

## Attachment-1

### Note on Project Development Proposal

**Name of Project Road Section-** *“Four laning of NH-166, Ratnagiri- Kolhapur road section from Kerle at Km 74.300 (Ex. Km 77+600) To Pajjarwadi at Km 111.000 (Ex. Km 115+300) (Design Length= 36.700 Km) in the state of Maharashtra”*

#### 1. General

The Project Stretch is very important National Highway (section of NH166) connecting Pune Bangalore Asian Highway AH-47 and Panvel-Panji, NH-66 facilitating Inter State commercial and tourist traffic. It is a major Gateway for traffic coming from Northern and Western parts of the country heading towards costal Maharashtra and Goa State. The Kolhapur-Ratnagiri Districts in Maharashtra are having rich heritage with many famous religious and tourist destinations, such as MahaLaxmi temple, Jotiba temple at Kolhapur and Ganpatipule, Pawas, Ratna Durg at Ratnagiri. Two important ports are located at Ratnagiri and JayGad. Many famous hill stations such as Panhala near Kolhapur and Amboli near Sawantwadi, beaches like , Ratnagiri Tarkarli are located in this area.

The Ratnagiri District and adjoining areas are famous for Alphanso mangoes, having large scale export potential; the improvement of this project stretch will accelerate tourism as well as export potential of this area and will facilitate the socio-economic development of this region.

The existing NH road is of 2-lane carriageway configuration with Fair to Poor geometrics, geometric deficiencies are mainly in Ghat portions. For the improvement of existing alignment, realignments in major length & bypasses are required in conjusted City/Town/Village portions.

The maximum length of the Project Road passes through hilly terrain and at few places passes through plain and rolling terrain. At very few places exposed hard strata is found and maximum length passes through Murrum strata.

In most of the length One-side valley and other side hill are located. Amba Ghat between Km. 62.00 & Km. 74.00 is major hilly portion having acute curves / hair pin bends & steep ascend & descent for improvement requiring major realignments & in part length from km 70 to 74 Tunnel is necessary for development, other Ghat portions are Dabhole between km 46 to km 56 & Panhala km 119 to km 123. Entire road is in half cutting & half banking and cut material is utilized on valley side for getting formation.

#### 2. Improvement Scheme

The improvement proposal consist of improvement to existing carriageway by strengthening/widening (concentric & eccentric)/reconstruction/new construction to two/four lane with paved shoulders. The improvement proposal includes improvement to geometrically deficient curves and grades to meet the geometrical standards by realignments, New Bypasses to conjusted towns/villages. New construction of Tunnel, New construction of grade separated structures Flyovers, VUP, PUP & service roads etc. All submersible minor and major bridges are proposed for reconstruction / widening / new construction as per standards of MoRTH. It is also proposed to reconstruction / widened /

new constructed the Hume Pipe Culverts / Slab drains to meet the National Highway standards.

### 1. Scope of Work

Table 1: Physical Scope

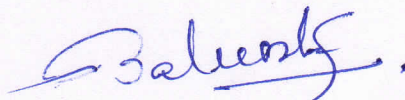
Sr. No.	Silent Features	Scope for Proposed Improvement
1)	Existing Length	37.700 km (km 77+600 to km 115+300)
2)	Design Length	36.700 km (km 74+300 to km 111+000)
3)	Total Length	36.700 km (Four Lane carriageway with 2 x 1.5m Paved shoulders with or without Service Road in open country and 2 x 2.0m Paved shoulders with Service Road and drain with Footpath in built-up sections)
4)	4 Lane Road	36.700 Km
5)	2 Lane Road	Nil
6)	Service/Slip Road	Service/Slip Road 18.500 Km (Linear Length) Car Track 10.660 km (Linear Length)
7)	Bypass	4 Nos Length = 15.140 km 1. Nile (km 82.500 to km 83.900 = 1.40 km 2.Malkapur (km 87.000 to km 93.500 = 6.50 km  3.Bambwade (km 100.560 to km 105.800 = 5.24 km  4.Paijarwadi (km 109.000 to km 111.000 = 2.00 km
8)	Realignment	11.600 Km
9)	Drainage	7.600 Km (Linear) for 1.50m wide drain RCC drain with Footpath.
10)	Intersection	37 Nos. (09 No. Major & 28 No. Minor)
11)	Strengthening	NIL
12)	Reconstruction	9.960 Km
13)	Raising	1.850 Km
14)	New Construction	15.140 Km

Sr. No.	Silent Features		Scope for Proposed Improvement	
	Crust Design		Main Carriageway 4 Lane with Paved Shoulders Km 74.300 to km 111.000  Service Road width of 7.50 m slip. Service roads	PQC 280 mm DLC 150 mm GSB 200 mm Total 630mm  BC 40 mm DBM 60 mm WMM 250mm GSB 200 mm Total 550mm
15)	Structure -			
i)	Major Bridges	New Construction - Under Construction- Widening - Retained/Repair -	09 No. NIL NIL NIL	
ii)	Minor Bridges	New Construction- Reconstruction- Retained/Repair - Widening	11Nos. 07 Nos. NIL NIL	
iii)	Slab / Box Culverts	New Construction -- Reconstruction- Retained/Repair - Widening - Dismantle-	08Nos. 18 Nos. NIL NIL 02 Nos.	
iv)	H.P. Culvert	New Construction -- Reconstruction- Retained/Repair -- Widening -- At Junction --	11 Nos. 34 Nos. Nil. NIL 40 Nos.	
v)	Flyovers	New Construction -	Nil	
vi)	VUP	New Construction -	09 No. ( 4 lane)	
vii)	PUP+LVUP	New Construction -	03 No. (4 lane)	
viii)	ROB / RUB	Retained -	NIL	
ix)	Tunnel	New Construction -	4 Nos	
		<i>Km 67/200 to km 67/500</i>	<i>0.300 km</i>	
		<i>km 67/600 to km 67/700</i>	<i>0.100 km</i>	
		<i>km 68/500 to km 68/650</i>	<i>0.150 km</i>	
		<i>km 69/500 to km 71/200</i>	<i>1.700 km</i>	
		<i>Km 67/200 to km 67/500</i>	<i>0.300 km</i>	
x)	Viaduct		NIL	
16)	Toll Plaza		NIL	
17)	Truck Lay bay		NIL	
18)	Bus Bay+ Bus Shelter		09 nos. Bus shelter	

Sr. No.	Silent Features	Scope for Proposed Improvement
		05 nos. Bus bay with Bus Shelter
19)	Utility Service Pipe	72.0 nos. (Utility pipe in C.C. Pipe – 600mm @ 500.00m c/c for rural & Utility pipe in C.C. Pipe – 300mm @ 200.00m c/c for urban length of project road across road width) alongwith 7.528 km Utility Duct of 600mm dia.
20)	Over Head Portal	5 No. (Overhead Sign gantry) 14 No. (cantilever Sign gantry)
21)	Metal Beam Crash Barrier	27.040 Km
22)	Steel Railing	7.288 Km (Linear)
23)	Road Furniture	36.700 Km.
24)	Traffic signage for road safety	36.700 Km.
25)	Breast Wall	Stone Masonary 5.200 km Both Side
26)	Protection Wall	3.920 km Both Side
27)	Retaining Wall	RCC 3m Height 3.510 km
28)	Shifting of Electric/Telephone Poles, Water Pipeline	As per requirement
29)	Horticulture	Work related to the greening of National Highway (1 % of Civil cost)
30)	Street Lighting	Street Lighting at Four lane & Flyover section and High mast light at Major Junction Locations
31)	Gas Pipe Line Protection	as per Requirement
32)	Rest Area	1 No near Nanij

Date

Place



Project Director  
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