

Dhaka Phulwariya Road me Bhagwanpur
to Bakhari Road M.M.HS.Y(SC)

1465

Schedule XLV-Form No. 134

R.W.D. WORKS

DIVISION

Dhaka

SUB-DIVISION

Dhaka

M/s. R.N. Construction

Measurement Book

1st on Apr 2011

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:- Const. of Road & C.D					
Work from Dhaka Phulwariya					
Road from Bhagwanpur to Bakhari					
under N.M.S.Y (Sd) Length - 1.480km					
Agency:- M/s R.N. Construction.					
Bhagwanpur Zilla: Motihari					
Dist. - East Champaran.					
Agreement No:- 24 SBD/2020-21					
Authority:- E.E.R.W.D(W) Division - Dhaka					
Const. Cost:- Rs - 934170320					
Date of Work Order - 24.09.2020					
Date of Completion:- 23.09.2021					
as per Agreement:-					
Item of Work					
1. Const. of Reference &					
Working Benchmark - 1.480 km					
2. Const. of Reference pillar					
on / Baryee - 1.480 km					
3. P.V and Fixing of					
N.M.S.Y informatory					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Sign with ^{board} logs and					
as per					2 No.
4. Clearing and grubbing Road Land					
2x 10m x 30m x 1.50					900.00 m ²
2x 10m x 30m x 1.50					900.00 m ²
2x 10m x 30m x 1.50					900.00 m ²
2x 10m x 30m x 1.50					900.00 m ²
2x 9m x 30m x 1.50					810.00 m ²
2x 10m x 10m x 1.50					30.00 m ²
				T.	4440.00 m ²
				or,	0.44 Hect.

5. Const. of embankment

with approved material

Obtained from borrow

as per with lift up

Earth work Quantity Sheet

Sl. No	CH	Area	Mean Area	Dist	Volume
1	0	0.566	-	-	-
2	50	1.713	1.140	50	56.975
3	100	1.640	1.677	50	83.825
4	150	1.946	1.793	50	89.650
5	200	2.177	2.062	50	103.075
6	250	2.608	2.393	50	119.625
7	300	1.808	2.208	50	110.400

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
8	350	2.148	1.978	50	98.960
9	400	1.974	2.061	50	103.050
10	450	1.805	1.890	50	94.475
11	500	2.138	1.972	50	98.535
12	550	2.222	2.180	50	109.600
13	600	0.137	1.180	50	58.925
14	650	0.044	0.091	50	4.525
15	700	0.055	0.80	50	2.475
16	750	0.080	0.068	50	3.375
17	800	0.182	0.131	50	6.550
18	850	0.092	0.137	50	6.850
19	900	0.004	0.048	50	2.400
20	950	0.072	0.038	50	1.900

21	1000	0.015	0.044	50	2.175
22	1050	0.010	0.013	50	0.625
23	1100	0.079	0.045	50	2.225
24	1150	1.906	0.993	50	49.625
25	1200	2.544	2.225	50	111.250
26	1250	2.788	2.666	50	133.300
27	1300	2.772	2.780	50	139.000
28	1350	1.906	2.339	50	116.950
29	1400	1.917	1.912	50	95.525
30	1450	3.131	2.524	50	126.200
31	1480	1.957	2.544	30	76.320
				T.	2007.045 m ³
(i) for level 46 to 100 m					
		2007.045 m ³	x 30%		602.353 m ³
(ii) for level 46 to 100 m					
		2007.045 m ³	x 20%		401.409 m ³

Continuation

Buttack
22/10/2020
8/20

22/10/2020
58

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
RCC Band cutty. 1m x 1m					
1. E/W in excavation					
for structure					
Ref	1n	1.50	6.00	0.79	7.11 m ³
Detached cutty wall	2n	8.10	0.30	1.80	8.74 m ³
				T	15.85 m ³
				Unit	15.72 m ³
2. Sand filling in foundation					
for structure					
Ref	1n	1.50	6.00	0.10	0.90 m ³
Detached cutty wall	2n	8.10	0.30	0.10	0.48 m ³
				T	1.38 m ³
3. Div PCC and M15 for					
plain concrete in open					
found					
Below					
Ref	1n	1.50	6.00	0.10	0.90 m ³
				T	0.90 m ³
17/11/2020					
17/11/2020					
1. Box cutting in excavat					
on for Road way					
2x 9n	30m	0.375	0.100		20.25 m ³
2x 1n	23m	0.375	0.100		1.72 m ³
				T	21.97 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Acc Bars culverts- 3m x 3m					
1. Supplying fitting steel					
Placing HYSD bar reinforcement in substructure					
Rate					
Main bar					
12mm ϕ	150 cm	Spacing center to center			
	82 No x 3.75 =				
	@ 0.89 kg/m				273.675 kg.
Distribution bar					
10mm ϕ	180 cm	Spacing center to center			
	34 No x 5.95 =				
	@ 0.62 kg/m				125.420 kg.
Ditched cut off wall					
Main bar					
10mm ϕ	150 cm	Spacing center to center			
	70 No x 2 x 3.50 =				
	@ 0.62 kg/m				303.800 kg.
Distribution bar					
8mm ϕ	200 cm	Spacing center to center			
	8 No x 2 x 10.40 =				
	@ 0.33 kg/m				64.890 kg.
Abutment = A ₁ + A ₂					
Main bar					
12mm ϕ	150 cm	Spacing center to center			
	82 x 2				
	164 No x 3.75 =				
	@ 0.89 kg/m				547.350 kg.
Distribution bar					
10mm ϕ	180 cm	Spacing center to center			
	34 x 2				
	68 No x 5.95 =				
	@ 0.62 kg/m				250.850 kg.

Continuation

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
RCC box culv. 1m x 1m					
L. Supplying fitting and placing HYSD bar reinforcement in sub structure					
Ref:-					
Main bar					
12 mm ϕ 150 cm Spacing center to center					
82 no x 1.50 m =					
@ 0.89 kg/m —					109.470 kg.
Distribution bar					
10 mm ϕ 200 cm Spacing center to center					
16 no x 6.00 =					
@ 0.62 kg/m —					59.520 kg.

Ditch cut off wall					
Main bar					
10 mm ϕ 200 cm Spacing center to center					
41 x 2					
82 No x 3.20 m =					
@ 0.62 kg/m —					162.680 kg.
Distribution bar					
8 mm ϕ 200 cm Spacing center to center					
16 x 2					
32 No x 8.10 m =					
@ 0.39 kg/m —					101.080 kg.
Abutment A ₁ + A ₂					
Main bar					
12 mm ϕ 150 cm Spacing center to center					
82 x 2					
164 no x 1.50 m =					
@ 0.89 kg/m —					218.940 kg.
Distribution bar					
10 mm ϕ 200 cm Spacing center to center					
82 x 2					
164 no x 6.00 =					
@ 0.39 kg/m —					121.680 kg.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Hurch					
10 mm ϕ 200 cm spacing centre to centre					
62 No $\times$ 1.20 =					
@ 0.62 kg/m					46.120 kg.
Corner					
10 mm ϕ 300 cm spacing centre to centre					
42 No $\times$ 1.20 =					
@ 0.62 kg/m					31.240 kg.
				T.	850.730 kg
				or.	0.85 MT
2. P/V reinforced cement					
RCC Slab M25 concrete					
In box call					

Left	1 no. $\times$ 1.50 $\times$ 6.00 $\times$ 0.21 =	1.89 m ³
Detached	2 no. $\times$ 8.10 $\times$ 0.30 $\times$ 1.50 =	7.29 m ³
Hurch	2 no. $\times$ 6.10 $\times$ 6.10 $\times$ 6.00 =	0.06 m ³
Abutment	2 no. $\times$ 9.00 $\times$ 6.00 $\times$ 0.25 =	3.00 m ³
	T-	12.24 m ³
<i>[Signature]</i>	<i>[Signature]</i>	
13/11/2020	13/11/2020	
#2	500	

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1. Construction of C.S.B.					
by 1/4 wall grade deep					
ms Temp 40.7					
Widening					
2 x 9m x 30 x 0.375 x 0.100					20.25 m ³
2 x 1m x 23 x 0.375 x 0.100					1.72 m ³
Dot Repair					
3m x 1.80 x 1.00 x 0.100					0.54 m ³
6m x 1.30 x 0.80 x 0.100					0.62 m ³
10m x 1.10 x 1.05 x 0.100					1.15 m ³
14m x 1.00 x 0.80 x 0.100					1.12 m ³
18m x 0.90 x 0.70 x 0.100					1.13 m ³
22m x 0.80 x 1.00 x 0.100					1.76 m ³
<i>Sum</i> 13/11/2020				T	28.29 m ³
2. P.V. laying spacing					
and compacting stone					
Aggregates WBM (1)					
9m x 30m x 3.75 x 0.075					75.93 m ³
1m x 23m x 3.75 x 0.075					6.46 m ³
<i>Sum</i> 18/11/2020				T	82.39 m ³
3. Const. of un-reinforced					
Plain Cement concrete					
Parapet - Grade M25					
3m x 30m x 3.75 x 0.160					54.00 m ³
1m x 30m x $\frac{3.75+3.85}{2}$ x 0.160					18.24 m ³
1m x 30m x $\frac{3.85+3.95}{2}$ x 0.160					18.24 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1. Distribution bar.					
8 mm ϕ 200 cm Spacing reinforcement					
	7 x 2				
	14 No x 3.80 =				
	@ 0.39 kg/m				20.740 kg.
				T.	596.050 kg
				or.	0.59 MT
2. P.V. reinforced cement					
RCC grade M. 25 concrete					
in box cell					
Heave.	1	0.15	0.15	6.00	0.13 m ³
Desk slab	1	3.80	6.00	0.30	6.84 m ³
Parapet	2	3.80	0.25	0.60	1.14 m ³
				T.	8.11 m ³
3. Back filling behind					
abutment wing wall and					
return wall					
	2	6.00	3.4	0.60	21.60 m ³
				T.	21.60 m ³
4. P.V. weepholes in					
reinforced concrete gully					
	2	5	0.3		30 No

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
RCC Bhp c/w. 1m x 1m					
1. Supplying fitting and placing HMSD bsr reinforcement in substructure					
Desk	1196				
Main bsr					
12mm ϕ	150 CM	Spacing	center to center		
	82 No X 1.50 =				
Distribution	@ 0.89 kg/m				109.470 kg.
10mm ϕ	200 CM	Spacing	center to center		
	12 No X 6.00 =				
	@ 0.62 kg/m				44.640 kg.
Hatch					
10mm ϕ	200 CM	Spacing	center to center		
	62 No X 1.20 =				
	@ 0.62 kg/m				46.120 kg.
Corner					
10mm ϕ	300 CM	Spacing	center to center		
	42 No X 1.20 =				
	@ 0.62 kg/m				31.240 kg.
Parapet					
12mm ϕ	150 CM	Spacing	center to center		
	11 X 2				
	22 No X 1.50 =				
	@ 0.89 kg/m				29.370 kg.
8mm ϕ	200 CM	Spacing	center to center		
	9 X 2				
	18 No X 1.50 =				
	@ 0.39 kg/m				10.530 kg.
					T. 271.970 kg.
					or. 0.27 MT

Continuation

or. 0.27 MT

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
2. P/v reinforcement cement					
2ccgm M 25 concrete in					
box cell					
<u>Branch</u>					
1 x 0.10 x 0.10 x 6.00 =					0.06 m ³
<u>Desk slab</u>					
2 x 1.50 x 6.00 x 0.21 =					1.89 m ³
<u>Perimeter</u>					
2 x 1.50 x 0.25 x 0.60 =					0.45 m ³
					T- 2.40 m ³
3. Back filling behind abutment using well					
2 x 6.00 x 1.00 x 0.60 =					7.20 m ³
					T- 7.20 m ³
4. P/v weep holes in back reinforcement concrete abutment					
2 x 5 x 1 =					10 No
					T- 10 No

ABSTRACT OF COST 15
Sch. XLV-Form No.134

Particulars	Details of actual measurement				Contents of area	
	No.	L.	B.	D.		
1/1	Const. of Reference of					
	Working benchmark					
	vide TM 6-P 1					
1.480 km @ R.	10586	63	/km	L	1566820	
3/2	Const. of Reference pillar					
	Burial					
	vide TM 6-P 1					
1.480 km @ R.	11026	10	/km	L	1631920	
3/23	Plv and fixing of					
	MM 934 informatory					
	Sign with logo					
	vide TM 3-P 2					
2 NO @ R.	11511	52	/each	L	2302320	
4/3	Clearing and grubbing					
	ing Road land					
	vide TM 3-P 2					
0.44 Hel.	@ R.	51133	76	/km	L	2249920
5/4	Const. of embankment					
	with approved material					
	land up to 1000 m					
	vide TM 3-P 3					
602.353 m ³	@ R.	202	52	/m ³	L	12198920
500/6	Const. of embankment					
	with approved material					
	land up to 100 m					
	vide TM 3-P 3					
1405.499 m ³	@ R.	167	41	/m ³	L	23529320

Continuation

6.543479120

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
6/31	f/w in excavation for structure				
75.97					
75.97 m ³					vide TMB-P-5
15.72 m ³					vide TMB-P-5
91.69 m ³	@ R.	269.32	1 m ³	-6	2469420
7/32	Sand filling in foundation structure				
3.42 m ³					vide TMB-P-4
1.38 m ³					vide TMB-P-5
4.80 m ³	@ R.	400	59	1 m ³	-6 192320
8/34	PIV RCC M15 for in open foundation				
5.40 m ³					vide TMB-P-4
0.90 m ³					vide TMB-P-5
6.30 m ³	@ R.	6092	75	1 m ³	-6 3838420
9/7	Box cutting in excav. for Roadway				
					vide TMB-P-5
21.97 m ³	@ R.	15.74	16	1 m ³	-6 162920
10/39	PIV reinforced ccm/r RCC grade M25 in Box cell				
30.73 m ³					vide TMB-P-7
12.24 m ³					vide TMB-P-9
8.11 m ³					vide TMB-P-12
2.40 m ³					vide TMB-P-12
53.48 m ³	@ R.	7618	85	1 m ³	-6 40745620

Continuation

4.190887720

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
11/9	Const. of G.S.B. by Plv				
	well graded material				
	Gr.?				
	vide TMB-P 10				
28.29 m ³	@ L. 29.33 = 95/m ³ - 6				8300100
12/10	Plv laying & spreading				
	and compacting stone				
	Approx. 2 B.M. 15				
	vide TMB-P 10				
82.39 m ³	@ L. 3651 = 77/m ³ - 6				30086900
13/14	Const. of 4 m. drain for				
	PCC 125 gauge.				
	vide TMB-P 10				
176.28 m ³	@ L. 7271 = 67/m ³ - 4				128185000
14/40	Back filling behind				
	abutment wing wall				
21.60 m ³	vide TMB-P 12				
7.20 m ³	vide TMB-P 14				
28.80 m ³	@ L. 2805 = 92/m ³ - 6				8081000
15/41	Plv weep holes in drain				
	Ascent concrete abutment				
30 No.	vide TMB-P 12				
10 No.	vide TMB-P 14				
40 No.	@ L. 83 = 11/each 1.				3324200
16/43	Subbing fitting and				
	Placing Hyso Bar rein.				
	for cement in substructure				

Continuation

14.265873100

118 265873120

July	Billed	clp
12/12/2020	12/12/2020	12/12/2020
K	S	H
Marginal Statement -		
Earth - 2007.845 m ³		
loose sand - 4.80 m ³		
Cement -		
Coarse Sand -		
stone chips -		
Steel - 3.35 MT		
Stone Aggregate -		
Concreting sand -		
Screening -		

Continuation