Name of Road - N.H 30 to Hidayatpur

Schedule XLV-Form No. 134

Executive Engineer, R.W.D.N DIVISION

Bakhtiyarpur SUB-DIVISION

M.B NO - 7573

Measurement Book

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 No.	L.	B.	D.	Contents of area
	1st m.B. = Bill				
Name of work :- Repair & 5 years maintenance of Road from NH-30 to Hidayatpur under 3054 MR.					
Agency - Ranjeet kumar, Alampur Kachhi Dargah, Digargaji Patna - 803201					
Agreement no - 23/MBD/2022-23					
Date Approved - 2-01% Below.					
Date of commencement - 23/3/23					
Date of completion - 22/12/2023					
Date of measurement - 01/12/2023.					
	Work-done				
Item (1)	Cleaning & grubbing road Land-do-etc.				
	2	× 10	× 30.00	× 1.125	= 675.00 m²
	2	× 10	× 30.00	× 1.125	= 675.00 "
	2	× 10	× 30.00	× 1.125	= 675.00 "
	2	× 10	× 30.00	× 1.125	= 675.00 "
	2	× 10	× 30.00	× 1.125	= 675.00 "
	2	× 10	× 30.00	× 1.125	= 675.00 "
			2		4050.00 m²
∴ Hect = 4050.00 m / 10000 = 0.405 Hect.					

Continuation

Sch. XLV_Form No. 134

Particulars	Details of actual measurement No	L	B	D	Contents of area
Item (2)	Excavation for roadway in soil using mechanical means -do- -do- etc				
Box cutting					
	2×10×30.00×0.525×0.100=				31.50 m³
	2×6×30.00×0.525×0.100=				18.90"
	2×1×20.00×0.525×0.100=				2.10"
					52.50 m³
Item (3)	Construction of embankment with approved material obtained from borrow pits with a lead up to 1000.0m -do- etc				
	2×6×30.00×1.925×0.800=				554.40 m³
	2×1×20.00×1.925×0.800=				61.60 m³
					616.00 m³
Item (4)	Construction of sub grade & earthen shoulder --do-do-etc				
	2×10×30.00×0.600×0.300=				108.00 m³
	2×10×30.00×0.600×0.300=				108.00"
	2×10×30.00×0.600×0.300=				108.00"
	2×10×30.00×0.600×0.300=				108.00"
	2×3×30.00×0.600×0.300=				32.40"
	2×1×10.00×0.600×0.300=				3.60"
	2×10×30.00×1.125×0.300=				202.50"

Continuation

T.O = 670.50 m³

C/O

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
					B/F = 6720.50 m³
Item (6) Cost of (Sub grade) etc					
	2 × 6 × 30.00 × 1.25 × 0.30				= 67.50 "
	2 × 1 × 30.00 × 1.25 × 0.30				= 13.50 "
					805.50 m³
Item (5) Construction of G.S.B by Prov. well graded material Gr. II					
-- do -- do -- etc					
Ch. o' from Fwd page					
	1 × 30.00 × 6.00 + 3.75 / 2				= 146.25 m²
	1 × 30.00 × 3.75 + 3.55				= 109.50 "
	1 × 30.00 × 3.55				= 106.50 "
	3 × 30.00 × 3.50				= 315.00 "
	1 × 30.00 × 3.50 + 3.65				= 107.25 "
	1 × 30.00 × 3.65				= 109.50 "
	1 × 30.00 × 3.65 + 3.75				= 111.00 "
	1 × 30.00 × 3.75 + 3.45				= 108.00 "
	1 × 30.00 × 3.45				= 103.50 "
	1 × 30.00 × 3.45 + 3.30				= 101.25 "
	1 × 30.00 × 3.30 + 4.65				= 119.25 "
	1 × 30.00 × 4.65 + 3.30				= 119.25 "
	1 × 30.00 × 4.65 + 3.60				= 123.75 "
	1 × 14.00 × 3.70				= 51.80 "
	1 × 26.00 × 3.75				= 97.50 "

Continuation 40

Sch. XLV_Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
					b/f = 1829.30 m²
Item ⑤ contd (4.5 Bq.r. 1)					
	1 ×	18.00 ×	3.75 =		67.50 m²
					1896.80 m²
Profile correction	1 ×	5.00 ×	3.00 =		15.00 "
	1 ×	4.50 ×	3.00 =		13.50 "
	1 ×	6.00 ×	3.00 =		18.00 "
	3 ×	4.00 ×	3.00 =		36.00 "
	1 ×	10.00 ×	3.00 =		30.00 "
	1 ×	8.00 ×	3.00 =		24.00 "
	2 ×	2.25 ×	3.00 =		13.50 "
	1 ×	6.00 ×	3.00 =		18.00 "
	1 ×	7.50 ×	3.00 =		22.50 "
	1 ×	5.00 ×	3.00 =		15.00 "
	3 ×	6.50 ×	3.00 =		58.50 "
	1 ×	7.00 ×	3.00 =		21.00 "
	1 ×	5.50 ×	3.00 =		16.50 "
	1 ×	1.20 ×	3.00 =		3.60 "
Beside of BT	2 ×	10 × 30.00 ×	0.525 =		315.00 "
	2 ×	6 × 30.00 ×	0.525 =		189.0 "
	2 ×	1 × 30.00 ×	0.525 =		21.0 "
					2726.90 m²
Qty =	2726.90 m² × 0.100 =				272.69 m³
Item ⑥	Prov. laying spreading & compacting stone aggregates of specific sizes to WBM gr. III				
	--- do — do — etc				
	1 ×	30.00 × 6.00 + 3.75 =			146.25 m²
	1 ×	30.00 × 3.75 + 3.55 =			109.50 "

Continuation 4025.75 m²

Sch. XLV-Form No. 154

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
					BF = 2556.76 m²
Item (6) Earth work (upto 3m depth)					
	1	× 30.00	× 3.55	= 106.50	
	3	× 30.00	× 3.50	= 315.00	
	1	× 30.00	× 3.50 + 3.65	= 107.25	
	1	× 30.00	× 3.65	= 109.50	
	1	× 30.00	× 3.65 + 3.75	= 111.00	
	1	× 30.00	× 3.75 + 3.45	= 108.00	
	1	× 30.00	× 3.45	= 103.50	
	1	× 30.00	× 3.45 + 3.30	= 101.25	
	2	× 30.00	× 3.30 + 4.65	= 238.50	
	1	× 30.00	× 4.65 + 3.60	= 123.75	
	1	× 14.00	× 3.70	= 51.80	
	1	× 26.00	× 3.75	= 97.50	
	1	× 18.00	× 3.75	= 67.50	
				1896.80 m²	
Qty = 1896.80 m²		× 0.075		= 142.26 m³	
				Limit to 142.03 m³	
Item (7) Prov. & applying primer coat with bitumen emulsion (Grade-I) -- do -- do -- etc					
	1	× 30.00	× 6.00 + 3.75	= 146.25 m²	
	1	× 30.00	× 3.75 + 3.55	= 109.50	
	1	× 30.00	× 3.55	= 106.50	
	3	× 30.00	× 3.50	= 315.00	
				Qty = 677.25 m²	

Continuation

CTD

Sch. XLV Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
				Bf	1872.75 m²
Item ② Cost of (former Cont.)					
	1 x 30.00	x 3.50	+ 3.65	=	107.25 "
	1 x 30.00	x 3.65		=	109.50 "
	1 x 30.00	x 3.65	+ 3.75	=	111.00 "
	1 x 30.00	x 3.75	+ 3.45	=	108.00 "
	1 x 30.00	x 3.45		=	103.50 "
	1 x 30.00	x 3.45	+ 3.30	=	101.25 "
	2 x 30.00	x 3.30	+ 4.65	=	238.50 "
	1 x 30.00	x 4.65	+ 3.62	=	123.75 "
	1 x 14.00	x 3.70		=	51.80 "
	1 x 26.00	x 3.75		=	97.50 "
	1 x 18.00	x 3.75		=	67.50 "
					1896.80 m²
		Limited to			1893.75 m²

Item ⑧ Prov. & applying tack coat with bitumen emulsion (RS-1) -- do -- etc Measurement & Qty same as item ⑦ of TM page ⑥ = 1893.75 m²

Item ⑨ Prov. laying & rolling of close graded bituminous surfacing material of 20 mm Thickness -- etc Qty same as item ⑦ of TM page ⑥ = 1893.75 m²

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area

Item (10) Prov. & applying tack coat with polymer emulsion (RS-1) for SDBC -do- -do- etc

Chainage 0 from 4 lane

1 x 30.00 x $\frac{6.00+3.75}{2}$ = 146.25 m²

1 x 30.00 x $\frac{3.75+3.55}{2}$ = 109.50 "

1 x 30.00 x 3.55 = 106.50 "

3 x 30.00 x 3.50 = 315.00 "

1 x 30.00 x $\frac{3.50+3.65}{2}$ = 107.25 "

1 x 30.00 x 3.65 = 109.50 "

1 x 30.00 x $\frac{3.65+3.75}{2}$ = 111.00 "

1 x 30.00 x $\frac{3.75+3.45}{2}$ = 108.00 "

1 x 30.00 x 3.45 = 103.50 "

1 x 30.00 x $\frac{3.45+3.30}{2}$ = 101.25 "

2 x 30.00 x $\frac{3.30+4.65}{2}$ = 238.50 "

1 x 30.00 x $\frac{4.65+3.60}{2}$ = 123.75 "

1 x 14.00 x 3.70 = 51.80 "

1 x 26.00 x 3.75 = 97.50 "

1 x 18.00 x 3.75 = 67.50 "

1896.80 m²

Limit to 1893.75 m²

Item (11) Prov. & laying SDBC with 100-120 TPH batch type HMP -do- do etc

Area same vide item (10) = 1893.75 m²

Qty = 1893.75 m² x 0.025 = 47.34 m³

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (12)	Construction of Dry lean cement concrete				
	--do--do--etc				
	4	6.00	3.75	0.125	11.25 m³
	1	4.07	3.75	0.125	1.875 "
	1	3.00	3.75	0.125	1.406 "
	5	4.50	3.75	0.125	10.55 "
	8	3.50	3.75	0.125	13.125 "
	1	30.00	3.75	0.125	14.06 "
	1	8.50	3.75	0.125	3.98 "
	1	10.00	3.75	0.125	4.69 "
					60.936 m³
Item (13)	Construction of lean concrete P.C.C. base-ment m. 20 grade				
	--do--do--etc.				
	10	30.00	3.75	0.125	140.625 m³
	10	30.00	3.75	0.125	140.625 "
	10	30.00	3.75	0.125	140.625 "
	10	30.00	3.75	0.125	140.625 "
	3	30.00	3.75	0.125	42.22 "
	1	10.00	3.75	0.125	4.69 "
	1	14.00	3.75	0.125	6.56 "
					615.94 m³
		Limit to			615.469 m³

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (14)	R.C.C.M-15 grade				
	km. stone -do- etc				
(i)	km. Stone				— 3 nos
(ii)	200 M stone				— 7 nos.
Item (15)	Prov. & erecting direc				
	tion & Place Identi				
	-fication sign-board etc				
	2	× 1.20	× 0.80	=	1.92 m²
Item (16)	Prov. & fixing metro				
	reflective sheet Cautionary				
	men datory & Inform-				
	-atory sign -do- etc				
(i)	600 mm eq. triangle				— 38 nos.
(ii)	600 mm circular				— 8. nos.
(iii)	600 × 450 mm rectangular				— 8. nos.
(iv)	900 mm side octagon				— 3 nos.
Item (17)	R.C.C.M-15 grade				
	boundary pillar-do-etc				
				Qty =	12 nos
Item (18)	Painting new letters				
	figures -do- etc				
	44	× 1.00		=	44.00 sqm

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (14) Road marking with hot applied thermo plastic compound					
---do---do---etc					
BT:-	2	10	30.00	0.100	= 60.00 m²
	2	6	30.00	0.100	= 36.00 "
	2	1	20.00	0.100	= 4.00 "
					100.00 m²
Pedestrian Crossing					
	4	6.00	0.500	x2	= 24.00 m²
C.C. Partition					
	2	10	30.00	0.100	= 60.00 m²
	2	10	30.00	0.100	= 60.00 "
	2	10	30.00	0.100	= 60.00 "
	2	10	30.00	0.100	= 60.00 "
	2	3	30.00	0.100	= 18.00 "
	2	1	10.00	0.100	= 2.00 "
					260.00 m²
Item (15) Prov. & fixing of Vertical mandatory information sign board with "logo"					
---do---do---etc					
					Qty = 3.00 nos.

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (21)	Providing & laying in a R.C.C. Pipe, dia 300 mm dia across the road – do – etc.				
2 nos × 4 × 2.50 m = 20.00 Rm					
Item (22)	Brick masonry work in c.m (1:3) in foundation – do – do – etc				
2 × 5.40 × 0.40 × 0.60 = 2.59 m³					
Item (23)	Plastering with c.m (1:4) in 6 thickness – do – do – etc				
Side	4 × 5.40 × 0.60 = 12.96 m²				
Top	2 × 5.40 × 0.40 = 4.32 "				
Front	4 × 0.40 × 0.60 = 0.96 "				
					18.24 m²
Item (24)	Painting two coats in – dyeing primer after filling the surface with synthetic enamel paint – do – do – etc				
@ same as item (23) = 18.24 m²					

Continuation

01/12/23

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Material Statement					
(I) Earth		—		805.50 m^3	
(II) Agg (26.5 to 9.5 mm)		—		114.53 m^3	
(III) Agg (9.5 to 2.36 mm)		—		81.81 m^3	
(IV) Local Sand		—		130.89 m^3	
(V) Agg (53 to 22.4 mm)		—		171.86 m^3	
(VI) Stone Screening		—		34.09 m^3	
(VII) Stone Crushed agg		—		54.13 m^3	
(VIII) Agg (9.5-4.75 mm)		—		39.43 m^3	
(IX) Agg (4.75 mm & below)		—		28.36 m^3	
(X) Crushed Stone Coarse agg		—		54.84 m^3	
(XI) Coarse Sand		—		304.38 m^3	
(XII) Agg (20 mm)		—		332.35 m^3	
(XIII) Agg (10 mm)		—		24.57 m^3	
(XIV) Brick		—		1295 Nos.	
(XV) Coarse Sand		—		0.95 m^3	
(XVI) Emulsion (SS-1)		—		1.610 MT	
(XVII) Emulsion (RS-1)		—		0.947 MT	
(XVIII) Bitumen (S-90)		—		3.598 MT	
(XIX) Bitumen (S-65)		—		5.444 MT	
	01/12/23 J.E.			01/12/23 A.E.	

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
					B/F Rs 87,35,312=00
Pedestrian crossing					
24.00 m² vide TMB page (34)					
@ Rs 821=26/m²					Rs 19,710=00
C.C. flooring					
268.00 m² vide TMB Page (34)					
@ Rs 853=78/m²					Rs 2,21,483=00
(20) Prov. fixing of typical map by information sign board with "logo" -do- etc. complete					
3.00 nos. vide TMB Page (34)					
@ Rs 10998=16/each					Rs 32,994=00
(21) Painting two coats in existing bituminous road with synthetic enamel paint -do- etc. complete					
18.24 m² vide TMB Page (35)					
@ Rs 195=85/m²					Rs 2246=00
(22) Plastering with c.m. (1:4) in substructure -do- etc. complete					
18.24 m² vide TMB Page (35)					
@ Rs 182=87/m²					Rs 3336=00
(23) Brick masonry work in c.m. (1:3) -do- etc. complete					
2.59 m³ vide TMB Page (35)					
@ Rs 6377=47/m³					Rs 16,518=00
					C/F Rs 90,32,139=00

Continuation

PTD

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
				B/F Rs 90,32,139=00	
(24)	Provn. & laying of a R.C.C. bifurcated 300mm dia ---do---do---etc. 20.00 Rm. vide Tm8 page (35)				
	@ Rs 963=25/Rm			Rs 19265=00	
				Rs 90,51,414=00	
	Add 18% GST (+)			Rs 16,29,255=00	
	Add 1% L.Cess (+)			Rs 90514=00	
	Add Sejigiorageas per agreement (+)			Rs 46529=00	
				Rs 1,08,17,712=00	
Less 0.01% Below					
	as per agreement (-)			Rs 1082=00	
				Rs 1,08,16,630=00	
Deduct Previous payment vide Tm8 page (32) (-)				Rs 1,08,16,630=00	
				Rs 00=00	
				(NiL)	

Todate

18/03/24

J.E.

Subhash Ch
18/03/24
A.E.

Pwr
18/03/24