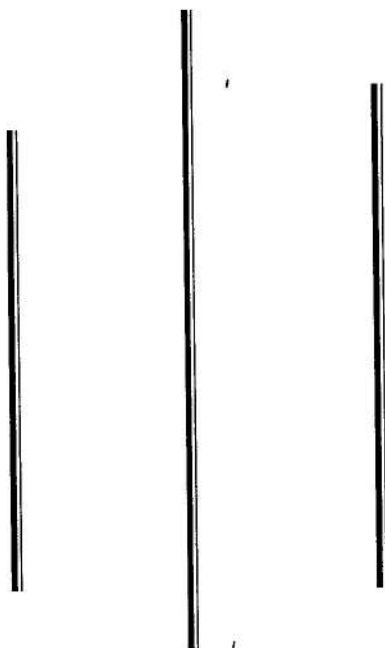




Darma Rural Municipality
Office of The Rural Municipal Executive
Karnali Province



Design, Estimate & Costing Report

Maulekhali-Maidan Road Improvement Project

Location:Darma RM-1

District:Salyan

F/Y: 2079/080



Darma Rural Municipality
Office of the municipal excutive
Farulachaur Salyan
Summary of cost



Project Name: Maulekhali-Maidan Road Improvement Project
Location: Darma -1

S.No.	Sub-project Component	Quantit	Unit	Sub Total(NRs.)	Total Cost (NRs)	Remarks
A	Civil works					
I	Road works/ Earthworks	1	No	557,656.04	3,914,675.31	
II	Cross Drainage Works	1	No	198,890.83		
III	longitudinal Drain	1	No	1,432,924.45		
IV	Retainig Structure Gabion	1	No	965,745.17		
V	Dry Stone Wall/ SM Wall	1	NO	733,682.82		
VI	Bio-Engineering	1	No	25,776.00		
B	General Items					
I	Non Local Materials Transportation	1	NO	89,847.24	485,565.63	
II	Worker Group Insurance	1	No	10,000.00		
III	UC Management Cost	1	No	50,900.00		
IV	13%Vat for Earthwork Cutting by Contractor	1	no	80,188.17		
V	13%Vat for Non Local Materials and Transportation	1	no	130,613.21		
VI	PPES Hand Tools	1	no	124,017.00		
	Grand Total (A+B+C)				4,400,240.94	
C	Co-Financing Budget					
I	LISP Pilot		3500000			
II	Municipality		900000	4,400,000.00		
In words: Forty Four lakhs Rupees Only						

Prepared By:

[Signature]

Sub Engineer

Checked By:

[Signature]

Er. Aju Chand
NEC.No. 30648 Civil 'A'

Approved By:

[Signature]

रेशन तोहरी
प्रमुख प्रशासकीय अधिकारी



**Darma Rural Municipality ,
Office of the municipal executive
Farulachaur Salyan**

Abstract of Cost

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1

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Item no.	Description Of Works	Unit	Quantity	Item Rate (NRs)	Total Amount (NRs)	Remarks
1	Earthworks					
1.1	Earthwork in Roadway: Excavation for roadway (grade adjustment ,back cutting and new cutting) in All type of soil by provide combination of manual and machine ,including disposal upto 30 m and lift upto 1.5m etc. all works complete as per specification By Machine					
a.	All Types of Soil	cum	4861.90	74.61	362,756.78	By Machine
b.	Ordinary ROck	cum	870.72	223.84	194,899.26	By Machine
			Sub Total		557,656.04	
2	Cross Drainage Structure					
2.1	Earthwork in excavation for foundation of structures including setting out, removal of stumps and other deleterious matter dressing of sides and bottom and including all lifts and leads complete as per drawing and Technical Specification	cum	55.12	74.61	4,112.32	By Machine
2.2	Providing, laying and levelling of dry stone soling works in the foundation all complete. [2602, 2603]	cum	1.57	2,589.57	4,066.92	
2.3	Concrete work- Providing and Placing of plain Cement Concrete M15/40 grade (or 1:2:4) machine/ manual mix) in foundation including compaction. Curing, all works complete as per drawing and Technical Specification	cum	1.97	11,382.61	22,423.74	
2.4	Stone Masonry Works- Random Rubble stone masonry in cement sand (1:4) mortar for Cross drainage Structure including curing, placing in position of weep holes all works complete .	cum	7.93	10,187.83	80,738.55	
2.5	Providing and laying and jointing NP3 (as per IS:458) Hume pipes of dia. 600mm for culverts, complete as per Technical Specification	Rm	10.00	8,360.85	83,608.50	
2.60	Earthwork in backfill with earthmass from near	cum	22.05	178.75	3,940.79	
			Sub Total		198,890.83	
3	Longitudinal Drain Works					
3.1	Earthwork in excavation for foundation of structures including setting out, removal of stumps and other deleterious matter dressing of sides and bottom and including all lifts and leads complete as per drawing and Technical Specification Clause	cum	378.00	74.61	28,203.38	By Machine
3.2	Providing, laying and levelling of dry stone soling works in the foundation all complete.	cum	94.50	2,589.57	244,714.37	
3.3	Plain Cement Concrete (Grade M 10) using 40 mm graded course aggregate for leveling course, for bedding of culverts, head wall etc. and annular space filling around footing in rock, complete as per drawing and Technical Specification	cum	51.79	10,135.65	524,884.77	
3.4	Providing and laying Random Rubble Stone Masonry works in cement sand mortar 1:6 C/M including scaffolding, curing, preparing cement mortar, pointing etc., all complete.	cum	56.70	9,512.17	539,340.04	
3.5	Providing and applying coping pcc M10 coping work structure as per Technical Specifications	cum	9.45	10,135.65	95,781.89	
			Sub Total		1,432,924.45	

Assistant Sub-Engineer

Sub Engineer

Er. Arju Chand
NEC.No. 30648 Civil 'A'

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प्रमुख प्रशासकीय अधिकारी



Darma Rural Municipality
Office of the municipal executive
Farulachaur Salyan

Abstract of Cost

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1



Item No.	Description Of Works	Unit	Quantity	Item Rate (NRs)	Total Amount (NRs)	Remarks
4	Retaining Structure /Gabion Wall					
4.1	Earthwork: Excavation for foundation of structure in all types of soil, provide combination of mannual and machine, including disposal lead upto 10m and lift upto 1.5m etc. all complete as per specification.	cum	360.00	74.61	26,860.37	By Machine
4.2	Supply,transportation and fabrication of machine made gabion boxes /matresses (including cutting and weaving,hexagonal mesh type (100mm*120mm) mesh wire-10swg,selvage wire 8swg including assembling,placing,and stretching all complete					
	Gabion Boxes 1.5*1*1	BOX	60.00	2,448.38	146,902.80	
	Gabion Boxes 2*1*1	BOX	90.00	3,374.05	303,664.50	
4.3	Stone filling in Gabion boxes with stone/ boulders including dressing, bounding, bracing, tying and binding with wire as per specification all complete.	cum	270.00	1,749.00	472,230.00	
4.40	Back Filling behind head walls, wing walls/retaining and return wall and earth cushion around pipes or at any other location complete as per drawing and Technical specification	cum	90.00	178.75	16,087.50	
	Sub Total				965,745.17	
5	DRY Stone Wall/SM Wall					
5.1	Earthwork: Excavation for foundation of structure in all types of soil, provide combination of mannual and machine, including disposal lead upto 10m and lift upto 1.5m etc. all complete as per specification.	cum	24.78	357.50	8,858.85	
5.2	Providing, laying and levelling of dry stone soling works in the foundation all complete.	cum	4.80	2,589.57	12,429.94	
5.3	Plain Cement Concrete (Grade M 10) using 40 mm graded course aggregate for leveling course, for bedding of culverts, head wall etc. and annular space filling around footing in rock, complete as per drawing and Technical Specification	cum	3.20	10,135.65	32,434.08	
5.4	Providing and laying Random Rubble Stone Masonry works in cement sand mortar 1:6 C/M including scaffolding, curing, preparing cement mortar, pointing etc., all complete.	cum	61.60	9,512.17	585,949.67	
5.5	Random Rubble Dry stone masonary wall	cum	24.50	3,820.87	93,611.32	
5.60	Back Filling behind head walls, wing walls/retaining and return wall and earth cushion around pipes or at any other location complete as per drawing and Technical specification	cum	2.23	178.75	398.97	
	Sub Total				733,682.82	
6	Environmental Protection					
6.1	Collection of shrub slips, and planting to suitable location as indicated by Engineer	sqm	50.00	515.52	25,776.00	
	Sub Total				25,776.00	
7	Miscellaneous					
7.1	Non Local Materials Transportation	Job	1	89,847.24	89,847.24	
7.2	Worker Group Insurance	Job	1	10,000.00	10,000.00	
7.3	UC Management Cost	Job	1	50,900.00	50,900.00	
7.4	13%Vat for Earthwork Cutting by Contractor	Job	1	80,188.17	80,188.17	
7.5	13%Vat for Non Local Materials and Transportation	Job	1	130,613.21	130,613.21	
7.5	PPES Hand Tools	Job	1	124,017.00	124,017.00	
	Sub Total				485,565.63	
	Total Item Price=				4,400,240.9	
	Grand Total =				4,400,240.9	

Assistant Sub-Engineer

Sub Engineer

Arju Chand
No. 30648 Civil 'A'

प्रमुख प्रशासकीय अधिकारी



Darma Rural Municipality
Office of the rural municipal executive
Pharulachaur, salyan
Karnali province, Nepal



Detailed estimate of Non- Local Material

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1

S.No.	Description	Unit	Quantity	Rate	Amount
1	Providing and laying and jointing NP3 (as per IS:458) Hume pipes of dai. 600mm for culverts, complete as per Technical Specification RCC hume pipe(NP3) 600 Dia	PCS	4.00	17,875.00	71500
2	Procurement and Supply of machine made Gabion fabricated (3x1x1) box size with Hexagonal mesh size 100x120mm, Meshwire 10 SWG, Salvagewire 7 SWG and assembling all complete Gabion Box(2*1*1)	Box	90.00	3,190.00	287100
3	Procurement and Supply of machine made Gabion fabricated (3x1x1) box size with Hexagonal mesh size 100x120mm, Meshwire 10 SWG, Salvagewire 7 SWG and assembling all complete Gabion Box Gabion Box(1.5*1*1)	Box	60.00	2,320.00	139200
4	Procuritment and supply GI Wire 10 SWG medium zinc coated(Binding Wire)GI Wire 10 SWG heavy zinc coated	Kg	124.50	126.00	15687
5	Cement PPC 50 kg	Bag	573.40	700.00	401382.73
6	Transportation tharmare to site	job	1	89847.2447	89847.245
				Sub Total	1004717
				Vat 13%	130613.21
				Grand Total	1135330.2

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Assistant Sub-Engineer

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Sub Engineer

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Er. Arju Chand
NEC.No. 30648 Civil 'A'

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प्रमुख प्रशासकीय अधिकारी



Darma Rural Municipality
Office of the municipal executive
Farulachaur Salyan
Non Local Material and Labour Cost Sheet



Project Name: Maulekhali-Maidan Road Improvement Project
Location: Darma -1

SN	Name of Item	Unit	Quantity	Unit Rate	Total Cost	Transportation cost	Total Amount	Remarks
A. Non Local Material								
2	RCC hume pipe(NP3) 600 Dia	Rm	10.00	7,150.00	71,500.00	3,686.00	36,860.00	
4	Gabion Box(2*1*1)	Box	90.00	3,190.00	287,100.00	47.25	4,252.66	
5	Gabion Box(1.5*1*1)	Box	60.00	2,320.00	139,200.00	40.79	2,447.12	
6	GI Wire 10 SWG heavy zinc coated	Kg	124.50	126.00	15,687.00	1.61	200.13	
7	Cement PPC 50 kg	Bag	573.40	700.00	401,382.73	80.38	46,087.34	
Sub Total of A					914,869.73		89,847.24	
Sub Total With Transportation						1,004,716.97		
Vat 13%						130,613.21		
Grand Total with Vat and Transportation						1,135,330.18		
C Local Material								
1	Aggregate							
	40mm down	Cum	43.55	2,350.00	102,337.33		-	With Transportation/Collection
	20mm down	Cum	15.13	2,350.00	35,555.59		-	With Transportation/Collection
	10mm down	Cum	0.22	2,350.00	509.25		-	With Transportation/Collection
2	Sand	Cum	90.41	3,325.00	300,609.33		-	With Transportation/Collection
3	Stone	Cum	552.62	1,265.00	699,063.79		-	With Transportation/Collection
Sub Total of B					1,138,075.29		-	
D. Worker Cost								
1	Skilled	No	281.04	1000			281,043.50	
2	Unskilled	No	1,504.66	715			1,075,829.65	
Sub Total of C							1,356,873.15	
Grand Total Material and worker (A+B+C), NPR							3,630,278.62	

K. K. K.

Sub Engineer

Er. Arijit Chand
NEC.No. 30648 Civil 'A'

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Darma Rural Municipality
Office of the municipal executive
Farulachaur Salyan
Karnali Province

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1

EARTHWORK CALCULATION SHEET FOR ROADWAY

Chainage	Length (m)	X- Area(m ²)		Volume (m ³)		Soil Classification						
		Cutting Area (Road)	Filling Area	Cutting Vol	Filling Vol	All types Soil		Ordinary Rock		Hard Rock		
						%	(m ³)	%	(m ³)	%	(m ³)	
0+000.00	5.00	1.88	0.00	9.38	0.00	100%	9.38	0%	0.00	0%	0.00	
0+010.00	10.00	0.00	0.00	0.02	0.00	100%	0.02	0%	0.00	0%	0.00	
0+020.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00	
0+030.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00	
0+040.00	10.00	0.13	0.00	1.31	0.00	100%	1.31	0%	0.00	0%	0.00	
0+050.00	10.00	0.23	0.00	2.28	0.00	100%	2.28	0%	0.00	0%	0.00	
0+060.00	10.00	1.35	0.00	13.53	0.00	100%	13.53	0%	0.00	0%	0.00	
0+070.00	10.00	3.48	0.00	34.76	0.00	100%	34.76	0%	0.00	0%	0.00	
0+080.00	10.00	9.82	0.00	98.19	0.00	100%	98.19	0%	0.00	0%	0.00	
0+090.00	10.00	5.23	0.00	52.32	0.00	100%	52.32	0%	0.00	0%	0.00	
0+100.00	10.00	3.72	0.00	37.16	0.00	100%	37.16	0%	0.00	0%	0.00	
0+110.00	10.00	1.53	0.00	15.31	0.00	100%	15.31	0%	0.00	0%	0.00	
0+120.00	10.00	0.38	0.00	3.79	0.00	100%	3.79	0%	0.00	0%	0.00	
0+130.00	10.00	0.00	0.00	0.02	0.00	100%	0.02	0%	0.00	0%	0.00	
0+140.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00	
0+150.00	10.00	0.00	0.00	0.00	0.00	80%	0.00	20%	0.00	0%	0.00	
0+160.00	10.00	0.00	0.00	0.00	0.00	80%	0.00	20%	0.00	0%	0.00	
0+170.00	10.00	5.17	0.00	51.72	0.00	80%	41.38	20%	10.34	0%	0.00	
0+180.00	10.00	4.42	0.00	44.21	0.00	80%	35.37	20%	8.84	0%	0.00	
0+190.00	10.00	13.33	0.00	133.32	0.00	80%	106.66	20%	26.66	0%	0.00	
0+200.00	10.00	5.89	0.00	58.87	0.00	70%	41.21	30%	17.66	0%	0.00	
0+210.00	10.00	2.88	0.00	28.81	0.00	70%	20.17	30%	8.64	0%	0.00	
0+220.00	10.00	12.36	0.00	123.58	0.00	70%	86.51	30%	37.07	0%	0.00	
0+230.00	10.00	12.42	0.00	124.22	0.00	70%	86.95	30%	37.27	0%	0.00	
0+240.00	10.00	11.11	0.00	111.11	0.00	70%	77.78	30%	33.33	0%	0.00	
0+250.00	10.00	9.49	0.00	94.90	0.00	70%	66.43	30%	28.47	0%	0.00	
0+260.00	10.00	6.16	0.00	61.59	0.00	70%	43.11	30%	18.48	0%	0.00	
0+270.00	10.00	16.17	0.00	161.66	0.00	70%	113.16	30%	48.50	0%	0.00	
0+280.00	10.00	13.93	0.00	139.28	0.00	70%	97.50	30%	41.78	0%	0.00	
0+290.00	10.00	10.47	0.00	104.71	0.00	70%	73.30	30%	31.41	0%	0.00	
0+300.00	10.00	5.93	0.00	59.29	0.00	70%	41.50	30%	17.79	0%	0.00	
0+310.00	10.00	2.67	0.00	26.70	0.00	70%	18.69	30%	8.01	0%	0.00	
0+320.00	10.00	4.99	0.00	49.92	0.00	70%	34.94	30%	14.98	0%	0.00	
0+330.00	10.00	3.68	0.00	36.78	0.00	70%	25.75	30%	11.03	0%	0.00	
0+340.00	10.00	7.97	0.00	79.65	0.00	100%	79.65	0%	0.00	0%	0.00	
0+350.00	10.00	11.88	0.00	118.80	0.00	100%	118.80	0%	0.00	0%	0.00	
0+360.00	10.00	28.72	0.00	287.15	0.00	100%	287.15	0%	0.00	0%	0.00	
0+370.00	10.00	20.87	0.00	208.74	0.00	100%	208.74	0%	0.00	0%	0.00	
0+380.00	10.00	12.13	0.00	121.27	0.00	100%	121.27	0%	0.00	0%	0.00	
0+390.00	10.00	8.28	0.00	82.79	0.00	100%	82.79	0%	0.00	0%	0.00	
0+400.00	10.00	5.67	0.00	56.72	0.00	100%	56.72	0%	0.00	0%	0.00	
0+410.00	10.00	1.29	0.00	12.86	0.00	100%	12.86	0%	0.00	0%	0.00	
0+420.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00	
0+430.00	10.00	2.12	0.00	21.24	0.00	100%	21.24	0%	0.00	0%	0.00	

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Sub Engineer

Sub Engineer

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Er. Arju Chand
NEC.No. 30648 Civil 'A'

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0+440.00	10.00	0.77	0.00	7.67	0.00	100%	7.67	0%	0.00	0%	0.00
0+450.00	10.00	0.92	0.00	9.17	0.00	100%	9.17	0%	0.00	0%	0.00
0+460.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+470.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+480.00	10.00	0.45	0.00	4.54	0.00	100%	4.54	0%	0.00	0%	0.00
0+490.00	10.00	1.22	0.00	12.16	0.00	100%	12.16	0%	0.00	0%	0.00
0+500.00	10.00	0.01	0.00	0.12	0.00	100%	0.12	0%	0.00	0%	0.00
0+510.00	10.00	0.81	0.00	8.08	0.00	100%	8.08	0%	0.00	0%	0.00
0+520.00	10.00	0.84	0.00	8.44	0.00	100%	8.44	0%	0.00	0%	0.00
0+530.00	10.00	0.65	0.00	6.46	0.00	100%	6.46	0%	0.00	0%	0.00
0+540.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+550.00	10.00	0.35	0.00	3.53	0.00	100%	3.53	0%	0.00	0%	0.00
0+560.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+570.00	10.00	0.80	0.00	7.98	0.00	100%	7.98	0%	0.00	0%	0.00
0+580.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+590.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+600.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+610.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+620.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+630.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+640.00	10.00	0.00	0.00	0.00	0.00	90%	0.00	10%	0.00	0%	0.00
0+650.00	10.00	5.15	0.00	51.51	0.00	90%	46.36	10%	5.15	0%	0.00
0+660.00	10.00	15.63	0.00	156.25	0.00	90%	140.63	10%	15.63	0%	0.00
0+670.00	10.00	23.15	0.00	231.47	0.00	90%	208.32	10%	23.15	0%	0.00
0+680.00	10.00	16.42	0.00	164.17	0.00	90%	147.75	10%	16.42	0%	0.00
0+690.00	10.00	20.11	0.00	201.08	0.00	90%	180.97	10%	20.11	0%	0.00
0+700.00	10.00	3.82	0.00	38.20	0.00	90%	34.38	10%	3.82	0%	0.00
0+710.00	10.00	7.60	0.00	75.98	0.00	80%	60.78	20%	15.20	0%	0.00
0+720.00	10.00	6.65	0.00	66.52	0.00	80%	53.22	20%	13.30	0%	0.00
0+730.00	10.00	1.75	0.00	17.45	0.00	80%	13.96	20%	3.49	0%	0.00
0+740.00	10.00	18.51	0.00	185.10	0.00	80%	148.08	20%	37.02	0%	0.00
0+750.00	10.00	28.08	0.00	280.76	0.00	80%	224.61	20%	56.15	0%	0.00
0+760.00	10.00	12.20	0.00	122.02	0.00	80%	97.62	20%	24.40	0%	0.00
0+770.00	10.00	16.69	0.00	166.85	0.00	80%	133.48	20%	33.37	0%	0.00
0+780.00	10.00	12.89	0.00	128.92	0.00	80%	103.14	20%	25.78	0%	0.00
0+790.00	10.00	5.57	0.00	55.72	0.00	80%	44.58	20%	11.14	0%	0.00
0+800.00	10.00	5.24	0.00	52.36	0.00	80%	41.89	20%	10.47	0%	0.00
0+810.00	10.00	21.98	0.00	219.84	0.00	80%	175.87	20%	43.97	0%	0.00
0+820.00	10.00	2.17	0.00	21.68	0.00	80%	17.34	20%	4.34	0%	0.00
0+830.00	10.00	8.13	0.00	81.31	0.00	80%	65.05	20%	16.26	0%	0.00
0+840.00	10.00	20.01	0.00	200.06	0.00	100%	200.06	0%	0.00	0%	0.00
0+850.00	10.00	11.04	0.00	110.37	0.00	100%	110.37	0%	0.00	0%	0.00
0+860.00	10.00	6.62	0.00	66.19	0.00	100%	66.19	0%	0.00	0%	0.00
0+870.00	10.00	0.01	0.00	0.08	0.00	100%	0.08	0%	0.00	0%	0.00
0+880.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+890.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+900.00	10.00	0.40	0.00	3.97	0.00	100%	3.97	0%	0.00	0%	0.00
0+910.00	10.00	2.39	0.00	23.88	0.00	100%	23.88	0%	0.00	0%	0.00
0+920.00	10.00	11.27	0.00	112.71	0.00	90%	101.44	10%	11.27	0%	0.00
0+930.00	10.00	6.53	0.00	65.32	0.00	90%	58.79	10%	6.53	0%	0.00
0+940.00	10.00	0.01	0.00	0.13	0.00	90%	0.12	10%	0.01	0%	0.00
0+950.00	10.00	0.00	0.00	0.00	0.00	90%	0.00	10%	0.00	0%	0.00
0+960.00	10.00	0.00	0.00	0.00	0.00	90%	0.00	10%	0.00	0%	0.00
0+970.00	10.00	0.00	0.00	0.00	0.00	100%	0.00	0%	0.00	0%	0.00
0+980.00	10.00	18.80	0.00	188.00	0.00	90%	169.20	10%	18.80	0%	0.00
0+990.00	10.00	29.27	0.00	292.69	0.00	90%	263.42	10%	29.27	0%	0.00
1+000.00	10.00	25.39	0.00	253.91	0.00	90%	228.52	10%	25.39	0%	0.00
TOTAL	1005.00			6370.61	0.00		4861.90		870.72		0.00

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Sub Engineer

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Er. Arju Chand
No. 30648 Civil 'A'

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प्रमुख प्रशासकीय अधिकारी



**Darma Rural Municipality
Office of the Municipal Executive
Farulachaur Salyan**



Project Name: Maulekhali-Maidan Road Improvement Project
Location: Darna -1

STRUCTURE WISE COST

STRUCTURE WISE COST																		
S.N	Description of works	Unit	Total Quantity	Cement (bag)	Sand (cum)	Aggregate (cum)			Gabion Box (3'x1')	Gabion Box (2'x1')	Gabion Box (1.5'x1')	GI Wire 12 SWG (kg)	600 MM Dia NP3 LIME No	900 MM DIA NP3 LIME no	63mm HDP pipe of PN-6 (Rm)	Binding wire (kg)	Skilled	Unskilled
A.	Road Works																	
1	Earthwork in Roadway: Excavation for roadway (grade adjustment, back cutting and new cutting) in All type of soil by provide combination of manual and machine, including disposal upto 30 m and lift upto 1.5m etc. all works complete as per specification By Machine	cum	4.861.90			Gravel_1 =40 mm gravel	Gravel_1 =20 mm gravel	Gravel_1 =10 mm gravel										
2	Ordinary ROck	cum	870.72															
B	Sub-Total C																	
1	Cross Draining Structure Earthwork in excavation for foundation of structures including setting out, removal of stumps and other deleterious matter dressing of sides and bottom and including all lifts and leads complete as per drawing and Technical Specification	cum																
2	Providing, laying and levelling of dry stone soling works in the foundation all complete.	cum	55.12															By Machine
3	Concrete work- Providing and Placing of plain Cement Concrete M15(40 grade (or 1:2:4) machine/ manual mix) in foundation including compaction. Curing, all works complete as per drawing and Technical Specification	cum	1.57						1.8846									2.36
4	Stone Masonry Works- Random Rubble stone masonry in cement sand (1:4) mortar for Cross drainage Structure including curing, placing in position of weep holes all works complete.	cum	1.97	12.608	0.87665	1.0244	0.4334	0.2167								1.97	7.88	
5	Providing and laying and jointing NP3 (as per IS:458) Hume pipes of dai. 600mm for culverts, complete as per Technical Specification	RM	10.00	1.28	0.08				8.0								11.89	39.63
7	Earthwork in backfill with earthmass from near	cum	22.05										4				0.80	5.60
	Sub-Total A			39.09	4.52	1.02	0.43	0.22	9.91				4.00				14.66	60.97

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Sub Engineer

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Er. Arju Chand

NEC.No. 30648 Civil 'A'

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A. Longitudinal Drain Works												
1	Earthwork in excavation for foundation of structures including setting out, removal of stumps and other deleterious matter dressing of sides and bottom and including all lifts and leads complete as per drawing and Technical Specification	Clause	378.00									189.00
2	Providing, laying and levelling of dry stone soling works in the foundation all complete.	cum	94.50									141.75
3	Plain Cement Concrete (Grade M 10) using 40 mm graded course aggregate for leveling course, for bedding of culverts, head wall etc. and annular space filling around footing in rock, complete as per drawing and Technical Specification	cum										207.14
4	Providing and laying Random Rubble Stone Masonry works in cement sand mortar 1:6 CM including scaffolding, curing, preparing cement mortar, pointing etc., all complete.	cum	51.79	227.858	24.3394	33.6609	12.4285					51.79
5	Providing and applying capping pcc M10 capping work structure	cum	56.70	120.204	26.649							85.05
			9.45	42	4	6	2					9.45
			389.64		55.43	39.80	14.70					146.29
Sub-Total A												
D Retaining Structure / Gabion Wall												
1	Earthwork: Excavation for foundation of structure in all types of soil, provide combination of manual and machine, including disposal lead upto 10m and lift upto 1.5m etc. all complete as per specification.	cum	360.00									
2	Supply, transportation and fabrication of machine made gabion boxes / mattresses (including cutting and weaving, hexagonal mesh type (100mm*120mm) mesh wire-10swg, selvaige wire 8swg including assembling, placing, and stretching all complete	cum										
		boxes	90.00									8.10
		boxes	60.00									3.90
3	Rubble packing in gabion box in compact way	cum	270.00									135.00
4	Back Filling Behind The wall	cum	90.00									22.50
												169.50
Sub-Total D												
Dry Wall/MS Wall												
1	Earthwork: Excavation for foundation of structure in all types of soil, provide combination of manual and machine, including disposal lead upto 10m and lift upto 1.5m etc. all complete as per specification.	cum	24.78									12.39
2	Providing, laying and levelling of dry stone soling works in the foundation all complete.	cum	4.80									7.20
3	Plain Cement Concrete (Grade M 10) using 40 mm graded course aggregate for leveling course, for bedding of culverts, head wall etc. and annular space filling around footing in rock, complete as per drawing and Technical Specification	cum	3.20	14.08	1.50	2.72						3.20
4	Providing and laying Random Rubble Stone Masonry works in cement sand mortar 1:6 CM including scaffolding, curing, preparing cement mortar, pointing etc., all complete.	cum	61.60	130.59	28.95							92.40
5	Random Rubble Dry stone masonry wall	cum	24.50									24.50
6	Back Filling behind head walls, wing walls/retaining and return wall and earth cushion around pipes or at any other location complete as per drawing and Technical specification	cum										49.00
			2.23									0.56
			144.67	30.46	2.72							120.10
Sub-Total B												
Bio-Engineering												
1	Collection of shrub slips, and planting to suitable location as indicated by Engineer	Sqm	50.00									25.04
												25.04
			573.40	90.41	43.55	15.13	0.22	552.62				281.04
												1504.66
Sub-Total A+B+C+D												

Assistant Sub-Engineer

Sub Engineer

Mr. Arju Chand
NEC No. 30648 Civil 'A'

प्राप्त पत्राचार अंतर्गत



Darma Rural Municipality
Office of the Rural Municipal Executive

Farulachaur Salyan
Karnali Province

List of Handtools

No of Road Scheme : 1
Propose Worker group for each Scheme: 3
No of worker in one group: 13
Total No of Worker: 39

Name of Road Scheme

Maulekhali-Maidan Road Improvement Project



S. No.	Handtool type	Specific details	Unit	Quantity	Cost per unit	Total Cost	Remarks
A	TOOLS						
1	Hammer (large one, for rock splitting)	TATA 16 lb/10 kg	Nos	3	1370	4110.00	
2	Hammer (large one, for rock splitting)	TATA 12 lb/8 kg	Nos	3	950	2850.00	
3	Hammer (large one, for rock splitting)	TATA 8 lb/ 6 kg	Nos	3	900	2700.00	
4	Mason hammer	1kg	Nos	6	425	2550.00	
5	Pick	TATA 2-2.5 kg	Nos	9	450	4050.00	
6	Chisel big	4 kg	Nos	3	350	1050.00	
7	Chisel medium	2.5 kg	Nos	6	350	2100.00	
8	Digging Bar	6kg	Nos	6	1000	6000.00	
10	Shovel	1.6 Kg	Nos	6	525	3150.00	
11	Spade	TATA 2-2.5 kg	Nos	3	475	1425.00	
12	Plumb bob with thread		Nos	3	300	900.00	
13	Measuring Tape 5m (Still)		Nos	3	400	1200.00	
	Measuring Tape 30m		Nos	1	970	970.00	
14	Strings (for layouts)		Roll	6	50	300.00	1 roll of 50m
15	Pliers (Wire cutter)		Nos	3	260	780.00	only for gabion works
16	Level Pipe		M	45	45	2025.00	
17	Wheel Barrow		Nos	1	7500	7500.00	
18	Iron Pans (Tasala)		Nos	6	355.00	2130.00	only for masonry wall with cement/sand
19	Mason trowel (Karni)		Nos	3	145	435.00	only for masonry wall with cement/sand
20	Mason trowel (rupasa)		Nos	3	135	405.00	only for pointing and plaster work

Assistant Sub Engineer

Sub Engineer

Arju Chand
NEC.No. 30648 Civil 'A'

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21	Finishing wooden trowel	Nos	3	70	210.00	only for pointing and plaster work
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Total of (A)

46840.00

B. Safety tools require for 13 workers in one group

S. No.	Handtool type	Specific details	Unit	Quantity per di (3 groups)	Cost per unit	Total Cost	Remarks
1	Safety Glasses	Test certified	Nos	6	300	1800.00	
2	Hard Hat (Helmet)	Test certified	Nos	36	525	18900.00	
3	Cotton Mask	Good Quality	Nos	36	35	1260.00	
4	Safety Footweares (gumboot) normal	Test certified	Pair	9	900	8100.00	
	Gloves	Good Quality	Pair	9	900	8100.00	
5	Reflective Vest	Test certified	Nos	18	550	9900.00	
6	First Aid Kit with medicine	Test certified	Set	3	2000	6000.00	
				Total of (B)		54060.00	
				Total Cost (A)+(B)		100900.00	
				VAT 13%		13117.00	
				Transportation Tharmare to site		10000.00	
				Total cost (A)+(B) with VAT		124017.00	

Note

- 1 The cost of handtools are based on Salyan District rate
- 2 Safety tools cost are as per district rate salyan

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Assistant Sub-Engineer

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Sub Engineer

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Er. Arju Chand
NEC.No. 30648 Civil 'A'

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प्रमुख प्रशासकीय अधिकारी



Darma Rural Municipality
Office of the Rural Municipal Executive
Farulachaur Salyan
karnali Province, Nepal
Management Cost

सल्यान
२०७३

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1

S.N.	Particular	Units	Quantity	Rate	Total Amount	Remarks
1	Hording Board with Transportation	Pic	1	12,000.00	12,000.00	
2	Store room	Room /month	3	1,000.00	3,000.00	
3	Fooding and Lodging cost during work at Municipality HQ	Day	12	700.00	8,400.00	F: 500, T-200
5	Public Review	Day	1	2,500.00	2,500.00	
6	Final Public Audit	Day	1	2,500.00	2,500.00	
8	Stationary	Ls	1	2,500.00	2,500.00	
9	Miscellaneous lteams cost	Ls	1	20,000.00	20,000.00	
	Total Management Cost				50,900.00	

Assistant Sub Engineer

Sub Engineer

Ex. Arju Chandra

Ex. Arju Chandra

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Darma Rural Municipality
Office of the municipal executive
Farulachaur Salyan



Drain Quantity

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1

S.No.	sec/chainage	No	Length (m)	Bottom Width (m)	Top Width (m)	Average Width (m)	Height (m)	Quantity (m3)	unit	Remarks
1	E/W in Excavation for Foundation of Structure (Stone Masonry Canal) By Manual									
	From	To								
i	0+180	0+360	1	180.00	1		0.6	108		
ii	0+530	0+980	1	450.00	1		0.6	270		
								Total Earth work QTY	378	Cum
2	Stone soling at foundation									
i	0+180	0+360	1	180.00	1		0.15	27		
ii	0+530	0+980	1	450.00	1		0.15	67.5		
								Total Stone Soling work	94.5	Cum
3	PCC Works for foundation 1:3:6									
i	0+180	0+360	1	180.00		0.822	0.1	14.796		
ii	0+530	0+980	1	450.00		0.822	0.1	36.99		
								Total Pcc work QTY	51.786	Cum
4	Stone Masonry Wall 1:6 C/M									
i	0+180	0+360	1	180.00	0.3		0.3	16.2		
ii	0+530	0+980	1	450.00	0.3		0.3	40.5		
								Total QTY	56.7	Cum
5	PCC Caping 1:3:6									
i	0+180	0+360	1	180.00	0.3		0.05	2.7		
ii	0+530	0+980	1	450.00	0.3		0.05	6.75		
								Total QTY	9.45	Cum

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Assistant Sub-Engineer

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Sub Engineer

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Er. Arju Choud
NEC.No. 30648 CIVIL 'A'

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महानगरपालिका अधिकारी



Darma Rural Municipality
Rural Municipal Executive
Farulachaur, Salyan
Karnali Province

DRY Wall Quantity

Project Name: Maulekhali-Maidan Road Improvement Project
Location: Darma -1

S.No.	sec/chainage	No	Length (m)	Bottom Width (m)	Top Width (m)	Average Width (m)	Height (m)	Quantity (m3)	unit	remarks
1	E/w in Excavation for Foundation of Structure DRY Wall									
	0+220	1	10.00	0.36			0.6	1.08		
	0+540	1	15.00	0.6			1	4.5		
	Total Earth work QTY							5.58	Cum	
2	Dry Rubble Masonary Wall									
	0+220	1	10.00	1	0.5	0.75	2	20		
	0+540	1	15.00	0.6	0.5	0.55	1	4.5		
	Total Earth work QTY							24.5	Cum	
3	Back Filling									
	Earthwork in backfill with earthmass from near									
	(40% of the excavation)							2.232	Cum	
	Total Dry Stone Wall									

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Assistant Sub Engineer

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Sub Engineer

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Er. Arju Chand
M.C.No. 30648 Civil /A

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प्रमुख कार्यवाही



Darma Rural Municipality
Office of The Rural Municipal Executive
Karnali Province, Nepal
Farulachaur, Salyan

Quantity Estimate Sheet (Stone masonry retaining wall)

डा. रमा गाउँपालिका
कार्यपालिकाको कार्यालय
सल्यान
२०७३

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1

S.No.	ec/chainag	No	Length (m)	Bottom Width (m)	Top Width (m)	Average Width (m)	Height (m)	Quantity (m3)	unit	Remarks
1	E/w in Excavation for Foundation of Structure (Stone Masonry retaining									
1		1	20.00	1			0.6	12		Near Chainage 720,740
2		1	12.00	1			0.6	7.2		Near Park purakot park
Total Earth work QTY								19.2	Cum	
2	Stone soling at foundation									
1		1	20.00	1			0.15	3		
2		1	12.00	1			0.15	1.8		
Total Stone Soling work								4.8	Cum	
3	Plain cement concrete(1:3:6)									
1		1	20.00	1			0.1	2		
2		1	12.00	1			0.1	1.2		
Total PCC work								3.2	Cum	
4	Stone Masonry(1:6) retaining wall									
1		1	20.00	1	0.4	0.70	2	28		
2		1	12.00	1	0.4	0.70	4	33.6		
Total								61.6	Cum	

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Assistant Sub-Engineer

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Sub Engineer

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Er. Arju Chand
NEC.No. 30642 Civil 'A'

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प्रमुख प्रशासकीय अधिकृत



Darma Rural Municipality
Office of the municipal executive
Farulachaur Salyan
Karnali Province

Project Name: Maulekhali-Maidan Road Improvement Project
Location: Darma -1

Estimate of Gabion Retaining Structure

Chainage	Length	Height	No of Gabion Boxes					Quantity (Cum)	Foundation			Backfilling			Remarks
			1x1x1	1.5x1x1	2x1x1	2.5x1x1	3x1x1		Base	Height	Quantity	Bredth (m)	Height (m)	Quantit y (m3)	
0+880								-			-			0.00	
1st layer	10.00	3.00			10.00			20.00	2.00	3.00	60.00	0.00	3.00	0.00	
2nd layer	10.00			10.00				15.00			-	0.25	3.00	7.50	
3rd layer	10.00				5.00			10.00			-	0.25	3.00	7.50	
0+890								-			-			0.00	
1st layer	10.00	3.00			10.00			20.00	2.00	3.00	60.00	0.00	3.00	0.00	
2nd layer	10.00			10.00				15.00			-	0.25	3.00	7.50	
3rd layer	10.00				5.00			10.00			-	0.25	3.00	7.50	
0+910								-			-			0.00	
1st layer	10.00	3.00			10.00			20.00	2.00	3.00	60.00	0.00	3.00	0.00	
2nd layer	10.00			10.00				15.00			-	0.25	3.00	7.50	
3rd layer	10.00				5.00			10.00			-	0.25	3.00	7.50	
0+900								-			-			0.00	
1st layer	10.00	3.00			10.00			20.00	2.00	3.00	60.00	0.00	3.00	0.00	
2nd layer	10.00			10.00				15.00			-	0.25	3.00	7.50	
3rd layer	10.00				5.00			10.00			-	0.25	3.00	7.50	
0+940								-			-			0.00	
1st layer	10.00	2.00			10.00			20.00	2.00	3.00	60.00	0.00	3.00	0.00	
2nd layer	10.00			10.00				15.00			-	0.25	3.00	7.50	
3rd layer	10.00				5.00			10.00			-	0.25	3.00	7.50	
0+950								-			-			0.00	
1st layer	10.00	3.00			10.00			20.00	2.00	3.00	60.00	0.00	3.00	0.00	
2nd layer	10.00			10.00				15.00			-	0.25	3.00	7.50	
3rd layer	10.00				5.00			10.00			-	0.25	3.00	7.50	
Total			0.00	60.00	90.00	0.00	0.00	270.00			360.00			90.00	

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Assistant Sub-Engineer

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Sub Engineer

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Er. Arju Chand
NEC.No. 30649 Civil 'A'

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Darma Rural Municipality
Office of The Rural Municipal Executive
Karnali Province, Nepal
Farulachaur, Salyan
Hume Pipe Quantity and cost Estimate Sheet

Project Name: Maulekhali-Maidan Road Improvement Project
Location: Darma -1

S.No.	Description	Nos	Length (L)	Breadth (B)	Height (H)	Quantity (L*B*H)	Unit	Remarks
1	Earthworks excavation for foundation of cross drainage structure, Retaining and Supporting Structure in all types soil and by provide combination of mannual and machine, Sheeting, removal of stumps, other deleterious matter disposal upto 10m and lift upto 1.5 m etc all complete as per specification							
	Portion of RCC Hume pipe NP3 600mm dia	1	10.00	0.90	1.55	13.95		
	Catchment Chamber	1	5.40	5.40	1.35	39.37		
	for a Last wall	1	2.00	0.90	1	1.80		
	Total Earth work					55.1160	Cum	
2	Stone Soling - Providing and laying of hand pack stone soling with 150 to 200 mm thick including levelling and all transportation as per drawing and technical Specification							
	Portion of RCC Hume pipe NP3 600mm dia	1.00	10.00	0.60	0.15	0.90		
	Catchment Chamber	1.00	1.20	2.60	0.15	0.47		
	for a Last wall	1.00	1.50	0.90	0.15	0.20		
	Total soling work					1.571	Cum	
3	Concrete work- Providing and Placing of plain Cement Concrete M15/40 grade (or 1:2:4) machine/ manual mix) in foundation including compaaaction. Curing, all works complete as per drawing and Technical Specification							
	Portion of RCC Hume pipe NP3 600mm dia	1.00	10.00	0.80	0.10	0.80		
	Catchment Chamber	1.00	1.20	2.60	0.08	0.23		
	Parapit wall capping	2.00	1.20	0.40	0.08	0.07		
	Masonry wall Capping	1.00	12.80	0.90	0.08	0.86		
	Total PCC work					1.970	Cum	
4	Stone Masonry Works- Random Rubble stone masonry in cement sand (1:4) mortar for Cross drainage Structure including curing, placing in position of weep holes all works complete .							
	Catchment Chamber	1	4.80	0.40	1.4	2.69		
	parapit wall	2	1.20	0.40	0.6	0.58		
	for a Last wall	1	2.50	0.65	3.4	5.53		
	Deduction hp portion	-2		0.43		-0.86		
	Total Masonary work					7.93	cum	
5	Supplying and laying 600 mm dia NP3 RCC pipes with or without collars, jointed with stiff mixture of cement mortar in the prporportion of 1:2 cement Sand mortar including transportation of 2.5 m long.	4				10.00	RM	
6	Earthwork in backfill with earthmass from near (40% of the excavation)					22.05	Cum	

[Signature]
Assistant Sub-Engineer

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Sub Engineer

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Er. Arij Chand
NEC.No. 30648 Civil 'A'

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राम बौली
मुख प्रशासकीय अधिकारी



Darma Rural Municipality
Office Of The Rural Municipal Executive
Karnali Province

SUMMARY of RATE ANALYSIS for Road Works 2079/080

S.N.	Items	Unit	Contractor's Rate	User's Rate	Remarks
1	Site clearance	m ²	5.14	4.47	
2	E/W exca. in Roadway & Drain : All types of Soil By machine	m ³	74.61	64.88	
3	E/W exca. in Roadway & Drain : Ordinary Soil manual	m ³	411.13	357.50	
4	E/W exca. in Roadway & Drain : Ordinary Rock	m ³	223.84	194.64	
5	Back filling By manual	m ³	205.56	178.75	
6	dry stone soling	m ³	2978.00	2589.57	
7	P.C.C. - 1:3:6 for Foundation	m ³	11656.00	10135.65	
8	P.C.C. - 1:2:4 for Foundation	m ³	13090.00	11382.61	
9	Gabion Work (3x1x1) box size with Hexagonal, supply, weving and placing in position	box	5631.26	4896.75	
10	Gabion Work (2x1x1) box size with Hexagonal supply, weving and placing in position	box	3880.16	3374.05	
11	Gabion Work (1.5x1x1) box size with Hexagonal supply, weving and placing in position	box	2815.64	2448.38	
12	Rubble packing in Gabion box	m ³	2011.35	1749.00	
13	Rubble Masonary Works 1:4 Cement Mortar	m ³	11716.00	10187.83	
14	Rubble Masonary Works 1:6 Cement Mortar	m ³	10939.00	9512.17	
15	Supply and installation of NP3 RCC Hume Pipe 600 Dia	RM	9614.98	8360.85	
17	Dry stone masonary works	m ³	4394.00	3820.87	
18	Bio Engineering Works	m ²	592.84	515.52	

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Sub Engineer

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Er. Arju Chand
NEC.No. 30648 Civil 'A'

[Signature]
राम पौडेल
मुख्य कार्यकारी अधिकारी

Darma Rural Municipality
Office of the rural Municipal Executive
Pharulachaur, Salyan
Karnali Province

District Labour and Material Rate, Fuel and Equipment Hire Rate and Rate of Materials at Site

1) Labour				
S.N.	Description	Unit		District Rate
1	Skilled	md		1000
2	Semiskilled	md		715
3	Unskilled (Labour)	md		715
4	Operator	md		900
5	Engineer	md		1200
6	Technician	md		1045

2) Fuel and Lubricant				
			With vat	Without vat
1	Diesel	lit.	172.00	NOC
3	Petrol	lit.	180.00	NOC

3) Equipment						
S.No.	Description	Unit	District rate	Fuel ltr	Fuel cost	Rate per hour
1	Truck 5.5 cum per 10 ton	hr.	1164.00	9.46	1627.12	2791.12
2	Truck 5.5 cum per 10 ton	hr.	1164.00	9.46	1627.12	2791.12
3	Truck 5.5 cum per 10 ton	hr.	1164.00	9.46	1627.12	2791.12
4	Grader	hr.	2746.00	8.67	1491.24	4237.24
5	Pump 10cm dia	hr.			0.00	0.00
6	Vibrator Roller 8 ton	hr.	1911.00	7.28	1252.16	3163.16
7	Smooth wheeled Roller	hr.	1054.00	5.40	928.80	1982.80
8	Water bowser	hr.	1146.00	4.32	743.04	1889.04
9	Front end loader, wheeled	hr.	2182.00	8.27	1422.44	3604.44
10	Bitumene Boiler oil fired	hr.	593.00	6.96	1197.12	1790.12
	Backhoe (0.2 bucket)	hr.	1000.00	7.99	1374.28	2374.28
11	Sprayer	hr.	300.00	125.00	21500.00	21800.00
12	Air compressor	hr.	977.00	5.73	985.56	1962.56
13	Hand Sprayer	hr.	260.00	125.00	21500.00	21760.00
14	Hydraulic chips spreader	hr.	3259.00	7.06	1214.32	4473.32
15	Pneumatic road Roller	hr.	2546.00	8.19	1408.68	3954.68
16	mixer	hr.	2684.00	16.38	2817.36	5501.36
17	Vibrator	hr.	150.00	125.00	21500.00	21650.00
18	Generator	hr.	671.00	1.30	223.60	894.60
19	Bitumen Pressure Distributor	hr.	3200.00	13.24	2277.28	5477.28
20	Chip Spreader	hr.	130.00	7.06	1214.32	1344.32
21	Tractor	hr.	500.00	4.50	774.00	1274.00
22	20t crane	hr.	3500.00	10.13	1742.36	5242.36
23	Boring equipment with pump and all accessories	hr.	3500.00	125.00	21500.00	25000.00
24	Crane for handling reinforcement cage and tremie pipe	hr.	3500.00	125.00	21500.00	25000.00
25	Gas cutter	hr.	1150.00	125.00	21500.00	22650.00
26	Welding machine	hr.	1150.00	125.00	21500.00	22650.00
27	10t crane with grab & accessories	hr.	3500.00	125.00	21500.00	25000.00
28	Screw jack	hr.	25.00	125.00	21500.00	21525.00
29	Electrical heating plate	hr.	50.00	125.00	21500.00	21550.00
30	Electrical hand drill	hr.	50.00	125.00	21500.00	21550.00
31	pre mixed mixture	hr.	4635.00	24.25	4171.00	8806.00
32	Asphalt paver finisher	hr.	4023.00	6.94	1193.68	5216.68
33	Steel tyred roller	hr.	440.00	125.00	21500.00	21940.00
34	Tipper trucks	hr.	1454.00	125.00	21500.00	22954.00
35	Prestressing jack	hr.	800.00	125.00	21500.00	22300.00
36	Grouting Pump	hr.	800.00	125.00	21500.00	22300.00
37	Drilling machine	hr.	130.00	125.00	21500.00	21630.00
38	Hydraulic Excavator	hr.	1800.00	9.12	1568.64	3368.64
39	Excavator with breaker	hr.	2100.00	8.96	1541.12	3641.12
40	Dozer	hr.	2000.00	14.40	2476.80	4476.80
41	Road marking machine	hr.	835.00	1.30	223.60	1058.60
42	boiler	hr.	51	6.96	1197.12	1248.12

4) Material									
S.N.	Description	Unit	District Rate (D)	Collection Rate (C)	Royalty (R)	Transportation Rate (Tp)	Total Rate (D+C+R+Tp)	Remark	
1	Sand	m ³	1600.00	1022		703.00	3325.00		
2	Rubble	m ³	1015.00			250.00	1265.00		
3	Cement pcc	mt.	14000.00			80375.00	94375.00		700
4	Water	lit.				0.15	0.15		
5	Crushed Aggregate						0.00		
5.a	10 mm (Small)	m ³	2350.00			0.00	2350.00		
5.b	20 mm (Intermediate)	m ³	2350.00			0.00	2350.00		
5.c	40 mm (Large)	m ³	2350.00			0.00	2350.00		
6	RCC Hume Pipes						0.00		
6.a	300 mm diameter	pcs	3850.00				3850.00		
6.b	450 mm diameter	rm	5390.00				5390.00		
6.c	600 mm diameter	rm	7150.00			3686.00	10836.00		
6.d	900 mm diameter	rm	12100.00			6253.64	18353.64		
7	Reinforcement						0.00		
7.a	8-16 mm dia	mt.	100480.00			0.00	100480.00		
7.b	16-32 mm dia	mt.	100480.00			0.00	100480.00		
8	Binding Wire						0.00		
8.a	Binding wire Black	kg	111.45				111.45		
8.b	Binding wire White	kg	111.45				111.45		
9	G.I Wire heavy coated						0.00		
9.a	7 gauge	kg	116.45			0.00	116.45		
9.b	10 gauge	kg	116.45			0.00	116.45		
9.c	12 gauge	kg	126.00			1.61	127.61		
10	Geo - Textile	Sqm	110.00				110.00		
11	GI Pipe 50mm medium class	rm	753.50				753.50		
12	MS steel	mt.	0.00				0.00		
13	Enamel	ltr	525.00				525.00		
14	Jute	kg	80.00				80.00		
15	Plywood 9mm thick	sqm	480.00				480.00		
16	Nuts & bolts	kg	199.50				199.50		
17	bentonite	kg	25.00				25.00		
18	Planks 38mm thick.	m ³	35320.00				35320.00		300
19	struts, ballies, etc.	m ³	35320.00				35320.00		580
20	Nails, spikes, etc.	kg	110.25				110.25		240
21	Graded filter material	m ³	1165.56				1165.56		191
22	timber	m ³	49448.00				49448.00		95
23	bearing	no.	60000.00				60000.00		1406
24	expansion joint	m	17825.00				17825.00		
25									
26	subbase aggregate	m ³	1597.00				1597.00		
27	Grass slips	no	50.00				50.00		
28	Line string	m ²	100.00				100.00		
29	Tendon/wire	t	130000.00			0.00	130000.00		
30	Tendon sheath	m	330.00				330.00		
31	anchorage assembly	no	8200				8200.00		
32	Bitumen	t	79247.79				79247.79		
33	Brick	no	19.99				19.99		
34	Plywood 12mm thick	Sqm	640.00				640.00		
36	Stone dust	cum	1400.00				1400.00		
37	Chips	cum	1975				1975.00		
38	Gabion Box								
	3*1*1	Box	4640				65.548		
	2*1*1	Box	3190				47.25175		
	1.5*1*1	Box	2320				40.78525		
							4705.55		
							3237.25		
							2368.79		

[Signature]
Assistant Sub-Engineer

[Signature]
Sub Engineer

[Signature]
Er. Arju Chand
NEC No. 30648 Civil 'A'

[Signature]
मुख्य प्रमुख अधिकारी

Earthwork Excavation

For 360.00 cu.m

Roadway excavation in all types of soil as per drawing and technical specification, including removal of stumps and other deleterious matter, with all lifts and lead as per Drawing and instruction of the Engineer to be made.

Spec. cl. No: 905	as per Drawing and instruction of the Engineer by mechanical means																Unit : m3				
	Labour (A)								Material (B)									Equipment (C)			
	Norms No.		Type	Unit	Qty.	Rate	Amount		Type	Unit	Qty.	Rate	Amount		Type	Unit		Qty.	Rate	Amount	
	9.1(D)B		Skilled	md	1.00	1000.00	1000.00						0.00		Hydraulic Excavator	h	6	3368.64	20211.84		
			Unskilled	md	3.00	715.00	2145.00						0.00								

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ПОПРАВКА К ЗАКОНУ

For 1.00 cu.m

Excavation in Roadway, Drain and foundation in Ordinary Soil including removal and satisfactory disposal of the materials upto a lead of 50m. Manual

team no 2, Page 21

[illegible]

Assistant Sub-Engineer

Chief Engineer

Prepared by

Checked by ET Arju Chand
MEC.No. 30648 Civil 'A'

Approved by

Description of works:	Roadway excavation in ordinary rock as per drawing and technical specification, including all lifts and lead as per Drawing and instruction of the Engineer by mechanical means		Unit : m3
	For 120.00 cu.m	For UC	
Spec. cl. No: 905			64.88

[illegible]

Spec. cl. No:	Description of works:	For	16.00 cu.m	Unit : m3
905	Roadway excavation in Hard rock with rock breakers,including breaking rock, lifts and lead for disposal as per Drawing and Technical Specifications by mechanical method for lead up to 30m			

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[Signature]
Assistant Sub Engineer

Sub Engineer

Checked by Atul Chaudhary
 Date: 30/06/2024
 Page No: 30648
 Civil 'A'

Prepared by

Approved by

Item No.	per	cu.m.	sq.m.	178.75
10	1	cu.m.	sq.m.	178.75
Norms-Dolidar 10 (2.5)		Page 22		205.56
ack filling				205.56

7. CONCRETE WORKS

Concreting of foundation, vertical faces	skilled	m.d.	1.00	1000.00	1000.00
walls (cement concrete) including supply	unskilled	m.d.	4.00	715.00	2860.00
of materials and haulage distance upto	ce ment	m.t.	0.22	14000.00	3080.00
30 m	a) P.C.C.(1:3:6)	cu.m.	0.65	2350.00	1527.50
aggregate 1 = 40 mm	" 2	cu.m.	0.24	2350.00	564.00
aggregate 2 = 20 mm	sand	cu.m.	0.47	2350.00	1104.50
Sub-Total		cu.m.			10136.00
Item No. 5.1					10136.00
Norms-7-2(c) page 44					11656.00
P.C.C. - 1:3:6 in foundation, walls etc.					

Concreting of foundation, vertical faces walls (cement concrete) including supply of materials and haulage distance upto 30m a) p.C.C.(1:2:4) aggregate 1 = 40 mm aggregate 2 = 20 mm aggregate 3 = 10 mm	skilled	m. d.	1.00	1000.00	1000.00
	unskilled	m. d.	4.00	715.00	2860.00
	cement	m. t.	0.32	14000.00	4480.00
	aggregate 1	cu. m.	0.52	2350.00	1222.00
	aggregate 2	cu. m.	0.22	2350.00	517.00
	aggregate 3	cu. m.	0.11	2350.00	258.50
	sand	cu. m.	0.4450	2350.00	1045.75
	Sub-Total				11383.25
			cu. m.		11383.00
				Including 25 % OH	13090.00
Item No. 5.2					
Norms-7- 2(d) page 44					
P.C.C. - 1:2:4 in foundation, walls etc.					

रेशम ओली
प्रमुख प्रशासकीय अधिकृत

Sub Engineer

Assistant Sub-Engineer

Checked by

Er. Arju Chandra
S.E.C.No. 30648 Civil

Approved by

Prepared by

Gabion Work (3x1x1) box size with Hexagonal, supply, weaving and placing in position				
10 SWG heavy coated Machine Made Gabion Box size 3*1*1.0m (16 m2)				
Item No.		per		
24.03.01		1	box	
Dolidar				
Gabion Box 3x1x1m				
skilled	m.d.	0.00	1000.00	0.00
unskilled	m.d.	0.13	715.00	92.95
Gabion box	box	1.00	4640.00	4640.00
Binding wire	Kg	1.30	126.00	163.80
Sub-Total				4896.75
Contract Rate (1.15)				5631.26
U. Rate without VAT				5631.26
per				

Gabion Work (2x1x1) box size with Hexagonal supply, weaving and placing in position				
10 SWG heavy coated Machine Made Gabion Box size 2*1*1.0m (11 m2)				
Item No.		per		
24.03.01		1	box	
Dolidar				
Gabion Box 2x1x1m				
skilled	m.d.	0.00	1000.00	0.00
unskilled	m.d.	0.09	715.00	64.35
Gabion box	box	1.00	3190.00	3190.00
Binding wire	Kg	0.95	126.00	119.70
Sub-Total				3374.05
Contract Rate (1.15)				3880.16
U. Rate without VAT				3880.16
per				

Gabion Work (1.5x1x1) box size with Hexagonal supply, weaving and placing in position				
10 SWG heavy coated Machine Made Gabion Box size 1.5*1*1 (9 m2)				
Item No.		per		
24.03.01		1	box	
Dolidar				
Gabion Box 1.5x1x1m				
skilled	m.d.	0.00	1000.00	0.00
unskilled	m.d.	0.07	715.00	46.48
Gabion box	box	1.00	2320.00	2320.00
Binding wire	Kg	0.65	126.00	81.90
Sub-Total				2448.38
Contract Rate (1.15)				2815.64
U. Rate without VAT				2815.64
per				

Rubble packing in Gabion box				
Item No.		per		
22		1	cu.m.	
NG 16(11)				
Rubble packing in Gabion box				
unskilled	m.d.	0.50	715.00	357.50
Rubble	cu.m.	1.10	1265.00	1391.50
Sub-Total				1749.00
Contract Rate (1.15)				2011.35
U. Rate without VAT				2011.35
per				

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Assistant Sub-Engineer

[Signature]
Sub Engineer

NEC.No: 30648 Civil V
Er. Arju Chand

Prepared by

Checked by

Approved by

6. STONE WORKS

Filling by stones in the foundation and levelling including haulage distance upto 30m	Unskilled	m.d.	1.50	715.00	1072.50
	Block stone	cu.m.	1.00	1265.00	1265.00
	Bond stone	cu.m.	0.20	1265.00	253.00
	Sub Total	cu.m.			2590.50
Item No. 1.6					2590.00
Norms - 6(5) page 39					2978.00

Stone filling in foundation trench

Rubble masonry work including supply of hard stone blocks preparing cement sand mortar and construction of the wall upto 5m high haulage distance upto 10m	skilled	m.d.	1.50	1000.00	1500.00
	unskilled	m.d.	5.00	715.00	3575.00
	cement	m.t	0.159	14000.00	2226.00
	Sand	cu.m	0.45	3325.00	1496.25
	bl. stone	"	1.00	1265.00	1265.00
	bond st.	"	0.10	1265.00	126.50
a) cement sand mortar 1:4					10188.75
Item No. 3.2					10188.00
Norms - 6(1-2) page 35					11716.00
Stone work in c.m. - 1:4					

Rubble masonry work including supply of hard stone blocks preparing cement sand mortar and construction of the wall upto 5m high haulage distance upto 10m	skilled	m.d.	1.50	1000.00	1500.00
	unskilled	m.d.	5.00	715.00	3575.00
	cement	m.L	0.106	14000.00	1484.00
	Sand	cu.m	0.47	3325.00	1562.75
	bl. stone	"	1.00	1265.00	1265.00
	bond st.	"	0.10	1265.00	126.50
a) cement sand mortar 1:5					9513.25
Item No. 3.3					9513.00
Norms - 6(1-3) page 35					10939.00
Stone work in c.m. - 1:5					

Rubble masonry work including supply of hard stone blocks and construction of the wall upto 5m high haulage distance upto 30 m	skilled	m.d.	1.00	1000.00	1000.00
	unskilled	m.d.	2.00	715.00	1430.00
	bl. stone	cu.m	1.00	1265.00	1265.00
a) dry wall	bond st.	"	0.10	1265.00	126.50
Sub-Total					3821.50
Item No. 3.5					3821.00
Norms - 6(2-1) page 36					4394.00
Dry stone masonry work					

Assistant Engineer

Sub Engineer

Checked by
E. Arju Chand
NEC.No. 30648 Civil 'A'

Approved by
राम प्रताप सिंह अधिकृत



Darma Rural Municipality
Rural Municipal Executive
Farulachaur, Salyan
Karnali Province

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Quantity Of Bio-Engineering works

Project Name: Maulekhali-Maidan Road Improvement Project

Location: Darma -1

Sl. No.	Description Of Works	Unit	Quantity	Item Rate (NRs)	Total Amount (NRs)	Remarks
1	Environmental Protection					
1.1	Collection of shrub slips, and planting to suitable location as indicated by Engineer	sqm	50.00	515.52	25,776.00	
			Total		25,776.00	
				Grand Total =	25,776.00	

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Assistant Sub-Engineer

[Signature]
Sub Engineer

[Signature]

Er. Arju Chand
NEC.No. 30648 Civil 'A'

[Signature]

प्रमुख प्रविष्टि अधिकारी



Darma Rural Municipality
Office Of The Rural Municipal Executive
Karnali Province

SUMMARY of RATE ANALYSIS for Road Works 2079/080

S.N.	Items	Unit	Contractor's Rate	User's Rate	Remarks
1	Site clearance	m ²	5.14	4.47	
2	E/W exca. in Roadway & Drain : All types of Soil By machine	m ³	74.61	64.88	
3	E/W exca. in Roadway & Drain : Ordinary Soil manual	m ³	411.13	357.50	
4	E/W exca. in Roadway & Drain : Ordinary Rock	m ³	223.84	194.64	
5	Back filling By manual	m ³	205.56	178.75	
6	dry stone soling	m ³	2978.00	2589.57	
7	P.C.C. - 1:3:6 for Foundation	m ³	11656.00	10135.65	
8	P.C.C. - 1:2:4 for Foundation	m ³	13090.00	11382.61	
9	Gabion Work (3x1x1) box size with Hexagonal, supply, weving and placing in position	box	5631.26	4896.75	
10	Gabion Work (2x1x1) box size with Hexagonal supply, weving and placing in position	box	3880.16	3374.05	
11	Gabion Work (1.5x1x1) box size with Hexagonal supply, weving and placing in position	box	2815.64	2448.38	
12	Rubble packing in Gabion box	m ³	2011.35	1749.00	
13	Rubble Masonary Works 1:4 Cement Mortar	m ³	11716.00	10187.83	
14	Rubble Masonary Works 1:6 Cement Mortar	m ³	10939.00	9512.17	
15	Supply and installation of NP3 RCC Hume Pipe 600 Dia	RM	9614.98	8360.85	
17	Dry stone masonary works	m ³	4394.00	3820.87	
18	Bio Engineering Works	m ²	592.84	515.52	

[Signature]

Assistant Sub-Engineer

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Sub Engineer

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Er. Arju Chand
NEC.No. 30648 CIVIL 'A'

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राम मोदी
मुख्य कार्यकारी अधिकारी

Darma Rural Municipality
Office of the rural Municipal Exctutive
Pharulachaur, Salyan
Karnali Province

District Labour and Material Rate, Fuel and Equipment Hire Rate and Rate of Matarials at Site

1) Labour			
S.N.	Description	Unit	District Rate
1	Skilled	md	1000
2	Semiskilled	md	715
3	Unskilled (Labour)	md	715
4	Operator	md	900
5	Engineer	md	1200
6	Technician	md	1045

2) Fuel and Lubricant		With vat		Without vat	
1	Diesel	lit.	172.00	NOC	
3	Petrol	lit.	180.00	NOC	

3) Equipment						
S.No.	Description	Unit	District rate	Fuel ltr	Fuel cost	Rate per hour
1	Truck 5.5 cum per 10 ton	hr.	1164.00	9.46	1627.12	2791.12
2	Truck 5.5 cum per 10 ton	hr.	1164.00	9.46	1627.12	2791.12
3	Truck 5.5 cum per 10 ton	hr.	1164.00	9.46	1627.12	2791.12
4	Grader	hr.	2746.00	8.67	1491.24	4237.24
5	Pump 10cm dia	hr.			0.00	0.00
6	Vibratori Roller 8 ton	hr.	1911.00	7.28	1252.16	3163.16
7	Smooth wheeled Roller	hr.	1054.00	5.40	928.80	1982.80
8	Water bowser	hr.	1146.00	4.32	743.04	1889.04
9	Front end loader, wheeled	hr.	2182.00	8.27	1422.44	3604.44
10	Bitumine Boiler oil fired	hr.	593.00	6.96	1197.12	1790.12
	Backhoe (0.2 bucket)	hr.	1000.00	7.99	1374.28	2374.28
11	Sprayer	hr.	300.00	125.00	21500.00	21800.00
12	Air compressor	hr.	977.00	5.73	985.56	1962.56
13	Hand Sprayer	hr.	260.00	125.00	21500.00	21760.00
14	Hudrolic chips spreader Spreader	hr.	3259.00	7.06	1214.32	4473.32
15	Pneumatic road Roller	hr.	2546.00	8.19	1408.68	3954.68
16	mixer	hr.	2684.00	16.38	2817.36	5501.36
17	Vibrator	hr.	150.00	125.00	21500.00	21650.00
18	Generator	hr.	671.00	1.30	223.60	894.60
19	Bitumen Pressure Distributor	hr.	3200.00	13.24	2277.28	5477.28
20	Chip Spreader	hr.	130.00	7.06	1214.32	1344.32
21	Tractor	hr.	500.00	4.50	774.00	1274.00
22	20t crane	hr.	3500.00	10.13	1742.36	5242.36
23	Boring equipment with pump and all accessories	hr.	3500.00	125.00	21500.00	25000.00
24	Crane for handling reinforcement cage and tremie pipe	hr.	3500.00	125.00	21500.00	25000.00
25	Gas cutter	hr.	1150.00	125.00	21500.00	22650.00
26	Welding machine	hr.	1150.00	125.00	21500.00	22650.00
27	10t-crane with grab & accessories	hr.	3500.00	125.00	21500.00	25000.00
28	Screw jack	hr.	25.00	125.00	21500.00	21525.00
29	Electical heating plate	hr.	50.00	125.00	21500.00	21550.00
30	Electrical hand drill	hr.	50.00	125.00	21500.00	21550.00
31	pre mixed mixture	hr.	4635.00	24.25	4171.00	8806.00
32	Asphalt paver finisher	hr.	4023.00	6.94	1193.68	5216.68
33	Steel tyrod roller	hr.	440.00	125.00	21500.00	21940.00
34	Tipper trucks	hr.	1454.00	125.00	21500.00	22954.00
35	Prestressing jack	hr.	800.00	125.00	21500.00	22300.00
36	Grouting Pump	hr.	800.00	125.00	21500.00	22300.00
37	Drilling machine	hr.	130.00	125.00	21500.00	21630.00
38	Hydrolic Excavator	hr.	1800.00	9.12	1568.64	3368.64
39	Excavator with breaker	hr.	2100.00	8.96	1541.12	3641.12
40	Dover	hr.	2000.00	14.40	2476.80	4476.80
41	Road marking machine	hr.	835.00	1.30	223.6	1058.6
42	boiler	hr.	51	6.96	1197.12	1248.12

4) Material								
S.N.	Description	Unit	District Rate (D)	Collection Rate (C)	Royalty (R)	Transportation Rate (Tp)	Total Rate (D+C + R + Tp)	Remark
1	Sand	m ³	1600.00	1022		703.00	3325.00	
2	Rubble	m ³	1015.00			250.00	1265.00	
3	Cement pec	mt.	14000.00			80375.00	94375.00	700
4	Water	lit.				0.15	0.15	
5	Crushed Aggregate						0.00	
5.a	10 mm (Small)	m ³	2350.00			0.00	2350.00	
5.b	20 mm (Intermediate)	m ³	2350.00			0.00	2350.00	
5.c	40 mm (Large)	m ³	2350.00			0.00	2350.00	
6	RCC Hume Pipes						0.00	
6.a	300 mm diameter	pcs	3850.00				3850.00	
6.b	450 mm diameter	rm	5390.00				5390.00	
6.c	600 mm diameter	rm	7150.00			3686.00	10836.00	
6.d	900 mm diameter	rm	12100.00			6253.64	18353.64	
7	Reinforcement						0.00	
7.a	8-16 mm dia	mt.	100480.00			0.00	100480.00	
7.b	16-32 mm dia	mt.	100480.00			0.00	100480.00	
8	Binding Wire						0.00	
8.a	Binding wire Black	kg	111.45				111.45	
8.b	Binding wire White	kg	111.45				111.45	
9	G.I Wire heavy coated						0.00	
9.a	7 gauge	kg	116.45			0.00	116.45	
9.b	10 gauge	kg	116.45			0.00	116.45	
9.c	12 gauge	kg	126.00			1.61	127.61	
10	Geo - Textile	Sqm	110.00				110.00	
11	GI Pipe 50mm medium class	rm	753.50				753.50	
12	MS steel	mt.	0.00				0.00	
13	Enamel	ltr	525.00				525.00	
14	Jute	kg	80.00				80.00	
15	Phywood 9mm thick	sqm	480.00				480.00	
16	Nuts & bolts	kg	199.50				199.50	
17	bentonite	kg	25.00				25.00	
18	Planks 38mm thick.	m ³	35320.00				35320.00	300
19	struts, ballies, etc.	m ³	35320.00				35320.00	580
20	Nails, spikes, etc.	kg	110.25				110.25	240
21	Graded filter material	m ³	1165.56				1165.56	191
22	timber	m ³	49448.00				49448.00	95
23	bearing	no	60000.00				60000.00	1406
24	expansion joint	m	17825.00				17825.00	
25								
26	subbase aggregate	m ³	1597.00				1597.00	
27	Grass slips	no	50.00				50.00	
28	Line string	m ²	100.00				100.00	
29	Tendon/wire	t	130000.00			0.00	130000.00	
30	Tendon sheath	m	330.00				330.00	
31	anchorage assembly	no	8200				8200.00	
32	Bitumen	t	79247.79				79247.79	
33	Brick	no	19.99				19.99	
34	Plywood 12mm thick	Sqm	640.00				640.00	
36	Stone dust	cum	1400.00				1400.00	
37	Chips	cum	1975				1975.00	
38	Gabion Box							
	3*1*1	Box	4640				65.548	
	2*1*1	Box	3190				47.25175	
	1.5*1*1	Box	2320				40.78525	

Kul
Assistant Sub-Engineer

Sub Engineer

Er. Arju Chand

Er. Arju Chand
NEC No. 30648 Civil 'A'

Sub Engineer
Sub Engineer

Karnali Province

Rate Analysis for F.Y 2079/080

[illegible]

Earthwork Excavation

[illegible]

[Signature]
Assistant Sub-Engineer

Sub Engineer

Checked by ET Arju Chand
MEC.No. 30648 Civil 'A'

Prepared by

Approved by

For	120.00 cu.m	For UC	64.88
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For UC	194.64
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For 16.00 cu.m

For UC	1367.30
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Checked by  A. K. Chaudhary
WV: 30648 Civil 'A'
REC.No: _____

Checked by

Approved by

Back filling with approved materials obtain from borrow pits excluding excavation.		Unskilled Equipment		715.00		178.75	
Item No.	per	cu.m.	m.d.	0.25			
10	1	Page 22					
Norms -Dolidar 10 (2.5)		Contract Rate (1.15)				178.75	
Back filling		U.Rate without VAT				205.56	
		per		sq.m.		205.56	

7. CONCRETE WORKS

Concreting of foundation, vertical faces walls (cement concrete) including supply of materials and haulage distance upto 30 m		skilled	m.d.	1.00	1000.00	1000.00
a) P.C.C. (1:3:6)		unskilled	m.d.	4.00	715.00	2860.00
Aggregate 1 = 40 mm		Aggregate 1	m.t.	0.22	14000.00	3080.00
Aggregate 2 = 20 mm		Aggregate 2	cu.m.	0.65	2350.00	1527.50
sand		Aggregate 3	cu.m.	0.34	2350.00	564.00
Sub-Total		Sub-Total	cu.m.	0.47	2350.00	1104.50
Item No. 5.1			cu.m.			10136.00
Norms-7-2(c) page 44						10136.00
P.C.C. - 1:3:6 in foundation, walls etc.						11656.00

Concreting of foundation, vertical faces walls (cement concrete) including supply of materials and haulage distance upto 30m		skilled	m.d.	1.00	1000.00	1000.00
a) P.C.C. (1:2:4)		unskilled	m.d.	4.00	715.00	2860.00
Aggregate 1 = 40 mm		Aggregate 1	m.t.	0.32	14000.00	4480.00
Aggregate 2 = 20 mm		Aggregate 2	cu.m.	0.52	2350.00	1222.00
Aggregate 3 = 10 mm		Aggregate 3	cu.m.	0.22	2350.00	517.00
sand		Aggregate 4	cu.m.	0.11	2350.00	258.50
Sub-Total		Sub-Total	cu.m.	0.4450	2350.00	1045.75
Item No. 5.2			cu.m.			11383.75
Norms-7-2(d) page 44						11383.75
P.C.C. - 1:2:4 in foundation, walls etc.						13090.00

Assistant Sub-Engineer

Sub Engineer

Prepared by

Checked by

Er. Arijit Chandra
30648 Civil 'A'

Approved by

राम अली
प्रमुख प्रशासकीय अधिकृत

Gabion Work (3x1x1) box size with Hexagonal, supply, weaving and placing in position					
Item No.	per	m.d.	skilled	m.d.	0.00
24.03.01	1	box	unskilled	m.d.	0.13
10 SWG heavy coated Machine Made Gabion Box size 3*1*1.0m (16 m2)					715.00
Dolidar					4640.00
Gabion Box 3x1x1m					163.80
Binding wire					126.00
Sub-Total					4896.75
Contract Rate (1.15)					5631.26
U.Rate without VAT					5631.26

Gabion Work (2x1x1) box size with Hexagonal supply, weaving and placing in position						
Item No.	per		skilled	m. d.		
24.03.01	1	box	unskilled	m. d.	0.09	1000.00
10 SWG heavy coated Machine Made Gabion Box size 2*1*1.0m (11 m2)						64.35
Doldar						3190.00
Gabion Box 2x1x1m						119.70
Binding wire						126.00
Sub-Total						3374.05
Contract Rate (1.15)						3880.16
U.Rate without VAT						3880.16
per box						

Gabion Work (1.5x1x1) box size with Hexagonal supply, weaving and placing in position					
10 SWG heavy coated Machine Made Gabion box size 1.5*1*1 (9 m2)					
Item No.	per		skilled	m. d.	
24.03.01	1	box	unskilled	m. d.	0.07
			Gabion box	box	1.00
			Binding wire	Kg	0.65
			Sub-Total		126.00
			Contract Rate (1.15)		
			U.Rate without VAT		
			per	box	
Dolidar					
Gabion Box 1.5x1x1m					

Rubble packing in Gabion box					
Item No.	per	cu m.	unskilled Rubble	m d cu m.	
22	1	cu m.	Sub-Total	0.50 1.10	357.50 1391.50
10 SWG heavy coated Machine Made Gabion Box size 3*1*1.0m (16 m2)					715.00 1265.00
Dolidar					1749.00
Rubble packing in Gabion box					2011.35
Sub-Total					2011.35
Contract Rate (1.15)					
U.Rate without VAT					
per				cu m.	

4/2020

Assistant Sub-Engineer

Sub Engineer

Checked by
Mr. Arjun Chandra
NEC.No. 300648 C/W/1 A

Prepared by

Approved by

6. STONE WORKS

Filling by stones in the foundation and levelling including haulage distance upto 30m	m.d.	1.50	715.00	1072.50
Block stone	cu.m.	1.00	1265.00	1265.00
Bond stone	cu.m.	0.20	1265.00	253.00
Sub Total	cu.m.			2590.50
Norms - 6(5) page 39				2590.00
Stone filling in foundation trench				2978.00

Rubble masonry work including supply of hard stone blocks preparing cement sand mortar and construction of the wall upto 5m high haulage distance upto 10m	m.d.	1.50	1000.00	1500.00
skilled	m.d.	5.00	715.00	3575.00
unskilled	m.t.	0.159	14000.00	2226.00
cement	cu.m	0.45	3325.00	1496.25
Sand	"	1.00	1265.00	1265.00
bl stone	"	0.10	1265.00	126.50
bond st.				10188.75
Sub-Total	cu.m.			10188.00
Item No. 3.2				11716.00
Norms - 6(1-2) page 35				
Stone work in c.m.- 1:4				

Rubble masonry work including supply of hard stone blocks preparing cement sand mortar and construction of the wall upto 5m high haulage distance upto 10m	m.d.	1.50	1000.00	1500.00
skilled	m.d.	5.00	715.00	3575.00
unskilled	m.t.	0.106	14000.00	1484.00
cement	cu.m	0.47	3325.00	1562.75
Sand	"	1.00	1265.00	1265.00
bl stone	"	0.10	1265.00	126.50
bond st.				9513.25
Sub-Total	cu.m.			9513.00
Item No. 3.3				10939.00
Norms - 6(1-3) page 35				
Stone work in c.m.- 1:5				

Rubble masonry work including supply of hard stone blocks and construction of the wall upto 5m high haulage distance upto 30 m	m.d.	1.00	1000.00	1000.00
skilled	m.d.	2.00	715.00	1430.00
unskilled	cu.m	1.00	1265.00	1265.00
bl stone	"	0.10	1265.00	126.50
bond st.				3821.50
Sub-Total	cu.m.			4394.00
Item No. 3.5				
Norms - 6(2-1) page 36				
Dry stone masonry work				

Assistant Engineer

Sub Engineer

Checked by
E. Arju Chand
NEC.No. 30648 Civil 'A'

Approved by
प्रमुख उपनिवेश अधिकृत
रेलवे बोली

Prepared by

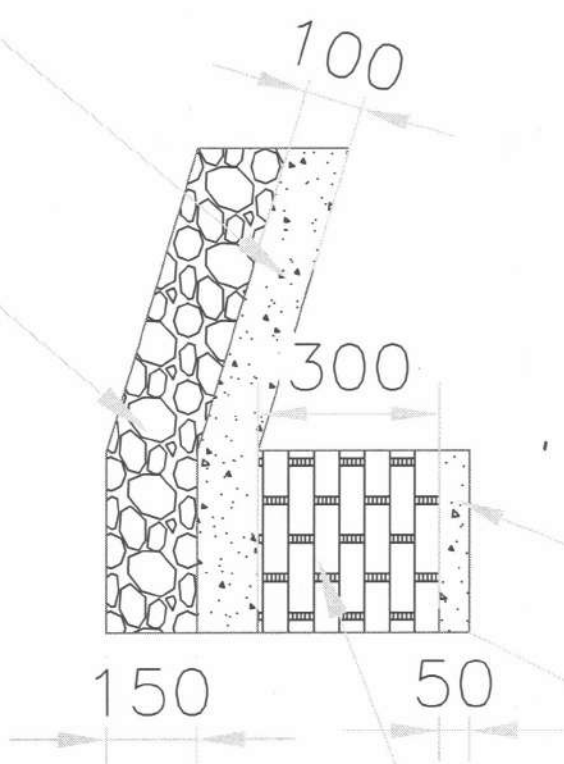
DRAWINGS

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[Signature]



CONCRETE-M10

SM WALL 1:6 C/M

CONCRETE-M10

STONE SOLING

ALL DIMENSIONS ARE IN MM

पञ्जाब प्रदेश सरकार
मुख्य अभियंता, पञ्जाब

Er. Arjun Chhabra
NEC No. 306948 Civil
Punjab

Amr

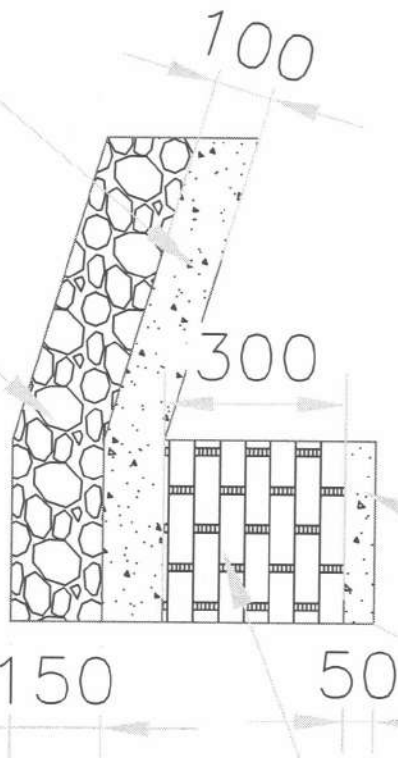
Sub Engineer

Assistant Sub-Engineer

Amr

CONCRETE-M10

SM WALL 1:6 C/M



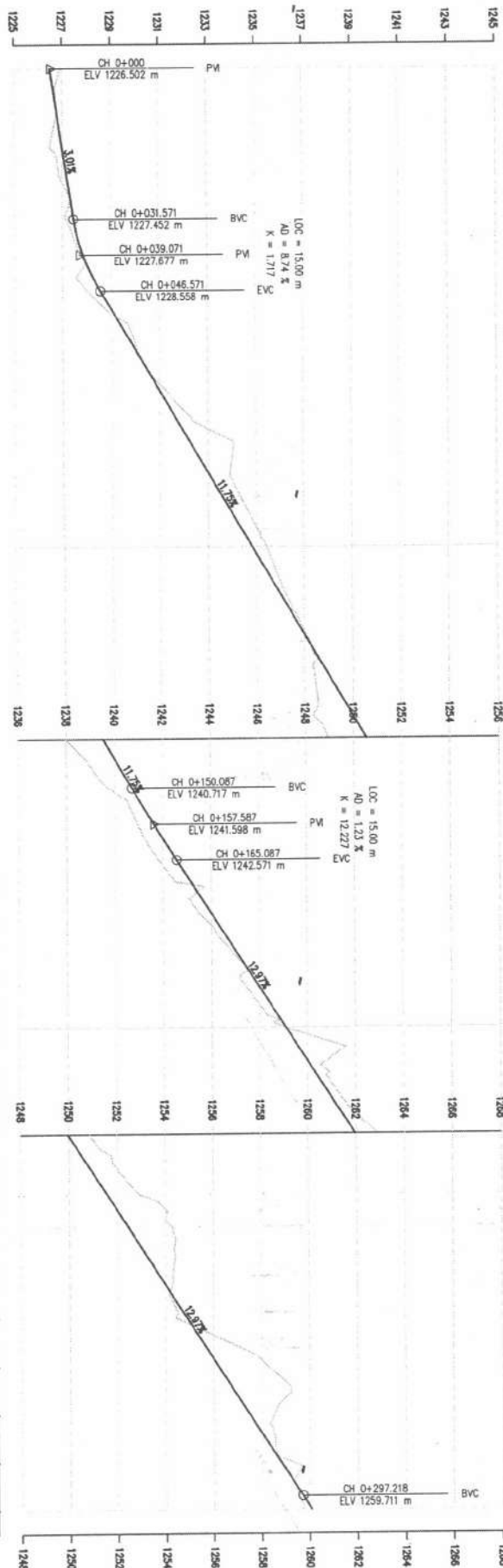
CONCRETE-M10

STONE SOLING

ALL DIMENSION ARE IN MM

SOIL TYPE	SIDE DRAIN		CHAINAGE(Km)	EXISTING LEVEL(m)	DESIGN LEVEL(m)
	RIGHT	LEFT			
			0+000	1226.812	1226.502
			0+010	1226.741	1226.803
			0+020	1226.618	1227.104
			0+030	1227.173	1227.404
			0+040	1227.891	1227.912
			0+050	1228.663	1228.961
			0+060	1230.170	1230.136
			0+070	1231.723	1231.310
			0+080	1234.040	1232.485
			0+090	1236.407	1233.659
			0+100	1238.451	1234.834
			0+110	1239.236	1236.009
			0+120	1237.220	1237.183
			0+130	1237.453	1238.358
			0+140	1237.565	1239.532
			0+150	1238.798	1240.707
			0+160	1241.129	1241.922
			0+170	1242.997	1243.208
			0+180	1244.203	1244.505
			0+190	1245.628	1245.803
			0+200	1247.066	1247.100
			0+210	1248.763	1248.397
			0+220	1250.449	1249.694
			0+230	1252.127	1250.992
			0+240	1253.969	1252.289
			0+250	1254.732	1253.586
			0+260	1254.435	1254.883
			0+270	1255.247	1256.181
			0+280	1256.539	1257.478
			0+290	1257.198	1258.775
			0+300	1259.735	1260.069

OS 70% SR 30%

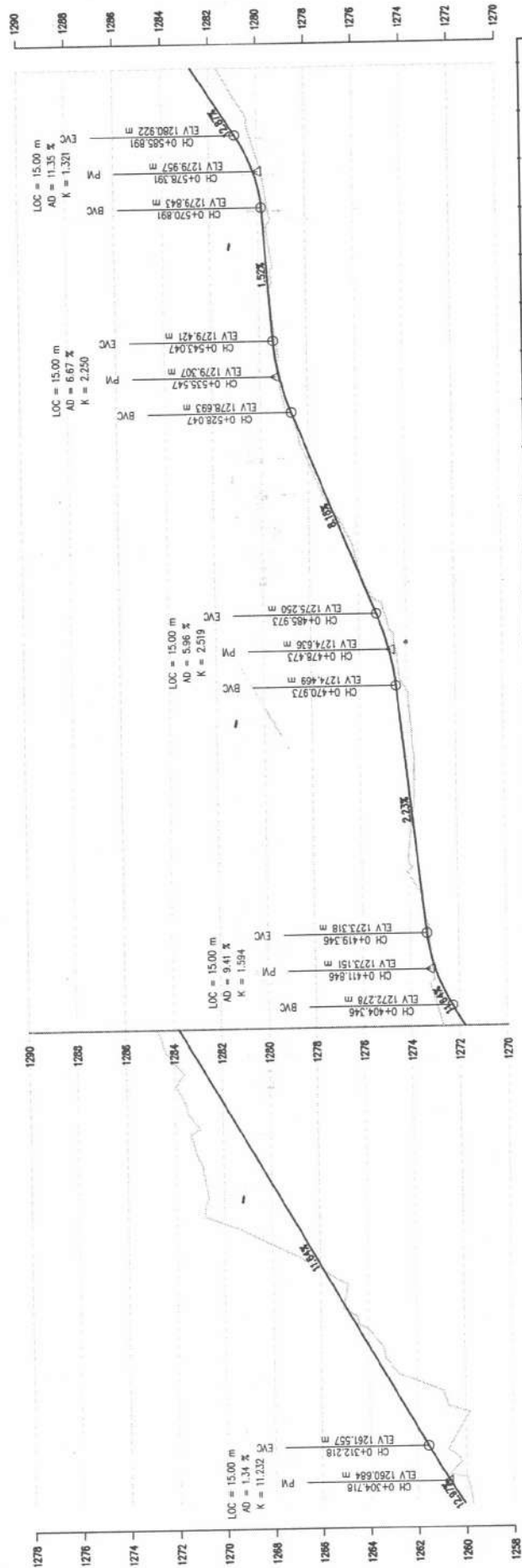


रेशम चौली
प्रमुख प्रशासकीय अधिकारी

Er. Arju Chand
Sub Engineer

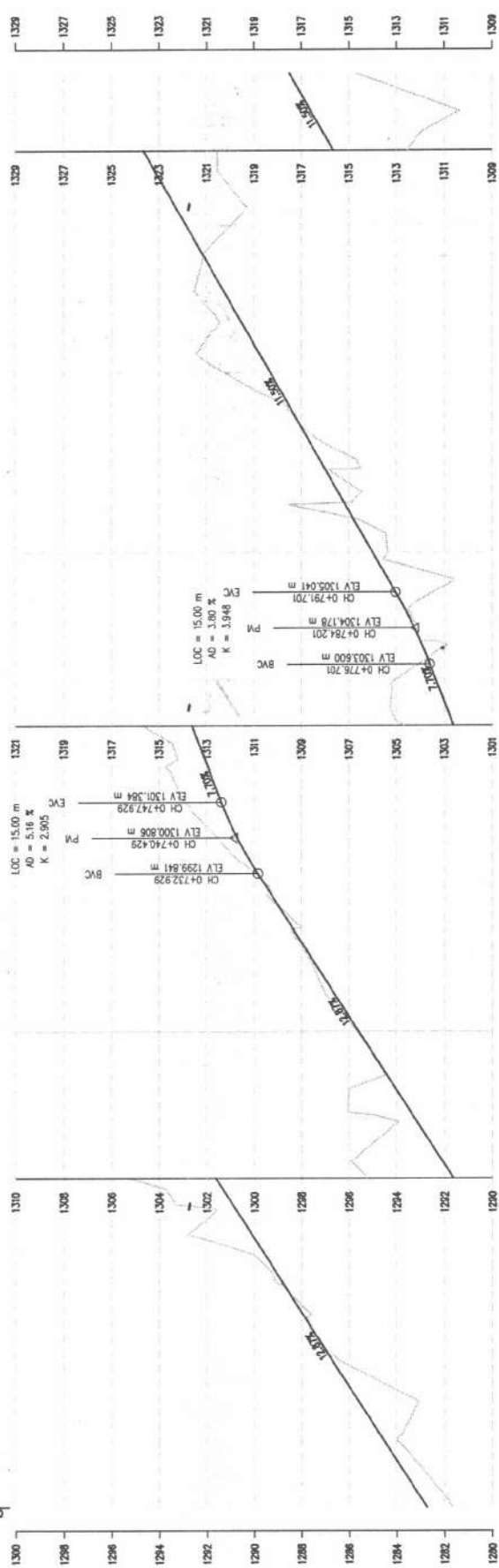
Sub Engineer

Sub Engineer



SOIL TYPE	Sub Engineer		Assistant Engineer		Design Officer	
	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT
CHAINAGE(Km)	0+300	0+310	0+320	0+330	0+340	0+350
EXISTING LEVEL(m)	1260.068	1261.297	1262.463	1263.627	1264.790	1265.954
DESIGN LEVEL(m)	1260.068	1261.297	1262.463	1263.627	1264.790	1265.954
CHAINAGE(Km)	0+360	0+370	0+380	0+390	0+400	0+410
EXISTING LEVEL(m)	1267.118	1268.281	1269.445	1270.609	1271.772	1272.936
DESIGN LEVEL(m)	1267.118	1268.281	1269.445	1270.609	1271.772	1272.936
CHAINAGE(Km)	0+420	0+430	0+440	0+450	0+460	0+470
EXISTING LEVEL(m)	1273.242	1273.835	1274.428	1275.021	1275.614	1276.207
DESIGN LEVEL(m)	1273.242	1273.835	1274.428	1275.021	1275.614	1276.207
CHAINAGE(Km)	0+480	0+490	0+500	0+510	0+520	0+530
EXISTING LEVEL(m)	1276.138	1276.731	1277.324	1277.917	1278.510	1279.103
DESIGN LEVEL(m)	1276.138	1276.731	1277.324	1277.917	1278.510	1279.103
CHAINAGE(Km)	0+540	0+550	0+560	0+570	0+580	0+590
EXISTING LEVEL(m)	1279.214	1279.807	1280.400	1280.993	1281.586	1282.179
DESIGN LEVEL(m)	1279.214	1279.807	1280.400	1280.993	1281.586	1282.179
CHAINAGE(Km)	0+600					
EXISTING LEVEL(m)	1281.670					
DESIGN LEVEL(m)	1281.670					

600 mm dia handover for cross drainage with catch pit



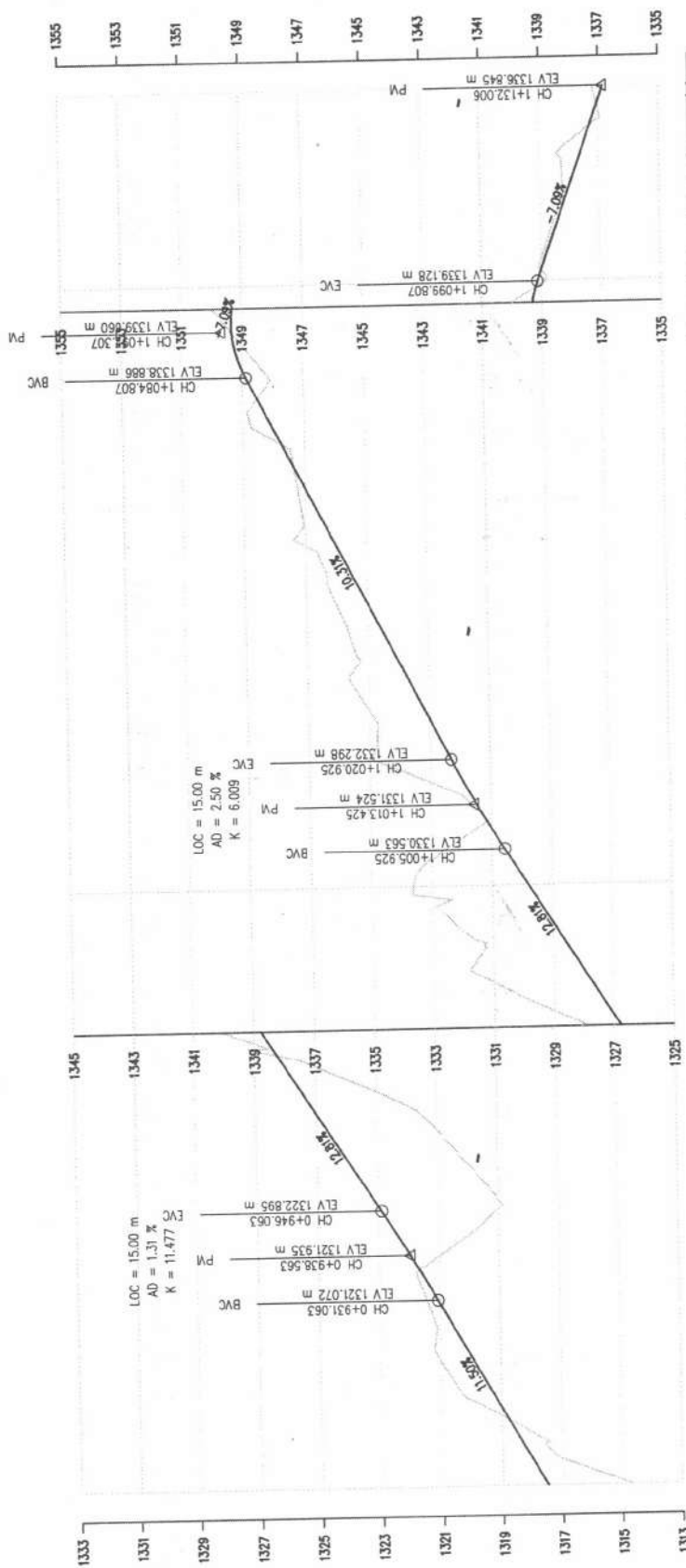
CHAINAGE(Km)	SIDE DRAIN	
	RIGHT	LEFT
0+600	1282.737	1284.034
0+610	1284.034	1285.310
0+620	1285.310	1286.587
0+630	1286.587	1287.864
0+640	1287.864	1289.171
0+650	1289.171	1290.457
0+660	1290.457	1291.744
0+670	1291.744	1293.031
0+680	1293.031	1294.318
0+690	1294.318	1295.604
0+700	1295.604	1296.891
0+710	1296.891	1298.178
0+720	1298.178	1299.464
0+730	1299.464	1300.750
0+740	1300.750	1302.034
0+750	1302.034	1303.318
0+760	1303.318	1304.604
0+770	1304.604	1305.888
0+780	1305.888	1307.174
0+790	1307.174	1308.446
0+800	1308.446	1309.709
0+810	1309.709	1310.957
0+820	1310.957	1312.197
0+830	1312.197	1313.428
0+840	1313.428	1314.648
0+850	1314.648	1315.858
0+860	1315.858	1317.058
0+870	1317.058	1318.248
0+880	1318.248	1319.428
0+890	1319.428	1320.608
0+900	1320.608	1321.788

प्रमुख प्रशासकीय अधिकारी

REC-NO. 30648 CIVIL TA
05.70% OF 30%

Sub Engineer

Sub-Engineer

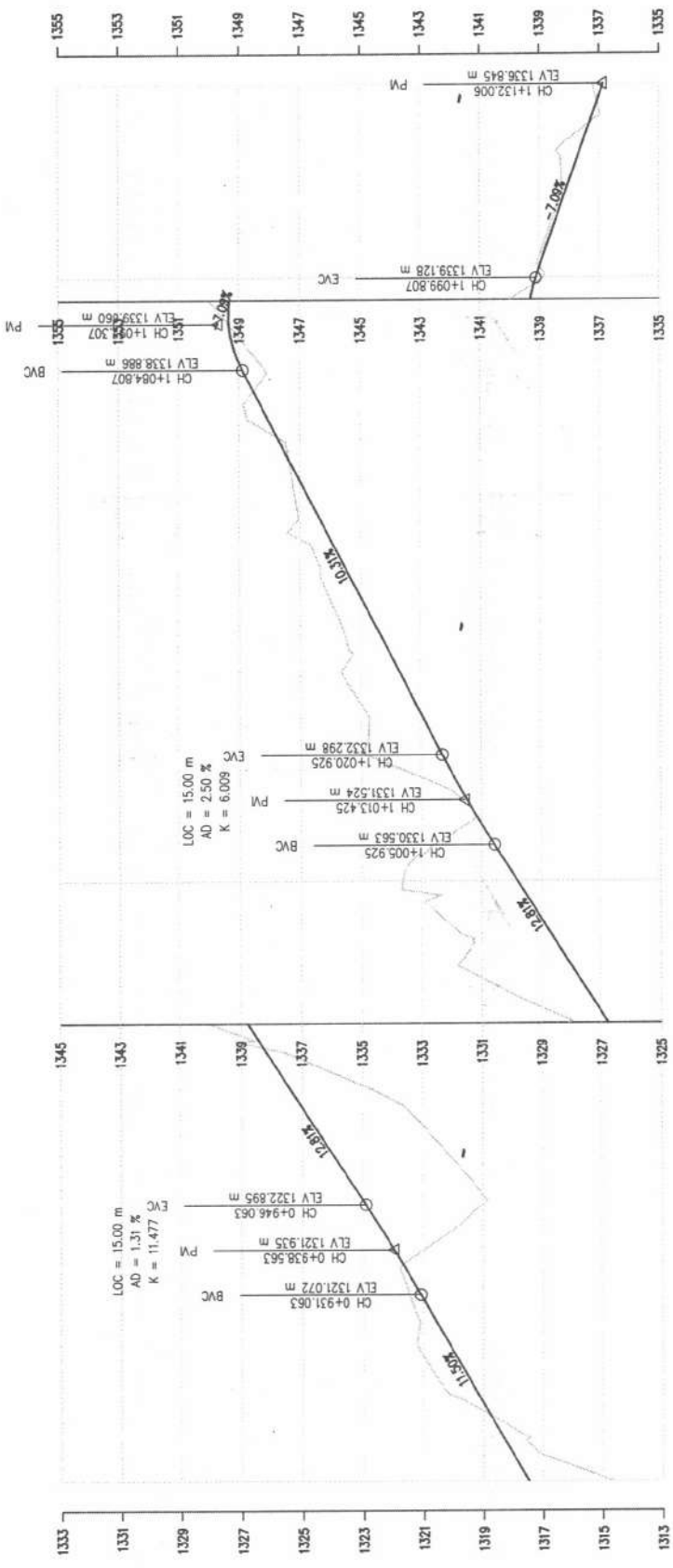


DESIGN LEVEL(m)	EXISTING LEVEL(m)	CHAINAGE(Km)	SIDE DRAIN		SOIL TYPE	Assistant	Sub-Engineer	OS 70% SR 30%	1313
			RIGHT	LEFT					
1317.499	1317.499	0+900							
1318.849	1318.280	0+910							
1319.799	1320.082	0+920							
1320.949	1321.060	0+930							
1322.135	1320.545	0+940							
1323.400	1319.352	0+950							
1324.681	1323.103	0+960							
1325.962	1324.820	0+970							
1327.243	1329.500	0+980							
1329.523	1331.280	0+990							
1329.804	1333.638	1+000							
1331.072	1335.289	1+010							
1332.202	1334.569	1+020							
1333.234	1338.079	1+030							
1334.265	1335.410	1+040							
1335.296	1336.298	1+050							
1336.328	1337.038	1+060							
1337.359	1337.358	1+070							
1338.391	1338.728	1+080							
1339.266	1339.975	1+090							
1339.405	1338.533	1+110							
1337.696	1338.177	1+120							
1338.845	1337.112	1+130							

NEC.No. 30648 Civil/A,
E. Arju Chand

प्रमुख प्रशासकीय अधिकृत

HP ELV = 1339.34 m
 HP ELV = 1339.34 m
 LOC = 15.00 m
 AD = 17.40 %
 K = 0.862



DESIGN LEVEL(m)	EXISTING LEVEL(m)	CHAINAGE(km)	SIDE DRAIN		Sub Engineer	Assistant
			RIGHT	LEFT		
1337.499	1317.499	0+900				
1318.649	1318.649	0+910				
1319.799	1319.799	0+920				
1320.949	1320.949	0+930				
1322.135	1322.135	0+940				
1323.400	1323.400	0+950				
1324.681	1324.681	0+960				
1325.962	1325.962	0+970				
1327.243	1327.243	0+980				
1328.523	1328.523	0+990				
1329.804	1329.804	1+000				
1331.072	1331.072	1+010				
1332.202	1332.202	1+020				
1333.234	1333.234	1+030				
1334.265	1334.265	1+040				
1335.296	1335.296	1+050				
1336.328	1336.328	1+060				
1337.359	1337.359	1+070				
1338.391	1338.391	1+080				
1339.266	1339.266	1+090				
1339.846	1339.846	1+100				
1338.405	1338.405	1+110				
1337.696	1337.696	1+120				
1336.987	1336.987	1+130				
1336.845	1336.845	1+132.01				

OS 70% SR 30%

Sub Engineer

रेशम ओली

E. Arju Chand

CHAINAGE : 0+900 - 1+132.006

प्रमुख प्रशासकीय अधिकारी