

**Ministry of Road Transport & Highways, (Govt. of
India)**

SCHEDULES

For

“Construction of 2-Lane with paved shoulder of Existing Intermediate Lane of NH-137G from Village near Pailapool at Design Ch. 0+00 (Ch. 20.800 of Silchar Jiribam Pkg-I, NH-37) to Village P. Songkai at Design Ch. 58+342 (Ch. 106+830 of Tamenglong- Mahur section of NH-137) near Hangrum (Length: 58.342 km) in the State of Assam under NH(O)-NE on HAM”

February, 2026

National Highways & Infrastructure Development Corporation Ltd

Schedule A

(See Clause 10.1)

SITE OF THE PROJECT

1 The Site

- 1.1 Site of the existing 2 lane Project Highways shall include the land, buildings, structures and road works as described in Annex-I of this Schedule-A.
- 1.2 An inventory of the Site including the land, buildings, structures, road works, trees and any other immovable property on or attached to the Site shall be prepared jointly by the Authority Representative and the Concessionaire and such inventory shall form part of the memorandum referred to in Clause 10.3.1 of the Agreement.
- 1.3 Additional land (if required) for Toll Plazas, Traffic Aid Posts, Medical Aid Posts and vehicle rescue posts or for construction of works specified in Change of Scope Order issued under Clause 16.2.3 of this agreement shall be acquired in accordance with the provisions of Clause 10.3.6 of this Agreement. Upon acquisition, such land shall form part of the Site and vest in the Authority.
- 1.4 The chainages given in this document are in km unless otherwise specified, all other dimensions are in meters.

Annex - I
(Schedule-A)
Site

1. Site

The Site of the two-lane (proposed 2-lane with paved shoulder carriageway) Project Highway starts from Km. 239.0 of NH-37 on existing X- Junction near Pailapool village, Dist.- Cachar, Assam and terminates on Km. 106.830 of NH-137 on existing Y - Junction near P. Songkai Village, Dist.- Dima Hasao, Assam. The land, carriageway and structures comprising the Site are described below.

Take-Off Point	Terminal Point	GPS Co-Ordinate (UTM)	
		Take-Off Point	Terminal Point
Km. 239.0 of NH-37 on existing X- Junction near Pailapool village, Dist.- Cachar, Assam	Km. 106.830 of NH-137 on existing Y - Junction near P. Songkai Village, Dist.- Dima Hasao, Assam.	Lat- 24°49'44.97"N Lon-93° 1'22.58"E	Lat-25° 8'56.55"N Lon-93°18'29.62"E



Existing Pailapool to P. Songkai section of NH-137G

The land, carriageway and structures and other project features comprising the site are broadly described below. However, the Concessionaire has to mandatorily visit the site and verify the land, carriageway, structures, junctions, project facilities etc. and all other inventories provided in Schedule-A.

The actual detailed inventory of the project highway shall be prepared at the time of site handover as per actual site condition and any variance from the inventory indicated in Schedule-A shall not absolve the Concessionaire of its obligations defined in the Concession Agreement.

The Concessionaire shall visit the Site and assess the durability and strength of Project Assets (as per actual on site) and make his own assessment for operation, management and maintenance as per Specifications and Standards and bear and pay all costs, expenses and charges in connection with or incidental to the performance of operation, management and maintenance including for inventory available on site but not indicated in Schedule-A.

2. Land

The Site of the Project Highway comprises the land (existing right of way) as described below:

S No.	Existing Chainage (km)		Length (m)	Available RoW (m)
	From	To		
1	0+000	14+250	14250	12-15
2	14+250	27+175	12925	10-12
3	27+175	65+043	37868	7

Note: There is no ROW demarcation at site in most of the sections of the project stretch. However as per the available record, of Authority and site conditions, the tentative ROW has been indicated as above. However, the ROW at site may vary from ROW indicated above.

3. Carriageway

The present carriageway of the Project Highway is 3.0/3.75/5.5/7.0m wide. The type of the existing pavement is flexible/CC/Paverblock. The detail is given below.

S No.	Existing Chainage (km)		Length (m)	Carriageway Width (m)	Remarks
	From	To			
1	0+000	0+400	0.4	5.5	BT
2	0+400	2+700	2.3	5.5	BT
3	2+700	8+200	5.5	5.5	BT
4	8+200	8+400	0.2	12	BT
5	8+400	10+200	1.8	3.75	BT
6	10+200	10+700	0.5	3.75	BT
7	10+700	14+250	3.55	5.5	BT
8	14+250	21+720	7.47	3.75	BT
9	21+720	22+600	0.88	3	BT
10	22+600	22+720	0.12	3	CC
11	22+720	22+820	0.1	3	Paver Block
12	22+820	22+900	0.08	3	CC
13	22+900	23+200	0.3	3	Paver Block
14	23+200	24+330	1.13	3	CC
15	24+330	24800	0.47	3	Paver Block
16	24800	34+400	9.6	3	BT
17	34+400	35+100	0.7	3	CC
18	35+100	37+270	2.17	3	BT
19	37+270	39+700	2.43	3	Paver Block
20	39+700	62+100	22.4	3	BT
21	62+100	65+043	2.84	3	Paver Block

4. Service Slip Road

The details of Bus bays are as follows:

S.No	Project Chainage	Side
NIL		

5. Bus bays

The details of Bus bays are as follows:

S.No	Project Chainage	Side
NIL		

6. Truck Lay byes

The details of truck lay byes are as follows:

S.No	Project Chainage	Side
NIL		

7. Road side Drains

The details of RCC roadside drains are as follows:

S. No.	Project Chainage		Side	Length in (m)
	From	To		
NIL				

8. Major Junctions

The details of major junctions are as follows:

Sr. No	Existing Chainage	Road	Junction type	Remark
1	0+000	Silchar – Imphal Road near Pailapool village, Dist.- Cachar, Assam	+	
2	65+043	Tamenglong – Mahur NH-137 near P. Songkai Village, Dist.- Dima Hasao, Assam.	Y	

(NH: National Highway, SH: State Highway, MDR: Major District Road)

9. Minor Junctions

The details of minor junctions are as follows:

S. No.	Existing Chainage	Type of Road	Type of Junctions	Side	Type of Road (SH/ MDR/ PMGSY/ VR)
1	0+500	BT	Y	LHS	Village Road
2	1+100	BT	Y	LHS	Village Road
3	1+220	BT	Y	RHS	Village Road
4	1+400	BT	Y	RHS	To Brick Factory
5	6+260	BT	Y	LHS	To Brick Factory
6	7+280	BT	T	LHS	Village Road
7	8+150	BT	X	BS	Village Road
8	8+400	BT	Y	LHS	Village Road
9	8+600	BT	Y	RHS	Village Road
10	8+870	BT	Y	RHS	Village Road
11	9+880	BT	Y	LHS	Village Road
12	10+170	GR	Y	LHS	To kanakpur
13	10+240	GR	Y	LHS	To kanakpur
14	10+340	CC	Y	RHS	To Baladhan Grant
15	11+610	CC	T	RHS	Village Road
16	12+360	CC	T	RHS	Village Road
17	12+385	CC	T	LHS	Village Road
18	12+490	GR	T	RHS	Village Road
19	12+835	CC	Y	LHS	Village Road
20	13+300	BT	X	BS	Village Road
21	13+850	CC	Y	BS	Village Road
22	13+900	CC	Y	BS	Village Road
23	14+130	GR	T	LHS	Village Road
24	14+450	BT	T	RHS	To Nutan Chandrapur
25	14+535	CC	T	LHS	To Ranachandi Temple
26	14+900	GR	T	RHS	To Paheipur
27	15+370	GR	T	RHS	To Paheipur
28	15+825	CC	X	BS	To Paschim Dikcha
29	16+360	BT	Y	LHS	Village Road
30	16+550	BT	Y	RHS	Village Road
31	17+915	CC	Y	LHS	Village Road
32	18+225	BT	X	BS	L-Paschim Kumachara, R- Existing Road
33	19+340	BT	X	BS	L-Paschim Kumachara, R- Kumachara
34	20+030	BT	Y	LHS	Village Road
35	26+900	BT	Y	RHS	Village Road
36	28+150	ER	Y		To Old Road
37	32+380	ER	Y	LHS	Village Road
38	38+170	ER	Y	LHS	Boro- arkap
39	38+650	ER	Y	RHS	Boro- arkap
40	39+550	ER	Y	LHS	Boro- arkap

41	39+820	ER	Y	LHS	Muollien
42	39+840	BT	Y	RHS	Muollien
43	39+940	ER	Y	LHS	Muollien
44	39+990	ER	Y	LHS	Muollien
45	43+640	ER	Y	LHS	Baladhan
46	43+910	ER	Y	LHS	Baladhan
47	44+280	ER	Y	RHS	Baladhan
48	44+325	ER	Y	LHS	Baladhan
49	44+420	ER	Y	RHS	Baladhan
50	45+260	ER	Y	LHS	Baladhan
51	46+620	ER	Y	RHS	Baladhan
52	46+880	ER	Y	LHS	Baladhan
53	47+180	ER	Y	LHS	Baladhan
54	47+375	ER	Y	LHS	Baladhan
55	47+870	ER	Y	LHS	Baladhan
56	48+770	ER	Y	LHS	Baladhan
57	49+680	ER	Y	LHS	Namreingram
58	50+145	ER	Y	LHS	Namreingram
59	50+500	ER	Y	LHS	Leiri
60	50+550	ER	Y	BS	Leiri
61	50+600	ER	Y	RHS	Leiri
62	50+660	ER	Y	LHS	Leiri
63	51+050	ER	Y	LHS	Namreingram & Leiri
64	51+160	ER	T	RHS	Leiri
65	51+440	ER	Y	LHS	Police Station
66	54+420	ER	Y	LHS	P. Hmar
67	55+020	ER	Y	LHS	N. Hmar
68	60+325	ER	Y	RHS	N. Sonkai
69	60+540	ER	Y	LHS	N. Sonkai
70	60+560	ER	T	RHS	N. Sonkai
71	60+570	ER	Y	RHS	N. Sonkai
72	60+600	ER	T	LHS	N. Sonkai

10. Bypasses

NIL

11. Major Bridges

The Site includes the following Major Bridges:

S. No.	Chainage(km)	Type of super structures			No. of Spans with span length (m)	Width (m)
		Foundation	Sub- structure	Superstructure		
1	8+700	RCC	RCC	Box Girder	2x34.5	8.4
2	34+275	RCC	RCC	Truss Girder	1x60	7.5

12. Road over bridges (ROB)

The Site includes the following ROB (road over bridge on railway line):

Sr. No	Project Chainage	Type of Structure	Span Arrangement	No. of spans	Total Length (m)	Outer width of Bridge (m)
NIL						

13. Road over bridges (ROB) Cum Flyover

The Site includes the following ROB (road over railway line) Cum Flyover:

Sr. No	Project Chainage	Type of Structure	Span Arrangement	No. of spans	Total Length (m)	Outer width of Bridge (m)
NIL						

14. Grade separators. Flyover:

The Site includes the following grade separators:

Sr. No	Project Chainage	Type of Structure	Span Arrangement	No. of spans	Total Length (m)	Outer width of Bridge (m)
NIL						

15. Minor bridges

The Site includes the following minor bridges:

S. No.	Chainage (km)	Type of super structures			No. of Spans with span length (m)	Width (m)
		Foundation	Sub - structure	Superstructure		
1	1013	RCC	RCC	Steel Composite Girder	1x38	8
2	7420	RCC	RCC	Box Girder	1x29.6	8.4
3	12267	RCC	RCC	Slab	1x6.2	9
4	12986	RCC	RCC	Truss Girder	1x25.7	8
5	13680	RCC	RCC	Slab	1x6.1	9.4
6	16520	RCC	RCC	Box Girder	2x27.6	8.5
7	19423	RCC	RCC	Truss Girder	1x29.7	8.6
8	21178	RCC	RCC	T- Beam Girder	1x19	8.4
9	21720	RCC	RCC	Truss Girder	1x29.7	8.4
10	24250	RCC	RCC	Box Girder	1x28.5	8.4
11	51650	-	-	BAILEY BRIDGE	1X12.2	4.1
12	54340	RCC	RCC	BOX	2X5X3.5	6.1
13	54765	-	-	BAILEY BRIDGE	1X18.2	4.1
14	56525	-	-	BAILEY BRIDGE	1X24.6	4.1
15	56875	-	-	BAILEY BRIDGE	1x27.6	4.1
16	61630	-	-	BAILEY BRIDGE	1X18.5	4.1
17	62900	-	-	BAILEY BRIDGE	1X18.4	4.1
18	63870	-	-	BAILEY BRIDGE	1X33.6	4.1

16. Railway level crossings

The Site includes the following railway level crossings:

S. No.	Location (km)	Remarks
1	0+525	Level Crossing
2	5+100	Level Crossing

17. Underpasses (vehicular, non-vehicular)

Sr. No	Project Chainage	Type of Structure	Span Arrangement	No. of spans	Total Length (m)	Outer width of Bridge (m)
NIL						

18. Culverts

The Site has the following culverts:

S. No.	Chainage(km)	Type of Culvert	Span /Opening with span length (m)
1	1+753	HPC	1 ROW1000
2	2+457	HPC	Burried
3	2+578	HPC	1 ROW1000
4	3+000	HPC	Burried
5	3+993	HPC	Burried
6	4+718	HPC	Burried
7	4+850	HPC	Burried
8	6+416	HPC	1 ROW1000
9	6+746	HPC	Burried
10	6+966	HPC	Burried
11	7+183	HPC	1 ROW1000
12	7+622	HPC	1 ROW1000
13	8+444	Solid slab	1x1.8
14	9+120	HPC	1 ROW1000
15	9+370	HPC	1 ROW1000
16	9+950	HPC	1 ROW300
17	10+140	HPC	1 ROW600
18	10+238	HPC	1 ROW900
19	10+705	HPC	1 ROW900
20	11+613	HPC	2 ROW1000
21	12+487	HPC	1 ROW600
22	13+815	HPC	1 ROW600
23	13+880	HPC	1 ROW600
24	14+008	HPC	1 ROW600
25	14+165	HPC	1 ROW900
26	14+275	HPC	3 ROW900
27	14+860	HPC	1 ROW1000
28	15+235	HPC	1 ROW900
29	15+615	HPC	Burried
30	16+642	HPC	1 ROW900
31	17+638	HPC	2 ROW900
32	17+833	HPC	1 ROW900
33	17+895	HPC	1 ROW600
34	18+086	HPC	1 ROW300

35	18+335	HPC	1 ROW900
36	18+693	HPC	1 ROW900
37	19+030	HPC	1 ROW900
38	19+715	HPC	1 ROW900
39	20+180	HPC	2 ROW900
40	20+472	HPC	1 ROW600
41	20+630	HPC	2 ROW900
42	21+020	HPC	1 ROW1000
43	21+395	HPC	1 ROW900
44	21+495	HPC	2 ROW900
45	21+640	HPC	Burried
46	22+560	HPC	Burried
47	22+853	HPC	Burried
48	23+258	HPC	1 ROW900
49	23+710	HPC	1 ROW600
50	24+675	Slab	1x2.4
51	25+250	HPC	Damage
52	25+420	HPC	1 ROW900
53	25+490	HPC	1 ROW1000
54	26+020	HPC	1 ROW600
55	26+550	HPC	1 ROW300
56	26+828	HPC	1 ROW600
57	27+213	HPC	1 ROW1000
58	27+510	HPC	1 ROW600
59	28+160	HPC	Burried
60	28+265	HPC	1 ROW1000
61	28+365	HPC	1 ROW1000
62	28+415	HPC	1 ROW900
63	28+515	HPC	1 ROW900
64	28+740	HPC	1 ROW900
65	28+878	HPC	1 ROW900
66	29+115	HPC	1 ROW900
67	29+380	HPC	Burried
68	29+540	HPC	Burried
69	29+645	HPC	1 ROW900
70	29+930	HPC	1 ROW600
71	30+035	HPC	1 ROW900
72	30+160	HPC	1 ROW1000
73	30+435	HPC	1 ROW600
74	30+830	HPC	1 ROW900
75	30+975	HPC	1 ROW900
76	31+277	HPC	1 ROW900
77	31+578	HPC	Burried
78	31+730	HPC	1 ROW900
79	31+868	HPC	1 ROW1200
80	32+165	HPC	1 ROW600
81	32+467	HPC	1 ROW1000
82	32+515	HPC	1 ROW300
83	32+670	HPC	1 ROW300
84	32+824	HPC	1 ROW1000
85	32+965	HPC	1 ROW1000
86	33+305	HPC	1 ROW1000
87	33+353	HPC	1 ROW1000
88	33+486	HPC	1 ROW1000

89	33+680	HPC	1 ROW1000
90	33+735	HPC	1 ROW1000
91	33+965	HPC	1 ROW900
92	34+035	HPC	1 ROW900
93	34+210	HPC	1 ROW900
94	34+725	Slab	1x4.8
95	34+768	HPC	1 ROW900
96	34+862	Slab	1x3.8
97	34+896	Slab	1x3
98	34+938	HPC	1 ROW900
99	35+050	HPC	1 ROW900
100	35+170	HPC	1 ROW900
101	35+312	HPC	1 ROW1000
102	35+360	HPC	1 ROW1000
103	35+430	HPC	1 ROW900
104	35+673	HPC	1 ROW1000
105	35+720	HPC	1 ROW1000
106	36+000	HPC	1 ROW1000
107	36+275	HPC	1 ROW1000
108	37+210	HPC	1 ROW1000
109	37+368	HPC	1 ROW1000
110	37+795	HPC	1 ROW900
111	38+028	HPC	1 ROW900
112	38+420	HPC	1 ROW1000
113	38+815	HPC	1 ROW900
114	39+550	HPC	1 ROW1000
115	39+677	HPC	1 ROW1000
116	40+045	HPC	1 ROW900
117	40+172	HPC	1 ROW1000
118	40+380	HPC	1 ROW1000
119	40+510	HPC	1 ROW1000
120	40+605	HPC	1 ROW1000
121	40+695	HPC	1 ROW1000
122	40+830	HPC	1 ROW1000
123	40+862	HPC	1 ROW1000
124	40+945	HPC	1 ROW1000
125	40+983	HPC	1 ROW900
126	41+110	HPC	1 ROW1000
127	41+234	HPC	1 ROW1000
128	41+322	HPC	1 ROW1000
129	41+430	HPC	1 ROW1000
130	41+500	HPC	1 ROW1000
131	42+060	HPC	1 ROW1000
132	42+415	HPC	1 ROW1000

133	42+990	HPC	1 ROW1000
134	43+075	HPC	1 ROW1000
135	43+250	HPC	1 ROW1000
136	43+592	HPC	1 ROW1000
137	44+025	HPC	1 ROW1000
138	44+168	HPC	1 ROW1000
139	44+225	HPC	1 ROW1000
140	44+345	HPC	1 ROW1000
141	44+740	HPC	1 ROW1000
142	45+125	HPC	1 ROW1000
143	45+768	HPC	1 ROW1000
144	46+320	HPC	1 ROW900
145	46+380	HPC	1 ROW1000
146	46+470	HPC	1 ROW1000
147	46+590	HPC	1 ROW1000
148	46+890	HPC	1 ROW900
149	46+975	HPC	1 ROW1000
150	47+035	HPC	1 ROW1000
151	47+205	HPC	1 ROW900
152	47+910	HPC	1 ROW1000
153	48+085	HPC	1 ROW900
154	48+295	HPC	1 ROW900
155	48+705	HPC	1 ROW1000
156	49+000	HPC	1 ROW1000
157	49+270	HPC	1 ROW1000
158	49+465	HPC	1 ROW1000
159	49+660	HPC	1 ROW1000
160	49+950	HPC	1 ROW1000
161	50+080	HPC	1 ROW900
162	50+150	HPC	1 ROW900
163	50+405	HPC	1 ROW1000
164	50+595	Slab	1X2
165	50+645	HPC	1 ROW1000
166	50+955	Slab	1X1.8
167	51+120	Slab	1X1
168	51+360	Slab	1x2.8
169	52+155	Slab	1X2.8
170	52+430	Slab	1X1.1
171	52+650	Slab	1X5.6
172	52+810	Slab	1X1.9
173	52+905	Slab	1X1
174	53+170	Slab	1X2.8
175	53+385	Slab	1X0.9
176	53+450	Slab	1X0.8

177	53+695	Slab	1X0.9
178	53+980	Slab	1x1.5
179	54+150	Slab	1x1.5
180	54+950	Slab	1x1.8
181	55+030	Slab	1X1.1
182	55+270	Slab	1X0.8
183	55+470	Slab	1X1.1
184	55+970	Slab	1X1.3
185	56+200	Slab	1X1
186	56+330	Slab	1X1.1
187	57+220	Slab	1X1.6
188	57+460	Slab	1X1
189	57+575	Slab	1X2.9
190	57+840	Slab	1X2.8
191	57+895	Slab	1X0.7
192	58+355	Slab	1X3
193	58+530	Slab	1X1.1
194	58+675	Slab	1X1.28
195	58+900	Slab	1X5.8
196	59+110	Slab	1X1.2
197	59+340	Slab	1X1.1
198	59+415	Slab	1X1
199	59+545	Slab	1X3
200	60+050	Slab	1X1
201	60+115	Slab	1X0.8
202	60+360	Slab	1X1.3
203	60+490	Slab	1X0.9
204	60+760	Slab	1X3.1
205	60+840	Slab	1X3.1
206	60+920	Slab	1X0.6
207	61+005	Slab	1X1
208	61+220	Slab	1X1.1
209	61+500	Slab	1X1
210	61+640	Slab	1X1.1
211	61+845	Slab	1X0.8
212	62+140	Slab	1X0.9
213	62+515	Slab	1X0.9
214	62+575	Slab	1X0.9
215	62+830	Slab	1X2.9
216	63+235	Slab	Burried
217	63+695	Slab	1X1.2
218	64+580	Slab	1X1
219	64+700	Slab	1X0.9
220	64+750	Slab	1X3

19. Loops

Details of Loop					
S.No.	Project Chainage		New Chainage of NH-44		Side
	From	To	From	To	
NIL					

21 Foot Over Bridge

S. No.	Project Chainage	New Chainage of NH-44	Nos.
NIL			

22 Electrical and Other Utilities:

The site includes the following electrical and other utilities:

a) i) Distribution Electric Lines up to (LT-11 KV & 33KV):-

Sr. No.	Design Km.		Along the Project Highway (Length in Km)			Across the Highway (Nos. of Crossings)			Transformers		Remarks
	From	To	33 KV	33/11* KV	LT	33 KV	33/11* KV	LT	Nos.	Capacity- KVA	
1.	0+000	0+100									
2.	0+100	0+200		0.1			02				
3.	0+500	1+000									
4.	1+000	1+500				02		02			
5.	1+500	2+000									
6.	2+000	3+000									
7.	3+000	3+600		0.3			02				
8.	3+600	3+900						02			
9.	3+900	4+300						01			
10.	4+300	4+800				01	01	02	1	25	
11.	4+800	5+300					01				
12.	5+300	5+500					02				
13.	5+500	6+000			0.3				1	25	
14.	6+000	6+500						02	1	63	
15.	6+500	8+000			0.1		01				
16.	8+000	9+450					02	09			
17.	9+450	12+200		2.75			09	10	2	25	
18.	9+450	12+200							2	63	
19.	9+450	12+200							2	100	
20.	12+200	12+600					01	01			
21.	12+600	13+200						03			
22.	13+200	15+700		1.6			05	13	1	63	
23.	13+200	15+700							1	100	
24.	15+700	17+000					02				
25.	17+000	17+400		0.2			01				
26.	17+400	19+800			0.05			03	1	25	
27.	19+800	20+100		0.2			01				
28.	20+100	20+800			0.5		01	03	1	25	
29.	20+800	24+400			2.7		02	08	2	63	
30.	20+800	24+400							2	25	

ii) Solar Panel, Electric Pole & Transformers: Low Tensions Lines (LT/11/33 KV Lines):

S. No.	Chainage		RCC/STP/Rail /Street/Solar/Electric Light Poles* (Nos.)	Transformers (Nos.)
	From	To		
1.	0+000	1+000		
2.	1+000	2+000		8
3.	2+000	3+000		5
4.	3+000	4+000		0
5.	4+000	5+000		14
6.	5+000	6+000		2
7.	6+000	7+000		5
				1
				1
				11
				1

8.	7+000	8+000	0	
9.	8+000	9+000	1	
10.	9+000	10+000	12	1
11.	10+000	11+000	35	1
12.	11+000	12+000	45	4
13.	12+000	13+000	13	
14.	13+000	14+000	17	
15.	14+000	15+000	17	2
16.	15+000	16+000	3	
17.	16+000	17+000	1	
18.	17+000	18+000	2	
19.	18+000	19+000	0	1
20.	19+000	20+000	2	
21.	20+000	21+000	15	1
22.	21+000	22+000	13	2
23.	22+000	23+000	44	1
24.	23+000	24+000	42	1
25.	24+000	25+000	1	
26.	25+000	26+000	0	

*Electric Poles including Single and double arm Street/Solar panel light within alignment Ch. 0.00 to Ch. 16+800.

*Underground cable running/crossing along road, working voltage is below than rated capacity voltage.
Note: No change of Scope shall be admissible due to voltage or any kind of changes.

c. Other Utilities:

i) Water, Sewage/Drainage Pipe Lines details:

Sl. No.	Chainage (Km)		Water/Sewage/Drainage Length (in Km)				Water/ Sewage/Drainage Pipe line Crossings				
	From	To	Water Supply Line		Sewage/Drainage Line		Water Supply Line		Sewage /Drainage Line		
			With Pumping	With gravity flow	With Pumping	With gravity flow	With Pumping		With gravity flow	With Pum ping	With gravity flow
							3, 4" & 18-72" & others sizes pipe line				
1.	3+400	3+492	92				RHS				
2.	4+250	4+280	30				LHS				
3.	6+100	6+220	120				RHS				
4.	7+960	7+991	31				LHS				
5.	10+800	10+910	110				LHS				
6.	11+000	12+050	1050				RHS				
7.	12+000	12+412	412				LHS				
8.	19+850	19+955	105				RHS				
9.	20+000	20+445	445				LHS				
10.	37+100	39+670	2570				BHS				
11.	37+200	38+200	1000				40mm dia pipe in BHS				
12.	40+100	42+100	2000				50mm dia pipe in BHS				
13.	40+150	41+020	870				65mm dia pipe in BHS				
14.	41+500	43+500	2000				40mm dia pipe in BHS				
15.	46+550	48+730	2180				65mm dia pipe in BHS				
16.	45+700	46+700	1000				50mm dia pipe in BHS				
17.	46+200	46+660	460				40mm dia pipe in BHS				

Sl. No.	Chainage (Km)		Water/Sewage/Drainage Length (in Km)				Water/ Sewage/Drainage Pipe line Crossings				
	From	To	Water Supply Line		Sewage/Drainage Line		Water Supply Line		Sewage /Drainage Line		
			With Pumping	With gravity flow	With Pumping	With gravity flow	With Pumping		With gravity flow	With Pumping	With gravity flow
							3, 4" & 18-72" & others sizes pipe line				
18.	47+000	49+550	2550					65mm dia pipe in BHS			
19.	46+700	48+280	1580					50mm dia pipe in BHS			
20.	47+000	48+780	1780					40mm dia pipe in BHS			
21.	50+500	52+780	2280					65mm dia pipe in BHS			
22.	50+450	50+870	420					50mm dia pipe in BHS			
23.	50+720	51+490	770					40mm dia pipe in BHS			
24.	51+500	51+750	250					50mm dia pipe in BHS			
25.	51+500	52+050	550					40mm dia pipe in BHS			

ii) **Hand Pump/Well / Tube well Details:**

SL. No.	Design Ch. (Km) From	Design Ch. (Km) To	Item	Hand Pump/Well /Tube well LHS/RHS (Nos.)
Nil				

d) **TP & OFC Crossings: -**

Sl. No.	Design Ch.		Telephone Mobile Towers/Poles (Nos.)	OFC Length (Km)	OFC Crossing (Nos.)
	From	To			
Nil					

e) **Oil/Gas Pipeline:**

Sl. No.	Design Ch.		Agency Name	Nos. of Oil/Gas Pipeline Crossing	Remarks
	From	To			
Nil					

Note: Shifting of all Utilities mentioned above shall fall in Concessionaire's purview. The LT-11/22/33KV & EHT transmission line crossings' & OH/UG utilities Chainage/quantity details as mentioned above may varied & differ, It will be subjected to concern utility departments. It may varied as per department cost. RMU Panels & Distribution boxes/Transformers are already installed and are in operation at site, therefore if required, they need to be shifted as per actual site /project requirement.

All the necessary permission and clearances for executting the utilities like EHT/HT, LT lines, Gas-Oil, water pipeline shifting works will be arranged by the Concessionaire.

Utility Relocation Plan (URP) Drawing enclosed.

The Concessionaire will provide all necessary safety framework for shifting of all utilities mentions above.. Any quantity variations up to 10 % (Ten Percent) in the under/over ground utilities specified in this schedule A/B shall not constitute any Change of Scope.

Utility Relocation Plan (URP) Drawing enclosed.

Annex II

(Schedule-A)

Data for providing Right of Way of Construction Zone

S.No	Description	Design Chainage		Length (in m)	Total ROW (in m)	Date of Providing ROW
		FROM	TO			
1	Full Right of Way (full width)	0	10000	10000	30	
2		10000	12890	2890	30	
3		12890	12920	30	45	
4		12920	13000	80	40	
5		13000	20700	7700	30	
6		20700	20730	30	40	
7		20730	20750	20	55	
8		20750	20800	50	70	
9		20800	20880	80	40	
10		20880	20900	20	50	
11		20900	20920	20	55	
12		20920	21000	80	40	
13		21000	21060	60	50	
14		21060	22500	1440	40	
15		22500	22550	50	60	
16		22550	22590	40	50	
17		22590	23000	410	40	
18		23000	23030	30	60	
19		23030	23100	70	45	
20		23100	24230	1130	40	
21		24230	24330	100	50	
22		24330	24480	150	40	
23		24480	24550	70	45	
24		24550	24680	130	40	
25		24680	24720	40	45	
26		24720	24820	100	40	
27		24820	24870	50	80	
28		24870	24890	20	45	
29		24890	24930	40	40	
30		24930	24950	20	50	
31		24950	25000	50	55	
32		25000	25060	60	40	
33		25060	25120	60	45	
34		25120	25150	30	40	
35		25150	25270	120	45	
36		25270	25360	90	130	
37		25360	25560	200	85	

38		25560	25570	10	70
39		25570	25720	150	60
40		25720	25780	60	45
41		25780	25820	40	60
42		25820	25900	80	45
43		25900	25970	70	40
44		25970	25990	20	45
45		25990	26190	200	40
46		26190	26250	60	45
47		26250	26350	100	40
48		26350	26380	30	45
49		26380	26480	100	40
50		26480	26580	100	45
51		26580	26770	190	80
52		26770	26820	50	50
53		26820	26860	40	40
54		26860	26920	60	65
55		26920	27260	340	40
56		27260	27330	70	45
57		27330	27360	30	40
58		27360	27480	120	45
59		27480	27600	120	95
60		27600	27660	60	65
61		27660	27690	30	45
62		27690	27780	90	40
63		27780	27900	120	55
64		27900	28050	150	45
65		28050	28390	340	60
66		28390	28620	230	80
67		28620	28700	80	50
68		28700	28910	210	40
69		28910	29090	180	45
70		29090	29190	100	40
71		29190	29260	70	60
72		29260	29290	30	50
73		29290	29350	60	45
74		29350	29420	70	40
75		29420	29530	110	55
76		29530	29610	80	50
77		29610	29680	70	60
78		29680	29730	50	75
79		29730	29770	40	50
80		29770	29810	40	70
81		29810	29830	20	50
82		29830	29870	40	45

83	29870	30000	130	40
84	30000	30240	240	40
85	30240	30260	20	45
86	30260	30460	200	80
87	30460	30610	150	45
88	30610	30690	80	40
89	30690	30750	60	50
90	30750	30950	200	85
91	30950	30970	20	50
92	30970	31060	90	45
93	31060	31320	260	40
94	31320	31330	10	45
95	31330	31560	230	95
96	31560	31610	50	50
97	31610	31620	10	45
98	31620	31700	80	40
99	31700	31710	10	45
100	31710	31860	150	40
101	31860	31910	50	45
102	31910	32080	170	40
103	32080	32120	40	55
104	32120	32150	30	45
105	32150	32380	230	40
106	32380	32420	40	45
107	32420	32500	80	40
108	32500	32550	50	55
109	32550	32680	130	40
110	32680	32790	110	45
111	32790	32960	170	40
112	32960	32970	10	45
113	32970	33040	70	55
114	33040	33120	80	50
115	33120	33180	60	65
116	33180	33540	360	40
117	33540	33590	50	45
118	33590	33740	150	40
119	33740	34070	330	70
120	34070	34130	60	45
121	34130	34170	40	55
122	34170	34180	10	50
123	34180	34400	220	40
124	34400	34550	150	75
125	34550	34780	230	70
126	34780	34830	50	50
127	34830	34840	10	45

128	34840	34990	150	40
129	34990	35000	10	45
130	35000	35050	50	55
131	35050	35070	20	45
132	35070	35510	440	40
133	35510	35550	40	45
134	35550	35890	340	40
135	35890	35930	40	50
136	35930	35960	30	45
137	35960	36040	80	40
138	36040	36160	120	65
139	36160	36230	70	40
140	36230	36250	20	45
141	36250	36370	120	60
142	36370	36380	10	45
143	36380	36800	420	40
144	36800	36870	70	45
145	36870	36920	50	50
146	36920	36980	60	45
147	36980	37070	90	40
148	37070	37220	150	50
149	37220	37260	40	40
150	37260	37300	40	50
151	37300	37310	10	45
152	37310	38060	750	40
153	38060	38090	30	45
154	38090	38170	80	75
155	38170	38200	30	45
156	38200	38290	90	40
157	38290	38340	50	45
158	38340	38500	160	40
159	38500	38560	60	45
160	38560	38740	180	40
161	38740	38770	30	45
162	38770	38830	60	40
163	38830	38880	50	45
164	38880	38960	80	40
165	38960	39030	70	50
166	39030	39190	160	65
167	39190	39230	40	50
168	39230	39290	60	40
169	39290	39330	40	60
170	39330	39570	240	55
171	39570	39630	60	40
172	39630	39660	30	45

173	39660	39870	210	75
174	39870	39880	10	85
175	39880	39960	80	90
176	39960	39970	10	65
177	39970	40110	140	40
178	40110	40170	60	50
179	40170	41280	1110	40
180	41280	41400	120	50
181	41400	41580	180	40
182	41580	41720	140	45
183	41720	42130	410	40
184	42130	42200	70	45
185	42200	42600	400	40
186	42600	42690	90	45
187	42690	42700	10	40
188	42700	42710	10	45
189	42710	42880	170	40
190	42880	43040	160	60
191	43040	43220	180	65
192	43220	43260	40	45
193	43260	43350	90	50
194	43350	43530	180	50
195	43530	43540	10	55
196	43540	43640	100	65
197	43640	43690	50	60
198	43690	43700	10	70
199	43700	43800	100	75
200	43800	43900	100	65
201	43900	43920	20	55
202	43920	43960	40	45
203	43960	44080	120	100
204	44080	44340	260	95
205	44340	44490	150	105
206	44490	44510	20	90
207	44510	44590	80	75
208	44590	44780	190	70
209	44780	44840	60	45
210	44840	44960	120	75
211	44960	44970	10	55
212	44970	45420	450	40
213	45420	45510	90	55
214	45510	45710	200	50
215	45710	46010	300	40
216	46010	46210	200	40
217	46210	46220	10	45

218		46220	46460	240	40
219		46460	46540	80	50
220		46540	46680	140	40
221		46680	46720	40	50
222		46720	46790	70	60
223		46790	46850	60	70
224		46850	46990	140	95
225		46990	47000	10	95
226		47000	47010	10	50
227		47010	47170	160	40
228		47170	47210	40	50
229		47210	47250	40	60
230		47250	47300	50	50
231		47300	47500	200	40
232		47500	47520	20	45
233		47520	47600	80	70
234		47600	47630	30	45
235		47630	47790	160	40
236		47790	47950	160	60
237		47950	47960	10	55
238		47960	48010	50	60
239		48010	48060	50	55
240		48060	48170	110	40
241		48170	48270	100	45
242		48270	48380	110	40
243		48380	48460	80	45
244		48460	49080	620	40
245		49080	49310	230	45
246		49310	49570	260	40
247		49570	49640	70	45
248		49640	49690	50	40
249		49690	49790	100	50
250		49790	49840	50	45
251		49840	49920	80	40
252		49920	50090	170	45
253		50090	50200	110	50
254		50200	50260	60	50
255		50260	50310	50	45
256		50310	50400	90	40
257		50400	50450	50	45
258		50450	50740	290	40
259		50740	50760	20	45
260		50760	50900	140	145
261		50900	51090	190	40
262		51090	51160	70	55

263	51160	51210	50	40
264	51210	51250	40	45
265	51250	51400	150	120
266	51400	51500	100	40
267	51500	51600	100	45
268	51600	51680	80	55
269	51680	51770	90	40
270	51770	51850	80	45
271	51850	51930	80	50
272	51930	52080	150	40
273	52080	52200	120	45
274	52200	52290	90	40
275	52290	52350	60	60
276	52350	52410	60	40
277	52410	52460	50	50
278	52460	52580	120	85
279	52580	52640	60	50
280	52640	52690	50	60
281	52690	52820	130	50
282	52820	52860	40	55
283	52860	52910	50	60
284	52910	52950	40	55
285	52950	53060	110	45
286	53060	53100	40	55
287	53100	53320	220	45
288	53320	53380	60	50
289	53380	53430	50	45
290	53430	53460	30	40
291	53460	53500	40	40
292	53500	53520	20	45
293	53520	53600	80	85
294	53600	53860	260	45
295	53860	53920	60	40
296	53920	53940	20	50
297	53940	54010	70	60
298	54010	54110	100	50
299	54110	54190	80	55
300	54190	54260	70	85
301	54260	54480	220	45
302	54480	54730	250	40
303	54730	54820	90	45
304	54820	54900	80	55
305	54900	54920	20	45
306	54920	55170	250	40
307	55170	55220	50	45

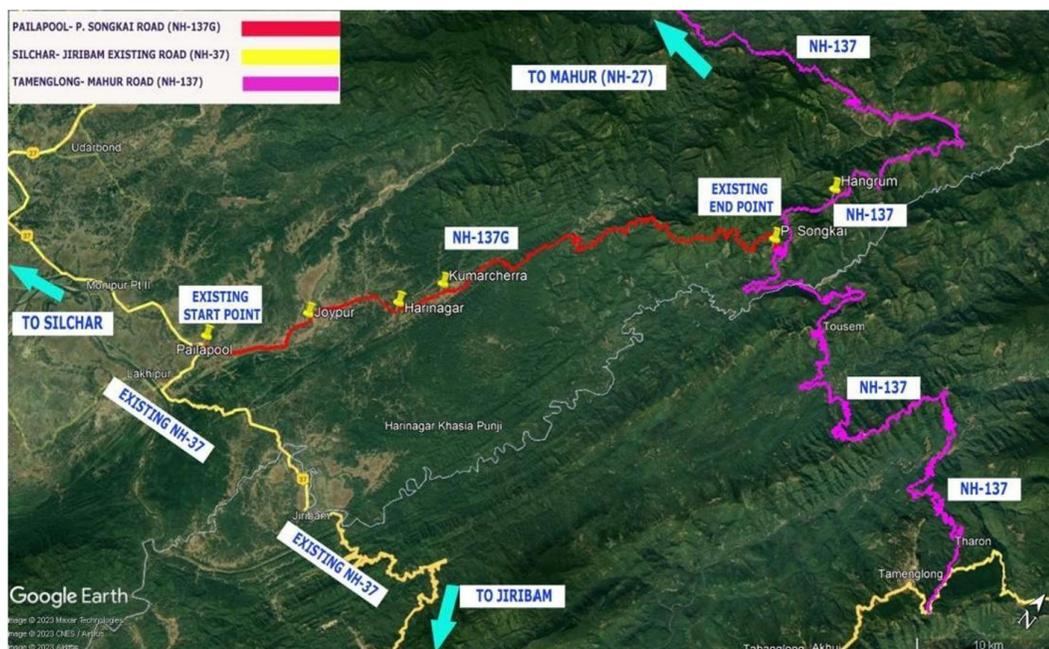
308		55220	55280	60	70	
309		55280	55290	10	45	
310		55290	55400	110	50	
311		55400	55460	60	80	
312		55460	55690	230	50	
313		55690	55800	110	80	
314		55800	55810	10	50	
315		55810	55890	80	40	
316		55890	55970	80	45	
317		55970	56100	130	50	
318		56100	56120	20	40	
319		56120	56170	50	40	
320		56170	56280	110	45	
321		56280	56370	90	40	
322		56370	56470	100	50	
323		56470	56540	70	85	
324		56540	56580	40	55	
325		56580	56640	60	40	
326		56640	56770	130	50	
327		56770	56880	110	65	
328		56880	57050	170	40	
329		57050	57090	40	50	
330		57090	57180	90	80	
331		57180	57190	10	50	
332		57190	57300	110	40	
333		57300	57340	40	45	
334		57340	57590	250	40	
335		57590	57640	50	55	
336		57640	57700	60	40	
337		57700	58040	340	45	
338		58040	58100	60	70	
339		58100	58120	20	45	
340		58120	58340	220	40	
				58340		

Annex - III

(Schedule-A)

Alignment Plans

- (i) The alignment of the Project Highway is enclosed in alignment plan. Finished road level indicated in the alignment plan shall be followed by the Contractor/Concessionaire as minimum FRL in Plain & Rolling area (Ch.0+000 to Ch.20+700). In any case, the finished road level of the project highway shall not be less than those indicated in the alignment plan & Profile. The Contractor/Concessionaire shall, however, improve/upgrade the Road profile as indicated in Annex-III based on site/design requirement and in accordance with the manual within the available Right of way (RoW).
- (ii) Traffic Signage plan of the Project Highway showing numbers & location of traffic signs is enclosed. The Contractor/Concessionaire shall, however, improve/upgrade upon the traffic signage plan as indicated in Annex-III based on site/design requirement as per the relevant specifications/IRC Codes/Manual.



Annex - IV

(Schedule-A)

Environment Clearances

As per the notification of the Government of India in the Ministry of Environment and Forests vide number S.O. 2559 (E,) dated the 22nd August, 2013.- Proposed Project Involved Expansion of National Highways greater than 100 km involving additional right of way or land acquisition greater than 40m on existing alignments and 60m on re-alignments or by-passes." will only require Environmental Clearance. **AS Result Environment Clearance is not Required for This Project.**

SCHEDULE - B
(See Clause 2.1)
DEVELOPMENT OF PROJECT HIGHWAY

1. Development of the Project Highway

Development of the Project Highway shall include detailed design, including plan & profile within available proposed ROW and construction of the Project Highway as described in Schedule-B and Schedule-C. The alignment plans of the Project Highway are given in Annex-III of Schedule A, which is minimum requirement and are for guidance only. The proposed plan & profile, locations of different structures/drains/service & slip road/RE walls, chainages of different structures/drains/service & slip road/RE walls, length of different structures/drains/service & slip road/RE walls etc. of the project highway as indicated in the Schedule A, Schedule B, Schedule C and their Annexures, shall be treated as an approximate assessment and as minimum requirement. Based on site/design requirement, the Concessionaire shall finalize Detailed Project Report (DPR) including plan & profile of the project highway and submit the same to Authority / Independent Engineer for acceptance, before the start of the execution of project.

Based on accepted designs including Plan & profile prepared by the Concessionaire, the detailed work program with Network Method (PERT/CPM) shall be prepared along with commensurate deployment of all resources and get approved from Independent Engineer before start of civil work. Any required changes in scope of work given in Schedule B and Schedule C, including any variation in standard, shall be finalized by both the parties before the start of actual civil work.

2. Project Highway

Construction of 2-Lane with paved shoulder of Existing Intermediate Lane of NH-137G from Village near Pailapool at Design Ch. 0+00 (Ch. 20.800 of Silchar Jiribam Pkg-I, NH-37) to Village P. Songkai at Design Ch. 58+342 (Ch. 106+830 of Tamenglong- Mahur section of NH-137) near Hangrum (Length: 58.342 km) in the State of Assam.

3. Specifications and Standards

The Project Highway shall be designed and constructed by the concessionaire in conformity with the Specifications and Standards specified in Annexure-I of Schedule-D.

Annexure – I

Schedule B

DEVELOPMENT OF THE PROJECT HIGHWAY

1. Development of the Project Highway

The Project Highway shall generally follow the horizontal alignment shown in the plan specified in Annexure-III of Schedule-A, unless otherwise specified by the Authority. Notwithstanding anything to the contrary contained in this Agreement or IRC: SP: 73-2018, the proposed plan & profile, locations of different structures/drains/service & slip road/RE walls, chainages of different structures/drains/service & slip road/RE walls, length of different structures/drains/service & slip road/RE walls etc. of the project highway as indicated in the Schedule A, Schedule B, Schedule C and their Annexures shall be treated as minimum requirement. Based on site/design requirement, the Concessionaire shall finalize their Detailed Designs (Development Stage) including plan & profile of the project highway and submit the same to Authority IE for its Consent/Approval and Safety Audit by Safety Auditor, before the start of the execution of project. The designs so approved shall not be in contradiction with the scope of project. For avoidance of doubt, the provisions mentioned in schedule B & C can not be changed, only the design of the components is to be submitted for consent/ approval.

1.1 Width of Carriageway

1.1.1 The two-lane undivided Carriageway in Hilly Terrain with paved shoulder Plain Section – Formation width of NH=12m (As per MoRTH Circular dated 04.06.2024).

- 1) Carriage Way Width =7.0 M
- 2) Paved Shoulder Width =1.5 m
- 3) Earthen Shoulder Width= 1.0 m

Formation Width of NH=12 m. (As per MoRTH Circular dated 04.06.2024) Hill Section

- 1) Carriage Way Width =7.0 M
- 2) Paved Shoulder Width =1.0 m
- 3) Earthen Shoulder Width= 0.5 m

1.1.2 The entire cross-sectional elements shall be accommodated in the available/proposed ROW. If required, suitable retaining structures shall be provided to accommodate the highway cross sections within the available/ proposed ROW. The details of such sections are mentioned in schedule-B.

1.2 Width of Median

1.2.1 The two-lane undivided Carriageway in Hilly Terrain with paved shoulder Plain Section – Formation width of NH=12m (As per MoRTH Circular dated 04.06.2024).

2. Geometric Design and General Features

2.1 General: Geometric design and general features of the Project Highway shall be in accordance with Section 2 of the manual. Intermediate Sight distance shall be followed for design of all vertical curves including structures as well as highways. (Clause No. 2.9.5 of IRC: SP: 73-2018).

2.2 Design speed: The design speed shall be 40 km per hr for Mountainous/Steep terrain & -100 km per hr. for Plain/Rolling terrain with some restrictions mentioned in Schedule -D).

2.3 Improvement of the Existing Road Geometrics

2.3.1 The existing road geometrics shall be improved as per the codal provisions. In the sections, where improvement of the existing road geometrics to the prescribed standards is not possible, the existing road geometrics shall be improved to the extent possible within the given right of way and appropriate road signs, pavement markings and safety measures shall be provided.

2.3.2 The entire cross-sectional elements shall be accommodated within the available/proposed ROW. Any occurrence of a sinking zone within the ROW/construction area shall not be considered as a change of scope and If required, suitable full height retaining structures shall be provided to accommodate the highway cross section within the available/ proposed ROW. The details of such sections are mentioned in Schedule B. In case of any other section not included in Schedule-B, where retaining structures are to be provided, shall not constitute a Change of scope.

2.3.3 Realignments: The existing road shall be improved to the standards as specified in the manual at the following locations:

Sr. No.	Existing Chainages (Km)		Design Chainages (Km)		Length (Km)
	From	To	From	To	
NIL					

2.3.4 Bypasses: The existing road shall be bypassed to the standards as specified in the manual at the following locations:

Sl. No	Existing Chainage (m)		Existin g Length (m)	Design Chainage (m)		Design Length (m)	Name of Village
	Start	End		Start	End		
1	0000	10115	10115	0	9450	9450	Joypur
2				12180	13880	1700	Joypur
3				13880	14350	470	Joypur
4				14750	17000	2250	Harinagr
5	18230	20400	2170	17600	21490	3890	Kuacherra
6				27000	31520	4520	Jinam Bridge
7				32000	33780	1780	Jinam Bridge
Total				Total (m)		24060	

2.4 Right of way

Details of the Right of way along Project Highways and side roads are given in Annexure-II of Schedule-A.

2.5 Type of shoulders

- 2.5.1 The two-lane undivided Carriageway in Hilly Terrain with paved shoulder Plain Section – Formation width of NH=12m (As per MoRTH Circular dated 04.06.2024).

2.6 Lateral and Vertical Clearance at Underpasses

- 2.6.1 In the case of VUP/LVUP, the proposed structure, the finished road level in VUP shall be kept 150 mm above the ground level/service road/ crossroad (whichever is higher) to ensure that these VUP don't become water accumulation points.

- 2.6.2 The vertical and horizontal clearance at the underpasses shall be as per Clause 2.10.2 of the manual.

2.7 Lateral and vertical clearances at Overpasses

- 2.7.1 The Lateral and vertical clearances at Overpasses clearance at the underpasses shall be as per IRC: SP:73-2018.

2.8 Service road/ Slip roads/ Connecting Roads:

- 2.8.1 The service/Slip roads shall be constructed at the locations and for the length indicated below:

Sr. No.	Design Chainages (Km)		Length (Km)		Paved Carriageway width including shyness (m)	Minimum Length (Km)	Remarks
	From	To	LHS	RHS			
NIL							

- 2.8.2 The parking bays shall be provided along service road

Sr. No.	Design chainages of Parking Bay		Remarks
	LHS Service Road	RHS Service Road	
NIL			

- 2.8.3 Slip Road: The height of the embankments of slip roads shall confirm to clause 4.2.1 (Clause No. 4.2.1 IRC: SP: 73-2018).

- 2.8.4 Separator Between Main Carriageway and Service/Slip Road (Clause No. 2.15.1 of IRC: SP: 73-2018)

- 2.8.5 A separator between main carriageway and service/slip road shall be provided to prevent the pedestrians, local vehicles and animals entering the highway.

Note:

- i. Above length of the service/slip roads is minimum specified. The actual length of the service/slip/connecting roads shall be determined by the Concessionaire in accordance with the approved plan & profile and design approved from the Independent Engineer. Any increase/decrease up to 5 percent length from the length specified in this Clause of Schedule-B shall not constitute a Change of Scope. Any additional length shall be dealt as per provisions of Change of Scope.
- ii. The Acceleration, deceleration lane, right turning storage lane, entry/exit lanes shall be constructed in addition to length given in above table and shall be deemed to be part of the scope and no Change of Scope shall be considered for the same.

2.9 Grade Separated Structures (IRC: SP: 73-2018):

Grade separated structures shall be constructed as per paragraph 2.13 of the Manual. Proposed levels at structure locations as shown in plan & profile specified in Annexure-III of schedule-A are minimum requirement and only for guidance.

- Any increase in levels shall not constitute any change of scope.
- Entry/ Exit arrangement from main carriageway shall be 50m before/ after the start/ end of approach road to grade separator i.e., start/ end of valley curve. (IRC: SP: 73-2018).
- RCC barrier shall start from start of valley curve and end after grade separator at end of valley curve.
- 50m long MBCB Safety barriers on structure approaches shall be provided on all four faces of each structure. MBCB provided towards median side of each structure shall be joined on ends in semi-circular shape. (Clause No. 4.3.5 and 4.9, IRC 119)
- footpaths shall be provided at grade intersection below structures for each direction of pedestrian movement (IRC: SP: 73-2018).
- Any Change in skew angle as per site requirement shall not be treated as change of scope.
- Structures shall have minimum number of expansion joints. Expansion joints shall conform to IRC: SP:69.
- The Span length mentioned above is minimum and any reduction in span length is not permitted.
- All structural components shall be designed for severe exposure conditions as per section-14 of IRC: 112.
- All structural components shall be designed for seismic zone as per codal provision
- All reinforcement bars shall have minimum percentage elongation of 14.5% as per section-18 of IRC: 112.
- All structural components shall be designed for live load as per IRC: 6 including Special Vehicle (SV) loading and congestion factor also.
- Construction of crash barrier and friction slab should be monolithic (separate casting of these two elements is not permitted) for approaches of grade separators.
- Minimum length of approach slab shall be 5m and Gap Slab shall be avoided.
- Proper drainage arrangement shall be provided
- Only RE/ retaining wall shall be provided in the approaches of structures location as shown in Typical cross section.

The requisite particulars are given below:

2.9.1 Elevated Structure

Elevated Structures along Main Highway

Sr. No.	Design Chainage (Km)	LHS Roadway Width (m)	RHS Roadway Width (m)	Super Structure Provision in Median	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Skew Angle (to be specified)	Remarks
NIL								

2.9.2 Vehicle Underpass (VUP)

Sr. No.	Design Chainage (Km)	Roadway Width	Type of Structure	Super Structure Provision in Median	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Skew Angle (to be specified)	Remarks
NIL								

2.9.3 Light Vehicle Underpass (LVUP)

Sr. No.	Design Chainage (Km)	LHS Roadway Width (m)	RHS Roadway Width (m)	Super Structure Provision in Median	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Skew Angle (to be specified)	Remarks
NIL								

2.9.4 Small Vehicle Underpasses (SVUP)

Sr. No.	Design Chainage (Km)	LHS Roadway Width (m)	RHS Roadway Width (m)	Super Structure Provision in Median	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Skew Angle (to be specified)	Remarks
NIL								

2.9.5 Cattle and Pedestrian Underpasses

Sr. No.	Design Chainage (Km)	LHS Roadway Width (m)	RHS Roadway Width (m)	Super Structure Provision in Median	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Skew Angle (to be specified)	Remarks
NIL								

2.9.6 Interchanges (IC) (IRC: SP:73-2018)

Sr. No.	Design Chainage (Km)	LHS Roadway Width (m)	RHS Roadway Width (m)	Super Structure Provision in Median	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Skew Angle (to be specified)	Remarks
NIL								

Note: Typical Cross Sections of Interchange are given in Annexure-II to Schedule-B.

2.9.7 Details of ramps, Cross Roads and Connecting Roads at Interchanges (IC)

Sr. No.	Design Chainage (Km)	LHS Roadway Width (m)	RHS Roadway Width (m)	Super Structure Provision in Median	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Skew Angle (to be specified)	Remarks
NIL								

Note: Layout and Geometric design and TCS shall be as indicated in the Plan and Profile/GAD.

2.9.8 Details of VUP cum MJB

Sr. No.	Design Chainage (Km)	Type of Structure	Clear Span Arrangement (m)	Minimum Vertical Clearance (m)	Remarks
1	5+676	PSC GIRDER	3X45	5.5	

Special Notes for above mentioned Structure:

1. The minimum vertical clearance of 5.5 m (from at grade cross road level up to soffit of elevated structure) shall be provided where major NH/SH / MDR / Sector Road / Municipal Road are crossing the proposed elevated corridor.
2. The minimum vertical clearance of 5.0 m above HFL up to soffit of structure shall be provided for entire elevated corridor. For fixing of Highest Flood Level (HFL), local concerned irrigation authority/Water resource department/Municipal Corporation/CWC/IWAI shall be consulted along with Authority & IE keeping the provision of future development in accordance with Proposed Land use Plan of Cachar, and neighboring cities and necessary approvals from concerned shall be taken by Concessionaire.
3. Structures shall have minimum number of expansion joints. Expansion joints shall conform to IRC: SP:69. In any case, the number of expansion joints shall not be more than 1 for each 90 m length of the Structure.
4. The Span length mentioned above is minimum and any reduction in span length is not permitted.
5. All structural components shall be designed for seismic zone-as per codal provision.
6. Single piers support system below elevated structure spans are only permitted for maximum utilization of land for future development purpose.
7. Design of Elevated structure shall be vetted by IITs/NITs.
8. Any other structure falling within acceleration/deceleration lane and taper portion shall be constructed to the required width.

2.10 Typical Cross section (TCS) of the Project Highway

The Project highway shall be constructed to two lane configurations. Typical cross sections required to be developed in different sections of the project Highway are given below: -

***In cutting sections, the side slopes shall not be steeper than 4:3 (Vertical: Horizontal) for cutting heights up to 20 meters. For cutting heights exceeding 20 meters, the side slopes shall be maintained at 1: 1. Further, any variation in the length of TCS (Typical Cross Section) arising due to cutting & filling or Slope Stability shall not be considered as a Change of Scope.**

Sl.	Type of Cross Section	Length (m)
TCS 1	Two Lane Carriageway with Paved Shoulder Up to 3m Embankment Height	16300
TCS 1A	Two Lane carriageway with Paved shoulder and Gabion Wall on both Side	710
TCS 1B	Two Lane carriageway with Paved shoulder and RHS >4.5m Height and LHS <3m Embankment Height.	510
TCS 1C	Two Lane carriageway with Paved shoulder and LHS >4.5m Height and RHS<3m Embankment Height.	160
TCS 1D	Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)	680
TCS 1DA	Two Lane carriageway with Paved shoulder and Toe wall	310
TCS 1DB	Two Lane carriageway with Paved shoulder and Toe wall	530
TCS 1DC	Two Lane carriageway with Paved shoulder and Toe wall	180
TCS 1DD	Two Lane carriageway with Paved shoulder and Toe wall	70
TCS 2	Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS	1742
TCS 2A	Two Lane carriageway with Paved shoulder on hill (Box cut section) with h=6m to 9m without Breast wall on both side	190
TCS 2B	Two Lane carriageway with Paved shoulder on hill (Box cut section) with H> 9M Breast wall on Both side	9340
TCS 2C	Two Lane carriageway with Paved shoulder on hill (Box cut section) with h=6m to 9m LHS Breast wall	490
TCS 2D	Two Lane carriageway with Paved shoulder on hill (Box cut section) with h=6m to 9m RHS Breast wall	410
TCS 2E	Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.	8440
TCS 2F	Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS	1850
TCS 2G	Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RHS H=6m to 9m Breast wall BHS	1690
TCS 2H	Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.	560
TCS 3	Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.	1580
TCS 3A	Two Lane carriageway with Paved shoulder with Breast wall in LHS.	310
TCS 3B	Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.	1450
TCS 3C	Two Lane carriageway with Paved shoulder with Breast wall in LHS.	1570
TCS 3D	Two Lane carriageway with Paved shoulder cutting Section.	230
TCS 3E	Two Lane carriageway with Paved shoulder cutting Section.	4360
TCS 3F	Two Lane carriageway with Paved shoulder cutting Section.	380
TCS 3G	Two Lane carriageway with Paved shoulder cutting Section.	160
TCS 4	Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.	950
TCS 4A	Two Lane carriageway with Paved shoulder with Breast wall in RHS.	190
TCS 4B	Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.	250
TCS 4C	Two Lane carriageway with Paved shoulder with Breast wall in LHS.	20
TCS 4D	Two Lane carriageway with Paved shoulder cutting Section.	110
TCS 4E	Two Lane carriageway with Paved shoulder cutting Section.	360
TCS 5	Two Lane carriageway with Paved shoulder cutting Section.	2260
Total length (m)		58342

Note:

- Any variations in the lengths specified in the above table shall not constitute a Change of Scope.
- Lengths mentioned in the above list for cross section types concerned to structures are inclusive of structure length, unless specified in the above table. The Road Width at all Grade Separated Structures/Major & Minor Bridge shall be as per the GADs of the Respective Structure as available in the Structure Drawing Volume.
- Retaining wall/RE wall/Toe wall shall be provided as per sections specified in Schedule-B and TCS

indicated in Clause 2.10 of Schedule-B.

4. Carriageway width tapering shall be provided 1 in 50.
5. Intermediate Sight Distance (Desirable Minimum Sight Distance) shall be followed for design of all vertical curves (Summit and Valley Curves) including structures as well as highways.
6. The placement and specification of Railing, Fencing and electric poles, etc are as indicated in the TCS and as indicated in the Schedule-B.
7. Chainages to be adjusted as per the location of the structure and as per drawing.

3. Intersections and Grade Separated Intersections

All at-grade intersections and grade separated intersections shall be as per Section 3 of the manual. Existing at-grade intersections shall be improved to the prescribed standards.

Properly designed intersections shall be provided at the locations and of types and features given in the tables below:

3.1 At-grade intersections:

3.1.1 Major Junctions:

S. No.	Design Chainage (Km)	Type of intersection	Other features
1	0+000	Rotary	NH-37 (L/s Silchar R/s Jiribam)
2	5+625	+	Existing Road Crossing
3	58+342	Y	NH-137 (L/s Hangrum R/s Tamenglong)

3.1.2 Minor Intersections:

Sr. No	Design Chainage (Km)	Side LHS/RHS	Junction Type
1	965	BHS	+
2	3110	BHS	+
3	3900	BHS	+
4	5625	BHS	+
5	6395	BHS	+
6	7605	BHS	+
7	7960	BHS	+
8	9350	LHS	Y
9	11060	RHS	Y
10	11705	RHS	Y
11	12165	LHS	Y
12	12185	RHS	Y
13	12565	BHS	+
14	13080	RHS	Y
15	13180	LHS	Y
16	13640	RHS	Y
17	14320	LHS	Y
18	15020	LHS	Y
19	15070	RHS	Y
20	15480	BHS	+
21	16040	RHS	Y
22	16930	LHS	Y
23	17590	LHS	Y
24	17700	LHS	Y
25	19200	LHS	Y
26	19900	LHS	Y
27	20280	LHS	Y
28	21100	LHS	Y
29	21480	RHS	Y
30	22915	RHS	Y
31	24370	RHS	Y
32	24730	RHS	Y
33	26665	RHS	Y
34	26870	LHS	Y
35	27550	LHS	Y
36	28270	LHS	Y
37	30850	RHS	Y
38	30930	LHS	Y
39	31575	RHS	Y
40	32000	RHS	Y
41	33665	RHS	Y

42	34150	LHS	Y
43	35165	LHS	Y
44	35773	RHS	Y
45	36108	BHS	+
46	36558	LHS	Y
47	37498	RHS	Y
48	37948	Rotary	Rotary
49	38208	LHS	Y
50	38673	RHS	Y
51	38698	LHS	Y
52	43038	RHS	Y
53	43563	RHS	Y
54	43958	RHS	Y
55	44418	LHS	Y
56	45608	RHS	Y
57	45968	RHS	Y
58	46518	RHS	Y
59	47148	RHS	Y
60	47778	RHS	Y
61	48333	RHS	Y
62	48503	RHS	Y
63	49073	RHS	Y
64	50018	RHS	Y
65	50098	LHS	Y
66	50578	RHS	Y
67	51058	RHS	Y
68	51693	RHS	Y
69	52818	RHS	Y
70	53518	RHS	Y
71	53908	RHS	Y
72	54248	RHS	Y
73	55158	RHS	Y
74	55673	RHS	Y
75	55893	RHS	Y
76	56288	RHS	Y
77	57508	RHS	Y
78	57978	RHS	Y

Note:

- a. Type of Junction to be improved as per manual.
- b. The Concessionaire shall take up 'Detailed Engineering study to ascertain further details of all intersections and treatment of the intersections shall be designed in accordance with the latest guidelines mentioned out in section-3 of the manual. Auxiliary lanes including storage, acceleration and deceleration lane along with physical islands to be provided.
- c. The cross road at the junctions which are having a level difference from the main carriageway, are to be improved at the level of main carriageway for the length of 30 meter and then to be merged with the cross road at the gradient not more than 1:50.
- d. For minor / major layout for left-in / left out arrangement with physical islands with hazard marking. Where there is space constraint to provide physical islands, the effect of junction kept wide opened can be avoided by Ghost Island with marking.
- e. For U-turn, Self-Regulated U-Turn facility shall be created.

3.2 At-Grade Intersections below Grade Separators:

These shall be provided as under: -

Sr. No	Design Chainage (Km)	Junction Type	Leads To		Category of Cross Road	Carriageway width of cross road (m)	Length of cross road to be developed	
			Left	Right			LHS	RHS
			1	5+625			+	Pailapool

Note:

1. In case of Flyovers/VUPs/LVUPs/Box Crossings, as indicated above, where the existing alignment of the crossroad has been modified on account of the skew of the Grade Separated Structure, the cross shall be developed within the available ROW to allow smooth flow of traffic on crossroad under the Grade Separator with width and crust composition as per the existing crossroad. In case of cross road being unpaved/dirt road, the improvement shall be carried out as per existing crust.
2. The Concessionaire shall take up 'Detailed Engineering study to ascertain further details of all intersections and treatment of the intersections shall be designed in accordance with the latest guidelines mentioned out in section-3 of manual.
3. Junction improvement under grade separators shall be carried out as per manual with proper entry/exit to cross roads and slip/service roads, etc. Auxiliary lanes including storage, acceleration and deceleration lane along with physical islands to be provided.
4. Location of grade-separated structures is indicative. Exact location should be decided in consultation with Independent Engineer
5. Only Entry or Exit shall be designed at any location (provision of entry/exit by Ghost Island not permitted).

4. Road Embankment and Cut Section

Construction of road embankment/cuttings shall conform to the Specifications and Standards given in section 4 of the manual. Notwithstanding anything to the contrary contained in this Agreement or Manual, the proposed profile of the project highway as indicated in the Annex-III of Schedule A shall be treated as minimum requirement.

Based on site/design requirement, the Concessionaire shall design the alignment plans and profiles of the project highway based on site/design requirement mentioned in Schedule B with approval from the Independent Engineer/Authority Engineer within the available Right of Way. However, it is clarified that bottom of subgrade level shall be at-least 1000 mm above Highest Flood Level (HFL).

Side Slope specified in the TCS in accordance with Slope Protection measure.

For stability of slope upto 3-meter height the turfing shall be adopted. For the slope from 3-6-meter suitable, geo-cell, geo-grid, geo-green etc. can be provided with suitable drainage chutes as per IRC 56. For the slope more than 6-meter height, a complete slope stability analysis as per IRC: 75 shall be done and the slopes shall be compulsorily protected with stone pitching within stone masonry grid structure of 4x4 meter and suitable drains/chutes etc. shall be provided for effective drainage of the water.

Concessionaire shall have to procure and use Pond/ Fly Ash preferably. In case of non-availability of the same, Concessionaire shall make their own arrangement for procurement of alternative material

/Good earth and no change of scope will be considered.

5. Pavement design

5.1 Pavement design shall be carried out in accordance with Section 5 of the Manual.

5.2 Type of Pavement and Design requirement

The project highway shall have flexible pavement throughout its length, including service/slip roads, while rigid pavement shall be provided at the Toll Plaza location.

5.2.1 Design Period and Strategy Pavement shall be constructed for Toll Plaza location, rigid pavement shall be designed for a minimum design life of 30 years, with the sub-grade CBR value to be considered as 8% only.

5.2.2 Recommended Flexible Pavement Design Notwithstanding anything to the contrary contained in this Agreement or the manual, the Concessionaire shall design the pavement of main carriageway, paved shoulder, entry/exit locations, acceleration/ deceleration lane, right turning lanes, approach's locations for design traffic of 50 MSA (Minimum) with the sub-grade CBR value to be considered strictly as 8% only.

5.3 In order to meet the intended functional requirement of respective pavement layers on main carriageway, the minimum thickness of respective pavement layers for main carriageway and connecting crossroads/ service roads/ slip roads/ entry/exit locations, acceleration/ deceleration lane, right turning lanes shall and Toll Plaza location however, in no case be less than as given below

5.3.1 Main carriageway, paved shoulder, entry/exit locations, acceleration/ deceleration lane, turning lanes (Flexible) CTB/CTSB

Crust Details (Main carriageway)	Thickness(mm)
Flexible Pavement	
Bituminous Concrete (BC) with VG-40	40
Dense Bituminous Macadam (DBM) with VG-40	60
CTB base Layer	140
CTSB Layer Grading IV of Table 400-1	200
Subgrade	500
Total Thickness	940 mm

5.3.2 Rigid Pavement for Toll Plaza location.

Pavement Composition	Minimum Crust Thickness(mm)
Subgrade	500
GSB	150
DLC	150
PQC	280

5.4 Bituminous Mix for Overlay

The following stretches of the existing road shall be provided bituminous overlay as follows:

Sr. No.	Design Chainages (Km)		Pavement Compositions	Remarks
	From	To		
NIL				

6. Roadside Drainage

6.1 Drainage System including surface and subsurface drains for the Project Highway including crossroads shall be provided as per section 6 of the manual. RCC Drain cum footpaths shall conform to the cross-sectional features and other details as given in Annexures to Schedule-B and shall be provided as under:

Details of V Type: -

Sr. No.	Design Chainages (Km)		Length(m)	Width of Drain (m)	Total Length (m)
	From	To	LHS/RHS		
1	90	110	LHS	Refer TCS, Annexure-II Schedule B	
2	960	970	LHS	Refer TCS, Annexure-II Schedule B	
3	970	980	BOTH SIDE	Refer TCS, Annexure-II Schedule B	
4	2240	2260	RHS	Refer TCS, Annexure-II Schedule B	
5	2340	2380	RHS	Refer TCS, Annexure-II Schedule B	
6	2790	2800	LHS	Refer TCS, Annexure-II Schedule B	
7	2800	2810	RHS	Refer TCS, Annexure-II Schedule B	
8	3480	3490	LHS	Refer TCS, Annexure-II Schedule B	
9	3570	3590	RHS	Refer TCS, Annexure-II Schedule B	
10	3700	3730	LHS	Refer TCS, Annexure-II Schedule B	
11	3790	3850	LHS	Refer TCS, Annexure-II Schedule B	
12	3970	3980	RHS	Refer TCS, Annexure-II Schedule B	
13	3980	4020	BOTH SIDE	Refer TCS, Annexure-II Schedule B	
14	4220	4270	LHS	Refer TCS, Annexure-II Schedule B	
15	4330	4340	RHS	Refer TCS, Annexure-II Schedule B	
16	4340	4420	BOTH SIDE	Refer TCS, Annexure-II Schedule B	
17	4420	4430	LHS	Refer TCS, Annexure-II Schedule B	
18	4460	4470	RHS	Refer TCS, Annexure-II Schedule B	
19	4470	4500	BOTH SIDE	Refer TCS, Annexure-II Schedule B	
20	4500	4540	RHS	Refer TCS, Annexure-II Schedule B	
21	4540	4550	BOTH SIDE	Refer TCS, Annexure-II Schedule B	
22	4550	4570	RHS	Refer TCS, Annexure-II Schedule B	
23	4590	4620	LHS	Refer TCS, Annexure-II Schedule B	
24	4860	4890	LHS	Refer TCS, Annexure-II Schedule B	
25	7480	7510	RHS	Refer TCS, Annexure-II Schedule B	
26	7950	7960	RHS	Refer TCS, Annexure-II Schedule B	
27	7960	7970	BOTH SIDE	Refer TCS, Annexure-II Schedule B	
28	8120	8140	RHS	Refer TCS, Annexure-II Schedule B	
29	9300	9310	RHS	Refer TCS, Annexure-II Schedule B	
30	9390	9420	RHS	Refer TCS, Annexure-II Schedule B	
31	9730	9770	LHS	Refer TCS, Annexure-II Schedule B	
32	10930	10940	LHS	Refer TCS, Annexure-II Schedule B	
33	11220	11230	RHS	Refer TCS, Annexure-II Schedule B	
34	11950	11970	LHS	Refer TCS, Annexure-II Schedule B	
35	12190	12200	LHS	Refer TCS, Annexure-II Schedule B	

36	12300	12310	RHS	Refer TCS, Annexure-II Schedule B
37	12320	12330	RHS	Refer TCS, Annexure-II Schedule B
38	12580	12590	BOTH SIDE	Refer TCS, Annexure-II Schedule B
39	12590	12610	RHS	Refer TCS, Annexure-II Schedule B
40	12870	12890	RHS	Refer TCS, Annexure-II Schedule B
41	12890	13160	BOTH SIDE	Refer TCS, Annexure-II Schedule B
42	13160	13380	RHS	Refer TCS, Annexure-II Schedule B
43	13380	13420	BOTH SIDE	Refer TCS, Annexure-II Schedule B
44	13420	13450	RHS	Refer TCS, Annexure-II Schedule B
45	13500	13540	RHS	Refer TCS, Annexure-II Schedule B
46	13630	13640	LHS	Refer TCS, Annexure-II Schedule B
47	13650	13690	RHS	Refer TCS, Annexure-II Schedule B
48	13690	13710	BOTH SIDE	Refer TCS, Annexure-II Schedule B
49	13710	13840	RHS	Refer TCS, Annexure-II Schedule B
50	13840	13860	BOTH SIDE	Refer TCS, Annexure-II Schedule B
51	13860	13890	RHS	Refer TCS, Annexure-II Schedule B
52	13890	13900	LHS	Refer TCS, Annexure-II Schedule B
53	14320	14340	RHS	Refer TCS, Annexure-II Schedule B
54	14340	14370	BOTH SIDE	Refer TCS, Annexure-II Schedule B
55	14370	14380	RHS	Refer TCS, Annexure-II Schedule B
56	14490	14520	RHS	Refer TCS, Annexure-II Schedule B
57	14780	14800	LHS	Refer TCS, Annexure-II Schedule B
58	15030	15050	RHS	Refer TCS, Annexure-II Schedule B
59	15080	15090	LHS	Refer TCS, Annexure-II Schedule B
60	15090	15130	BOTH SIDE	Refer TCS, Annexure-II Schedule B
61	15130	15150	LHS	Refer TCS, Annexure-II Schedule B
62	15550	15580	LHS	Refer TCS, Annexure-II Schedule B
63	16950	16980	RHS	Refer TCS, Annexure-II Schedule B
64	17060	17190	RHS	Refer TCS, Annexure-II Schedule B
65	17210	17230	RHS	Refer TCS, Annexure-II Schedule B
66	17370	17380	RHS	Refer TCS, Annexure-II Schedule B
67	17540	17550	RHS	Refer TCS, Annexure-II Schedule B
68	18230	18260	RHS	Refer TCS, Annexure-II Schedule B
69	20230	20270	LHS	Refer TCS, Annexure-II Schedule B
70	20270	20300	BOTH SIDE	Refer TCS, Annexure-II Schedule B
71	20300	20330	RHS	Refer TCS, Annexure-II Schedule B
72	20400	20410	LHS	Refer TCS, Annexure-II Schedule B
73	20430	20480	LHS	Refer TCS, Annexure-II Schedule B
74	20620	20670	LHS	Refer TCS, Annexure-II Schedule B
75	20670	20840	BOTH SIDE	Refer TCS, Annexure-II Schedule B
76	20840	20850	LHS	Refer TCS, Annexure-II Schedule B
77	20880	20890	LHS	Refer TCS, Annexure-II Schedule B
78	20890	20950	BOTH SIDE	Refer TCS, Annexure-II Schedule B
79	20950	20960	RHS	Refer TCS, Annexure-II Schedule B
80	21000	21110	BOTH SIDE	Refer TCS, Annexure-II Schedule B
81	21120	21180	LHS	Refer TCS, Annexure-II Schedule B

82	21210	21250	RHS	Refer TCS, Annexure-II Schedule B
83	21250	21270	BOTH SIDE	Refer TCS, Annexure-II Schedule B
84	21270	21300	RHS	Refer TCS, Annexure-II Schedule B
85	21300	21400	BOTH SIDE	Refer TCS, Annexure-II Schedule B
86	21400	21500	LHS	Refer TCS, Annexure-II Schedule B
87	21510	21520	LHS	Refer TCS, Annexure-II Schedule B
88	21520	21590	BOTH SIDE	Refer TCS, Annexure-II Schedule B
89	21630	21730	RHS	Refer TCS, Annexure-II Schedule B
90	21730	21740	BOTH SIDE	Refer TCS, Annexure-II Schedule B
91	21740	21770	LHS	Refer TCS, Annexure-II Schedule B
92	21800	21820	LHS	Refer TCS, Annexure-II Schedule B
93	21820	21830	BOTH SIDE	Refer TCS, Annexure-II Schedule B
94	21830	21940	LHS	Refer TCS, Annexure-II Schedule B
95	21940	22020	BOTH SIDE	Refer TCS, Annexure-II Schedule B
96	22020	22100	RHS	Refer TCS, Annexure-II Schedule B
97	22100	22430	BOTH SIDE	Refer TCS, Annexure-II Schedule B
98	22430	22470	LHS	Refer TCS, Annexure-II Schedule B
99	22470	22700	BOTH SIDE	Refer TCS, Annexure-II Schedule B
100	22700	22730	LHS	Refer TCS, Annexure-II Schedule B
101	22730	22740	BOTH SIDE	Refer TCS, Annexure-II Schedule B
102	22740	22750	LHS	Refer TCS, Annexure-II Schedule B
103	22760	22780	RHS	Refer TCS, Annexure-II Schedule B
104	22780	22790	LHS	Refer TCS, Annexure-II Schedule B
105	22810	22860	LHS	Refer TCS, Annexure-II Schedule B
106	22900	22910	LHS	Refer TCS, Annexure-II Schedule B
107	22910	22950	BOTH SIDE	Refer TCS, Annexure-II Schedule B
108	22950	22980	LHS	Refer TCS, Annexure-II Schedule B
109	22980	23110	BOTH SIDE	Refer TCS, Annexure-II Schedule B
110	23110	23150	RHS	Refer TCS, Annexure-II Schedule B
111	23150	23250	BOTH SIDE	Refer TCS, Annexure-II Schedule B
112	23250	23320	LHS	Refer TCS, Annexure-II Schedule B
113	23320	23370	BOTH SIDE	Refer TCS, Annexure-II Schedule B
114	23370	23400	LHS	Refer TCS, Annexure-II Schedule B
115	23400	23440	BOTH SIDE	Refer TCS, Annexure-II Schedule B
116	23440	23470	LHS	Refer TCS, Annexure-II Schedule B
117	23490	23520	RHS	Refer TCS, Annexure-II Schedule B
118	23530	23570	RHS	Refer TCS, Annexure-II Schedule B
119	23570	23600	LHS	Refer TCS, Annexure-II Schedule B
120	23600	23620	BOTH SIDE	Refer TCS, Annexure-II Schedule B
121	23620	23630	RHS	Refer TCS, Annexure-II Schedule B
122	23670	23680	LHS	Refer TCS, Annexure-II Schedule B
123	23680	23910	BOTH SIDE	Refer TCS, Annexure-II Schedule B
124	23910	23920	LHS	Refer TCS, Annexure-II Schedule B
125	23990	24020	BOTH SIDE	Refer TCS, Annexure-II Schedule B
126	24020	24050	LHS	Refer TCS, Annexure-II Schedule B
127	24060	24070	RHS	Refer TCS, Annexure-II Schedule B

128	24070	24120	BOTH SIDE	Refer TCS, Annexure-II Schedule B
129	24180	24330	BOTH SIDE	Refer TCS, Annexure-II Schedule B
130	24330	24360	RHS	Refer TCS, Annexure-II Schedule B
131	24360	24370	BOTH SIDE	Refer TCS, Annexure-II Schedule B
132	24370	24390	RHS	Refer TCS, Annexure-II Schedule B
133	24390	24420	BOTH SIDE	Refer TCS, Annexure-II Schedule B
134	24420	24510	RHS	Refer TCS, Annexure-II Schedule B
135	24510	24570	BOTH SIDE	Refer TCS, Annexure-II Schedule B
136	24570	24610	RHS	Refer TCS, Annexure-II Schedule B
137	24610	24660	BOTH SIDE	Refer TCS, Annexure-II Schedule B
138	24660	24690	RHS	Refer TCS, Annexure-II Schedule B
139	24690	24730	BOTH SIDE	Refer TCS, Annexure-II Schedule B
140	24730	24780	RHS	Refer TCS, Annexure-II Schedule B
141	24800	24910	BOTH SIDE	Refer TCS, Annexure-II Schedule B
142	24910	24940	RHS	Refer TCS, Annexure-II Schedule B
143	24940	25030	BOTH SIDE	Refer TCS, Annexure-II Schedule B
144	25030	25080	RHS	Refer TCS, Annexure-II Schedule B
145	25080	25220	BOTH SIDE	Refer TCS, Annexure-II Schedule B
146	25220	25260	RHS	Refer TCS, Annexure-II Schedule B
147	25260	25930	BOTH SIDE	Refer TCS, Annexure-II Schedule B
148	25960	26050	BOTH SIDE	Refer TCS, Annexure-II Schedule B
149	26050	26110	LHS	Refer TCS, Annexure-II Schedule B
150	26120	26170	RHS	Refer TCS, Annexure-II Schedule B
151	26170	26180	BOTH SIDE	Refer TCS, Annexure-II Schedule B
152	26180	26210	RHS	Refer TCS, Annexure-II Schedule B
153	26210	26280	BOTH SIDE	Refer TCS, Annexure-II Schedule B
154	26280	26290	LHS	Refer TCS, Annexure-II Schedule B
155	26290	26320	BOTH SIDE	Refer TCS, Annexure-II Schedule B
156	26320	26340	LHS	Refer TCS, Annexure-II Schedule B
157	26340	26390	BOTH SIDE	Refer TCS, Annexure-II Schedule B
158	26390	26420	LHS	Refer TCS, Annexure-II Schedule B
159	26440	26450	LHS	Refer TCS, Annexure-II Schedule B
160	26450	26940	BOTH SIDE	Refer TCS, Annexure-II Schedule B
161	26940	26960	RHS	Refer TCS, Annexure-II Schedule B
162	26990	27040	RHS	Refer TCS, Annexure-II Schedule B
163	27040	27070	BOTH SIDE	Refer TCS, Annexure-II Schedule B
164	27070	27110	RHS	Refer TCS, Annexure-II Schedule B
165	27110	27130	BOTH SIDE	Refer TCS, Annexure-II Schedule B
166	27130	27160	RHS	Refer TCS, Annexure-II Schedule B
167	27160	27180	BOTH SIDE	Refer TCS, Annexure-II Schedule B
168	27180	27190	RHS	Refer TCS, Annexure-II Schedule B
169	27250	27300	RHS	Refer TCS, Annexure-II Schedule B
170	27300	27330	BOTH SIDE	Refer TCS, Annexure-II Schedule B
171	27330	27380	RHS	Refer TCS, Annexure-II Schedule B
172	27380	27430	BOTH SIDE	Refer TCS, Annexure-II Schedule B
173	27430	27470	RHS	Refer TCS, Annexure-II Schedule B

174	27470	27710	BOTH SIDE	Refer TCS, Annexure-II Schedule B
175	27710	27800	RHS	Refer TCS, Annexure-II Schedule B
176	27800	27930	BOTH SIDE	Refer TCS, Annexure-II Schedule B
177	27930	28220	RHS	Refer TCS, Annexure-II Schedule B
178	28220	28330	BOTH SIDE	Refer TCS, Annexure-II Schedule B
179	28330	28400	RHS	Refer TCS, Annexure-II Schedule B
180	28400	28700	BOTH SIDE	Refer TCS, Annexure-II Schedule B
181	28700	28770	RHS	Refer TCS, Annexure-II Schedule B
182	28830	28940	RHS	Refer TCS, Annexure-II Schedule B
183	28940	29120	BOTH SIDE	Refer TCS, Annexure-II Schedule B
184	29120	29130	LHS	Refer TCS, Annexure-II Schedule B
185	29180	29200	RHS	Refer TCS, Annexure-II Schedule B
186	29200	29280	BOTH SIDE	Refer TCS, Annexure-II Schedule B
187	29280	29460	RHS	Refer TCS, Annexure-II Schedule B
188	29460	29540	BOTH SIDE	Refer TCS, Annexure-II Schedule B
189	29540	29590	RHS	Refer TCS, Annexure-II Schedule B
190	29590	29840	BOTH SIDE	Refer TCS, Annexure-II Schedule B
191	29840	30100	RHS	Refer TCS, Annexure-II Schedule B
192	30170	30190	RHS	Refer TCS, Annexure-II Schedule B
193	30190	30230	BOTH SIDE	Refer TCS, Annexure-II Schedule B
194	30230	30240	RHS	Refer TCS, Annexure-II Schedule B
195	30240	30690	BOTH SIDE	Refer TCS, Annexure-II Schedule B
196	30690	30700	RHS	Refer TCS, Annexure-II Schedule B
197	30700	31190	BOTH SIDE	Refer TCS, Annexure-II Schedule B
198	31190	31210	RHS	Refer TCS, Annexure-II Schedule B
199	31320	31650	BOTH SIDE	Refer TCS, Annexure-II Schedule B
200	31680	32230	BOTH SIDE	Refer TCS, Annexure-II Schedule B
201	32230	32260	LHS	Refer TCS, Annexure-II Schedule B
202	32260	32290	BOTH SIDE	Refer TCS, Annexure-II Schedule B
203	32290	32300	LHS	Refer TCS, Annexure-II Schedule B
204	32330	33300	BOTH SIDE	Refer TCS, Annexure-II Schedule B
205	33300	33330	RHS	Refer TCS, Annexure-II Schedule B
206	33440	33560	RHS	Refer TCS, Annexure-II Schedule B
207	33560	33640	BOTH SIDE	Refer TCS, Annexure-II Schedule B
208	33640	33660	RHS	Refer TCS, Annexure-II Schedule B
209	33660	34100	BOTH SIDE	Refer TCS, Annexure-II Schedule B
210	34100	34110	RHS	Refer TCS, Annexure-II Schedule B
211	34110	34190	BOTH SIDE	Refer TCS, Annexure-II Schedule B
212	34190	34240	RHS	Refer TCS, Annexure-II Schedule B
213	34290	34300	BOTH SIDE	Refer TCS, Annexure-II Schedule B
214	34300	34310	LHS	Refer TCS, Annexure-II Schedule B
215	34310	34860	BOTH SIDE	Refer TCS, Annexure-II Schedule B
216	34860	34880	LHS	Refer TCS, Annexure-II Schedule B
217	34880	34890	BOTH SIDE	Refer TCS, Annexure-II Schedule B
218	34890	34900	LHS	Refer TCS, Annexure-II Schedule B

219	34900	34930	BOTH SIDE	Refer TCS, Annexure-II Schedule B
220	34930	34950	LHS	Refer TCS, Annexure-II Schedule B
221	35000	35110	BOTH SIDE	Refer TCS, Annexure-II Schedule B
222	35110	35120	RHS	Refer TCS, Annexure-II Schedule B
223	35130	35140	RHS	Refer TCS, Annexure-II Schedule B
224	35140	35180	BOTH SIDE	Refer TCS, Annexure-II Schedule B
225	35180	35190	RHS	Refer TCS, Annexure-II Schedule B
226	35568	35570	RHS	Refer TCS, Annexure-II Schedule B
227	35608	35660	BOTH SIDE	Refer TCS, Annexure-II Schedule B
228	35658	35760	RHS	Refer TCS, Annexure-II Schedule B
229	35758	36050	BOTH SIDE	Refer TCS, Annexure-II Schedule B
230	36088	36320	BOTH SIDE	Refer TCS, Annexure-II Schedule B
231	36318	36350	RHS	Refer TCS, Annexure-II Schedule B
232	36418	36440	LHS	Refer TCS, Annexure-II Schedule B
233	36438	36540	BOTH SIDE	Refer TCS, Annexure-II Schedule B
234	36538	36560	LHS	Refer TCS, Annexure-II Schedule B
235	36558	37210	BOTH SIDE	Refer TCS, Annexure-II Schedule B
236	37208	37240	RHS	Refer TCS, Annexure-II Schedule B
237	37358	37420	RHS	Refer TCS, Annexure-II Schedule B
238	37418	37530	BOTH SIDE	Refer TCS, Annexure-II Schedule B
239	37528	37600	LHS	Refer TCS, Annexure-II Schedule B
240	37598	37610	BOTH SIDE	Refer TCS, Annexure-II Schedule B
241	37608	37620	RHS	Refer TCS, Annexure-II Schedule B
242	37618	37690	BOTH SIDE	Refer TCS, Annexure-II Schedule B
243	37688	37700	RHS	Refer TCS, Annexure-II Schedule B
244	37698	38210	BOTH SIDE	Refer TCS, Annexure-II Schedule B
245	38208	38250	RHS	Refer TCS, Annexure-II Schedule B
246	38248	38300	BOTH SIDE	Refer TCS, Annexure-II Schedule B
247	38298	38320	RHS	Refer TCS, Annexure-II Schedule B
248	38378	38430	BOTH SIDE	Refer TCS, Annexure-II Schedule B
249	38428	38440	RHS	Refer TCS, Annexure-II Schedule B
250	38468	38530	RHS	Refer TCS, Annexure-II Schedule B
251	38568	38590	LHS	Refer TCS, Annexure-II Schedule B
252	38588	38650	BOTH SIDE	Refer TCS, Annexure-II Schedule B
253	38648	38670	LHS	Refer TCS, Annexure-II Schedule B
254	38668	38760	BOTH SIDE	Refer TCS, Annexure-II Schedule B
255	38758	38800	LHS	Refer TCS, Annexure-II Schedule B
256	38848	39130	BOTH SIDE	Refer TCS, Annexure-II Schedule B
257	39128	39140	RHS	Refer TCS, Annexure-II Schedule B
258	39138	39230	BOTH SIDE	Refer TCS, Annexure-II Schedule B
259	39228	39290	RHS	Refer TCS, Annexure-II Schedule B
260	39288	39360	BOTH SIDE	Refer TCS, Annexure-II Schedule B
261	39358	39380	RHS	Refer TCS, Annexure-II Schedule B
262	39378	39430	BOTH SIDE	Refer TCS, Annexure-II Schedule B

263	39428	39490	RHS	Refer TCS, Annexure-II Schedule B
264	39488	39840	BOTH SIDE	Refer TCS, Annexure-II Schedule B
265	39838	39870	RHS	Refer TCS, Annexure-II Schedule B
266	39878	40070	BOTH SIDE	Refer TCS, Annexure-II Schedule B
267	40068	40090	RHS	Refer TCS, Annexure-II Schedule B
268	40088	40140	BOTH SIDE	Refer TCS, Annexure-II Schedule B
269	40268	40350	RHS	Refer TCS, Annexure-II Schedule B
270	40418	40440	LHS	Refer TCS, Annexure-II Schedule B
271	40438	40460	BOTH SIDE	Refer TCS, Annexure-II Schedule B
272	40458	40470	LHS	Refer TCS, Annexure-II Schedule B
273	40468	40510	BOTH SIDE	Refer TCS, Annexure-II Schedule B
274	40508	40570	LHS	Refer TCS, Annexure-II Schedule B
275	40718	40730	RHS	Refer TCS, Annexure-II Schedule B
276	40728	40790	BOTH SIDE	Refer TCS, Annexure-II Schedule B
277	40788	40940	RHS	Refer TCS, Annexure-II Schedule B
278	40998	41190	BOTH SIDE	Refer TCS, Annexure-II Schedule B
279	41188	41210	LHS	Refer TCS, Annexure-II Schedule B
280	41208	41690	BOTH SIDE	Refer TCS, Annexure-II Schedule B
281	41688	41700	RHS	Refer TCS, Annexure-II Schedule B
282	41698	41810	BOTH SIDE	Refer TCS, Annexure-II Schedule B
283	41808	41880	RHS	Refer TCS, Annexure-II Schedule B
284	41878	41900	BOTH SIDE	Refer TCS, Annexure-II Schedule B
285	41898	41950	RHS	Refer TCS, Annexure-II Schedule B
286	41948	42030	BOTH SIDE	Refer TCS, Annexure-II Schedule B
287	42028	42080	RHS	Refer TCS, Annexure-II Schedule B
288	42078	42100	BOTH SIDE	Refer TCS, Annexure-II Schedule B
289	42098	42170	RHS	Refer TCS, Annexure-II Schedule B
290	42168	42250	BOTH SIDE	Refer TCS, Annexure-II Schedule B
291	42248	42330	RHS	Refer TCS, Annexure-II Schedule B
292	42328	44840	BOTH SIDE	Refer TCS, Annexure-II Schedule B
293	44908	44940	RHS	Refer TCS, Annexure-II Schedule B
294	44998	45030	RHS	Refer TCS, Annexure-II Schedule B
295	45028	45090	BOTH SIDE	Refer TCS, Annexure-II Schedule B
296	45088	45140	RHS	Refer TCS, Annexure-II Schedule B
297	45138	45170	BOTH SIDE	Refer TCS, Annexure-II Schedule B
298	45168	45240	RHS	Refer TCS, Annexure-II Schedule B
299	45238	45600	BOTH SIDE	Refer TCS, Annexure-II Schedule B
300	45598	45630	RHS	Refer TCS, Annexure-II Schedule B
301	45628	45690	BOTH SIDE	Refer TCS, Annexure-II Schedule B
302	45688	45780	RHS	Refer TCS, Annexure-II Schedule B
303	45818	45860	BOTH SIDE	Refer TCS, Annexure-II Schedule B
304	45858	45900	RHS	Refer TCS, Annexure-II Schedule B
305	45958	45980	RHS	Refer TCS, Annexure-II Schedule B
306	45978	46080	BOTH SIDE	Refer TCS, Annexure-II Schedule B

307	46078	46200	RHS	Refer TCS, Annexure-II Schedule B
308	46238	46270	RHS	Refer TCS, Annexure-II Schedule B
309	46278	46290	RHS	Refer TCS, Annexure-II Schedule B
310	46288	46370	BOTH SIDE	Refer TCS, Annexure-II Schedule B
311	46368	46390	RHS	Refer TCS, Annexure-II Schedule B
312	46388	46400	BOTH SIDE	Refer TCS, Annexure-II Schedule B
313	46398	46530	RHS	Refer TCS, Annexure-II Schedule B
314	46528	46880	BOTH SIDE	Refer TCS, Annexure-II Schedule B
315	46878	46900	RHS	Refer TCS, Annexure-II Schedule B
316	46898	46980	BOTH SIDE	Refer TCS, Annexure-II Schedule B
317	46978	47020	RHS	Refer TCS, Annexure-II Schedule B
318	47018	47140	BOTH SIDE	Refer TCS, Annexure-II Schedule B
319	47138	47200	RHS	Refer TCS, Annexure-II Schedule B
320	47278	47370	RHS	Refer TCS, Annexure-II Schedule B
321	47368	47460	BOTH SIDE	Refer TCS, Annexure-II Schedule B
322	47458	47470	LHS	Refer TCS, Annexure-II Schedule B
323	47478	47540	RHS	Refer TCS, Annexure-II Schedule B
324	47578	47630	RHS	Refer TCS, Annexure-II Schedule B
325	47628	47760	BOTH SIDE	Refer TCS, Annexure-II Schedule B
326	47758	47800	RHS	Refer TCS, Annexure-II Schedule B
327	47798	47900	BOTH SIDE	Refer TCS, Annexure-II Schedule B
328	47898	48010	RHS	Refer TCS, Annexure-II Schedule B
329	48008	48150	BOTH SIDE	Refer TCS, Annexure-II Schedule B
330	48148	48220	RHS	Refer TCS, Annexure-II Schedule B
331	48218	48240	BOTH SIDE	Refer TCS, Annexure-II Schedule B
332	48238	48260	RHS	Refer TCS, Annexure-II Schedule B
333	48258	48350	BOTH SIDE	Refer TCS, Annexure-II Schedule B
334	48348	48360	RHS	Refer TCS, Annexure-II Schedule B
335	48378	48410	RHS	Refer TCS, Annexure-II Schedule B
336	48428	48490	RHS	Refer TCS, Annexure-II Schedule B
337	48508	48520	RHS	Refer TCS, Annexure-II Schedule B
338	48518	48540	BOTH SIDE	Refer TCS, Annexure-II Schedule B
339	48538	48580	RHS	Refer TCS, Annexure-II Schedule B
340	48578	48620	BOTH SIDE	Refer TCS, Annexure-II Schedule B
341	48618	48670	RHS	Refer TCS, Annexure-II Schedule B
342	48668	48800	BOTH SIDE	Refer TCS, Annexure-II Schedule B
343	48798	48850	RHS	Refer TCS, Annexure-II Schedule B
344	48848	49010	BOTH SIDE	Refer TCS, Annexure-II Schedule B
345	49008	49020	RHS	Refer TCS, Annexure-II Schedule B
346	49018	49060	BOTH SIDE	Refer TCS, Annexure-II Schedule B
347	49058	49100	RHS	Refer TCS, Annexure-II Schedule B
348	49098	49140	BOTH SIDE	Refer TCS, Annexure-II Schedule B
349	49138	49410	RHS	Refer TCS, Annexure-II Schedule B
350	49408	49470	BOTH SIDE	Refer TCS, Annexure-II Schedule B

351	49468	49500	RHS	Refer TCS, Annexure-II Schedule B
352	49498	49530	BOTH SIDE	Refer TCS, Annexure-II Schedule B
353	49528	49560	RHS	Refer TCS, Annexure-II Schedule B
354	49558	49680	BOTH SIDE	Refer TCS, Annexure-II Schedule B
355	49678	49750	RHS	Refer TCS, Annexure-II Schedule B
356	49748	49970	BOTH SIDE	Refer TCS, Annexure-II Schedule B
357	50008	50150	BOTH SIDE	Refer TCS, Annexure-II Schedule B
358	50148	50250	RHS	Refer TCS, Annexure-II Schedule B
359	50248	50290	BOTH SIDE	Refer TCS, Annexure-II Schedule B
360	50288	50370	RHS	Refer TCS, Annexure-II Schedule B
361	50398	50460	BOTH SIDE	Refer TCS, Annexure-II Schedule B
362	50458	50600	RHS	Refer TCS, Annexure-II Schedule B
363	50598	50790	BOTH SIDE	Refer TCS, Annexure-II Schedule B
364	50788	50960	RHS	Refer TCS, Annexure-II Schedule B
365	50958	51010	BOTH SIDE	Refer TCS, Annexure-II Schedule B
366	51008	51100	RHS	Refer TCS, Annexure-II Schedule B
367	51098	51280	BOTH SIDE	Refer TCS, Annexure-II Schedule B
368	51288	51320	RHS	Refer TCS, Annexure-II Schedule B
369	51348	51460	RHS	Refer TCS, Annexure-II Schedule B
370	51458	51470	BOTH SIDE	Refer TCS, Annexure-II Schedule B
371	51468	51600	RHS	Refer TCS, Annexure-II Schedule B
372	51648	51660	BOTH SIDE	Refer TCS, Annexure-II Schedule B
373	51658	51730	RHS	Refer TCS, Annexure-II Schedule B
374	51728	51740	BOTH SIDE	Refer TCS, Annexure-II Schedule B
375	51738	51820	RHS	Refer TCS, Annexure-II Schedule B
376	51818	51840	BOTH SIDE	Refer TCS, Annexure-II Schedule B
377	51838	51920	RHS	Refer TCS, Annexure-II Schedule B
378	51928	52160	RHS	Refer TCS, Annexure-II Schedule B
379	52158	52210	BOTH SIDE	Refer TCS, Annexure-II Schedule B
380	52208	52240	RHS	Refer TCS, Annexure-II Schedule B
381	52248	52270	RHS	Refer TCS, Annexure-II Schedule B
382	52268	52570	BOTH SIDE	Refer TCS, Annexure-II Schedule B
383	52568	52580	RHS	Refer TCS, Annexure-II Schedule B
384	52578	52640	BOTH SIDE	Refer TCS, Annexure-II Schedule B
385	52638	52660	RHS	Refer TCS, Annexure-II Schedule B
386	52658	53050	BOTH SIDE	Refer TCS, Annexure-II Schedule B
387	53048	53070	RHS	Refer TCS, Annexure-II Schedule B
388	53068	53140	BOTH SIDE	Refer TCS, Annexure-II Schedule B
389	53138	53170	RHS	Refer TCS, Annexure-II Schedule B
390	53168	53240	BOTH SIDE	Refer TCS, Annexure-II Schedule B
391	53238	53330	RHS	Refer TCS, Annexure-II Schedule B
392	53418	53480	BOTH SIDE	Refer TCS, Annexure-II Schedule B
393	53478	53550	RHS	Refer TCS, Annexure-II Schedule B
394	53548	53580	BOTH SIDE	Refer TCS, Annexure-II Schedule B

395	53578	53640	RHS	Refer TCS, Annexure-II Schedule B
396	53638	53750	BOTH SIDE	Refer TCS, Annexure-II Schedule B
397	53748	53780	RHS	Refer TCS, Annexure-II Schedule B
398	53798	54040	BOTH SIDE	Refer TCS, Annexure-II Schedule B
399	54038	54050	RHS	Refer TCS, Annexure-II Schedule B
400	54048	54150	BOTH SIDE	Refer TCS, Annexure-II Schedule B
401	54148	54170	RHS	Refer TCS, Annexure-II Schedule B
402	54198	54240	BOTH SIDE	Refer TCS, Annexure-II Schedule B
403	54238	54270	RHS	Refer TCS, Annexure-II Schedule B
404	54268	54310	BOTH SIDE	Refer TCS, Annexure-II Schedule B
405	54308	54350	RHS	Refer TCS, Annexure-II Schedule B
406	54348	54390	BOTH SIDE	Refer TCS, Annexure-II Schedule B
407	54388	54450	RHS	Refer TCS, Annexure-II Schedule B
408	54488	54530	RHS	Refer TCS, Annexure-II Schedule B
409	54528	54540	BOTH SIDE	Refer TCS, Annexure-II Schedule B
410	54538	54570	RHS	Refer TCS, Annexure-II Schedule B
411	54568	54940	BOTH SIDE	Refer TCS, Annexure-II Schedule B
412	54938	54970	RHS	Refer TCS, Annexure-II Schedule B
413	55018	55040	RHS	Refer TCS, Annexure-II Schedule B
414	55038	55240	BOTH SIDE	Refer TCS, Annexure-II Schedule B
415	55238	55260	RHS	Refer TCS, Annexure-II Schedule B
416	55258	55330	BOTH SIDE	Refer TCS, Annexure-II Schedule B
417	55328	55370	RHS	Refer TCS, Annexure-II Schedule B
418	55388	55400	RHS	Refer TCS, Annexure-II Schedule B
419	55398	55450	BOTH SIDE	Refer TCS, Annexure-II Schedule B
420	55448	55460	RHS	Refer TCS, Annexure-II Schedule B
421	55458	55480	BOTH SIDE	Refer TCS, Annexure-II Schedule B
422	55478	55490	RHS	Refer TCS, Annexure-II Schedule B
423	55488	55700	BOTH SIDE	Refer TCS, Annexure-II Schedule B
424	55698	55720	RHS	Refer TCS, Annexure-II Schedule B
425	55728	55740	RHS	Refer TCS, Annexure-II Schedule B
426	55798	56100	BOTH SIDE	Refer TCS, Annexure-II Schedule B
427	56098	56140	RHS	Refer TCS, Annexure-II Schedule B
428	56138	56150	BOTH SIDE	Refer TCS, Annexure-II Schedule B
429	56148	56240	RHS	Refer TCS, Annexure-II Schedule B
430	56238	56270	BOTH SIDE	Refer TCS, Annexure-II Schedule B
431	56268	56310	RHS	Refer TCS, Annexure-II Schedule B
432	56308	56460	BOTH SIDE	Refer TCS, Annexure-II Schedule B
433	56458	56760	RHS	Refer TCS, Annexure-II Schedule B
434	56758	56790	BOTH SIDE	Refer TCS, Annexure-II Schedule B
435	56788	56820	RHS	Refer TCS, Annexure-II Schedule B
436	56828	56870	RHS	Refer TCS, Annexure-II Schedule B
437	56928	56950	RHS	Refer TCS, Annexure-II Schedule B
438	56948	57070	BOTH SIDE	Refer TCS, Annexure-II Schedule B

439	57068	57100	RHS	Refer TCS, Annexure-II Schedule B
440	57108	57120	BOTH SIDE	Refer TCS, Annexure-II Schedule B
441	57158	57400	BOTH SIDE	Refer TCS, Annexure-II Schedule B
442	57398	57410	RHS	Refer TCS, Annexure-II Schedule B
443	57408	57520	BOTH SIDE	Refer TCS, Annexure-II Schedule B
444	57518	57550	RHS	Refer TCS, Annexure-II Schedule B
445	57588	57650	RHS	Refer TCS, Annexure-II Schedule B
446	57648	57980	BOTH SIDE	Refer TCS, Annexure-II Schedule B
447	57978	58010	RHS	Refer TCS, Annexure-II Schedule B
448	58028	58198	RHS	Refer TCS, Annexure-II Schedule B

Note: The sections indicated above are inclusive of the section of the structure/Minor Bridge/Major Bridge etc. In case, the definite outfall is not available, a rainwater harvesting system shall be provided at the deepest location for dispersal of water.

6.2 Unlined Drains as per typical cross-section other than above mentioned locations shall be provided in the entire project length which gets terminated at all cross road locations. In case, the definite outfall is not available, a rainwater harvesting system shall be provided at the deepest location for dispersal of water.

6.3 Drainage where Embankment Height is more than 3m

Drainage chutes shall be provided at suitable intervals on embankment slopes. The drainage arrangement shall include kerb, cement concrete drainage channel at the edge roadway. Cement Concrete Chutes, CC bedding, energy dissipation basin, etc. Mountable Kerb shall be provided beyond the post of MBCB to channelize storm water. (IRC: SP:73-2018)

6.4 Drainage for Structures

A suitable drainage arrangement for draining storm water from deck slab shall be provided. Water shall not fall on any surface of the structures, or remain standing or flowing over the road below structure.

6.5 Drainage for Underpass and Subways Structures

A suitable drainage arrangement for draining storm water from Underpass and Subways shall be provided

6.6 Drainage arrangement of Retaining Structures

Vertical Drop-down drainage pipes with suitable cleaning provision shall be provided at suitable interval Drainage fixtures and dropdown pipes shall be of rigid, corrosion resistant material not less than 100mm dia. The Storm water of main carriageway draining on service road is not permitted.

7. Design of Structures

7.1 General

Project Highway is proposed to be constructed to two lane configurations. Special vehicle loading is to be considered in design of all bridges, culverts and structures.

Wherever cushion is available as per the profile, the pavement layers (DBM, BC, etc.) shall be continued over the structures to ensure smooth riding quality of the project highway. These structures shall be designed considering the dead load of these pavement layers

All major structures will be designed preferably as continuous slab (Deck Continuity) to reduce the number of expansion joints on the MJB/ ROBs/ flyover/ Interchange etc.

Location of structures is indicative which may change as per direction of Authority/IE. Any change in span arrangement of structures up to 10 % (Ten percent) as per direction of authority / IE shall not constitute Change of Scope.

7.1.1 All bridges, culverts and structures shall be designed for IRC class Special Vehicle (SV) loading as per IRC: 6 and constructed in accordance with section-7 of the manual and shall conform to the cross-sectional features and other details specified therein.

- 7.1.2 The overall width of the structures shall be as given in Para 7.3 of Annex-I of Schedule- B.
- 7.1.3 The Safety Barrier and Footpath on Bridges and ROB shall be provided as per TCS mentioned in Annexure-II of Schedule B.
- 7.1.4 All bridges shall be high level bridges.
- 7.1.5 All structures shall be designed to carry utility services on outer side of RCC barrier/Railing as per site requirement.
- 7.1.6 Cross section of the new culverts and bridges at deck level for the Project Highway shall conform to the typical cross sections given in of the Schedule-B. The Road Width at all Structures shall be as per the GADs of the respective Structure as available in the Structure Drawing Volume.

Culverts

7.1.7 The Overall width of all culverts shall be equal to the roadway width of the approaches unless specifically brought in Schedule-B. The overall width of culverts shall include width of main carriageway and slip/service roads/Entry ramps/ Exit Ramps/ Acceleration/Deceleration lanes, etc. All culverts shall also be continued in median and in gap between main carriageway and service road.

7.1.7 New / Reconstruction of existing Hume pipe culverts: The existing culverts at the following locations shall be reconstructed as new culverts: -

Sr. No.	Chainage	Structure Type	Remark
1	0+280	SINGLE HP	Pipe Culvert
2	0+620	SINGLE HP	Pipe Culvert
3	1+820	SINGLE HP	Pipe Culvert
4	2+120	SINGLE HP	Pipe Culvert
5	2+720	SINGLE HP	Pipe Culvert
6	3+475	SINGLE HP	Pipe Culvert
7	3+910	SINGLE HP	Pipe Culvert
8	4+435	SINGLE HP	Pipe Culvert
9	4+905	SINGLE HP	Pipe Culvert
10	5+264	SINGLE HP	Pipe Culvert
11	5+870	DOUBLE HP	Pipe Culvert
12	6+196	SINGLE HP	Pipe Culvert
13	6+620	SINGLE HP	Pipe Culvert
14	6+934	SINGLE HP	Pipe Culvert
15	7+520	SINGLE HP	Pipe Culvert
16	7+820	SINGLE HP	Pipe Culvert
17	8+317	SINGLE HP	Pipe Culvert
18	8+520	SINGLE HP	Pipe Culvert
19	8+820	SINGLE HP	Pipe Culvert
20	9+120	SINGLE HP	Pipe Culvert
21	9+703	SINGLE HP	Pipe Culvert

22	10+020	SINGLE HP	Pipe Culvert
23	10+350	SINGLE HP	Pipe Culvert
24	11+003	SINGLE HP	Pipe Culvert
25	11+296	SINGLE HP	Pipe Culvert
26	11+970	SINGLE HP	Pipe Culvert
27	12+770	SINGLE HP	Pipe Culvert
28	13+223	SINGLE HP	Pipe Culvert
29	13+448	SINGLE HP	Pipe Culvert
30	14+020	SINGLE HP	Pipe Culvert
31	14+868	SINGLE HP	Pipe Culvert
32	15+255	SINGLE HP	Pipe Culvert
33	15+577	SINGLE HP	Pipe Culvert
34	15+770	SINGLE HP	Pipe Culvert
35	16+032	SINGLE HP	Pipe Culvert
36	16+320	SINGLE HP	Pipe Culvert
37	16+580	SINGLE HP	Pipe Culvert
38	16+960	SINGLE HP	Pipe Culvert
39	17+260	SINGLE HP	Pipe Culvert
40	17+634	SINGLE HP	Pipe Culvert
41	18+170	SINGLE HP	Pipe Culvert
42	18+278	SINGLE HP	Pipe Culvert
43	18+731	SINGLE HP	Pipe Culvert
44	19+445	SINGLE HP	Pipe Culvert
45	19+670	SINGLE HP	Pipe Culvert
46	20+126	SINGLE HP	Pipe Culvert
47	20+463	SINGLE HP	Pipe Culvert
48	21+420	SINGLE HP	Pipe Culvert
49	22+205	SINGLE HP	Pipe Culvert
50	22+452	SINGLE HP	Pipe Culvert
51	22+803	DOUBLE HP	Pipe Culvert
52	22+968	DOUBLE HP	Pipe Culvert
53	23+273	DOUBLE HP	Pipe Culvert
54	24+050	SINGLE HP	Pipe Culvert
55	25+138	SINGLE HP	Pipe Culvert
56	25+380	SINGLE HP	Pipe Culvert
57	25+600	SINGLE HP	Pipe Culvert
58	26+014	SINGLE HP	Pipe Culvert
59	26+262	DOUBLE HP	Pipe Culvert
60	26+420	DOUBLE HP	Pipe Culvert
61	27+013	DOUBLE HP	Pipe Culvert
62	27+740	SINGLE HP	Pipe Culvert
63	28+365	SINGLE HP	Pipe Culvert
64	29+375	SINGLE HP	Pipe Culvert
65	29+978	DOUBLE HP	Pipe Culvert
66	30+228	SINGLE HP	Pipe Culvert
67	30+674	SINGLE HP	Pipe Culvert

68	31+815	DOUBLE HP	Pipe Culvert
69	31+870	DOUBLE HP	Pipe Culvert
70	32+020	DOUBLE HP	Pipe Culvert
71	32+230	DOUBLE HP	Pipe Culvert
72	32+445	DOUBLE HP	Pipe Culvert
73	32+585	DOUBLE HP	Pipe Culvert
74	32+600	DOUBLE HP	Pipe Culvert
75	32+740	DOUBLE HP	Pipe Culvert
76	32+820	DOUBLE HP	Pipe Culvert
77	33+647	SINGLE HP	Pipe Culvert
78	34+870	DOUBLE HP	Pipe Culvert
79	35+198	SINGLE HP	Pipe Culvert
80	35+827	DOUBLE HP	Pipe Culvert
81	36+005	DOUBLE HP	Pipe Culvert
82	36+668	DOUBLE HP	Pipe Culvert
83	37+378	DOUBLE HP	Pipe Culvert
84	37+705	DOUBLE HP	Pipe Culvert
85	38+070	DOUBLE HP	Pipe Culvert
86	38+236	DOUBLE HP	Pipe Culvert
87	38+540	DOUBLE HP	Pipe Culvert
88	38+655	DOUBLE HP	Pipe Culvert
89	39+150	DOUBLE HP	Pipe Culvert
90	39+465	DOUBLE HP	Pipe Culvert
91	40+335	DOUBLE HP	Pipe Culvert
92	40+530	DOUBLE HP	Pipe Culvert
93	40+715	DOUBLE HP	Pipe Culvert
94	41+845	DOUBLE HP	Pipe Culvert
95	42+210	DOUBLE HP	Pipe Culvert
96	44+180	SINGLE HP	Pipe Culvert
97	44+550	SINGLE HP	Pipe Culvert
98	44+690	SINGLE HP	Pipe Culvert
99	45+240	DOUBLE HP	Pipe Culvert
100	45+670	DOUBLE HP	Pipe Culvert
101	45+990	DOUBLE HP	Pipe Culvert
102	46+490	SINGLE HP	Pipe Culvert
103	46+670	SINGLE HP	Pipe Culvert
104	46+890	SINGLE HP	Pipe Culvert
105	46+940	SINGLE HP	Pipe Culvert
106	47+620	DOUBLE HP	Pipe Culvert
107	47+960	SINGLE HP	Pipe Culvert
108	48+855	SINGLE HP	Pipe Culvert
109	49+130	SINGLE HP	Pipe Culvert
110	49+230	SINGLE HP	Pipe Culvert
111	49+590	SINGLE HP	Pipe Culvert
112	50+020	SINGLE HP	Pipe Culvert
113	50+545	SINGLE HP	Pipe Culvert

114	51+080	SINGLE HP	Pipe Culvert
115	52+930	DOUBLE HP	Pipe Culvert
116	53+180	DOUBLE HP	Pipe Culvert
117	53+510	DOUBLE HP	Pipe Culvert
118	54+290	SINGLE HP	Pipe Culvert
119	54+820	SINGLE HP	Pipe Culvert
120	55+020	DOUBLE HP	Pipe Culvert
121	55+500	SINGLE HP	Pipe Culvert
122	56+195	SINGLE HP	Pipe Culvert
123	56+530	SINGLE HP	Pipe Culvert
124	56+620	SINGLE HP	Pipe Culvert
125	57+370	DOUBLE HP	Pipe Culvert
126	57+430	SINGLE HP	Pipe Culvert
127	58+150	SINGLE HP	Pipe Culvert

7.1.9 Widening of existing RCC pipe culverts

All existing culverts which are to be retained shall be widened to the proposed roadway width of the Project Highway as per the typical cross section given in section 7 of the Manual unless specifically brought out in Schedule-B. Repairs and strengthening of existing structures where required shall be carried out.

Sr. No.	Design Chainage	Culvert Type	Skew Angle	Span/Opening (m)	New/ Reconstruction	Culvert Crossing Type (Balancing/Stream , etc.)	Remarks
NIL							

7.1.10 Construction of Box Culverts:

New culverts (given in table below) shall be constructed for width equal to the proposed roadway width of the Project Highway (unless specifically indicated in the Schedule-B) & as per typical cross-section given in schedule B unless specifically brought out in Schedule-B. The details are given as under:

Box Culverts

Sr. No.	Chainage	Structure Type	Remark
1	33+482	Box Culvert	(1X6X3)
2	45+810	Box Culvert	(1X5X3)
3	46+255	Box Culvert	(1X5X3)
4	48+540	Box Culvert	(1X5X3)
5	51+950	Box Culvert	(1X5X3)
6	52+128	Box Culvert	(1X5X3)
7	52+265	Box Culvert	(1X5X3)
8	52+490	Box Culvert	(1X5X3)
9	56+755	Box Culvert	(1X5X3)

10	58+080	Box Culvert	(1X5X3)
----	--------	-------------	---------

Note:

1. The width of the culvert shall be as indicated in the GAD provided in drawing volume.
2. Location of culverts may be subjected to change in location (to accommodate any Existing Underground utilities or any other site-specific condition) which may be finalized in consultation with Independent Engineer and if required after joint survey with relevant Authority. However, such a change in location shall not be considered as Change in Scope.
3. The culverts of the same type and size as provided in Main Carriageway shall also be provided in service road (one or both sides)/ slip/service roads/Entry ramps/ Exit Ramps/ Acceleration/Deceleration lanes, etc. as indicated in Plan & Profile drawing.
4. Special Vehicle loading as per IRC-6 is to be considered for design of all Structures.

7.1.11 Widening of existing box culverts

All existing culverts which are to be retained shall be widened to the proposed roadway width of the Project Highway as per the typical cross section given in Schedule-B. Repairs and strengthening of existing structures where required shall be carried out.

Sr. No.	Design Chainage (Km)	Culvert Type	Skew Angle	Clear Span Arrangement (m)	Remarks
NIL					

7.1.12 Culverts on Crossroads:

Sr. No.	Design Chainage (Km)	Culvert Type	Skew Angle	Clear Span Arrangement (m)	Remarks
NIL					

7.1.13 Utility in form of NP-4 RCC Pipe dia 600 mm shall be provided across the Project Highway @ 0.50 km c/c and along with inspection chamber where directed for crossing of utilities anywhere as per manual (Clause 2.16) requirements. Location for such utility crossing shall be finalized in consultation with Engineer.

Location for utility Ducts

Sr. No.	Design Chainage (Km)		Remarks
	From	To	
As per entire Project length			

The exact location of the utility ducts shall be finalized in consultation with IE.

7.1.14 Drain out Culverts: The: The drainage plan shall be designed to discharge the drain water to the nearest Natural choe/Nala/river/Channel

7.2 Bridges

7.2.1 Existing bridges to be re-constructed/widened:

1. Existing bridges proposed for reconstructed as new structures:

Sr. No.	Design Chainage (Km)	Total Proposed length (m) (Square Span)	Type of Crossing	Total Proposed width (m)	Typical cross section of Manual	Skew Angle
NIL						

7.2.2 **Additional New Bridges:** New bridges at the following locations on the Project Highway shall be constructed. GADS for the new bridges are attached in the drawings folder.

- **Minor Bridge**

7.3

S.no	Design Ch	Span	Carriageway Width	Type of Structure	Remarks
1	0+833	(1X25)	Carriageway Width = 13.0 m Footpath width= 3.0m (2x1.5m) Width of Crash Barrier = 1.0m (2x0.5m) Width of Railings = 1.0m (2x0.5m) Overall width = 18.0 m	PSC GIRDER	Minor Bridge
2	1+226	(1X45)		PSC GIRDER	Minor Bridge
3	11+561	(1X15)		BOX TYPE	Minor Bridge
4	12+343	(1X20)		PSC GIRDER	Minor Bridge
5	12+517	(1X15)		BOX TYPE	Minor Bridge
6	15+366	(2X30)		PSC GIRDER	Minor Bridge
7	20+586	(1X40)		PSC GIRDER	Minor Bridge
8	20+858	(1X30)		PSC GIRDER	Minor Bridge
9	20+966	(1X45)		PSC GIRDER	Minor Bridge
10	21+200	(2X30)	Carriageway Width = 13.0 m Footpath width= 3.0m (2x1.5m) Width of Crash Barrier = 1.0m (2x0.5m) Width of Railings = 1.0m (2x0.5m) Overall width = 18.0 m	PSC GIRDER	Minor Bridge
11	21+766	(1X30)		PSC GIRDER	Minor Bridge
12	23+635	(1X35)		PSC GIRDER	Minor Bridge
13	23+926	(3X20)		PSC GIRDER	Minor Bridge
14	24+784	(1X25)		PSC GIRDER	Minor Bridge
15	25+937	(1X35)		PSC GIRDER	Minor Bridge
16	27+216	(2X30)		PSC GIRDER	Minor Bridge
17	28+757	(2X30)		PSC GIRDER	Minor Bridge

S.no	Design Ch	Span	Carriageway Width	Type of Structure	Remarks	
18	29+142	(2X25)	<p>Carriageway Width = 13.0 m Footpath width= 3.0m (2x1.5m) Width of Crash Barrier = 1.0m (2x0.5m) Width of Railings = 1.0m (2x0.5m) Overall width = 18.0 m</p>	PSC GIRDER	Minor Bridge	
19	30+120	(2X30)		PSC GIRDER	Minor Bridge	
20	31+648	(1X30)		PSC GIRDER	Minor Bridge	
21	32+308	(1X30)		PSC GIRDER	Minor Bridge	
22	34+245	(2X25)		PSC GIRDER	Minor Bridge	
23	34+960	(2X25)		PSC GIRDER	Minor Bridge	
24	35+355	(1X40)		PSC GIRDER	Minor Bridge	
25	35+662	(1X30)		PSC GIRDER	Minor Bridge	
26	36+070	(1X30)		PSC GIRDER	Minor Bridge	
27	36+360	(2X25)		PSC GIRDER	Minor Bridge	
28	38+342	(2X30)		PSC GIRDER	Minor Bridge	
29	38+795	(2X25)		PSC GIRDER	Minor Bridge	
30	39+870	(1X15)		<p>Carriageway Width = 13.0 m Footpath width= 3.0m (2x1.5m) Width of Crash Barrier = 1.0m (2x0.5m) Width of Railings = 1.0m (2x0.5m) Overall width = 18.0 m</p>	BOX TYPE	Minor Bridge
31	40+188	(2X30)			PSC GIRDER	Minor Bridge
32	40+625	(2X30)	PSC GIRDER		Minor Bridge	
33	40+935	(2X30)	PSC GIRDER		Minor Bridge	
34	44+935	(2X30)	PSC GIRDER		Minor Bridge	
35	47+245	(1X40)	PSC GIRDER		Minor Bridge	
36	47+530	(1X40)	PSC GIRDER		Minor Bridge	
37	48+410	(1X25)	PSC GIRDER		Minor Bridge	
38	49+970	(1X40)	PSC GIRDER		Minor Bridge	
39	50+370	(1X30)	PSC GIRDER		Minor Bridge	

S.no	Design Ch	Span	Carriageway Width	Type of Structure	Remarks
40	51+320	(1X30)		PSC GIRDER	Minor Bridge
41	51+610	(1X40)		PSC GIRDER	Minor Bridge
42	53+360	(2X30)		PSC GIRDER	Minor Bridge
43	53+785	(1X20)		PSC GIRDER	Minor Bridge
44	54+175	(1X30)		PSC GIRDER	Minor Bridge
45	54+450	(1X40)		PSC GIRDER	Minor Bridge
46	54+965	(2X25)		PSC GIRDER	Minor Bridge
47	55+375	(1X25)		PSC GIRDER	Minor Bridge
48	55+740	(2X30)		PSC GIRDER	Minor Bridge
49	56+865	(2X30)		PSC GIRDER	Minor Bridge
50	57+120	(1X40)		PSC GIRDER	Minor Bridge
51	57+550	(1X40)		PSC GIRDER	Minor Bridge
52	58+015	(1X25)		PSC GIRDER	Minor Bridge

• Major Bridge: -

Sl. No.	Bridge location	Salient details of existing bridge		Proposed Span Arrangement (m)	Carriageway Width	Remarks
	(km)	Type of Structures	Span Arrangement and Total Vent way (No. x Length) (m)			
1	5+676	PSC GIRDER	135	(3X45) MJB cum VUP	Carriageway Width = 13.0 m Footpath width= 3.0m (2x1.5m) Width of Crash Barrier = 1.0m (2x0.5m) Width of Railings = 1.0m (2x0.5m) Overall width = 18.0 m	
2	31+258	PSC GIRDER	105	(3x35)		
3	33+366	PSC GIRDER	70	(2X35)		
4	58+100	PSC GIRDER	90	(2X45)		

7.3.1 The railings of existing bridges shall be replaced by crash barriers at the following locations:

Sr. No.	Design Chainage (Km)		Length (Km)	Remarks
	From	To		
NIL				

7.3.2 The existing bridges/ RoB / Grade Separators/ RUB retained on the project highway shall be upgraded and rehabilitation measures/proposals shall be specified as follows:

Sr. No.	Location at (Km)	Rehabilitation Proposals	Remarks
NIL			

7.3.3 Structures in marine environment: - NIL

7.4 Low Height subway (LHS)

7.4.1 Low Height subway (LHS) shall be provided at the following locations, as per GAD drawings attached:

S. No.	Location of Level crossing (Chainage km)	Number and length of span(m)
1	Existing Road Chainage – 0+537	7X4.5
2	Existing Road Chainage – 5+118	7X4.5

Low Height subway (LHS) shall be provided at above level crossings location as per Standard drawing of railway.

7.5 Grade Separated Structures

The grade separated structures shall be provided at the locations and of the type and length specified in paragraphs 2.9, 2.10 and 3 of Annexure-1 of Schedule-B.

7.6 FoB/Skywalks

Sr. No.	Location at (Km)	FOB Type	Remarks
NIL			

7.7 A summary of culverts, Bridges and structures shall be presented as follows:

Sr. No.	Name of the structure	Total Numbers	Remarks
1.	Major Bridge	3	
2.	Minor Bridge	52	
3.	ROB	-	
4.	VUP cum MJB	1	
5.	Box Culverts	10	
6.	Pipe Culverts	127	
7	Low Height subway (LHS)	2	

8. Traffic Control Devices and Road Safety Works

8.1 Traffic control devices and road safety works shall be provided in accordance with Section 9 of the IRC: SP: 73-2018.

8.2 Traffic Signs:

Traffic signs shall be provided as per IRC: 67-2022 as mentioned in Schedule-C

8.3 Pavement Marking:

Pavement markings shall be completed as per IRC: 35-2015 as mentioned in Schedule-C.

8.4 Safety Barrier:

The safety barriers shall be provided at high embankment, sharp curve , water body ,obstacle in clear zone and in accordance with Clause 9.7 of IRC:SP:73-2018

9. Roadside furniture

9.1 It shall be provided as per the details mentioned in Schedule-C.

10. Hazardous locations

The safety barriers shall be provided at the following hazardous location such as ponds, well, electric sub- station, Electric tower, spilt carriageway, etc.

Sr. No.	Location stretches (Km)		Type of safety Barrier	LHS/RHS
	From	To		
NIL				

11. Special Requirement:

Retaining Structure and protection works shall be provided at locations as indicated below and as provided in TCS schedule in Cl. 2.10 of schedule-B. The length of the Retaining wall/RE wall/Toe wall as indicated below is excluding the sections of Major Bridges, Minor Bridges, LVUP, VUP and Flyover, however the length is inclusive of the sections of Box Crossing, Box culverts.

11.1 Stretch for provision of RCC/Retaining wall

Retaining Wall location as below: -

RETAINING WALL LHS			
FROM	TO	LENGTH	SIDE
160	290	130	LHS
830	850	20	LHS
1260	1270	10	LHS
5530	5550	20	LHS
5650	6010	360	LHS
12340	12360	20	LHS
12520	12530	10	LHS
15330	15410	80	LHS
TOTAL		650	
RETAINING WALL RHS			
240	310	70	RHS
830	840	10	RHS
1220	1230	10	RHS
5530	5580	50	RHS
5650	6000	350	RHS
12340	12390	50	RHS
12510	12520	10	RHS
15360	15410	50	RHS
TOTAL		600	

Toe Wall location as below: -

TOE WALL DETAILS						
S.NO	Start Chainage	End Chainage	Total Length	TCS	Total Length	SIDE
1	70	80	10	TCS 1DB	10	LHS
2	150	160	10	TCS 1DB	10	LHS
3	230	240	10	TCS 1DD	10	RHS
4	290	310	20	TCS 1DC	20	LHS
5	310	350	40	TCS 1D	80	BOTH SIDE
6	820	830	10	TCS 1DA	10	RHS
7	1170	1180	10	TCS 1DA	10	RHS
8	1210	1220	10	TCS 1DA	10	RHS
9	1270	1280	10	TCS 1DB	10	LHS
10	5300	5310	10	TCS 1DB	10	LHS
11	5320	5350	30	TCS 1D	60	BOTH SIDE

12	5350	5360	10	TCS 1DA	10	RHS
13	5380	5390	10	TCS 1DB	10	LHS
14	5390	5530	140	TCS 1D	280	BOTH SIDE
15	5550	5580	30	TCS 1DC	30	LHS
16	5580	5650	70	TCS 1D	140	BOTH SIDE
17	6000	6010	10	TCS 1DD	10	RHS
18	6010	6070	60	TCS 1D	120	BOTH SIDE
19	6070	6080	10	TCS 1DB	10	LHS
20	6080	6090	10	TCS 1D	20	BOTH SIDE
21	6090	6150	60	TCS 1DB	60	LHS
22	6180	6230	50	TCS 1D	100	BOTH SIDE
23	6230	6240	10	TCS 1DA	10	RHS
24	6340	6350	10	TCS 1DB	10	LHS
25	6350	6370	20	TCS 1DA	20	RHS
26	10860	10920	60	TCS 1DB	60	LHS
27	10940	10980	40	TCS 1DB	40	LHS
28	11000	11060	60	TCS 1DA	60	RHS
29	11070	11080	10	TCS 1DA	10	RHS
30	11090	11170	80	TCS 1DB	80	LHS
31	11170	11200	30	TCS 1DA	30	RHS
32	11270	11280	10	TCS 1DA	10	RHS
33	11280	11290	10	TCS 1D	20	BOTH SIDE
34	11290	11300	10	TCS 1DA	10	RHS
35	11450	11470	20	TCS 1DB	20	LHS
36	11570	11600	30	TCS 1DB	30	LHS
37	11600	11620	20	TCS 1D	40	BOTH SIDE
38	11620	11660	40	TCS 1DB	40	LHS
39	12390	12420	30	TCS 1DA	30	RHS
40	12420	12430	10	TCS 1D	20	BOTH SIDE
41	12430	12480	50	TCS 1DB	50	LHS
42	12500	12510	10	TCS 1DA	10	RHS
43	12510	12520	10	TCS 1DC	10	LHS
44	12660	12840	180	TCS 1D	360	BOTH SIDE
45	12840	12860	20	TCS 1DA	20	RHS
46	15320	15330	10	TCS 1DB	10	LHS
47	15410	15420	10	TCS 1DB	10	LHS
48	20950	20960	10	TCS 3D	10	RHS
49	21480	21500	20	TCS 4D	20	LHS
50	21500	21510	10	TCS 1DB	10	LHS
51	21670	21690	20	TCS 3G	20	RHS
52	21710	21720	10	TCS 3D	10	RHS
53	21800	21810	10	TCS 4D	10	LHS
54	22760	22770	10	TCS 3D	10	RHS
55	22870	22890	20	TCS 1DA	20	RHS
56	23530	23550	20	TCS 3D	20	RHS
57	24030	24050	20	TCS 4D	20	LHS
58	26150	26160	10	TCS 3G	10	RHS
59	26410	26420	10	TCS 4D	10	LHS
60	26430	26440	10	TCS 1DB	10	LHS

TOE WALL DETAILS						
S.NO	Start Chainage	End Chainage	Total Length	TCS	Total Length	SIDE
61	26940	26950	10	TCS 3D	10	RHS
62	27180	27190	10	TCS 3D	10	RHS
63	29120	29130	10	TCS 4D	10	LHS
64	29990	30000	10	TCS 3D	10	RHS
65	30070	30080	10	TCS 3G	10	RHS
66	33320	33330	10	TCS 3D	10	RHS
67	33330	33340	10	TCS 1DA	10	RHS
68	33360	33370	10	TCS 1DC	10	LHS
69	34200	34210	10	TCS 3G	10	RHS
70	34930	34940	10	TCS 4D	10	LHS
71	36048	36058	10	TCS 1DD	10	RHS
72	36328	36338	10	TCS 3D	10	RHS
73	36398	36418	20	TCS 1DB	20	LHS
74	36418	36428	10	TCS 4D	10	LHS
75	37278	37298	20	TCS 1DC	20	LHS
76	37298	37308	10	TCS 1DD	10	RHS
77	37308	37318	10	TCS 1DB	10	LHS
78	38298	38308	10	TCS 3G	10	RHS
79	38458	38468	10	TCS 1DC	10	LHS
80	38768	38778	10	TCS 4D	10	LHS
81	40268	40278	10	TCS 3G	10	RHS
82	40578	40588	10	TCS 1DD	10	RHS
83	40698	40708	10	TCS 1DD	10	RHS
84	40848	40858	10	TCS 3D	10	RHS
85	40888	40898	10	TCS 3D	10	RHS
86	42308	42318	10	TCS 3G	10	RHS
87	44838	44848	10	TCS 1DB	10	LHS
88	44848	44858	10	TCS 1DD	10	RHS
89	44868	44888	20	TCS 1DC	20	LHS
90	45098	45118	20	TCS 3D	20	RHS
91	45198	45208	10	TCS 3D	10	RHS
92	45208	45218	10	TCS 3G	10	RHS
93	45788	45798	10	TCS 1DA	10	RHS
94	45868	45878	10	TCS 3D	10	RHS
95	45928	45948	20	TCS 1DC	20	LHS
96	45968	45978	10	TCS 3D	10	RHS
97	47198	47208	10	TCS 1DC	10	LHS
98	47218	47228	10	TCS 1DC	10	LHS
99	47458	47468	10	TCS 4D	10	LHS

100	47588	47598	10	TCS 3G	10	RHS
101	48498	48508	10	TCS 1DA	10	RHS
102	50218	50228	10	TCS 3G	10	RHS
103	50518	50528	10	TCS 3D	10	RHS
104	51288	51308	20	TCS 3D	20	RHS
105	51598	51608	10	TCS 1DC	10	LHS
106	51908	51918	10	TCS 3G	10	RHS
107	53328	53338	10	TCS 1DC	10	LHS
108	53768	53778	10	TCS 3D	10	RHS
109	54418	54438	20	TCS 3D	20	RHS
110	57098	57108	10	TCS 1DA	10	RHS
111	58038	58058	20	TCS 3G	20	RHS
112	58118	58128	10	TCS 3G	10	RHS
113	58158	58168	10	TCS 3G	10	RHS

Location/Length of Wall (Toe Wall & Retaining wall) is indicative which may change as per direction of Authority/IE. Any change in Length up to 10 % (Ten percent) as per direction of authority / IE shall not constitute Change of Scope.

12. Shifting of Utilities

The Concessionaire shall undertake the work of shifting of all utilities (including electric lines, water pipes, gas pipelines and telephone cables) to an appropriate location or alignment, in accordance with the provisions of Concession Agreement.

Shifting of obstructing existing utilities indicated in Schedule A to an appropriate location in accordance with the standards and specifications of concerned Utility Owning Department is part of the scope of work of the Concessionaire. The bidders may visit the site and assess the quantum of shifting of utilities for the project before submission of their bid. The specifications of concerned Utility Owning Department shall be applicable and followed.

Note 1: -

a. The type/spacing/size/specifications of poles/towers/lines/cables to be used in shifting work shall be as per the guidelines of Utility Owning Department and it is to be agreed solely between the Concessionaire and the Utility Owning Department. No change of scope shall be admissible and no cost shall be paid for using different type/spacing/size/specifications in shifted work in comparison to those in the existing work or for making any over head crossings to underground as per requirement of Utility owning Department and/or construction of project highway. The Concessionaire shall carry out joint inspection with Utility Owning Department and get the estimates from utility Owning Department. The assistance of the Authority is limited to giving forwarding letter on the proposal of Concessionaire. The decision/approval of Utility owning Department shall be binding on the Concessionaire.

b. The supervision charges at the rates/charges applicable of the Utility owning Department shall be paid directly by the Authority to the Utility owning Department as and when Concessionaire furnished demand of Utility owning Department along with a copy of estimated cost given by the latter.

c. The dismantled material/scrap of existing Utility to be shifted/dismantled shall belong to the Concessionaire who would be free to dispose-off the dismantled material as deemed fit by them unless the Concessionaire is required to deposit the dismantled material to Utility Owning Department as per the norms and practice and, in that case the amount of credit for dismantled material may be availed by the Concessionaire as per the conditions agreed between them.

d. The utilities shall be handed over after shifting work is completed to Utility Owning Department to their entire satisfaction. The maintenance liability shall rest with the Utility Owning Department after handing over process is complete as far as utility shifting works are concerned.

13. Work Zone Traffic Management Plans

The traffic diversion plans shall be prepared as per IRC SP 55 for smooth flow of traffic and safety or as provided in the Schedule-B. A diversion plan shall be proposed for construction of Culvert, Grade Separated Structures, Bridges, ROB/RUB, etc. and traffic management plan for widening/reconstruction of carriageway.

**Appendix B-1
Typical Cross Section**

S.NO	Start	End	Total	TCS	Discription
	Chainage	Chainage	Length		
1	0	70	70	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
2	70	80	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
3	80	90	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
4	90	110	20	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
5	110	150	40	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
6	150	160	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
7	160	230	70	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
8	230	240	10	TCS1DD	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill Rhs Toe wall and LHS Gabbion wall
9	240	290	50	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
10	290	310	20	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabbion wall
11	310	350	40	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
12	350	820	470	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
13	820	830	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
14	830	850	20	TCS 5	Structure
15	850	960	110	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
16	960	970	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
17	970	980	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
18	980	1170	190	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
19	1170	1180	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
20	1180	1210	30	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
21	1210	1220	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
22	1220	1230	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
23	1230	1270	40	TCS 5	
24	1270	1280	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
25	1280	2240	960	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height

26	2240	2260	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
27	2260	2340	80	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
28	2340	2380	40	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
29	2380	2790	410	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
30	2790	2800	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
31	2800	2810	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
32	2810	3480	670	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
33	3480	3490	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
34	3490	3570	80	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
35	3570	3590	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
36	3590	3700	110	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
37	3700	3730	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
38	3730	3790	60	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
39	3790	3850	60	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
40	3850	3970	120	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
41	3970	3980	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
42	3980	3990	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
43	3990	4000	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
44	4000	4020	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
45	4020	4220	200	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
46	4220	4270	50	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
47	4270	4330	60	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
48	4330	4340	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
49	4340	4350	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
50	4350	4360	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
51	4360	4370	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.

52	4370	4390	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with H> 9M Breast wall on Both side
53	4390	4400	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
54	4400	4410	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
55	4410	4420	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
56	4420	4430	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
57	4430	4460	30	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
58	4460	4470	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
59	4470	4480	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
60	4480	4490	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
61	4490	4500	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
62	4500	4510	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
63	4510	4540	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
64	4540	4550	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
65	4550	4570	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
66	4570	4590	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
67	4590	4620	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
68	4620	4860	240	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
69	4860	4890	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
70	4890	5300	410	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
71	5300	5310	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
72	5310	5320	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
73	5320	5350	30	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
74	5350	5360	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
75	5360	5380	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
76	5380	5390	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
77	5390	5530	140	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
78	5530	5550	20	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side

79	5550	5580	30	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabbion wall
80	5580	5650	70	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
81	5650	5680	30	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
82	5680	5810	130	TCS 5	
83	5810	6000	190	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
84	6000	6010	10	TCS 1DD	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill Rhs Toe wall and LHS Gabion wall
85	6010	6070	60	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
86	6070	6080	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
87	6080	6090	10	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
88	6090	6150	60	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
89	6150	6180	30	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
90	6180	6230	50	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
91	6230	6240	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
92	6240	6340	100	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
93	6340	6350	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
94	6350	6370	20	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
95	6370	7480	1110	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
96	7480	7510	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
97	7510	7950	440	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
98	7950	7960	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
99	7960	7970	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
100	7970	8120	150	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
101	8120	8140	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
102	8140	9300	1160	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
103	9300	9310	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
104	9310	9390	80	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
105	9390	9420	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.

106	9420	9730	310	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
107	9730	9770	40	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
108	9770	10860	1090	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
109	10860	10920	60	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
110	10920	10930	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
111	10930	10940	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
112	10940	10980	40	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
113	10980	11000	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
114	11000	11060	60	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
115	11060	11070	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
116	11070	11080	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
117	11080	11090	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
118	11090	11170	80	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
119	11170	11200	30	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
120	11200	11220	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
121	11220	11230	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
122	11230	11270	40	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
123	11270	11280	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
124	11280	11290	10	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
125	11290	11300	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
126	11300	11450	150	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
127	11450	11470	20	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
128	11470	11560	90	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
129	11560	11570	10	TCS 5	
130	11570	11600	30	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
131	11600	11620	20	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
132	11620	11660	40	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3

133	11660	11950	290	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
134	11950	11960	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
135	11960	11970	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
136	11970	12190	220	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
137	12190	12200	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
138	12200	12300	100	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
139	12300	12310	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
140	12310	12320	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
141	12320	12330	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
142	12330	12340	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
143	12340	12360	20	TCS 5	
144	12360	12390	30	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
145	12390	12420	30	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
146	12420	12430	10	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
147	12430	12480	50	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
148	12480	12500	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
149	12500	12510	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
150	12510	12520	10	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
151	12520	12540	20	TCS 5	
152	12540	12580	40	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
153	12580	12590	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
154	12590	12610	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
155	12610	12660	50	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
156	12660	12840	180	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
157	12840	12860	20	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
158	12860	12870	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
159	12870	12890	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
160	12890	12910	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.

161	12910	12930	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
162	12930	12950	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
163	12950	12960	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
164	12960	13030	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
165	13030	13040	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
166	13040	13060	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
167	13060	13110	50	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
168	13110	13160	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
169	13160	13170	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
170	13170	13380	210	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
171	13380	13420	40	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
172	13420	13450	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
173	13450	13500	50	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
174	13500	13540	40	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
175	13540	13630	90	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
176	13630	13640	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
177	13640	13650	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
178	13650	13690	40	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
179	13690	13710	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
180	13710	13840	130	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
181	13840	13860	20	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
182	13860	13870	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
183	13870	13890	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
184	13890	13900	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
185	13900	14320	420	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
186	14320	14340	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.

187	14340	14350	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
188	14350	14370	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
189	14370	14380	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
190	14380	14490	110	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
191	14490	14520	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
192	14520	14780	260	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
193	14780	14800	20	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
194	14800	15030	230	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
195	15030	15050	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
196	15050	15080	30	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
197	15080	15090	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
198	15090	15130	40	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
199	15130	15150	20	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
200	15150	15320	170	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
201	15320	15330	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
202	15330	15350	20	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
203	15350	15410	60	TCS 5	
204	15410	15420	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
205	15420	15490	70	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
206	15490	15500	10	TCS 5	
207	15500	15550	50	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
208	15550	15580	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
209	15580	16950	1370	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
210	16950	16980	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
211	16980	17060	80	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
212	17060	17190	130	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
213	17190	17210	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height

214	17210	17230	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
215	17230	17370	140	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
216	17370	17380	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
217	17380	17540	160	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
218	17540	17550	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
219	17550	18230	680	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
220	18230	18260	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
221	18260	20230	1970	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
222	20230	20260	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
223	20260	20270	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
224	20270	20300	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
225	20300	20330	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
226	20330	20400	70	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
227	20400	20410	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
228	20410	20430	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
229	20430	20480	50	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
230	20480	20540	60	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
231	20540	20580	40	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
232	20580	20620	40	TCS 5	
233	20620	20640	20	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
234	20640	20650	10	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
235	20650	20670	20	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
236	20670	20700	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
237	20700	20710	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
238	20710	20750	40	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
239	20750	20760	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
240	20760	20820	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

241	20820	20830	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
242	20830	20840	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
243	20840	20850	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
244	20850	20860	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
245	20860	20880	20	TCS 5	
246	20880	20890	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
247	20890	20910	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
248	20910	20930	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
249	20930	20940	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
250	20940	20950	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
251	20950	20960	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
252	20960	21000	40	TCS 5	
253	21000	21010	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
254	21010	21070	60	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
255	21070	21080	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breastwall on Both Side
256	21080	21110	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
257	21110	21120	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
258	21120	21130	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
259	21130	21180	50	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
260	21180	21210	30	TCS 5	
261	21210	21240	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
262	21240	21250	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
263	21250	21270	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
264	21270	21300	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
265	21300	21310	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
266	21310	21350	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
267	21350	21360	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.

268	21360	21400	40	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
269	21400	21460	60	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
270	21460	21470	10	TCS 4C	TCS-4C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
271	21470	21480	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
272	21480	21500	20	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
273	21500	21510	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
274	21510	21520	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
275	21520	21550	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
276	21550	21570	20	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
277	21570	21590	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
278	21590	21610	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
279	21610	21630	20	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
280	21630	21670	40	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
281	21670	21690	20	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
282	21690	21710	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
283	21710	21720	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
284	21720	21730	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
285	21730	21740	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
286	21740	21750	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
287	21750	21770	20	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
288	21770	21800	30	TCS 5	
289	21800	21810	10	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
290	21810	21820	10	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
291	21820	21830	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
292	21830	21920	90	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
293	21920	21940	20	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
294	21940	21980	40	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.

295	21980	21990	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
296	21990	22000	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
297	22000	22020	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
298	22020	22030	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
299	22030	22060	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
300	22060	22080	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
301	22080	22090	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
302	22090	22100	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
303	22100	22110	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
304	22110	22130	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
305	22130	22140	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
306	22140	22150	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
307	22150	22160	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
308	22160	22190	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
309	22190	22210	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9mBreast wall only RHS.
310	22210	22230	20	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
311	22230	22270	40	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
312	22270	22280	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
313	22280	22370	90	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
314	22370	22380	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
315	22380	22430	50	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9mBreast wall only RHS.
316	22430	22470	40	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
317	22470	22510	40	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9mBreast wall only RHS.
318	22510	22570	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
319	22570	22630	60	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9mBreast wall only RHS.

320	22630	22650	20	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
321	22650	22660	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
322	22660	22670	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
323	22670	22690	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9mBreast wall only RHS.
324	22690	22700	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
325	22700	22730	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
326	22730	22740	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
327	22740	22750	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
328	22750	22760	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
329	22760	22770	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
330	22770	22780	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
331	22780	22790	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
332	22790	22810	20	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
333	22810	22860	50	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
334	22860	22870	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
335	22870	22890	20	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
336	22890	22900	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
337	22900	22910	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
338	22910	22920	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
339	22920	22930	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
340	22930	22950	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9mBreast wall only RHS.
341	22950	22960	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
342	22960	22970	10	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
343	22970	22980	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
344	22980	22990	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL

345	22990	23040	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
346	23040	23110	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
347	23110	23150	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
348	23150	23200	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
349	23200	23220	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
350	23220	23230	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breastwall on Both Side
351	23230	23250	20	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
352	23250	23280	30	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
353	23280	23300	20	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
354	23300	23320	20	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
355	23320	23340	20	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
356	23340	23370	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
357	23370	23400	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
358	23400	23440	40	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
359	23440	23470	30	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
360	23470	23480	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
361	23480	23490	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
362	23490	23520	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
363	23520	23530	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
364	23530	23550	20	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
365	23550	23570	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
366	23570	23580	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
367	23580	23590	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
368	23590	23600	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
369	23600	23620	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS

370	23620	23630	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
371	23630	23660	30	TCS 5	
372	23660	23670	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
373	23670	23680	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
374	23680	23910	230	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
375	23910	23920	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
376	23920	23980	60	TCS 5	
377	23980	23990	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
378	23990	24020	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
379	24020	24030	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
380	24030	24050	20	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
381	24050	24060	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
382	24060	24070	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
383	24070	24120	50	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
384	24120	24180	60	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
385	24180	24190	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
386	24190	24200	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
387	24200	24210	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
388	24210	24220	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
389	24220	24330	110	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
390	24330	24360	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
391	24360	24370	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
392	24370	24390	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
393	24390	24420	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
394	24420	24450	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
395	24450	24460	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
396	24460	24510	50	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL

397	24510	24570	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
398	24570	24580	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
399	24580	24590	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
400	24590	24600	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
401	24600	24610	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
402	24610	24660	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
403	24660	24690	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
404	24690	24710	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
405	24710	24720	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
406	24720	24730	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
407	24730	24740	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
408	24740	24780	40	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
409	24780	24800	20	TCS 5	
410	24800	24820	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
411	24820	24830	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
412	24830	24840	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
413	24840	24850	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
414	24850	24880	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
415	24880	24910	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
416	24910	24940	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
417	24940	24970	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
418	24970	25000	30	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
419	25000	25030	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
420	25030	25060	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
421	25060	25070	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
422	25070	25080	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL

423	25080	25220	140	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
424	25220	25240	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
425	25240	25250	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
426	25250	25260	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
427	25260	25270	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
428	25270	25730	460	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
429	25730	25740	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
430	25740	25790	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
431	25790	25820	30	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
432	25820	25920	100	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
433	25920	25930	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
434	25930	25960	30	TCS 5	
435	25960	25970	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breastwall on Both Side
436	25970	25980	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
437	25980	26000	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
438	26000	26010	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
439	26010	26020	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
440	26020	26050	30	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
441	26050	26080	30	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
442	26080	26090	10	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
443	26090	26110	20	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
444	26110	26120	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
445	26120	26150	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
446	26150	26160	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
447	26160	26170	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
448	26170	26180	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.

449	26180	26190	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
450	26190	26210	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
451	26210	26230	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
452	26230	26270	40	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
453	26270	26280	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
454	26280	26290	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
455	26290	26320	30	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
456	26320	26340	20	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
457	26340	26390	50	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
458	26390	26410	20	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
459	26410	26420	10	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
460	26420	26430	10	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
461	26430	26440	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
462	26440	26450	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
463	26450	26460	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
464	26460	26480	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
465	26480	26610	130	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
466	26610	26660	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
467	26660	26680	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
468	26680	26690	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
469	26690	26780	90	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
470	26780	26800	20	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
471	26800	26810	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
472	26810	26840	30	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
473	26840	26850	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL

474	26850	26870	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
475	26870	26920	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
476	26920	26930	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
477	26930	26940	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
478	26940	26950	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
479	26950	26960	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
480	26960	26990	30	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
481	26990	27030	40	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
482	27030	27040	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
483	27040	27070	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
484	27070	27080	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
485	27080	27090	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
486	27090	27100	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
487	27100	27110	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
488	27110	27130	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
489	27130	27140	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
490	27140	27160	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
491	27160	27180	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
492	27180	27190	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
493	27190	27250	60	TCS 5	
494	27250	27280	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
495	27280	27300	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
496	27300	27330	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
497	27330	27350	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
498	27350	27360	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
499	27360	27380	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
500	27380	27430	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.

501	27430	27470	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
502	27470	27490	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
503	27490	27500	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
504	27500	27680	180	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
505	27680	27690	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
506	27690	27710	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
507	27710	27800	90	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
508	27800	27930	130	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
509	27930	28050	120	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
510	28050	28060	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
511	28060	28070	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
512	28070	28100	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
513	28100	28220	120	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
514	28220	28330	110	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
515	28330	28360	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
516	28360	28390	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
517	28390	28400	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
518	28400	28430	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
519	28430	28640	210	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
520	28640	28650	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
521	28650	28660	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
522	28660	28680	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
523	28680	28700	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
524	28700	28710	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
525	28710	28770	60	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
526	28770	28830	60	TCS 5	

527	28830	28870	40	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
528	28870	28940	70	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
529	28940	29040	100	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
530	29040	29050	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
531	29050	29100	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
532	29100	29110	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
533	29110	29120	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
534	29120	29130	10	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
535	29130	29180	50	TCS 5	
536	29180	29200	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
537	29200	29210	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
538	29210	29260	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
539	29260	29270	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
540	29270	29280	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
541	29280	29300	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
542	29300	29310	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
543	29310	29360	50	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
544	29360	29370	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
545	29370	29410	40	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
546	29410	29420	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
547	29420	29460	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
548	29460	29540	80	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
549	29540	29590	50	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
550	29590	29620	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
551	29620	29630	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
552	29630	29650	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

553	29650	29660	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
554	29660	29680	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
555	29680	29690	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
556	29690	29740	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
557	29740	29780	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
558	29780	29790	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
559	29790	29820	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
560	29820	29840	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
561	29840	29910	70	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
562	29910	29970	60	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
563	29970	29990	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
564	29990	30000	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
565	30000	30010	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
566	30010	30070	60	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
567	30070	30080	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
568	30080	30100	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
569	30100	30110	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
570	30110	30170	60	TCS 5	
571	30170	30180	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
572	30180	30190	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
573	30190	30200	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
574	30200	30230	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
575	30230	30240	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
576	30240	30270	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
577	30270	30310	40	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
578	30310	30460	150	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

579	30460	30470	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
580	30470	30690	220	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
581	30690	30700	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
582	30700	30750	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
583	30750	30760	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
584	30760	30950	190	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
585	30950	30970	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
586	30970	30980	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
587	30980	31000	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
588	31000	31030	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
589	31030	31090	60	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
590	31090	31110	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
591	31110	31120	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
592	31120	31140	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
593	31140	31150	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
594	31150	31190	40	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
595	31190	31210	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
596	31210	31220	10	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
597	31220	31240	20	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
598	31240	31310	70	TCS 5	
599	31310	31320	10	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
600	31320	31330	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
601	31330	31340	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
602	31340	31630	290	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
603	31630	31650	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.

604	31650	31680	30	TCS 5	
605	31680	31770	90	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
606	31770	31790	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
607	31790	31800	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
608	31800	31810	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
609	31810	31830	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
610	31830	31860	30	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
611	31860	31920	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
612	31920	31930	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
613	31930	32000	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
614	32000	32080	80	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
615	32080	32090	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
616	32090	32130	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
617	32130	32150	20	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
618	32150	32220	70	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
619	32220	32230	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
620	32230	32240	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
621	32240	32260	20	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
622	32260	32280	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
623	32280	32290	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
624	32290	32300	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
625	32300	32330	30	TCS 5	
626	32330	32340	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
627	32340	32390	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
628	32390	32420	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
629	32420	32430	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
630	32430	32450	20	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL

631	32450	32480	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
632	32480	32490	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
633	32490	32500	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
634	32500	32570	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
635	32570	32580	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
636	32580	32600	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
637	32600	32610	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
638	32610	32620	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
639	32620	32630	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
640	32630	32640	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
641	32640	32650	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
642	32650	32660	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
643	32660	32680	20	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
644	32680	32720	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
645	32720	32730	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
646	32730	32740	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
647	32740	32750	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
648	32750	32760	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
649	32760	32770	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
650	32770	32800	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
651	32800	32850	50	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
652	32850	32860	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
653	32860	32970	110	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
654	32970	32980	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
655	32980	33060	80	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

656	33060	33070	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
657	33070	33080	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
658	33080	33100	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
659	33100	33120	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
660	33120	33190	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
661	33190	33220	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
662	33220	33230	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
663	33230	33260	30	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
664	33260	33270	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
665	33270	33300	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
666	33300	33310	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
667	33310	33320	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
668	33320	33330	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
669	33330	33340	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
670	33340	33350	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
671	33350	33360	10	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
672	33360	33370	10	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
673	33370	33440	70	TCS 5	
674	33440	33510	70	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
675	33510	33520	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
676	33520	33550	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
677	33550	33560	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
678	33560	33580	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
679	33580	33610	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
680	33610	33620	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.

681	33620	33630	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
682	33630	33640	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
683	33640	33660	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
684	33660	33680	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
685	33680	33720	40	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
686	33720	34080	360	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
687	34080	34100	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
688	34100	34110	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
689	34110	34120	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
690	34120	34130	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
691	34130	34170	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
692	34170	34180	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
693	34180	34190	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
694	34190	34200	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
695	34200	34210	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
696	34210	34220	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
697	34220	34240	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
698	34240	34290	50	TCS 5	
699	34290	34300	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
700	34300	34310	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
701	34310	34320	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
702	34320	34330	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
703	34330	34340	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
704	34340	34350	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
705	34350	34380	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.

706	34380	34400	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
707	34400	34550	150	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
708	34550	34560	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
709	34560	34790	230	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
710	34790	34800	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
711	34800	34810	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
712	34810	34840	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
713	34840	34850	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
714	34850	34860	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
715	34860	34870	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
716	34870	34880	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
717	34880	34890	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
718	34890	34900	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
719	34900	34910	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
720	34910	34920	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
721	34920	34930	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
722	34930	34940	10	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
723	34940	34950	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
724	34950	35000	50	TCS 5	
725	35000	35060	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
726	35060	35070	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
727	35070	35080	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
728	35080	35110	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
729	35110	35120	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
730	35120	35130	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
731	35130	35140	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.

732	35140	35170	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
733	35170	35180	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
734	35180	35190	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
735	35190	35200	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
736	35200	35220	20	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
737	35220	35250	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
738	35250	35320	70	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
739	35320	35380	60	TCS 1D	TCS-1D Two Lane carriageway with Paved shoulder and Toe wall on both Side (H=3m to 4m)
740	35380	35460	80	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
741	35460	35510	50	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
742	35510	35550	40	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
743	35550	35690	140	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
744	35690	35870	180	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
745	35870	36000	130	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
746	36000	36040	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
747	36040	36050	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
748	36050	36060	10	TCS 1DD	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill Rhs Toe wall and LHS Gabion wall
749	36060	36090	30	TCS 5	
750	36090	36100	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
751	36100	36170	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
752	36170	36190	20	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
753	36190	36230	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
754	36230	36240	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
755	36240	36260	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
756	36260	36270	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL

757	36270	36320	50	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
758	36320	36330	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
759	36330	36340	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
760	36340	36350	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
761	36350	36400	50	TCS 5	
762	36400	36420	20	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
763	36420	36430	10	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
764	36430	36440	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
765	36440	36470	30	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
766	36470	36480	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
767	36480	36500	20	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
768	36500	36520	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
769	36520	36540	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
770	36540	36550	10	TCS 4C	TCS-4C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
771	36550	36560	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
772	36560	36580	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
773	36580	36590	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
774	36590	36600	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
775	36600	36610	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
776	36610	36630	20	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
777	36630	36640	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
778	36640	36670	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
779	36670	36680	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
780	36680	36690	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
781	36690	36700	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
782	36700	36740	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

783	36740	36750	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
784	36750	36800	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
785	36800	36870	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
786	36870	36910	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
787	36910	36920	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
788	36920	37100	180	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
789	37100	37110	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
790	37110	37120	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
791	37120	37130	10	TCS 2A	TCS-2A Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m without Breast wall on Both Side
792	37130	37180	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
793	37180	37190	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
794	37190	37200	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
795	37200	37210	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
796	37210	37220	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
797	37220	37240	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
798	37240	37280	40	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
799	37280	37300	20	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
800	37300	37310	10	TCS 1DD	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill Rhs Toe wall and LHS Gabion wall
801	37310	37320	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
802	37320	37360	40	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
803	37360	37410	50	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
804	37410	37420	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
805	37420	37530	110	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
806	37530	37540	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
807	37540	37590	50	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.

808	37590	37600	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
809	37600	37610	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
810	37610	37620	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
811	37620	37690	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
812	37690	37700	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
813	37700	37710	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
814	37710	37720	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
815	37720	37730	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
816	37730	37740	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
817	37740	37760	20	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
818	37760	37770	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
819	37770	37950	180	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
820	37950	37960	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
821	37960	38050	90	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
822	38050	38080	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
823	38080	38090	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
824	38090	38160	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
825	38160	38180	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
826	38180	38190	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
827	38190	38200	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
828	38200	38210	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
829	38210	38220	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
830	38220	38230	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
831	38230	38240	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
832	38240	38250	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.

833	38250	38300	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
834	38300	38310	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
835	38310	38320	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
836	38320	38380	60	TCS 5	
837	38380	38390	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
838	38390	38410	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
839	38410	38420	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
840	38420	38430	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
841	38430	38440	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
842	38440	38460	20	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
843	38460	38470	10	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
844	38470	38530	60	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
845	38530	38560	30	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
846	38560	38570	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
847	38570	38580	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
848	38580	38590	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
849	38590	38620	30	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
850	38620	38630	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
851	38630	38650	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
852	38650	38670	20	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
853	38670	38710	40	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
854	38710	38720	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
855	38720	38740	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
856	38740	38760	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
857	38760	38770	10	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
858	38770	38780	10	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall

859	38780	38800	20	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
860	38800	38850	50	TCS 5	
861	38850	38870	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
862	38870	38900	30	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
863	38900	38990	90	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
864	38990	39010	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
865	39010	39060	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
866	39060	39070	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
867	39070	39130	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
868	39130	39140	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
869	39140	39150	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
870	39150	39210	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
871	39210	39230	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
872	39230	39290	60	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
873	39290	39360	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
874	39360	39380	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
875	39380	39430	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
876	39430	39440	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
877	39440	39480	40	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
878	39480	39490	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
879	39490	39520	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
880	39520	39530	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
881	39530	39680	150	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
882	39680	39690	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
883	39690	39830	140	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

884	39830	39840	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
885	39840	39850	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
886	39850	39870	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
887	39870	39880	10	TCS 5	
888	39880	39890	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
889	39890	39900	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
890	39900	40050	150	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
891	40050	40070	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
892	40070	40090	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
893	40090	40140	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
894	40140	40150	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
895	40150	40190	40	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
896	40190	40250	60	TCS 5	
897	40250	40260	10	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
898	40260	40270	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
899	40270	40280	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
900	40280	40300	20	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
901	40300	40310	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
902	40310	40350	40	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
903	40350	40360	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
904	40360	40410	50	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
905	40410	40420	10	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
906	40420	40430	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
907	40430	40440	10	TCS 4	TCS-4 Two Lane carriageway with Paved shoulder RHS in cutting without Breast wall.
908	40440	40460	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
909	40460	40470	10	TCS 4A	TCS-4A Two Lane carriageway with Paved shoulder with Breast wall in RHS.
910	40470	40480	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.

911	40480	40490	10	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
912	40490	40510	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
913	40510	40540	30	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
914	40540	40560	20	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL
915	40560	40570	10	TCS 4B	TCS-4B Two Lane carriageway with Paved Shoulder LHS in cutting without Breast wall.
916	40570	40580	10	TCS 1C	TCS-1C Two Lane carriageway with Paved shoulder, and LHS >4.5m Height and RHS <3m Embankment Height.
917	40580	40590	10	TCS 1DD	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill Rhs Toe wall and LHS Gabion wall
918	40590	40630	40	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
919	40630	40690	60	TCS 5	
920	40690	40700	10	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
921	40700	40710	10	TCS 1DD	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill Rhs Toe wall and LHS Gabion wall
922	40710	40720	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
923	40720	40730	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
924	40730	40740	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
925	40740	40790	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
926	40790	40810	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
927	40810	40850	40	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
928	40850	40860	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
929	40860	40890	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
930	40890	40900	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
931	40900	40940	40	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
932	40940	41000	60	TCS 5	
933	41000	41010	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
934	41010	41160	150	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
935	41160	41170	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
936	41170	41190	20	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
937	41190	41210	20	TCS 4E	TCS-4E Two Lane carriageway with Paved shoulder with RHS CUT WITH BERM and LHS FILL

938	41210	41220	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
939	41220	41230	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
940	41230	41290	60	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
941	41290	41310	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
942	41310	41340	30	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
943	41340	41440	100	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
944	41440	41480	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
945	41480	41490	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
946	41490	41530	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
947	41530	41560	30	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
948	41560	41690	130	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
949	41690	41700	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
950	41700	41810	110	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
951	41810	41820	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
952	41820	41840	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
953	41840	41880	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
954	41880	41900	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
955	41900	41910	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
956	41910	41930	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
957	41930	41950	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
958	41950	42030	80	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
959	42030	42080	50	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
960	42080	42100	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
961	42100	42150	50	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
962	42150	42170	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
963	42170	42200	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.

964	42200	42210	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
965	42210	42220	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
966	42220	42250	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
967	42250	42280	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
968	42280	42290	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
969	42290	42310	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
970	42310	42320	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
971	42320	42330	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
972	42330	42340	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
973	42340	42360	20	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
974	42360	42370	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
975	42370	42480	110	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
976	42480	42510	30	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
977	42510	42680	170	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
978	42680	42700	20	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
979	42700	43060	360	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
980	43060	43070	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
981	43070	43080	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
982	43080	43120	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
983	43120	43130	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
984	43130	43180	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
985	43180	43190	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
986	43190	43230	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
987	43230	43240	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
988	43240	43260	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

989	43260	43270	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
990	43270	43320	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
991	43320	43330	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
992	43330	43360	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
993	43360	43370	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
994	43370	43510	140	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
995	43510	43540	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
996	43540	43550	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
997	43550	43750	200	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
998	43750	43780	30	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
999	43780	44490	710	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1000	44490	44500	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1001	44500	44630	130	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1002	44630	44640	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1003	44640	44660	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1004	44660	44680	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1005	44680	44830	150	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1006	44830	44840	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1007	44840	44850	10	TCS 1DB	TCS-1DB Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS <3
1008	44850	44860	10	TCS 1DD	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill Rhs Toe wall and LHS Gabion wall
1009	44860	44870	10	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
1010	44870	44890	20	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
1011	44890	44910	20	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1012	44910	44930	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.

1013	44930	44940	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1014	44940	45000	60	TCS 5	
1015	45000	45010	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1016	45010	45020	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1017	45020	45030	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1018	45030	45070	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1019	45070	45090	20	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1020	45090	45100	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1021	45100	45120	20	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
1022	45120	45140	20	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1023	45140	45160	20	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
1024	45160	45170	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1025	45170	45200	30	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1026	45200	45210	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
1027	45210	45220	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
1028	45220	45230	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1029	45230	45240	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1030	45240	45250	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1031	45250	45260	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
1032	45260	45270	10	TCS 2H	TCS-2H Two Lane carriageway with Paved shoulder and H>9m Breast wall BHS.
1033	45270	45340	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1034	45340	45360	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1035	45360	45370	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1036	45370	45420	50	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1037	45420	45470	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1038	45470	45490	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.

1039	45490	45600	110	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1040	45600	45620	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1041	45620	45630	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1042	45630	45690	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1043	45690	45720	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1044	45720	45740	20	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1045	45740	45780	40	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1046	45780	45790	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1047	45790	45800	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
1048	45800	45820	20	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
1049	45820	45860	40	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1050	45860	45870	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1051	45870	45880	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
1052	45880	45900	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1053	45900	45930	30	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1054	45930	45950	20	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
1055	45950	45960	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1056	45960	45970	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1057	45970	45980	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
1058	45980	45990	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
1059	45990	46070	80	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1060	46070	46080	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1061	46080	46090	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1062	46090	46100	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1063	46100	46110	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1064	46110	46120	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1065	46120	46150	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.

1066	46150	46160	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1067	46160	46180	20	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1068	46180	46200	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1069	46200	46240	40	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1070	46240	46270	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1071	46270	46280	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1072	46280	46290	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1073	46290	46300	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1074	46300	46350	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1075	46350	46370	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1076	46370	46390	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1077	46390	46400	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1078	46400	46440	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1079	46440	46460	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1080	46460	46470	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1081	46470	46480	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1082	46480	46510	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1083	46510	46520	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1084	46520	46530	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1085	46530	46550	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1086	46550	46620	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1087	46620	46630	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1088	46630	46670	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1089	46670	46680	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1090	46680	46870	190	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1091	46870	46880	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1092	46880	46890	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL

1093	46890	46900	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1094	46900	46910	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1095	46910	46920	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1096	46920	46930	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1097	46930	46970	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1098	46970	46980	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1099	46980	46990	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1100	46990	47000	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1101	47000	47020	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1102	47020	47050	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1103	47050	47070	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1104	47070	47080	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1105	47080	47130	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1106	47130	47140	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1107	47140	47150	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1108	47150	47170	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1109	47170	47200	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1110	47200	47210	10	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
1111	47210	47220	10	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
1112	47220	47230	10	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
1113	47230	47240	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1114	47240	47280	40	TCS 5	
1115	47280	47350	70	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1116	47350	47370	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1117	47370	47380	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1118	47380	47390	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.

1119	47390	47460	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1120	47460	47470	10	TCS 4D	TCS-4D Two Lane carriageway with Paved shoulder with RHS Cut without wall LHS Toe Wall
1121	47470	47480	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
1122	47480	47500	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1123	47500	47510	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1124	47510	47520	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1125	47520	47530	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1126	47530	47540	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1127	47540	47580	40	TCS 5	
1128	47580	47590	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1129	47590	47600	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
1130	47600	47610	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1131	47610	47620	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1132	47620	47630	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1133	47630	47670	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1134	47670	47730	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1135	47730	47750	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1136	47750	47760	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1137	47760	47770	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1138	47770	47780	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1139	47780	47800	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1140	47800	47810	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1141	47810	47820	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1142	47820	47830	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1143	47830	47850	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1144	47850	47880	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1145	47880	47890	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast

					wall BHS.
1146	47890	47900	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1147	47900	47920	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1148	47920	47930	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1149	47930	48010	80	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1150	48010	48150	140	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1151	48150	48220	70	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1152	48220	48240	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1153	48240	48260	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1154	48260	48290	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1155	48290	48320	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1156	48320	48340	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1157	48340	48350	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
1158	48350	48360	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1159	48360	48380	20	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1160	48380	48390	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1161	48390	48410	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1162	48410	48430	20	TCS 5	
1163	48430	48470	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1164	48470	48480	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1165	48480	48490	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1166	48490	48500	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1167	48500	48510	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
1168	48510	48520	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1169	48520	48530	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1170	48530	48540	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1171	48540	48580	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL

1172	48580	48620	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1173	48620	48630	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1174	48630	48640	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1175	48640	48670	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1176	48670	48800	130	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1177	48800	48810	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1178	48810	48820	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1179	48820	48840	20	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1180	48840	48850	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1181	48850	48970	120	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1182	48970	48990	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1183	48990	49010	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1184	49010	49020	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1185	49020	49060	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1186	49060	49100	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1187	49100	49140	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1188	49140	49170	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1189	49170	49280	110	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1190	49280	49310	30	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1191	49310	49320	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1192	49320	49380	60	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1193	49380	49400	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1194	49400	49410	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1195	49410	49420	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1196	49420	49430	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1197	49430	49450	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

1198	49450	49460	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1199	49460	49470	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1200	49470	49500	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1201	49500	49530	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1202	49530	49560	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1203	49560	49680	120	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1204	49680	49750	70	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1205	49750	49950	200	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1206	49950	49960	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1207	49960	49970	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1208	49970	50010	40	TCS 5	
1209	50010	50020	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1210	50020	50060	40	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1211	50060	50150	90	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1212	50150	50220	70	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1213	50220	50230	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
1214	50230	50240	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1215	50240	50250	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1216	50250	50290	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1217	50290	50330	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1218	50330	50340	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1219	50340	50360	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1220	50360	50370	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1221	50370	50400	30	TCS 5	
1222	50400	50460	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1223	50460	50490	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1224	50490	50500	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.

1225	50500	50510	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1226	50510	50520	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1227	50520	50530	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
1228	50530	50540	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1229	50540	50560	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1230	50560	50600	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1231	50600	50620	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1232	50620	50780	160	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1233	50780	50790	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1234	50790	50900	110	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1235	50900	50920	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1236	50920	50940	20	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1237	50940	50960	20	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1238	50960	50980	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1239	50980	50990	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1240	50990	51010	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1241	51010	51020	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1242	51020	51090	70	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1243	51090	51100	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1244	51100	51110	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1245	51110	51120	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1246	51120	51260	140	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1247	51260	51270	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1248	51270	51280	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1249	51280	51290	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
1250	51290	51310	20	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL

1251	51310	51320	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1252	51320	51350	30	TCS 5	
1253	51350	51460	110	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1254	51460	51470	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1255	51470	51510	40	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1256	51510	51520	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1257	51520	51600	80	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1258	51600	51610	10	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
1259	51610	51650	40	TCS 5	
1260	51650	51660	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1261	51660	51670	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1262	51670	51720	50	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1263	51720	51730	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1264	51730	51740	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1265	51740	51820	80	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1266	51820	51840	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1267	51840	51890	50	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1268	51890	51910	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1269	51910	51920	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
1270	51920	51930	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1271	51930	51940	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1272	51940	51950	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1273	51950	52070	120	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1274	52070	52080	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1275	52080	52100	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1276	52100	52130	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1277	52130	52140	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1278	52140	52150	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.

1279	52150	52160	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1280	52160	52180	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1281	52180	52190	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1282	52190	52210	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1283	52210	52230	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1284	52230	52240	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1285	52240	52250	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1286	52250	52260	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1287	52260	52270	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1288	52270	52330	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1289	52330	52340	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1290	52340	52450	110	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1291	52450	52460	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1292	52460	52510	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1293	52510	52520	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1294	52520	52550	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1295	52550	52570	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1296	52570	52580	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1297	52580	52640	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1298	52640	52660	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1299	52660	52740	80	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1300	52740	52770	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1301	52770	52910	140	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1302	52910	52920	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
1303	52920	52930	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1304	52930	52970	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

1305	52970	53050	80	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1306	53050	53070	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1307	53070	53120	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1308	53120	53130	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1309	53130	53140	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1310	53140	53170	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1311	53170	53190	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1312	53190	53200	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1313	53200	53220	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1314	53220	53230	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1315	53230	53240	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1316	53240	53290	50	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1317	53290	53320	30	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1318	53320	53330	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1319	53330	53340	10	TCS 1DC	TCS-1DC Two Lane carriageway with Paved shoulder and Both Side fill LHS Toe wall and RHS Gabion wall
1320	53340	53360	20	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
1321	53360	53420	60	TCS 5	
1322	53420	53470	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1323	53470	53480	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1324	53480	53550	70	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1325	53550	53580	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1326	53580	53640	60	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1327	53640	53660	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1328	53660	53670	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1329	53670	53680	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1330	53680	53750	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.

1331	53750	53760	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1332	53760	53770	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1333	53770	53780	10	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
1334	53780	53800	20	TCS 5	
1335	53800	53870	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1336	53870	53920	50	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1337	53920	54000	80	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1338	54000	54040	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1339	54040	54050	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1340	54050	54060	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1341	54060	54130	70	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1342	54130	54140	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1343	54140	54150	10	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
1344	54150	54160	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1345	54160	54170	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1346	54170	54200	30	TCS 5	
1347	54200	54240	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1348	54240	54270	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1349	54270	54310	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1350	54310	54350	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1351	54350	54390	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1352	54390	54410	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1353	54410	54420	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1354	54420	54440	20	TCS 3D	TCS-3D Two Lane carriageway with Paved shoulder with LHS CUT RHS TOE WALL
1355	54440	54450	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1356	54450	54490	40	TCS 5	
1357	54490	54500	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.

1358	54500	54530	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1359	54530	54540	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1360	54540	54550	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1361	54550	54560	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1362	54560	54570	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1363	54570	54610	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1364	54610	54630	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1365	54630	54670	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1366	54670	54690	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1367	54690	54780	90	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1368	54780	54850	70	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
1369	54850	54880	30	TCS 2D	TCS-2D Two Lane carriageway with Paved shoulder on hill (Box cut section with H=6m to 9m RHS BREST WALL
1370	54880	54890	10	TCS 2F	TCS-2F Two Lane carriageway with Paved shoulder and H>9m Breast wall only RHS.
1371	54890	54940	50	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1372	54940	54950	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1373	54950	54970	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1374	54970	55020	50	TCS 5	
1375	55020	55040	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1376	55040	55070	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1377	55070	55090	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1378	55090	55100	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1379	55100	55140	40	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1380	55140	55240	100	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1381	55240	55260	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1382	55260	55270	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1383	55270	55320	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side

1384	55320	55330	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1385	55330	55340	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1386	55340	55360	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1387	55360	55370	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1388	55370	55390	20	TCS 5	
1389	55390	55400	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1390	55400	55410	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1391	55410	55420	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1392	55420	55440	20	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1393	55440	55450	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1394	55450	55460	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1395	55460	55480	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1396	55480	55490	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1397	55490	55550	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1398	55550	55570	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1399	55570	55660	90	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1400	55660	55670	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1401	55670	55690	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1402	55690	55700	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1403	55700	55710	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1404	55710	55720	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1405	55720	55730	10	TCS 1	TCS-1 Two Lane Carriageway with Paved Shoulder Upto 3m Embankment Height
1406	55730	55740	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1407	55740	55800	60	TCS 5	
1408	55800	55930	130	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1409	55930	55950	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.

1410	55950	56100	150	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1411	56100	56140	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1412	56140	56150	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1413	56150	56170	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1414	56170	56180	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1415	56180	56240	60	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1416	56240	56250	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1417	56250	56260	10	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1418	56260	56270	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1419	56270	56310	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1420	56310	56340	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1421	56340	56400	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1422	56400	56460	60	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1423	56460	56540	80	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1424	56540	56550	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1425	56550	56580	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1426	56580	56620	40	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1427	56620	56650	30	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1428	56650	56660	10	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1429	56660	56700	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1430	56700	56750	50	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1431	56750	56760	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1432	56760	56790	30	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1433	56790	56800	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1434	56800	56820	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1435	56820	56830	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1436	56830	56870	40	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.

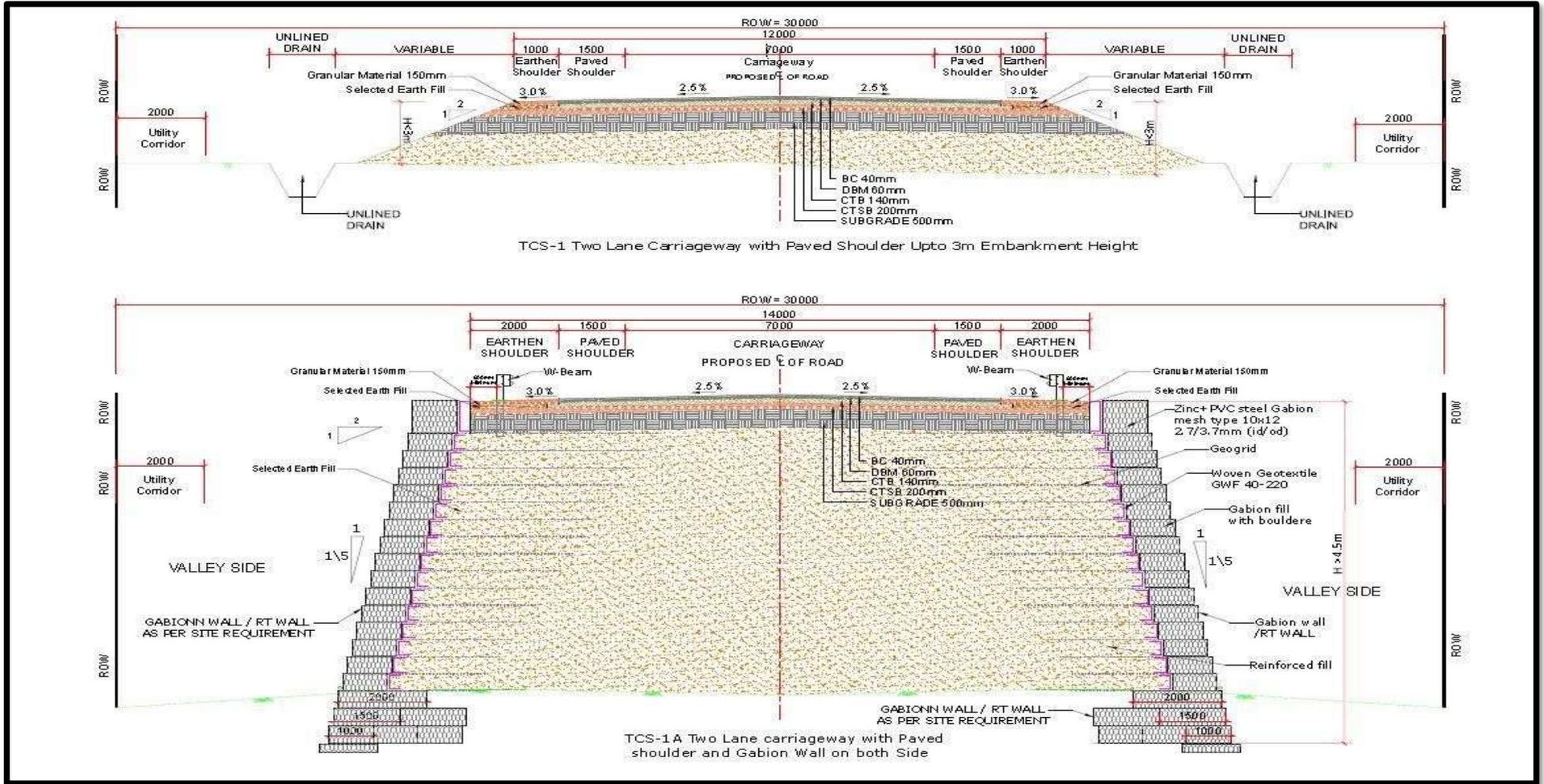
1437	56870	56930	60	TCS 5	
1438	56930	56950	20	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1439	56950	56960	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1440	56960	57050	90	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1441	57050	57070	20	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1442	57070	57080	10	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1443	57080	57100	20	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1444	57100	57110	10	TCS 1DA	TCS-1DA Two Lane carriageway with Paved shoulder and Both Side fill LHS <3 and Rhs Toe wall
1445	57110	57120	10	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
1446	57120	57160	40	TCS 5	
1447	57160	57190	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1448	57190	57200	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1449	57200	57270	70	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1450	57270	57280	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1451	57280	57310	30	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1452	57310	57330	20	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1453	57330	57340	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1454	57340	57400	60	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
1455	57400	57410	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1456	57410	57430	20	TCS 2C	TCS-2C Two Lane carriageway with Paved shoulder on hill (Box cut section) with H=6m to 9m LHS BREST WALL
1457	57430	57440	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1458	57440	57450	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSHS=6m to 9m Breast wall BHS.
1459	57450	57510	60	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1460	57510	57520	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1461	57520	57540	20	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1462	57540	57550	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL

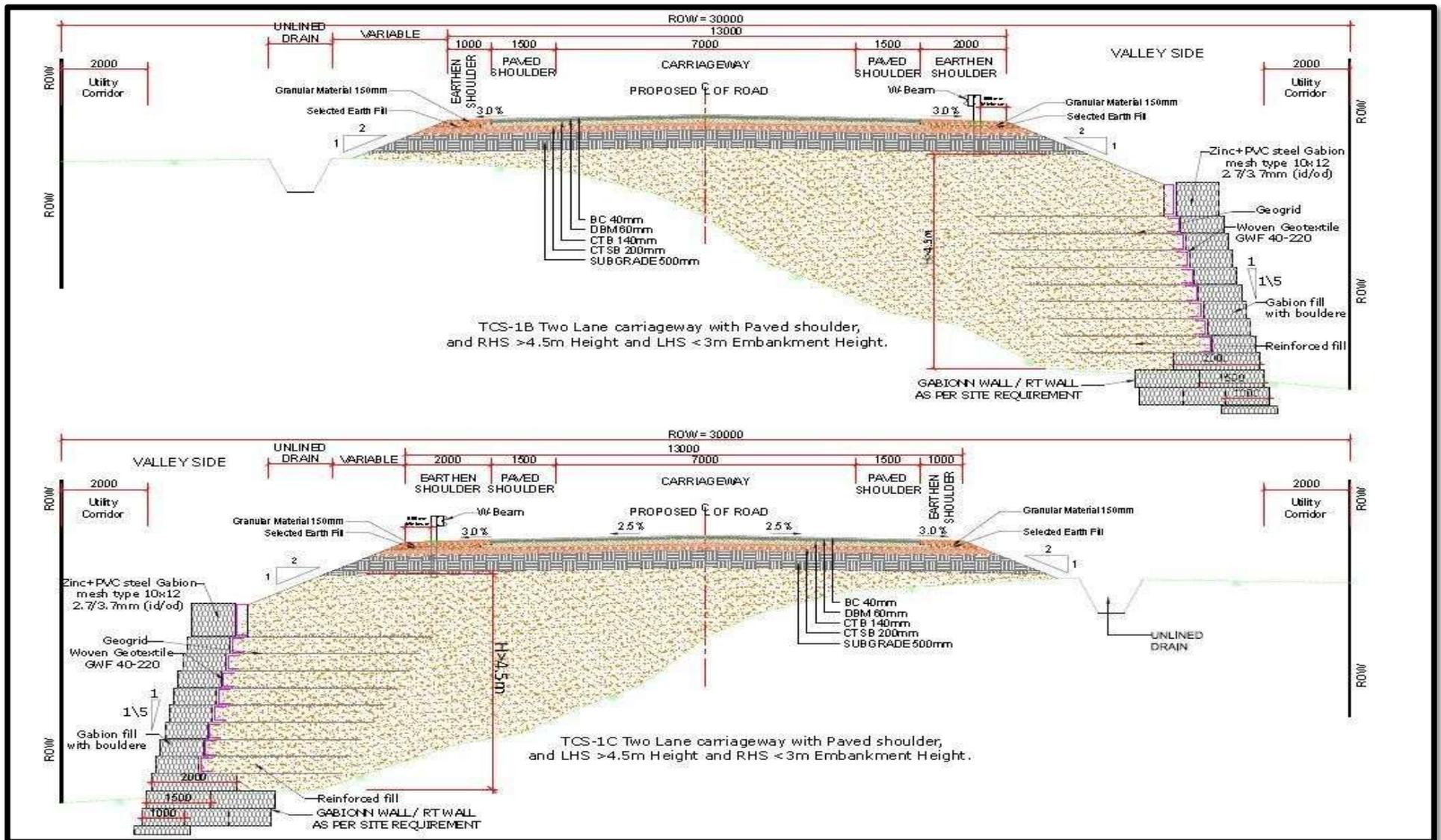
1463	57550	57590	40	TCS 5	
1464	57590	57640	50	TCS 3C	TCS-3C Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1465	57640	57650	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1466	57650	57660	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1467	57660	57680	20	TCS 2G	TCS-2G Two Lane Carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1468	57680	57910	230	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1469	57910	57960	50	TCS 2B	TCS-2B Two Lane carriageway with Paved shoulder on hill (Box cut section) with h> 9M Breast wall on Both side
1470	57960	57970	10	TCS 2G	TCS-2G Two Lane carriageway with Paved shoulder (Box cut section) and H>9m LHS & RSH=6m to 9m Breast wall BHS.
1471	57970	57980	10	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.
1472	57980	57990	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1473	57990	58000	10	TCS 3	TCS-3 Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1474	58000	58010	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1475	58010	58030	20	TCS 5	
1476	58030	58040	10	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1477	58040	58060	20	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
1478	58060	58070	10	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1479	58070	58080	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1480	58080	58120	40	TCS 3E	TCS-3E Two Lane carriageway with Paved shoulder with LHS CUT WITH BERM RHS FILL
1481	58120	58130	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
1482	58130	58140	10	TCS 3F	TCS-3F Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WAL AND RHS FILL
1483	58140	58160	20	TCS 3A	TCS-3A Two Lane carriageway with Paved shoulder with Breast wall in LHS.
1484	58160	58170	10	TCS 3G	TCS-3G Two Lane carriageway with Paved shoulder with LHS CUT WITH BREAST WALL, RHS TOE WALL
1485	58170	58200	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1486	58200	58210	10	TCS 1B	TCS-1B Two Lane carriageway with Paved shoulder, and RHS >4.5m Height and LHS <3m Embankment Height
1487	58210	58250	40	TCS 1A	TCS-1A Two Lane carriageway with Paved shoulder and Gabion Wall on both Side
1488	58250	58280	30	TCS 3B	TCS-3B Two Lane carriageway with Paved shoulder LHS in cutting without Breast wall.
1489	58280	58320	40	TCS 2E	TCS-2E Two Lane Carriageway with Paved shoulder and H>9m Breast wall only LHS.

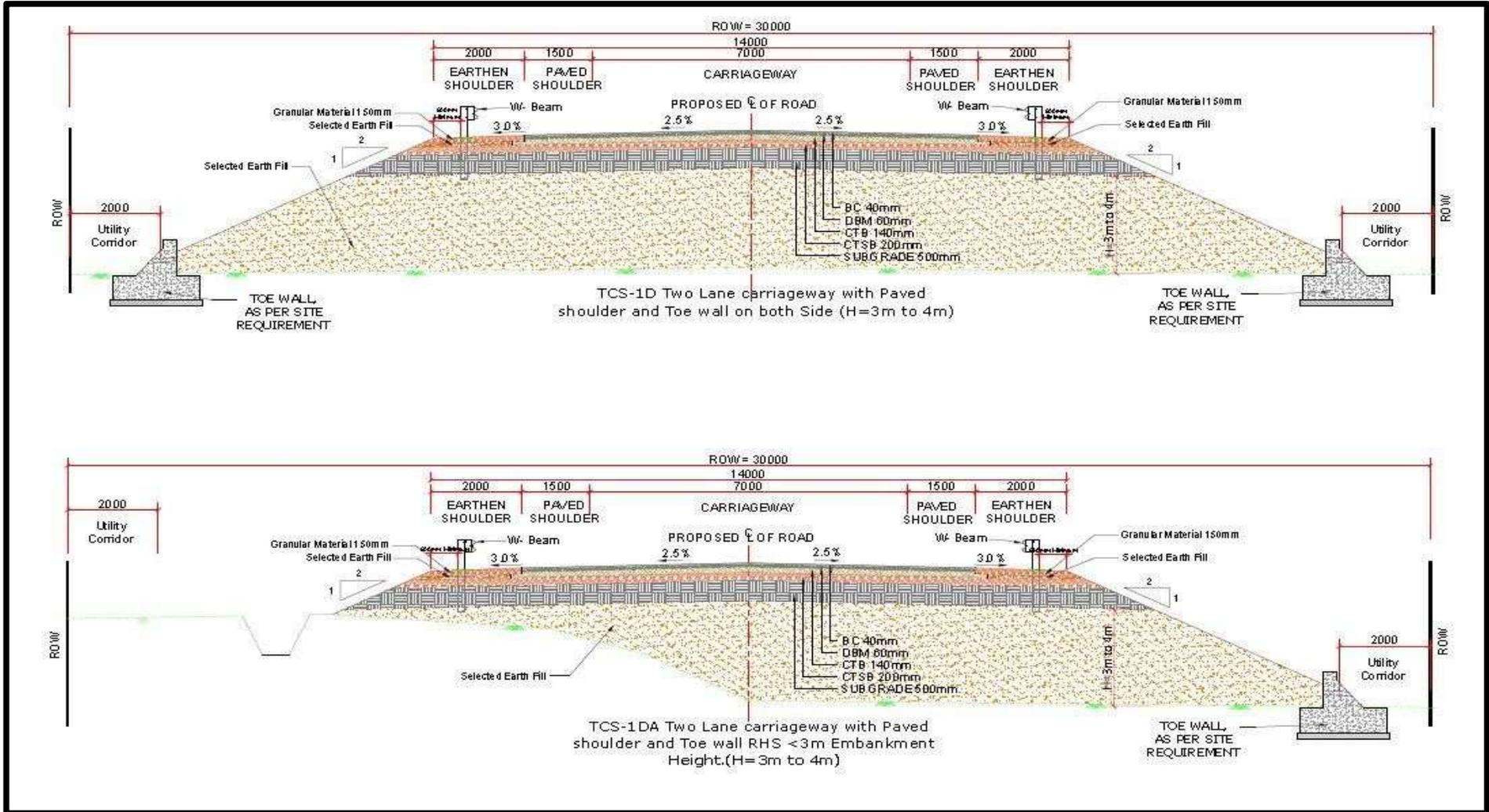
1490	58320	58342	22	TCS 2	TCS-2 Two Lane Carriageway with Paved shoulder (Box Cut Section) and 6m BHS
------	-------	-------	----	-------	---

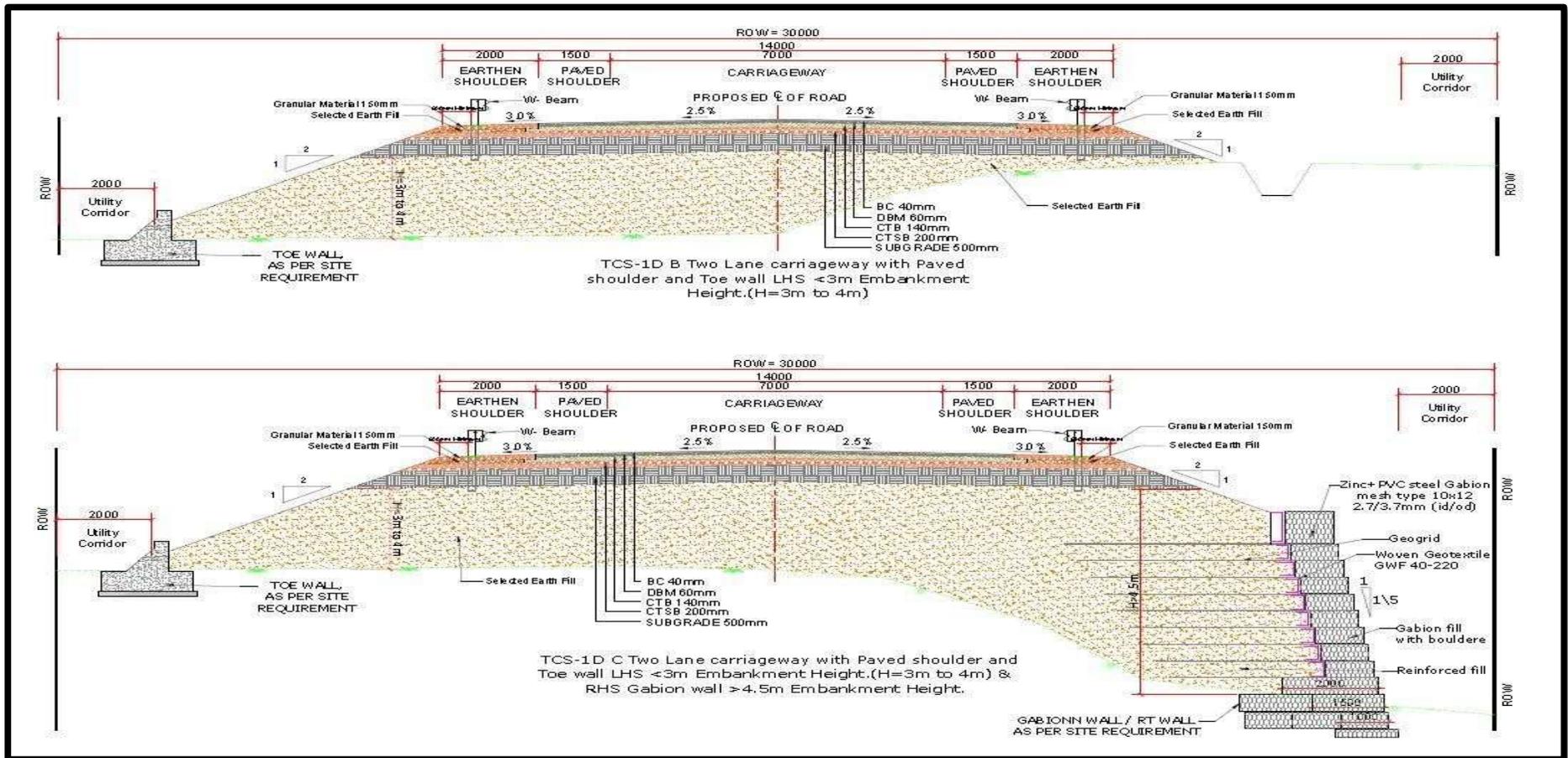
*In cutting sections, the side slopes shall not be steeper than 4:3 (Vertical: Horizontal) for cutting heights up to 20 meters. For cutting heights exceeding 20 meters, the side slopes shall be maintained at 1: 1. Further, any variation in the length of TCS (Typical Cross Section) arising due to cutting & filling or Slope Stability shall not be considered as a Change of Scope.

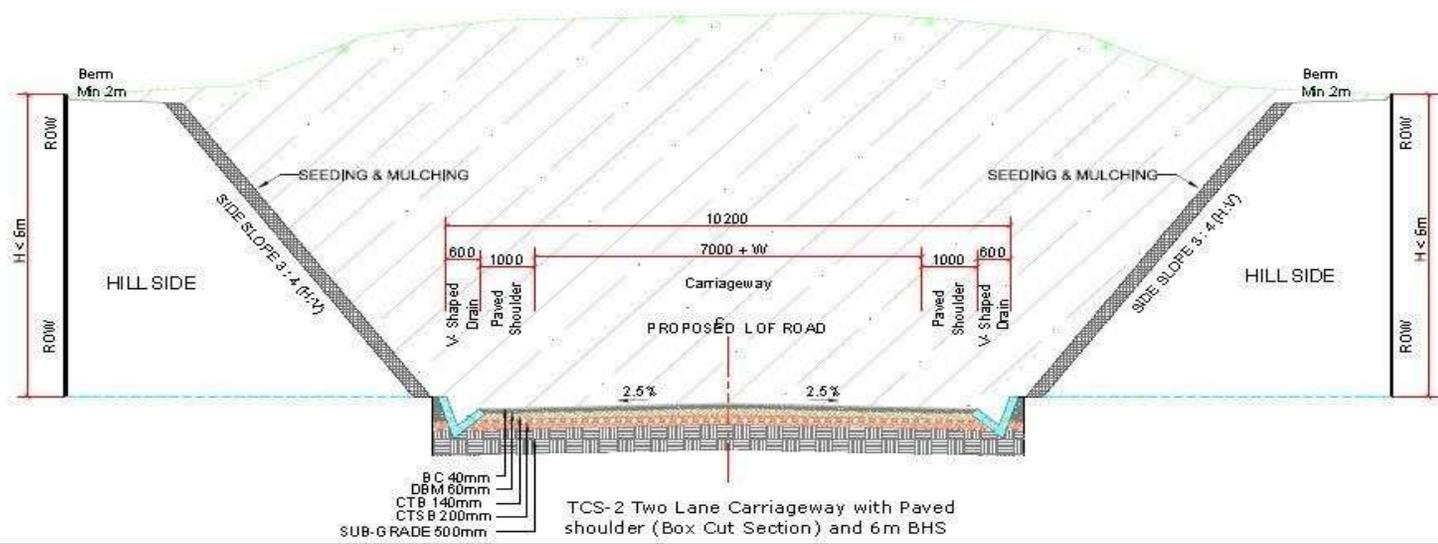
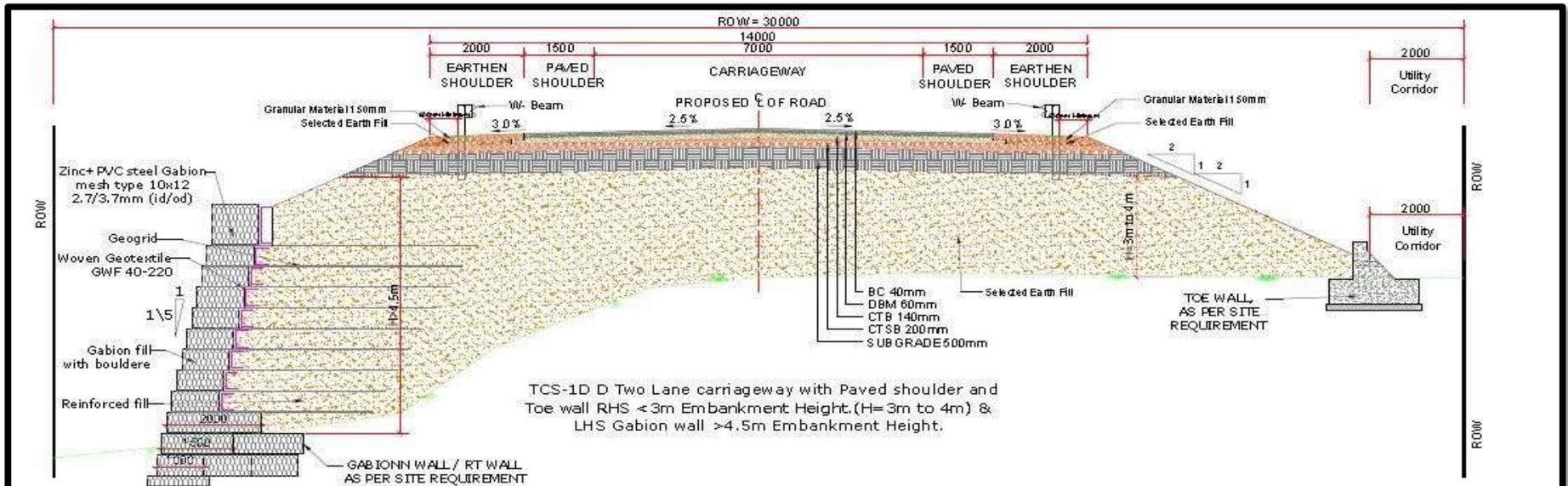
Annexure - II (Schedule - B) Typical Cross Sections

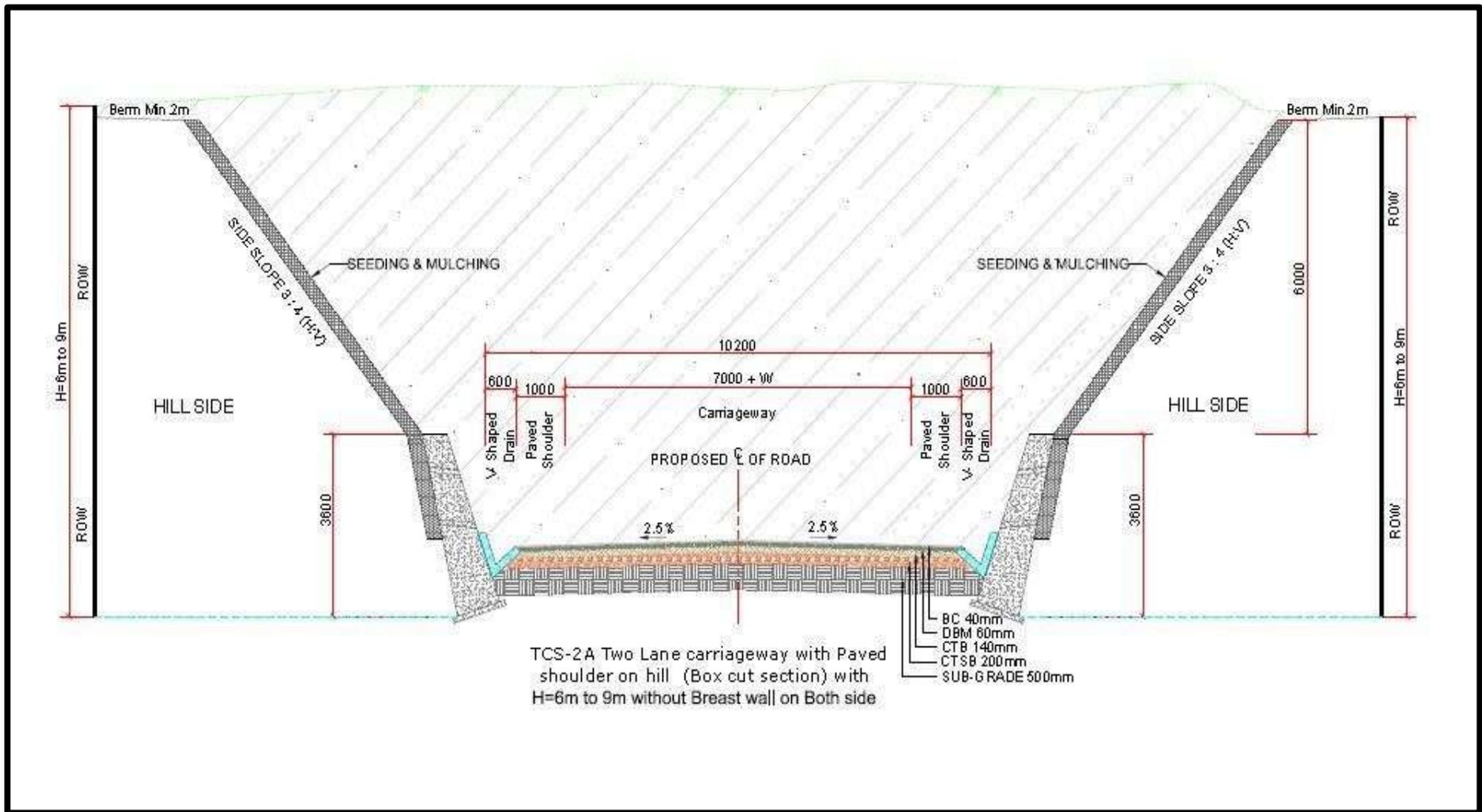


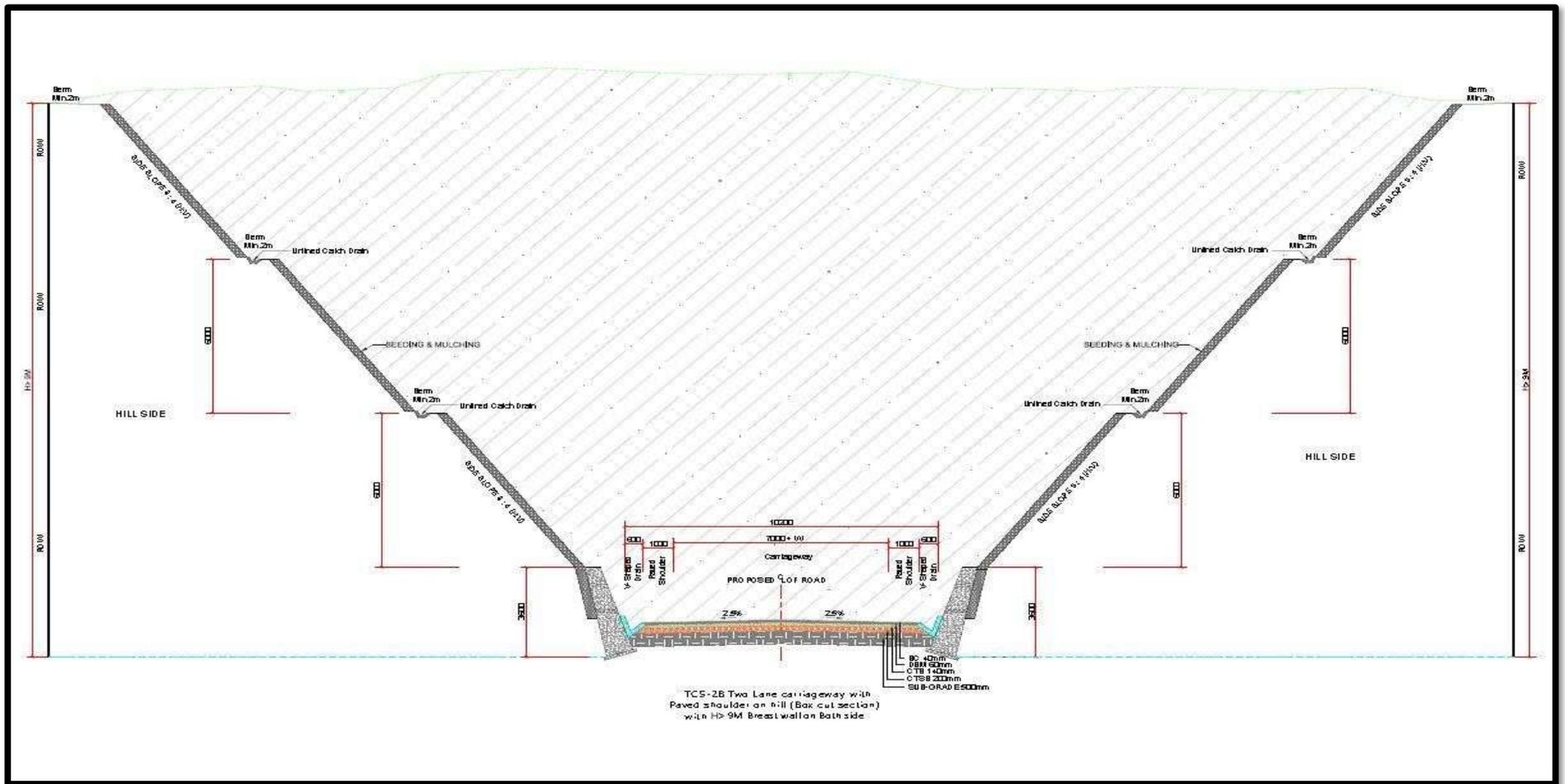


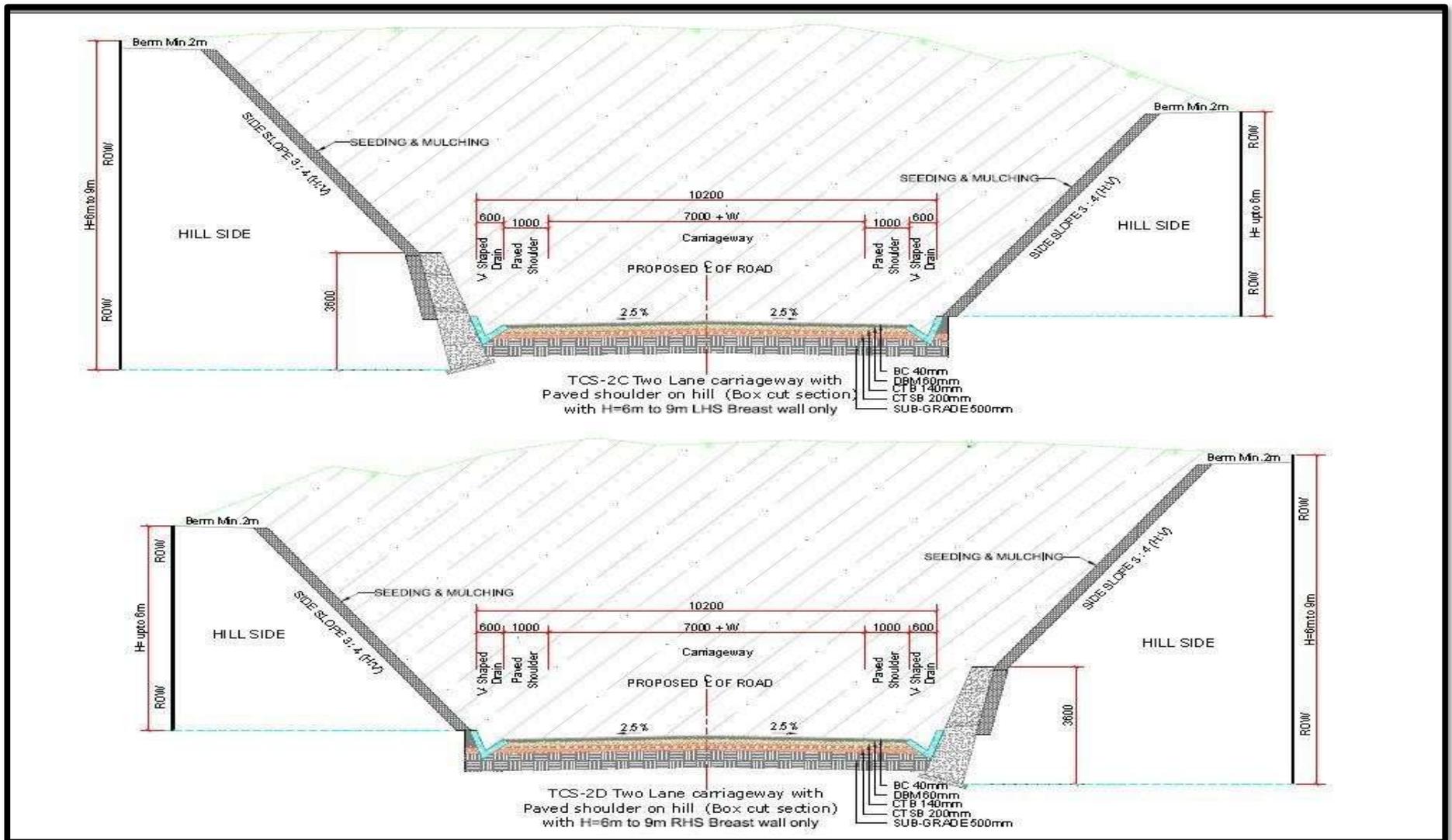


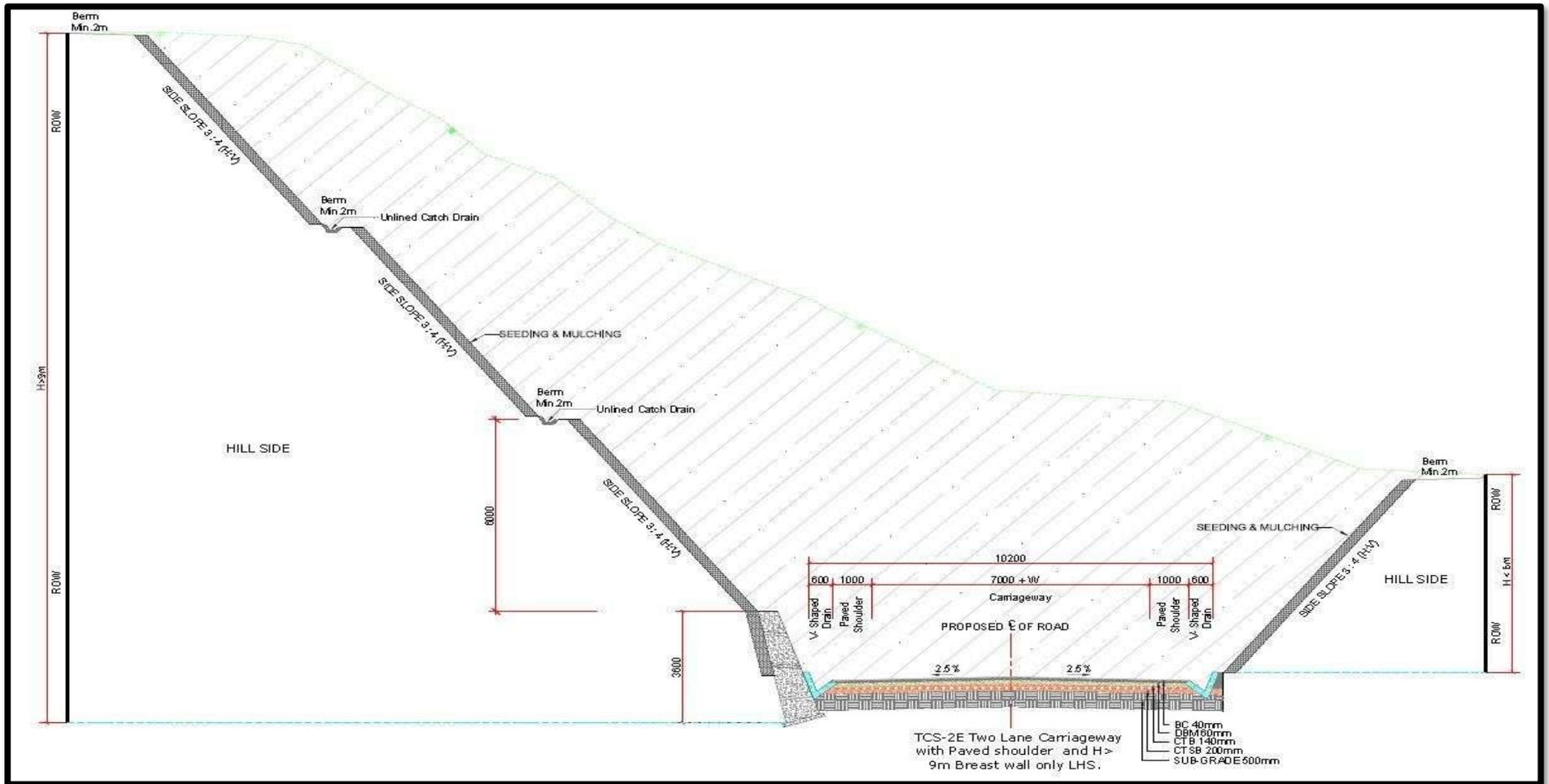


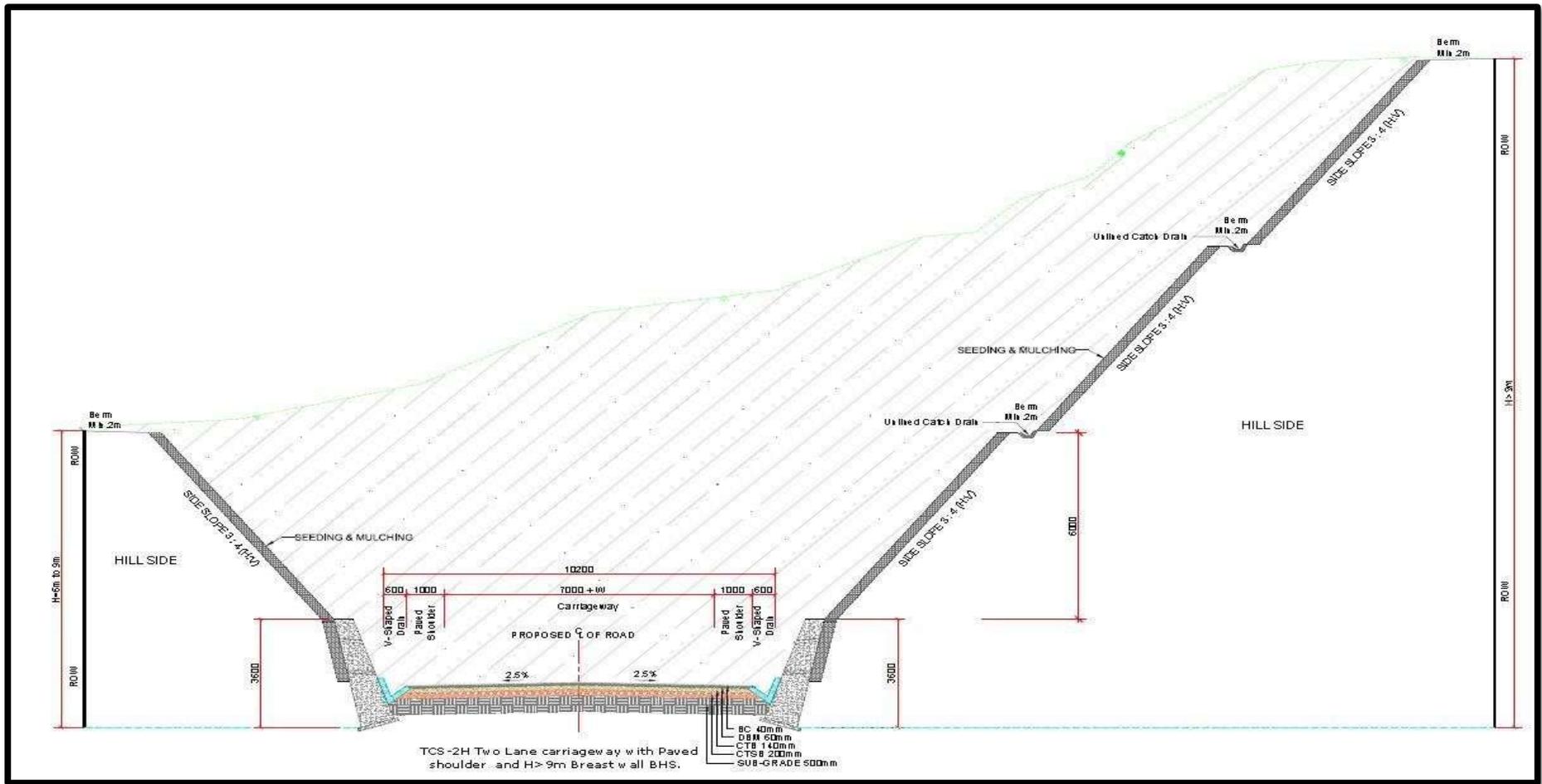


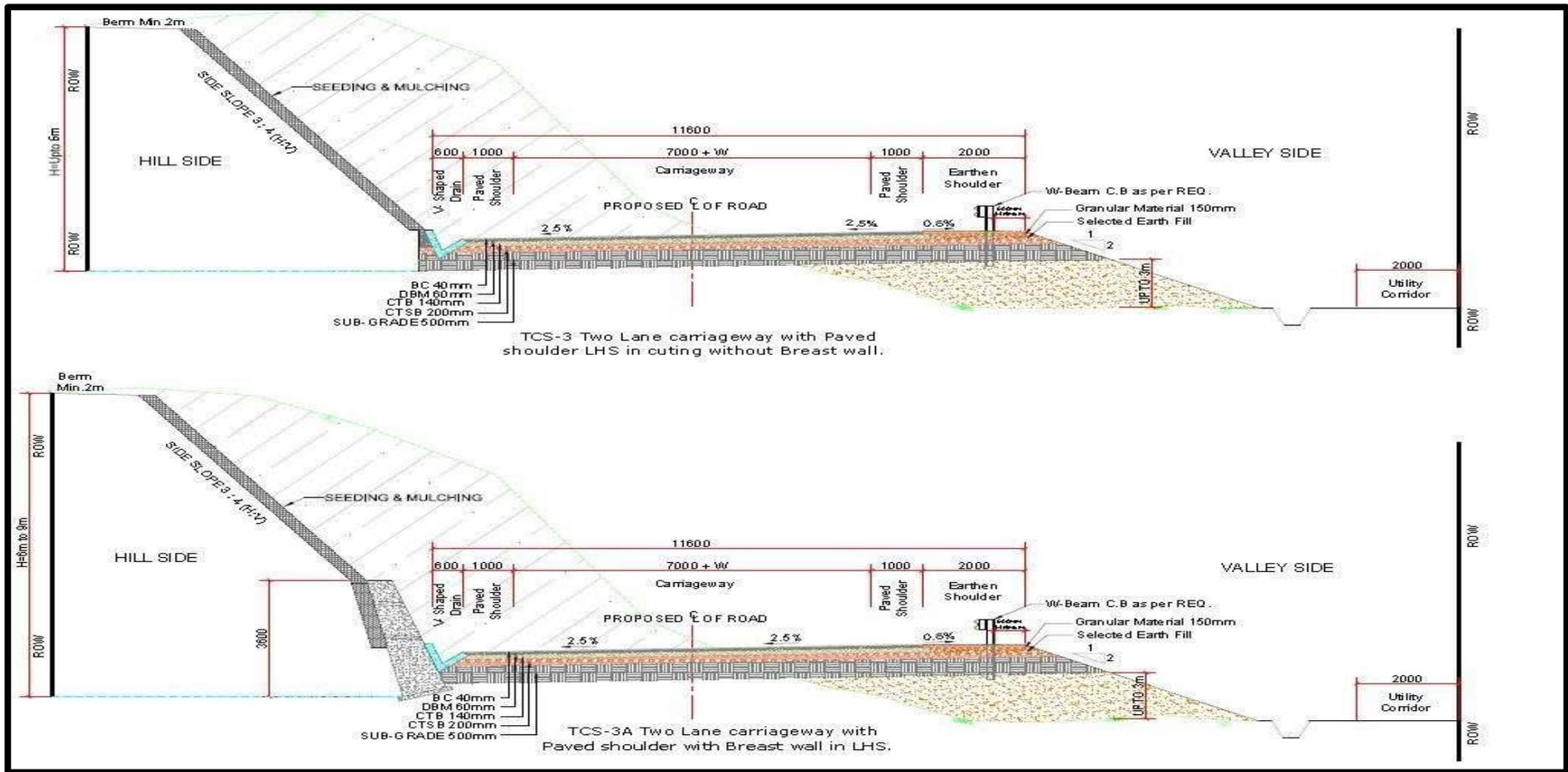


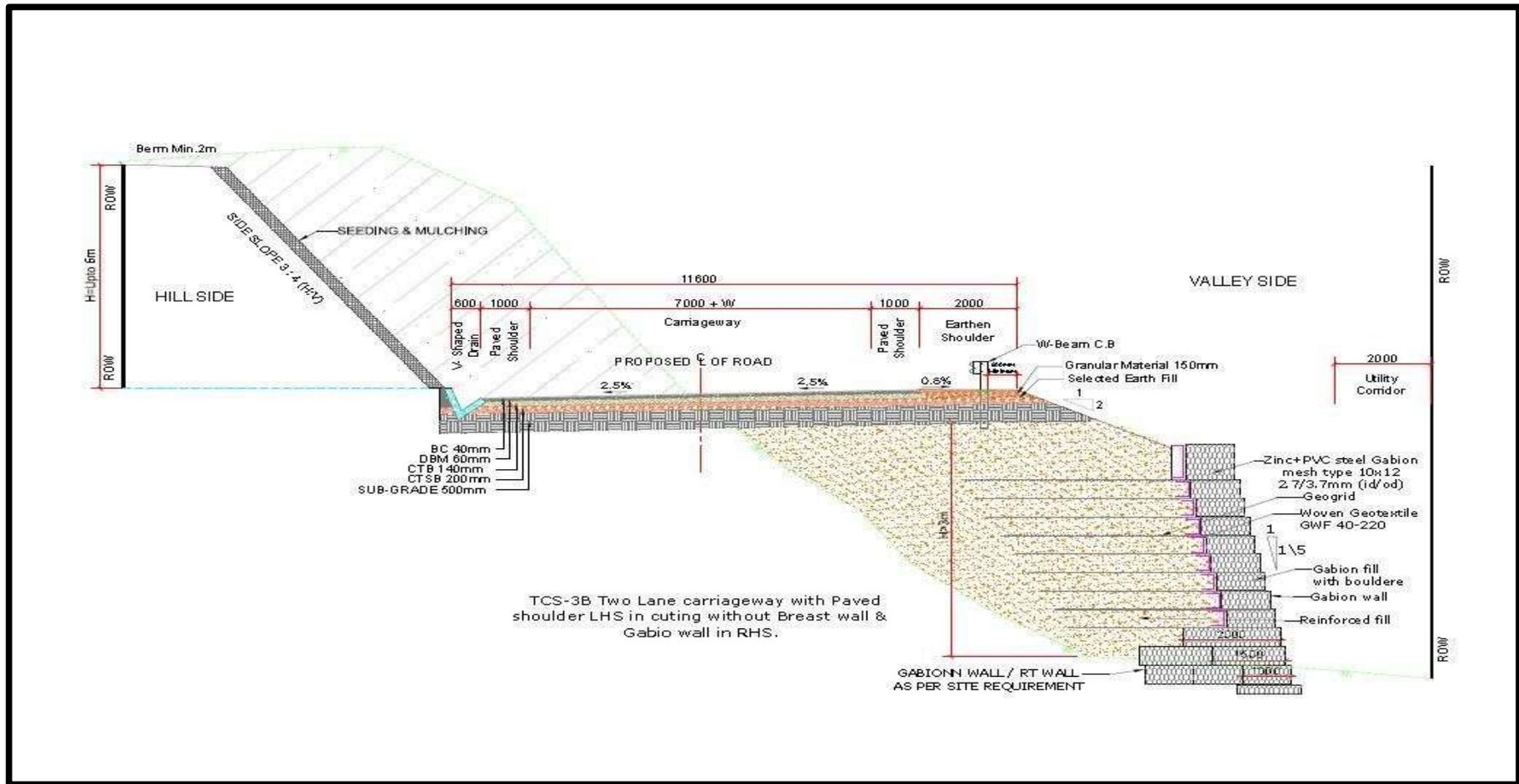


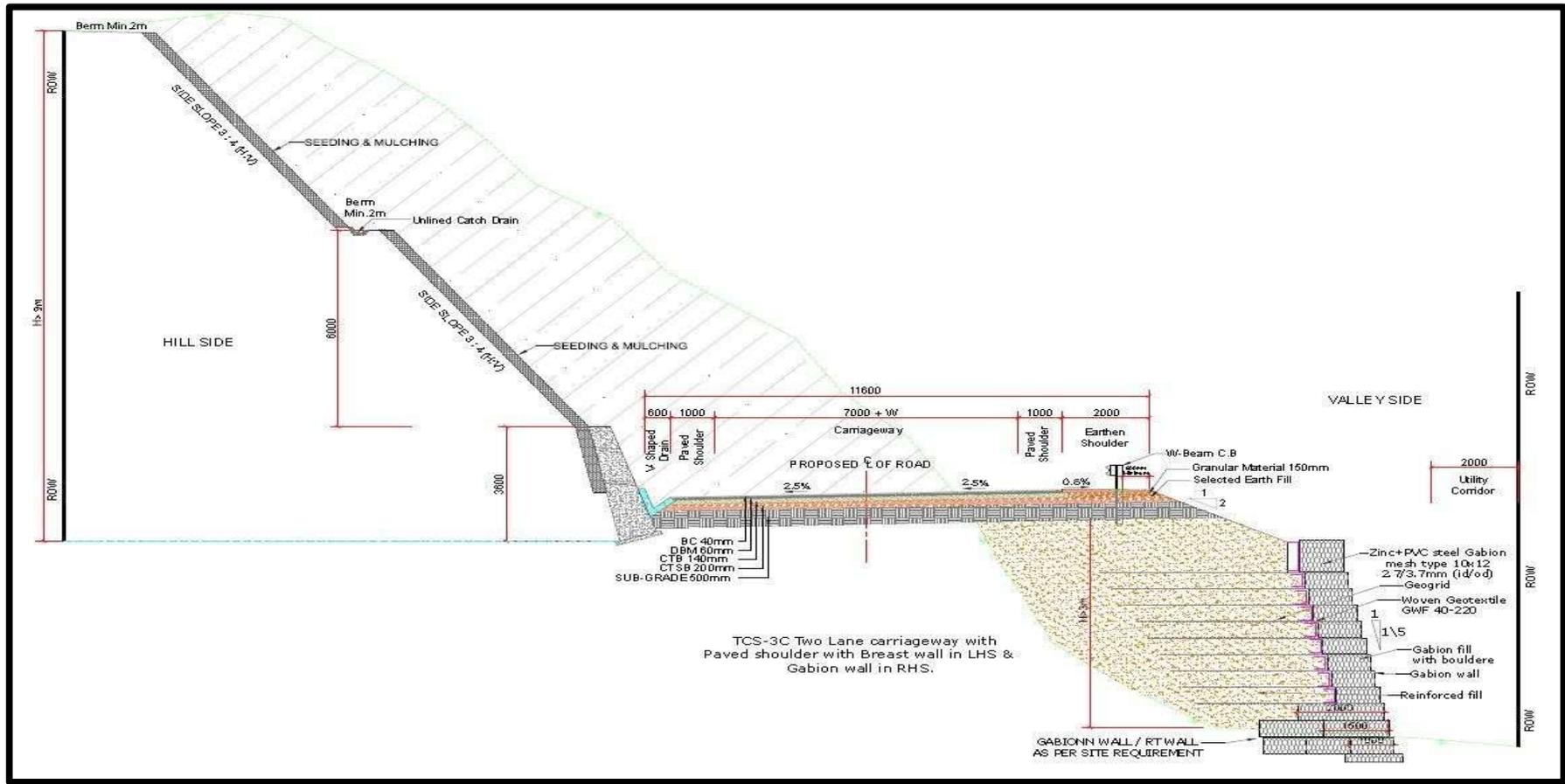


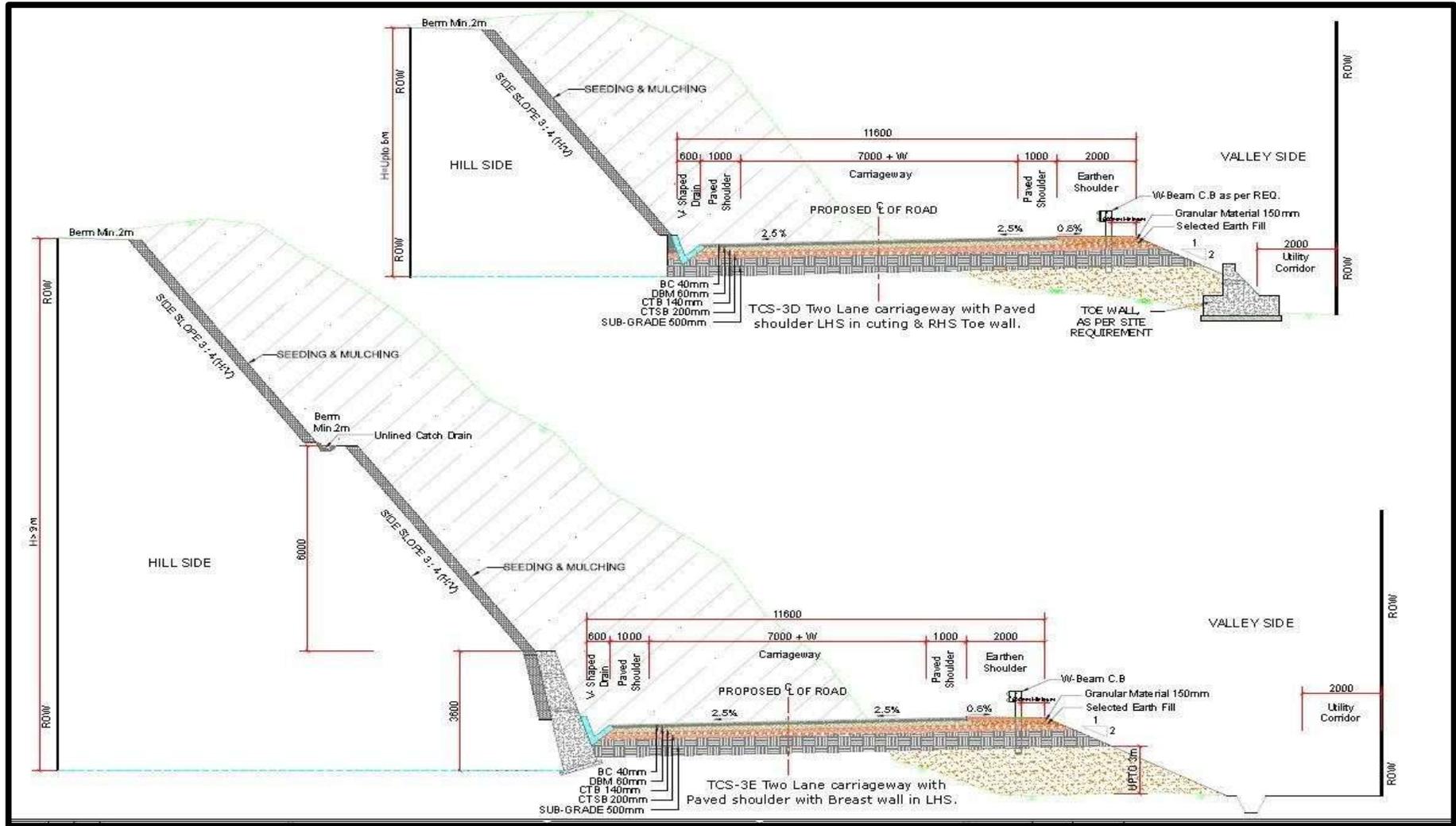


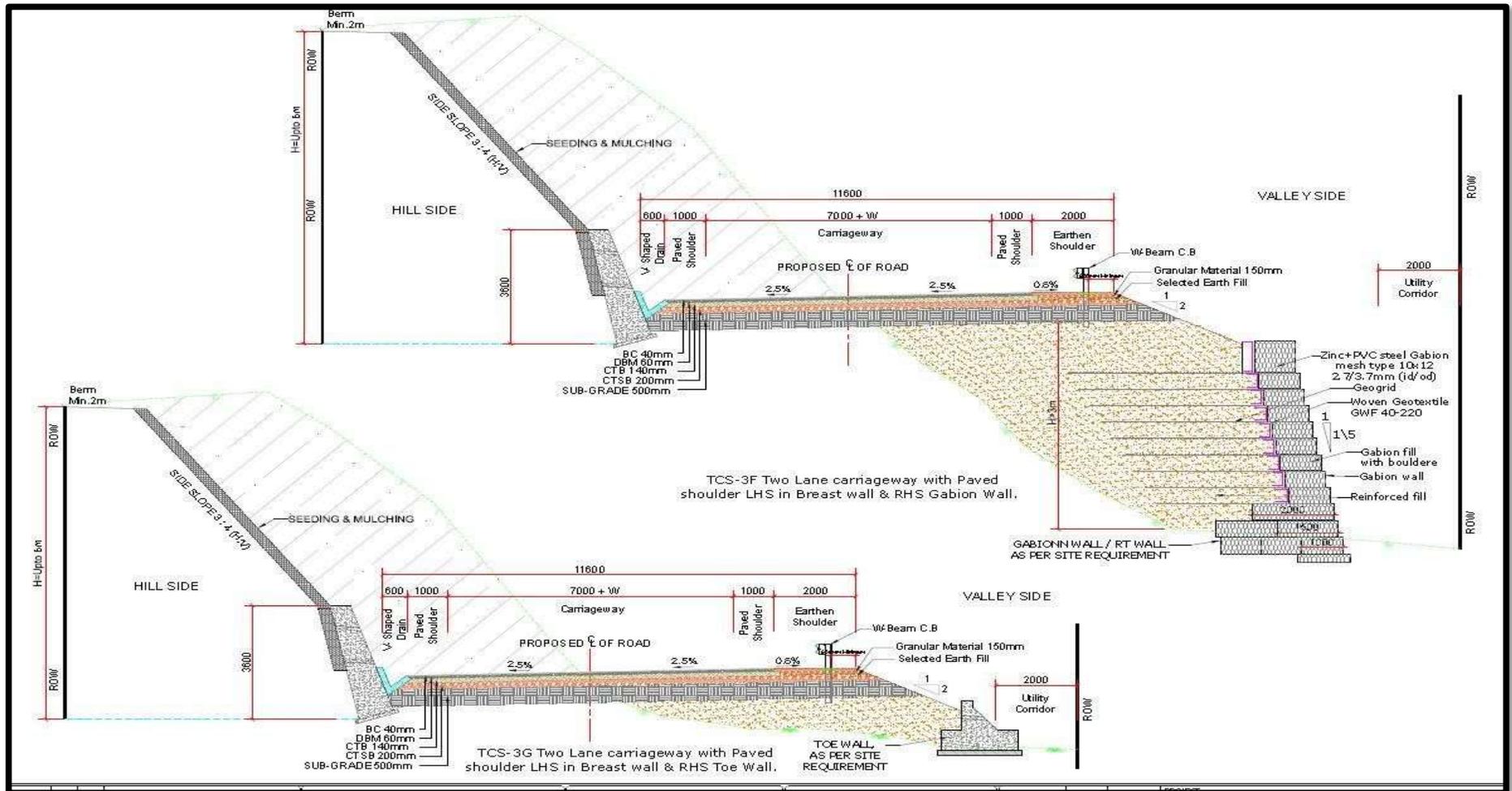


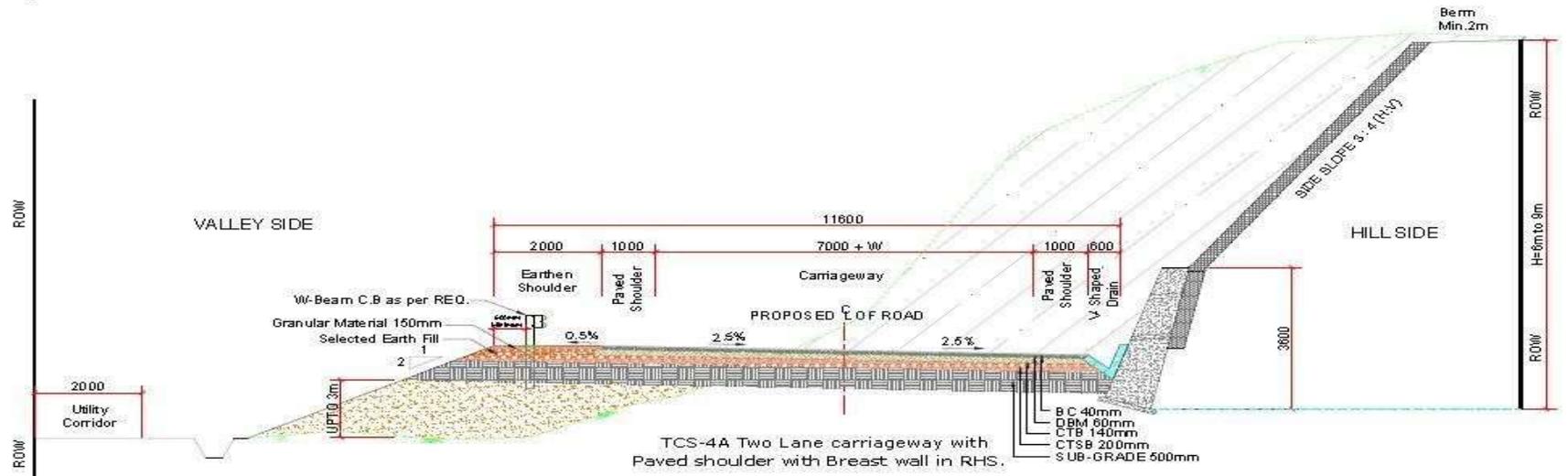
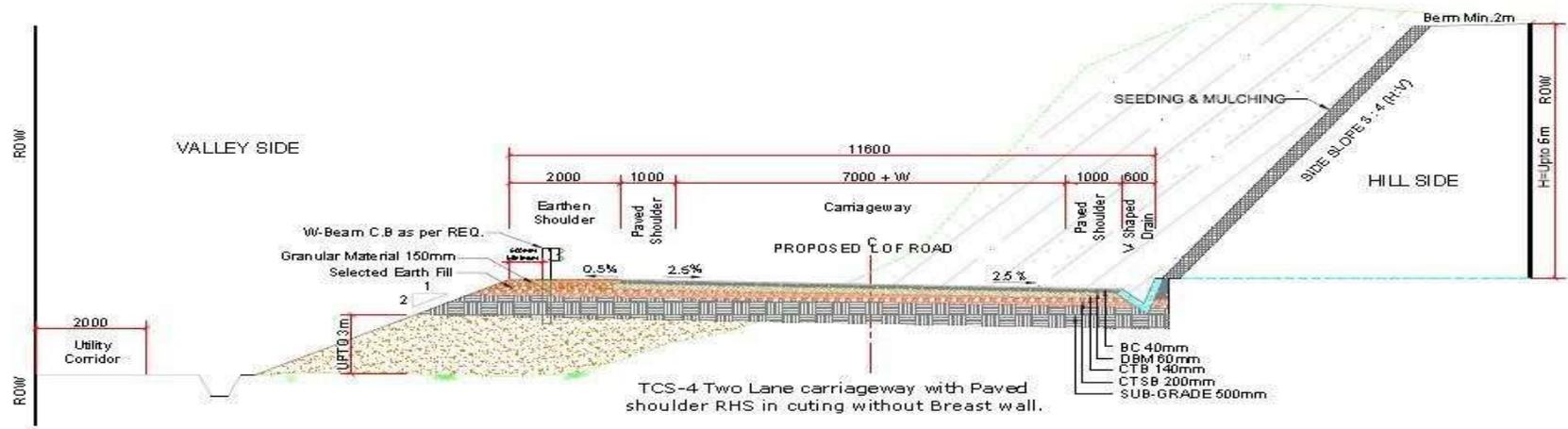


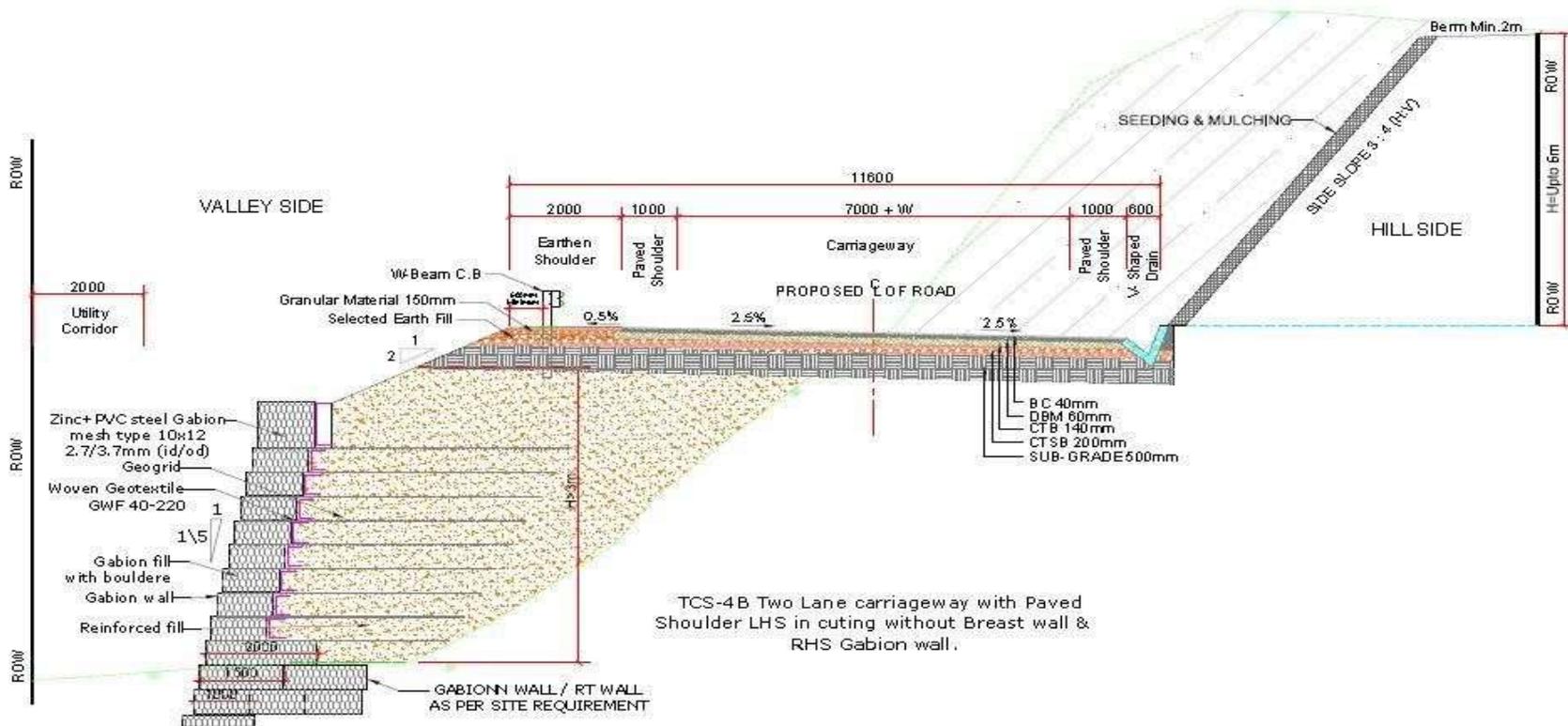


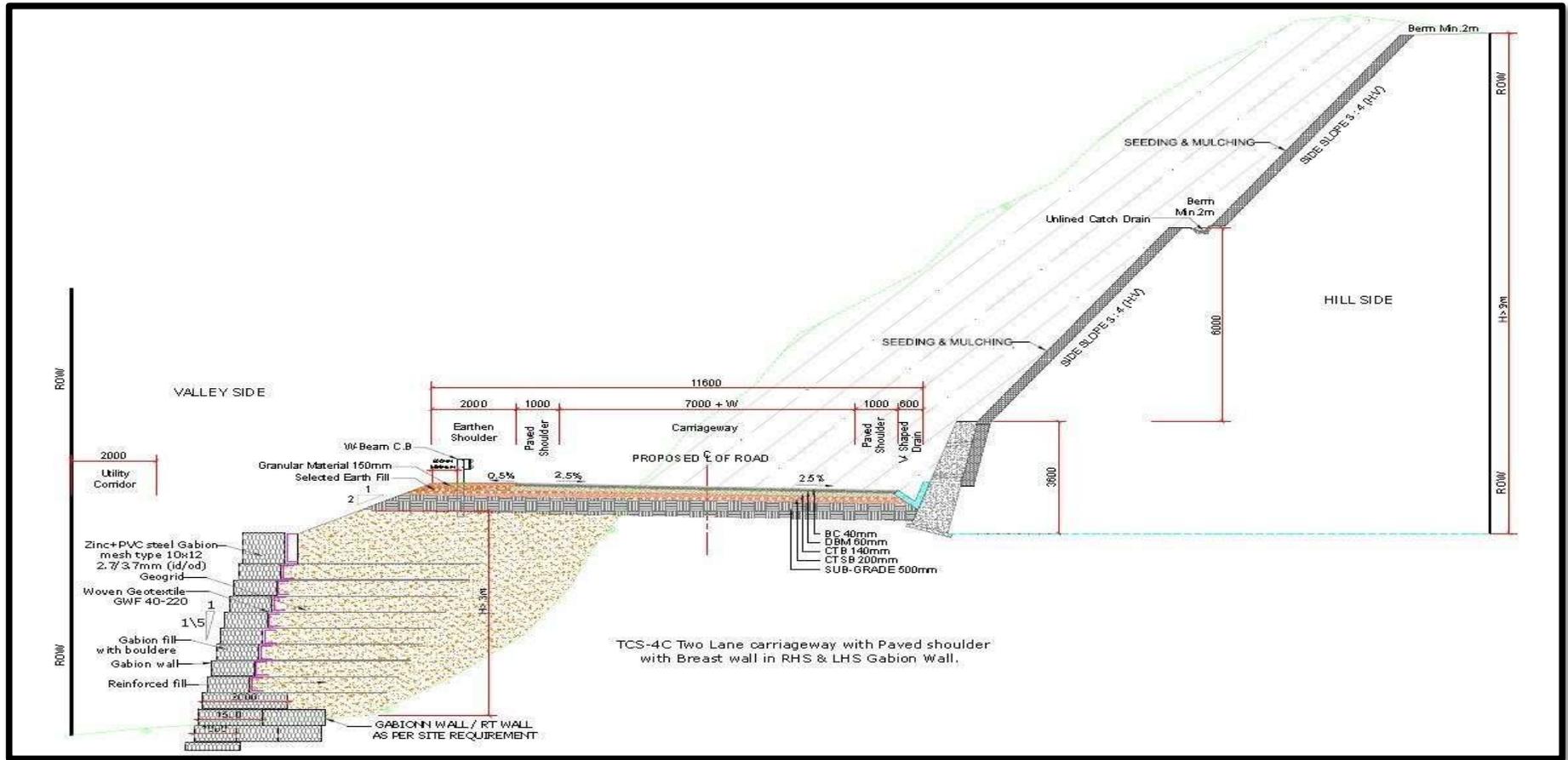


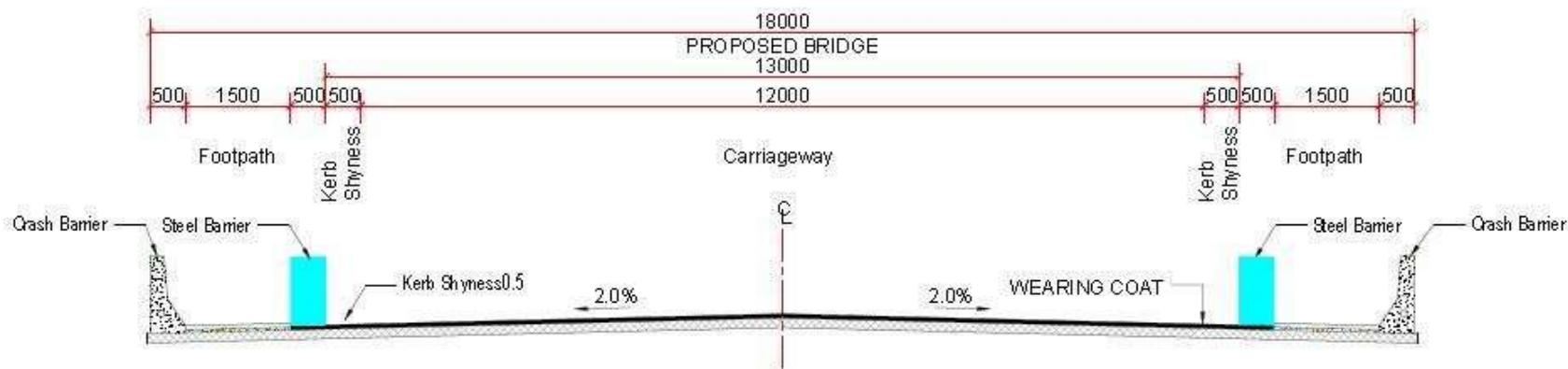












TCS-5 of Bridge for 2-Lane Highway with paved shoulder and protected footpath (Open country - Plain/rolling terrain)

SCHEDULE-C
(See Clause-2.1)
PROJECT FACILITIES

1. Project Facilities

The Concessionaire shall construct the project facilities in accordance with the provisions of this agreement. Such Project facilities shall include:

- a) Toll Plaza
- b) Road side furniture
 - i. Kilometer and 200 M Stones
 - ii. Traffic Signs
 - iii. Overhead Signs
 - iv. Road Marking
 - v. Road Delineators
 - vi. Reflective Pavement Markers & Solar Studs
 - vii. Traffic Impact Attenuators
 - viii. Boundary wall and Fencing
 - ix. Noise Barrier
- c) Operation and Maintenance centers
- d) Way side Amenities / Service Areas
- e) Truck lay-byes
- f) Bus Bay and Bus shelter
- g) Pedestrian Facilities
- h) Highway Lighting
- i) Rainwater Harvesting
- j) Environmental Management Plan
- k) Land Scaping and Tree Plantation
- l) Advanced Traffic Management System (ATMS)
- m) Highway Patrol Units
- n) Emergency medical services
- o) Crane Service

1.1 Project Facilities to be completed on or before project completion date have been described in Annexure-I of this Schedule-C.

**Annexure - I
(Schedule-C)
PROJECT
FACILITIES**

1. Project Facilities

The Concessionaire shall construct the Project Facilities described in this Annexure-I to form part of the Project Highway. The Project Facilities shall include:

- a) Toll Plaza
- b) Roadside furniture
 - i. Kilometer and Hectometer Stones
 - ii. Traffic Signs
 - iii. Overhead Signs
 - iv. Road Marking
 - v. Road Delineators
 - vi. Reflective Pavement Markers & Solar Studs
 - vii. Traffic Impact Attenuators
 - viii. Boundary wall
- c) Operation and Maintenance centers
- d) Way side Amenities 1 Service Areas
- e) Truck lay-byes
- f) Bus Bay and Bus shelter
- g) Pedestrian Facilities
- h) Highway Lighting
- i) Rainwater Harvesting
- j) Environmental Management Plan
- k) Land Scaping and Tree Plantation
- l) Advanced Traffic Management System (ATMS)
- m) Highway Patrol Units
- n) Emergency medical services
- o) Crane Service
- p) Office building and ancillary facilities

Description of Project Facilities

Each of the Project Facilities is briefly described below:

1. Toll Plaza

Tolling system shall be provided in entire length of the project and the same is integrated with the adjoining packages. The Toll Plazas shall be provided as per NHAI **circular No. 17.5.82 dated 24/5/2021** and Schedule D. Minimum Lane requirement in the opening year are as follows.

Toll Plaza shall be provided confirming to **Clause 10.2 of IRC SP: 73:2018** at the following locations:

S. No	Location of Toll Plaza		Direction (Entry: to highway, Exit: from Highway)	Minimum number of Toll Lanes	
	Existing Chainages	Design Chainages		Entry	Exit
1.	-	10+150	At Grade	2+1	2+1

Note:

1. The Toll Plaza shall be constructed as per Manual (Schedule D) considering the modification as per NHAI Circular NHAI/Policy Guidelines/Management of Toll Plaza/2021 Policy Circular No. 17.5.82 dated 24th May, 2021.
2. Based on the toll lanes as given above, toll Booth complex, weigh bridges, electrical systems, and all other facilities required/ mentioned in manual shall be provided as per specification mentioned in Schedule D.
3. No. of toll lane specified above are to be provided. The Concessionaire shall design and provide toll lane as per Manual (Schedule D)
4. All Toll Lanes to be equipped with Hybrid ETC equipment's as per NHAI/Policy Guidelines/Management of Toll Plaza/2021 Policy Circular No. 17.5.82 dated 24th May, 2021. DPR consultant to specify details of equipment's with their numbers. (Clause No. 10.5 IRC: IRC: SP:73-2018).
5. A separate Highway Nest with toilet facility for road users shall be provided near toll plaza location along with parking facility. One toilet block on each direction shall be provided. These toilet facilities shall follow CPWD specifications for sanitary ware items and fittings such as WC, wash basin, Wash basin-Under counter, Urinal flat back, PVC Cistern, IWC Orissa Pan, Flush Valve –CP, Wash Basin pillar cock-CP, Bib Cock—CP, Health Faucet, W/c Bib cock, Wash Basin angle cock. One WC shall be provided for specially challenged persons. Point of Sale (POS) with card swapping machines shall be provided.
6. Concessionaire shall provide Lane Marking and Traffic Signs as per IRC:35 and IRC:67 (Clause No. 10.10 & 10.09 of IRC: SP:73-2018).
7. Solar panels shall be erected over the either on FOB or over Toll Plaza / Admin building to generate the green energy. Same shall be utilized for toll plaza lighting and other energy requirement within toll plaza area along with conventional lighting.
8. Medium speed Weigh in Motion (MSWIM) devices shall be provided in all toll lanes at Toll Plaza Location. In addition to MSWIM, Static weigh Bridge (SWBs) shall be provided on each direction as per manual.
9. Provide Impact Attenuators on Toll Plaza islands in the direction of traffic. Impact attenuators shall be self-restoring conform to IRC SP 73 i.e. Manual of Specifications and Standards for Two Laning of Highways with Paved Shoulder.
10. Provide Staircase on either side of the FOB at Median Island location by widening the island appropriately.
11. The Concessionaire shall provide Electrical connection, Water boring connections etc approved by the Authority/IE. The Concessionaire shall be responsible for bearing the cost of procuring the electrical connection and water connections for the toll plaza including the operation charges of electric as well water connection during the entire concession period.

2. Roadside furniture

2.1 Kilometer and Hectometer Stones

S. No.	Item	Minimum Number	Remarks
1	Kilometer Marker/ Stones	59	The Km/ 200 M stones/ marker can be concrete/ stones and shall be placed on outer side of the earthen shoulder.
2	200 M Stones	239	

Note: It is clarified here that the above requirement is minimum only and they may vary at site, which shall be as per design of the Concessionaire and shall be subjected to approval of IE/NHIDCL and any increase in number or change in locations shall not constitute COS.

2.2 Traffic Signs

Traffic Signs include roadside signs, overhead signs and kerb mounted signs etc. shall be provided along the entire Project Highway and on all Side, Roads joining the main carriageway/service road. A QR code shall be marked on back of each sign as per IRC 67-2022.

All sign shall be of Micro Prismatic Grade Sheeting Corresponding to Class C sheeting as per ASTM D 4956 Type VIII, IX and XI.

The overhead gantry signs shall be placed as given below:

S.No.	Item	Carriageway (Left, Right, Both)
1	Overhead Gantry signs	Both
a	Start of project	Left (Welcome Gantry), Right (Thank you Gantry)
b	End of project	Left (Thank you Gantry), Right (Thank you Gantry Welcome Gantry)
c	Toll Plaza location on both side	Both
2	Overhead Cantilever Gantry signs	02 (Either left or right)
a	At all major locations of crossroads i.e. NH, SH, MDR (start of grade separated structure/ at grade interchange)	Either left or right
b	At major trauma center, roads leading to religious places or any other important location	Both sides
3	Double/ Butterfly Cantilever	-

The detailed minimum number of signage's indicating places, direction, distances, and other features shall be marked on the alignment plan and submitted to IE for approval.

Note:

- The locations and placement of signages shall be finalized in consultation with Independent Engineer/ NHIDCL.
- The locations of the placement of signages shall be finalized in consultation with Independent Engineer/ NHIDCL, as per site requirement. The signage shall be provided as per MoRT&H guidelines no. RT-25035/07/2023-RS (Part) (221534) dated 20-07-2023. It is clarified that the above details of sign boards are indicative and minimum specified. The actual plan for road signage shall be as per the design of the concessionaire and shall be subjected to the approval of IE/NHIDCL. Any increase in number or change in location shall not constitute Change of Scope.

2.3 Road Marking

The concessionaire shall provide Road marking through the project highway including

main carriageway, service/slip roads, Ramps etc. as per IRC:35-2015 & IRC: SP:73-2018.

Road Markings shall be Hot applied thermoplastic materials with reflectorized beads to achieve visibility confirming to clause 2.7.2 of IRC 35. **(Clause No. 2.2 IRC: 35)**

The cold applied plastics pavement markings shall be used for School Zone Markings, Audible Raised Profile Edge Lines and Block Markings (BM 01/02/03). **(Clause No. 2.4 of IRC: 35)**

Note:

- The locations of the marking shall be finalized in consultation with Independent Engineer/NHIDCL, as per site requirement.
- The locations of the marking shall be finalized in consultation with Independent Engineer/NHIDCL, as per site requirement. Type/ Numbers/ Location mentioned are minimum, any additional requirement shall be provided and the same shall not constitute change of scope. The road marking at entry/ exit of slip/ service road of grade separated intersection/ built-up areas shall be executed in accordance with figure 2.1 (A) to 2.1 (F) as per Section 2 of IRC: SP:73-2018.

2.4 Road Studs

Road Studs including Solar Studs shall be provided throughout the project highway as Per IRC: SP:73-2018.

2.5 Road Delineators/Median Marker/Objective Marker

- (i) Road Delineators shall be provided throughout the project highway as per IRC: SP:73-2018 & IRC:79-2019. It is clarified here that spacing of the delineator shall be as per the IRC-79-2019, however delineator shall be provided in Completed length of the project highway.
- (ii) Object markers shall be provided as per the provisions contained in IRC: SP:73-2018 & IRC:79-2019 in consultation with IE/Authority

Note: The locations of the marking shall be finalized in consultation with Independent Engineer/NHIDCL, as per site requirement. Type/ Numbers mentioned are minimum, any additional requirement shall be provided and the same shall not constitute change of scope

2.6 Solar Blinkers

- (i) Solar Blinkers shall be provided at all the U turn facilities at Toll Plaza. Apart from the above, solar blinkers shall be provided and as per manual IRC: SP:73- 20218. The numbers and locations of shall be finalized in consultation with NHIDCL/IE.

2.7 Transverse Bar Marking

- (i) The Transverse Thermoplastic Bar Marking shall be provided as per NHAI Circular (105/2012) issued vide letter no. 11041/218/2007-Admn, dated- 11th June 2012 and IRC: SP:73-2018, at the hazardous locations including but not limited to the locations, Toll Plaza approaches, Approaches to At-Grade junctions, Exit ramps and down side of the approach of the Underpass for both carriageways of Main Carriage way etc.
- (ii) The locations/scheme of Traverse Bar Marking shall be finalized in consultation with NHIDCL/IE. The decision of the NHIDCL/IE in this regard shall be final.

2.8 Traffic Impact Attenuators (IRC: SP:73-2018)

2.8.1 Provide Impact Attenuators in Gore Areas It shall be self-restoring confirming to section 10.4.3 of IRC: SP:73-2018.

2.8.2 Providing End Terminals (IRC: SP:73-2018.)

Provide End Terminals P-4 type confirming to EN 1317-4 to Parapet Walls of Culverts, Structures ends for the safety of approaching traffic etc.

S.No.	Item	Chainage / Number	Remarks
1	Culvert Ends		End Terminals P-4 type confirming to EN 1317-4 shall be provided at culverts ends, structures ends and at any other safety hazard locations as per site requirement in consultation with Authority/IE Engineer.
2	Structures Ends		
3	Any other location which Safety Hazard		

2.9 Boundary wall and Fencing

Deleted

2.10 Noise Barrier

The Concessionaire shall provide Noise barriers at the locations and for the lengths indicated below: -

S. No	Noise Barrier Locations	Side
NIL		

The specification of the Noise barrier shall be finalized in consultations with concerned Forest officials and after approval by IE/Authority

3 Operation and Maintenance centers (IRC: SP:73-2018)

There shall be operation and maintenance center(s) either near the toll plaza location or at any other location along the Project Highway, as identified by the Concessionaire. The minimum land for O & M center shall be NIL and shall be acquired by the Concessionaire at his own cost and risk. Dedicated operation and maintenance center shall be provided in accordance to Schedule D.

4 Way side Amenities / Service Areas/Rest Area (IRC: SP:73-2018)

S.No	Item	Design Chainage (Km)	Side	Remarks
NIL				

The Site needs to leveled/ graded for the whole of Way side Amenities area and boundary wall of the height of 1.5 m shall be constructed along the periphery of the area.

4(a) View Point: -

The View Point shall be constructed at the locations and for the lengths indicated below

Sr. No.	Design Chainage	Side	Remarks
1	41+310	LHS	30m (L) X 4m(W)

5 Truck lay-byes: (IRC: SP:73-2018)

5.1 The truck lay-bye shall be provided at below given location and as per the design mentioned in Schedule-D.

Sr. No.	Design Chainage	Side	Remarks
	12+730	LHS	

5.2 Toilet block along with Janitor room on each Truck Lay bye shall be provided. The toilet block shall consist of at least 1 block for bathing, at least 2 fixtures each for urinals, WC and wash basin. There shall be 24-hour lighting facility in toilet block. These toilets facilities must be functional round the clock including proper maintenance. For arrangement of water, 1 no. of boring along with water pump shall be provided to keep the toilet clean. For upkeep and maintenance of Toilet, 3 Safai wale (1 in each 8-hour shift) shall be engaged and is in the scope throughout contract period.

5.3 Truck Lay Bye Pavement Provide Pavement Composition (Flexible/Rigid/ Paver Blocks) as follows:

Pavement Composition (Flexible/Rigid/ Paver Blocks)
As per Main Carriageway

6 Bus Bay and Bus shelter: (IRC: SP:73-2018)

Provision of Busbay and bus shelter on highways as per **IRC 80: 2022** including paving of layby, signs, markings, speed calming measures, drainage, lighting etc., in built-up areas, intersections of NH/SH/MDR and roads leading to large settlements shall be as follows:

6.1 Bus Bay with tapers shall be provided along with passenger’s shelters shall be constructed at the following locations.

S. No	Chainage	Project Facility	Side LHS/RHS
1	220	Bus Shelter	RHS
2	7900	Bus Shelter	RHS
3	9250	Bus Shelter	RHS
4	9500	Bus Shelter	RHS
5	14600	Bus Shelter	RHS
6	20090	Bus Shelter	RHS
7	21700	Bus Shelter	RHS
8	23230	Bus Shelter	RHS
9	30970	Bus Shelter	RHS
10	35598	Bus Shelter	RHS
11	41668	Bus Shelter	RHS
12	46468	Bus Shelter	RHS

6.2 Bus Bay Pavement Provide pavement composition (Flexible/Rigid/ Paver Blocks) as follows:

Pavement composition (Flexible/Rigid/ Paver Blocks)
As per Main Carriageway

7 Pedestrian Facilities (IRC: SP:73-2018)

Pedestrian Facilities shall be provided in accordance with the Manual of Specifications and Standards as referred in Clause 9.8 of IRC:SP:73-2018 and IRC: 103-2022. This shall consist of footpath (sidewalks), pedestrian guard rails and pedestrian crossing.

7.1 Pedestrian Guard Rails shall be provided wherever required in accordance with Section 9.8 of the Manual of Specifications and Standards. The location of the same shall be finalized in consultation with IE/NHIDCL

7.2 Footpath Paving shall be provided wherever required in accordance with Section 9.8 of the

Manual of Specifications and Standards. The location of the same shall be finalized in consultation with IE/NHIDCL.

7.3 Pedestrian crossings shall be provided wherever required in accordance with Section 9.8 of the Manual of Specifications and Standards. The location of the same shall be finalized in consultation with IE/NHIDCL

8 Highway Lighting (IRC: SP:73-2018)

Location of highway lighting shall be as per IRC:SP:73-2018

The street light poles shall be 1 piece, continuous-tapered, octagonal poles and shall be manufactured from one length of steel sheet, formed in continuous tapered tube, with one continuous arc-welded vertical seam. The minimum wall thickness for lighting poles shall not be less than 4 mm. The Bottom Diameter shall be minimum 175 mm. The Top Diameter shall be minimum 75 mm. The door on window of pole shall be antitheft. All electrical cable should be concealed. All electrical lighting fixtures shall be LED. The fixtures shall be concealed except on poles. Lighting poles shall be fixed on outer side of steel/concrete barrier. The typical lighting location shall be providing at typical cross section:

Note:

1. All lighting systems shall be maintained for the entire Maintenance period. Charges for procuring the connection shall be borne by the Concessionaire/Contractor. The provision with regards to lighting/energization for the ATMS shall be as per IRC:SP:73-20218.

2. The lighting source from Electricity Board is the primary source to be ensured by the Concessionaire/Contractor. However, backup/standby arrangement with DG/Solar sets etc. shall be ensured by the Concessionaire/Contractor as per provisions of the IRC: SP:73-2018.

9 Rainwater Harvesting

(1) Construction/Maintenance of Rainwater Harvesting system shall be done as per Clause – 4.5.3 of IRC SP-42- 2014.

10 Environmental Management Plan (Attach MOEF Mitigation Report in Schedule D)

The Concessionaire shall implement the Environmental Management plan & action Plan for undertaking possible mitigation measures in accordance with environmental clearance accorded by Ministry of Environment and Forests and climate change. The conditions & directions stipulated by the MOEF shall be complied by the concessionaire

11 Land Scaping and Tree Plantation (IRC: SP:73-2018)

The Concessionaire shall plant trees and shrubs of required numbers and types at the appropriate locations within Right of Way and in the land earmarked by the Authority for afforestation as per Schedule D at the following areas.

Sl. No.	Types of Plantations	Location (Km)	Number of trees to be planted	Remarks
As per IRC Codal/Manual /MoRTH Circular Policy				

12 Advanced Traffic Management System (ATMS) (NHAI Policy Circular No

11.53/2023 dated 10th October, 2023)

The Concessionaire is required to design, install, operate and maintain Advanced Traffic Management System (ATMS) as part of the project facilities. Advanced Traffic Management System shall be provided as per standards and specifications specified in the manual and as per MoRTH/NHAI circular 11.53/2023 dated 10th October, 2023 and shall be maintained throughout the contract period.

The ATMS components to be deployed shall inter alia include:

12.1 General

The ATMS Project shall broadly include the following sub-systems to be provided as per the standards & specifications.

12.1.1 Video Incident Detection System (VIDS)

12.1.2 Vehicle Actuated Speed Display System(VASDS)

12.1.3 Fixed and Portable Variable Message Sign (VMS) System

12.1.4 Communication Network with OFC Backbone

12.1.5 Common ATMS Command & Control Center (01) for Km.0.000 to Km. 58.342.

12.1.6 Power Supply for Field Equipment as well as for ATMS Command & Control Center

12.1.7 Operation & Maintenance (O&M) of the entire ATMS Facility

12.1.8 Maintenance Vehicle

12.2 The requirements stated herein shall be construed as minimum requirement and meeting the respective requirements individually shall not relieve the Contractor from the responsibility. The entire system should function efficiently as an integrated solution during the entire O&M period.

12.2.1 ATMS Command and Control Center

One ATMS Command and Control Centre structure will be constructed by Civil Contractor of NHIDCL at Toll Plaza location. The ATMS Contractor shall set up and operate the ATMS Command And Control Center as per the Standards and Specification. The ATMS Contractor shall undertake any additional civil works, interior works, MEP works, for setting up the Command Center, including all additional related electrical, lighting, electrical connection, DG set, power backup, HVAC works, access control, building CCTV, PTZ cameras outside building, firefighting system, alarm, fire extinguishers, raised floor, housekeeping, building cleaning, maintenance, recurring charges including electricity bills, telephone bills, DG fuel, servicing, security.

12.2.2 Power Supply for ATMS Command & Control Center and Field Equipment

The Concessionaire shall ensure 24x7 power supply for the ATMS Command and Control Centre and Field Equipment with supply power from Electricity Department as primary source supported by UPS renewable power (solar etc) and DG Set of adequate capacity.

There shall be no obligation of NHIDCL with regard to providing power/ electricity supply/connections for testing commission, operation & maintenance of any component of the ATMS. Further, the following points are to also be observed by the

ATMS contractor:

- a. The Concessionaire shall perform all the necessary application procedures to the Power Company required for the power to be supplied to the Traffic Management Centre, Sub-Centre and the field equipment in their own name. All the expenses charged by Power Companies regarding such applications and execution of work shall be borne by the Concessionaire as part of the scope of this contract. Any damage to the highway during such execution of work shall have to be repaired by the ATMS Contractor to the pre-existing condition without any cost implications to NHIDCL.
- b. The Concessionaire shall make all necessary arrangements for the electricity needed for the execution of the Works and O&M period for the entire period of the Contract. In case electricity is not made available through electricity companies, alternate electricity arrangement such as through renewable energy/DG Set should be made by the Concessionaire. Under no circumstances NHIDCL shall grant an extension of time for achieving the milestones if the contractor is unable to make the electricity arrangement either for the execution of the work or for the O&M activities.
- c. The fixed charges, installation charges, recurring charges, electricity bill, DG set fuel, maintenance etc. for each field equipment, TMC, Control Centre, Sub-centre, Contractor's site office, or any other facility being used by the Contractor under the scope of this Contract shall be in the scope of the Contractor only for the entire Contract period i.e., Design phase, procurement, installation, testing, trail-run, commissioning, operations, and maintenance period. The Authority shall not be responsible for any provision for power supply during implementation as well as operations and maintenance period.

12.2.3 Operation & Maintenance(O&M) of the entire ATMS Facility.

- a. The O&M period after the successful completion of works shall include Operation & Maintenance of the entire ATMS Facility as per the Service Level Agreement (SLA) with Qualified Manpower mentioned in Standards & Specifications including supply of adequate spares, parts, consumables and maintenance equipment required for the facility. The Contractor shall maintain required spare parts to maintain required service levels.
- b. The Concessionaire shall have sufficient infrastructure and capability to keep/store spares required for maintenances and will at all times during the contract period maintain sufficient inventory of spares and consumables for operating and maintaining the ATMS and to meet the Service Level requirements. Before the start of O&M Period, the Concessionaire shall deploy the O&M Personal mentioned at Appendix-C of Standards & Specification with prior approval of the Authority.

12.2.4 Maintenance Vehicle

The Concessionaire shall keep adequate numbers of dedicated vehicles (minimum 1 vehicle per 50km) to attend the maintenance requirement during the Operation & Maintenance period.

13 Highway Patrol Units IRC: SP:73-2018)

Highway Patrol units shall be established and operate at toll plaza location as per Schedule-D Clause 12.10 (strictly as per details mentioned in Annexure-C), which shall

continuously patrol the highway in a stretch not exceeding 50 km (if the stretch is more than 50 km additional 1 number of patrol vehicle per 50 km or less shall be provided). The vehicle shall be brand new with fuel, driver, and insurance all-inclusive for the entire contract period. Highway Patrol units shall be fitted with GPS and GSM based vehicle tracker system. Highway Patrol Vehicles shall be stationed on layby constructed on Project Highway @ every 20 km of each Toll Plaza.

14 Emergency medical services (Clause No. 12.11 of IRC: SP:73-2018)

The Concessionaire shall, at its own cost, construct a medical aid post at toll plaza with a minimum size of 5 x 5 sq.m with a toilet (to be used for the patients of minimum size of 3 x3 sq.m) and hand it over to the Authority, no later than 30 (thirty) days prior to PCOD/COD. The Medical Aid Post(s) shall be deemed to be part of the project and shall vest in the Authority. Medical Aid Post shall be set up at Administrative Block with round-the-clock services for victims of accidents on the Project Highway.

One number Ambulance shall be provided in a stretch not exceeding 50 km (if the stretch is more than 50 km additional 1 number of ambulances per 50 km or less shall be provided). The Ambulance shall be brand new with fuel, driver, medical staff and insurance all-inclusive for the entire contract period. Ambulance fitted with GPS and

GSM based vehicle tracker system shall be provided to be integrated with the Video Incident Detection System with ATMS, as per Schedule-D, Clause 12.11 (strictly as per details mentioned in Annexure-D), along with all necessary manpower (including paramedical staff), medicines, equipment's etc. and shall be maintained in an effective manner throughout the contract period starting from the appointed date. Ambulance shall be stationed on layby constructed on Project Highway @ every 20 km of each Toll Plaza.

15 Crane Service: (Clause No. 12.12 of IRC: SP:73-2018)

Crane Service shall be provided on project highway, as specified in the manual Clause 12.12. One number crane shall be provided in a stretch not exceeding 50 km (if the stretch is more than 50 km additional 1 number of cranes per 50 km or less shall be provided). Crane having capacity of minimum 50T shall be made available. The crane shall be brand new with fuel, driver, and insurance all-inclusive for the entire contract period.

SCHEDULE - D

SPECIFICATIONS AND STANDARDS

1 Specifications and Standards of the Project

The Contractor/ Concessionaire shall comply with the Specifications and Standards set forth in Annexure-I of this Schedule-D for construction of the Project Highway.

2 Design Standards

The Contractor/ Concessionaire shall comply with the Specifications and Standards set forth in Annexure-I of this Schedule-D for construction of the Project Highway.

Annex – I
(Schedule-D)

SPECIFICATIONS AND STANDARDS FOR CONSTRUCTION

1 Manual of Specifications and Standards to apply

- (i) Two laning of the Project Highway shall Confirm to the “Manual of Specifications and Standards for Highway” published as IRC: SP: 73-2018 with all amendments and additions up to bid date (Referred to as "Manual" in this Schedule) and MoRT&H Specifications for Road and Bridge Works (5th revision). Where the specification for a work is not given, Good Industry Practice shall be adopted to the satisfaction of the Independent Engineer.
- (ii) As regards, the work of utility shifting, the relevant specifications, relevant rules, regulations and acts of Utility Owning Department/Agencies shall be applicable

2 Deviations from the Manual

- 2.1 The terms “Concessionaire”, “Independent Engineer” and “Concession Agreement” used in the Manual shall be deemed to be substituted by the terms “Contractor”, “Authority’s Engineer” and “Agreement” respectively.

[Note1: Deviations from the aforesaid Specifications and Standards shall be listed out here. Such deviations shall be specified only if they are considered essential in view of project-specific requirements.]

- 2.2 Notwithstanding anything to the contrary contained in aforesaid Manual, the following Specifications and Standards shall apply to the Project Highway, and for purposes of this Agreement, the aforesaid Specifications and Standards shall be deemed to be amended to the extent set forth below:

Sl. No.	Clause Referred in Manual	Provision as per Manual	Modified Provision	
			Chainage	Speed (Kmph)
1	Cl.2.2 Table2.1	Minimum Design Speed for Mountainous and Steep- 40 kmph	Locations where Speed is less than 40km/hr :-	
			32290	30
			32630	30
			32930	30
			33620	30
			34580	30
			34940	35
			35176	35
			36616	35
			36686	35
			37936	35
			38006	35
			38396	35
			38676	20
			38996	20
			39806	35
			40226	35
40486	20			
40786	20			

			40986	20
			41736	20
			42186	20
			42536	20
			44636	20
			44896	20
			47116	20
			47426	20
			48196	20
			48536	20
			49646	20
			50016	35
			51316	35
			51436	35
			51676	35
			51736	35
			51896	35
			52036	35
			53676	20
			53756	20
			53826	20
			54156	35
			54226	35
			54306	35
			54436	35
			54856	35
			55276	35
			55896	35
			56016	35
			56476	35
			57386	35

3 Advanced traffic Management System (ATMS)

Advanced Traffic Management System shall be provided as per standards and specifications specified in the Manual and as per NHA Policy Circular No. 11.53/2023 dated 10th October 2023 and shall be maintained throughout the contract period.