

Detail Estimate

Name of Project : Irriwang Danda solar lifting irrigation Project

Location : Paribartan 6, Irrigawang Rolpa

Year : 079/080

Date : 11 Feb. 2023

SN	Description	No.	Length	Breadth	Height	Quantity	Unit	Remarks
A. Spring canaling								
1	Site Clearance for intake & RVT (8.40m3)	1	30.00	0.50	0.40	6.00	m ³	
2	Earth work excav. ⁿ in foundation							
2.1	In the catchment	1	7.00	0.50	0.50	1.75		
2.2	In the filting RVT 1st lear	1	3.50	3.50	0.50	6.13		
2.3	In the filting RVT 2nd lear	1	3.70	3.70	0.50	6.85		
						20.73	m ³	
3	Stone Soling work for VC							
3.1	In the RVT foundation	1	3.30	3.30	0.15	1.63		
3.2	In the catchment frontside	1	7.00	3.00	0.75	15.75		
						17.38	m ³	
4	PCC (1:2:4)							
4.1	In the canal base	1	7.00	0.45	0.08	0.24		
4.2	In the lifting RVT	1	3.20	3.20	0.08	0.77		
						1.01	m ³	
5	RCC work in RVT slab in 1:2:4	1	3.20	3.20	0.08	0.77		
						0.77	m ³	
	Deduction mainhole cover	1	0.60	0.60	0.08	0.03		
	Net RCC work					0.74	M ³	
6	Stone masonry (1:4) c/m							
6.1	In the catchment l wall	1	7.00	0.35	0.75	1.84		
	In the RVT long wall	2	3.20	0.35	1.50	3.36		
6.2	In the RVT Short wall	2	2.50	0.35	1.50	2.63		
						7.83	m ³	
7	Cement Plaster in (1:4)							
7.1	In the inside catchment wall	1	7.00		0.75	5.25		
7.2	In the outside catchment wall	1	7.00		0.75	5.25		
7.3	In the outside catchment wall top	1	7.00	0.35		2.45		
7.4	In the inside RVT wall	4	2.50		1.50	15.00		
7.5	In the inside floor	1	2.50	2.50		6.25		
7.6	In the outside wall	4	3.20		1.50	19.20		
7.7	In the top of RVT	1	3.20	3.20		10.24		
						63.64	m ²	
8	Cement punning in (1:1)							
8.1	In the inside catchment wall	1	7.00		0.75	5.25		
8.2	In the inside RVT wall	4	2.50		1.50	15.00		
8.2	In the inside floor	1	2.50	2.50		6.25		
						11.50	m ²	
9	Re bar 10mm for slab work							
9.1	10 mm dia MS rod	1		58.09		58.09		
						58.09	Kgs	
10	Form work for shuttering							
10.1	In the outside edge of wall	4	3.20	0.10		1.28		
10.2	In the RVT Slab	1	2.50	2.50		6.25		
						7.53	m ²	
11	60cm dia man hole cover round					1.00	Sets	
12	Binding Wire 1% of Tor Steel					2.00	Kgs	
13	Nails 4"					1.00	Kgs	
14	Pipe line trench excavation & filling work	1	282.00	0.30	0.75	63.45		
						63.45	m ³	
B. lifting Tank construction (30m3)								
1	Site Clearance	1	7.00	7.00	0.25	12.25		

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							12.25	m ³	
2	Earth work excav.ⁿ in foundation								
2.1	In the RVT foundation	1	6.90	5.90	0.50		20.36		
	In the DC	5	1.30	1.30	0.50		4.23		
2.2	In the HDPE casing foundation	1	2.00	2.00	3.96		15.85		
							40.44	m ³	
3	Stone Soling work								
3.1	In the DC foundation	5	1.30	1.30	0.15		1.27		
3.2	In the RVT foundation	1	6.90	5.90	0.15		6.11		
							1.27	m ³	
4	PCC work in 1:2:4	1	6.90	5.90	0.08		3.05		
							3.05	m ³	
5	RCC work of slab in 1:2:4								
5.1	For RVT slab	0	6.90	5.90	0.08		0		
5.2	In the DC slab	5	1.30	1.30	0.08		0.63		
							0.63	m ³	
	Deduction of mainhole cover	6	3.14	0.09	0.08		0.13		
	Net RCC work						0.50	m ³	
6	Stone masonry work in 1:4 c/m								
6.1	1stp long wall	2	6.90	0.45	0.50		3.11		
6.2	1stp Short wall	2	5.00	0.45	0.50		2.25		
6.3	2stp long wall	2	6.70	0.35	0.70		3.28		
6.4	2stp Short wall	2	5.00	0.35	0.70		2.45		
6.5	In the DC long wall	10	1.30	0.35	0.60		2.73		
6.6	In the DC short wall	10	0.60	0.35	0.60		1.26		
							15.08	m ³	
7	Cement Plaster in work in 1:4								
7.1	Inside long wall	2	6.00		1.20		14.40		
7.2	Short long wall	2	5.00		1.20				
7.3	Inside floor	1	6.00	5.00			30.00		
7.4	In the outside wall 1st step	2	6.90		0.50		3.45		
7.5	In the outside wall 1st step	2	5.90		0.50		2.95		
7.6	In the outside wall 2nd step	2	6.35		0.70		8.89		
7.7	In the outside wall 2nd step	2	5.35		0.70		7.49		
7.8	In the outside top of slab	1	6.70	5.70			38.19		
							105.37	m ²	
8	Cement punning in 1:1								
8.1	In the inner long wall of RVT	2	6.00		1.20		14.40		
8.2	In the innerShort wall of RVT	2	5.00		1.20		12.00		
8.3	For RVT inside floor	1	6.00	5.00			30.00		
							44.40	m ²	
9	Re. bar 10mm dia for RVT								
9.1	For slab cover Longitudinaly	0	6.70	@	0.62		0.00		
9.2	For Transversely	0	5.70	@	0.62		0.00		
9.3	For slab cover Longitudinaly	9	1.30	@	0.62		6.99		
9.4	For Transversely	9	1.30	@	0.62		6.99		
							13.98	Kgs	
10	Form work for shuttering								
10.1	For out side	2	24.80	0.10			4.96		
10.2	Slab inside	1	6.00	5.00			30.00		
							34.96	m ²	
11	60cm dia man hole cover round						0.00	Sets	
12	Nails 4"						1.50	Kgs	
C	Barabed wire finishing work for puping tank								
1	Earth work excav.n in foundation								
1.1	For iron gate pole	2	0.45	0.45	0.50		0.20		

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1.2	For iron angle pole	16	0.30	0.30	0.45	0.65		
						0.85	m3	
2	Stone solling work in Iron gate pole	2	0.45	0.45	0.15	0.06		
						0.06	m3	
3	PCC work in 1:2:4							
3.1	In the iron gate pole	2	0.45	0.45	0.08	0.03		
3.2	In the iron angle pole	16	0.30	0.30	0.45	0.65		
						0.68	m3	
4	Stone masonry work in 1:4 c/m							
4.1	In the iron gate pole	2	0.40	0.40	1.85	0.59		
						0.59	m3	
5	Cement Plaster in work in 1:4							
5.1	In the gete wall	8	0.40		1.50	4.80		
5.2	In the gete wall top	2	0.40	0.40		0.32		
						5.12	m2	
6	Barabed wire	6	24.00	@	0.22	31.95		
7	lorn angle pole	16			7.50	120.00	Kgs	

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SUMMARY SHEET

Name of Project : Irriwang Danda solar lifting irrigation Project

Location : Paribartan 6, Irrigawang Rolpa

Year : 079/080

SN	Description	Unit	Qty	Remarks
1	Materials			
A	Nonlocal materials			
1	Cement 53 gred opc	Bags	141.00	
3	10 mm dia ms rod	kg	72.07	
4	22gauge binding wire	kg	5.00	
5	2 1/2" nails	kg	2.50	
6	60 cm dia main holcover	Set	1.00	LS
7	Barabed wire finishing	Kgs	31.95	
8	Iron angle pole	Kgs	120.00	40 Nos LS
9	Iron get 3'*5' pipe mould	Nos	1.00	LS
B	Pipe			
	Main line			
1	63mm dia PN - 16 HDPE pipe NS - 40	m	282.00	
2	40mm dia PN - 12.50 HDPE Pipe NS - 40	m	1036.00	
3	25 mm dia PN - 16 HDPE Pipe NS -40	m	1000.00	
			2318.00	
C	RVT			
1	2" dia GI nipple 45cm long	Pc	6	
2	2 1/2" GI Nipple 1.90m long	Pc	1	
3	2 1/2" GI Nipple 4" long	Pc	3	
4	2 1/2" GI Elbow	Pc	1	
5	2 1/2" GM gatevalve	Pc	1	
6	2 1/2" * 2" Reducer socket	Pc	1	
7	2" dia Flange set	Pc	6	
8	2" dia GI nipple 3" long	Pc	2	
9	2" dia G I Cap	Pc	2	
10	2" GM gatevalve	Pc	1	
D	DC fittings			
1	1 1/4 * 1/2 " dia GI unequal tee	Pc	10	
2	1 1/4 " dia GM Getvalve	Pc	5	
3	1 1/4 " dia Brass unions	Pc	10	
4	1 1/4 " dia GI nipple 3" long	Pc	16	
5	1/2 " dia Nipple 3" long	Pc	20	
6	1/2 " dia GM gatevalve	Pc	10	
7	1/2 " Brass unions	Pc	10	
	Sub total			
	13% VAT			
	Total amaunt with VAT (A+B+C+D)			
E	Solar items for pumping (5HP)			
E.A	Supply of Vat able Materials (without VAT)			

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1	Submersible water pump (Model: TPSLPW 660R/ 22 Three phase Or Equivalent - 7 HP	Nos.	1	2 years
2	INVT (Controller) 7.50 KW (Model GD100-018G-4-PV Or Equivalent) 5 KW	Nos.	1	2 years
3	3 Core Submersible PVC insulated Power Cable 10 mm2,	M	10	
4	2 Core Submersible PVC insulated Power Cable 10 mm2,	M	115	
5	Solar Panel Mounting Structure Complete set (MS angle frame, squire & Circular pipe, J hook, U hook, Pipe Clamp Cable tie etc)	Set	30	
6	Installing materias Hardware items for fitting pump to delivery pipeline including Non return valve, elbow, sockets, Gat valve, Nipple Flange Set & Tochan Wire also 10 Sqmm-20	Job	1	
7	Grounding Earthing System For Panel & Pump, Inverter	Set	1	
8	DC Cable For Serises Panel	M	25	
9	Water Flat Switch (Sensor) Dry Run Protection	Nos.	1	
10	Water Flat Switch (Sensor) wire 1.5mm	M	15	
11	Mounting Structure with PCC base Foundation for Supporting of Solar panel	Job	1	
12	Miscellaneous (Insulation Tap ,Submersible Tap, Yam seal, Glue, Water Tape etc)	LS	1	
13	Installation of Earthings set, Pumps and Solar Panels with all hardware component as per necessary and Testing & Commissioning and Field verification	Job	1	
14	HDEP Cashing Pipe-PN 6, 250mm-13 Feet With Fitting Items and Earthwork excavation in back filling in Foundation, Complate works As per Direction, Inculding	Nos	1	
Sub Total Amount Without VAT				
			VAT @ 13%	
			Total Amount With VAT(EA)	
E.B	Supply of Non-Vat able Materials & Installation			
1	Solar PV module RETS Certified (25 years Warranty) - 325 WP 24 Pcs	KW	7.80	25 Years
Total Amount Without VAT (EB)				
Total Amount (EA+EB)				
2	Local materils			
2.1	Stone	M ³	46.43	
2.2	Sand	M ³	17.07	
2.3	Aggregate	M ³	5.32	
2.4	Wood for form work	M ³	2.12	
Sub Total				
3	Labours			
3.1	Skill	Md.	95.40	
3.2	Unskill	Md.	477.31	
Sub Total				
4	2" dia GI pipe joining & wilding work	Nos	61	
5	Transportation			
5.1	Nonlocal materials Ghorahi to site	Trip	2.00	
5.2	Solar items for pumping Ghorahi to site	Trip	1.00	
Sub total				
6	Information board	Job	1.00	
Total amount of (2+3+4+5+6)				
All total amount of (1+2+3+4+5+6)				
Miscellaneous 2.5%				

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