

KOKARSA MAHADALIT TOLA

Schedule XLV-Form No. 134

~~A~~ E.E. Rwd. W. Div. ^{Tevesubay}
DIVISION

A.E. Rwd. W. Sub. Div. ^{Hulasgan}
SUB-DIVISION

2684-

MEASUREMENT BOOK

E.E. R.W.D. W. Div Jehanabad **DIVISION.**

A.E. R.W.D. W. Sub. Div Hulasganj **SUB-DIVISION**

Measurement Book

No.

Name of officer

Date of first entry

Date of last entry

Schedule PLV Form No. 134

NOTES

REFERENCE TO P. W. D. CODE CHPI-VII
Para 39 & 81

1. In recording details of measurements, the following general instructions should be carefully observed:-
 - (a) Subject to such special instructions 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 taken down in a measurement book Form 23, issued for the purpose, no where else.
 - (c) Each set of measurement should commence with entries starting-
 - (i) In the case of bills for work done:-
 - (a) Full name of work 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 then 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 incumbent 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 recorded continuously in the measurement book No blank pages may be left and no page be turned out. Any page left inadvertently 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, if 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 officer ordering the cancellation or by reference 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 up to date.

1

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item no (2/28)	Providing and fixing of typical 100 cm x 100 cm sign board with cage				
	— do —	— do —			
	221	—			2 nos
Item no (3/1)	Providing & fixing of work benchmark pillars 0 m & 0.5 m of reference pillars				
	— do —	— do —			

work by person = 2 x 1 =	2 nos
Area between = 9 x 1 =	9 nos

Item no (5/6)	Construction of embankment even material obtained from borrow pits — do — do —				
CH	Area	Mean Area	Distance	—	Q + y
0	1.103	—	—		
50	0.860	0.982	50	—	49.08 m ³
100	0.543	0.702	50	—	35.08 m ³
150	0.542	0.543	50	—	27.13 m ³
200	0.432	0.487	50	—	24.35 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
250	0.420	0.426	50	—	21.30 m ²
300	0.240	0.330	50	—	16.50 m ²
350	0.482	0.311	50	—	18.05 m ²
400	0.542	0.512	50	—	25.60 m ²
450	0.548	0.545	50	—	27.25 m ²
500	0.424	0.486	50	—	24.30 m ²
550	0.214	0.319	50	—	15.95 m ²
600	0.542	0.378	50	—	18.90 m ²
650	0.473	0.508	50	—	25.38 m ²
700	0.898	0.686	50	—	34.28 m ²
750	0.563	0.731	50	—	36.53 m ²

800	0.189	0.376	50	—	18.80 m ²
850	0.356	0.273	50	—	13.63 m ²
900	0.564	0.460	50	—	23.90 m ²
950	0.986	0.775	50	—	38.75 m ²
1000	0.874	0.930	50	—	46.50 m ²
1050	0.964	0.919	50	—	45.95 m ²
1100	0.864	0.914	50	—	45.70 m ²
1150	0.986	0.925	50	—	46.25 m ²
1200	0.921	0.954	50	—	47.68 m ²
1250	0.456	0.689	50	—	34.43 m ²
1300	0.412	0.434	50	—	21.70 m ²
1350	0.342	0.377	50	—	16.85 m ²
1400	0.348	0.345	50	—	17.25 m ²
1450	0.432	0.330	50	—	19.50 m ²

Continuation

Item No	For 100 m lead-
(15/7)	
	$0.40 \times 1073.63 = 429.45 \text{ m}^3$
<u>Q</u>	
3/10/2020	
2-6	
Date of Entry →	03/11/2020
Item No	Earthwork in excavation
(1/29)	for structure as per drawing
— do —	do —
For 1000 mm g dia H.P culvert	
— " —	— " —

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
At Clearance $\rightarrow 1400$					
H.W.	2	6.450	1.400	1.500	27.09 m ³
Rebar pipe	1	4.850	1.530	0.365	2.71 m ³
				Total	29.80 m ³
at Clearance - 950					
H.W.	2	6.450	1.400	1.500	27.09 m ³
Rebar pipe	1	4.850	1.530	0.365	2.71 m ³
				Total	29.80 m ³
				Total	59.60 m ³

Item No providing 14-15 p.c.c (1:2:3)
(2/31) as per drawing curve in foundation
do do do

Head wall location:-

$2 \times 2 \times 9.900 \times 1.150 \times 0.150$	2.69 m^3
Rebar pipe: $2 \times 1 \times 5.311 \times 1.130 \times 0.250$	3.00 m^3
Total:	5.69 m^3

Item No Earth work in excavation
(3/29) for structure as per
drawing - do - do -

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
at damage 1600 sq. ft. slab.					
curves + 1 →					
both side abutment →					
	2	9.300	3.200	1.800	107.14 m ³
All four side Return wall					
	4	1.257	2.895	1.800	26.41 m ³
				Total	133.55 m ³
Item no providing M-15 (P.C.C.-1:1.5:2.5)					
(4/31) as leveling course in foundation					
— do — do —					
Abutment					
	2	9.300	3.200	0.200	11.90 m ³
Return wall	4	1.257	2.895	0.200	2.93 m ³
				Total	14.83 m ³
Q					
03/11/2020					
JRE					
Date of entry → 03/11/2020					
Item no					
Boxen masonry work C.M					
(1/92) (11/9) in foundation completed					
— do — do —					

Continuation

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Cross wall U/S and D/S					
2 x 0.600 x 1.000 x 1.800					2.16 m ³
2 x 2.100 x 1.00 x 1.800					7.56 m ³
Flooring U/S and D/S					
1 x 8.200 x 0.600 x 0.280					1.23 m ³
1 x 8.200 x 2.100 x 0.280					4.31 m ³
				Total =	54.78 m ³
Item no Sand filling in foundation					
(9/30) trenches as per drawing					
— do — do —					
Below the Deck slab					
1 x 8.900 x 3.600 x 0.100					3.20 m ³
Item no providing M-15 (P.C.C-					
(5/31) 1:2:5:5) as levelling course					
in foundation trench — do — do —					
floor under Deck slab —					
1 x 8.900 x 3.600 x 0.150					4.81 m ³
Cut of wall, U/S and D/S —					
2 x 10.200 x 1.00 x 0.150 =					3.06 m ³
Cross wall					
2 x 0.600 x 1.000 x 0.150 =					0.18 m ³
2 x 2.100 x 1.00 x 0.150 =					0.63 m ³
				Total =	8.68 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item No	Providing and laying R.C.C				
(6/43)	ND-9 for culverts —				
—	do	—	do	—	—
CL-950	3	2.50	=		7.50m
CL-1400	3	2.80	=		7.80m
				Total =	15.00m
Item No	plastering with C.M. on				
(7/44)	(1:4) on brick work —				
—	do	—	do	—	—
Outer wall	2	6.00	0.20	—	26.40m ²
Inner wall	2	6.00	0.60	—	7.20m ²
Top =	2	6.00	0.40	—	4.80m ²
Grd =	4	0.800	2.500	—	7.04m ²
End p.p. =	4	0.400	1.200	—	1.92m ²
Less for door	2	0.780	1.250	(-)	2.38m ²
				Total =	44.98m ²
for 2 nos.	2	44.98	=		89.96m ²
Item No	providing 1.5mm cement				
(8/45)	forming, including, curing				
carriage of water etc	—	do	—	do	—
Top =	2	6.00	0.40	—	4.8m ²
End =	4	0.400	1.200	—	1.92m ²
Inner hole =	2	6.00	0.60	—	7.20m ²

Continuation

Total = 13.92m²

Continuation

11
Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
— de — do —					
Brick work in abutment					
		2 x 8.00 x 1.40 x 2.800			62.72 m ³
Return wall		4 x 1.80 x 1.00 x 3.20			25.22 m ³
				Total =	87.94 m ³
Item no	Supplying, fitting and placing				
(3/37)	F.R.S.D bar reinforced in				
	super structure as per contract drawn.				
— de — do —					

In abutment cap - (700mm wide bottom).					
Main Bar - 12mm ϕ ,					
10 Nos x 7.690 x 0.89 kg/m = 68.44 kg.					
Ring Bar 8mm ϕ , 150mm c/c.					
— x — Both sides.					
51 Nos x 1.680 m x 0.39 kg/m = 33.42 kg.					
Dort wall					
— x —					
Main Bar, 12mm ϕ , 150mm c/c B.S					
2 x 51 x 0.640 x 0.89 kg/m = 58.09 kg					
Longitudinal Bar, 10mm ϕ					
Both sides, 3 Nos,					
2 x 3 x 7.690 x 0.62 kg/m = 28.61 kg					
Total = 168.56 kg.					

Continuation

12/11/2020

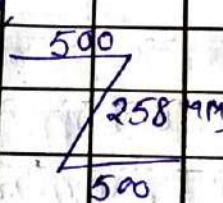
2.5

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Date of Entry	1	26/11/2020			
Item no	Reinforced cement concrete				
(1/34)	CM-20 in substructure				
complete as per drawing - do					
do					
abutment Cop:-					
	2x7.500x0.700x0.200				2.10 m ³
drift wall	2x7.500x0.300x0.300				1.66 m ³
Return wall	4x2.200x0.400x0.150				0.53 m ³
Coping					
				Total	4.29 m ³

Item no	construction of granular				
(2/9)	sub-base by providing coarse				
graded material - do - do					
	6x30x0.200				
Chairs	0 to 1750 M + 10 M +				
	58x30x4.05x0.200				1409.4 m ³
	1x20x4.05x0.200				16.20 m ³
				Total	1425.60 m ³

Item no	supplying fitting and				
(3/39)	placing HYSD Bar reinforcement				
in abutment and (2000 steel - M-25)					
as per drawing and technical					
specification - do - do					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Main Bar, 6mm ϕ , 105 C/C.					
$72 \times 4.550 \times 1.58 \text{ kg/m} = 517.6019$					
and, top main bar.					
16mm ϕ 105 C/C =					
$72 \times 4.550 \times 1.58 \text{ kg/m} = 517.6019$					
Distribution Bar, 2mm ϕ					
200 C/C; both top and bottom,					
$2 \times 38 \times 7.50 \times 0.89 \text{ kg/m} = 507.319$					
mountain the steel					
Z bar.					
16 mm ϕ					
					
$16 \text{ Nos} \times 1.258 \times 1.58 \text{ kg/m} = 31.8019$					
Link bar, 12 mm ϕ					
					
Spacer, 105 mm and, 200mm C/C					
Total No = $72 + 38$					
= 120 Nos					
$120 \times 0.410 \times 0.89 \text{ kg/m} = 43.7819$					
Total = 1618.0819.					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item No (4/36) Providing and laying reinforced cement concrete in superstructure (Deck slab - M-25) as per drawing and technical specification - do - do -					
Deck slab -					
		1 x 4.60	7.500		
			0.370		12.76 m ³
Item No (5/4) Excavation for roadway in soil, using manual means for carrying of cut earth - do - do -					
Grades B.E.S Road.					
2 x 03 x 30.00 x 0.625 x 0.100					11.25 m ³ 48.75 m³
Item No (6/9) Construction of granular sub-base by providing coarse graded material - do -					
(width p-7)					
2 x 03 x 30.00 x 0.625 x 0.100					11.25 m ³ 48.75 m³
B.E.S POT					
1 x 10 x 2.00 x 0.100					2.00 m ³
1 x 5.00 x 1.8 x 0.100					0.90 m ³
1 x 8.00 x 1.2 x 0.100					0.96 m ³
1 x 3.00 x 1.4 x 0.100					0.42 m ³
1 x 8.00 x 2.00 x 0.100					1.60 m ³
1 x 15.00 x 1.8 x 0.100					2.70 m ³

Continuation

Total = ~~57.35 m³~~
19.83 m³

26/11/2022
D.E

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Date of Entry: → 04/12/2020					
Item No	providing, laying, spreading				
(1/10)	and compacting stone aggregate of specific sizes of water bound macadam - do - do -				
In B.E.S P.T. Ch-0 to 600m	— x — x —				
					$20 \times 30.00 \times 3.75 \times 0.075 = 168.75 m^3$
Ch-600 to 1200					$20 \times 30.00 \times 3.75 \times 0.075 = 168.75 m^3$
Item No	Circular sub-base by				Total: $337.5 m^3$
(2/3)					
providing well graded material -					
— do — do —					
In B.E.S P.T. Ch-					
G.S.B. in Pat Potholes:-					
					$1 \times 10.00 \times 2.10 \times 0.10 = 2.10 m^3$
					$1 \times 15.00 \times 2.10 \times 0.10 = 3.15 m^3$
					$1 \times 8.00 \times 1.80 \times 0.10 = 1.44 m^3$
					$4 \times 1.4 \times 1.6 \times 0.10 = 0.90 m^3$
					$5 \times 1.2 \times 1.00 \times 0.10 = 0.60 m^3$
					$1 \times 15.00 \times 2.20 \times 0.10 = 3.30 m^3$
Edge P.T.					
					$2 \times 30.00 \times 1.00 \times 0.10 = 6.00 m^3$
					$1 \times 20.00 \times 2.00 \times 0.10 = 4.00 m^3$
					Total: $21.49 m^3$

Continuation

04/12/2020.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Abstract of cost					
— x — x —					
Date of abstract: → 30/12/2020.					
Name of work: → Construction of					
Road from Bhaki Bigla toll to kokarda					
Mahabali Tola in Hulgaganj, under					
PHDSY, Dist. Jalandhar (Bihar) -					
Name of contractor: → Sri Alok Kumar.					
Vill → Birra, Post - Dharwal High.					
P.S. - Hulgaganj, Jalandhar					
Agreement No. →					
Date of Agreement = 18/08/2020 -					
Date of completion of work					
as per agreement — 17/08/2021.					
But Actual Date of Start: → 18/08/2020.					
Actual Date of completion: → work is in					
progress -					
Date of abstract: → 30/12/2020.					
Item No providing and yixm					
(1/1) of working benchmark					
pillars - do - do -					
V.T.M.B. P. No: → 02.					
2021					
2020 @ Rs 3595.97/No. Rs 7192200.					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item No (2/2)	Prov ⁿ & fixing of working benchmark pillars as per drawing and correction of G.I. — do —				
V.T.M.B. P.No:-	82,				
	09 Nos,				
@ Rs 1635.50 / Nos —	Rs 14719.50				
Item No (3/3)	Clearing and grubbing Eng Road Land —				
— do —	— — — —				
V.T.M.B. P.No:-	01,				
	1.2 Hec.				
@ Rs 51161.75 / Hec —	Rs 61394.00				
Item No (4/4)	Excavation for Roadway in soil using manual means for carrying of cut earth — do — do —				
V.T.M.B. P. No:-	14,				
	11.25 m ³				
@ Rs 74.16 / m ³ —	Rs 834.00				
Item No (5/6)	Construction of embankment with material obtained from borrow pit.				

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
create a lift up to 1.5 m					
— do — do —					
V.T.M.B, P.No. - 04,					
					644.20 m ³
@ Rs 188.05/m ³ —					Rs 121142.00
Item no Construction of					
(6/7) embankment with					
material obtained from					
horizontal pit — do —					
— do —					
for 100 m lead.					
V.T.M.B, P.No. - 04,					
					429.45 m ³
@ Rs 170.62/m ³ —					Rs 73228.00
Item no Construction of					
(7/8) subgrade and surface					
Shoulder — do — do —					
V.T.M.B, P.No. - 10,					
					4410 m ³
@ Rs 235.98/m ³ —					Rs 10,40,672.00
Item no Granular sub-base					
(8/9) with coarse graded					
material for grading & material					
— do — do —					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
V.T.M.B. P.NO-12,					
			1425.60 m ³		
P.NO:- 14,			19.83 m ³		
P.NO 15,			21.49 m ³		
Total = 1466.92 m ³ .					
@ Rs 1837.41/m ³ — Rs 26,95,333.20					
Item no					
WB.M-Grading-3,					
(9/10) providing, laying, spreading and compacting stone					
aggregate of specific size of					
water bound macadam —					
— do — do —					
V.T.M.B. P.NO:- 15,					
			168.75 m ³		
P.NO:- 16,			148.50 m ³		
Total = 317.25 m ³ .					
P.NO: 15 =			168.75 m ³		
Total = 486.00 m ³ .					
@ Rs, 2359.69/m ³ — Rs 11,46,809.20					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item No (10/14) Cement concrete pavement construction of uncracked plain cement concrete pavement thickness, as per design - do - do - V.T.M.B, P. NO. 1 - 16. 216.00 m ³ @ Rs 5034.84/m ³ — Rs 10,98,325.00					
Item No (11/28) providing and fixing of typical M.C.S. information sign board with logo as per M.O.R.D. specification and drawing - do - do - V.T.M.B, P. NO. 1 - 02, 02 nos. @ Rs 9132.53/nos — Rs 18265.00					
Item No (12/29) Earthwork in excavation for structure as per drawing and technical sheets — do — do — V.T.M.B, P. NO. 1 - 08, 54.78 m ³ . @ Rs NO. 1 - 06, 133.55 m ³ . P. NO. - 05, 59.60 m ³ .					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	B/F, Total = 247.93m ²				
@ Rs 294.73/m ²					Rs 73072.00
Item No (13/30)	sand filling in foundation trenches				
- as per drawing - do -					
- do -					
V.T.M.B. P.No! - 08.					
				3.20m ³	
@ Rs, 428.00/m ³					Rs 15302.00
Item No (14/31)	providing M-15 (1:2:5:5) P.C.C on levelling course - do - do -				
V.T.M.B. P.No! - 08.					
				8.68m ³	
P.No! 06 -				14.83m ³	
P.No! - 05 -				5.69m ³	
				Total = 29.20m ³	
@ Rs, 4208.80/m ³					Rs 122892.00
Item No (15/32)	BRICK masonry work in C.M (1:4) in foundation complete				

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
excluding plastering & finish					
as per drawing -					
do do					
V.T.M.B. P.No. - 11,					
				87.99 m ³	
P.No. - 07,				159.81 m ³	
				59.33 m ³	
@ Rs 5662.53					3,35958.00
Rs 5617.57/m ³ — Rs					3,33,290.00
Item no Brick-masonry					
(16/33) work C.M (1:1.4) in					
substructure and kerb-cum					
as per drawing - do					
do do					
V.T.M.B. P.No. - 11,					
				87.99 m ³	
@ Rs 5820.12/m ³ — Rs					5,12,112.00
Item no Reinforced cement					
(17/34) concrete M-20 in					
substructure - do - do -					
V.T.M.B. P.No. - 12,					
				4.29 m ³	
@ Rs, 4959.67/m ³ — Rs,					21277.00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item No	R.C.C M-25 in				
(18/36)	Deck - slab, over				
1 layer, reinforced, cement-					
concrete - in super structure -					
— do — do —					
V.T.M.B.	P. NO: - 14,				
	12.76 m ³ .				
@ Rs 6017.72/m ³	—				Rs 76786=00
Item No	supplying lifting				
(19/37)	and placing HYSD Bar				
reinforced in super-structure					
complete as per drawing					
— do — do —					
V.T.M.B.	P. NO: - 11,				
	188.56 kg				
	P. NO: - 12, 1425.60 kg				
Total = 1614.16 kg					
= 1.61 M.T					
@ Rs 51407.87 / M.T	—				Rs 82767=00
Item No	Brick masonry work				
(20/38)	in C.M (1:4) in ground				
complete as per drawing - do					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
V.T.M.B. P. No. 07,					
		98.08 m ³ .			
@ Rs 5617.57/m ³ —					Rs 5509712
Item No					
(21/43) Providing and laying					
R.C.C No-3 pipe —					
— do — do —					
V.T.M.B. P.No-09,					
		15.00 m			
@ Rs 3632.88/m —					Rs. 544920
Item No					
(22/44) (1.4) on brick work					
— do — do —					
V.T.M.B. P.No-09,					
		89.96 m ²			
@ Rs 146.68/m ² —					Rs 13,195200
Item No					
(23/45) Providing 1.5 mm					
Cement putty, curvy					
Carriage of work etc —					
V.T.M.B. P. No. 10,					
		27.84 m ²			
@ Rs. 45.49/m ² —					Rs- 1266200

Continuation

$\frac{10881.91 \times 0.05}{\frac{0.05}{30 \cdot 12 \cdot 2020}} =$	$(-) 174,287 = 00$
$\frac{10881.91}{30 \cdot 12 \cdot 2020}$	$713.151 = 89,50732 = 00$
$\frac{00}{30/12/2020}$	$\frac{00}{30/12/2020}$
$30/12/2020$	$A.E.$

⑦ soil = 5224.82 m^3 .

④ Gr. S.B, 53 to 9.5 = 998.822 / 516.42

$$24.5 \pm 0.9 \text{ g} =$$

$$9.5 \times 2.36 = 375.53 \text{ m}^3 (411.53)$$

621.000	2.36 mm	2	563.29 m ³	[150.80]
---------	---------	---	-----------------------	----------

718-31-

$$53 \text{ mm to } 20.42 \text{ m} = 588 \text{ m}^3 (458.22)$$

Stone Scoring = 116.64 m^3 (345.52)

(5) Bricks = 1,22,700 Nos.

Continuation