

1813. No. 3182

5

2019.20

Division

SUB-DIVISION

MEASUREMENT BOOK

Scanned with CamScanner

2nd and final bill

18

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of work - const. of road from murarapur Kalisthan to Kalisthan tola under m m c s j					
Name of Agency - Dhderaj Kumar Mishra					
Agreement no - 31 SBD / 2019-2020					
Date of start of work - 02/03/2019					
measurement					

1. Setting out pillars							
1. Box cutting							
Excavation for roadway							
in soil using manual							
do							
Provision of right of road							
2.5m	2	5	2	2	0.375	0.10	8.25m

2. const. of embankment with material obtained from borrow pits - do - - as per technical specifi					
---	--	--	--	--	--

2.5m	(A)	For 1000 m load	2	8	2	5	1	35	0.75	405m ³
------	-----	-----------------	---	---	---	---	---	----	------	-------------------

Continuation

unit to 390.47 m³

P.T.O

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(B) For 100 m lead					
2x4x25x1.20x0.70					$= 168 \text{ m}^3$
					Limit to 161.50 m^3
(3) const. of subgrade and earthen shoulder					
do					
(A) 9m flexible road					
6x30x7.0x0.30					$= 378.0$
1x15x7.0x0.30					$= 31.50$
side of GSB					
2x6x30x1.40x0.20					$= 100.80$
2x15x1.40x0.20					$= 8.40$
side of WBM					
2x6x30x1.20x0.075					$= 32.40$
2x15x1.20x0.075					$= 2.70$
					Total = 553.80 m^3
(B) 9m rigid road					
side of GSB					
2x10x30x0.625x0.10					$= 37.50 \text{ m}^3$
2x5x0.625x0.10					$= 0.625$
side WBM					
2x30.5x0.625x0.075					$= 28.59$
side of CC road					
2x30.5x0.625x0.160					$= 61.0$
Hard shouldering					
2x30.5x0.375x0.125					$= 28.59$
					Total 156.31 m^3

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Total A+B					
					$= 553.80 + 156.31 = 710.11m^2$

(4) construction of granular subbase - - do - - as per technical specification for flexible portion

6 X 30 X 4.050 X 0.202	145.8
1 X 15 X 4.050 X 0.202	12.15

For rigid portion

2 X 10 X 30 X 0.375 X 0.10	= 22.50
2 X 5 X 0.375 X 0.102	0.375

Profile correction

30 X 3 X 0.10	= 9.0
---------------	-------

Total 2 189.825m³

(5) W.B.M. gr. - III

X Providing, laying, spreading and compacting stone aggregates - - do - - as per technical specification

flexible portion 6 X 30 X 3.75 X 0.075	= 50.625
1 X 15 X 3.75 X 0.075	= 4.218

Total 54.843m³

Rigid portion

10 X 30 X 3.75 X 0.075	= 84.375
------------------------	----------

5 X 3.75 X 0.075	= 1.406
------------------	---------

Total 85.781m³

Total 140.624m³

G Singh
6/10/2020
JE

RPS
6-10-2020
AE
Lakhdeepu

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
⑥ Prime coat					
providing and applying					
primer coat with bitumen					
emulsion - - do - -					
Area	1X	30	3.50	=	105 m ²
	2X	30	3.70	=	222 m ²
	1X	30	3.40	=	102 m ²
	2X	30	3.75	=	225 m ²
	1X	15	3.75	=	56.25
Total					710.25 m ²

⑦ Tack coat					
Providing and applying					
tack coat with					
bitumen emulsion					
do —					
Area used in prime coat					= 710.25m ²

⑧ mix seal surface					
Providing laying and					
rolling of close graded					
premix 20mmols —					
as per technical specification					
Area	1X	30	3.50	=	105m ²
	2X	30	3.70	=	222m ²
	1X	30	3.40	=	102m ²
	2X	30	3.75	=	225m ²
	1X	15	3.75	=	56.25m ²
Total					710.25m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
⑨ const. of un-reinforced plain cement concrete pavement - - do - - as per technical specification					
1X 30X $\frac{(3.75 + 4.05)}{2} \times 0.16 = 18.72$					
1X 30X $\frac{(3.8 + 4.0)}{2} \times 0.16 = 18.72$					
1X 30X $3.8 \times 0.16 = 18.24$					
1X 20X $\frac{(3.8 + 4.0)}{2} \times 0.16 = 12.48$					
Total					68.16m ³

- ⑩ Kilometer stone
Reinforced cement concrete
m-15 grade - - do

as per technical specification

- (i) km stone = 2 NO.
(ii) 200m stone = 2 NO.

- ⑪ Boundary pillar
Reinforced cement concrete
m-15 grade boundary
pillars - - do - -

3 X 20 = 60 NO.

- ⑫ Traffic sign
Providing & fixing of
retro-reflective cautionary
and mandatory and
informative sign board
do - - do

as per technical specification

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(i) 600mm circular board					6 No.
(ii) 900mm equilateral triangle left right curve board - do -					4 No.
(iii) 600mm x 450mm rectangular school place board =					2 No.
13 Road marking with hot applied Thermoplastic compound - do -					
on BT surface					
2 x 195 x 0.10 =					39.0m ²
14 Road marking with hot applied Thermoplastic - on concrete					
surface - do -					
2 x 305 x 0.10 =					61.0m ²
15 Direction & Place identification sign up to 0.9 sqm					
Providing & erecting direction and place identification - do -					1 No.
RCC slab cumert					
16 painting two coats on new plastered surface - do -					
Parapet walls					
sides - 4 x 8.0 x 0.6 =					19.20 m ²
Top - 2 x 8.0 x 0.4 =					6.40 m ²
Ends					
Continuation 4 x 0.4 x 0.6 =					0.960 m ²
Total					26.560 m ²

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(17) Providing weepholes in brick masonry as per drawing -					
RPSM [(2X 6) + (4X 4) = 28 No.					
(18) Hard shouldering Laying brick soling layer on prepared sub grade -					
RPSM [2X 8X25X3+75X0.375 = 150m					
(19) Providing and fixing of typical masonry informatory sign board with logo -					
as per specification					
(i) Logo identification sign board -					2 No.
(ii) citizen information board -					2 No.
(iii) maintenance board -					2 No.
Total					6 No.
using 11/10/2020 JE					
RPSM					
11-10-2020					
AG					
Lahlae/pw					

Continuation

Abstract of cost

25

Sch. XLV—Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1. Setting out pillars					
(A) working bench mark					
ent = 1 NO. vide TMB					
Paye - (10) item (A)					
@ Rs 3989.20/No. = Rs					3989 =
(B) Reference pillars					
ent = 3 NO. P-10 item-1B					
Limit to 2 NO.					
as per supplementary revised agreement					
@ Rs 1828.53/No. = Rs					3657 =
2. clearing and grubbing					
road cut - do -					
ent = 0.35 Hectare					
vide TMB page - (10)					
item - (2) @ Rs 50148.62/H					
= Rs					17552 =
(3) Dismantling of existing structure - do -					
ent = 64.53 m ³ P-110					
item - (3) @ Rs 231.85/m ³					
= Rs					14920 =
(4) Removing all types of lime pipe - do -					
ent = 5m P-110 item-4					
@ Rs 231.69/m = Rs					1158 =

Continuation

C/O Total Rs 41276

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(5) Dismantling of structure					
do					
Qnt = 3.60 m ³ P- (11)					
item - (5) @ Rs 480.23/m ³					
					= Rs 1729 =
(6) Box cutting					
Excavation for road					
way - do					
Qnt = 25.13 m ³ P- (11)					
= 33.38 m ³ item - (6) + 8.25 m ³ P- (18) item - (1)					
Qnt. limit to 22.88 m ³					
as per revised agreement					
@ Rs 75.43/m ³ = Rs 1725 =					
(7) Earthwork in excavation for found of structure					
do					
Qnt = 29.798 m ³					
P- (11) item - (7)					
@ Rs 264.02/m ³ = Rs 7867 =					
(8) Providing M-15 as levelling course					
do					
Qnt = 2.960 m ³ P- (11)					
item - (8) @ Rs 5624.05/m ³					
					= Rs 16647 =
(9) Brick masonry work in cm (1:4) in headwall					
do					

Continuation

C/O Total Rs 69244

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Qnt = 30.607 m ³ P- (11)					
item - (9) @ Rs 5999.11/m ³					
					= Rs 183615=
(10) Providing and laying RCC pipe NP-3 for culvert - do -					
Qnt = 7.5 m P- (12)					
item - (14) @ Rs 4159.08					
					= Rs 31193=
(11) Plastering with cement mortar (1:4) on brick work - do -					
Qnt = 66.850 m ²					
P- (12) item - (11)					
@ Rs 166.99/m ²					= Rs 11163=
(12) Providing 1.5 mm cement punning do					
Qnt = 14.22 m ² P- (12)					
item - (12) @ Rs 49.48=					
					= Rs 704=
(13) Earthwork in excavation for structure do					
Qnt = 93.18 m ³ P- (12)					
item - (13) @ Rs 264.02/m ³					
					= Rs 24601=
(14) Sand filling in trench trenches - do -					

Continuation

C/o Total Rs 320520

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Qnt = 1.25 m ³ P- (12)					
item - (14) @ Rs 397.62/m ³					
					= Rs 497 =
(15) Providing P.C.C m-15					
concrete for plain					
concrete in open form					
- - - do - - -					
Qnt = 12.497 m ³ P- (13)					
item - (15) @ Rs 5624.05/m ³					
					= Rs 70284 =
(16) Brick masonry work					
in cement mortar					11103 =
- - - do - - -					
Qnt = 52.10 m ³					
P- (13) item - (16)					
@ Rs 5698.54/m ³ = Rs 296894 =					
(17) Brick masonry work					
in cement mortar					
cm (1:4) in substructure					
- - - do - - -					
Qnt = 26.26 m ³ P- (13)					
item - (17) @ Rs 5999.11/m ³					
					= Rs 157537 =
(18) Plain/reinforced cement					
concrete (m-20) in					
substructure - do -					
Qnt = 4.068 m ³ P- (13)					
item - (18) @ Rs 6593.48/m ³					
					= Rs 26822 =

Continuation

C/o Total Rs 872554:

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(19) Providing bitumen painting over top surface - - - do - -					
Qnt = 14.10 m ² P- (14)					
item - (19) @ Rs 16.10/m ²					
				= Rs	2272
(20) RCC m-25 in Dec slab providing and laying reinforced cement concrete in super structure - - - do - -					
Qnt = 4.608 m ³ P- (14)					
item - (20)					
@ Rs 7769.03/m ³				= Rs	358002
(21) Providing and fitting and placing HSD bar - reinforced in super structure - do -					
Qnt = 0.58 MT Page - (14)					
item - (21) @ Rs 72254.80					
				= Rs	7222
				= Rs	419082
(22) Providing & filling joint - - - do - -					
Qnt = 15.7 m P- (14)					
item - (22) @ Rs 35.26/m					
				= Rs	5292

Continuation

C/O Total Rs 9510182

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(22) Brick masonry work in cement mortar 1:3 in parapet — do —					
Qnt = 3.84 m^3 @ R					6472.10
P-15 item (23)					= R 24.853
(24) Plastering with cement mortar (1:4) — do —					
Qnt = 68.557 m^2					
P-15 item (24)					
@ R 166.99/m ² = R					114492
					32800

(25) WBM gr - I const. granular subbase by Providing laying spreading and compacting stone — do —					
Qnt = 189.825 m^3					
P-20 R 20 item (4)					
@ R 2894.53/m ³ = R					549454
(26) WBM gr - III Providing laying spreading and compacting stone aggregates — do —					
Qnt = 141.618 m^3					
P-15 item (26)					
@ R 4322.31/m ³ = R					612117

Continuation

C/O Total R 2148891

P.T.O

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(27) construction of un-reinforced plain cement concrete pavement — do —					
Qnt = 117.0 m ² P- (15)					
item - (26) + 68.16 m ³					
P- (22) item - (9)					
= 117.0 + 68.16					
= 185.16 m ³					
@ Rs 4322.31/m ³ Rs					
@ Rs 8039.49/m ³ = Rs 1488592					
(28) const. of embankment with material obtained from borrow pits — do —					
(A) For 1000 m lead					
Qnt = 390.47 m ³					
Page - (18) item - 2(A)					
@ Rs 155.23/m ³ = Rs 60612					
(B) For 1000 m lead					
Qnt = 161.50 m ³					
Page - (19) item - 2(B)					
@ Rs 130.88/m ³ = Rs 21137					
(29) construction of subgrade and earthen shoulder — do —					
Qnt = 710.11 m ² Page - (20)					
item - (3) @ Rs 195.94/m ²					

Continuation

Rs 1391389=

= Rs 139139=

C/O Total Rs 3858371=

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(30) Prime coat Providing and applying primer coat with bitumen emulsion — do —					
Qnt = 710.25 m ² Page (21)					
item (6) @ Rs 49.60/m ²					
					Rs 35228=
(31) Tack coat Providing and applying tack coat with bitumen emulsion — do —					
Qnt = 710.25 m ²					
Page (21) item (7)					
@ Rs 16.10/m ² = Rs					11435=
(32) mix seal surface Providing laying and spreading, rolling of close graded premix 20 mm - do -					
Qnt = 710.25 m ²					
Page (21) item (8)					
@ Rs 244.81/m ² = Rs					173876=
(33) Kilometer Stone Reinforced cement concrete m-15 grade - do -					

Continuation

C/O Total Rs 41078910=

P.T.O

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(i) Km Stone					
Qnt = 2 No. P- (22)					
item - 10(i)					
@ Rs 2375.37 / No. = Rs 4750=					
(ii) 200 m Stone					
Qnt = 2 No. P- (22)					
item - 10(ii)					
@ Rs 668.85 / No. = Rs 1337=					
(34) Boundary pillar reinforced cement concrete m-15 grade do					
Qnt = 60 No. Paje- (22)					
item - (11) @ Rs 506 / no =					
					Rs 30360=
(35) Traffic sign Providing and fixing of retro-reflective cautionary and mandatory and information sign board do					
Qnt =					
(i) 600 mm circular board					
Qnt = 6 No. P- (23)					
item - (12)(i) @ Rs 5595.20					
					= Rs 33571=

Continuation

C/o Total Rs 4148928=

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(ii) 900mm equilateral triangle - do -					
Qnt = 4 No. P- (23)					
item - (12)(ii) @ Rs 6216.50					
					= Rs 248662
(iii) 600mm x 450mm rectangular school of place board					
- do -					
Qnt = 2 No. Page (23)					
item - (12)(iii) @ Rs 5445.17					
					= Rs 108902

(36) Road marking with hot applied Thermoplastic					
- do - on BT surface					
Qnt = 39 m ² P- (23)					
item - (13) @ Rs 942.89					
					Rs 367732
(37) Road marking with hot applied Thermoplastic					
- do - on concrete surface					
Qnt = 61.0 m ² P- (23)					
item - (14) @ Rs 1048.107					
					= Rs 639322

Continuation

C/o Total Rs 42853892

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(38) Direction & place identification sign up					
- - do - -					
Qnt = 1 No. Page - (23)					
item - (15) @ Rs 3483.16					
				= Rs	3483 =
(39) Painting two coats on new concrete surface					
- - do - -					
Qnt = 26.560 m ² Page - (23)					
item - (16) @ Rs 110.65 = Rs					2938 =
(40) Providing weepholes in brick masonry - do -					

Qnt = 28 No. Page - (24)					
item - (17) @ Rs 122.95					
				= Rs	3442 =

(41) Hard shouldering laying brick soldier layer - do -					
Qnt = 150 m ² Page - (24)					
item - (18) @ Rs 489.66					
				= Rs	73449 =

(42) Providing and fixing of typical masonry informative sign board					
- - do - -					
Qnt = 6 No. Page - (24)					

Continuation
item - (19)

C/o Total Rs 436870 =

~~6/11/2020~~
~~11/10/20~~
~~JE~~

RP Gmt.
11-10-2020
AE
Lahadapur

W. L. Brown

material statement

- | | |
|---|--|
| ① | $E/W = 1262.08m^3$ |
| ② | stone aggregates = $182.232m^3$ |
| ③ | coarse sand = $76.23m^3$ |
| ④ | emulsion (SS-1) = $0.60066mt$ |
| ⑤ | Emulsion (RS-1) = $0.194811mt$ |
| ⑥ | Bitumen (S-90) = $1.349475mt$ |
| ⑦ | stone crushed aggregates = $19.176m^3$ |
| ⑧ | stone chips = $61.344m^3$ |
| ⑨ | |
| ⑩ | Fine sand = $5.66m^3$ |

~~6singh~~
~~11/10/2020~~
~~JE~~

RP Gov
11-10-2020
Af

Continuation
Lehigh Valley