

AGREEMENT NO:- 32/MMGSY(ST)/SBD/2020-21

CH. OF WORK:- Const. OF ROAD FROM Gardhinagar to
Dhimalgachh.

Schedule XLV-Form No. 134

RWD(WD) KISHANGANT-2 DIVISION

SUB-DIVISION

MB NO:- 1132

MEASUREMENT BOOK

NAME OF AGENCY:- AATESH RAUSAN KOMAR

प्रमाणित किया जाता है कि इस मापि पुस्त में कुल 100
(एक सौ) मुद्रित दोहरे पृष्ठ है। जो...
सहायक अभियंता, ग्रा०का०वि० कार्य अवर प्रमण्डल.....
के नाम से निर्गत किया जाता है।

कार्यपालक अभियंता
ग्रा०का०वि० कार्य प्रमण्डल
किलोवाज-2

26/7/20

RW3 (W3) Kishongom-2 DIVISION
THAKURGANJ SUB-DIVISION

Measurement Book

No. 1132

Name of officer अजीत कुमार राम (सहायक)

अधीन ग्रा०का० वि० कार्य अवर प्रमण्डल

Date of first entry _____

Date of last entry _____

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 measurement relating to each work)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
N/w:-	Const. of Road from				
	Gomahinagar to Dhimalgaachh.				
Agreement no-	32/MMGSY(ST)/SBD/2020-21				
Agency:-	Rajesh Ramesh Kumar				
	AT-Dharanganj PS-Kishanganj				
Date of start-	24-06-2020				
Date of completion-	23-06-2021				

1.	clearing and grubbing				
	Road land (by manual				
	meas) all comp.				
	2x10	30.0	1.35	=	810.0m ²
	2x10	30.0	1.40	=	840.0m ²
	2x6	30.0	1.30	=	468.0m ²
	2x12	30.0	1.15	=	828.0m ²
	2x8	30.0	1.20	=	576.0m ²
					3522.0m ²
				Say =>	0.34 Hq.
2.	P/v. & fixing of w/B				
	Pillars all comp.				
(i)	working bench mark pillars - 1.50km				
(ii)	Reference pillars - 1.50 km.				

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
3. Dismantling of existing structures with all comp.					
(i) Plain Cement concrete					
					$1 \times 2.0 \times 5.0 \times 0.15 = 1.50 \text{ M}^3$
	1	2.0	5.0	0.30	3.00 M^3
	2	2.0	0.30	0.30	0.36 M^3
					<u>4.86 M^3</u>
(ii) Brick Masonry/stone all comp.					
	2	2.0	0.825	3.0	9.90 M^3

4. Box culvert - $2\text{m} \times 2\text{m}$ size - 850M					
1. E/W in Excavation in found? with all comp.					
Box culvert- 1	3.50	6.0	0.65		13.65 M^3
cutoff wall- 2	3.50	1.30	1.80		16.38
Return wall- 4	2.90	3.88	1.80		80.91
					<u>110.94 M^3</u>
2. PCC (M15) 1:2.5:5 in levelling course below open found? with all comp.					
	1	2.50	6.0	0.10	1.50 M^3
	4	2.90	2.88	0.20	6.67 M^3
					<u>8.17 M^3</u>

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
3.	PCC M15 (1:2.5:5) concrete				
	with all comp.				
	Cutoff Wall				
	2	2.50	0.30	1.50	2.25 M ³
	Return wall.				
	4	2.50	$\frac{2.475 + 1.775}{2}$	1.60	
	$4 \times (2.10 + 2.90 + 2.70 + 3.0) \times \frac{2.40 + 1.60}{2} \times 1.6 = 34.24$				
					36.49 M ³
4.	Reinforcement c/c comp.				
	10mm ϕ in cutoff wall				
	2x12	1.5	0.62	-	22.32 kg.
	2x2	2.5	0.62	-	0.62 kg.
	Refr.				
	Bottom - 10mm ϕ bar.				
	2x42	2.70	0.62/kg	-	140.62 kg.
	2x12	6.0	0.62/kg	-	89.28 kg.
	2x32	3.0	0.62/kg	-	119.0 kg.
	12mm ϕ bar				
	2x43	3.80	0.89/kg	-	290.85 kg.
	10mm ϕ - 2x32	1.45	0.62	-	57.54 kg.
	Hunch - 8mm ϕ bar.				
	Bottom 2x32	1.25	0.39	-	31.20
	Top 2x32	1.20	0.39	-	29.95
	10mm ϕ binder				
	2x2x13	6.10	0.62	-	146.65
					983.62 kg.

Continuation

Sum = 0.984 ton.

A. S. S. S. S.

13/9/20

J.E.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
8.	P/W and laying reinforced				
	Concrete concrete in super				
	str. all comp-				
Box slab- 1	2.50	6.0	0.25		3.75 m ³
Haunch- 4	6.0	0.01 (1/4)			0.27 m ³
Kerb- 2	2.50	0.25	0.30		0.38 m ³
					4.395 m ³
9.	Const. of RCC walling of				
	M25 in cast in-situ all comp-				
	2	2.50	-	-	5.0 m
10.	Drainage spouts comp-				4.0 m ³
	1	2.50	5.50		13.75 m ³
12.	Plain/Reinforced (M20) in				
	Substr. in cutting return				
	wall cell comp-				
	$(2.10 + 2.90 + 2.70 + 3.0) \times 0.070$				0.749 m ³
13.	P/W. and laying filter material				
	with all comp.				
Behind Abt- 2	4.26	0.60	1.70		8.69
Ret. Wall 4	1.90	0.60	2.01		9.16
					17.85 m ³
14	Back filling cell comp.				
	2	2.50	5.20	0.20	5.20
	2	2.50	4.26	1.78	37.79

Continuation
 Less filter material 17.85 m³
 net m³ P. No. 5 (13) 25.14 m³

A. Suresh
 01/10/20

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Box culvert (2m x 2m) CH-1					180 M
1. E/W in excavation in found? all comp.					
Box culvert	1	3.50	6.0	0.65	13.65 M ³
Cutoff wall	2	3.50	1.30	1.80	16.38 M ³
Ret. wall	4	2.90	3.88	1.80	80.91 M ³
					110.94 M ³
2. PCC (M15) 1:2.5:5 in levelling course below open found? all comp.					
	1	2.50	6.0	0.10	1.50 M ³
	4	2.90	3.88	0.20	6.57 M ³
3. PCC (M15) 1:2.5:5 concrete in found? all comp.					
Cutoff wall	2	2.50	0.30	1.50	2.25 M ³
Return wall	4	3.00	$\frac{2.36+1.20}{2}$	$\times 1.60$	34.17 M ³
					36.42 M ³
4. S/F/P HYSD reinforcement with all comp.					
Cutoff wall	10mmφ	2x12	1.50	0.62	-
					22.32 kg
		2x2	2.50	0.62	-
					06.20 kg.
Raft. Bottom slab					
Continuation					28.52 kg.

12.1.87-28.52 kg.

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
10mm x f	2x42	2.70	0.62	-	140.62 kg
	2x12	6.10	0.62	-	90.76 kg
	2x32	3.0	0.62	-	119.0 kg
120mm x f	2x43	3.80	0.89	-	290.85 kg
10mm x f	2x32	1.40	0.62	-	57.54
	2x2x13	6.10	0.62	-	196.66 kg
8mm x funch-	2x32	1.25	0.39	-	39.20 kg
top	2x32	1.20	0.39	-	29.95 kg.
					985.10 kg.
					⇒ 0.985 ton.
					Summ.
					26/10/20

5. Plain / reinforced concrete

Concrete (100) in sub-

sts. all comp-

Bottom slab.

1 2.50 6.0 0.25 3.75 M³

Side wall

2 6.0 2.0 0.25 6.00 M³

Ret. wall-

4 3.0 $\frac{1.40+0.40}{2}$ 2.0 18.0 M³27.75 M³

6. p/v. weep holes in

Abt. & Ret. wall etc.

Abt 2x 6.0 Nos = 12.0 Nos.

Ret. wall 4x 5.0 Nos = 20.0 Nos.

32.0 Nos.

Continuation

Summ.
09/10/20
JB.

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1. SIF/P HYSD bar rein- forcement with all comp. top slab.					
12mm ϕ	44	2.80	0.89	-	109.65 kg.
10mm ϕ	44	3.40	0.62	-	92.75 kg.
	2x44	1.40	0.62	-	76.38
	2x13	6.0	0.62	-	96.72 kg.
					375.40 kg.
					$\Rightarrow 0.3754 \text{ ton.}$
					<u>Answer.</u>
2. P/c and being provided Concrete to super- str. all comp.					
Slab -	1	2.50	6.0	0.25	3.75 M ³
Chuch -	4	6.0	0.011 (qv)		0.27 M ³
Kerb -	2	2.50	0.25	0.30	0.38 M ³
					4.395 M ³
3. Const. of Rec. sculling of M25 in cast in situ all comp.					
	2	2.50	—	—	5.0 M.
4. Drainage spouts all comp.					4.0 Nos.

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
5.	P/v. and laying Cement concrete masonry				
	course M30 all comp.				
	1	2.50	5.50	-	13.75m ²
6.	coping - plain/reinforced				
	Cement concrete (M20) in				
	substs. all comp.				
	4	3.0	0.075 (avg)		0.84 m ³
7.	providing and laying filter material all comp.				
Behind Ret. Wall					
8.	Backfilling behind				
	Abt. & Ret. Wall all comp.				
	2	2.50	5.20	0.20	5.20 m ³
	2	2.50	4.26	1.78	37.79 m ³
	less Qty. void m ³ (1.94 m ³)				17.85 m ³
	Net Qty -				25.14 m ³

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1. E/W in gty. sheet.					
Ch.	Field Area	mean Area	Dist.		Fill volume
0	0.411	0.00	-		0.00
50	0.365	0.388	50		19.40
100	1.022	0.694	50		34.68
150	1.022	1.022	50		51.10
200	0.655	0.839	50		41.93
250	0.144	0.400	50		19.98
300	0.145	0.145	50		7.23
312	0.325	0.00	0		0.00
350	0.155	0.240	33		9.12
400	0.255	0.255	50		9.25
450	0.366	0.477	50		23.85
500	1.458	0.912	50		45.60
600	0.011	0.735	50		36.73
610	0.222	0.117	10		1.17
635	0.255	0.00	0		0.00
650	0.555	0.405	15		6.08
700	1.235	0.895	50		44.75
750	0.322	0.779	50		38.93
800	0.144	0.233	50		11.65
830	0.588	0.366	30		10.98
832	0.255	0.00	0		0.00
850	1.055	0.655	18		11.79
900	1.055	1.055	50		52.75

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
950	1.022	1.039	50		51.93
1000	2.588	1.405	50		90.25
1050	0.588	1.588	50		79.40
1100	0.655	0.622	50		31.08
1150	0.255	0.455	50		22.75
1200	0.011	0.133	50		6.65
1250	1.666	0.839	50		41.93
1300	1.555	1.611	50		80.53
1350	0.555	1.055	50		52.75
1400	0.022	0.289	50		14.43
1433	0.011	0.00	0		0.00

(i) E/W in 100m lead 96%

$$994.55 \times 96 / 100 = 954.76 \text{ M}^3$$

(ii) E/W in 1000m lead 4%

$$994.55 \times 4 / 100 = 39.81 \text{ M}^3$$

Asymmer.

03/11/20

SE.

Continuation

~~Aug 19 v.~~
18/11/20
JE.

Continuation

Rs. 21,396.00

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
3. Const. of Embankment					
With material obtained from borrow pits all comp.					
vide TMS p.no. (11)					
Area (11) - 954.74 m^3					
@ $141.39/\text{m}^3$ → 13499.20					
(11) 39.84 @ $175.32/\text{m}^3$ → 6988.00					
4. Const. of subgrade and earthen shoulders					
vide TMS p.no. (12)					
Area (12) - 985.87 m^3					
@ $176.96/\text{m}^3$ → 40552.50					
5. Const. of granular sub-base by providing well graded material all comp.					
vide TMS p.No. (12)					
Area (3) 985.87 m^3					
@ $2100.85/\text{m}^3$ → 207165.20					
6. P.V. laying spreading and Compacting WBM gr. III with all comp.					
vide TMS p.no. (13)					

Continuation

R.B-26,40,057-00

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				B.F.Bs-2	6,40,057 ⁰⁰
				9/1000 (4) 3	20.625 M ³
				Qs 4764.35 / M ³	→ 1527567 ⁰⁰
7.				E/W in excavation in	
				fourth all comp.	
				110.94 M ³ wide TMB P.no. (2) 9th (1)	
				110.94 M ³ wide TMB P.no. (6) 9th (1)	
				121.88 M ³	
				Qs 260.59 / M ³	→ 31760 ⁰⁰
8.				Plain Cement Concrete	
				PCC M15 (1:2.5:5) in	
				3.77 M ³ wide TMB P.no. (2) 9th (1)	
				16.34 M ³	
				Qs 5774.05 / M ³	→ 94348 ⁰⁰
9.				P/V. PCC M15 (1:2.5:5)	
				Concrete for Plain	
				Concrete in open fourth	
				Complete -	
				36.49 M ³ wide TMB P.no. (3) 9th (3)	
				36.42 M ³ wide TMB P.no. (6) 9th (3)	
				72.91 M ³	
				Qs 6508.42 / M ³	→ 474529 ⁰⁰
					/
					Rs. 47,68,261 ⁰⁰

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					B.F.RS-47,68,261=00
10. Plain/reinforced cement concrete (M ₂₀) in substn complete -					
27.72 M³ vide TMB P.No.(4) g/m(5)					
27.75 M³ vide TMB P.No.(7) g/m(5)					
55.47 M³					
@ 6719/-75/M³ →					372745=00
11. P.V. weepholes all comp. 30.0 nos vide TMB P.No.(4) g/h-(6) 32.0 nos vide TMB P.No.(7) g/h-(7)					
o.g.s vide TMB P.No.3 g/h-(4) o.g.s vide TMB P.No.(7) g/h-(4) 1.969 ton.					
@ 53259/-66/tt →					104868=00
13. Backfilling behind Abt. and Ret. wall all comp. 25.14 M³ vide TMB P.No.(5) g/cm(14) 25.14 M³ vide TMB P.No.(9) g/cm(8) 50.28 M³					
@ 690.24/M³ →					34705=00
					Rs. 52,87,408=00

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				10. F. B. - S	287408=00
14. P.V. and laying filter					
material all comp.					
17.85 M ³ wide TMB P.No. (5) 94m (13)					
17.85 M ³ wide TMB P.No. (9) 94m (7)					
35.70 M ³					
				@ 4475.74/m ³ —	159784=00
15. coping: Plain/reinforced					
Concrete (M 20) in					
substs. complete					
0.749 M ³ wide TMB P.No. (5) 94m (12)					
16. P.V. and laying all					
in filter sub. all comp.					
4.395 M ³ wide TMB P.No. (5) 94m (8)					
4.395 M ³ wide TMB P.No. (8) 94m (2)					
8.790 M ³					
				@ 7773.29/m ³ —	68327=00
17. S/F/P HYSD bgr reinfor					
Concrete all comp.					
0.370 ton wide TMB P.No. (4) 94m (7)					
0.3750 ton wide TMB P.No. (8) 94m (1)					
0.745 ton					
				@ 54327.64/ton —	40474=00
					6.55, 66, 671=00

Continuation

Continuation