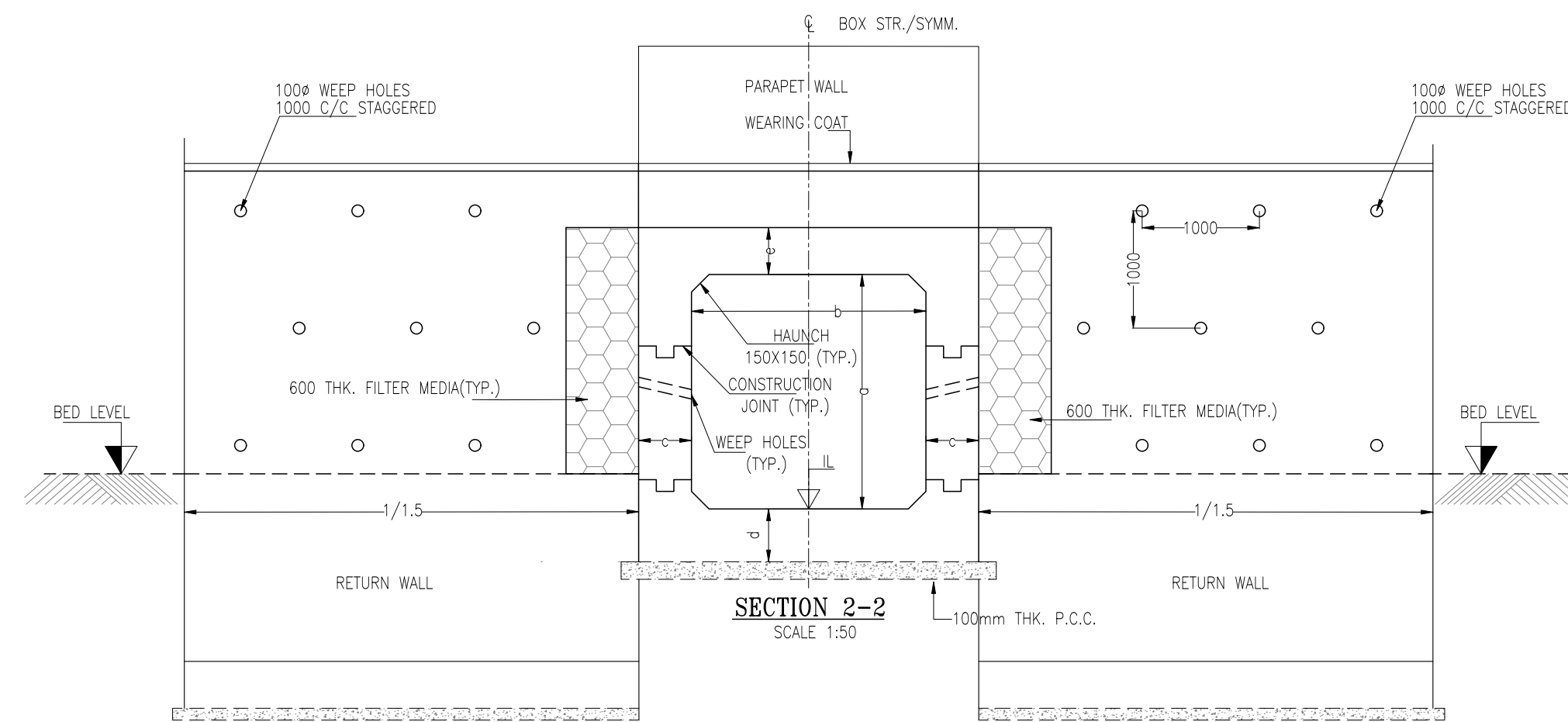


MAJOR JUNCTION @ 101+360

Rev. No.	Date	Description For Revision.	Client:	Design Consultant:	Project :	Design By : RK	Title:	
R0	12/09/2024	Draft Detailed Project Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : VR	Junction Detail Of Rishi (NH717A) To Rhenock (NH717A) Major Junction at CH: 101+360	
R1	21/09/2024	Revised Draft Detailed Project Report				Checked By : AH		
R2	21/10/2024	Revised as per the Observations				Approved By : SS	Dwg No: XPL/DSD/SK/KM20.6/JCN-04	
						Scale : NTS	Sheet: 04 OF 04	Date : DEC-2024

GENERAL ARRANGEMENT DRAWINGS

CULVERT DRAWINGS



A cross-sectional diagram of a concrete structure. The diagram shows a central rectangular cavity. The top surface is labeled 'PCC 1:3:6'. The side walls are labeled 'RRM IN MM 1:4'. The bottom of the cavity is labeled '100mm WEEP HOLES'. The entire structure is shown in cross-section with diagonal hatching. Below the diagram, the text 'SECTION A-A' and 'SCALE 1:50' is written.

A detailed cross-section diagram of a catch pit and manhole assembly. The diagram shows a vertical wall on the left labeled 'CATCH PIT'. Below the wall, a horizontal section of '100mm THK. P.C.C.(M15)' is shown, with a vertical dimension of '100' indicating its thickness. This section is supported by a base of 'COMPACTED EARTH'. To the right, a sloped section of '100mm THK. P.C.C.' is shown, with a vertical dimension of '800' indicating its height. This sloped section is also supported by 'COMPACTED EARTH'. A horizontal section of '100mm THK. P.C.C.' is shown at the top right, with a vertical dimension of '100' indicating its thickness. A 1:1 slope triangle is shown between the sloped and horizontal sections. The diagram is labeled 'DETAIL - 'C'' and 'SCALE 1:40'.

HAUNCH
150X150 (TYP.)

EQ

EQ

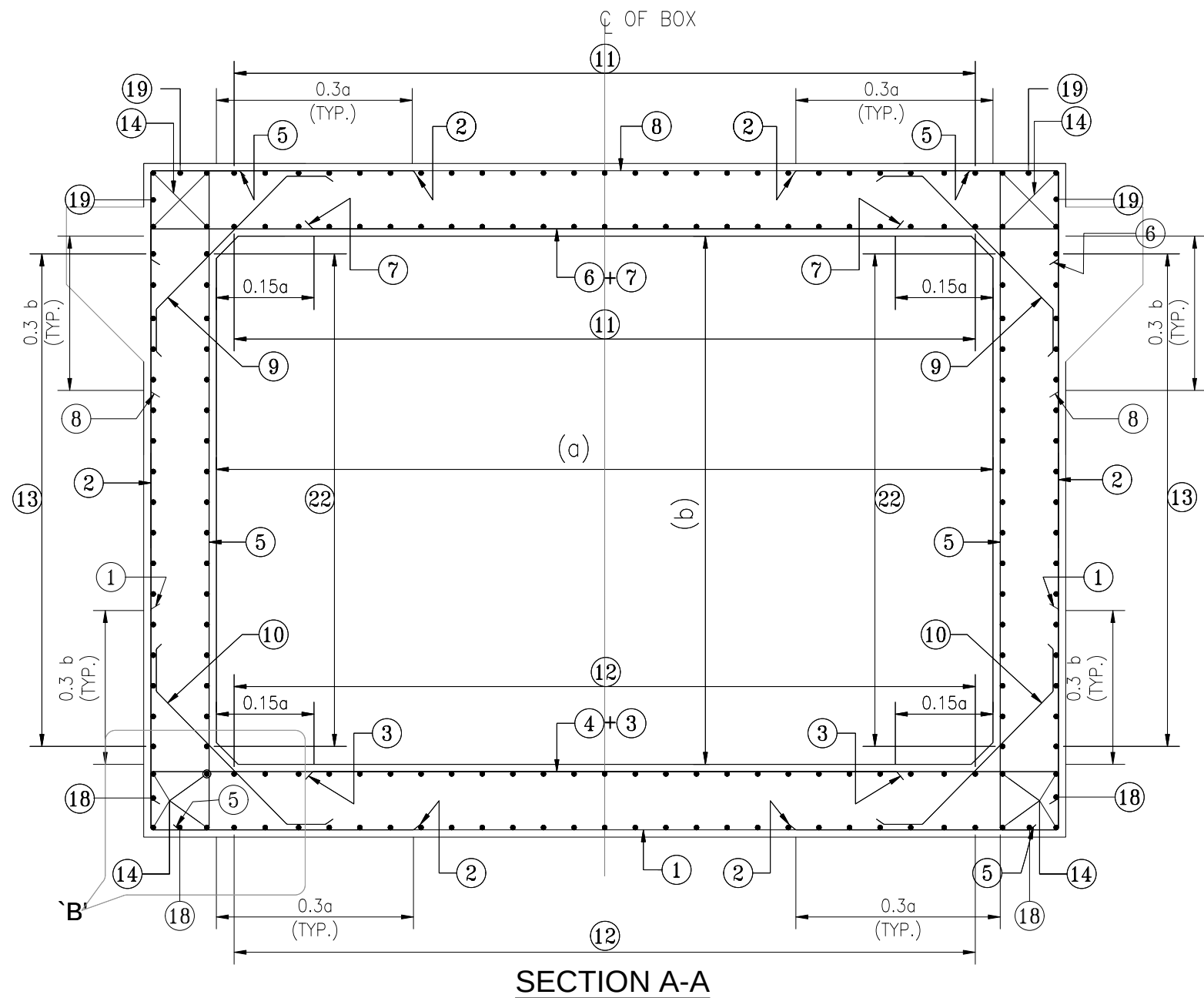
EQ

CONSTRUCTION JOINT

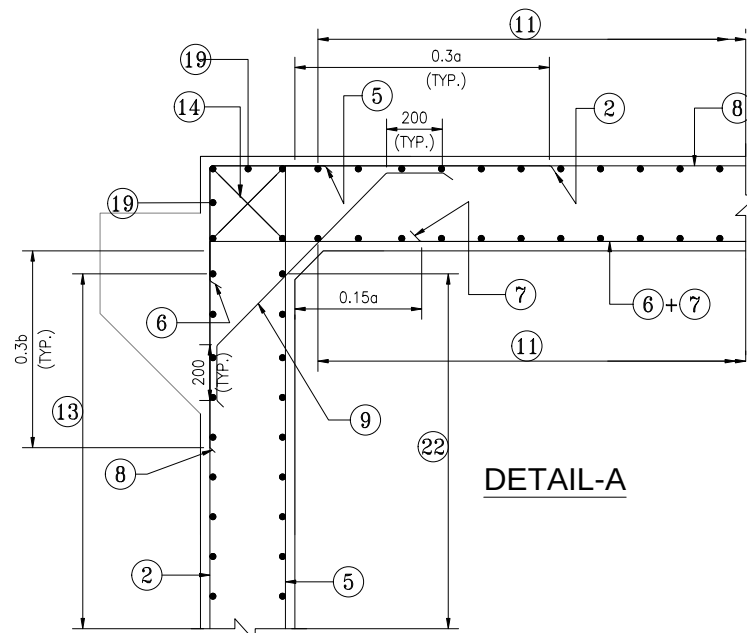
DETAIL 'D'

SCALE 1:40

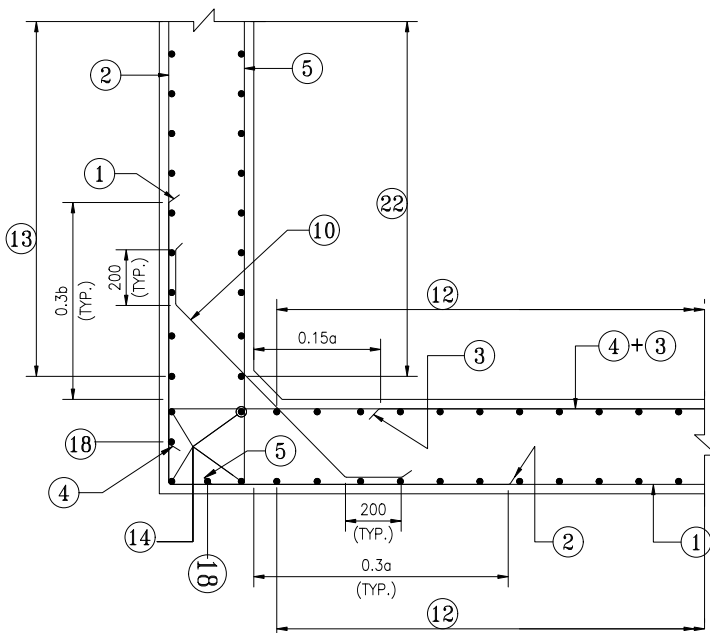
Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title:		
R0-	12-09-2024 Draft Detailed Project report.	 XPLORER In JV with In Association with	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi - 110029	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of Widening And Up-Grading Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Box Culvert With Catchpit			
R1-	21-09-2024 Revised Draft Detailed Project report.				Drawn By : MK			
R2-	21-10-2024 Revised As Per Observation.				Checked By : JS			
					Approved By : VY	Dwg No: XPL/DSD/SK/KM5.3/BC-01		
					Scale : As Shown	Sheet: 1 OF 1	Date : Nov-2024	A2



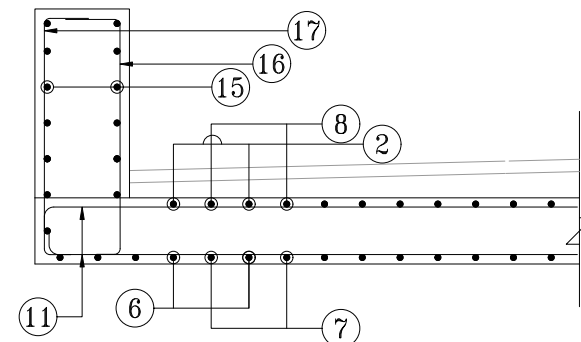
SECTION A-A



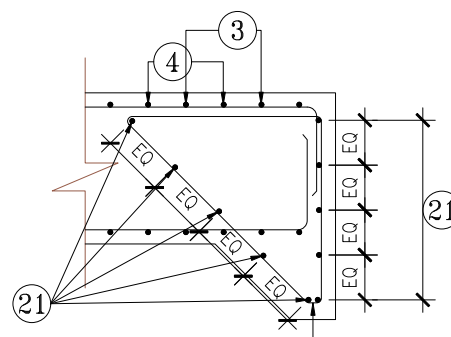
DETAIL-A



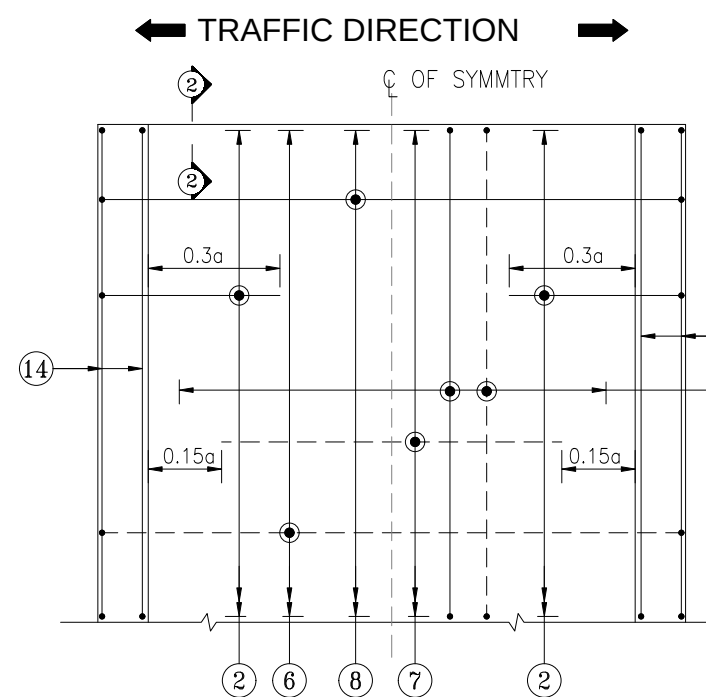
DETAIL-B



CRASH BARRIER

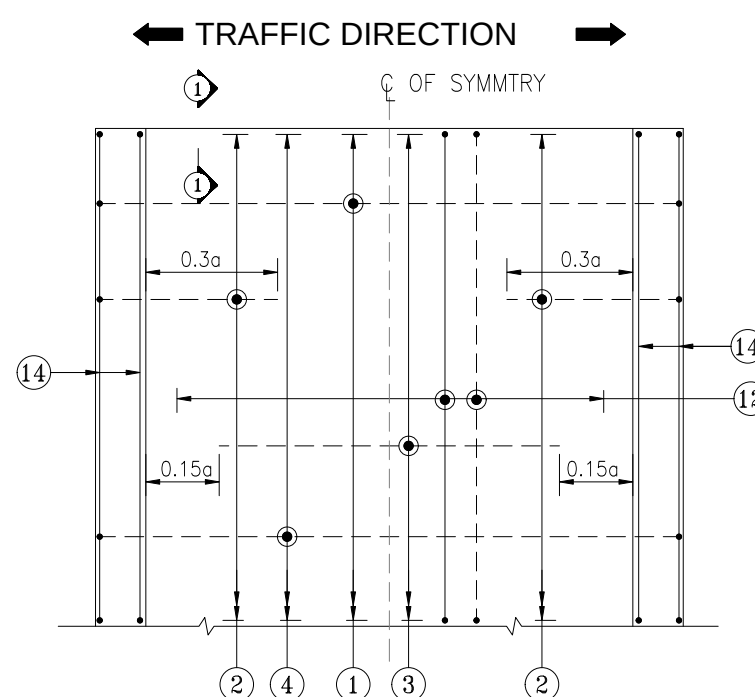


SHEAR KEY DETAILS



PLAN SHOWING REINFORCEMENT
DETAIL OF TOP SLAB

(HAUNCH BAR NOT SHOWN IN PLAN FOR CLARITY)
(SCALE:1:75)



PLAN SHOWING REINFORCEMENT
DETAIL OF BOTTOM SLAB

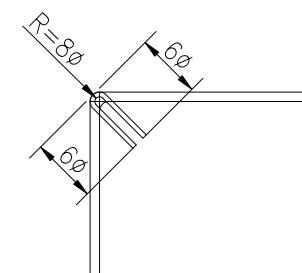
(HAUNCH BAR NOT SHOWN IN PLAN FOR CLARITY)
(SCALE:1:75)

NOTES:-

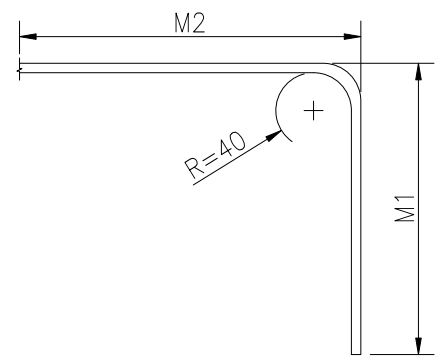
1. ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE RELEVANT DR^
3. CONCRETE GRADE OF
RCC BOX- M30
RCC PAPAPET WALL- M 30
PCC- M15
4. REINFORCEMENT GRADE-FE500 UNCOATED.
5. LAP LENGTH FOR M--30 GRADE OF CONCRETE SHALL BE
a) FAVOURABLE BOND CONDITION - 46 X BAR DIA
b) UNFAVOURABLE BOND CONDITION - 66 X BAR DIA
6. ANCHORAGE LENGTH FOR M-30 GRADE CONCRETE SHALL BE
a) FAVOURABLE BOND CONDITION - 40 X BAR DIA
b) UNFAVOURABLE BOND CONDITION - 58 X BAR DIA
7. MINIMUM CLEAR COVER TO ALL REINFORCEMENT SHALL BE
(i) 75 mm IN BOTTOM SLAB & WALL TOWARDS EARTH FACE.
(ii) 50 mm IN TOP SLAB & IN WALL AWAY FROM EARTH FACE.
8. REINFORCEMENT OF KERB/PAPAPET/ANT CRASH BARRIER/ RAILING SHALL BE PROPERLY EMBEDDED IN TOP SLAB OF BOX BEFORE CASTING.

LEGENDS:-

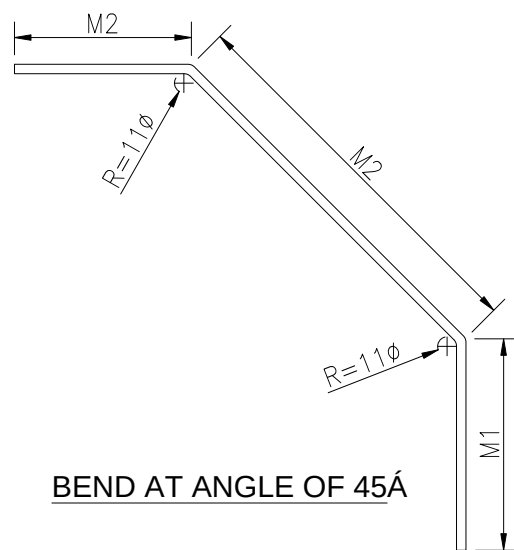
—————	:TOP FACE BARS / OUTER FACE BARS
-----	:BOTTOM FACE BARS / INNER FACE BARS



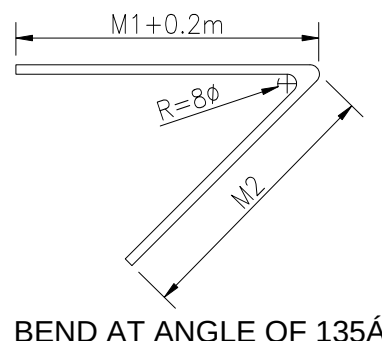
BEND WITH CLOSE HOOKS



BEND AT RIGHT ANGLE



BEND AT ANGLE OF 45°



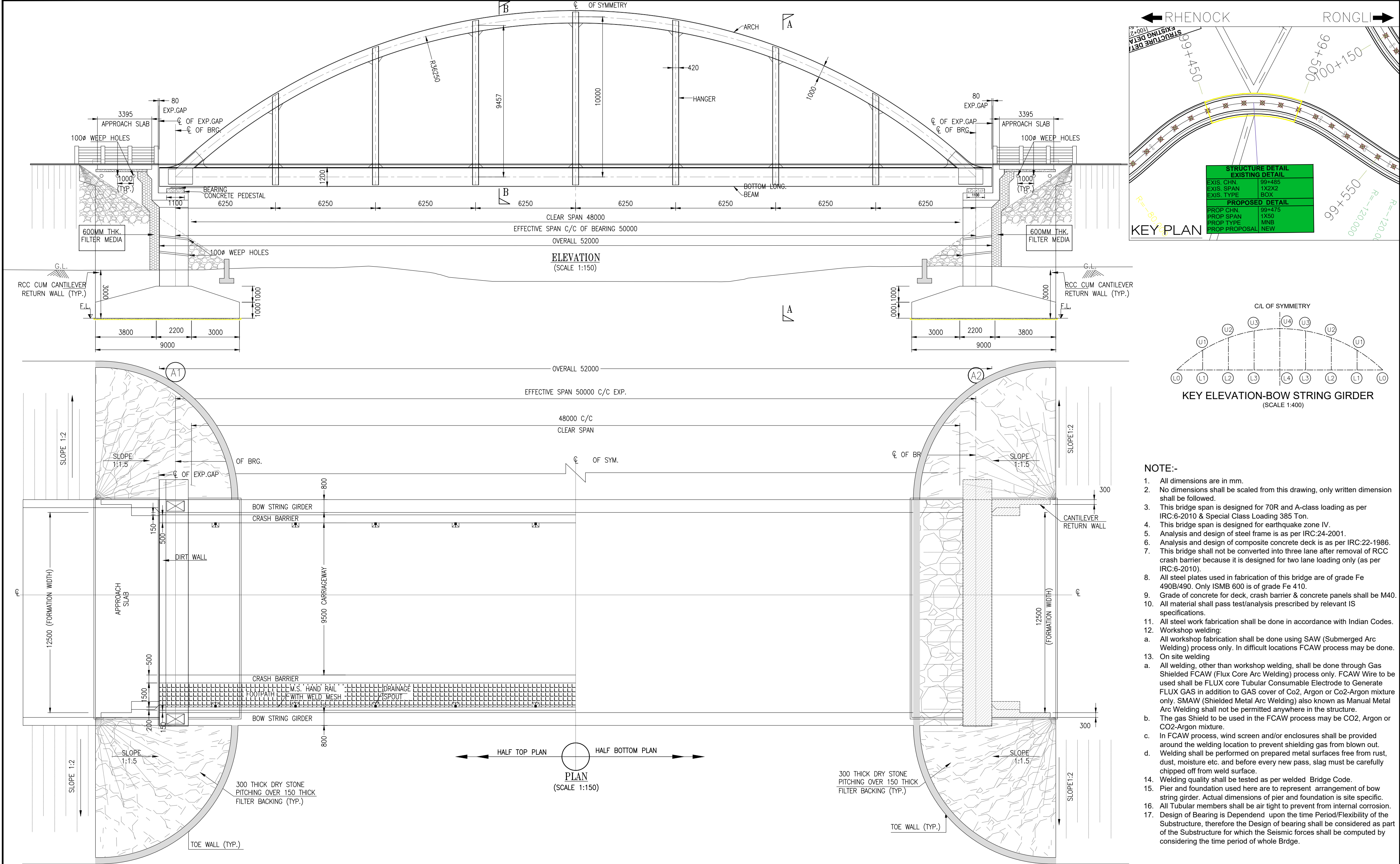
BEND AT ANGLE OF 135°

REINFORCEMENT TABLE :-

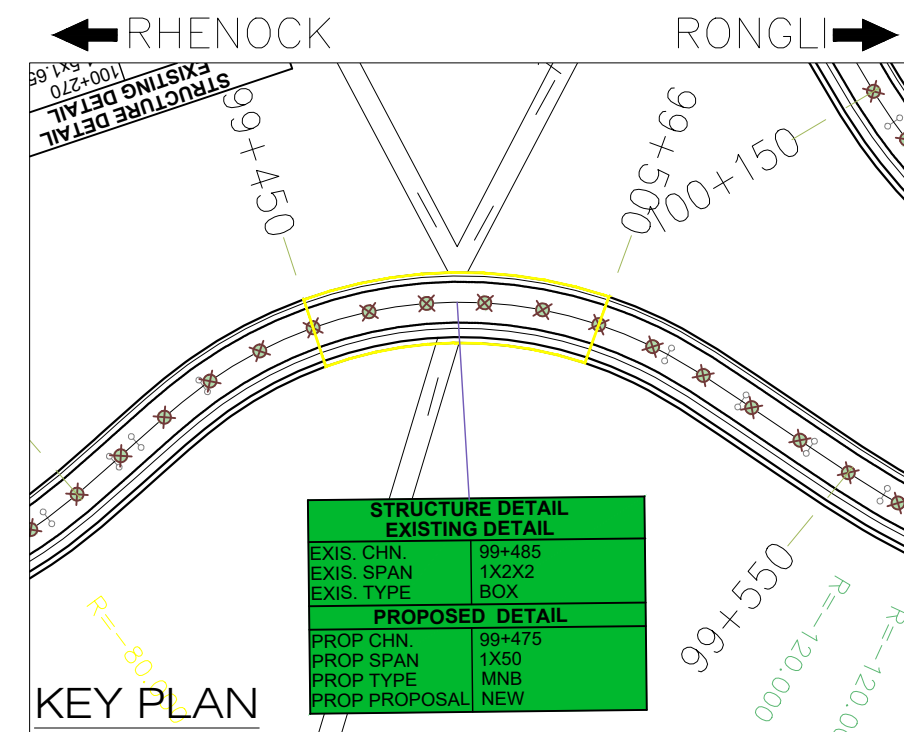
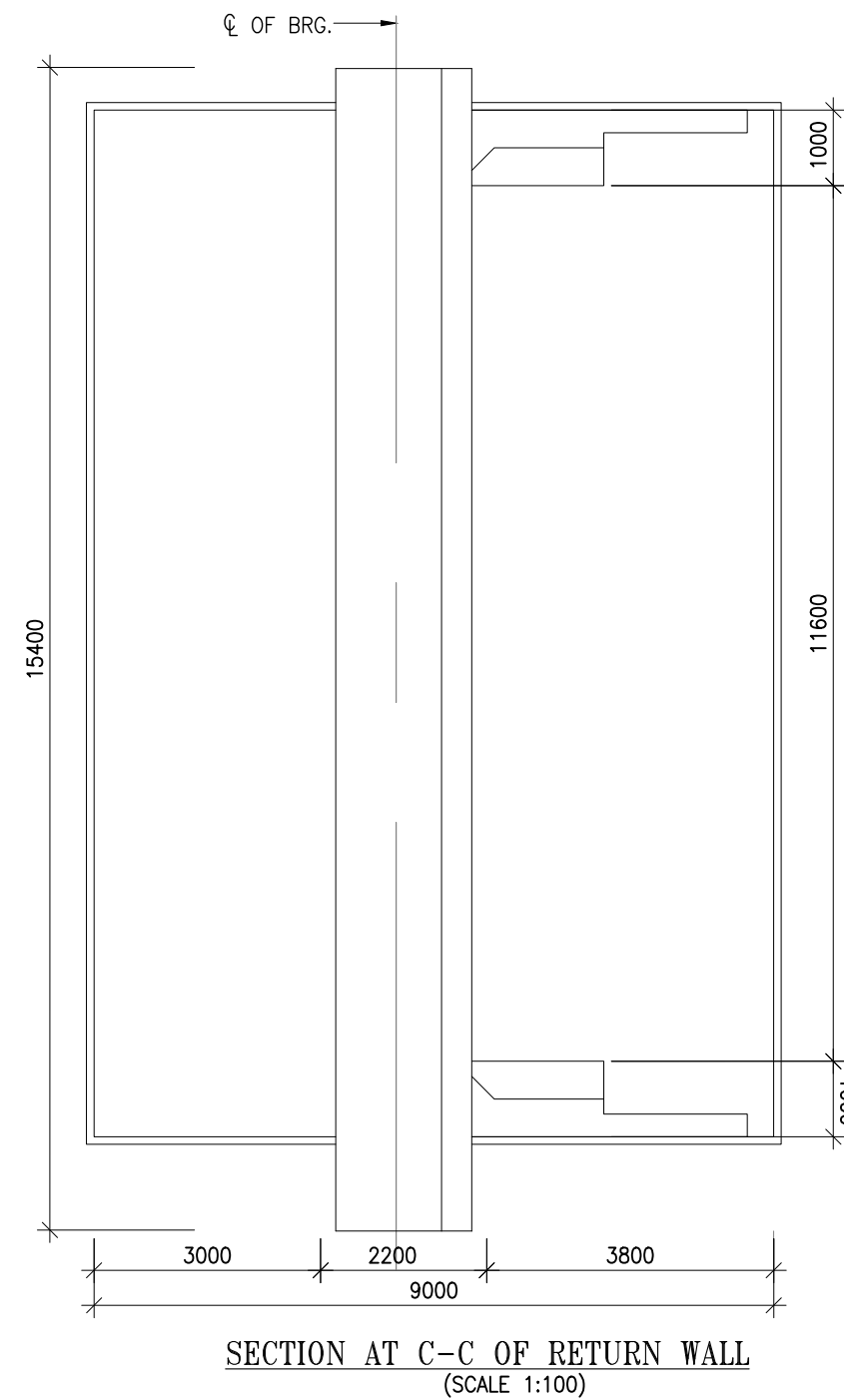
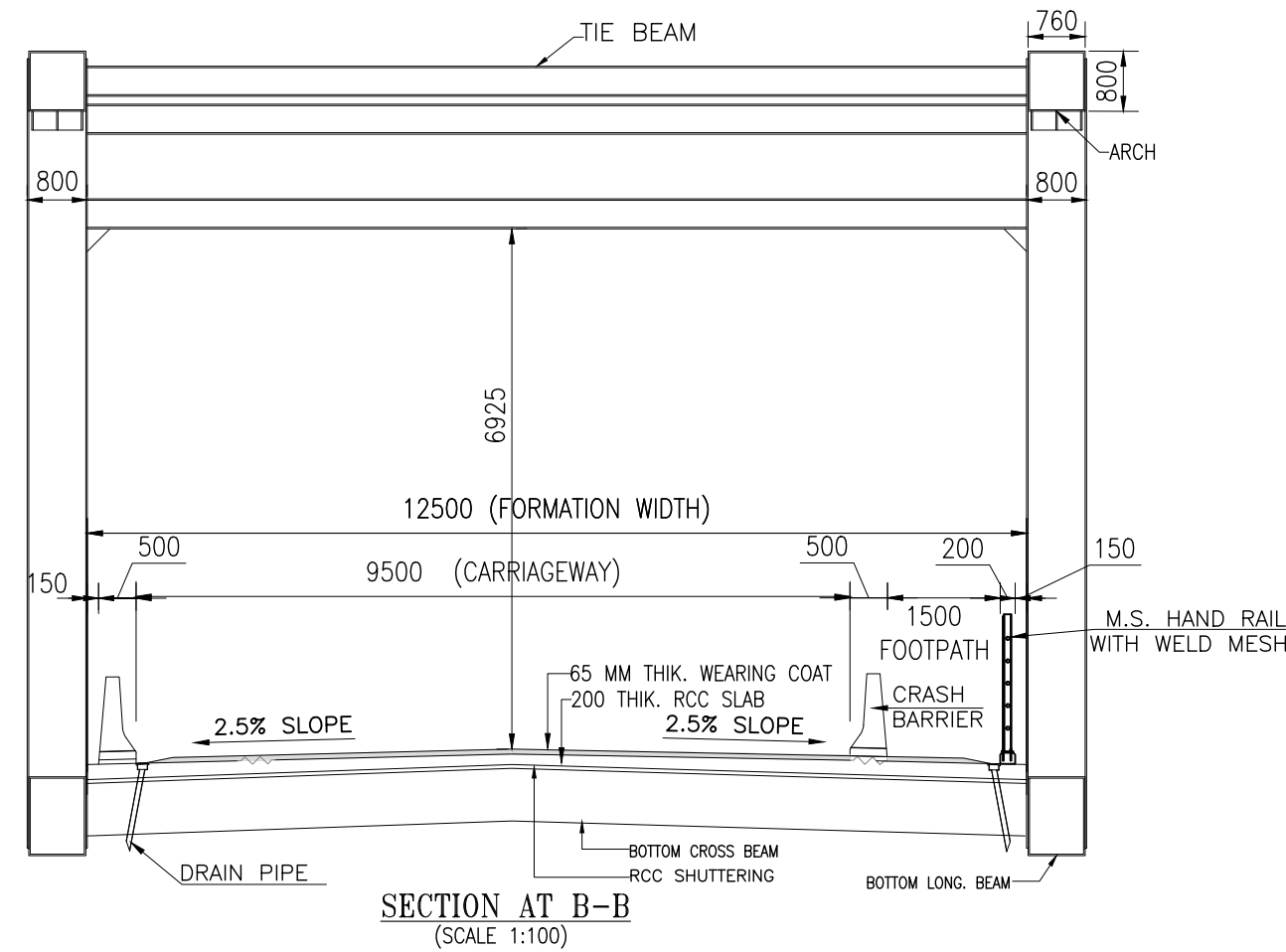
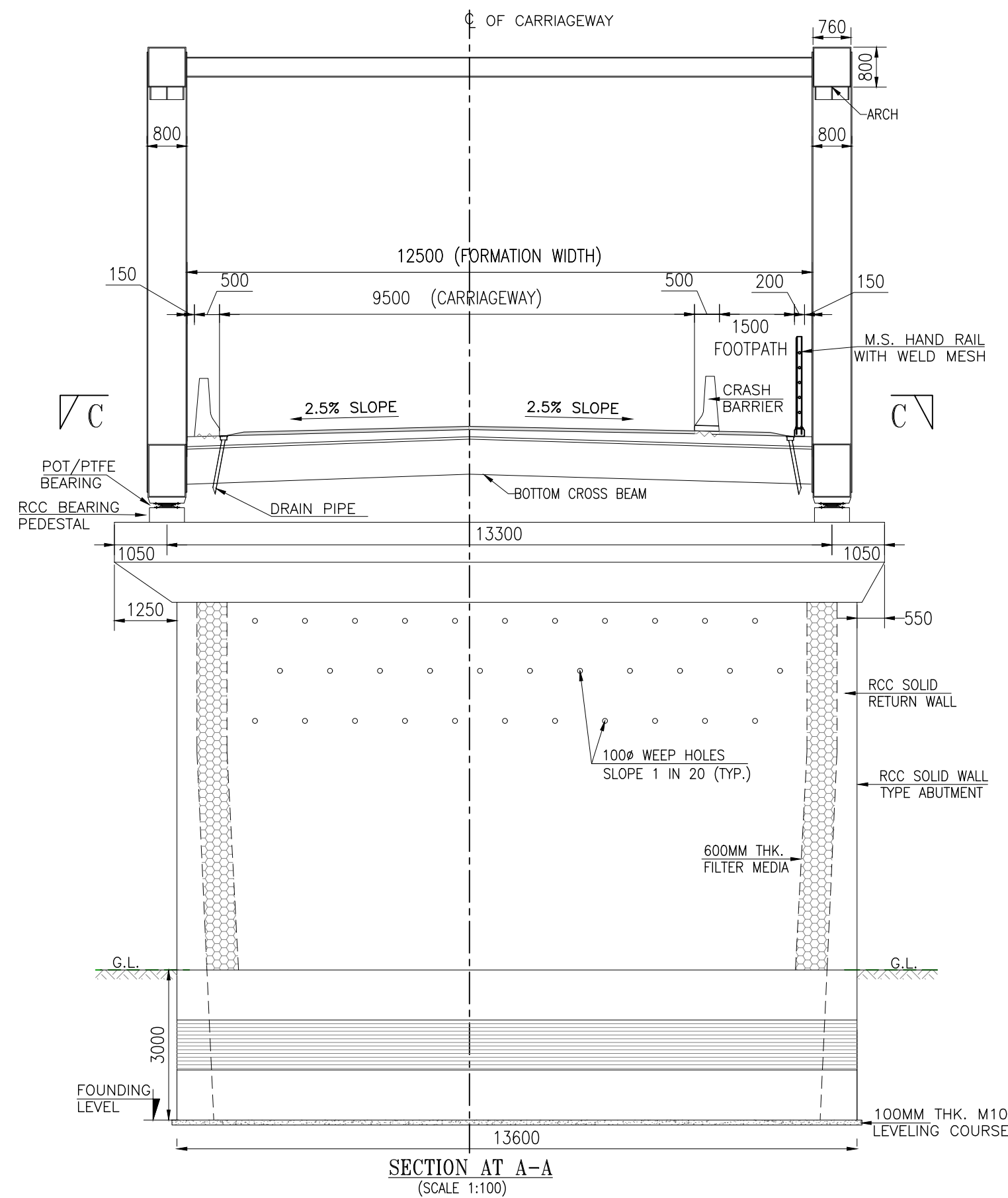
CULVERT SIZE	NUMBER OF REINFORCEMENT																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1 1X2X2	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @ 16 nos.	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @ 4x1	12 ĩ @ 4x1	12 ĩ @250 C/C	12 ĩ @ 10x2 nos.	12 ĩ @200 C/C
2 1X3X3	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @ 16 nos.	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @ 4x1	12 ĩ @ 4x1	12 ĩ @250 C/C	12 ĩ @ 10x2 nos.	12 ĩ @200 C/C
3 1X5X3	16 ĩ @200 C/C	16 ĩ @200 C/C	16 ĩ @200 C/C	16 ĩ @200 C/C	16 ĩ @200 C/C	16 ĩ @200 C/C	16 ĩ @200 C/C	16 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @200 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @ 16 nos.	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @250 C/C	12 ĩ @ 4x1	12 ĩ @ 4x1	12 ĩ @250 C/C	12 ĩ @ 10x2 nos.	12 ĩ @200 C/C

Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title: REINFORCEMENT DRAWING OF BOX CULVERT			
		Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh ĩ 201301 	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi ĩ 110029 	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of rWidening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK				
					Checked By : JS				
					Approved By : VY	Dwg No:XPL/DSD/SK/KM5.3/BC/REIN-1			
					Scale : NTS	Sheet: -1 of 1	Date : Nov-2024	A2	

MINOR BRIDGE



Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title:		
R0-	12-09-2024- DRAFT DETAILED PROJECT REPORT	XPLORER in JV with DSD In Association with M Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	NHIDCL National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK	MINOR BRIDGE (GAD) BOW STRING STEEL GIRDER AT CH:99+475 - SPAN 1X50		
R1-	21-09-2024- REVISED DRAFT DETAILED PROJECT REPORT				Checked By : JS			
					Approved By : VY	Dwg No: XPL/DSD/SK/KM5.3/MNB-01		
					Scale : As Shown	Sheet: 1 OF 2	Date : Nov-2024	A2



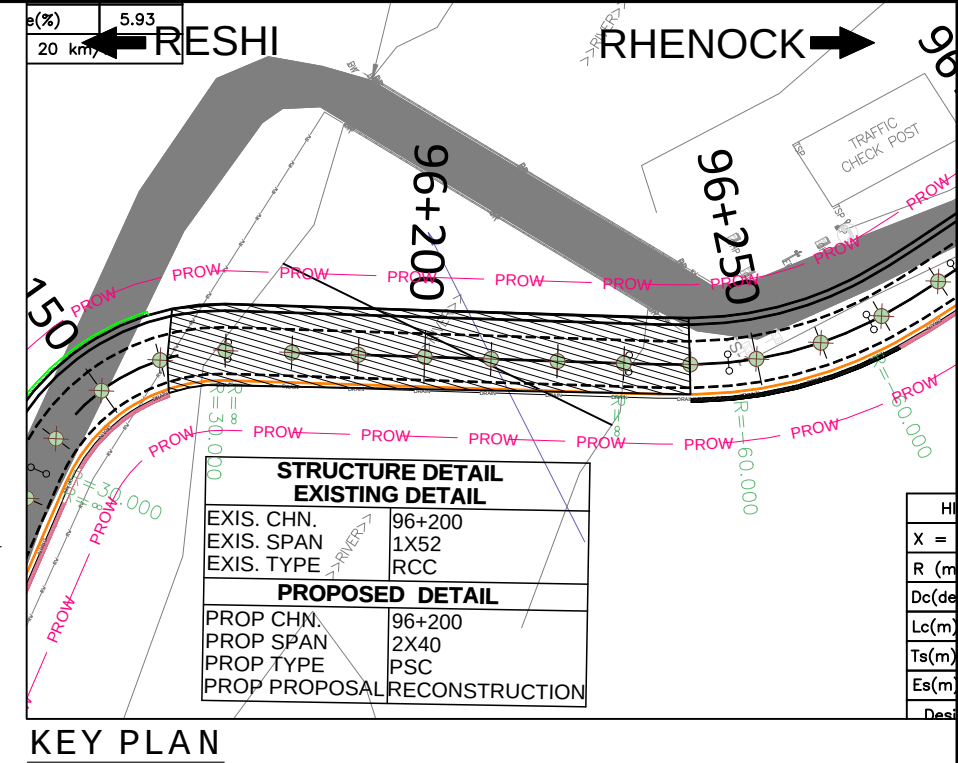
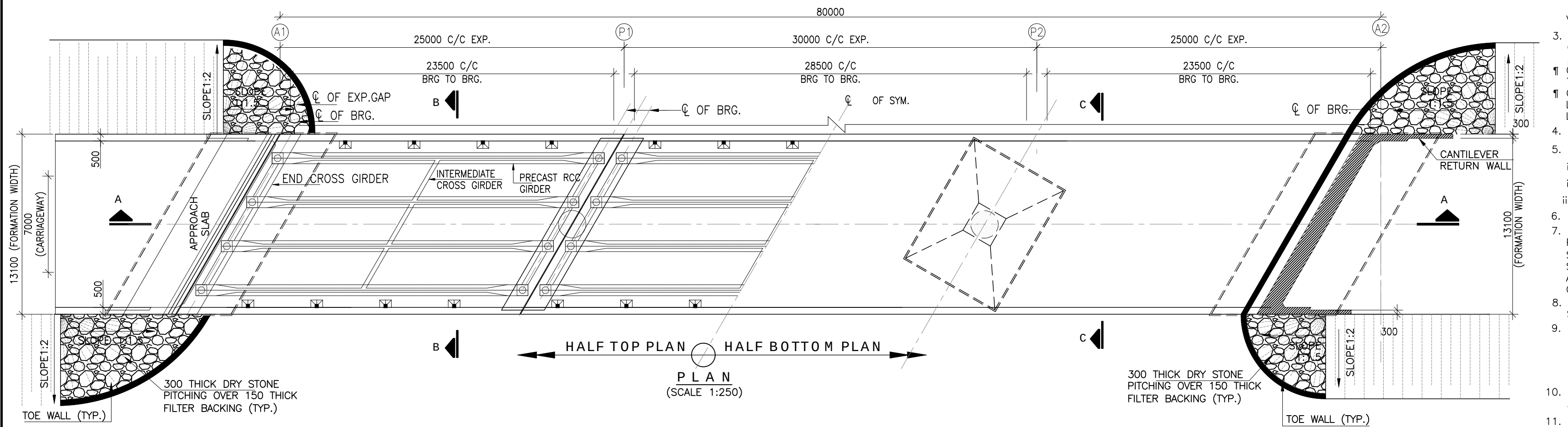
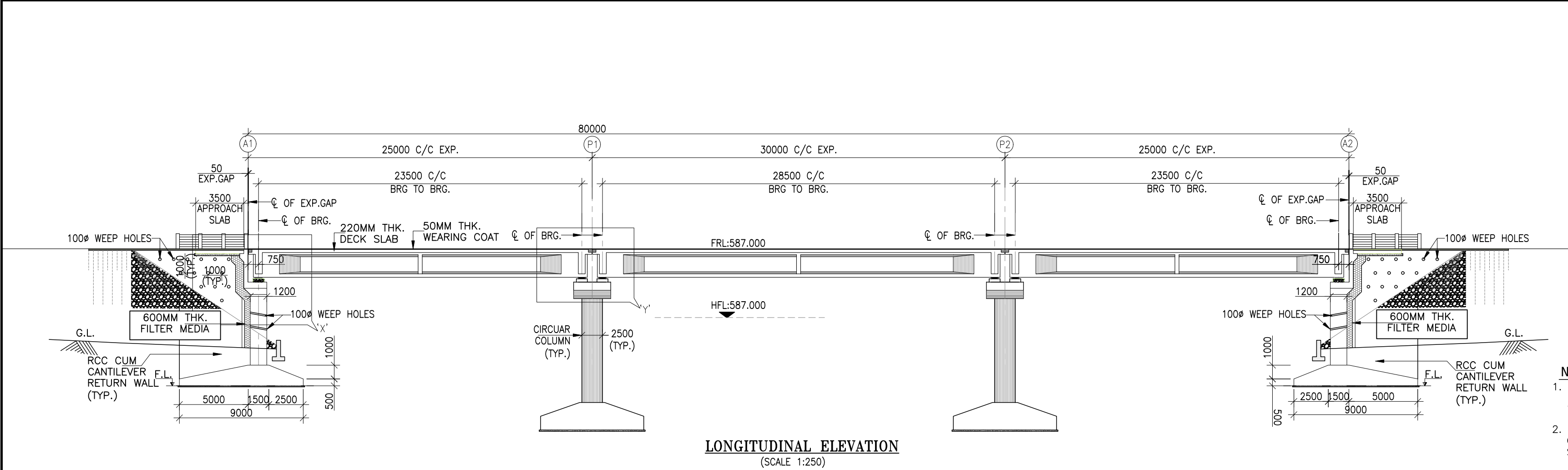
1. TYPE OF BRIDGE - BOW STRING
2. LENGTH OF BRIDGE - 50 Mtr.
3. SPAN ARRANGEMENT OF BRIDGE - 1NOS.@50 Mtr, C/C
4. OVERALL WIDTH - 12.5 Mtr.
5. CLEAR ROADWAY - 9.5 Mtr.
6. FORMATION LEVEL - RL- 734.940 Mtr.
7. TYPE OF FOUNDATION - OPEN
8. PROPOSED FOUNDATION LEVEL
9. TYPE OF BEARINGS - SPHERICAL
10. TYPE OF EXPANSION JOINT - FILLER TYPE
11. APPROACH SLAB - RCC
12. S.B.C - 33.2 T/M2.

NOTE:-

1. All dimensions are in mm.
2. No dimensions shall be scaled from this drawing, only written dimension shall be followed.
3. This bridge span is designed for 70R and A-class loading as per IRC:6-2010 & Special Class Loading 385 Ton.
4. This bridge span is designed for earthquake zone IV.
5. Analysis and design of steel frame is as per IRC:24-2001.
6. Analysis and design of composite concrete deck is as per IRC:22-1986.
7. This bridge shall not be converted into three lane after removal of RCC crash barrier because it is designed for two lane loading only (as per IRC:6-2010).
8. All steel plates used in fabrication of this bridge are of grade Fe 490B/490. Only ISMB 600 is of grade Fe 410.
9. Grade of concrete for deck, crash barrier & concrete panels shall be M40.
10. All material shall pass test/analysis prescribed by relevant IS specifications.
11. All steel work fabrication shall be done in accordance with Indian Codes.
12. Workshop welding:
 - a. All workshop fabrication shall be done using SAW (Submerged Arc Welding) process only. In difficult locations FCAW process may be done.
13. On site welding
 - a. All welding, other than workshop welding, shall be done through Gas Shielded FCAW (Flux Core Arc Welding) process only. FCAW Wire to be used shall be FLUX core Tubular Consumable Electrode to Generate FLUX GAS in addition to Co2, Argon or Co2-Argon mixture only. SMAW (Shielded Metal Arc Welding) also known as Manual Metal Arc Welding shall not be permitted anywhere in the structure.
 - b. The gas Shield to be used in the FCAW process may be CO2, Argon or CO2-Argon mixture.
 - c. In FCAW process, wind screen and/or enclosures shall be provided around the welding location to prevent shielding gas from blown out.
 - d. Welding shall be performed on prepared metal surfaces free from rust, dust, moisture etc. and before every new pass, slag must be carefully chipped off from weld surface.
14. Welding quality shall be tested as per welded Bridge Code.
15. Pier and foundation used here are to represent arrangement of bow string girder. Actual dimensions of pier and foundation is site specific.
16. All Tubular members shall be air tight to prevent from internal corrosion.
17. Design of Bearing is Dependend upon the time Period/Flexibility of the Substructure, therefore the Design of bearing shall be considered as part of the Substructure for which the Seismic forces shall be computed by considering the time period of whole Brdge.

Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title: MINOR BRIDGE (GAD) BOW STRING STEEL GIRDER AT CH:99+475 - SPAN 1X50			
R0-	12-09-2024- DRAFT DETAILED PROJECT REPORT	Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301 	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029 	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK				
R1-	21-09-2024- REVISED DRAFT DETAILED PROJECT REPORT				Checked By : JS				
					Approved By : VY	Dwg No: XPL/DSD/SK/KM5.3/MNB-02			
					Scale : As Shown	Sheet: 2 OF 2	Date : Nov-2024	A2	

MAJOR BRIDGE

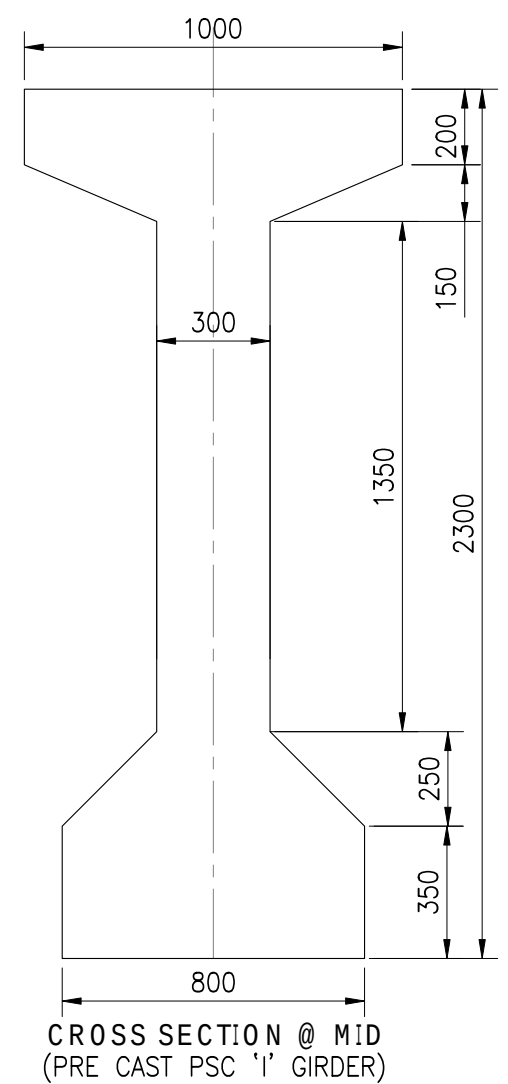
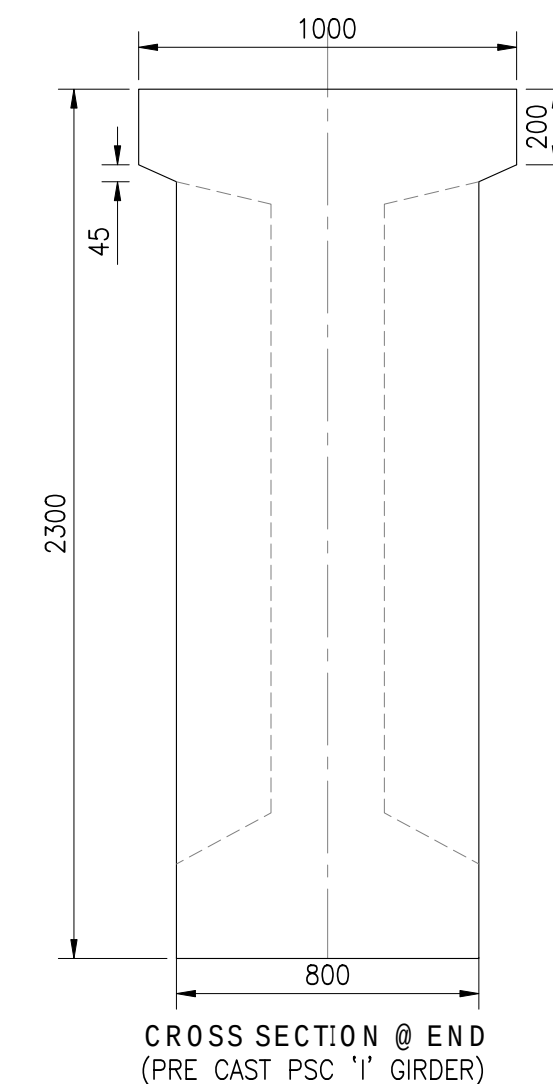
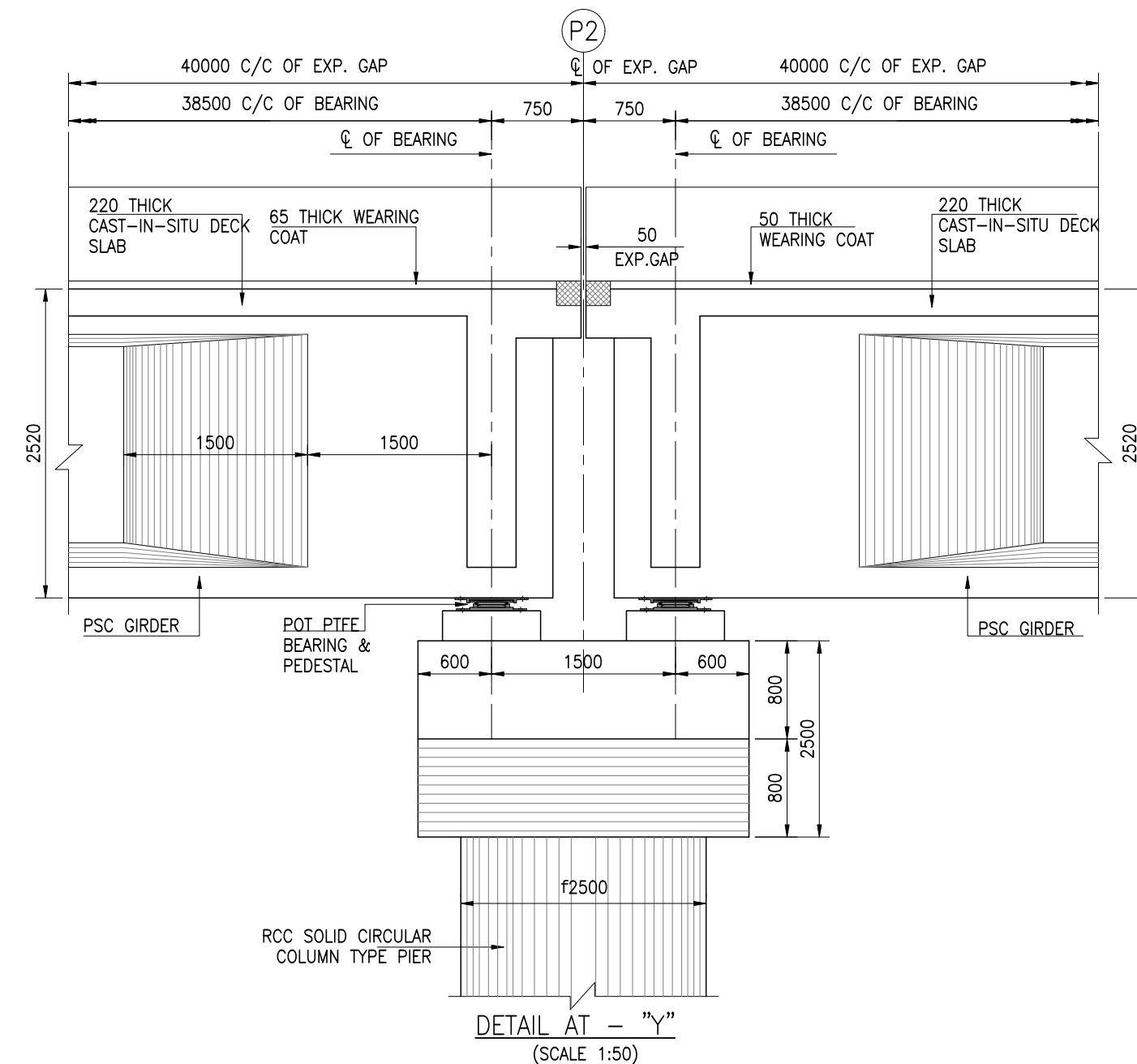
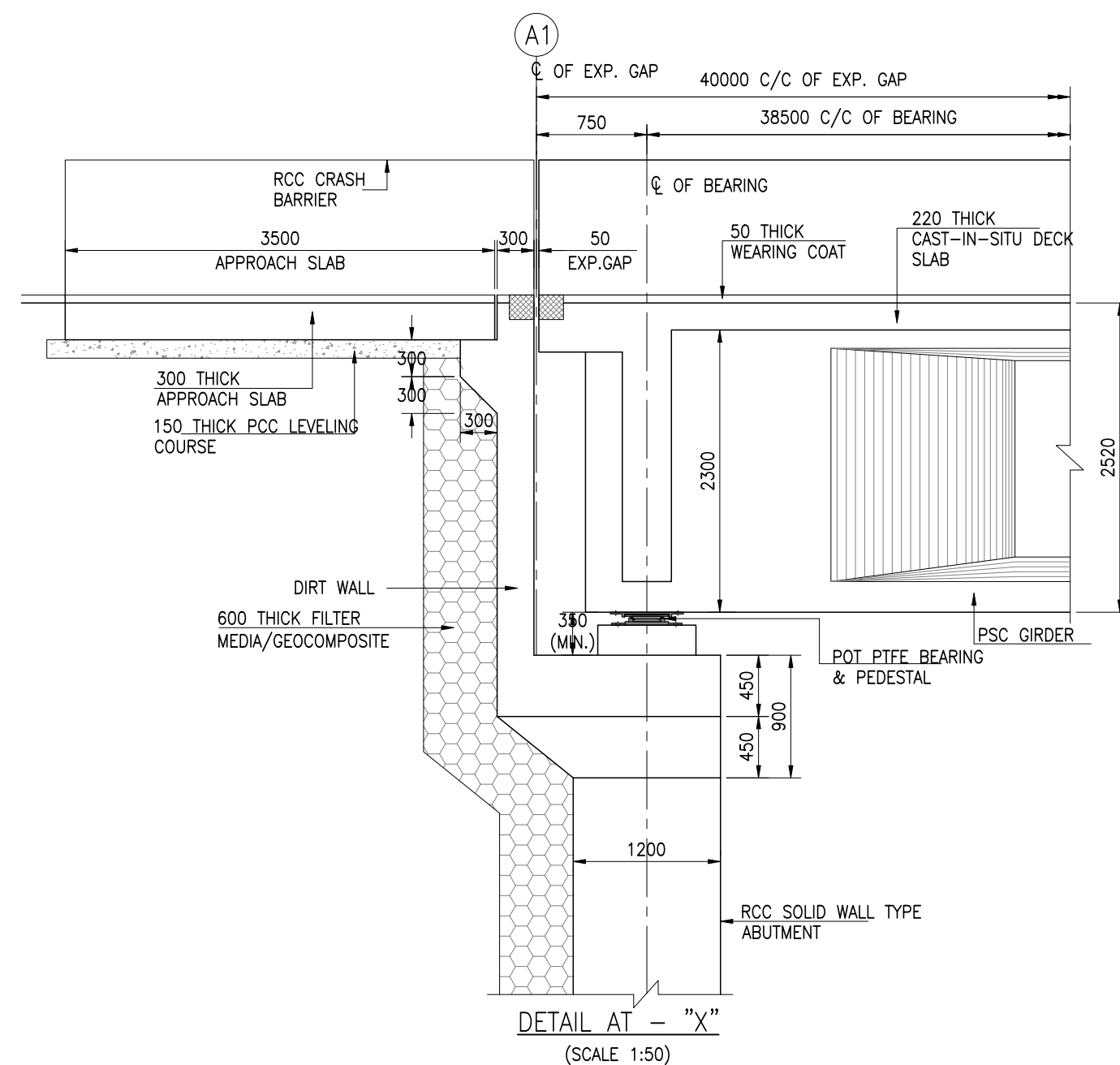
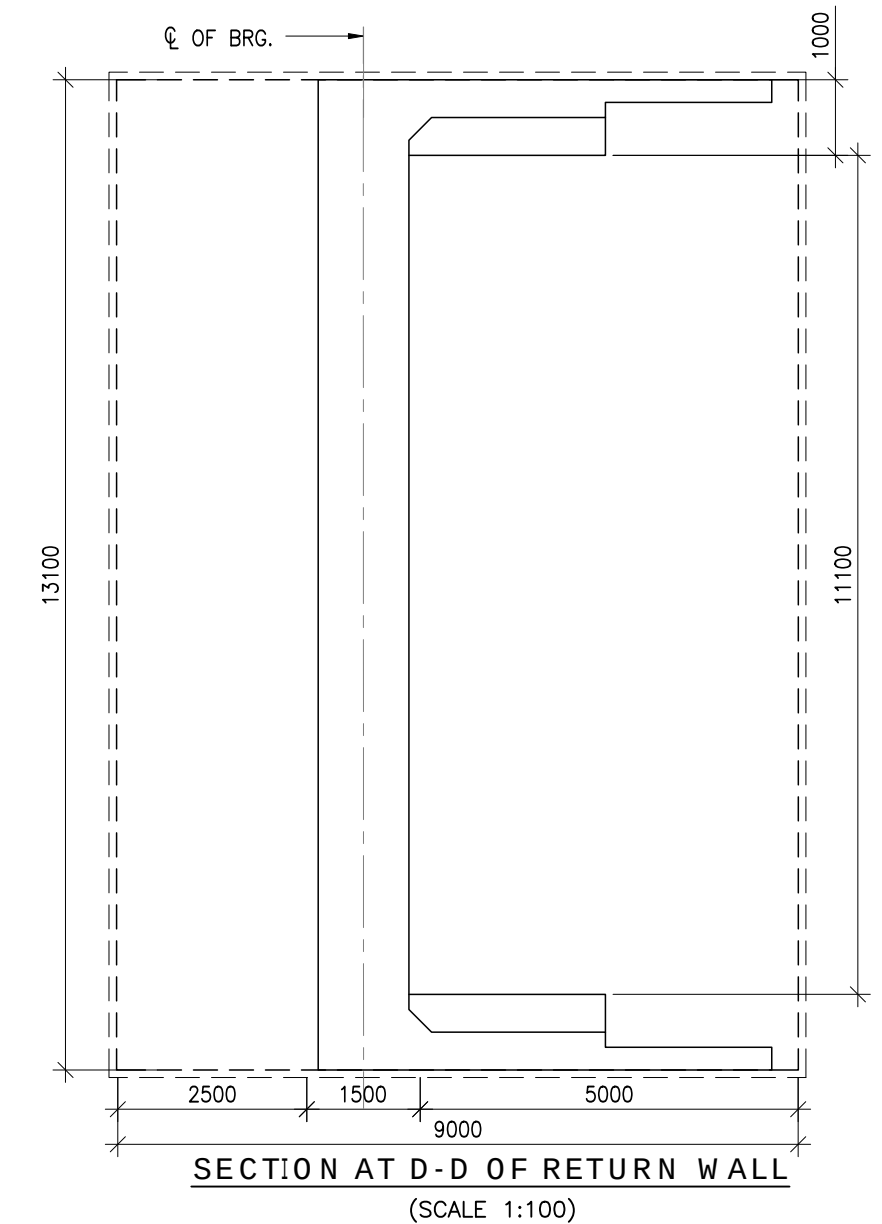
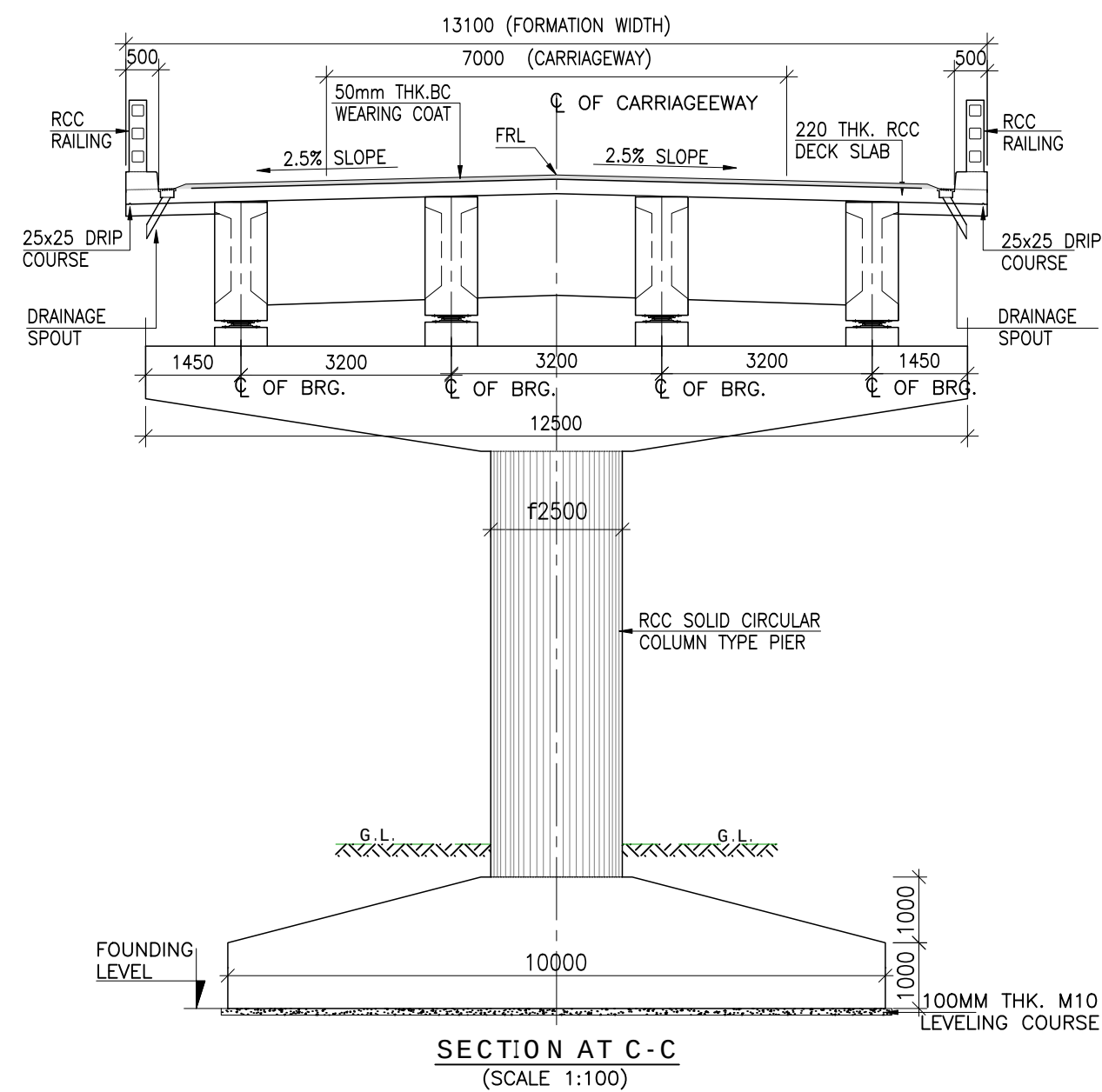
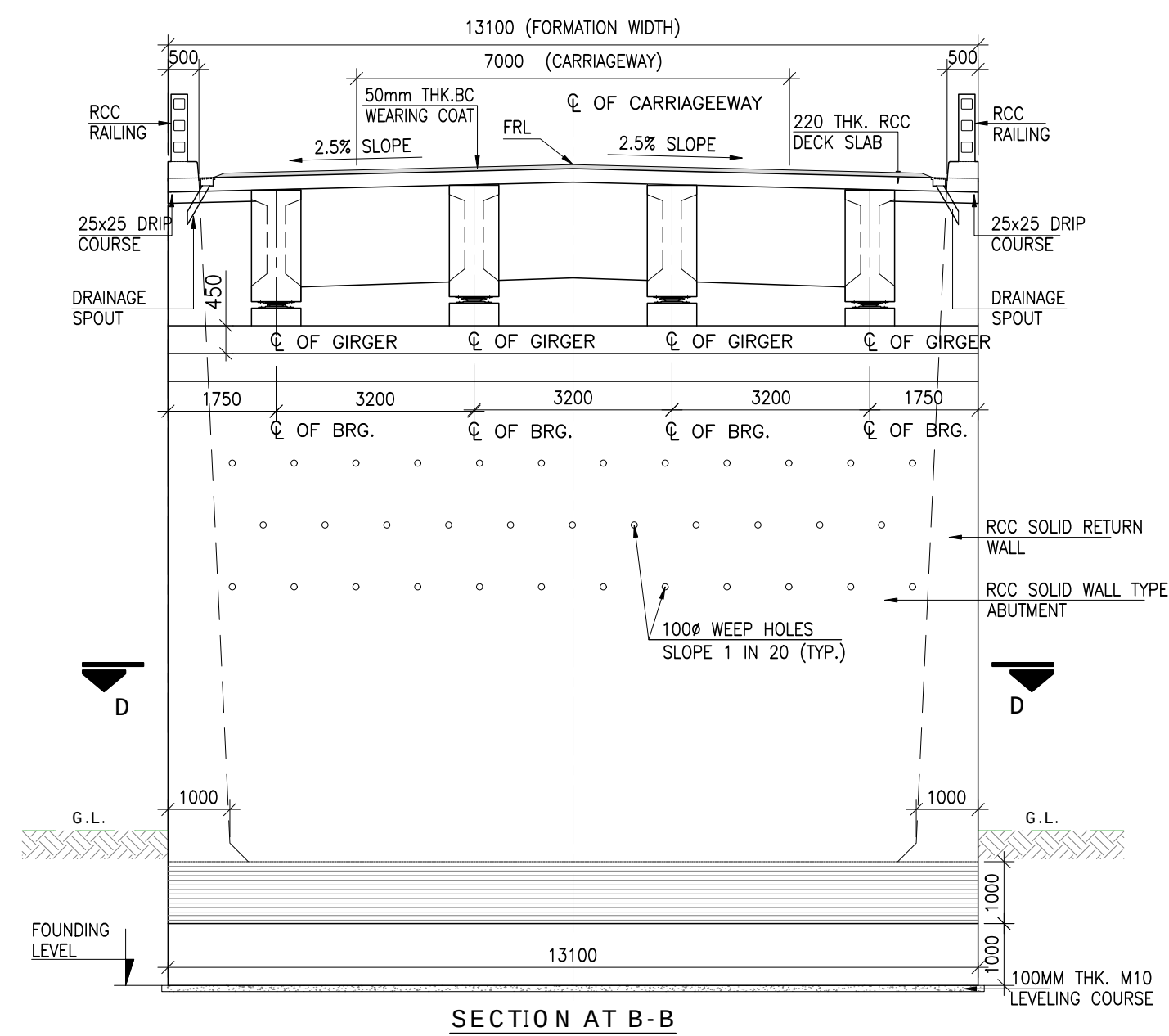


- NOTES:-**
- ALL DIMENSION ARE IN MILLIMETERS, LEVELS IN METERS AND CHAINAGES IN KILOMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSION TO BE FOLLOWED.
 - CONCRETE SHALL BE DESIGN MIX AND SHALL HAVE MINIMUM 28 DAYS CHARACTERISTIC STRENGTH ON 150mm CUBES FOR ALL ELEMENTS OF STRUCTURES AS INDICATED BELOW:-
 - i) RCC CRASH BARRIER M40
 - ii) RCC CAST-IN-SITU DECK SLAB (SUPERSTRUCTURE) M40
 - iii) PSC GIRDER (SUPERSTRUCTURE)..... M45
 - iv) RCC CROSS GIRDER (SUPERSTRUCTURE) M35
 - v) SUBSTRUCTURE & FOUNDATION M35
 - vi) APPROACH SLAB M30
 - vii) PCC LEVELING (UNDER FOUNDATION) M10
 - viii) PCC LEVELING (UNDER APPROACH SLAB) M15
 - PROPOSED STRUCTURE IS DESIGNED IN ACCORDANCE WITH PROVISION OF CLAUSE 204.3 AND 204.5 OF IRC:6-2017 FOR MOST SEVERE LOADING OF:
 - 1) ONE LANE OF IRC CLASS 70R LOADING AND ONE LANE OF IRC CLASS A OR THREE LANE OF IRC CLASS A LOADING WHEN FOOTPATH IS IN POSITION.
 - 1) ONE LANE OF IRC CLASS 70R LOADING AND ONE LANE OF IRC CLASS-A LOADING OR FOUR LANE OF IRC CLASS A OR TWO LANE OF IRC CLASS 70R LOADING, WHEN FOOTPATH IS REMOVED. FOUR
 - WEARING COAT 65MM THK.
 - CLEAR COVER TO OUTERMOST STEEL SHALL BE AS BELOW:-
 - i) SUPERSTRUCTURE (CAST IN-SITU) 40mm
 - ii) SUB-STRUCTURE 50mm
 - iii) FOUNDATION 75mm
 - HYSD STEEL - FE:500D (CONFIRM TO IS:1786)
 - ALL SPACE EXCAVATED AND NOT OCCUPIED BY THE FOUNDATION & OTHER PERMANENT WORK SHALL BE REFILLED WITH EARTH UP TO SURFACE OF SURROUNDING GROUND IN ACCORDANCE WITH SECTION 300 OF "MORTH" SPECIFICATION. IN CASE OF EXCAVATION IN ROCK,THE ANNULAR SPACE AROUND FOUNDATION SHALL BE FILLED WITH M15 PCC UP TO THE TOP OF ROCK.
 - STRIP SEAL TYPE EXPANSION JOINTS SHALL BE PROVIDED AS PER MORTH SPECIFICATIONS FOR ROAD AND BRIDGE WORKS.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT APPROVED HIGHWAY DRAWINGS FOR STRUCTURE ORIENTATION, SKEW FRL & CAMBER/SUPER ELEVATION,ETC IF ANY DISCREPANCY FOUND IT SHALL BE BROUGHT TO THE NOTICE OF DESIGN CONSULTANT/PROOF CHECKING CONSULTANT.
 - PROPOSED CHAINAGE / FRL SHALL BE CHECKED AND CONFIRMED AS PER APPROVED PLAN & PROFILE.
 - THE PROJECT ROAD FALLS WITHIN SEISMIC ZONE- III
 - EXPOSURE CONDITION IS MODERATE.
 - NET SBC CONSIDERED IN DESIGN IS 40T/M² & SAME SHALL BE ASCERTAINED PRIOR TO RESTING OF FOUNDATION.
 - TYPE OF FOUNDATION & STRUCTURE IS TENTATIVE, IT MAY BE CHANGE, DURING DETAIL DESIGN. THIS GAD ONLY REFER FOR SPAN ARRANGEMENT.
 - BEARING TYPE: POT PTFE.
 - DRAINAGE SPOUT/PIPE SHALL BE PROVIDED IN DECK SLAB AS PER MORTH 2014
 - LEVELS SHOWN IN RESPECTIVE DRAWINGS MUST BE ASCERTAINED/VERIFIED AT SITE. IN CASE OF ANY DEVIATION, DESIGN AND DRAWINGS ARE REQUIRED TO BE REVISED FOR FURTHER REVIEW BEFORE EXECUTION OF WORK.
 - WEEP HOLES OF 100MM DIA SHALL BE PLACED AT 1.0M C/C HORIZONTALLY AND 1.0M C/C VERTICALLY FROM LWL TO H.F.L IN RETAINING WALLS AND ABUTMENT FOLLOWED IRC 78:2014 AND MORTH SPECIFICATION.
 - BACK FILLING SHALL BE CARRIED OUT WITH SOIL PROPERTIES, C=0 % & $\phi > 30^\circ$ THE SOIL SHALL BE COMPACTED AT OPTIMUM MOISTURE CONTENT TO 98% PROCTOR DENSITY, SHALL BE CONFIRMED AS PER C:710.1.4 OF IRC 78:2014 AND MORTH SPECIFICATIONS.

LEGEND:-

FDN. LVL - FOUNDING LEVEL
FRL - FINISHED ROAD LEVEL
CL - CENTER LINE
E.J - EXPANSION GAP
BRG - BEARING

Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title:		
		Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh 201301	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi 110029	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK	MAJOR BRIDGE (GAD) AT CH-96+200 (SPAN 1X25+1X30+1X25)		
					Checked By : JS			
					Approved By : VY	Dwg No: XPL/DSD/SK/KM15.3/MJB-01		
					Scale : As Shown	Sheet: - 1 of 2	Date : Dec-2024	A2



TYPICAL X-SECTION OF GIRDER
(SCALE 1:20)

Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title:					
		 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh ĩ 201301	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi ĩ 110029	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of fWidening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK	MAJOR BRIDGE (GAD) AT CH-96+200 (SPAN 1X25+1X30+1X25)					
					Checked By : JS						
					Approved By : VY				Dwg No: XPL/DSD/SK/KM15.3/MJB-02		
								Scale : As Shown	Sheet: - 2 of 2	Date : Dec-2024	A2

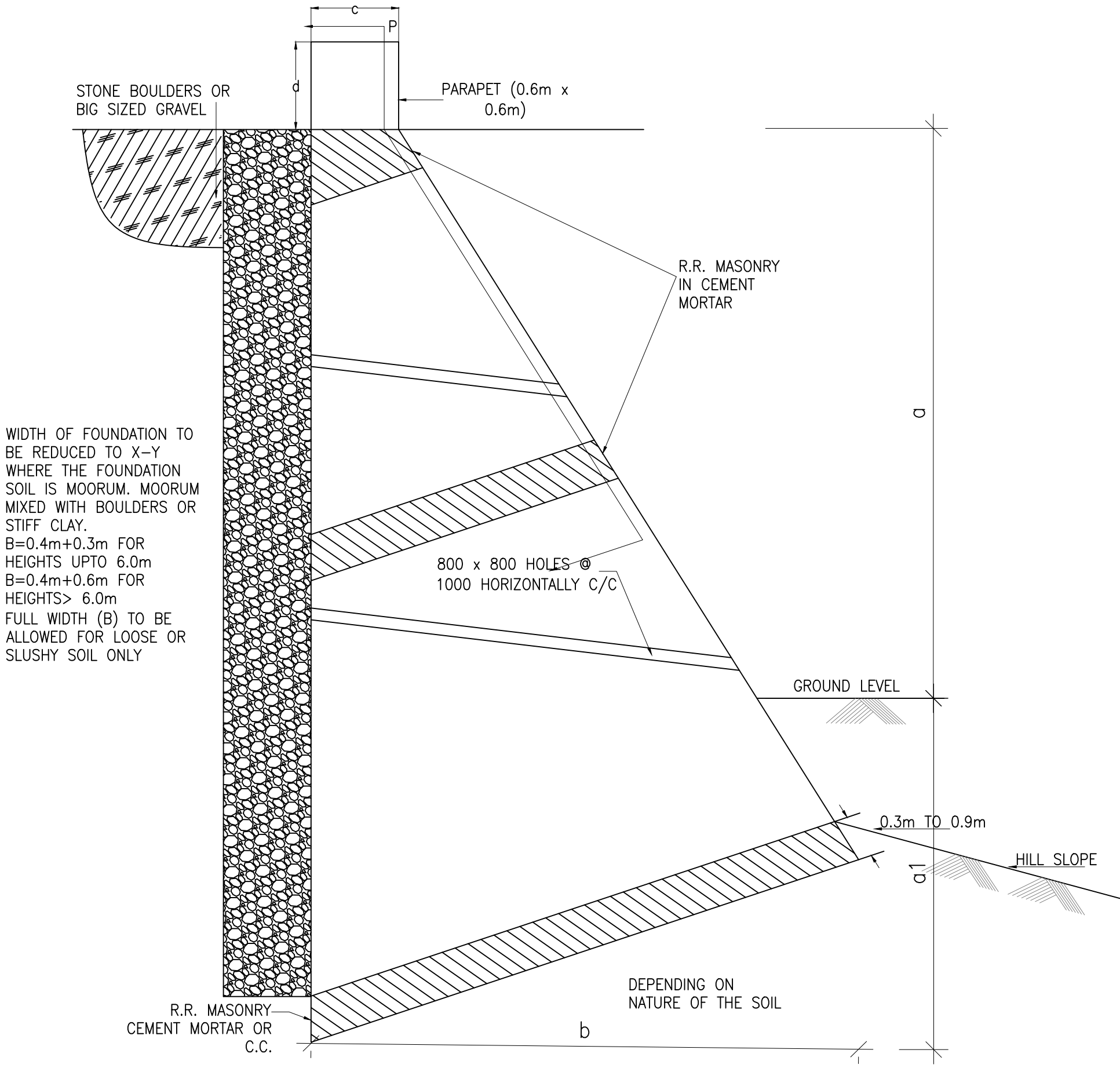
BREAST WALL & RETAINING WALL

TABLE 1: DIMENSIONS OF RETAINING WALL
SCHEDULE OF DIMENSIONS (mm)

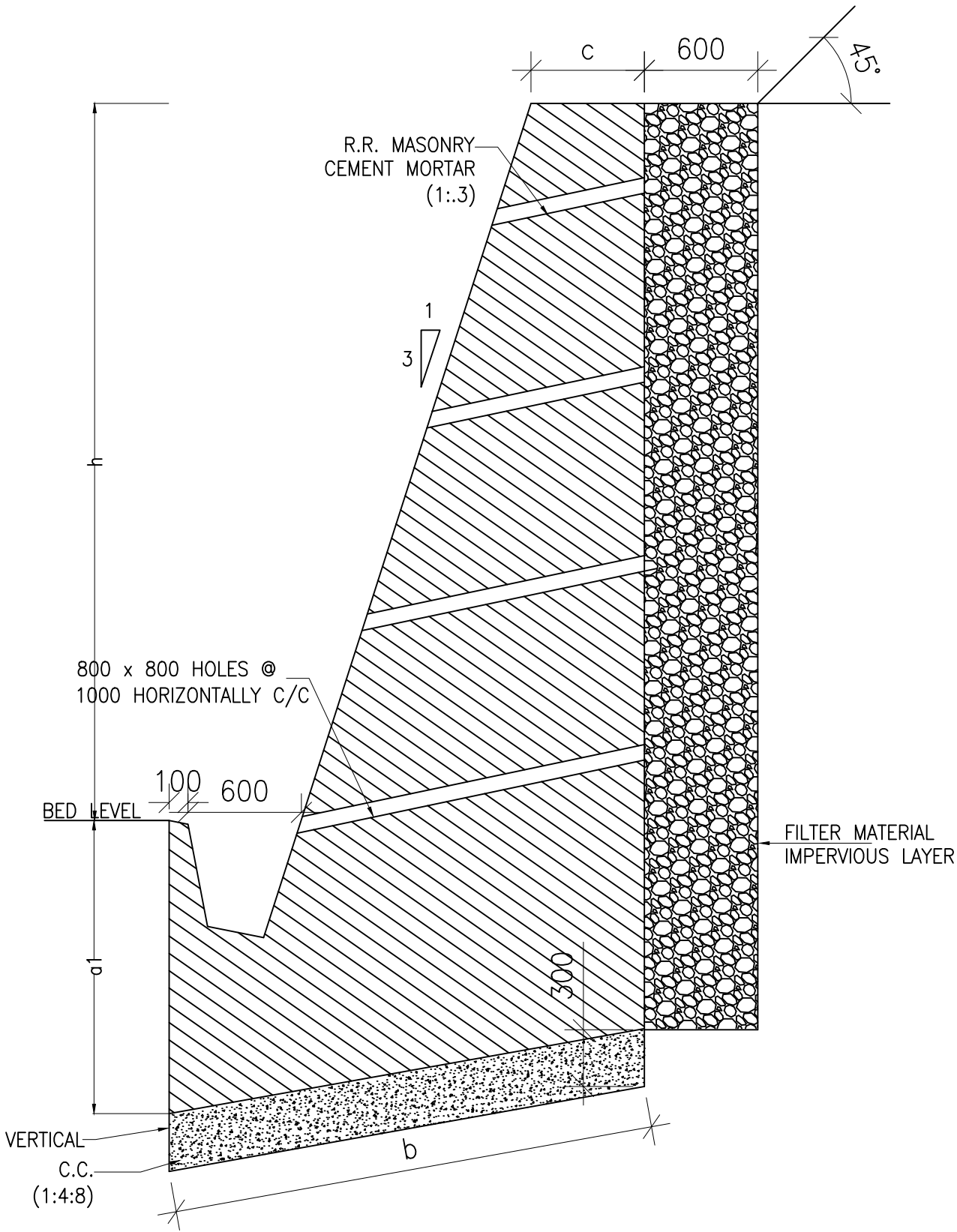
TOTAL HEIGHT 'H'	BASE WIDTH 'b'	AT TOP 'c'	HEIGHT OF PARAPET 'd'	HEIGHT FROM TOP TO GROUND LEVEL 'a'	DEPTH BELOW EGL 'a1'
4000	2250	600	1000	2000	2000
5000	2750	600	1000	3000	2000
6000	3250	600	1000	4000	2000

TABLE 2: DIMENSIONS OF BREAST WALL
SCHEDULE OF DIMENSIONS (mm)

TOTAL HEIGHT 'H'	BASE WIDTH 'b'	AT TOP 'c'	DEPTH BELOW EGL 'a1'
3000	1750	600	1500
4000	2250	600	1500



TYPICAL CROSS SECTION RETAINING WALL



TYPICAL CROSS SECTION BREAST WALL

Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title: TYPICAL CROSS SECTION OF PLUM CONCRETE RETAINING WALL & BREAST WALL			
R0-	12-09-2024- DRAFT DETAILED PROJECT REPORT	XPLORER CONSULTANCY SERVICES PVT. LTD. In joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Project : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradaation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK				
R1-	21-09-2024- REVISED DRAFT DETAILED PROJECT REPORT				Checked By : JS				
					Approved By : VY				
					Scale : - NTS				
						Dwg No: XPL/DSD/SK/KM5.3/RW&BW	Sheet: - 1 of 1	Date : Nov-2024	A2

TABLE 1: SCHEDULE OF DIMENSIONS
SCHEDULE OF DIMENSIONS (mm)

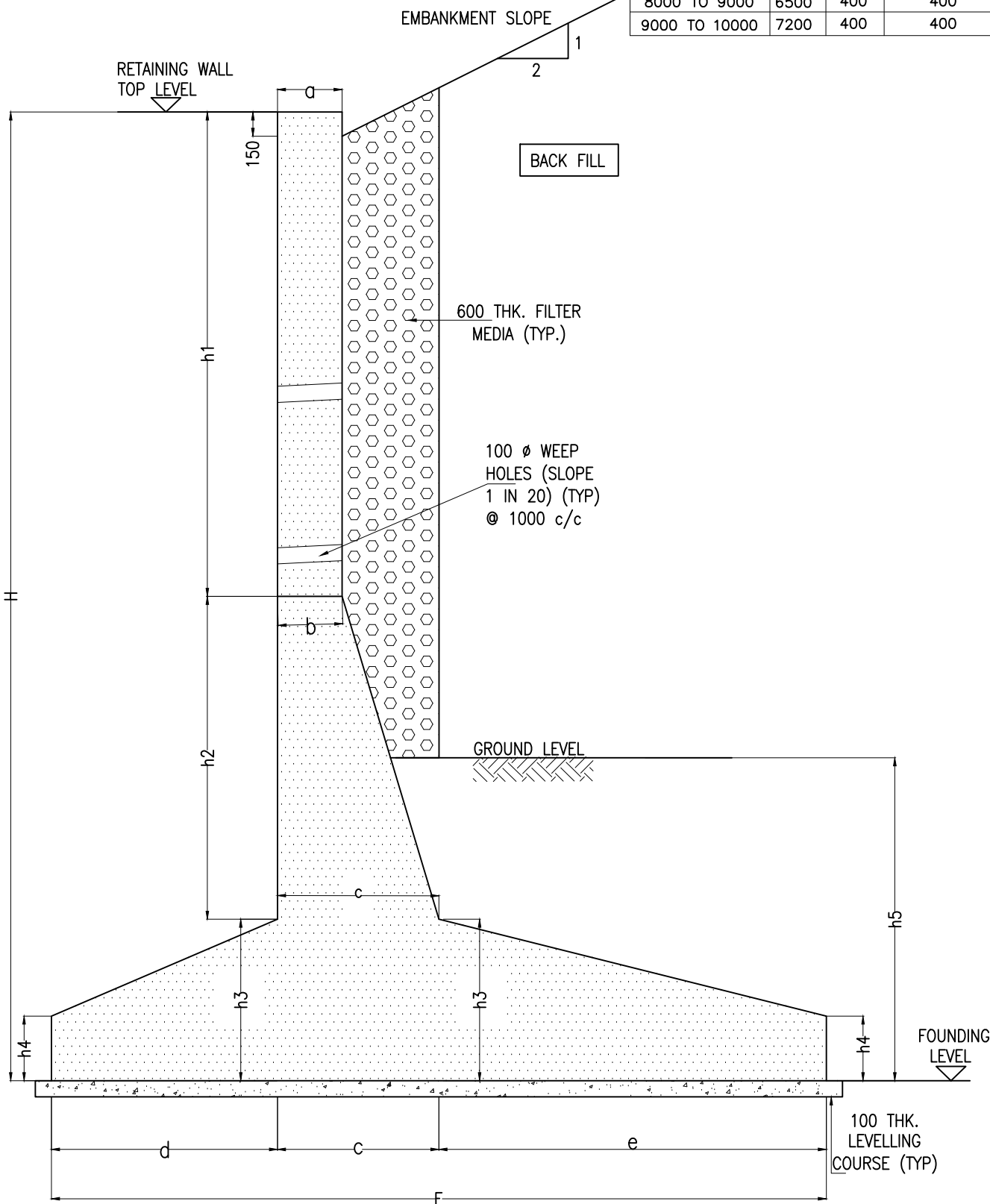
TOTAL HEIGHT 'H'	BASE WIDTH 'F'	AT TOP 'a'	STEM THICKNESS AT START OF VARYING SECTION 'b'	AT JUNCTION 'c'	HEIGHT FROM TOP TO STARTING OF VARIABLE SECTION 'h1'	HEIGHT OF VARIABLE SECTION FROM JUNCTION 'h2'	TOE WIDTH 'd'	TOE THICKNESS		HEEL WIDTH 'e'	DEPTH BELOW EGL 'h5'
								AT EDGE 'h4'	AT JUNCTION 'h3'		
7000 TO 8000	5300	400	400	1100	3000	4000	2000	400	750	2200	2000
8000 TO 9000	6500	400	400	1150	3000	5000	2900	400	1150	2300	2000
9000 TO 10000	7200	400	400	1300	3000	6000	3200	400	1300	2900	2000

NOTES :-

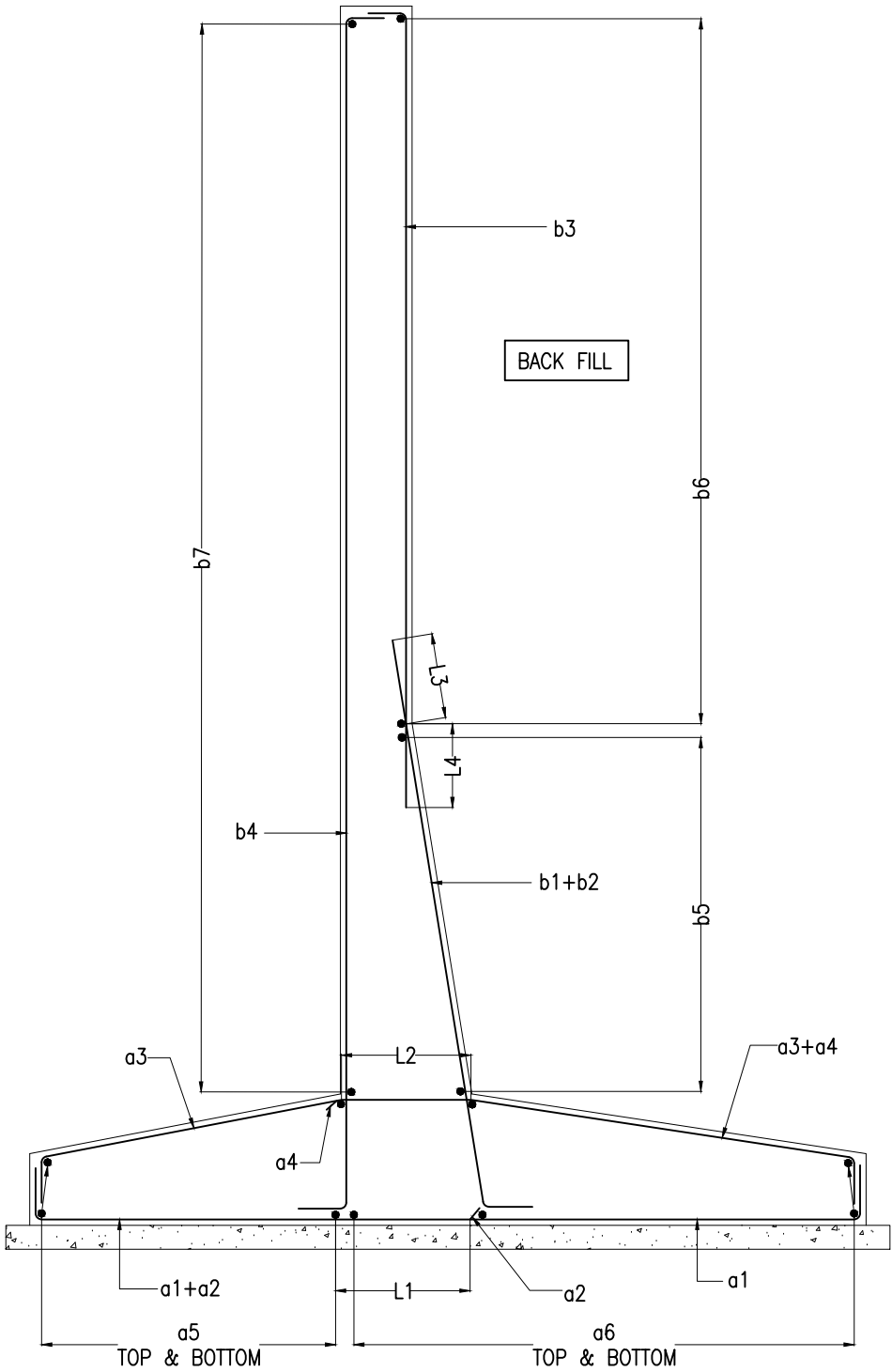
1. ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS IN METER UNLESS NOTED OTHERWISE.
2. DIMENSIONS ARE NOT TO BE SCALED, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. GRADE OF CONCRETE FOR DIFFERENT COMPONENTS SHALL BE (i) RETAINING WALL ----- M30
4. CLEAR COVER TO OUTERMOST REINFORCEMENT SHALL BE (i) RETAINING WALL -----(EARTH FACE) 75MM (NON EARTH FACE) 50MM
5. ALL REINFORCING BARS SHALL BE THERMO MECHANICALLY TREATED (TMT) BARS (GRADE DESIGNATION Fe-500D) CONFORMING TO IS:1786 STANDARDS.
6. LAPPING OF REINFORCEMENT SHALL BE AVOIDED AS FAR AS POSSIBLE. IN CASE LAPPING OF REINFORCEMENT BARS BECOMES UNAVOIDABLE. MINIMUM LAP LENGTH OF REINFORCEMENT BARS SHALL BE 56 TIMES OF DIA OF SMALLER BARS.NOT MORE THAN 50% BARS SHALL BE LAPPED AT A SECTION.
7. ALL LAPS SHALL BE SUITABLY STAGGERED AND MINIMUM C/C DISTANCE BETWEEN THE ADJACENT LAPS SHALL BE 1.3 TIMES OF LAP LENGTH.

TABLE 2: SCHEDULE OF REINFORCEMENT

REINFORCEMENT DETAILS					
S.N.	BAR MARK	BAR SHAPE	HEIGHT 7000 TO 8000	HEIGHT 8000 TO 9000	HEIGHT 9000 TO 10000
1	a1		ϕ 25-200	ϕ 25-200	ϕ 32-200
2	a2		ϕ 20-200	ϕ 25-200	ϕ 25-200
3	a3		ϕ 20-200	ϕ 25-200	ϕ 25-200
4	a4		ϕ 20-200	ϕ 20-200	ϕ 25-200
5	a5		ϕ 16-200	ϕ 16-200	ϕ 16-150
6	a6		ϕ 16-200	ϕ 16-200	ϕ 16-150
7	b1		ϕ 25-200	ϕ 25-200	ϕ 32-200
8	b2		ϕ 20-200	ϕ 25-200	ϕ 25-200
9	b3		ϕ 16-200	ϕ 16-200	ϕ 20-200
10	b4		ϕ 12-220	ϕ 12-220	ϕ 12-220
11	b5		ϕ 12-200	ϕ 12-200	ϕ 12-150
12	b6		ϕ 12-200	ϕ 12-200	ϕ 12-150
13	b7		ϕ 12-200	ϕ 12-200	ϕ 12-150
	L1	mm	1000	1200	1500
	L2	mm	1000	1200	1500
	L3	mm	1000	1200	1500
	L4	mm	1000	1200	1500

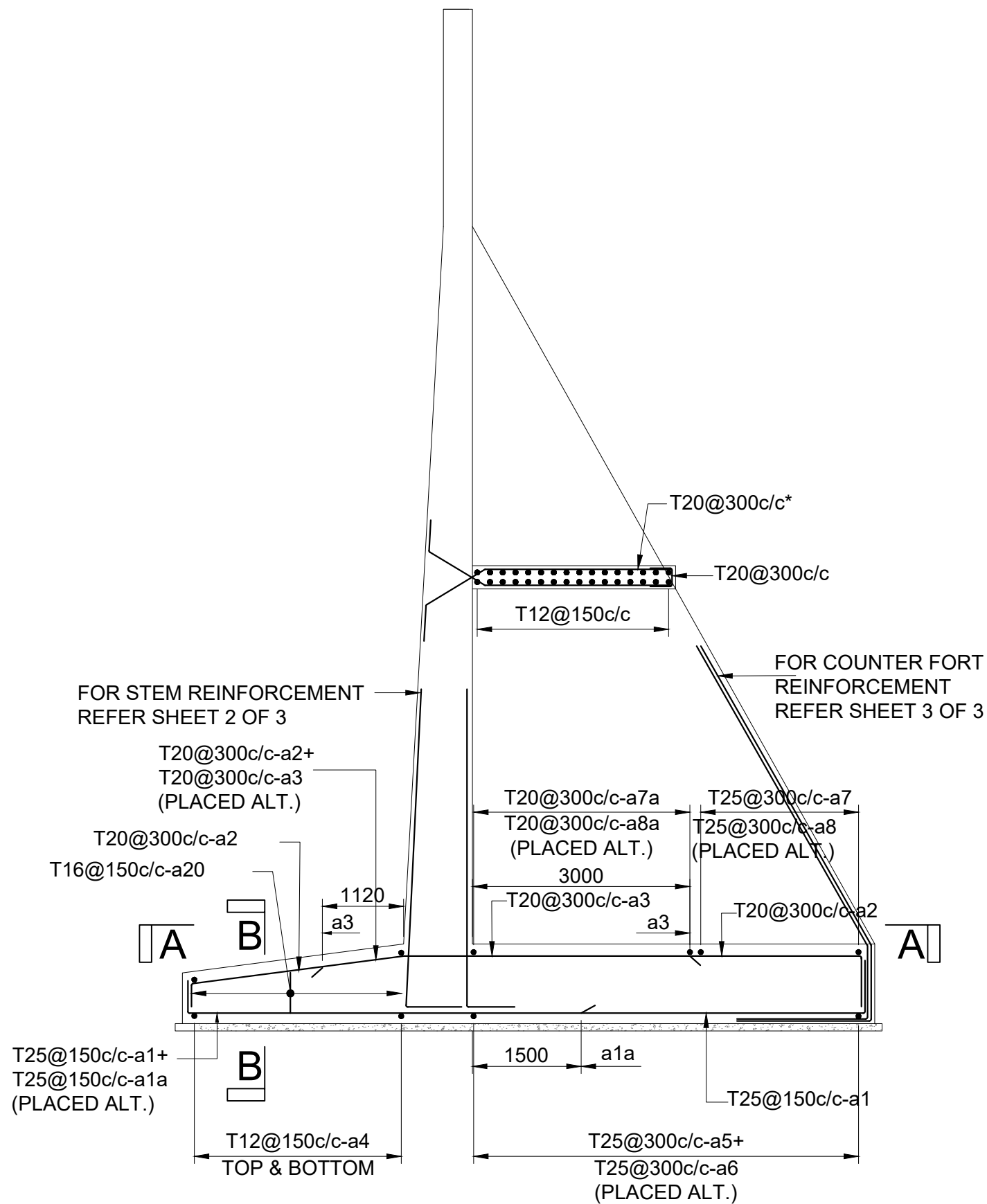


TYPICAL CROSS SECTION OF RETAINING WALL
(SHOWING DIMENSIONS REFER TABLE 1)



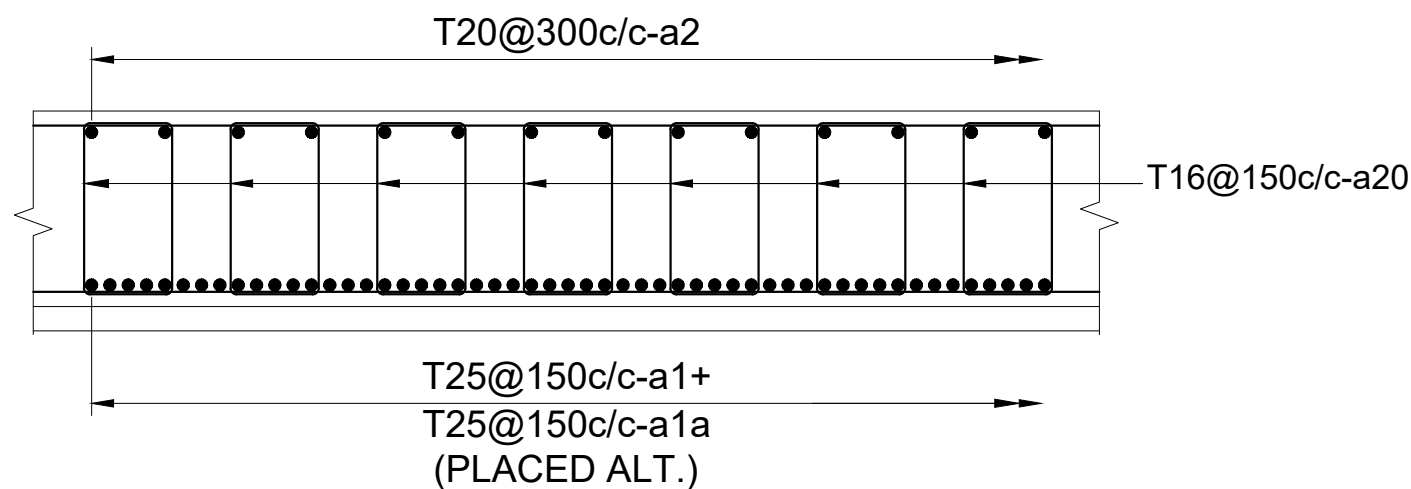
TYPICAL CROSS SECTION OF RETAINING WALL
(SHOWING REINFORCEMENT REFER TABLE 2)

Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title: DETAIL DRAWING OF RETAINING WALL WITH REINFORCEMENT (HEIGHT-7000mm TO 10000mm)		
R0-	12-09-2024- DRAFT DETAILED PROJECT REPORT	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK			
R1-	21-09-2024- REVISED DRAFT DETAILED PROJECT REPORT				Checked By : JS			
					Approved By : VY			
					Scale :	Dwg No: XPL/DSD/SK/KM5.3/RW/01 -	Sheet: 1 of 1	Date : Nov-2024
								A2

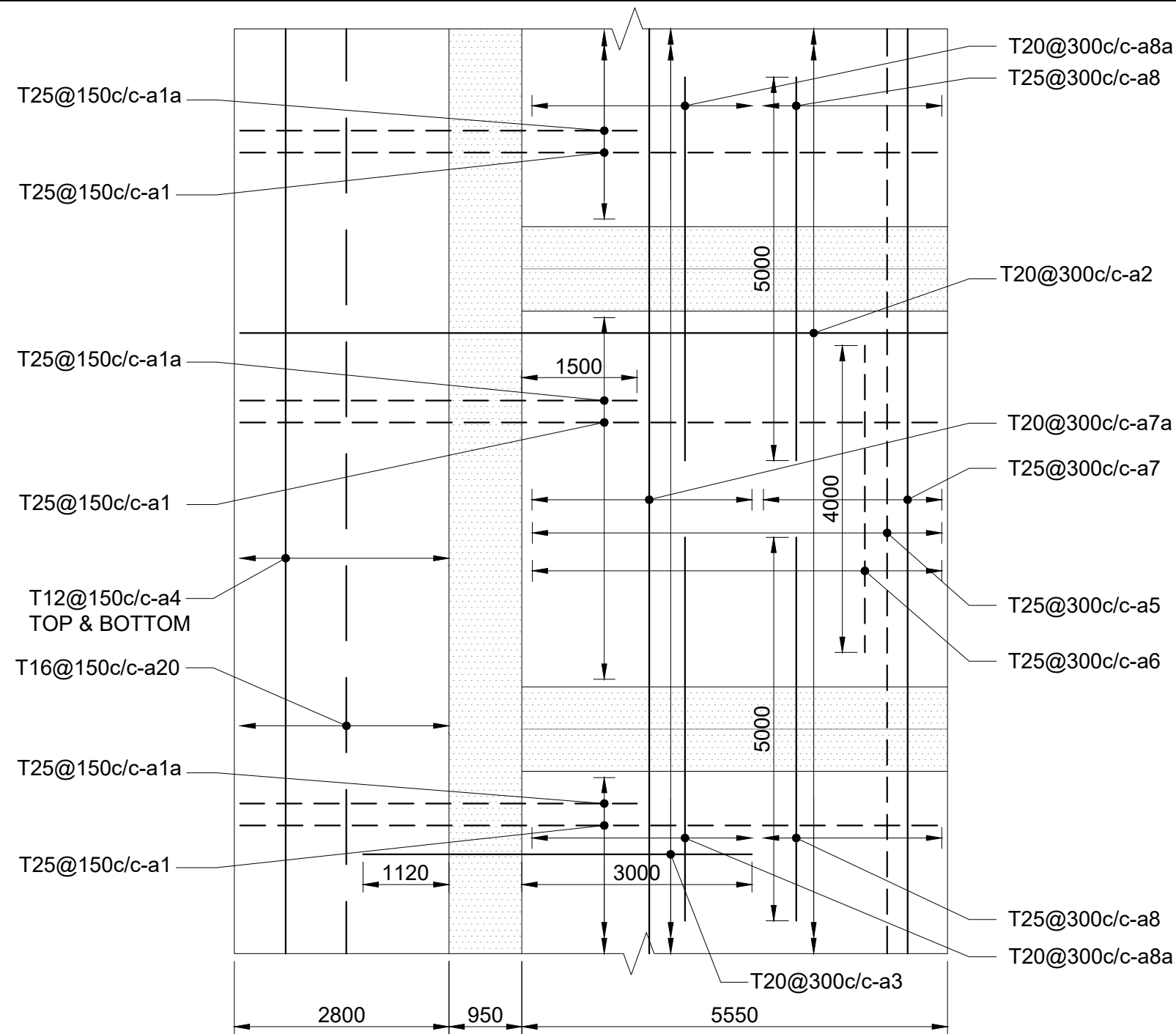


CROSS SECTION OF COUNTERFORT RETAINING WALL

(SHOWING REINFORCEMENT OF HEEL & TOE)
(*REINFORCEMENT TO BE GALVANIZED)



SECTION B-B



SECTION A-A

(SHOWING REINFORCEMENT OF HEEL & TOE)

FOR CLARITY COUNTERFORT & STEM REINFORCEMENT NOT SHOWN

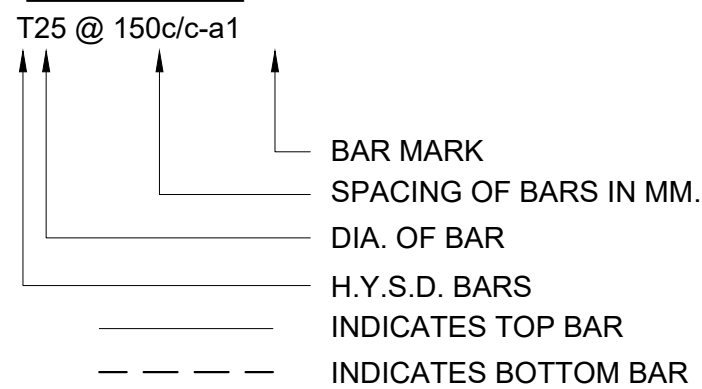
NOTES:

1. ALL DIMENSIONS AND R.LS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
3. 75mm CLEAR COVER TO OUTER MOST REINFORCEMENT SHALL BE PROVIDED.
4. ALL REINFORCING BARS SHALL BE THERMO MECHANICALLY TREATED (TMT) BARS (GRADE DESIGNATION Fe-500D) CONFIRMING TO IS:1786.
5. BARS SHALL BE LAPPED IN SUCH A WAY THAT NOT MORE THAN 50% OF THE BARS ARE LAPPED AT ANY SECTION. LAP LENGTH SHALL BE KEPT AS $56 \times d$, FOR ALL BARS EXCEPT BAR MARKED a3, a4, a7 & a8. FOR THESE BARS LAP LENGTH SHALL BE $81d$, WHERE d IS THE DIA OF BARS. SPACING OF THE TRANSVERSE REINFORCEMENT SHALL NOT BE MORE THAN 150MM AT THE LOCATIONS WHERE BARS ARE LAPPED.

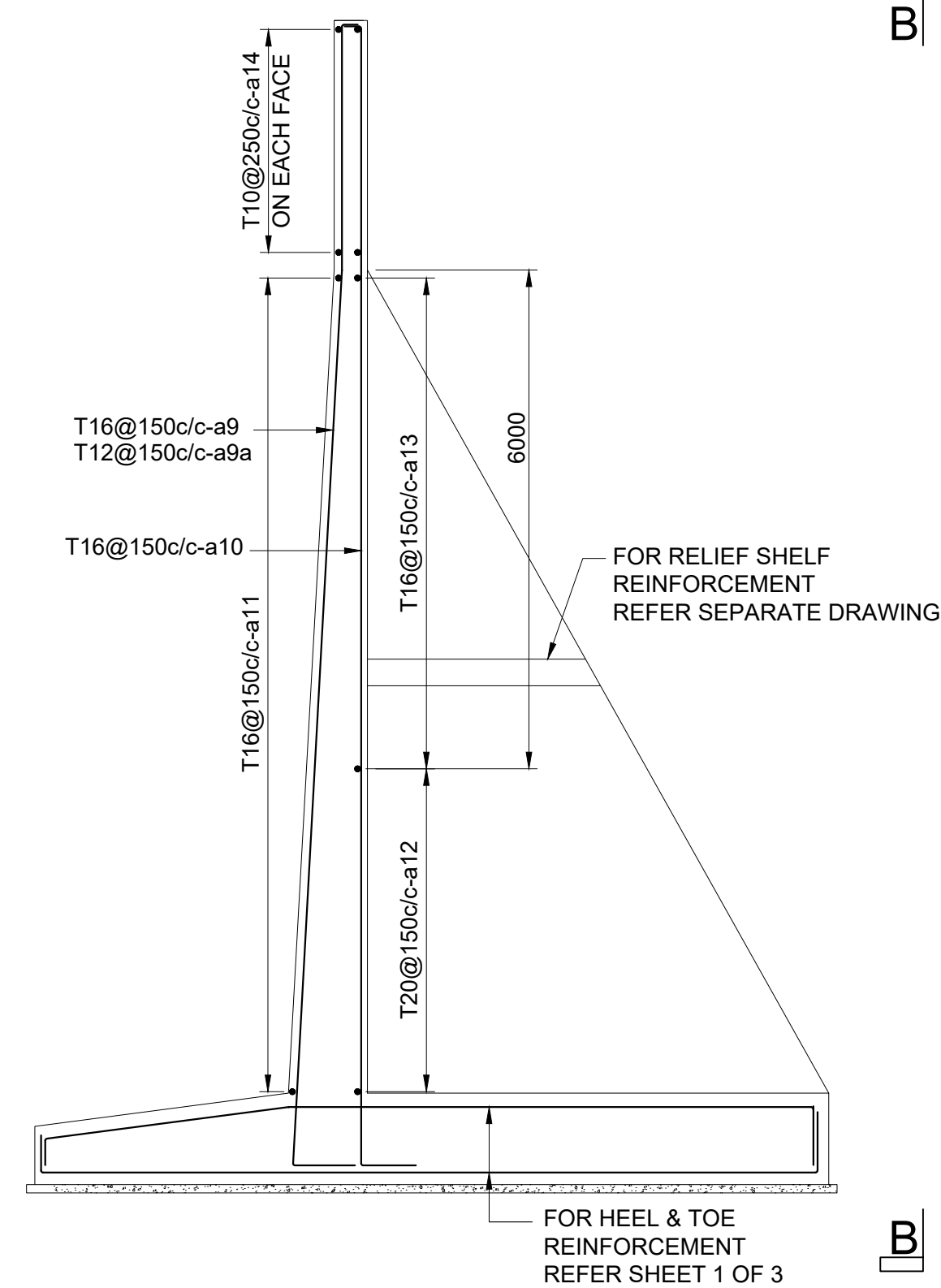
SEQUENCE OF CONSTRUCTION

1. PREFERABLY CAST FOOTING SLAB CONTINUOUSLY IN ONE SEGMENT LEAVING DOWELS FOR STEM AND COUNTERFORT.
2. CAST TOGETHER STEM AND COUNTERFORT IN DIFFERENT LIFTS LEAVING DOWEL FOR RELIEF SLAB. THE CONSTRUCTION JOINT SHOULD BE TREATED AS PER CLAUSE 1709 OF MORTHS STANDARDS SPECIFICATIONS OF ROAD AND BRIDGE WORKS FIFTH REVISION-V.
3. BACK FILL UP TO THE RELIEF SLAB BEFORE IT'S CASTING AND BACK FILL REST UP TO THE TOP AFTER 28 DAYS FROM CASTING RELIEF SLAB.

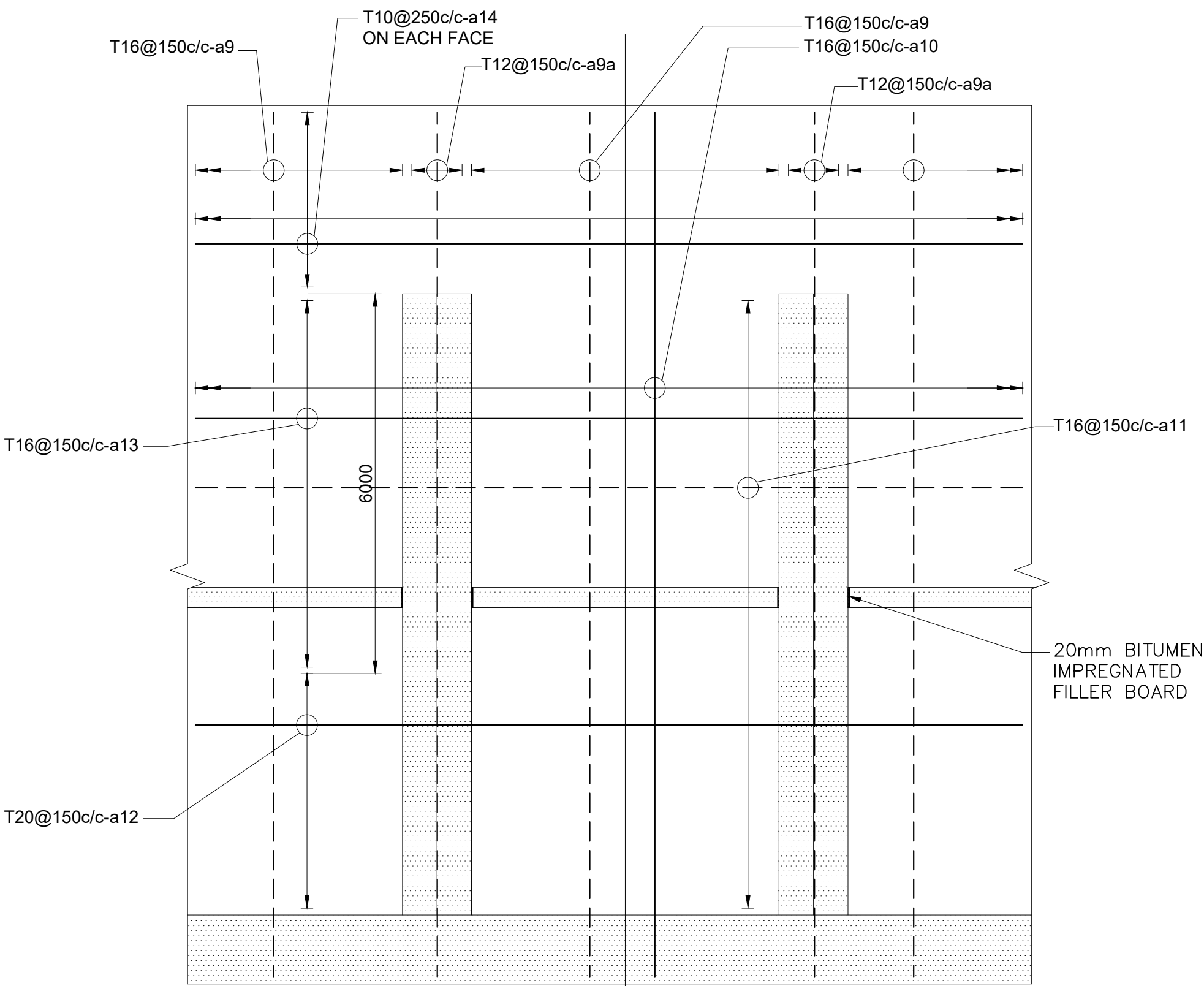
LEGEND :



Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title:
R0-	12-09-2024- DRAFT DETAILED PROJECT REPORT	Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, itum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301 In Association with 	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029 	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradaation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK	Reinforcement Detail of Counterfort Retaining Wall
R1-	21-09-2024- REVISED DRAFT DETAILED PROJECT REPORT				Checked By : JS	
					Approved By : VY	
					Scale : NTS	Dwg No: XPL-DSD/SK/CFRW/RE-01
					Sheet:01 OF 03	Date : Nov-2024
						A2



CROSS SECTION OF COUNTERFORT
RETAINING WALL
(SHOWING REINFORCEMENT OF STEM)



SECTION B-B
(SHOWING REINFORCEMENT OF STEM)

FOR CLARITY COUNTERFORT REINFORCEMENT NOT SHOWN

LEGEND :

T16 @ 150c/c-a9

BAR MARK

SPACING OF BARS IN MM.

DIA. OF BAR

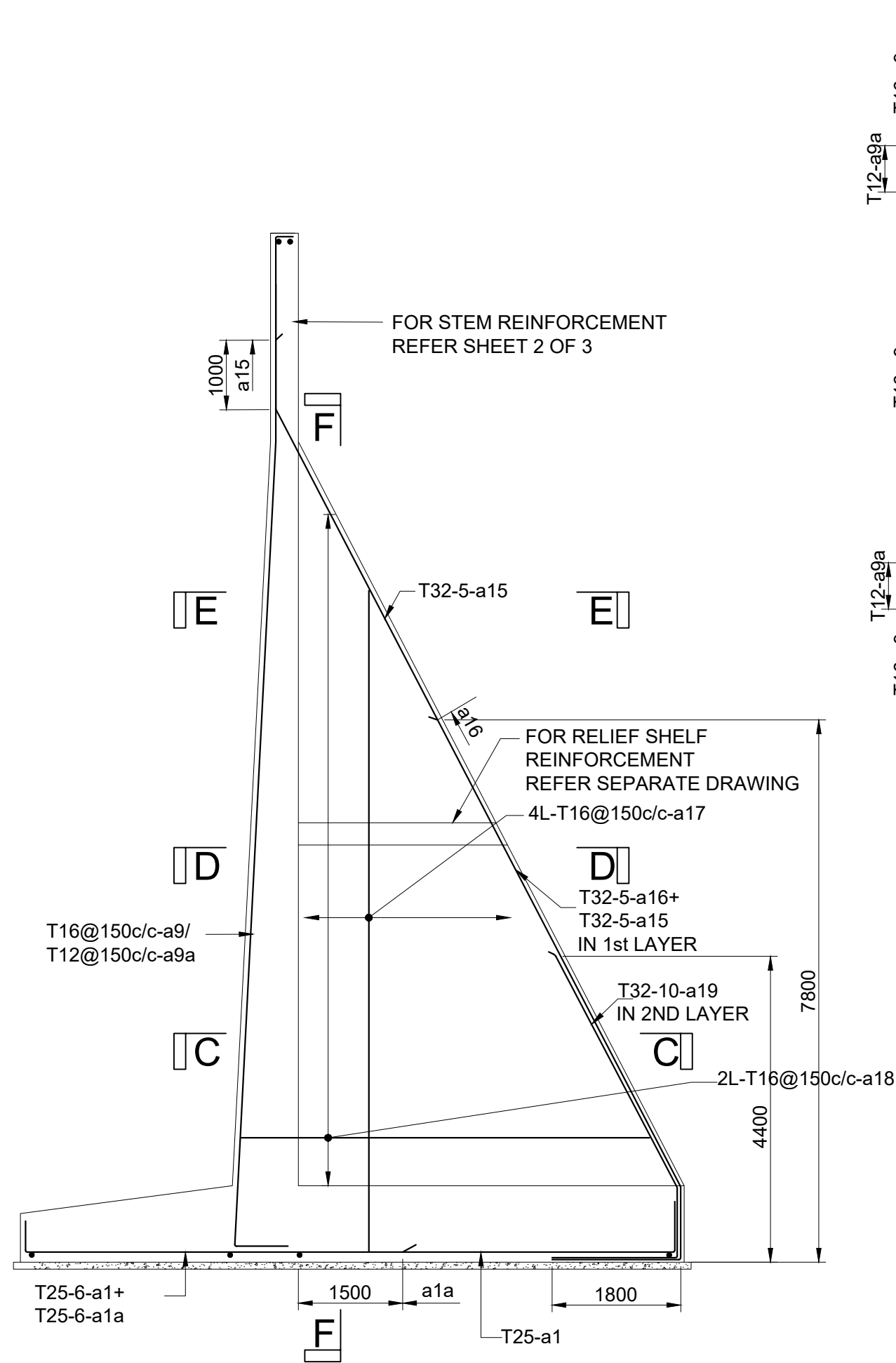
H.Y.S.D. BARS

INDICATES BAR IN FRONT

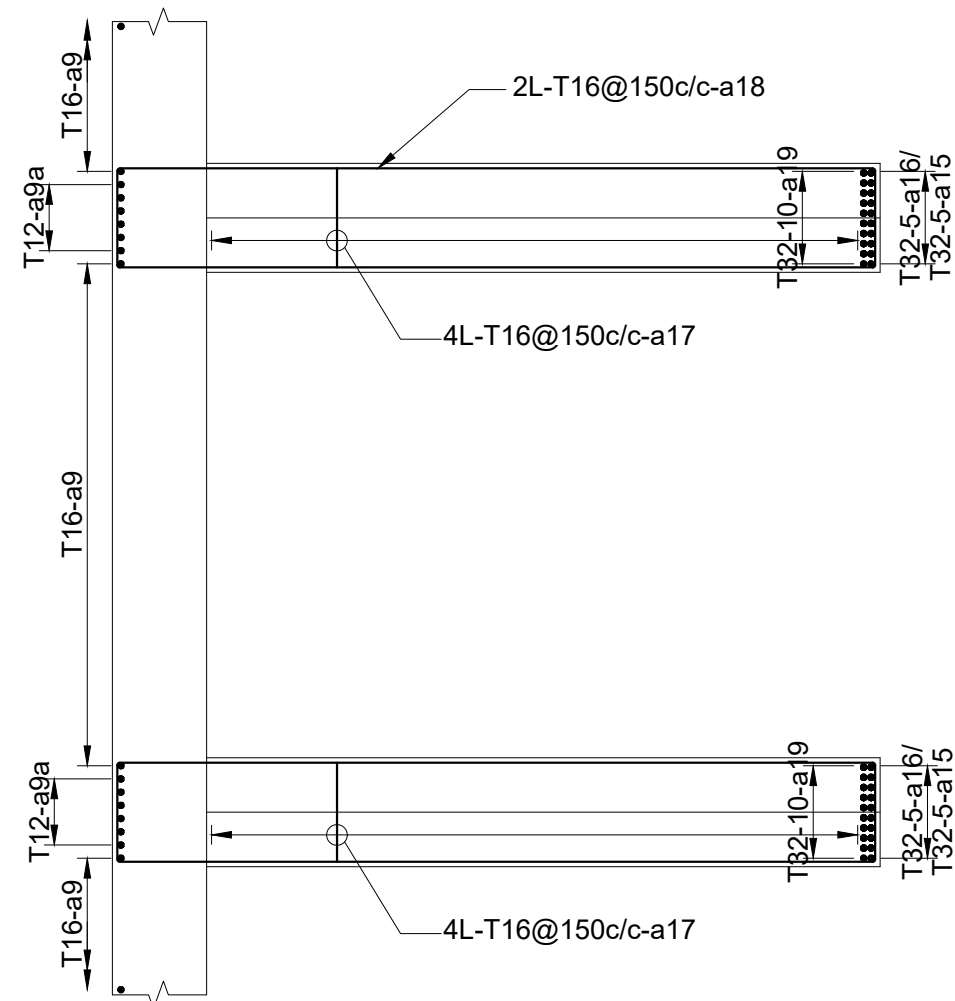
INDICATES BAR IN BEHIND

- NOTES:**
- ALL DIMENSIONS AND R.LS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 - DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
 - 75mm CLEAR COVER TO OUTER MOST REINFORCEMENT SHALL BE PROVIDED.
 - ALL REINFORCING BARS SHALL BE THERMO MECHANICALLY TREATED (TMT) BARS (GRADE DESIGNATION Fe-500D) CONFIRMING TO IS:1786.
 - BARS SHALL BE LAPPED IN SUCH A WAY THAT NOT MORE THAN 50% OF THE BARS ARE LAPPED AT ANY SECTION. LAP LENGTH SHALL BE KEPT AS 56 x d, FOR ALL BARS EXCEPT BAR MARKED a3 a4, a7 & a8. FOR THESE BARS LAP LENGTH SHALL BE 81d, WHERE d IS THE DIA OF BARS. SPACING OF THE TRANSVERSE REINFORCEMENT SHALL NOT BE MORE THAN 150MM AT THE LOCATIONS WHERE BARS ARE LAPPED.

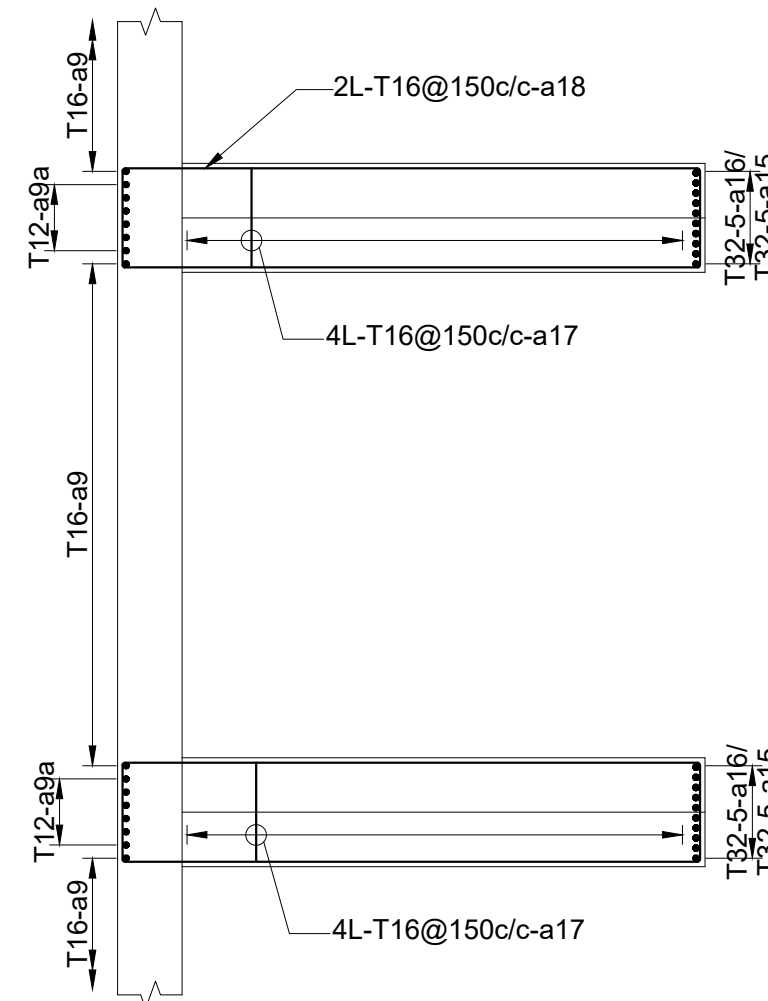
Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title:		
R0-	12-09-2024- DRAFT DETAILED PROJECT REPORT	XPLORER in JV with DSD In Association with m Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	WADCL National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK	Reinforcement Detail of Counterfort Retaining Wall		
R1-	21-09-2024- REVISED DRAFT DETAILED PROJECT REPORT				Checked By : JS			
					Approved By : VY	Dwg No: XPL-DSD/SK/CFRW/RE-01		
					Scale : NTS	Sheet: 02 OF 03	Date : Nov-2024	A2



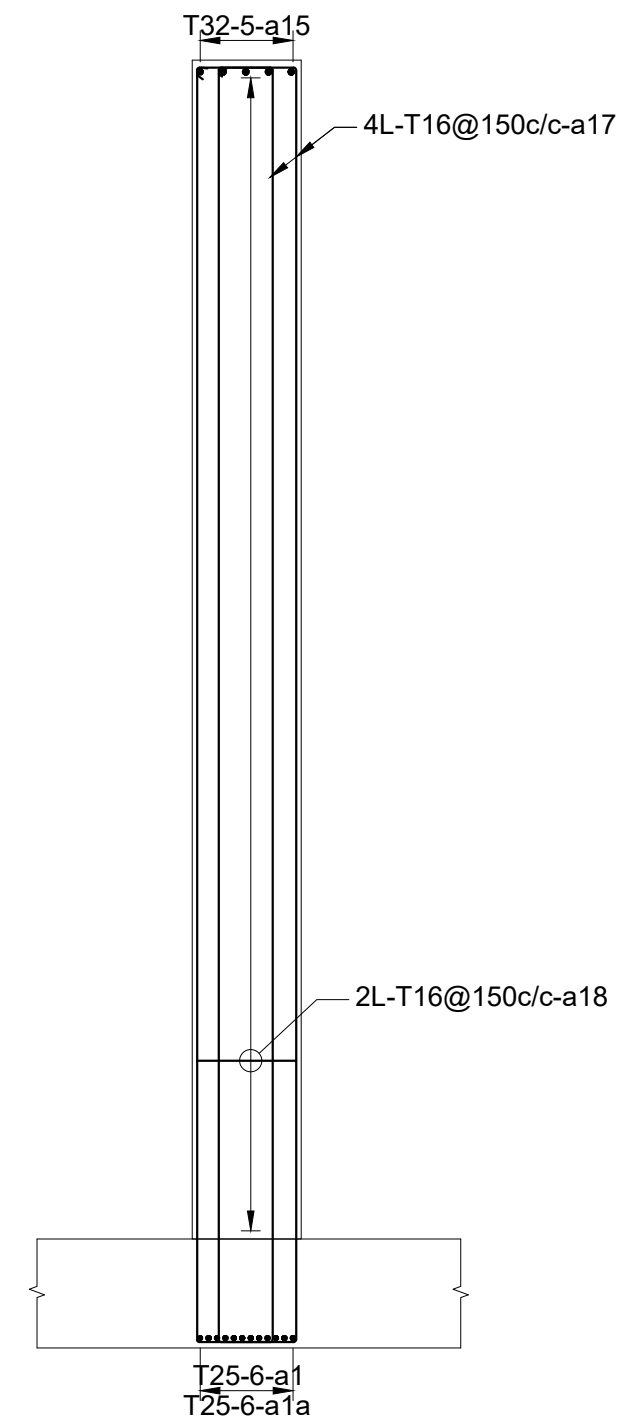
**CROSS SECTION OF COUNTERFORT
RETAINING WALL**
(SHOWING REINFORCEMENT OF COUNTERFORT)



SECTION C-C
(SHOWING REINFORCEMENT OF COUNTERFORT)

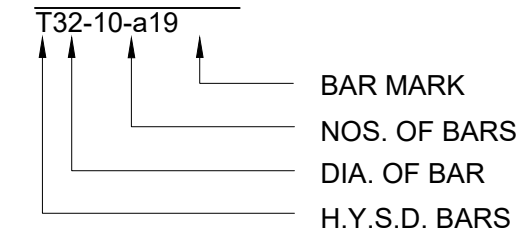


SECTION D-D
(SHOWING REINFORCEMENT OF COUNTERFORT)



SECTION F-F
(SHOWING REINFORCEMENT OF COUNTERFORT)

LEGEND :



FOR CLARITY STEM & FOOTING REINFORCEMENT NOT SHOWN

NOTES:

- ALL DIMENSIONS AND R.LS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS ARE NOT TO BE SCALED AND ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
- 50mm CLEAR COVER TO OUTER MOST REINFORCEMENT SHALL BE PROVIDED.
- ALL REINFORCING BARS SHALL BE THERMO MECHANICALLY TREATED (TMT) BARS (GRADE DESIGNATION Fe-500D) CONFIRMING TO IS:1786.
- BARS SHALL BE LAPPED IN SUCH A WAY THAT NOT MORE THAN 50% OF THE BARS ARE LAPPED AT ANY SECTION. LAP LENGTH SHALL BE KEPT AS $56 \times d$, FOR ALL BARS EXCEPT BAR MARKED $\alpha 3$, $\alpha 4$, $\alpha 7$ & $\alpha 8$. FOR THESE BARS LAP LENGTH SHALL BE $81d$, WHERE d IS THE DIA OF BARS. SPACING OF THE TRANSVERSE REINFORCEMENT SHALL NOT BE MORE THAN 150MM AT THE LOCATIONS WHERE BARS ARE LAPPED.

Rev.No.	Description For Revision.	Design Consultant:	Client:	Project :	Design By : PB	Title:		
R0-	12-09-2024- DRAFT DETAILED PROJECT REPORT	Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : MK	Reinforcement Detail of Counterfort Retaining Wall		
R1-	21-09-2024- REVISED DRAFT DETAILED PROJECT REPORT				Checked By : JS			
					Approved By : VY	Dwg No: XPL-DSD/SK/CFRW/RE-01		
					Scale : NTS	Sheet:03 OF 03	Date : Nov-2024	A2

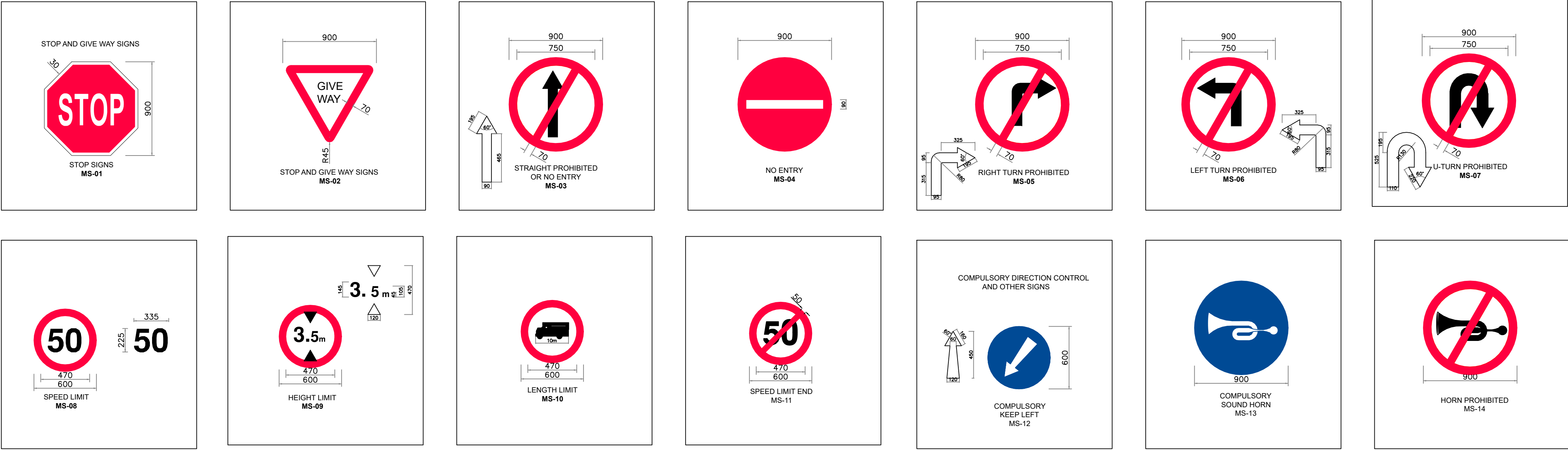
MISCELLANEOUS DRAWING

CAUTIONARY/WARNING SIGNS



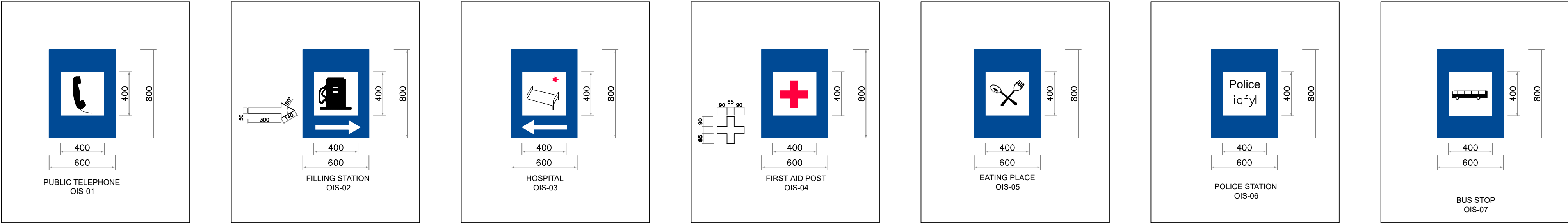
R.No.	Date	DESCRIPTION	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Design By: RK	TITLE: CAUTIONARY / WARNING SIGNS	
						Drawn By : M.K		
						Checked By : AH		
						Approved By : VY	DWG NO:XPL/DSD/SK/KM5.3/RS-01	
						SCALE : NTS	SHEET: 01 OF 03	DATE: Nov-2024

MANDATORY/REGULATORY SIGNS



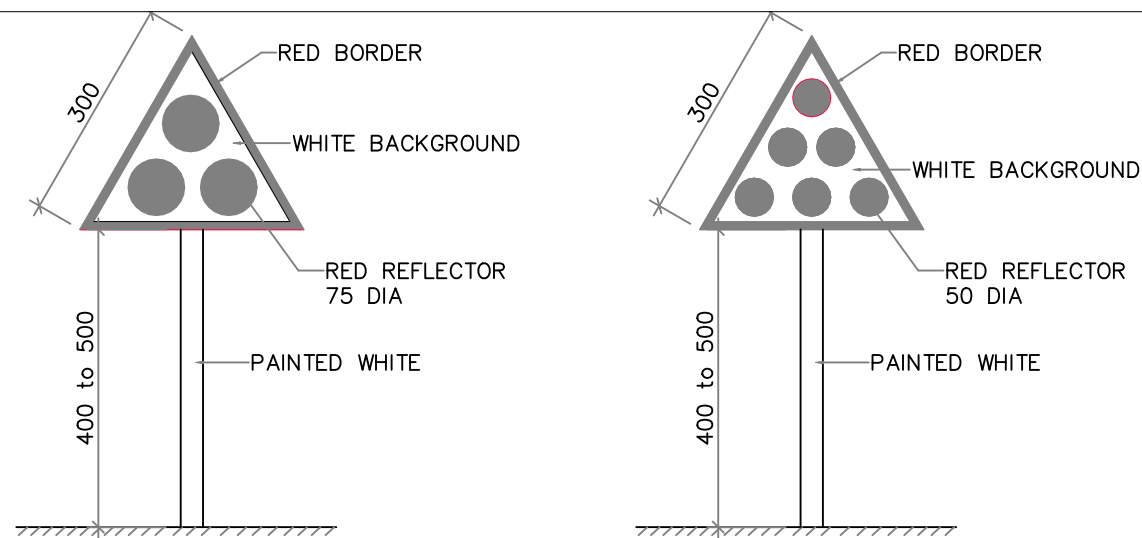
INFORMATORY SIGN BOARD:-

(A) FACILITY INFORMATION SIGNS

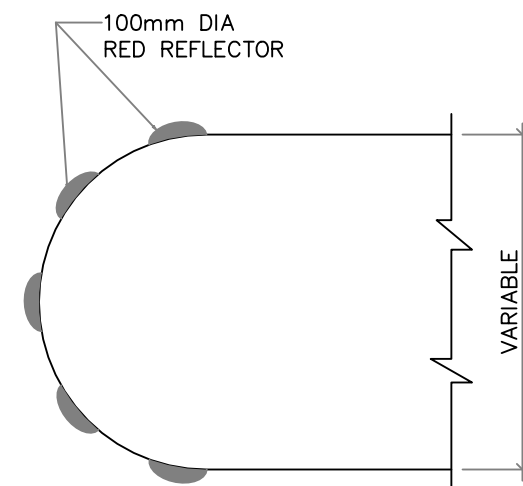


(B) DIRECTION AND PLACE IDENTIFICATION SIGNS

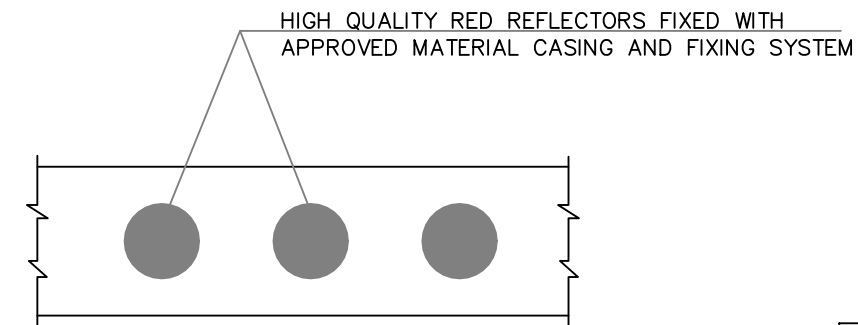
R.No.	Date	DESCRIPTION	CLIENT: National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT: Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Design By: RK	TITLE: CAUTIONARY / WARNING SIGNS	
R0	12-09-2024	Draft Detailed Report				Drawn By : M.K		
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH		
R2	21-10-2024	Revised As Per Observation				Approved By : VY	DWG NO: XPL/DSD/SK/KM5.3/RS-02	
						SCALE : NTS	SHEET: 02 OF 03	DATE: Nov-2024



CLUSTER OF RED REFLECTORS
TA-1



PLAN

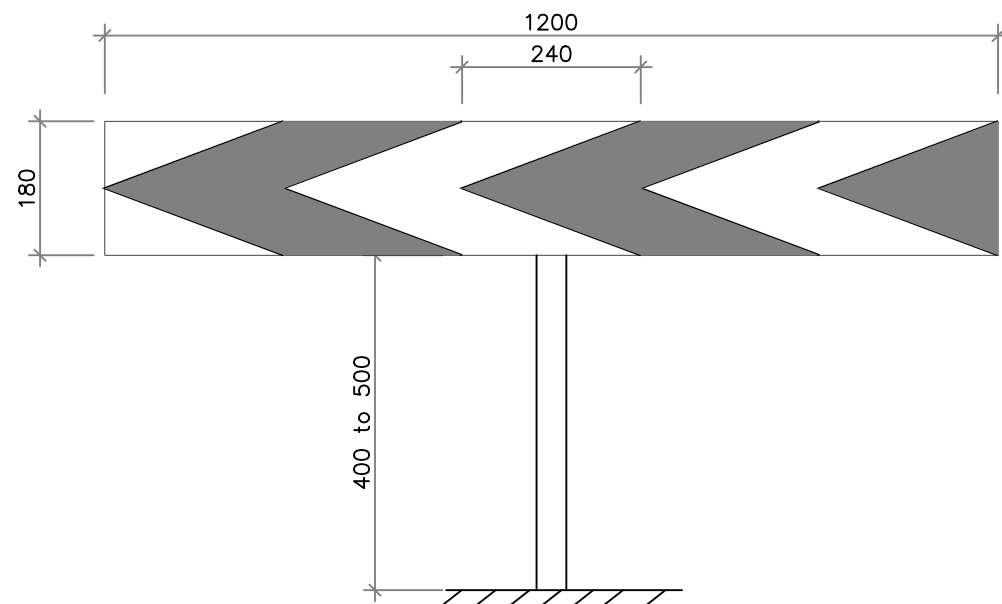


ELEVATION

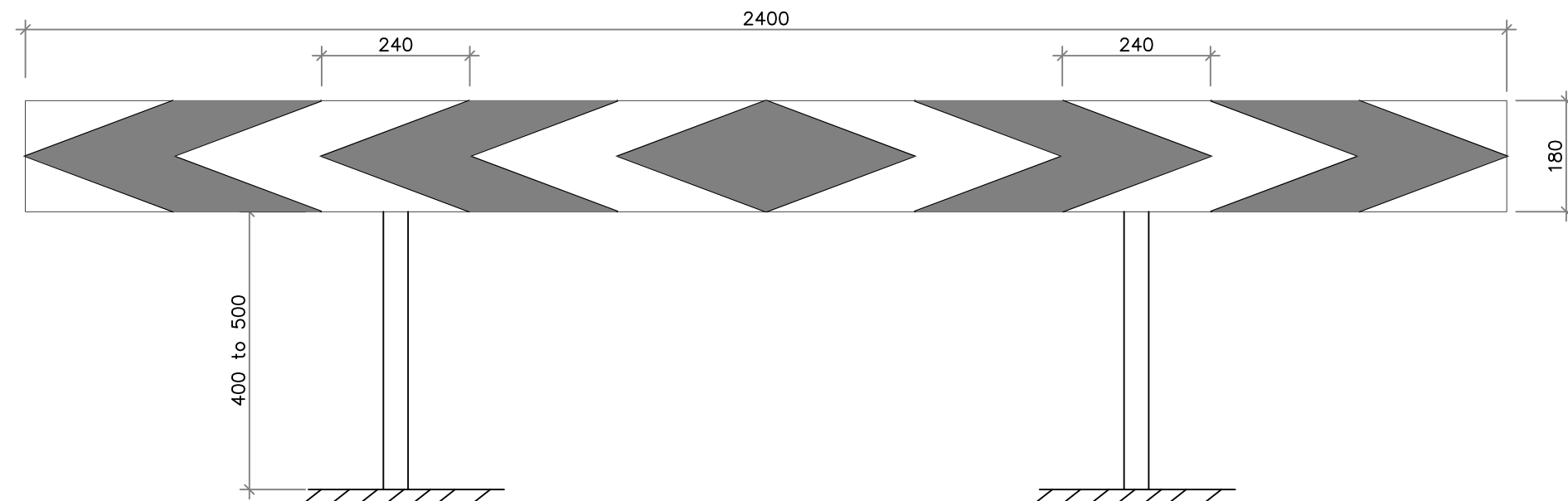
MEDIAN TIP REFLECTORS
TA-4

HIGH QUALITY RED REFLECTORS OF APPROVED
SIZE AND SHAPE (TO FIXED IN THE SHAPE OF
W-BEAM), FIXED WITH APPROVED MATERIAL,
CASING ANF FIXUP SYSTEM

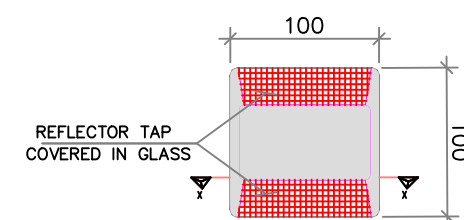
ON W-BEAM OF
METAL BEAM
CRASH BARRIER
TA-5



ONE-WAY HAZARD MARKER
TA-2

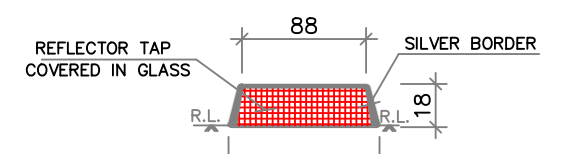


TWO-WAY HAZARD MARKER
TA-3



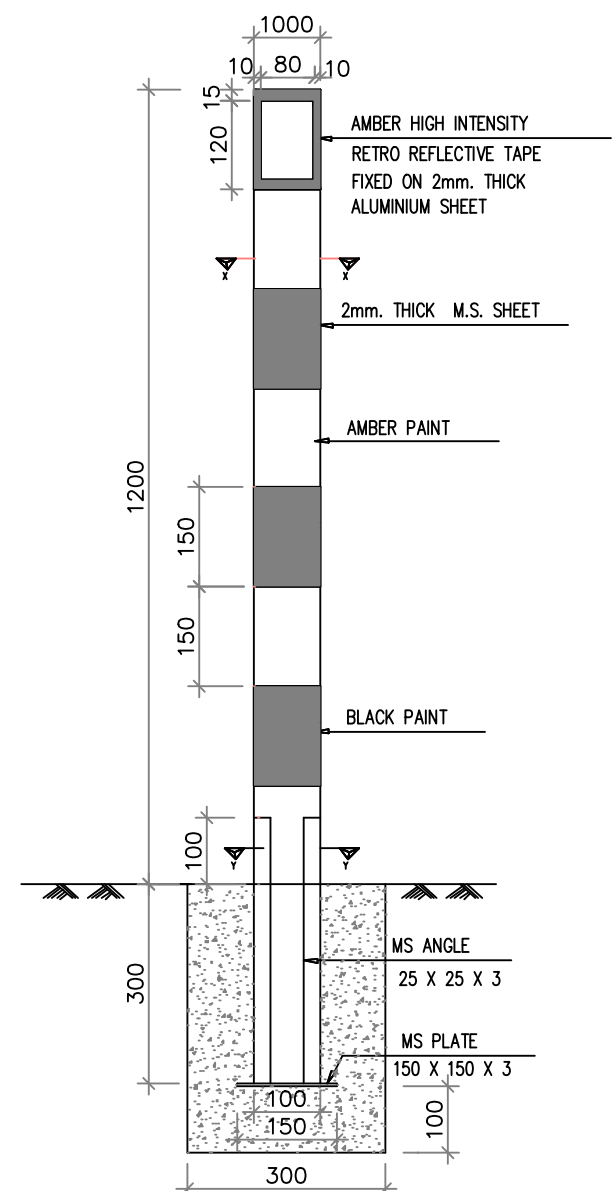
PLAN

Road Studs
(Cateyes)

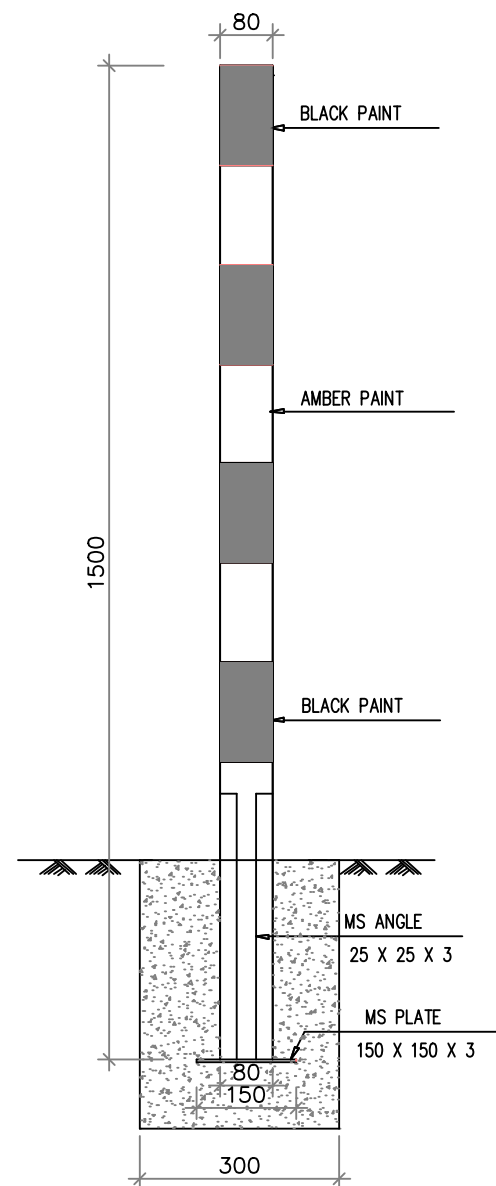


Section X - X

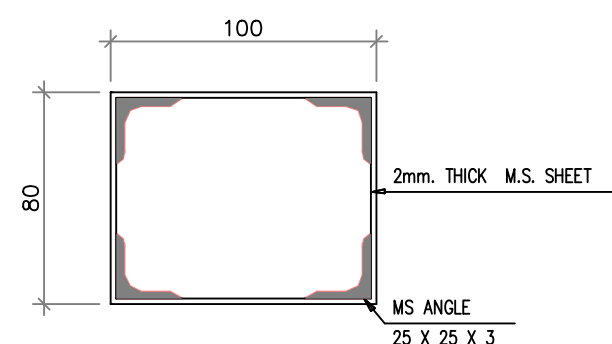
Road Studs
(Cateyes)



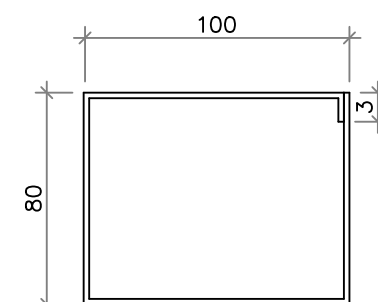
FRONT VIEW



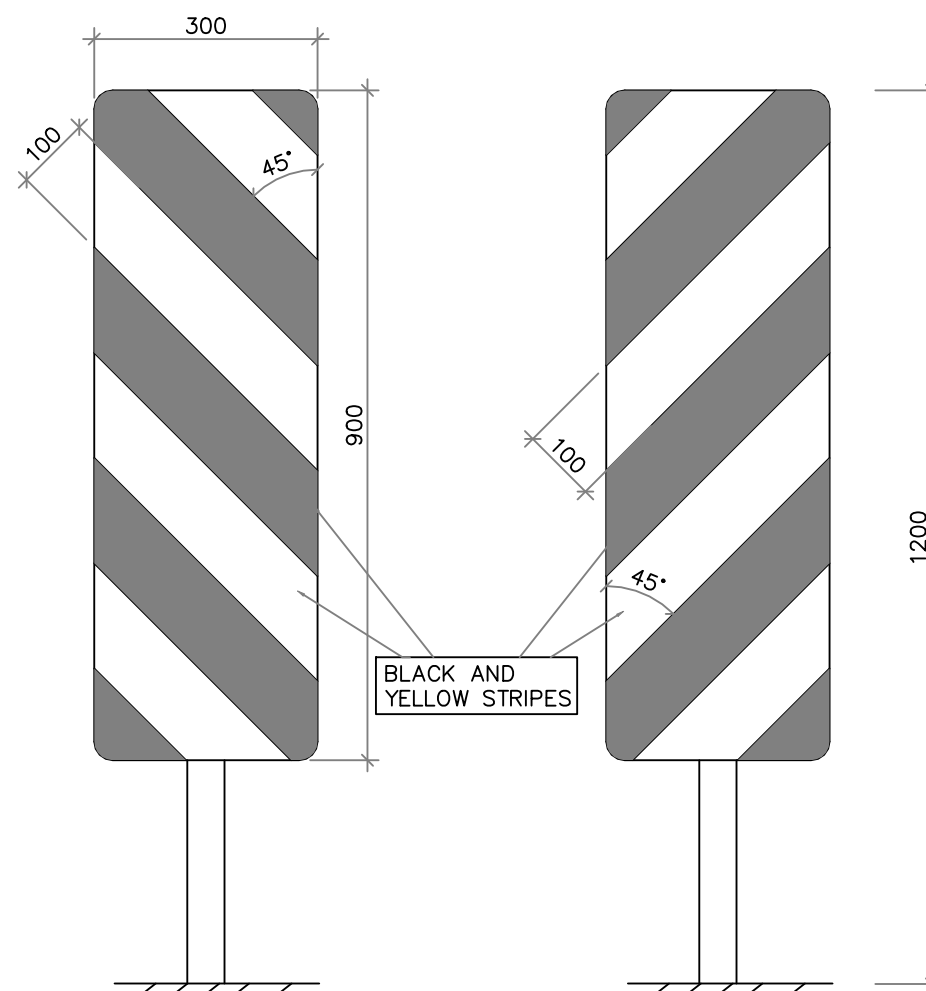
SIDE VIEW



SECTION Y-Y



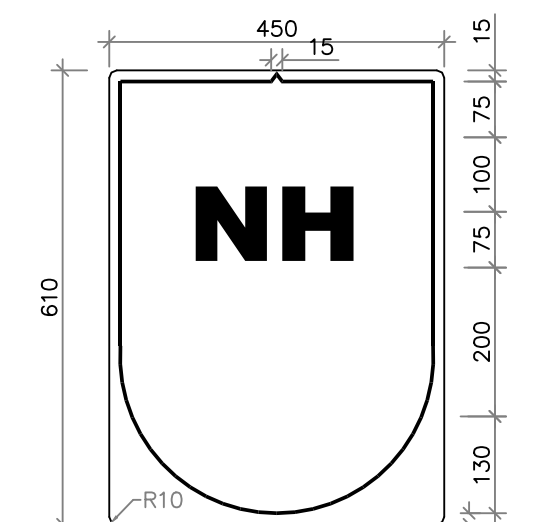
SECTION X-X



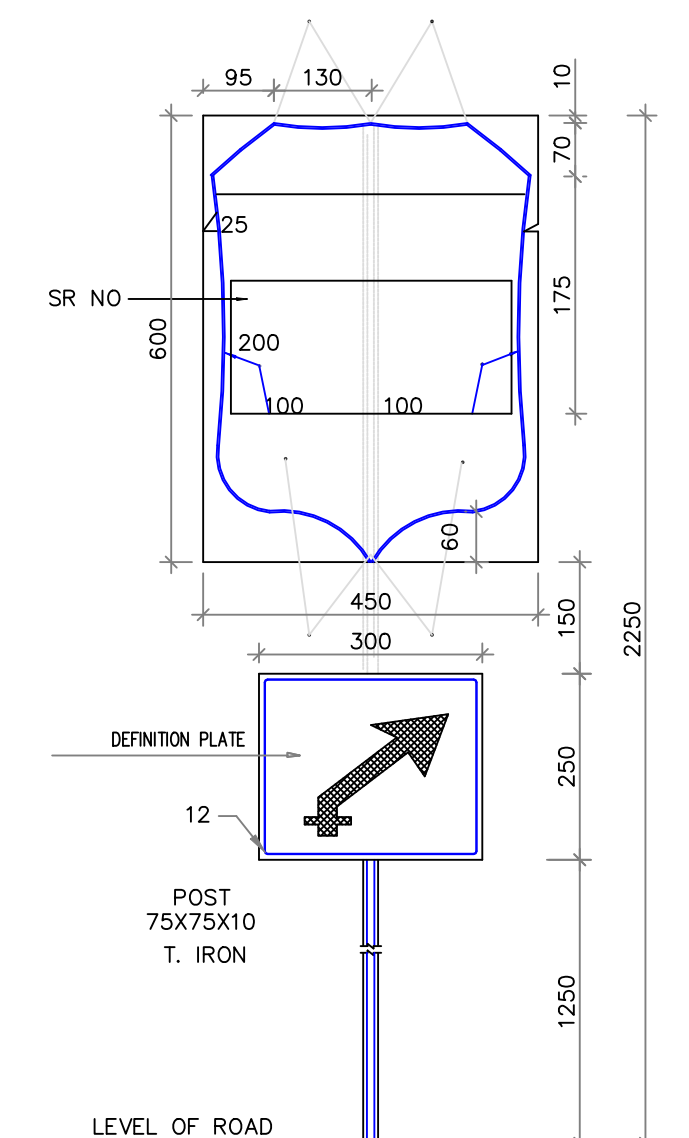
LEFT

RIGHT

OBJECT HAZARD MARKERS

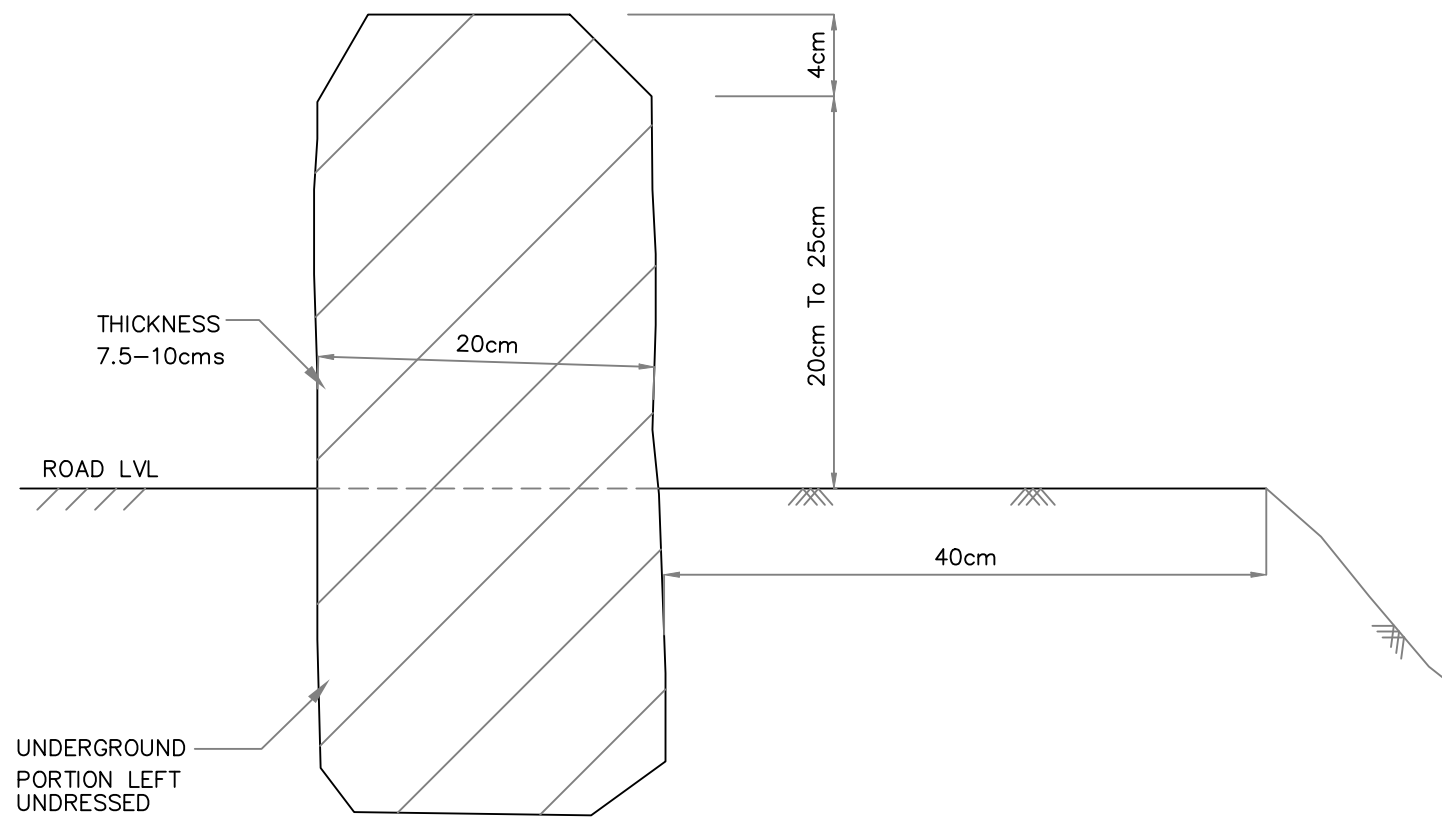


NH ROUTE MARKER SIGN
IS-07

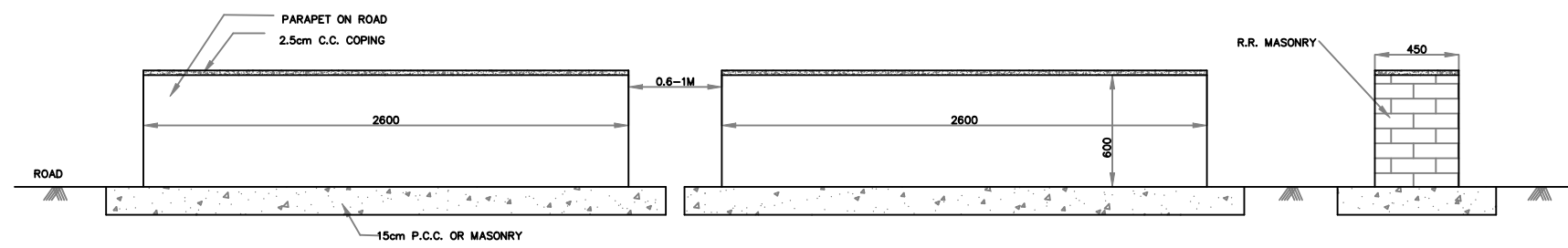


ASSEMBLY OF ROUTE MARK SIGN
ARRANGEMENT FOR ERECTION OF
STATE ROUTE MARKER SIGN

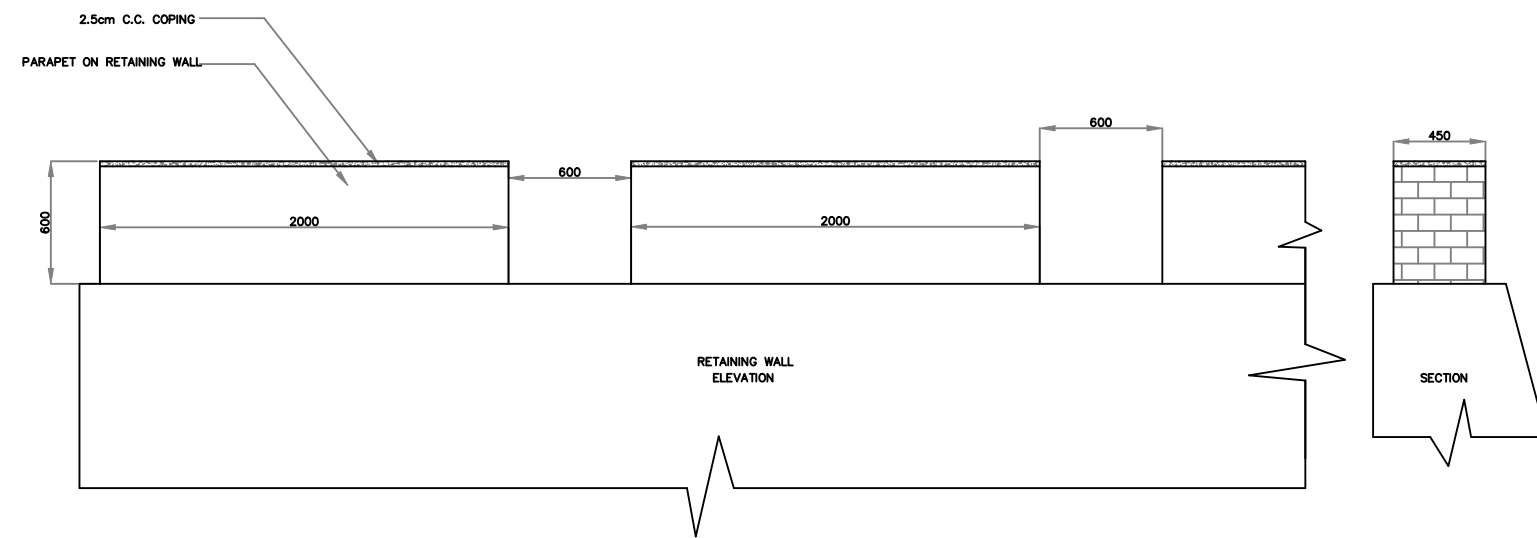
R.No.	Date	DESCRIPTION	CLIENT:	DESIGN CONSULTANT:	PROJECT :	Design By: RK	TITLE:
R0	12-09-2024	Draft Detailed Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : M.K	CAUTIONARY / WARNING SIGNS
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH	
R2	21-10-2024	Revised As Per Observation				Approved By : VY	
						SCALE : NTS	DWG NO: XPL/DSD/SK/KM5.3/RS-03
							SHEET: 03 OF 03 DATE: Nov-2024



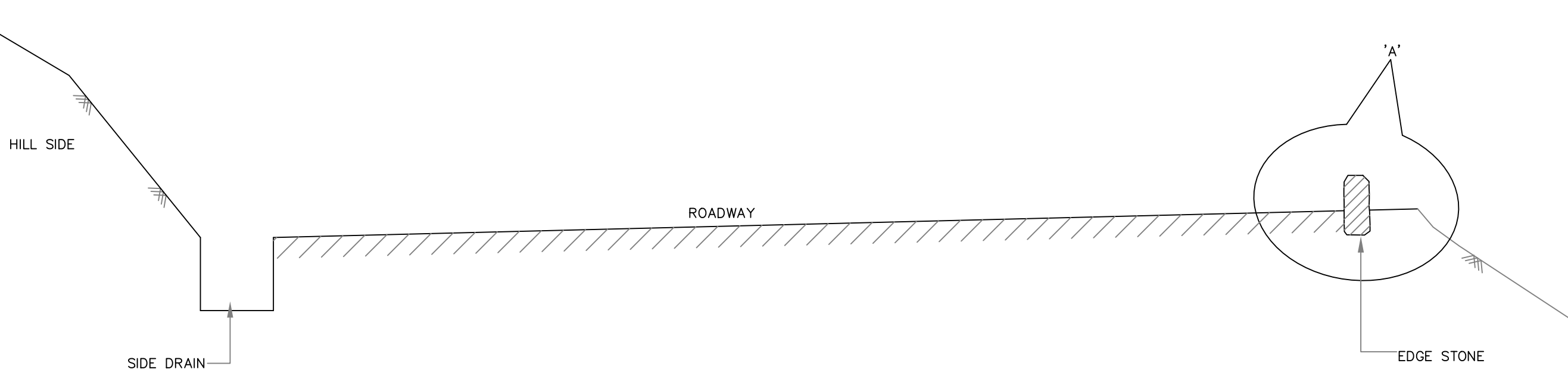
DETAIL 'A'



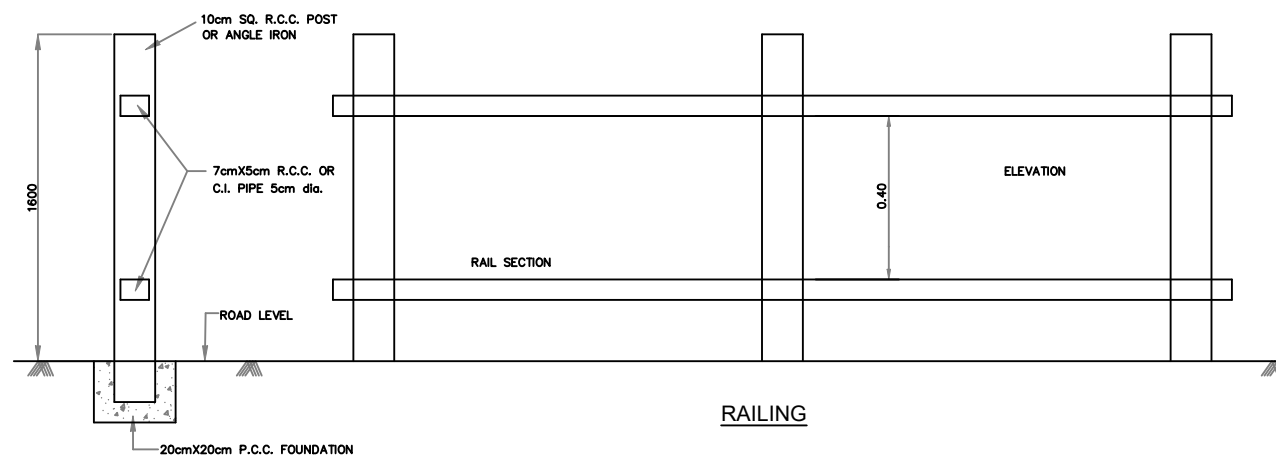
PARAPET ON ROAD



PARAPET ON RETAINING WALL



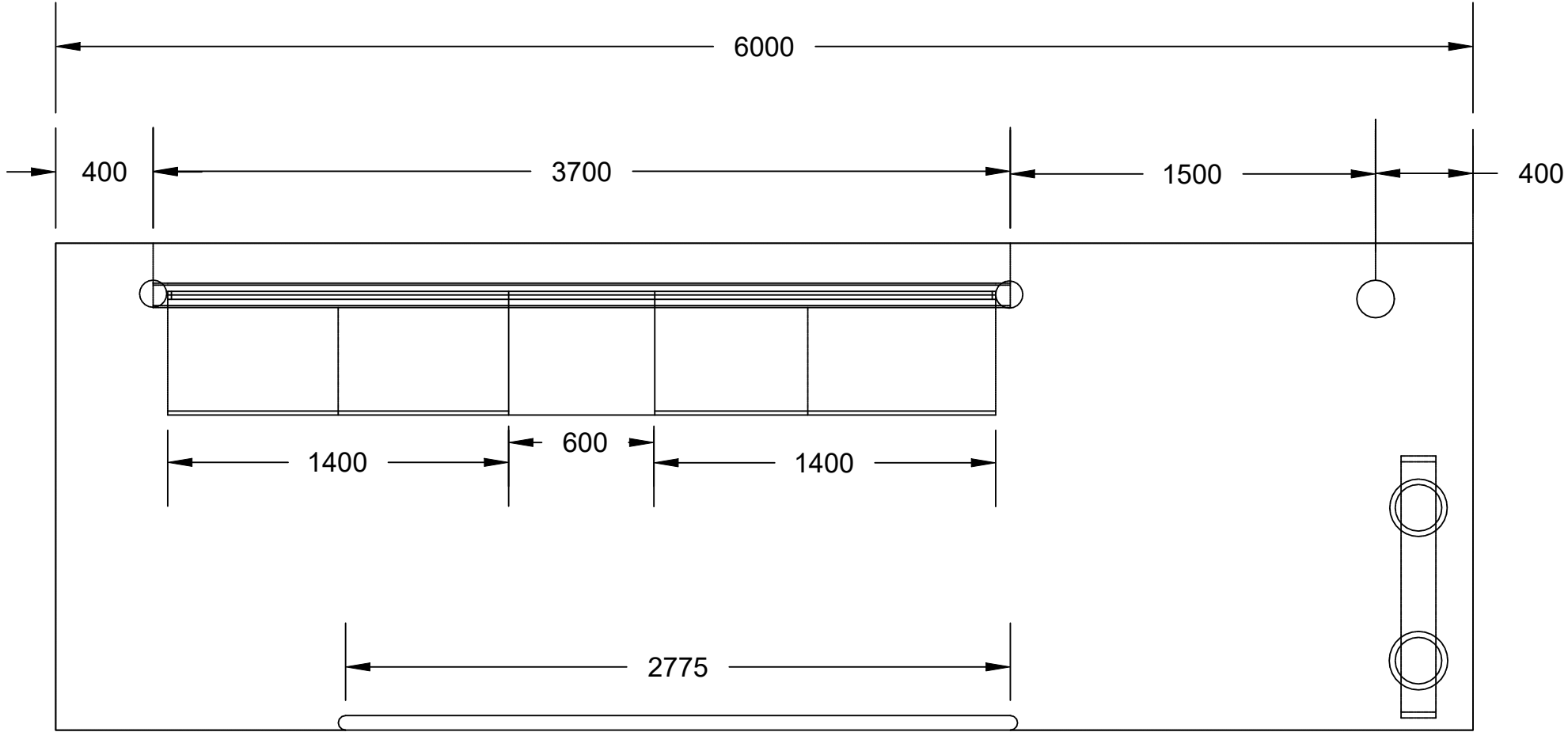
SECTION
EDGE STONE



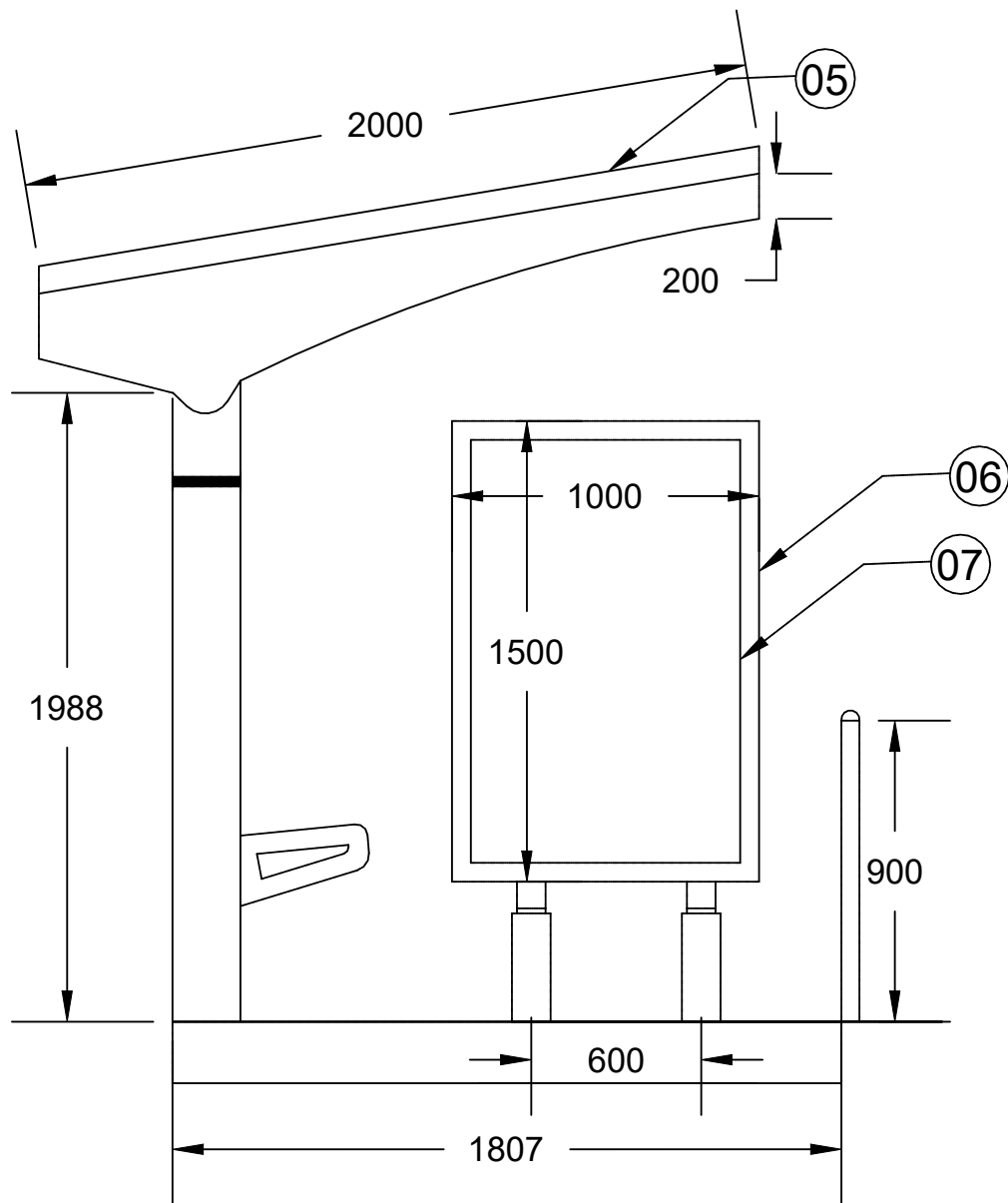
RAILING

R.No.	Date	DESCRIPTION	CLIENT:	DESIGN CONSULTANT:	PROJECT :	Design By: RK	TITLE:
R0	12-09-2024	Draft Detailed Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Drawn By : M.K	PARAPET, RAILING AND EDGE STONE DWG NO: XPL/DSD/SK/KM5.3/RL-01
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH	
R2	21-10-2024	Revised As Per Observation				Approved By : VY	
						SCALE : NTS	
							SHEET: 01 OF 01 DATE: Nov-2024

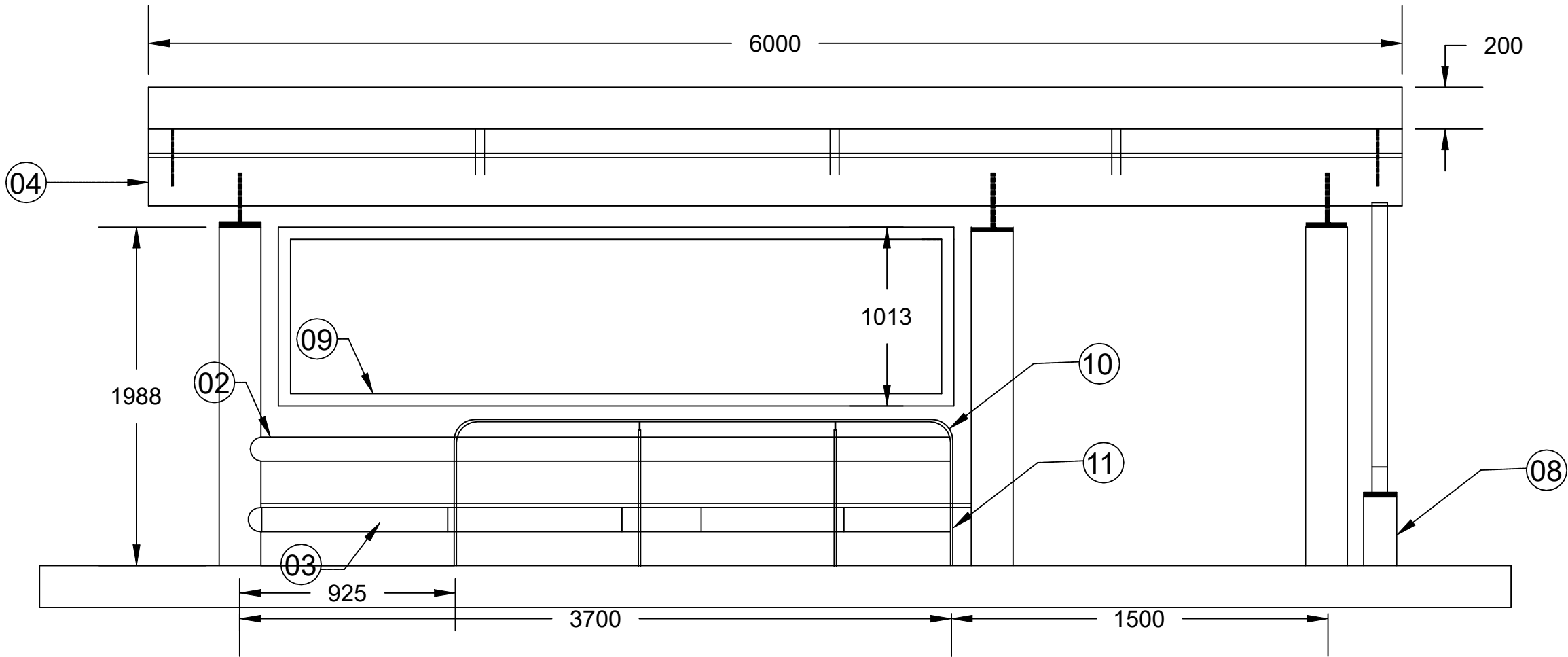
SR	DESCRIPTION	SIZE	MATERIAL
01	MAIN VERTICAL COLUMNS	OD.200mm X15 SWG	S.S 304
02	BACK SUPPORT PIPE	OD'75MM X17 SWG	S.S 304
03	BENCH SUPPORT PIPE	OD.150 X15 SWG	S.S 304
04	ROOF SUPPORT PIPE	OD.200mm X15 SWG	S.S 304
05	ROOF SUPPORT PLATES	2.5MM THK.	S.S 304
06	ADV BORD OUTER FRAME	100X40 X18 SWG	S.S 304
07	ADV BORD INNER FRAME	25X25X 18 SWG	M.S/G.I
08	ADV BORD COLUMNS (SIDE)	OD.150MM X15 SWG	S.S 304
09	ADV BORD FRAME (MAIN)	25X25X 18SWG	M.S/G.I
10	RAILING	OD.75MM X17 SWG	S.S 304
11	RAILING COLUMNS	OD.50MM X18 SWG	S.S 304



TOP PLAN



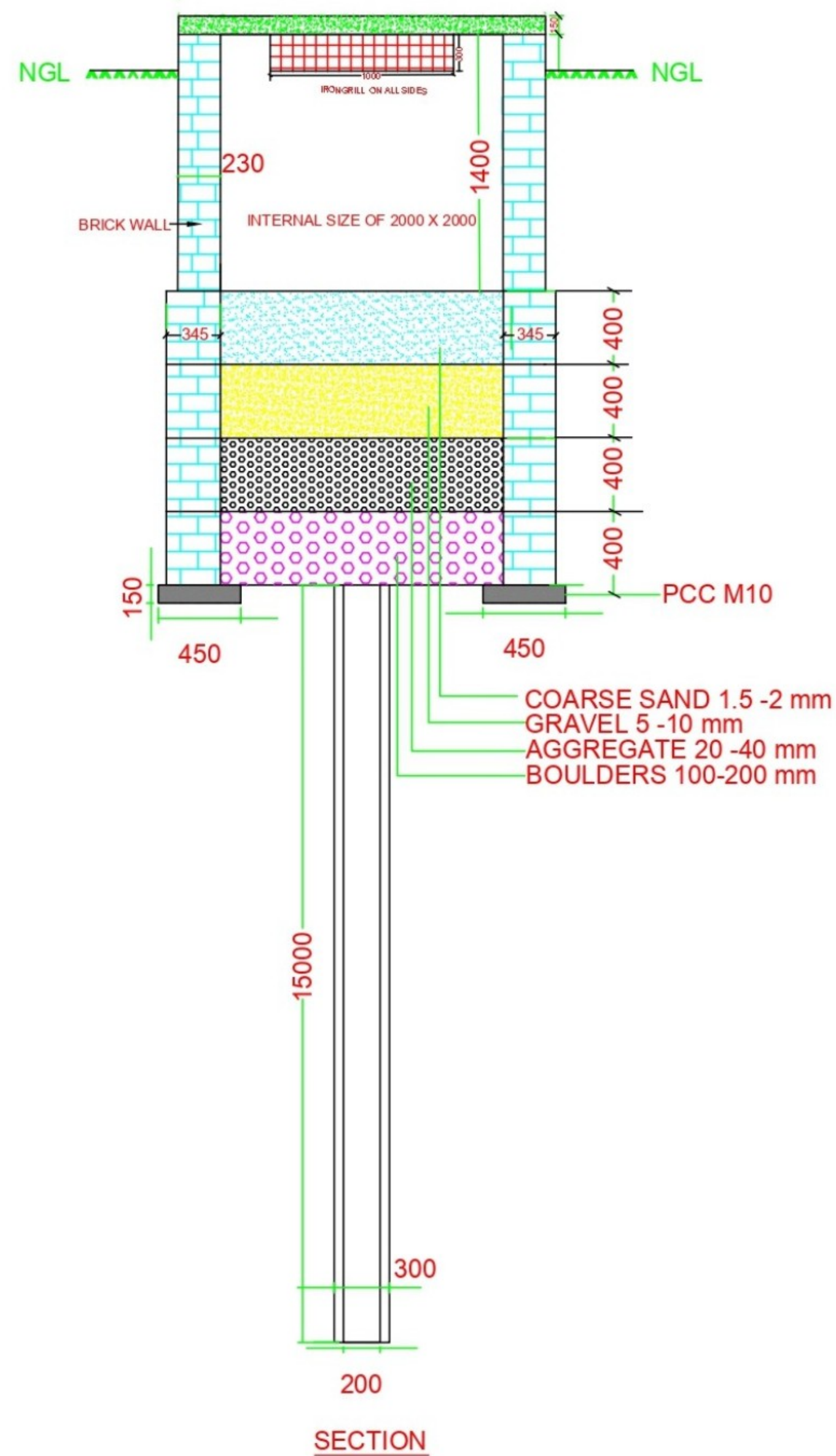
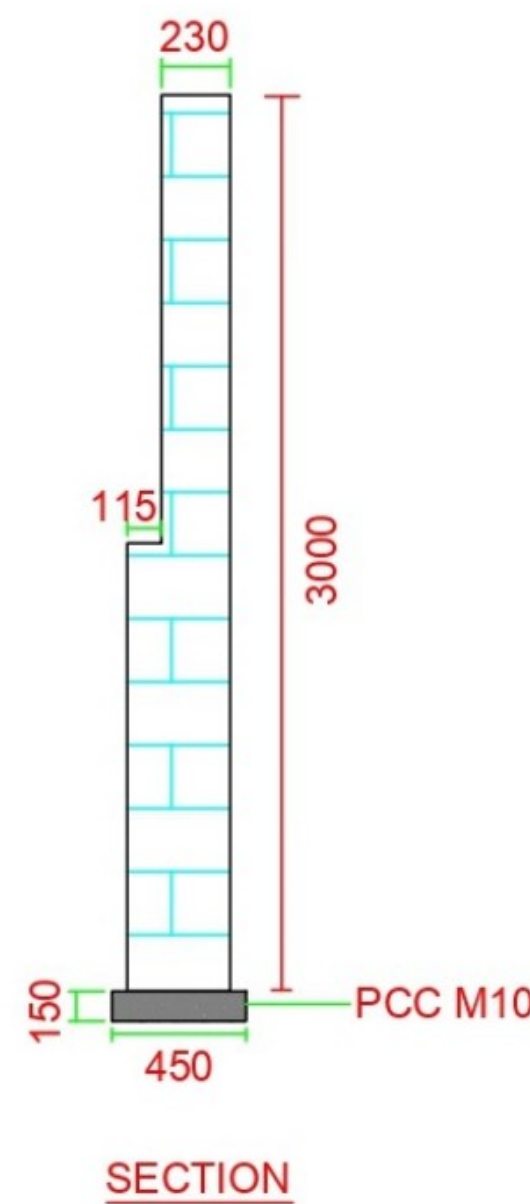
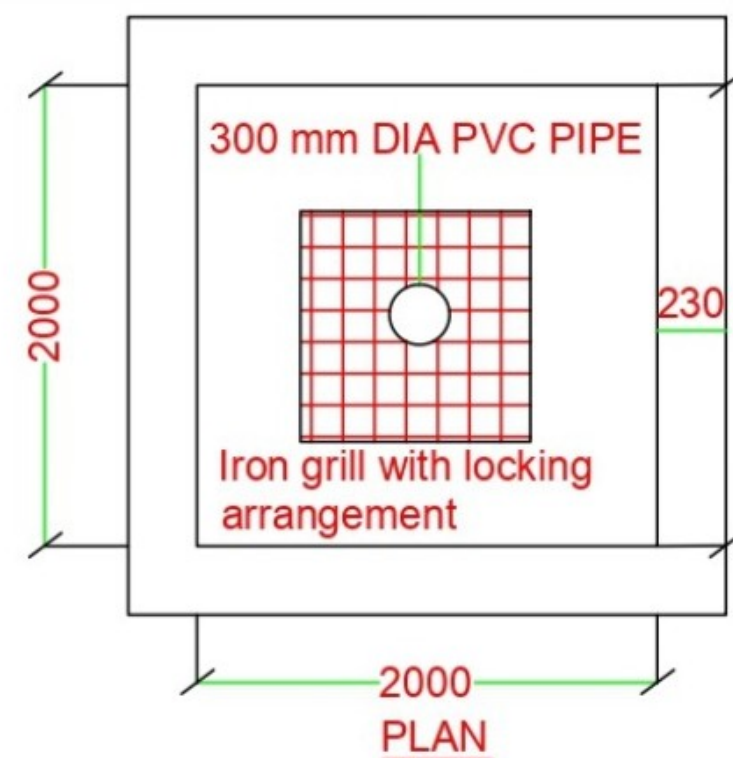
SIDE VIEW



FRONT ELEVATION

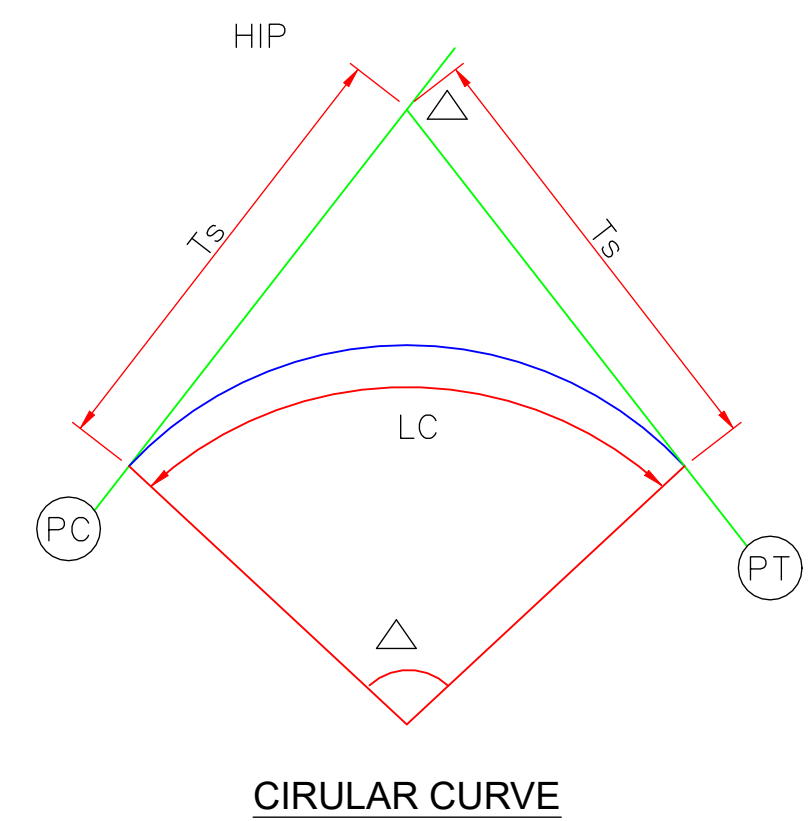
NOTE:- ALL DIMENSIONS ARE IN MM.

R.No.	Date	DESCRIPTION	CLIENT:	DESIGN CONSULTANT:	PROJECT :	Design By: RK	TITLE:
R0	12-09-2024	Draft Detailed Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : M.K	TYPICAL LAYOUT FOR BUS SHELTER
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH	
R2	21-10-2024	Revised As Per Observation				Approved By : VY	
						SCALE : NTS	
							DWG NO: XPL/DSD/SK/KM5.3/BS-01 SHEET: 01 OF 01 DATE: Nov-2024

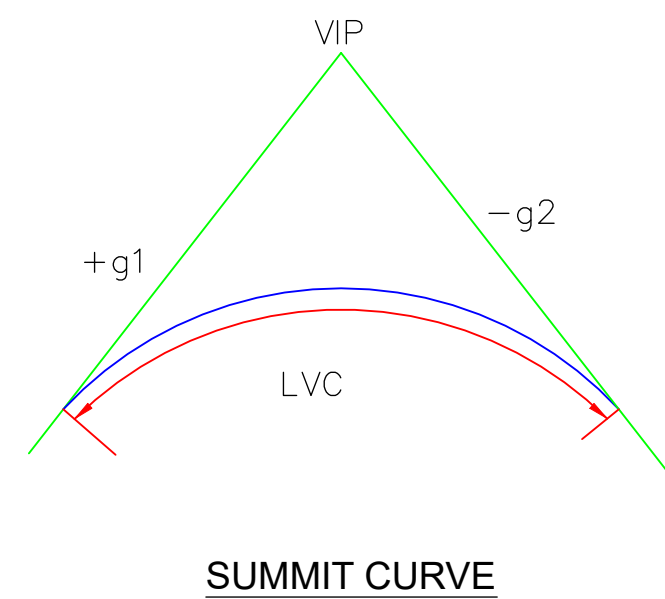


R.No.	Date	DESCRIPTION	CLIENT:	DESIGN CONSULTANT:	PROJECT :	Design By: RK	TITLE:
R0	12-09-2024	Draft Detailed Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : M.K	RAIN WATER HARVESTING
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH	
R2	21-10-2024	Revised As Per Observation				Approved By : VY	DWG NO: XPL/DSD/SK/KM5.3/RW-01
						SCALE : NTS	SHEET: 01 OF 01 DATE: Nov-2024

DETAILS OF HORIZONTAL CURVE

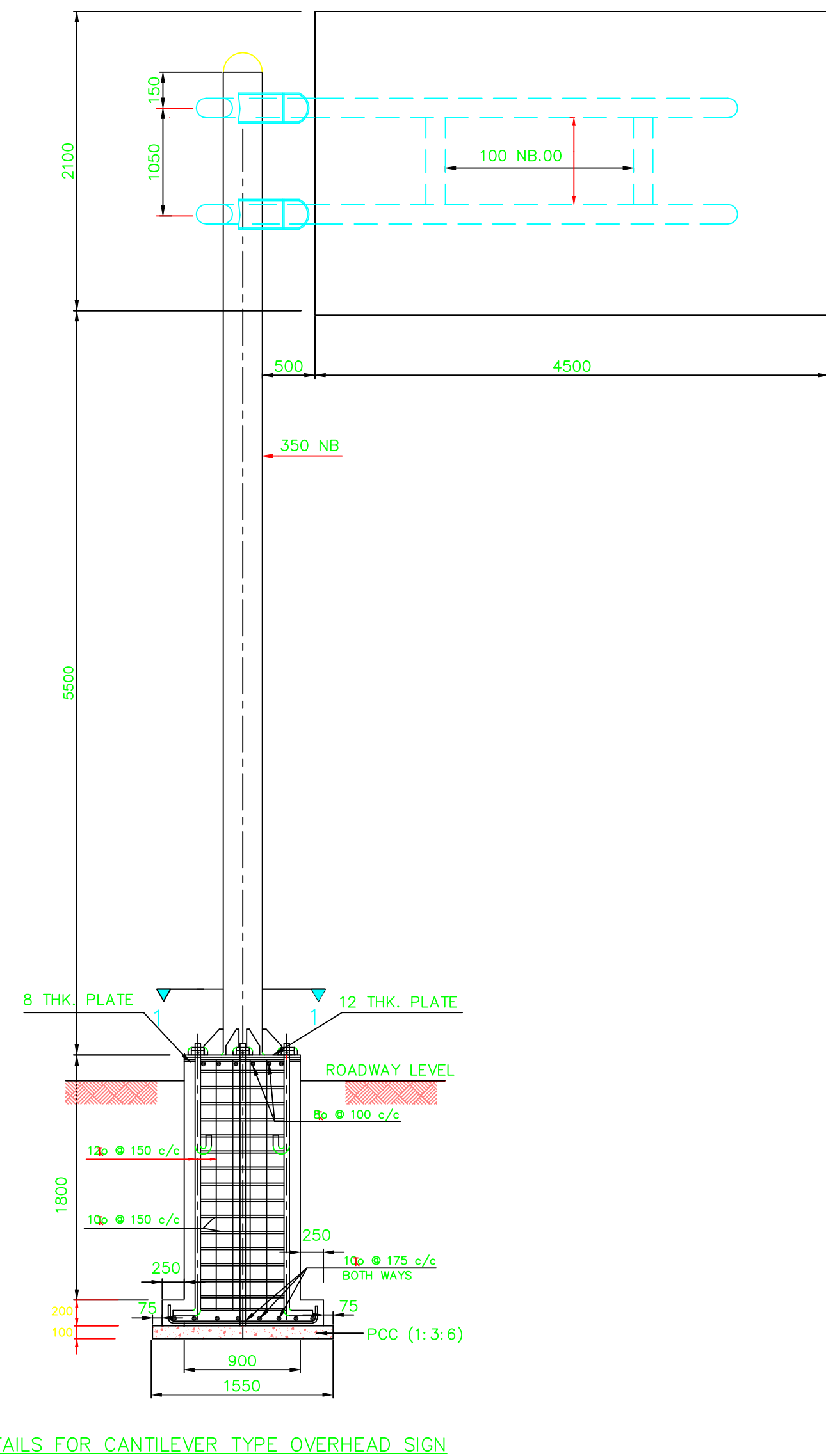
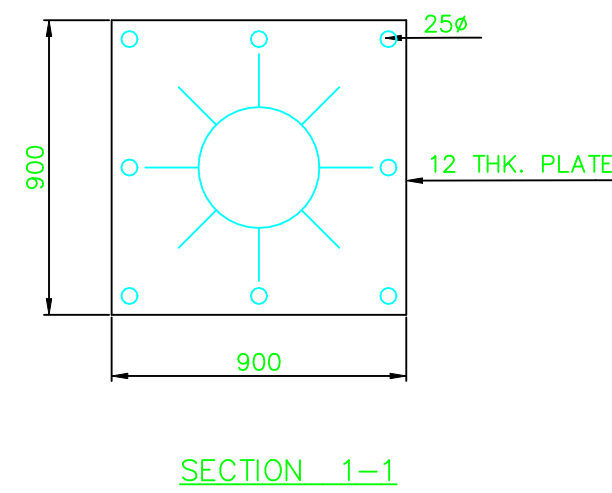
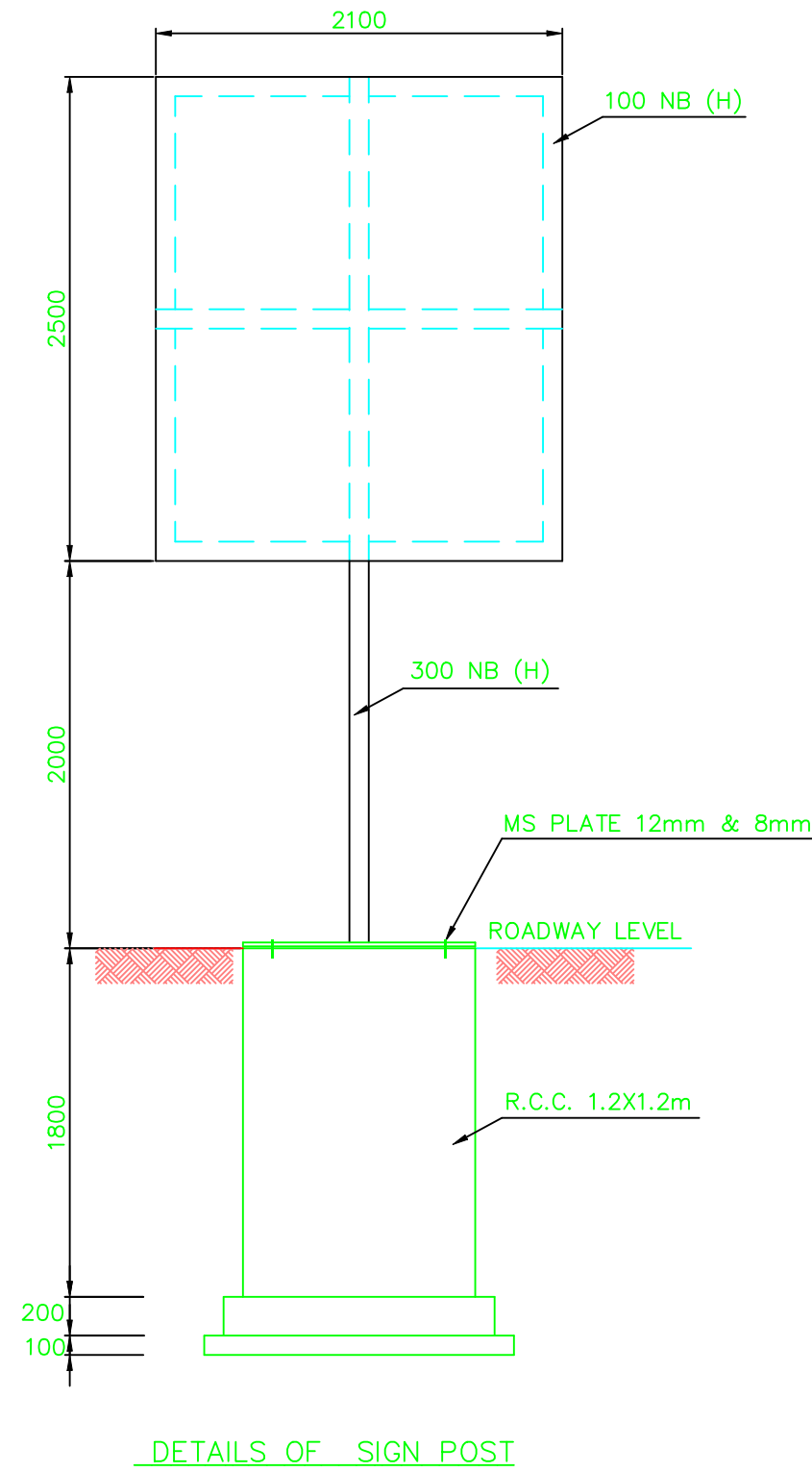
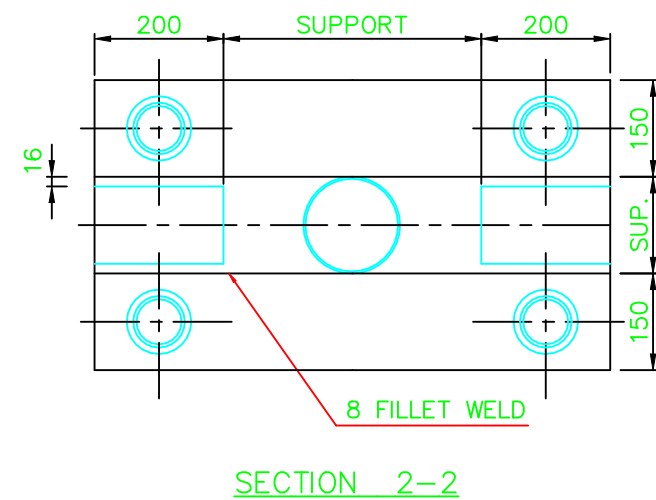
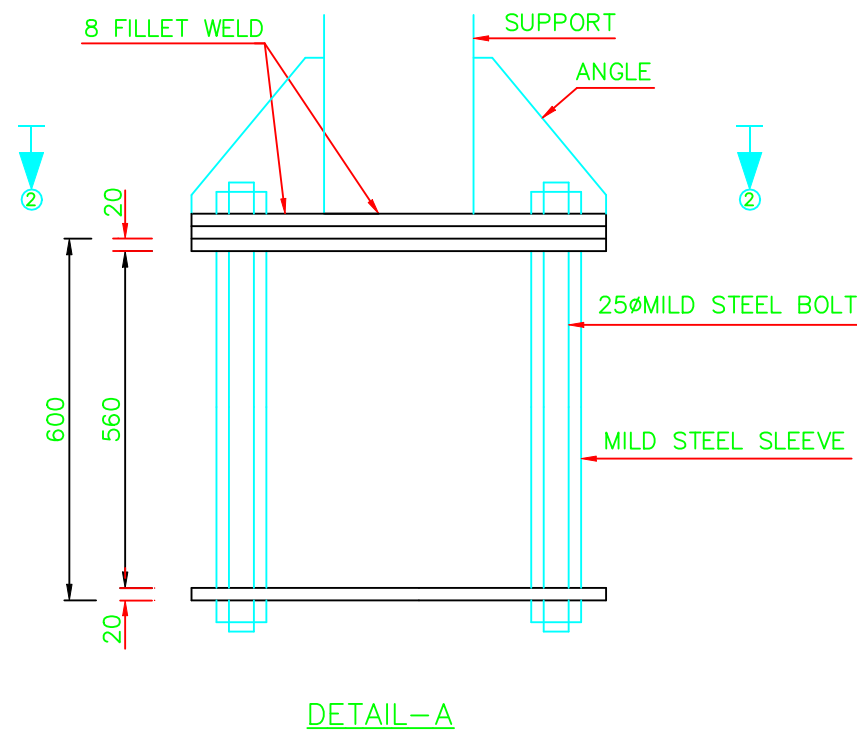
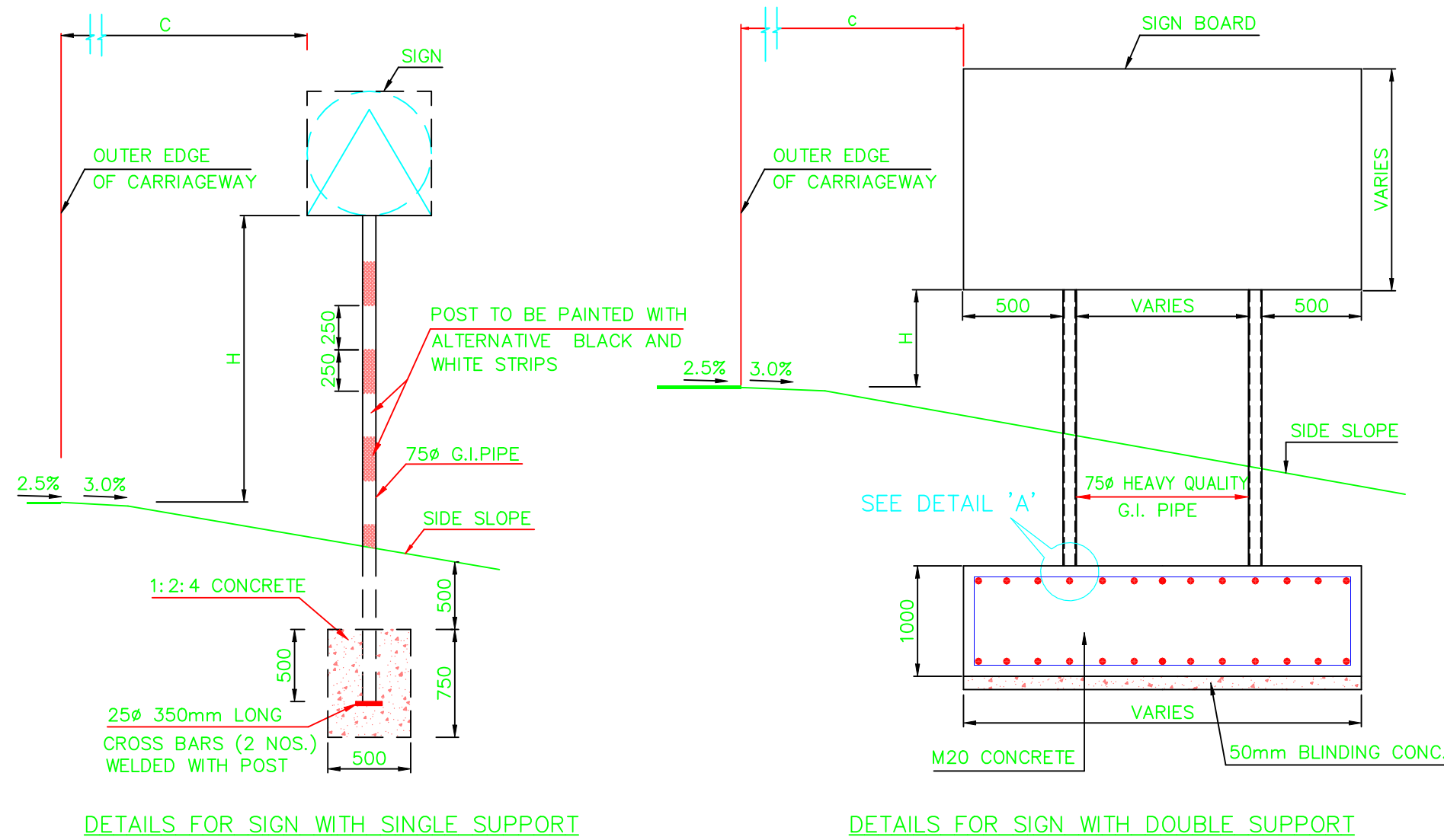


CIRCULAR CURVE WITH TRANSITION

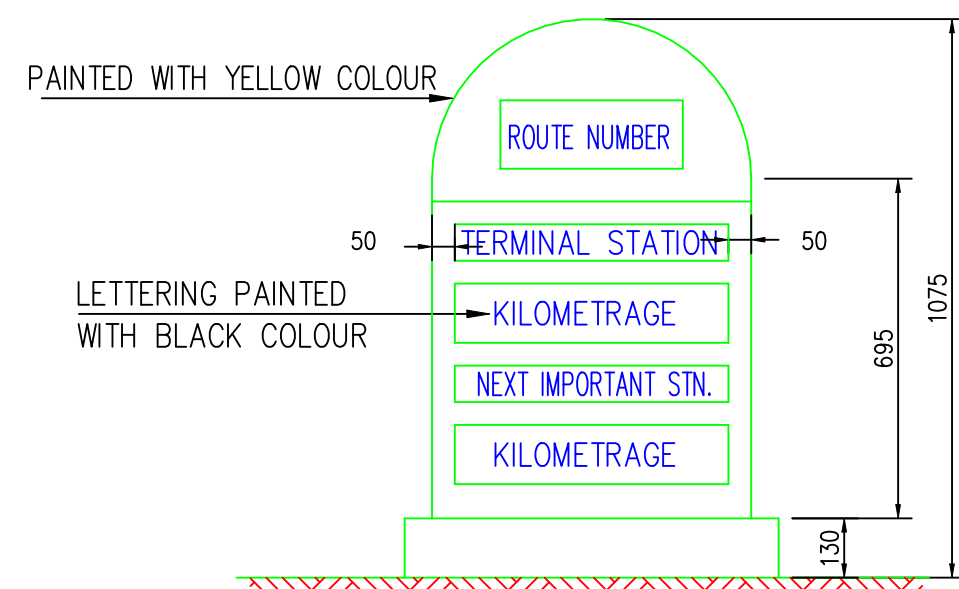


- | | | | |
|------|--------------------|----------------|--|
| (TS) | TANGENT TO SPIRAL | HIP | HORIZONTAL INTERSECTION POINT |
| (SC) | SPIRAL TO CURVE | LS | LENGTH OF TRANSITION |
| (CS) | CURVE TO SPIRAL | T _s | TANGENT DISTANCE |
| (ST) | SPIRAL TO TANGENT | △ | TOTAL DEVIATION ANGLE |
| (PC) | POINT OF CURVATURE | α _s | DEVIATION ANGLE OF
TRANSITION CURVE |
| (PT) | POINT OF TANGENT | LVC | LENGTH OF VERTICAL CURVE |
| | | g ₁ | VERTICAL GRADIENT |
| | | VIP | VERTICAL INTERSECTION POINT |

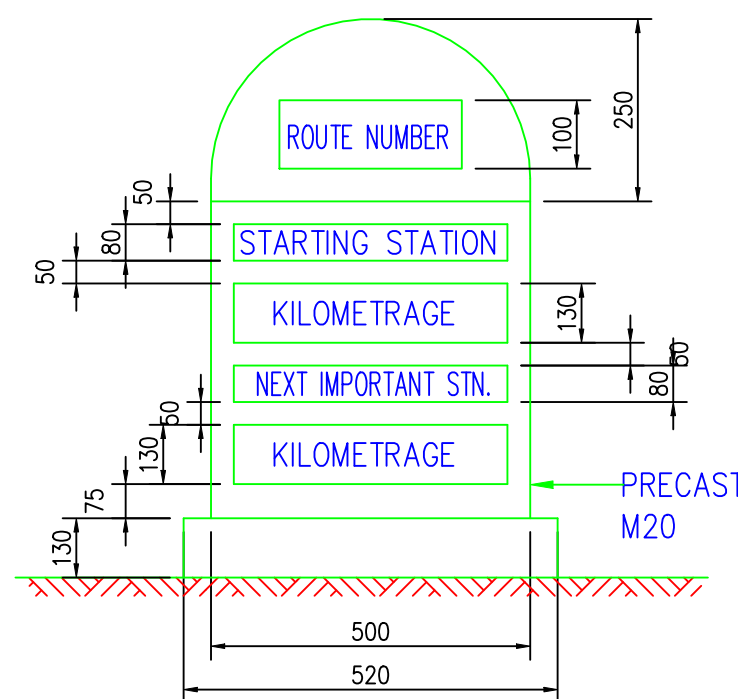
R.No.	Date	DESCRIPTION	CLIENT:  National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	DESIGN CONSULTANT:  Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	PROJECT : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Design By: RK		TITLE: DETAILS OF CURVE & SUPER ELEVATION	
R0	12-09-2024	Draft Detailed Report				Drawn By : M.K			
R1	21-09-2024	Revised Draft Detailed Report							
R2	21-10-2024	Revised As Per Observation				Checked By : AH		DWG NOXPL/DSD/SK/KM5.3/CU-01	
						Approved By : VY			
						SCALE : NTS			
								SHEET: 01 OF 01	DATE: Nov-2024



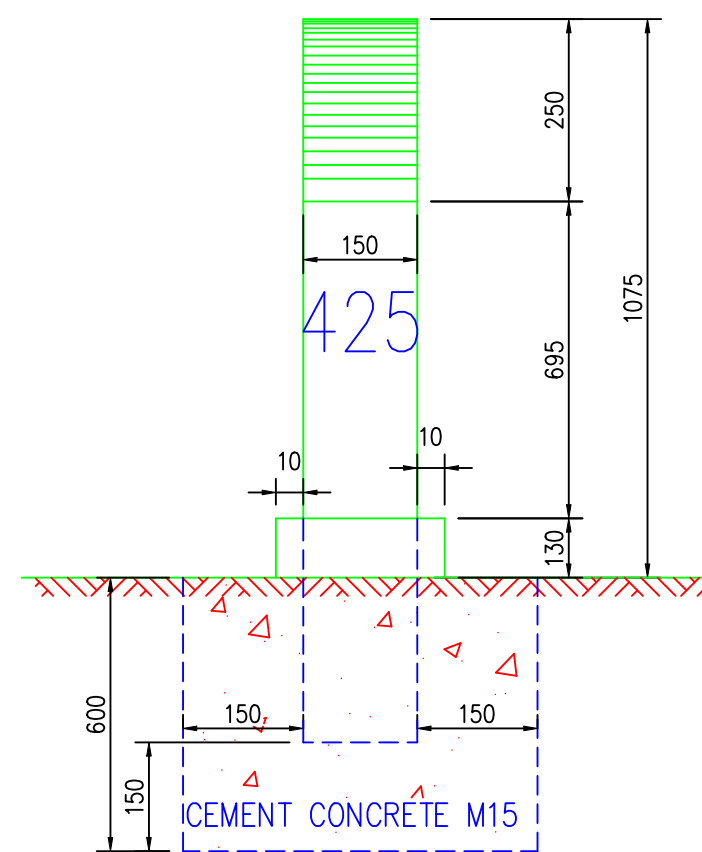
R.No.	Date	DESCRIPTION	CLIENT:	DESIGN CONSULTANT:	PROJECT :	Design By: RK	TITLE:
R0	12-09-2024	Draft Detailed Report	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL)  1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	Xplorer Consultancy Services Pvt. Ltd.  in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : M.K	TYPICAL CANTILEVER TYPE OVERHEAD SIGN
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH	
R2	21-10-2024	Revised As Per Observation				Approved By : VY	
						SCALE : NTS	DWG NO: XPL/DSD/SK/KM5.3/OS-01
							SHEET: 01 OF 01 DATE: Nov-2024



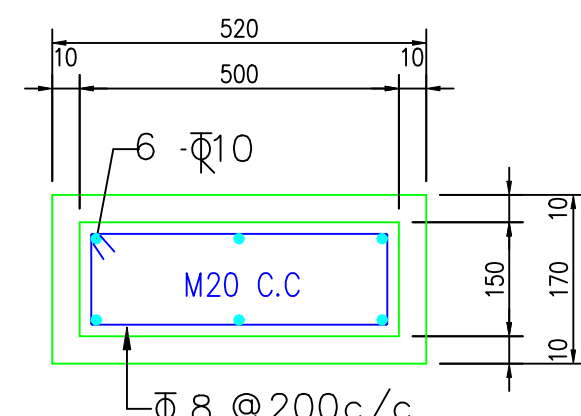
FACE 1



FACE 2



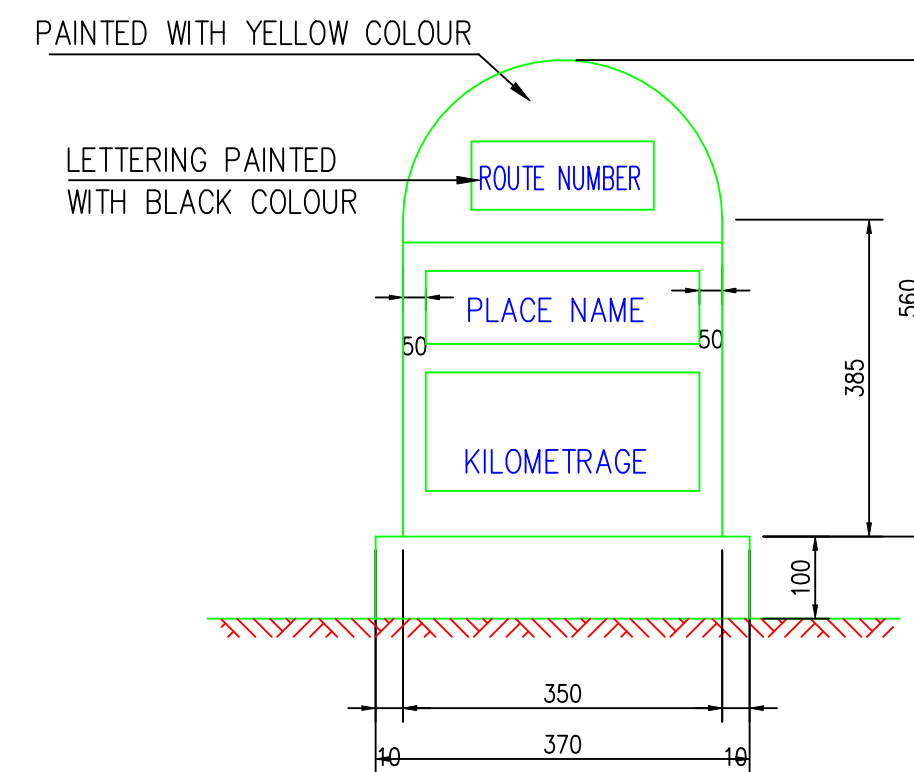
SIDE ELEVATION



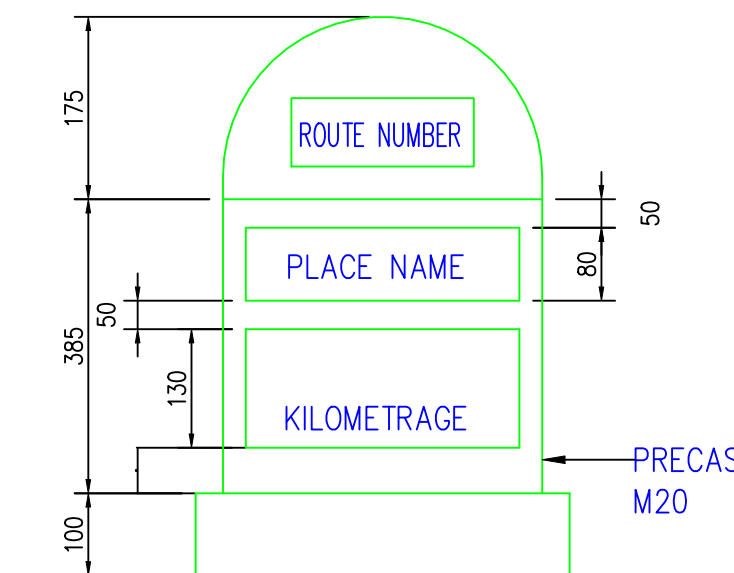
SECTIONAL PLAN

TYPICAL DESIGN FOR THE 5TH KILOMETRE STONE

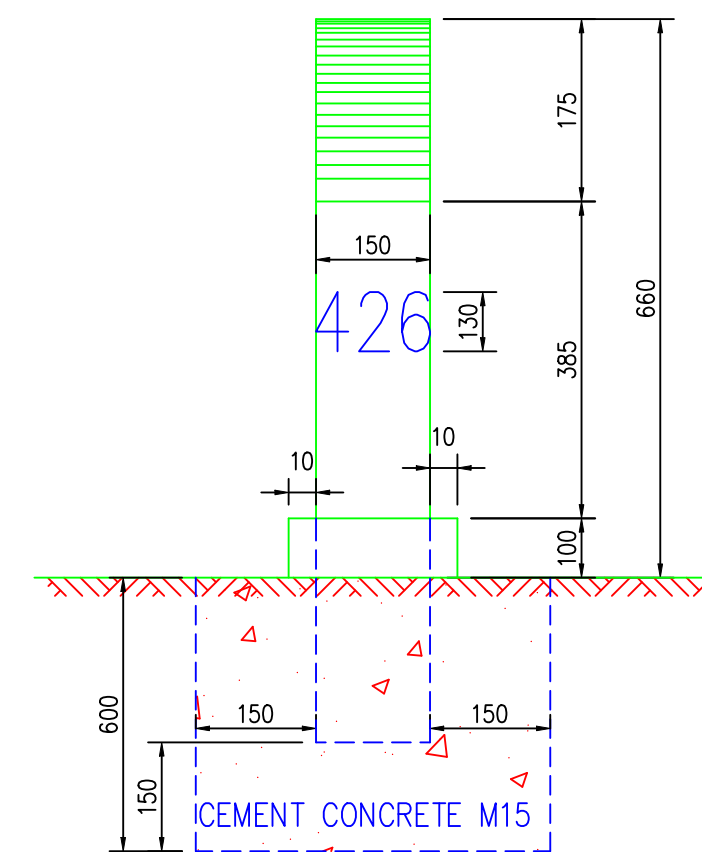
INDEX FOR KILOMETRE STONES		
Km No.	SCRIPT FOR PLACE NAMES	PLACE TO BE SHOWN
0	ROMAN	TERMINAL/STARTING STATION AND NEXT IMPORTANT TOWN
1	HINDI (DEVANAGARI SCRIPT)	NEXT IMPORTANT TOWN
2	LOCAL LANGUAGE	NEXT IMPORTANT TOWN
3	HINDI (DEVANAGARI SCRIPT)	TERMINAL / STARTING STATION
4	LOCAL LANGUAGE	TERMINAL / STARTING STATION
5	ROMAN	TERMINAL/STARTING STATION AND NEXT IMPORTANT TOWN
6	HINDI (DEVANAGARI SCRIPT)	NEXT IMPORTANT TOWN



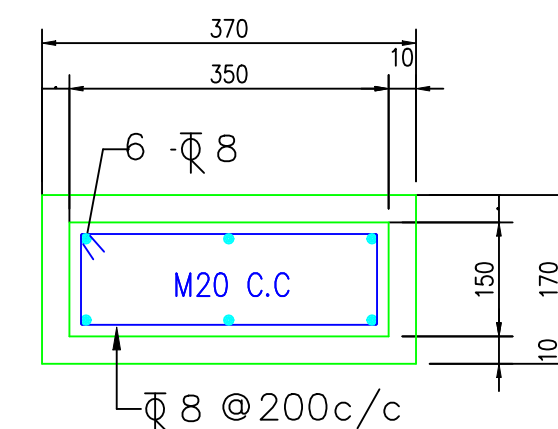
FACE 1



FACE 2



SIDE ELEVATION



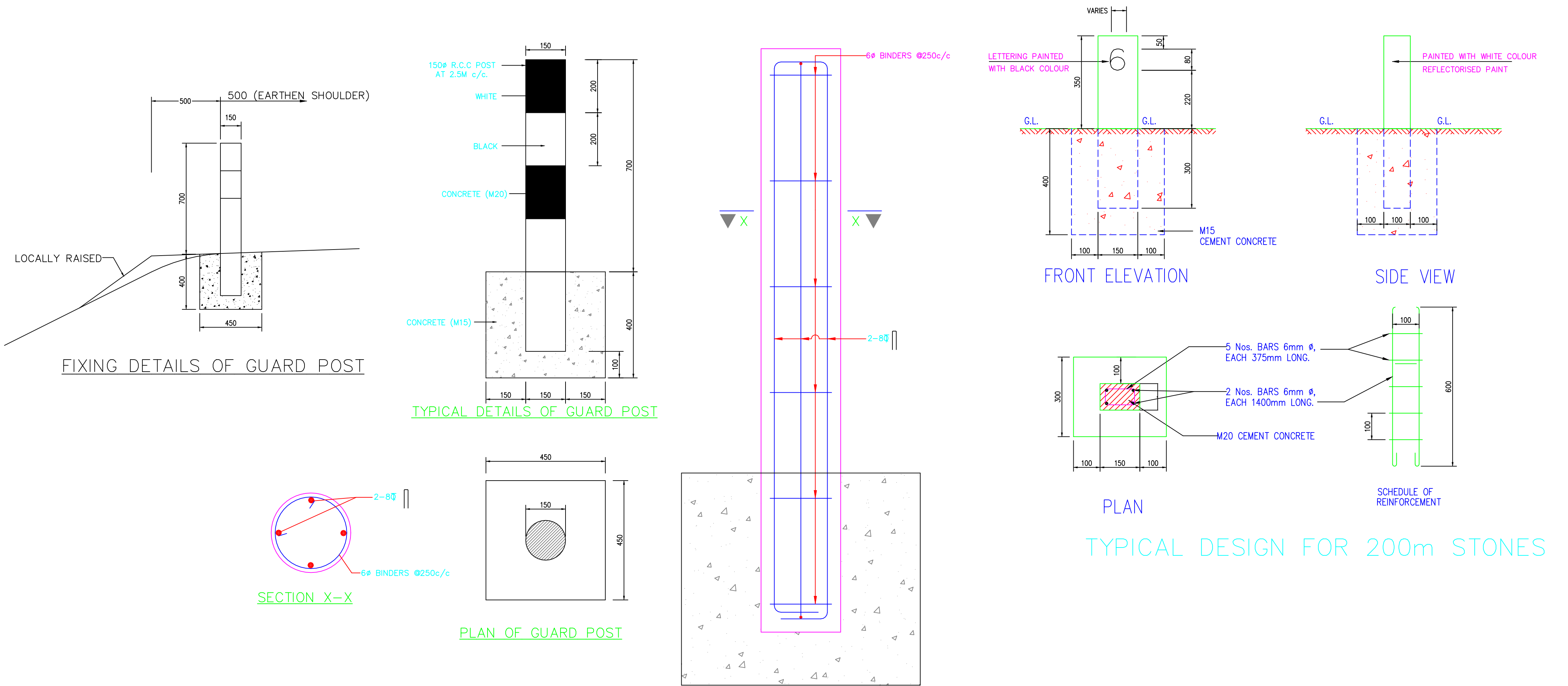
SECTIONAL PLAN

TYPICAL DESIGN FOR ORDINARY KILOMETRE STONE

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFLECTORISED PAINT SHALL BE IN ACCORDANCE WITH CL.803.5 OF M.O.R.T & H SPEC.
3. FOR TYPE & STYLE SIZE OF LETTERING RELEVANT IRC CODE OF PRATICE SHALL BE REFERED.
4. LETTERING IS DONE WITH APPROVED QUALITY BLACK ENAMEL PAINT USING STENCIL

R.No.	Date	DESCRIPTION	CLIENT:	DESIGN CONSULTANT:	PROJECT :	Design By: RK	TITLE:
R0	12-09-2024	Draft Detailed Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of "Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	Drawn By : M.K	TYPICAL DRAWING OF KM STONE DWG NO: XPL/DSD/SK/KM5.3/KM-01
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH	
R2	21-10-2024	Revised As Per Observation				Approved By : VY	
						SCALE : NTS	
							SHEET: 01 OF 02 DATE: Nov-2024



NOTES:

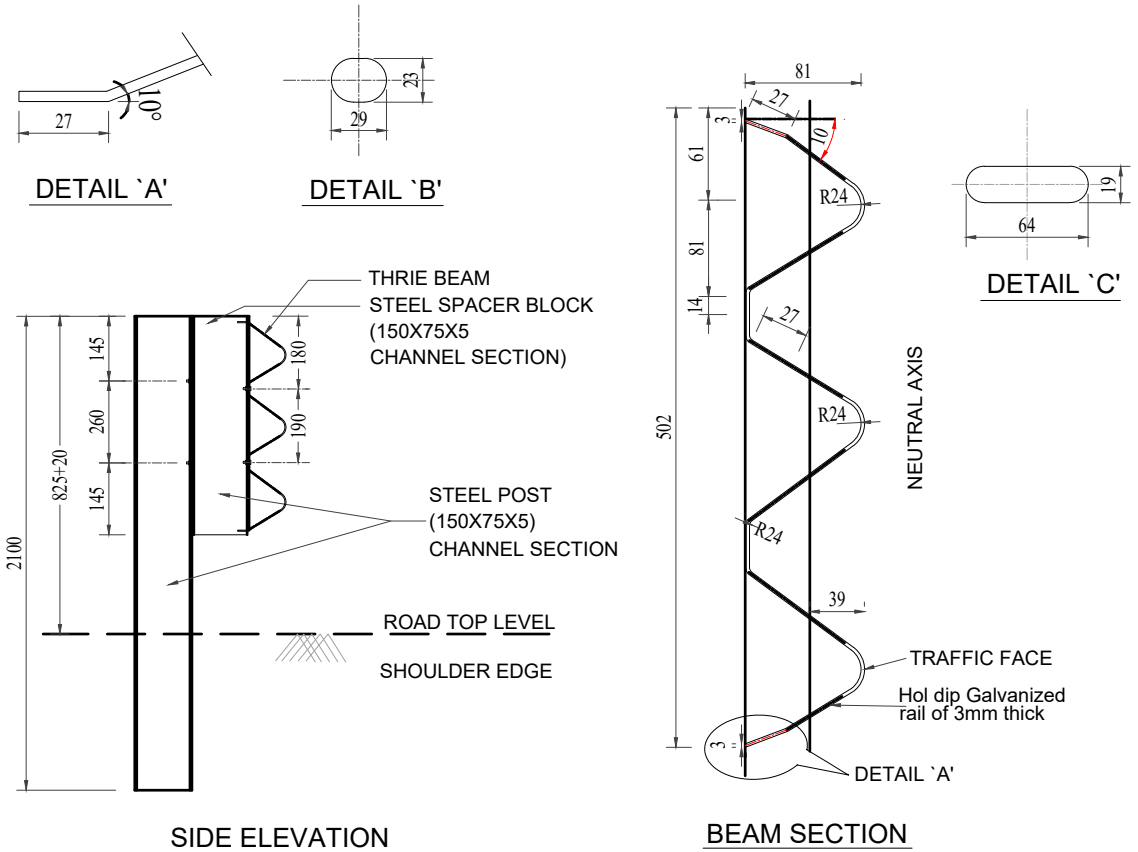
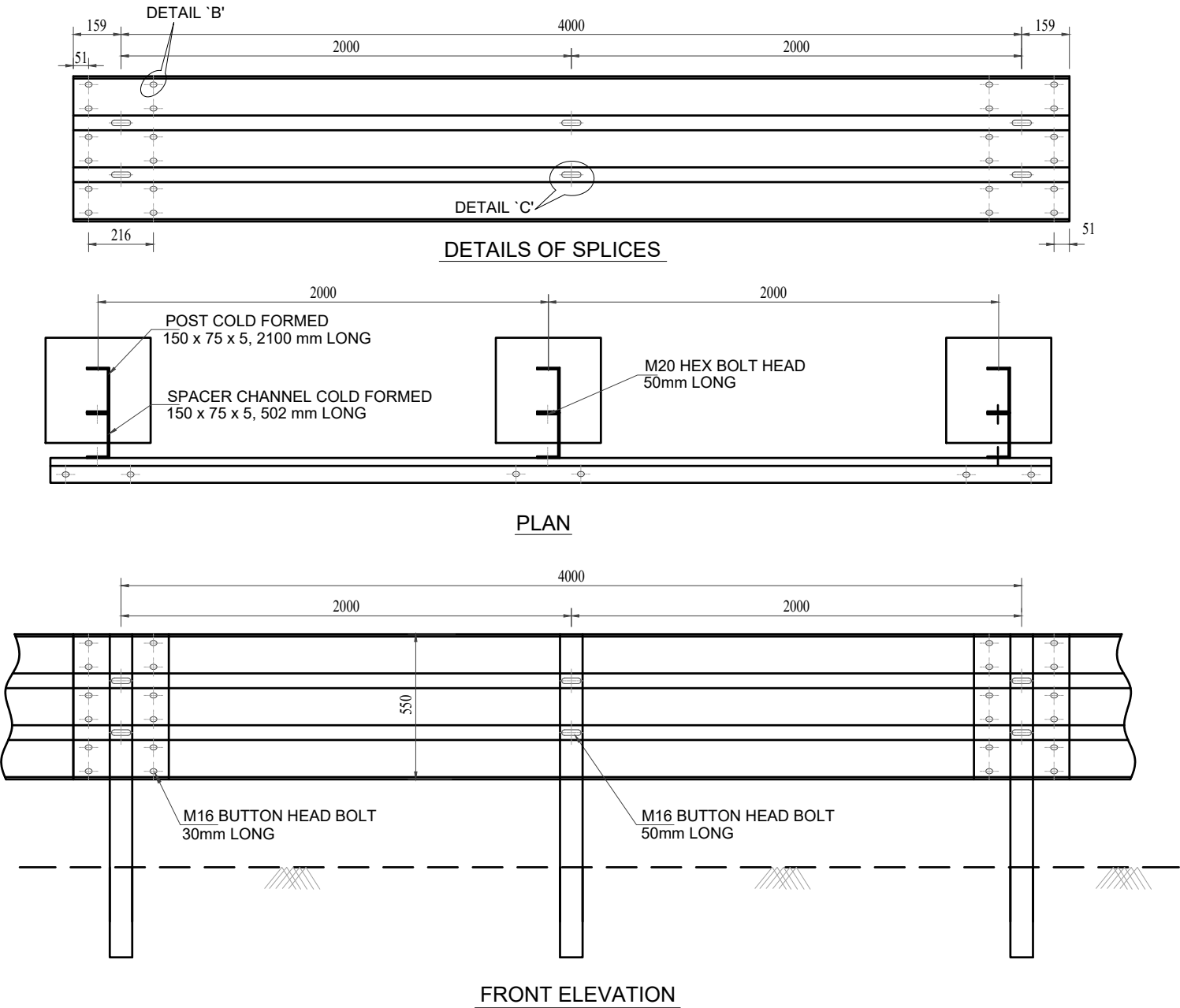
- 1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE MENTIONED.
- 2. FOR EXACT DETAILS OF W-BEAM, REFER MANUFACTURER DRAWING.
- 3. W-BEAM BARRIER IS INSTALLED WHERE EMBANKMENT HEIGHT IS MORE THAN 6 METRES & AT IMMEDIATE BRIDGE APPROACHES.
- 4. R.C.C. GUARD POSTS IS TO BE INSTALLED AS PER THE INSTRUCTIONS OF ENGINEER.

NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETRES.
- 2. REFLECTORISED PAINT SHALL BE IN ACCORDANCE WITH CL.803.5 OF M.O.R.T & H SPEC.
- 3. FOR TYPE & STYLE SIZE OF LETTERING RELEVANT IRC CODE OF PRATICE SHALL BE REFERED.
- 4. LETTERING IS DONE WITH APPROVED QUALITY BLACK ENAMEL PAINT USING STENCIL

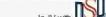
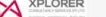
R.No.	Date	DESCRIPTION	CLIENT:	DESIGN CONSULTANT:	PROJECT :	Design By: RK	TITLE:
R0	12-09-2024	Draft Detailed Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor,Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 110029	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration Start From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	Drawn By : M.K	TYPICAL DRAWING OF KM STONE
R1	21-09-2024	Revised Draft Detailed Report				Checked By : AH	
R2	21-10-2024	Revised As Per Observation				Approved By : VY	DWG NO: XPL/DSD/SK/KM5.3/KM-02
						SCALE : NTS	SHEET: 02 OF 02 DATE: Nov-2024

DETAILS OF THRIE-BEAM CRASH BARRIERS

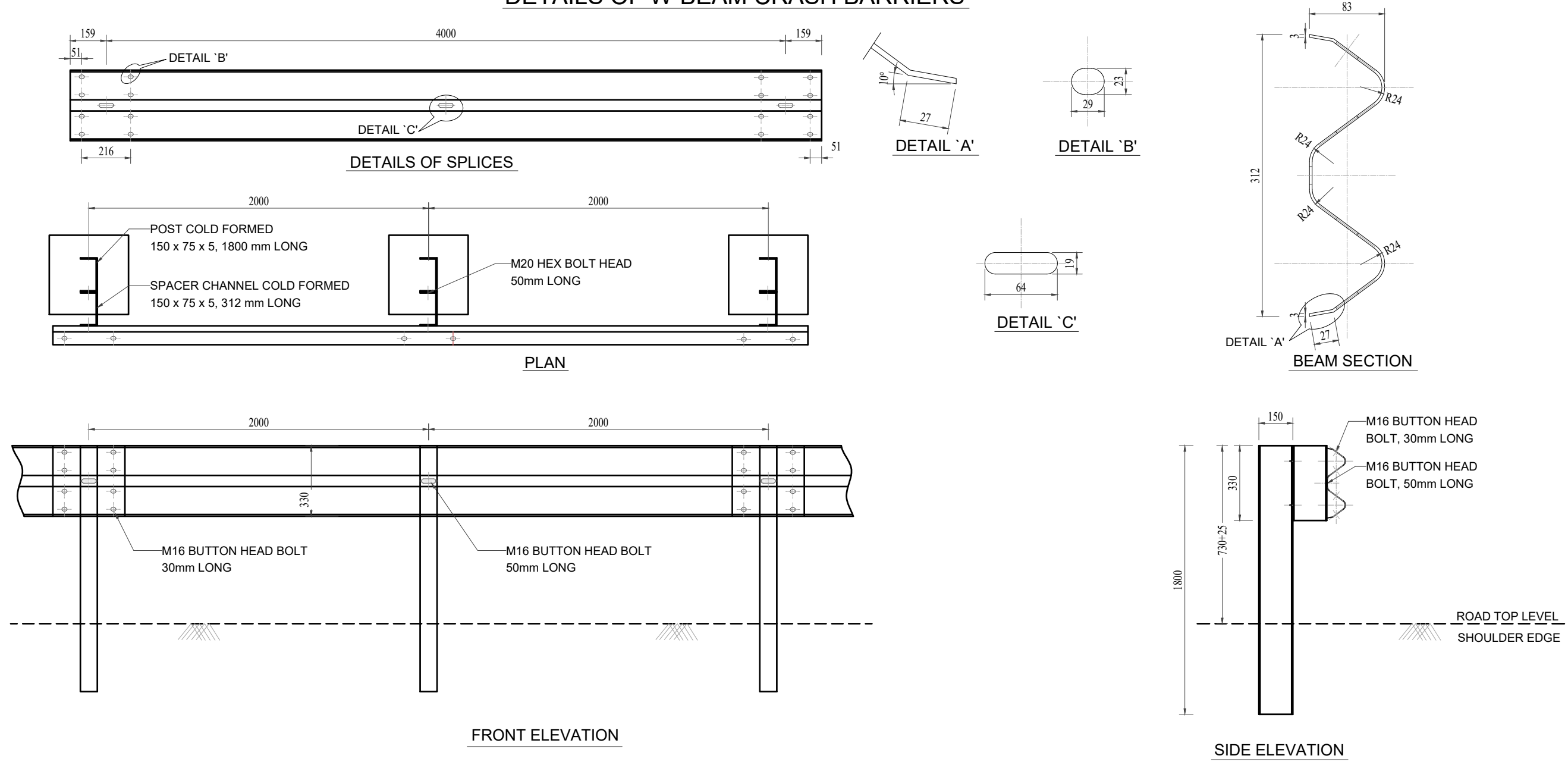


NOTE:

1. HEIGHT OF POSTS SHOULD BE 825mm LONG ABOVE THE FINISHED ROAD LEVEL.
2. SPACING OF POSTS SHOULD BE 2.0m C/C.
3. POST CONSISTS OF FORMED CHANNEL OF SIZE 150 x 75 x 5, 825mm LONG ABOVE GROUND LVL.
4. SPACER CONSISTS OF FORMED CHANNEL OF SIZE 150 x 75 x 5, 502mm LONG.
5. BUTTON HEAD BOLTS M16 x 30mm LONG, 12 Nos FOR THE SPLICING OF THE W PROFILE AT EACH LOCATION.
6. BUTTON HEAD BOLTS M16 x 50mm LONG, 2 Nos AT THE CONNECTION OF THE THRIE BEAM TO SPACER.
7. HEX HEAD BOLTS M20 x 50mm LONG, 2 Nos AT THE CONNECTION OF THE SPACER TO POST.
8. THE BASE MATERIAL OF THE CORRUGATED BEAM SHALL COMPLY TO FOLLOWING MECHANICAL PROPERTIES:-
 - I. TENSILE STRENGTH, MIN=483 MPA.
 - II. ELONGATION, in 2 inches, MIN = 12%
 - III. YIELD, MIN=345 MPA.
9. ALL MEMBERS OF THE SYSTEM SHOULD BE HOT DIPPED GALVANIZED AND TO HAVE A MINIMUM COATING OF 550g/Sq m, EACH FACE IN CONFORMANCE TO M.O.R.T & H. SPECIFICATIONS (CLAUSE 810).

Color Code	Abbreviation	Design Consultant:	Client:	Project :	Design By : RK	Title:	
		Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301 	National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 3rd Floor, Pti Building, 4-Parliament Street, New Delhi - 110001 	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L +PS Configuration From Reshi(Km 96.254) . To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim ”.	Thrie Beam Details	Dwg No: XPL/DSD/SK/KM5.3/S-001	
					Drawn By : MK		
					Checked By : AH		
					Approved By : VY	Sheet: 01 OF 02	Date : Nov-2024
					Scale : NTS		

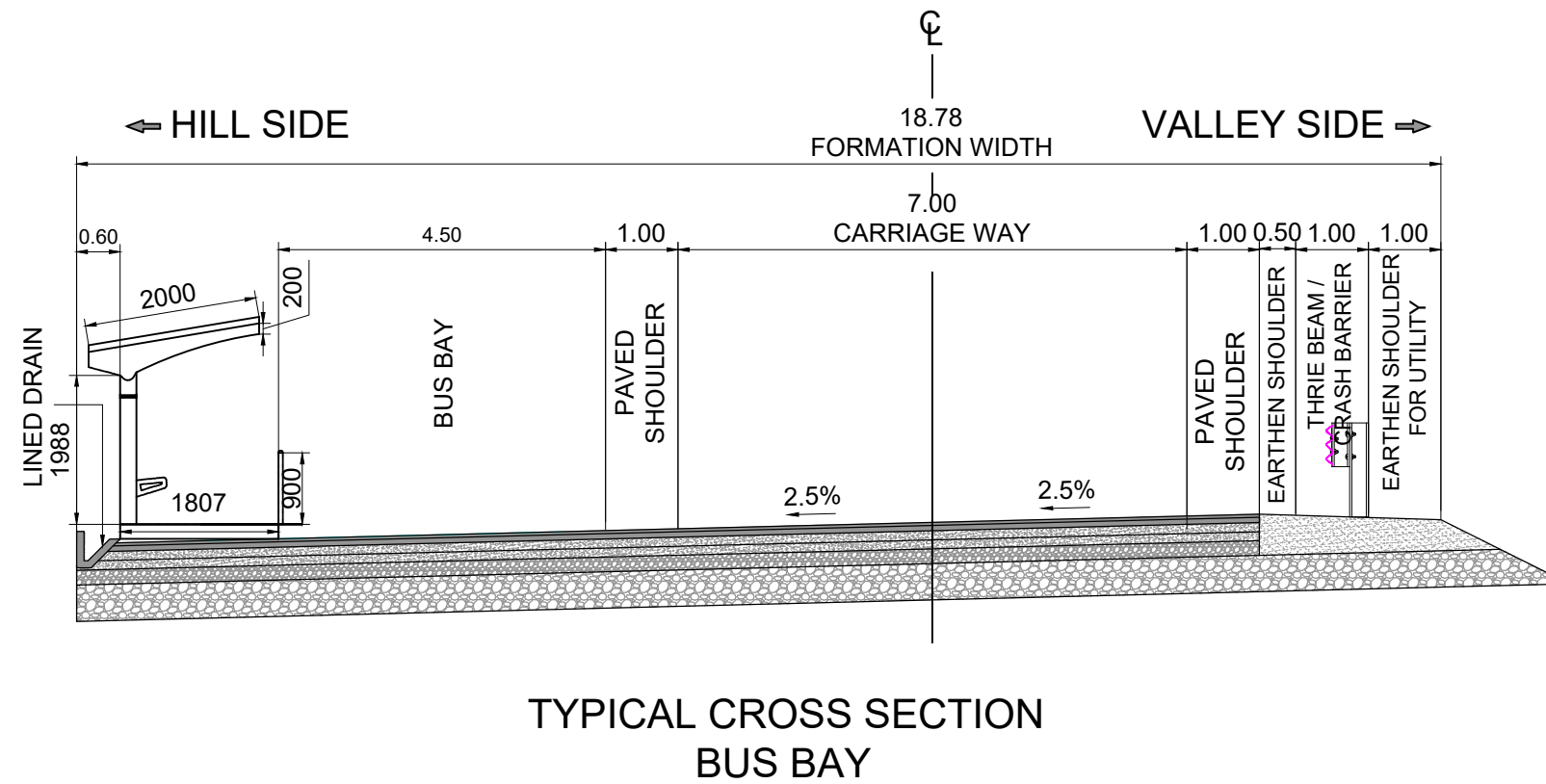
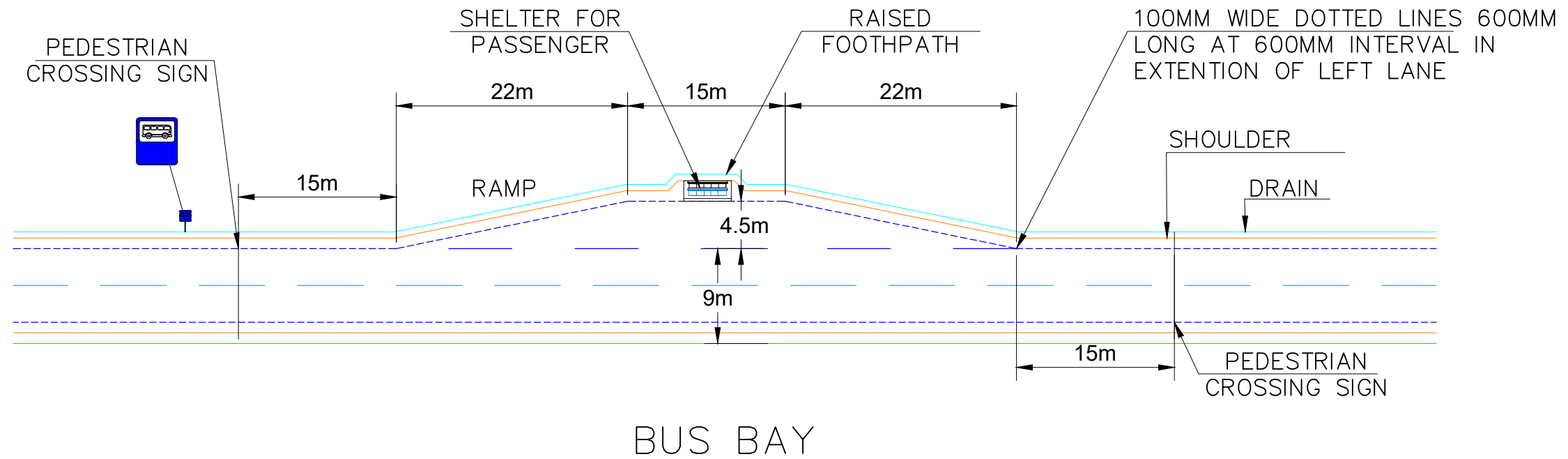
DETAILS OF W-BEAM CRASH BARRIERS



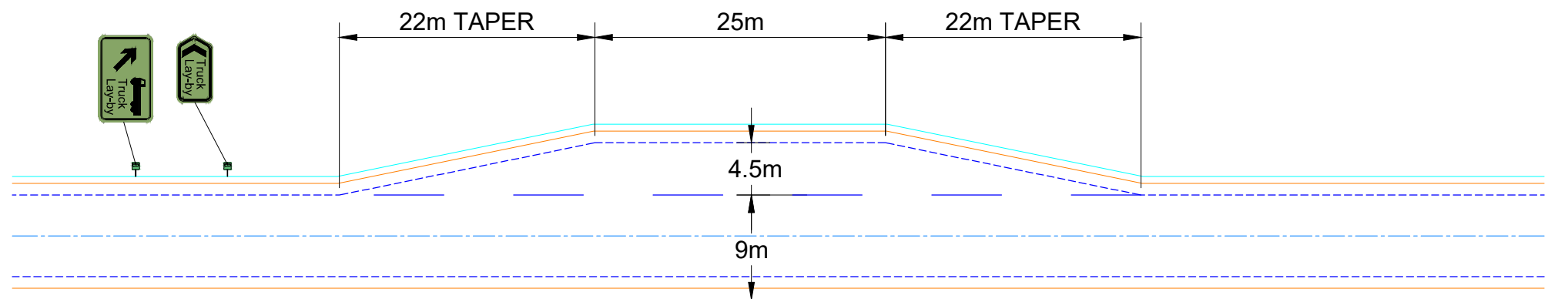
NOTE:

1. HEIGHT OF POSTS SHOULD BE 825mm LONG ABOVE THE FINISHED ROAD LEVEL.
2. SPACING OF POSTS SHOULD BE 2.0m C/C.
3. POST CONSISTS OF FORMED CHANNEL OF SIZE 150 x 75 x 5, 825mm LONG ABOVE GROUND LVL.
4. SPACER CONSISTS OF FORMED CHANNEL OF SIZE 150 x 75 x 5, 502mm LONG.
5. BUTTON HEAD BOLTS M16 x 30mm LONG, 12 Nos FOR THE SPLICING OF THE W PROFILE AT EACH LOCATION.
6. BUTTON HEAD BOLTS M16 x 50mm LONG, 2 Nos AT THE CONNECTION OF THE THRIE BEAM TO SPACER.
7. HEX HEAD BOLTS M20 x 50mm LONG , 2 Nos AT THE CONNECTION OF THE SPACER TO POST.
8. THE BASE MATERIAL OF THE CORRUGATED BEAM SHALL COMPLY TO FOLLOWING MECHANICAL PROPERTIES:-
 - I. TENSILE STRENGTH, MIN=483 MPA.
 - II. ELONGATION, in 2 inches, MIN = 12%
 - III. YIELD, MIN=345 MPA.
9. ALL MEMBERS OF THE SYSTEM SHOULD BE HOT DIPPED GALVANIZED AND TO HAVE A MINIMUM COATING OF 550g/Sq m, EACH FACE IN CONFORMANCE TO M.O.R.T & H. SPECIFICATIONS (CLAUSE 810).

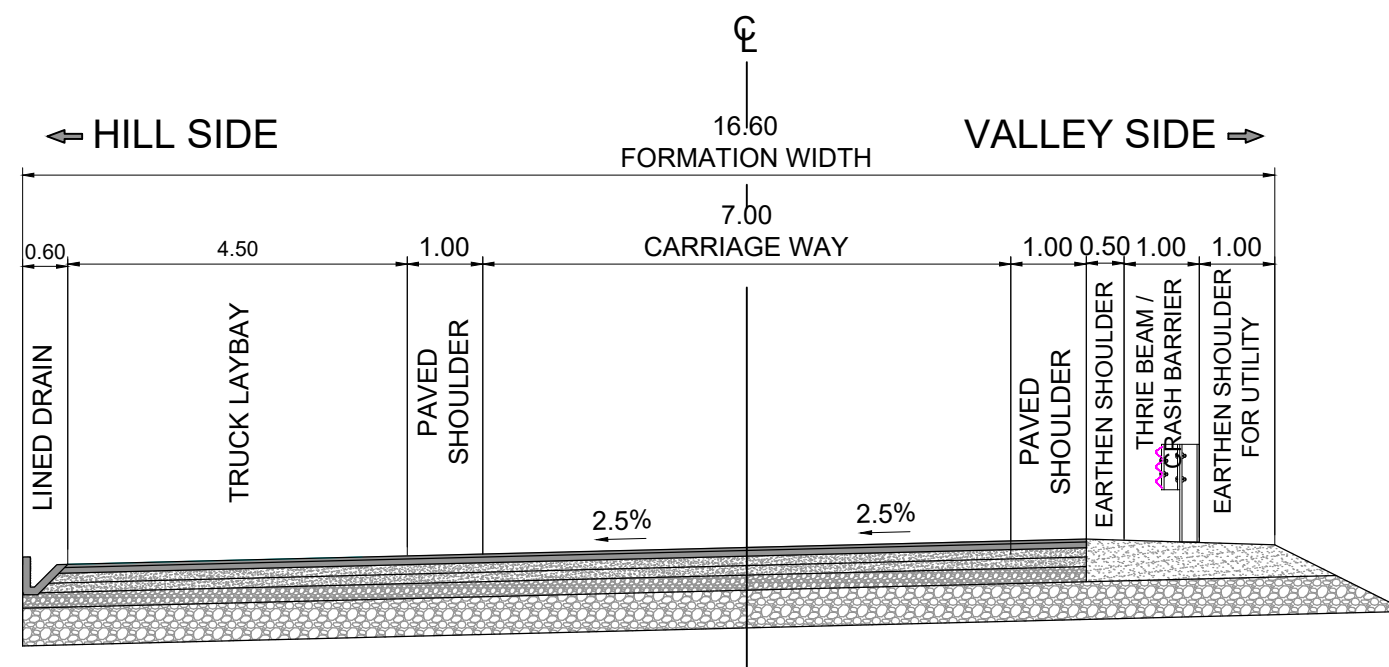
Color Code	Abbreviation	Design Consultant: Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Client: National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 3rd Floor, Pti Building, 4-Parliament Street, New Delhi - 110001	Project : Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradaation Of Existing Carriageway into 2L +PS Configuration From Reshi(Km 96.254) . To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim ”.	Design By : RK	Title: Thrie Beam Details	
					Drawn By : MK		
					Checked By : AH		
					Approved By : VY	Dwg No: XPL/DSD/SK/KM5.3/S-001	
					Scale : NTS	Sheet: 02 OF 02	Date : Nov-2024



Rev. No	Date	Revision Details	CLIENT:	DESIGN CONSULTANT:	PROJECT :	DGN BY: RK	TITLE:	
R0	12-09-2024	Draft Detailed Project Report	 National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 11002	 Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim".	DRN BY: MK	Bus Bay And Truck Lay-By of Reshi To Rhenock, Sikkim (SK) (96+040 To 101+367)	
R1	21-09-2024	Revised Draft Detailed Project Report				CHK BY: AH		
R2	21-10-2024	Revised As Per Observation				APR BY: VY		
						SCALE: NTS		



TRUCK LAYBAY



TYPICAL CROSS SECTION
TRUCK LAYBAY

Rev. No	Date	Revision Details	CLIENT:	DESIGN CONSULTANT:	PROJECT :	DGN BY: RK	TITLE:	
R0	12-09-2024	Draft Detailed Project Report	NHIDCL BUILDING INFRASTRUCTURE - BUILDING THE NATION National Highway & Infrastructure Development Corp. Ltd. (NHIDCL) 1st & 2nd Floor, Tower A, World Trade Centre, Nauroji Nagar, New Delhi – 11002	XPLOER in JV with DSD In Association with m Xplorer Consultancy Services Pvt. Ltd. in joint venture Dsd Infratech Management Pvt. Ltd, in Association With Maverick Mernok & Construction 511, Tower b, ithum, plot-A40 Sector-62, Noida Uttar Pradesh – 201301	Consultancy Services For Preparation Of DPR And Providing Services For Pre-Construction Activities in Respect of “Widening And Up-Gradation Of Existing Carriageway into 2L+PS Configuration From Reshi(Km 96.254) .To Rhenock (Km 101.554) Along NH-717A & From Rhenock (Km 0.00) To Rongli Bazaar (Km 15.300) Along NH-717B in the States Of Sikkim”.	DRN BY: MK	Bus Bay And Truck Lay-By of Reshi To Rhenock, Sikkim (SK) (96+040 To 101+367)	
R1	21-09-2024	Revised Draft Detailed Project Report				CHK BY: AH		
R2	21-10-2024	Revised As Per Observation				APR BY: VY		
						SCALE: NTS	SHEET:	DATE: Nov-2024