PUBLIC WORKS DEPARTMENT

"T.A.D."
"DETAILED ESTIMATE"

NAME OF WORK : ***ESTIMATE FOR CONSTRUCTION OF SUBMERSIBLE BRIDGE ON SOM RIVER AT LARATHI TO LARATHI "B"***

ESTIMATED COST	***:***	***Rs. 326.58 Lacs***
BLOCK	***:-***	***KHERWARA***
CONSTITUENCY	***:-***	***KHERWARA***
DISTRICT	***:-***	***UDAIPUR***
STATE	***:-***	***RAJASTHAN***

P.W.D. DN. KHERWARA

TECHNICAL – REPORT

1 NAME OF WORK	:-	**ESTIMATE FOR CONSTRUCTION OF SUBMERSIBLE BRIDGE ON SOM RIVER AT LARATHI TO LARATHI "B"**
2 REF. OF ADM. SANCTION	:-	कार्यालय आयुक्त, जनजाति क्षेत्रीय विकास विभाग, उदयपुर की प्रशासनिक स्वीकृति पत्र क्रमांक एफ–5/अभि./सीटीएडी/सडक निर्माण/2022–23/15602–9 दिनांक 18.05.2022 राशि रू. 326.58 लाख
3 NECESSITY	:-	Larathi and Larathi B revenue villages are seprated by Som River therfore it is necessary to construct Submersibe bridge for there connectivity.
4 PROPOSALS	:-	The following proposal have been taken in the estimate.
		1 RCC Submersible Bridge (M-25) has been proposed
5 B.S.R.	:-	Estimate has been framed by P.W.D. B.S.R. 2019 (Roads) P.W.D. Circle Udaipur
6 LABOUR & MATERIAL	:-	Skilled & unskilled labour's are locally available. stone, sand, cement are also locally available in the near by market.
7 EXECUTION	:-	The work will be executed through contractors after inviting competitive tenders.
8 ESTIMATED COST		The Estimated cost comes to **Rs. 326.58 Lacs** Including 1.50% Contingencies , 1.00% Q.C. and 13% Prorata Charges.

(ANIL YADAV)
ASSISTANT ENGINEER
P.W.D. SUB DN. KHERWARA

(MOHD. YUNUS PEERZADA)
EXECUTIVE ENGINEER
P.W.D. DN. KHERWARA

"G E N E R A L - A B S T R A C T"

NAME OF WORK :- ESTIMATE FOR CONSTRUCTION OF SUBMERSIBLE BRIDGE ON SOM RIVER AT LARATHI TO LARATHI "B"

PART	PARTICULARS			AMOUNT
T PART "A"	SUBMERSIBLE BRIDGE	1 Nos	Rs.	28191434.00
		TOTAL	**Rs.**	**28191434.00**
		Add 1.50% For Contingencies Charges	Rs.	422872.00
		TOTAL	**Rs.**	**28614306.00**
		Add 1.00% For Q.C. Charges	Rs.	286143.00
		TOTAL	**Rs.**	**28900449.00**
		Add 13% For Prorata Charges	Rs.	3757058.00
		GRAND TOTAL	**Rs.**	**32657507.00**
			Say	**326.58 Lacs**

(ANIL YADAV)
ASSISTANT ENGINEER
P.W.D. SUB DN. KHERWARA

(MOHD. YUNUS PEERZADA)
EXECUTIVE ENGINEER
P.W.D. DN. KHERWARA

T. S. No……...……..Date……..……..……..
Technically Sanctioned for Rs……
In Words……
……..……..……..
Chargeable head……..…..……
……..……..……..

(P.R. MEENA)
SUPERINTENDING ENGINEER
P.W.D. (RURAL) CIRCLE UDAIPUR

NAME OF WORK :- ESTIMATE FOR CONSTRUCTION OF SUBMERSIBLE BRIDGE ON SOM RIVER AT LARATHI TO LARATHI "B"

"ABSTRACT"

PART "A" SUBMERSIBLE BRIDGE

S.No	Particulars	Quantity	Rate	Unit	Amount
1 R-12.1	Excavation for Structures (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.)				
	Classification :-				
a) 12.1 (I)	Ordinary Soil. Upto 3 m depth. Manual Means	1309.50 Cum	126.00	P.Cum	164997.00
b) 12.1 (II)	Ordinary rock (not requiring blasting) Depth upto 3 m depth. Manual Means	1309.50 Cum	353.00	P.Cum	462254.00
c) 12.1 (IV)	Hard rock (requiring blasting) Manual Means	1746.00 Cum	467.00	P.Cum	815382.00
2 R-12.40	PCC 1:3:6 in Foundation (Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	456.30 Cum	3599.00	P.Cum	1642224.00
3 R-12.11 (v) Case I	Plain/Reinforced cement concrete, in well foundation complete as per drawing and technical specification RCC M25 Grade. Using concrete mixer	2167.66 Cum	5178.00	P.Cum	11224143.00

S.No	Particulars	Quantity	Rate	Unit	Amount
4 R-13.6	Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and technical specifications	22.48 MT	65447.00	P.MT	1471249.00
5 R-84 14.1 (B) Case II (i) (p)	Furnishing and Placing Reinforced/Prestressed cement concrete in super-structure as per drawing and Technical Specification RCC Grade M25. Using Batching Plant, Transit Mixer and Concrete Pump; For solid slab super-structure, 20-30% of (a+b+c) Height upto 5m	1689.87 Cum	4797.00	P.Cum	8106306.00
6 R-14.2	Supplying, fitting and placing HYSD bar reinforcement in super-structure complete as per drawing and technical specifications	64.50 MT	66698.00	P.MT	4302021.00
7 B-4.28.1	Providing and fixing in position bitumen impregnated fiberboard confirming to IS : 1838-1961 in expansion joints including the cost of primer sealing compound. 12mm thick	5.04 Sqm	567.00	P.Sqm	2858.00
			TOTAL	**Rs.**	**28191434.00**

(ANIL YADAV)
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P.W.D. DN. KHERWARA

"DETAIL"

NAME OF WORK :- ESTIMATE FOR CONSTRUCTION OF SUBMERSIBLE BRIDGE ON SOM RIVER AT LARATHI TO LARATHI "B"

2

PART "A" SUBMERSIBLE BRIDGE

S.N	Particulars										Quantity	Unit
1 R-12.1	Excavation for Structures (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.)											
	A1 - A2	2	x	12.00	x	6.00	x	3.00		=	432.00	
	Pier P1	10	x	12.00	x	4.60	x	3.00		=	1656.00	
	Wing Wall	4	x	50.00	x	3.30	x	3.00		=	1980.00	
	Toe wall											
	U/S , D/S	2	x	110.00	x	0.90	x	1.50		=	297.00	
										=	4365.00	
a) 12.1 (I)	Classification : Ordinary Soil. Upto 3 m depth. Manual Means											
		30	%	1309.50						=	1309.50	
							For	1	Nos	=	1309.50	Cum
b) 12.1 (II)	Ordinary rock (not requiring blasting) Depth upto 3 m depth. Manual Means											
		30	%	1309.50						=	1309.50	
							For	1	Nos	=	1309.50	Cum
c) 12.1 (IV)	Hard rock (requiring blasting) Manual Means											
		40	%	1746.00						=	1746.00	
							For	1	Nos	=	1746.00	Cum
2 R-12.40	PCC 1:3:6 in Foundation (Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)											
	A1 - A2	2	x	12.00	x	6.00	x	0.30		=	43.20	
	Pier P1	10	x	12.00	x	4.60	x	0.30		=	165.60	
	Wing Wall	5	x	50.00	x	3.30	x	0.30		=	247.50	
	Toe wall											
	U/S, D/S	2	x	110.00	x	0.90	x	0.20		=	39.60	
										=	456.30	
							For	1	Nos		456.30	Cum

S.N	Particulars										Quantity	Unit
3 R-12.1 1 (v) Case I	Plain/Reinforced cement concrete, in well foundation complete as per drawing and technical specification RCC M25 Grade. Using concrete mixer											
	A1 2	2	x	11.60	x	5.60	x	0.75		=	97.44	
		2	x	11.00	x	5.03	x	0.75		=	83.00	
		2	x	10.40	x	4.45	x	0.75		=	69.42	
	Abut	10	x	11.60	x	4.20	x	0.75		=	365.40	
		10	x	11.00	x	3.60	x	0.75		=	297.00	
		10	x	10.40	x	2.80	x	0.75		=	218.40	
	Wing Wall	4	x	50.00	x	2.90	x	0.75		=	435.00	
		4	x	50.00	x	2.30	x	0.75		=	345.00	
	Toe wall	2	x	110.00	x	(0.9+0.5)/2	x	1.50		=	231.00	
						0.70						
		1	x	13.00	x	10.00	x	0.20		=	26.00	
										=	2167.66	
							For	1	Nos	=	2167.66	Cum
4 R-13.6	Supplying, fitting and placing HYSD bar reinforcement in sub-structure complete as per drawing and technical specifications											
				28 mm		**12 mm**		**10 mm**				
	Anchor bar											
	2 x 15 x 10			300.00								
	Pier											
	13 x 15 x 10			1950.00								
	CC Jhali											
	A1 2											
	2 X 80 x 6.50					1040						
	2 x 40 x 12.50					1000						
	Pier											
	13 x 80 x 5.00					5200						
	13 x 30 x 12.50					4875						
	Stare bar											
	2 x 6 x 9.8					117.6						
	13 x 6 x 9.8					764.4						
				2250.00		12997.00						
				4.85		0.89						
				10912.5	+	11567.33				=	22479.83	
									Or	=	22.48	MT
							For	1	Nos	=	22.48	
							Grand Total			=	**22.48**	MT
5 R-84 14.1 (B) Case II (i) (p)	Furnishing and Placing Reinforced/Prestressed cement concrete in super-structure as per drawing and Technical Specification RCC Grade M25. Using Batching Plant, Transit Mixer and Concrete Pump; For solid slab super-structure, 20-30% of (a+b+c) Height upto 5m											
	Abutment	2	x	(9.8+8.4)/2	x	(3.83+0.50)/2	x	6.00		=	236.42	

S.N	Particulars										Quantity	Unit
				9.10		2.17						
	Pier	10	x	(9.8+8.4)/2	x	(2.2+0.80)/2	x	6.00		=	819.00	
				9.10		1.50						
	Circular part	10	x	0.785	x	(1.44+0.5)/2	x	6.00		=	45.69	
						0.97						
	Bed plate											
	Abutment	1	x	8.400	x	0.50	x	0.30		=	1.26	
	Pier	10	x	8.400	x	0.80	x	0.30		=	20.16	
	Wearing coat	1	x	110.00	x	8.40	x	0.15		=	138.60	
	Slab											
		11	x	8.400	x	8.00	x	0.58		=	428.74	
											1689.87	Cum
								For	1	Nos	1689.87	Cum
6 R-14.2	Supplying, fitting and placing HYSD bar reinforcement in super-structure complete as per drawing and technical specifications											
				25 mm		12 mm		10 mm				
	Bed plate A1											
	2 x 2 x 5 x 8.40					168.00						
	2 x 1 x 84 x 1.70					285.60						
	Pier											
	13 x 8 x 8.40					873.60						
	13x 84 x 2.40					2620.80						
	Slab											
	14 x 112 x 8.50			13328.00								
	14 x 53 x 8.9					6603.80						
	Top rainforecement											
	14 x 52 x 8.40							6115.20				
				13328.00		10551.80		6115.20				
				3.85		0.89		0.62				
				51312.8	+	9391.10	+	3791.42		=	64495.33	
									Or	=	64.50	MT
								For	1	Nos	= 64.50	MT
								Grand Total			= **64.50**	MT
7 B-4.28.1	Providing and fixing in position bitumen impregnated fiberboard confirming to IS : 1838-1961 in expansion joints including the cost of primer sealing compound. 12mm thick											
				13	x	8.40	x	0.60		=	5.04	
										=	5.04	Sqm
								For	1	Nos	= 5.04	Sqm

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