

GENERAL NOTES

- MATERIAL SPECIFICATIONS AND WORK SPECIFICATIONS FOR COMPLETE PROJECT ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGES" 2073 UNLESS OTHERWISE SPECIFIED.
- FOLLOWING SPECIFICATIONS OF "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGES" SHALL BE FOLLOWED FOR MATERIAL SELECTION AND CONSTRUCTION:
 - EARTHWORK IN CUTTING : CLAUSE 905 & 906
 - EARTHWORK IN EMBANKMENT : CLAUSE 909 & 910
 - SUBGRADE : CLAUSE 1000
 - GRANULAR SHOULDER & MEDIAN : CLAUSE 1205
 - GRANULAR SUB-BASE : CLAUSE 1201, TABLE 12.1
 - WET MIX MACADAM : CLAUSE 1208, TABLE 12.12
 - DENSE BITUMINOUS MACADAM : CLAUSE 1308, TABLE 13.28
 - BITUMINOUS CONCRETE (POLYMER MODIFIED) : CLAUSE 1309, TABLE 13.31
 - DRY LEAN CONCRETE : CLAUSE 601 OF MORTH REV 5*
 - PAVEMENT QUALITY CONCRETE : CLAUSE 602 OF MORTH REV 5*
- COMPACTION REQUIREMENTS (% OF DRY DENSITY), MODIFIED PROCTOR SHALL BE AS FOLLOWS:
 - EMBANKMENT : 95%
 - CUT SECTIONS SUPPORTING PAVEMENT : 95%
 - SUBGRADE : 95%
 - SHOULDER AND MEDIAN FILL : 95%
- COMPACTED SURFACE OF ROAD SUPPORTING VARIOUS LAYERS SHALL HAVE THE FOLLOWING CBR VALUE (4 DAYS SOAKED) AS MINIMUM:
 - EMBANKMENT : 5%
 - SUBGRADE : 10% (EFFECTIVE)
 - CUT SURFACE SUPPORTING PAVEMENT : 10% (EFFECTIVE)
 - CUT SURFACE SUPPORTING SUBGRADE : 5%
- IF THE LEVEL DIFFERENCE BETWEEN NATURAL GROUND LEVEL AND ROAD TOP LEVEL IS LESS THAN THE PAVEMENT THICKNESS, THEN THE GROUND SUPPORTING THE PAVEMENT SHALL BE COMPACTED TO REQUIRED DENSITY AND WITH REQUIRED CBR.
- AT ALL CUT SECTIONS, THE NATURAL GROUND SUPPORTING THE GROUND SHALL BE PROVIDED WITH SELECT / BORROW SOIL FOR SUBGRADE IF EFFECTIVE CBR OF THE SOIL AT NATURAL GROUND IS LESS THAN THE REQUIRED CBR.
- UNSUITABLE MATERIAL / SOIL ENCOUNTERED DURING FORMATION, EMBANKMENT AND PAVEMENT CONSTRUCTION SHALL BE REMOVED AND REFILLED WITH SELECT FILL (EMBANKMENT / SUBGRADE) AND COMPACTED IN LAYERS.

* MORTH SPECIFICATION FOR ROAD AND BRIDGE WORKS - V REVISION.

NOTES:
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2. THE WIDTH OF FOOTPATH SPACE INCLUDING CYCLE TRACK VARIES WHERE RIGHT OF WAY IS CONSTRAINED

- THE EXISTING PAVEMENT THROUGH OUT THE PROJECT IS PROPOSED TO BE DISMANTLED AND NEW PAVEMENT AS PER PAVEMENT COMPOSITION GIVEN IN TABLE-1 SHALL BE CONSTRUCTED.
- FINISHED ROAD LEVELS FOR MAIN ROAD IS MEASURED WITH RESPECT TO MEDIAN KERB EDGES. SERVICE ROAD LEVELS WILL BE AN EXTENDED CROSS FALL OF MAIN ROAD EXCEPT AT UNDERPASS / FLYOVER LOCATIONS/ SECTIONS WHERE SERVICE ROAD PROFILE IS DIFFERENT FROM MAIN ROAD PROFILE WITH CAMBER.
- MEDIAN TOP SLOPE INDICATED IN THE TYPICAL CROSS SECTION IS INDICATIVE. THE SLOPE SHALL VARY DEPENDING ON KERB EDGE LEVELS OF LEFT AND RIGHT CARRIAGEWAYS.
- THE SIDES SLOPES OF ROAD IN FILL / CUT SECTIONS SHALL BE IN ACCORDANCE WITH CLAUSE 11.7 OF NRS 2070.

12. PAVEMENT COMPOSITION FOR MAIN ROAD AND SERVICE ROAD ARE GIVEN BELOW.

PAVEMENT THICKNESS IN MM	LAYERS, SECTION I, CH 236.500 TO CH 268.300	SECTION II, CH 268.300 TO CH 347.200	SECTION III, CH 347.200 TO CH 366.887	SERVICE ROAD (ALL SECTIONS)
BITUMINOUS CONCRETE	50	40	50	40
DENSE BITUMINOUS MACADAM	90	90	100	50
WET MIX MACADAM	250	250	250	150
GRANULAR SUBBASE	200	200	200	200
TOTAL	590	580	600	440

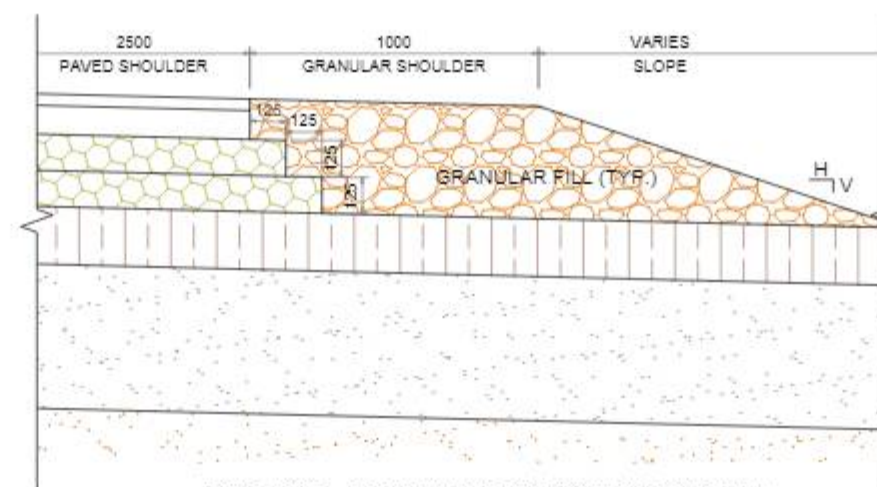
13. PAVEMENT COMPOSITION FOR CYCLE TRACK AND FOOTPATH SHALL BE AS FOLLOWS,

	FOOTPATH	CYCLETRACK
* CAST-IN-SITU CEMENT CONCRETE SLAB, M20	50mm	50mm
* CEMENT MORTAR, 1:3	12mm	12mm
* SAND BED	30mm	30mm
* COMPACTED GRAVEL	--	350mm
* GRANULAR SUBBASE	200mm	200mm
* LAID OVER SUBGRADE, EFFECTIVE CBR ≥ 10%		

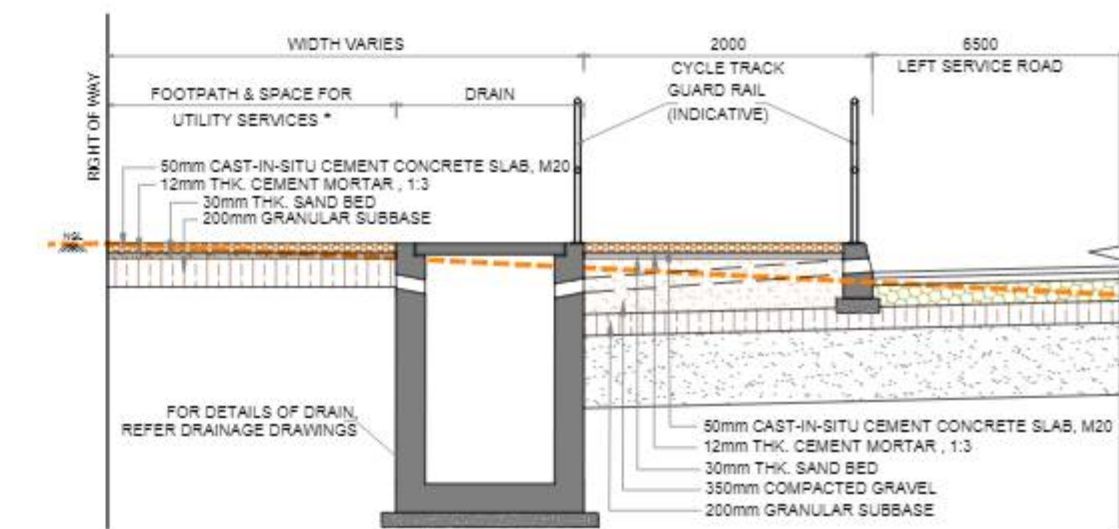
PRE CAST KERB AT LONGITUDINAL INTERVAL OF 10m SHALL BE PLACED ALONG SEPARATOR TO ACHIEVE PROPER COMPACTION OF PAVEMENT LAYERS. THE TOP OF PRE CAST KERB SHALL BE FLUSH WITH TOP SURFACE OF CYCLE TRACK / FOOTPATH.

14. RIGID PAVEMENT FOR BUSBAY & TRUCK LAYBY SHALL AS FOLLOWS,

- * PQC 300mm THK. M40
- * DLC 150mm THK. M15
- * GSB 200mm.
- * LAID OVER SUBGRADE, EFFECTIVE CBR ≥ 10%



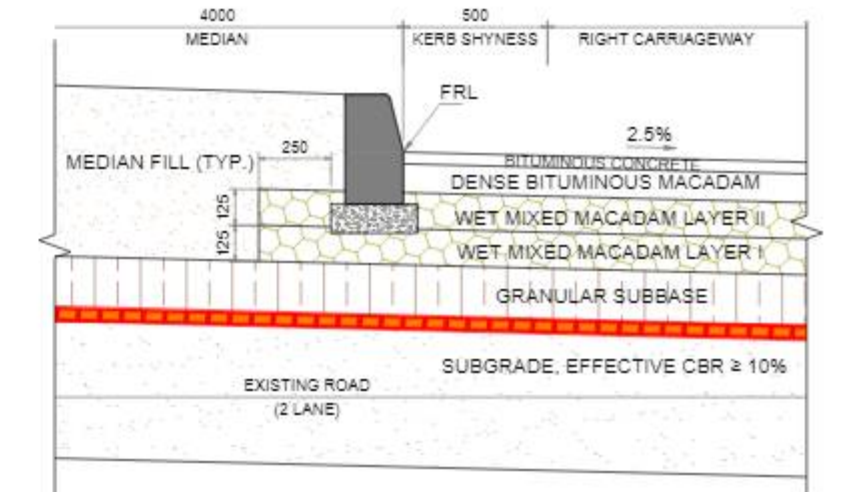
TYPICAL CONSTRUCTION OFFSETS BETWEEN PAVED SHOULDER AND GRANULAR SHOULDER



TYPICAL DETAILS OF CYCLE TRACK AND FOOTPATH

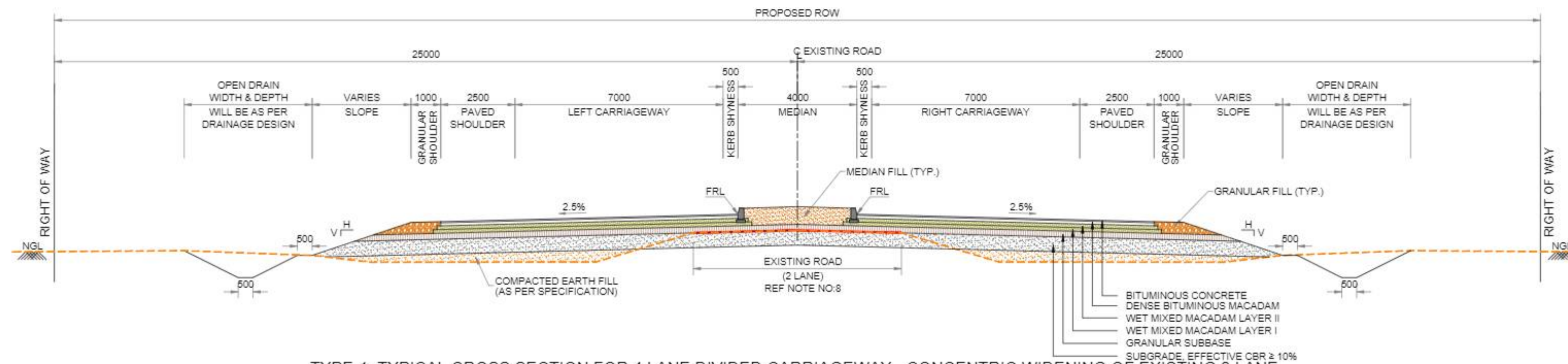


TYPICAL DETAILS OF PRECAST KERB

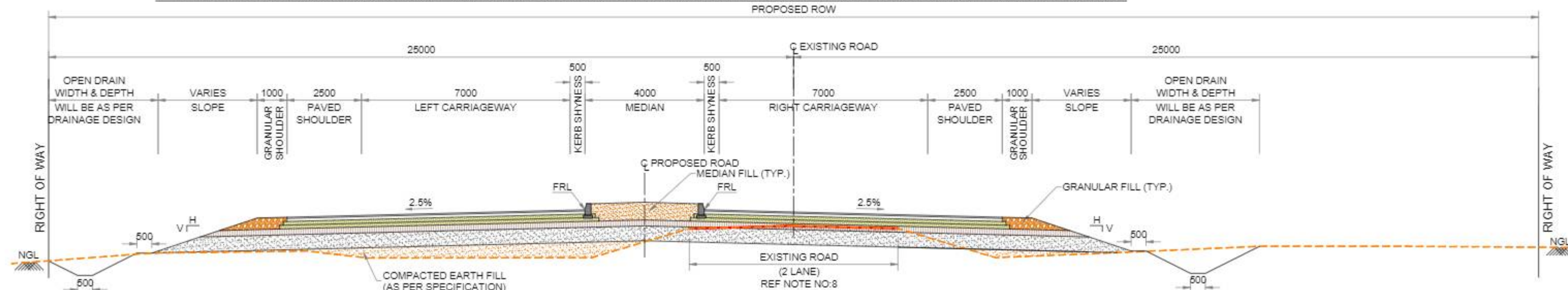


TYPICAL CONSTRUCTION OFFSETS FOR MEDIAN

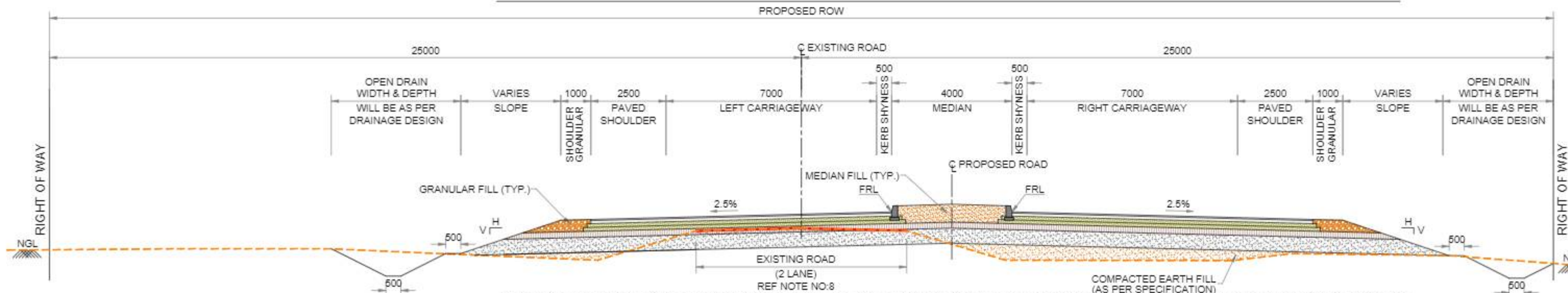
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Pushkar Poudel Nec.No. 6146	Mr. T.V. Ramesh Nec.No. 6146	Mr. Harikrishna Bhaisar Nec.No. 6146	GENERAL NOTES AND TYPICAL DETAILS	Scale: 1:100	JUNE 2023
						Reference Drawings 1. TYPICAL HORIZONTAL CURVE & ATTAINMENT OF SUPERELEVATION DETAILS- KDP/DDR/HIGHWAY/STD/001 2. HORIZONTAL CURVE DETAILS- KDP/DDR/HIGHWAY/STD/002 TO 008 3. PLAN AND PROFILE - KDP/DDR/HIGHWAY/PP/ 501 TO 538	Chainage:	Drawing No. KDP/DDR/HIGHWAY/TCS/ 001 REV R(0) Sheet No.



TYPE-1: TYPICAL CROSS SECTION FOR 4 LANE DIVIDED CARRIAGEWAY - CONCENTRIC WIDENING OF EXISTING 2 LANE



TYPE-2: TYPICAL CROSS SECTION FOR 4 LANE DIVIDED CARRIAGEWAY - ECCENTRIC WIDENING ON LHS SIDE

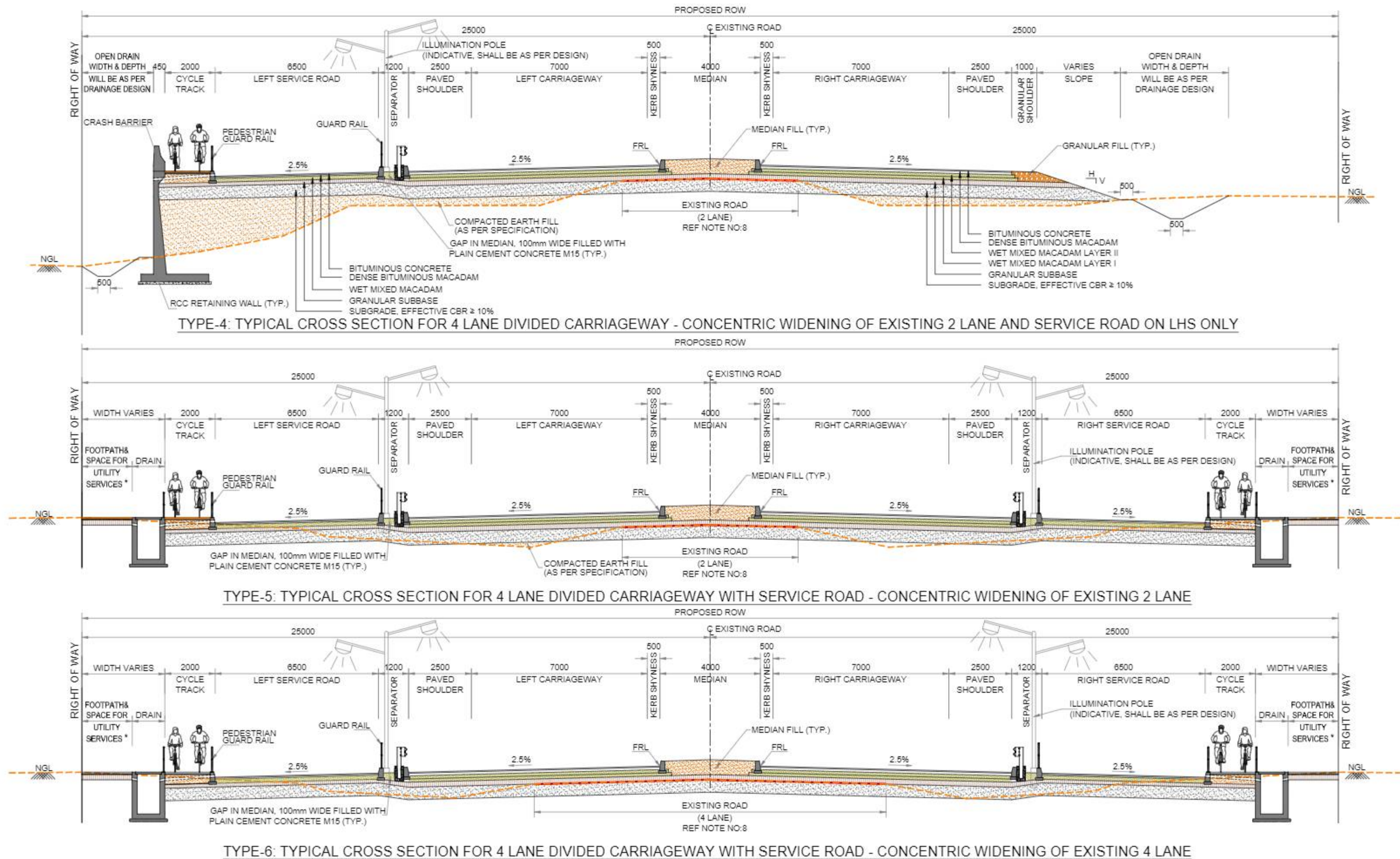


TYPE-3: TYPICAL CROSS SECTION FOR 4 LANE DIVIDED CARRIAGEWAY - ECCENTRIC WIDENING ON RHS SIDE

NOTES:

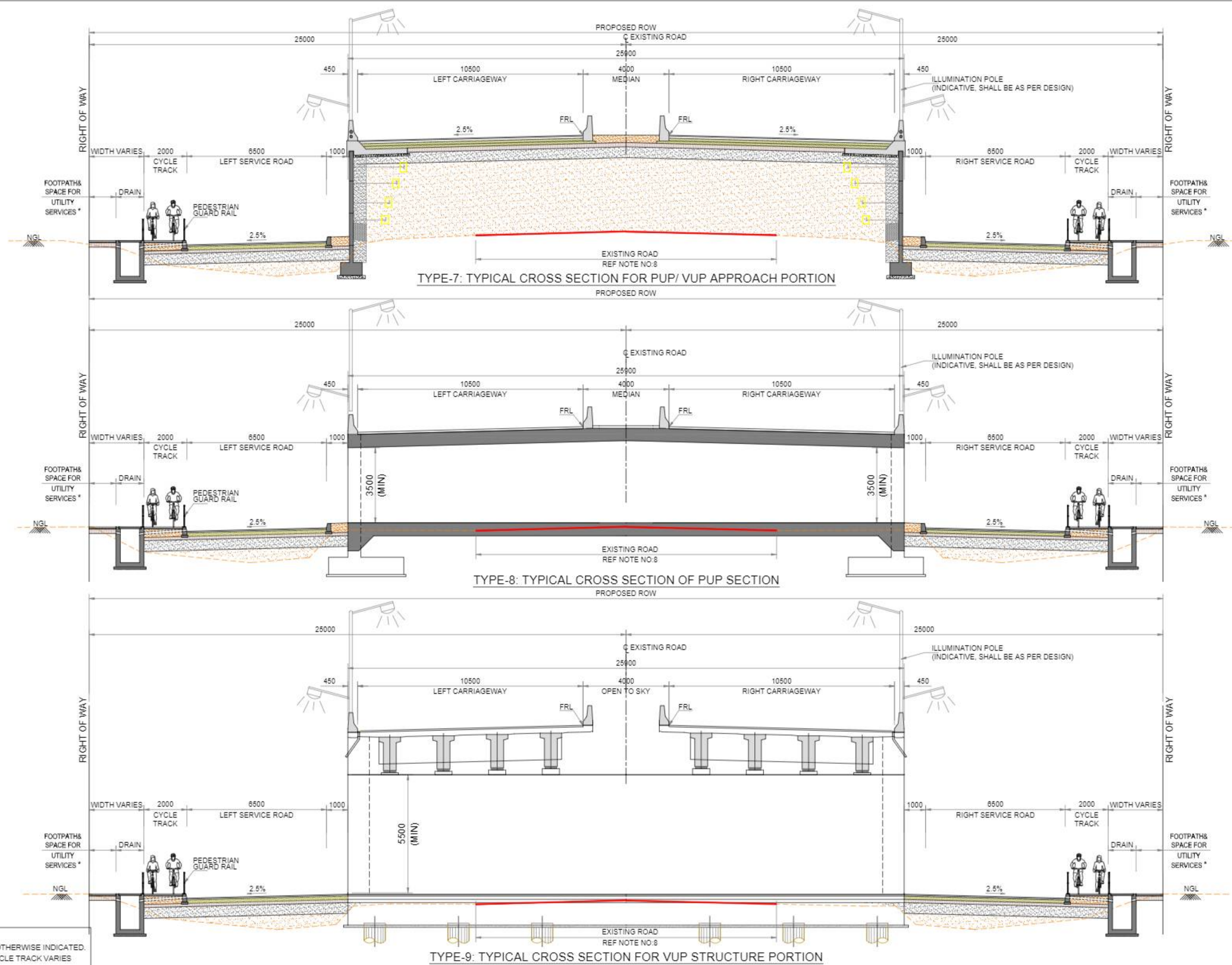
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2. THE WIDTH OF FOOTPATH SPACE INCLUDING CYCLE TRACK VARIES WHERE RIGHT OF WAY IS CONSTRAINED

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			Checked By Mr. T.V. Rajeev Nec. No. Signature		Chainage:	Drawing No.
			Approved By Mr. Hanukrishna Bhavsar Nec. No. Signature			KDP/DDR/HIGHWAY/TCS/003 REV R(0) Sheet No.



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EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
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		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Checked By Mr. T.V. Ravi Nec.No.	<i>[Signature]</i>	Reference Drawings 1. TYPICAL HORIZONTAL CURVE & ATTAINMENT OF SUPERELEVATION DETAILS- KDP/DDR/HIGHWAY/STD/001 2. HORIZONTAL CURVE DETAILS- KDP/DDR/HIGHWAY/STD/002 TO 005 3. PLAN AND PROFILE- KDP/DDR/HIGHWAY/PP/ 501 TO 536	Chainage:	Drawing No. KDP/DDR/HIGHWAY/TCS/ 004 REV R(0)
			Approved By Mr. Harikrishna Bhavsar Nec.No.	<i>[Signature]</i>			Sheet No.

SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
1	236500.000	236702.000	202.000	Transition Portion
2	236702.000	237342.000	640.000	Kamala Bridge
3	237342.000	237500.000	158.000	Type-2
4	237500.000	237930.000	430.000	Type-4
5	237930.000	238080.000	150.000	Transition Portion
6	238080.000	238125.000	45.000	Kamala Canal
7	238125.000	238290.000	165.000	Transition Portion
8	238290.000	239280.000	990.000	Type-1
9	239280.000	239400.000	120.000	Transition Portion
10	239400.000	239900.000	500.000	Type-5
11	239900.000	240020.000	120.000	Transition Portion
12	240020.000	241430.000	1410.000	Type-1
13	241430.000	241583.500	153.500	Transition Portion
14	241583.500	241904.500	321.000	Chamath Bridge
15	241904.500	242060.000	155.500	Transition Portion
16	242060.000	242880.000	820.000	Type-1
17	242880.000	243000.000	120.000	Transition Portion
18	243000.000	243100.000	100.000	Type-5
19	243100.000	243396.000	296.000	Type-7
20	243396.000	243404.000	8.000	Type-8
21	243404.000	243630.000	226.000	Type-7
22	243630.000	243650.000	20.000	Type-9
23	243650.000	243836.000	186.000	Type-7
24	243836.000	243844.000	8.000	Type-8
25	243844.000	244100.000	256.000	Type-7
26	244100.000	244220.000	120.000	Transition Portion
27	244220.000	245020.000	800.000	Type-1
28	245020.000	245172.000	152.000	Transition Portion
29	245172.000	245284.000	112.000	Baluwa Bridge
30	245284.000	245440.000	156.000	Transition Portion
31	245440.000	247380.000	1940.000	Type-1
32	247380.000	247500.000	120.000	Transition Portion
33	247500.000	247800.000	300.000	Type-5
34	247800.000	247920.000	120.000	Transition Portion
35	247920.000	250600.000	2680.000	Type-1
36	250600.000	250751.000	151.000	Transition Portion
37	250751.000	250771.000	20.000	Jagdev Branch Bridge
38	250771.000	251068.000	297.000	Transition Portion
39	251068.000	251121.200	53.200	Jagadev Bridge
40	251121.200	251295.000	173.800	Transition Portion

SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
41	251295.000	252195.000	900.000	Type-1
42	252195.000	252347.000	152.000	Transition Portion
43	252347.000	252613.000	266.000	Jalad Bridge
44	252613.000	252770.000	157.000	Transition Portion
45	252770.000	254350.000	1580.000	Type-1
46	254350.000	254503.000	153.000	Transition Portion
47	254503.000	254822.200	319.200	Aurahi Bridge
48	254822.200	254980.000	157.800	Transition Portion
49	254980.000	255985.000	1005.000	Type-1
50	255985.000	256138.000	153.000	Transition Portion
51	256138.000	256234.000	96.000	Basai Bridge
52	256234.000	256440.000	206.000	Transition Portion
53	256440.000	258300.000	1860.000	Type-5
54	258300.000	258420.000	120.000	Transition Portion
55	258420.000	258565.000	145.000	Type-1
56	258565.000	258712.000	147.000	Transition Portion
57	258712.000	258756.000	44.000	Sukhajor Bridge
58	258756.000	258910.000	154.000	Transition Portion
59	258910.000	260740.000	1830.000	Type-1
60	260740.000	260887.000	147.000	Transition Portion
61	260887.000	260962.000	75.000	Barahari Bridge
62	260962.000	261110.000	148.000	Transition Portion
63	261110.000	265090.000	3980.000	Type-1
64	265090.000	265229.000	139.000	Transition Portion
65	265229.000	265455.000	226.000	Ratu Bridge
66	265455.000	265595.000	140.000	Transition Portion
67	265595.000	266280.000	685.000	Type-1
68	266280.000	266400.000	120.000	Transition Portion
69	266400.000	268100.000	1700.000	Type-5
70	268100.000	268278.000	178.000	Transition Portion
71	268278.000	268353.000	75.000	Bhapsi Bridge
72	268353.000	268485.000	132.000	Transition Portion
73	268485.000	269210.000	725.000	Type-1
74	269210.000	269360.000	150.000	Transition Portion
75	269360.000	269388.500	28.500	Atabbe Bridge
76	269388.500	269540.000	151.500	Transition Portion
77	269540.000	270680.000	1140.000	Type-1
78	270680.000	270810.000	130.000	Transition Portion
79	270810.000	270935.000	125.000	Jangapul-1 Bridge
80	270935.000	271060.000	125.000	Transition Portion

SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
81	271060.000	271330.000	270.000	Type-1
82	271330.000	271477.000	147.000	Transition Portion
83	271477.000	271552.000	75.000	Gadhanta Bridge
84	271552.000	271690.000	138.000	Transition Portion
85	271690.000	274760.000	3070.000	Type-1
86	274760.000	274904.000	144.000	Transition Portion
87	274904.000	274944.000	40.000	Belgachhi Bridge
88	274944.000	275090.000	146.000	Transition Portion
89	275090.000	275470.000	380.000	Type-1
90	275470.000	275621.000	151.000	Transition Portion
91	275621.000	275641.000	20.000	Tuteswor-1 Bridge
92	275641.000	275847.000	206.000	Transition Portion
93	275847.000	275867.000	20.000	Tuteswor-2 Bridge
94	275867.000	276015.000	148.000	Transition Portion
95	276015.000	277050.000	1035.000	Type-1
96	277050.000	277201.000	151.000	Transition Portion
97	277201.000	277366.000	165.000	Maraha Bridge
98	277366.000	277510.000	144.000	Transition Portion
99	277510.000	278750.000	1240.000	Type-1
100	278750.000	278895.000	145.000	Transition Portion
101	278895.000	278933.000	38.000	Dholan Bridge
102	278933.000	279085.000	152.000	Transition Portion
103	279085.000	280425.000	1340.000	Type-1
104	280425.000	280566.000	141.000	Transition Portion
105	280566.000	280586.000	20.000	Jarlahi Bridge
106	280586.000	280735.000	149.000	Transition Portion
107	280735.000	281825.000	1090.000	Type-1
108	281825.000	281975.000	150.000	Transition Portion
109	281975.000	282003.500	28.500	Batuwa Bridge
110	282003.500	282155.000	151.500	Transition Portion
111	282155.000	282560.000	405.000	Type-1
112	282560.000	282709.000	149.000	Transition Portion
113	282709.000	282811.000	102.000	Bhankhe Bridge
114	282811.000	282960.000	149.000	Transition Portion
115	282960.000	285565.000	2605.000	Type-1
116	285565.000	285712.000	147.000	Transition Portion
117	285712.000	285737.000	25.000	Amuwa Bridge
118	285737.000	285890.000	153.000	Transition Portion
119	285890.000	290030.000	4140.000	Type-1
120	290030.000	290150.000	120.000	Transition Portion

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SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
121	290150.000	290275.000	125.000	Phuljor Bridge
122	290275.000	290415.000	140.000	Transition Portion
123	290415.000	291705.000	1290.000	Type-5
124	291705.000	291855.000	150.000	Transition Portion
125	291855.000	291883.500	28.500	Kalinjor-1 Bridge
126	291883.500	292035.000	151.500	Transition Portion
127	292035.000	292520.000	485.000	Type-1
128	292520.000	292671.000	151.000	Transition Portion
129	292671.000	292737.000	66.000	Kalinjor-2 Bridge
130	292737.000	292890.000	153.000	Transition Portion
131	292890.000	294030.000	1140.000	Type-1
132	294030.000	294150.000	120.000	Transition Portion
133	294150.000	294360.000	210.000	Type-5
134	294360.000	294556.000	196.000	Type-7
135	294556.000	294564.000	8.000	Type-8
136	294564.000	294890.000	326.000	Type-7
137	294890.000	294910.000	20.000	Type-9
138	294910.000	295066.000	156.000	Type-7
139	295066.000	295074.000	8.000	Type-8
140	295074.000	295250.000	176.000	Type-7
141	295250.000	295350.000	100.000	Transition Portion
142	295350.000	295375.000	25.000	Dumdume Bridge
143	295375.000	295550.000	175.000	Transition Portion
144	295550.000	296300.000	750.000	Type-5
145	296300.000	296420.000	120.000	Transition Portion
146	296420.000	298980.000	2560.000	Type-1
147	298980.000	299100.000	120.000	Transition Portion
148	299100.000	299316.000	216.000	Type-7
149	299316.000	299324.000	8.000	Type-8
150	299324.000	299540.000	216.000	Type-7
151	299540.000	299560.000	20.000	Type-9
152	299560.000	299816.000	256.000	Type-7
153	299816.000	299824.000	8.000	Type-8
154	299824.000	300050.000	226.000	Type-7
155	300050.000	300170.000	120.000	Transition Portion
156	300170.000	300220.000	50.000	Type-1
157	300220.000	300365.000	145.000	Transition Portion
158	300365.000	300569.000	204.000	Lakhandei Bridge
159	300569.000	300720.000	151.000	Transition Portion
160	300720.000	301760.000	1040.000	Type-1

SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
161	301760.000	301911.500	151.500	Transition Portion
162	301911.500	302021.500	110.000	Chapani Bridge
163	302021.500	302170.000	148.500	Transition Portion
164	302170.000	303480.000	1310.000	Type-1
165	303480.000	303600.000	120.000	Transition Portion
166	303600.000	303780.000	180.000	Type-5
167	303780.000	303986.000	206.000	Type-7
168	303986.000	303994.000	8.000	Type-8
169	303994.000	304180.000	186.000	Type-7
170	304180.000	304200.000	20.000	Type-9
171	304200.000	304386.000	186.000	Type-7
172	304386.000	304394.000	8.000	Type-8
173	304394.000	304600.000	206.000	Type-7
174	304600.000	304800.000	200.000	Type-5
175	304800.000	304920.000	120.000	Transition Portion
176	304920.000	306480.000	1560.000	Type-1
177	306480.000	306600.000	120.000	Transition Portion
178	306600.000	306876.000	276.000	Type-7
179	306876.000	306884.000	8.000	Type-8
180	306884.000	307040.000	156.000	Type-7
181	307040.000	307060.000	20.000	Type-9
182	307060.000	307296.000	236.000	Type-7
183	307296.000	307304.000	8.000	Type-8
184	307304.000	307500.000	196.000	Type-7
185	307500.000	307732.000	232.000	Transition Portion
186	307732.000	307770.000	38.000	Rai Bridge
187	307770.000	307920.000	150.000	Transition Portion
188	307920.000	309845.000	1925.000	Type-1
189	309845.000	309995.000	150.000	Transition Portion
190	309995.000	310035.000	40.000	Dumajor Bridge
191	310035.000	310185.000	150.000	Transition Portion
192	310185.000	311430.000	1245.000	Type-1
193	311430.000	311575.000	145.000	Transition Portion
194	311575.000	311595.000	20.000	Godari Bridge
195	311595.000	311850.000	255.000	Transition Portion
196	311850.000	312300.000	450.000	Type-5
197	312300.000	312455.000	155.000	Transition Portion
198	312455.000	312480.000	25.000	Bhagmati East Bridge
199	312480.000	312625.000	145.000	Transition Portion
200	312625.000	312785.000	160.000	Type-5

SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
201	312785.000	312936.000	151.000	Transition Portion
202	312936.000	313299.000	363.000	Bhagmati Bridge
203	313299.000	313450.000	151.000	Transition Portion
204	313450.000	313650.000	200.000	Type-5
205	313650.000	313801.000	151.000	Transition Portion
206	313801.000	313826.000	25.000	Bhagmati West Bridge
207	313826.000	314138.000	312.000	Transition Portion
208	314138.000	314173.000	35.000	Gairi Bridge
209	314173.000	314330.000	157.000	Transition Portion
210	314330.000	317500.000	3170.000	Type-1
211	317500.000	317653.000	153.000	Transition Portion
212	317653.000	317719.000	66.000	Paurai Bridge
213	317719.000	317870.000	151.000	Transition Portion
214	317870.000	319170.000	1300.000	Type-1
215	319170.000	319322.000	152.000	Transition Portion
216	319322.000	319342.000	20.000	Lachkan Bridge
217	319342.000	319500.000	158.000	Transition Portion
218	319500.000	323405.000	3905.000	Type-1
219	323405.000	323565.000	160.000	Transition Portion
220	323565.000	323590.000	25.000	Katha ko pul Bridge
221	323590.000	323750.000	160.000	Transition Portion
222	323750.000	324820.000	1070.000	Type-1
223	324820.000	324970.000	150.000	Transition Portion
224	324970.000	325135.000	165.000	Chandi Bridge
225	325135.000	325350.000	215.000	Transition Portion
226	325350.000	327300.000	1950.000	Type-5
227	327300.000	327420.000	120.000	Transition Portion
228	327420.000	327845.000	425.000	Type-1
229	327845.000	327995.000	150.000	Transition Portion
230	327995.000	328015.000	20.000	Jungle Tole Bridge
231	328015.000	328165.000	150.000	Transition Portion
232	328165.000	329580.000	1415.000	Type-1
233	329580.000	329726.000	146.000	Transition Portion
234	329726.000	329751.000	25.000	Amu-1 Bridge
235	329751.000	329900.000	149.000	Transition Portion
236	329900.000	332630.000	2730.000	Type-1
237	332630.000	332782.000	152.000	Transition Portion
238	332782.000	332812.000	30.000	Kathi Bridge
239	332812.000	332970.000	158.000	Transition Portion
240	332970.000	333540.000	570.000	Type-1

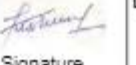
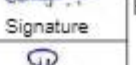
NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
2. THE WIDTH OF FOOTPATH SPACE INCLUDING CYCLE TRACK VARIES WHERE RIGHT OF WAY IS CONSTRAINED

EMPLOYER		PROJECT		DESIGN CONSULTANTS		Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
	Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India	Joint Venture of		Mr. Pushkar Poudel		TYPICAL CROSS SECTION SCHEDULE	Scale: 1:100	JUNE 2023
							Mr. T.V. Rajeev				
					In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Mr. Harikrishna Bhaisar				
						Mr. T.V. Rajeev			Reference Drawings 1. TYPICAL HORIZONTAL CURVE & ATTAINMENT OF SUPERELEVATION DETAILS- KOP/DDR/HIGHWAY/STD/001 2. HORIZONTAL CURVE DETAILS- KOP/DDR/HIGHWAY/STD/002 TO 008 3. PLAN AND PROFILE - KOP/DDR/HIGHWAY/PP/ 501 TO 538	Chainage: KM 290150 TO KM 333540	Drawing No. KOP/DDR/HIGHWAY/TCS/008 REV R(0) Sheet No.
						Mr. Harikrishna Bhaisar					
						Mr. T.V. Rajeev					

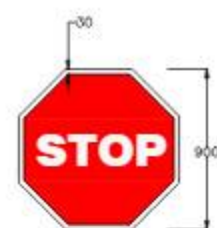
SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
241	333540.000	333688.000	148.000	Transition Portion
242	333688.000	333754.000	66.000	Lamaha Bridge
243	333754.000	333900.000	146.000	Transition Portion
244	333900.000	334290.000	390.000	Type-1
245	334290.000	334443.000	153.000	Transition Portion
246	334443.000	334476.000	33.000	Kali khola
247	334476.000	334630.000	154.000	Transition Portion
248	334630.000	339090.000	4460.000	Type-1
249	339090.000	339242.000	152.000	Transition Portion
250	339242.000	339406.000	164.000	Dhansar Bridge
251	339406.000	339560.000	154.000	Transition Portion
252	339560.000	342080.000	2520.000	Type-1
253	342080.000	342238.000	158.000	Transition Portion
254	342238.000	342263.000	25.000	Lamopul
255	342263.000	342420.000	157.000	Transition Portion
256	342420.000	343400.000	980.000	Type-1
257	343400.000	343550.000	150.000	Transition Portion
258	343550.000	343583.000	33.000	Bhamara Bridge
259	343583.000	343735.000	152.000	Transition Portion
260	343735.000	343920.000	185.000	Type-1
261	343920.000	344068.000	148.000	Transition Portion
262	344068.000	344088.000	20.000	Rampul Bridge
263	344088.000	344250.000	162.000	Transition Portion
264	344250.000	345700.000	1450.000	Type-5
265	345700.000	346800.000	1100.000	Type-6
266	346800.000	347012.000	212.000	Transition Portion
267	347012.000	347367.200	355.200	Bakeya Bridge
268	347367.200	347520.000	152.800	Transition Portion
269	347520.000	348750.000	1230.000	Type-1
270	348750.000	348958.000	208.000	Transition Portion
271	348958.000	348993.000	35.000	Unasi Bridge
272	348993.000	349180.000	187.000	Transition Portion

SI No	Design Chainage (m)		Length (m)	Cross Section Type / Other Details
	From	To		
273	349180.000	353430.000	4250.000	Type-1
274	353430.000	353590.000	160.000	Transition Portion
275	353590.000	353625.000	35.000	Terhakilo Bridge
276	353625.000	353780.000	155.000	Transition Portion
277	353780.000	354470.000	690.000	Type-1
278	354470.000	354620.000	150.000	Transition Portion
279	354620.000	354655.000	35.000	Barahakilo Bridge
280	354655.000	354810.000	155.000	Transition Portion
281	354810.000	356975.000	2165.000	Type-1
282	356975.000	357124.000	149.000	Transition Portion
283	357124.000	357289.000	165.000	Pasaha Bridge
284	357289.000	357440.000	151.000	Transition Portion
285	357440.000	358290.000	850.000	Type-1
286	358290.000	358440.000	150.000	Transition Portion
287	358440.000	358475.000	35.000	Bangandi Bridge
288	358475.000	358625.000	150.000	Transition Portion
289	358625.000	360670.000	2045.000	Type-1
290	360670.000	360816.000	146.000	Transition Portion
291	360816.000	360882.000	66.000	Balganga Bridge
292	360882.000	361030.000	148.000	Transition Portion
293	361030.000	362690.000	1660.000	Type-1
294	362690.000	362839.000	149.000	Transition Portion
295	362839.000	362885.000	46.000	Baijura Bridge
296	362885.000	363035.000	150.000	Transition Portion
297	363035.000	365540.000	2505.000	Type-1
298	365540.000	365688.000	148.000	Transition Portion
299	365688.000	365723.000	35.000	Tin Bridge
300	365723.000	365870.000	147.000	Transition Portion
301	365870.000	366180.000	310.000	Type-1
302	366180.000	366300.000	120.000	Transition Portion
303	366300.000	366750.000	450.000	Type-6
304	366750.000	366887.000	137.000	Pathlaiya Jn
			130387.000	

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
2. THE WIDTH OF FOOTPATH SPACE INCLUDING CYCLE TRACK VARIES WHERE RIGHT OF WAY IS CONSTRAINED

EMPLOYER	PROJECT	DESIGN CONSULTANTS		Designed By	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain		Mr. Pashker Poudel		TYPICAL CROSS SECTION SCHEDULE	Scale: 1:100	JUNE 2023
		 STUP Consultants Private Limited Kolkata, India		Mr. T.V. Rajeev				Drawing No.
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Mr. Harikrishna Bhavsar		Reference Drawings 1. TYPICAL HORIZONTAL CURVE & ATTAINMENT OF SUPERELEVATION DETAILS- KDP/DDR/HIGHWAY/STD/001 2. HORIZONTAL CURVE DETAILS- KDP/DDR/HIGHWAY/STD/002 TO 008 3. PLAN AND PROFILE - KDP/DDR/HIGHWAY/PP/ 501 TO 538	Chainage: KM 333540 TO KM 366887	KDP/DDR/HIGHWAY/TCS/007 REV R(0) Sheet No.

≡ MISCELLANEOUS DRAWINGS ≡



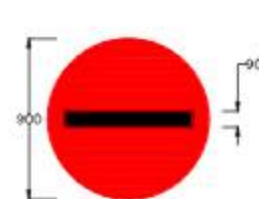
STOP SIGNS
Fig. 14.01



GIVE WAY
Fig. 14.02



HORN PROHIBITED
Fig. 14.18



NO ENTRY
Fig. 14.19



ONE WAY
Fig. 14.20



ONE WAY
Fig. 14.20



LEFT TURN PROHIBITED
Fig. 14.21



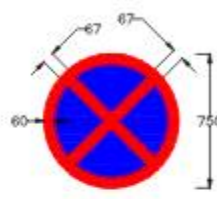
RIGHT TURN PROHIBITED
Fig. 14.22



OVERTAKING PROHIBITED
Fig. 14.23



U-TURN PROHIBITED
Fig. 14.24



NO STOPPING
Fig. A15



NO PARKING
Fig. A14



MAXIMUM SPEED
Fig. A22



RESTRICTION ENDS
Fig. A26



AHEAD ONLY
Fig. A27



TURN LEFT
(right if sign reversed)
Fig. A28



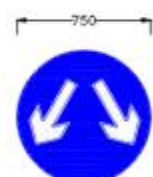
KEEP LEFT
(right if symbols reversed)
Fig. A29



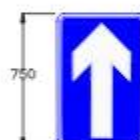
TURN LEFT AHEAD
(right if symbols reversed)
Fig. A30



SMALL ROUNDABOUT
(give way to vehicles from the right)
Fig. A31



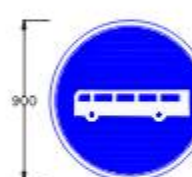
PASS EITHER SIDE
Fig. A32



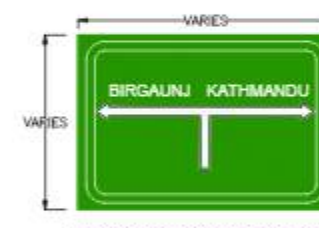
ONE WAY TRAFFIC
Fig. A33



MINIMUM SPEED LIMIT
Fig. 14.51



BUS WAY/BUSES ONLY
Fig. 14.56



ADVANCE DIRECTION SIGN
Fig. 16.03



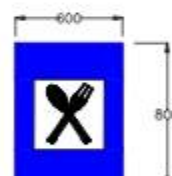
REASSURANCE SIGN
Fig. 16.05



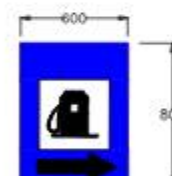
PLACE IDENTIFICATION SIGN
Fig. 16.06



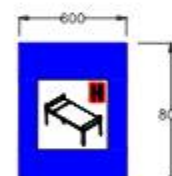
TRUCK LAY-BY
Fig. 16.07



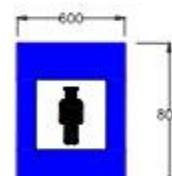
EATING PLACE
Fig. 17.01



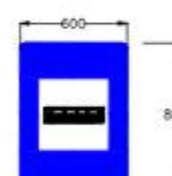
FILLING STATION (FUEL PUMP)
Fig. 17.06



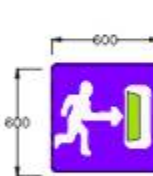
HOSPITAL
Fig. 17.07



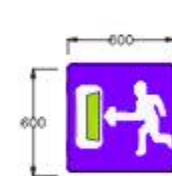
POLICE STATION
Fig. 17.13



BUS STOP
Fig. 17.35



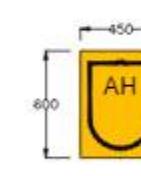
EMERGENCY EXIT
Fig. 17.41



EMERGENCY EXIT
Fig. 17.42



PARKING
Fig. 18.01

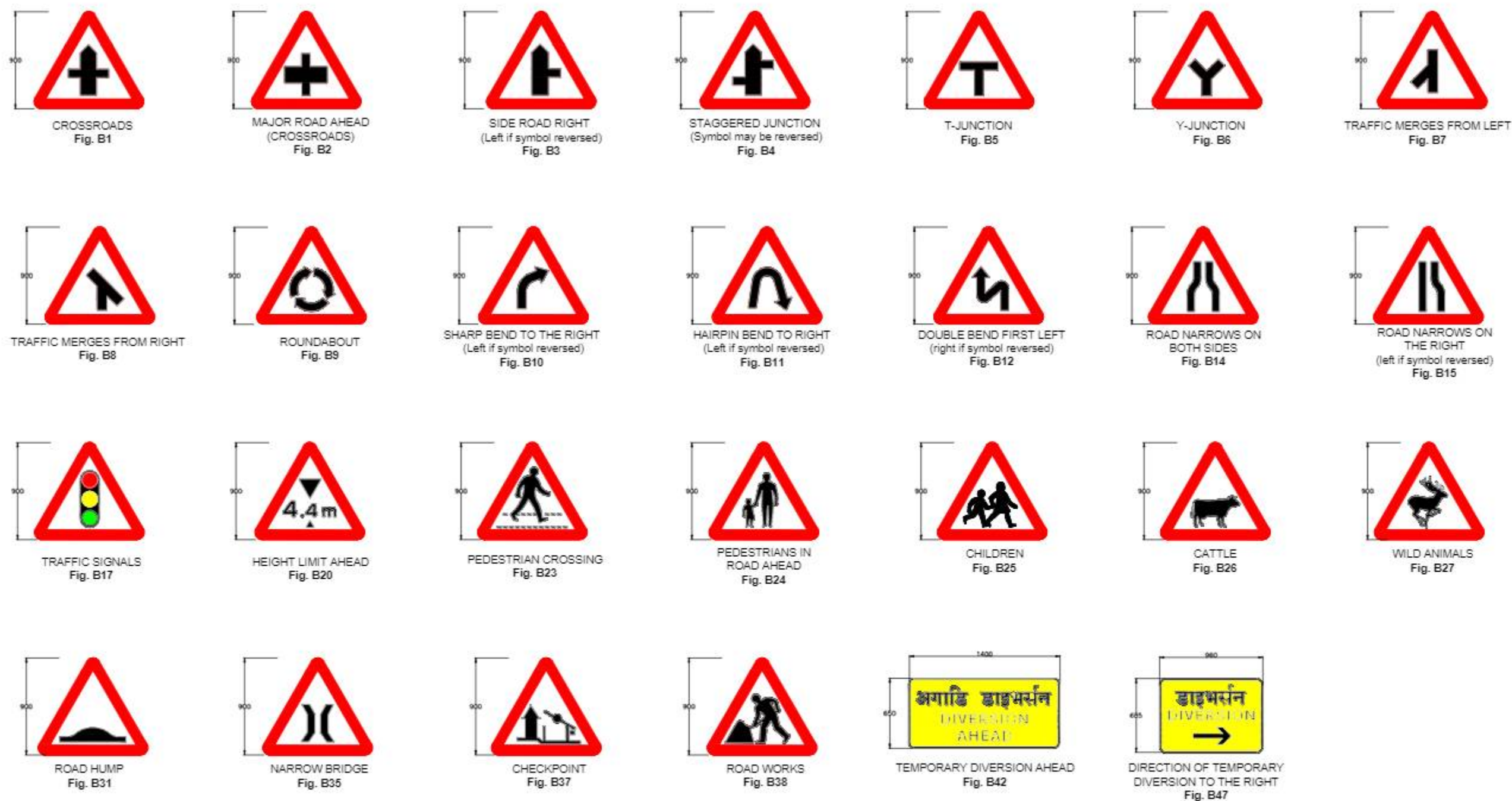


ASIAN HIGHWAY ROUTE
MARKER SIGN
Fig. 20.02

Notes:

1. Road signs shall be erected as per Traffic Sign Manual (DoR, 1997) & IRC:67-2012.
2. Sizes of arrows, letters and numerals for road signs shall be as per Traffic Sign Manual (DoR, 1997) & IRC:67-2012.
3. All items indicated in this drawing may not be relevant for the subject project, these shall be used depending upon the requirement.
4. All dimensions are in millimetres unless otherwise mentioned.

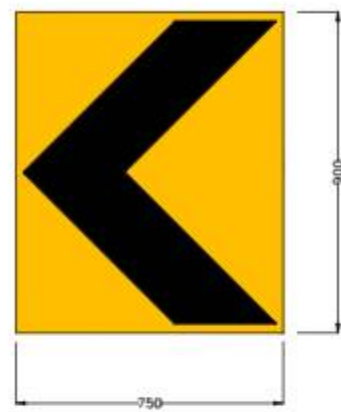
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Pushkar Poudel NED NO. 6146 Signature	Mr. Gopal Mitr NED No. Signature	Mr. Harikrishna Bhandari NED No. Signature	MISCELLANEOUS DRAWING Road Signs & Road Delineators	NOT TO SCALE	JUNE, 2023
						Reference Drawings	Chainage:	Drawing No. KOP/DDR/HIGHWAY/MISC-01 R(0) Sheet No.01



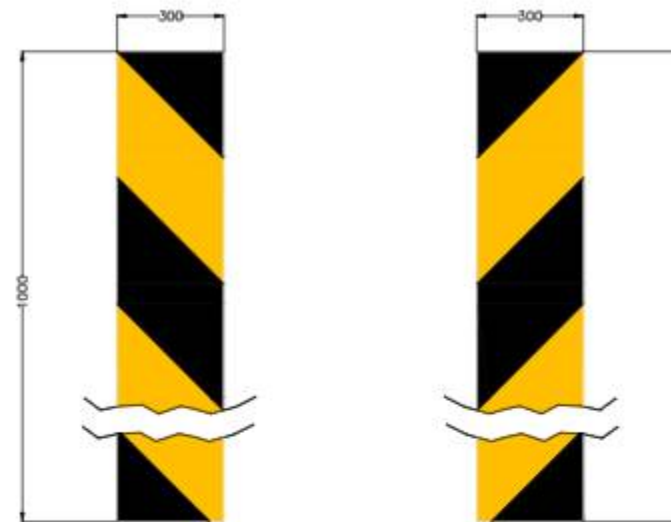
Notes:

1. Road signs shall be erected as per Traffic Sign Manual (DoR, 1997).
2. Sizes of arrows, letters and numerals for road signs shall be as per Traffic Sign Manual (DoR, 1997).
3. All items indicated in this drawing may not be relevant for the subject project, these shall be used depending upon the requirement.
4. All dimensions are in millimetres unless otherwise mentioned.

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Pushkar Poudel Nec.No. 6146 Signature	Mr. Gopal Mitr Nec.No. Signature	Mr. Harikrishna Bhavsar Nec.No. Signature	MISCELLANEOUS DRAWING Road Signs & Road Delineators Reference Drawings	NOT TO SCALE Chainage:	JUNE, 2023 Drawing No. KOP/DDR/HIGHWAY/MISC-02 R(0) Sheet No.02



SINGLE CHEVRON

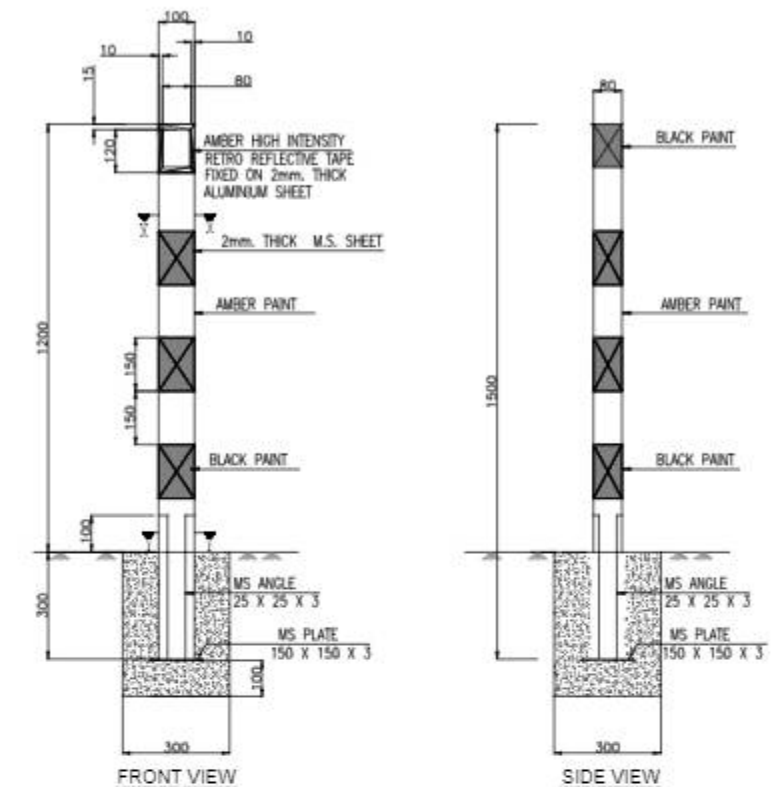


DANGEROUS OBSTRUCTION
Fig. B43

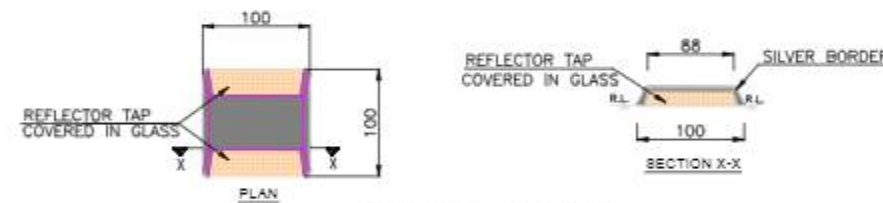


TWO WAY HAZARD MARKER
Fig. 15.78

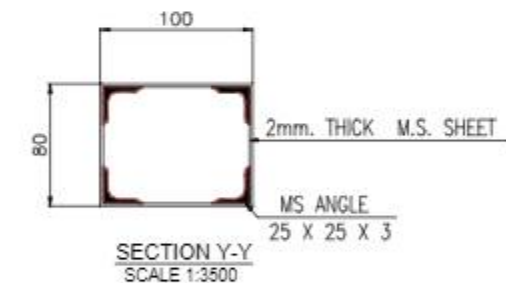
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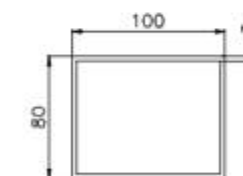
ROAD DELINEATORS
SCALE 1:15000



ROAD STUDS (CATS' EYE)
SCALE 1:5000



SECTION Y-Y
SCALE 1:3500

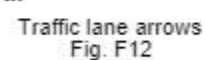
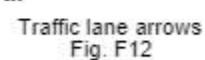
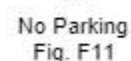
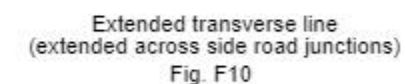
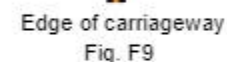
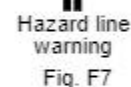
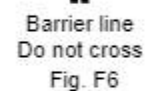
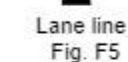
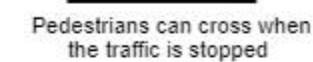
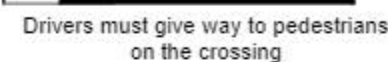
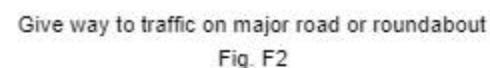


SECTION X-X
SCALE 1:3500

Notes:

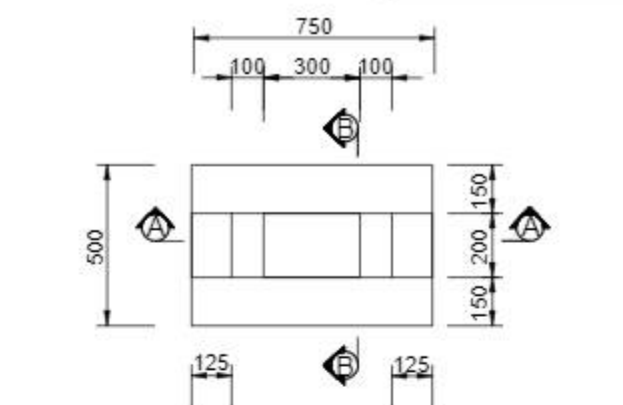
1. Road signs shall be erected as per Traffic Sign Manual (DoR, 1997) & IRC:67-2012.
2. Sizes of arrows, letters and numerals for road signs shall be as per Traffic Sign Manual (DoR, 1997) & IRC:67-2012
3. All items indicated in this drawing may not be relevant for the subject project, these shall be used depending upon the requirement.
4. All dimensions are in millimetres unless otherwise mentioned.
5. The scale mentioned is applicable for A2 size sheet.

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India	Mr. Pushkar Poudel NED NO. 6148 Signature	Mr. Gopal Mitr NED NO. 6149 Signature	Mr. Harikrishna Bhandari NED NO. 6150 Signature	MISCELLANEOUS DRAWING Road Signs & Road Delineators	AS SHOWN	JUNE, 2023
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited				Reference Drawings	Chainage:	Drawing No. KOP/DDR/HIGHWAY/MISC-03 R(0) Sheet No. 03

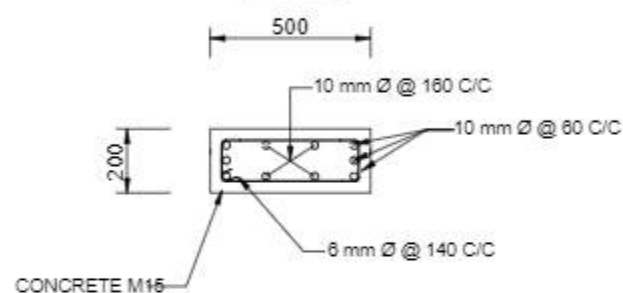


EMPLOYER	PROJECT	DESIGN CONSULTANTS	Mr. Pankaj Poudel NEC NO. 5148 Signature	Drawing Name MISCELLANEOUS DRAWING Road/Kerb Markings	Scale: NOT TO SCALE	Date: JUNE, 2023
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India	Designed By	Reference Drawings	Chainage:	Drawing No. KDP/DDR/HIGHWAY/MISC-04 R(0) Sheet No.04
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Checked By			
			Approved By			

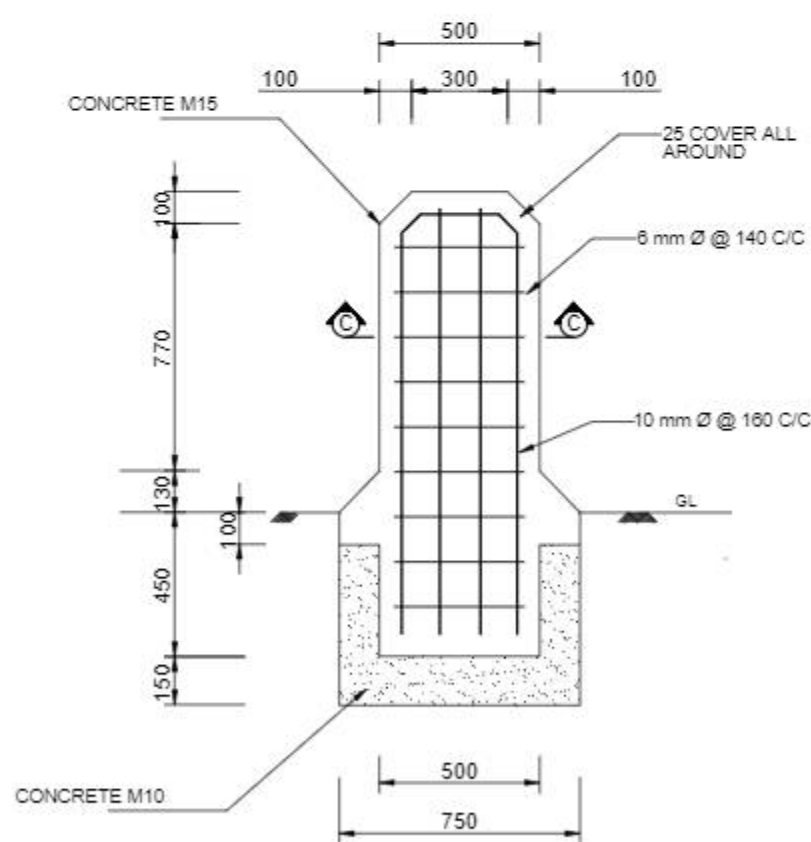
5 km. POST



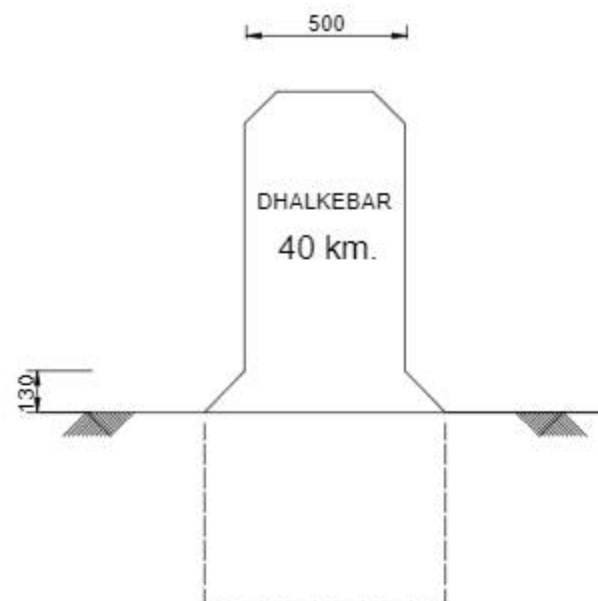
PLAN



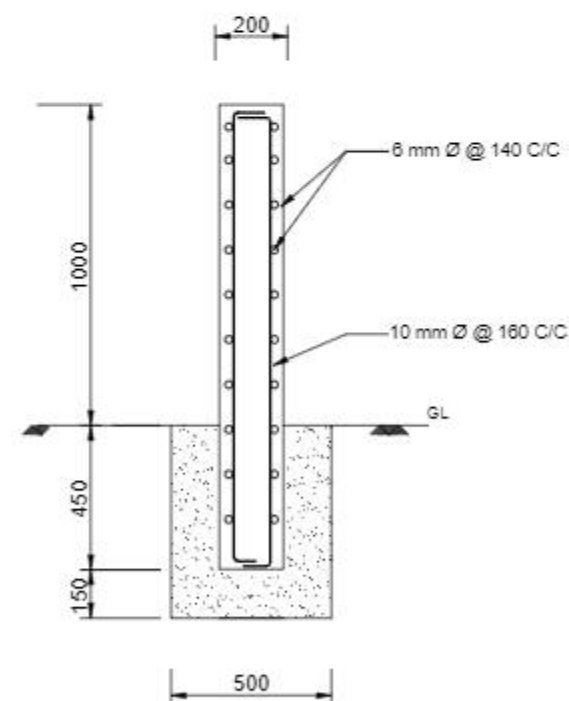
SECTION AT C-C



SECTION AT A-A

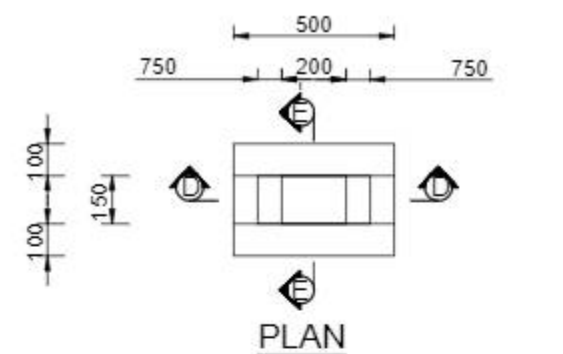


ELEVATION

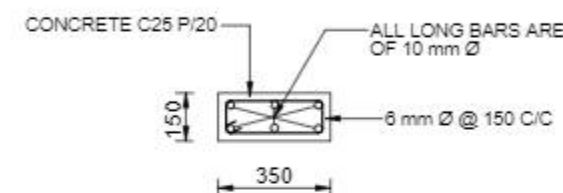


SECTION AT B-B

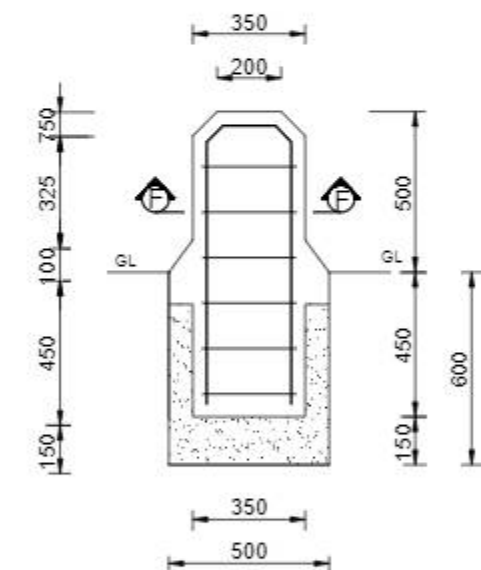
1 km. POST



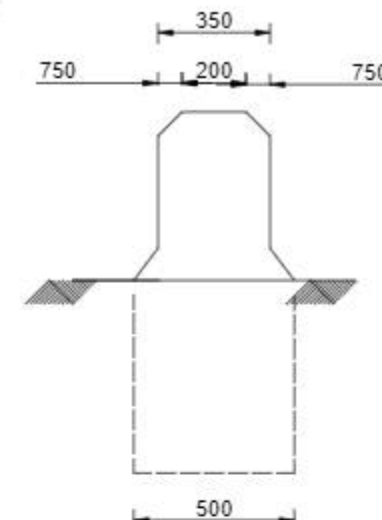
PLAN



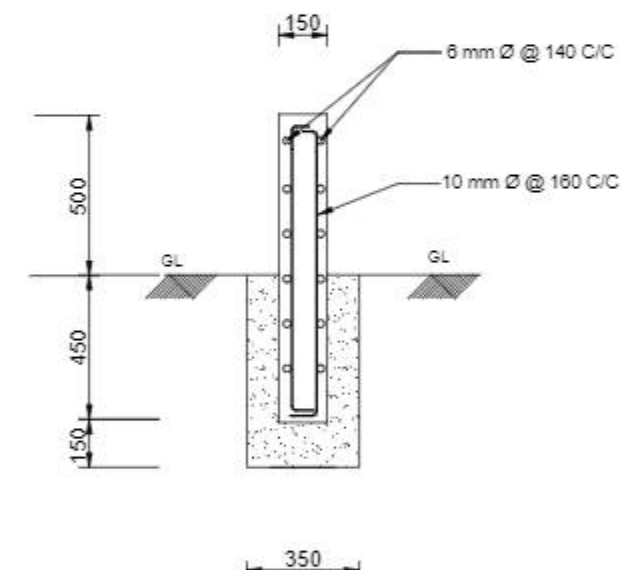
SECTION AT F-F



SECTION AT D-D



ELEVATION

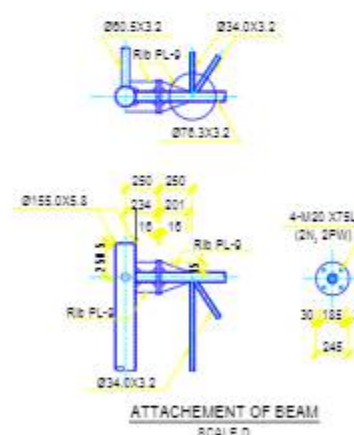


SECTION AT E-E

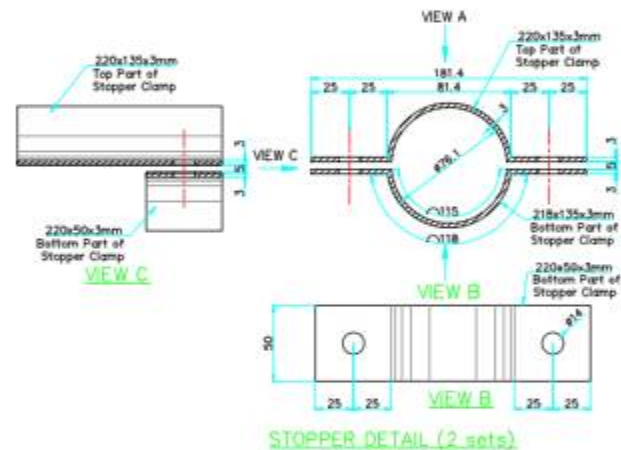
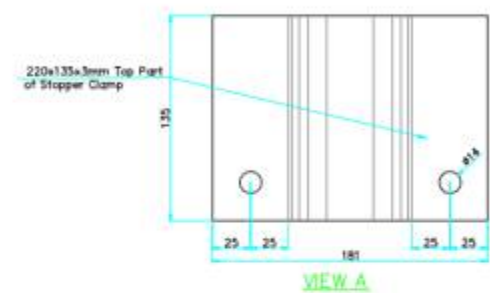
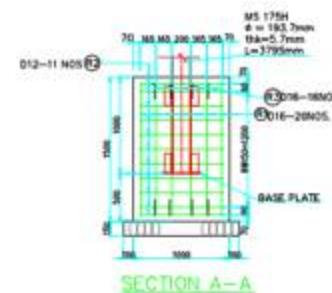
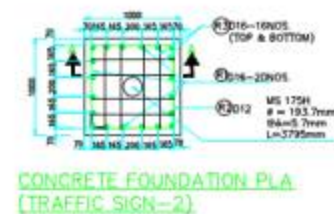
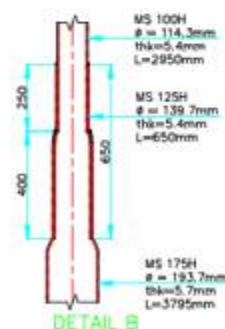
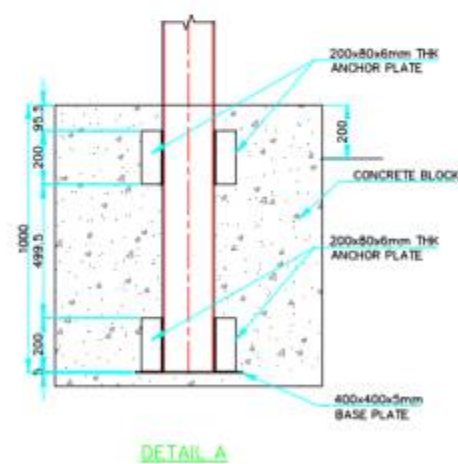
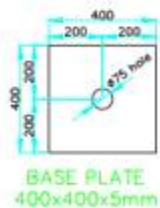
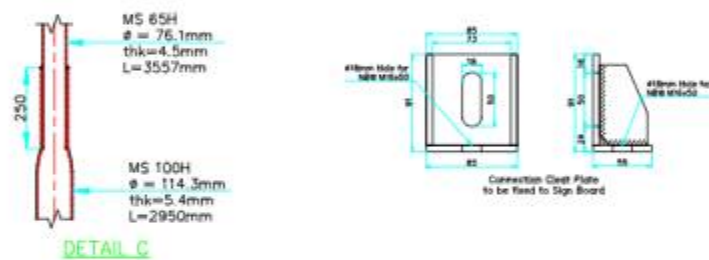
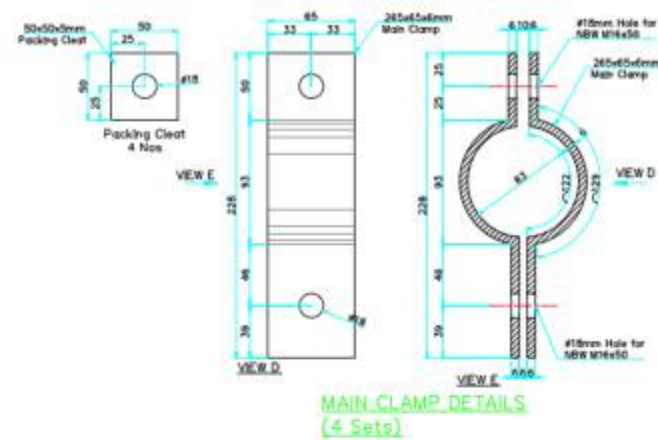
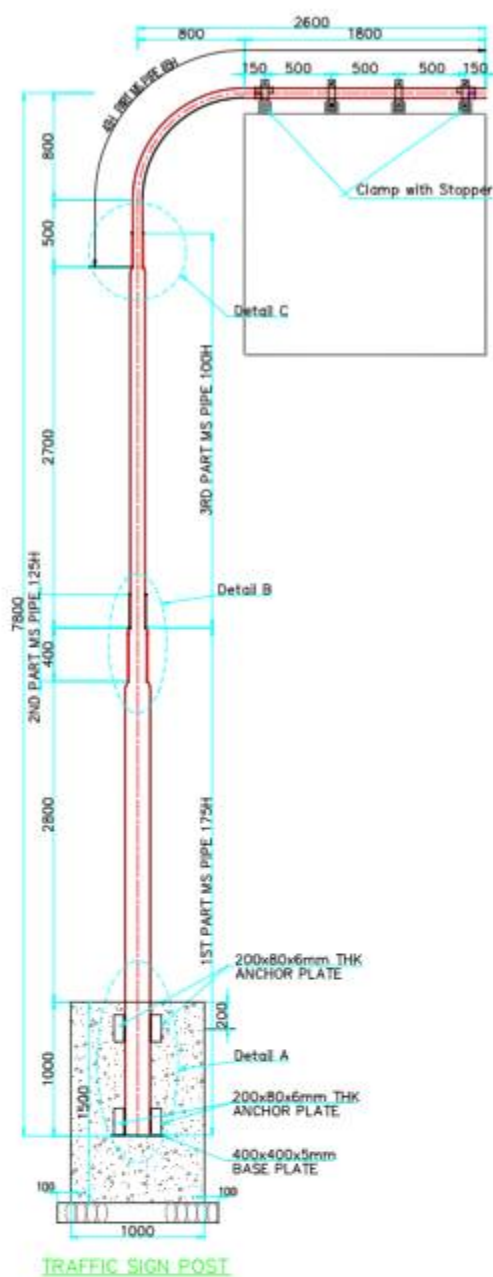
NOTE:

1. All dimensions are in mm unless otherwise stated.
2. Alternate 1 km and 5 km post will be in Nepali and english language.
3. Lettering size will be as recommended in Traffic Sign Manual or as directed by the Engineer.
4. The background of the post will be painted in white and deep black paints will be used for letters & numerals.
5. In hilly terrain the post will be located in the valley side of the road and in plains area will be located on the left side as one proceeds from the starting station towards the terminal station.

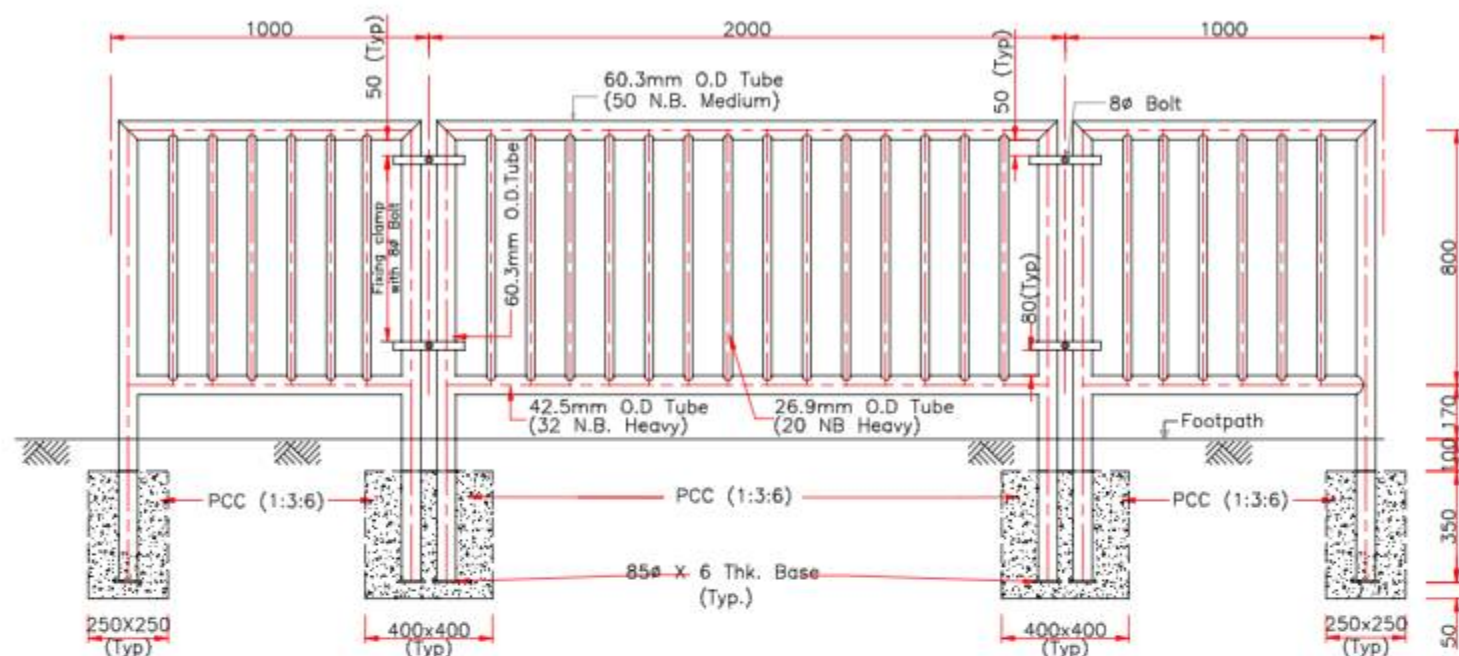
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkata, India	Mr. Pushkar Poudel NED NO. 6146	Mr. Gopal Mitr NED NO. 6146	Mr. Harikrishna Bhavsar NED NO. 6146	MISCELLANEOUS DRAWING STANDARD DRAWING OF KILOMETER POST	Meter 0 0.25 0.50	JUNE, 2023
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited				Reference Drawings	Chainage:	Drawing No. KDP/DDR/HIGHWAY/MISC-05 R(0) Sheet No. 05



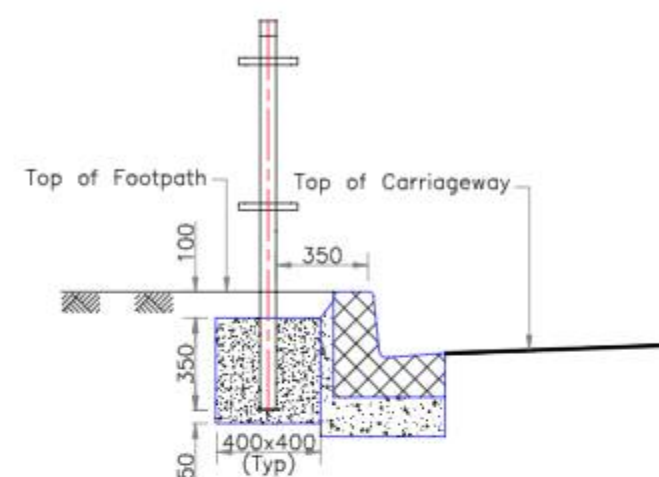
EMPLOYER	PROJECT	DESIGN CONSULTANTS		Mr. Pashkar Poudel Signature NEC.NO. 8148	Drawing Name MISCELLANEOUS DRAWING GANTRY TYPE - I	Scale: (m) 0 1.0 2.0 0 0.5 1.0 0 0.4 0.8 1.2 1.6 2.0	Date: JUNE, 2023
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India	Designed By	Reference Drawings	Chainage:	Drawing No. KDP/DDR/HIGHWAY/MISC-06 R(0) Sheet No.06
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Checked By Gopal Mitr Signature NEC.No.			



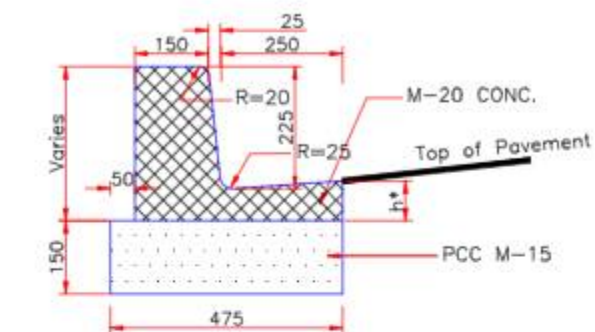
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Pushkar Poudel NED NO. 6146 Signature	Mr. Gopal Mitr NED NO. 6146 Signature	Mr. Hari Krishna Bhandari NED NO. 6146 Signature	MISCELLANEOUS DRAWING GANTRY TYPE - II		JUNE, 2023
						Reference Drawings	Chainage:	Drawing No. KDP/DDR/HIGHWAY/MISC-07 R(0) Sheet No. 07



Typical Details for Pedestrian Guard Rail (PGR)

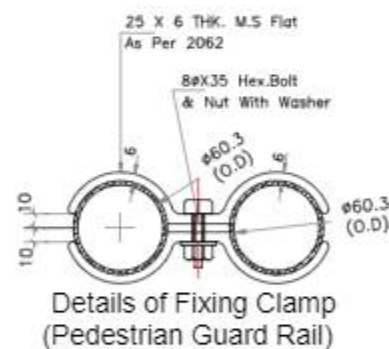


Side View of PGR

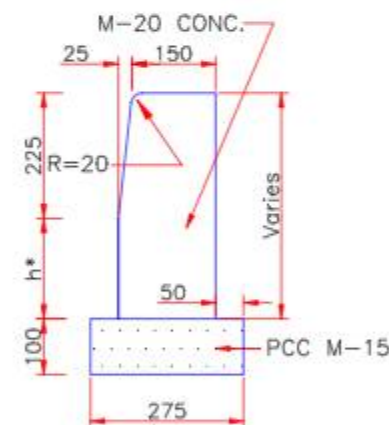


Kerb with Channel

*h - Depends on thickness (BC + DBM)

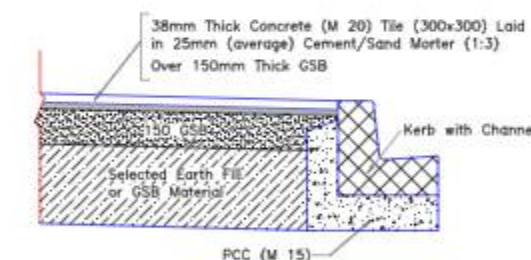


Details of Fixing Clamp
(Pedestrian Guard Rail)



Kerb

*h - Depends on thickness (BC + DBM)

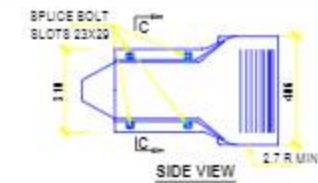
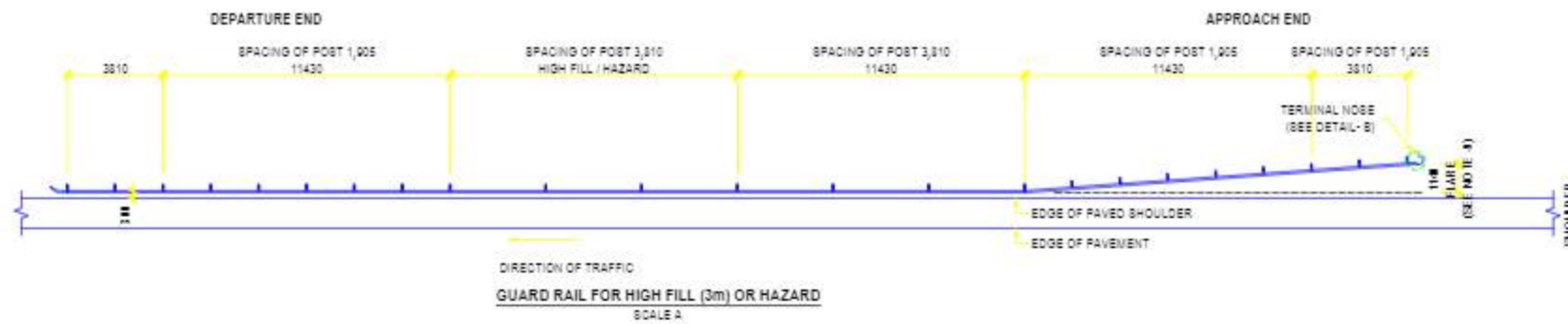


Details of Footpath

Notes:

1. All dimensions are in millimetres unless otherwise mentioned.
2. All fillet welds shall be 3 mm thick.
3. Details of pedestrian guard rails are for typical modules in straight. Length of modules shall need some adjustments to fit in the individual runs of the fencing between discontinuities at locations of cross roads, driveways etc. A fencing plan finalising the details shall be prepared by the concessioner/contractor after final setting out and as approved by the Engineer.
4. After erection, kerbs shall be painted with one coat of primer and two coats of colour paint. All colour paints shall be ready mix oil bound and shall be approved by the Engineer.
5. Kerb shall be provided at every location except some selected stretches where kerb with channel shall be provided.
6. Besides the above, standards and specifications mentioned in IRC : SP : 84-2019 shall be followed strictly whenever applicable.

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Pushkar Poudel NED NO. 6146 Signature	Mr. Gopal Mitr Nec.No. Signature	Mr. Harikrishna Bhavsar Nec.No. Signature	MISCELLANEOUS DRAWING Typical Details of Kerb, Kerb with Channel Footpath and Pedestrian Guard Rail	NOT TO SCALE	JUNE, 2023
						Reference Drawings	Chainage:	Drawing No. KOP/DDR/HIGHWAY/MISC-08 R(0) Sheet No.08



TERMINAL NOSE
DETAIL B
SCALE B

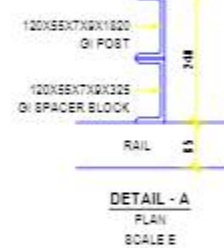
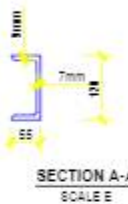
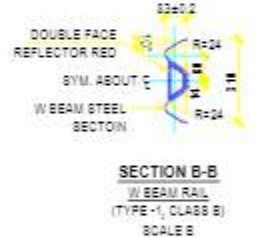
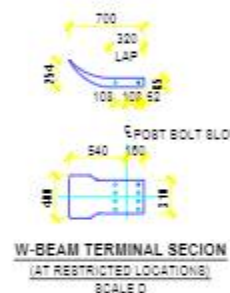
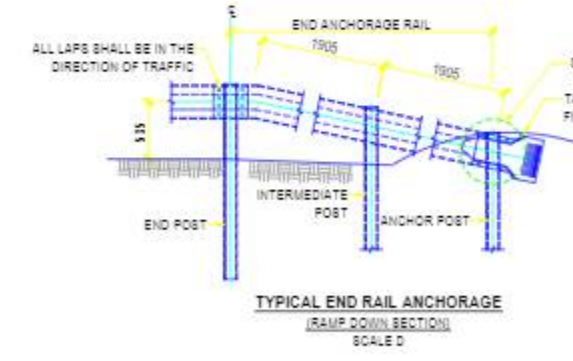
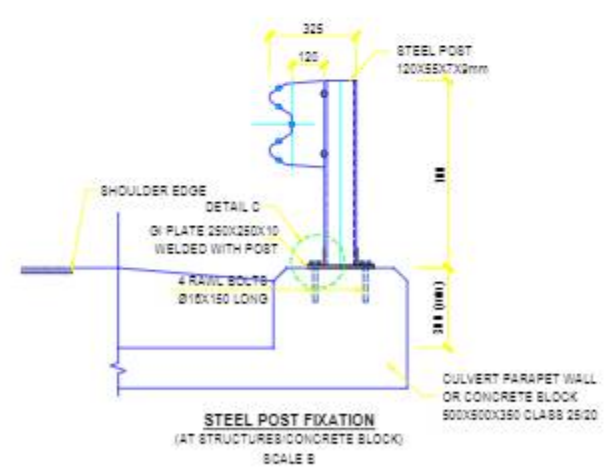
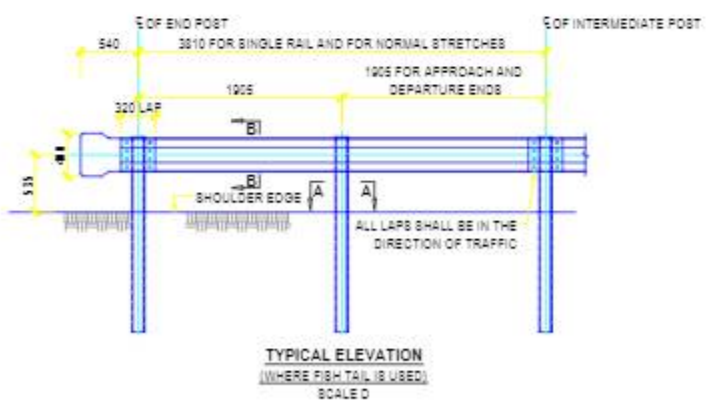
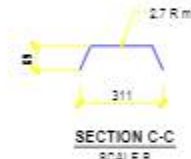
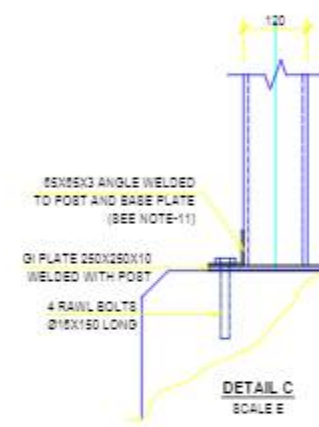
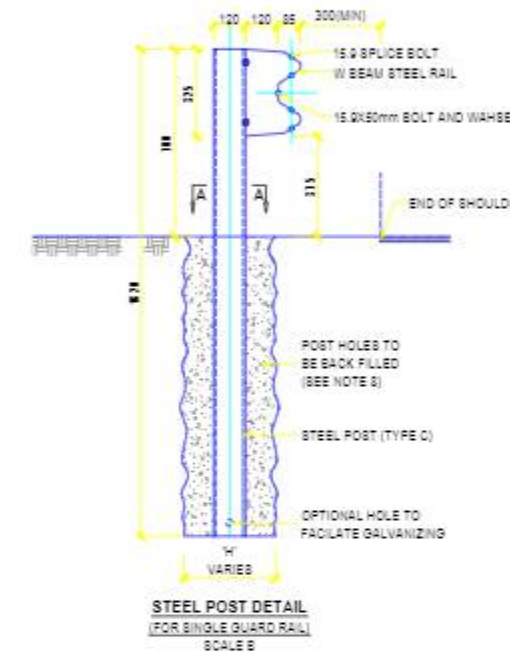


TABLE NO.1

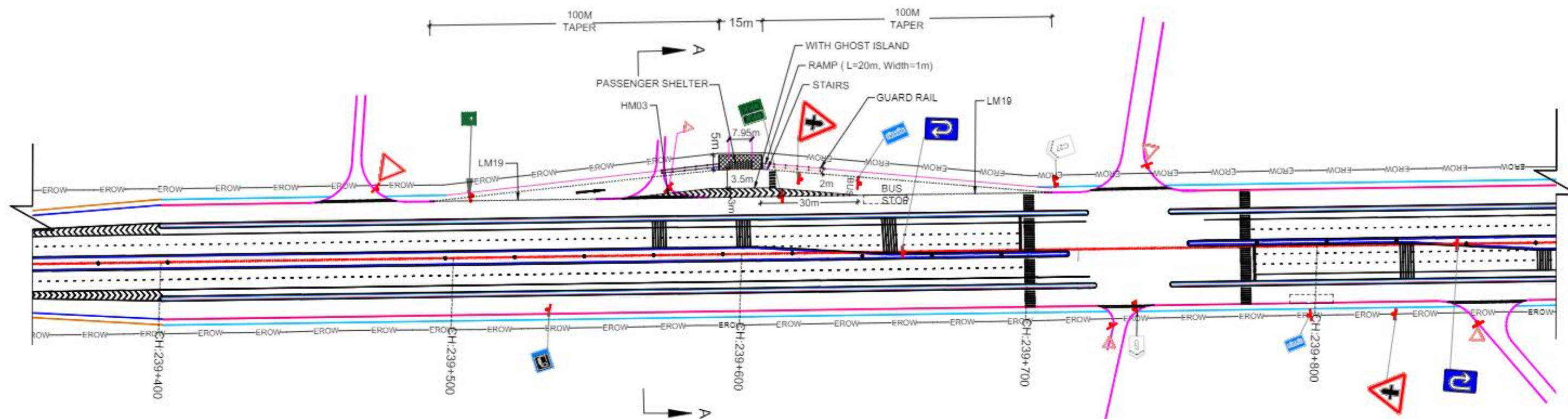
L (mm)	THREAD LENGTH (mm)
35	FULL THREAD
50	45mm THREAD
255	100mm THREAD
460	150mm THREAD

POST OR SPLICE BOLT AND NUT
SCALE C

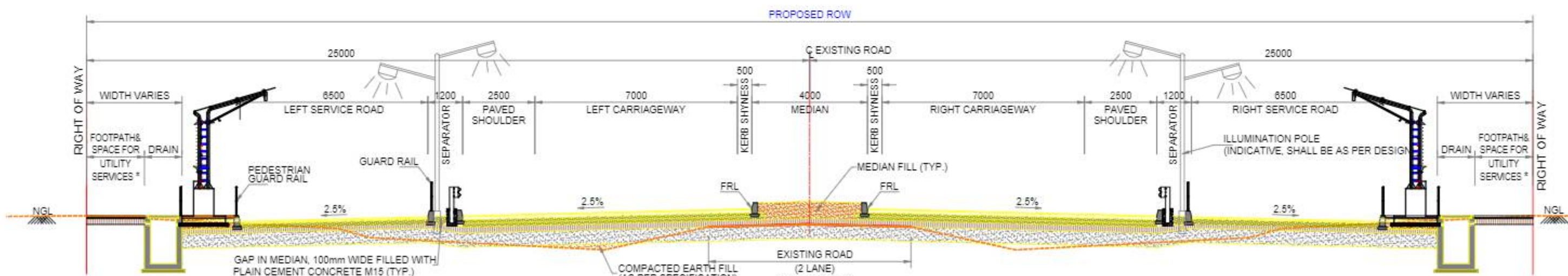


- NOTES
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.
 - ALL LAPS SHALL BE IN THE DIRECTION OF TRAFFIC.
 - W-BEAM TERMINAL SECTIONS SHALL BE USED IN PLACE OF END RAIL ANCHORAGE AT RESTRICTED LOCATIONS AS APPROVED BY THE ENGINEER.
 - W-BEAM RAIL SECTIONS SHALL CONFORM TO AASHTO M-183 AND SHALL BE TYPE-1, CLASS B, UNLESS POST SHALL BE TYPE C (STRONG POST).
 - WHERE THE GUARDRAIL HAS TO FOLLOW A CURVE OF LESS THAN 45M RADIUS, THE BEAM SHALL BE CURVED TO SUIT, BY THE BEAM MANUFACTURER.
 - THE HOLES FOR ANCHORAGE POSTS SHALL BE BACK FILLED WITH WELL COMPACTED GRANULAR MATERIAL. THE SPACE INSIDE THE TERMINAL NOSE SHALL BE FILLED WITH CONCRETE AT NO EXTRA COST TO THE EMPLOYER.
 - CONTRACTOR SHALL PREPARE DRAWINGS SHOWING LOCATION, ELEVATION AND SPACING OF POSTS EACH CULVERT HIGH FILL LOCATION AND SHALL OBTAIN ENGINEER'S APPROVAL. THE LOCATION AND EXTENT OF GUARD RAIL CAN BE REDUCED DEPENDING UPON SITE CONDITIONS OF AS DIRECTED BY THE ENGINEER.
 - BACKFILLING OF THE POST HOLES WILL BE CARRIED OUT AS FOLLOWS:
 - IN CASE OF ROCK, CORED HOLES-250 DIA (AS MADE) WILL BE BACK FILLED WITH LEAN CONCRETE.
 - IN CASE OF STRATA OTHER THAN ROCK, HOLES-300 DIA (AS MADE) WILL BE BACK FILLED WITH LEAN CONCRETE OR THEROSTS MAY BE HAMMERED IN PLACE AS APPROVED BY THE ENGINEER. NO EXTRA PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR CORING AND OR CONCRETING FOR POST FIXATION.
 - ENVIRONMENT MAY BE WIDENED, WHERE NECESSARY, TO ACCOMMODATE GUARD RAIL FLARE AT APPROACH END.
 - POSTS DAMAGED DURING HAMMERING SHALL BE REPLACED BY THE CONTRACTOR AT NO EXTRA COST TO THE EMPLOYER.
 - ALL WELDING OPERATIONS TO BE CARRIED OUT PRIOR TO GALVANIZING.

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale (m)	Date
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Pushkar Poudel Nec.No. 5146 Signature	Mr. Gopal Mitr Nec.No. Signature	Mr. Harikrishna Bhavsar Nec.No. Signature	MISCELLANEOUS DRAWING STEEL SAFETY BARRIER Reference Drawings	Scale (m) Chainage:	JUNE, 2023 Drawing No. KDP/DDR/HIGHWAY/MISC-09 R(0) Sheet No. 09



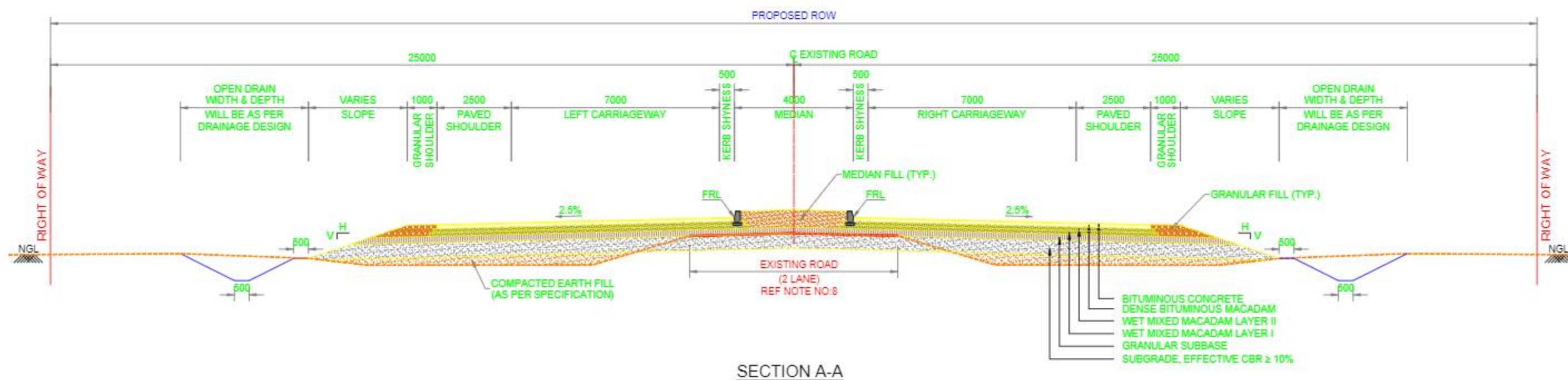
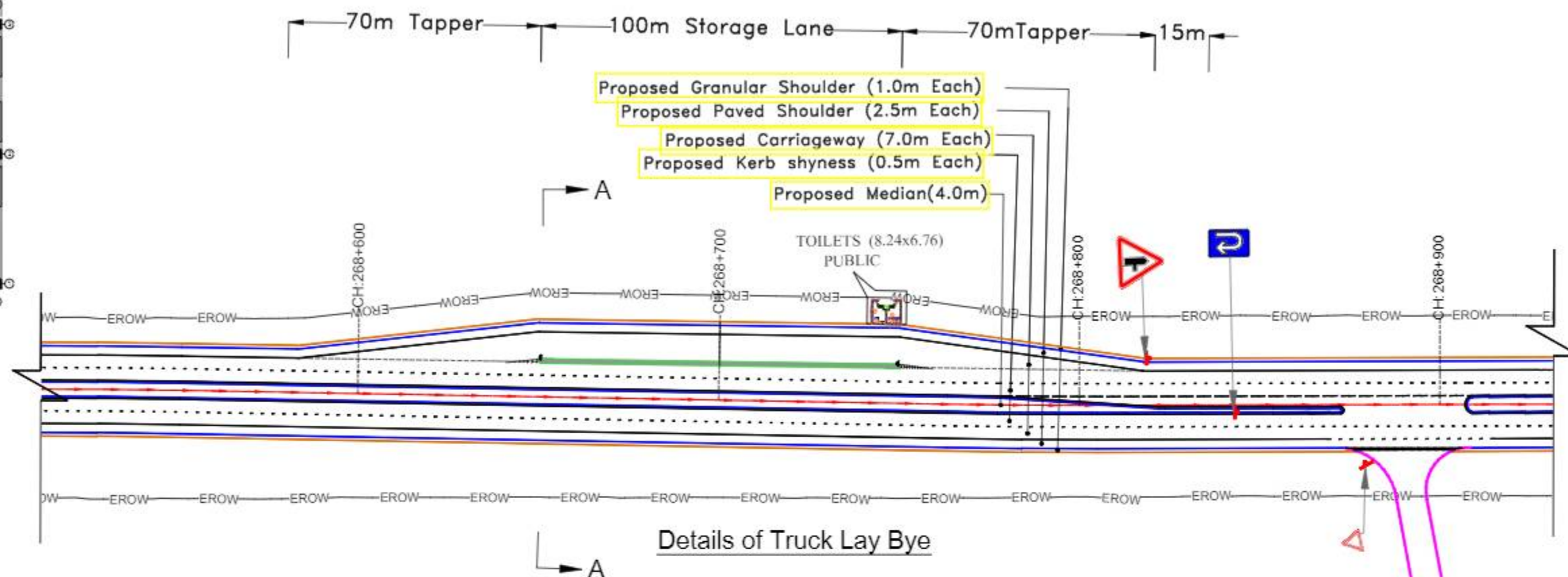
TYPICAL LAYOUT OF BUS BAY



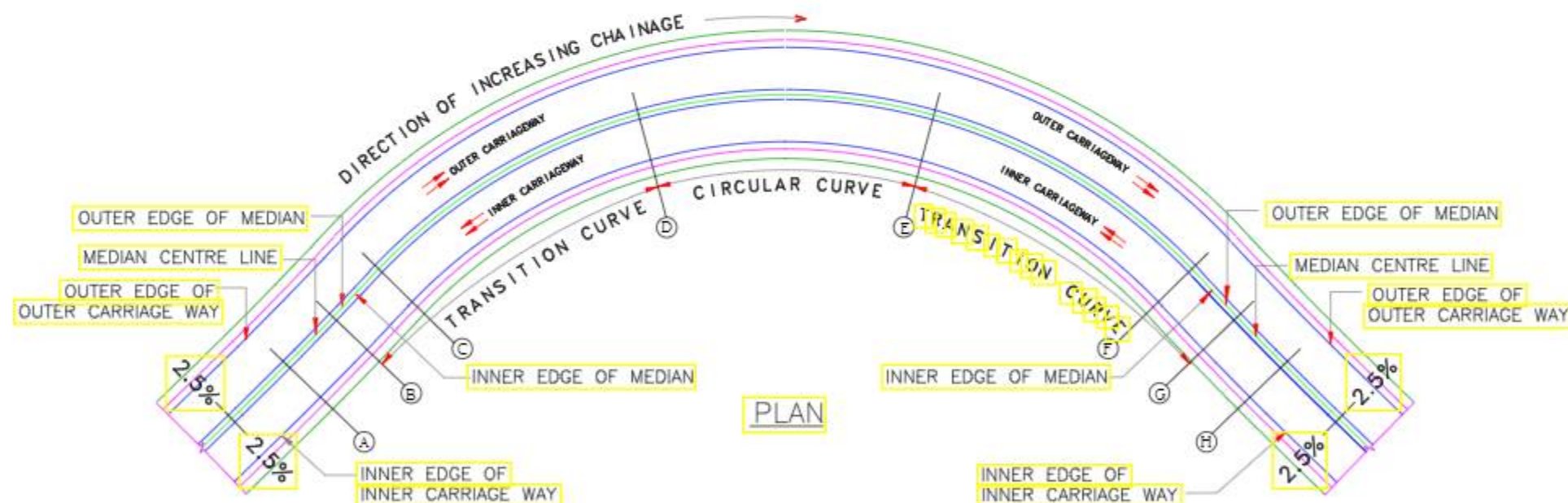
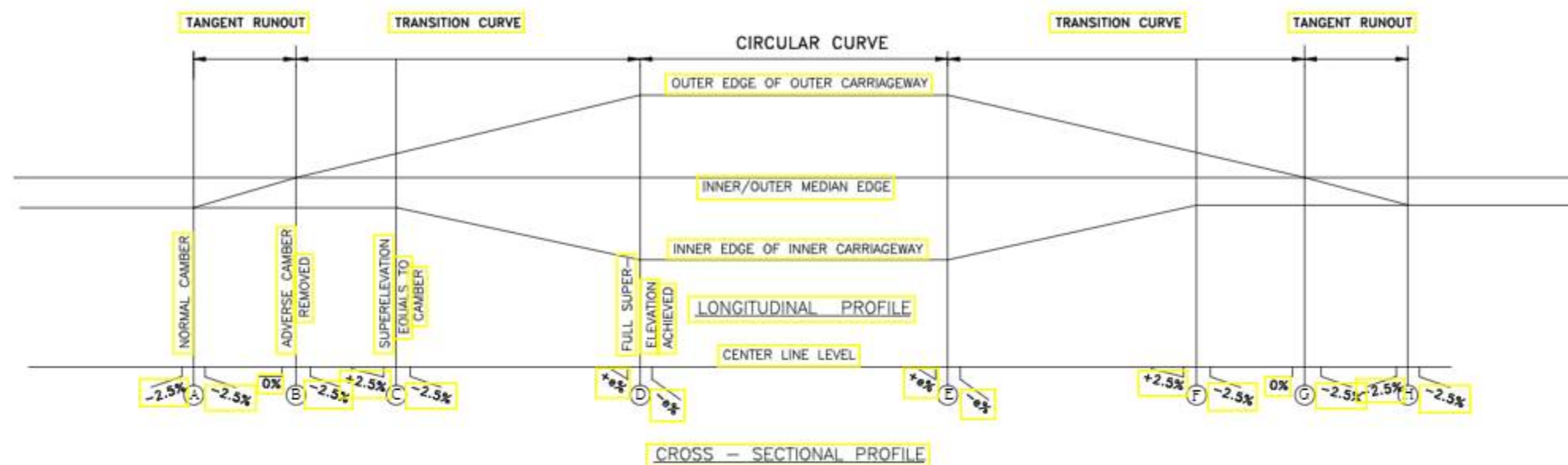
SECTION A-A

Note:
Passenger Shelter shown as typical in TCS figure on both sides where it is applicable for Left or Right side

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. [Signature] Nec.No. [Signature] Checked By: Gopal Mitr Nec.No. [Signature] Approved By: Harikrishna Bhavsar Nec.No. [Signature]	Signature Signature Signature	MISCELLANEOUS DRAWING TYPICAL LAYOUT OF BUS BAY Reference Drawings	N.T.S. Chainage:	JUNE 2023 Drawing No. KOP/DCR/HIGHWAY/MISC-11 R(0) Sheet No.

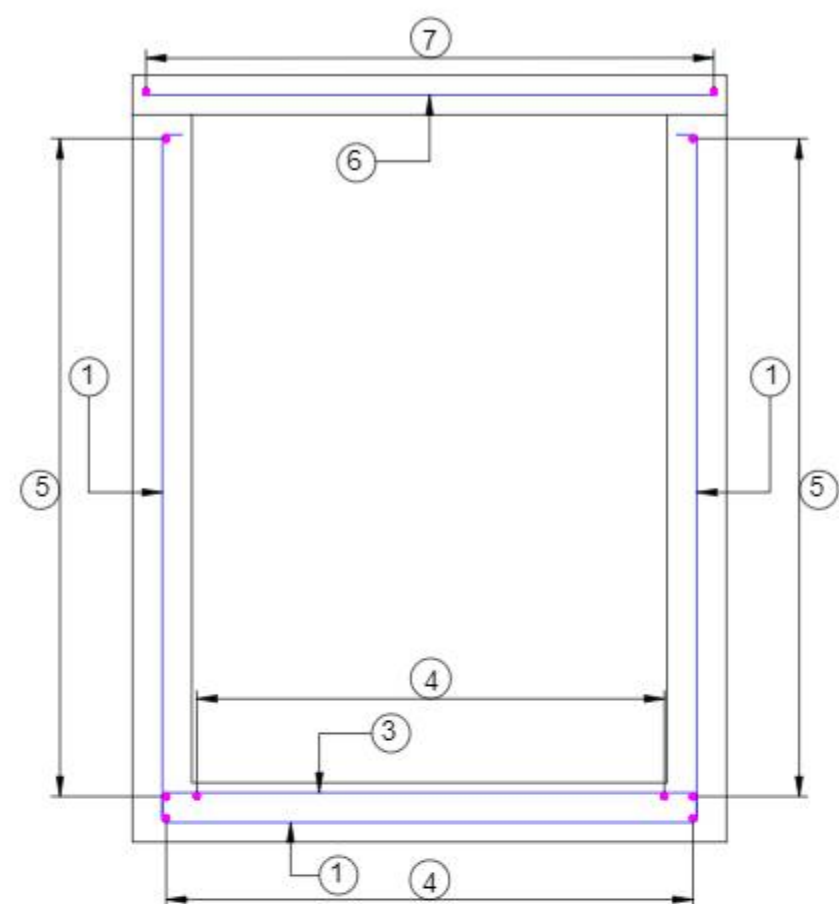
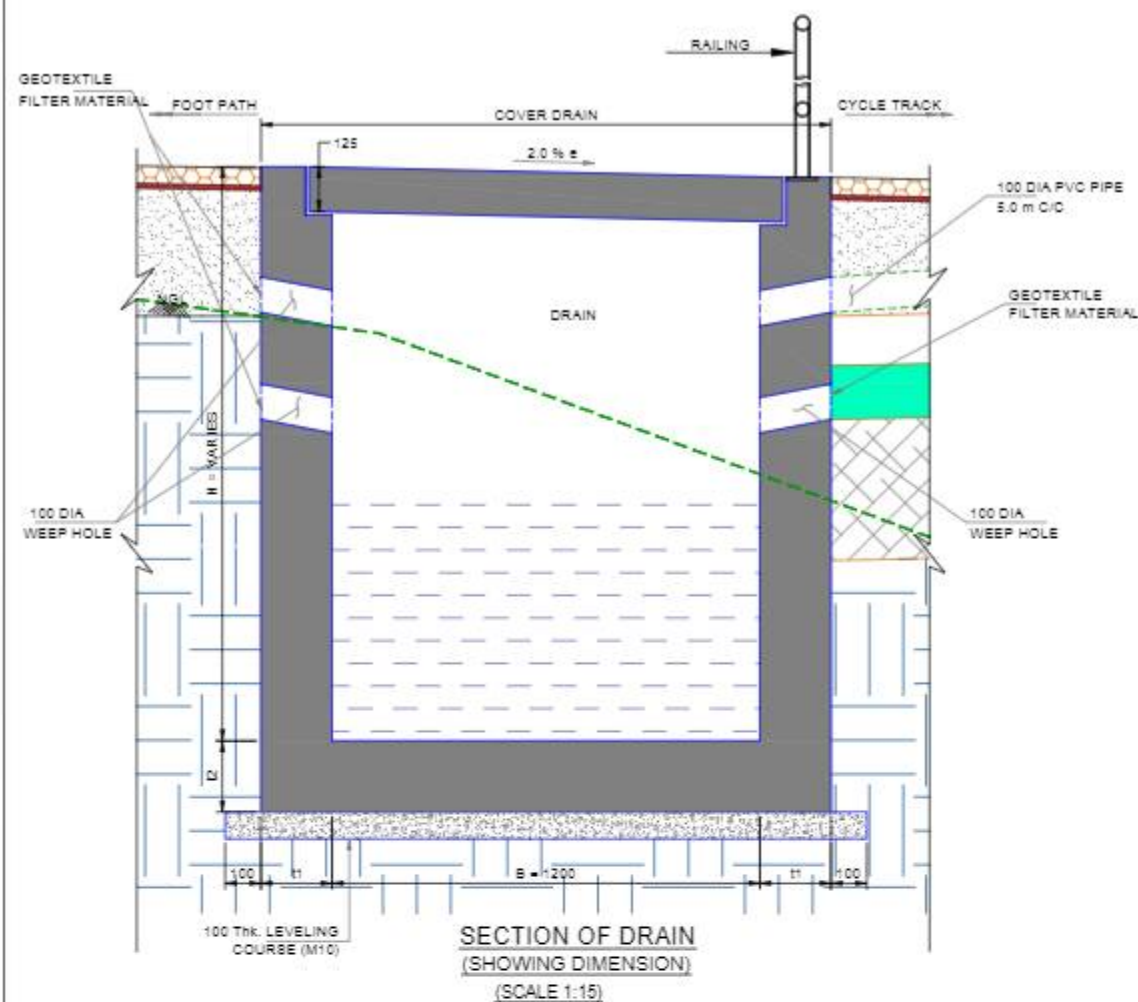


EMPLOYER	PROJECT	DESIGN CONSULTANTS		Mr.		Drawing Name	Scale:	Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	Mr.	MISCELLANEOUS DRAWING TYPICAL LAYOUT OF TRUCK-LAY BAY	N.T.S	JUNE 2023	
		 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India	Nec.No.	Signature			Drawing No.	
		In Association With		Checked By	Gopal Mitr			Signature	Chainage:
		Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Approved By	H.K.Krishna Signature			Signature	Sheet No.

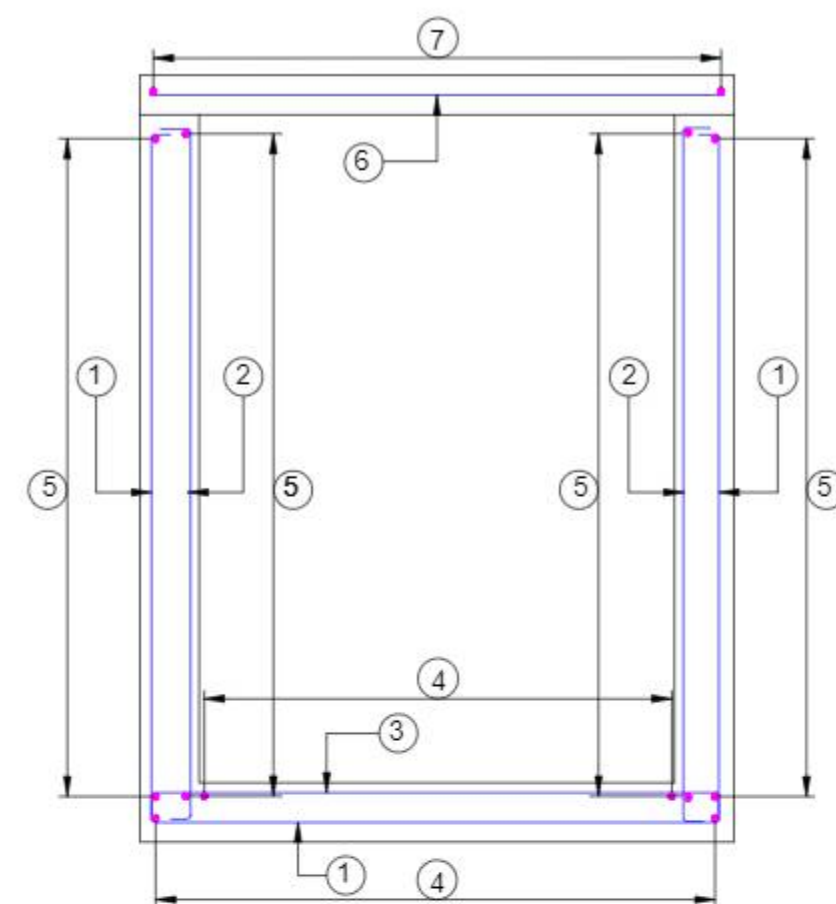


**TYPICAL DETAILS OF SUPERELEVATION ATTAINMENT FOR A CIRCULAR CURVE WITH TRANSITION CURVE
(ROTATION ABOUT MEDIAN EDGE)**

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Pushkar Poudel NED NO. 6146 Signature	Mr. Gopal Mitr NED No. Signature	Mr. Harikrishna Bhandari NED No. Signature	MISCELLANEOUS DRAWING DETAILS OF CURVE COMPONENT Reference Drawings	N.T.S. Chainage:	JUNE, 2023 Drawing No. KDP/DDR/HIGHWAY/MISC-15 R(0) Sheet No. 15



SECTION OF DRAIN
(SHOWING REINFORCEMENT FOR HEIGHT- 1.0M TO 1.5M)



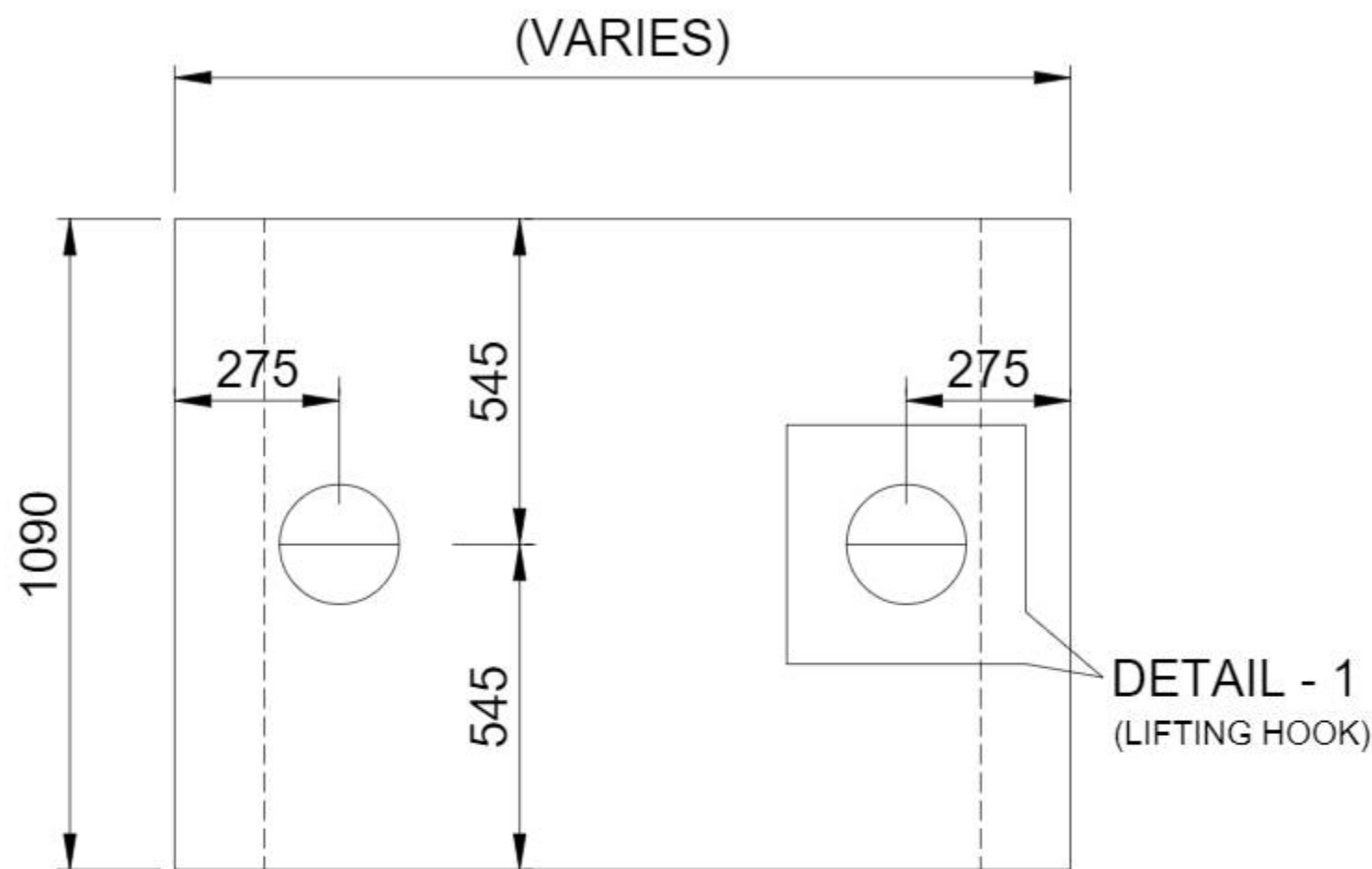
SECTION OF DRAIN
(SHOWING REINFORCEMENT FOR HEIGHT- 1.8M TO 3.6M)

NOTES

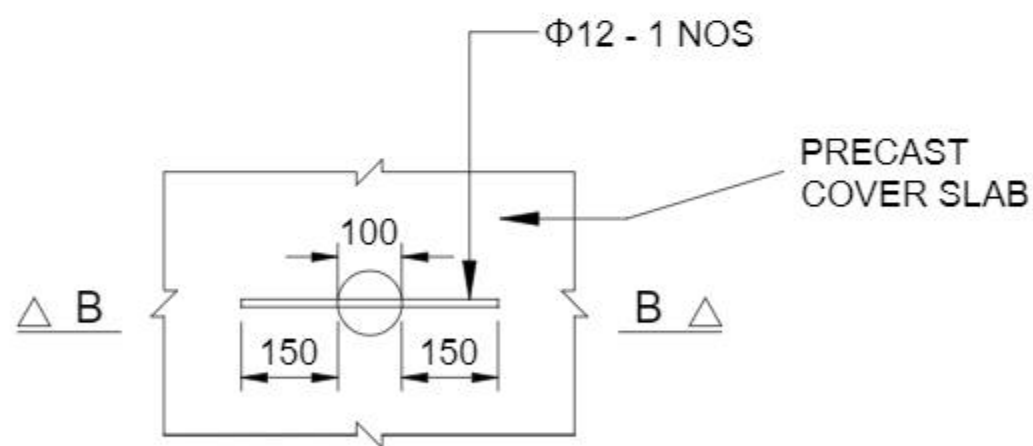
- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- GRADE OF CONCRETE FOR DRAIN AND COVER SLAB SHALL BE M20.
- THE REINFORCEMENT SHALL BE THERMO MECHANICALLY TREATED (TMT) BARS (GRADE DESIGNATION Fe 500) CONFORMING TO IS:1786 STANDARDS.
- CLEAR COVER TO ANY REINFORCEMENT IN VARIOUS COMPONENTS SHALL BE 50MM EXCEPT TOP SLAB CLEAR COVER 40MM.
- MINIMUM LAP LENGTH SHALL BE 66 TIMES DIAMETER OF BAR. LAP SHALL BE AVOIDED AT MID SPAN AND SUPPORT LOCATIONS.
- LAPS OF REINFORCEMENT MAY BE PROVIDED AS APPROVED BY ENGINEER-IN-CHARGE. LAPS SHALL BE STAGGERED AND NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT ANY ONE SECTION.
- 100 DIA WEEP HOLES SHALL BE PROVIDED @ 5.0M SPACING BOTHWAYS AT EACH WALL OF DRAIN IN A STAGGERED PATTERN IN A SLOPE OF 1:20 TOWARDS INNER SIDE OF DRAIN.
- FOOTPATH LIVE LOAD OF 500KG/M² CONSIDERED ON COVER SLAB.
- SUFFICIENT EARTH PROTECTION AT OUTER SIDE OF THE DRAIN SHALL BE PROVIDED TO COUNTER THE EARTH PRESSURE AT ROAD SIDE FACE.
- THE CONTRACTOR MAY OPT FOR PRE-CAST CONSTRUCTION, SUBJECT TO ENGINEER'S APPROVAL.

HEIGHT	B	t1	t2	WALL/BASE OTOM'		BASE TOP	DIST. BASE	Dist wall	Top slab	
(m)	(mm)	(mm)	(mm)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1200	150	150	T8-150c/c	-	T8-150c/c	t8-250 c/c	t8-250 c/c	T8-150 C/C'	T8-250 C/C
1.3	1200	175	150	t10-200c/c	-	t10-200c/c	t8-250 c/c	t8-200 c/c	T8-150 C/C'	T8-250 C/C
1.4	1200	175	150	t10-150c/c	-	t10-150c/c	t8-250 c/c	t8-200 c/c	T8-150 C/C'	T8-250 C/C
1.5	1200	175	150	t10-150c/c	-	t10-150c/c	t8-250 c/c	t8-200 c/c	T8-150 C/C'	T8-250 C/C
1.8	1200	200	150	t10-125c/c	T8-125 C/C	t10-125c/c	t8-250 c/c	T10-200 C/C	T8-150 C/C'	T8-250 C/C
2	1200	225	150	t12-150c/c	T8-150 C/C	T10-150c/c	t8-250 c/c	T10-200 C/C	T8-150 C/C'	T8-250 C/C
2.5	1200	275	150	t12-125c/c	T8-125 C/C	T10-125c/c	t8-250 c/c	T10-200 C/C	T8-150 C/C'	T8-250 C/C
3	1200	325	200	t16-180 c/c	T10-180C/C	T12-180 c/c	T8-200 C/C	T10-200 C/C	T8-150 C/C'	T8-250 C/C
3.6	1200	350	200	t16-125 c/c	T10-125C/C	t12-125 c/c	T8-200 C/C	T10-200 C/C	T8-150 C/C'	T8-250 C/C

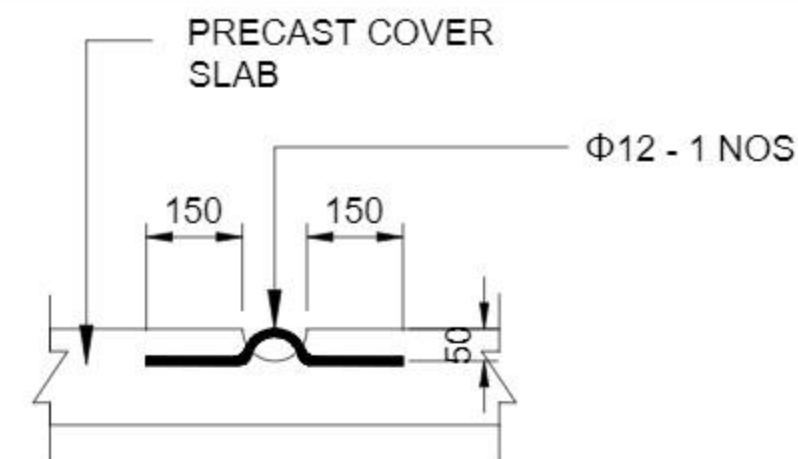
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Gopal Mitr Nec.No. Signature	Mr. Sanjeev Mitr Nec.No. Signature	Mr. Harikrishna Bhavsar Nec.No. Signature	TYPICAL DRAWING OF DRAIN SECTION	N.T.S	JUNE 2023
						Reference Drawings	Chainage:	Drawing No. KOP/DDR/HIGHWAY/MISC-16 R(0) Sheet No. 16



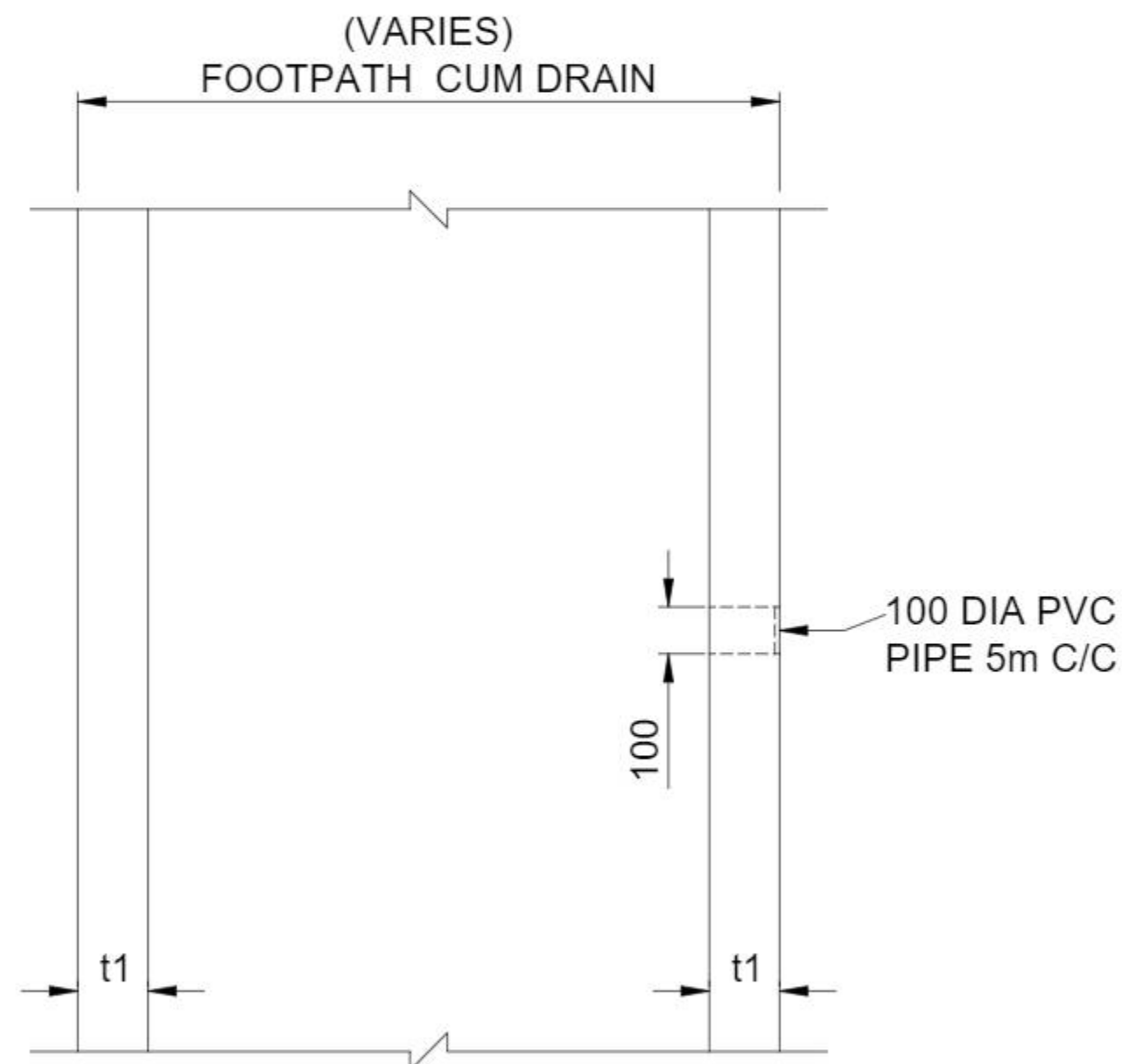
PLAN OF PRECAST SLAB



DETAIL - 1 (LIFTING HOOK)
(SHOWING REINFORCEMENT DETAIL)



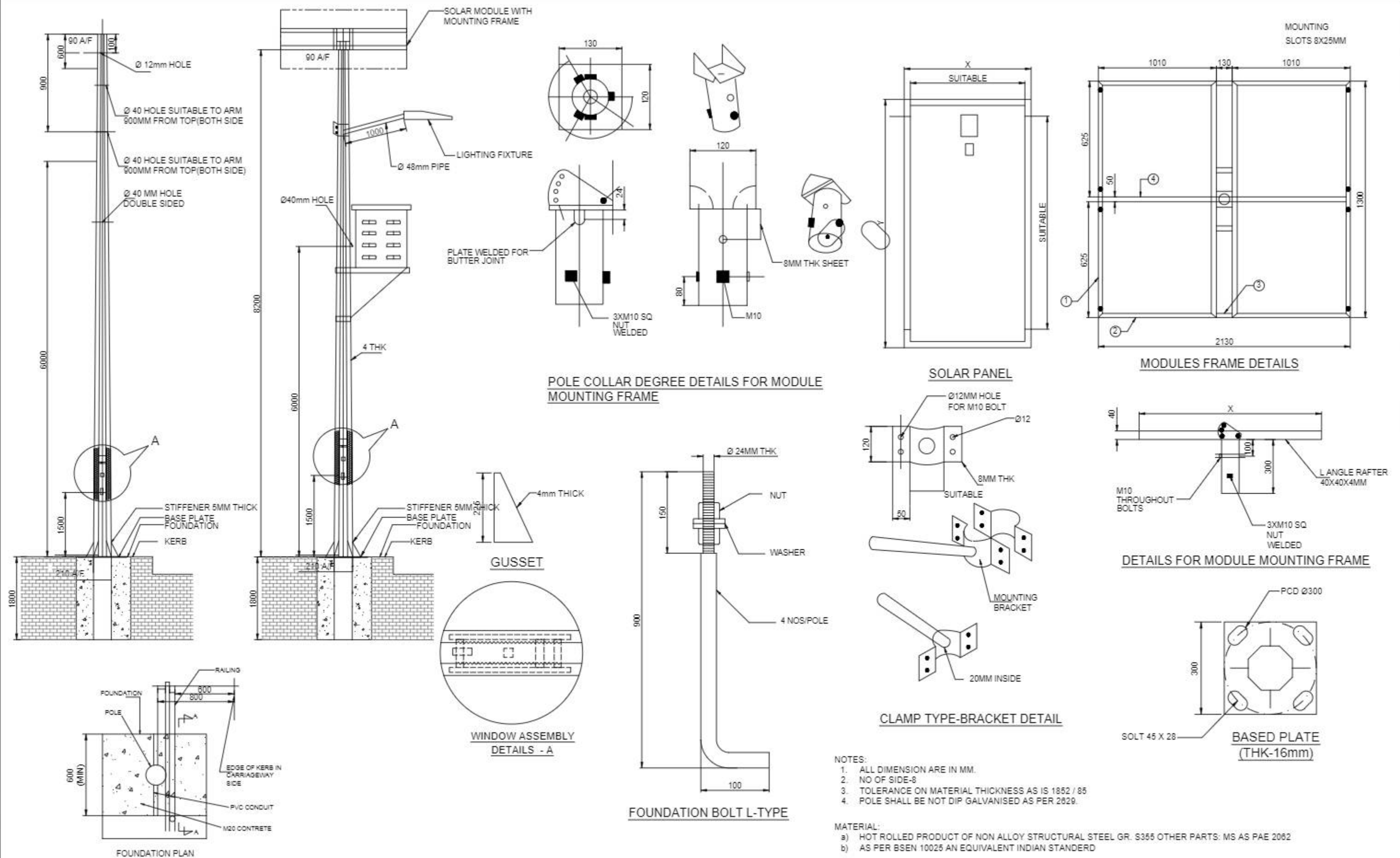
SECTION B-B



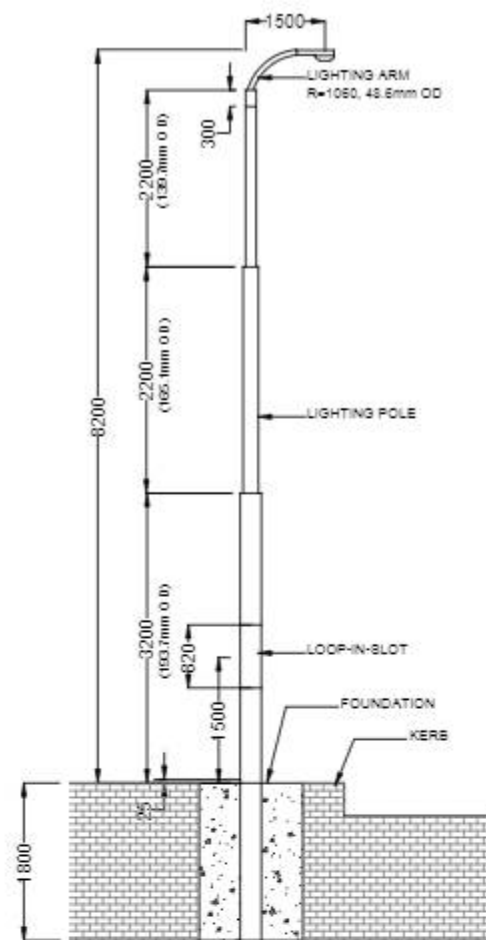
PLAN OF DRAIN WITH FOOTPATH

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkatta, India	Mr. Gopal Mitr Nec.No. Signature	TYPICAL DRAWING OF DRAIN SECTION	N.T.S	JUNE 2023
			Checked By Mr. Sanjeev Mitr Nec.No. Signature	Reference Drawings	Chainage:	Drawing No. KOP/DCR/HIGHWAY/MISC-17 R(0)
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Approved By Mr. Harikrishna Bhavsar Nec.No. Signature			Sheet No. 17

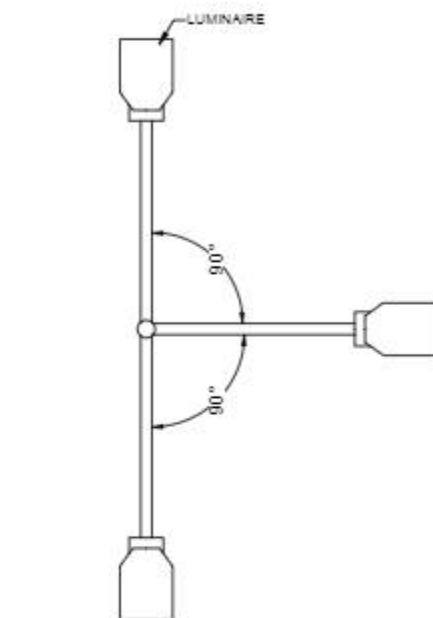
EMPLOYER	PROJECT	DESIGN CONSULTANTS		Mr.		Drawing Name	Scale:	Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	Mr.	TYPICAL DRAWING FOR LED BEACONS / BLINKER Reference Drawings	N.T.S	JUNE 2023	
		 EPTISA Servicios De Ingeniera Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India	Nec.No.	Signature			Drawing No.	
		In Association With		Checked By	Gopal Mitr			Signature	Chainage:
		Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Approved By	Harikrishna Bhavsar			Signature	KOPIDOR/HIGHWAY/MISC-18 R(0)
				Nec.No.	Signature			Sheet No.	



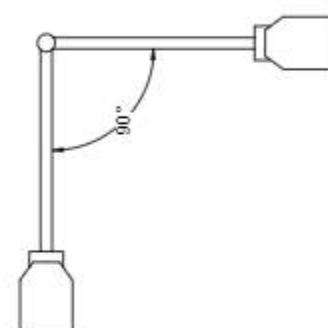
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Mr.	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. No.			GA DRAWING OF 10.0M OCTAGONAL SOLAR POLE Reference Drawings	N.T.S Chainage:	JUNE 2023
			Checked By	Mr. Gopal Mitr				Drawing No. KOP/DDR/HIGHWAY/MISC-19 R(0)
			Approved By	Mr. Harikrishna Bhavsar				Sheet No.



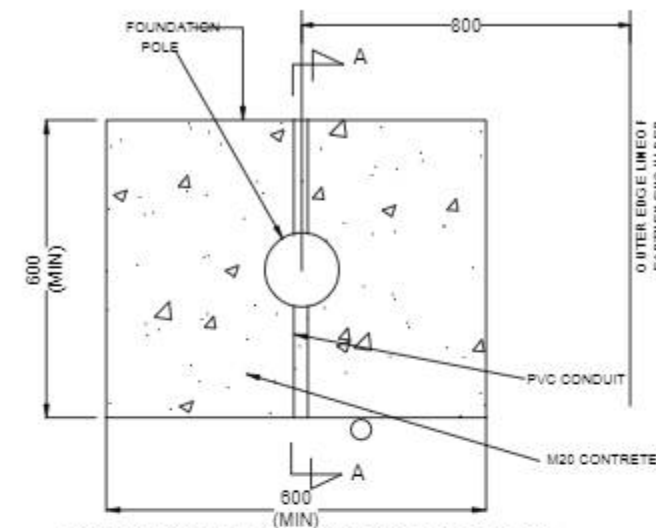
TYPICAL VIEW (TYPE -A1)



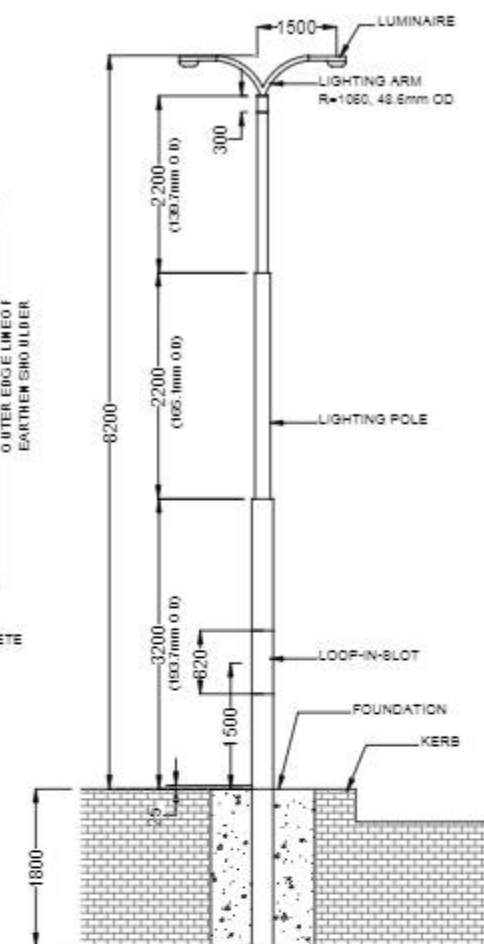
ORIENTATION OF ARM
IN A4 TYPE POLE



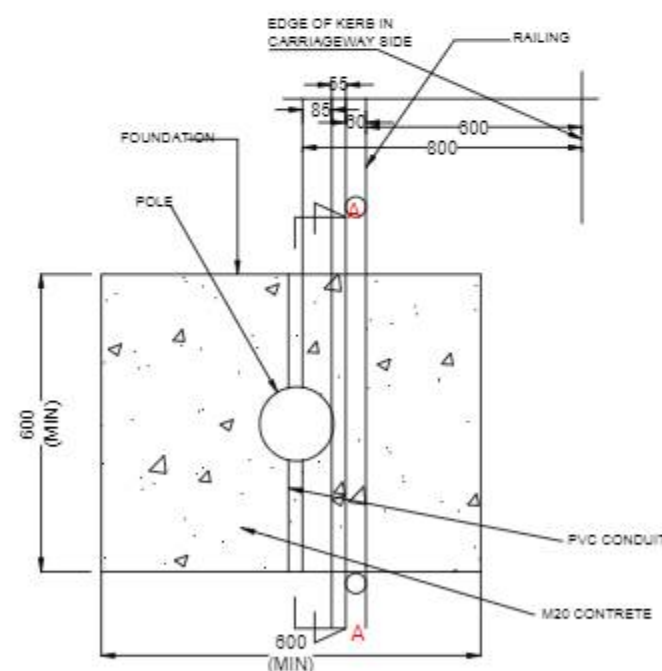
ORIENTATION OF ARM
IN A3 TYPE POLE



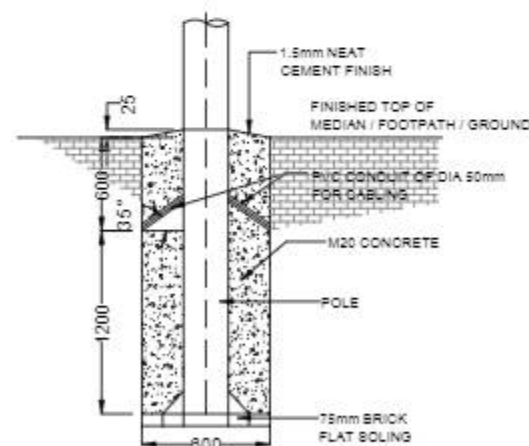
FOUNDATION PLAN & LOCATION OF TYPE A1
POLE OUTSIDE EDGE OF HARD SHOULDER



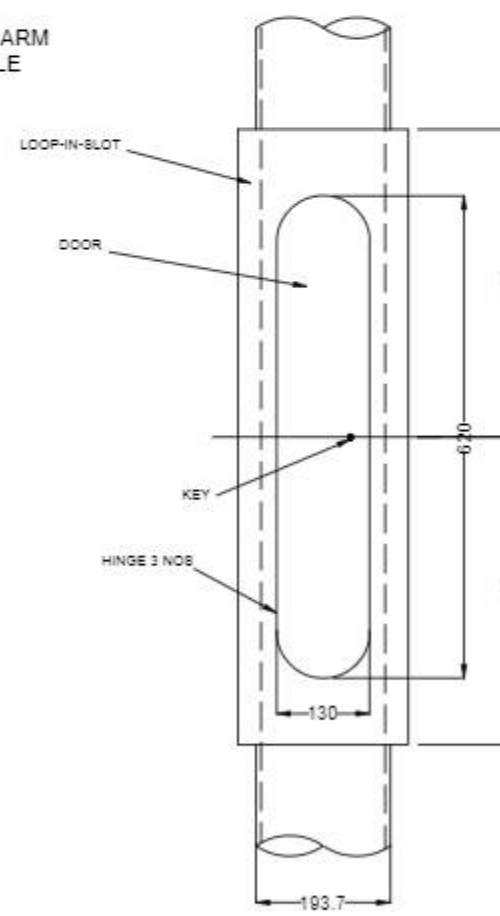
TYPICAL VIEW (TYPE -A2)



FOUNDATION PLAN



SECTION A-A

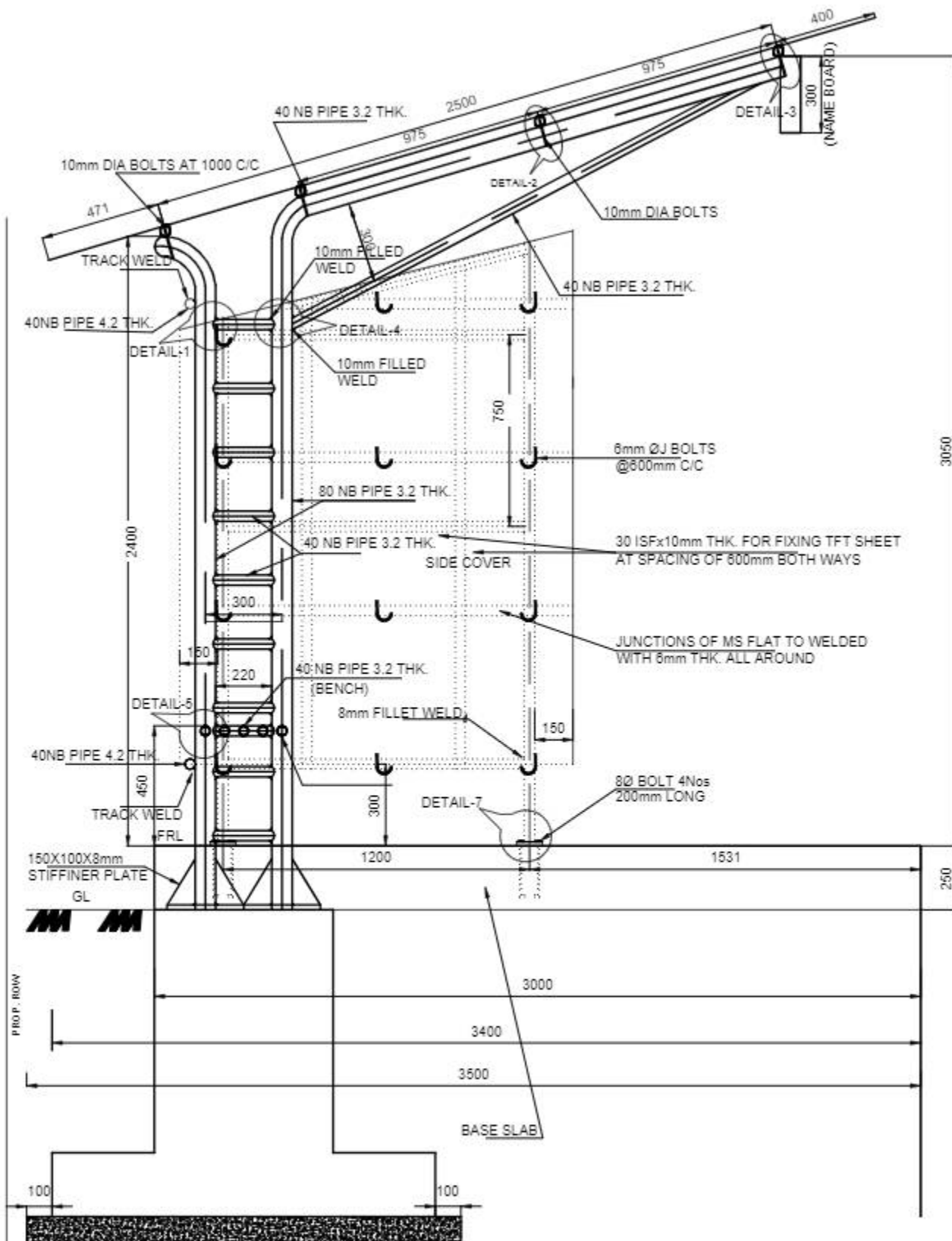


VIEW OF
LOOP-IN-SLOT

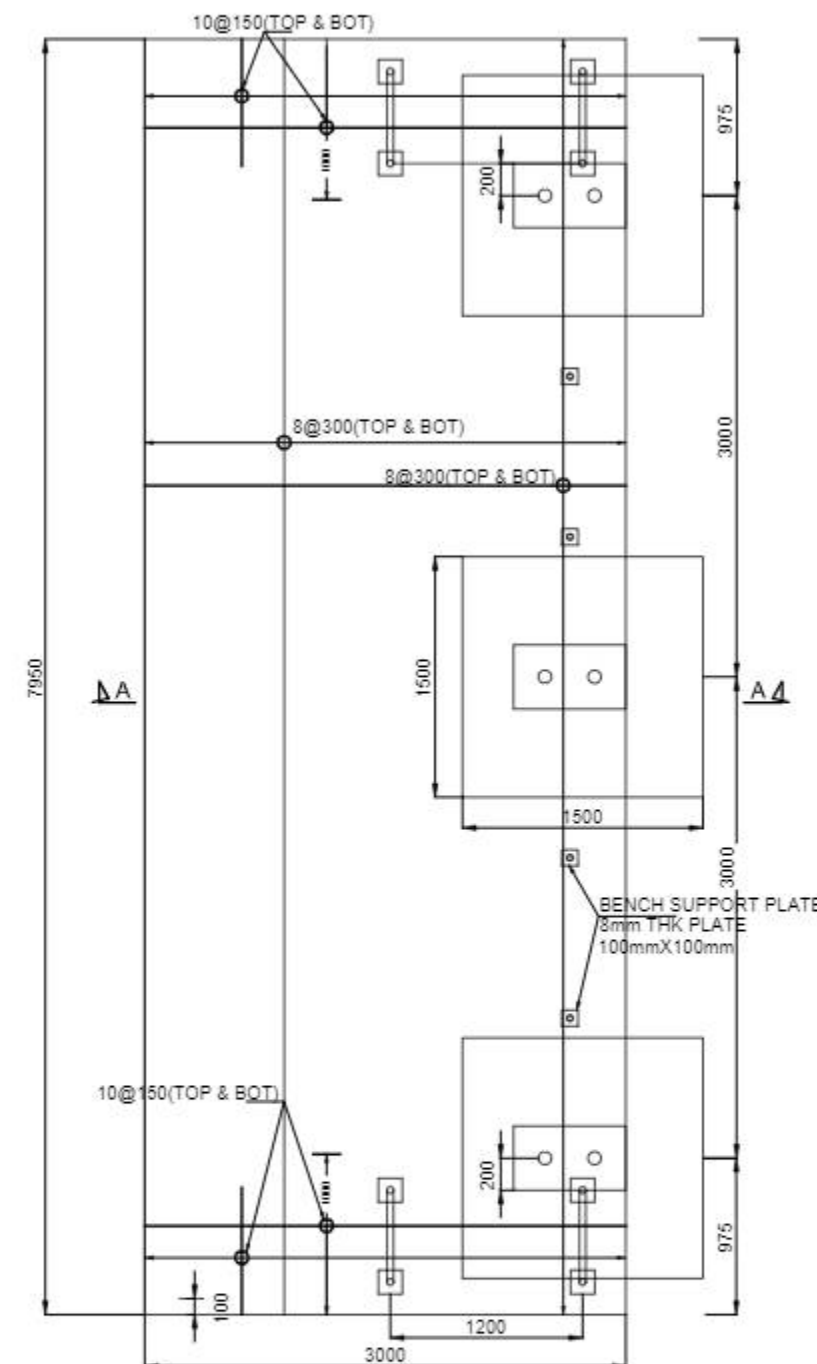
NOTES:

1. ALL THE DIMENSIONS ARE IN MILLIMETERS UNLESS AND OTHERWISE SPECIFIED.
2. POLE TYPE-410SP46 AS PER IS:2713 (P.T.- 1 TO 3):1980.
3. DIMENSIONS ARE INDICATIVE, MAY VARY DURING EXECUTION OF WORK.
4. BESIDES THE ABOVE, STANDARDS AND SPECIFICATIONS MENTIONED IN IRC:SP:84:2014 SHALL BE FOLLOWED STRICTLY WHENEVER APPLICABLE.

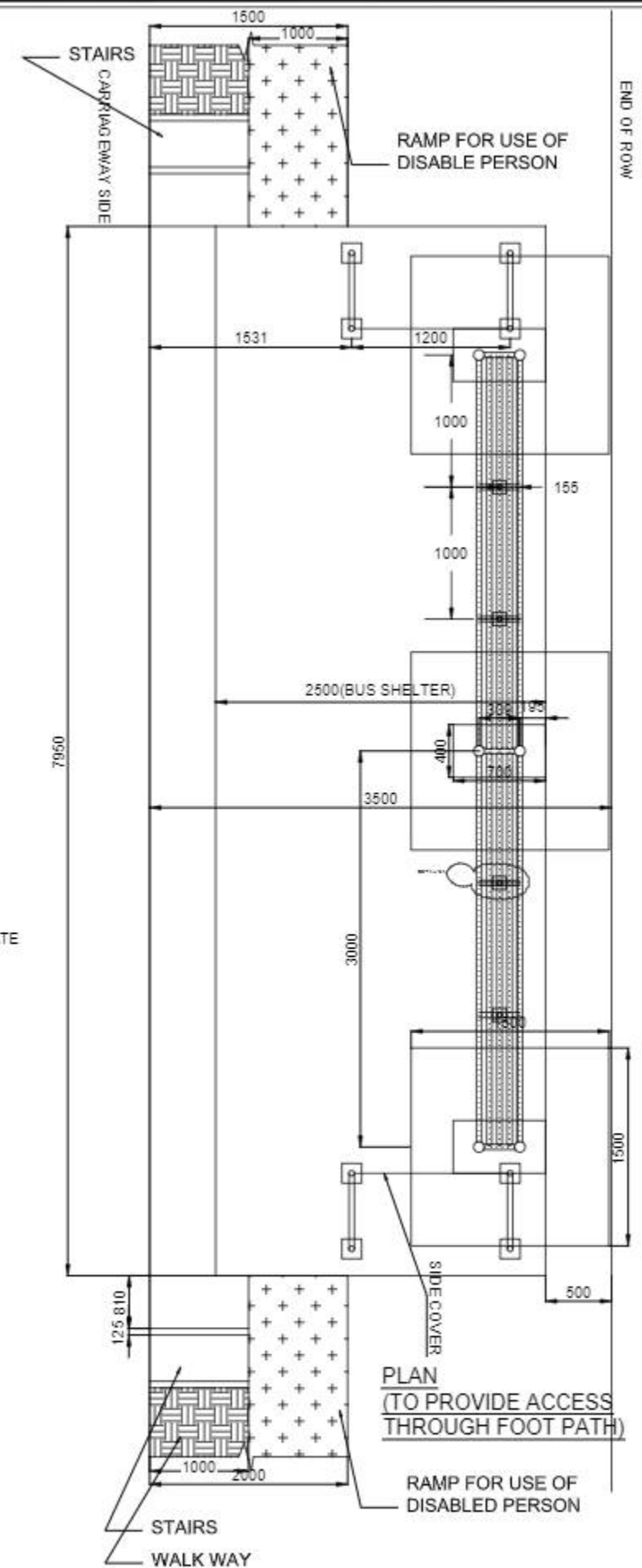
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Mr.	Signature	Drawing Name	Scale:	Date:
Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	EPTISA Servicios De Ingenieria Madrid, Spain STUP Consultants Private Limited Kolkatta, India	Mr. Gopal Mitr	Mr. Gopal Mitr		TYPICAL DRAWING OF STREET LIGHT (POWER SUPPLY)	N.T.S	JUNE 2023
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Checked By	Mr. Hari Krishna Bhavsar		Reference Drawings	Chainage:	Drawing No. KOP/DDR/HIGHWAY/MISC-21 R(0)
			Approved By	Mr. Hari Krishna Bhavsar				Sheet No.



SECTION A-A
(SCALE 1:10)

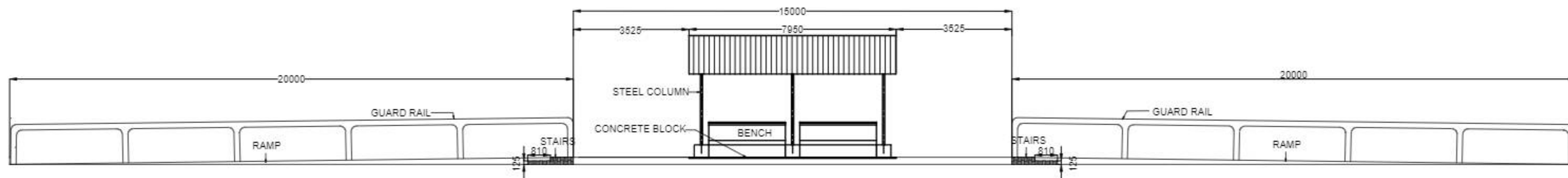


PLAN AT FLOOR LEVEL
(SCALE 1:15)



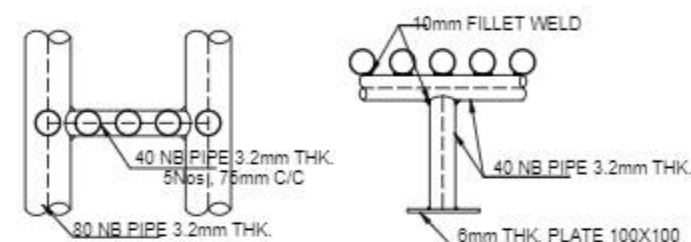
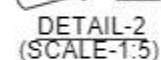
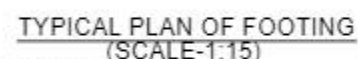
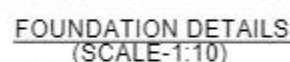
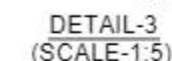
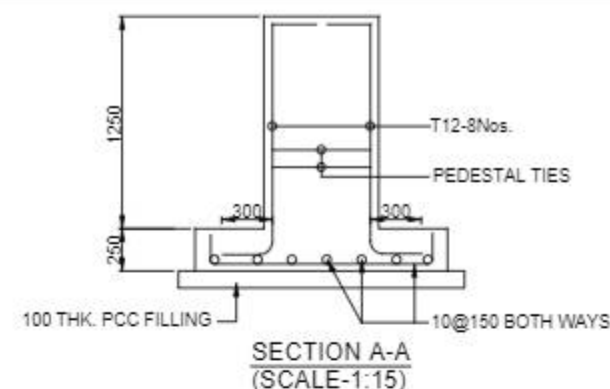
PLAN
(TO PROVIDE ACCESS
THROUGH FOOT PATH)

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Checked By	Approved By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	 EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India	Mr.  Nec. No.  Mr.  Nec. No. 	Mr.  Nec. No.  Mr.  Nec. No. 	Mr.  Nec. No.  Mr.  Nec. No. 	MISCELLANEOUS DRAWING TYPICAL DETAILS OF BUS SHELTER	AS SHOWN	JUNE 2023
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited				Reference Drawings	Chainage:	Drawing No. KOP/DCR/HIGHWAY/MISC-22 R(0) Sheet No.

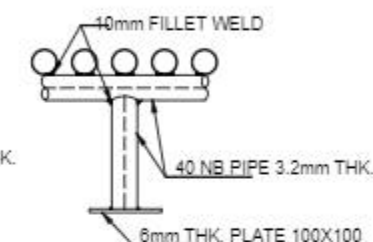


FRONT ELEVATION OF BUS SHELTER

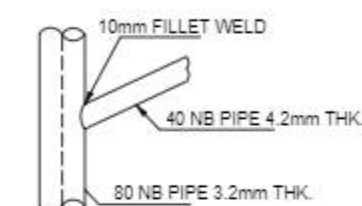
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	EPTISA Servicios De Ingeniera Madrid, Spain STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. [Signature]		MISCELLANEOUS DRAWING TYPICAL DETAILS OF BUS SHELTER	N.T.S	JUNE 2023
			Checked By	Signature	Reference Drawings	Chainage:	Drawing No.
			Approved By	Signature			Sheet No.



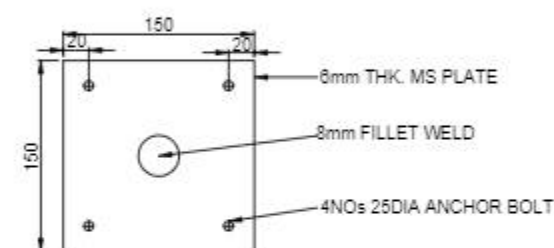
DETAIL-5
(SCALE-1:5)



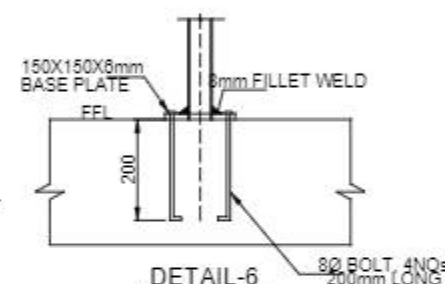
DETAIL-5A
(SCALE-1:5)



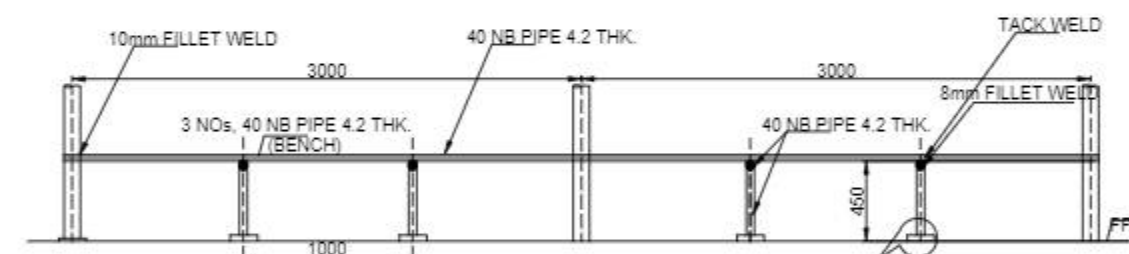
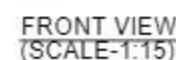
DETAIL-4
(SCALE-1:5)



DETAIL-7
(SCALE-1:2)



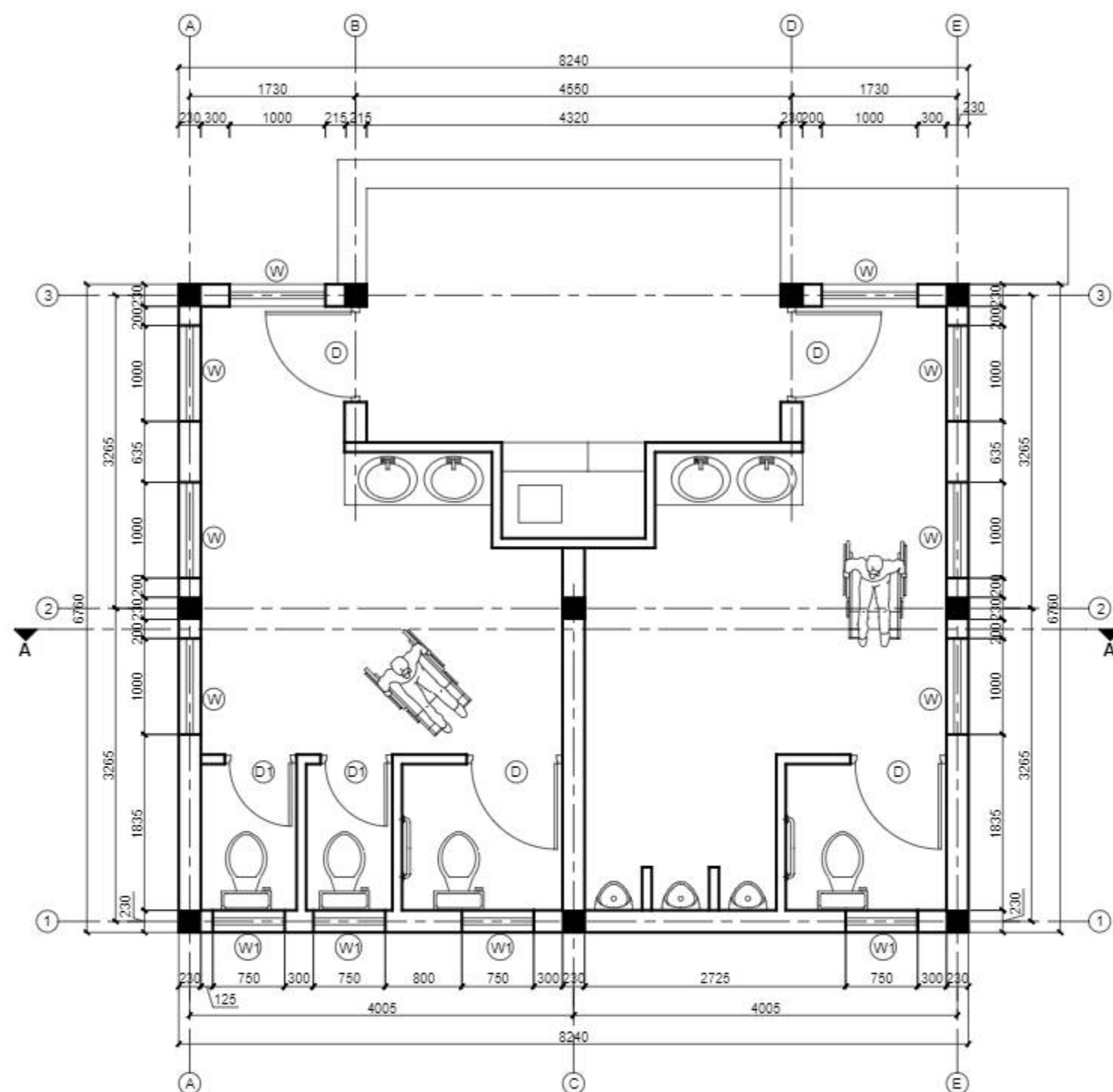
DETAIL-6
(SCALE-1:5)



SEATING ARRANGEMENT
(SCALE-1:15)

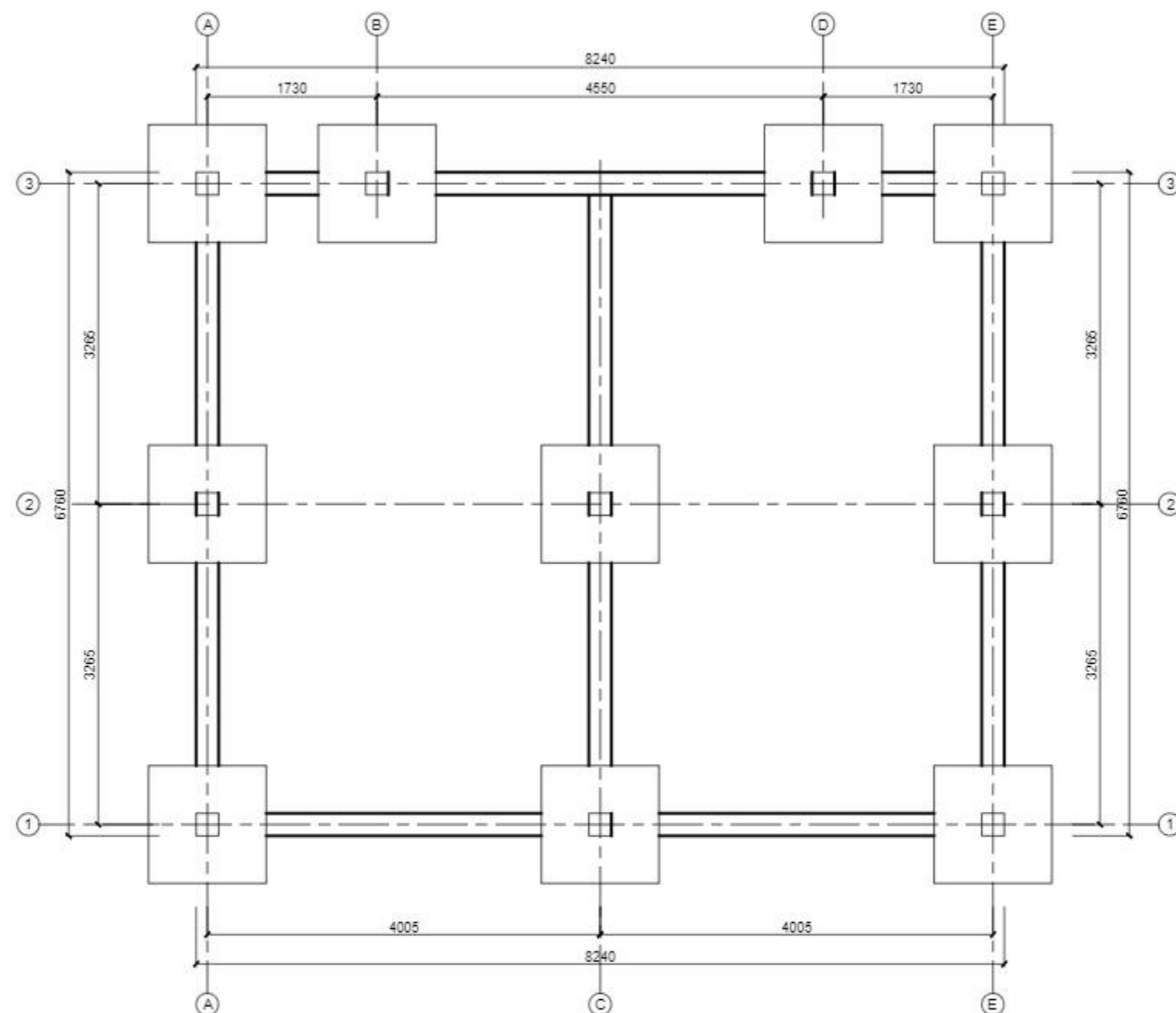
1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. GRADE OF CONCRETE FOR FOUNDATION BASE SLAB AND PEDESTAL : M25
3. GRADE OF STEEL FOR FOUNDATION BASE SLAB AND PEDESTAL : Fe500
4. GRADE OF STEEL TUBES : YSt240.
5. GRADE OF BOLT : 4.6.
6. PROPERTY OF BASE PLATE : $F_y=250$.
7. MINIMUM SBC OF SOIL : 100kN/M
8. COVER FOR FOOTING AND COLUMN : 50mm.
9. PAINTING SHALL CONFIRMS TO 1906 OF SECTION 1900 OF SPECIFICATIONS OF ROADS AND BRIDGE WORKS OF MORTHREVS.
10. ALL WELDS OF MAIN FRAME SHELL BE SHOP WELDED.
11. WELDING SHALL BE PERFORMED UNDER CONTROLLED CONDITIONS ENSURING FULL PENETRATION OF WELD.

EMPLOYER		PROJECT		DESIGN CONSULTANTS		DRAWING Name		Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	Mr.	Signature	MISCELLANEOUS DRAWING TYPICAL DETAILS OF BUS SHELTER	N.T.S	JUNE 2023
		 EPTISA Servicios De Ingenieria Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India	Checked By	Mr.	Signature			Drawing No.
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Approved By	Mr.	Signature			Reference Drawings
					Mr.	Signature			Sheet No.

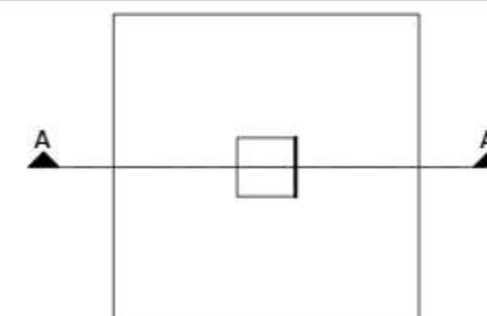


Ground Floor Plan (Area:- 55.70 sq.m.)
Scale:-1:40

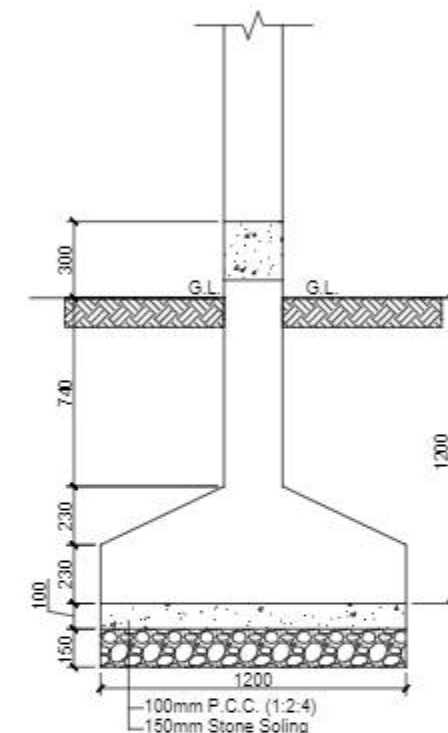
EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingeniera Madrid, Spain  STUP Consultants Private Limited Kolkatta, India	Mr. Nec.No. Signature		MISCELLANEOUS DRAWING SMART TOILET DETAILS	AS SHOWN	JUNE 2023
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Checked By Mr. Nec.No. Signature		Reference Drawings	Chainage:	Drawing No.
			Approved By Mr. Nec.No. Signature				KDP/ODR/HIGHWAY/MISD-25 R(0) Sheet No.



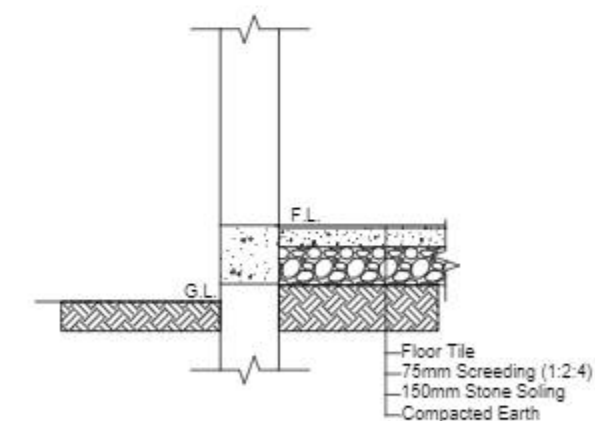
Trench Plan
Scale:-1:40



Column Plan
Scale:-1:20

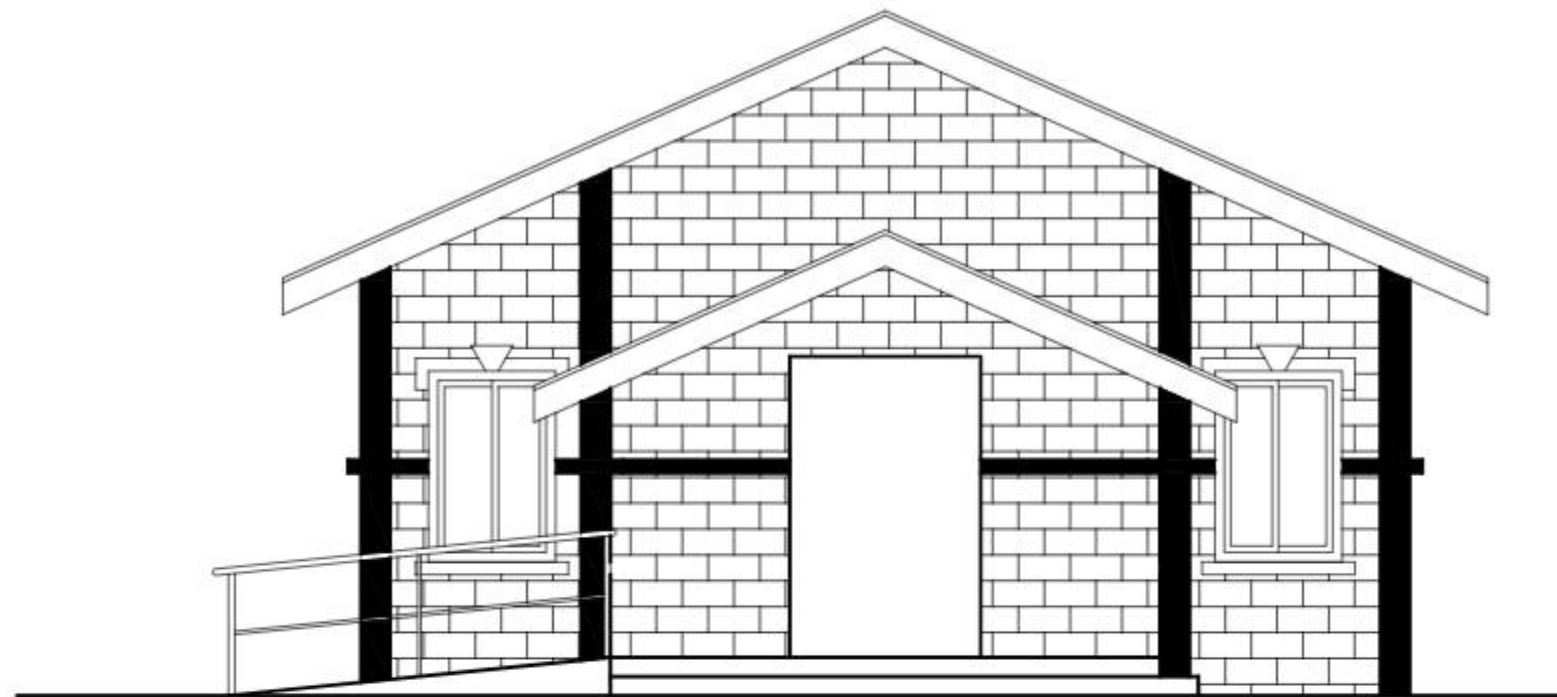


Section A-A
Scale:-1:20

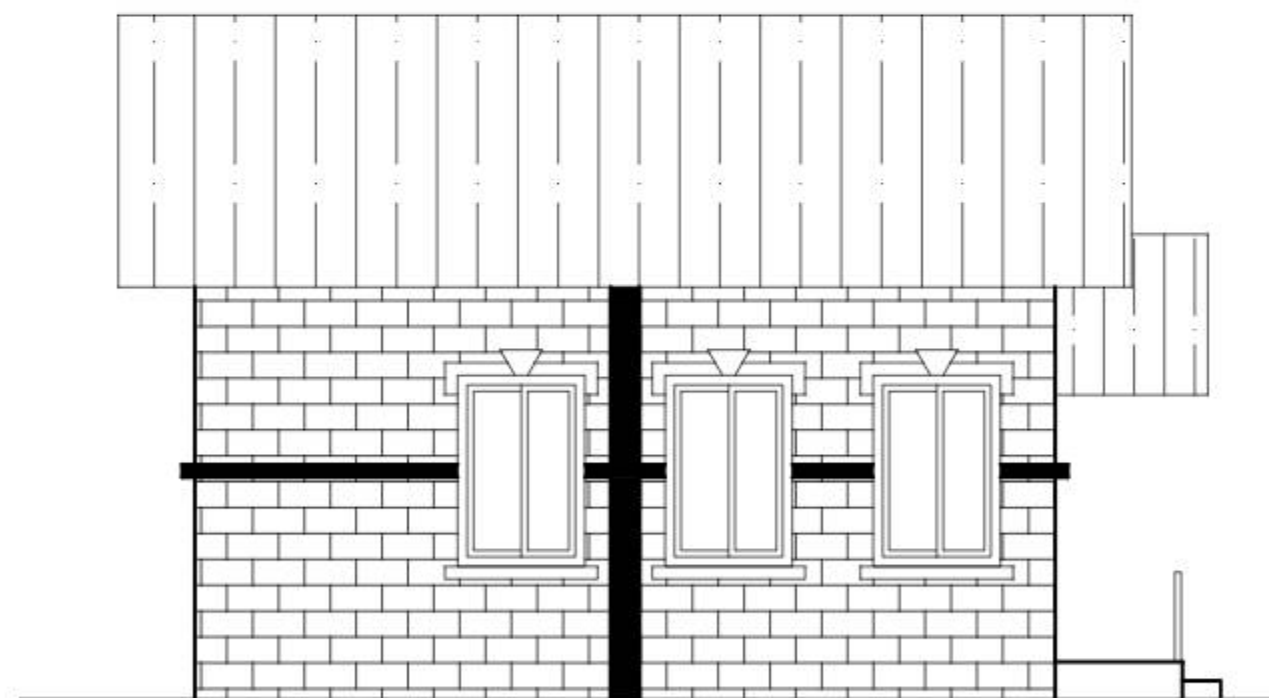


Flooring Details
Scale:-1:20

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingeniera Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. [Signature]		MISCELLANEOUS DRAWING SMART TOILET DETAILS	AS SHOWN	JUNE 2023
			Checked By	Signature	Reference Drawings	Chainage:	Drawing No.
			Approved By	Signature			KDP/ODR/HIGHWAY/MISD-26 R(D) Sheet No.

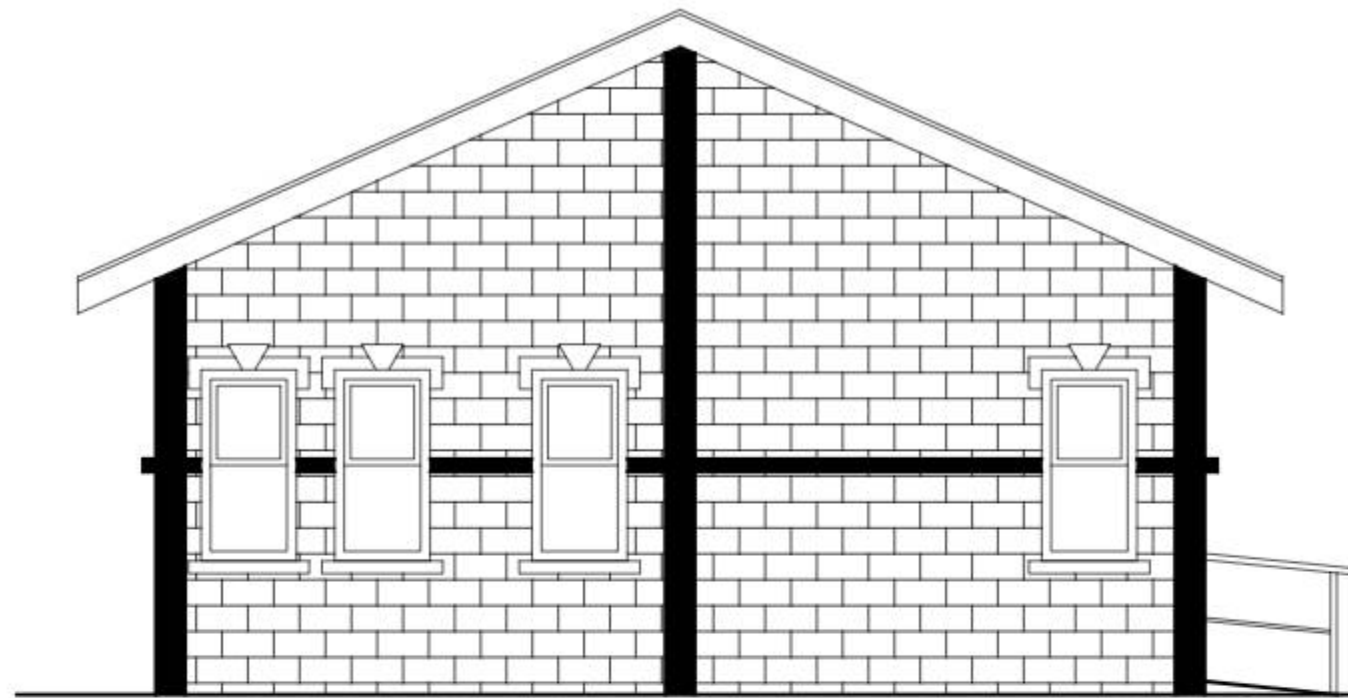


Front Elevation
Scale:-1:40

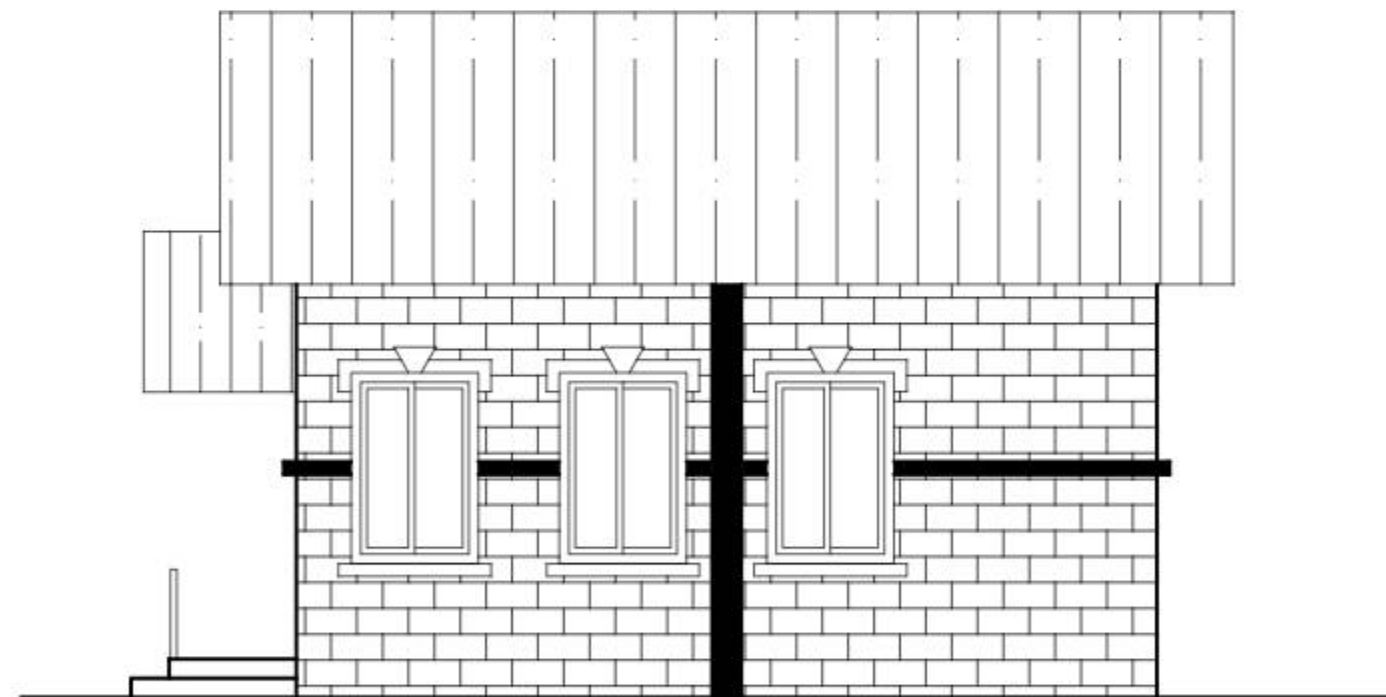


Side Elevation
Scale:-1:40

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr.		MISCELLANEOUS DRAWING SMART TOILET DETAILS	AS SHOWN	JUNE 2023
			Checked By	Signature	Reference Drawings	Chainage:	Drawing No.
			Approved By	Signature			KDP/ODR/HIGHWAY/MISD-27 R(D) Sheet No.

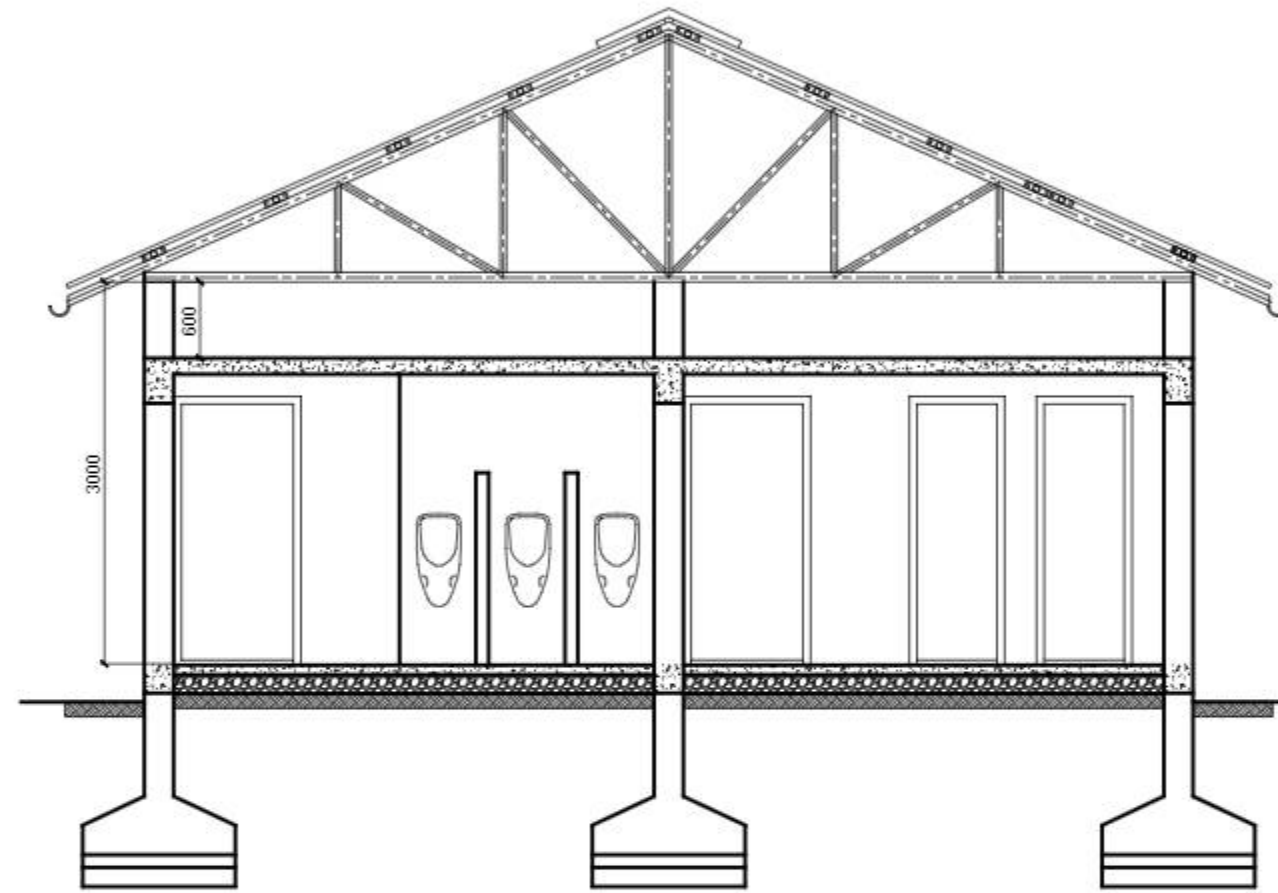


Back Elevation
Scale:-1:50



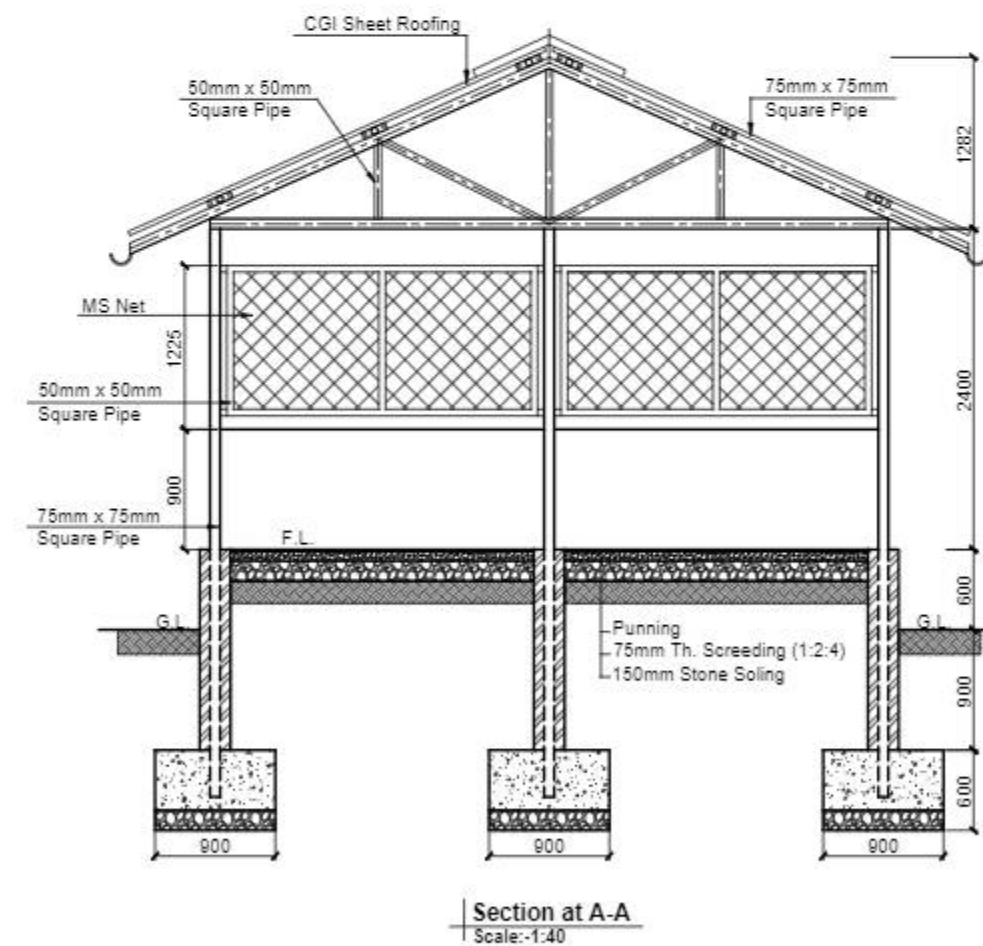
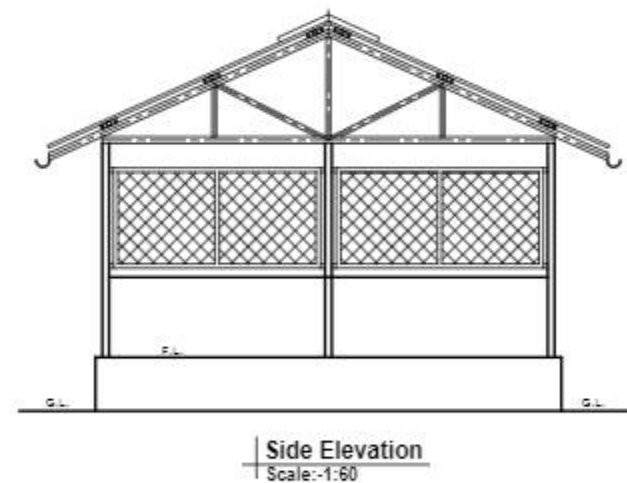
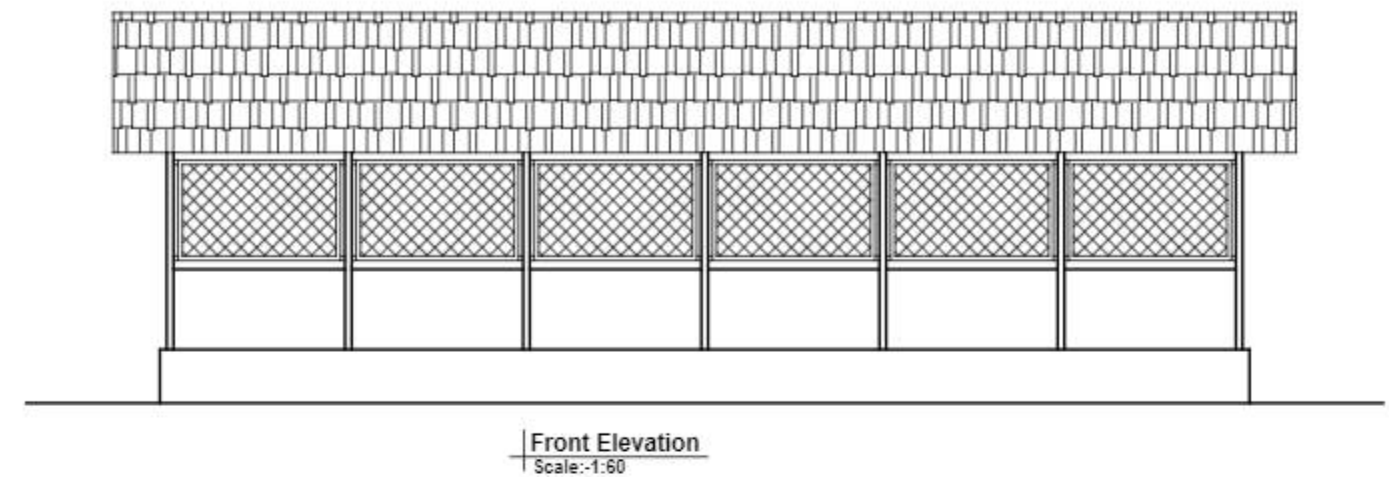
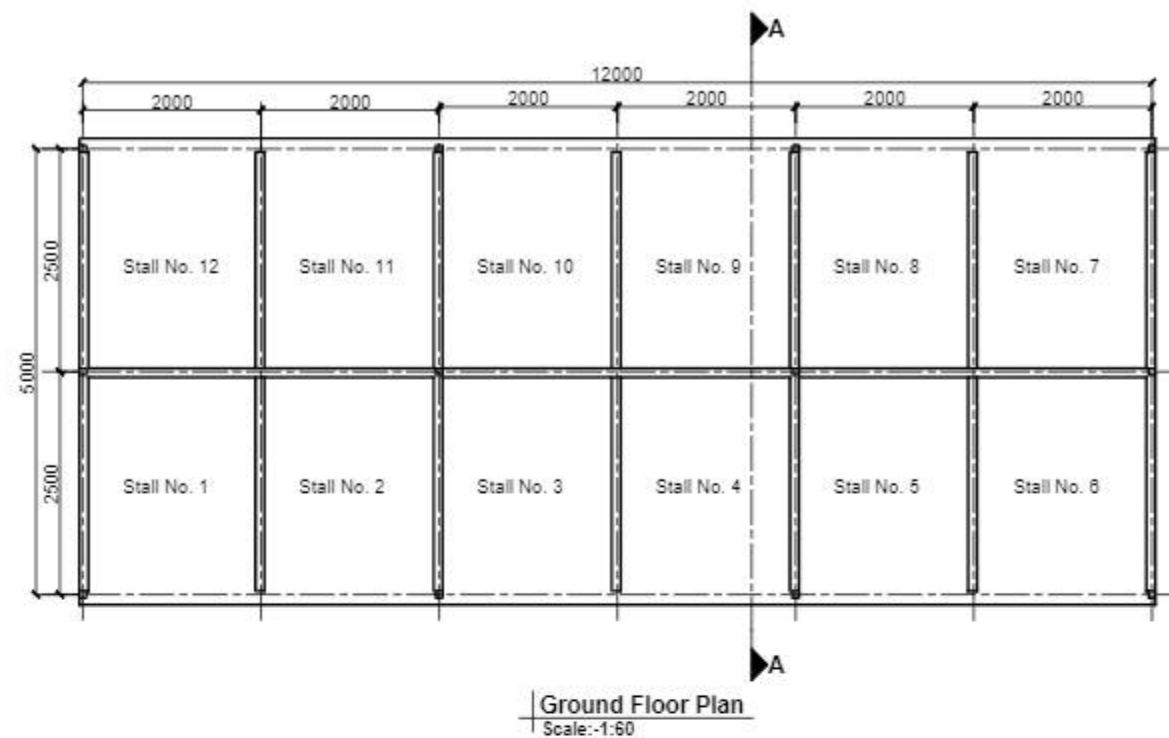
Side Elevation
Scale:-1:50

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingenieria Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. Nec.No. Mr.	Signature	MISCELLANEOUS DRAWING SMART TOILET DETAILS	AS SHOWN	JUNE 2023
			Checked By Gopal Mtr Nec.No. Mr.	Signature	Reference Drawings	Chainage:	Drawing No. KDP/ODR/HIGHWAY/MISD-28 R(D)
			Approved By Hemkrishna Bansari Nec.No.	Signature			Sheet No.



Section at A-A
Scale: 1:50

EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Signature	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingeniera Madrid, Spain  STUP Consultants Private Limited Kolkatta, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr. [Signature]	Signature	MISCELLANEOUS DRAWING SMART TOILET DETAILS	AS SHOWN	JUNE 2023
			Checked By	Signature	Reference Drawings	Chainage:	Drawing No.
			Approved By	Signature			KDP/ODR/HIGHWAY/MISD-25 R(0) Sheet No.



EMPLOYER	PROJECT	DESIGN CONSULTANTS	Designed By	Drawing Name	Scale:	Date:
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of  EPTISA Servicios De Ingeniera Madrid, Spain  STUP Consultants Private Limited Kolkata, India In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited	Mr.  Nec. No.	MISCELLANEOUS DRAWING VEGETABLE SHED DETAILS	AS SHOWN	JUNE 2023
			Checked By Mr.  Nec. No.	Reference Drawings	Chainage:	Drawing No. KOP/DCR/HIGHWAY/MISC-30 R(0)
			Approved By Mr.  Nec. No.			Sheet No.



EMPLOYER	PROJECT	DESIGN CONSULTANTS		Mr.	Drawing Name	Scale:	Date:	
 Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Development Cooperation Implementation Division	Strategic Road Connectivity & Trade Improvement Project (SRCTIP) Detailed Design of Upgradation of Kamala-Dhalkebar-Pathlaiya Road Section (130 KM) of Mahendra Highway and Bridges	Joint Venture of		Designed By	MISCELLANEOUS DRAWING VEGETABLE SHED DETAILS	AS SHOWN	JUNE 2023	
		 EPTISA Servicios De Ingeniera Madrid, Spain	 STUP Consultants Private Limited Kolkatta, India	Nec.No. Mr. Gopal Mitr			Signature 	Drawing No.
		In Association With Udaya Consultancy, Geocom International, Sundar Kriti Consultant and Rays Consultant Private Limited		Nec.No. Mr. Vankrishna Shrivastava	Signature 	Reference Drawings	Chainage:	KD/DDR/HIGHWAY/MISC-21 R(0)
				Approved By	Nec.No. Mr. Vankrishna Shrivastava	Signature 		Sheet No.