

**TYPICAL ESTIMATE FOR CONSTRUCTION OF MULTI ARCH BUTRESS
CHECK DAM IN BIDAR DIST.**

Sl no	Perticulars	NO.	L.	B.	D.	Qty.	Rate	Amount
1	2	3	4	5	6	7	8	9
1	Site clearance at the work spot, upstream and downstream side						L.s.	Rs 1000=00
2	Earthwork excavation for fondation such as cut off trenches,rock toe toe drain, fondn of waste wier,etc. and removing the excavated stuff to a dist.of 50m. And lift upto 1.50m. in all soils boulders upto 300mm size in any direction. In hard soil Levelling of bed From ch 3.5 to20.5 RL 98.70-97.60	1	17.0	4.5	1.10	84.15		
	front cutoff wall of arches	4	5.38	0.6	1.00	12.91		
	rear cut off wall	1	17.3	0.2	0.30	10.38		
	End Butress wall	2	1.2	0.6	1.00	1.44		
	Middle butress wall	3	0.9	0.6	1.00	1.62		
	Stilling basin	1	17.3	1.7	0.45	12.85		
	Key wall	2	1.5	0.6	2.05	3.69		
	Obstruction removal on U/S side	1	15.0	10.0	0.50	75.0		
						202.04cum		
	MI DSR 2000-01 it no.2.4 pno.20						60.13	Rs 12149=00
	Basic rate						Rs 38.88	
	Head lead upto 200m.						21.25	
							Rs 60.13	
2	Providing and layingtrap jelly cc (1:4:8) with 40mm and downsize jelly and clean sieved appd. Sand for fondation including mixing laying and tamping and curing etc. foundation of arch	4	5.38	0.60	0.15	1.94		
	End butress wall	2	1.2	0.60	0.15	0.22		
	Middle butress wall	3	0.9	0.60	0.15	0.24		
	In between arch portion	4x2/3x4.25x1.40			0.15	2.38		
	In between butress	4	4.1	0.90	0.15	2.21		
	for D/S side cut off wall	1	17.3	0.2	0.3	1.04		
						8.03 cum		
	It no. 5.2 pno. 29						Rs 1166.81	Rs 9369=00
	L/c for metal0.96x108.60					104.25		
	L/c for sand 0.48x68.25					32.76		
	L/c forcement0.175x108.8					19.04		
	Total						Rs 1166.81	
4	Providing and layingCC(1:2:4) prop by using 20mm and downsize with clean sieved appd sand including mixing,laying,vibrating and smooth							

contd...2

1	2	3	4	5	6	7	8	9
finishing to exposed faces in cm (1:4) including curing etc. complete								
Raft for arch		4	5.38	0.6	0.15	1.94		
Raft for butress		2	1.2	0.6	0.15	0.22		
.....do.....		3	0.9	0.6	0.15	0.24		
Key wall		2	1.5	0.15	3.2	1.44		
Top of arches		4x2/3x4.25x1.40x0.075				1.19		
						5.03		
Stilling basin		1	17.3	1.85	0.15	4.80		
Down stream cut off wall		1/2x17.3x0.15+0.45x0.15				1.56		
						11.39cum		
It no.5.7 pno. 29	Rs 1930.32						2196.69	Rs 25020=00
L/c for metal0.9x108.6	97.74							
L/c for sand 0.45x296.50	133.42							
cement0.3237x108.8	35.21							
	Rs 2196.69							
5 Providing and layingCC (1:1.5:3) prop. For RCC works with 12mm and downsize jelly with clean sieved appd. Sand including machine mixing laying,vibrating with necessary centering and formwork and smooth finishing to exposed faces in cm(1:3) including curing etc. complete.								
For arches		4	5.38	0.12	2.2	5.68		
Butress wall end side		2	1.2	0.15	0.70	0.25		
Butress wall end side		2/2x	1.2	1.8	0.15	0.32		
Butress wall middle		2	0.9	0.15	0.7	0.19		
Butress wall middle		2/2x	0.9	1.50	0.15	0.20		
						6.64 cum		
PHE DSR2002-03							4051.97	Rs 26905=00
It no. 2.8.2 pno.59	Rs 3600.00							
L/c for metal0.85x108.60	92.31							
L/c for sand 0.41x296.5	121.56							
L/c for cem.0.415x108.8	45.15							
	total							
	Rs 3859.02							
Add 5% area wt.	192.95							
	Total							
	Rs 4051.97							
6 Cost of steel app. 0.5% of itno. 4&5 5.03+6.64 I.e. 11.67cum 6.00 qtl. 2000/-MR Rs 12000=00								
7 Labour charges for fabrication of steel bars including straightening cutting bending, laying in position hooking,laping in position binding with approved quality of binding wire etc. complete.								

1	2	3	4	5	6	7	8	9
	Qty. same as it no.5							
	PWD DSR 2002-03					6.00qtl	262.5	Rs 1575=00
	It no.1.1 pno.15	Rs 250.00						
	Add 5% area wt.	12.50						
		<u>Rs 262.50</u>						
8	Providing boulder filling below apron with trap boulders 15cm to 90cm size with an initial lead of 50m. And lift upto 1.5m.							
	Arch portion		4x2/3x4.10x1.35x1.30			19.19		
	In between butress wall		4	4.1	<u>0.65+0</u>	1.3	<u>6.93</u>	
					2		26.12	
	It no.1.4.3 pno.26	Rs 51.84						
	Lead for boulders	108.60						
	loading&unloading	36.00						
		<u>Rs 196.44</u>						
						Rs 196.44/cum		Rs 5131=00
9	Providing and constructing trap size stone masonry in courses not less than 20cm high with bond stones 2m. Apart in each course including curing etc.in cm(1:6)							
	In between butress wall		4	4.1	1.6	0.25	6.56 cum	
								868.18 Rs 5695=00
	It. No.6.2.2 pno.30	Rs 727.32						
	l/c for stone1.05x108.6	114.03						
	l/c for sand 0.28x68.25	19.11						
	l/c for cem.0.071x108.8	7.72						
		<u>Total</u>						Rs868.18
10	Providing pointing to stone masonry in cm(1:3) prop. Including racking joints including, scaffolding and curing etc. complete.							
	In betn. Butress wall		4	4.1	1.6		26.24 sqm	
	It no. 1.7.2 p no.30	Rs 27.12						27.92 Rs 733=00
	l/c for sand0.002x296.5	0.59						
	cement 0.00191x108.8	0.21						
		<u>Rs 27.92</u>						
11	Add L.S. for other unforceen items							Rs 423=00
								<u>Grand Total</u> Rs 1,00000=00