

SCHEDULE – A
(See Clauses 2.1 and 8.1)

SITE OF THE PROJECT

1 The Site

- 1.1 Site of the Two-Laning of Existing Joram – Koloriang Road on EPC basis from design km 44+000 to km 59+363 (Existing km 50+050 to km 70+000) in the state of Arunachal Pradesh under SARDP-NE, Project Highway shall include the land, buildings, structures and road works as described in **Annex-I** of this Schedule-A.
- 1.2 The dates of handing over the Right of Way to the Contractor are specified in **Annex-II** of this Schedule-A.
- 1.3 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 8.2.1 of this Agreement.
- 1.4 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 modified.
- 1.5 The status of the environment clearances obtained or awaited is given in **Annex-IV**.

Annex I (Schedule-A)

1. Site

The Site of the [Two-Lane] Project Highway comprises the section of Joram – Koloriang road commencing from design km 44+000 to km 59+363 (Existing km 50.050 to km 70.000) i.e Dam – New Palin Section in the State of Arunachal Pradesh. The road is of sub-standard two lane with poor road surface, passing through mountainous terrain, in general. The road is deficient in geometric features at almost all locations. The stretch lies within Kurung Kumey district.

The project corridor i.e. Joram - Koloriang passes through settlements of Shakti and New Palin.

The Index Map is appended at the end of this Schedule–A.

2. Chainage References (Existing vs Design)

“Existing Chainage” means Km Stones existing on the Project Highway. During topography survey, observations are made to these Km stones and after finalization of alignment by improving the existing geometry the chainage has been referred to “Design Chainage”. The relationship between the “Existing Chainage” and the “Design Chainage” as per field surveys of the location of existing Km stones for the “Project Highway” is given below:

Sl No.	Existing Chainage (Km)	Design chainage (Km)	Remarks
1	50+050	44+000	
2	50+500	44+350	
3	51+000	45+000	
4	51+500	45+190	
5	52+000	45+430	
6	52+500	45+820	
7	53+000	46+270	
8	53+500	46+700	
9	54+000	47+000	

SI No.	Existing Chainage (Km)	Design chainage (Km)	Remarks
10	54+500	47+310	
11	55+000	47+710	
12	55+500	48+020	
13	56+000	48+350	
14	56+500	48+810	
15	57+000	49+250	
16	57+500	49+600	
17	58+000	50+050	
18	58+500	50+390	
19	59+000	50+750	
20	59+500	51+300	
21	60+000	51+750	
22	60+500	52+160	
23	61+000	52+610	
24	61+500	53+000	
25	62+000	53+420	
26	62+500	53+900	
27	63+000	54+400	
28	63+500	54+720	
29	64+000	55+050	
30	64+500	55+400	
31	65+000	55+720	
32	65+500	56+100	
33	66+000	56+515	
34	66+500	56+940	
35	67+000	57+400	
36	67+500	57+800	
37	68+000	58+150	
38	68+500	58+660	
39	69+000	59+115	
40	69+500	59+220	
41	70+000	59+363	

3. Land

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

Two Laning of Joram – koloriang Road (NH-713) on EPC basis from design km 44+000 to km 59+363 [Existing km 50.050 to km 70.000] in the State of Arunachal Pradesh under SARDP-NE

Sl. No.	Existing Chainage (km)		Design Chainage (km)		Length in m (Design)	Existing/Available ROW (m)	Remarks
	From	To	From	To			
1	50+050	70+000	44+000	59+363	15363	9m to 15m	No ROW available in realignment stretch of total 9164m as given

4. Carriageway

The present carriageway of the Project Highway is substandard single lane configuration. The type of the existing pavement is flexible.

Sl. No.	Existing Chainage (km)		Design Chainage (km)		Length in m (Design)	Lane Width (m)	Remarks
	From	To	From	To			
1	50+050	70+000	44+000	59+363	15363	3.0-3.25*	*Lane width other than realignment portion

5. Major Bridges

The Site includes no major bridges.

The site includes no major bridges.						
Sl. No.	Chainage (km)	Type of Structures			No. of Spans with span length (m)	Width (m)
		Foundation	Sub-Structure	Superstructure		
NIL						

6. Railway over-bridges (ROB)

The Site includes no ROB/RUB

Sl. No.	Chainage (km)	Type of Structures			No. of Spans with span length (m)	Width (m)
		Foundation	Sub-Structure	Superstructure		
NIL						

7. Grade Separators

The Site includes no grade separators

Sl. No.	Chainage (km)	Type of Structures			No. of Spans with span length (m)	Width (m)
		Foundation	Sub-Structure	Super structure		
NIL						

8. Minor Bridges

The Site includes the following minor Bridges:

Sl. No.	Existing Chainage (km)	Type of Structures			No. of Spans with Span Length (m)	Total Width (m)
		Foundation	Sub-Structure	Super Structure		
1	56+350	Open	Wall type	RCC Single Cell Box type	Single span, L = 7m	6.60
2	56+420	Open	Wall type	RCC Single Cell Box type	Single span, L = 6.75m	5.50
3	62+150	Open	Wall type	RCC T Girder	Single span, L = 15.5m	5.00
4	69+200	Open	Wall type	PSC Girder	Single span, L = 33.0m	4.50

9. Railway level crossings / Railway Track

The Site includes the following railway level crossings:

Sl. No.	Road Segment	Existing Chainage (km)	Remarks
Nil			

10. Underpasses (vehicular, non-vehicular)

The Site includes the following underpasses:

Sl. No.	Road Segment	Existing Chainage (km)	Type of Structure	No. of Spans with Span Length (m)	Width (m)
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Nil

11. Culverts

The Site includes the 93 Nos of culverts at the following locations and types:

Sl no.	Existing Chainage	Type of Culvert	Span/Dia (m)	Width (m)	Remarks
1	50160	Slab	1x1.0	5.0	
2	50290	Not visible	-	5.1	
3	50360	Slab	1x1.0	5.0	
4	50500	Slab	1x1.0	5.5	
5	50830	Slab	1x1.0	5.0	
6	51450	Pipe	Not visible	5.5	
7	51500	Slab	-	5.0	
8	51860	Slab	1x1.0	5.5	
9	52255	Pipe	1x0.6	5.0	
10	52475	Pipe	1x0.6	5.5	
11	52710	Slab	1x1.0	5.0	
12	53475	Slab	1x1.0	5.0	
13	53550	Pipe	1x0.6	5.0	
14	53870	Slab	1x1.0	5.2	
15	53920	Slab	1x1.0	5.0	
16	54020	Pipe	1x0.35	5.2	
17	54050	Slab	1x1.0	5.0	
18	54620	Pipe	1x0.9	5.3	
19	55550	Not visible	-	5.0	
20	55610	Slab	1x1.0	5.0	
21	55700	Slab	1x1.0	5.0	
22	56270	Slab	1x1.0	5.0	
23	56570	Slab	1x1.0	5.0	
24	56895	Slab	1x1.0	5.0	
25	57030	Slab	1x1.0	5.0	
26	57160	Not visible	-	5.0	
27	57260	Slab	1x1.0	5.0	
28	57320	Slab	1x1.0	5.5	
29	57450	Slab	1x1.0	5.3	
30	57600	Slab	1x1.0	5.0	
31	57650	Slab	1x3.0	5.0	
32	57750	Pipe	1x0.9	5.0	
33	57900	Slab	1x1.5	5.5	

Two Laning of Joram – koloriang Road (NH-713) on EPC basis from design km 44+000 to km 59+363 [Existing km 50.050 to km 70.000] in the State of Arunachal Pradesh under SARDP-NE

SI no.	Existing Chainage	Type of Culvert	Span/Dia (m)	Width (m)	Remarks
34	58320	Slab	1x2.0	5.3	
35	58325	Slab	1x1.0	5.5	
36	58500	Slab	1x1.0	5.0	
37	58625	Slab	1x1.0	5.0	
38	58750	Not visible	-	5.4	
39	59000	Slab	1x1.0	6.0	
40	59150	Slab	1x1.0	5.0	
41	59270	Slab	1x1.0	5.0	
42	59494	Slab	1x1.5	5.5	
43	59550	Pipe	1x0.9	5.3	
44	59640	Slab	1x1.0	5.0	
45	59825	Slab	1x1.0	5.0	
46	60160	Slab	1x1.0	5.0	
47	60350	Slab	1x1.0	5.0	
48	60600	Slab	1x1.0	5.0	
49	61080	Slab	1x1.0	5.0	
50	61190	Slab	1x1.0	5.0	
51	61330	Slab	1x6.0	6.0	
52	61510	Slab	1x1.0	5.0	
53	61700	Slab	1x1.0	5.0	
54	61810	Not visible	-	5.1	
55	61950	Slab	1x1.0	6.0	
56	62280	Slab	1x1.5	6.1	
57	62410	Slab	1x1.0	5.0	
58	62510	Slab	1x1.0	5.0	
59	62650	Slab	1x1.0	5.0	
60	62745	Slab	1x1.0	5.0	
61	62810	Slab	1x1.0	5.0	
62	63125	Slab	1x1.0	5.0	
63	63260	Slab	1x1.5	5.5	
64	63280	Slab	1x1.5	5.3	
65	63560	Slab	1x1.0	5.0	
66	63650	Slab	1x1.0	5.0	
67	63750	Slab	1x1.0	5.0	
68	63820	Slab	1x1.0	5.0	
69	64125	Slab	1x1.0	5.0	
70	64355	Slab	1x1.0	5.0	
71	64455	Slab	1x1.0	5.0	
72	64560	Slab	1x1.0	5.0	
73	64610	Slab	1x1.0	5.0	

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SI no.	Existing Chainage	Type of Culvert	Span/Dia (m)	Width (m)	Remarks
74	64740	Slab	1x1.0	5.0	
75	64800	Slab	1x1.0	5.0	
76	64990	Slab	1x1.0	5.0	
77	65300	Slab	1x1.0	5.0	
78	65575	Slab	1x1.0	5.0	
79	65740	Slab	1x1.0	5.0	
80	65810	Slab	1x1.5	5.2	
81	65950	Slab	1x1.5	5.3	
82	66150	Not visible	Not visible	5.2	
83	66350	Slab	1x1.0	5.0	
84	66400	Slab	1x1.0	5.0	
85	66480	Slab	1x1.5	5.4	
86	66790	Slab	1x2.2	5.3	
87	67480	Slab	1x3.0	5.2	
88	67660	Slab	1x2.0	5.6	
89	68000	Slab	1x1.0	5.0	
90	68440	Slab	1x1.5	5.5	
91	68680	Slab	1x1.5	5.1	
92	68870	Slab	1x1.5	5.4	
93	69110	Slab	1x1.0	5.0	

12. Bus Shelters

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

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

13. Truck Lay Bye

The details of truck lay byes on the Site are as follows:

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

14. Road side drains

The details of the road side drains on the Site are as follows:

Sl. No.	Existing Location		Side	Type	
	From (km)	To (km)		Masonry/CC (Pucca)	Earthen (Kutcha)
1	51.120	51.128	Right	-	✓
2	51.175	53.128	Right	-	✓
3	53.175	53.280	Left	-	✓
4	54.590	54.800	Right	-	✓
5	54.855	55.075	Left	-	✓
6	55.100	55.610	Left	-	✓
7	55.625	55.975	Left	-	✓
8	56.000	56.275	Right	-	✓
9	56.445	56.575	Right	-	✓
10	56.580	56.860	Right	-	✓
11	56.880	57.025	Right	-	✓
12	57.050	57.150	Right	-	✓
13	57.200	57.450	Right	-	✓
14	57.520	57.580	Right	-	✓
15	57.605	57.650	Right	-	✓
16	57.700	57.750	Right	-	✓
17	57.760	57.800	Right	-	✓
18	58.325	58.450	Right	-	✓
19	58.503	58.555	Right	-	✓
20	58.655	58.730	Right	-	✓
21	58.750	59.000	Right	-	✓
22	59.005	59.145	Right	-	✓
23	59.150	59.480	Right	-	✓
24	59.510	59.530	Right	-	✓

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Sl. No.	Existing Location		Side	Type	
	From (km)	To (km)		Masonry/CC (Pucca)	Earthen (Kutcha)
25	59.560	59.610	Right	-	✓
26	59.650	59.830	Right	-	✓
27	59.835	60.150	Right	-	✓
28	60.160	60.250	Right	-	✓
29	60.855	60.925	Right	-	✓
30	62.375	62.502	Right	-	✓
31	62.525	62.560	Right	-	✓
32	62.575	63.640	Right	-	✓
33	63.652	64.125	Right	-	✓
34	64.150	65.010	Right	-	✓
35	65.050	65.078	Right	-	✓
36	65.140	65.200	Right	-	✓
37	65.275	65.290	Right	-	✓
38	65.550	65.575	Right	-	✓
39	65.700	65.790	Right	-	✓
40	65.850	65.940	Right	-	✓
41	66.050	66.090	Right	-	✓
42	66.130	66.185	Right	-	✓
43	66.275	66.350	Right	-	✓
44	66.375	66.470	Right	-	✓
45	66.520	66.625	Right	-	✓
46	66.700	66.780	Right	-	✓

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Sl. No.	Existing Location		Side	Type	
	From (km)	To (km)		Masonry/CC (Pucca)	Earthen (Kutcha)
47	66.820	67.205	Right	-	✓
48	67.260	67.475	Right	-	✓
49	67.500	67.750	Right	-	✓

15. Major Junctions

The details of major junctions are as follows:

Sl. No.	Location		At Grade	Separated	Category of Cross Roads			
	Existing Ch.	Design Ch.			NH	SH	MDR	Others
NIL								

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

16. Minor Junctions

The details of minor junctions are as follows:

S. No.	Existing Chainage	Design Chainage	Type	
	(Km)	(Km)	'T' Junction	Cross Road both sides
1	50+450	44+000	✓	-
2	56+875	49+185	✓	-
3	60+300	52+055	✓	-
4	65+025	55+980	✓	-
5	68+300	58+480	✓	-

17. Bypasses

The details of bypasses are as follows:

Sl. No.	Name of Bypass (Town)	Road Segment	Existing Chainage		Length (km)	Carriageway	
			From (km)	To (km)		Width m)	Type
Nil							

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18. Other Structures/ Details

The details of other structures are as follows:

S No.	Type	Existing Chainage (km)	Length (m)	Width
Nil				

Annex-II
(Schedule-A)

Details for Providing Right of Way

The dates on which the Authority shall provide Right of Way (ROW) to the Contractor on Different stretches of the Site are stated below:

Sl. No	Design Chainage		Length	Existing ROW	Proposed ROW Width (m)	Date of Providing proposed ROW
	From	To				
(i) 90% of ROW (full width)	44.000	59.363	15.363	9-12 m	18m - 35 m	At appointed date
(ii) Balance ROW (full width)						Within 90 days after the appointed Date as per clause 8.2 of DCA

Annex-III
(Schedule-A)

Alignment Plans

It is enclosed.

Annex-IV
*(Schedule-A)***Environmental Clearances**

The project Highway does not require Environment Clearance as per MoEF corrigendum dated 22.08.2013.

In addition, the Stage-I Clearance is applied online dated 05.10.2016 which is likely to be received shortly. The Money will be deposited with MoEF for final approval on receipt of Stage-I clearance. Temporary working provision will be ensured before appointed date. All conditions imposed by MoEF while issuing the Approval in Principle(AIP) and final forest clearance(FC) to be adhered during construction stage and after construction stage are to be complied with.

The muck dumping sites in forest area stand identified and freezed by Forest department to be abided by agency during dumping of muck as stated in Schedule-‘F’

INDEX MAP OF PROJECT HIGHWAY SECTIONS

It is enclosed.