

Khap to19 to PMSY road to khar
Babuan to19 (mmsy-5c)

Measurement Book

Schedule XLV-Form No. 134

Baahka-2 DIVISION

Bvita4g SUB-DIVISION

Name of Work -

Situation of work -

Agency by which work is executed -

Date of measurement -

No. and date of agreement -

(These four lines should be repeated at the commencement of the measurements relating to each work).

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of work: to be to be					
PMGSY Road to be Bahwan					
to					
Agency: Rudra Infra Solution & Structure					
Dist - Karur, Sathy, West Champ					
Agreement No: 375BD of 20-21					
Agreement Amount = Rs 19133586.00					
Date of Start: 01/6/2020					
Date of Completion: 31/05/2021					
Record measurement					

1	Construction of working Bm =	1.94 km
2	Construction of reference pillar =	1.94 km
2	Clearing and grubbing road land	
	$2 \times 60 \times 30.00 \times 1.50 =$	5760.00 m ³
	$2 \times 1 \times 15.00 \times 1.50 =$	45.00 m ³
	Total =	5805.00 m ³
	Say =	0.5815
	Box culvert (m)	
	(3 x 1m x 1m)	
4	R/W in Excavation -	
	R/tt = $3 \times 1.50 \times 5.40 \times 0.50 =$	12.39 m ³
	C/W (below R/tt) $3 \times 2 \times 1.50 \times 0.50 \times 1.80 =$	8.10 m ³
	R/W = $2 \times 4 \times 2.00 \times 0.50 \times 1.80 =$	21.60 m ³
	Site clearance = $2 \times 7.79 =$	23.37 m ³
	Continuation Total =	49.25 m ³
		65.46 m ³

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
5. Sand filling in foundation					
Roff =	3	5.40	1.50	0.15	3.64 m ³
C/w =	3	2	1.50	0.50 x 0.12	0.54 "
R/w	3	4	2	0.50 x 0.15	4.18 m ³
				Total.	
6. Providing PCC Grade M15 in					
Roff =	3	5.40	1.50	0.15	3.64 m ³
C/w =	3	2	1.50	0.40 x 0.10	1.08 m ³
				Total =	4.72 m ³
7. Supplying Bitting and placing					
HYSD in Cut off wall					
up to bed level 10mm dia					
120	3	2	2	8 x 1.00	144.00 m
10mm dia in Return wall					
up to slab level					
100	3	4	2	9 x 2.00	583.20 m
10mm dia distribution bar					
up to bed level C/w & R/w					
3	2	2	6	5.00	256.00 m
R/w above bed level					
10mm dia	3	4	6	2.25	162.00 m
Charin bar 10mm dia bar					
3	2	4	1.2		28.80 m
10mm dia bar overlaps					
3	145	0.60			174 m

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
10 mm ϕ bar in R.C.C. slab					
Slab					
1400	2X4	38	X 1.10		= 684.00 m
10 mm ϕ bar in abutment					
Inner side					
1400	3X2	38	X 1.80		= 342.00 m
10 mm ϕ bar in abutment					
Outer side					
1400	3X2	38	X 2.20		= 501.60 m
10 mm ϕ bar for distribution bar in					

Slab, R.C.C. and S.R.C. abutment					
3X8	X 8	X 6.00			= 1152.00 m
10 mm ϕ bar					
Angle bar connecting to					
R.C.C. and abutment					
3X2	X 38	X 0.8			= 182.40 m
10 mm ϕ bar in					
Angle bar connecting to					
Slab and abutment					
3X2	X 38	X 0.8			= 182.40 m
10 mm ϕ bar in					
Handrail					
3X4	X 28	X 0.85			= 387.60 m
Total					= 4920 m
Net of 10 mm ϕ bar (20.67 kg per m)					= 3035.64 kg

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
8 Provisionally Rec M 25 in Box					
Cell					
Reft	2	6.00	1.00	0.20	= 5.67 m ²
Q/W	2	2.00	1.50	0.30	= 3.08 "
(Cable Reft)					
R/W	2	4.00	2.00	0.30	= 9.72 "
(up to cable)					
Asphalt	2	2.00	6.00	0.20	= 9.60 m ²
R/W	2	4.00	2.00	0.30	= 8.70 "
Finish	2	4.00	1.50	0.15	= 0.81 "
				Total	36.98 m ²
9 Provisionally Weep Hole 240mm					30mm
Reputed					

Revised Measurement

1 Supply, fitting and placing					
MYSO bar in parapet					
Main bar in parapet 10mm					
φ 5mm					
	3	2.00	2.00	8.00	= 96.00 m
Distribution bar in parapet					
14mm					
10mm φ 5mm					
	2	2.00	2.00	4.00	= 72.00 m
				Total	168.00 m
Weight of 10mm φ 5mm @					
0.617 kg/m					= 103.65 kg
2 Provisionally Rec M 25 in					
Box Column					

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1. Piling of floor					
Up = $8.50 \times 1.50 \times 0.60$					$= 7.70 \text{ m}^3$
Down = $8.50 \times 2.20 \times 0.60$					$= 11.20 \text{ m}^3$
Site clean & leveling up & width					19.90 m^3
			Total L		54.80 m^3
2. Sand filling in foundation					
Left = $2.50 \times 5.20 \times 0.15$					$= 1.95 \text{ m}^3$
Cut off wall and return = $2 \times 6.50 \times 0.50 \times 0.10$					$= 0.65 \text{ m}^3$
			Total		$= 2.60 \text{ m}^3$
3. Providing P.C.C. M15 in open foundation					
Left = $2.50 \times 5.40 \times 0.10$					$= 2.02 \text{ m}^3$
Cut off wall and return = $2 \times 6.50 \times 0.50 \times 0.10$					$= 1.95 \text{ m}^3$
			Total		$= 3.97 \text{ m}^3$
4. Supplying, fitting and placing HYSD bar reinforcement					
12 ϕ Main bar in cut off wall					
10 mm ϕ bar up to bed level @ 200 mm c/c					
			$2 \times 2 \times 12 \times 1.36$		$= 65.48 \text{ m}$
12 ϕ Main bar in return wall					
10 mm ϕ bar up to slab level @ 200 mm c/c					
			$4 \times 2 \times 11 \times 3.55$		$= 312.40 \text{ m}$
10 Distribution bar in cut off wall and return wall up to bed level 10 mm ϕ bar @ 200 mm c/c					
			$2 \times 2 \times 6 \times 6.50$		$= 156 \text{ m}$

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
150 2130	10	Distribution bar in return wall above bed level			
		10 mm ϕ bar @ 200 mm c/c			
		4 X 2 X 12 X 2.25			= 234 m
2400					
150 2400	10	Main bar (upper and lower) in left 10 mm			
		ϕ bar @ 150 mm c/c			
		2 X 50 X 2.10			= 200 m
50 5900	150	Distribution bar in			
50 750	150	Left 10 mm ϕ bar @ 200 mm c/c			
		2 X 11 X 6.00			= 132 m
50 2400		Main bar in Abutment			
		inner side of box 10 mm ϕ bar @ 200 mm c/c			
		2 X 30 X 2.10			= 150 m
2400 2400		Main bar in Abutment			
		outer side of box 10 mm ϕ bar @ 150 mm c/c			
		2 X 40 X 3.80			= 304 m
150 5900	150	Distribution bar in			
		Abutment 10 mm ϕ bar @ 200 mm c/c			
		4 X 11 X 6.00			= 264 m
150 700		Angle bar connecting to left and right 10 mm			
		ϕ bar 150 mm c/c			
		2 X 40 X 1.40			= 112 m

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Huntch bar connecting to Rall and about 8 mm ϕ bar 150 mm c/c					
	2	40	1.15		92 m
10 mm ϕ over lgs bar 134 X 0.4					13.6 m
10 mm ϕ chain bar					
	2	4	1.25		10 m
5. providing R.C.C. M20 m					
Rall + 6.50 X 2.50 X 0.25					3.25 m
cut off bar	2	6.50	0.30	0.85	3.31
return bar					7.06 m

Alepsals bar

04/07/2020

JR

Revised measurement

1. Supplying, fitting and tying

HYSD bar main bar m

Slab (lower side) 12 mm ϕ

24 bar @ 150 mm c/c

150 mm

40 X 2.50

100 m

Main bar m Slab (upper)

side) 10 mm ϕ bar @ 150 mm

c/c

24 X 40 X 2.50

100 m

150 mm

24 bar

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Distribution bar in slab				10mm	
ϕ bar @ 150 mm c/c					
2X 11X 6.00					= 132 m
Angle bar connecting to slab and abutment				8 mm ϕ bar	
@ 150 mm c/c					
2X 40 X 1.40					= 112 m
Hunter bar connecting to slab and abutment				8 mm ϕ bar @ 150 mm c/c	
2X 40 X 1.15					= 92 m
providing R.C.C. grid in					
m					
Abutment	2X 6.00X 0.25X 2.00				6.00 m ²
Retain wall	4X 2.00X $\left(\frac{0.10+0.25}{2}\right)X 2.25$				4.95 m ²
Hunter	4X $\frac{1}{2}X 6.00X 0.15X 0.15$				= 0.22 m ²
Total					= 11.22 m ²
providing weep hole in					
Culvert	2X 5X 2				= 20 m ²
Alphabetical					
06/07/2022					
12					

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Recoral measurement					
Supplying, fitting and					
250 placing 1450 bar in					
main bar in parapet					
10 mm ϕ bar @ 200 mm c/c					
2 X 2 X 12 X 1 m					48 m
Distribution bar in					
2400 parapet 10 mm ϕ bar					
@ 200 mm c/c					
2 X 2 X 2 X 9 X 2.5					90 m
providing RCC M25					
Descent = 6 m X 2.50 X 0.75					3.75 m ³

Parapet	2 X 2.50 X 0.25 X 0.61	0.75 m ³
Total		4.50 m ³

~~Revised~~

Total length of 8 ϕ bar	296 m
wt. @ 0.40 kg/m	118.40 kg
length of 10 mm ϕ bar	2273.28 m
wt. @ 0.617 kg/m	1402.61 kg
length of 12 mm ϕ bar	100 m
wt. @ 0.85 kg/m	85 kg
Total	1610.01 kg

Revised by

08/07/20

SR

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>Revol. masonry</u>					
1. Provisionally Bedded fully bedded					
abutment					
	2X	6.00X	2.00X	0.60	14.40 m
2. Provisional and fixing masonry					
intermediate sign sand					2 m.
3. Provisional and fixing masonry					
bed					2 m.
4. Construction of granular					
sub-base					
	62X	30.00X	4.050X	0.20	1530.50 m ²
less legs	5X	4.050X	0.20		4.05 m
franchise					
				Total	1526.85 m ²

Nepean's hill

15/07/2000

JK

Masonry of structure

1. Earth work	6323.71 m ²	(1.71 m)
2. Stone masonry	1282.559 m ²	(516.42 m)
3. Crushed stone	549.67 m ²	(188.4 m)
4. Stone chips	60.82 m ²	(530.85 m)
5. Course sand	37.258 m ²	(614.17 m)
6. Cement	26.591 t	(5002.4 t)

Nepean's hill

15/07/2000

JK

	Particulars	Details of actual measurement				Contents of area
		No.	L.	B.	D.	
	<u>Abstract of work</u>					
1	Construction of working Bm vide TMA page no 1 = 1.94 km @ Rs. 12/98.55/m				Rs	23665 = w
2	Construction of reference pillar vide TMA page no 1 = 1.54 km @ Rs. 13912.88/km				Rs	26991 = w
2	Clearing and grading road bet vide TMA page no 1 = 0.3843 @ Rs 51137.76 /km				Rs	29658 = w
4	Construction of embankment - part upto 1000 m vide TMA page no. S = 518.40 m² @ Rs 202.52/m²					104986 = w
5	Construction of sub grade & center shoulder vide TMA page no. 5 = 4555.71 m² @ Rs 204.16/m²				Rs	938260 = w
6	Construction of embankment - lead up to 100 m vide TMA page no. 5 = 1209.60 m² @ Rs. 167.41/m²				Rs	202499 = w
7	Construction of granular sub base vide TMA page no 11 = 1526.85 m² @ Rs 2998.92 /m²				Rs	6105751 = w
8	Provision and fixing mmg by RL sign board vide TMA page no 11 = 2m @ Rs 11827.20/km				Rs	236542 = w
					Total Rs	7668352 = w

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 24 Provision and Erection of board work TMB page no 11 =					
2 m ² @ Rs 27.20 / m ²					Rs 23654 = ∞
10 31 Earth work in excavation vide TMB page no =					
1 = 65.46 m ² vide TMB page no 8					
6 2 = 54.80 m ²					
Total = 120.26 m ² @ Rs 267.32					
per m ²					Rs 32388 = ∞
11 32 Sand filling vide TMB page no 2 = 4.18 m ²					
page no 6 = 2.60 "					
Total = 6.78 m ²					
Restricted to 6.27 m ² @ Rs 400.59 / m ²					Rs 2512 = ∞
12 34 Provision R.C.C. M/S vide TMB page no 2 = 4.72 m ²					
TMB page no 6 = 3.97 m ²					
Total = 8.69 m ²					
Restricted to 8.46 m ² @ Rs 7207.40					
per m ²					Rs 609752 = ∞
13 39 Provision R.C.C. M/S vide TMB page no 4 = 36.98 m ²					
TMB page no 5 = 7.02 m ²					
TMB page no 8 = 7.06 "					
TMB page no 9 = 11.22 "					
Total = 62.28 m ²					
Restricted to 60.06 m ² @ Rs					
8838.09 / m ²					Rs 530816 = ∞
Total Rs 8318697 = ∞					

Sch. XLV-Form No. 134					
Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
14 40	Drain falling wide TMS py				
	no. = 5 =	23.40 m	wide TMS		
	page no. 11 =	14.40 m			
	Total =	37.80 m	rest of area		
to	36.00 m	@ Rs. 3832.57/m ²			Rs. 1379732 =
15 41	Provisional well hole wide TMS				
	page no. 4 =	20 m	wide TMS		
	page no. 9 =	20 m			
	Total =	50 m	@ Rs. 8311/ha		Rs. 4156 =
16 42	Supply, fitting and laying				
	H/SO San Rm from well				
	TMS page no. 3 =	3025.64 kg			
	TMS B kg no. 4 =	102.65 kg			
	TMS page no. 10 =	1610.01 kg			
	Total =	4799.3 kg			
	Qty = 4.75 MT rest of area				
	4.30 MT @ Rs. 46509.64/MT				Rs. 199991 =
	Total Rs.				8660817 =
	Add 12% GST			Rs.	1039298 =
	Add 1% Cess			Rs.	86608 =
	Add seigniorage fees			Rs.	97481 =
	Total Rs.				9797596 =
	Per				
	Alphabetical				
	15/09/22				