

ANNEXURE-2 - NH-209 BRT STRETCH - ELEPHANT UNDERPASSES & VEHICULAR UNDERPASSES PROPOSAL																												
Sl. No.	Existing Chainage	Design Chainage	Type of Structures	Type of Crossing (Nala / Drain / Canal / Field Channel / River)	Skew Angle	Existing Details						Existing Deck Width	Proposal	Proposed Details												TCS	Widening Schedule	Remarks
						Span Arrangement			Total Length	Structure Details				Span Arrangement				Length	Type of Structure			Proposed Deck Width						
						No. of Spans	Size of Vent	Clear Height		Super structure	Sub structure			Found ation	No. of Spans	Span	Clear Height		Super structure	Sub structure	Found ation							
						(No's)	(m)	(m)		-	-			-	(m)	(m)	(m)		(m)	-	-		-	(m)	-			
1	Realignment	193+296	-	-	-	-	-	-	-	-	-	-	New Construction	SVUP	Earthen road	12°	1	7.00	4.00	7.00	RCC Box	-	-	-	2x11.60	3A	Greenfield Alignment	Crossing earthen Road for fields
2	Realignment	193+855	-	-	-	-	-	-	-	-	-	-	LHS-MCW-New Construction; RHS-MCW-New Construction	VUP	MDR	-	1	15.00	5.50	15.00	RCC I- Girder + Deck Slab	RCC Abutment	Open	2x11.60	2A	Greenfield Alignment	Crossing MDR; LHS- LHS- Ramapuram (Connecting to Existing NH-209 Road), RHS- Thignarai Village; Regrade the cross road by 1.40m	
3	-	203+600	-	-	-	-	-	-	-	-	-	-	New Construction	EUP	Elephant Crossing	-	3	30.00	8.00	90.00	PSC I- Girder + Deck Slab	RCC Abutment & Circular Pier	Open	12.00	4	Concentric	Elephant crossing location	
4	274.026	204+425	Minor Bridge	Nala	5	3	1 x 5.5 + 1 x 10.7 +1 x 6.0	5.00	22.20	RCC Solid slab	PCC Wall type Abutment & Piers	Open	8.50	Reconstruction	Minor bridge cum EUP	Nala & Elephants	-	2	30.00	8.00	60.00	PSC I- Girder + Deck Slab	RCC Abutment & Circular Pier	Open	12.00	4	Concentric	Crossing Nala & Elephant crossing location
5	271.134	207+309	RCC Slab Culvert	-	-	1	4.40	1.70	4.40	-	-	-	8.20	Reconstruction	EUP	Nala & Elephants	-	2	30.00	8.00	60.00	PSC I- Girder + Deck Slab	RCC Abutment & Circular Pier	Open	12.00	4	Concentric	Elephant crossing location
6	-	209+325	-	-	-	-	-	-	-	-	-	-	New Construction	EUP	Elephant Crossing	-	2	30.00	8.00	60.00	PSC I- Girder + Deck Slab	RCC Abutment & Circular Pier	Open	12.00	4	Concentric	-	
7	267.293	211+151	Pipe culvert	-	-	2	2.20	-	4.40	-	-	-	12.60	Reconstruction	EUP	Nala & Elephants	-	2	30.00	8.00	60.00	PSC I- Girder + Deck Slab	RCC Abutment & Circular Pier	Open	12.00	4	Concentric	-

ANNEXURE-3 - NH-209 BRT STRETCH - BRIDGES & CULVERTS PROPOSAL																													
Sl. No.	Existing Chainage	Design Chainage	Existing Details										Existing Deck Width	Proposal	Proposed Details												TCS	Widening Schedule	Remarks
			Type of Structures	Type of Crossing (Nala / Drain / Canal / Field Channel / River)	Skew Angle	Span Arrangement				Structure Details					Proposed Type	Type of Crossing (Nala / Drain / Canal / Field Channel / River)	Skew Angle	Span Arrangement			Type of Structure								
						No. of Spans	Size of Vent	Clear Height	Total Length	Super structure	Sub structure	Founda tion						No. of Spans	Span	Clear Height	Length	Super structure	Sub structure	Founda tion	Proposed Deck Width				
	(km)	(km)	-	-	(Deg.)	(No's)	(m)	(m)	(m)	-	-	-	(m)		-	(Deg.)	(No's)	(m)	(m)	(m)	-	-	-	(m)	-	-	-		
1	Realignment	190+110	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	1A	Greenfield Alignment	Balancing Culvert		
2	Realignment	190+253	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	2B	Greenfield Alignment	Balancing Culvert		
3	Realignment	190+400	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	5.00	3.00	-	-	-	-	2C	Greenfield Alignment	Balancing Culvert in Valley		
4	Realignment	190+563	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	3.00	2.00	-	-	-	-	2B	Greenfield Alignment	Nala training to be done on LHS of length 130m.		
5	Realignment	190+650	-	-	-	-	-	-	-	-	-	-	-	LHS-MCW-New Construction; RHS-MCW-New Construction	Minor bridge	Main Canal	20°	3	8.00 SQ Clear	-	24.00	RCC Box	-	-	2x13.50	2B	Greenfield Alignment	Canal with Vertical clearance of 4m on canal service road with clear span of 8.00m is provided	
6	Realignment	190+950	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Field Channel	-	1	2.00	2.00	-	-	-	-	1A	Greenfield Alignment	-		
7	Realignment	191+320	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Field Channel	-	1	2.00	2.00	-	-	-	-	1A	Greenfield Alignment	-		
8	Realignment	192+078	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	5.00	3.00	-	-	-	-	2B	Greenfield Alignment	-		
9	Realignment	192+160	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Field Channel	-	1	2.00	2.00	-	-	-	-	2B	Greenfield Alignment	Balancing Culvert		
10	Realignment	192+846	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	22°	1	5.00	3.00	-	-	-	-	2B	Greenfield Alignment	-		
11	Realignment	193+010	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	1A	Greenfield Alignment	Balancing Culvert - Acts as PUP/CUP in dry condition		
12	Realignment	193+260	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	12°	1	5.00	3.00	-	-	-	-	3A	Greenfield Alignment	Nala training on LHS of length 50m		
13	Realignment	193+890	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	2B	Greenfield Alignment	Balancing Culvert		
14	Realignment	194+033	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	23°	1	5.00	3.00	-	-	-	-	2C	Greenfield Alignment	-		
15	Realignment	194+317	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	5.00	3.00	-	-	-	-	1A	Greenfield Alignment	Acts as PUP/CUP in dry condition		
16	Realignment	194+470	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	1A	Greenfield Alignment	Balancing Culvert		
17	Realignment	194+750	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	3.00	2.00	-	-	-	-	2B	Greenfield Alignment	-		
18	Realignment	194+847	-	-	-	-	-	-	-	-	-	-	-	LHS-MCW-New Construction; RHS-MCW-New Construction	Minor bridge	Nala	-	2	8.00 SQ Clear	-	16.00	RCC Box	-	-	2x13.50	2B	Greenfield Alignment	-	
19	Realignment	195+185	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	1A	Greenfield Alignment	Balancing Culvert		
20	Realignment	196+410	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	4.00	2.00	-	-	-	-	2A	Greenfield Alignment	-		
21	Realignment	196+820	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	3.00	2.00	-	-	-	-	2C	Greenfield Alignment	Balancing Culvert in pond (acts as inlet) in Valley		
22	Realignment	196+892	-	-	-	-	-	-	-	-	-	-	-	LHS-MCW-New Construction; RHS-MCW-New Construction	Minor bridge	Nala	-	1	8.00 SQ Clear	-	8.00	RCC Box	-	-	2x13.50	2C	Greenfield Alignment	In Valley portion	
23	Realignment	197+545	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	3.00	2.00	-	-	-	-	1A	Greenfield Alignment	-		
24	Realignment	197+790	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	3.00	2.00	-	-	-	-	2A	Greenfield Alignment	-		
25	Realignment	197+845	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Pond	-	1	5.00	2.00	-	-	-	-	2A	Greenfield Alignment	-		
26	Realignment	198+075	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	3.00	2.00	-	-	-	-	2A	Greenfield Alignment	-		
27	Realignment	198+190	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	1A	Greenfield Alignment	Balancing Culvert		
28	2.920(MDR)	198+689	Causeway	Nala to Addar Pallam Stream	-	-	-	-	20.00	-	-	-	10.50	Reconstruction	Minor bridge	Addar Pallam Stream	-	1	25.00	-	25.00	PSC I-Girder + Deck Slab	RCC Abutment	Open	12.00	4A	Concentric	-	
29	Existing MDR	199+361	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	2.00	1.50	-	-	-	-	1	Concentric	-		
30	Existing MDR	199+800	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	2.00	1.50	-	-	-	-	1	Concentric	-		
31	Existing MDR	200+097	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	2.00	1.50	-	-	-	-	1	Concentric	-		

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Sl. No.	Existing Chainage	Design Chainage	Existing Details											Existing Deck Width	Proposal	Proposed Details													TCS	Widening Schedule	Remarks
			Type of Structures	Type of Crossing (Nala / Drain / Canal / Field Channel / River)	Skew Angle	Span Arrangement				Structure Details			Type of Crossing (Nala / Drain / Canal / Field Channel / River)			Skew Angle	Span Arrangement			Type of Structure											
						No. of Spans	Size of Vent	Clear Height	Total Length	Super structure	Sub structure	Founda- tion					No. of Spans	Span	Clear Height	Length	Super structure	Sub structure	Founda- tion	Proposed Deck Width							
	(km)	(km)	-	-	(Deg.)	(No's)	(m)	(m)	(m)	-	-	-	(m)			-	(Deg.)	(No's)	(m)	(m)	(m)	-	-	-	(m)	-	-	-			
32	Existing MDR	201+253	Slab culvert	Nala	-	1	Empty to 4.50	Empty to 1.80	-	-	-	-	7.50	Reconstruction	Box Culvert	Nala	-	1	5.00	2.00	-	-	-	-	-	1	Concentric	-			
33	276.8	201+652	Minor Bridge	Nala	-	1	8.00	3.50	8.00	RCC Solid Slab	PCC Wall type Abutment	Open	8.30	Reconstruction	Minor bridge	Nala	-	2	10.00	-	20.00	RCC Solid Slab	RCC Abutment	Open	12.00	4A	Concentric	-			
34	276.085	202+365	Buried	Drain	-	-	-	-	-	-	-	-	-	Reconstruction	Box Culvert	Drain	-	1	2	2	-	-	-	-	-	1	Concentric	-			
35	275.871	202+562	Pipe culvert	Canal to Nala	-	2	2.20	-	4.40	-	-	-	12.50	Reconstruction	Box Culvert	Nala	-	1	5.00	3.00	-	-	-	-	-	1	Concentric	-			
36	275.351	203+102	Pipe culvert	-	-	1	1.00	-	1.00	-	-	-	8.20	Reconstruction	Box Culvert	Nala	-	1	2.00	2.00	-	-	-	-	-	4	Concentric	-			
37	275.154	203+305	Box Culvert	Nala	-	1	5.60	3.10	5.60	RCC Box	-	-	8.90	Reconstruction	Minor bridge	Nala	-	1	8.00	-	8.00	RCC Solid Slab	RCC Abutment	Open	12.00	4	Concentric	-			
38	273.268	205+177	RCC Slab culvert	-	-	1	2.50	0.90	2.50	-	-	-	8.10	Reconstruction	Box Culvert	Nala	-	1	3.00	2.00	-	-	-	-	-	1	Concentric	-			
39	272.863	205+581	Stone slab culvert	-	17°	1	3.50	-	3.50	-	-	-	10.80	Reconstruction	Box Culvert	Nala	15°	1	4.00	2.00	-	-	-	-	-	1	Concentric	-			
40	272.658	205+788	Pipe Culvert	-	-	1	0.30	-	-	-	-	-	-	Reconstruction	Box Culvert	Nala	-	1	2.00	2.00	-	-	-	-	-	1	Concentric	-			
41	271.922	206+522	Pipe culvert	-	-	1	0.90	-	-	-	-	-	7.50	Reconstruction	Box Culvert	Nala	-	1	2.00	2.00	-	-	-	-	-	4A	Concentric	-			
42	271.76	206+685	Box Culvert	Canal TO Nala	-	1	4.50	3.20	4.50	-	-	-	8.10	Reconstruction	Minor bridge	Nala & Animals	-	1	8.00 SQ Clear	6.00	8.00	RCC Box	-	-	12.00	4A	Concentric	-			
43	270.536	207+907	RCC Slab Culvert	-	-	1	2.70	3.00	2.70	-	-	-	8.00	Reconstruction	Minor bridge	Nala & Animals	-	1	6.00 SQ Clear	4.50	6.00	RCC Box	-	-	12.00	4A	Concentric	-			
44	-	207+956	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	-	-	1	2.00	2.00	-	-	-	-	-	4A	Concentric	Balancing Culvert			
45	270.125	208+318	Pipe culvert	-	-	2	0.90	-	1.80	-	-	-	10.10	Reconstruction	Box Culvert	Nala & Animals	-	1	4.00	2.10	-	-	-	-	-	1	Concentric	-			
46	269.874	208+569	Pipe culvert	-	-	3	0.90	-	2.70	-	-	-	12.40	Reconstruction	Box Culvert	Nala & Animals	-	1	5.00	3.00	-	-	-	-	-	1	Concentric	-			
47	269.321	209+121	RCC Slab Culvert 1x0.60 to Pipe- 1x0.90 as per Forest Dept Photos	-	-	1	0.90	-	-	-	-	-	12.40	Reconstruction	Box Culvert	Nala	-	1	2.00	2.00	-	-	-	-	-	4	Concentric	-			
48	269.064	209+379	RCC Slab Culvert	-	-	1	2.00	1.80	2.00	-	-	-	11.90	To be dismantled	-	-	-	-	-	-	-	-	-	-	-	4	Concentric	EUP substructure falling on culvert			
49	Existing Alignment	209+390	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala & Animals	-	1	4.50	3.00	-	-	-	-	-	4	Concentric	Nala training to be done on bothsides of length 14m.			
50	268.885	209+558	Pipe culvert	-	-	1	1.20	-	1.20	-	-	-	7.80	Reconstruction	Box Culvert	Nala & Animals	-	1	3.50	2.50	-	-	-	-	-	4	Concentric	-			
51	268.275	210+152	Pipe culvert	-	-	1	0.60	-	-	-	-	-	7.40	Reconstruction	Box Culvert	Nala	-	1	2.00	2.00	-	-	-	-	-	4A	Concentric	-			
52	268.05	210+392	Pipe culvert 2x0.90 as per Forest Dept. photos	-	-	2	0.90	-	-	-	-	-	10.00	Reconstruction	Minor bridge	Nala & Animals	-	2	8.00 SQ Clear	6.00	16.00	RCC Box	-	-	12.00	4A	Concentric	-			
53	267.873	210+571	Pipe culvert	-	-	1	0.90	-	0.90	-	-	-	10.10	Reconstruction	Box Culvert	Nala & Animals	-	1	4.50	2.50	-	-	-	-	-	4A	Concentric	-			
54	-	210+935	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	2.00	2.00	-	-	-	-	-	4	Concentric	-			
55	-	211+045	-	-	-	-	-	-	-	-	-	-	-	New Construction	Box Culvert	Nala	-	1	2.00	2.00	-	-	-	-	-	4	Concentric	-			
56	267.115	211+325	RCC Slab Culvert	-	-	1	4.50	3.60	4.50	-	-	-	10.70	Reconstruction	Minor bridge	Nala	-	1	6.00 SQ Clear	4.00	6.00	RCC Box	-	-	12.00	4	Concentric	-			
57	266.907	211+537	Pipe culvert	-	-	1	0.60	-	0.60	-	-	-	10.80	Reconstruction	Box Culvert	Nala	-	1	2.50	4.00	-	-	-	-	-	4A	Concentric	-			
58	266.562	211+883	Stone slab culvert	-	-	1	0.60	1.00	0.60	-	-	-	10.60	Reconstruction	Box Culvert	Nala	-	1	2.50	4.00	-	-	-	-	-	4A	Concentric	-			