

Schedule XLV-Form No. 134

offg:- MMGSY(CAWSESH)-NDB-BRRP-2

Name of road:- R.E.O road to Parijog 70/9.

Executive Engineer

DIVISION

R.W.D. WORKS DIVISION
Darbhanga-1

Bahar

SUB-DIVISION

MB.No:- 4163

MEASUREMENT BOOK

Name of Cont:- Subodh Kumar Singh.

2nd on A/L 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 measurements relating to each work).

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
N/work Construction of Road from RFO Road to Paryag Tola.					
Agency Sri Subodh kr. Singh.					
Aggr. No. 32-SBP/2023-24					
D/Start - 10/01/24					
D/Compli - 09/01/25					
(1) P&F - MINUSY Project logo & Intermediary Sign boards as per specification.					
± 02 x 04 Nos = 02 Nos.					
(2) Clearing & grubbing Road lands both sides as per sketch.					
1 x 10 x 30.00 m x 2 x 3.50 m = 2100.00 m ²					
1 x 10 x 30.00 m x 2 x 3.50 m = 2100.00 m ²					
1 x 5 x 30.00 m x 2 x 3.50 m = 1050.00 m ²					
1 x 5.00 m x 2 x 3.50 m = 35.00 m ²					
Area - Total = 5285.00 m ²					
= 0.529 Hect.					

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
(3) Setting out Bench Mark Pillars as per Specification. For = 0.755 km.					
(4) Box-Cutting for widening of existing Road as per Specification					
	5 x 2	30.0m	0.775	0.100	23.25 m ³
	5 x 2	30.0m	0.755	0.100	23.25 "
(A) 2 x 2	30.0m	0.755	0.100		9.30 "
1 x 2	70m	0.755	0.100		1.06 "
				Total =	56.86 m ³

(5) P.C. 4 x 3 B with wall. Graded materials as per Specification

(A) For levelling B/S Roads.

$$2 \times 4.50m \times 1.50 \times 0.100 = 1.35 m^3$$

$$B \left\{ 5 \times 3.00m \times 2.00 \times 0.100 = 3.00 \right.$$

$$3 \times 1.00m \times 1.0 \times 0.100 = 0.30 "$$

$$\text{Total} = 4.65 m^3$$

(B) For widening in Box Cutting Qty. same as Box-Cutting Qty. with item 4, P-2 = 56.86 m³

(C) For overlay throughout.

$$A \left\{ 10 \times 30.00m \times 4.05 \times 0.100 = 121.50 m^3 \right.$$

$$2 \times 30.00m \times 4.05 \times 0.100 = 24.30 "$$

$$1 \times 70m \times 4.05 \times 0.100 = 2.84 "$$

$$\text{Total} = 148.64 m^3$$

Continuation

$$\text{Total Qty} = (A+B+C) = 210.45 m^3$$

For 11/08/24
22
11/08/24
A/E

Sch.XLV-Form No. 134

Sch.XLV-Form No. 134					Contents of area
Particulars	Details of actual measure				
	No.	L.	B.	D.	
(6)	Measurements				
(1) Construction of sub-grade as per Spentika - Earthen Portion					
	3 x 30.0m	x 1/2 x (7.10 + 5.90)	x 0.300	= 202.50 m ³	
	4 x 30.0m	x 1/2 x (7.0 + 5.8)	x 0.300	= 270.0 "	
	3 x 30.0m	x 1/2 x (6.80 + 7.80)	x 0.300	= 197.10 "	
	2 x 30.0m	x 1/2 x (7.0 + 5.90)	x 0.300	= 134.10 m ³	
	1 x 28.0m	x 1/2 x (7.10 + 5.80)	x 0.300	= 63.42 "	
	Total = 867.12 m ³				
	Unit = 806.93 m ³				
(2) P.C. G.S.D with well graded materials as per Spentika					
A) Thickness	5 x 30.0m	x 4.05	x 0.200	= 121.50 m ³	
	5 x 30.0m	x 4.05	x 0.200	= 121.50 "	
	2 x 30.0m	x 4.05	x 0.200	= 48.60 "	
	1 x 28.0m	x 4.05	x 0.200	= 22.68 "	
	Total = 314.28 m ³				
(B) 4 Curves / width					
	2 x 2 x 15.0m	x 0.50	x 0.20	= 6.0 m ³	
	Total Qty = (A+B) = 320.28 m ³				
(3) P.C. W.B.M. gr-3 with specific size of materials as per Spentika					
	5 x 30.0m	x 3.75	x 0.075	= 42.20 m ³	
	5 x 30.0m	x 3.75	x 0.075	= 42.20 "	
	2 x 30.0m	x 3.75	x 0.075	= 16.88 "	
Continuation					
101.28 m ³					

Sch. XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
$1 \times 30.0 \times \frac{1}{2} \times (3.75 + 4.50) \times 0.075 =$					9.28 m ³
$1 \times 30.0 \times \frac{1}{2} \times (4.50 + 4.0) \times 0.075 =$					9.56 "
$1 \times 30.0 \times \frac{1}{2} \times (4.0 + 3.75) \times 0.075 =$					8.72 m ³
$5 \times 30.0 \text{ out} \times 3.75 \times 0.075 =$					42.20 "
$3 \times 30.0 \text{ out} \times 3.75 \times 0.075 =$					42.20 "
$1 \times 30.0 \times \frac{1}{2} \times (3.75 + 4.50) \times 0.075 =$					8.72 "
$1 \times 30.0 \times \frac{1}{2} \times (4.50 + 4.50) \times 0.075 =$					9.0 "
$1 \times 5.0 \times \frac{1}{2} \times (4.0 + 4.0) \times 0.075 =$					1.50 "
Total =					215.57 m ³
Limit =					214.47 m ³
<i>Attn</i> 16/03/24 <i>AE</i> <i>Signature</i> 16/03/24 <i>AE</i>					

Measurements

(1) PIA. Prime Cost with SS,
as per Specification.

$3 \times 30.0 \text{ out} \times \frac{1}{2} \times (3.75 + 3.75) \text{ ml} =$	337.50 m ³
$5 \times 30.0 \text{ out} \times \frac{1}{2} \times (3.75 + 3.75) =$	562.50 "
$4 \times 30.0 \text{ out} \times \frac{1}{2} \times (3.75 + 3.75) =$	450.0 "
$1 \times 30.0 \times \frac{1}{2} \times (3.75 + 4.40) =$	244.50 m ³
$1 \times 30.0 \times \frac{1}{2} \times (4.40 + 4.0) =$	126.0 "
$1 \times 30.0 \text{ out} \times \frac{1}{2} \times (4.0 + 3.75) =$	116.25 "
$5 \times 30.0 \text{ out} \times \frac{1}{2} \times (3.75 + 3.75) =$	562.50 m ³
$4 \times 30.0 \text{ out} \times \frac{1}{2} \times (3.75 + 3.75) =$	450.0 "
$1 \times 30.0 \text{ out} \times \frac{1}{2} \times (3.75 + 4.0) =$	116.25 "
$1 \times 5.0 \text{ out} \times \frac{1}{2} \times (4.0 + 4.0) =$	20.0 m ³

Continuation

Total = 2885.50 m³Limit = 2859.56 m³

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
(2) P/A - Trench wall with R.S. as per Specification.					
Area - Same as item 1, P-5					
					$= 2859.56 \text{ m}^2$
(3) P/L - 20mm thick - M.S.S. as per Specification.					
Area - Same as Item-2, P-5					
					$= 2859.56 \text{ m}^2$
Area 24/09/24 24					
Area 24/09/24 24					

Measure mts.

(1) Construction of embankment with excavated materials.

Total Qty. required - 4, P-2
 $= 56.86 \text{ m}^3$

For Embankment - 60%.

Qty. $= 0.60 \times 56.86 \text{ m}^3 = 34.12 \text{ m}^3$

(2) Constr. of Embankment with materials obtained from.

Borrow Pit as per Specification.

CH	Area	Area	Qty.	Qty.
0	0.621	—	—	—
25	3.727	2.174	25	54.35

Continuation

54.35 m³

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
Ch.	Area (m ²)	Avg Area (m ²)	Length (m)	Qty (m ³)	
50	7.022	5.374	25	134.34	
75	4.815	5.918	25	147.96	
100	4.025	4.42	25	110.50	
125	4.382	4.204	25	105.10	
150	7.671	6.027	25	150.66	
175	3.251	5.461	25	136.53	
200	0.96	2.106	25	52.64	
225	2.894	1.927	25	48.18	
250	6.113	4.50	25	112.59	
275	6.270	3.192	25	73.79	
300	12.399	6.335	25	156.36	
325	5.332	8.866	25	221.64	

350	4.746	5.039	25	125.98	
375	9.102	6.924	25	173.10	
400	6.541	7.822	25	195.54	
425	4.636	5.589	25	139.71	
450	5.428	5.032	25	125.80	
475	2.969	4.199	25	104.96	
500	9.479	6.224	25	155.60	
525	8.65	9.065	25	226.61	
550	8.291	8.471	25	211.76	
575	16.447	12.369	25	309.23	
600	9.771	13.109	25	327.73	
625	8.063	8.917	25	222.93	
625	0.054	4.059	25	101.46	
675	2.325	1.19	25	29.74	

Continuation 3954.79m³

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
CH	Area	Avr Area	Wth	Qty (m)	
700	12.958	7.642	25	191.04	
725	21.452	11.205	25	255.13	
750	19.156	8.304	30	249.12	
755	Total Qty = 4650.28 m ³				(X)
Total deduction					
G.S.D				529.63 m ³	
W.B.M-gr-3				214.47 m ³	
Subgrade/shoulders				1268.79 m ³	
Total deduction				2012.89 m ³	(Y)
Net filling Qty = (X - Y)					
Total				2637.20 m ³	(X)
A) Load - 1000 wt - 304.04 (X)					

$$= 0.30 \times 2637.20 \text{ m}^3 = 791.16 \text{ m}^3$$

$$(B) \text{ Load - 100 wt} = 204.04 (X)$$

$$= 0.70 \times 2637.20 \text{ m}^3 = 1846.04 \text{ m}^3$$

Sub
30/03/2011
DE

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
<u>Measurements</u>					
(1) PIF- NIS gr. K.M. Posts. as per Specification					
(1A) K.M. Stones = 02 Nos					
(1B) 200 mt Stones = 04 Nos.					
(2) PIF- Project Informatory Maintenance Board as per Specification. = 01 No.					
(3) PIF- Boundary Pillars as per Specification = 16 Nos.					

(4) PIF- Semi-reflective Sign Boards as per Specification.					
(A) 600mm-Triangular = 10 Nos					
(B) 900 mm-Triangular = 01 No					
(C) 600mm-Circular = 01 No					
(D) 600mm x 450mm-Rect = 06 Nos					
(E) 900 mm-Octagonal = 01 No					
(5) Pr. Road Marking as per Specification -					
2x10 x 30.0mt x 0.100mt = 60.0m ²					
2x10 x 30.0mt x 0.100 = 60.00					
2x5 x 30.0mt x 0.100 = 30.00					
2x5.0mt x 0.100 = 10.00					

Continuation

Total- 157.0m²

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
(6) Constr. of Earthen shoulder					
as per Specification.					
Adjacent to L.S.B A.W.D.M.					
1x2x3x30.0wt	x	0.90	x	0.275	= 44.55 m ³
1x2x2x30.0wt	x	1.10	x	0.275	= 36.30 m ³
1x2x5x20.0wt	x	0.95	x	0.275	= 52.25 m ³
1x2x3x20.0wt	x	0.70	x	0.275	= 23.10 m ³
1x2x5x30.0wt	x	0.90	x	0.275	= 74.25 m ³
2x3x30.0wt	x	0.75	x	0.275	= 37.13 m ³
Total - 267.58 m ³					

(7) Constr. of Earthen shoulder					
Adjacent to BT Portion -					
10x30x2x1.125x0.275					
6x30x2x1.125x0.275					= 11.375 m ³
1x25x2x1.125x0.275					= 15.46 m ³
					894.41 m ³

(8) Planting trees by road side.
= 300 Nos.

Dr. J. K. Singh
04/10/24

Dr. J. K. Singh
04/10/24

मापी सं. संतुष्ट है
मुबंर 05.10.24

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
<u>Abstract of Cost.</u>					
(1) Setting out B.M. Allars.					
<u>Vide</u> <u>litm-3, P-2</u>					
<u>T.M.B</u>					
					<u>= 0.758 Km.</u>
@ A -					
(2) Clearing & grubbing					
<u>litm</u> <u>litm 2, P-1</u>					
<u>T.M.B</u>					
					<u>= 0.529 Haul</u>
@ A -					

Const. of 1000mm dia.
Hume Pipe Culvert

(1) Excavate in excavator for
founda. of structure -

$$H/Wall = 1 \times 2 \times 6.450m \times 1.40 \times 1.50 = 27.09m^3$$

$$\text{Below Pipe} = 1 \times 4.850m \times 1.53 \times 0.365 = 2.708m^3$$

$$\text{Total} = 29.798m^3$$

(2) P/L + P.C.C. M15 (1:2:5) in
founda. as per specifica.

$$H/W - 2 \times 6.450m \times 1.40 \times 0.150 = 2.709m^3$$

$$\text{Below Pipe} = 1 \times 4.931m \times 1.530 \times 0.250 = 1.886m^3$$

$$\text{Total} = 4.595m^3$$

Particulars	Details of actual measure				Contents of area
	No.	L	B	D	
(3) P.I.C. - P.I.C. 100 mm dia HP ₃ as per Specification.					
H/W -	2	6.150 m	3.780 m		37.049 m ³
Parapet -	2	6.150 m	0.40 m	0.60	2.952 "
Loss for Pipes -	2	0.7857 m	(1.230 m) ²	0.62	(-) 1.448 "
					Net Qty = 33.443 m ³

(4) P.I.C. - R.L.C. 100 mm dia HP ₃ Pipes as per Specification.					
	1	7.3	2.50 m	7.50 m	

(5) Plying with C.M. (1:4) as per Specification.					
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Outer Side -	1	7.2	6.150 m	3.780	16.494 m ²
Inner Side -	1	2	6.150 m	0.600	7.380 "
TD P -	2	7	6.150 m	0.400	4.920 "
Ends -	4	0.825 m	2.580		8.514 m ²
Fals -	2	2	0.40 m	0.60	0.960 "
Loss -	2	0.7857 m	(1.23 m) ²		(-) 2.371 "
					Net Area = 65.89 m ²

(6) pr- 1.5 mm. Cement Punning at Parapets as per Specification.					
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TD P -	1	2	6.15 m	0.40	4.920 m ²
Ends -	2	2	0.60 m	0.40	0.960 "
Inner side -	1	2	6.150 m	0.60	7.380 "
					Total = 13.26 m ²

Asw
 10/10/2020
 02
 Continuation
 10/10/2020
 AE

24 on A/c. Bill

12

Sch. XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
Abstract of Col.					
(1) Setting out B.M. Pillars					
49					
vide 7m. 15, itm - 3, P-2					
= 0.755 km.					
@ A - 150 + 8.10 / km - P -					11384 =
(2) Clearing & grubbing.					
50					
Road 10m. 15					
vide 7m. 15, itm - 2, P-1					
= 0.529 Hmt.					
@ A - 75573.34 / Hmt - P -					39978 =
(3) Pr. Box-cutting for widening					
52					
vide 7m. 15, itm - 4, P-2					
= 56.86 m ²					
@ A - 103.96 / m ² - P -					5911 =
(4) Constr. of Embankment					
53					
with excavated earth					
vide 7m. 15, itm - 1, P-5 = 34.12 m ²					
@ A - 63.01 / m ² - P -					2150 =
(5) Constr. of embankment.					
54					
level - 100 out					
vide 7m. 15, itm - 2/A, P-7 = 791.16 m ²					
@ A - 261.09 / m ² - P -					206564 =
(6) Constr. of Embankment					
55					
level - 100 out					
vide 7m. 15, itm - 2/B, P-7 = 1846.04 m ²					
@ A - 24740 / m ² - P -					456710 =

Continuation

722697 =

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
(7) Const. of Subgrade.					
56	vide T.M.B, Hm-1, P-3				
	846.73m ² 846.43m²				
	vide Hm-2, P-9 =				
	@ 1 - 264.68/m ²				224165 =
(8) Const. of Earthen Shoulder					
57	vide T.M.B, Hm-6, P-9 = 267.58m ²				104324 =
	@ 1 - 264.68/m ²				70823 =
(9) P/L - G.S.D.					
59	vide T.M.B Hm-5, P-2 = 210.45m ²				
	vide T.M.B Hm-2, P-3 = 319.28m ²				
	Total = 529.73m ²				
	@ 1 m ² = 529.63m ²				
	@ 1 - 4296.83/m ²				2275730 =
(10) P/L - W.B.M. gr-3					
60	vide Hm-3, P-3/4 = 214.47m ²				
	@ 1 - 6145.11/m ²				1317942 =
(11) P/L - Prime Coat.					
62	vide T.M.B, Hm-1, P-4 = 2859.56m ²				
	@ 1 - 58.68/m ²				167799 =
(12) P/L - Tank Coat.					
63	vide Hm-2, P-5 = 2859.56m ²				
	@ 1 - 20.090/m ²				57449 =

Continuation

4836605 =
4870106.00

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
(13) PIF- M.S.S with waist Plastic 64 View item-3, P-5=2859-56mL T.M.B. @ A-275.31/mL P-787, 265=					
(14) PIF- K.M Stows. View T.M.B, item-1, P-8					
(14) K.M. Stows = 0.21 Nos. 66 @ A-3279.20 /cu ft 6559=					
(15) 200mm Stows = 0.41 Nos. 67 @ A-876.40 /cu ft - 3506=					
(15) PIF- M.N.U.S.Y Boards. View T.M.B, item-1, P-1 = 0.2 Nos.					

H.M-2, P-8 = 01 No

Total = 0.31 Nos.

@ A-11120.03 /cu ft - 33360=

(16) PIF- Boundary Pillars.

View item-3, P-8 = 161 Nos.

@ A-720.62 /cu ft - 11530=

(17) PIF- Sign- Boards.

View T.M.B, item-4, P-8

(18) 600mm Triangular = 10 Nos
72

@ A-2089.97 /cu ft - 20900=

(19) 900mm- Triangular = 01 No
73

@ A-2148.42 /cu ft - 2148=

Continuation

~~5701873=~~
 5735374.00

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
(C) 600mm Circular = 01 No					
@ 2151.26/m					21.50 =
(D) 600x450mm = 06 Nos					
@ 2144.09/m					12.865 =
(E) 900mm. Octagonal = 01 No					
@ 2334.91/m					23.35 =
(18) As Round Nanking					
77 Vile, itm - 5, P-8					
T.M.B = 151.0 m					
@ 886.46/mL					133.855 =
(19) 9 planting trees - 30 Nos @ 1317.26					39518.00
(19) El work in excav					
78 Vile, itm - 1, P-10					
T.M.B = 29.798 m					
@ 398.62/m					11.878 =
(20) P/C - P.C.C. M15 - for da.					
81 Vile, itm - 2, P-10 = 4.595 m					
@ 8395.04/m					38.575 =
(21) P/C - P.C.C. M20 - Street.					
82 Vile, itm - 3, P-11 = 33.443 m					
T.M.B @ 9469.10/m					319.516 =
(22) P/C 1000mm R.C.C. Pipe					
83 Vile, itm - 4, P-11 = 7.50 m					
@ 3922.97/m					29.422 =

Continuation

6252469 =

6361069.00

6325487.00

B/F - ~~6364063-00~~

				Below \$ = 59,51,507.00
				768,388.00
				764,480.00
				163,126.00
				162,152.00
				6,56,124.00
				60,99,60.00

10/10/2024

gint

AC

27/02/2015

CEP
Munim
22/02/2015
EG

Continuation