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Made and Issued to Sri Babam
Ram A.E. R.W.D. W.W. Sub Div. Kutumba.

5.12.19

Executive Engineer
Rural Works Division, at
Works Division, Aurangabad

5/12/19

Schedule KLV - Form No. 114.

E.E. Aurangabad. Division.

A.E. Kutumba. Sub-Division.

MEASUREMENT BOOK.

511215

2494

Sri Babam Ram A.E. Kutumba.

Date of entry

Date of entry

3rd on A/c Bill

Sch. XLV-Form No. 134 9

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Name of work - Construction of Road from Sarda Dumar Road to Thakhar					
Agency - Aurangzeb Real Estate, Pvt. Ltd.					
Aggr. No - 54/SBD/2019-20					
Date of Commence - 30.12.19					
Date of Completion - 29.12.20					
Measurement					

1. Construction of					
WBM 78-III					
$20 \times 30 \times 3.75 \times 0.075 = 168.75$					
$6 \times 30 \times 3.75 \times 0.075 = 50.62$					
$1 \times 20 \times 3.75 \times 0.075 = 5.62$					
$3 \times 30 \times 3.75 \times 0.100 = 33.75$					
$1 \times 20 \times 3.75 \times 0.100 = 7.50$					
					266.24 m ³

2. Constn. of earthen					
Subgrade Complete.					
$2 \times 46 \times 30 \times 1.38 \times 0.075 = 244.26$					
$2 \times 1 \times 20 \times 1.18 \times 0.075 = 3.54$					
$2 \times 46 \times 30 \times 1.38 \times 0.200 = 761.76$					
$2 \times 1 \times 20 \times 1.38 \times 0.200 = 11.04$					
$2 \times 3 \times 30 \times 0.375 \times 0.160 = 10.80$					
$2 \times 1 \times 20 \times 0.375 \times 0.160 = 2.40$					
$2 \times 3 \times 30 \times 0.375 \times 0.075 = 5.06$					
$2 \times 1 \times 20 \times 0.375 \times 0.075 = 1.12$					
$2 \times 3 \times 30 \times 0.375 \times 0.100 = 6.75$					
$2 \times 1 \times 20 \times 0.375 \times 0.100 = 15.00$					
Continuation					1061.43 m ³

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
3. Providing Formwork					
10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
3 x 30 x 3.75					= 337.50
1 x 10 x 3.75					= 37.50
					<u>4875.00 m²</u>

4. Providing Deck load.

10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
3 x 30 x 3.75					= 337.50
1 x 10 x 3.75					= 37.50
					<u>4275.00 m²</u>

5. Providing M.S.

10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
10 x 30 x 3.75					= 1125.00
3 x 30 x 3.75					= 337.50
1 x 10 x 3.75					= 37.50
					<u>4875.00 m²</u>

6. Box cutting

2 x 46 x 30 x 0.525 x 0.100					= 144.90
2 x 1 x 20 x 0.525 x 0.100					= 2.10
2 x 3 x 30 x 0.375 x 0.100					= 6.75
2 x 1 x 20 x 0.375 x 0.100					= 1.50

Continuation -

155.25 m³

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Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
7. Providing & fixing marking bench mark reference pillars					
Bench Mark Pillar	Qty	2 Nos			
Reference Pillar	Qty	6 Nos.			
8. Kilometre stone					
Ordinary Km stone		2 Nos			
200 m stone		6 Nos.			
9. Boundary pillar / or. Post					
	Qty	32 Nos.			
10. Traffic Signs					
600 mm equilateral triangle					12 Nos.
800 mm x 600 mm rectangular					4 Nos.
600 mm x 450 mm rectangular					4 Nos.
11. Road Marking (BT)					
$2 \times 40 \times 30 \times 0.100$					240.00
$2 \times 3 \times 30 \times 0.100$					18.00
$2 \times 1 \times 10 \times 0.100$					2.00
					260.00 m ²
12. Road Marking (R.C.)					
$2 \times 30 \times 0.100$					6.00
$2 \times 30 \times 0.100$					6.00
$2 \times 30 \times 0.100$					6.00
$2 \times 20 \times 0.100$					4.00
					22.00 m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
12. Plantation of tree					
					Qty - 125 Nos.
1000mm ϕ NP 3 HP					

13. E/w in excavation					
HW - $2 \times 2 \times 6.45 \times 1.40 \times 0.15 = 54.18$					
BHP - $2 \times 1 \times 4.93 \times 1.53 \times 0.25 = 5.42$					
					59.60 m ³

14. PCC M15 (1:2:5:5)					
HW - $2 \times 2 \times 6.45 \times 1.40 \times 0.15 = 5.42$					
BHP - $2 \times 1 \times 4.93 \times 1.53 \times 0.25 = 3.76$					
					9.18 m ³

15. Plain / Reinforced concrete					
HW - $2 \times 2 \times 6.15 \times 0.82 \times 3.18 = 64.52$					
Parapet - $2 \times 2 \times 6.15 \times 0.40 \times 0.60 = 5.90$					
deducted for HP					

$$2 \times 2 \times 0.78 \times 1.23 \times 0.62 = 2.92$$

$$67.50 \text{ m}^3$$

16. S / F / F 1000mm ϕ NP 2 HP					
$2 \times 3 \times 2.50 = 15.00 \text{ Mtr.}$					

17. Painting on parapet.					
Top - $2 \times 2 \times 6.15 \times 0.40 = 9.84$					
Side - $2 \times 4 \times 6.15 \times 0.60 = 29.52$					
Front - $2 \times 4 \times 0.400 \times 0.60 = 1.92$					
					41.28 m ²

18. Providing sight row in gutter (conduit)					
					Qty - 60 Nos.

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
2.00 M x 2.00 M Single					
Cell Box Culvert					
19. Erod in excavation					
Box Culvert - $2 \times 1 \times 6.00 \times 3.50 \times 0.65 = 27.30$					
Cut off Wall - $2 \times 2 \times 3.50 \times 1.30 \times 1.80 = 32.76$					
Return Wall - $2 \times 4 \times 3.32 \times 3.42 \times 1.80 = 163.36$					
					223.42 m ³

20. PCC M15 grade

Box Culvert - $2 \times 1 \times 6.00 \times 2.50 \times 0.100 = 3.00$ Return Wall - $2 \times 4 \times 3.32 \times 2.42 \times 0.200 = 12.84$ 15.84 m³

21. PCC M20 grade

R/Wall - $2 \times 4 \times 2.92 \times 2.017 \times 0.20 = 9.42$ $2 \times 4 \times 2.92 \times 1.917 \times 0.20 = 8.96$ $2 \times 4 \times 2.92 \times 1.817 \times 0.20 = 8.48$ $2 \times 4 \times 2.92 \times 1.717 \times 0.20 = 8.02$ $2 \times 4 \times 2.92 \times 1.617 \times 0.20 = 7.56$ $2 \times 4 \times 2.92 \times 1.517 \times 0.20 = 7.08$ $2 \times 4 \times 2.92 \times 1.417 \times 0.20 = 6.62$ $2 \times 4 \times 2.92 \times 1.317 \times 0.20 = 6.16$ Cut-off - $2 \times 2 \times 2.50 \times 0.300 \times 1.50 = 4.50$ 66.80 m³

22. Providing HYSD bars,

12 mm ϕ bars $18 \text{ Nos} \times 10 \times 10 = 1800 \text{ m}$ $18 \text{ Nos} \times 10 \times 10 = 1800 \text{ m}$

3600 m

② 0.889 kg/m

3.20 MT

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
23. RCC M20 in slab & etc.					
$2 \times 4 \times 9.92 \times 0.79 \times 1.78 = 32.48$					³ m
24. Provisioning weep whole					
Qty - 36 Nos					
25. RCC M25 grade					
Bottom Slab - $2 \times 1 \times 6.00 \times 2.50 \times 0.25 = 7.50$					
Side Wall - $2 \times 2 \times 6.00 \times 2.00 \times 0.25 = 12.00$					
Haunch - $2 \times 4 \times 6.00 \times 0.01 = 0.48$					
					20.04 m ³
26. Provisioning HYSD bar					
12 mm ϕ - $2 \times 113 \times 10 \times 0.889 = 2.00$ MT					
27. Barbed wire					
$2 \times 2 \times 2.92 \times 2.00 \times 0.20 = 12.14$					
$2 \times 2 \times 2.92 \times 4.61 \times 1.78 = 96.04$					
Less Filter Media - (-) 39.04					
					69.14 m ³
28. Filter Media					
$2 \times 2 \times 4.61 \times 0.60 \times 1.70 = 18.40$					
$2 \times 4 \times 2.32 \times 0.60 \times 1.87 = 20.84$					
					39.24 m ³
29. RCC M30 grade S/S					
$2 \times 1 \times 2.50 \times 6.00 \times 0.25 = 7.50$					
$2 \times 2 \times 2.50 \times 2.50 \times 0.25 = 1.26$					
					8.66 m ³
30. Provisioning HYSD bar					
$2 \times 43 \times 9.95 \times 0.889 = 0.76$ MT					
31. Parapet Construction					
$2 \times 2 \times 8.34 \times 0.60 \times 0.40 = 8.00$ m					³
32. Painting of Parapet					
$2 \times 2 \times 8.34 \times 0.40 = 13.34$					
$2 \times 4 \times 8.34 \times 0.60 = 40.04$					
$2 \times 4 \times 0.40 \times 0.60 = 1.92$					
					55.30 m ²

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Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
27	1300	2.864	2.954	50	147.700
28	1350	2.806	2.835	50	141.750
29	1400	2.703	2.755	50	137.725
30	1450	2.904	2.806	50	140.300
31	1500	0.114	1.512	50	75.575
32	1510	0.271	0.193	10.0	1.925
Total Qty =					4021.35 m ³

34. Construction of embankment with material obtained from roadways cutting.

As per TMB

P-12, I-13 — 59.60

As per TMB

P-13, I-19 — 223.42

283.02

Total Qty = 283.02 m³

Limited as per aggr. — 93.15 m³

35. Construction of embankment complete

E/W Calculation Chart

SL	CH	Area	W/A	Dist	Volume
1	0	1.898	—	—	—
2	50	2.494	2.005	50	100.250
		2.112			

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
3	100	2.494	2.303	50	115.150 = 0
4	150	2.586	2.540	50	127.000
5	200	3.355	2.971	50	148.525
6	250	3.163	3.259	50	182.950
7	300	6.638	4.901	50	245.025
8	350	2.982	4.810	50	240.500
9	400	6.211	4.597	50	229.825
10	450	5.916	6.064	50	363.175
11	500	7.379	6.648	50	332.375
12	550	7.463	7.421	50	371.050
13	600	2.745	5.104	50	255.200
14	650	3.596	3.171	50	158.525
15	700	3.101	3.819	50	167.425
16	750	3.017	3.059	50	152.250
17	800	2.966	2.962	50	148.075
18	850	2.786	2.846	50	142.300
19	900	1.920	2.353	50	117.650
20	950	3.497	2.709	50	135.425
21	1000	3.012	3.255	50	162.725
22	1030	7.837	5.425	50	271.225
23	1100	7.199	7.518	50	375.900
24	1150	6.808	7.004	50	350.175
25	1200	6.417	6.613	50	330.625
26	1250	7.324	6.871	50	343.525
27	1300	7.575	7.450	50	372.475
28	1350	6.217	6.896	50	344.800
29	1400	5.931	6.074	50	303.700
30	1450	7.308	6.620	50	330.975
31	1500	8.677	7.993	50	399.625
32	1550	3.248	6.313	10	63.125

Continuation

$$Qty = 7302.250 m^3$$

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
				BF Qty =	7302.250
<u>Deduction for crust</u>					
1. WSB gr-I					2804.65
2. WBM gr-II					433.19
3. C.C. Pavement					67.32
4. BT Pavement					77.50
					5899.59 m ³

(i) For 100 m lead

Qty - 5231.45 m³

(ii) For 1000 m lead

5899.59 - 5231.45 = 668.14

Limited Qty - 518.14 m³

23.12.20

A E

3rd on the Bill

Name of work - Construction
of Road from Sander
Dumari Road to
Jhakhar

Agency - Aug. Real Est. Pvt. Ltd.

Agg. No - 54/SBD/2019-20

Date of Commencement - 30.12.19

Date of Completion - 29.12.20

ABSTRACT OF COST

1. clearing and grubbing

Reced land comp. job

TMB: P-3 2-1

1.06 Hect. @ 49739.47/m² Rs 52724 = 00

2. constn of Embankment with material

TMB P-3, 1-2

For 100 m lead

402.44/m³ @ 187.23/m³ Rs 75293 = 00

For 1000 m lead

3619.21/m³ @ 132.56/m³ Rs 479762 = 00

(3) const'n of G.S.B.
TMBP-

19

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
2. providing cut BOX					
cut & comp. job					
TMBP-10, I-6					
155.25 m^3 @ 82.91 m^3					12732 = 0
223.42 m^3 @ 285.71 m^3					63833 = 0
E/W in excavation					
3. construction of Embankment					
TMBP-12, I-3				59.60	
TMBP-13, I-19				223.42	
				283.02 m^3	
Limit of 283.02 m^3					
Limit of 93.15 m^3					
@ 283.02 m^3 @ 27.98 m^3 Rs.					2606 = 0
@ 256.71 Rs.					
4. construction of G.S.B					
gr-2					
TMBP-4, I-4					
804 TMBP					
TMBP-41-4, 790.92 m^3					
TMBP-5, I-4 68.04 m^3					
858.76 m^3					
Limit - 804.65 m^3					
@ 2627.74 m^3 Rs.					2114410 = 0
5. construction of WBM.					
gr-III comp. job					
TMBP-7 I-4 - 168.75 m^3					
TMBP-9, I-1 - 266.24 m^3					
434.99 m^3					
Limit of 433.19 m^3					
@ 3937.03 m^3 Rs.					1705482 = 0
6. construction of sub-grade in earthen shoulder.					
TMBP-P-9, Continuation					
1061.43 m^2 - Limit - 1053.04 m^2					
@ 189.60 m^3 Rs.					199652 = 0

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
39. providing single row irrigation (canal)					
TMBP - 12, I-18					
60/Rm @ 985.41/Rm Rs					59365 = 00
40. C/w in excavation					
TMBP - 12, I-12,					
59.60/m ³ @ 285.71/m ³ Rs					
41. const ⁿ of Embankment					
TMBP - 16 to 18, I-35					

3rd on A.C. Bill

Name of work - Construction of Road from Sarda Duran Road to Thakhar

Abstract of cost

1. clearing & grubbing
rock land comp job

TMBP - 3, I-1

1.06/sect @ 49739.47/sect Rs 52724 = 00

2. constⁿ of embankment

with materials comp job

TMBP - 18 I-2.10, 35

(1) For 1000 m length

97011 = 00

518.14
402.44/m³ @ 187.23/m³ Rs 75293 = 00

3(1) For 100 m length

693481 = 00

5231.45
3619.21/m³ @ 132.56/m³ Rs 479762 = 003. constⁿ of G.S.B comp job

TMBP - 4, I-3

2629.74/m³
804.65/m³ @ 2722.90 Rs 219441 = 00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
4. providing & laying					
W.B.M gr-II comp job					
TMBP- 5/106 I-4					
168.75/m ³ @ 3937.03/m ³ Rs					6643742 = 00
5. cement conc. pavement					
m-30 comp. job					
TMBP- 6, I-5					
67.32/m ³ @ 6844.13/m ³ Rs					460747 = 00
6. providing and fixing					
mmlsly 109cm comp. job					
TMBP- 6, I-6					
2/NOS @ 10077.23/NOS Rs					20155 = 00
7. construction of					
W.B.M gr-III					
TMBP- 9, I-7					
TMBP- 9, I-14					168.75/m ³
TMBP- 9, I-14					266.24/m ³
TMBP- 9, I-14					434.99/m ³
limit. 433.19/m ³ @ 3937.03/m ³ Rs					1705482 = 00
8. construction of sub-grade					
earthen sub-grade comp job					
TMBP- 9, I-2					
1061.43/m ³ limit - 1053.04/m ³					
@ 189.6/m ³ Rs					199656 = 00
9. providing primer					
coat comp. job					
TMBP- 10, I-3					
4875.0/m ² @ 54.90/m ² Rs					267638 = 00
10. providing tack coat					
TMBP- 10, I-4					
4875.0/m ² @ 18.42/m ² Rs					89798 = 00

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
10. providing m.s.s					
comp. job					
TMBP-10, I-5					
4875.0/m ² @ 233.85/m ² Rs					11400192.00
11. providing box					
cutting comp. job					
TMBP-10, I-6					
155.25/m ³ @ 82.01/m ³ Rs					12732.00
12. providing and setting					
bench mark working					
bench mark					
reference pillar					
TMBP-11, I-7					
(i) Bench mark pillar					
2/nos @ 4341.14/nos Rs					8682.28
(ii) reference pillar					
6/nos @ 1980.05/nos Rs					11880.30
13. providing kilometer					
stone comp. job					
TMBP-11, I-8					
(i) ordinary km. stone					
2/nos @ 2307.13/nos Rs					4614.26
(ii) 200mm stone					
6/nos @ 658.88/nos Rs					3953.28
14. Boundary pillar					
comp. job					
TMBP-11, I-9					
32/nos @ 534.17/nos Rs					17093.44

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
15. providing traffic					
sign comp-506					
TMB P-11, I-10					
(i) 600mm c/w/lat 841A					
12/NOS @ 4066.31/NOS RS					48803 = 00
(ii) 800mm x 600mm Rectangular					
4/NOS @ 7733.42/NOS RS					3130934 = 00
(iii) 600mm x 450mm Rectangular					
4/NOS @ 5356.98/NOS RS					21428 = 00
16. providing road marking (BT)					
TMB P-11, I-11					
260/m ² @ 850.93/m ² RS					221242 = 00
17. providing road marking (C.C)					
TMB P-11, I-12					
22/m ² @ 953.99/m ² RS					20988 = 00
18. Planting of trees.					
TMB P-12, I-13					
125/NOS @ 749.73/NOS RS					93716 = 00
19. 1000mm ϕ MP3 pipe					
E/w 10 excavation compo					
TMB P-12, I-14					
59.60/m ³ @ 285.71/m ³ RS					17028 = 00
20. PCC m-15 (1:2:5)					
TMB P-12, I-15					
9.18/m ³ @ 5649.93/m ³ RS					51866 = 00
21. Plain/Reinforced concrete					
TMB P-12, I-16					
67.50/m ³ @ 6616.06/m ³ RS					446584 = 00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
22. S/F/F 1000 mm ϕ					
TMBP-12, I-17					
15/m @ 4215.01/m Rs.					63225 = 00
23. painting of parapet					
TMBP-12, I-18					
41.28/m ² @ 108.98/m ² Rs					4499 = 00
24. providing single row 300mm ϕ (irrigation conduit)					
TMBP-12, I-19					
60/Rm @ 988.41/Rm Rs					59305 = 00
2.0m x 2.0m cell BOX culvert					
25. E/W in excavation comp. job					
TMBP-13, I-20					
223.42/m ³ @ 286.71/m ³ Rs					63833 = 00
26. providing pcc m-15 grade comp. job					
TMBP-13, I-21					
15.84/m ³ @ 5649.93/m ³ Rs					89495 = 00
27. providing pcc m-20 grade comp. job					
TMBP-13, I-22					
66.80/m ³ @ 6374.37/m ³ Rs					425808 = 00
28. providing HYSD bar 12mm ϕ bar					
TMBP-13, I-23, = 3.2d/mt					
Unit - 0.32/mt @ 76761.77/mt Rs					24564 = 00
29. providing sub-str pcc-m-20 Sub structure comp job					
TMBP-14, I-24 continuation					218198 = 00
32.48/m ³ @ 6616.06/m ³ Rs					2148889 = 00

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
30. providing weepholes					
comp. job					
TMBP-14, I-25.					
36 / NOS @ 131.42 / NOS RS					4731 = 00
31. providing RCL m-25 grade					
TMBP-14, I-26					
20.04 / m ³ @ 7391.97 / m ³ RS					148135 = 00
32. providing HYSD bar					
TMBP-14, I-27					
2.00 / MT @ 76911.33 / MT RS					153823.00
33. providing Back filling					
TMBP-14, I-28					
69.14 / m ³ @ 742.14 / m ³ RS					50896 = 00
34. providing ^{filler} falling media					
TMBP-14, I-29.					
39.24 / m ³ @ 3325.99 / m ³ RS					130512 = 00
35. providing RCL m-30					
grade comp. job.					
TMBP-14, I-30					
8.66 / m ³ @ 8102.21 / m ³ RS					70165 = 00
36. providing HYSD bar					
12mm ϕ bar comp. job					
TMBP-14, I-31					
0.76 / MT @ 78034.13 / MT RS					59306 = 00
37. providing parapet					
construction comp. job					
TMBP-14, I-32.					
8.0 / m ³ @ 6616.06 / m ³ RS					52928.00

Continuation

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Particulars	Details of actual measurement			Contents of area
	No.	L	B	
38. providing painting parapet comp. job				
TMBP-14, I-33				
55.30/m ² @ 108.98/m ² Rs				6027=00
39. providing drainage spot comp. job				
TMBP-15, I-34				
4/mos. @ 468.21/mos Rs				1873=00
40. construction of Embankment comp. job				
TMBP-16 to 18, I-35				
				9480123=00

Deducted 10%

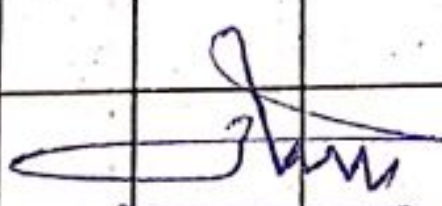
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Deducted

bearing layout @ 348079=00

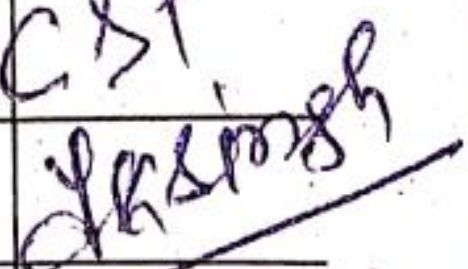
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23.12.20

AE

CSP



1/3/21