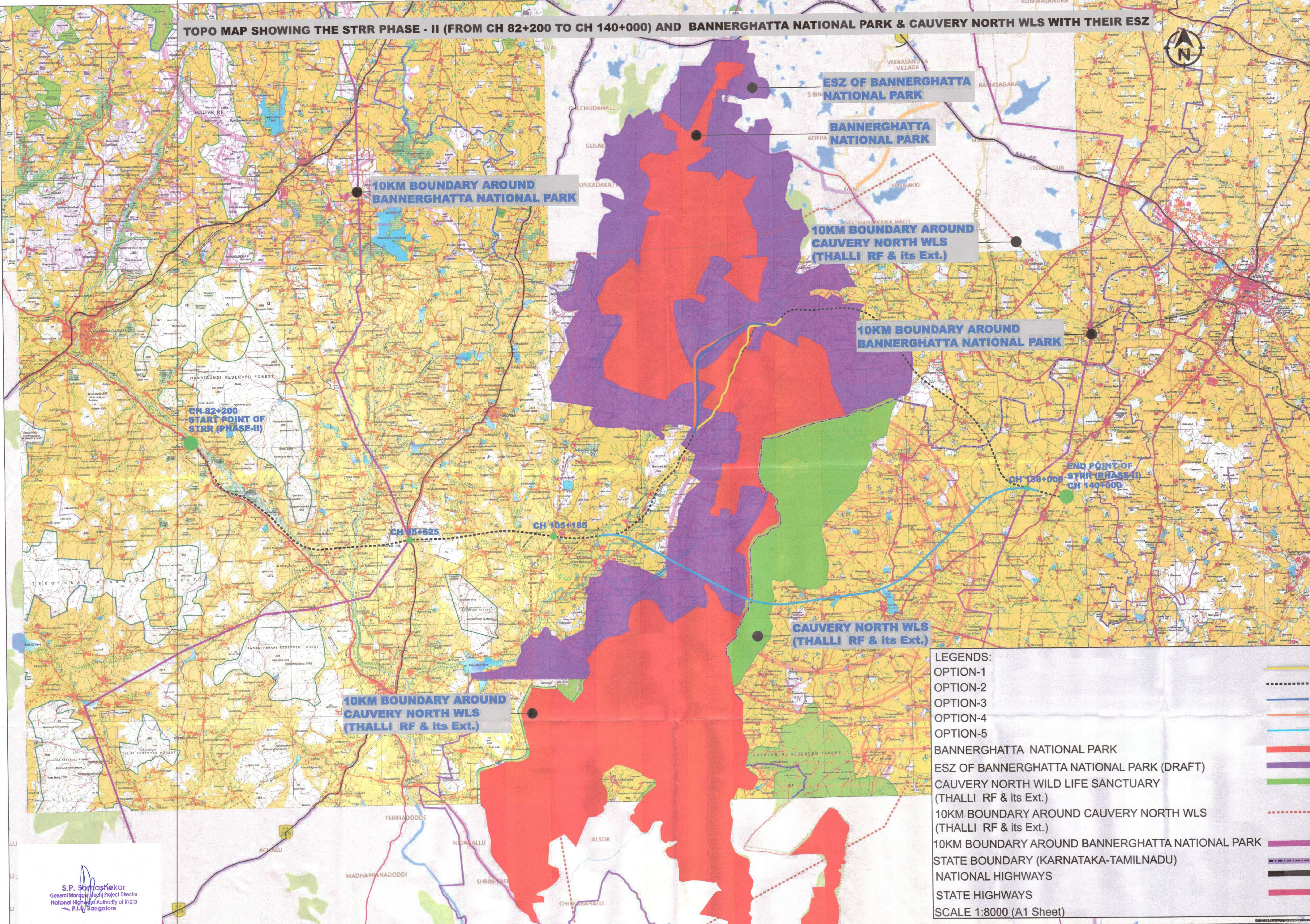


TOPO MAP SHOWING THE STRR PHASE - II (FROM CH 82+200 TO CH 140+000) AND BANNERGHATTA NATIONAL PARK & CAUVERY NORTH WLS WITH THEIR ESZ



10KM BOUNDARY AROUND BANNERGHATTA NATIONAL PARK

ESZ OF BANNERGHATTA NATIONAL PARK

BANNERGHATTA NATIONAL PARK

10KM BOUNDARY AROUND CAUVERY NORTH WLS (THALLI RF & its Ext.)

10KM BOUNDARY AROUND BANNERGHATTA NATIONAL PARK

CH 82+200 START POINT OF STRR (PHASE-II)

END POINT OF STRR (PHASE-II) CH 138+000 CH 140+000

10KM BOUNDARY AROUND CAUVERY NORTH WLS (THALLI RF & its Ext.)

CAUVERY NORTH WLS (THALLI RF & its Ext.)

LEGENDS:

- OPTION-1
- OPTION-2
- OPTION-3
- OPTION-4
- OPTION-5
- BANNERGHATTA NATIONAL PARK
- ESZ OF BANNERGHATTA NATIONAL PARK (DRAFT)
- CAUVERY NORTH WILD LIFE SANCTUARY (THALLI RF & its Ext.)
- 10KM BOUNDARY AROUND CAUVERY NORTH WLS (THALLI RF & its Ext.)
- 10KM BOUNDARY AROUND BANNERGHATTA NATIONAL PARK
- STATE BOUNDARY (KARNATAKA-TAMILNADU)
- NATIONAL HIGHWAYS
- STATE HIGHWAYS

SCALE 1:8000 (A1 Sheet)

S.P. Somashekhar
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National Highway Authority of India
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Matrix: Comparative Analysis for Proposed Alignment

S. No.	Description	Option I	Option II	Option III	Option IV	Option V
1	Length, km	33.400	33.000	33.930	34.200	25.200
2	Start point	The option starts near Marasarahalli at km (Ch. 105+500).	The option starts near Marasarahalli at km (Ch. 105+500).	The option starts near Marasarahalli at km (Ch. 105+500).	The option starts near Marasarahalli at km (Ch. 105+500).	The option starts near Marasarahalli at km (Ch. 105+500).
3	End point	The option ends near Periamadhagondapalli km (Ch. 138+500).	The option ends near Periamadhagondapalli km (Ch. 138+500).	The option ends near Periamadhagondapalli km (Ch. 138+500).	The option ends near Periamadhagondapalli km (Ch. 138+500).	The option ends near Periamadhagondapalli km (Ch. 138+500).
4	Districts	Ramanagara, Bangalore Urban & Krishnagiri	Ramanagara, Bangalore Urban & Krishnagiri	Ramanagara, Bangalore Urban & Krishnagiri	Ramanagara, Bangalore Urban & Krishnagiri	Ramanagara & Krishnagiri
		Thattekere and Shivapura	Thattekere and Shivapura	Billiganekuppe, JaipurDoddi	Billiganekuppe, JaipurDoddi	Marasarahalli, Yalachavadi, Arupalli, Binnamangalam.
5	Connecting Highways	Existing Alignment, New Alignment	Existing Alignment, New Alignment	New Alignment	New Alignment	New Alignment
		MDR	MDR	MDR	MDR	SH 35 & SH 17 B
6	Design Speed, Kmph	80	80	100	100	100
7	Lane Configuration	6 Lane	6 Lane	6 Lane	6 Lane	6 Lane
8	Right of Way, m	70	70	70	70	70
9	No of NH crossings	Nil	Nil	Nil	Nil	Nil
10	No of SH crossings	Nil	Nil	Nil	Nil	2
11	Access Control	Yes	Yes	Yes	Yes	Yes
12	Number of structures	MJB 0	MJB 0	MJB 1	MJB 1	MJB 2
		MNB 0	MNB 0	MNB 4	MNB 4	MNB 3
		VUP 0	VUP 0	VUP 1	VUP 3	VUP 2
		Viaduct 1 (6.300km)	Viaduct 1 (6.300km)	Viaduct 1 (3.300km)	Viaduct 1 (3.300km)	Viaduct 1 (6.500km)
13	Number of settlements shall be affected	Nil	Nil	30-40	25-30	30-40

S. No.	Description	Option I	Option II	Option III	Option IV	Option V
14	Land Area Required (Ha)	233.80	231.00	237.51	239.40	175.00
15	Affected Forest	Bannerghatta National Park	Bannerghatta National Park	Bannerghatta National Park	Bannerghatta National Park	Bannerghatta National Park & Thalli Reserve Forest
16	Eco-sensitive/Protected Area	Yes	Yes	Yes	Yes	Yes
17	Affected Trees	Reasonable Numbers as the alignment is along the existing road and elevated	Significant Numbers as the alignment is new	Significant Numbers as the alignment is new	Significant Numbers as the alignment is new	Significant Numbers as the alignment is new
18	Water bodies	Nil	Nil	1-2	1-2	5-6
19	Merits	<ul style="list-style-type: none"> • Following existing Road alignment • Existing road geometry Improved with enhanced traffic safety and reduction in road accident rate. • Entire BNP reserve forest is bypassed with elevated corridor • Provided with Noise and visual barrier • Human – Animal conflict completely eliminated 	<ul style="list-style-type: none"> • Better geometric properties in comparison to Option 1. • Enhanced traffic safety and reduction in road accident rate. • Entire BNP reserve forest is bypassed with elevated corridor Provided with Noise and visual barrier 	<ul style="list-style-type: none"> • Completely new alignment therefore will disturb more forest and eco sensitive areas • Passing through and crossing more streams which requires more number of cross drainage structures and bridges 	<ul style="list-style-type: none"> • Completely new alignment therefore will disturb more forest and eco sensitive areas • Entire BNP reserve forest is bypassed with elevated corridor • Provided with Noise and visual barrier • Human – Animal conflict completely eliminated 	<ul style="list-style-type: none"> • Completely new alignment leading to better road geometry. • Entire BNP reserve forest is bypassed with elevated corridor • Provided with Noise and visual barrier • Human – Animal conflict completely eliminated

S. No.	Description	Option I	Option II	Option III	Option IV	Option V
		<ul style="list-style-type: none"> Least additional Land to be acquired as the road is following existing road 				
20	Demerits	<ul style="list-style-type: none"> Slightly reduced geometry to achieve 80kmph speed to minimize Land Acquisition.. Length of elevated Viaduct is more 	<ul style="list-style-type: none"> Not following existing road geometry therefore leading to more Land Acquisition. Length of elevated Viaduct is more 	<ul style="list-style-type: none"> The alignment is passing through a lot of undulations, leading to sub-standard vertical geometry New alignment leading to more disturbance to the reserve forest area Passing through and crossing more streams More number of cross drainage structures and bridges 	<ul style="list-style-type: none"> The alignment is passing through a lot of undulations, leading to sub-standard vertical geometry New alignment leading to more disturbance to the reserve forest area Passing through and crossing more streams More number of cross drainage structures and bridges 	<ul style="list-style-type: none"> Being new alignment, requires more additional land area. Passing through BNP and Thalli Reserve forest area. Crossing many ponds Huge length of structures needs to be provided due to undulation of existing natural Terrain

From the above table it is evident that **Option I** is Recommended.