## SOS CHILDREN'S VILLAGES NEPAL

SOS CHILDREN'S VILLAGE GANDAKI

## PROJECT: RENOVATION WORKS AT SOS CHILDREN'S VILLAGE GANDAKI

	SUMMARY OF COSTS- ELECTRIC AND SOLAR WORKS							
S. N.	PARTICULARS	AMOUNT (NPR) INCLUSIVE OF VAT	REMARKS					
A.0	PRELIMINARY WORKS							
B.0	ELECTRICAL AND ALLIED INSTALLATIONS							
B.1	REPAIR/MAINTENANCE OF ELECTRIC INFRASTRUCTURE WORKS		NPR					
B.2	RENOVATION OF SOLAR ON-GRID SYSTEM 28.05KWp		NPR					
B.3	REPAIR/MAINTENANCE OF EXISTING NETWORK CONNECTION AND		NPR					
	TELECOMMUNICATION SYSTEM							
B.4	TOTAL OF B.1+ B.2+ B.3		NPR					
C.0	TOTAL OF A.0+ B.4		NPR					

## Project: RENOVATION WORKS AT SOS CHILDREN'S VILLAGE GANDAKI

Location: SOS Children's Village Gandaki, Rambazar-15

	BILL OF QUAN	1				-	
S. N.	PARTICULARS	QUANTITY	UNIT	RATE IN FIGURE (NPR)	RATE IN WORDS (NPR)	AMOUNT (NPR)	REMARKS
1.0	PROVISIONAL SUM						
	INSURANCE						
	Insurance of works covering all risk, materials, workmen's and third parties	1.00	P.S.				
	liabilities covering for entire period of construction plus defects labiality period						
	as per GCC clause No. 19. (Payment Shall be made in Actual Basis.)						
2.0	MOBILIZATION AND DEMOBILIZATION						
	Generally in construction projects, this implies- "Mobilization of the construction	1.00	L.S.				
	by constructing temporary acomodation for labours and site staff with required						
	suitable facilities and keeping the same in good hygenic condition for entire						
	project completion time; demolition of the same and cleaning the site after						
	completion of the construction activities all complete". However, constructing						
	temporary accomodation for manpower within the SOS CV premises is against						
	the policies of SOS Children's Villages; hence, under this item, the Contractor						
	shall quote an amount, deemed in his analysis, suitable and reasonably sufficient						
	for covering the expense of temporary accomodation of labours and site staff						
	(outside the SOS CV premises), over the entire project completion time. [Note:						
	50% payment shall be made after completion of mobilization and remaining						
	50% after completion of works as per contract]						
3.0	PROJECT INFORMATION BOARD						
	Providing and Fixing of Project Information board with approved Text in	1.00	L.S.				
	appropriate location including all required fixing accessories as per drawing all						
	complete.						
4.0	SAFETY SIGN BOARD						
	Providing and Fixing of Safety Sign Board with approved Text and Sinage	1.00	L.S.				
	including required fixing accessories as per drawing all complete.						
5.0	BARRICADING WORKS						

	Barricading between the Village area and Construction area with 1.8 m high CGI	100.00	R.M.			
	Sheet fixed to Bamboo support frame all complete as per instruction of					
	Engineer.					
6.0	SAFETY MATERIALS AND SITE SAFETY					
	Providing and Maintaining Construction Safety Measures in Construction Site	1.00	L.S.			
	with proper Safety measures to person and work area (Helmet, Shoes, First Aid					
	Kit, Clothing, Glove, Guard Rail for edge protection, Safety Net, Safety rope, Fall					
	Protection etc.). The number of Safety Materials Personal Protecting					
	Equipments (PPE) shall be minimum but not limited to 15 sets. [Note: 50%					
	payment shall be made after completion of mobilization and remaining 50%					
	after completion of works as per contract]					
	TOTAL AMOUNT					NPR
			NPR			
	1		NPR			

## Project: RENOVATION WORKS AT SOS CHILDREN'S VILLAGE GANDAKI

Location: SOS Children's Village Gandaki, Rambazar-15

	BILL OF QUANTITY- A.1 ELECTRIC INFRASTRUCTURE WORKS							
S. N.	PARTICULARS	QUANTITY	UNIT	RATE IN FIGURE (NPR)	RATE IN WORDS (NPR)	AMOUNT (NPR)	REMARKS	
	Supply, delivery, installation, testing and commissioning of armoured power cable of 4C size 70 sq.mm from meter to distribution bus bar inside powerhouse.	5.00	М.					
	Supply, delivery, installation, testing and commissioning of distribution box 800*600 with copper busbar (RYBN) with incomer MCCB of 63A and outgoing of 6 units of DP MCB of 32A each with AC SPD and Grounding busbar with proper glanding mechanism with IP65 rating: for out-door installation.	5.00	SET					
	Line seggregation works: disconnect all the existing wire connection and re- connect them to newly procured distribution box with out door installation.	1.00	LOT					
	Supply, delivery of SS fastener nut and bolt for existing main distribution work (change all the rusted nut and bolt in the main DB)- 60 sets.	1.00	LOT					
	Service wire coincentric cable: Replace the service wire from chamber pit to individual houses, as and where required.	500.00	М.					
		TOTAL AMOUNT			NPR			
		ADD VAT 13%			NPR			
				NPR				

S. N.				D SYSTEM 28.0	ontrip		
5. N.	PARTICULARS	QUANTITY	UNIT	RATE IN FIGURE (NPR)	RATE IN WORDS (NPR)	AMOUNT (NPR)	REMARKS
1.0	Solar panel >500Wp mono crystalline half-cut cell with not less than 20%-550 monocrystalline half cut cell.	51.00	NO.				
2.0	Solar on-grid inverter 25kW, Type/size= Three-phase PV Inverter with in-built MPPT of total minimum capacity: atleast 25kW; Efficiency of MPPT Controller= atleast 95%, Inverter Peak Efficiency= atleast 97%; Inverter Euro Efficiency= atleast 96%; AC Output Voltage= Three-phase 400+/-10% Vac (L-L), Single- phase 230+-10% Vac (L-N); Isolation= Transformer less; Output Frequency= 50Hz+-2.5%; Output Waveform= Pure Sine Wave; Total Harmonic Distortion (THD)= <5% at full load; Power factor at nominal power= >0.00; Power factor range= 0.85 lagging to 0.95 leading.	1.00	NO.				
3.0	Monitoring system with proper data logging system compatible with PV inverter.	1.00	SET				
4.0	Solar support structure: Adhesive glue structure with minirails or Aluminium L- angle.	1.00	LOT				
5.0	Cable and accessories: Armoured power cable of 70 sq.mm of AL 4C for AC output of length 135m, solar DC cable as required for interwiring and upto th ePV inverter. Earthing cable as required.	1.00	LOT				
6.0	Lightning protection and Earthing system: 6 number of earthing pits with LA with base support of 2" 6m GI pipe with 1.5m length Copper bonded Earthing electrode with 2 sack for each pit backfill compound.	1.00	LOT				-
7.0	Installation accessories: Cable conduit UPVC, Cable shoe, ferrule, PVC tape, AC combiner box, DC combiner box, cable tie, etc.	1.00	LOT				
8.0	Installation, transportation, testing and commissioning of the system	1.00	LOT				
9.0	Solar street light 40W LED light with 200Wp solar module with 82Ah life PO4 battery with dusk to dawn controller.	5.00	SET				
				TOTAL AMOUNT			NPR
				ADD VAT 13%			NPR

	BILL OF QUANTITY- A.3 REPAIR/MAINTENANCE OF EXISTING NETWORK CONNECTION AND TELECOMMUNICATION SYSTEM								
S. N.	PARTICULARS	QUANTITY	UNIT	RATE IN FIGURE (NPR)	RATE IN WORDS (NPR)	AMOUNT (NPR)	REMARKS		
1.0	6 Core Fiber (meters) without messenger	2,000.00	R.M.						
2.0	24 Core Fiber (meters) without messenger	600.00	R.M.						
3.0	Tiffin Box Heavy	22.00	NO.						
4.0	Fiber ODF 24 Port	6.00	NO.						
5.0	5m Fiber Patch Cord LC to LC	16.00	NO.						
6.0	2m Fiber Patch Cord LC to LC	100.00	NO.						
7.0	1.25G SFP 20KM LC	52.00	NO.						
8.0	Linkbasic Cable Manager	5.00	NO.						
9.0	Commscope LSZH Pure Cat6 Cable (Box 305m))	9.00	NO.						
10.0	Hikvision Outdoor 2MP Camera with PVC Box	18.00	BOX						
11.0	Hikvision 32 Channel NVR with 2 Sata DS-7632NXI-K2 (2 SATA)	1.00	NO.						
12.0	HDD 6TB	2.00	NO.						
13.0	8 Port PoE Switch (Sophos CS101-8FP) Manageable 2 SPF Uplink	26.00	NO.						
14.0	Cisco CBS 350-28 Port SFP Switch	1.00	NO.						
15.0	Linkbasic 6 Way PDU	3.00	NO.						
16.0	Comrack 4U Network Rack	22.00	NO.						
17.0	Netrack 9U Network Rack	2.00	NO.						
18.0	Power Shocket with PVC Box and Power Cable	25.00	NO.						
19.0	Fiber Wiring with Black Pipe, Listi, nail accessories and Installation of CCTV,	1.00	NO.						
	Rackmanagement								
		TOTAL AMOUNT			NPR				
		ADD VAT 13%			NPR				
		CLUDING VAT			NPR				