

for Khushboo Kumari

Labordian Refused to Middle School -
M. M. S. S. S.

to the

M. M. S. S. S.

DEAR P. V. D.

E. E. R. W. D. Work Arranged Division

At the same time Engineers S. D. Division

Work Sub Division - R. A. R. V. M.

W. A. R. V. M. S. S. S.

2591

Certified that this M.B. contains
¹⁰⁰
(one hundred) Pages by printed
Machine & Issued to Sri Krishan
Kr. Yadvendra A.E. R.W.D Work
Sub Division Barun

Executive Engineer
Rural Works Division, nt
Works Division, Aurangabad
10/11/20

Schedule XLV - Form No. 134.

E.E. R.W.D A.B.A. DIVISION.

Assistant Engineer SUB-DIVISION.

R.W.D Work Sub Division - BARUN

MEASUREMENT BOOK.

222281

2591

Sri Krishan Kr. Yadvendra

A.E. Subdivision BARUN

Date of first entry

Date of last entry

विद्या पारमर्षि देवा, गुरुः ।

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 area
	No.	L.	B.	D.	

Test & Bill

NAME OF WORK - Construction of
 Road from Gobardhan Pahar
 to middle school under
 Ministry

Name of Agency - Smt. Khushboo -
 Kumari

Vill - Bikan, Aurangabad
 Agreement No - 07 S.R.P. 120-21
 Estimated cost - 213,76,169/-
 Agreement value - 39,38,552/-
 Agreement rate - 10% below est.

F.R.D. g. rate -
 Date of work start - 08.06.20
 Date of comp - 07.03.2021
 Date of measurement - 14.06.20

1/ Setting out Pillars.

Providing & fixing of
 working bench mark

Pillars - Do - all -
 = 1.0 No.

2/ Providing & Fixing of

Reference pillar -
 = 2.0 No.

3/ Clearing & Grubbing

Road land -

Continuation

$$\begin{aligned}
 2 \times 20 \text{ Nos} \times 30.0 \times 3.50 &= 4200.00 \\
 2 \times 1 \text{ No} \times 10.0 \times 3.50 &= 70.00 \text{ m}^2 \\
 &= 4270.00 \text{ m}^2 \\
 &= 0.43 \text{ Hec}
 \end{aligned}$$

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
(4) Box cutting.					
Excavation for Roadway,					
in Soil - - - - -					
Re side of BESGES Road					
Result:					
$2 \times 16 \text{ No} \times 30.0 \times 0.375 \times 0.10 = 36.0 \text{ m}^3$					
$2 \times 1 \text{ No} \times 5.0 \times 0.375 \times 0.10 = 0.375 \text{ m}^3$					
Result of Rec					
$2 \times 4 \text{ No} \times 30.0 \times 0.375 \times 0.175 = 15.75 \text{ m}^3$					
$2 \times 1 \text{ No} \times 5.0 \times 0.375 \times 0.175 = 0.656 \text{ m}^3$					
Total = 52.78 m ³					
(5) Construction of embankment with approved material - - - - -					
60% qty of from excavated material from Box cutting =					
$52.78 \times 60\% = 31.67 \text{ m}^3$					
U.S.B					
(6) Construction of U.S.B. and well graded materials.					
Both sides of					
Adjacent of					
$2 \times 20 \text{ No} \times 30.0 \times 0.375 \times 0.160 =$					
$2 \times 1 \text{ No} \times 10.0 \times 0.375 \times 0.160 =$					
Adjacent of W.B. murr					
Ramp					
14-06-20					
J.E					

Continuation

3

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

Date of measurement

04.07.20

① WBM-brr-3, Providing,
laying, spreading and
compacting - - - - -

$$1 \times 16 \text{ No} \times 30.0 \times 3.75 \times 0.075 = 135 \text{ m}^3$$

$$1 \text{ No} \times 5.0 \times 3.75 \times 0.075 = 1.40 \text{ m}^3$$

In widening both sides.

$$2.0 \times 4 \text{ No} \times 30.0 \times 0.375 \times 0.075 = 6.75 \text{ m}^3$$

$$2.0 \times 1 \text{ No} \times 5.0 \times 0.375 \times 0.075 = 1.40 \text{ m}^3$$

For extra widening on
curve -

T-Transition.

$$12.0 \times (5.0 - 3.75) \times 0.075 = 0.56 \text{ m}^3$$

$$2 = 0.56 \text{ m}^3$$

Curve -

$$8.0 \times (5.0 - 3.75) \times 0.075 = 0.75 \text{ m}^3$$

instep.

$$2.0 \times 1.5 \times 0.075 = 0.225 \text{ m}^3$$

Curve - 2

$$15.0 \times 2 \times (5.0 - 3.75) \times 0.075 = 1.40 \text{ m}^3$$

$$= 146.735 \text{ m}^3$$

$$\text{Say, finally} = 146.31 \text{ m}^3$$

Ram
4.07.20
J.E.

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
					Date of measurement 16.07.20
(18) Providing & laying of a reinforced concrete pipe duct - 300 mm					
- - - - - All in					
2 x 4 m x 2.50 m = 20.0 m					

Hume Pipe - 600 mm

(19) Earthwork in excavation for foundation of structure

$$\begin{aligned} \text{H.W.} &= 2 \times 3.90 \times 1.150 \times 1.50 = 12.45 \text{ m}^3 \\ \text{Below H.P.} &= 1 \times 5.350 \times 1.130 \times 0.365 = 2.20 \text{ m}^3 \\ \text{Qty} &= 15.66 \text{ m}^3 \end{aligned}$$

(20) Providing 175 P.C.C. (1:2.5:5) as leveling course in foundation

$$\begin{aligned} \text{H.W.} &= 2 \times 3.90 \times 1.15 \times 0.150 = 1.345 \text{ m}^3 \\ \text{Below pipe} &= 1 \times 5.31 \times 1.130 \times 0.280 = 1.50 \text{ m}^3 \\ \text{Qty} &= 2.85 \text{ m}^3 \end{aligned}$$

(21) P.C.C. M20 in sub-structure

$$\begin{aligned} \text{H.W.} &= 2 \times 3.60 \times (0.40 + 0.40) \times 2.78 = 14.0 \text{ m}^3 \\ \text{Parapet} &= 2 \times 3.60 \times 0.40 \times 0.60 = 1.728 \text{ m}^3 \\ \text{Less for pipe} &= 2 \times 0.530 \times 0.530 = 0.574 \text{ m}^3 \\ \text{Qty} &= 15.17 \text{ m}^3 \end{aligned}$$

Particulars	Details of actual measurement				Content of area
	No.	L	B	D	
Ch/in	Ch	Area	Area	Length	Volume
		(m ²)	(m ²)	(m)	(m ³)
150.0	3.310	3.312	50	165.625	
200.0	3.255	3.282	50	164.125	
250.0	4.10	3.679	50	183.875	
300.0	2.85	3.432	50	173.75	
350.0	3.265	3.057	50	152.87	
400.0	3.239	3.249	50	162.47	
450.0	3.255	3.247	50	162.22	
500.0	3.210	3.232	50	161.62	
550.0	3.115	3.162	50	158.125	
610.0	3.105	3.11	80	186.60	
Up to 610 m long (Total) =					1831.88 m ³

Deduction Qty

① Subgrade = 80.25 m³

② U.S.B = 68.49 m³

③ 1.18 m U.S.B = 146.31 m³

Embankment Qty = 1536.83 m³

For 1000 m length = 1536.83 m³

③ Providing & fixing logo

of Project Typical

MMWSY - - - - -

Qty = 2.0 Nos.

Ranjit
28-07-20

Continuation

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

Date of measurement
14-08-20
P.C.C. m3

(1/10) Construction of

R.C. 1750 grade of

Concrete - m3 - 1111

$$1 \text{ No} \times 12.0 \times \frac{(5.20 + 3.75)}{2} \times 0.160 = 8.592 \text{ m}^3$$

$$1 \text{ No} \times 30.0 \times \frac{(3.75 + 3.75)}{2} \times 0.160 = 18.0 \text{ m}^3$$

$$1 \text{ No} \times 30.0 \times \frac{(3.75 + 3.80)}{2} \times 0.160 = 18.12 \text{ m}^3$$

$$1 \text{ No} \times 30.0 \times \frac{(3.80 + 3.75)}{2} \times 0.160 = 18.12 \text{ m}^3$$

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$$1 \text{ No} \times 30.0 \times \frac{(3.80 + 3.75)}{2} \times 0.160 = 18.12 \text{ m}^3$$

$$1 \text{ No} \times 30.0 \times \frac{(3.75 + 3.75)}{2} \times 0.160 = 18.0 \text{ m}^3$$

$$1 \text{ No} \times 18.0 \times \frac{(3.75 + 3.90)}{2} \times 0.160 = 18.36 \text{ m}^3$$

$$1 \text{ No} \times 30.0 \times \frac{(3.0 + 3.10)}{2} \times 0.160 = 14.64 \text{ m}^3$$

$$1 \text{ No} \times 30.0 \times \frac{(3.75 + 3.75)}{2} \times 0.160 = 18.0 \text{ m}^3$$

$$1 \text{ No} \times 30.0 \times \frac{(3.75 + 3.80)}{2} \times 0.160 = 18.12 \text{ m}^3$$

$$240.192 \text{ m}^3$$

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

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ABSTRACT of COST.

(1) Providing & fixing of
working bench mark.

- - - - - All w/p.

Qty vide Tm P-1 = 1.0 No.

@ RS = 3821.92/Each = RS = 3822 = 00

(2) Providing & fixing

Reference Pillar - 100.

Qty vide Tm P-1 = 2.0 No.

@ RS = 1729.55/Each = RS = 3459 = 00

(3) Clearing & grubbing

Road land. - - - - - All w/p.

Qty vide Tm P-1 = 5.43 Hec.

@ RS = 51133.76/Hec = RS = 21988 = 00

(4) Box cutting - excavation

for Roadway in soil.

- - - - - All w/p.

Qty vide Tm P-2 = 52.78 m³

@ RS = 74.16/m³ = RS = 3914 = 00

(5) Construction of Embank.

-ment with materials

obtain from Roadway

Cutting - - - - - All w/p.

Qty vide Tm P-2 = 31.67 m³

@ RS = 26.11/m³ = RS = 827 = 00

(6) Construction of embank.

-ment with approved

materials - - - - - (lead - 100m)

Qty vide Tm P-2 = 1536.83 m³

@ RS = 174.94/m³ = RS = 268,853 = 00

3,02,863 = 00

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

$$BF = PS = 3,02,863 = \infty$$

(7) Construction of
Subgrade and earth
shoulder - - - Do - All

$$Qty \text{ vide TMB P-6} = 45.94 m^3$$

$$@ PS = 176.58/m^3 = PS = 8119 = \infty$$

(8) Construction of Subgrade
and earth shoulder
for (room lead) - - - Do - All

$$Qty \text{ vide TMB P-6} = 34.07 m^3$$

$$@ PS = 107.28/m^3 = PS = 3676 = \infty$$

(9) C.S.B - Construction
of C.S.B with well
local material - - -

- - - Do - All

$$Qty \text{ vide TMB P-3} = 68.49 m^3$$

$$@ PS = 2370.05/m^3 = PS = 1,62,325 = \infty$$

(10) WBM - W-3

Providing laying, Spreading
and compacting - - - WBM - W-3

- - - Do - All

$$Qty \text{ vide TMB P-4} = 146.31 m^3$$

$$@ PS = 3591.52/m^3 = PS = 5,25,475 = \infty$$

(11) P.C.C - M30

(10) Construction of P.C.C
M30 grade of concrete
- - - Do - All

$$Qty \text{ vide TMB P-9} = 373.32 m^3$$

$$@ PS = 5921.26/m^3 = PS = 22,10,525 = \infty$$

Continuation

$$(10 - PS) = 32,29,88 = \infty$$

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

$$BF = PS = 3212983200$$

(12) Providing & Fixing

13 of mm w/sy layer

& Typical Sphum

— — — — — All in

Qty vide TMBP-7 = 2.0 m³

$$@ PS = 9206.52 / \text{Each} = PS = 1841300$$

(13) Irrigation Pipe - 300 mm

18 Providing & Laying of

R.C.C. Pipe duct - 300 mm

— — — — — All in

Qty vide TMBP-5 = 20.0 m

$$@ PS = 852.98 / \text{m} = PS = 1706000$$

(14) Earth work in Excavation

for foundation - — — — — All in

Qty vide TMBP-5 = 15.68 m³

$$@ PS = 269.32 / \text{m}^3 = PS = 421800$$

(15) Providing M15 P.C.C.

as leveling course — —

— — — — — All in

Qty vide TMBP-5 = 2.85 m³

$$@ PS = 4631.93 / \text{m}^3 = PS = 1320100$$

(16) P.C.C M20 grade

in substructure

— — — — — All in

Qty vide TMBP-5 = 15.17 m³

$$@ PS = 5416.71 / \text{m}^3 = PS = 8217100$$

Continuation

$$10 - PS = 334804600$$

$$BF = RS = 33,48,046 = \infty$$

Sch. XLV-Form No. 134

13

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

172 Providing and laying

22 R-C-C pipe NP-3 -

600mm ϕ - 100 - m

Qty width trans P-6 = 7.50m

@ RS = 910.73/m = RS = 6830 = ∞

Sub-Total = 3354,876 = ∞

Add W-S.T. = 12% = 4,02,585 = ∞

Add Labour cess = 1% = 33,549 = ∞

Gr-Total = 37,91,010 = ∞

less 10% below at

Per B.O.G. Rate. (C) 37,91,01 = ∞

Net RS = 34,11,909 = ∞

Ramji
14-08-20

C & P
18/8/2020

Materials STATEMENT.

(1) Stone metal = 234.56 m³

(2) Course sand = 196.964 m³

(3) Screening (Stone dust) = 35.11 m³

(4) Stone chips (Aggregate) = 352.20 m³

Ramji
14-08-20

Continuation