



BHARATMALA
ROAD TO PROSPERITY



BUILDING INFRASTRUCTURE - BUILDING THE NATION

CIN: U45400DL2014GOI269062

सार्वजनिक क्षेत्र का उपक्रम

A PUBLIC SECTOR UNDERTAKING

NHIDCL/Manipur/CivilWork/I-J//2020/Pkg-2-Part(1)/4447
e-194772

Date: 10.01.2025

Project Name: Widening to 2 (Two) Lane with Paved Shoulder of Imphal to Jiribam section of NH-37 from Design Chainage km 15.940 to km 33.120 (Existing Chainage km 15.946 to km 33.955) (Length = 17.180 km) (PKG-2) in the State of Manipur on Engineering, Procurement & Construction (EPC) Mode - **Balance Works & Rectification Works**

Contract Package No.: NHIDCL/Manipur/CivilWork/I-J//2020/Pkg-2

Tender ID: 2024_NHIDC_841769_1

Corrigendum No.1

Sr. No.	Reference/Clause No./Annexure	Existing Provision	Modified Provision (To be read as)
1	Schedule-A	Schedule-A	Modified Schedule-A is attached as Annexure-1.
2	Schedule-B	Schedule-B	Modified Schedule-B is attached as Annexure-2.
3	Schedule-H	Schedule-H	Modified Schedule-H is attached as Annexure-3.
4	Schedule-D	2. Design Standards The Project Highway including Project Facilities shall conform to design requirements set out in the following documents: [Manual of Specifications and Standards for Two Laning of Highways (IRC: SP: 73-2018), referred to herein as the Manual]	2. Design Standards The Project Highway including Project Facilities shall conform to design requirements set out in the following documents: [Manual of Specifications and Standards for Two Laning of Highways (IRC: SP: 73-2018), referred to herein as the Manual] As regards, the work of utility shifting, the relevant specification, relevant rules, regulations and Acts of Utility Owning Department /Agencies shall be applicable.
5	Annex-III (Schedule-A) Alignment Plan	-	Alignment Plan is enclosed as Annexure-4.
6	Clause 2 (xi) of Schedule-B- Typical Cross-section of the Project Highway	-	Typical Cross-section of the Project Highway and other drawings are enclosed as Annexure-5.

(Ankit Loyal)

DGM(T), Manipur Division

MODIFIED SCHEDULE-A

SCHEDULE - A

(See Clauses 2.1 and 8.1)

SITE OF THE PROJECT

1 The Site

- (i) Site of the Project Highway shall include the land, buildings, structures and road works as described in **Annex-I** of this **Schedule-A**.
- (ii) The dates of handing over the Right of Way to the Contractor are specified in **Annex-II** of this **Schedule-A**.
- (iii) 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 Contractor, and such inventory shall form part of the memorandum referred to in Clause 8.2 (i) of this Agreement.
- (iv) The alignment plans of the Project Highway are specified in **Annex-III**. In the case of sections where no modification in the existing alignment of the Project Highway is contemplated, the alignment plan has not been provided. Alignment plans have only been given for sections where the existing alignment is proposed to be upgraded. The proposed profile of the Project Highway shall be followed by the contractor with minimum FRL as indicated in the alignment plan. The Contractor, however, improve/upgrade the road profile indicated in **Annex-III** based on site/design requirements.
- (v) The status of the environment clearances obtained or awaited is given in **Annex IV**.

Annex-I

(Schedule-A)

SITE

1. Site

The Site of the Two-Lane Project Highway comprises the section of NH-53 commencing from km 15+945 to km 33+396 i.e. Keithelmanbi Village to Kharam Village in the state of Manipur. The land, carriageway and stretches comprising the site are described below.

2. Land

The Site of the Project Highway comprises the land as described below:

Sl. No.	Existing Chainage (km)		Existing Right of Way (m)
	From	To	
1	15+940	16+025	20
2	16+025	16+125	20
3	16+125	16+225	20
4	16+225	16+325	20
5	16+325	16+425	15
6	16+425	16+525	15
7	16+525	16+625	15
8	16+625	16+725	15
9	16+725	16+825	15
10	16+825	16+925	15
11	16+925	17+025	15
12	17+025	17+125	15
13	17+125	17+225	15
14	17+225	17+325	15
15	17+325	17+425	15
16	17+425	17+525	20
17	17+525	17+625	20
18	17+625	17+725	20
19	17+725	17+825	20
20	17+825	17+925	20
21	17+925	18+025	20
22	18+025	18+125	20
23	18+125	18+225	20
24	18+225	18+325	20
25	18+325	18+425	20
26	18+425	18+525	20
27	18+525	18+625	20
28	18+625	18+725	20
29	18+725	18+825	20
30	18+825	18+925	20
31	18+925	19+010	20
32	19+010	19+125	24
33	19+125	19+225	24
34	19+225	19+325	24

Sl. No.	Existing Chainage (km)		Existing Right of Way (m)
	From	To	
35	19+325	19+425	24
36	19+425	19+525	24
37	19+525	19+625	24
38	19+625	19+725	24
39	19+725	19+825	24
40	19+825	19+925	24
41	19+925	20+025	24
42	20+025	20+125	24
43	20+125	20+225	24
44	20+225	20+325	24
45	20+325	20+425	24
46	20+425	20+525	24
47	20+525	20+625	24
48	20+625	20+725	24
49	20+725	20+825	24
50	20+825	20+925	24
51	20+925	21+025	24
52	21+025	21+125	24
53	21+125	21+225	24
54	21+225	21+325	24
55	21+325	21+425	24
56	21+425	21+525	24
57	21+525	21+625	24
58	21+625	21+725	20
59	21+725	21+825	20
60	21+825	22+025	20
61	22+025	22+025	20
62	22+025	22+125	20
63	22+125	22+225	20
64	22+225	22+325	20
65	22+325	22+425	20
66	22+425	22+525	20
67	22+525	22+625	20
68	22+625	22+725	20
69	22+725	22+825	20
70	22+825	22+925	24
71	22+925	23+025	24
72	23+025	23+125	24
73	23+125	23+225	24
74	23+225	23+325	24
75	23+325	23+425	24
76	23+425	23+525	24
77	23+525	23+625	24
78	23+625	23+725	24
79	23+725	23+825	20
80	23+825	23+925	20
81	23+925	24+025	20
82	24+025	24+125	20
83	24+125	24+225	20

Sl. No.	Existing Chainage (km)		Existing Right of Way (m)
	From	To	
84	24+225	24+325	20
85	24+325	24+425	20
86	24+425	24+525	20
87	24+525	24+625	20
88	24+625	24+725	20
89	24+725	24+825	20
90	24+825	24+925	20
91	24+925	25+025	20
92	25+025	25+125	20
93	25+125	25+225	20
94	25+225	25+325	24
95	25+325	25+425	24
96	25+425	25+525	24
97	25+525	25+625	24
98	25+625	25+725	24
99	25+725	25+825	24
100	25+825	25+925	20
101	25+925	26+025	20
102	26+025	26+125	20
103	26+125	26+225	20
104	26+225	26+325	20
105	26+325	26+425	20
106	26+425	26+525	20
107	26+525	26+625	20
108	26+625	26+725	20
109	26+725	26+825	20
110	26+825	26+925	20
111	26+925	27+025	20
112	27+025	27+125	24
113	27+125	27+225	24
114	27+225	27+325	24
115	27+325	27+425	24
116	27+425	27+525	24
117	27+525	27+625	24
118	27+625	27+725	24
119	27+725	27+825	24
120	27+825	27+925	24
121	27+925	28+025	24
122	28+025	28+125	24
123	28+125	28+225	20
124	28+225	28+325	20
125	28+325	28+425	20
126	28+425	28+525	20
127	28+525	28+625	20
128	28+625	28+725	20
129	28+725	28+825	20
130	28+825	28+925	20
131	28+925	29+025	20
132	29+025	29+125	24

Sl. No.	Existing Chainage (km)		Existing Right of Way (m)
	From	To	
133	29+125	29+225	24
134	29+225	29+325	20
135	29+325	29+425	20
136	29+425	29+525	20
137	29+525	29+625	20
138	29+625	29+725	20
139	29+725	29+825	20
140	29+825	29+925	20
141	29+925	30+025	20
142	30+025	30+125	20
143	30+125	30+225	24
144	30+225	30+325	24
145	30+325	30+425	24
146	30+425	30+525	24
147	30+525	30+625	24
148	30+625	30+725	20
149	30+725	30+825	20
150	30+825	30+925	20
151	30+925	31+025	20
152	31+025	31+125	20
153	31+125	31+225	20
154	31+225	31+325	20
155	31+325	31+425	20
156	31+425	31+525	20
157	31+525	31+625	20
158	31+625	31+725	20
159	31+725	31+825	20
160	31+825	31+925	24
161	31+925	32+025	24
162	32+025	32+125	24
163	32+125	32+225	24
164	32+225	32+325	24
165	32+325	32+425	24
166	32+425	32+525	24
167	32+525	32+625	24
168	32+625	32+725	24
169	32+725	32+825	24
170	32+825	32+925	24
171	32+925	33+025	24
172	33+025	33+125	24
173	33+125	33+225	24
174	33+225	33+325	24
175	33+325	33+955	24

3. Carriageway

The present carriageway of the Project Highway is 2-lane except in few sections where 2-laning with paved shoulder works have been carried out as summarized in following tables. Type of existing pavement is flexible.

(i) Already completed work for Earthwork upto Top of Sub-grade layer is as under:

Sr.No.	Design Chainage		Length (km)	Remarks
	From	To		
1	15.940	17.950	2.010	
2	20.290	25.330	5.040	
3	25.350	25.370	0.020	
4	25.390	25.750	0.360	
5	26.000	26.660	0.660	
6	26.880	30.030	3.150	
7	31.200	32.860	1.660	
		Total	12.900	

(ii) Already completed work for GSB layer is as under:

Sr.No.	Design Chainage		Length (km)	Remarks
	From	To		
1	15.940	16.830	0.890	
2	17.000	17.950	0.950	Rectification works to be carried out
3	20.290	20.830	0.540	
4	20.830	20.860	0.030	Rectification works to be carried out
5	20.860	23.175	2.315	
6	23.175	23.490	0.315	Rectification works to be carried out
7	23.490	23.580	0.090	
8	23.580	23.735	0.155	Rectification works to be carried out
9	23.735	23.890	0.155	
10	23.950	24.520	0.570	Rectification works to be carried out
11	24.520	24.830	0.310	
12	24.850	25.115	0.265	
13	25.115	25.145	0.030	Rectification works to be carried out
14	25.145	25.325	0.180	
15	25.390	25.610	0.220	
16	26.000	26.660	0.660	Rectification works to be carried out
17	26.880	27.155	0.275	
18	27.155	29.950	2.795	
19	31.655	31.730	0.075	Rectification works to be carried out
20	31.730	31.835	0.105	
21	31.835	31.930	0.095	Rectification works to be carried out
22	31.930	32.760	0.830	
23	32.760	32.820	0.060	Rectification works to be carried out
24	32.840	32.850	0.010	

Sr.No.	Design Chainage		Length (km)	Remarks
	From	To		
		Total	11.920	

(iii) Already completed work for WMM layer is as under:

Sr.No.	Chainage From	Chainage To	Length (km)	Remarks
1	15.940	16.825	0.885	
2	20.290	20.810	0.520	
3	20.810	20.830	0.020	Rectification works to be carried out
4	20.830	20.870	0.040	
5	20.870	20.910	0.040	Rectification works to be carried out
6	20.910	22.890	1.980	
7	22.890	22.930	0.040	Rectification works to be carried out
8	22.930	23.110	0.180	
9	23.110	23.175	0.065	
10	24.520	24.825	0.305	Rectification works to be carried out
11	24.855	25.115	0.260	
12	25.145	25.320	0.175	
13	27.150	29.600	2.450	
14	29.600	29.835	0.235	Rectification works to be carried out
15	29.835	29.950	0.115	
16	31.940	32.640	0.700	
17	32.640	32.760	0.120	Rectification works to be carried out
		Total	8.130	

(iv) Already completed work for DBM layer is as under:

Sr.No.	Design Chainage		Length (km)	Remarks
	From	To		
1	15.940	16.825	0.885	
2	20.290	20.810	0.520	Rectification works to be carried out
3	20.910	22.935	2.025	
4	22.935	23.110	0.175	
5	27.155	27.160	0.005	
6	27.160	29.830	2.670	Rectification works to be carried out
7	29.830	29.835	0.005	
8	31.930	32.730	0.800	Rectification works to be carried out
			7.085	

(v) Already completed work for BC layer is as under:

Sr.No.	Design Chainage		Side	Length (km)	Remarks
	From	To			
1	15.940	16.820	BHS	0.880	
		Total	Total	0.880	

4. Major Bridges

The Site includes the following Major Bridges:

S. No.	Existing Chainage (km)	Type of Structure			Span Arrangement (m)	Width (m)
		Foundation	Sub-structure	Super-structure		
Nil						

5. Road over-bridges (ROB)/ Road under-bridges (RUB)

The Site includes the following ROB (road over railway line) / RUB (road under railway line):

S. No.	Existing Chainage (km)	Type of Structure		Span Arrangement (m)	Width (m)
		Foundation	Superstructure		
Nil					

6. Grade separators

The Site includes the following grade separators:

S. No.	Existing Chainage (km)	Type of Structure		Span Arrangement (m)	Width (m)
		Foundation	Superstructure		
Nil					

7. Minor bridges

The Site includes the following minor bridges:

Sr. No.	Existing Chainage (km)	Design Chainage (km)	Type of Structure			No of spans with Span Length (m)	Width (m)	Remarks
			Foundation	Sub-structure	Super Structure			
1	25.490	25.348	Open	Wall	RCC Box Bridge	1 x 10.7 m	10.6	Bridge proper upto Super-structure completed and balance work of Retaining wall, Approach slab, wearing coat, Stone pitching, Filter Media and Protection Work etc., to be complete in all respect.
2	33.360	33.080	Open	Wall	RCC Slab Bridge	1 x 8.5 m	6.8	

8. Railway level crossings

The Site includes the following railway-level crossings:

S. No.	Location (km)	Remarks
Nil		

9. Underpasses (vehicular, non-vehicular)

The Site includes the following underpasses:

S.No	Existing Chainage (km)	Type of structure	No. of span with Span Arrangement (m)	width (m)
Nil				

10. Culverts

The Site has the following culverts:

(a) Existing Culverts:

Sl. No.	Existing Chainage (km)	Design Chainage (km)	Type of Culvert	Span/Opening with Span length	Width of Culvert (m)
1	16.125	16.119	R.C.C SLAB	5x3	12
2	16.536	16.530	R.C.C SLAB	3X4	12
3	17.023	17.016	HP (Skew)	1 X 1.00 Dia	18.6
4	17.255	17.248	HP (Skew)	1 X 1.00 Dia	16.6
5	18.048	18.029	HP	1 X 1.00 Dia	11.3
6	18.158	18.141	HP	1 X 1.00 Dia	8.83
7	18.341	18.393	HP	1 X 1.00 Dia	10.1
8	18.586	18.564	HP	1 X 0.90 Dia	11.55
9	18.672	18.650	R.C.C SLAB	1x1.70	10
10	18.786	18.762	R.C.C SLAB	1x1.70	7.5
11	19.033	19.010	R.C.C SLAB	1x2.00	8.9
12	19.292	19.267	Chocked (Remarks: After Excavation It has found a Single Row HP of 0.90M Dia)	1 X 0.90 Dia	9.3
13	19.516	19.490	HP	1 X 1.20 Dia	15
14	19.638	19.619	HP	1 X 1.00 Dia	11.6
15	19.915	19.883	HP	1 X 1.00 Dia	12
16	19.99	19.955	HP	1 X 1.00 Dia	9.6
17	20.155	20.106	Not Clearly Visible (Remarks: After Excavation It has found a Single Row HP of 1.00M Dia)	1 X 1.00 Dia	10
18	20.298	20.254	Not Clearly Visible (Remarks: After Excavation It has found a Single Row HP of 1.00M Dia)	1 X 1.00 Dia	13
19	20.679	20.615	R.C.C SLAB	4X5	12
20	20.912	20.849	R.C.C SLAB	4X5	12
21	21.322	21.260	R.C.C SLAB	2X3	12
22	21.664	21.562	R.C.C SLAB	3X4	12

Sl. No.	Existing Chainage (km)	Design Chainage (km)	Type of Culvert	Span/Opening with Span length	Width of Culvert (m)
23	21.77	21.648	R.C.C SLAB	2X3	12
24	21.9	21.755	R.C.C SLAB	2X2	12
25	22.184	22.039	R.C.C SLAB	3X4	12
26	22.408	22.257	R.C.C SLAB	3X4	12
27	22.449	22.299	R.C.C SLAB	2X3	12
28	22.524	22.376	R.C.C SLAB	2X3	12
29	22.667	22.516	R.C.C SLAB	3X4	12
30	22.885	22.728	R.C.C SLAB	2X2	12
31	23.034	22.874	R.C.C SLAB	2X2	12
32	23.351	23.195	HP	1 X 1.00 Dia	12.8
33	23.565	23.411	HP	2 X 1.00 Dia	13.7
34	24.672	24.510	R.C.C SLAB	1X1.70	8
35	24.999	24.836	R.C.C SLAB	3X4	12
36	25.310	25.130	R.C.C SLAB	2X2	12
37	25.545	25.381	HP	1 X 1.00 Dia	14.5
38	25.813	25.643	HP	1 X 0.90 Dia	9
39	26.251	26.074	HP	1 X 1.00 Dia	10
40	26.603	26.430	HP	1 X 1.00 Dia	10.7
41	26.847	26.666	HP	1 X 1.00 Dia	11.5
42	27.025	26.840	HP	1 X 1.00 Dia	14
43	26.102	26.916	HP	1 X 1.00 Dia	12
44	27.3	27.096	R.C.C SLAB	2X2	12
45	27.351	27.150	R.C.C SLAB	3X4	12
46	27.5	27.284	R.C.C SLAB	2X2	12
47	27.7	27.481	R.C.C SLAB	2X2	12
48	27.745	27.529	R.C.C SLAB	2X2	12
49	27.903	27.684	R.C.C SLAB	2X2	12
50	28.117	27.893	HP	1 X 1.00 Dia	10.8
51	28.226	28.002	R.C.C SLAB	2X2	12
52	28.392	28.167	R.C.C SLAB	2X2	12
53	28.884	28.655	R.C.C SLAB	2X2	12
54	29.115	28.879	R.C.C SLAB	2X2	12
55	29.185	28.949	R.C.C SLAB	3X3	12
56	29+440	29.220	R.C.C SLAB	2X2	12
57	29.74	29.501	R.C.C SLAB	3X4	12
58	29.848	29.610	R.C.C SLAB	2X3	12
59	30.272	30.033	R.C.C SLAB	1x1.80	9.8
60	31.025	30.775	Chocked (Remarks: After Excavation It has found a Slab Culvert of 1x1.00M Span)	1 X 1.50 Dia	9.5
61	31.232	30.982		1 X 0.30 Dia	
62	31.367	31.117	HP	1 X 0.90 Dia	10
63	31.703	31.450	R.C.C SLAB	1x3.00	9.7
64	31.897	31.646	HP	1 X 1.00 Dia	12.1
65	32.269	32.060	R.C.C SLAB	2X3	12
66	32.721	32.460	R.C.C SLAB	2X3	12
67	33.102	32.832	R.C.C SLAB	3X3	12

11. Bus bays

The details of bus bays on the Site are as follows:

S. No.	Chainage (km)	Length (m)	Left Hand Side	Right Hand Side
Nil				

12. Truck Lay byes

The details of truck lay byes are as follows:

S. No.	Chainage (km)	Length (m)	Left Hand Side	Right Hand Side
Nil				

13. Road side drains

The details of the road side drains are as follows:

Sl. No.	Location		Type	
	From km	To km	Masonry/cc (Pucca)	Earthen (Kutchha)
1	16.650	16.890		Kachha (Single Side)
2	16.890	17.000	Pucca (Single Side)	
3	17.000	17.015		Kachha (Single Side)
4	17.075	17.225		Kachha (Single Side)
5	17.250	17.720		Kachha (Single Side)
6	17.920	17.950	Pucca (Single Side)	
7	18.050	18.075		Kachha (Single Side)
8	18.100	18.340		Kachha (Single Side)
9	18.775	18.855		Kachha (Single Side)
10	19.000	19.425		Kachha (Single Side)
11	19.615	19.750		Kachha (Single Side)
12	20.675	20.800		Kachha (Single Side)
13	20.800	20.815	Pucca (Single Side)	
14	20.815	20.860		Kachha (Single Side)
15	20.920	20.940		Kachha (Single Side)
16	20.940	21.050	Pucca (Single Side)	
17	21.050	21.210		Kachha (Single Side)
18	22.185	22.780		Kachha (Single Side)
19	23.485	24.710		Kachha (Single Side)
20	25.000	25.175		Kachha (Single Side)
21	25.300	25.375		Kachha (Single Side)
22	25.400	25.475		Kachha (Single Side)
23	25.550	25.650		Kachha (Single Side)
24	25.650	25.700	Pucca (Single Side)	
25	25.700	25.875		Kachha (Single Side)
26	25.875	25.980	Pucca (Single Side)	
27	25.980	26.150		Kachha (Single Side)
28	26.200	26.980		Kachha (Single Side)
29	27.331	28.300		Kachha (Single Side)
30	28.350	28.560		Kachha (Single Side)
31	28.700	28.725		Kachha (Single Side)
32	28.815	28.880		Kachha (Single Side)
33	28.935	29.110		Kachha (Single Side)

Sl. No.	Location		Type	
	From km	To km	Masonry/cc (Pucca)	Earthen (Kutchha)
34	30.480	31.250		Kachha (Single Side)
35	31.380	31.450		Kachha (Single Side)
36	31.450	31.660	Pucca (Single Side)	
37	31.660	31.720		Kachha (Single Side)
38	32.000	32.615		Kachha (Single Side)
39	32.715	33.190		Kachha (Single Side)

Already completed work of RR Masonry Trapezoidal Drain / Catch water is as under:

Sl. No.	Chainage		Side	Length in Meter
	From	To		
1	20+300	20+400	LHS	100.00
2	20+400	20+550	LHS	150.00
3	20+550	20+580	LHS	30.00
4	20+580	20+608	LHS	28.00
5	20+612	20+640	LHS	28.00
6	20+640	20+690	LHS	50.00
7	20+690	20+730	LHS	40.00
8	20+730	20+780	LHS	50.00
9	20+780	20+830	LHS	50.00
10	20+910	21+120	LHS	210.00
11	21+120	21+259	LHS	139.00
12	21+261	21+450	LHS	189.00
13	21+450	21+560	LHS	110.00
14	21+564	21+647	LHS	83.00
15	21+649	21+723	LHS	74.00
17	21+756	21+960	LHS	204.00
19	22+000	22+037	LHS	37.00
20	22+040	22+150	LHS	110.00
21	22+150	22+200	LHS	50.00
22	22+200	22+250	LHS	50.00
23	22+382	22+515	LHS	133.00
24	22+518	22+570	LHS	52.00
25	22+570	22+726	LHS	156.00
26	22+729	22+872	LHS	143.00
27	22+875	23+100	LHS	225.00
28	23+100	23+130	LHS	30.00
29	23+130	23+170	LHS	40.00
31	23+965	24+005	LHS	40.00
32	24+005	24+045	LHS	40.00
33	24+045	24+090	LHS	45.00
34	24+090	24+140	LHS	50.00
35	24+165	24+200	LHS	35.00
36	24+200	24+222	LHS	22.00
37	24+222	24+270	LHS	48.00
38	24+270	24+288	LHS	18.00
39	24+288	24+319	LHS	31.00
40	24+319	24+352	LHS	33.00

Sl. No.	Chainage		Side	Length in Meter
	From	To		
41	24+710	24+835	LHS	125.00
42	24+838	25+130	LHS	292.00
43	25+132	25+320	LHS	188.00
44	25+390	25+450	LHS	60.00
45	25+450	25+575	LHS	125.00
46	25+575	25+625	LHS	50.00
47	26+110	26+240	LHS	130.00
48	27+482	27+528	LHS	46.00
49	27+530	27+940	LHS	410.00
49	28+990	29+045	LHS	55.00
50	29+045	29+090	LHS	45.00
51	29+090	29+135	LHS	45.00
52	29+135	29+180	LHS	45.00
53	29+180	29+212	LHS	32.00
54	29+280	29+325	LHS	45.00
55	29+325	29+370	LHS	45.00
56	29+370	29+405	LHS	35.00
57	29+405	29+445	LHS	40.00
58	29+445	29+480	LHS	35.00
59	29+508	29+540	LHS	32.00
60	29+540	29+580	LHS	40.00
61	29+611	29+670	LHS	59.00
62	29+670	29+720	LHS	50.00
63	29+720	29+760	LHS	40.00
64	29+760	29+795	LHS	35.00
65	29+795	29+835	LHS	40.00
66	31+825	31+870	LHS	45.00
67	31+875	31+925	LHS	50.00
68	31+925	31+980	LHS	55.00
69	31+980	32+050	LHS	70.00
70	32+061	32+105	LHS	44.00
71	32+105	32+160	LHS	55.00
72	32+160	32+220	LHS	60.00
73	32+220	32+458	LHS	238.00
74	32+461	32+600	LHS	139.00
75	32+600	32+700	LHS	100.00
76	32+700	32+770	LHS	70.00
TOTAL in Meter				5993.00

14. Major junctions

The details of major junctions are as follows:

S. No	Existing Chainage	Lane Configuration	Type	Sides	Remarks
Nil					

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

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15. Minor junctions

The details of the minor junctions are as follows:

Sl. No.	Location (km)	Type of intersection	
		Type of Junction	Cross Road
1	16+110	T	3-Legged
2	16+290	T	3-Legged
3	16+435	T	3-Legged
4	17+020	T	3-Legged
5	17+125	T	3-Legged
6	17+925	T	3-Legged
7	18+020	Y	3-Legged
8	18+570	T	3-Legged
9	19+605	Y	3-Legged
10	19+800	Y	3-Legged
11	20+165	Y	3-Legged
12	20+300	Y	3-Legged
13	24+055	Y	3-Legged
14	24+105	Y	3-Legged
15	25+900	T	3-Legged
16	26+885	Y	3-Legged
16	28+675	Y	3-Legged

16. Bypasses

The details of the bypasses are as follows:

S. No.	Name of bypass (town)	Chainage (km)	Design Length (km)	Carriageway	
				Width (m)	Type
Nil					

17. Other structures

Sl. No.	Chainage(km)	Type of Structure	No. of Spans with span length(m)	Width(m)
Nil				

18. Hazardous Locations

a) Already completed work of Retaining Wall is as under:

Sr. No	Chainage		Length (m)	Side
	From	To		
1	31+855	31+925	70	RHS
2	31+975	32+005	30	RHS
	Total		100	

b) Already completed work of Breast Wall is as under:

Sr. No	Chainage		Length of CD	Length (m)	Side
	From	To			
1	17270	17320	0	50.0	Hill
2	18275	18350	0	75.0	Hill
3	20300	23100	44.7	2755.3	Hill
4	23850	24000	2.6	147.4	Hill
5	25750	25850	0	100.0	Hill
6	28370	28850	2.6	477.4	Hill
7	30850	31050	2.7	197.3	Hill
	Total			3802	

19. Existing Utilities

(i) The site includes the following electrical utilities:

(a) Extra High-Tension Lines (EHT Lines) *

S. No.	Chainage		Length (in Km)				Crossings			
	From	To	400KV	220KV	110KV	66KV	400KV	220KV	110KV	66KV
Nil										

(b) High Tension/Low Tension Lines (HT/LT Lines) *

Sr. No.	Chainage		HT/LT Lines (Length/Nos.)			Distribution Station	
	From	To	33KV	11KV	LT	No	Capacity
1	15.940	33.120	4.94 km/ 23 Nos.	6.5 km/ 84 Nos.	5.44 km/ 50 Nos.	2 Nos.	63 kVA
						2 Nos.	100 kVA

(ii) Public Health utilities (Water/Sewage Pipe Lines) *

- The site includes the following Public Health utilities: -

Sr. No.	Chainage		Pipe line	Distribution Tank	Reservoir	Community Sanitary Complex	IHHL
	From	To	(in km)	No.	No.	No.	No.
1	15.940	33.120	4.735	2.7 kLD – 1 No.	9 kLD – 1 No.	1 No.	8 Nos.

(* This illustrative and may change as per features of existing utilities.)

Contractor shall inspect the project highway for existing utilities and undertake shifting in accordance with Annexure – I of Schedule – B and as per the Utility Relocation Plan approved by the concerned Utility Owning Dept.

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Annex – II

(See Clauses 8.3 (i))

(Schedule-A)

Dates for providing Right of Way of Construction Zone

The dates on which the Authority shall provide Right of Way of construction Zone to the Contractor on different stretches of the Site are stated below:

Sl. No	Ch From	Ch To	Length (km)	Width (m)	Date of providing RoW
1	15+940	33+120	17.180	15 to 24	100% on Appointed date

The Construction of Project Highway will be implemented as per Manual, details of which are already given in Article-2 of Annexure – I of Schedule –A.

Annex - III

(Schedule-A)

Alignment Plans

The existing alignment of the Project Highway shall be modified in the following sections as per the alignment plan indicated below:

- (i) The alignment of the Project Highway is enclosed at Annexure-4. Finished road level indicated in the alignment plan shall be followed by the contractor as minimum FRL. In any case, the finished road level of the project highway shall not be less than those indicated in the alignment plan. The contractor shall, however, improve/upgrade the Road profile as indicated in Annex-III based on site/design requirement.
- (ii) Traffic Signage plan of the Project Highway showing numbers & location of traffic signs is enclosed. The contractor shall, however, improve/upgrade upon the traffic signage plan as indicated in Annex-III based on site/design requirement as per relevant specifications/IRC Codes/Manual.

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Annex - IV

(Schedule-A)

Environment Clearances

The project highway does not require environmental clearance as per MoEF circular F. No. 21-270/2008-1A.III (dated 22 August 2013).

Modified Schedule-B

SCHEDULE - B
(See Clause 2.1)

DEVELOPMENT OF THE PROJECT HIGHWAY

1 Development of the Project Highway

Development of the Project Highway shall include the design and construction of the Project Highway as described in this **Schedule - B** and **Schedule - C**.

2. Rehabilitation and Augmentation

[Rehabilitation and augmentation] shall include [Two-Laning and strengthening] of the Project Highway as described in Annex-I of this Schedule-B and in Schedule-C.

3 Specifications and Standards

The Project Highway shall be designed and constructed in conformity with the specifications and standards specified in **Annex-I** of **Schedule - D**.

Annex - I

(Schedule-B)

DESCRIPTION OF PROJECT

Site of the Two-lane with paved shoulder comprises between Imphal to Jiribam section (from design CH. 15+940 to CH. 33+120), Design Length = 17.18 km in the State of Manipur for execution on EPC Mode.

1 Widening of existing Highway

- (i) The Project Highway shall follow the existing alignment unless otherwise specified by the Authority and shown in the alignment plans specified in **Annex-III of Schedule-A**. Geometric deficiencies, if any, in the existing horizontal and vertical profiles shall be corrected as per the prescribed standards for hilly terrain to the extent land is available.
- (ii) Width of Carriageway
- (a) Two-Lanning with paved shoulders shall be undertaken. The paved carriageway shall be 10 (Ten) m wide in accordance with the typical cross section drawings in the Manual.

Provided that in the built-up areas the width of the carriageway shall be as specified in the following table excluding the median:

Sl. No.	Built-up stretch (Township)	Location		Width (m)	Typical Cross Section (Refer to Manual)	Remarks
1	Keithelmanbi	16+300	16+820	7	As per attached TCS	7 m Carriageway
2	T. Nangjol	16+900	18+000	7	As per attached TCS	7 m Carriageway
3	kotlen	28+380	28+850	7	As per attached TCS	7 m Carriageway
4	Kharam	30+850	31+050	7	As per attached TCS	7 m Carriageway

- (b) Except as otherwise provided in this Agreement, the width of the paved carriageway and cross-sectional features shall conform to paragraph 1 (i) & (ii) above.

2 Geometric Design and General Features

(i) General

Geometric design and general features of the Project Highway shall be in accordance with Section 2 of the Manual.

(ii) Design speed

For Mountainous terrain design speed shall be the minimum design speed of 40-60 km/hr and for sharp curve and hair pin bend locations speed reduces up to 30 km/hr & 20 km/hr, respectively.

(iii) **Improvement of the existing road geometrics**

The stretches where design speed reduces below 40 kmph are summarized below:

Sl. No.	Stretch (from km to km)	Type of Deficiency	Remarks
1	16+991 to 17+009	Sharp Bend	Design Speed = 20 Km/hr
2	17+205 to 17+242	Sharp Bend	Design Speed = 30 Km/hr
3	17+357 to 17+398	Sharp Bend	Design Speed = 20 Km/hr
4	17+676 to 17+784	Sharp Bend	Design Speed = 30 Km/hr
5	17+902 to 17+919	Sharp Bend	Design Speed = 30 Km/hr
6	18+037 to 18+047	Sharp Bend	Design Speed = 30 Km/hr
7	18+416 to 18+455	Sharp Bend	Design Speed = 30 Km/hr
8	18+744 to 18+758	Sharp Bend	Design Speed = 20 Km/hr
9	18+810 to 18+897	Sharp Bend	Design Speed = 30 Km/hr
10	18+937 to 18+946	Sharp Bend	Design Speed = 30 Km/hr
11	18+994 to 19+033	Sharp Bend	Design Speed = 20 Km/hr
12	19+372 to 19+400	Sharp Bend	Design Speed = 30 Km/hr
13	19+445 to 19+492	Sharp Bend	Design Speed = 30 Km/hr
14	19+527 to 19+551	Sharp Bend	Design Speed = 30 Km/hr
15	19+595 to 19+635	Sharp Bend	Design Speed = 20 Km/hr
16	19+688 to 19+728	Sharp Bend	Design Speed = 30 Km/hr
17	19+839 to 19+881	Sharp Bend	Design Speed = 30 Km/hr
18	19+982 to 19+997	Sharp Bend	Design Speed = 30 Km/hr
19	20+110 to 20+114	Sharp Bend	Design Speed = 30 Km/hr
20	20+155 to 20+201	Sharp Bend	Design Speed = 20 Km/hr
21	20+237 to 20+253	Sharp Bend	Design Speed = 20 Km/hr
22	20+287 to 20+474	Sharp Bend	Design Speed = 30 Km/hr
23	20+599 to 20+636	Sharp Bend	Design Speed = 30 Km/hr
24	20+834 to 20+868	Sharp Bend	Design Speed = 20 Km/hr
25	20+941 to 20+983	Sharp Bend	Design Speed = 30 Km/hr
26	21+253 to 21+264	Sharp Bend	Design Speed = 20 Km/hr
27	21+295 to 21+334	Sharp Bend	Design Speed = 20 Km/hr
28	21+506 to 21+545	Sharp Bend	Design Speed = 20 Km/hr
29	21+611 to 21+628	Sharp Bend	Design Speed = 20 Km/hr
30	21+673 to 21+695	Sharp Bend	Design Speed = 20 Km/hr
31	21+778 to 21+819	Sharp Bend	Design Speed = 20 Km/hr
32	21+949 to 21+966	Sharp Bend	Design Speed = 20 Km/hr
33	22+044 to 22+048	Sharp Bend	Design Speed = 30 Km/hr
34	22+094 to 22+131	Sharp Bend	Design Speed = 30 Km/hr
35	22+201 to 22+211	Sharp Bend	Design Speed = 30 Km/hr
36	22+271 to 22+305	Sharp Bend	Design Speed = 30 Km/hr
37	22+405 to 22+458	Sharp Bend	Design Speed = 30 Km/hr
38	22+507 to 22+518	Sharp Bend	Design Speed = 30 Km/hr
39	22+559 to 22+641	Sharp Bend	Design Speed = 30 Km/hr
40	22+881 to 22+895	Sharp Bend	Design Speed = 30 Km/hr
41	23+188 to 23+219	Sharp Bend	Design Speed = 20 Km/hr
42	23+257 to 23+344	Sharp Bend	Design Speed = 30 Km/hr
43	23+390 to 23+416	Sharp Bend	Design Speed = 20 Km/hr
44	23+462 to 23+573	Sharp Bend	Design Speed = 30 Km/hr
45	23+606 to 23+702	Sharp Bend	Design Speed = 30 Km/hr
46	23+744 to 23+748	Sharp Bend	Design Speed = 30 Km/hr
47	24+330 to 24+344	Sharp Bend	Design Speed = 30 Km/hr
48	25+053 to 25+059	Sharp Bend	Design Speed = 30 Km/hr
49	25+264 to 25+287	Sharp Bend	Design Speed = 30 Km/hr
50	25+341 to 25+374	Sharp Bend	Design Speed = 20 Km/hr

Sl. No.	Stretch (from km to km)	Type of Deficiency	Remarks
51	25+492 to 25+525	Sharp Bend	Design Speed = 30 Km/hr
52	25+671 to 25+693	Sharp Bend	Design Speed = 30 Km/hr
53	26+012 to 26+034	Sharp Bend	Design Speed = 20 Km/hr
54	26+075 to 26+084	Sharp Bend	Design Speed = 20 Km/hr
55	26+133 to 26+166	Sharp Bend	Design Speed = 30 Km/hr
56	26+230 to 26+237	Sharp Bend	Design Speed = 30 Km/hr
57	26+276 to 26+293	Sharp Bend	Design Speed = 30 Km/hr
58	26+499 to 26+527	Sharp Bend	Design Speed = 20 Km/hr
59	26+547 to 26+582	Sharp Bend	Design Speed = 20 Km/hr
60	26+652 to 26+672	Sharp Bend	Design Speed = 20 Km/hr
61	26+692 to 26+746	Sharp Bend	Design Speed = 20 Km/hr
62	26+785 to 26+788	Sharp Bend	Design Speed = 30 Km/hr
63	26+840 to 26+853	Sharp Bend	Design Speed = 30 Km/hr
64	26+889 to 26+947	Sharp Bend	Design Speed = 30 Km/hr
65	26+996 to 27+029	Sharp Bend	Design Speed = 30 Km/hr
66	27+089 to 27+154	Sharp Bend	Design Speed = 30 Km/hr
67	27+202 to 27+215	Sharp Bend	Design Speed = 20 Km/hr
68	27+277 to 27+287	Sharp Bend	Design Speed = 30 Km/hr
69	27+420 to 27+445	Sharp Bend	Design Speed = 30 Km/hr
70	27+498 to 27+536	Sharp Bend	Design Speed = 30 Km/hr
71	27+586 to 27+631	Sharp Bend	Design Speed = 30 Km/hr
72	27+676 to 27+704	Sharp Bend	Design Speed = 30 Km/hr
73	27+799 to 27+837	Sharp Bend	Design Speed = 30 Km/hr
74	28+160 to 28+168	Sharp Bend	Design Speed = 20 Km/hr
75	28+199 to 28+229	Sharp Bend	Design Speed = 20 Km/hr
76	28+289 to 28+417	Sharp Bend	Design Speed = 20 Km/hr
77	28+443 to 28+455	Sharp Bend	Design Speed = 20 Km/hr
78	28+510 to 28+539	Sharp Bend	Design Speed = 30 Km/hr
79	28+577 to 28+586	Sharp Bend	Design Speed = 30 Km/hr
80	28+820 to 28+827	Sharp Bend	Design Speed = 30 Km/hr
81	28+879 to 28+897	Sharp Bend	Design Speed = 30 Km/hr
82	29+163 to 29+182	Sharp Bend	Design Speed = 30 Km/hr
83	29+493 to 29+513	Sharp Bend	Design Speed = 30 Km/hr
84	30+023 to 30+075	Sharp Bend	Design Speed = 30 Km/hr
85	30+118 to 30+130	Sharp Bend	Design Speed = 30 Km/hr
86	30+265 to 30+284	Sharp Bend	Design Speed = 30 Km/hr
87	30+300 to 30+333	Sharp Bend	Design Speed = 30 Km/hr
88	30+444 to 30+457	Sharp Bend	Design Speed = 30 Km/hr
89	30+500 to 30+533	Sharp Bend	Design Speed = 20 Km/hr
90	31+097 to 31+131	Sharp Bend	Design Speed = 20 Km/hr
91	31+207 to 31+230	Sharp Bend	Design Speed = 30 Km/hr
92	31+271 to 31+305	Sharp Bend	Design Speed = 30 Km/hr
93	31+640 to 31+674	Sharp Bend	Design Speed = 20 Km/hr
94	32+021 to 32+030	Sharp Bend	Design Speed = 30 Km/hr
95	32+873 to 32+884	Sharp Bend	Design Speed = 30 Km/hr
96	32+919 to 32+940	Sharp Bend	Design Speed = 30 Km/hr
97	32+988 to 32+996	Sharp Bend	Design Speed = 30 Km/hr
98	33+054 to 33+088	Sharp Bend	Design Speed = 20 Km/hr

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 proper road signs and safety measures shall be provided;

(iv) **Right of Way**

The site of the project highway comprises the land as described in **Annex-II** of **Schedule-A**.

(v) **Type of shoulders**

(a) In built-up sections, footpaths/ covered drains shall be provided in the following stretches:

Sl. No.	Stretch (from km to km)	Fully Paved shoulders/footpaths	Reference to cross section
1	16+300 to 16+850	2X2.5 m paved shoulder & 2X1.75 m footpath	TCS-1
2	16+970 to 17+200	2X1.5 m paved shoulder & 2 X 1.0 m footpath	TCS-6
3	23+850 to 24+000	2X1.5 m paved shoulder & 1X1.0 m footpath	TCS-7
4	25+750 to 25+850	2X1.5 m paved shoulder & 1X1.0 m footpath	TCS-7
5	28+370 to 28+850	2X1.5 m paved shoulder & 1X1.0 m footpath	TCS-7
6	30+850 to 31+050	2X1.5 m paved shoulder & 1X1.0 m footpath	TCS-7

(b) In open country, paved shoulders (1.5 m width) shall be provided as per TCS Schedule and the earthen shoulder (1 m width) shall be covered with granular material in full depth up to the GSB layer as shown in a typical cross-section.

(c) Design and specifications of paved shoulders and granular material shall conform to the requirements specified in the relevant manual.

(vi) **Lateral and vertical clearances at underpasses**

(a) Lateral and vertical clearances at underpasses and provision of guardrails/crash barriers shall be as per paragraph 2.10 of the Manual.

(b) Lateral & Vertical clearance: The width of the opening and vertical clearances at underpasses shall be as follows:

S. No.	Design Chainage	Clear span/ opening (m)	Vertical Clearance (m)	Remarks
Nil				

(vii) **Lateral and vertical clearances at overpasses**

(a) Lateral and vertical clearances at overpasses shall be as per paragraph 2.11 of the Manual.

(b) Lateral & Vertical clearances at overpasses shall be as follows:

Sl. No.	Design Chainage	Clear Span (m)	Vertical Clearance (m)	Remarks
Nil				

(viii) **Service Roads**

Service roads shall be constructed at the locations and for the lengths indicated below: [Refer requirements specified in the relevant Manual]

Sl. No.	Location of service road	Side	Length (km) of service Road
Nil			

(ix) Grade-separated structures

- (a) Grade-separated structures shall be provided as per paragraph 2.13 of the Manual. The requisite particulars are given below:

i) Overpass

Sl. No.	Design Chainage	Span arrangement(m)	Road to be carried under the structure	Width of Structure (m)
Nil				

ii) Vehicular Underpass (VUP)

Sl. No.	Design Chainage	Span arrangement (m)	Road to be carried under the structure	Min. Vertical clearance (m)	Width of Structure (m)
Nil					

iii) Light Vehicular Underpass

S. No.	Design Chainage	Span arrangement(m)	Road to be carried under the structure	Min. Vertical clearance (m)	Width of Structure (m)
Nil					

iv) Small Vehicular Underpass

S. No.	Design Chainage	Span arrangement(m)	Road to be carried under the structure	Min. Vertical clearance (m)	Width of structure (m)
Nil					

- (b) In the case of grade-separated structures, the type of structure and the level of the Project Highway and the crossroads shall be as follows:

S. No.	Location (Design Chainage)	Type of Structure	Cross road at		
			Existing level	Raised Level	Lowered Level
Nil					

(x) Cattle and pedestrian underpass/overpass

Cattle and pedestrian underpass/ overpass shall be constructed as follows:

Sl. No.	Location	Type of crossing
Nil		

(xi) Typical cross-sections of the Project Highway

The schedule of typical cross-sections is given in the table below. Drawings of typical cross-sections are attached as Annexure-5. The indicative TCS for Project Highway are as follows-

TCS Type	Description	Length (km)
TCS-1	Typical Cross Section of Two-Lane Carriageway with Paved Shoulder in Built up area with Both sides covered drain cum footpath in plain terrain	0.55
TCS-2	Typical Cross Section of Two-Lane Carriageway with Paved Shoulder in Rural area in Plain Terrain (Reconstruction)	0.48
TCS-2A	Typical Cross Section of Two-Lane Carriageway with Paved Shoulder in Rural area in Hilly Terrain (Reconstruction)	0.365
TCS-3	Typical Cross Section of Two-Lane Carriageway with Paved Shoulder in Rural area with trapezoidal open drain on hill side and earthen shoulder on valley side (Reconstruction)	10.32
TCS-3A	Typical Cross Section of Two-Lane Carriageway with Paved Shoulder in Rural area with trapezoidal open drain on hill side and earthen shoulder on valley side (New Construction)	0.26
TCS-4	Typical Cross Section of Two-Lane Carriageway in Rural Area with Retaining Wall on Valley Side and Trapezoidal Open drain on Hill side (Reconstruction)	1.05
TCS-5	Typical Cross Section of Two-Lane Carriageway in Rural Area with Breast Wall on Hill Side and Earthen Shoulder on Valley side (Reconstruction)	2.925
TCS-6	Typical Cross Section of Two-Lane Carriageway in Built Up Area with Both Side Footpath Cum RCC Rectangular Covered Drain in Hilly Terrain (Reconstruction)	0.23
TCS-7	Typical Cross Section of Two-Lane Carriageway in Built-Up Area with Breast Wall on Hill Side and Footpath Cum RCC Rectangular Covered Drain on Valley side (Reconstruction)	0.93
TCS-8	Typical Cross Section of Two-Lane Carriageway in Rural Area with Retaining Wall on One Side and Earthen Shoulder on other side (Reconstruction)	0.07
Total Design Length of Project Road = 17.180 km		

Sr. No.	Design Chainage (m)		Length of CD (m)	Net Length (m)	TCS No.
	From	To			
1	15940	16300	6.14	353.86	TCS-2
2	16300	16850	3.96	546.04	TCS-1
3	16850	16970		120	TCS-2
4	16970	17200	2.7	227.3	TCS-6
5	17200	17270	3.96	66.04	TCS-8
6	17270	17320		50	TCS-5
7	17320	17475		155	TCS-2A
8	17475	17525		50	TCS-4
9	17525	18225	7.9	692.1	TCS-3
10	18225	18275		50	TCS-4
11	18275	18350		75	TCS-5
12	18350	18410	2.6	57.4	TCS-4
13	18410	18590	3.96	176.04	TCS-3
14	18590	18670	2.7	77.3	TCS-4
15	18670	18750		80	TCS-3
16	18750	18825	2.7	72.3	TCS-2A
17	18825	19385	5.3	554.7	TCS-3
18	19385	19435		50	TCS-4
19	19435	19625	9.22	180.78	TCS-3
20	19625	19675		50	TCS-4
21	19675	20030	9.22	345.78	TCS-3
22	20030	20090		60	TCS-3A
23	20090	20225	2.6	132.4	TCS-2A
24	20225	20300	3.96	71.04	TCS-3

Widening to 2 (Two) Lane with Paved Shoulder of Imphal to Jiribam section of NH-37 from Design Chainage km 15.940 to km 33.120 (Existing Chainage km 15.946 to km 33.955) (Length = 17.180 km) (PKG-2) in the State of Manipur on Engineering, Procurement & Construction (EPC) Mode - Balance Works & Rectification Work

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Sr. No.	Design Chainage (m)		Length of CD (m)	Net Length (m)	TCS No.
	From	To			
25	20300	23100	44.7	2755.3	TCS-5
26	23100	23850	7.92	742.08	TCS-3
27	23850	24000	2.6	147.4	TCS-7
28	24000	25750	28.52	1721.48	TCS-3
29	25750	25850		100	TCS-7
30	25850	25960		110	TCS-3
31	25960	26010		50	TCS-4
32	26010	26850	12.06	827.94	TCS-3
33	26850	27050	2.6	197.4	TCS-3A
34	27050	28370	26.22	1293.78	TCS-3
35	28370	28850	2.6	477.4	TCS-7
36	28850	29310	9.04	450.96	TCS-3
37	29310	29360		50	TCS-4
38	29360	29425		65	TCS-3
39	29425	29510	3.96	81.04	TCS-4
40	29510	30075	5.3	559.7	TCS-3
41	30075	30215		140	TCS-4
42	30215	30850	5.3	629.7	TCS-3
43	30850	31050	2.7	197.3	TCS-7
44	31050	31800	14.36	735.64	TCS-3
45	31800	31925		125	TCS-4
46	31925	31975		50	TCS-3
47	31975	32060		85	TCS-4
48	32060	32350	2.7	287.3	TCS-3
49	32350	32415		65	TCS-4
50	32415	32530	2.7	112.3	TCS-3
51	32530	32580		50	TCS-4
52	32580	32775		195	TCS-3
53	32775	32835	3.84	56.16	TCS-4
54	32835	33120	8	277	TCS-3
Total Length =			252	16928	

(xii) Rectification works of the Project Highway: -

(a) GSB layer:

Sr.No.	Design Chainage		Length (km)
	From	To	
1	17.000	17.950	0.950
2	20.830	20.860	0.030
3	23.175	23.490	0.315
4	23.580	23.735	0.155
5	23.950	24.520	0.570
6	25.115	25.145	0.030
7	25.390	25.610	0.220
8	26.000	26.660	0.660
9	26.880	27.155	0.275
10	31.655	31.730	0.075
11	31.835	31.930	0.095
12	32.760	32.820	0.060
13	32.840	32.850	0.010
	Total		3.445

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(b) WMM layer:

Sr.No.	Design Chainage		Length (km)
	From	To	
1	20.810	20.830	0.020
2	20.870	20.910	0.040
3	22.890	22.930	0.040
4	23.110	23.175	0.065
5	24.520	24.825	0.305
6	24.855	25.115	0.260
7	25.145	25.320	0.175
8	29.600	29.835	0.235
9	29.835	29.950	0.115
10	32.640	32.760	0.120
		Total	1.375

(c) DBM layer:

Sr.No.	Design Chainage		Length (km)
	From	To	
1	20.290	20.810	0.520
2	20.910	22.935	2.025
3	27.160	29.830	2.670
4	31.930	32.730	0.800
		Total	6.015

Note: The rectification works required on-site must be fully assessed by the contractor. The contractor will be responsible for maintaining the site in an all-weather working condition, including any repairs or rework required on-site, if any, including its Defect Liability period as per Contract Agreement.

3 Intersections and Grade Separators

All intersections and grade separators shall be as per section 3 of the Manual. Existing intersections which are deficient shall be improved to the prescribed standards.

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

(i) At grade Intersections

All intersections as per the site requirement shall be designed and constructed in accordance with the manual. A list of intersections is given in the below table. The draft layout of minor junctions is given in indicative Plan & Profile drawings for reference.

Sr.No.	Location of Intersection	Type of Intersection (T, Y, +)	Other features
	Major Junctions		
		Nil	
	Minor Junctions		
1	16+110	T-Type	3-Legged
2	16+290	T-Type	3-Legged
3	16+435	T-Type	3-Legged
4	17+010	T-Type	3-Legged
5	17+710	T-Type	3-Legged
6	17+910	T-Type	3-Legged
7	17+990	Y-Type	3-Legged

Sr.No.	Location of Intersection	Type of Intersection (T, Y, +)	Other features
8	18+545	T-Type	3-Legged
9	19+590	Y-Type	3-Legged
10	19+765	Y-Type	3-Legged
11	20+120	Y-Type	3-Legged
12	20+260	Y-Type	3-Legged
13	23+900	Y-Type	3-Legged
14	23+950	Y-Type	3-Legged
15	25+750	T-Type	3-Legged
16	26+710	Y-Type	3-Legged
17	28+450	Y-Type	3-Legged

(ii) Grade-separated intersection without ramps

S. No	Design Chainage	Salient Feature (Formation width) (m)	Minimum Length of Viaduct (m)	Road to be carried Under the structure	Type of Structure
NIL					

4 Road Embankment and Cut Section

- (i) Widening and improvement of the existing road embankment/cuttings and construction of new road embankment/ cuttings shall conform to the Specifications and Standards given in Section 4 of the Manual and the specified cross-sectional details. Deficiencies in the plan and profile of the existing road shall be corrected.

- (ii) Raising of the existing road/New carriageway

The existing road shall be raised as per design requirements in accordance with the manual in conformity with the minimum FRL.

The Contractor may adopt a suitable slope (angle) for the embankment as per the availability of fill material/design requirements. The slopes shall be checked for safety against failure. The slopes shall be protected with turfing/geosynthetics /geo green blanket/geo cells/stone pitching or any other method as per schedule D.

Wherever required, toe wall/retaining wall/other protection works along with a drainage system shall be provided to contain the toe of the earthwork, so that all the features shown in the TCS are accommodated in the ROW provided.

5 Pavement Design

- (i) Pavement design shall be carried out in accordance with Section 5 of the Manual.

- (ii) Type of pavement

Flexible pavement shall be provided for the entire length of the project highway.

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- (iii) Design requirements - as per paragraphs 5.4, 5.9 and 5.10 of the manual and extant relevant IRC Guidelines.

(a) Design Period and strategy

Flexible pavement for new pavement or for widening and strengthening of the Existing pavement shall be designed for a minimum design period of 20 years. Stage construction shall not be permitted.

(b) Design Traffic

Notwithstanding anything to the contrary contained in this Agreement or the Manual, the Contractor shall design the pavement for design traffic of not less than 20 MSA.

(iv) Reconstruction of stretches:

The following stretches of the existing road shall be reconstructed. These shall be designed as new pavement.

Sl. No.	Stretch from km to km	Remarks	TCS Type
1	15+940 to 16+300	Reconstruction	TCS-2
2	16+300 to 16+850	Reconstruction	TCS-1
3	16+850 to 16+970	Reconstruction	TCS-2
4	16+970 to 17+200	Reconstruction	TCS-6
5	17+200 to 17+270	Reconstruction	TCS-8
6	17+270 to 17+320	Reconstruction	TCS-5
7	17+320 to 17+475	Reconstruction	TCS-2A
8	17+475 to 17+525	Reconstruction	TCS-4
9	17+525 to 18+225	Reconstruction	TCS-3
10	18+225 to 18+275	Reconstruction	TCS-4
11	18+275 to 18+350	Reconstruction	TCS-5
12	18+350 to 18+410	Reconstruction	TCS-4
13	18+410 to 18+590	Reconstruction	TCS-3
14	18+590 to 18+670	Reconstruction	TCS-4
15	18+670 to 18+750	Reconstruction	TCS-3
16	18+750 to 18+825	Reconstruction	TCS-2A
17	18+825 to 19+385	Reconstruction	TCS-3
18	19+385 to 19+435	Reconstruction	TCS-4
19	19+435 to 19+625	Reconstruction	TCS-3
20	19+625 to 19+675	Reconstruction	TCS-4
21	19+675 to 20+030	Reconstruction	TCS-3
22	20+090 to 20+225	Reconstruction	TCS-2A
23	20+225 to 20+300	Reconstruction	TCS-3
24	20+300 to 23+100	Reconstruction	TCS-5
25	23+100 to 23+850	Reconstruction	TCS-3
26	23+850 to 24+000	Reconstruction	TCS-7
27	24+000 to 25+750	Reconstruction	TCS-3
28	25+750 to 25+850	Reconstruction	TCS-7
29	25+850 to 25+960	Reconstruction	TCS-3
30	25+960 to 26+010	Reconstruction	TCS-4
31	26+010 to 26+850	Reconstruction	TCS-3
32	27+050 to 28+370	Reconstruction	TCS-3
33	28+370 to 28+850	Reconstruction	TCS-7
34	28+850 to 29+310	Reconstruction	TCS-3
35	29+310 to 29+360	Reconstruction	TCS-4

6 Road Side Drainage

Drainage system including surface and subsurface drains for the Project Highway shall be provided as per Section 6 of the Manual.

RCC Covered Drain

Sr. No.	Chainage (m)		Length of CD	Net Length (m)	TCS No.	Side
	From	To				
1	16300	16850	3.96	1092.1	TCS-1	Both
2	16970	17200	2.7	454.6	TCS-6	Both
3	23850	24000	2.6	147.4	TCS-7	Valley
4	25750	25850	0	100	TCS-7	Valley
5	28370	28850	2.6	477.4	TCS-7	Valley
6	30850	31050	2.7	197.3	TCS-7	Valley
Total				2469		

RR Masonry Trapezoidal Drain

Sr.No.	Design Chainage (km)		Length (m)	Side	Remarks
	From	To			
1	17+475	17+525	50	Hill	RR masonry drain
2	17+525	18+225	700	Hill	RR masonry drain
3	18+225	18+275	50	Hill	RR masonry drain
4	18+350	18+410	60	Hill	RR masonry drain
5	18+410	18+590	180	Hill	RR masonry drain
6	18+590	18+670	80	Hill	RR masonry drain
7	18+670	18+750	80	Hill	RR masonry drain
8	18+825	19+385	560	Hill	RR masonry drain
9	19+385	19+435	50	Hill	RR masonry drain
10	19+435	19+625	190	Hill	RR masonry drain
11	19+625	19+675	50	Hill	RR masonry drain
12	19+675	20+030	355	Hill	RR masonry drain
13	20+030	20+090	60	Hill	RR masonry drain
14	20+225	20+300	75	Hill	RR masonry drain
15	23+170	23+850	680	Hill	RR masonry drain
16	24+140	24+165	25	Hill	RR masonry drain
17	24+352	24+710	358	Hill	RR masonry drain
18	24+835	24+838	3	Hill	RR masonry drain
19	25+130	25+132	2	Hill	RR masonry drain
20	25+320	25+390	70	Hill	RR masonry drain
21	25+625	25+750	125	Hill	RR masonry drain
22	25+850	25+960	110	Hill	RR masonry drain
23	25+960	26+010	50	Hill	RR masonry drain
24	26+010	26+110	100	Hill	RR masonry drain
25	26+240	26+850	610	Hill	RR masonry drain
26	26+850	27+050	200	Hill	RR masonry drain
27	27+050	27+482	432	Hill	RR masonry drain
28	27+528	27+530	2	Hill	RR masonry drain
29	27+940	28+370	430	Hill	RR masonry drain
30	28+850	28+990	140	Hill	RR masonry drain
31	29+212	29+280	68	Hill	RR masonry drain
32	29+480	29+508	28	Hill	RR masonry drain

Widening to 2 (Two) Lane with Paved Shoulder of Imphal to Jiribam section of NH-37 from Design Chainage km 15.940 to km 33.120 (Existing Chainage km 15.946 to km 33.955) (Length = 17.180 km) (PKG-2) in the State of Manipur on Engineering, Procurement & Construction (EPC) Mode - Balance Works & Rectification Work

Sr.No.	Design Chainage (km)		Length (m)	Side	Remarks
	From	To			
33	29+580	29+611	31	Hill	RR masonry drain
34	29+835	30+075	240	Hill	RR masonry drain
35	30+075	30+215	140	Hill	RR masonry drain
36	30+215	30+850	635	Hill	RR masonry drain
37	31+050	31+800	750	Hill	RR masonry drain
38	31+800	31+825	25	Hill	RR masonry drain
39	31+870	31+875	5	Hill	RR masonry drain
40	32+050	32+061	11	Hill	RR masonry drain
41	32+458	32+461	3	Hill	RR masonry drain
42	32+770	32+775	5	Hill	RR masonry drain
43	32+775	32+835	60	Hill	RR masonry drain
44	32+835	33+120	285	Hill	RR masonry drain
Total			8163		

Trapezoidal Drain/Catch Water drain

Sr.No.	Design Chainage (km)		Length (m)	Side	Remarks
	From	To			
1	17+270	17+320	50	Hill	Trapezoidal Drain
2	18+275	18+350	75	Hill	Trapezoidal Drain
3	20+608	20+612	4	Hill	Trapezoidal Drain
4	20+830	20+910	80	Hill	Trapezoidal Drain
5	21+259	21+261	2	Hill	Trapezoidal Drain
6	21+560	21+564	4	Hill	Trapezoidal Drain
7	21+647	21+649	2	Hill	Trapezoidal Drain
8	21+723	21+756	33	Hill	Trapezoidal Drain
9	21+960	22+000	40	Hill	Trapezoidal Drain
10	22+037	22+040	3	Hill	Trapezoidal Drain
11	22+250	22+382	132	Hill	Trapezoidal Drain
12	22+515	22+518	3	Hill	Trapezoidal Drain
13	22+726	22+729	3	Hill	Trapezoidal Drain
14	22+872	22+875	3	Hill	Trapezoidal Drain
15	23+850	23+965	115	Hill	Trapezoidal Drain
16	25+750	25+850	100	Hill	Trapezoidal Drain
17	28+370	28+850	480	Hill	Trapezoidal Drain
18	30+850	31+050	200	Hill	Trapezoidal Drain
Total			1329		

Total Length of Trapezoidal Drain = 9492 m

Chute Drain shall be constructed @ 50m Interval where average height of hill exceeds 8 m.

Note: The rectification works required on-site for the drains, already constructed as mentioned in Para 13 of Schedule-A, must be fully assessed by the contractor. The contractor will be responsible for maintaining the site in an all-weather working condition, including any repairs or rework required on-site, if any, including its Defect Liability period as per Contract Agreement

7 Designs of Structures

(i) General

- (a) All bridges, culverts and other structures shall be designed and constructed in accordance with section 7 of the Manual and shall conform to the cross-sectional features and other details specified therein.
- (b) Width of carriageway of new bridges and structures shall be as follows:

S. No.	Design Chainage	Width of structure and cross-sectional features	Remarks
1	25+348	Carriageway Width = 11.0 m Width of Railings = 1.0 m (2 x 0.50m) Overall width = 12 m	Works already completed at site may be referred from Para 7 of Schedule-A.
2	33+080		

- (c) The following structures shall be provided with footpaths:

Sl. No.	Bridge/Structure at km	Width of carriageway and cross-sectional features
Nil		

- (d) All bridges shall be high-level bridges.
- (e) The structures shall be designed to carry utility services like electric cable, water pipeline, OFC etc. as per the requirement of the site.
- (f) Cross-section of the new culverts and bridges at deck level shall conform to the typical cross-sections given in section 7 of the Manual.

(ii) Culverts

- (a) Overall width of all culverts shall be equal to the roadway width of the approaches.
- (b) Reconstruction of New additional culverts / existing culverts:
Reconstruction of new culverts / existing culverts shall be provided at the following locations:

S. No.	Design Chainage	Clear Span (m) (NosxLxH/dia.)	Proposal for improvement
1	17+016	2x3	New Culvert
2	17+248	3x4	New Culvert
3	18+029	2x3	New Culvert
4	18+141	2x2	New Culvert
5	18+393	2x2	New Culvert
6	18+564	3x4	New Culvert
7	18+650	2x3	New Culvert
8	18+762	2x3	New Culvert
9	19+010	2x2	New Culvert
10	19+267	2x3	New Culvert
11	19+490	4x5	New Culvert
12	19+619	3x4	New Culvert

S. No.	Design Chainage	Clear Span (m) (NosxLxH/dia.)	Proposal for improvement
13	19+883	4x5	New Culvert
14	19+955	3x4	New Culvert
15	20+106	2x2	New Culvert
16	20+254	3x4	New Culvert
17	23+195	3x4	New Culvert
18	23+411	3x4	New Culvert
19	24+510	2x2	New Culvert
20	25+381	3x4	New Culvert
21	25+643	2x3	New Culvert
22	26+074	3x4	New Culvert
23	26+430	2x3	New Culvert
24	26+666	2x3	New Culvert
25	26+840	2x3	New Culvert
26	26+916	2x2	New Culvert
27	27+893	3x4	New Culvert
28	30+033	2x2	New Culvert
29	30+775	2x3	New Culvert
30	30+982	2x3	New Culvert
31	31+117	4x5	New Culvert
32	31+450	3x3	New Culvert
33	31+646	4x5	New Culvert

(c) Widening of existing culverts

All existing culverts which are not to be reconstructed shall be widened to the roadway width of the Project Highway as per the typical cross section given in section 7 of the Manual. Repairs and strengthening of existing structures where required shall be carried out.

Sl. No.	Culvert location	Type, span height and width of the existing culvert(m)	Repairs to be carried out
Nil			

(d) Additional new culverts shall be constructed as per particulars given in the table below:

Sl. No.	Culvert Location	Span /Opening (m)
1	17+532	2.0 X 2.0
2	23+870	2.0 X 2.0
3	24+164	2.0 X 3.0
4	30+415	2.0 X 2.0

(e) Repairs/replacements of railing/parapets, flooring and protection works of the existing culverts shall be undertaken as follows:

S. No.	Location	Type of repair required
Nil		

- (f) Floor protection works shall be as specified in the relevant IRC Codes and Specifications.

(iii) Bridges

(a) Existing bridges to be re-constructed/widened

- (i) The existing bridges at the following locations shall be re-constructed:

Sl. No.	Bridge location (Ch)	Salient details of the existing bridge	Adequacy or otherwise of the existing waterway, vertical clearance, etc.	Remarks
1	25+348	RCC Slab 1x10.7M	Insufficient width and not conform to IRC Loading	RCC SLAB of (1 X 10m) to be constructed by Contractor
2	33+080	RCC Slab 1x8.5M	Insufficient width and not conform to IRC Loading	RCC SLAB (1 X 8m) to be constructed by Contractor

- (ii) The following narrow bridges shall be widened:

Sl. No.	Design Chainage	Existing Chainage	Span Arrangement	Existing width (m)	Proposed Total Width (m)	Cross-section at deck level for widening
Nil						

(b) Additional new bridges

Sl. No	Design Chainage	Name of Nallah	Span arrangement (m)	Total Width of Structure (m)
Nil				

Note: Proposed span arrangement is indicative and any increase in length/span/height shall not be treated as a change in the scope of work.

IRC Class Special Vehicle loading shall be taken into account in the structural design of bridges/Flyover/VUP/ Viaduct.

- (c) The railings of existing bridges shall be replaced by crash barriers at the following locations:

Sl. No.	Location at Chainage	Remarks
NIL		

- (d) Repairs/replacements of railing/parapets of the existing bridges shall be undertaken as follows:

The existing bridges and structures to be repaired/ strengthened, the nature and extent of repairs /strengthening required are given below;

The following bridges shall be retained with repairs:

S. No.	Design Chainage	Existing Chainage	Remarks
NIL			

(e) Drainage system for bridge decks

An effective drainage system for bridge decks shall be provided as specified in the Manual.

(iv) Rail-road bridges

(a) Design, construction and detailing of ROB shall be as specified in section 7 of the Manual.

(b) Road over-bridges

Road over-bridges (road over rail) shall be provided at the following locations:

Sl. No.	Design Chainage	Route	Span arrangement (m)	Total Length (m)	Width (m)
NIL					

(c) Road under-bridges

Road under-bridges (road under railway line) shall be provided at the following level crossings, as per the GAD drawings attached:

Sl. No.	Location of Level crossing (Ch)	Number and length of span(m)
NIL		

(v) Grade-separated structures

The grade-separated structures shall be provided at the locations and of the type and length specified in paragraphs 2 (vi), 2 (vii) and 2 (ix) of this Annex-I.

(vi) Repairs and strengthening of bridges and structures

The existing bridges and structures to be repaired/strengthened, and the nature and extent of repairs /strengthening required are given below:

Bridges

Sl. No.	Location	Nature and extent of repairs to be carried out
As per table on para 7 (iii) d		

ROB / RUB

Sl. No.	Location of ROB/RUB(Ch)	Nature and extent of repairs /strengthening to be carried out
NIL		

Overpasses/Underpasses and other structures

Sl. No.	Location of Structure (Ch)	Nature and extent of repairs/strengthening to be carried out
NIL		

(vii) List of Major Bridges and Structures

The following is the list of the Major Bridges and Structures:

Sl. No.	Location	Type
Nil		

8. Traffic Control Devices and Road Safety Works

- (i) Traffic control devices and road safety devices and road furniture shall be provided in accordance with Section 9 of the Manual.

Sl. No.	Traffic Signages, Road Marking and other appurtenances	Unit	Quantity
1	Total Nos. of Street Light	Nos	53
2	Kilometer stones	Nos	14
3	5th Kilometer stones	Nos	3
4	Boundary Stones	Nos	174
5	Delineators (100 cm long and circular shaped) +Hazard marker	Nos	2005
6	Road Stud	Nos	9726
7	900 mm Octagonal	Nos	17
8	600 mm circular	Nos	66
9	900 mm Triangular	Nos	274
10	800 mm x 600 mm rectangular	Nos	6
11	Convex Mirror for Blind Curve	Nos	36
12	Rumble Strip	Sqm	580

- (ii) Specifications of the reflective sheeting. [Refer to provision of relevant Manual]

9. Roadside Furniture

- (i) Road side furniture shall be provided in accordance with article 8(i) of this schedule.
- (ii) Overhead traffic signs: location and size

Sl. No.	Location (km)	Size
Nil		

10. COMPULSORY AFFORESTATION

[Refer to provision of relevant Manual and specify the number of trees which are required to be planted by the Contractor as compensatory a forestation.]

11. HAZARDOUS LOCATIONS

The safety measures shall be provided at all hazardous/sinking/landslide locations as per the manual in consultation with the Authority's Engineer The safety barriers shall also be provided at the following hazardous structure (Bridges, culverts) locations:

- a) Retaining Wall

Chainage (m)		Length of CD	Net Length (m)	TCS No.	Side	Avg. Height (m)
From	To					
17+200	17+270	3.96	66	TCS-8	Valley	2
17+475	17+525	0	50	TCS-4	Valley	2
18+225	18+275	0	50	TCS-4	Valley	2
18+350	18+410	2.6	57.4	TCS-4	Valley	2
18+590	18+670	2.7	77.3	TCS-4	Valley	2
19+385	19+435	0	50	TCS-4	Valley	2
19+625	19+675	0	50	TCS-4	Valley	2
25+960	26+010	0	50	TCS-4	Valley	2
29+310	29+360	0	50	TCS-4	Valley	2
29+425	29+510	3.96	81	TCS-4	Valley	2
30+075	30+215	0	140	TCS-4	Valley	2
31+800	31+855	0	55	TCS-4	Valley	2
32+005	32+060		55	TCS-4	Valley	2
32+350	32+415	0	65	TCS-4	Valley	2
32+530	32+580	0	50	TCS-4	Valley	2
32+775	32+835	3.84	56.2	TCS-4	Valley	2
Total			1003			

b) Breast Wall –

- (i) New Construction of 400m as per directions of Authority/Authority's Engineer.
- (ii) Repairs/replacements of breast wall on site shall be assessed as per its site condition as per directions of Authority/ Authority's Engineer.

c) Metal Beam Crash Barrier

Chainage (m)		Net Length (m)	Side
From	To		
20300	20500	200	Valley
21500	21750	250	Valley
22050	22250	200	Valley
22380	22625	245	Valley
23550	23750	200	Valley
24120	24220	100	Valley
24850	25100	250	Valley
25560	25660	100	Valley
26100	26200	100	Valley
26480	26630	150	Valley
26950	27250	300	Valley
27150	27250	100	Valley
27550	27650	100	Valley
28150	28300	150	Valley
28950	29300	350	Valley
30480	30580	100	Valley
31320	31420	100	Valley
31925	31975	50	Valley
32130	32280	150	Valley
32730	32880	150	Valley
Total		3345	

Total no. of Bridges on the project = 2 nos. Approach length on valley side for each bridge (25 m on both side) 50m. Hence, Crash barrier length for 2 bridges = 200m, Therefore, total length of crash barrier = (3345+200) m = 3545m

d) Railing (is inclusive part of RCC covered drain)

Chainage (m)		Length of CD	Net Length (m)	TCS No.	Side
From	To				
16300	16850	3.96	1092.1	TCS-1	Both
Total			1092		

Note: The safety barriers shall also be provided at the hazardous location mentioned hereinabove including repair/ replacement of retaining wall and breast wall on site as per its condition.

12. SPECIAL REQUIREMENTS FOR HILL ROADS

In accordance with Section 13 of the Manual (from IRC: SP: 73-2018), IRC: SP:48- 1998 & recommended practice for the treatment of embankment and roadside slopes for erosion control (first revision) IRC: 56-2011 and relevant IRC codes & The cutting slope surface except on Hard Rock classified as per Clause 301.2 of MORTH Specifications for Road and Bridge Works shall be protected by the Seeding and Mulching as per Clause 301.8 of MORTH Specification, and the embankment slope shall be protected by Turfing as per Clause 301.7 of MORTH Specification.

Sl. No.	Design Ch. (From)	Design Ch. (To)	LHS/RHS
Whenever necessary to be notified by Authority's Engineer.			

13. CHANGE OF SCOPE

The length of Structures, bridges, culverts, underpasses, flyovers etc. specified hereinabove shall be treated as an approximate assessment. The actual lengths as required on the basis of detailed investigations shall be determined by the Contractor in accordance with the Specifications and Standards. Any variations in the lengths specified in this Schedule-B shall not constitute a Change of Scope, save and except any variations in the length arising out of a Change of Scope expressly undertaken in accordance with the provisions of Article 13.

Annexure-I to Schedule-B1

Utility Shifting

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

Notes:

- 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 contractor 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 overhead crossing to underground as per requirement of utility owning department and/or construction of project highway. The contractor shall carry out joint inspection with utility owning department and get the estimates from the utility owning department. The assistance of the Authority is limited to giving forwarding letter on the proposal of contractor to utility owning department whenever asked by the contractor. The decision/ approval of utility owning department shall be on the contractor.
- 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 contractor furnishes demand of utility Owning Department along with a copy of estimated cost given by later.
- c) The dismantled material/scrap of existing Utility to be shifted/Dismantled shall belong to the contractor who would be free to dispose-off the dismantled material as deemed fit by them unless the contractor is required to deposit the dismantled material to utility owning department as per the norm and practice and in that case the amount for dismantled material may be available by the contractor as per estimate 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.

Note-II: Copy of utility shifting plans enclosed as Annexure – II to Schedule B1

Modified Schedule-H

(See Clauses 10.1 (iv) and 19.3)

1 Contract Price Weightages

1.1 The Contract Price for this Agreement is Rs.

1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
I. Road works including culverts, widening and repair of culverts	74.18%	A-Widening and strengthening of existing road	
		(1) Earthwork up to top of the embankment	[Nil]
		(2) Sub-Grade	[Nil]
		(3) Sub-Base Course	[Nil]
		(4) Non bituminous Base Course	[Nil]
		(5) Bituminous Base Course	[Nil]
		(6) Wearing Coat	[Nil]
		(7) Widening and repair of culverts	[Nil]
		B.1-Reconstruction/ New realignment/ bypass (Flexible pavement)	
		(1) Earthwork up to top of the embankment	3.26%
		(2) Sub-Grade	0.81%
		(3) Sub-Base Course	8.19%
		(4) Non bituminous Base Course	17.17%
		(5) Bituminous Base Course	19.69%
		(6) Wearing Coat	15.99%
		B.2-Reconstruction/ New realignment/ bypass – Rectification work (Flexible pavement)	
		(1) Sub-Base Course	2.67%
		(2) Non bituminous Base Course	1.29%
		(3) Base Course	9.84%
		B.3-Reconstruction/ realignment/ bypass/Geometric Improvement (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	[Nil]
		(2) Sub-Grade	[Nil]
		(3) Sub-Base Course	[Nil]
		(4) Dry Lean Concrete (DLC) Course	[Nil]
		(5) Pavement Quality Concrete (PQC) Course	[Nil]
		C.1-Reconstruction/ New Service Road (Flexible Pavement)	
		(1) Earthwork up to top of the embankment	[Nil]
		(2) Sub-Grade	[Nil]
		(3) Sub-Base Course	[Nil]
		(4) Non bituminous Base Course	[Nil]
		(5) Bituminous Base Course	[Nil]
		(6) Wearing Coat	[Nil]

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Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		C.2-Reconstruction/ New Service Road (Rigid Pavement)	
		(1) Earthwork up to top of the embankment	[Nil]
		(2) Sub-Grade	[Nil]
		(3) Sub-Base Course	[Nil]
		(4) Dry Lean Concrete (DLC) Course	[Nil]
		(5) Pavement Quality Concrete (PQC) Course	[Nil]
		D-Reconstruction and New culverts on existing road, realignment, bypasses:	
		Culverts (length < 6m)	21.09%
II. Minor Bridges/ Underpasses/ Overpasses	4.76%	A.1-Widening and repairs of Minor Bridges (length > 6m and < 60m)	
		Minor Bridges	
		(1) Foundation: On completion of the foundation work of abutments and piers	[Nil]
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	[Nil]
		(3) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	[Nil]
		(4) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	[Nil]
		A.2-New of Minor Bridges (length > 6m and < 60m)	
		(1) Foundation: On completion of the foundation work of abutments and piers	19.19%
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	48.09%
		(3) Super-structure: On completion of the super-structure upto deck slab including bearings.	13.44%
		(4) Miscellaneous Works: On completion of wearing coat, expansion joint, crash barrier, railings, protection works and any remaining work associated to bridge including tests on bridge.	6.78%
		(5) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	12.50%
		(6) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respect.	[Nil]
		B.1-Widening and repairs of Underpasses/Overpasses	

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Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		Underpasses/ Overpasses	[Nil]
		B.2 - New Underpasses/Overpasses	
		(1) Foundation: On completion of the foundation work of abutments and piers	[Nil]
		(2) Sub-structure: On completion of abutments and piers with abutment/ pier cap	[Nil]
		(3) Super-structure: On completion of the super-structure upto deck slab including bearing	[Nil]
		(4) Miscellaneous Works: On completion of wearing coat, expansion joint, crash barrier, railings and any remaining work associated to bridge including tests on bridge	[Nil]
		(5) Approaches: On completion of approaches including Wing walls/ Return walls, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	[Nil]
III. Major Bridge (length > 60 m) works and ROB/RUB/elevated sections/flyovers including viaducts, if any	0.00%	A.1-Widening and repairs of existing major bridges	
		(1) Foundation:	[Nil]
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	[Nil]
		(3) Super-structure (including bearings.)	[Nil]
		(4) Wearing Coat including expansion joints	[Nil]
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/return walls	[Nil]
		(7) Guide bunds, river training works etc.	[Nil]
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	[Nil]
		A.2-New major bridges	
		(1) Foundation	[Nil]
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-Structure	[Nil]
		(3) Super-structure (including bearings)	[Nil]
		(4) Wearing Coat including expansion joints	[Nil]
		(5) Miscellaneous Items (like hand rails, crash barriers, road markings etc.)	[Nil]
		(6) Wing walls/return walls	[Nil]
		(7) Guide Bunds, River Training works etc.	[Nil]
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope, etc.)	[Nil]
		B.1-Widening and repairs of	
		(a) ROB	

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Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(b) RUB	
		(1) Foundation:	[Nil]
		(i) Pile Foundation	
		(ii) Open Foundation	
		(2) Sub-structure	[Nil]
		(3) Super-structure (including bearings.)	[Nil]
		(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	[Nil]
		(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	[Nil]
		(6) Wing walls/return walls	[Nil]
		(7) Approaches (including Retaining walls, stone pitching and protection works)	[Nil]
		B.2-New ROB / RUB	
		(a) ROB	
		(b) RUB	
		(1) Foundation	[Nil]
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	[Nil]
		(3) Super-structure (including bearings)	[Nil]
		(4) Wearing Coat: (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	[Nil]
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	[Nil]
		(6) Wing walls/return walls	[Nil]
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]
		C.1-Widening and repairs of Elevated section / Flyover / Grade Separators	
		(1) Foundation	[Nil]
		(i) Pile Foundation	
		(ii) Open Foundation	
		(2) Sub-structure	[Nil]
		(3) Superstructure (including bearing)	[Nil]
		(4) wearing coat including expansion joint	[Nil]
		(5) Miscellaneous items (like hand rails, crash barriers, road markings etc.)	[Nil]
		(6) wing walls/return walls	[Nil]
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		C.2-New Elevated section/Flyover/Grade Separators	
		(1) Foundation	[Nil]
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	[Nil]
		(3) Super-structure (including bearing)	[Nil]
		(4) wearing coat including expansion joint	[Nil]
		(5) Miscellaneous items (like hand rails, crash barriers, road markings etc.)	[Nil]
		(6) wing walls/return walls	[Nil]
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]
IV. Other works	21.06%	(i) Toll plaza	[Nil]
		(ii) Road side drains	49.18%
		(a) Drain	
		(b) Cover Slab	
		(iii) Road signs, markings, km stones safety Devices etc.	12.61%
		(iv) Overhead gantry mounted signs	[Nil]
		(v) Project facilities	7.73%
		(a) Bus Bays/Junctions	
		(b) Truck lay-byes	
		(c) Passenger Shelter/Rest areas	
		(d) Others	
		(vi) Road side plantation	[Nil]
		(vii) Protection works # other than approaches to the bridges, elevated sections, flyovers/grade separators and ROB/RUBs.	
		(a) Crash Barrier	7.08%
		(b) Retaining Wall	15.98%
		(c) Breast Wall	
		(viii) Safety and traffic management during construction	[Nil]
		(viii) Electrical Utilities and Public Health Utilities (Water pipelines and Sewage lines)	
		(a) LT lines	0.94%
		(b) 11 kV Line	2.18%
		(c) 33 KV	1.00%
		(c) Distribution Sub-Station	0.62%
		(d) Water pipe lines	1.53%
		(e) Reservoir, Distribution Tanks, Community Sanitary Complex, IHHL	1.15%

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1.3 Procedure of estimating the value of work done.

1.3.1 Road Works- Procedure for estimating the value of road work done shall be as follows:

Table 1.3.1

Stage of Payment	Percentage - weightage	Payment Procedure
A-Widening and strengthening of existing road		
(1) Earthwork up to top of the embankment	[Nil]	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in a length of not less than 10 (ten) percent of total length of 500m, whichever is less.
(2) Sub-Grade	[Nil]	
(3) Sub-Base Course	[Nil]	
(4) Non bituminous Base Course	[Nil]	
(5) Bituminous Base Course	[Nil]	
(6) Wearing Coat	[Nil]	
(7) Widening and repair of culverts	[Nil]	Cost of completed culverts shall be determined on pro rata basis with respect to the total no. of culverts. The payment shall be made on the completion of at least one culverts. 75% of the cost will be payable on completion of box/abutments and slab/pipe and head wall. Remaining 25% will become payable on completion of protection works including return/wing wall and any other work associated with culverts.
B.1-Reconstruction/ New realignment/ bypass (Flexible pavement)		
(1) Earthwork up to top of the embankment	3.26%	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	0.81%	
(3) Sub-Base Course	8.19%	
(4) Non bituminous Base Course	17.17%	
(5) Bituminous Base Course	19.69%	
(6) Wearing Coat	15.99%	
B.2- Reconstruction/ New realignment/ bypass – Rectification work (Flexible pavement)		
(1) Sub-Base Course	2.67%	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Non bituminous Base Course	1.29%	
(3) Bituminous Base Course	9.84%	
B.3-Reconstruction/ realignment/ bypass/Geometric Improvement (Rigid Pavement)		
(1) Earthwork up to top of the embankment	[Nil]	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in
(2) Sub-Grade	[Nil]	

Stage of Payment	Percentage - weightage	Payment Procedure
(3) Sub-Base Course	[Nil]	full length or 500 m length, whichever is less.
(4) Dry Lean Concrete (DLC) Course	[Nil]	
(5) Pavement Quality Concrete (PQC) Course	[Nil]	
C.1-Reconstruction/ New Service Road (Flexible Pavement)		
(1) Earthwork up to top of the embankment	[Nil]	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	[Nil]	
(3) Sub-Base Course	[Nil]	
(4) Non bituminous Base Course	[Nil]	
(5) Bituminous Base Course	[Nil]	
(6) Wearing Coat	[Nil]	
C.2-Reconstruction/ New Service Road (Rigid Pavement)		
(1) Earthwork up to top of the embankment	[Nil]	Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 500 m length, whichever is less.
(2) Sub-Grade	[Nil]	
(3) Sub-Base Course	[Nil]	
(4) Dry Lean Concrete (DLC) Course	[Nil]	
(5) Pavement Quality Concrete (PQC) Course	[Nil]	
D-Reconstruction and New culverts on existing road, realignment, bypasses:		
Culverts (length < 6m)	21.09%	Cost of completed culverts shall be determined on pro rata basis with respect to the total no. of culverts. The payment shall be made on the completion of at least one culverts. 75% of the cost will be payable on completion of box/abutments and slab/pipe and head wall. Remaining 25% will become payable on completion of protection works including return/wing wall and any other work associated with culverts.

@ For example, if the total length of bituminous work to be done is 100 km, the cost per km of bituminous work shall be determined as follows:

$$\text{Cost per km} = P \times \text{weightage for road work} \times \text{weightage for bituminous work} \times (1/L)$$

Where P= Contract Price

L = Total length in km

Similarly, the rates per km for other stages shall be worked out accordingly.

Note: The length affected due to law-and-order problems or litigation during execution due to which the Contractor is unable to execute the work, may be deducted from the total project length for payment purposes. The total length calculated here is only for payment purposes and will not affect and referred in other clauses of the Contract Agreement.

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1.3.2 Minor Bridges and Underpasses/Overpasses - Procedure for estimating the value of Minor bridge and Underpasses/Overpasses shall be as stated in table 1.3.2:

Table 1.3.2

Stage of Payment	Percentage - weightage	Payment Procedure
A.1-Widening and repairs of Minor Bridges (length > 6m and < 60m) (i) Foundation: On completion of the foundation work of abutments and piers	[Nil]	Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges. (i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	[Nil]	(ii) Sub-structure: Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	[Nil]	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause.
(iv) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	[Nil]	(iv) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub-clause for each bridge.
A.2-New of Minor Bridges (length > 6m and < 60m) (i) Foundation: On completion of the foundation work of abutments and piers	19.19%	Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges. (i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.

Stage of Payment	Percentage - weightage	Payment Procedure
(ii) Sub-structure: On completion of abutments and piers with abutment/ pier cap.	48.09%	(ii) Sub – structure: Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab including bearings.	13.44%	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause. If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works: On completion of wearing coat, expansion joint, crash barrier, railings, protection works and any remaining work associated to bridge including tests on bridge.	6.78%	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works, drainage and any other remaining work associated to bridge including tests on bridge for each bridge.
(v) Approaches: On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	12.50%	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub-clause for each bridge.
(vi) Guide Bunds and River Training Works: On completion of Guide Bunds and river Training Works complete in all respect.	[Nil]	(vi) Guide Bunds and River Training Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of Guide Bunds and River training Works in all respects as specified for each bridge.
B.1-Widening and repairs of Underpasses/Overpasses	[Nil]	Cost of each underpass/overpass shall be determined on pro rata basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on the completion of widening & repair works of a underpass/overpass.
B.2-New Underpasses/Overpasses (i) Foundation: On completion of the foundation work of abutments and piers	[Nil]	Cost of each underpass/overpass shall be determined on pro rata basis with respect to the total linear length of the underpasses/overpasses. (i) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of

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Stage of Payment	Percentage - weightage	Payment Procedure
		foundation(s) of each underpass/overpass. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) Sub-structure: On completion of abutments and piers with abutment/ pier cap	[Nil]	(ii) Sub-structure: Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) Super-structure: On completion of the super-structure upto deck slab including bearing	[Nil]	(iii) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of at least one span upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) Miscellaneous Works: On completion of wearing coat, expansion joint, crash barrier, railings and any remaining work associated to bridge including tests on bridge	[Nil]	(iv) Miscellaneous Works: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works and any other remaining work associated to bridge including tests on bridge for each bridge.
(v) Approaches: On completion of approaches including Wing walls/ Return walls, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	[Nil]	(v) Approaches: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing wall/ return wall, retaining walls, Reinforced Earth walls, stone pitching, protection works complete in all respect for each bridge.

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1.3. Major Bridge works, ROB/RUB and Structures - Procedure for estimating the value of Major Bridge works, ROB/RUB and Structures shall be as stated in table 1.3.3:

Table 1.3.3

Stage of Payment	Percentage - weightage	Payment Procedure
A.1-Widening and repairs of existing major bridges (1) Foundation:	[Nil]	<p>Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges.</p> <p>(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified hereinunder.</p>
<p>(i) Pile Foundation</p> <p>(a) Piling - On completion of pile upto bottom of pile cap.</p> <p>(b) Pile Cap – On completion of pile cap.</p>		<p>(i) Pile Foundation</p> <p>(a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis.</p> <p>(b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap.</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	[Nil]	<p>(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments /piers upto abutment/pier cap level of each of the major bridge.</p>
(3) Super-structure (including bearings.)	[Nil]	<p>(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under:</p> <p>If pre-cast RCC/PSC/Steel girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on</p>

Stage of Payment	Percentage - weightage	Payment Procedure
		Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints	[Nil]	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	[Nil]	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	[Nil]	(6) Wing walls/return walls: Payments shall be made on completion of all Wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide bunds, river training works etc.	[Nil]	(7) Guide bunds, river training works: Payments shall be made on completion of all Guide bunds, river training works etc complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	[Nil]	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
A.2-New major bridges (1) Foundation	[Nil]	Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridge. (1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified here in under:
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb (b) Wellsteining: On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Wellsteining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof.

Stage of Payment	Percentage - weightage	Payment Procedure
		(c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling - On completion of pile upto bottom of pile cap. (b) Pile Cap – On completion of pile cap.		(ii) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-Structure	[Nil]	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure (including bearings)	[Nil]	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon. (For cable stayed bridge and suspension cable bridge, detailed payment stage may be included on case-to-case basis)
(4) Wearing Coat including expansion joints	[Nil]	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in

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Stage of Payment	Percentage - weightage	Payment Procedure
		all respects as specified for each major bridge.
(5) Miscellaneous Items (like hand rails, crash barriers, road markings etc.)	[Nil]	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.
(6) Wing walls/return walls	[Nil]	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	[Nil]	(7) Guide Bunds, River Training works: Payments shall be made on completion of all guide bunds, river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope, etc.)	[Nil]	(8) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
B.1-Widening and repairs of (a) ROB (b) RUB (1) Foundation:	[Nil]	Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs. (1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under.
(i) Pile Foundation (a) Piling - On completion of pile upto bottom of pile cap. (b) Pile Cap – On completion of pile cap.		(i) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	[Nil]	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis

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Stage of Payment	Percentage - weightage	Payment Procedure
		on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings.)	[Nil]	<p>(3) Super-structure:</p> <p>Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under:</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p>
(4) Wearing Coat: (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.	[Nil]	<p>(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.</p>
(5) Miscellaneous Items like hand rails, crash barrier, road markings etc.	[Nil]	<p>(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/RUB.</p>
(6) Wing walls/return walls	[Nil]	<p>(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/RUB.</p>
(7) Approaches (including Retaining walls, stone pitching and protection works)	[Nil]	<p>(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each of the ROB/RUB.</p>
B.2-New (a) ROB (b) RUB (1) Foundation	[Nil]	<p>Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.</p> <p>(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here</p>

Stage of Payment	Percentage - weightage	Payment Procedure
		in under:
<p>(i) Well Foundation</p> <p>(a) On completion of Cutting Edge + Well Curb.</p> <p>(b) Wellsteining: On completion of well steining upto bottom of well cap.</p> <p>(c) On completion of bottom plug + top plug (if provisioned as per design) + well cap.</p>		<p>(i) Well Foundation</p> <p>(a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb.</p> <p>(b) Wellsteining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof.</p> <p>(c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.</p>
<p>(ii) Pile Foundation</p> <p>(a) Piling - On completion of pile upto bottom of pile cap.</p> <p>(b) Pile Cap – On completion of pile cap.</p>		<p>(ii) Pile Foundation</p> <p>(a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis.</p> <p>(b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap.</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-Structure	[Nil]	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings)	[Nil]	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified herein under:

Stage of Payment	Percentage - weightage	Payment Procedure
		If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility complete in all respects as specified.	[Nil]	(4) Wearing Coat: Payment shall be made on completion of (a) in case of ROB-wearing coat including expansion joints complete in all respects as specified for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	[Nil]	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/RUB.
(6) Wing walls/return walls	[Nil]	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/RUB.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each of the ROB/RUB. If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon. Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.
C.1-Widening and repairs of Elevated section / Flyover / Grade Separators (1) Foundation	[Nil]	(1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under:
(i) Pile Foundation (a) Piling - On completion of pile upto bottom of pile cap.		(i) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile

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Stage of Payment	Percentage - weightage	Payment Procedure
(b) Pile Cap – On completion of pile cap.		cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	[Nil]	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Superstructure (including bearing)	[Nil]	(3) Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified herein under: If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing coat including expansion joint	[Nil]	(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous items (like hand rails, crash barriers, road markings etc.)	[Nil]	(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	[Nil]	(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]	(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works,

Stage of Payment	Percentage - weightage	Payment Procedure
		etc. complete in all respects as specified for each of the structure.
C.2-New Elevated section/Flyover/Grade Separators (1) Foundation	[Nil]	Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures. (1) Foundation: Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under:
(i) Well Foundation (a) On completion of Cutting Edge + Well Curb. (b) Wellsteining: On completion of well steining upto bottom of well cap. (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap.		(i) Well Foundation (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb. (b) Wellsteining: Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof. (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation (a) Piling - On completion of pile upto bottom of pile cap. (b) Pile Cap – On completion of pile cap.		(ii) Pile Foundation (a) Piling: Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis. (b) Pile Cap: Payment of 30% on pro-rata basis shall be made on completion of pile cap. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	[Nil]	(2) Sub-Structure: Payment against Sub-structure shall be made on pro-rata basis

Stage of Payment	Percentage - weightage	Payment Procedure
		on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super-structure (including bearing)	[Nil]	<p>(3) Super-structure:</p> <p>Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified herein under:</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p>
(4) Wearing coat including expansion joint	[Nil]	<p>(4) Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.</p>
(5) Miscellaneous items (like hand rails, crash barriers, road markings etc.)	[Nil]	<p>(5) Miscellaneous: Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.</p>
(6) Wing walls/return walls	[Nil]	<p>(6) Wing walls/return walls: Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.</p>
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[Nil]	<p>(7) Approaches: Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified here in under:</p> <p>If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p>

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1.3.4 Other works.

Procedure for estimating the value of other works done shall be as stated in table 1.3.4.

Table 1.3.4

Stage of Payment	Percentage - weightage	Payment Procedure
(i) Toll plaza	[Nil]	Unit of measurement is each completed toll plaza. Payment for each toll plaza shall be made on pro-rata basis with respect to the total of all toll plazas as specified here in under:
(a) DLC (LHS)		(a) DLC (LHS): Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e., completion of DLC on LHS.
(b) DLC (RHS)		(b) DLC (RHS): Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e., completion of DLC on LHS.
(c) PQC (LHS)		(a) PQC (LHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e., completion of DLC on LHS.
(d) PQC (RHS)		(b) PQC (RHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e., completion of DLC on LHS.
(e) Admin Building		(e) Admin Building: Payment of 10% on pro-rata basis shall be made on completion of a stage i.e. completion of Admin Building and miscellaneous works.
(f) Toll Booth, canopy, safety items and all other associated works		(f) Toll Booth, canopy, safety items and all other associated works: Payment of 15% on pro-rata basis shall be made on completion of a stage i.e. completion of Toll Booth, canopy, safety items and all other associated works.
(ii) Road side drains	49.18%	
(a) Drains		(a) Drains: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(b) Cover Slabs		(b) Cover slabs: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(iii) Road signs, markings, km stones, safety devices, ...	12.61%	Unit of measurement is linear length in km. Payment shall be made on pro-rata basis on completion of a stage in a length of not less than one km on both sides.
(iv) Overhead gantry mounted signs	[Nil]	Unit of measurement is each number. Payment shall be made on pro-rata basis

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Stage of Payment	Percentage - weightage	Payment Procedure
		on completion of each overhead gantry mounted sign.
(v) Project facilities (a) Bus Bays (b) Truck lay-byes (c) Rest areas (d) Others	7.73%	Unit of measurement is each number. Payment shall be made on pro-rata basis for completed facilities.
(vi) Road side plantation	[Nil]	Unit of measurement is linear length in km Payment shall be made on pro-rata basis on completion of one km.
(vii) Protection works # other than approaches to the bridges, elevated sections, flyovers/grade separators and ROBs/RUBs.		
(a) Crash Barrier	7.08%	Unit of measurement is linear length. Payment against items (a), (b) & (c) shall be made on pro rata basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length and 100 m whichever is less.
(b) Retaining Wall	15.98%	
(c) Breast Wall		
(viii) Safety and traffic management during construction	[Nil]	Payment shall be made on pro-rata basis every six months.
(x) Electrical Utilities and Public Health Utilities (Water pipelines and Sewage lines)		
(a) LT lines	0.94%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of LT line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable- 30%, (iii) DTR erection (if involved)-15% (iv) Charging of line including dismantling and site clearance-35% (with DTR) and 50% without DTR).
(b) 11 kV lines	2.18%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of 11 kV line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable- 30%, (iii) DTR erection (if involved)-10%

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Stage of Payment	Percentage - weightage	Payment Procedure
		(iv) Charging of line including dismantling and site clearance-40% (with DTR) and 50% without DTR).
(c) 33 kV lines	1.00%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of 33 kV line. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable- 30%, (iii) DTR erection (if involved)-10% (iv) Charging of line including dismantling and site clearance-40% (with DTR) and 50% without DTR).
(d) Distribution Sub-Station	0.62%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of Distribution Sub-Station. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Erection of Poles-20%, (ii) Conductor stringing including laying of cable- 30%, (iii) DTR erection (if involved)-10% (iv) Charging of line including dismantling and site clearance-40% (with DTR) and 50% without DTR).
(e) Water pipelines	1.53%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of pipeline. Payment shall be made for completed activity. (The average weightage of major activities (only for payment purpose) in shifting work is (i) Laying of Pipe-50%, (ii) Charging of line including all miscellaneous works and dismantling and site clearance-50%.
(f) Reservoir, Distribution Tanks, Community Sanitary Complex, IHHL	1.15%	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost of Reservoir, Distribution Tanks, Community

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Stage of Payment	Percentage - weightage	Payment Procedure
		Sanitary Complex, IHHL. Payment shall be made for completed activity.

Note:

- (1) (a) In order to maintain cash flow in the project, the Authority shall also make interim monthly payments to the Contractor for the work done during the month for which the corresponding stage, as mentioned in Schedule-H, has not been achieved. Such work shall be measured, in a length, number or area as specified in corresponding stage of Schedule-H and valued in accordance with the proportion of the weightage of Contract Price assigned to that stage in Schedule-H. '90% of value of such work shall be paid as an 'Interim Monthly Payment' under clause 19.3 (i) of Contract Agreement.
- (b) For Pre cast/ pre-fabricated elements to be used in permanent works, interim payments to be made @ 75% of cost of that element (to be derived from MoRT&H data book) as per schedule H.
- (c) Upon completion of the defined 'stage', a reconciliation of the interim payments shall be carried out, and any balance amount shall be paid. For the avoidance of doubt, it is clarified that the interim monthly payments are made solely to maintain cash flow in the project. In the event of termination of the project, under Clause 23.1, 23.2 or 23.3, as the case may be, such interim payments shall be dealt with as per Clause 23.5 (i) (b) of the Contract Agreement.

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