

MR (3054) N.E. 10

MR. Ho - 14 (11)
year - 2019-20

Schedule XLV-Form No. 134

MR-N / 19-20 Dhondola / 04

Arbama to Patnaha DIVISION

B. Kaithi SUB-DIVISION

WEASUREMENT BOOK

Aditya Kumar Singh

Ag. No - 14/MBD/2019-20
Sch. XLV-Form No. 134
Date - 05/12/2019

Dhamdaha DIVISION

Braheera Kaphi SUB-DIVISION

MR-M/19-20 Dhamdaha / 04

Arbanna to Patraha

Acitya Kumar Singh

Measurement Book

No. - 14(11)

प्रमाणित किया जाता है कि इस मापी
पुस्त में सूचित 1 से 100 यन्त्रों के यह मापी
पुस्त और समस्त पराधिकारी सहित
कोई के नाम किताब किया जाता है

Name of officer _____

Date of first entry Executive Engineer

Rural Works Department

Date of last entry Works Division, Dhamdaha (Purnea)

Amrit
05/12/19

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 measurements relating to each work.)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
N/work -	MR	H/1	20	Dharmdgh/04	
(const of Road from Ashanaga to put 29 km)					
Agency -	Aditya & Co. SLP				
Agreement No -	311/MBD/2021-2022				
Agreement value -	Rs. 3,60,62,700				
Agreement value -	Rs. 5,56,86,700				
Date of Agreement -	08/03/2022				
Date of completion -					
<u>Record Measurement</u>					
(1/1) clearing & grubbing Road land including uprooting wild vegetation, dead					
2 x 10300 x 1.00 = 20600.00 m ²					
20600 m ² = 2.06 Hect.					
10000					
H.P. (1 x 1 room) 4.708					
(2/25) E/W in excavation for foundation of structure do - d -					
H.W - 2 x 6.45 x 1.4 x 1.50 = 27.09 m ³					
Below pipe - 1 x 4.85 x 1.53 x 0.36 = 2.708					
					29.80 m ³

do 4.708 = 4 x 29.8 = 119.20 m³

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
3/28 providing 15" (p.c. mtr) of leveling course chd.					
H.W. →	2	6.15	1.40	0.15	2.709
Below pipe	1	4.90	1.53	0.25	1.881
					<u>4.60 m³</u>
for 4 Nos =	4	4.60			<u>18.40 m³</u>
4/28 plum prepared cement concrete substructure complete chd.					
H.W. →	2	6.15	0.825	3.18	32.269
perimeter 2x		6.15	0.40	0.00	
less pipe =	2	0.788	1.25	0.62	1.478
					<u>30.79 m³</u>
for 4 Nos =	4	30.79			<u>123.16 m³</u>
5/28 providing & laying p.c. pipe HP-3 for culvert chd.					
	3	2.5			7.50 m
for 4 Nos =	4	7.5			<u>30.00 m</u>
6/30 painting on prepared wall (Black white & red)					
Top -	2	6.15	0.40		4.920
side -	4	6.15	0.60		14.76
front -	2	0.40	0.60		0.96
					<u>20.64 m²</u>
for 4 Nos =	4	20.64			<u>82.56 m²</u>

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
RCC Box Culvert (2x2m)					14.00
7/31 E/W in excavation for foundation of structure up to 0.30m					
Box culvert 1 x 6.00 x 3.50 x 0.45 =					13.65 m ³
Reform 2 x 3.50 x 1.30 x 1.80 =					16.38 m ³
Reform 4 x 2.40 x 3.42 x 1.80 =					59.05 m ³
					<u>89.08 m³</u>
8/32 providing cement for plain concrete in open foundation					
Box culvert 1 x 6.00 x 2.50 x 0.10 =					1.50 m ³
Reform 2 x 2.40 x 2.42 x 0.20 =					1.64 m ³
					<u>3.14 m³</u>
9/33 supplying, laying & placing by 83 bars reinforcement do do do					
cutting					
vertical					
10p = 2 x 16 x 3.04 x 0.62 kg/m =					60.31 kg
10q = 4 x 10 x 2.42 x 0.62 kg/m =					60.016 kg
					<u>120.326 kg</u>
					<u>= 0.12 MT</u>

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(0/35) providing concrete for plan/reduce concrete in open ground					
cut-off/m					
2 x 2.50 x 0.30 x 1.50 =					2.25 m ³
4 x 2.50 x $\left(\frac{2.00 + 1.30}{2}\right) \times 1.50 =$					21.12 m ³
Total =					23.37 m ³
(1/38) S/R/P 1183 mm reinforcement in substructure					
Bottoming					
① 43 x 2.74 x 0.629/m =					73.05
② 43 x 2.74 x 0.629/m =					73.05
③ 2 x 13 x 6.24 x 0.629/m =					100.58
④ 40 x 1.15 x 0.399/m =					35.88
⑤ 10 x 1.20 x 0.899/m =					10.68
Side wall					
⑥ 2 x 43 x 3.84 x 0.629/m =					204.75
⑦ 2 x 30 x 2.74 x 0.629/m =					101.93
⑧ 2 x 43 x 1.42 x 0.899/m =					108.69
⑨ 2 x 20 x 1.3 x 6.24 x 0.629/m =					201.18
⑩ 2 x 40 x 1.15 x 0.399/m =					35.88
⑪ 2 x 43 x 1.42 x 0.899/m =					108.69
Total =					993.91 m ³
					0.994 M7

Continuation

Particulars	Details of actual measurement				Co of area
	No.	L.	B.	D.	
(12/35) plain/reinforced cement Cement in sub/stair L2					
Bottom slab	1	6.10	2.80	0.25	$= 3.45 m^3$
Side wall	2	6.10	2.10	0.25	$= 6.10 m^3$
Handrail	4	6.10	0.01		$= 0.27 m^3$
					$= 10.02 m^3$
(13/36) ready mix concrete					
					$\Rightarrow 36 m^3$
(14/35) plain/prestressed concrete in sub/stair L2					
Reinforced 4	4	2.10	0.78	1.75	$= 10.92 m^3$
(15/42) S/R/R 1kg/m ³ br reinforcement in sub/stair L2					
(5)	46	2.80	4	0.89 kg/m	$= 114.79$
(9)	43	2.14	0.62	8/m	$= 73.05$
(7)	2	3.13	6.14	0.62 kg/m	$= 100.59$
Churn	10	1.2	0.89	18/m	$= 10.68$
Reinforced					
	2	3	2.42	0.58 kg/m	$= 22.94$
	2	1.25	0.62	18/m	$= 15.60/155$
	2	2	3	2.42	$= 11.47$
					$= 335.07 kg$
					$Tot = 0.34 MT$

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(16/41) providing & laying reinforced cement concrete in super structure					
per hr.					
Top slab -	1	2.50	6.00	0.15	3.75
1ceob -	2	2.50	0.25	0.50	0.63
				Tot =	4.38 m ³
(17/43) providing cement plaster/reach					
on wall					
2 x 6.50 x 0.60 x 0.4 =					3.72 m ³
(18/40) providing d/t's rebar					
concrete					
Behind Box wall	2	4.61	0.60	1.70	9.40 m ³
Behind Pch wall	4	1.40	0.60	1.87	6.29 m ³
				Total =	15.69 m ³
(19/39) providing d/t's rebar					
concrete					
Behind Pch	2	2.40	0.20	0.20	4.16 m ³
Behind for d/t's rebar	4	1.40	0.60	1.87	48.03 m ³
Behind for d/t's rebar					= 15.69 m ³
					= 36.50 m ³
(20/44) providing on parapet wall					
with mesh					
Top	2	6.50	0.40		5.20
Side	4	6.80	0.60		15.60
Parapet	4	0.40	0.60		0.96
					Continuation
					Total = 21.76 m ³

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(21/45) discharge spur completely per drawing					
per drawing					
(22/3) Const of granular sub-base by mndg. incl. geotext netting 0-1.00cm					
5 x 9.00 x 1.65 = 74.25 m ²					
1 x 6.00 x 1.20 = 7.20 m ²					
3 x 8.00 x 1.10 = 26.40 m ²					
2 x 6.20 x 0.80 = 9.92 m ²					
8 x 2.00 x 0.60 = 9.60 m ²					
3 x 1.60 x 0.50 = 2.40 m ²					
2 x 2.40 x 0.45 = 2.16 m ²					
2 x 12.00 x 0.10 = 2.40 m ²					
4 cm to 2.14 m					
1 x 4.20 x 1.00 = 4.20 m ²					
2 x 5.20 x 2.00 = 20.80 m ²					
2 x 6.50 x 1.50 = 19.50 m ²					
4 cm - 5.10 m					
3 x 2.60 x 1.20 = 9.36 m ²					
2 x 5.65 x 1.25 = 14.13 m ²					
7 x 3.10 x 1.35 = 29.30 m ²					
1 x 1.30 x 1.10 = 1.43 m ²					
2 x 2.05 x 1.15 = 4.71 m ²					
6 x 3.65 x 0.85 = 18.42 m ²					

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
3x 1.50 x 1.10 =					4.95
1x 2.90 x 0.90 =					2.61
5 km to 6 km					
2x 8.00 x 0.80 =					12.80
3x 2.30 x 1.34 =					9.25
2x 6.65 x 0.70 =					11.97
11x 5.45 x 1.25 =					77.69
8x 4.95 x 1.30 =					51.48
3x 4.20 x 1.25 =					15.75
1x 3.80 x 1.25 =					4.75
4x 6.20 x 1.10 =					27.28
6 km to 7 km					
3x 3.20 x 1.05 =					10.08
2x 8.95 x 1.25 =					17.38
4x 4.30 x 1.30 =					22.36
4x 3.55 x 0.90 =					12.78
8x 6.30 x 1.10 =					58.44
3x 5.30 x 1.25 =					19.88
8x 2.3 x 0.80 =					14.72
9x 2.70 x 0.90 =					13.77
3x 0.80 x 1.20 =					2.88
2x 7.65 x 1.35 =					20.66
7 km to 8 km					
6x 3.10 x 1.20 =					22.32
4x 2.60 x 1.30 =					13.52
2x 2.30 x 1.50 =					6.90

Continuation

Sch. XIV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
4 X	6.80	X	1.05	=	28.56
3 X	5.10	X	1.20	=	18.36
5 X	5.60	X	0.85	=	23.80
4 X	1.50	X	0.90	=	5.40
5 X	1.45	X	1.40	=	10.15
81cm to 91cm					
1 X	2.30	X	1.30	=	2.99
2 X	2.45	X	1.45	=	7.1
3 X	3.60	X	1.05	=	11.34
6 X	4.25	X	1.15	=	29.33
1 X	6.30	X	0.80	=	5.04
				=	85.30m ²

Qty

$$85.30m^2 \times 0.175 = 148.98m^3$$

(2314) mounding & dymg spreading
and compacting same WBM 40-II
do - do -

$$\text{Same again as per Item 22(i)} = 85.30m^2$$

5 X	2.5	X	2.70	=	33.75m ³
10 X	9.80	X	2.55	=	249.90m ³
5 X	11.25	X	2.60	=	146.25m ³
11 X	5.25	X	2.80	=	161.70m ³
2 X	15.20	X	2.60	=	79.04m ³
3 X	6.45	X	1.95	=	36.56m ³
4 X	7.25	X	2.25	=	65.25m ³

Continuation

$$40 = 1623.78m^3$$

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				$B.P = 10$	$23.75 m^2$
1 x	5.50 x	1.70			$= 9.35 m^2$
2 x	6.10 x	2.15			$= 24.23 m^2$
1 x	7.00 x	2.20			$= 15.40 m^2$
3 x	2.20 x	1.75			$= 6.93 m^2$
2 x	5.05 x	1.50			$= 15.15 m^2$
1 x	4.25 x	1.75			$= 7.44 m^2$
1 x	8.05 x	2.10			$= 16.91 m^2$
1 x	7.05 x	2.20	2		$= 15.81 m^2$
1 x	3.70 x	1.90			$= 7.03 m^2$
2 x	5.25 x	2.20	2		$= 23.10 m^2$

2 x	6.15 x	2.10			$= 25.83 m^2$
1 x	8.05 x	2.50			$= 20.125 m^2$
1 x	2.55 x	2.10			$= 5.36 m^2$
3 x	4.10 x	2.25			$= 2.48 m^2$
4 x	2.25 x	1.50			$= 3.375 m^2$
					$= 1818.12 m^2$
Only	1818.12	x 0.075			$= 136.36 m^3$

(24/5) Monday, 24/5/2018
 Computing share against WBM 60-3

same as above	23(1)				$= 1818.12 m^2$
1 x	2.25 x	3.00			$= 6.75 m^2$
2 x	4.15 x	2.25			$= 19.125 m^2$
2 x	8.05 x	2.30			$= 23.23 m^2$

Continuation

$$46 = 1867.225 m^2$$

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Particulars	Details of actual measurement				Contents of area
	No.	L.	D.	D.	
			3.5		1867.225 m ²
5x	4.00	2.15			43.00 m ²
1x	6.25	2.05			12.81 m ²
1x	5.55	2.25			12.49 m ²
2x	3.25	2.10			13.65 m ²
5x	4.95	2.70			42.46 m ²
3x	2.95	2.15			25.47 m ²
4x	5.75	2.25			51.78 m ²
3x	7.05	1.90			40.185 m ²
2x	8.25	1.95			32.175 m ²
4x	3.75	2.25			33.75 m ²
3x	3.75	1.75			17.06 m ²
4x	6.95	2.95			82.01 m ²
4x	7.25	2.70			78.30 m ²
2x	8.95	2.10			56.385 m ²
1x	10.15	2.25			22.84 m ²
1x	7.75	2.15			16.66 m ²
1x	4.95	2.95			14.60 m ²
4x	5.50	1.90			41.80 m ²
5x	6.25	2.20			68.78 m ²
2x	7.00	2.15			30.53 30.53 m ²
					2603.90 m ²
Qty					(i)
	2603.90	0.075			195.29 m ³

Continuation

14/04/22
2/2

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(25/6) providing & applying primer coat with bitumen emulsion (SS-7)					
Same as above 24 (50) =					2603.90 m ²
(26/8) providing & applying tack coat with bitumen emulsion (RS-1)					
over 40 mm 3					
10 x 10 x 30 x 3.75 =					11250.00
10 x 10 x 30 x 3.75 =					11250.00
10 x 10 x 30 x 3.75 =					11250.00
4 x 10 x 30 x 3.75 =					4500.00
1 x 3 x 30 x 3.75 =					337.50
1 x 1 x 10 x 3.75 =					37.50
Curve					
10.00 x (6.50 + 5.25 + 4.25 + 3.25 - 3.75) =					11.875 m ²
8.00 x (7.00 + 6.50 + 5.05 + 3.75 - 3.75) =					15.51
9.10 x (6.90 + 5.8 + 4.50 + 3.75 - 3.75) =					13.54
7.50 x (6.20 + 4.90 + 4.10 + 3.75 - 3.75) =					7.40
12.00 x (7.20 + 5.95 + 4.90 + 3.75 - 3.75) =					20.40
					38693.73 m ²
over B.M					(A)
Same as above					38693.73 m ²
					(B)
Total (A+B) =					77387.46 m ²

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(27/9) providing & laying bituminous Macadam concrete dkd.					
same as above 11m 26m = 8869.87					
Qty					
$8869.87 \times 0.05 = 1934.69 \text{ m}^3$					
(28/10) providing & laying semi dense bituminous concrete dkd.					
same as above 11m 26m = 8869.87					
Qty					
$8869.87 \times 0.225 = 967.34 \text{ m}^3$					

(29/11) ①	5 Kilometre stone			
	→ 1.00 Nos			
(ii)	1km stone			
	→ 12.00 Nos			
(iii)	200m stone			
	→ 41.00 Nos			
(30/12)	Traffic sign			
(i)	600mm square			
	→ 85.00 Nos			
(ii)	600mm circular			
	→ 20.00 Nos			
(4)	600mm x 450 Rectangular			
	→ 28.00 25.00 Nos			

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(iv) 9 mm stone octagon					
=> 4.00 Nos					
(31/13) ground & erecting drenching & place installation of sum rd					
$6 \times 1.2 \times 0.80 = 5.76 m^2$					
(32/14) ground & laying of hot applied (Thermoplastic)					
(1) $6.00 \times 3.00 \times 0.50 = 9.00 m^2$					

(11) Road stops				
$11 \times 12 = 132.00 Nos$				

(33/15) Boundary Pillars				
=> 166 Nos				

(31/2) Cost of subgrade & earth shoulder				
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BTP (m)

$2 \times 10 \times 30 \times 30 \times 1.00 \times 0.450 = 27.00 m^3$	
$2 \times 9 \times 10 \times 30 \times 1.00 \times 0.450 = 24.30 m^3$	
$2 \times 1 \times 1 \times 30 \times 1.00 \times 0.450 = 2.70 m^3$	
$2 \times 1 \times 1 \times 10 \times 1.00 \times 0.450 = 0.90 m^3$	
$\text{Total} = 51.66 m^3$	

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>PCC Pathing</u>			<u>BF</u>		5146.00
$2 \times 10 \times 10 \times 30 \times 0.50 \times 0.30$					$= 960.00 \text{ m}^3$
$2 \times 5 \times 10 \times 30 \times 0.50 \times 0.30$					$= 480.00$
$2 \times 1 \times 2 \times 30 \times 0.50 \times 0.30$					$= 18.00$
					<u>$= 6534.00 \text{ m}^3$</u>
<u>35/28) Brick Masonry work in cement Mortar (1:3)</u>					
$2 \times 5 \times 8 \times 0 \times 0.4 \times 0.60$					$= 12.00 \text{ m}^3$
<u>36/24) Plastering with cement mortar (1:4)</u>					
Side face	$5 \times 4 \times 5$	0×0.60			60.00 m^2
Top	$5 \times 2.0 \times 5.0$	0×0.40			$= 20.00 \text{ m}^2$
Bottom face	$5 \times 4.0 \times 0.40$	0×0.60			$= 4.80 \text{ m}^2$
					<u>$= 84.80 \text{ m}^2$</u>
<u>37/25) painting two coat including primer coat after filling sand.</u>					
Side face	$5 \times 4.0 \times 4.0$	0×0.60			$= 48.00 \text{ m}^2$
Top	$5 \times 2.0 \times 4.0$	5.0			$= 20.00 \text{ m}^2$
Bottom face	$5 \times 4.0 \times 0.40$	0×0.60			$= 4.80 \text{ m}^2$
					<u>$= 252.80 \text{ m}^2$</u>

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(38/21) plastering with cement mortar (1:4) on brick work in sub tank by					
Side face	4.00	5.0	0.60	=	12.00
Top	2.0	5.0	0.40	=	4.00
Front face	4.00	0.40	0.60	=	0.96
				=	16.96 m ²
(39/22) painting two coats including primer coat of these d/t by					
Side face	4.00	4.0	0.60	=	9.60
Top	2.0	4.0	0.50	=	4.00
Front face	4.0	0.40	0.60	=	0.96
				=	50.56 m ²
(40/17) painting of tree by hand side (Horse tree)					
				=	251.10 Nos
(41/18) Rough Mortaring with hot Applied Thermoplastic mud.					
2 x 10240					
2 x 10 x 10 x 30 x 0.10				=	600.00
2 x 10 x 10 x 30 x 0.10				=	600.00
2 x 10 x 10 x 30 x 0.10				=	600.00
2 x 1 x 10 x 30 x 0.10				=	240.00
2 x 1 x 3 x 30 x 0.10				=	18.00
2 x 1 x 1 x 10 x 0.10				=	2.00
				=	2080.00 m ²

Continuation