

प्रमाणित किया जाना है कि
मापी पुल में मशीन इकाई 100
हूट है जिसे लक्ष्यक अभियान
प्रमाणित कार्य क्रमांक 1177 काय 3192
पुर्तम 4 नई को पटना में
निर्गत किया जाना है


27.2.24

Executive Engineer
RWD Works Division

Pakradda
27.2.24

Sch. XLV - Form No. 134

RWD PAKRADDAYAL DIVISION

R-W-D PATNAH SUB-DIVISION

Measurement Book

No.

1442

Name _____

Date of first entry _____

Date of last entry _____

Ist. on A/c Bill.

Name of Work- **1**
 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.	
					Record measurement
					N/W - Const. of Rd. as C/D work from Sikergan's pitch Rd. to Chamarjali Rd. to S. K. Tola.
					Package NO - M.M. B.S.Y. (Amalgamated)
					ND B BRRP - 275
					Pakaridayal.
					Block - Portahi.
					Agency - Arvind Singh.
					Chota Bariyarpur, Motihari, E. Champaran.
					Agg. NO - 29 SBD / 2023-24.
					Const. Cost - Rs. 34981655 = 00
					Date of start - 23.2.2024.
					Date of completion - 22.2.2025.
					① P.N. as fixing as typical M.M. B.S.Y. sign. with logo board - do - B.I.
					————— 2 NOS.
					② P.N. as fixing as typical M.M. B.S.Y. citizen board - do - B.I.
					————— 1 NO.

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
③ P.V. of fixing working					
B.M. of reference pillars - do - E.I.					
(i) Benchmark pillar					3 NOS.
(ii) Reference pillars					10 NOS.
Adj. 28.2.24.					
J.E.					
④ Clearing of grubbing Rd.					
Land - do - do - E.I.					1.89 HEC
2 x 8.6 x 38.00 x 31.50 S.NO. Ch Area Mean Area Dist. Volume					
1	0	0.382	-	-	-
2	50	0.370	0.376	50	10.80
3	100	0.175	0.273	50	13.625
4	150	0.151	0.163	50	8.15
5	200	0.179	0.165	50	8.25
6	250	0.171	0.175	50	8.75
7	300	0.102	0.137	50	6.825
8	350	0.217	0.160	50	7.975
9	400	0.174	0.196	50	9.775
10	450	0.164	0.169	50	8.45
11	500	2.105	1.135	50	56.725
12	550	2.222	2.164	50	108.175
13	600	2.524	2.373	50	118.65
14	650	2.093	2.309	50	115.425
15	700	2.420	2.257	50	112.825
16	750	2.219	2.320	50	115.975

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
17	800	3.293	2.756	50	137.800
18	850	3.607	3.450	50	172.500
19	900	4.269	3.938	50	196.900
20	950	3.414	3.842	50	192.075
21	1000	3.385	3.400	50	169.975
22	1050	1.909	2.647	50	132.350
23	1100	2.173	2.041	50	102.050
24	1150	2.193	2.183	50	109.150
25	1200	1.983	2.088	50	104.400
26	1250	1.634	1.809	50	90.425
27	1300	1.792	1.678	50	83.900
28	1350	1.786	1.754	50	87.700
29	1400	1.654	1.720	50	86.000
30	1450	1.983	1.819	50	90.925
31	1500	1.990	1.987	50	99.325
32	1550	2.018	2.004	50	100.000
33	1600	1.916	1.967 1.967	50	98.350
34	1650	1.633	1.775	50	88.725
35	1700	1.809	1.721	50	86.050
36	1750	1.883	1.846	50	92.300
37	1800	1.828	1.856	50	92.775
38	1850	1.731	1.780	50	88.975
39	1900	2.153	1.942	50	97.100
40	1950	1.964	2.059	50	102.925
41	2000	2.078	2.021	50	101.050

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
SINO 42	2050	50	1.909	1.934	93.675
43	2100	50	2.272	2.091	104.525
44	2150	50	1.892	2.082	104.100
45	2200	50	2.272	2.082	104.100
46	2250	50	1.911	2.092 1.934	104.575
47	2300	50	1.956	2.083 1.934	96.675
48	2350	50	2.210	2.083	104.150
49	2400	50	2.052	2.131 2.033	106.550 101.65
50	2450	50	2.014	1.444 1.411	70.525 70.525
51	2500	50	0.807	1.038 1.038	51.900 51.900
52	2550	50	1.269	1.038	85.450
53	2600	50	2.149	1.709	85.450
					T- 4656.175m ³
(i) For 100m lead -					
					4656.175 x 30% = 1396.852m ³
					Limit - 698.420m ³
(ii) For 100m lead -					
					4656.175 x 70% = 3259.323m ³
					Limit - 1629.662m ³
9.3.24, J.E.		AE			

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
R.C. C. slab cut out - 1 x 5.00 x 3.00 m.					
① E.W. in exca. in found. - do - E.I.					
Abut. - 2 x 9.30 x 3.20 x 1.80 =					107.14 m ³
R.W. - 4 x 1.267 x 2.921 x 1.80 =					26.65 "
F. un. D. slab - 8.90 x 2.266 x 0.250 =					5.04 "
L. wall (U/S & D/S) -					
2 x 11.20 x 1.00 x 1.80 =					40.32 "
C. wall (U/S) - 2 x 0.600 x 1.00 x 1.80 =					2.16 "
C. wall (D/S) - 2 x 2.10 x 1.00 x 1.80 =					7.56 "
					188.87 m ³
② Sand filling in open found.					
- do - do - E.I.					
1 x 8.90 x 4.625 x 0.100 =					4.12 m ³
11.324					
J.E.					
③ P.W. M ₁₅ P.C.C. (1:2:5) as					
dovetailing course in found. -					
- do - do - E.I.					
Abut. - 2 x 9.30 x 3.20 x 0.200 =					11.90 m ³
R.W. wall - 4 x 1.267 x 2.921 x 0.200 =					2.96 "
L. wall - (U/S & D/S) -					
2 x 11.20 x 1.00 x 0.150 =					3.36 "
C. wall (U/S) - 2 x 0.600 x 1.00 x 0.150 =					0.18 "
" " (D/S) - 2 x 2.10 x 1.00 x 0.150 =					0.63 "

Continuation

C.084x-19.03 m³

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				B.F. 19	0.3 m ³
F.V.D. 2	8.30	4.734	0.150		6.32
					25.35 m ³
Ans.					
13.3.24.					
J.E.					
① P.V.P.C.C. M15 (1:2.5:5) in					
open foundry - do - do - E.I.					
Abut.	2	8.40	$\frac{3.6+2.30}{2}$	1.60	71.23 m ³
R Wall	4	1.267	$\frac{2.72+2.02}{2}$	1.60	19.23
L. Wall (4/S/D/S) -					
	2	11.00	0.588	1.50	19.33
C. Wall (U/S)	2	0.913	0.588	1.50	1.61
C. Wall (D/S)	2	2.413	0.588	1.50	4.25
					115.71 m ³
Ans.					
18.3.24.					
J.E.					
① P.V.P.C.C. M15 (1:2.5:5) in					
sub-struct - do - E.I.					
Abut.	2	7.50	$\frac{2.1+0.70}{2}$	2.80	58.80 m ³
R Wall	4	1.734	$\frac{1.82+0.40}{2}$	3.28	25.26
					84.06 m ³
Ans.					
23.3.24.					
J.E.					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
① Reinforcement in pier cap					
Dist wall - do - E/I.					
Abut. cap - 10Φ - 2 x 12 x 7.50 M					@ 0.62 kg/m = 111.600 kg.
8Φ - 2 x 32 x 2.20 M.					@ 0.39 kg/m = 54.912 "
Dist wall -					
10 mm Φ - 2 x 8 x 7.50 M					@ 0.62 kg/m = 74.400 "
8 mm Φ - 2 x 32 x 1.860 M					@ 0.39 kg/m = 46.425 "
					287.337 kg.
					Limit - 282.45 kg.
					or, 0.283 MT.
② P.V. R.C.C. M20 in sub-stage					
- do - do - E/I					
Abut. cap - 2 x 7.50 x 0.700 x 0.200 = 2.10 M ³					
Dist wall - 2 x 7.50 x 0.300 x 0.430 = 1.94 "					
					4.04 M ³
③ P.V. weep hole in abut. on					
R/W - do - E/I					
2 x 15 NOS.					= 30 NOS.
4 x 3 NOS.					= 12 "
					42 NOS.
<i>[Signature]</i>					
28.3.24.					
J.E.					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
R.C.C. slab - 1x	2.40	2.40	2.40	(4 NOS)	
① E.I.W. in exca. in found.					
- do - do - E.I.					
Abut.	2x7.60	x2.30	x1.60	=	55.936 m ³
R.Wall	4x1.60	x2.097	x1.60	=	21.473 m ³
F.U.D. slab	6.20	x0.400	x0.250	=	0.620 m ³
					78.029 m ³
For, 4 NOS. curb					
	4x	78.029 m ³		=	312.12 m ³
② Sand filling in open found.					
- do - do - E.I.					

F.U.D. slab	6.20	x1.629	x0.100	=	1.01 m ³
For, 4 NOS.	4x	1.01	=	4.04 m ³	
Part					
3.7.24.					
J.E.					
① P.V. P.C.C. M15 in open					
Found.					
- do - E.I.					
Abut.	2x7.60	x2.30	x0.200	=	6.992 m ³
R.Wall	4x1.60	x2.097	x0.200	=	2.684 m ³
F.U.D. slab	6.20	x1.736	x0.150	=	1.614 m ³
C. Off. wall	2x0.40	x1.00	x0.250	=	0.16 m ³
					11.45 m ³
For, 4 NOS	4x	11.45 m ³	=	45.80 m ³	

Continuation
 5.4.24.
 J.E.
 03/4/24
 A.G.

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
① P.N. P.C. C.M. 15 (1:2:5:5)					
in open form - do E.I.					
Ab -	2 x 6.80 x	$\frac{2.10 + 1.50}{2}$	x	1.40 =	34.272 m ³
R.W. -	4 x 1.60 x	$\frac{1.897 + 1.297}{2}$	x	1.40 =	14.309 m ³
C. off wall -	2 x 1.20 x	$\frac{0.568}{2}$	x	1.40 =	1.974 m ³
					50.555 m ³
For, 4 nos. -	4 x	50.555	=		202.22 m ³
15.4.24					
J.E.					
① P.N. P.C.C. M15 (1:2:5:5)					
in sub. struc. - do E.I.					
Ab -	2 x 6.00 x	$\frac{1.30 + 0.70}{2}$	x	1.80 =	21.60 m ³
R.Wall -	4 x 1.90 x	$\frac{1.097 + 0.40}{2}$	x	2.090 =	11.889 m ³
					33.489 m ³
For, 4 nos. -	4 x	33.489	=		133.96 m ³
26.4.24					
J.E.					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
① Reinforcement in abut. cap					
∅ Dist. wall - do - E.I.					
10 ∅ - 2 x 10 NOS x 6.10 M.					
			@ 0.62 K _y /M		74.400 K _y .
8 mm ∅ - 2 x 30 NOS x 2.20 M					
			@ 0.39 K _y /M		51.48 K _y .
10 ∅ - 2 x 8 x 6.10 M.					
			@ 0.62 K _y /M		59.52 K _y .
8 mm ∅ - 2 x 30 x 1.86 M					
			@ 0.39 K _y /M		43.524 K _y .
					T-228.924 K _y .
					Limit - 198.24 K _y .
					or, 0.198 MT.
					For, 4 NOS - 4 x 0.198 MT = 0.792 MT.
② PIV. R.C.C. m ₉₀ in sub-struct.					
- do - do - E.I.					
Ab. cap - 2 x 6.10 x 0.700 x 0.210 = 1.680 m ³					
D. wall - 2 x 6.10 x 0.400 x 0.210 = 1.152 m ³					
					T-2.832 m ³
					For, 4 NOS - 4 x 2.832 m ³ = 11.33 m ³
③ PIV. m ₉₀ Kals - do - E.I.					
2 x 8 NOS					= 16 NOS
4 x 4 NOS					= 16 "
					32 NOS
					For, 4 NOS - 4 x 32 NOS = 128 NOS.

3.5.24.
J.E.

Continuation
3524
AZ

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Abstract of cost.					
(1/6) P.V. fixing typical masonry sign with Log board of do E.I.					
Q.M. vide T.M.B.P. No. (1) - 2 NOS.					
" " " (1) - 1 "					
				3 NOS.	
					@ 11747 = 78/each RS. 243 = 10
(2/5) P.V. fixing working B.M. pillars as reference pillars to E.I.					
1/1 - Bench mark pillars -					
					3 NOS. @ 5115 = 29/each - RS. 15346 = 10
1/2 - Reference pillars -					
					10 NOS. @ 2386 = 70/each - RS. 23867 = 10
(3/9) Clearing & grubbing ref. land -					
- do - do - E.I.					
Q.M. vide T.M.B.P. No. (2)					
					1.81 Hec. @ 75573 = 34/Hec. - RS. 136788 = 10
(4/6) Contr. of embankment from borrow pits with obtained material - do - do - E.I.					
Q.M. vide T.M.B.P. No. (4)					
(i) with lead 1000 m -					
					698.42 m ³ @ 266-88/m ³ - RS. 182205 = 10
(ii) with lead 100 m -					
					1629.662 m ³ @ 195-89/m ³ - RS. 319234 = 10

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
5/31 E/W. in exca. in found. -					
- do - do - E/I.					
Qty. vib. T.M.B.P. NO. - (5)				188.87m ³	
" " - (8)				312.12"	
				500.99m ³	
				398 = 62/m ³	199 705 = 00
				575 = 24/m ³	RS 28 8189 = 00
6/32 Sand filling in found. - do - E/I.					
Qty. vib. T.M.B.P. NO. - (5)				4.12m ³	
" " - (8)				4.04"	
				8.16m ³	
				@ 575 = 24/m ³	RS 4694 = 00
7/33 P.V. P.C.C. MIS in open found. - do - E/I.					
Qty. vib. T.M.B.P. NO. - (8)				25.35m ³	
" " - (8)				45.80"	
				71.15m ³	
				@ 7865 = 96/m ³	RS 5 9663 = 00
8/34 P.V. P.C.C. MIS in found. -					
- do - do - E/I.					
Qty. vib. T.M.B.P. NO. - (6)				115.71m ³	
" " - (9)				202.22"	
				317.93m ³	
				@ 7865 = 96/m ³	RS 25 00825 = 00
9/35 P.V. P.C.C. MIS in sub. -					
Struc - do - do - E/I.					

Particulars	Details of actual measurement			Contents of area
	No.	L.	B.	
STY. VICK T.M.B.P. NO. (6)			84.06m ³	
" " " (9)			133.96"	
			218.02m ³	
			@ 8459 = 28/m ³ - RS 1844292 = ∞	
(10/38) SIF ∞ Macing HYSD				
bar - do - E/I				
STY. VICK T.M.B.P. NO. (7)			0.1283MT.	
" " " (10)			0.792"	
			1.075MT.	
			@ 76528 = 69/MT. - RS 82268 = ∞	
(11/36) PIV. R.C.C. 2m sub-structure				
M20 - do - E/I				
STY. VICK T.M.B.P. NO. (7)			4.04m ³	
" " " (10)			11.33"	
			15.37m ³	
			@ 8506 = 30/m ³ - RS 136890 = ∞	
(12/40) PIV. sweep hole - do - E/I				
STY. VICK T.M.B.P. NO. (7)			42 NOS.	
" " " (10)			128"	
			170 NOS.	
			@ 109 = 70/each - RS 18649 = ∞	
			RS 6059669 = ∞	
Adol. - 0.26% below			(-) 15255 = ∞	
Adol. - B.S.T. - 18%			(+) RS 1087905 = ∞	
Adol. - L.C. - 1%			(+) RS 60597 = ∞	
			60439 = ∞	
Adol. - S. Fee -			(+) RS 157456 = ∞	
C.O. - RS. T. - RS.			7349714 = ∞	

