MR-3054-2018 New Maint. Policy.

Schedule XLV-Form No. 134

Lakhisarai Bye pass Canal More to Ramgarh chowk Huddi Nahar Packge No. 04

S.B. Engicom Pvt. Ltd.

DIVISION

Agg NO- 30/MBD/2022-23

Start — 21/12/2022

SUB-DIVISION

End - 20/09/2023

M.B. NO - 765

MEASUREMENT BOOK

1st on A/C Bill

1

Name fo 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.	
Name of work- Lakhisarai Bypass Canal more to Ramgarh chowk Huddi Nahar					
Name of Agency - S.B. engicon Pvt. Ltd.					
Agreement No. - 30 MBD of 2022-23					
Date of start - 21.12.2022					
Date of Completion - 20.03.2023					
Date of measurement - 20-03-2023					
Record measurement					
① clearing and Grubbing road lay etc all Comp					
	2x	20x	30x	1.50	= 1800 m²
	2x	25x	30x	1.50	= 2250 m²
	2x	10x	30x	1.50	= 900 m²
	2x	30x	30x	1.50	= 2700 m²
	2x	20x	30x	1.50	= 1800 m²
	2x	20x	30x	1.50	= 1800 m²
	2x	15x	30x	1.50	= 1350 m²
	2x	20x	30x	1.50	= 1800 m²
	2x	20x	30x	1.50	= 1800 m²
	2x	10x	30x	1.50	= 900 m²
					17100 m²
					1.71 Hect
② scarifying the existing bituminous road surface etc all Comp					
	5x	30x	3.25		= 487.50 m²

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	8 x	30 x	2.95	= 70	8 m²
	3 x	25 x	2.45	= 183	.75 m²
	7 x	24 x	2.80	= 470	.40 m²
	6 x	30 x	2.15	= 38	7 m²
	7 x	26 x	3.50	= 63	7 m²
				2873.65	m²
		limit	—	2868.75	m²
③ Construction of embankment with approved material etc all Comp					
1 x 25 x	7.90 + 5.80 / 2	x 1.25	= 219.10	m³	
2 x 30 x	5.80 + 6.10 / 2	x 1.25	= 446.25	m³	
4 x 30 x	6.10 + 4.90 / 2	x 1.25	= 825	m³	
1 x 16 x	4.90 + 7.20 / 2	x 1.25	= 121	m³	
1 x	29 x	7.20 + 7.65 / 2	x 1.25 =	263.16	
				1875.51	m³
06/04/23 JE		limit —		1875	m³
RCC slab culvert ④ F/W in excavation for structure etc. all Comp					
Abutment 2 x	9.10 x	2.30 x	1.60	= 66.976	m³
Return wall 4 x	1.60 x	2.117 x	1.60	= 21.678	m³
Floor under deck slab 1 x	7.70 x	1.40 x	0.25	= 2.695	m³
10% Qty Extra for slope				= 9.135	m³
				100.48	m³
⑤ Sand filling in foundation trenches etc. all Comp					
1 x	7.70 x	2.629 x	0.100	= 2.024	m³
⑥ providing PCC M15 Concrete					

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
for plain Concrete in open					
foundation etc. all Comp					
Abutment					
2x	9.10x	2.30x	0.200	= 8.372	m^3
Return wall					
4x	1.60x	2.117x	0.200	= 2.71	m^3
Floor under deck slab					
1x	2.70x	2.736x	0.150	= 3.16	m^3
				14.24	m^3
(7) providing PCC M15 Concrete					
for open foundation etc. all Comp.					
Abutment					
2x	8.30x	1.80x	1.40	= 41.832	m^3
Return wall					
4x	1.60x	1.617x	1.40	= 14.488	m^3
				56.32	m^3
(8) plain/RCC M20 in Substructure					
etc. all Comp.					
Abutment					
2x	7.50x	1.00x	1.80	= 27	m^3
Return wall					
4x	1.90x	0.759x	2.15	= 12.399	m^3
				39.39	m^3
(9) plain/RCC M20 in Substructure					
etc. all Comp					
Abutment Cap					
2x	7.50x	0.700x	0.20	= 2.10	m^3
Dirt wall					
2x	7.50x	0.400x	0.30	= 1.80	m^3
Return wall Coping					
4x	2.20x	0.40x	0.150	= 0.528	m^3
				4.43	m^3
(10) providing Bitumen painting					
over top surface etc. all Comp					
Abutment Cap					
2x	7.50x	0.700		= 10.50	m^2
Dirt wall					
2x	7.50x	0.300		= 4.50	m^2
				15	m^2

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
(11) p/L RCC in Superstructure					
(Deck slab M25) etc. all Comp					
	1x	7.50x	3.56x	0.30	= 8.01 m³
(12) Supplying, fitting and placing					
HYSD bar etc. all Comp					
Abutment Cap & pier wall @					
75 kg/m³		= 3.90x75			= 292.50 kg
Deck Slab @ 105 kg/m³					
		= 8.01x	105		= 841.050 kg
Add 2% for laps & wastage					22.671 kg
Total					1.16 MT
(13) providing and filling joint					
Sealing etc. all Comp					
	2x	7.50	=		15 m
(14) plain/RCC M20 in Substructure					
etc. all Comp.					
parrapet	2x	9 x	0.40x	0.60	= 4.32 m³
(15) painting two coats on new					
Concrete Surface etc. all Comp.					
parrapet wall (sides)	4x	9.0x	0.60		= 21.60 m²
parapet wall (Top)	2x	9.0x	0.40		= 7.20 m²
parrapet wall (ends)	4x	0.40x	0.60		= 0.960 m²
					29.76 m²
(16) providing weepholes in brick					
masonry etc. all Comp.					
	2x	12 +	4x4	=	40 NOS.

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(17) E/W in excavation for foundation etc. all Comp. (12 nos. 300mm HP Culvert)					
H.W.	12 x	2 x	2.05 x	0.8 x 1.3 =	51.168 m³
Below pipe	12 x 1 x	6.10 x	0.75 x	0.225 =	12.348 m³
					63.516 m³
(18) Sand filling in foundation trenches etc. all Comp.					
H.W.	12 x 2 x	2.05 x	0.80 x	0.10 =	3.936 m³
Below pipe	12 x 1 x	6.599 x	0.750 x	0.15 =	8.832 m³
					12.768 m³
(19) Brick flat soling in foundation trenches etc. all Comp.					
H.W.	12 x 2 x	2.05 x	0.80 x	=	
					39.36 m³
(20) providing PCC M15 Concrete for plain Concrete etc. all Comp.					
H.W.	12 x 2 x	2.05 x	0.80 x	0.150 =	5.904 m³
(21) plain/RCC in Substructure etc. all Comp.					
H.W.	12 x 2 x	1.80 x	0.50 x	1.35 =	29.16 m³
parapet	12 x 2 x	1.80 x	0.40 x	0.60 =	10.368 m³
Less for pipe	12 x 2 x	0.7857 x	0.450² x	0.433 =	1.656 m³
					37.872 m³
(22) P/L 300 mm dia RCC pipe NP-3 etc. all Comp.					
	12	x 3 x	2.50	=	90 m
(23) E/W in excavation for foundation etc. all Comp. (2 Nos. 600mm HP Culvert)					

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
H.W. 2x2x	3.90x	1.15x	1.50	= 26	.91 m³
Below pipe 2x1x	5.35x	1.13x	0.765	= 4.	414 m³
				31.	32 m³

(24) providing M15 RCC as levelling course in foundation etc. all Comp

H.W 2x2x	3.90x	1.15x	0.150	= 2.	691 m³
Below pipe 2x1x	5.311x	1.13x	0.250	= 3.	0 m³
less for pipe 2x	0.250x	0.7857	x0.85²x	5.849 =	1.582 m³
				4.	10 m³

(25) plain RCC in Substructure etc. all Comp

H.W. 2x2x	3.60x	0.700x	2.18	= 21.	974 m³
parapet 2x2x	3.60x	0.900x	1.20	= 6.	912 m³
less for pipe 2x2x	0.7857	x0.85²x	0.550	= 1.	178 m³
				27.	74 m³

(26) p/L RCC pipe NP-3 for Culverts etc. all Comp.

2x3 x 2.50 = 15 m

(27) Dismantling of existing structure etc. all Comp

Cement Concrete — 2.22 m³

(28) Dismantling of existing structure etc all Comp.

RCC — 6.72 m³

(29) Removing all type of HP upto 600mm dia — 10 Nos.

27/09/23
JE

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(30) Construction of Subgrade and earthen shoulder etc all Comp					
2x	20x30	x 1.10+1.13/2	x0.95 =		602.10m³
2x	10x30x	1.12+1.12/2	x0.95 =		303.75m³
2x	20x30	x 1.12+1.11/2	x0.95 =		602.10m³
2x	30x30	x 1.11+1.13/2	x0.95 =		907.20m³
2x	20x30	x 1.13+1.05/2	x0.95 =		588.60m³
2x	25x50	x 1.05+1.13/2	x0.95 =		735.75m³
2x	25x30	x 1.13+1.12/2	x0.95 =		759.375m³
2x	20x30x	1.12+1.10/2	x0.95 =		599.40m³
2x	10x30x	1.10+1.14/2	x0.95 =		302.40m³
2x	9x30x	1.14+1.11/2	x0.95 =		273.375m³
2x	11x23x	1.11+1.13/2	x0.95 =		273.184m³
					5697.234m³
(31) Excavation for roadwork in soil etc all Comp					
2x10x	30x	0.40+0.388/2	x0.100 =		23.64m³
2x5x	30x	0.388+0.372/2	x0.100 =		11.4m³
2x2x	30x	0.372+0.370/2	x0.100 =		4.45m³
2x1x	15x	0.370+0.292/2	x0.100 =		0.92m³
					40.41m³
		Limit			39.38m³
2x20	x30x	0.392+0.372/2	x0.2 =		91.68m³
2x15	x30x	0.372+0.376/2	x0.2 =		67.32m³
2x25	x30x	0.376+0.374/2	x0.2 =		112.50m³
2x20	x30x	0.374+0.378/2	x0.2 =		90.24m³
2x30	x30x	0.378+0.362/2	x0.2 =		133.20m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
2×20×	30×0·	362+0·377 / 2	×0·2 =		88·68 m³
2×25	×30×0	377+0·369 / 2	×0·2 =		111·90 m³
2×15×	30×0·	369+0·378 / 2	×0·2 =		67·23 m³
					762·75 m³
Total = 762·75 m³ + 39·38 m³					
Ayan 25/5/23 JE					802·13 m³

(32) Construction of GSB Gr-1

etc. all Comp.

in earthen portion

1×25	× 4·52+4·05 / 2	× 0·2	=	21·425 m³
2×30×	4·05+3·98 / 2	×0·2	=	48·18 m³
1×30×	3·98+4·11 / 2	×0·2	=	24·27 m³
1×22×	4·11+3·92 / 2	×0·2	=	17·67 m³
1×13×	3·92+4·15 / 2	×0·2	=	10·931 m³
				122·03 m³
	limit			121·50 m³

in widening portion

2×2×	30×0·	455+0·362 / 2	×0·10 =	4·90 ~~2·48~~ m³
2×5×	30×0·	362+0·382 / 2	×0·10 =	11·16 m³
2×3×	30×0·	382+0·377 / 2	×0·10 =	6·83 m³
2×4×	30×0·	377+0·373 / 2	×0·10 =	9 m³
2×1×	23×	0·373+0·248 / 2	×0·10 =	1·428
				33·32 m³

overlay on BES

1×23×	4·28+3·82 / 2	×0·10	=	9·315 m³
5×30×	3·82+3·68 / 2	×0·10	=	56·25 m³
3×30×	3·68+3·76 / 2	×0·10	=	33·48 m³
4×30×	3·76+3·74 / 2	×0·10	=	45 m³
2×30×	3·74+3·62 / 2	×0·10	=	22·08 m³
				166·125 m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Qty as per Appendix					
1x	9 x	2.40x	0.10	=	2.16m³
1x	8 x	1.90x	0.10	=	1.52m³
1x	7x	2.0x	0.10	=	1.40m³
1x	10 x	1.80x	0.10	=	1.80m³
1x	7 x	1.60x	0.100	=	1.12m³
1x	9 x	1.50x	0.100	=	1.35m³
1x	10 x	1.70x	0.100	=	1.70m³
1x	9 x	1.80x	0.100	=	1.62m³
1x	10 x	1.90x	0.100	=	1.90m³
1x	11 x	2.10x	0.100	=	2.31m³
1x	9x	2.30x	0.100	=	2.07m³
1x	8 x	2.20x	0.100	=	1.76m³
1x	10 x	2.20x	0.100	=	2.20m³
1x	9 x	2.00x	0.100	=	1.80m³
1x	10 x	2.40x	0.100	=	2.40m³
1x	10 x	2.00x	0.10	=	2.00m³
1x	8 x	2.20x	0.150	=	2.64m³
1x	11 x	2.20x	0.150	=	3.63m³
1x	7 x	2.30x	0.150	=	2.42m³
1x	10 x	2.20x	0.150	=	3.30m³
1x	8x	2.40x	0.150	=	2.88m³
1x	9 x	2.20x	0.150	=	2.97m³
1x	10 x	2.60x	0.150	=	3.90m³
1x	9 x	2.10x	0.150	=	2.84m³
1x	11 x	2.0 x	0.150	=	3.30m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1x	10 x	2.40x	0.150	=	3.60m³
1x	11 x	2.40x	0.150	=	3.96m³
1x	10 x	2.20x	0.150	=	3.30m³
1x	11 x	2.10x	0.150	=	3.47m³
1x	10 x	2.20x	0.150	=	3.30m³
1x	11 x	2.40x	0.150	=	3.96m³
1x	10 x	2.50x	0.150	=	3.75m³
1x	12 x	2.10x	0.150	=	3.78m³
1x	13 x	2.10x	0.150	=	4.10m³
1x	10 x	2.20x	0.150	=	3.30m³
1x	11 x	2.40x	0.150	=	3.96m³
1x	9 x	2.20x	0.150	=	2.97m³
1x	11 x	1.80x	0.150	=	2.97m³
1x	8 x	1.90x	0.150	=	2.28m³
1x	11 x	1.70x	0.100	=	1.87m³
1x	7 x	1.50x	0.100	=	1.05m³
1x	6 x	1.60x	0.100	=	0.96m³
1x	10 x	1.60x	0.150	=	2.40m³
1x	9 x	1.70x	0.150	=	2.30m³
1x	11 x	1.80x	0.150	=	2.97m³
1x	10 x	2.40x	0.150	=	3.60m³
1x	9 x	2.40x	0.150	=	3.24m³
1x	10 x	2.60x	0.150	=	3.90m³
1x	9 x	1.90x	0.100	=	1.71m³
1x	10 x	2.30x	0.100	=	2.30m³
1x	8 x	2.10x	0.100	=	1.68m³
1x	10 x	2.40x	0.100	=	2.40m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 x	11 x	2·30 x	0·100	=	2·53 m³
1 x	8 x	2·40 x	0·100	=	1·92 m³
1 x	11 x	2·10 x	0·100	=	2·31 m³
1 x	9 x	2·30 x	0·100	=	2·07 m³
1 x	10 x	2·40 x	0·100	=	2·40 m³
1 x	11 x	2·50 x	0·100	=	2·75 m³
1 x	10 x	2·60 x	0·100	=	2·60 m³
1 x	9 x	2·10 x	0·100	=	1·89 m³
1 x	9 x	2·60 x	0·100	=	2·34 m³
1 x	11 x	2·30 x	0·100	=	2·53 m³
1 x	9 x	2·40 x	0·100	=	2·16 m³
1 x	10 x	2·10 x	0·100	=	2·10 m³
1 x	10 x	2·70 x	0·100	=	2·70 m³
1 x	10 x	1·90 x	0·100	=	1·90 m³
1 x	10 x	2·30 x	0·100	=	2·30 m³
1 x	10 x	2·10 x	0·150	=	3·15 m³
1 x	11 x	2·40 x	0·150	=	3·96 m³
1 x	9 x	2·30 x	0·150	=	3·11 m³
1 x	10 x	2·50 x	0·150	=	3·75 m³
1 x	10 x	2·10 x	0·150	=	3·15 m³
1 x	11 x	2·30 x	0·150	=	3·80 m³
1 x	12 x	2·40 x	0·150	=	4·32 m³
1 x	10 x	2·50 x	0·100	=	2·50 m³
1 x	11 x	2·40 x	0·100	=	2·64 m³
1 x	12 x	2·20 x	0·100	=	2·64 m³
1 x	11 x	2·60 x	0·100	=	2·86 m³
1 x	11 x	2·50 x	0·100	=	2·75 m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 x	10 x	2·10 x	0·100	=	2·10 m³
1 x	11 x	2·10 x	0·100	=	2·31 m³
1 x	12 x	2·20 x	0·100	=	2·64 m³
1 x	11 x	2·40 x	0·100	=	2·64 m³
1 x	10 x	2·20 x	0·100	=	2·20 m³
1 x	12 x	1·80 x	0·100	=	2·16 m³
1 x	10 x	1·90 x	0·100	=	1·90 m³
1 x	11 x	1·70 x	0·100	=	1·87 m³
1 x	10 x	1·50 x	0·100	=	1·50 m³
1 x	8 x	2·60 x	0·100	=	2·08 m³
1 x	7 x	2·10 x	0·100	=	1·47 m³
1 x	11 x	2·00 x	0·100	=	2·20 m³
1 x	10 x	1·90 x	0·100	=	1·90 m³
1 x	11 x	2·40 x	0·100	=	2·64 m³
1 x	10 x	2·50 x	0·150	=	3·75 m³
1 x	11 x	2·10 x	0·150	=	3·47 m³
1 x	12 x	2·20 x	0·150	=	3·96 m³
1 x	11 x	2·40 x	0·150	=	3·96 m³
1 x	9 x	2·50 x	0·150	=	3·38 m³
1 x	12 x	2·10 x	0·150	=	3·78 m³
1 x	11 x	2·10 x	0·150	=	3·47 m³
1 x	12 x	2·20 x	0·100	=	2·64 m³
1 x	11 x	2·40 x	0·100	=	2·64 m³
1 x	12 x	2·20 x	0·100	=	2·64 m³
1 x	11 x	1·80 x	0·100	=	1·98 m³
1 x	10 x	1·90 x	0·100	=	1·90 m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 x	11 x	1·70 x	0·100	=	1·87 m³
1 x	12 x	1·70 x	0·100	=	2·04 m³
1 x	11 x	1·60 x	0·100	=	1·76 m³
1 x	12 x	1·80 x	0·100	=	2·16 m³
1 x	11 x	1·90 x	0·100	=	2·09 m³
1 x	11 x	2·00 x	0·100	=	2·20 m³
1 x	12 x	1·70 x	0·100	=	2·04 m³
1 x	12 x	1·80 x	0·100	=	2·16 m³
1 x	11 x	1·90 x	0·100	=	2·09 m³
1 x	9 x	2·40 x	0·100	=	2·16 m³
1 x	12 x	2·50 x	0·100	=	3·00 m³
1 x	10 x	2·10 x	0·100	=	2·10 m³
1 x	11 x	2·10 x	0·100	=	2·31 m³
1 x	10 x	2·20 x	0·100	=	2·20 m³
1 x	11 x	2·40 x	0·150	=	3·96 m³
1 x	12 x	2·20 x	0·150	=	3·96 m³
1 x	10 x	1·80 x	0·150	=	2·70 m³
1 x	10 x	1·90 x	0·150	=	2·85 m³
1 x	12 x	1·70 x	0·150	=	3·06 m³
1 x	11 x	2·10 x	0·150	=	3·47 m³
1 x	12 x	2·20 x	0·150	=	3·96 m³
1 x	10 x	2·40 x	0·100	=	2·40 m³
1 x	9 x	2·10 x	0·100	=	1·89 m³
1 x	11 x	1·70 x	0·100	=	1·87 m³
1 x	9 x	2·20 x	0·100	=	1·98 m³
1 x	10 x	2·10 x	0·100	=	2·10 m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 x	9 x	1.90 x	0.100	=	1.71 m³
1 x	12 x	1.80 x	0.100	=	2.16 m³
1 x	11 x	2.0 x	0.100	=	2.20 m³
1 x	10 x	2.10 x	0.100	=	2.10 m³
1 x	9 x	2.50 x	0.100	=	2.25 m³
1 x	11 x	2.0 x	0.100	=	2.20 m³
1 x	10 x	2.10 x	0.100	=	2.10 m³
1 x	9 x	1.90 x	0.100	=	1.71 m³
1 x	11 x	2.10 x	0.100	=	2.31 m³
1 x	9 x	2.30 x	0.100	=	2.07 m³
1 x	10 x	1.60 x	0.100	=	1.60 m³
1 x	8 x	2.00 x	0.100	=	2.16 m³
1 x	11 x	2.00 x	0.100	=	2.20 m³
1 x	10 x	2.10 x	0.100	=	2.10 m³
1 x	9 x	2.20 x	0.150	=	2.97 m³
1 x	10 x	2.40 x	0.150	=	3.60 m³
1 x	11 x	2.20 x	0.150	=	3.63 m³
1 x	11 x	1.80 x	0.150	=	2.97 m³
1 x	9 x	1.90 x	0.150	=	2.57 m³
1 x	11 x	1.70 x	0.150	=	2.81 m³
1 x	10 x	2.10 x	0.150	=	3.15 m³
1 x	11 x	2.20 x	0.100	=	2.42 m³
1 x	10 x	2.40 x	0.100	=	2.40 m³
1 x	11 x	1.70 x	0.100	=	1.87 m³
1 x	12 x	2.20 x	0.100	=	2.64 m³
1 x	13 x	2.10 x	0.100	=	2.73 m³
1 x	11 x	1.90 x	0.100	=	2.09 m³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1x	12x	1.80x	0.100	=	2.16m³
1x	11x	2.0x	0.100	=	2.20m³
1x	12x	2.10x	0.100	=	2.52m³
1x	11x	2.20x	0.100	=	2.42m³
1x	12x	2.40x	0.100	=	2.88m³
1x	13x	2.20x	0.100	=	2.86m³
1x	11x	1.80x	0.100	=	1.98m³
1x	11x	1.90x	0.100	=	2.09m³
1x	13x	1.70x	0.100	=	2.21m³
1x	12x	2.10x	0.100	=	2.52m³
1x	13x	2.20x	0.100	=	2.86m³
1x	15x	2.40x	0.100	=	3.60m³
1x	14x	2.10x	0.150	=	4.41m³
1x	16x	1.70x	0.150	=	4.08m³
1x	14x	2.20x	0.150	=	4.62m³
1x	14x	2.10x	0.150	=	4.41m³
1x	14x	1.90x	0.150	=	3.99m³
1x	12x	1.80x	0.150	=	3.24m³
1x	11x	2.00x	0.150	=	3.30m³
1x	11x	1.70x	0.100	=	1.87m³
3x	9.0x	2.20x	0.100	=	5.94m³
2x	9.0x	2.10x	0.100	=	3.78m³
1x	9.0x	1.90x	0.100	=	1.71m³
1x	12x	1.80x	0.100	=	2.16m³
1x	11x	2.00x	0.100	=	2.20m³
1x	12x	2.10x	0.100	=	2.52m³
2x	11x	2.20x	0.100	=	4.84m³

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 ×	12 ×	2.40 ×	0.100	=	2.88 m³
1 ×	13 ×	2.20 ×	0.100	=	2.86 m³
1 ×	11 ×	1.80 ×	0.100	=	1.98 m³
1 ×	11 ×	1.90 ×	0.100	=	2.09 m³
1 ×	13 ×	1.70 ×	0.100	=	2.21 m³
2 ×	12 ×	2.10 ×	0.100	=	5.04 m³
1 ×	13 ×	2.20 ×	0.100	=	2.86 m³
1 ×	15 ×	2.40 ×	0.100	=	3.60 m³
1 ×	14 ×	2.10 ×	0.100	=	2.94 m³
1 ×	16 ×	1.70 ×	0.100	=	2.72 m³
1 ×	14 ×	2.20 ×	0.100	=	3.08 m³
1 ×	14 ×	2.10 ×	0.150	=	4.41 m³
					529.87 m³
In widening for BT Road					
2 × 20 ×	30 × 0.415+0.388/2		× 0.2	=	96.36 m³
2 × 30 ×	30 × 0.388+0.376/2		× 0.2	=	137.52 m³
2 × 25 ×	30 × 0.376+0.368/2		× 0.2	=	111.60 m³
2 × 25 ×	30 × 0.368+0.372/2		× 0.2	=	111 m³
2 × 30 ×	30 × 0.372+0.382/2		× 0.2	=	135.72 m³
2 × 20 ×	30 × 0.382+0.378/2		× 0.2	=	91.20 m³
2 × 20 ×	30 × 0.378+0.305/2		× 0.2	=	81.96 m³
					765.36 m³
		limit —			765 m³
To 121 =	121.50 + 33.32 + 166.125 +				
	529.87 + 765 —				1615.82 m³
(33) P/L.	Spreading and Compacting				

Continuation

20/05/23
JE

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
W&M Gr-3 etc. all Comp					
5 x	30 x 4	(3.55+3.38)/2	x 0.075	=	47.38 m³
5 x	30 x 3	(3.38+3.76)/2	x 0.075	=	43.54 m³
10 x	30 x 3	(3.76+3.45)/2	x 0.075	=	81.11 m³
10 x	30 x 3	(3.45+3.82)/2	x 0.075	=	81.79 m³
20 x	30 x 3	(3.82+3.84)/2	x 0.075	=	172.35 m³
5 x	30 x 3	(3.84+3.68)/2	x 0.075	=	42.30 m³
5 x	30 x 3.68	(3.68+3.74)/2	x 0.075	=	41.74 m³
15 x	30 x 3	(3.74+3.78)/2	x 0.075	=	126.90 m³
20 x	30 x 3	(3.78+3.90)/2	x 0.075	=	172.80 m³
15 x	30 x 3	(3.90+3.82)/2	x 0.075	=	130.27 m³
5 x	30 x 3	(3.82+3.58)/2	x 0.075	=	41.62 m³
10 x	30 x	(3.58+3.78)/2	x 0.075	=	82.80 m³
10 x	30 x	(3.78+3.94)/2	x 0.075	=	86.85 m³
20 x	30 x	(3.94+3.80)/2	x 0.075	=	174.15 m³
5 x	30 x	(3.80+3.96)/2	x 0.075	=	43.65 m³
15 x	30 x	(3.96+3.66)/2	x 0.075	=	128.59 m³
10 x	30 x	(3.66+3.86)/2	x 0.075	=	84.60 m³
4 x	30 x	(3.86+3.78)/2	x 0.075	=	39.38 m³
1 x	23 x	(3.78+2.25)/2	x 0.075	=	5.20 m³
Area 16/06/23					1622.62 m³
		limit		—	1601.16 m³
(34) P/A primer Coat with bitumen emulsion etc. all Comp.					
Area vide Gr-III					
= 160	1.16			=	213.49 m²
	0.075				

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(35) patch work over worn using					
MSS etc. all Comp.					
5x	30x	4.55+3.98 / 2		= 63	9.75m²
5x	30x	3.98+3.76 / 2		= 5	80.50m²
10x	30x	3.76+3.45 / 2		= 5	~~70.75~~ 81.50 m²
10x	30x	3.45+3.82 / 2		= 10	90.50m²
20x	30x	3.82+3.84 / 2		= 22	98m²
5x	30x	3.84+3.68 / 2		= 56	4m²
5x	30x	3.68+3.74 / 2		= 5	56.50m²
15x	30x	3.74+3.78 / 2		= 16	92m²
20x	30x	3.78+3.90 / 2		= 29	04m²
15x	30x	3.90+3.82 / 2		= 17	37m²
5x	30x	3.82+3.58 / 2		= 5	55m²
10x	30x	3.58+3.78 / 2		= 110	4m²
10x	30x	3.78+3.74 / 2		= 11	58m²
20x	30x	3.74+3.80 / 2		= 23	22m²
5x	30x	3.80+3.36 / 2		= 5	82m²
15x	30x	3.36+3.66 / 2		= 17	14.50m²
10x	30x	3.66+3.86 / 2		= 11	28m²
4x	30x	3.86+3.78 / 2		= 4	58.40m²
1x	29x	3.78+2.25 / 2		= 69	.34m²
				216	34.99m²
		limit		215	62.24m²
(36) P/A tack Coat with bitumen					
emulsion etc. all Comp.					
Qty same as item No. (35)					
		Continuation			21562.24m²

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
(37) P/L Semi dense bituminous					
Concrete etc. all Comp.					
	5 x	30 x	$\frac{4.55+3.98}{2}$ x	0.025	= 15.99 m³
	5 x	30 x	$\frac{3.98+3.76}{2}$ x	0.025	= 14.51 m³
	10 x	30 x	$\frac{3.76+3.45}{2}$ x	0.025	= 27.03 m³
	10 x	30 x	$\frac{3.45+3.82}{2}$ x	0.025	= 27.26 m³
	20 x	30 x	$\frac{3.82+3.84}{2}$ x	0.025	= 57.45 m³
	5 x	30 x	$\frac{3.84+3.68}{2}$ x	0.025	= 14.10 m³
	5 x	30 x	$\frac{3.68+3.79}{2}$ x	0.025	= 13.91 m³
	15 x	30 x	$\frac{3.79+3.78}{2}$ x	0.025	= 42.30 m³
	20 x	30 x	$\frac{3.78+3.90}{2}$ x	0.025	= 57.60 m³
	15 x	30 x	$\frac{3.90+3.82}{2}$ x	0.025	= 43.42 m³
	5 x	30 x	$\frac{3.82+3.58}{2}$ x	0.025	= 13.87 m³
	10 x	30 x	$\frac{3.58+3.78}{2}$ x	0.025	= 27.60 m³
	10 x	30 x	$\frac{3.78+3.94}{2}$ x	0.025	= 28.95 m³
	20 x	30 x	$\frac{3.94+3.80}{2}$ x	0.025	= 58.05 m³
	5 x	30 x	$\frac{3.80+3.96}{2}$ x	0.025	= 14.55 m³
	15 x	30 x	$\frac{3.96+3.66}{2}$ x	0.025	= 42.86 m³
	10 x	30 x	$\frac{3.66+3.86}{2}$ x	0.025	= 28.20 m³
	4 x	30 x	$\frac{3.86+3.78}{2}$ x	0.025	= 11.46 m³
	1 x	23 x	$\frac{3.78+3.25}{2}$ x	0.025	= 1.73 m³
					540.84 m³
		limit	—		539.06 m³
(38) RCC M15 grade 5th km Stone			—		1 No.
(39) RCC M15 grade km stone			—		6 Nos.

Continuation

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(40) RCC M15 grade 200mm					
Stone		—	—	23	NOS.
(41) Direction and place identi-					
fication sign etc. all Comp					
	2 x	1.20 x	0.80	=	1.92m²
(42) p/f of retro-reflectorised					
600mm equilateral triangle					16 NOS.
(43) p/f of retro reflectorised					
600mm Circular		—	—		12 NOS.
(44) p/f of retro reflectorised					
600mm x 450mm rectangular					10 NOS.
(45) p/f of retro-reflectorised					
900mm octagon stop board					
			—		6 NOS.
(46) RCC M15 grade boundary					
pillar		—	—		48 NOS.
(47) p/f of hot applied					
thermoplastic Compound etc all Comp					
2 x	30 x	30 x	0.1	=	180m²
2 x	40 x	30 x	0.1	=	240m²
2 x	20 x	30 x	0.1	=	120m²
2 x	30 x	30 x	0.1	=	180m²
2 x	10 x	30 x	0.1	=	60m²
2 x	40 x	30 x	0.1	=	240m²
2 x	10 x	30 x	0.1	=	60m²
2 x	9 x	30 x	0.1	=	54m²
2 x	1 x	23 x	0.1	=	4.6m²

Continuation 1138.60m²

Sch. XLV—Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
(48) p/f of typical information					
Sign board				3	Nos.
Akur 28/08/23 JE					
(49) planting of trees and their maintenance etc. all Comp.					
30% Qty of	289				87 Nos.
Akur 28/08/23 JE		Upper 28/8/23 AE			

material statement

① E/W - ~~1875 m³~~ 7572.23 m³

② GSB Gr-1
Stone metal - 1438 m³
Course Sand - 630.17 m³

③ WBM Gr-3
Stone metal - 1937.40 m³
Screening material - 384.28 m³

④ Emulsion SS-1 - 18.146 MT
Emulsion RS-1 - 5.93 MT
Bitumen S90 - 105.655 MT

⑤ Stone Chips - 1353 m³
Filler - 114.45 m³

⑥ PCC M15
Agg - 77.34 m³
Sand - 38.67 m³

⑦ PCC M20
Agg - 43.33 m³
Sand - 21.66 m³

Mining challan of stone materials verified and found Correct

Akur 28/08/23 JE

Akur 28/08/23 JE

Upper 28/8/23 AE

Continuation

Abstract of Cost
1st on A/c Bill

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1/1 Clearing and Grubbing road land etc. all Comp					
Qty vide TMBP.				(1)/(1)	
= 1.71 Hect @ Rs 59726.13/Hect					
				Rs. 102132=00	
2/2 Scarifying the existing bituminous road etc. all Comp					
Qty vide TMBP.				(2)/(2)	
= 2868.78 m² @ Rs. 20.18/m²					Rs. 57891=00
3/3 Construction of embankment with approved material etc. all Comp					
Qty vide TMBP.				(2)/(3)	
= 1875 m³ @ Rs. 250.13/m³					Rs. 469106=00
4/4 Construction of Subgrade and earthen shoulders etc. all Comp					
Qty vide TMBP.				(7)/(30)	
= 5697.234 m³ @ Rs. 253.56/m³					
				Rs. 1444591=00	
5/5 Excavation for road work in soil etc. all Comp					
Qty vide TMBP.				(7)/(31)	
= 802.13 m³ @ Rs. 99.69/m³					Rs. 79964=00
6/6 Construction of GSB Gr-I etc. all Comp					
Qty vide TMBP.				(10)/(32)	
1615.82 m³ @ Rs. 2217.81/m³					
				Continuation Rs. 3583582=00	

C/o Rs. 5737266=00

Sch. XLV—Form No. 134 B/F Rs. 5737266=00

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
7/7 P/L spreading and Comp. acting etc. all Comp. Qty vide TMBP — (17)/(33) = 1601.16 m³ @ Rs. 309491/m³ — Rs. 4955446=00					
8/8 P/A primer Coat with bitumen emulsion etc. all Comp. Qty vide TMBP — (17)/(34) = 21349 m² @ Rs. 59.03/m² — Rs. 1260231=00					
9/9 patch work over WBM using MSS etc. all Comp. Qty vide TMBP — (18)/(35) = 21562.24 m² @ Rs. 243.80/m² — Rs. 5256874=00					
10/10 P/A tack Coat with bitumen emulsion etc. all Comp. Qty vide TMBP — (18)/(36) = 21562.24 m² @ Rs. 20.10/m² — Rs. 433401=00					
11/11 P/L Semi dense bituminous Concrete etc. all Comp. Qty vide TMBP — (19)/(37) = 539.06 m³ @ Rs. 12879.84/m³ — Rs. 6943007=00					
12/12 RCC M/S grade 5th Km Stone etc. all Comp. Qty vide TMBP — (19)/(38)					

Continuation

C/o Rs. 24586225=00

Sch. XLV—Form No. 134 B/F Rs 24586225=00

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
1 No. @ Rs 4944.95/No. — Rs. 4944=00					
13/13 RCC M15 grade Km Stone					
Qty vide TMBP. — (19)/(19)					
= 6 Nos. @ Rs 2507.73/No. — Rs 15046=00					
14/14 RCC M15 grade 200m Stone					
Qty vide TMBP. — (20)/(20)					
= 23 Nos @ Rs 721.76/No. — Rs. 16600=00					
15/15 Direction and place identification signs etc. all Comp					
Qty vide TMBP. — (20)/(21)					
= 1.92 m² @ Rs 14873.20/m² — Rs. 28557=00					
16/16 P/F of retro reflectorised 600 mm equilateral triangle					
Qty vide TMBP — (20)/(22)					
= 16 Nos. @ Rs 4314.94/No. — Rs 69031=00					
17/17 P/F of retro-reflectorised 600mm Circular signs					
Qty vide TMBP. — (20)/(23)					
= 12 Nos. @ Rs 4215.58/No. — Rs. 50587=00					
18/18 P/F of retro reflectorised 600mm x 450 mm rectangular					
Qty vide TMBP. — (20)/(24)					
= 10 Nos. @ Rs. 4070.90/No. — Rs 40709=00					
19/19 P/F of retro reflectorised 900mm octagon stop board					
Qty vide TMBP. — (20)/(25)					
= 6 Nos. @ Rs. 8559.59/No. — Rs 51358=00					

Continuation

C/o Rs. 24863052=00

Sch. XLV—Form No. 134 B/F Rs 24586235=00

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
1 No. @ Rs 4944.95/No. — Rs. 4944=00					
13/13 RCC M15 grade Km Stone					
Qty vide TMBP. — (19)/(39)					
= 6 Nos @ Rs 2507.73/No. — Rs 15046=00					
14/14 RCC M15 grade 200mm Stone					
Qty vide TMBP. — (20)/(40)					
= 23 Nos @ Rs 721.76/No. — Rs. 16600=00					
15/15 Direction and place identification sign etc. all Comp					
Qty vide TMBP. — (20)/(41)					
= 1.92 m² @ Rs 14875.20/m² — Rs. 28557=00					
16/16 P/F of retro reflectorised 600mm equilateral triangle					
Qty vide TMBP. — (20)/(42)					
= 16 Nos @ Rs 4314.94/No. — Rs 69031=00					
17/17 P/F of retro-reflectorised 600mm Circular Signs.					
Qty vide TMBP. — (20)/(43)					
= 12 Nos. @ Rs 4215.58/No. — Rs. 50587=00					
18/18 P/F of retro reflectorised 600mm x 450mm rectangular					
Qty vide TMBP. — (20)/(44)					
= 10 Nos. @ Rs. 4070.90/No. — Rs 40709=00					
19/19 P/F of retro reflectorised 900mm octagon stop board					
Qty vide TMBP. — (20)/(45)					
= 6 Nos. @ Rs. 8559.59/No. — Rs 51358=00					

Continuation

C/o Rs. 24863052=00

Sch. XLV—Form No. 134 B/F Rs. 24863052=00

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
20/20 RCC M15 grade boundary pillar etc. all Comp					
Qty vide TMBP. — (20)/(46)					
= 48 Nos. @ Rs. 706.28/No. — Rs 33900=00					
21/23 P/L of hot applied thermoplastic Compound etc all Comp					
Qty vide TMBP. — (20)/(47)					
= 1138.60 m² @ Rs. 823.74/m² — Rs. 937910=00					
22/24 P/F of typical information sign board etc. all Comp					
Qty vide TMBP. — (21)/(48)					
= 3 nos @ Rs. 12356.03/No. — Rs. 37068=00					
23/25 E/W in excavation for structure etc. all Comp					
Qty vide TMBP. — (2)+(5)+(6) / (4)+(17)+(23)					
= 195.32 m³ @ Rs. 314.41/m³ — Rs. 61411=00					
24/26 providing M15 PCC as levelling Course in foundation					
Qty vide TMBP. — (3)+(5)+(6) / (6)+(7)+(22)+(24)					
= 80.56 m³ @ Rs. 5824.72/m³ — Rs. 469241=00					
25/27 P/L RCC pipe NP-3 for Culvert etc. all Comp					
Qty vide TMBP. — (5)/(22)					
= 90 m @ Rs 747.11/m — Rs. 67240=00					
26/28 P/L RCC pipe NP-3 for Culverts etc. all Comp					

Continuation

c/o Rs. 26469822=00

Sch. XLV—Form No. 134 B/F Rs. 26469822=00

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Qty vide TMBP				6/26	
= 15m @ Rs. 3038.87/m				Rs. 45583=00	
27/29 Brick flat soling in foundation etc. all Comp					
Qty vide TMBP				5/19	
= 39.36m³ @ Rs 284.84/m³				Rs 11211=00	
28/30 painting two Coats including primer Coat etc. all Comp					
Qty vide TMBP				4/15	
= 29.76m² @ Rs 117.40/m²				Rs. 3405=00	
29/31 Sand filling in foundation trenched etc. all Comp					
Qty vide TMBP				2+4 / 2+20	
= 14.79m³ @ Rs 550.45/m³				Rs 8141=00	
30/32 plain/RCC m20 in Substructure etc. all Comp					
Qty vide TMBP				3+4 / 8+9+14	
= 48.14m³ @ Rs. 6698.63/m³				Rs 322472=00	
31/33 plain/RCC m20 in Sub-Structure etc. all Comp					
Qty vide TMBP				5+6 / 21+25	
= 65.61m³ @ Rs. 5925.06/m³				Rs 388743=00	
32/34 providing Bitumen painting over top Surface etc. all Comp					
Qty vide TMBP				3/10	

Continuation

C/o Rs. 27249377=00

Sch. XLV— Form No. 134 B/F Rs 27249377=00

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
=15m² @ Rs 20.10/m² — Rs. 301=00					
33/35 P/L RCC in Superstructure etc. all Comp.					
Qty vide TMBP — (4)/(11)					
= 8.01m³ @ Rs 7690.00/m³ — Rs 61602=00					
34/36 Supplying, fitting and placing HYSD bar etc. all Comp.					
Qty vide TMBP — (4)/(12)					
= 1.16MT @ Rs 76831.18/MT					
— Rs. 89131=00					
35/37 P/F Joint Sealing Compound etc. all Comp.					
Qty vide TMBP — (4)/(13)					
= 15m @ Rs 45.72/m — Rs 686=00					
36/38 providing weepholes etc. all Comp.					
Qty vide TMBP — (4)/(16)					
= 40 NOS @ Rs 131.90/No — Rs 5276=00					
37/39 Dismantling of existing structures etc. all Comp.					
Qty vide TMBP — (6)/(27)					
= 2.22m³ @ Rs. 644.44/m³ — Rs 1431=00					
38/40 Dismantling of existing structure etc. all Comp.					
Qty vide TMBP — (6)/(28)					
= 6.72m³ @ Rs. 939.56/m³ — Rs 6314=00					
39/41 Removing all type pedof HP					

Continuation

C/o Rs 27414118=00

Sch. XLV—Form No. 134 B/F Rs. 27414118=00

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
etc all Comp					
Qty vide TMBP				(6)/(29)	
= 10m @ Rs 202.04/m				Rs 2040=00	
			Rs. 27416158=00		
Add 1% Labour Cess				Rs. 274162=00	
Add 12% GST				Rs. 3289939=00	
Seigniorage fee				Rs. 470999=00	
			Rs. 31451252=00		
less for 15.55% below					
as per agreement				(-) Rs 4890670=00	
			Rs. 26560582=00		
Akew 28/08/23 JE					
40/22 planting of trees and their maintenance etc all Comp					
Qty vide TMBP				(21)/(49)	
= 87 Nos @ Rs 1092.53/No				Rs 95050=00	
			Rs. 27511208=00		
Add 1% Labour Cess				Rs. 275112=00	
Add 12% GST				Rs. 3301345=00	
Seigniorage fee				Rs. 472626=00	
			Rs 31560291=00		
less for 10.55% below					
as per agreement					
				(-) Rs. 3329611=00	
			Rs. 28230680=00		

Continuation

Akew 28/08/23 JE

28/8/23 AE

19/9/23

Sf. Rs. 28230680=00
limited as per available fund
Rs 265,60582=00

Sch. XLV—Form No. 134

Memo of Payment

Particulars	Details of actual measurement				Contents of area
	No.	L	B.	D.	
SD 5% — Rs. 505553=00		1328029=00			
IT 2% — Rs. 505553=00					
Lcess 1% — Rs. 265603=00					
CGST 1% — Rs. 252776=00					
SGST 1% — Rs. 252776=00					
Royalty — Rs. 698462=00		398462			
S.F — Rs. 472626=00					
Net pay Rs 22784757=00		23084757=00			
Total Rs. 26560582=00					

Passed for Rupees two crore sixty five lac sixty thousand five hundred eighty two only.

Rs. 3775825=00
3475825=00

20/9/23

Executive Engineer
RWD Works Division, Lakhisarai

20/09/23

20/09/23

Continuation