

**DETAILS OF QUANTITY**

**Rehabilitation of various roads at Municipal Area Begun (Begun Chechi Samron Ka Lewa Road )  
RCC 7 Span 10.0m Major Bridge ( Ch. 0/450)**

S.N	BSR Item No.	Description of Item	No.	Length (m)	Width (m)	Height	Quantity	Rate	Unit	Amount
		<b>FOUNDATION</b>								
1	13.1.3.2	Earthwork in excavation for foundation of structure complete with all lift, dewatering, shoring and shuttering etc. including refilling of trenches in 250 mm layer, ramming, watering and disposal of surplus soil within a lead of 1000 meters, as per drawing and technical Earth in excavation for foundation of specification. [MoRTH Specification : Clause 304]. In Ordinary/Soft rock (not requiring blasting) [MoRTH Specification : Clause 301] BY MECHANICAL MEANS								
(a)		Abutment	2	11.05	7.50	0.50	82.88 Cum			
		Piers	1 x 6	10.35	7.50	0.50	232.88 Cum			
		Curtain Wall	2 x 7	10.00	1.60	0.50	112.00 Cum			
							427.76 Cum	99.00	Per Cum	42348.00
(b)	13.1.4.1	In Hard Rock [MoRTH Specification : Clause 301, 302, 303]. Requiring Blasting								
		Abutment	2	11.05	7.50	2.00	331.50 Cum			
		Piers	1 x 6	10.35	7.50	2.00	931.50 Cum			
		Curtain Wall	2 x 7	10.00	1.60	2.00	448.00 Cum			
		Flooring	1 x 7	10.00	8.15	0.30	171.15 Cum			
							1882.15 Cum	331.00	Per Cum	622992.00
2	14.6.1.2	Structural cement concrete (Design Mix) in open foundations, with form work, at any level. Cement concrete for plain/reinforced concrete in open foundations as per drawing and technical specification. [MoRTH Specification : Section 1700 & 1500].  With 20mm nominal size aggregate								
(a-1)		P.C.C. M-15 grade By using concrete mixer								
		Abutment	2	11.05	7.50	0.30	49.73 Cum			
		Piers	1 x 6	10.35	7.50	0.30	139.73 Cum			
		Curtain Wall	2 x 7	10.00	1.60	0.20	44.80 Cum			
		Under Flooring	1 x 7	10.00	8.15	0.10	57.05 Cum			
							291.31 Cum	3512.00	Per Cum..	1023081.00

S.N	BSR Item No.	Description of Item	No.	Length (m)	Width (m)	Height	Quantity	Rate	Unit	Amount
(a-2)	14.6.1.3	Structural cement concrete (Design Mix) in open foundations, with form work, at any level. Cement concrete for plain/reinforced concrete in open foundations as per drawing and technical specification. [MoRTH Specification : Section 1700 & 1500]. With 20mm nominal size aggregate By using concrete mixer P.C.C. M-20 grade								
		Flooring	0 x 7	10.00	8.15	0.15	0.00 Cum			
		Annular Concrete								
		Abutment	1 x 1	11.05	7.50	2.50	207.19 Cum			
		Piers	0 x 6	10.35	7.50	2.50	0.00 Cum			
		Curtain Wall	1 x 7	10.00	1.60	2.50	280.00 Cum			
		Deductions								
		Abutment	0 x 2	11.05	7.50	0.30	0.00 Cum			
		Abutment	0 x 2	10.55	7.00	0.60	0.00 Cum			
		" " "	0 x 0	( 10.55 x 7.00 ) + ( 9.55 x 1.60 )		0.90	0.00 Cum			
		" " "		2						
		Pier	0 x 6	10.35	7.50	0.30	0.00 Cum			
		" " "	0 x 6	9.85	7.00	0.30	0.00 Cum			
		" " "	0 x 0	( 9.85 x 7.00 ) + ( 9.15 x 0.90 )		0.70	0.00 Cum			
		" " "		2						
		Curtain Wall	1 x 7	10.00	1.60	0.20	-22.40 Cum			
		" " "	1 x 7	10.00	( 0.50 + 1.20 )	2.30	-136.85 Cum			
					2.00		327.94 Cum	3960.00	Per Cum	1298642.00
(b)	14.6.2.3	With 20mm nominal size aggregate, By using batching plant R.C.C. M-25 grade								
		Abutment	2	10.55	7.00	0.60	88.62 Cum			
		Footing Base	2	( 10.55 x 7.00 ) + ( 9.55 x 1.60 )		0.90	80.22 Cum			
		Tepring		2						
		Piers	1 x 6	9.85	7.00	0.30	124.11 Cum			
		Footing Base	1 x 6	( 9.85 x 7.00 ) + ( 9.15 x 0.90 )		0.70	162.09 Cum			
		Tepring		2						
		Curtain wall	2 x 7	10.00	( 0.50 + 1.20 )/2	2.30	273.70 Cum			
							728.74 Cum	3787.00	Per Cum	2759738.00

SN	BSR Item No.	Description of Item	No.	Length (m)	Width (m)	Height	Quantity	Rate	Unit	Amount
3	14.13.1	Providing and laying steel reinforcement at any level in foundation complete as per drawing and technical specification. [MoRTH Specification : Section 1600]. HYSD bar reinforcement								
		Footings For Anchor bars		728.74	1.30%	7850.00	74.37 MT 13.13 MT 87.50 MT	52910.00	Per Mt	4629625.00
4	14.22.2	Drilling of holes upto 50mm dia using rotary percussion drilling machine in any strata, fixing of casing pipe washing of holes by alternate cycles of air & water jetting till cleaning water flows from the pipe complete.								
		For pier, abutment etc.	350	2.50	1.00		875.00 RM	345.00	Per RM	301875.00
5	14.23	Grouting of foundation by chemical cement/ cement sand slurry of specified consistency conforming IS:6066 using single/double packed assembly in either descending or ascending order								
		Foundation	350	1.00			350.00 Kg.	6.00	Per Kg	2100.00
6	13.4	Filter medium behind abutment, wing wall and return wall, complete as per drawing and technical specification. (Same as R7.20.3) [MoRTH Specification : Clause 2504]. Abutment								
			2 x 1	8.55	0.60	6.80	69.77 Cum 69.77 Cum	483.00	Per Cum	33698.00
TOTAL										10714099.00
7	SUBSTRUCTURE									
	15.5.2.2.1	Structural cement concrete for plain concrete/ reinforced concrete for substructure at any level, complete as per drawing and technical specification. Design mix concrete - [MoRTH Specification : Section 1500 & 1700]. RCC M-25 grade, including form work For height upto 5 mtr.								
		Abutment Stem Piers	2 x 1 6 x 1 6 x 0.79	8.55 8.55 ( 0.90 x 0.90 ) + ( 0.80 x 0.80 )	( 1.60 + 0.80 )/2 ( 0.90 + 0.80 )/2 ( 0.80 x 0.80 )	5.40 5.40 5.40	110.81 Cum 235.47 Cum 3.07 Cum			
		Abutment Bed Plate Pier Cap	2 x 1 6 x 1	8.55 8.55	0.80 0.80	0.50 0.50	6.84 Cum 20.52 Cum			



S.N	BSR Item No.	Description of Item	No.	Length (m)	Width (m)	Height	Quantity	Rate	Unit	Amount
8	15.9.1	Dirt Wall	6 x 1 2 x 1	3.14/4 8.55	0.64 0.40	0.50 0.90	1.51 Cum 6.16 Cum 384.38 Cum	4326.00	Per Cum	1662828.00
9	15.16	Steel reinforcement in substructure complete. [MoRTH Specification : Section 1600] HYSD reinforcement				1.50%	45.26 MT	53009.00	Per MT	2399187.00
		Providing A.C. pipe Weep holes 150mm dia in Masonry/plain Concrete/Reinforced Concrete abutment, wing wall/return wall complete as per drawing and technical specification. [MORTH Specification : Clause 2205].	1 x 2 1 x 2 1 x 2 1 x 2	8.00 8.00 8.00 8.00	1.55 1.40 1.25 1.10		24.80 Rmt 22.40 Rmt 20.00 Rmt 17.60 Rmt 84.80 Rmt	118.00	Per rmt	10006.00
TOTAL										
10	16.1.1.4	<b>SUPER STRUCTURE</b> Structural RCC/PSC upto a height of 5 mtr. for reinforced concrete in superstructure complete including steel formwork, scaffolding etc. As per drawing and technical specification. Design mix concrete. [MoRTH Specification : 1500 & 1700]. RCC/PSC M-35 grade Using Batching Plant Solid slab superstructure								4072021.00
11	16.2	Slab Providing and laying HYSD bar reinforcement at any level in superstructure complete as per drawing and technical Specification. [MoRTH Specification : Section 1600]	7 x 1 2 x 7	10.80 10.80	8.55 0.525	0.900 0.450	581.74 Cum 35.72 Cum 617.46 Cum	5231.00	Per Cum	3229933.00
12	16.15	Approach Slab Providing and Laying PCC M-15 grade leveling course below approach slab complete as per drawing and technical specifications. [MoRTH specification : 2700]	2 x 1	7.50	3.00	1.20%	58.16 MT	53897.00	Per MT	3134650.00
							4.50 Cum	2681.00	Per Cum	12065.00

S.N	BSR Item No.	Description of Item	No.	Length (m)	Width (m)	Height	Quantity	Rate	Unit	Amount
13	16.16	Reinforced cement concrete M-30 grade approach slab including reinforcement and formwork complete as per drawing and technical specifications. [MoRTH specification : 1500, 1600, 1700, 2704] Approach Slab	2 x 1	7.50	3.00	0.30	13.50 Cum	7149.00	Per Cum	96512.00
14	16.4	Reinforced cement concrete wearing coat M-30 grade at any level including formwork and reinforcement complete as per drawing and technical Specification. [MoRTH Specification : Clause 2204, 1500 & 1700].	7 x 1 2 x 1	10.80 0.40	7.50 7.50	0.075 0.075	42.53 Cum 0.45 Cum 42.98 Cum	7949.00	Per Cum	341648.00
15	16.10.02	Providing, laying and fixing of Filler Joint Providing and fixing 20mm thick Compressible Fibre Board in expansion joint complete as per drawing and technical specification in MoRTH specification : clause 2605.	8 x 1 2 x 1	8.55 7.55	0.90 0.90		61.56 Sqm 13.59 Sqm 75.15 Sqm	1149.00	Per Sqm	86347.00
16	16.14	Drainage spout with GI pipe 100mm dia and GI bolt 10mm dia with galvanized MS flat clamp complete as per drawing and Technical Specification	7 x 4	1.00			28.00 Nos	1559.00	Each	43552.00
17	16.10.1	Providing and fixing 2mm thick Corrugated Copper Plate in expansion joint complete as per drawing and technical specifications in MoRTH specification : clause 2605.	1 x 2 1 x 6 1 x 2	8.55 8.55 7.55			17.10 Rm 51.30 Rm 15.10 Rm 83.50 Rm	4688.00	Per Rm	391448.00

S.N	BSR Item No.	Description of Item	No.	Length (m)	Width (m)	Height	Quantity	Rate	Unit	Amount
18	16.10.3	Providing and fixing in position 20mm thick Premoulded Joint Filler in expansion joint for fixed ends of simply supported spans not exceeding 10m to cater for a horizontal movement upto 20mm, covered with sealant complete as per drawing and technical specification in MoRTH specification : clause 2605.	1 x 2 1 x 6 1 x 2	8.55 8.55 7.55			17.10 Rm 51.30 Rm 15.10 Rm 83.50 Rm	251.00	Per Rm	20959.00
19	16.10.4	Providing and filling joint sealing compound as per drawings and technical specification with coarse sand and 6% bitumen by weight as per MoRTH specification : clause 2605.	1 x 2 1 x 6 1 x 2	8.55 8.55 7.55			17.10 Rm 51.30 Rm 15.10 Rm 83.50 Rm	15.75	Per RM/ CM depth	1315.00
20	16.7.1	Providing and laying reinforced cement concrete grade M 30 design mix railing complete as per drawing and technical Specification. [MoRTH Specification : 2703, 1500, 1600 & 1700]. Precast RCC railing	1 x 2 1 x 2	7.00 0.40	10.80		151.20 Mtr 0.80 Mtr 152.00 Mtr	1242.00	Per Mtr	183784.00
TOTAL										
							Total "A"	(I) + (ii) + (iii)		7547313.00
										22333433.00

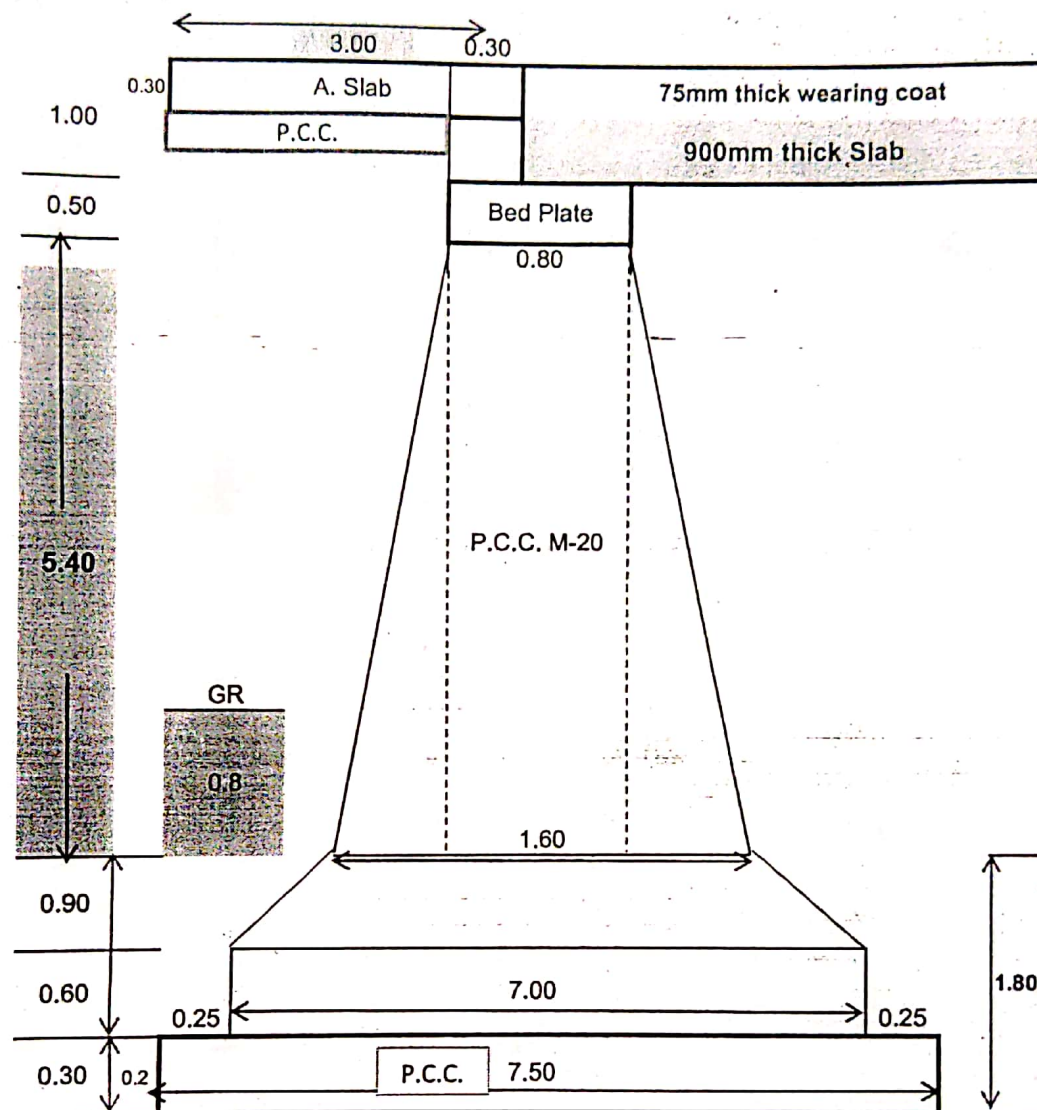
  
**Assistant Engineer,**  
 P.W.D. Sub Div, Begun

  
**Executive Engineer,**  
 P.W.D. Div, Begun



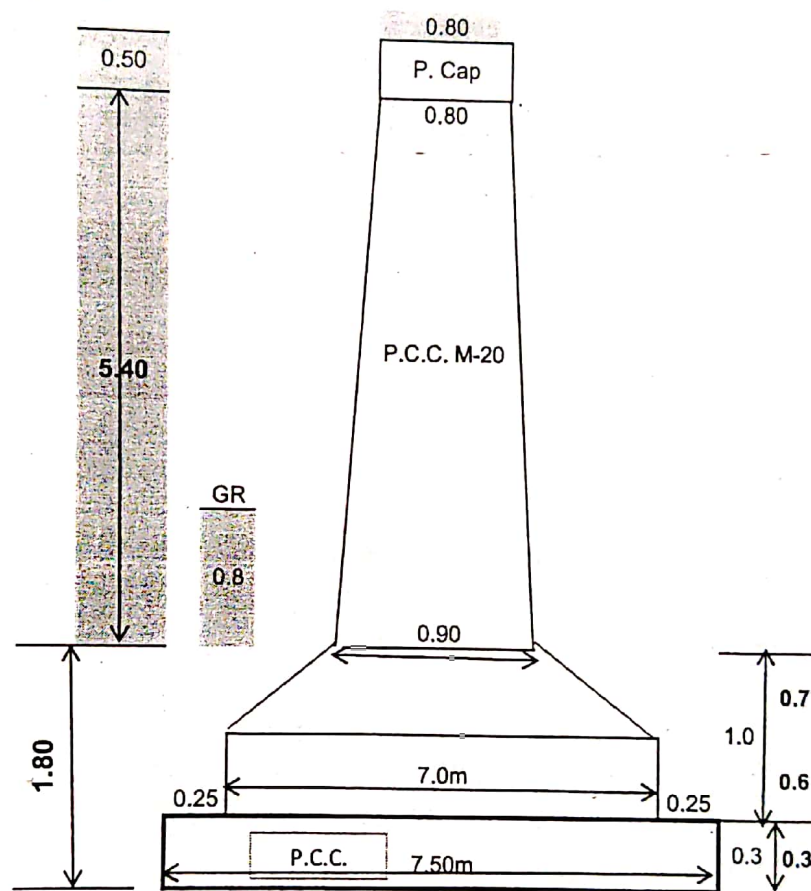
# Rehabilitation of various roads at Muncipal Area Begun (Begun Chech Samron Ka Lewa Road )

7x10m Span Major Bridge

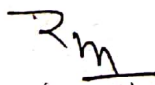


SECTION OF ABUTMENT

सहायक अभियन्ता  
सा. नि. वि. उपखण्ड III, बेगू



SECTION OF PIER

  
 सहायक अभियन्ता  
 सा. नि. वि. उपखण्ड III, बेगू