Baruka Bridge - (Nabinagar)

[redacted]

[redacted] State Scheme

[redacted] P. W. D.

E.E. R.W.D. Work Aurangabad. [redacted]

Assistant Engineer. [redacted]

R.W.D. Work Sub-Division Aurangabad.

[redacted] No/2477

[redacted]

Agency - Ram Nandan Singh

2nd on A/C bill

Sch. XLV-Form No. 134 - 6

Particulars	Details of actual measurement No.	L	B	D	Contents of area
1) Name of Work - Construction of H.L Bridge at Barwa on Adr River Under (Navard) State Scheme.					
2) Agreement No - 485/BD/2019-20					
3) Agency - Sri Ram Nandan Singh					
4) Agreement Amount - Rs 25723,632=00					
5) Date of work starts - 22-11-2019					
Date of Entry 3/12					
1) PW and laying at free MIS levelling course 100 mm below FD etc - do - TS					
	24	12.6	5.4	0.10	= 13.61 m³
	14	9.00	5.4	0.10	= 9.86 m³
				Total	18.47 m³

2) PW supply fitting and placing HYSD bar reinforcement etc - do - TS

Abutment pile cap - A1.

25 mm φ bottom Main bar.

98 × 7.45 mt = 730.1 mt

@ 3.851 kg/mt = 2811.912 kg — (A)

20 mm φ Distribution bottom

34 × 14.59 mt = 496.06 mt

20 mm φ Main bar Top

82 × 7.60 mt = 623.20 mt

20 mm φ Distribution Top

27 × 14.59 mt = 393.93 mt

Total 1513.19 mt

@ 2.465 kg/mt = 3730.01 kg — (B)

Continuation

Sch. XLV-Form No. 134 7

Particulars	Details of actual measurement No.	L	B	D	Contents of area
16 mm ϕ closed bar					
	251	× 4.238	mt	=	1063.738 mt
16 mm ϕ	Side face reinforcement				
cluster	12	× 4.995 mt	=		59.400 mt
16 mm ϕ	Side face reinforcement				
	12	× 12.150 mt	=		145.800 mt
					1268.938 mt
	@ 1.578 kg/mt	=			2002.384 kg
Total (1+2+3+4)	=				8544.31 kg (C)
Add 5% wastage & lap	=				427.21 kg
	Total				8971.53 kg
	≅	8.971 MT			

Abut

Date of Entry 13/12

1) PW R.C.C M35 in pile Cap : Abutment A1

etc. — do. T1

1 × 12.30 × 5.10 × 1.80 = 112.914 M³

2) PW Supply, fitting and placing HYSD bar reinforcement

etc. — do. T1

Abutment pile cap - A2

25 mm ϕ bottom Main bar

cluster 16/12

98 × 7.45 mt = 730.1 mt

@ 3.851 kg/mt = 2811.912 kg (A)

20 mm ϕ Distribution bottom

34 × 14.59 mt = 496.06 mt

20 mm ϕ Main bar Top

82 × 7.60 mt = 623.20 mt

20 mm ϕ Distribution Top (Continuation)

27 × 14.59 mt = 393.93 mt

Total 1513.19 mt

@ 2.485 kg/mt = 3758.07 kg (B)

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
16 mm ϕ chair bar					
	251	× 4.238 mt			= 1063.738 mt
16 mm ϕ Side face reinforcement					
	12	× 4.95 mt			= 59.400 mt
16 mm ϕ Side face reinforcement					
	12	× 12.150 mt			= 145.80 mt
		Total			1268.938 mt
	@ 1.578 kg/mt				= 2002.384 kg (C)
Total (A+B+C)					= 8544.31 kg
Add 5% Wastage & Lap					= 427.21 kg
			Total		8971.53 kg
					= 8.971 MT

Date of Entry 27.12

1) For R.C.C M35 in pile Cap for Abutment - A2 abutment

1	× 12.30	× 5.10	× 1.80	= 112.914 M³

2) For Supply fitting and placing HYSD Bar reinforcement in pile Cap. for pier abutment

25 mm ϕ Main bar bottom

69	× 7.993 mt			= 551.517 mt
@ 3.854 kg/mt				= 2124.116 kg (A)

20 mm ϕ Distribution bottom

34	× 11.564 mt			= 393.176 mt

20 mm ϕ Top bar Longitudinal direction -

58	× 8.023 mt			= 465.334 mt

20 mm ϕ Top bar ~~Transverse~~ distribution =

34 × Continuation/mt = 393.176 mt

20 mm ϕ Side face reinforcement

12 × 9.43 mt = 113.160 mt

Total 1364.846 mt

@ 2.4649 kg/mt — 3364.21 kg (B)

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
16 mm φ Side face reinforcement					
	12 × 5.854 mt				70.248 mt
16 mm φ chair bar.					
	177 × 3.373 mt				597.071 mt
				Total	667.269 mt
	@ 1.5775 kg/mt				1052.62 kg (C)
Total	A+B+C)			=	6540.946 kg
Add 5% Wastage & lap					327.05 kg
				Total	6867.996 kg
				=	6.868 MT

checked 28/11

Date of Entry 10-1.

1) P/L R.C.C M35 in pile Cap for pier etc.. do TS

1 × 8.7 × 5.10 × 1.80 = 79.87 M^3

2) P/L and Construction of Service road to reach pier etc. do. TS

2 × 18.75 = 37.50 mt

3) P/L Supply filling and placing HYSD bar reinforcement in Abutment Shaft. A1 etc.. do. do TS

20 mm φ Main bar Earth face

61 × 7.084 mt = 432.124 mt

20 mm φ Main bar opposite earth face.

61 × 7.064 mt = 430.904 mt

checked 10/1/21

Continuation

Total 863.028 mt

@ 2.465 kg/mt — 2127.364 kg (A)

Total

— Contd...

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
16mm ϕ Distribution bar					
	48	10.788 mt	=		517.824 mt
16mm ϕ Main bar Side face					
checked 20/10/21	20 × 7.084 mt	=			141.68 mt
			Total		659.504 mt
	@ 1.578 kg/mt	—			1040.70 kg (B)
10mm ϕ Link bar					
	160 × 1.15 =	184.0 mt			
	@ 0.616 kg/mt	—			113.385 kg (C)
Total (A+B+C)		=			3281.45 kg
Add 5% Wastage & lap		—			164.07 kg
			Total		3445.52 kg
			=		3.445 MT

Date of Entry 18.1.

1) PW supply and placing HYSD bar reinforcement in Abutment - 1. Return wall etc - do - (7)

16mm ϕ Main bar earth face				
	86 × 6.262 mt	=		538.532 mt
16mm ϕ Main bar opposite earth face				
	58 × 5.002 mt	—		290.116 mt
16mm ϕ Vertical bar -				
	112 × 5.909 mt	—		616.808 mt
16mm ϕ Main bar earth face Dirt wall				
	42 × 5.770 mt	=		243.180 mt
16mm ϕ Main bar opposite earth face dirt wall.				
checked 19/11/21	30 × 4.284 mt	=		128.520 mt
		Continuation Total		1817.156 mt
	@ 1.578 kg/mt	—		2867.47 kg
Add 5% Wastage & lap		—		143.37 kg
		Total		3010.84 kg
		=		3.01 MT

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
	Date of Entry				30.1.

1) PW R.C.C M30 in Sub structure
a Abutment Shaft and return Wall

A_1 @ 1 × 8.40 × 1.00 × 3.319 = 27.88 M³

4 × 3.5 × 0.48 × 4.00 = 26.88 M³

54.76 M³

2) ~~PW Supply, fitting and placing~~
HYSD bar reinforcement
in Abutment Shaft & Return wall
etc. - Co. - T/S
Abutment - 2 -

20 mm ϕ Main bar earth face

61 × 7.084 mt = 432.124 mt

20 mm ϕ Main bar opposite earth face

61 × 7.084 mt = 430.904 mt

Total 863.028 mt

@ 2.465 kg/mt = 2127.364 kg (A)

16 mm ϕ Distribution bar

48 × 10.788 mt = 517.824 mt

16 mm ϕ Main bar Side face

20 × 7.084 mt = 141.68 mt

Total 859.504 mt

@ 1.578 kg/mt = 1040.70 kg (B)

10 mm ϕ Link bar

160 × 1.15 = 184.0 mt

@ 0.616 kg/mt = 113.385 kg (C)

Return Wall

16 mm ϕ Main bar earth face

86 × 6.282 mt = 538.532 mt

16 mm ϕ Main bar opposite earth face

58 × 5.002 mt = 290.116 mt

16 mm ϕ Vertical bar

112 × 5.909 mt = 618.808 mt

16 mm ϕ Main bar earth face
Third wall

42 × 5.790 mt = 243.180 mt

16 mm ϕ Main bar opposite earth

Continuation

30 × 4.284 mt = 128.520 mt

Total 1812.186 mt

@ 1.578 kg/mt = 2867.47 kg

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area 2
Total A+B+C+D =					6148.92 kg
Add 5% Wastage & lap					307.45 kg
				Total	6456.37 kg
				=	6.456 MT

Rate of Entry 574/2

1) Plr R.C.C M30 in Sub-Structure i Abutment Shaft and Return Wall etc TLs

A2- 1 × 8.40 × 1.00 × 3.319 = 27.88 M³

4 × 3.5 × 0.48 × 4.00 = 26.88 M³

Total 54.76 M³

2) PN Supply fitting and placing HYSD bar reinforcement i Pier Shaft etc TLs

25 mm ϕ Main bar

46 × 8.60 mt — 395.6 mt

@ 3.851 kg — 1523.45 kg

12 mm ϕ Binder.

45 × 5.460 mt = 245.7 mt

Continuation

@ 0.887 kg/mt = 217.94 kg

741.39 kg

5% Wastage & lap — 37.07 kg

-c/c- Total 778.46 kg

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Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
			Contd -		778.46 M³
3) PW Head Walls & Abutment					778 M³
Cap also - do - (1)					
		192 Nos			

14/09/21
AE

Date of Entry 25.2.

1) PW R.C.C M30 W sub Structure i/c Pier Shaft

also - do - (1)

1 × 1.57 × 2.00 × 4.00 = 12.56 M³

26/09/21
AE

Checked & admitted

[signature]
02/3/2021
AE RWD Aurangabad

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
		Abstract of Cost			
1) Dismantling of structure					
etc. -- do -- do -- TS					
14.93 M^3 Qty vide P-②					
@ 1140.29/M^3					৳ 17013=00
2) P/W E/W in Excavation					
in fd" Foundation etc. -- TS					
553.58 M^3 Qty vide P-③					
@ 125.24/M^3					৳ 69330=00
3) P/W R.C.C M35 in pile					
Bored Cast in Situ etc. TS					
484.00 M^3 Qty vide P-④					
@ ৳ 15673.23/M^3					৳ 7585843=00
4) P/W and Layer P.C.C M-15					
in fd" -- do -- TS					
18.47 M^3 Qty vide P-⑥					
@ ৳ 5304.29/M^3					৳ 97924=00
5) P/W R.C.C M30 in pile					
Cap etc. -- do -- TS					
112.914 M^3 Qty vide P-⑦					
112.914 M^3 Qty vide P-⑧					
79.82 M^3 Qty vide P-⑨					
305.698 M^3 @ ৳ 6828.64/M^3					৳ 2087502=00
6) P/W Supply fitting and					
placing HYSD bar etc.					
-- do -- TS					
56.773 MT Qty vide P-③					
8.971 MT Qty vide P-④					
8.971 MT Qty vide P-⑧					
6.868 MT Qty vide P-⑨					
81.549 MT @ ৳ 76759.64/MT					৳ 6259672=00
				Total ৳	16117284=00

Continuation — C/O

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
				B/F	Tk 1,61,17,284=00
7) PW & Construction Service road etc complete					
37.5 mt	Qty as per (9)				
	@ Tk 3880.24/mt				Tk 1447580=00
8) PW R.C.C in Sub Structure & Abutment & Pier Slab etc complete					
54.26 M^3	Qty as per (11)				
54.26 M^3	Qty as per (12)				
12.58 M^3	Qty as per (13)				
112.08 M^3	@ Tk 6881.54/M^3				Tk 8400980=00
9) PW Wing Walls & Abutment Cap Slab etc complete					
192 M^2	Qty as per (13)				
	@ Tk 132.62/sft				Tk 25473=00
10) PW Supply, fitting and placing HYSD bar reinforcement in Sub-Structure etc complete					
3.445 MT	Qty as per (6)				
3.01 MT	Qty as per (10)				
6.456 MT	Qty as per (12)				
0.778 MT	Qty as per (13)				
13.698 MT	@ Tk 76910.13/MT				Tk 1053515=00
				Total	Tk 1,81,81,128=00
Deduct @10% as per agreement					Tk 18181713=00
				Total	Tk 1,63,63,015=00
Deduct PP P-5					Tk 113,37,274=00
				Total	Tk 50,25,741=00

Continuation

5/3/21

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