REQ ROAD BISHUNGANJ TO JAMANGANJ

Schedule XLV-Form No. 134

EE, Road (W) Div Jehanabad DIVISION

A.E. Road (W) Makhdumpur SUB-DIVISION

2663

MEASUREMENT BOOK

Sch. XLV - Form No. 134

EE. Road (co) Johnsonpet DIVISION

A.B. Road (co) Mekhelapuram SUB-DIVISION

Measurement Book

No. 2663

Name of officer _____

_____

Date of first entry _____

Date of last entry _____

प्रमाणित किया जाता है कि इस माप पुस्तिका में अंकित कुल 100 (सौ) पृष्ठ हैं इसे श्री राजेन्द्र प्रसाद सहायक अभियंता द्वारा अपने प्रयोजन हेतु प्रारम्भ किया गया है

Executive Engineer
P.W.D. (W) Division
Jalandhar

Schedule PLV-Form No. 134

NOTES

REFERENCE TO P. W. A. CODE, CHPI.VII
Para 39 & 81

1.In recording detailed measurements the following general instructions should be carefully observed.

(a)Subject to such subsidiary orders as may be laid down by the local Government detailed measurements should be recorded only by Executive or Assistant Engineers or by Executive subordinates in-charges of work to whom measurement books have been supplied by the Executive Engineer for the purpose.

(b)All measurements should be bear taken down in a measurement book Form 23, issued for the purpose, no where else.

(c) Each set of measurement should commende with entries tarting-

(i) In the case of bills for work done :-

(a) Full name of wok as given in estimate
(b) Situation of work
(c) Name of contractor.
(d) Number and date of his agreement and
(e) Date of measurement
(i) :Stock", (ii) "Purchase" for direct issue to (here enter full name of work as given in estimate)

(ii) "Purchase" for (here enter full name of work as given in estimate) issued to contractor ..... on ..... and

(d) Date of measurements and should end with the Paid initials of the officer marking the measurement, see also paragraph 24, A suitable abstract should than be

prepared which / should collect in the case of measurement for work done, the total quantities of each distinct item of work relating to each sanctioned sub-head.

(d) As all payments for work supplies are based on the quantities recorded in the measurement books it is incombent upon the person taking the measurement to record the quantities clearly and accurately. If the measurements are taken in connection with a running contract account on which work has been previously measured he is further responsible (1) that reference to the last set of measurements is recorded and (2) that if the entire job or contract has been completed the fact is recorded prominently just above his initials.

(e) Entries should be record continuously in the measurement book No blank pages may be left and no page be turn out. Any page left in adveitenly must be cancelled by diagonal lines. The cancellation being attested. See also paragraph or the Public Work Department Code.

(f) No entry may be erased, of a mistake is made it should be correct (and dated) by the responsible officer in the manner prescribed in paragraph 335 of the Public Works Department Code. When any measurements are cancelled, the cancellation, must be supported by the dated initials of the officver ordering the cancellation or by refrence to his orders initialled by the officer who made the measurements in either case the reason for cancellation should be provided with an index which should be kept upto date.

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.	
Name of work :- Repair of road from RCO road Bisunganj to Jamanganj.					
Agency :- M.G. Construction Co. Court area Jehanabad.					
Agreement no - 08 M/SD/2019-20					
Date of Agreement - 21/01/2020					
Date of Commencement - 10/12/2019					
Date of Completion - 09/03/2020					
Date of measurement -					
(1) Clearing & grubbing of road land by manual means					
- do - do -					
	2 ×	40 ×	30.00 ×	1.00	= 2400 m²
	2 ×	30 ×	30.00 ×	1.00	= 1800 m²
	2 ×	3 ×	30.00 ×	1.00	= 180 m²
	2 ×	1 ×	10.00 ×	1.00	= 20 m²
					4400 m²
	9n Hact =		4400 / 10000		= 0.44 Hact
(2) Dismantling of existing structures like culverts bridges etc (stone / brick masonry)					

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
	-do	-do	-		
2 × 2 × 6.00 × 0.60 × 0.40 = 5.76 m³					
(3) Construction of Subgrade and Earthen Shoulder					
	-do	-do	-		
2 × 40 × 30.00 × 1.25 × 0.40 = 1200 m³					
2 × 30 × 30.00 × 1.25 × 0.40 = 900 m³					
2 × 3 × 30.00 × 1.25 × 0.40 = 90 m³					
2 × 10.00 × 1.25 × 0.40 = 10 m³					
					= 2200 m³

(4) Construction of granular Sub-base (GB-2)		-do	-do-		
2 × 22 × 1.10 × 0.175 =					8.47 m³
6 × 12 × 1.80 × 0.175 =					22.68 m³
1 × 35 × 1.15 × 0.150 =					6.0375 m³
2 × 35 × 1.10 × 0.150 =					11.55 m³
4 × 20 × 1.75 × 0.175 =					24.50 m³
1 × 40 × 1.40 × 0.175 =					9.80 m³
2 × 12 × 1.50 × 0.170 =					6.12 m³
3 × 15 × 1.45 × 0.175 =					11.4188 m³
3 × 28 × 1.25 × 0.160 =					16.80 m³
1 × 32 × 1.50 × 0.175 =					8.40 m³
2 × 15 × 1.40 × 0.175 =					5.25 m³

Continuation

3 × 13 × 1.95 × 0.175 = 13.3088 m³

Total = 144.335 m³

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
(5) Providing, laying, spreading & compacting of WBM Gr-2					
— do — do —					
2	× 25	× 1.90	× 0.075		= 7.125 m³
3	× 15	× 2.10	× 0.075		= 6.750 m³
1	× 30	× 2.10	× 0.075		= 4.725 m³
4	× 22	× 1.80	× 0.075		= 11.880 m³
1	× 25	× 2.05	× 0.075		= 3.8438 m³
7	× 12	× 1.95	× 0.075		= 12.285 m³
2	× 35	× 2.00	× 0.075		= 10.50 m³
5	× 24	× 1.80	× 0.075		= 16.20 m³
2	× 32	× 1.75	× 0.075		= 8.40 m³
2	× 18	× 1.80	× 0.075		= 4.86 m³
				Total =	86.57 m³
(6) Providing, laying, spreading & Compacting of WBM Gr-3					
— do — do —					
3	× 18	× 2.10	× 0.075		= 8.505 m³
2	× 25	× 1.90	× 0.075		= 7.125 m³
1	× 35	× 2.20	× 0.075		= 5.775 m³
2	× 24	× 1.80	× 0.075		= 6.480 m³
1	× 42	× 2.05	× 0.075		= 6.4575 m³
1	× 25	× 2.15	× 0.075		= 4.0313 m³
2	× 15	× 2.25	× 0.075		= 5.0625 m³
1	× 68	× 2.35	× 0.075		= 11.985 m³

Continuation

3 × 14 × 1.80 × 0.075 = 5.670 m³

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	5	12	2.10	0.075	= 9.450 m³
	4	20	1.95	0.075	= 11.700 m³
	3	25	2.15	0.075	= 12.0938 m³
	1	35	1.90	0.075	= 4.9875 m³
	4	12	2.20	0.075	= 7.920 m³
	3	28	1.75	0.075	= 11.025 m³
	2	30	2.35	0.075	= 10.575 m³
	2	22	2.10	0.075	= 6.930 m³
	5	10	1.85	0.075	= 6.9375 m³
	3	15	2.20	0.075	= 7.425 m³
	4	24	2.25	0.075	= 16.20 m³
	7	12	1.80	0.075	= 11.34 m³
	1	20	2.10	0.075	= 3.150 m³
				Total	= 180.285 m³

(7) Providing and applying primer coat with bitumen emulsion (SS-1) —do—do— qty vide item no. 06 P-04

$$qty = \frac{180.285}{0.075} = 2403.80\ m^2$$

(8) Providing, laying & Rolling of close graded premix surfacing material —do—do— VTMB P-04 item-07

Continuation

qty = 2403.80 m²

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
(9) Providing & applying tack coat with bitumen emulsion (RS-1) — do — do —					
on BT portion					
	1	2200	3.75		= 8250.00 m²
for MSS on portion on BT					= 2403.80 m²
					= 10653.80 m²
1/4 Extra for curve					= 106.54 m²
					10760.34
Qty = 10760.34 m²					

(10) Providing & laying Semi-dense bituminous concrete

— do — do —

BT portion

1 × 2200 × 3.75 × 0.025 = 206.25 m³

1/4 Extra for curve =

$9 \times 15 \times \left(\frac{3.75 + 5.60 + 3.75}{3} - 3.75\right) \times 0.025 = 2.06 m^3$

Total = 208.31 m³

(11) Providing & fixing of RCC M15 grade Key stone

— do — do —

Continuation

Qty = 04 Nos.

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
(12)		200 mm Stone			
		— do —	do	—	
	Qty = 09 Nos.				
(13)	Providing & fixing of retro-reflectorised cautionary, mandatory & informatory Sign — do —		do	—	
	600 mm equilateral triangle				
	Qty = 18 Nos.				
(14)	600 mm Circular				
	— do —		do	—	
	Qty = 02 Nos.				
(15)	600 mm x 450 mm rectangular				
	Qty = 04 Nos.				
(16)	Providing & fixing of RCC M15 grade boundary Pillars / guard posts				
	— do —		do	—	
	Qty = 24 Nos.				
(17)	Road marking with hot applied Ready Thermoplastic				
	Compound — do —		do	—	

Continuation

$2 \times 2200 \times 0.100 = 440.00 m^2$

Sch. XLV-Form No. 134

Particulars	Details of actual measurement: No.	L.	B.	D.	Contents of area
(18) Providing & fixing of typical masonry information Sign board with legs					
— do — do —					
Qty = 04 Nos.					
Parapet (Slab Single span)					
(19) Brick masonry work in Cement mortar (1:3) in parapet — do — do —					
2 × 2 × 6.00 × 0.40 × 0.60 = 5.76 m³					
(Slab Single Span)					
(20) Plastering with cement mortar (1:4) on brick work in Sub structure — do —					
— do —					
Side face	2 × 4.00 × 6.00 × 0.60 = 28.80 m²				
Top	2 × 2.00 × 6.00 × 0.40 = 9.60 m²				
front face	2 × 4.00 × 0.40 × 0.60 = 1.920 m²				
	Total = 40.32 m²				
New parapet					
(21) Plastering with Cement mortar (1:4) in Sub-structure					
— do — do —					
(Old parapet walls)					

Continuation 03 Nos.

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Side face					
	3	4.00	0.60	0.60	= 43.20 m²
Top	3	2	6.00	0.40	= 14.40 m²
front face					
	3	4.00	0.40	0.60	= 2.88 m²
				Total	= 60.48 m²
(22) Painting two coats including primer coat on new plastered surface —do—					
					40.32 m² VTMB P-7 Item no-20
					60.48 m² VTMB P-8 Item no-21
					100.80 m²
(23) Planting of trees by road side —do—					
dry = 80 trees					
(24) Providing & erecting direction & Place identification signs —do—					
	6	1.20	0.80		= 5.76 m²

Continuation

03/09/2020 JE

Abstract of cost

9

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Name of work :- Repair of road from R&B road Bijhnagaon to Jamangang.					
Agency :- M/s. Construction Co Contractor Jalukbari.					
Agreement no - 08 WORKS/2019-20					
Agreement Date - 21/07/2020					
Date of Commencement - 10/12/2019					
Date of Completion - 09/09/2020					
Date of measurement :-					

(1) clearing & grubbing of road land — do — do — VTMB P-01

0.44 Hect. @ Rs. 49524.68/Hect

= Rs. 21791.00

(2/2) Dismantling of existing structures like culverts bridges (stone/brick masonry) — do — do — VTMB P-02

5.76 m^3 @ Rs. 339.00/m^3

= Rs. 1953.00

(2/3) Construction of subgrade & earthen shoulder — do — do

Continuation VTMB P-02

2200.00 m^3 @ Rs. 176.75/m^3

= Rs. 388850.00

412594=

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
4/4 Construction of granular Sub-base (Gr-II) -do-do- VTMB P-02					
144.335 m³ @ Rs. 1470.65/m³ = Rs. 212266.00					
5/5 Providing, laying, spreading & compacting of WBM Gr-II -do-do- VTMB P-03					
86.57 m³ @ Rs. 2455.79/m³ = Rs. 212598.00					
6/6 Providing, laying, spreading & compacting of WBM Gr-III -do-do- VTMB P-04					
180.285 m³ @ Rs. 2304.90/m³ L+ 179.44 = Rs. 415539.00					413591-
7/7 Providing & applying bituminous coat with bituminous emulsion (SS-1) -do-do- VTMB P-04					
2403.80 m² @ Rs. 41.08/m² L+ 2392.5 = Rs. 98748.00					98285-
8/8 Providing, laying & Rolling of close graded premix surfacing material -do-do- VTMB P-04					
Continuation					
2403.80 m² @ Rs. 167.05/m² L+ 2392.53 = Rs. 407535.00					

175088/-

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
9/9) Providing & applying tack coat with bitumen emulsion (RS-1) -do- -do- VTMS P-05					
10760.34 m^2 @ Rs. 13.94/m^2 = Rs. 149999.00					
10/10) Providing & laying semi-dense bituminous concrete -do- -do- VTMS P-05					
208.31 m^3 @ Rs. 8097.37/m^3 = Rs. 1686763.00					
11/11) Providing & fixing of RCC M15 grade kerb stone -do- -do- VTMS P-05					
04 Nos. @ Rs. 1899.95/each = Rs. 7600.00					
12/12) 200 m stone -do- -do- VTMS P-06					
09 Nos. @ Rs. 564.75/each = Rs. 5083.00					
13/13) Providing & fixing of retro-reflectorised Cautionary mandatory & informatory Sign board -do- -do-					
600 mm Equilateral triangle					
18 Nos. @ Rs. 3514.82/each = Rs. 63267.00					

Continuation

3663445

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
14/15)		600 mm	Circular		
		VTMB P-06			
02 Nos.	@ Rs. 3615.16/each				
	= Rs. 7230.00				
15/16)	600 mm	x 450 mm	Rectangular		
VTMB P-06					
04 Nos.	@ Rs. 3484.75/each				
	= Rs. 13939.00				
16/17) Providing & fixing of					
RCC MIS grade boundary					
Pillars – do – do –					
from VTMB P-06					
24 ~~28~~ Nos.	@ Rs. 502.50/each				
	= ~~Rs. 12078.~~				
	= Rs 12108.00				
17/20) Road marking with hot					
applied thermoplastic com-					
pound – do – do – VTMB P-06					
440.00 m²	@ Rs. 735.75/m²				
	= Rs. 323730.00				
18/21) Providing & fixing of					
typical MMGS information					
Sign board with logo – do –					
– do – VTMB P-07					
04 Nos.	@ Rs. 9008.69/each				
	= Rs. 36035.00				

Continuation

4056485

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
19/08) Brick masonry work in cement mortar (1:3) in foundation VTMB P-					
	5.76 m³ @ Rs. 5212.54/m³				
			= Rs. 30032.00		
20/21-25) Plastering with cement mortar (1:4) on brick work in Sub structure -do- -do- VTMB P-07					
	40.32 m²				
	60.48 m² VTMB P-08				
Total = 100.80 m² @ Rs. 146.87/m²					
			= Rs. 14806.00		
21/26) Painting two coats on new plastered surface -do- -do- VTMB P-08					
	100.80 m² @ Rs. 95.63/m²				
			= Rs. 9639.00		
22/19) Planting of trees by road side -do- -do- VTMB P-08					
	80 Nos. @ Rs. 799.08				
			= Rs. 63926.00		
23/13) Providing & erecting of					

Continuation

of direction Place identification Signs

4377184--

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	— do	— do —			
	V	MB	P — 08		
5.75 m²	@	Rs.	12050.05/m²		
			= Rs. 69408.70		
		Total	= Rs.		4249161.70 4246592=
Add 12% GST & 1% lab. cess			= Rs.		552391.70 552057=
			= Rs.		4801552.70 4798649=
Less 5.10% as per agreement			= (–) Rs.		244879.00 244731=
			= Rs.		4556673.00 4553918=
DAO / Cxd 1.10.2020					
Prasant Ro 03/09/2020 JE			25.09.2020 AE		

Continuation

Material Statement

15

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
①	E/W – 2200 m³				
②	GSB (GR-II) – 144.335				
26.5 – 9.5 mm – 64.66 m³ @ Rs. 550.85					
9.5 – 2.36 mm – 46.19 m³ @ Rs. 11.53					
2.36 & below – 73.61 m³ @ Rs. 116.85					
③	WBM (GR-II) – 86.57 m³				
63 – 45 mm – 104.75 m³ @ Rs. 427.19					
Stone screening type B (11.2 mm)					
– 23.09 m³ @ Rs. 345.52					
④	WBM (GR-III) – 180.285 m³				
53 – 22.4 mm – 218.14 m³ @ Rs. 458.22					
Stone screening type B (11.2 mm)					
– 43.27 m³ @ Rs. 345.52					
⑤	Prime Coat (SS-1) – 2403.80 m²				
= 2043.23 kg.					
⑥	Tack Coat – 10760.34				
= 2959.09 kg.					
⑦	Bitumen for MSS – 2403.80 m²				
= 4567.22 kg.					
Stone crushed agg – 64.90 m³					
⑧	Bitumen for SDBC =				

Continuation

Ech. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Aggregate –					
9.5 to 4.75 mm – 173.54 m^3 @ Rs. 528.94					
4.75 < below – 124.83 m^3 @ Rs. 200.45 –					
Filler – 9.99 m^3 (@ 7.83 t) @ Rs. 3949.30					
(9) Brick masonry – 5.76 m^3					
Brick – 2880					
Coarse sand – 1.382 m^3 @ Rs. 150.80					
(10) Plastering – 100.50 m^2					
Coarse sand – 24.19 m^3 @ Rs. 150.80					
Transit Rd. 03/09/2020 JE					
25.09.2020 AE					

Continuation

1st & Fc bill
Memo of Payment for Rs 4553918=

17

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
S.D. 5% (Additional S.D. for Tape Plantation 2%)				240181=	
S.Tax 3%				91078=	
L.Cess 1%				45540=	7206671=
CGST 1%				45540=	
SGST 1%				45540=	
Royalty				207571=	
S.Fee				49321=	
By Cheque				3833247=	
	Total			45539188=	
Passed for Rs 45539188= (Four Crore Fifty Five Lakh Thirty Nine Thousand One Hundred Eighteen Only)					

Executive Engineer
E. & D. (W) Division
Jalpaiguri

12/10/2020

12/10/20

Continuation