Sehedule XLV Form No.-134
BIHAR P.W.D.

304/19-20

Mathloliyar School to Log

DIVISION

Sonu kumar

SUB-DIVISION

MMGSY General

MEASUREMENT BOOK

सहा० अभि० हरेन्द्र साह

final

3rd ~~and~~ & bill

12

Sch. XLV-Form No.134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
name of work :- construction of road from nath lohiyar school to Lo 47 under MMGSY (SC)					
Agency :- sonu kumar					
Agreement no. -					
Date of start :- 21-06-2020					
Date of completion :- 20-06-2021					
(Recorded measurement dt) 15.04.23.					
1mx1m slab culvert					
Item no (1) :- Earth work in Excavation found. - - - ofcls					
	1	1.50	6.00	0.79 =	7.07 m³
	2	8.10	0.30	1.80 =	8.74 "
	2	2.50	0.55	1.10 =	3.02 "
	1	3.00	2.50	0.90 =	6.75 "
	1	6.00	2.50	0.90 =	13.50 "
				Total =	39.08 m³
Item no (2) :- sand filling in found. - - - - ofcls					
Below salb -	1	1.50	6.00	0.10 =	0.90 m³
cut of wall -	2	8.10	0.30	0.10 =	~~1.35~~ 0.48 "
"	2	2.50	0.55	0.10 =	0.275 "
				Total =	~~2.52 m³~~ 1.65 m³

Continuation

Sch. XLV-Form No.134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
item no (3) :- providing					
pcc grade M-15 - - - cft/m					
1	1	1.50	6.00	0.10	= 0.90 m³
2	2	2.50	0.45	0.60	= 1.35 "
2	2	2.50	0.55	0.10	= 0.27 "
				Total	= 2.52 m³
					Qassy 19/6/23 J.E
			25/6/23		
(Rewood measurement dt)					20.4.23
item no (1) :- stripping fitting					
And placing (fe415) - - - cft/m					
vertical bar :- 12 mm ϕ 100 mm c/c					
Qty. => 2 x 2 x 61 x 1.60 m x 0.89 kg = 347.45 kg					
Horizontal bar => 10 mm ϕ bar 125 mm c/c					
Qty => 2 x 2 x 9 nos x 6.15 m x 0.62 kg = 137.26 kg					
Bottom bar Main => 12 mm ϕ bar - 100 mm c/c					
Qty => 1 x 61 nos x 1.15 m x 0.89 kg/m					
					= 62.43 kg
10 mm ϕ bar 125 mm c/c					
distbn => 1 x 9 nos x 6.15 m x 0.62 kg/m					= 34.31 kg
top bar => 10 mm ϕ 125 mm c/c					
Qty => 1 x 61 nos x 1.15 m x 0.62 kg					= 43.49 kg
10 mm ϕ 125 mm c/c					
Qty => 1 x 9 nos x 6.15 x 0.62 kg =					34.3 kg
Deck slab					
Main Bottom bar 12 mm ϕ bar 100 mm c/c					
Qty => 1 x 61 nos x 1.30 m x 0.89 kg =					70.57 kg

Continuation

Sch. XLV-Form No.134 — 14

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
10mm ϕ bar 125mm c/c					
Distribution Qty → 1x9nos x 6.15m x 0.62kg					
				=	34.31kg
10mm bar 125mm c/c					
Qty → 1x61nos x 1.30 x 0.62kg =					49.16
Hench Bar → 12mm ϕ bar - 4nos each					
Qty → 4x4nos x 1.60m x 0.89kg =					22.78kg
parapet wall → 10mm ϕ bar - 6nos each					
Qty → 2x6nos x 6.15m x 0.62kg =					44.75kg
Ring → 8mm ϕ bar @ 100mm c/c					
Qty → 2x61nos x 1.30m x 0.39kg =					61.65
chair bars					
→ 12mm ϕ - 4nos					
2x25 x 0.90 x 0.89kg =					40.05kg
~~Total~~ = 982.72kg					
					0.982 mT
item no-(2) :- providing					
Reinforcement for 25) cement in					
Box cell culvert - ~~of~~ RR					
Raft — 1x1.50x6.00x0.210 =					1.89m³
Abutment - 2x1.00x6.00x0.250 =					3.00 "
Deck slab — 1x1.50x6.00x0.21 =					1.89 m³
parapet - 2x1.50x0.25x0.60 =					0.45 "
cutoff wall — 2x8.10x0.30x1.50 =					7.29 "
Hunch — 2x0.10x0.10x6.00 =					0.12 "
				Total =	14.64m³

Continuation

25/6/22 A.E 20/4/23 J.E

(3) Pitching Boulder pitching — EW

U/S → 1 × 3 × 2.50 × 0.60 = 4.50 m³

D/S → 1 × 6 × 2.50 × 0.60 = 9.00

Total = 13.50 m³

Sch. XLV-Form No.134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
(Record measurement dt) 25.4.23					
item no-(1):- Back filling					
Abutment — — of E12					
Abutment — 2 × 6.00 × 1.00 × 0.60 =					7.20 m³
item no-(2):- Brick weep					
holes — — of E12					
	2 × 5 × 1 nos →				10 nos
			total =		10 nos
item no (3):- laying Boulder approach					
U/S → 1 × 3.00 × 2.50 × 0.60 =					4.50 m
D/S → 1 × 6.00 × 2.50 × 0.60 =					9.00
			Total =		13.50 m
(Record measurement dt)					
item no (1):- cement concrete					
pavement (M-25) — — of E12					
	1 × 15.50 × (6.50 + 3.75)/2 × 0.160 =				12.7 m³
	2 × 30 × 3.75 × 0.160 =				36 "
	3 × 30 × 3.75 × 0.160 =				54 "
	2 × 30 × 3.75 × 0.160 =				36 "
	24.5 × (3.75 + 5.80)/2				
		× 0.160 =			~~[illegible]~~ 18.71 "
			total =		157.09 m³
					25/04/23 J.E
(Record measurement dt)					18.06.23
item no (1):- providing and					
applying prime coat (SS-1) — of E12					

Continuation

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Particulars	No.	L.	B.	D.	Contents of area
	6.50	×(7.10 + 3.75)/2		=	70.52 m²
	2 ×	30 ×	3.75 =		225 m²
	4 ×	30 ×	3.75 =		450 "
	20 ×	3.75		=	75 "
	5 ×	30 ×	3.75 =		562.5
	3 ×	30 ×	3.75 =		337.5
	5 ×	30 ×	3.75 =		562.5
	5 ×	30 ×	3.75 =		562.5
	20.80	(3.75 + 3.80)/2		=	78.52 "
	4 ×	30 ×	3.75 =		450 "
	3 ×	30 ×	3.75 =		337.5
	2 ×	30 ×	3.75 =		225 "
	10.10	×(3.75 + 3.80)/2		=	38.12 "
			Total =		3974.66
					= 3974.66 m²
			23/6/23 AE		18/06/23 J.E
(Reload measurement dt)					19.06.23
6.50 × 1 (item no-2) :- providing and appling tack coat (RS-1)-E12					
	6.50	×(7.10 + 3.75)/2		=	70.52 m²
	2 ×	30 ×	3.75 =		225 "
	4 ×	30 ×	3.75 =		450 "
	20 ×	3.75		=	75 "
	5 ×	30 ×	3.75 =		562.5 "
	3 ×	30 ×	3.75 =		337.5
	5 ×	30 ×	3.75 =		562.5
	5 ×	30 ×	3.75 =		562.5

Continuation

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Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
				20.80 x (3.75 + 3.80)/2 =	78.52 m²
	4	x 30	x 3.75	=	450 m²
	3	x 30	x 3.75	=	337.5 "
	2	x 30	x 3.75	=	225 "
		10.10 x	(3.75 + 3.80)/2	=	38.12 "
			Total	= 39	74.66 m²
Item no (2) :- providing laying 20mm - - - of ft 12					
		6.50 x	(7.10 + 3.75)/2	=	70.52 m
	2	x 30	x 3.75	=	225 "
	4	x 30	x 3.75	=	450 "
	2	0 x	3.75	=	75 "
	5	x 30	x 3.75	=	562.5 "
	3	x 30	x 3.75	=	337.5
	5	x 30	x 3.75	=	562.5
	5	x 30	x 3.75	=	562.5 "
		20.80 x	(3.75 + 3.80)/2	=	78.52 m
	4	x 30	x 3.75	=	450 "
	3	x 30	x 3.75	=	337.5
	2	x 30	x 3.75	=	225 "
		10.10 x	(3.75 + 3.80)/2	=	38.12 "
			Total	=	3974.66 m²
				25/4/23 A.E	Qissa 25/04/23 J.E
				(Recorded in estimate)	23.6.23
Item no 3) :- const^n of subsidiary shoulders - - - of ft 12					

Continuation

Sch. XLV-Form No.134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
cc	2	15.50	$\frac{(1.50+1.52)}{2}$		
				x0.175 =	8.19 m³
	2	x3x30	$\frac{(1.48+1.54)}{2}$		
				x0.175 =	47.56
	2	x2x30	$\frac{(1.50+1.52)}{2}$		
				x0.175 =	31.71 "
	2	x2x30	$\frac{(1.48+1.54)}{2}$		
				x0.175 =	31.71
	2	x24.50	$\frac{(1.50+1.54)}{2}$		
				x0.175 =	13.03 "
B.T	- 2	x6.50	$\frac{(1.40+1.30)}{2}$		
				x0.30 =	5.26 m³
	2	x2x30	$\frac{(1.45+1.35)}{2}$		
				$x\frac{(0.30+0.275)}{2}$ =	48.3 "
	2	x4x30	$\frac{(1.4+1.30)}{2}$		
				x 0.30 =	97.2 "
	2	x20	$\frac{(1.5+1.4)}{2}$ x 0.30 =		17.40
	2	x5x30	$\frac{(1.40+1.30)}{2}$		
				$x\frac{(0.30+0.275)}{2}$	116.22
	2	x3x30	$\frac{(1.49+1.51)}{2}$		
				x 0.30 =	81.00
	2	x5x30	$\frac{(1.15+1.45)}{2}$		
				x 0.30 =	117.00
	2	x5x30	$\frac{(1.25+1.35)}{2}$		
				x 0.30 =	117.00
	2	x20 80	$\frac{(1.25+1.15)}{2}$		
				x 0.30 =	14.97
	2	x4x30	$\frac{(1.15+1.25)}{2}$	$x\frac{0.30+0.275}{2}$ =	82.65

Continuation

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Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
	2	30	$\frac{1.35+1.45}{2}$	0.30 =	75.6
	2	30	$\frac{1.25+1.35}{2}$	0.30 =	46.8 "
	2	10	$\frac{1.25+1.35}{2}$	0.30 =	7.8 "
Earthen	2	30	7.98	0.30 =	143.64
	2	30	7.98	0.30 =	143.64
	1	30	7.90	0.30 =	71.4
			total	= 13	17.69 m³
					23/04/23
					7.6
(Revised measurement)					22.132.28

Item no 6) :- Kilometer stone

4 no x 2000 ⇒ 2nos

(11) 200m stone - nos

4 no x 5 nos → 5nos

Item no 8) :- painting two coats on N.C.C concrete - m²

2 x 6nos x 6.20 x 0.30 = 22.32 m²

total = 22.32 m²

Item no 13) :- Road marking white part - - m²

2 x 4 x 30 x 0.10 = 24 m²

2 x 4 x 30 x 0.10 = 24 "

2 x 10 x 0.10 = 2.0

Continuation total = 50 m²

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
item no-(4) :- Road marking on B.T pont, - - - of EIR					
	2	X 5 X 30	X 0.	10 =	30 m²
	2	X 5 X 30	X 0.	10 =	30 m²
	2	X 8 X 30	X 0.	10 =	48 "
	2	X 5 X 30	X 0	.10 =	30 m²
	2	X 5 X 30	X 0	.10 =	30 m²
	2	X 6 X 30	X 0.	10 =	36 "
	2	X 27.40	X 0.	10 =	5.48 "
			Total	=	209.48 m²
item no-(5) :- providing Y Bord - - of EIP					
Maintenance Bord -		1.00	X 2 nos	=	2 nos
			Total	=	2 nos
item no (6) :- Retro-Reflexted traffic sign Bord - of EIR					
(i) 600 mm equilatrel triangle					
		1.00	X 10 nos	→	10 nos
			Total	=	10 nos
(ii) 600 mm circular - - of EIR					
		1.00 X	6 nos	→	6 nos
(iii) 600 mm X 450 mm Rectangular					
		1.00 X	2 nos	→	2 nos
(iv) 900 mm side octagon - of EIR					
		1.00 X	2 nos	→	2 nos
			Total	=	2 nos

Continuation

Sch. XLV-Form No.134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item no (A) i- Construction of embankment soil - filling					
OH -	Area mean Area x		Dist =		Qty
0 to 0.00 m	1.164				
50 m	2.429	1.767	x 50 =		88.325 m³
100 m	1.985	2.267	x 50 =		110.350
150 M	1.187	1.586	x 50 =		79.300
200 m	1.847	1.517	x 50 =		75.850
250 M	1.787	1.792	x 50 =		89.400
B.1 300 m	2.130	1.884	x 50 =		94.175
350 m	2.132	2.082	x 50 =		104.100
400 m	1.885	2.010	x 50 =		100.125
450 m	4.845	3.345	x 50 =		168.250
500 m	5.374	5.110	x 50 =		255.475
550 "	4.810	5.092	x 50 =		254.600
600 "	2.957	3.884	x 50 =		194.175 "
650 "	4.420	3.759	x 50 =		185.425
700 "	2.836	3.648	x 50 =		182.400
750 "	5.259	4.048	x 50 =		202.375
800 "	3.245	4.262	x 50 =		213.100
850 "	0.928	2.097	x 50 =		104.825
900 "	1.333	1.131	x 50 =		56.525
950 "	1.280	1.307	x 50 =		65.325
1000 "	0.872	1.676	x 50 =		53.800
1050 "	7.136	4.004	x 50 =		200.200
1100 "	6.202	6.469	x 50 =		333.450
1150 "	6.984	6.593	x 50 =		329.450
1200 "	4.778	5.881	x 50 =		294.050
1250 "	5.145	4.952	x 50 =		248.100

Continued

C.D

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Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
1300m	6.059	5.423	X50 =		281.125
1330m	5.824	5.963	X50 =		178.875
	Total Qty =				4543.96m³

Deduct for.

(1) G.S.B. Grade-II, Qty =	-637.20m³
(2) W.B.M. Grade-III, Qty =	-375.58m³
(3) P.C.C. Qty =	-157.09m³
(4) Sub-grade Qty =	-1317.69m³
(5) Soiling Qty =	-23.03m³
(6) Box cutting Qty =	-115.05m³
Total =	1918.24m³
for 1000m lead 30% =	575.47m³
for 1000m lead 70% =	1342.78m³

(8) Foundation/laying edge Qty

2x3x30x0.375 =	67.50m³
2x1x10x0.375 =	7.50 "
2x1x21x0.375 =	15.75 "
2x1x25.5x0.375 =	19.125 "
2x1x18.50x0.375 =	13.87 "
2x2x30x0.375 =	45.00 "
2x1x15.5x0.375 =	11.62 "
1x10.50x0.375 =	3.94 "
Total =	184.30m³

25/6/23

23/04/23

Continuation

(ABSTRACT of COST)

Sch. XLV-Form No.134 — 23

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
item no (1) :- Bench mark					
pilar - - - - of EI					
Qty. side from BP - 9					
Qty = 1.330 km					
@ Rs 10862.01/km = Rs					14454
(a) Refence pilar - - - of EI2					
Qty. side from BP - 09					
Qty = 1.330 km					
@ Rs 9934.20/km = Rs					13212
item no (2) :- clearing and					
Qty. side from BP - 09					
Qty = 0.40 Heaters					
@ Rs 49809.13/Heaters = Rs					19924
item no (3) :- Const^n of embankment					
with soil - 100m lead - - of EI2					
Qty. side from BP - 22					
Qty = ~~1027.13~~ Qaij 1342.78 m3					
@ Rs 143.08/m3 = Rs					Qaij 146961 = 192,125
item no (4) :- Const^n of embankment					
with soil - 100m lead - - of EI2					
Qty. side from BP - 22					
Qty = ~~440.20~~ Qaij 575.47 m3					
@ Rs 187.92/m3 = Rs					Qaij 82722 = 108,142

Continuation

Sch. XLV-Form No.134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
item no (5) :- constn of subgrade					
earthen shoulder - - - of EI 7					
Qty. vide TM BP - 19					
Qty = 1317.69 m3					
@ Rs 189.80/m3 = Rs					250098=
item no (6) :- providing					
Box cutting from roadway - of EI 7					
Qty. vide TM BP - 09					
Qty = 115.05 m3					
@ Rs 82.01/m3 = Rs					9435=0 ~~9436~~
item no (7) :- providing And laying G.S.B-GR-I - - of EI I					
Qty. vide TM BP - 09					
Qty = ~~26 nos~~ 634.20 m3					
~~@ 559.07/ each~~ 2916.69/m3 = Rs					1858515= ~~14536~~
item no (8) :- Boundary pillar					
Qty. vide TM BP - 09					
Qty = 26 nos					
@ Rs 559.07/each = Rs					14536=0
item no (9) :- NMWSY Board					
sign - - - - of EI I					
Qty. vide TM BP - 09					
Qty = 2 nos					
@ Rs 11469.36/km = Rs					22939=

Continuation

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Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
item no (11) ;- providing and laying w.B.m - grade - per m2					
Qty. ride from BP-10					
Qty = 375.58 m3					
@ Rs 3633.73/m3 = Rs					136402 136401=
item (12) ;- providing prime coat (RS-1) - - - per m2					
Qty. ride from BP-16					
Qty = 3974.66 m2					
@ Rs 52.28/m2 = Rs					207795=
item no (13) providing And applying tack coat (RS-1) - per m2					
Qty. ride from BP-17					
Qty = 3974.66 m2					
@ Rs 18.93/m2 = Rs					75240=
item no (14) ;- providing And laying 20 mm thick BC. S.S. - per m2					
Qty ride from BP-17					
Qty = 3974.66 m2					
@ Rs 249.45/m2 = Rs					991479=
item no (15) ;- construction Cement from 25 concrete pavement per m2					
Qty. ride from BP-15					
Qty = 157 cgm3					1186,535=
@ Rs 7553.22/m3 = Rs					485663=

Continuation

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
item no(18) :- ordinary					
kilometer stone - - - of RIF					
Qty. wide from BP - 19					
Qty = 2nos					
@Rs 2664.33/ each = Rs					5329 =
item no(19) :- 200m stone					
Qty. wide from BP - 19					
Qty = 3nos					
@Rs 716.23/ each = Rs					3581 =
item no(21) :- painting two					
coats on New - - - of RIF					
Qty. wide from BP - 19					
Qty = 22.32 m2					
@Rs 108.98/m2 = Rs					2432 =
item no(22) :- painting road					
marking rec past - of RIF					
Qty. wide from BP - 19					
Qty = 50 m2					
@Rs 851.80/m2 = Rs					42590 =
item no(23) :- painting					
B.T Road marking - - of RIF					
Qty. wide from BP - 20					
Qty. = 209.48 m2					
@Rs 851.80/m2 = Rs					178439 =

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
item no (24/26) :- Maintence					
Board - - - of EIR					
Qty. vide TMBP - 20					
Qty = 2 nos					
@Rs 11469.38/ each = Rs					22939=
item no (25/27) :- Retro traffic					
sign Board - - - of EIR					
(T128) 600mm equilateral triangle					
Qty. vide TMBP - 20					
Qty = 10 nos					
@Rs 3984.63/ each = Rs					39846=
(29) 600mm circular - of EIR					
Qty. vide TMBP - 20					
Qty = 6 nos					
@Rs 5362.67/ each = Rs					32176=
(30) 600mm x 450mm - - of EIR					
Qty. vide TMBP - 20					
Qty = 2 nos					
@Rs 4582.52/ each = Rs					9165=
(31) 900mm side octagon of EIR					
Qty. vide TMBP - 20					
Qty = 2 nos					
@Rs 8731.21/ each = Rs					17462=

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
item no (32) :- supplying and					
fitting laying 300 mm dia - of EI					
Qty. vide from BP - 10					
Qty = 30 RM					
@ Rs 829.97 / Rm = Rs					24899
item no (33) :- Earthwork					
in foundn. - - - of EI					
Qty. vide from BP - 12					
Qty = 39.08 m³					
@ Rs 285.71 / m³ = Rs					11166=
item no (34) :- sand filling					
in foundn. - - - of EI					
Qty. vide from BP - 12					
Qty = 1.65 m³					
@ Rs 455.62 / m³ = Rs					752=
item no (35) :- providing					
M-15 P.C.C in foundn. - of EI					
Qty. vide from BP - 13					
Qty = 2.52 m³					
@ Rs 6533.21 / m³ = Rs					16464=
item no (36) :- providing R.C.C					
concrete pedestal - of EI					
Qty. vide from BP - 14					
Qty = 14.64 m³					

Continuation

@ Rs 8466.73 / m³ = Rs 123953=

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Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item no (37) :- Back filling behind abutment - - - cft					
Qty. vide Trm BP – 15					
Qty = 7.20 m³					
@ Rs 3046.38/m³ = Rs 21934 =					
Item no (38) :- providing weep holes					
Qty. vide Trm BP – 15					
Qty = 10 nos @ 103.40/each = Rs 1034 =					
Item no (39) :- providing laying					
Approach boulder apron - - - cft					
Qty. vide Trm BP – 15					
Qty = 13.50 m³					
@ Rs 3559.83/m³ = Rs 48058 =					
Item no (40) :- Supplying fitting					
And placing HYSD - - - - cft					
Qty. vide Trm BP – 14					
Qty = 0.982 MT					
@ Rs 71141.14/MT = Rs 69860 =					
Item No - (41) Providing laying edge					
bolting - - - - 4 Ell					
Qty. vide Trm B.P - 22					
Qty = 184.36 m²					
(a) ৳ 499.47/m² = ৳ 92052 =					
Total = ৳ 70,95,562 =					
Deduct previous Bill = ৳ -37,77,245 =					
Total = ৳ 33,18,317 =					

Continuation

25/6/23 A.E

24/04/23 H.S