Darma Rural Gaunpalika
Salyan

दर्मा गाउँपालिका
गाउँ कार्यपालिकाको कार्यालय
सल्यान
२०७३

FINAL REPORT
DETAIL SURVEY, DESIGN, DRAWING AND COST ESTIMATE
Kanjalukeni Kamalpokheri Lift Drinking Water Supply scheme(Kramagat)
Darma-, Salyan

Jan, 2023

Prepared By
Darma Rural Municipality
Darma-3, Salyan

DETAIL ESTIMATE

Darma Rural Municipality

Office of the Municipal Executive

Darma, Salyan

Karnali Province, Nepal

Component wise cost Summary

Project Name:Kanjalukeni Kamalpokheri Lift Drinking Water Supply construction (Karmagat)

Location:Darma Rural Municipality-4 Kamalpokheri , Salyan

S.No.	Description	Unit	Quantity	Rate(13% VAT Excluded)	Amount	Contribution pattern		Total Contribution	Remarks
						Municipality	LISP-Pilot		
A) Non-local materials Construction					**525,023.83**	**525,023.83**		**525,023.83**	
1	Cement NS Nepali OPC(50 kg)	Bag	259.00	800.00	207,200.00			-	
2	8mm Dia Reinforcement Bar	Kg	395.31	102.00	40,321.90			-	
3	10mm Dia Reinforcement Bar	Kg	1,581.25	102.00	161,287.60			-	
4	Binding Wire	Kg	25.13	110.00	2,763.79			-	
5	Barbed wire 12 guage	Kg	81.00	115.00	9,315.00			-	
6	Nail	Kg	9.84	110.25	1,085.25			-	
7	Angle Pole 40*40*6mm 2.1m Long	KG	354.82	126.00	44,707.32			-	
8	950* 1500 mm Iron Grill Door	Piece	3.00	4,000.00	12,000.00			-	
9	Chicken wire	sq-m	86.37	115.50	9,976.10			-	
10	3.5mm Plane GI Wire medium Ga	kg	99.26	115.00	11,414.62			-	
11	Kerosene	ltr	19.60	100.00	1,959.52			-	
12	Snowcorn Cem Paint	kg	16.94	73.50	1,245.09			-	
13	Enamel	ltr	2.00	525.00	1,050.00			-	
14	Polythene Sheet	sq-m	37.63	135	5,080.05			-	
15	600 dia Manhole cover with Frame	set	7.00	2200	15,400.00			-	
16	Bitumen Paint	ltr	2.96	73.50	217.57			-	
17	Water Profing Compound	kg	17.76	63.00	1,118.88			-	
B) Labor for pipeline and structures					**1,621,132.31**		**1,621,132.31**	**1,621,132.31**	
1	Skilled labor	Man/day	199.64	1000	199,638.15			-	
2	Unskilled labor	Man/day	1,988.10	715	1,421,494.16			-	
C) Pipes and fittings (HDPE/GI)					**1,823,733.10**		**1,823,733.10**	**1,823,733.10**	
1	GI pipes (structure and pipeline)	Unit			766,444.00			-	
2	HDPE pipeline (structure and pipe	Unit			603,175.93			-	
3	GI/HDPE fittings (pipeline and fittir	Unit			454,113.18			-	
D) Supply and Installation of pump and accessories All complete works					**996,069.01**	**996,069.01**		**996,069.01**	
E) Fencing For Solar Pannel		Nos	2	170504.282	**341,008.56**	**341,008.56**		**341,008.56**	
F) Tools and PPE's		Nos	1	133,503.12	**133,503.12**	**133,503.12**		**133,503.12**	
G) Local construction materials					**232,755.38**	**77,620.79**	**155,134.59**	**232,755.38**	
1	Sand	cum	22.68	3426.38	77,707.80			-	
2	Aggregate	cum	30.12	2892.32	87,122.20			-	
3	Stone	cum	23.51	1215.00	28,560.82			-	
4	Local wood	cum	1.22	28256	34,441.56			-	
5	Bamboo	Piece	16.41	300	4,923.00			-	
H) Miscellaneous Costs (wuc mgmt cost)					**209,188.00**	**209,188.00**		**209,188.00**	
1	UC management Cost				56,000.00			-	
5	Unnamed insurance for workers		10000	1	10,000.00			-	
6	Miscelleneous Fittings Items Purches		143188	1	143,188.00			-	
I) VAT 13% on Non local materials vatable Iteams					**305,338.40**	**305,338.40**		**305,338.40**	
J) Load Unload, Transportation and Portering Cost					**87,247.38**	**87,247.38**		**87,247.38**	
		Project cost		**6,274,999.09**				-	
		Total project cost			***6,274,999.09***	***2,674,999.09***	***3,600,000.00***	**6,274,999.09**	

Prepare By: Assistant Sub-Engineer

Verify By: Er. Arju Chand NEC.No. 30648 Civil 'A'

Approved By: रेशम लोहनी प्रमुख प्रशासकीय अधिकृत

Darma Rural Municipality
Office of the Municipal Executive

Darma, Salyan
Karnali Province, Nepal

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Salient Feature of Scheme

Scheme Code:	**WSP001**

Scheme Name:Kanjalukeni Kamalpokheri Lift DWS(Karmagat)

Generala Information	
District:	Salyan
Gaupalika:	Darma
Ward No:	4
Community Name:	Kamalpokheri
Demand Information	
Total Daily Demand (lpd):	34,125.00
Other Demand (Ltr):	
Per Capita Demand (lpcd):	65.00

Survey/Design Information	
Number of Households:	71.00
Number of HHSConn :	71.00
Present Population:	402.00
Design Population:	474.00
Population Growth Rate:	1.00
Design Period (Yr):	20.00
Number Institution:	1.00
Connection Type:	Yard Connection
Scheme Type:	Lift

Source Information

Source Name:	Kanjalukeni	Source Yield (lps):	2.00
Source Type:	Spring+Stream	Safe Yield (lps):	1.93
Water Quality:	Clear		

Structural Information

Name of Structure	Total Quantity	Remarks
Spring Source CC	2	Catchment collection
Reinforced Cement Concrete Tank/30m3	1	
Division Box/Stone masonry(SV)	1	
Ferrocement Tank 10 CUM	2	
Anchore Block for GI Pipe Clamping	110	
Boundary Fencing for Solar Pannel	2 (60m)	
Pumps Purchease and installation	2	
School Tap (with Hand Washplateform)	1	
Pipe Line HDPE	7,083.00	Pipe Length (m)
Transmission Pipe Line GI	868.00	Pipe Length (m)

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Office of the Municipal Executive
Darma, Salyan
Karnali Province, Nepal

Component wise cost Calculation

Project Name:Kanjalukeni Kamalpokheri Lift Dwsp Sub-Project

Location:Darma Rural Municipality-4 Kamalpokhari , Salyan

S.No.	Description	Quantity	Unit Cost	Amount
A) Structures cost only				
1	Spring Source CC	2	10,494.70	20,989.40
2	Reinforced Cement Concrete Tank/30m3	1	572,263.71	572,263.71
3	Division Box/Stone masonry(SV)	1	21,935.22	21,935.22
4	Ferrocement Tank 10 CUM	2	208,256.54	416,513.08
5	Anchore Block for GI Pipe Clamping	1	272,618.23	272,618.23
6	School Tap (with Hand Washplateform)	1	24,037.54	24,037.54
7	Pipe line Excavation/ back filling /Jointing			1,040,863.73
8	Boundary fencing For Solar Pannel 60m (2	2	170,504.28	341,008.56
			Total cost for structures	**2,710,229.47**
B) Pipes and fittings (HDPE/GI)				
1	GI pipes			766,444.00
2	HDPE pipeline			603,175.93
3	GI/HDPE fittings			454,113.18
			Sub Total	**1,823,733.10**
			Vat 13%	**237,085.30**
			Total Cost for pipes and fittings	**2,060,818.40**
C) Supply and Installation of Complete pump and accessories with 13% Vat & Transportation				**996,069.01**
D) Tools and PPE's with 13% Vat and Transportation				**133,503.12**
E) Miscellaneous Costs with Transportation				**296,435.38**
			Grand Total	**6,197,055.39**

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

S.N.	Particular	Units	Quantity	Rate	Total Amount	Remarks
1	Hording Board with Transportati	Pic	1	12,000.00	12,000.00	
2	Store room	Room /mont	4	1,500.00	6,000.00	
3	Fooding and Lodging cost during work at Municipality HQ	Day	10	2,000.00	20,000.00	F: 1000, T-1000
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	3,000.00	3,000.00	
9	WUC Miscellaneous Work cost	Ls	1	10,000.00	10,000.00	
	Total Management Cost				**56,000.00**	

Assistant Sub-Engineer

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SUMMARY QUANTITY

S.N	Description	Unit	Quantity
A	**Human Resources**		
1	Skilled	Md	211
2	Unskilled	Md	2033
B	**Local Construction Materials**		
1	Stone	Cu m	24
2	Sand	Cu m	20
3	Aggregate	Cu m	30
4	Bamboo	No	16
5	Local Wood	sqm	72
C	**Non-Local Construction Materials**		
1	OPC Cement (50kg)	Bags	266
2	Reinforement Bar - 10 mm (TMT)	Kgs	1581
3	Reinforement Bar - 6mm (TMT)	Kgs	11
4	Reinforement Bar - 8 mm (TMT)	Kgs	385
5	Binding Wire	Kgs	25
6	Plain Wire (3.5 mm)	Kgs	99
7	Chicken Wire Mesh (90 cm width)	m²	86
8	Angle pole for fencing(2.1mm long 8mm thick)	Nos.	48
9	M.S. Grill Gate for Fencing (0.9mx 1.5m)	No.	4
10	Machine made Fencing Wiremesh GI WIRE 10 SWG Mesh size 3"*3"	sqm	109
11	MS Black Pipe 1-1/2"	kg	292
12	2" GI pipe- Medium duty	m	868
13	PE100, Pn 16 kgf,DN 20mm	M	1481
14	PE100, Pn 12.5 kgf,DN 25mm	M	1111
15	PE100, Pn 16 kgf,DN 25mm	M	150
16	PE100, Pn 10 kgf,DN 32mm	M	770
17	PE100, Pn 12.5 kgf,DN 32mm	M	840
18	PE100, Pn 16 kgf,DN 32mm	M	220
19	PE100, Pn 10 kgf,DN 40mm	M	970
20	PE100, Pn 12.5 kgf,DN 40mm	M	350
21	PE100, Pn 6 kgf,DN 50mm	M	2310
22	PE80, Pn 4 kgf,DN 63mm	M	142
23	Standard manhole cover set - 600 Ø	Set	7
24	Barbed wire 12 SWG	Kgs	89
25	Nails	Kgs	10
26	Water Proofing	ltr	18
27	Paints	ltr	20
28	U-hook	No	208
29	Plastic Sheet	sqm	38
30	Bitumen paint	ltr	3
31	kerosene	ltr	20
32	Snowcem	Kg	17

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Darma Rural Municipality
Office of the Municipal Executive

Darma, Salyan
Karnali Province, Nepal

Tools &PPE

Project Name:Kanjalukeni Kamalpokheri Lift Drinking Water Supply Scheme (Karmagat)
Location:Darma Rural Municipality-4 Kamalpokheri, Salyan

Description	Unit	Quantity	Rate NPr.	Amount NPr.
Tool box (14"-8"-12")	Nos	1	2000.00	2000.00
Tool box key	Nos	1	135.00	135.00
Heating plate 5"	Nos	1	1235.00	1235.00
Heating plate 6"	Nos		1500.00	1500.00
Blow torch	Nos	1	1045.00	1045.00
Gebrit knife	Nos	2	100.00	200.00
Pipe wrench 18"	Nos	1	1350.00	1350.00
Pipe wrench 24"	Nos	2	1525.00	3050.00
Pipe wrench 36"	Nos	2	2500.00	5000.00
Hacksaw frame	Nos	4	235.00	940.00
Hacksaw blade	Doz	4	235.00	940.00
Slide wrench 10"	Nos	1	560.00	560.00
Shovel	Nos	6	525.00	3150.00
Pick axe	Nos	9	450.00	4050.00
Crow bar (1"-5") 9 kg	Nos	9	1000.00	9000.00
Sledge hammer (10 pound)	Nos	3	900.00	2700.00
Sledge hammer (1/2 pound)	Nos	3	335.00	1005.00
Stone cutting hammer	Nos	3	425.00	1275.00
Chiesel (1"-6")	Nos	4	350.00	1400.00
Building trovel	Nos	3	115.00	345.00
Pointing trovel	Nos	3	115.00	345.00
Finishing trovel	Nos	3	115.00	345.00
Plumbob line	Nos	2	300.00	600.00
Steel scissor	Nos	2	600.00	1200.00
Spirit level	Nos	2	250.00	500.00
Claw hammer	Nos	1	220.00	220.00
Mason square	Nos	2	250.00	500.00
Half-round file-250 mm	Nos	1	300.00	300.00
Flat file- 250mm	Nos	1	300.00	300.00
Steel bucket	Nos	1	535.00	535.00
Measuring tape - 3m	Nos	2	400.00	800.00
Measuring tape - 30m	Nos	1	970.00	970.00

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Die set 1/2" to 1" (with teeth) Automatic	Set	1	5000.00	5000.00
Die set 1-1/4" to 2" (with teeth) Automatic	Set	1	7500.00	7500.00
Spare die teeth 1/2" to 1"	Set	1	1850.00	1850.00
Teflon tape (small)	Nos	50	25.00	1250.00
Teflon cover bag	Nos	2	500.00	1000.00
Thermochrome chalk	Nos	2	265.00	530.00
Steel pan	Nos	4	355.00	1420.00
Mason string	Nos	2	70.00	140.00
Steel brush	Nos	2	130.00	260.00
Soft brush (4")	Nos	2	245.00	490.00
Oil can	Nos	1	450.00	450.00
Table vice (with table)	Nos	1	1872.00	1872.00
Kerosene	Liter	5	100.00	500.00
Die teeth oil	Liter	1	200.00	200.00
Sieving net	Nos	3	360.00	1080.00
Jarkin 20ltr	nos	3	500.00	1500.00
		Sub-Total		**74387.00**
PPE KIT				
First Aid kit box (with medicine)	Nos	1	2000.00	2000.00
Safety helmet (yellow)	Nos	9	525.00	4725.00
Safety goggles	Nos	10	300.00	3000.00
Masks	Nos	35	55.00	1925.00
Visibility jacket for Group Leader	Nos	6	550.00	3300.00
Leather gloves	Pair	20	300.00	6000.00
Safety boots	Pair	6	900.00	5400.00
		Sub-Total		**26,350.00**
		Total		**100,737.00**
			Vat 13%	**22,766.12**
Transportation Tharmare-Site				**10,000.00**
Grand Total				**133,503.12**

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Darma Rural Municipality

Office of the Municipal Executive

Karnali Province, Nepal

BREAK DOWN OF LABOUR & MATERIALS

SN	ITEMS	UNIT	QUANTITY	Labour		Local Materials														
				SKILLED (MD)	UNSKILLE (MD)	MUD SAND cum	(CQ.M.)	AGGREGA (CQ.M.)	STONE (CQ.M.)	CEMENT (mt)	HDPE m	Gi pipe & m	binding wire kg	Installation &	Paints	CGI sqm	Water ltr	Nails kg	Bamboo nos	Local cum
A	**Catchment CC 2 nos**																			
1	Eaethwork Excavation Soft Soil	cu.m	1.90		1.05															
2	Stone Soling in Foundation	cu.m	0.68		1.02				0.88											
3	PCC 1:2:4	cu.m	0.20	0.20	0.80		0.09	0.07		0.03										
4	Stone Masonary work 1:4 cement Mortar	cu.m	0.70	1.05	3.50		0.32		0.77	0.11										
5	Instalation of Pipe Fittings	Job	2.00	2.00										1.00						
	Total Quantity	2nos		3.25	6.37	0.00	0.40	0.07	1.65	0.14	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
B	**Division Box 1 nos**																			
1	Earthwork in foundation for excavation BMS	cu.m	2.43		1.94															
2	Stone Soling in Foundation	cu.m	0.34		0.51				0.41											
3	1:2:4 P.C.C. in Foundation	cu.m	0.23	0.23	0.92		0.10	0.53		0.07										
4	Wooden form work all complete for slab and floor	sq-m	0.60	1.03	1.54													1.50		0.04
5	Stone(rubble) masonry work with 1:4 cement mortar	cu.m	0.80	1.20	4.00		0.36		0.90	0.13										
6	8 mm dia reinforcement works for R.C.C.	kg	11.54	0.14	0.14								0.12							
7	RCC work in Slab, etc. in 1:1.5:3	cu.m	0.17	0.14	1.19		0.07	0.39		0.07										
8	Installation of Pipes and fittings	job	1.00	1.00										1.00						
9	Standard Manhole cover (600mm dia)	set	1.00																	
	Total Quantity			3.74	10.24	0.00	0.53	0.91	1.31	0.27	0.00	0.00	0.12	1.00	0.00	0.00	0.00	1.50	0.00	0.04
C	**RVT for 10 cum (2 Nos.)**																			
1	site clearance	Sq.m	128.00		42.24															
2	Earthwork in foundation for excavation	cu.m	25.33		20.26															
3	Refilling of trench with soil including water	cu.m	14.50		4.79															
4	Boulder soling with sand filling	cu.m	4.80		7.20		0.34		5.00											
5	Stone masonry in Cement Mortar, 1:6	cu.m	4.02	6.03	6.03		1.89		4.42	0.43										
6	1:2:4 P.C.C.	cu.m	0.80	0.80	3.20		0.36	0.75		0.26										
7	1:1.5:3 P.C.C.	cu.m	2.22	1.78	15.54		0.94	1.56		0.89							17.76			
8	6mm dia bar	kg	21.48	0.26	0.26								2.15							
9	Centering and shuttering works	Sq.m	2.32	0.39	0.58													0.58		0.12
10	Cement punning (1:1)	Sq.m	45.22	4.52	4.52					0.24										
11	12.5mm Cement plastering (1:2)	Sq.m	190.90	22.91	30.54		1.91			1.19										
12	12.5mm Cement plastering (1:3)	Sq.m	14.14	1.70	2.26		0.18			0.09										
13	20mm cement plaster (1:4)	Sq.m	9.88	1.38	1.88		0.22			0.08										
14	Bitumen paint	Sq.m	15.58	0.62	0.47															
15	Snowcem paint	Sq.m	33.88	2.20	2.20															
16	Installation of pipes and fittings	job	2.00	2.00	4.00									2.00						
17	Laying of 500 guage-plastic sheet	Sq.m	17.10	1.03	1.03															
18	Formwork for ferrocement	Sq.m	46.54	17.44	26.16													1.16	15.36	0.31
19	Reinforcement for tank, including chicken wiremesh	Sq.m	47.72	11.93	3.82								5.25							
20	Barbed wire fencing with MS angle	rm	54.00	1.80	3.60															
21	Iron grill entrance gate	nos	2.00	3.40	0.34										0.50					0.10
22	Standard Manhole cover (600mm dia)	set	4.00		0.80															
	Total Quantity			80.19	181.72	0.00	5.84	2.30	9.42	3.17	0.00	0.00	7.40	2.00	0.50	0.00	17.76	1.74	15.36	0.52

Assistant Sub-Engineer

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D	**30 CUM RCC Tank (1 Nos.)**																			
1	Site Clearance	m^3	25.00		8.25															
2	E/W excavation for foundation in BMS	m^3	24.36		19.49															
3	Refilling of trench	m3	15.75		5.20															
4	Boulder Soling-	m3	3.12		4.68				3.74											
5	Stone masonary in (1:6) cement mortar	m3	2.01	3.02	10.06		0.95		2.21	0.21										
6	P.C.C. for RCC in (1:1.5:3)	m3	11.86	9.49	83.00		5.04	10.20		4.74										
7	Reinforcement Bar	kg	1388.24	16.66	16.66								13.88							
8	Formwork	m^2	72.29	7.23	7.23															0.48
9	12.5mm thick Cement Plaster in (1:4)	m^2	95.67	11.48	15.31		1.40			0.51										
10	Cement punning	m^2	48.65	4.87	4.87					0.26										
11	laying Polythene sheet 500 guage	m2	13.69																	
12	Assembling 600 mm circular metal manhole cover for tank as per standard details	set	2.00											1.00						
13	Installation of pipes & fittings	Job	1.00																	
14	Barbed wire fencing with M.S. angle (Type A)	rm	27.00	0.90	1.80										0.25					
15	Entrance gate in barbed wire fencing (Type A)	nos	1.00	1.70	0.17															
	Total Quantity			**55.34**	**176.71**	**0.00**	**7.38**	**10.20**	**5.96**	**5.73**	**0.00**	**0.00**	**13.88**	**1.00**	**0.25**	**0.00**	**0.00**	**0.00**	**0.00**	**0.48**
E	**ANCHOR BLOCK (110 Nos.)**																			
1	E/W excavation in Foundation in BMS	m^3	8.91		7.13															
2	E/W in Back filling	m^3	5.35		1.34															
3	Stone soling work	m^3	3.34		5.01				4.01											
4	P.C.C (1:2:4) for R.C.C	m^3	11.88	11.88	47.52		5.29	16.28		3.80										
5	Steel Bar 8 mm	Kg	373.03	4.48	4.48								3.73							
6	Form Work	m^2	26.40	9.89	14.84													6.60		0.17
	Total quantity			**26.25**	**80.31**	**0.00**	**5.29**	**16.28**	**4.01**	**3.80**	**0.00**	**0.00**	**3.73**	**0.00**	**0.00**	**0.00**	**0.00**	**6.60**	**0.00**	**0.17**
F	**School Tap (1)**																			
1	Site Clearance Work	m^2	3.20		1.06															
2	Earthwork excavation in Soft soil	m^3	0.88		0.48															
3	Dry Stone Boulder Packing	m^3	0.20		0.30				0.40											
4	PCC 1:3:6	m^3	0.20	0.20	0.80		0.09	0.37		0.04										0.01
5	Wooden Formwork	Sq-m	1.31	0.49	0.73															
6	20mm thick plastering work in (1:4)	Sq-m	8.27	1.16	1.57		0.18			0.07										
7	Stonw Masonary Works 1:4	cum	0.69	1.04	3.45				0.76	0.07										
8	Pipe fitting works for Private tap	LS	3.00																	
	Total Quantity			**2.88**	**8.39**	**0.00**	**0.28**	**0.37**	**1.16**	**0.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**
G	**Pipe Jointing/Pipelines**																			
1	Pipe jointing works (GI 50mm/Medium) GI/	rm	868.00	21.70	115.44															
2	GI Fittings For Main Pipe lines	Nos																		
3	Pipe jointing works(HDPE)	rm	5,296.00	6.29	20.70															
4	**Pipe Excavation HDPE**																			
5	1.1. Transmission pipeline	Cum	444.15		244.28															
6	1.2. Distribution pipeline	cum	1,429.92		786.46															
7	**Back filling HDPE**																			
9	2.2. Transmission /Distribution pipeline	cum	1,429.92		357.48															
	Total quantity			**27.99**	**1,524.36**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
													0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Quantity																			
	Total quantity			**199.64**	**1,988.10**	**0.00**	**19.72**	**30.12**	**23.51**	**13.30**	**0.00**	**0.00**	**25.13**	**5.00**	**0.75**	**0.00**	**17.76**	**9.84**	**15.36**	**1.22**

Assistant Sub-Engineer

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plastic sheet	3.5mm	MS angle	MS	MS	MS	600mm	Block Stone	Bitumen	Cement	kerosene	Snowcem	chicken
sqm	kg	no	kg	kg	kg	nos	cum	ltr	Kg	ltr	Kg	m
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				11.54								
						1.00						
0.00	0.00	0.00	0.00	11.54	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
			10.74									

Assistant Sub-Engineer

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No. 30848 Civil 'A'

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								2.96				
											16.94	
23.94												
	99.26				123.59							86.37
							0.02					
						4.00						
23.94	**99.26**	**0.00**	**10.74**	**0.00**	**123.59**	**4.00**	**0.02**	**2.96**	**0.00**	**0.00**	**16.94**	**86.37**
					1457.66							
13.69												
						2.00						
							0.01					
13.69	**0.00**	**0.00**	**0.00**	**0.00**	**1,457.66**	**2.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Assistant Sub-Engineer

Er. Anju Chand

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				373.03								
0.00	0.00	0.00	0.00	373.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
										19.60		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.60	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.63	99.26	0.00	10.74	384.57	1,581.25	7.00	0.03	2.96	0.00	19.60	16.94	86.37

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Darma Rural Municipality
Office of the Municipal Executive

Darma, Salyan
Karnali Province, Nepal

Spring Source CC /Stone masonry (2 Nos)

दार्मा गाउँपालिका गाउँ कार्यपालिकाको कार्यालय सल्यान २०७३

Project Name:Kanjalukeni Kamalpokheri Lift Dws (Karmagat)
Location:Darma Rural Municipality-4 Kamalpokheri , Salyan

S.No.	Description	No.	Length	Breadth	Height	Quantity	Total quantity	Unit	Rate	Amount	Remarks
										20,989.40	
1	Earthwork excavation in foundation, pipeline etc. all complete in soft soil						0.950	cum	465.00	441.75	
		1.0	1.000	1.000	0.950	0.950					
2	Stone soling in foundation						0.340	cum	2,530.00	860.20	
		1.0	1.50	1.50	0.15	0.34					
3	Plain cement concrete work in wall,foundation etc. in 1:2:4						0.100	cum	13,230.00	1,323.00	
		1.0	1.00	1.00	0.10	0.10					
4	Stone(rubble) masonry work with 1:4 cement mortar						0.700	cum	10,630.00	7,441.00	
	Long wall	2.0	1.00	0.35	0.50	0.35					
	Short wall	2.0	1.00	0.35	0.50	0.35					
5	Installation of Pipes and fittings										
		1.0				1.00	1.000	nos	428.75	428.75	
							Total			10,494.70	
							Grand Total foro 2 CC			20,989.40	

Prepare By: Assistant Sub-Engineer

Verify By: Er. Arju Chand
NEC.No. 30648 Civil 'A'

Approved By: रेशम ओली
प्रमुख प्रशासकीय अधिकृत

Darma Rural Municipality
Office of the Municipal Executive

Darma, Salyan

Karnali Province, Nepal

Reservoir Tank/30m^{3-} Reinforced Cement Concrete

Project Name:Kanjalukeni Kamalpokheri Lift Drinking Water Supply Scheme (Karmagat)

#REF!

Location:Darma Rural Municipality-4 Kamalpokheri, Salyan

572,263.71

S.No.	Description	No.	Radius	Length	Breadth	Height	Quantity	Total Quantity	Unit	Rate	Amount	Remarks
1	Site clearance							25.00	m^2	23.50	587.50	
		1.00		5.00	5.00		25.00					
2	Earthwork In excavation BMS Soil							24.36	m^3	572.00	13,933.92	
	Tank	1.00		3.70	3.70	1.50	20.54					
	Valve Box	1.00		1.70	1.50	1.50	3.83					
3	Refilling of trench							15.75	m^3	178.00	2,803.50	
		1.00		14.00	0.45	2.50	15.75					
4	Boulder Soling with							3.12	m^3	2,530.00	7,894.87	
	Tank	1.00		3.70	3.70	0.20	2.74					
	Valve Box	1.00		1.70	1.50	0.15	0.38					
5	Stone masonary in (1:6) cement mortar							2.01	m^3	9,806.00	19,734.58	
	Valve Box	1.00		5.00	0.35	1.15	2.01					
6	P.C.C. for RCC in (1:1.5:3)							11.86	m^3	16,440.00	194,925.08	
	RCC Long Walls	2.00		3.80	2.60	0.15	2.96					
	RCC Short Walls	2.00		3.50	2.60	0.15	2.73					
	RCC Slabs(Top)	1.00		3.50	3.50	0.15	1.84					
	RCC Slabs(Bottom)	1.00		4.80	4.80	0.20	4.61					
	Deductions(Opening)	1.00	0.30			pr^2	-0.28					
7	PCC(1:2:4) Sloping							0.68	m^3	13,230.00	9,055.94	
		1.00		3.70	3.70	0.05	0.68					
8	Reinforcement Bar							1,388.24	Kg	140.00	194,354.16	
	Base of tank main bar-10mm Dia	65.33		4.90	0.15	0.62	197.61					
	Binder-10mm Dia	64.00		4.90	0.15	0.62	193.58					
	Four side of wall											
	main bars-10mm dia	192.00		3.60	0.15	0.62	426.67					
	binder-10mm dia	144.00		4.50	0.15	0.62	400.00					
	slab main bar-8mm Dia	48.00		4.50	0.15	0.40	85.33					
	slab binder-8mm Dia	48.00		4.50	0.15	0.40	85.33					

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	Deduction opening	1.00	0.30			pr²	-0.28				
9	Formwork							72.29	m^2	569.00	41,132.46
	floor of tank	1.00		4.80	3.80	0.20	0.96				
	Top Slab	1.00		4.80	3.80	0.15	0.72				
	Top Slab Down Layer	1.00		3.50	3.50	0.20	0.70				
	Tank Walls(Inner)	1.00		14.00		2.40	33.60				
	Tank Walls(Outer)	1.00		15.20		2.40	36.48				
	Valve Box	1.00		6.40		0.15	0.96				
	Deduction opening	4.00	0.30			pr²	-1.13				
10	12.5mm thick Cement Plaster in (1:4)							95.67	m^2	372.00	35,589.24
	Tank Wall outer part	1.00		15.20		2.60	39.52				
	Tank Wall inner part	1.00		14.00		2.60	36.40				
	Celling of tank	1.00		3.50		3.50	12.25				
	Valve Box inner part	1.00		5.00		1.50	7.50				
11	Cement punning							48.65	m^2	260.00	12,649.00
	Inner part of tank	1.00		14.00		2.60	36.40				
	Base of tank	1.00		3.50	3.50		12.25				
12	laying Polythene sheet 500 guage							13.69	m^2	264.90	3,626.48
		1.00		3.70	3.70		13.69				
13	Assembling 600 mm circular metal manhole cover for tank as per							2.00	No.	2,957.50	5,915.00
		2.00					2.00				
14	Installation of pipes & fittings							1.00	L.S.	3,430.00	3,430.00
		1.00					1.00				
	Barbed wire fencing with M.S. angle (Type A)							27.00	M	616.00	16,632.00
15	Entrance gate in barbed wire fencing (Type A)	1.00						1.00	L.S	10,000.00	10,000.00
										Total	572,263.71

Prepare By: Assistant Sub-Engineer

Verify By: Er. Arju Chand
NEC.No. 30648 Civil 'A'

Approved By: अशोक बोहरा
प्रमुख प्रशासकीय अधिकृत

Darma Rural Municipality

Office of the Municipal Executive

Darma, Salyan

Karnali Province, Nepal

Division Box/Stone masonry (SV)

Project Name:Kanjalukeni Kamalpokheri Lift Drinking Water Supply Scheme (Karmagat)
Location:Darma Rural Municipality-4 Kamalpokheri, Salyan

21,935.22

S.No.	Description	No.	Length	Breadth	Height	Quantity	Total quantity	Unit	Rate	Amount	Remarks
1	Earthwork in Excavation in BMS Soil						2.430	cum	572.00	1,389.96	
		1.0	1.600	1.600	0.950	2.430					
2	Stone soling in foundation						0.340	cum	2,530.00	860.20	
		1.0	1.50	1.50	0.15	0.34					
3	Plain cement concrete work ,foundation etc. in 1:2:4						0.230	cum	13,230.00	3,042.90	
		1.0	1.50	1.50	0.10	0.23					
4	Wooden form work all complete for slab and floor						0.600	sq.m	569.00	341.40	
		4.0	1.50		0.10	0.60					
5	Stone(rubble) masonry work with 1:4 cement mortar						0.800	cum	10,630.00	8,504.00	
	Long wall	2.0	1.30	0.35	0.60	0.55					
	Short wall	2.0	0.60	0.35	0.60	0.25					
6	8 mm dia reinforcement works for R.C.C.						11.541	Kg	140.00	1,615.71	40/10 DoLIDAR
	8 mm @ 100 mm c/c	13.0	1.30	0.40	kg/m	6.76					
	8 mm @ 100 mm c/c	13.0	1.30	0.40	kg/m	6.76					
		-7.0	0.28		kg/m	-1.98					
7	RCC work in Slab, etc. in 1:1.5:3						0.170	cum	16,440.00	2,794.80	
		1	1.3	1.3	0.1	0.17					
8	Installation of Pipes and fittings										
		1.0				1.00	1.000	nos	428.75	428.75	
9	Assembling 600mm dia ciccular manhole cover frame	1.0				1.00	1.000	nos	2,957.50	2,957.50	
							Grand Total			21,935.22	

Prepare By: Assistant Sub-Engineer

Verify By: Er. Arju Chand NEC.No. 30648 Civil 'A'

Approved By: प्रमुख प्रशासकीय अधिकृत

Darma Rural Municipality

Office of the Municipal Executive

Darma, Salyan

Karnali Province, Nepal

DETAILED ESTIMATE AND ABSTRACT OF COST

FERROCEMENT STORAGE TANK(10.0 Cu.m.)

:t Name:Kanjalukeni Kamalpokheri Lift Drinking Water Supply Scheme (Karmagat)
Location:Darma Rural Municipality-4 Kamalpokheri, Salyan

S.No.	Description	No.	Radius	Length	Breadth	Height	Quantity	Unit	Rate	Amount
1	Site Clearance	1		8.00	8.00		**64.00**	m2	23.50	1504.00
2	Earthwork in excavation for foundation in									
	boulder mixed soil for:									
	valve chamber	1		1.70	1.50	1.30	3.32			
	storage tank	1	2.30			1.00	16.61			
	(Q=pai x r2 x h, r=d/2+0.05+0.75, d=3.5m)									
	Wash out pipe trench	1		10.00	0.60	0.90	5.40			
						Total-	**25.33**	m3	572.00	14488.76
3	Refilling of trench with soil including water									
	sprinkling and ramming									
	(Q=pai x(R 2-r2) x h, r=d/2+.05+.75, r=d/2+0.05					0.80	**7.25**	m3	178.00	1290.50
4	Boulder soling with sand for									
	valve chamber	1		1.70	1.50	0.15	0.38			
	storage tank	1	1.85			0.20	2.15			
	(Q=pai x r 2 x h, r=d/2+.05+.3)									
	deduction for valve chamber portion	1		1.70	0.40	0.20	(0.14)			
						Total-	**2.40**	m3	2,530.00	6072.00
5	Stone masonry works									
	valve chamber	1		5.00	0.35	1.15	**2.01**	m3	9,806.00	19710.06
6	Plain cement concrete(1:2:4)in RCC work for									
	Cover slab of valve chamber	1		1.70	1.50	0.10	0.26			
	Deduction for manhole opening	1	0.30			0.10	(0.03)			
	Q=pai x r 2 x h, r=.60/2=.30									
	Manhole cover	2	0.30			0.05	0.03			
	Q=pai x r 2 x h, r=.60/2=.30									
	pipe embeddment block	2		1.00	0.35	0.20	0.14			
						Total-	**0.40**	m3	13,230.00	5292.00
7	Plain Cement Concrete (1:1:5:3) for tank base	1	1.65			0.13	**1.11**	m3	16,440.00	18248.40
	Q=pai x r 2 x h, r=d/2+.05+.1									
8	Steel work in RCC for cover slab of valve									
	chamber 6mm dia bars @ 10cm c/c both ways									
	Longer span	18*1.5=		27.00						
	Shorter span	16*1.7=		27.20						
	Deduction for manhole opening	12*.45=		(5.40)						
				48.8m. @ 0.22kg./m.			**10.74**	kg	140.00	1503.60
9	Centering & shuttering works for RCC for									
	Cover slab									
	Bottom	1		1.00	0.80		0.80			
	Sides	1		6.40		0.10	0.64			
	Deduction for manhole opening	1	0.30				(0.28)			
	Q=pai x r 2, r=0.60/2=0.30					Total-	**1.16**	m2	569.00	660.04
10	3mm thick cement punning with (1:1) cement									
	sand mortar for									
	Floor portion storage tank	1	1.50				7.07			
	Q=pai x r 2, r=d/2									
	Wall portion of storage tank	1	1.50			1.65	15.54			
	Q=2 x pai x r x h, r=d/2					Total-	**22.61**	m2	260.00	5878.60

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11	Cement plaster 12.5mm thick with (1:2) cement									
	sand mortar(4 layers) for ferrocement for									
	Wall portion of storage tank	4	1.53			1.65	63.21			
	Q=4 x 2 x pai x h, r=d/2+.05/2									
	Roof portion (Q= 4 x 2 x pai x R xh)	4	2.31			0.58	33.37			
	R=(D 2 +4 h 2)/8h, D=d +.05, h=d/5-.05/2									
	Deduction for manhole opening	4	0.30				(1.13)			
	(Q=4 x pai x r 2), r= .60/2=.30					Total-	**95.45**	m2	381.00	36366.45
12	12.5mm thick cement plaster with(1:3)cement									
	sand mortar for									
	Floor portion of storage tank	1	1.50				**7.07**	m2	381.00	2693.67
	Q=pai x r 2, r=d/2									
	Total of this page: Rs.									113,708.08

DETAILED ESTIMATE AND ABSTRACT OF COST

FERROCEMENT STORAGE TANK(10.0 Cu.m.)

S.No.	Description	No.	Radius	Length	Breadth	Height	Quantity	Unit	Rate	Amount
13	20mm thick cement plaster with(1:4)cement									
	sand mortar for									
	Floor portion of valve chamber	1		1.00	0.80		0.80			
	Wall portion of valve chamber	1		3.60		1.15	4.14			
						Total-	**4.94**	m2	372.00	1837.68
14	Bitumen paint on the buried surface of tank	1	1.55			0.80	**7.79**	m2	77.00	599.83
	Q= 2 x pai x r x h, r=d/2+.05									
15	Snowcem paint on exposed surface of tank									
	Wall portion	1	1.55			0.85	8.27			
	Q= 2 x pai x r x h, r=d/2+.05									
	Roof portion	1	2.30			0.60	8.67			
	Q=2*pai xR*h, R=(D/2 +4 h2)/ 8h, D=d+0.10, h=d/5					Total-	**16.94**	m2	85.00	1439.90
16	Installation of pipes & fittings						1.00	L.S	3,000.00	3000.00
17	Polythene sheer 500 gauge for tank base	1	1.65				8.55	m2	125.00	1068.75
	Q=pai x r 2, r=d/2+0.05+0.10									
18	Formwork for ferrocement									
	Wall portion	1	1.50			1.65	15.54			
	Q=2 x pai x r x h, r=d/2									
	Roof portion	1	2.32			0.55	8.01			
	Q= 2 x pai xR x h, R= d 2 + 4h2/8h, h= d/5-0.05									
	Deduction for manhole (Q=pai x r 2)	1	0.30				(0.28)			
						Total-	**23.27**	m2	990.00	23037.30
19	Reinforcement, including chicken wire mesh,									
	steel rod,GI Wire etc.									
	Wall portion of storage tank	1	1.53			1.65	15.80			
	Q = 2 x pai x r h, r= d/2+.05/2									
	Roof portion (Q=2 x pai x R x h)	1	2.31			0.58	8.34			
	R=(D 2 + 4h2)/8h, D= d+0.05, h=d/5-0.05/2									
	Deduction for manhole opening	1	0.30				(0.28)			
	(Q= pai x r 2), r= 0.60/2=0.30					Total-	**23.86**	m2	1,300.00	31018.00
20	Barbed wire fencing with M.S. angle (Type A)						**27.00**	m	616.00	16632.00
21	Entrance gate in barbed wire fencing (Type A)	1					1.00	l.s	10,000.00	10000.00
22	600mm circular manhole cover for ferrocement tank as per standard details	2					2.00	set	2,957.50	5915.00
	Total of this page: Rs									94548.46
	Total of page 1 of 2 Rs.									113708.08
	Grand-Total : Rs									208256.54

Prepare By: Verify By: Approved By:

Assistant Sub-Engineer

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