

10/11/2023

Schedule XLV-Form No. 134

Executive Engineer

R.W.D. Works Division

Specified

DIVISION

SUB-DIVISION

~~W.H.C.~~

MEASUREMENT BOOK

3861

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.	
	1st	omatic Bill			
I.W.—	Construction of Road &c. O. Work with Maintenance for Bikhampur R. F. O. Road to Kurmi Tilla under Parihar Block				
Reg. No.—	S.B.R.—58 / 2023-24				
Agency!—	Mandy Rai				
D.O.S.!—	30.12.023				
D.O.C.!—	29.12.024				

Record Entry/ Measurement

① Earth work in excavation for foundation

$$H.W. = 2 \times 6.45 \times 1.40 \times 1.50 = 27.09 M^3$$

$$\begin{aligned} \text{Belt @ } & 1 \times 4.85 \times 1.53 \times 0.365 = 2.708" \\ \text{Pipe} - & = 29.798 M^3 \end{aligned}$$

② Dr. PCC M15 in levelling course

$$2 \times 6.45 \times 1.40 \times 0.15 = 2.709 M^3$$

$$\begin{aligned} 1 \times 4.93 \times 1.53 \times 0.25 &= 1.886" \\ &= 4.595 M^3 \end{aligned}$$

Signature Date
10/1/24 10/1/24

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
① DPC PCC Mixing Substructure					
Walls - $2 \times 6.10 \times 0.825 \times 3.10 = 32.083 m^3$					
Roof - $2 \times 6.10 \times 0.43 \times 1.0 = 4.89 m^3$					
Floor - $2 \times \frac{3.10}{2} \times (0.23)^2 \times 0.522 = 0.1678 m^3$					
					$\approx 35.452 m^3$
② DPL RCC N P C 1000 mm dia concrete Pipe					
		$3 \times 2.50 = 7.50 m$			
③ Painting on concrete walls					
Walls - $2 \times 6.10 \times 0.40 = 4.88 m^2$					
Floor - $4 \times 6.10 \times 0.60 = 14.52 m^2$					
Door - $2 \times 2 \times 0.40 \times 0.60 = 0.96 m^2$					
					$= 20.48 m^2$

Initial Survey
1st 1/24 18/11/20

Record Entry

① Earth work in excavation fund

$$\text{Bottom} - 2 \times \frac{4.55}{2} \times 2.133 \times 1.60 = 31.056 m^3$$

$$\text{R. wall} - 2 \times 1.767 \times 1.93 \times 1.60 = 10.913 m^3$$

$$\text{Floor under} \\ \text{Deck slab} - 1 \times 7.70 \times 1.20 \times 0.25 = 2.31 m^3$$

$$\text{Add 10% extra for slope} = \frac{= 44.28 m^3}{44.428 m^3}$$

$$= 48.707 m^3$$

② Sand filling in fund trench

— do — 61 t.

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
1x7.70	$\times 1.62 \times 0.10 = 1.254 m^3$				
	<i>Surveyor</i>	<i>Surveyor</i>			
	20/1/24	20/1/24			
	7.2	7.2			

Record Entry

① Br. Pcc M 15 in open foundation
$2 \times 9.55 \times 2.133 \times 0.20 = 3.882 m^3$
$2 \times 1.767 \times 1.93 \times 0.20 = 1.364 m^3$
$1 \times 7.70 \times 1.736 \times 0.15 = 2.008 m^3$
$= 7.251 m^3$

Surveyor *Surveyor*
 20/1/24 21/1/24

Record Entry

① Brick masonry in C.M (1:4) in foundation Below G.L.
A.L - $2 \times 4.15 \times 1.63 \times 3 \times 1.40 = 18.975 m^3$
R.WALL - $2 \times 1.757 \times 1.43 \times 1.40 = 7.0675 m^3$
$= 26.05 m^3$

② Brick masonry (1:4) in substructure
Above G.L.
A.L - $2 \times 3.75 \times 0.917 \times 1.30 = 8.936 m^3$
R.WALL - $2 \times 1.984 \times 0.665 \times 1.59 = 4.195 m^3$

Surveyor *Surveyor*
 18/1/24 28/1/24

4
Soh. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	H	A	B	C	
① Supply fitting & placing H.I.Y. S. D. Bar					
Alum. paint - surface	2.75	0.75	0.25		
8mm Ø! - 2x 10	2.75	0.75	0.25	= 57.75 kg	
	2.75	0.75	0.25	= 25.25 "	
				= 82.00 kg	
② P.I.L. Peep (cm ²) in subtracting area					
Area - op	2x 3.75 x 0.75 x 0.25 = 1.05 m ²				
Area - wall	2x 3.75 x 0.15 x 0.25 = 0.675 m ²				
Area - 2x 2.00 x 0.44 x 0.15 = 0.264 m ²					
				= 2.034 m ²	
③ Bitumont painting over top surface					
	2x 3.75 x 0.70 = 5.25 m ²				
	2x 3.75 x 0.24 = 1.80 "				
				= 7.05 m ²	
	Wooden Human				
	6/2/24				
	6/2/24				
	Record Entry				
① Supply fitting & placing H.I.Y. S. D. Bar					
Deck slab! -					
16mm Ø! - 51x	2.20	x 1.58	= 177.27 kg		
12mm Ø! - 12x	7.50	x 0.89	= 80.10 "		
12mm Ø! - 51x	2.20	x 0.89	= 99.86 "		
12mm Ø! - 12x	7.50	x 0.89	= 80.10 "		
			= 37.32 kg.		

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
② P.I.L Rcc m25 in deck slab					
	1X 7.50 X 2.28 X 0.24 = 4.104 M ³				
③ Filling joints Sealing compound.					
	1X 7.50 = 7.50 M ³				
	<i>String</i>	<i>Front</i>			
	<i>total 1.24</i>	<i>10/124</i>			
	Record Entry				
① Brick Masonry(11.3) in parapet wall					
	2X 4.0 X 0.40 X 0.60 = 1.92 M ³				
② Pr. 15mm thick Cement plaster(1.4)					
	2X 0.917 X 1.30 = 2.383 M ²				
	1X 7.50 X 1.30 = 9.75 M ²				
	4X 0.665 X 1.59 = 4.229 M ²				
	4X 2.084 X 1.30 = 10.834 M ²				
	4X 2.30 X 0.29 = 2.668 M ²				
	2X 8.0 X 0.60 = 9.60 M ²				
	1X 8.0 X 0.40 = 3.20 M ²				
	2X 0.40 X 0.60 = 0.48 M ²				
	= 43.145 M ²				
③ Pr. 1.5mm Cement running					
	2X 2X 4.0 X 0.60 = 9.60 M ²				
	2X 4.0 X 0.40 = 3.20 M ²				
	2X 0.40 X 0.60 = 0.48 M ²				
	= 13.28 M ²				

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
⑤ Br. width hole					
	$2 \times 6 + 4 \times 4 = 28.0 \text{ m}^2$				
	<i>Spiral</i> <i>islet</i>	<i>Outer</i> <i>15.27 m</i>	<i>Inner</i> <i>7.8924 m</i>		
	<u>Record Entry</u>				
⑥ Setting out pillars					
	$= 0.502 \text{ km}$				
⑦ clearing & grubbing Round land.					
	$1 \times (30.0 + 23.0) \times 3.50 = 185.50 \text{ m}^2$				
	$1 \times (30.0 + 26.0) \times 3.50 = 156.0 \text{ m}^2$				
	$= 1746.50 \text{ m}^2 = 0.175 \text{ Ha.}$				
⑧ Excavating soil for road work					
	$2 \times (30.0 + 23.0) \times 0.525 \times 0.10 = 5.56 \text{ m}^3$				
	$2 \times (4 \times 30.0 + 19.0) \times 0.525 \times 0.10 = 14.60 \text{ m}^3$				
	$= 20.16 \text{ m}^3$				
⑨ Excavating roadway by manual method.					
	Qty. Samoal g. NO. (3) = 20.16 m^3				
⑩ Construction of embankment with roadway cutting					
	Qty. = $60 \times 4 \times 9.50 \times 3 = 12.10 \text{ m}^3$				
⑪ Construction of embankment with loose load.					
	$2 \times 4 \times 30.0 \times 1.0 \times 0.5 \times 0.70 = 176.40 \text{ m}^3$				
	$2 \times 4 \times 30.0 \times 0.90 \times 0.5 \times 0.70 = 129.60 \text{ m}^3$				
	$2 \times 1 \times 25.0 \times 1.0 \times 0.5 \times 0.70 = 35.0 \text{ m}^3$				
	$= 341.0 \text{ m}^3$				
	<i>To be continued</i>				
	<u>Continuation</u>				

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
Record Entry					
Cont'n of Surveyor's Note Book					
$10 \times 30.0 \times 5.25 \times 0.30 = 472.50 \text{ m}^3$					
$1 \times 7.0 \times 5.25 \times 0.30 = 11.03 \text{ "}$					
$= 483.53 \text{ m}^3$					

Surveyor	Examiner
25/2/24	25/2/24

Record Entry -
Cont'n of G.S. B.G. I

of file correction:-
$4 \times 1.50 \times 1.50 \times 0.10 = 0.90 \text{ m}^3$
$6 \times 2.80 \times 1.90 \times 0.10 = 3.12 \text{ "}$

2 $\times (30.0 + 23.0) \times 0.525 \times 0.10 = 5.56 \text{ "}$
2 $\times (4 \times 30.0 + 19.0) \times 0.525 \times 0.10 = 14.60 \text{ "}$
Full width
$1 \times (30.0 + 23.0) \times 3.75 \times 0.10 = 19.88 \text{ "}$
$1 \times (4 \times 30.0 + 19.0) \times 3.75 \times 0.10 = 52.13 \text{ "}$
Earth portion - $(10 \times 30.0) \times 3.75 \times 0.20 = 225.0 \text{ "}$
$1 \times 7.0 \times 3.75 \times 0.20 = 5.25 \text{ "}$
$= 326.51 \text{ m}^3$

Surveyor	Examiner
10/3/24	10/3/24

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1. P.I.L. spreading & Compacting B.M. Gr III					
130.0+23.0) X 37.5 X 0.075 = 14.30 m ³					
14 X 30.0+26.0 X 37.5 X 0.075 = 15.44 "					
					= 140.34 m ³

*Sugar cane
12/14/24*

Abstract of Cost

1. P.I.P working Bench mark

QH. videtm BIP-6 = 0.502 km

@ Rs 30581.56 per km = Rs 15352.0

2. clearing & grubbing Road Land.

QH. videtm BIP-6 = 0.175 Ha.

@ Rs 75573.34 per ha = Rs 13225.0

3. Excavation godway using manual labour

QH. videtm BIP-6 = 20.16 m³

@ Rs 186.85 per m³ = Rs 3767.0

4. Contract earth embankment with godway cutting

QH. videtm BIP-6 = 12.10 m³

@ Rs 61.52 per m³ = Rs 744.0

Continuation = Rs 33088.0

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
					Rs 33038.0
5. <u>Excess of side</u> <u>High embankment</u>					
<u>Qty. vide T.M.B.I.P - 6 = 20.16 m³</u>					
<u>@ Rs 103.96 per m³ = Rs 2036.0</u>					
6. <u>Contra q. embankment with loose load</u>					
<u>Qty. vide T.M.B.I.P - 6 = 341.0 m³</u>					
<u>@ Rs 140.15 per m³ = Rs 47731.0</u>					
7. <u>Contra q. subgrade & then shoulder</u>					
<u>Qty. vide T.M.B.I.P - 7 = 483.53 m³</u>					
<u>@ Rs 222.50 per m³ = Rs 107585.0</u>					
8. <u>Contra q. G.S.B. Gr T</u>					
<u>Qty. vide T.M.B.I.P - 7 = 26.51 m³</u>					
<u>@ Rs 4263.68 per m³ = Rs 1382134.0</u>					
9. <u>PIL, spreading W.B.M. Gr TTT</u>					
<u>Qty. vide T.M.B.I.P - 8 = 140.34 m³</u>					
<u>@ Rs 5630.20 per m³ = Rs 798563.0</u>					
10. <u>Forth working excavation for found</u>					
<u>Qty. vide T.M.B.I.P - 1 = 9.798 m³</u>					
<u>@ Rs 427.09 per m³ = Rs 12726.0</u>					
11. <u>PIL pccm 5 in levelling course</u>					
<u>Qty. vide T.M.B.I.P - 1 = 4.595 m³</u>					
<u>@ Rs 8176.13 per m³ = Rs 37569.0</u>					
12. <u>Pc. pcc/ACM 20 in sur. structure</u>					
<u>Qty. vide T.M.B.I.P - 2 = 35.409 m³</u>					
<u>@ Rs 9434.44 per m³ = Rs 334064.0</u>					
Continuation					= Rs 2765616.0

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
13					R 765616.0
25	PIL RC CONP 3.1000 m width 11 m high Pipe.				
	Q ⁴ .vide TM B1P- 2=7.50m				
14		R 7295.33 per m >R 54715.0			
26	Painting on port port wall				
	Q ⁴ .vide TM B1P- 2=20.48 m ²				
	R 136.22 per m ² >R 2790.0				
5					
7.	Earthwork in excavation for structure.				
	Q ⁴ .vide TM B1P- 2=48.707 m ³				
	R 427.09 per m ³ >R 20802.0				
6					
8.	Sand filling in found' trench				
	Q ⁴ .vide TM B1P- 3=1.254 m ³				
17		R 565.68 per m ³ >R 709.0			
29	PIL PCC M.5 in levelling course				
	Q ⁴ .vide TM B1P- 3=7.251 m ³				
	R 8176.13 per m ³ >R 59285.7				
18					
30.	Brick masonry (1:4) in foundation				
	Q ⁴ .vide TM B1P- 3=26.05 m ³				
	R 7343.33 per m ³ >R 191294.0				
19					
31.	Brick masonry (1:4) in substructure				
	Q ⁴ .vide TM B1P- 3=13.13 m ³				
	R 7690.41 per m ³ >R 100983.0				
20					
32	PIL PCC Rcc M20 in substructure.				
	Q ⁴ .vide TM B1P- 4=2.034 m ³				
	R 9434.44 per m ³ >R 19190.0				
	Continuation >R 3215384.0				

11
Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				BIP>R _b	321538M ²
1. <u>Plastering on brick masonry in structure</u>					
2. <u>Brick masonry painting over int surface</u>					
3. <u>Hy. wide TM BIP- 4 = 7.05 M²</u>					
				@ Rs 19. 99 per M ²	> Rs 141.0
4. <u>RCC M25 indoor slab</u>					
5. <u>Hy. wide TM BIP- 5 = 4.104 M³</u>					
				@ Rs 106.90.21 per M ³	> Rs 43873.0
6. <u>Supply, fitting & placing of SD bars</u>					
7. <u>Hy. wide TM BIP- 4 = 82.99 kg</u>					
				TMRBIP-4 = 437.33 "	
					= 520.32kg.
				= 0.52 M ³ @ Rs 81798.40 per M ³	> Rs 42535.0
8. <u>Pr. of filling joint reading compound</u>					
9. <u>Hy. wide TM BIP- 5 = 7.50 M</u>					
				@ Rs 59.16 per M	> Rs 444.0
10. <u>Brick masonry C1:3Y in parapet</u>					
11. <u>Hy. wide TM BIP- 5 = 1.92 M³</u>					
				@ Rs 7941.90 per M ³	> Rs 15248.0
12. <u>Pr. 15mm thick C.P. (1:4)</u>					
13. <u>Hy. wide TM BIP- 5 = 4.315 M²</u>					
				@ Rs 562.18 per M ²	> Rs 24255.0
14. <u>Pr. 15mm Cement Furring</u>					
15. <u>Hy. wide TM BIP- 5 = 13.28 M²</u>					
				@ Rs 65.54 per M ²	> Rs 870.0

Continuation : Rs 3342750.0

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					Rs 3342750.0
8. R-Brick masonry in walls					
Qty. vide TM B/P - 6228.0 NRS					
(@ Rs 236.04 each)					Rs 6609.0
					Rs 3349359.0
Add) 1% L.C.					Rs 33494.0
Add) 18% GST					Rs 602885.0
Add) 10% S.F.					Rs 34393.0
					Rs 4020131.0
Less 1.1% Below					Rs 44623.0
					Rs 3975508.0

Swarnak
12/4/24

18umer
12/4/24
1.2

C.S.P
Ami
29/04/24

conducting sand & c works with departmental
to Kanchanaburi R.C.S. road/station, hole

Schedule XLV-Form No. 134

Executive Engineer

R.W.D. Works Division

Station

DIVISION

SUB-DIVISION

W.W.G.L.

MEASUREMENT BOOK

3862

Name of Work-

Situation of Work-

Agency by which work is executed-

Date of Measurement-

No. and Date of agreement

(These four boxes should be completed at the commencement of the measurement relating to each work)

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
		1 km & 10 Rill			
N.W.-Construction of Road with Maintenance for R.C.D. Road from Tala to Kuru Talai Shapka.					
Agt.-No:-	S.A.N - 58/	2023-24			
Agency:-	Mangal Puri				
D.O.S.: -	30.12.023				
D.O.C.: -	29.12.024				

Recording of measurement

1) D.P.F working Bench mark

$$= 0.65 \text{ km.}$$

2) clearing & grubbing Road land.

$$91 \times 30 \cdot 0 \times 3 \cdot 50 = 2205 \cdot 0 \text{ m}^2$$

$$1 \times 20 \cdot 0 \times 3 \cdot 50 = 70 \cdot 0 \text{ "}$$

$$= 2275 \cdot 0 \text{ m}^2 = 0 \cdot 23 \text{ Ha.}$$

3) Excavating soilings using manual means

$$2 \times (30 \cdot 0 + 20 \cdot 0) \times 0 \cdot 525 \times 0 \cdot 10 = 5 \cdot 25 \text{ m}^3$$

4) Constrg on bankment from Road cutting

$$\text{Qty.} = 65 \cdot 4 - 9 \cdot 10 \cdot (3) = 3 \cdot 15 \text{ m}^3$$

5) Excavating soilings hydraulic excavator

$$\text{Qty. same as } 3 \cdot 10 \cdot (3) = 5 \cdot 25 \text{ m}^3$$

6) Constrg on bankment with loose m lead

Continuation

2

BOM BILL OF MATERIAL NO. 226

Part Number	Quantity of material required per unit			Quantity of space
	M	E	S	
273001	1	1	1	24 ft²
273201	1	1	1	24 ft²

63 ft² total

Overall dimensions
276108 L x 276 W x 200 H ft³

Storage Area
276108 ft³
276 ft²

Record Entry

① Case required to store materials
200 ft³ = 200 x 276 x 200 = 2053600 ft³

Storage Area
276 ft²

Record Entry

② Case required to store materials
200 ft³ = 200 x 276 x 200 = 2053600 ft³

Storage Area
276 ft² = 276 x 276 x 200 = 152300 ft³

Storage Area
276 ft² = 276 x 276 x 200 = 152300 ft³

Storage Area
276 ft² = 276 x 276 x 200 = 152300 ft³

Storage Area
276 ft² = 276 x 276 x 200 = 152300 ft³

Storage Area
276 ft² = 276 x 276 x 200 = 152300 ft³

Conclusion

3
Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$(30 \times 0.4 \times 0.2) \times$	3	30.0	0.4	0.2	$= 26.88 \text{ m}^3$
$(3 \times 30 \times 0.4 \times 0.2) \times$	3	30.0	0.4	0.2	$= 81.0 \text{ m}^3$
$(2 \times 30 \times 0.4 \times 0.2) \times$	2	30.0	0.4	0.2	$= 48.0 \text{ m}^3$

Square
10/1/24

Parallelogram
10/1/24
7.9

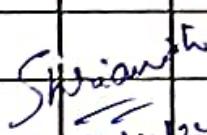
Abstract of Cont

1. PIF working from mark			
Qty. vide TMBIP - 1	= 0.65 km ²		
@ Rs 3821.02 per km ²	Rs 28484.0		
2. clearing & grubbing flood land.			
Qty. vide TMBIP - 1	= 0.23 Ha.		
@ Rs 75573.34 per Ha.	Rs 17382.0		
3. Excavation of soil dry using Manual method			
Qty. vide TMBIP - 1	= 5.25 m ³		
@ Rs 186.85 per m ³	Rs 981.0		
4. cutting embankment by roads by cutting			
Qty. vide TMBIP - 4	= 3.15 m ³		
@ Rs 61.52 per m ³	Rs 194.0		
5. Excavation of soil dry by hand excavator			
Qty. vide TMBIP - 1	= 5.25 m ³		
@ Rs 103.96 per m ³	Rs 546.0		

Continuation

Rs 47587.0

4
Soh. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				$8.17 + 8.47$	597.0
• Content of embankment with 10% slope					
Quantity Tn P.I.P - 2 =	63.6 m ³				
⇒ P. ₂ 17.31 bar m ³ = Rs. 15240.0					
• Content of embankment with 10% slope					
Quantity Tn P.I.P - 2 = 230.4 m ³					-
⇒ P. ₂ 17.015 bar m ³ = Rs. 32231.0					
• Content of Sulphur deposit shoulder					
Quantity Tn P.I.P - 2 = 345.0 m ³					
⇒ P. ₂ 22.50 bar m ³ = Rs. 210263.0					
• Content of S.R. Cut I					
Quantity Tn P.I.P - 2 = 462.45 m ³					
⇒ P. ₂ 177.10 bar m ³ = Rs. 1331700.0					
					Rs. 2237081.0
Add 1% L.C.					Rs. 22371.0
Add 1% C.S.T.					Rs. 402675.0
Add 1% S.F.					Rs. 26138.0
					Rs. 2688265.0
Less 1% V.Ballow					Rs. 29840.0
					Rs. 2658425.0
Signature  Surveyor 10/4/24					
<u>C.A.P.</u> <u>Ami</u> <u>29/04/24</u>					

Continuation