

AMGSI

BAK-TTAR PUR PATH to

Schedule XLV-Form No. 134

BERKA

and the station with the station DIVISION

and the station with the station SUB-DIVISION

MEASUREMENT BOOK 730

2998 → Sharwan & sunny con. not Ltd

Sch. XLV - Form No. 134

Executive Engineer DIVISION
Assistant Engineer SUB-DIVISION
24/01/2019
G104

Measurement Book

No.

Name of Officer _____

Date of first entry _____

Date of last entry _____

प्रमाणित किया जाता है कि
 इस मासिक में कुल 100 (एक सौ)
 पृष्ठ संकेत हैं, निचे सत्यक अभिलेख
 कार्य INDEX समुदाय - के नाम
 से निर्दिष्ट किया जाता है

12/2017
 Executive Engineer
 R.W.D. Works Division
 Daudnagar (A. bad)

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1st on A/c Bill

1

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: Bhalvandi					
Baktiyarpur Fath					
to Berka					
Name of Agency: Shanwan					
S. Sunny Construction					
Pvt. Ltd Aurangabad					
Agreement No: 37-SB0/2021-2022					
Date of Commencement - 29/09/2021					
Date of Completion - 28/09/2022					
Date of Measurement - 15/07/2022					
work done details					
(1) Providing & Fixing					
of working bench					
mark Pillars					
Qty. 3 Nos					
Reference Pillars					
Qty. 8 Nos					
(2) clearing and grubbing					
ing Road lane etc					
do-do-all comp.					
$2 \times 18 \times 30 \times 3.50 = 3780 \text{ m}^2$					
$2 \times 15 \times 30 \times 3.50 = 3150 \text{ m}^2$					
$2 \times 21 \times 30 \times 3.50 = 4410 \text{ m}^2$					

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
		$2 \times 19 \times 30 \times 3.50$			$= 2520 \text{ m}^2$
		$2 \times 1 \times 25 \times 3.50$			$= 175 \text{ m}^2$
					14035 m^2
					$= 1.40 \text{ Hec.}$

 $(\frac{3}{5})$

Construction of emb-
ankment with appro-
-ved material etc do d.
all Comp. job
E/w Calculation as
per graph.

CH (m)	C/S Area m^2	Mean of Area m^2	Length m	Quantity m^3
0	0.305	-	-	-
50	0.452	0.379	50	18.925
100	1.020	1.186	50	59.300
150	0.498	1.059	50	52.950
200	3.450	1.824	50	91.200
250	0.303	1.877	50	93.825
300	0.951	0.627	50	31.350
350	0.251	0.601	50	30.050
400	0.336	0.294	50	14.675
450	1.690	1.013	50	50.650
500	0.275	0.983	50	49.125
550	0.980	0.628	50	31.375
600	0.398	0.689	50	34.450
650	0.737	0.568	50	28.375
700	2.050	1.394	50	69.675

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
		2 x 17	30	3.50	= 2570 m ²
		2 x 1	25	3.50	= 175 m ²
					14035 m ²
					= 1.40 Hec.

(3)

Construction of emb-
-ment with appro-
-ved material etc do d.
all Comp Job

E/w Calculation as
per graph.

CH	Cl Area	Mean	Length	Quantity
(m)	m ²	m ²	m	m ³
0	0.305	-	-	-

50	0.452	0.379	50	18.925
100	1.020	1.186	50	59.300
150	0.498	1.059	50	52.950
200	3.450	1.824	50	91.200
250	0.303	1.874	50	93.825
300	0.951	0.627	50	31.350
350	0.251	0.601	50	30.050
400	0.336	0.294	50	14.675
450	1.690	1.013	50	50.650
500	0.275	0.983	50	49.125
550	0.980	0.628	50	31.375
600	0.398	0.689	50	34.450
650	0.737	0.568	50	28.375
700	2.050	1.394	50	69.675

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
CH c/s (m)	Mean (m)	Length (m)	Quantity		m ³
750	3.404	2.727	50		136.350
800	0.792	1.848	50		72.400
850	0.788	0.540	50		27.000
900	2.585	1.687	50		84.325
950	0.766	1.426	50		71.275
1000	0.669	0.168	50		8.375
1050	0.669	0.369	50		18.450
1100	1.075	0.872	50		73.600
1150	0.475	0.775	50		38.750
1200	3.807	2.141	50		107.050
1250	0.295	2.051	50		102.550
1300	0.520	0.403	50		20.375
1350	0.650	0.575	50		28.750
1400	3.712	2.171	50		108.550
1450	0.870	2.291	50		114.550
1500	0.415	0.643	50		32.125
1550	2.659	1.537	50		76.950
1600	1.501	2.080	50		104.000
1650	1.050	1.276	50		63.775
1700	2.960	2.005	50		100.250
1750	0.631	1.796	50		89.775
1800	1.520	1.076	50		53.775
1850	0.485	1.003	50		50.125
1900	1.360	0.923	50		46.125
1950	0.773	0.817	50		40.825
2005	0.520	0.897	55		21.808

E/w 2337.70 m³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
		Lead up to 100m			
		$2337.70 \text{ m}^3 \times 44.98\%$			
		$= 1051.50 \text{ m}^3$			
$(\frac{4}{6})$		Lead up to 100m			
		$2337.70 \text{ m}^3 \times 55.02\%$			
		$= 1286.20 \text{ m}^3$			
$(\frac{5}{7})$		Construction of Subgrade and earthen Shoulders etc do do - cut Comp			
		$12 \times 30 \times \frac{6.82 + 7.72}{2} \times 0.30 = 785$			
		$15 \times 30 \times \frac{6.82 + 7.72}{2} \times 0.30 = 981$			
		$5 \times 30 \times \frac{6.82 + 7.72}{2} \times 0.30 = 327.15$			
		$6 \times 30 \times \frac{6.82 + 7.72}{2} \times 0.30 = 392.58$			
		$1 \times 15 \times \frac{6.82 + 7.72}{2} \times 0.30 = 82.71$			
					2519.05
		Lead up to 100m			
		$2519.05 \text{ m}^3 \times 30\%$			
		$= 755.72 \text{ m}^3$			
$(\frac{6}{8})$		Lead up to 100m			
		$2519.05 \text{ m}^3 \times 70\%$			
		$= 1763.33 \text{ m}^3$			
$(\frac{7}{9})$		Box cutting; Excavation			

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
for roadway etc do-					
do - all comp.					
	2	7	30	0.375	0.175 = 29.56 m ³
	2	9	30	0.375	0.175 = 35.43 m ³
	2	4	30	0.375	0.175 = 15.75 m ³
					78.74 m ³
($\frac{8}{4}$) Construction of embankment with material etc do - all comp.					
60% of 78.74 m ³					
= 47.24 m ³					
($\frac{9}{9}$) Construction of granite Sub base etc do - all comp.					
	5	30	4.05	0.200	= 121.50 m ³
	3	30	4.05	0.200	= 72.90 m ³
	8	30	4.05	0.200	= 194.40 m ³
	7	30	4.05	0.200	= 170.10 m ³
	5	30	4.05	0.200	= 121.50 m ³
	3	30	4.05	0.200	= 72.90 m ³
	5	30	4.05	0.200	= 121.50 m ³
	2	30	4.05	0.200	= 48.60 m ³
	1	15	4.05	0.200	= 12.15 m ³
					935.55 m ³
for widening of curve					
$\frac{0+8}{2} \times 23 \times 0.200$					= 18.40 m ³
					953.95 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	Nb.	L.	B.	D.	
($\frac{10}{9}$) Construction of gran.					
- ula+ Sub-base etc					
do-do-all comp.					
(Pcc Portion)					
$5 \times 30 \times 3.75 \times 0.100 =$					$56.25 m^3$
$3 \times 30 \times 3.75 \times 0.100 =$					$33.75 m^3$
$1 \times 10 \times 3.75 \times 0.100 =$					$3.75 m^3$
$2 \times 20 \times 30 \times 0.375 \times 0.100 =$					$93.75 m^3$
Extra widening on curve					$45.00 m^3$
$\frac{0+8}{2} \times 6 \times 0.100 =$					$2.40 m^3$
					$146.15 m^3$
($\frac{11}{10}$) WBM Graveling 3:					
Providing, laying					
Spreading and comp.					
- setting stone etc. do-do					
all comp.					
$5 \times 30 \times 3.75 \times 0.075 =$					$42.18 m^3$
$2 \times 30 \times 3.75 \times 0.075 =$					$16.87 m^3$
$7 \times 30 \times 3.75 \times 0.075 =$					$59.106 m^3$
$6 \times 30 \times 3.75 \times 0.075 =$					$50.62 m^3$
$5 \times 30 \times 3.75 \times 0.075 =$					$42.18 m^3$
$3 \times 30 \times 3.75 \times 0.075 =$					$25.31 m^3$
$1 \times 10 \times 3.75 \times 0.075 =$					$2.81 m^3$
					$239.03 m^3$
$2 \times 20 \times 30 \times 0.375 \times 0.075 =$					$33.75 m^3$
Extra widening on curve					
$\frac{0+8}{2} \times 15 \times 0.075 =$					$4.50 m^3$
					$243.31 m^3$

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
($\frac{12}{14}$) Construction of un-					
-reinforced plain co-					
-ment concrete etc do-					
do-all Comp.					
					$5 \times 30 \times 3.75 \times 0.160 = 90 \text{ m}^3$
					$3 \times 30 \times 3.75 \times 0.160 = 54 \text{ m}^3$
					$6 \times 30 \times 3.75 \times 0.160 = 108 \text{ m}^3$
					$2 \times 30 \times 3.75 \times 0.160 = 36 \text{ m}^3$
					$5 \times 30 \times 3.75 \times 0.160 = 90 \text{ m}^3$
					$7 \times 30 \times 3.75 \times 0.160 = 126 \text{ m}^3$
					$1 \times 10 \times 3.75 \times 0.160 = 6 \text{ m}^3$
					510.00 m
Entire widening in curve					
$\frac{0+8}{2} \times 15 \times 0.160$					$= 9.60 \text{ m}^3$
					519.60 m
Header Pipe culvert					
1x1000 mm dia = 3 Nos.					
($\frac{13}{24}$) Earthwork in exca-					
-vation etc do-do-all					
Comp.					
H.W					$3 \times 2 \times 6.45 \times 1.40 \times 1.50 = 81.27 \text{ m}^3$
Below pipe					$2 \times 1 \times 4.85 \times 1.53 \times 0.365 = 8.12 \text{ m}^3$
					89.39 m ³
($\frac{14}{25}$) Providing concrete for					
plain reinforced etc					
do-do-all Comp.					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
H.W	3 x 2	6.45	1.40	0.15	$= 8.17 m^3$
Below pipe	3 x 1	4.731	1.53	0.25	$= 5.65 m^3$
					$13.47 m^3$
(15) (58)	Providing and laying				
	Rec pipe NP ₂ for culvert				
	etc do-do-all comp.				
	$3 \times 3 \times 2.50 = 22.50 m^3$				
(16) (26)	Plain reinforced Co-				
	- ment concrete in				
	Substructure etc do-do				
	all comp.				
H.W	3 x 2	6.15	10.825	3.18	$= 96.8$
Parapet	3 x 2	6.15	0.40	0.60	$= 8.85$
Less for pipe	3 x 2	0.7857	1.2307	0.62	$= 4.4$
					$101.22 m^3$
(17) (31)	Dismantling of existing				
	Structure like Culvert				
	etc do-do-all comp.				
	Cement concrete				
	$3 \times 3.50 \times 1.4 \times 0.15 = 1.79 m^3$				
	$1 \times 3.50 \times 1.54 \times 0.15 = 0.80 m^3$				
	$2.59 m^3$				
(18) (22)	Dismantling of existing				
	Structure like Culvert				
	etc do-do-all comp.				
	Cement mortar				
	$3 \times 2 \times 4.20 \times 0.825 \times 2.50 = 51.97 m^3$				

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
		$2 \times 4.30 \times 0.825 \times 3 =$			30.69 m^3
					82.66 m^3
($\frac{19}{33}$)	Removing all type of hume pipe etc do-do all comp.				
(i)	upto 600mm dia $3 \times 3 \times 2.50 = 22.50 \text{ Rm.}$				
(ii)	Above 600mm to 900mm $2 \times 2.50 = 5 \text{ Rm.}$				
($\frac{20}{24}$)	Earthwork in excavation etc do-do. all comp.				
H.W	$2 \times 2 \times 3.90 \times 1.15 \times 1.50 =$				26.91
Below Pipe	$2 \times 1 \times 5.35 \times 1.13 \times 0.365 =$				4.41 m
					31.32 m
($\frac{21}{25}$)	Providing Concrete for plain reinforced etc do-do. all comp.				
H.W	$2 \times 2 \times 3.90 \times 1.15 \times 0.150 =$				2.69 m^3
Below Pipe	$2 \times 1 \times 5.311 \times 1.13 \times 0.250 =$				3.6 m^3
					5.69 m^3
($\frac{22}{24}$)	Providing and laying Ree pipe HP ₃ for Culvert etc do-do. all comp.				
	$2 \times 3 \times 2.50 = 15 \text{ Rm.}$				
($\frac{23}{26}$)	Plain reinforced ce- ment concrete in				

Continuation

Material statement

$$E/w = 4856.75 \text{ m}^3$$

$$\text{Stone chips} = 1143.99 \text{ m}^3$$

$$\text{Coarse Sand} = 319.97 \text{ m}^3$$

$$\text{Stone metal} = 294.67 \text{ m}^3$$

$$\text{Stone Screening} = 58.44 \text{ m}^3$$

Samer
15/07/2022
76



Abstract of Cost

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(1/1) Providing & Fixing of working bench - main Pillars					
3 Nos (vide TMBP-1)					
@ Rs 3510.58					Rs 10531.74
Reference Pillars					
8 Nos (vide TMBP-1)					
@ Rs 1597.03					Rs 12776.24
(2/1) Clearing and Grubbing Road land etc do do - all Comp.					
1.40 Hec (vide TMBP-2)					
@ Rs 52950.33					Rs 74158.46
(3/1) Construction of embankment with approved material etc do do - all Comp.					
Lead up to 100 m					
1051.50 m ³ (vide TMBP-4)					
@ Rs 143.20					Rs 150574.80
(4/1) Lead up to 100 m					
1286.20 m ³ (vide TMBP-4)					
@ Rs 190.36					Rs 244841.03
(5/1) Construction of Subgrade and earthen slab - do do etc do do - all Comp.					
Lead up to 100 m					
					Rs 492882.27

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
755.72 m ³ (Vide TMBP-4)					
	@ Rs	192=04			Rs 145128=4
($\frac{6}{5}$) Lead up to 100 m					
1763.35 m ³ (Vide TMBP-4)					
	@ Rs	131=20			Rs 231348=8
($\frac{7}{3}$) Box cutting & excavation for roadway etc do do-4 Comp.					
78.74 m ³ (Vide TMBP-5)					
	@ Rs	75=57			Rs 5950=38
($\frac{8}{4}$) Construction of embankment with material etc do do-4 Comp.					
47.24 m ³ (Vide TMBP-5)					
	@ Rs	26=68			Rs 1260=36
($\frac{9}{9}$) Construction of granular sub-base etc do do-4 Comp.					
953.95 m ³ (Vide TMBP-5)					
146.15 m ³ (Vide TMBP-6)					
1095.10 m ³ @ Rs 1769=06					Rs 1937277=6
($\frac{10}{10}$) WBM Graveling 3: Providing laying Spl. & bedding and Compd. Eng etc do do-4 Comp.					
277.31 m ³ (Vide TMBP-6)					
	@ Rs	2555=27			Rs 708601=92

Continuation

Rs 3522469=88

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
($\frac{11}{14}$) Construction of un-reinforced plain cement concrete etc do do-all comp.					
519.60 m ³ (vide TMBP-7)					
@ Rs 5365 = 58					Rs 27873550
($\frac{12}{24}$) Earthwork in excavation etc do do-all comp.					
89.39 m ³ (vide TMBP-7)					
31.32 m ³ (vide TMBP-8)					
120.71 m ³ @ Rs 279209					Rs 3368879
($\frac{13}{25}$) Fronting concrete for plain reinforced etc do do-all comp.					
13.77 m ³ (vide TMBP-8)					
5.69 m ³ (vide TMBP-9)					
19.46 m ³ @ Rs 4183 = 18					Rs 81404 = 68
($\frac{14}{28}$) Providing and laying Receipt NP ₂ for culvert etc do do-all comp.					
22.50 m (vide TMBP-8)					
@ Rs 3511 = 85					Rs 80366 = 62
($\frac{15}{26}$) Plain reinforced cement concrete in sub-structure etc do do-all comp.					
					Rs 6505885 = 4

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
101.22 m ³ (Vide TMBP-8)					
30.33 m ³ (Vide TMBP-10)					
131.55 m ³ @ Rs 4901 = 86					Rs 6448376
(16/31) Dismantling of exist- ing structure like Culvert etc do do. all comp. sub. Cement concrete					
2.59 m ³ (Vide TMBP-8)					
@ Rs 497 = 31					Rs 1289 = 32
(17/32) Dismantling of exist- ing structure like Culvert etc do do. all comp.					
Cement mortar					
82.66 m ³ (Vide TMBP-9)					
@ Rs 235 = 98					Rs 19506 = 10
(18/33) Removing all types of house pipe etc do do. all comp. (i) upto 600 mm dia					
22.50 Rm (Vide TMBP-9)					
@ Rs 181 = 13					Rs 4075 = 42
(ii) Above 600 mm to 900 mm					
5 Rm (Vide TMBP-9)					
@ Rs 244 = 92					Rs 1224 = 60
(19/34) Paving and laying					
					Rs 7176820 = 61

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	

15/07/2022
RG