

Detail Estimate

Name of Project : Saipu solar lifting irrigation Project
 Location : Thawang - 3, Saipu Rolpa
 Year : 079/080

Date : 15 Feb. 2023

SN	Description	No.	Length	Breadth	Height	Quantity	Unit	Remarks
A. Spring canaling								
1	Site Clearance for intake	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 filtering Tank	1	1.70	1.70	0.50	1.45		
						9.20	m³	
3	Stone Soling work for VC							
3.1	In the RVT foundation	1	1.70	1.70	0.15	0.43		
3.2	In the catchment frontside	1	7.00	3.00	0.75	15.75		
						16.18	m³	
4	PCC (1:2:4)							
4.1	In the canal base	1	7.00	0.30	0.08	0.16		
4.2	In the lifting RVT	1	1.70	1.70	0.08	0.22		
						0.38	m³	
5	RCC work in RVT slab in 1:2:4	1	1.70	1.70	0.08	0.22		
						0.22	m³	
	Deduction mainhole cover	1	0.60	0.60	0.08	0.03		
	Net RCC work					0.19	M³	
6	Stone masonry (1:4) c/m							
6.1	In the catchment I wall	1	7.00	0.35	0.75	1.84		
6.2	In the RVT long wall	2	1.70	0.35	1.20	1.43		
6.3	In the RVT Short wall	2	1.00	0.35	1.20	0.84		
						4.11	m³	
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	1.00		1.20	4.80		
7.5	In the inside floor	1	1.00	1.00		1.00		
7.6	In the outside wall	4	1.70		1.20	8.16		
7.7	In the top of RVT	1	1.70	1.70		2.89		
						29.80	m²	
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	1.00		1.20	4.80		
8.2	In the inside floor	1	1.00	1.00		1.00		
						6.25	m²	
9	Re bar 10mm for slab work							
9.1	10 mm dia MS rod	1		14.92		14.92		
						14.92	Kgs	
10	Form work for shuttering							
10.1	In the outside edge of wall	4	1.70	0.10		0.68		
10.2	In the RVT Slab	1	1.00	1.00		1.00		
						1.68	m²	
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	275.00	0.25	0.75	51.56		
						51.56	m³	
B. IRVT construction (30m3)								
1	Site Clearance	1	7.00	7.00	0.25	12.25		

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							12.25	m³	
2	Earth work excav.ⁿ in foundation								
2.1	In the RVT foundation	1	6.90	5.90	0.50		20.36		
2.2	In the DC	1	1.70	1.70	0.50		1.45		
2.3	In the HDPE casing foundation	1	2.00	2.00	3.96		15.85		
							37.66	m³	
3	Stone Soling work								
3.1	In the DC foundation	1	1.70	1.70	0.15		0.43		
3.2	In the RVT foundation	1	6.90	5.90	0.15		6.11		
							0.43	m³	
4	PCC work in 1:2:4	1	6.90	5.90	0.08		3.05		
							3.05	m³	
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	1	1.70	1.70	0.08		0.22		
							0.22	m³	
	Deduction of mainhole cover	1	3.14	0.09	0.08		0.02		
	Net RCC work						0.20	m³	
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	2	1.70	0.35	1.20		1.43		
6.6	In the DC short wall	2	1.00	0.35	1.20		0.84		
							13.36	m³	
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		12.00		
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		
7.9	In the DC inside wall	4	1.00		1.20		4.80		
7.10	In the DC inside floor	1	1.00	1.00			1.00		
7.11	In the DC outside wall	4	1.70		1.20		8.16		
7.12	In the DC outside slab	1	1.70	1.70			2.89		
							134.22	m²	
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		
8.4	In the DC inside wall	4	1.00		1.20		4.80		
8.5	In the DC inside floor	1	1.00	1.00			1.00		
							62.20	m²	
9	Re. bar 10mm dia for RVT								
9.1	For slab cover Longitudinaly	11	1.70	@	0.62		11.95		
9.2	For Transversely	11	1.70	@	0.62		11.95		
							23.90	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	m²	
11	60cm dia man hole cover round						1.00	Sets	
12	Nails 4"						1.50	Kgs	

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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		
1.2	In the sncorage bluck for GI Pipe	24	0.30	0.30	0.30	0.64		
1.3	For iron angle pole	12	0.30	0.30	0.45	0.49		
						1.33	m3	
2	Stone solling work in Iron gate pole							
2.1	Stone solling work in Iron gate pole	2	0.45	0.45	0.15	0.06		
2.2	In the ancorage bluck	24	0.30	0.30	0.15	0.32		
						0.38	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 ancorage bluck	24	0.25	0.25	1.25	1.86		
3.3	In the iron angle pole	12	0.30	0.30	0.45	0.49		
						2.38	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	18.00	@	0.22	23.96		
7	lorn angle pole	12			7.50	90.00	Kgs	

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SUMMARY SHEET

Name of Project : Saipu solar lifting irrigation Project

Location : Thawang - 3, Saipu Rolpa

Year : 079/080

SN	Description	Unit	Qty	Remarks
1	Materials			
A	Nonlocal materials			
1	Cement 53 gred opc	Bags	124.00	
2	10 mm dia ms rod	kg	38.82	
3	22gauge binding wire	kg	5.00	
4	2 1/2" nails	kg	2.50	
5	60 cm dia main holcover	Set	2.00	LS
6	Barabed wire finishing	Kgs	23.96	
7	Iron angle pole	Kgs	90.00	12 Nos LS
8	Iron get 3'*5' pipe mould	Nos	1.00	LS
B	Pipe			
	Main line			
1	63mm dia PN - 16 HDPE pipe NS - 40	m	137.50	
2	50mm dia GI pipe medium	m	137.50	
3	40mm dia PN - 12.50 HDPE Pipe NS - 40	m	500.00	
4	25 mm dia PN - 16 HDPE Pipe NS - 40	m	500.00	
			1275.00	
C	RVT			
1	2" dia GI nipple 45cm long	Pc	9	
2	2 1/2" GI Nipple 1.15m 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	5	
8	2" dia GI nipple 3" long	Pc	2	
9	2" dia G I Cap	Pc	2	
10	2" GM gatevalve	Pc	3	
D	DC fittings			
1	1 1/4 " dia GM Gatevalve	Pc	2	
2	1 1/4 " dia Brass unions	Pc	2	
3	1 1/4 " dia GI nipple 0.55 long	Pc	5	
4	3/4" dia GI Nipple 0.55	Pc	10	
5	3/4" dia Brass unions	Pc	10	
6	3/4" dia GI Nipple 3'	Pc	10	
7	3/4" dia GM gatevalve	Pc	10	
8	1 1/4 " dia GI nipple 3" long	Pc	4	
	Sub total			
	13% VAT			
	Total amount with VAT (A+B+C+D)			

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E	Solar items for pumping (10HP)			
E.A	Supply of Vat able Materials (without VAT)			
1	Submersible water pump (Model: TPSPW 660R/ 22 Three phase Or Equivalent - 10	Nos.	1	2 years
2	INVT (Controller) 7.50 KW (Model GD100-018G-4-PV Or Equivalent) 7.5 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	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 33 Pcs	KW	10.73	25 Years
	Total Amount Without VAT (EB)			
	Total Amount (EA+EB)			
2	Local materils			
2.1	Stone	M ³	38.56	
2.2	Sand	M ³	14.61	
2.3	Aggregate	M ³	5.52	
2.4	Wood for form work	M ³	1.83	
	Sub Total			
3	Labours			
3.1	Skill	Md.	84.86	
3.2	Unskill	Md.	733.70	
	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)			
	Miscellanous 2.5%			
	In %			

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