

Kolapadon

ESTIMATE

Name of Work : Construction of road From Kota to Pator

RJ-22-01/5054/RR/Plan/2017-18

Rates:- Rates are based on Road BSR 2013 & 01.04.2016 of PWD Circle Karauli

GENERAL ABTRACT

Particulars				Amount
PART-'A' ROAD WORK				
PART-'B' HP Culvert				9284524.00
PART-'C' Protection Wall				649183.00
				1321307.00
			TOTAL	11255474.00
Add 1.00% for Q.C Charges	1.50%	for contingencies		172832.10
Add 5.14% for Contingency Charges	3.64%	Expected T.P. (1)		468839.00
			TOTAL	578551.00
Add for Proreta charges 13% =				11946560.00
G.TOTAL				1553053.00
			Say Rs.	13499613.00
				135.00 Lakhs

Junior Engineer

PWD Sub Dn. Kailadevi

and vide Admn depth letter
M/PWD/2017 dated 23.5.2017 &
No F-7(225)/Sec-2/2017/D-34
dtd 17.5.17 to Rs 135 Lakhs Job No 51/
M/P/2017-18.

Checked

Assistant Engineer
PWD Sub Dn. Kailadevi

24

04.07.17

Technically Sanctioned - Rs 135.00 Lakhs

For Rs. One Hundred Thirty Five Lakhs only.

Signature

(A To E.E.)

Executive Engineer

ESTIMATE

Name of Work : Construction of road From Kota to Pator
RJ-22-01/5054/RR/Plan/2017-18

Rates:- Rates are based on Road BSR 2013 & 01.04.2016 of PWD Circle Karauli

GENERAL ABTRACT

Particulars			Amount
PART-'A' ROAD WORK			9284524.00
PART-'B' HP Culvert			649183.00
PART-'C' Protection Wall			1321767.00
		TOTAL	11255474.00
Add 1.00% for Q.C Charges	1.50%	for contingencies	281387.00
Add 5.14% for Contingency Charges		Expected T.P. (+)	11255474.00
			469653.00
		TOTAL	11946560.00
Add for Proreta charges 13% =			1553053.00
G.TOTAL			13499613.00
	Say Rs.		135.00 Lakh

Varsh...

Junior Engineer
PWD Sub Dn. Kailadevi

Y...

Assistant Engineer
PWD Sub Dn. Kailadevi

Divide Admn dept. letter
M/PWD/2017. Dated 23.5.2017 &
No. F-7(225)/Sec-2/2017/D-34
29.5.17 to Rs. 135.00 lac Job. No 51/
RR/ Cn 1P/ 2017-18

Checked.
(H)

24

04.07.17

-Rs 135.00 Lacs.

One Hundred Thirty Five Lacs only

(Signature)

(Signature)

due to forest TS not issued.

ESTIMATE

Name of Work : Construction of road From Kota to Pator
PART-'A' ROAD WORK

Particulars	Qty.	Unit	Rate	Amount
Clearing and grubbing road land including rooting rank vegetation, grass, bush, shrubs, saplings and trees of girth upto 300mm, removal of stumps, disposal of unserviceable material and hauling of serviceable material upto 1000 m from road boundry as per MoRTH Specification : 201 Mechanical Means. Area of light jungle $2 \times 3000 \times 2.50 \times 1 / 10000 =$	1.50	P.Hect.	12650.00 ✓	18975.00
Construction of Embankment with Material obtained from Borrow Pits Construction of embankment with approved material obtained from borrow pits with a lift upto 10 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead of 1000 m as per Technical Specification Clause 300.5, with lead upto - 50mtr $1 \times 3000 \times (7.50 + 10.50) / 2 \times 0.90 =$ 24300.00 $2 \times 3000 \times 1.80 \times 0.15 =$ 1620.00 Total = 25920.00		P.Cum.	47.00 ✓	1218240.00
Spreading and laying granular sub-base material in P.I. not more than 6, including compacted mass and consolidation by 8-10 tonne power roller at OMC to achieve desired density to required camber and grade including cost of water and hire charges of machinery, including T&P and haulage of material from quarry (compacted mass to be measured). As per MoRTH specification : Table 400- 10-2 with CBR value not less than 25. To achieve 100% Proctor density $1 \times 3000 \times 4.05 \times 0.15 =$ 1822.50 For BT Berms - $2 \times 2400 \times 1.80 \times 0.15 =$ 1296.00 For CC Berms - $2 \times 600 \times 1.875 \times 0.20 =$ 450.00 Total = 3568.50		P.Cum.	431.00 ✓	1538024.00

Providing, laying, spreading and compacting stone aggregate of specific size as per table 400-6 & 400-7 to Water Bound Macadam specification including spreading in uniform thickness, hand packing, rolling with power roller 8-10 tonnes, in stages to proper grade and camber, applying and brooming requisite type of Stone screening to fill-up the interstices of coarse aggregates, watering (with water browser) and rolling, making necessary earthen bund to protect edges, lighting, guarding, barricading and maintenance of diversion etc. [MoRTH specification : Clause 404] (by manual means) with all leads (compacted thickness as specified to be measured)
Grading no.2 (63-45mm) crusher broken

$$1 \times 3000 \times 4.05 \times 0.075 =$$

911.25

P.Cum.

✓
1325.00

1207406.00

Providing, laying, spreading and compacting stone aggregate of specific size as per table 400-6 & 400-7 to Water Bound Macadam specification including spreading in uniform thickness, hand packing, rolling with power roller 8-10 tonnes, in stages to proper grade and camber, applying and brooming requisite type of Stone screening to fill-up the interstices of coarse aggregates, watering (with water browser) and rolling, making necessary earthen bund to protect edges, lighting, guarding, barricading and maintenance of diversion etc. [MoRTH specification : Clause 404] (by manual means) with all leads (compacted thickness as specified to be measured)
Grading no.3 (53-22.4 mm) crusher broken

$$1 \times 2400 \times 3.75 \times 0.075 =$$

675.00

P.Cum.

✓
1450.00

978750.00

Providing and applying primer coat over prepared surface or granular base with bitumen emulsion as per IS: 8887 & manufacturer's specifications @ 1.5 kg /10 sqm with a self propelled or towed bitumen pressure sprayer equipped for spraying the material uniformly at specified rates and temperatures including cleaning of road surface as per MoRTH specification Clause- 502,112. Add to above item per 10 Kg Extra in Emulsion per 10 Sqm

$$1 \times 2400 \times 3.75 =$$

9000.00

P.Sqm.

✓
22.00

198000.00

Particulars	Qty.	Unit	Rate	Amount
<p>Providing and applying tack coat with bitumen VG 40 on the prepared surface including cleaning as per IS : 8887 & manufacturer's specifications @ 3 kg/10sqm with a self propelled or towed bitumen pressure sprayer equipped for spraying the material uniformly at specified rates and temperatures as per MoRTH specification CI.503,112</p> <p style="text-align: right;">1x2400x3.75 =</p>	9000.00	P.Sqm.	7.00	63000.00
<p>Providing and laying open graded premix carpet 20 mm thick (compacted) on prepared surface in a single course as wearing course, aggregates as per Table 500-23, heating bituminous binder @ 14.6 kg/10 Sqm. and aggregates in Hot Mix Plant including cost of antistripping compound, wherever required), transporting the mixed material with tipper and laying with paver finisher to the required level and grade, rolling with power roller 8 - 10 tonne but excluding cost of tack and seal coat with lead for mix of material 1 km. (MoRTH Specification : Clause 511,112) with all lead.</p> <p>Hot Mix Plant 40-60 TPH, including loading of aggregates with F.E loader.</p> <p>with bitumen grade 80/100</p> <p style="text-align: right;">1x2400x3.75 =</p>	9000.00	P.Sqm.	92.00	828000.00
<p>Providing and applying premixed seal coat type B comprising of thin application of fine aggregate (0.06 Cum. per 10 Sqm) premix with 6.8 kg per 10 sqm bitumen binder (including cost of antistripping compound, wherever required) in semi hot mix plant 6-10 TPH and laying and rolling with power roller 8-10 tonne including all lead of mix material [MORTH Specification : Clause 513] with all lead.</p> <p>with bitumen grade 80/100</p> <p style="text-align: right;">1x2400x3.75 =</p>	9000.00	P.Sqm.	33.20	298800.00

Particulars	Qty.	Unit	Rate	Amount
Construction of un-reinforced, dowel jointed, plain cement concrete pavement M-30, over a prepared sub-base with 43 grade cement @ 400 Kg per cum, coarse and fine aggregate conforming to IS: 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per MoRTH specification clause 602.				
For Causeway - 1x100x7.50x0.20 =	150.00			
For CC - 1x500x3.75x0.20 =	375.00			
Total =	525.00	P.Cum	✓ 5451.00	2861775.00
Providing, laying & fixing in position RCC spun or hume pipes ISI marked with proper jointing in required slope packed in the gasket of hume or spun yarn and neatly finished with rich grout of cement mortar 1:3 or having flexible rubber ring joint made with perfectly air and water tight including testing of joints as per MoRTH Specification : Clause : 1000 & 2900.				
NP-3 300 mm dia				
7x3x2.50 =	52.50	Mtr.	✓ 920.00	48300.00
2. F Mukhya Mantri Sadak Yojana logo for roads funded by State road fund having M.S. Definition plate of 1.6mm thickness frame to steel hollow section of 75mm x 75mm, 2.5m long stove painted with hold fast including paint logo as per approved design and colours. The logo shall be made out of 1.6mm thick circular plate fix on 200mm x 150mm rectangular steel base plate 1.6mm thick, the base of circular shall be plain at the junction of base plate. The size of definition plate shall be 1500x600mm and embedding the posts by M-15 mix C.C. block 300x300x600 mm including lettering / writing and painting etc. complete in all respect.				
1 No.	1	Each	✓ 10876.00	10876.00

Particulars	Qty.	Unit	Rate	Amount	
Supply of direction and place identification sign boards made out of 2mm thick sheet framed to angle iron 40 x 40 x 5 mm and two vertical posts of angle size 65 x 65 x 6 mm, 3 m long with hold fasts, stove enamelled paint and reflective letters,numerals,symbols etc. complete of size : 750 x 750 mm	2 No.	2	Each	✓ 3139.00	6278.00
Kilometre Stone					
Reinforced cement concrete M15 grade kilometer stone/local stone of standard design as per IRC:8 lying in position including painting and printing, as per drawing and Technical Specification Clause 1703.					
Ordinary Kilometer Stone (Precast)	3 Nos.	3	Each	✓ 1260.00	3780.00
200 m stone (precast)	12 Nos.	12	Each.	✓ 360.00	4320.00
TOTAL					9284524.00

V. Anshu

Junior Engineer
PWD Sub Dn. Kailadevi

[Signature]

Assistant Engineer
PWD Sub/Dn. Kailadevi

ESTIMATE

Name of Work : Construction of road From Kota to Pator

PART 'B' (HP Culvert 1x1000)

Particulars	Qty.	Unit	Rate	Amount
Earthwork in excavation in foundation trenches etc. not exceeding 2 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil 3m. Clear from the edge of excavation and subsequent filling around hume pipes/masonry in 15cm layers with compaction including disposal of all surplus soil as directed within a lead of 1000 metres. [MoRTH Specification : Clause 301.304]. Ordinary Soil				
3x2x7x1.50x1.20 =	75.60			
Pipe Bed - 3x5.50x2.00x1.00 =	33.00			
Total =	108.60	P.Cum	✓ 126.00	13684.00
Providing and laying mechanically mixed and vibrated Cement Concrete in foundation upto a depth of 1.5 metres below ground level and 1.50 metres above Ground/Bed level as per MoRTH Specification : Clause 1000 & 1700.				
C.C. 1:4:8 mix with crushed stone aggregate 20 mm nominal size.				
3x2x7x1.50x0.15 =	9.45			
Pipe Bed - 3x5.50x1.85x0.15 =	4.58			
Hunching - 3x(5.50+6.30)/2x1.85x1.23 =	40.28			
Deduction of pipe - 3x3.14/4x1.25x1.25x(6.30+5.50)/2 =	-21.71			
Total =	32.59	P.Cum.	✓ 3163.00	103098.00
Providing and laying stone masonry work in cement mortar 1:3 with mechanical mixer for foundation (any wall) complete including all scaffolding etc. but excluding pointing and plastering as per drawing and technical specification as per MoRTH Specification : Clause 1000, 1400				
Random rubble masonry				
3x2x7x(1.40+0.40)/2x3.0 =	113.40			
Deduction-3x2x3.14x(1.23x1.23)/4x(0.60+1.03)/2 =	-5.81			
Total =	107.59	P.Cum.	✓ 3450.00	371194.00

Particulars	Qty.	Unit	Rate	Amount
Providing, laying & fixing in position RCC spun or hume pipes ISI marked with proper jointing in required slope packed in the gasket of hume or spun yarn and neatly finished with rich grout of cement mortar 1:3 or having flexible rubber ring joint made with perfectly air and water tight including testing of joints as per MoRTH Specification : Clause : 1000 & 2900.NP - 3 1000 mm dia 3x3x2.50 =	22.50	Mtr.	✓ 6764.00	152190.00
Providing PCC M-20 architectural coping on the top of wing wall, return wall etc. complete as per drawing and technical specification Clauses 615, 710 and 1204.3.11 50 mm thick 3x2x7x0.40 =	16.80	P.Sqm	✓ 163.00	2738.00
Raised and cut pointing on stone work in CM 1:2 (1 cement : 2 sand) 3x2x7x1.30 =	54.60	P.Sqm.	✓ 115.00	6279.00
	TOTAL			649183.00

[Signature]
Junior Engineer
PWD Sub Dn. Kailadevi

[Signature]
Assistant Engineer
PWD Sub Dn. Kailadevi

ESTIMATE

Name of Work : Construction of road From Kota to Pator

PART C (Protection wall)

Particulars	Qty.	Unit	Rate	Amount
Earthwork in excavation in foundation trenches etc. not exceeding 2 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil 3m. Clear from the edge of excavation and subsequent filling around hump pipes/masonry in 15cm layers with compaction including disposal of all surplus soil as directed within a lead of 1000 metres.[MoRTH Specification : Clause 301,304]. Ordinary Soil $2 \times 86 \times 1.40 \times 0.90 =$	216.72	P.Cum	✓ 126.00	27307.00
Providing and laying mechanically mixed and vibrated Cement Concrete in foundation upto a depth of 1.5 metres below ground level and 1.50 metres above Ground/Bed level as per MoRTH Specification : Clause 1000 & 1700. P.C.C. 1:4:8 mix with crushed stone aggregate 20 mm nominal size. $2 \times 86 \times 1.40 \times 0.15 =$	36.12	P.Cum	✓ 3163.00	114248.00
Providing and laying stone masonry work in cement mortar 1:3 with mechanical mixer for foundation (any level) complete including all scaffolding etc. but excluding pointing and plastering as per drawing and technical specification as per MoRTH Specification : Section 1000,1400 Random rubble masonry $2 \times 86 \times (0.40 + 1.20) / 2 \times 2.40 =$	330.24	P.Cum.	✓ 3450.00	1139328.00
Providing PCC M-20 architectural coping on the top of wing wall, return wall etc. complete as per drawing and technical specification Clauses 615, 710 and 1204.3.11 50 mm thick $2 \times 86 \times 0.40 =$	68.80	P.Sqm	✓ 163.00	11214.00
Raised and cut pointing on stone work in CM 1:2 (cement : 2 sand) $2 \times 86 \times 1.50 =$	258.00	P.Sqm.	✓ 115.00	29670.00
	TOTAL			1321767.00

✓
Junior Engineer
PWD Sub Dn. Kailadevi

✓
Assistant Engineer
PWD Sub Dn. Kailadevi