

HEAD - MEMBERSY - NIDG BOKS
Name of work - Const & Fin. year maint of Road Toz To

Schedule XLV-Form No. 134

Channpura

325831mm52ND
2018-19

Palligant DIVISION

Name of A.E.-Sri Akshay Lal Bostak
SUB-DIVISION
-Mudbunapur

10.1 Below

MEASUREMENT BOOK

552

Name of Agency - VIVER & CO

1st on A/c Bill.

1

Name to 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 - Const ⁿ & five years maintenance of road from TQ2 to Champura under MMGSY (NDB: BRICS)					
Agency - Vivek and Co.					
At - S/M/23, Bahadurpur Housing colony, Patna.					
Agreement No. - 32/SBD/MMGSY NDB/2018-19.					
Agreement Amount -					
Date of Commencement - 28-07-18					

Date of Completion - 27-09-19.

Date of Measurement -

1) Providing & fixing of Bench
 Mark pillars - 1.04K
 Sub.
 F.E.

2) Clearing & grubbing road
 Land do-it all comp job.

1x30x3.5	=	105m ²
1x30x3.5	=	105m ²
2x30x3.5	=	210m ²
1x30x3.5	=	105m ²
3x30x3.5	=	315m ²
2x30x3.5	=	210m ²
2x30x3.5	=	210m ²
3x30x3.5	=	315m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
At- 8/m/23, Bahadurpur					
Housing colony, Patna.					
Agreement No.- 32/SB0/MHGSY(NB3)					
2018-19.					

Date of commencement- 28-09-18

① Constⁿ of granular sub-base by providing well graded material of Grading I.

2x30x4.05x0.10	=	24.3m ³
3x30x4.05x0.10	=	36.45m ³
2x30x4.05x0.10	=	24.30m ³
4x30x4.05x0.10	=	48.6m ³
2x30x4.05x0.10	=	24.30m ³
3x30x4.05x0.10	=	36.45m ³
4x30x4.05x0.10	=	48.6m ³
4x4.05x0.10	=	1.62m ³

8x4.05+4.20+5.90x0.10=3.77m³
 1502/2020 3 248.39m³

② Providing laying, spreading and compacting WBM Gradients of specific sizes of aggregates

2x30x3.75x0.075	=	16.875m ³
2x30x3.75x0.075	=	16.875m ³
3x30x3.75x0.075	=	25.313m ³
2x30x3.75x0.075	=	16.875m ³
3x30x3.75x0.075	=	25.313m ³
4x30x3.75x0.075	=	33.750m ³
2x30x3.75x0.075	=	16.875m ³
2x30x3.75x0.075	=	16.875m ³

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
4 x 3.75 x 0.075					= 1.125 m ³
8 x 3.75 + 4.20 + 5.90					x 0.075 = 2.77 m ³
Surf. 05/03/2020 3 85 km					06/04/2020 172.64 m ³
③ Providing and applying.					
primer coat with Bitumen emulsion (SS-1)					
2 x 30 x 3.75					= 225.00 m ²
2 x 30 x 3.75					= 225.00 m ²
3 x 30 x 3.75					= 337.50 m ²
3 x 30 x 3.75					= 337.50 m ²
2 x 30 x 3.75					= 225.00 m ²
2 x 30 x 3.75					= 225.00 m ²
4 x 30 x 3.75					= 450.00 m ²
2 x 30 x 3.75					= 225.00 m ²
15 x 3.75					= 56.25 m ²
8 x 3.75 + 4.20 + 5.90					= 36.93 m ²
3					2343.8 m ²

④ Providing and applying					
lack coat with Bitumen emulsion (RS-1)					
2 x 30 x 3.75					= 225.00 m ²
2 x 30 x 3.75					= 225.00 m ²
3 x 30 x 3.75					= 337.50 m ²
3 x 30 x 3.75					= 337.50 m ²
2 x 30 x 3.75					= 225.00 m ²
2 x 30 x 3.75					= 225.00 m ²
4 x 30 x 3.75					= 450.00 m ²
2 x 30 x 3.75					= 225.00 m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
		15	3.75		= 56.25 m ²
		8	3.75+4.20+5.90		= 36.93 m ²
		3			2343.18 m ²

(5) Providing, laying & rolling of close graded premix surfacing material of 20 mm thickness -

2	30	3.75		= 225.00 m ²
2	30	3.75		= 225.00 m ²
3	30	3.75		= 337.50 m ²
3	30	3.75		= 337.50 m ²
2	30	3.75		= 225.00 m ²
2	30	3.75		= 225.00 m ²
4	30	3.75		= 450.00 m ²
2	30	3.75		= 225.00 m ²
15	3.75			= 56.25 m ²
8	3.75+4.20+5.90			= 36.93 m ²
3				2343.18 m ²

(6) Subgrade & Earthen shoulder with approved material obtained from borrow pits -

For rigid pavement -

Built up area -

$$2 \times 440.00 \times 0.563 (av.) \times 0.175 = 86.702 \text{ m}^3$$

For open area (RT position)

$$2 \times 600.00 \times 1.113 (av.) \times 0.175 = 233.73 \text{ m}^3$$

$$320.432 \text{ m}^3$$

(7) Constⁿ of embankment

Continuation

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Sch. XLV—Form No. 134					
Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
with material obtained from borrow pits -					
Stn. No.	Ch.	Area in m ²	Mean Area m ²	Dist. (m)	Volume (m ³)
1	0	2.474			
2	50	3.467	2.971	50	148.525
3	100	2.873	3.170	50	158.500
4	150	5.096	3.985	50	199.225
5	200	5.625	5.361	50	268.025
6	250	4.179	4.902	50	245.100
7	300	3.471	3.825	50	191.250
8	350	3.058	3.265	50	163.225
9	400	4.921	3.990	50	199.475
10	450	3.089	4.005	50	200.250
11	500	5.210	4.150	50	207.475
12	550	3.887	4.549	50	227.425
13	600	4.530	4.209	50	210.425
14	650	4.499	4.575	50	225.725
15	700	4.796	4.648	50	232.375
16	750	4.840	4.818	50	240.900
17	800	4.729	4.785	50	239.225
18	850	4.329	4.529	50	226.450
19	900	5.114	4.722	50	236.075
20	950	3.431	4.273	50	213.425
21	1000	5.866	4.649	50	232.425
22	1040	4.579	5.223	40	208.960
					4474.600 m ³
Deduction for embankment					
for 1000 m lead					805.56 m ³
Qty vide MBP @ item 4(a)					
For 100 m lead					
Qty vide MBP @ item 4(b)					229.965 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Deduction for GSB of TMBP					
(10) item (5)				—	43.27 m ³
Deduction for WBM of TMBP					
(11) item (E)				—	124.24 m
Deduction for CC Pavement of TMBP (11) item (7)				—	260.10 m
Deduction for GSB of TMBP					
(15) item (1) for BT Pavement				—	248.39 m
Deduction for WBM for BT					
Pavement of TMBP (15) item (2)				—	172.646
Deduction for MSS of TMBP (7) item (5)				—	46.869 2343.8 m
Deduction for Subgrade and Earth				—	320.432 m ³
					2223.133 m ³

(8) Providing and Laying of hot applied thermoplastic compound of 2.5 mm thick

2x2x30x0.10				= 12.00 m ²
2x2x30x0.10				= 12.00 m ²
2x3x30x0.10				= 18.00 m ²
2x3x30x0.10				= 18.00 m ²
2x2x30x0.10				= 12.00 m ²
2x2x30x0.10				= 12.00 m ²
2x4x30x0.10				= 24.00 m ²
2x2x30x0.10				= 12.00 m ²
2x2x30x0.10				= 12.00 m ²
				127.6 m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(9) Reinforced Cement concrete					
M15 grade kilometer local					
stone of standard design-					
(i) Km Stone					2 Nos.
(ii) 200m Stone					4 Nos.
(10) Providing and fixing					
of retro-reflective cautionary,					
mandatory and informatory					
sign board —					
(i) 600 mm equilateral A					4 Nos.
(ii) 600 mm circular					2 Nos.
(iii) 600 mm x 450 mm rectangular					2 Nos.
Sub- 02/12/2020 J.E. Est. Officer 02/12/2020 A.E.					

Abstract of Cost.

(1) Const ⁿ of granular sub- base of grading I —					
248.39 m ³ qty vide TMBP (15) item (1)					
43.27 m ³ qty vide TMBP (16) item (5)					
291.66 m ³ @ Rs. 2379.14/m ³					Rs. 693900=00
(2) Providing, laying, spreading and compacting WBM grading 3					
172.646 m ³ qty vide TMBP (15-16) item (2)					
124.240 m ³ qty vide TMBP (11) item (6)					
296.886 m ³ @ Rs. 3405.36/m ³					Rs. 1011004=00
(3) Providing and fixing of bench mark pillars					
1.04 Km qty vide TMBP (10)					
Item (1) @ Rs. 12752.03/Km					Rs. 13262=00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
④ Clearing and grubbing road land					
0.364 hect. qty vide TMBP (10)					
item (2) @ Rs. 48792.70/hect. — Rs. 17753=00					
⑤ Excavation for road work in soil —					
33.00 m ³ qty vide TMBP (10)					
item (3) @ Rs. 77.59/m ³ — Rs. 2560=00					
⑥ Const ⁿ of un-reinforced —					
260.10 m ³ qty vide TMBP (11)					
item (7) @ Rs. 7277.32/m ³ Rs. 1892831=00					
⑦ Providing & fixing of typical minor informational sign					
Logo board — 1 No					
Citizen board — 1 No					
2 Nos qty.					
Vide TMBP (1) item (8) @					
Rs. 9735.60/No — Rs. 19471=00					
⑧ Providing and applying primer coat with Bitumen emulsion (SS-1)					
2343.18 m ² qty vide TMBP (16)					
item (3) @ Rs. 49.21/m ² — Rs. 112937=00					
⑨ Providing and applying tack coat with bitumen emulsion (RS-1)					
2343.18 m ² qty vide TMBP (16-17)					
item (4) @ Rs. 16.63/m ² — Rs. 38166=00					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
(10) Providing, Laying & rolling of close graded proma surfacing 2343.18 m ² qty vide TMBP (17) Lt. 2295.00					
item (5) @ Rs. 169.83/m ² — Rs. 389071.00					
(11) Subgrade & Earthen shoulder with approved material 320.432 m ³ qty vide TMBP (10) item (6) @ Rs. 162.10/m ³ — Rs. 51942.00					
(12) Const ⁿ of embankment with material obtained from borrow pits — 2223.138 m ³ qty vide TMBP (19) item (5) Eg to 805.56 m ³ for 1000 m lead qty vide TMBP (5) item 4(b) 227.965 m ³ for 100 m lead qty vide TMBP (5) item 4(b) 3258.658 m ³ Lt. 2685.20 m ³					
(i) 805.56 m ³ for 1000 m lead @ Rs. 162.10/m ³ — Rs. 130586.00					
(ii) 1879.64 m ³ for 100 m lead @ Rs. 118.85/m ³ — Rs. 223395.00					
(13) Providing & Laying of hot applied thermoplastic compound 2.5 mm thick — 124.6 m ² qty vide TMBP (19) item (6) Lt. 120.00 m ² @ Rs. 942.86/m ² — Rs. 113143.00					
(14) Reinforced cement concrete M 15 grade kilometre to be					
Stone Continuation					

Stone Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(i) Kerb stone -					
2 Nos. Qty vide TMBP (20) item (iv)					
@ Rs. 2350.25/No —					Rs. 4701.25
(ii) 200 mm stone -					
4 Nos. Qty vide TMBP (20)					
item 9(ii) @ Rs. 667.03/No —					Rs. 2668.12
(15) Providing and fixing of					
retro-reflective cautionary					
mandatory and informatory					
sign board -					
(i) 600 mm equilateral Δ					
4 Nos. Qty vide TMBP (20)					
item 100(i) @ Rs. 1576.61/No —					Rs. 6306.44
(ii) 600 mm Circular -					
2 Nos. Qty vide TMBP (20) item (iii)					
@ Rs. 1620.66/No —					Rs. 3241.32
(iii) 600 mm X 450 mm rectangular					
2 Nos. Qty vide TMBP (20) item 100(ii)					
@ Rs. 1616.13/No —					Rs. 3232.26
					Rs. 4730172.00
3.58 10.0 below as per app. (1) —					Rs. 4730172.00
					Rs. 4257155.00
Previous Payment (-)					Rs. 23668342.00
					Rs. 1890321.00
20/12/2020					
J.E.					
8/12/2020					
सहायक अभियंता					
ग्रामीण कार्य विभाग					
मार्ग अवर प्रमंडल, नौबतपुर					

Continuation