

NAME OF PROJECT: Community Based Family Strengthening Program: WASH Construction Component, Karjahna

PROJECT COMPONENTS: Shallow Tube Well with Handpump, Deep Borehole Construction with Submersible Pumping System, Elevated Water Storage Tank with Steel Staging and Mat Footing, Distribution Pipeline, Public Tapstand and Site Fencing

CLIENT: SOS Children 's Villages Nepal

LOCATION: Ward No. 4 & 5, Karjahna Municipality, Siraha District

MONTH/YEAR: September/2026

SUMMARY OF COST			
S.N	DESCRIPTION OF WORKS	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
1.0	Preliminary Works		
2.0	Ward No.5, Shallow Tube Well with Hand Pump		
3.0	Badhara Ward No.4 Deep Borehole Construction, Submersible Pumping System, Elevated Water Storage Tank with Steel Staging, Public Tapstand and Site Fencing		
4.0	Bhulke Ward No.4 Elevated Water Storage Tank with Steel Staging, Distribution Pipeline, Public Tapstand and Site Fencing		
5.0	Mahuwatole, Bastipur Ward No.4 Deep Borehole Construction, Submersible Pumping System, Elevated Water Storage Tank with Steel Staging, Public Tapstand and Site Fencing		
6.0	Khanepanitole, Bastipur Ward No.4 Deep Borehole Construction, Submersible Pumping System, Elevated Water Storage Tank with Steel Staging, Public Tapstand and Site Fencing		
	Add VAT @13%		
	Discounts (if any)		
	GRAND TOTAL AMOUNT		

NAME OF PROJECT: Community Based Family Strengthening Program: WASH Construction Component, Karjahna

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CLIENT: SOS Children 's Villages Nepal

LOCATION: Ward No. 4 and 5, Karjahna Municipality, Siraha District

MONTH/YEAR: September/2026

<u>BILL OF QUANTITIES- PRELIMINARY WORKS</u>						
S. N.	DESCRIPTION OF WORKS	QUANTITY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
P.0	PRELIMINARY WORKS*					
	* All the quantities are for all the works under the project					
1.0	PROVISIONAL SUM INSURANCE					
	Insurance of works covering all risk, materials, workmen's and third parties liabilities covering for entire period of construction plus defects liability period as per GCC clause No. 19. (Payment Shall be made in Actual Basis.)	1.00	P.S.			
2.0	PROJECT INFORMATION BOARD					
	Providing and fixing of Project Information board (3'-0"*4'-0") made of high quality printed flex (minimum 280-300 GSM, high resolution, UV-resistant, weather-resisnatnt) with approved text, layout and colour scheme, mounted on an MS angle frame (25*25*3mm), and installed at an appropriate location including all required fixing accessories, supports (MS pie/angle embedded in 1:2:4 concrete), transportation, labour and materials including cutting, welding, fixing, tensioning of flex, finishing all complete as per the drawings and instructions of the Engineer.	5.00	NO.			
		TOTAL FOR P.0				

NAME OF PROJECT: Community Based Family Strengthening Program: WASH Construction Component, Karjahna

PROJECT COMPONENTS: Shallow Tube Well with Handpump

CLIENT: SOS Children 's Villages Nepal

LOCATION: Ward No.5, Karjahna Municipality, Siraha District

MONTH/YEAR: September/2026

BILL OF QUANTITIES- SHALLOW TUBE WELL WITH HANDPUMP						
S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
A.0	SHALLOW TUBE WELL WITH HANDPUMP WORKS*					
	* All the quantities are for a total of 15 number of shallow tubewells with handpumps					
A.1	Supply, install, test and commission heavy-duty hand pump head assembly (minimum weight 20-22 kg) complete with handle, connecting rod, nuts, bolts and all necessary accessories as per approved specifications.	15.00	SET			
A.2	Supply and install 1½" diameter PVC suction/riser pipe complete with couplers, solvent cement, jointing materials and all accessories required for proper installation and operation.	297.26	R.M.			
A.3	Supply and install 1½" diameter medium class GI pipe (minimum wall thickness 2.4 mm) including threading, sockets, fittings and all accessories complete.	15.00	R.M.			
A.4	Supply and install nylon screen/filter suitable for shallow tube well construction, including fixing, testing and commissioning complete.	30.00	R.M.			
A.5	Supply all miscellaneous consumables required for tube well installation, including rope, clamps, sealing materials, tapes, nails and other incidental items, complete.	15.00	JOB			

BILL OF QUANTITIES- SHALLOW TUBE WELL WITH HANDPUMP						
S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
A.6	Drilling and construction of shallow tube well from ground level to the required depth, including boring, lowering of pipes and screen, development and testing complete.					
A.6.1	Drilling and construction of shallow tube well from 0 ft to 60 ft depth complete.	900.00	R.FT.			
A.6.2	Additional drilling and construction from 60 ft to 100 ft depth complete.	75.00	R.FT.			
A.7	Installation, washing, gravel packing, development, yield testing and commissioning of the completed hand pump shallow tube well, complete in all respects.	15.00	JOB			
A.8	Providing and laying flat brick soling around the hand pump platform, including preparation of subgrade and all materials, labour and equipment required for completion.	33.75	SQ.M.			
A.9	Providing and laying 50 mm thick PCC (1:2:4) hand pump platform with smooth steel trowel finish, including curing and all incidental works complete.	33.75	SQ.M.			
A.10	Providing and constructing brick masonry in cement mortar (1:4) for hand pump platform edging, drain channel and wastewater disposal arrangement, complete.	0.72	CU.M.			
A.11	Transportation, loading, unloading and handling of all materials, tools, equipment and accessories required for completion of the works.	15.00	JOB			
	TOTAL COST FOR A.0					

NAME OF PROJECT: Community Based Family Strengthening Program: WASH Construction Component, Karjahna

PROJECT COMPONENTS: Deep Borehole Construction, Submersible Pumping System, Elevated Water Storage Tank with Steel Staging, Public Tapstand and Site Fencing

CLIENT: SOS Children 's Villages Nepal

LOCATION: Badhaara, Ward No.4, Karjahna Municipality, Siraha District

MONTH/YEAR: September/2026

BILL OF QUANTITIES- BADHAARAA						
S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
B.0	DEEP BOREHOLE CONSTRUCTION WORKS					
B.1	BOREHOLE MATERIALS AND COMPLETION WORKS					
B.1.1	Supply and installation of 114 mm dia threaded UPVC casing pipe, Class-E BS 3505 6kg/cm2 or approved equivalent.	25.00	R.M.			
B.1.2	Supply and installation of 114 mm dia ribbed screen pipe with approximately 1 mm slot opening, Class-E BS 3505 or equivalent.	7.00	R.M.			
B.1.3	Supply and installation of 4" dia UPVC bottom plug/cone.	1.00	NO.			
B.1.4	Solvent cement and jointing materials for UPVC pipe installation.	0.20	LTR.			
B.1.5	Supply and installation of 4"dia GI top pipe including threading and fabrication complete matching with upvc pipe.	1.00	R.M.			
B.1.6	Supply and installation of GI nipples, bends, reducers and accessories complete.	1.00	NO.			
B.1.7	Supply and installation of 4-inch check valve complete.	1.00	NO.			
B.1.8	Supply and delivery of G.I bottle, tee - reducer (4"*3*1.5"), medium class CI cap 1.5 " and 3" with all accessories complete	1.00	NO.			
B.1.9	Supply and placement of washed pea gravel (4-6 mm) for gravel packing.	0.45	CU.M.			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
B.1.10	Supply and installation of borehole head arrangement with all fittings and accessories complete.	1.00	SET			
B.1.11	Miscellaneous materials required for borehole completion and commissioning.	1.00	L.S.			
	TOTAL FOR B.1					
B.2	BOREHOLE DRILLING, DEVELOPMENT AND TESTING WORKS					
B.2.1	Drilling, reaming and construction of borehole suitable for installation of 114 mm dia casing and submersible pump, including disposal of spoil materials.	95.00	R.FT.			
B.2.2	Well development through air lifting/pumping until clear water is obtained and required yield is achieved.	5.00	HR.			
B.2.3	Pumping test and performance verification of completed borehole.	1.00	L.S.			
B.2.4	Collection and laboratory testing of water quality samples including bacteriological and basic physicochemical parameters.	1.00	L.S.			
	TOTAL FOR B.2					
	TOTAL FOR B.0 (B.1+ B.2)					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
C.0	SUBMERSIBLE PUMP INSTALLATION AND RISING MAIN WORKS					
C.1	Supply, installation, testing and commissioning of 2 HP single-phase 230V submersible pump set suitable for 4 inch borehole with 2" dia delivery outlet, 99% copper winding of indian origin suitable to operate with fluctuating (low) voltage of Madhesh pradesh (IS Certified) 60m total head, complete with motor, cable, starter and all necessary accessories	1.00	SET			
C.2	Supply and installation of HDPE rising main pipe PN10/PN16 from borehole to overhead tank including fittings and jointing complete.	38.27	R.M			
C.3	Supply and installation of gate valves, non-return valves, unions, reducers, adaptors and specials complete (3" dia bend, 3" dia GI nipple, 3" dia section pipe).	1.00	SET			
C.4	Miscellaneous construction material as Nylon jali, tape, rope, Mseal, etc items for installation of one bore well all complete	1.00	JOB			
	TOTAL FOR C.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
D.0	ELEVATED WATER STORAGE AND DISTRIBUTION SYSTEM WORKS					
D.1	Supply, laying , jointing testing of 2" dia of hdpe main pipe pn10, pn16 and Conection pipe 1.1/2 ", 1", 3/4 " from 15' high O/H tank to 5 Tap points, 5 number of taps, interconnection of tank inlet, outlet, overflow, washout and vent pipe arrangements and accessories, fitting and fixing items all complete, as per specification and Site Engineer's instruction.	1.00	PS			
D.2	Supply and installation of 10,000 L HDPE water storage tank conforming to Nepal Standard 353 or approved equivalent.	10,000.00	LTR			
	TOTAL FOR D.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.0	STRUCTURAL STEEL STAGING FOR ELEVATED WATER TANK WORKS					
E.1	Fabrication, supply and erection of structural steel tower for elevated water tank including ISMC sections, angle bracing, platform members, base plates, connection plates, welding and erection complete according to approved structural design, consisting of the following: Main vertical post/legs (ISMC150, D= 150mm, B= 75mm, t= 5.7mm, T= 9.0mm), no.= 4, L= 4.57m each @16.80 kg/m; Horizontal Tie-beam (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 8, L= 3.05m each @9.56 kg/m; Diagonal cross x - bracings (ISA 65*65*6), no.= 16, L= 4.30m each @5.80 kg/m; Top platform grid beams (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 9, L= 3.05m each @9.56 kg/m; Base floor of 4mm chequered plate (no.=1, A= 3.05*3.05 sq.m. @32.20 kg/m²); Top platform safety railings: Horizontal safety Top Rail 32 NB MS pipe (no.=4, L= 3.05m each @3.09 kg/m); Horizontal safety Bottom Rail 25 NB MS pipe (no.= 4, L= 3.05m each @2.12 kg/m); Vertical safety railing ISA 50*50*5 @1.5m c/c, (no.= 8, L= 1.00m @3.80 kg/m); Fabricating portable MS monkey ladder, 1'-6" wide and 15'-6" long, including 40*40*3 ISA, 4.73m long as Stringers (2 no.s, L=4.73m each @1.80 kg/m); 20mm dia 2.35 mm th. MS round bar steps @300mm c/c as Rungs (15 no.s, L= 0.45m @1.42 kg/m); Knee brace ISA 50*50*5mm, (no.= 4, L= 0.80m, Total L= 3.20m @3.80 kg/m	1,634.24	KG			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.2	High strength anchor pre fab plate 300*300*20 and j-bolts (20mm - 22 mm dia) embedded 2' inside concrete column blocks properly secured with bolts on base plate	16.00	NO.			
E.3	Supplying and applying 1 coat anti-rust red-oxide primier and 2 coats industrial enamel weather paint over steel sections. 1 kg steel =0.035m2	57.20	SQ.M.			
E.4	10MM gusset plate (connection plate)	8.00	NO.			
	TOTAL FOR E.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
F.0	RCC FOUNDATION AND SUBSTRUCTURE WORKS					
F.1	Site clearance, setting out and preparation of construction area.	1.00	L.S.			
F.2	Earthwork in Excavation in ordinary soil for foundation pits including lifting dewatering, dressing and leveling all complete (L= 3.20m, B= 3.20m, H= 1.50m)	15.36	CU.M.			
F.3	Flat Brick soling work (L= 3.05m, B= 3.05m)	9.30	SQ.M.			
F.4	Providing and laying plain cement concrete (PCC1:3:6) for base coarse bedding underneath footing pads (no.=1, A= 3.05*3.05m ² , H= 0.10m)	0.93	CU.M.			
F.5	Providing , mixing placing , vibrating, finishing of M20 grade (1:1.5:3) RCC for Raft footing (A= 3.05m*3.05m ² , H= 0.45m), RCC column M20 grade (1:1.5:3) (4 no.s, A=14"*14", H= 1.52m), Plinth beam M20 grade (1:1.5:3) (6 no. of beams, 12"*12", L= 2.35m) all complete	6.21	CU.M.			
F.6	Supplying cutting ,bending and placing TMT steel Reinforcement 12mm both way slab ,rebars inside RCC footing for wind load and anchoring stability (88 no.s, L= 3.35m), RCC Column (4 no. 16mm dia main bars, 4 no. 12mm dia main bars, 8mm dia stirrups @5"c/c); Plinth Beam Reinforcement steel (6 no. of beams with 6 no. 12mm dia main bars, 8mm dia stirrups @5"c/c)	618.12	KG			
F.7	Formworks (for footing: 4 sides, L= 3.05m, H= 0.45m; for column: 4 columns, A= 14"*14", H= 1.52m); for plinth beam: 6 no. , 12"*12", L= 2.35m all complete	26.93	SQ.M.			
F.8	Earthworks in back filling around foundation in 15cm layers including watering and ramming	6.98	CU.M.			
	TOTAL FOR F.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
G.0	TAPSTAND AND DRAINAGE WORKS					
G.1	Flat brick soling for tap stand apron complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.2	50mm thick cement concere (1:2:4) floor casting and finishing by rubbing complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.3	Brick masonry in 1:4 c/s mortar (L= 9.00m, B= 0.25m, H= 0.15m)	0.34	CU.M.			
G.4	First class Brick masonary work for Tap, dhara stand in 1:4 ratio including finishing work (5 no., L=0.25m. B= 0.25m, H= 1.00m)	0.31	CU.M.			
G.5	Plastering 20mm th., C:S=1:4, finishing and curing complete (L= 3.00m, H= 5.00m)	15.00	SQ.M.			
G.6	Testing and commissioning of tap stand complete.	1.00	JOB			
	TOTAL FOR G.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
H.0	FENCING AND SITE PROTECTION WORKS					
H.1	Excavation for poles for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.2	Providing & laying PCC (1:3:6) for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.3	Metal Works (Chain Link Fence)					
	Providing and installation in position MS angles of required sizes as shown in drawings (Top and Bottom Chord- ISA 35*35*4mm, 2 no.s, L= 18.70m, Total L= 37.39 @ 2.09 kg/m, Vertical Post- ISA 40*40*4mm, no.= 9, L= 2.40m, Total L= 21.60m @ 2.42 kg/m, Bracing at corner- ISA 40*40*4mm, no.= 8, L= .75m,, Total L= 6m @ 2.42kg/m, add 10% for wastage, nut, bolt and plate) for line, corner, end, bracing post, top and bottom rail including applying one coat Zinc Rich Primer and painting with two coat of zinc paint, etc., all complete as per drawings, specification and instruction of the Engineer.	159.43	KG			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
H.4	Chain Link Fence (50*50 Mesh)					
	Providing 1.8 meter high chain link fence (undeground length= 0.6m) having mesh size 50mm x 50mm woven with SWG 10 heavy GI coated wire with 40x40x4 mm ISA line post spaced at 2.34 meter center to center, 40x40x4 mm corner and end post , 40x40x4 mm ISA bracing post at every 15 meter straight run and at every change in direction more than 15 degree and at end and corner post, 35x35x4 mm ISA top and bottom rail including installation of all post by excavating hole and filling with concrete 1:3:6 (1 cement : 3 sand : 6 stone aggregate 20 mm and down grade), rails, stretching chain link fabric, fixing chain link fabric securely in all post, top and bottom rail, etc., all complete as per drawings, specification and instruction of the Engineer. MS work, excavation for foundation and concreting shall be paid separately.					
	Fencing Area including gate (L= 18.70m, H= 1.80m)	33.65	SQ.M.			
	TOTAL FOR H.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
I.0	ELECTRICAL AND ANCILLARY WORKS					
I.1	Electrical works including electrical metre box with all accessories; 50 m metre connection wire 8mm th., MCB (8A) 415V-615V; RCCB 8A; Main Switch: 32A 240V; connection wire 15m 4mm; 2 no. high power boards (Brand Anchor); Flood Light- 2 no. 50W, 4 no. 15 W LED bulb with holder, connection plate, switch, indicator, fuse, 5-pin power socket, 1 coil 1.5mm wire for connection; water metre- 1 no.	1.00	P.S			
I.2	Transportation of materials (tank, pipe, fencing materials, etc), equipment and tools to site including loading, unloading and handling complete.	1.00	JOB			
	TOTAL FOR I.0					
	TOTAL FOR B.0+ C.0+ D.0+ E.0+ F.0+ G.0+ H.0+ I.0					

NAME OF PROJECT: Community Based Family Strengthening Program: WASH Construction Component, Karjahna

PROJECT COMPONENTS: Elevated Water Storage Tank with Steel Staging, Distribution Pipeline, Public Tapstand and Site Fencing

CLIENT: SOS Children 's Villages Nepal

LOCATION: Bhulke, Ward No.4, Karjahna Municipality, Siraha District

MONTH/YEAR: September/2026

BILL OF QUANTITIES- <i>BHULKE</i>						
S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
D.0	ELEVATED WATER STORAGE AND DISTRIBUTION SYSTEM WORKS					
D.1	Supply, laying , jointing testing of 2" dia of hdpe main pipe pn10, pn16 and Conection pipe 1.1/2 " , 1" , 3/4 " from 15' high O/H tank to 5 Tap points, 5 number of taps, interconnection of tank inlet, outlet, overflow, washout and vent pipe arrangements and accessories, fitting and fixing items all complete, as per specification and Site Engineer's instruction.	1.00	PS			
D.2	Supply and installation of 10,000 L HDPE water storage tank conforming to Nepal Standard 353 or approved equivalent.	10,000.00	LTR			
	TOTAL FOR D.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.0	STRUCTURAL STEEL STAGING FOR ELEVATED WATER TANK WORKS					
E.1	Fabrication, supply and erection of structural steel tower for elevated water tank including ISMC sections, angle bracing, platform members, base plates, connection plates, welding and erection complete according to approved structural design, consisting of the following: Main vertical post/legs (ISMC150, D= 150mm, B= 75mm, t= 5.7mm, T= 9.0mm), no.= 4, L= 4.57m each @16.80 kg/m; Horizontal Tie-beam (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 8, L= 3.05m each @9.56 kg/m; Diagonal cross x - bracings (ISA 65*65*6), no.= 16, L= 4.30m each @5.80 kg/m; Top platform grid beams (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 9, L= 3.05m each @9.56 kg/m; Base floor of 4mm chequered plate (no.=1, A= 3.05*3.05 sq.m. @32.20 kg/m²); Top platform safety railings: Horizontal safety Top Rail 32 NB MS pipe (no.=4, L= 3.05m each @3.09 kg/m); Horizontal safety Bottom Rail 25 NB MS pipe (no.= 4, L= 3.05m each @2.12 kg/m); Vertical safety railing ISA 50*50*5 @1.5m c/c, (no.= 8, L= 1.00m @3.80 kg/m); Fabricating portable MS monkey ladder, 1'-6" wide and 15'-6" long, including 40*40*3 ISA, 4.73m long as Stringers (2 no.s, L=4.73m each @1.80 kg/m); 20mm dia 2.35 mm th. MS round bar steps @300mm c/c as Rungs (15 no.s, L= 0.45m @1.42 kg/m); Knee brace ISA 50*50*5mm, (no.= 4, L= 0.80m, Total L= 3.20m @3.80 kg/m	1,634.24	KG			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.2	High strength anchor pre fab plate 300*300*20 and j-bolts (20mm - 22 mm dia) embeded 2' inside concrete column blocks properly secured with bolts on base plate	16.00	NO.			
E.3	Supplying and applying 1 coat anti-rust red-oxide primier and 2 coats industrial enamel weather paint over steel sections. 1 kg steel =0.035m2	57.20	SQ.M.			
E.4	10MM gusset plate (connection plate)	8.00	NO.			
	TOTAL FOR E.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
F.0	RCC FOUNDATION AND SUBSTRUCTURE WORKS					
F.1	Site clearance, setting out and preparation of construction area.	1.00	L.S.			
F.2	Earthwork in Excavation in ordinary soil for foundation pits including lifting dewatering, dressing and leveling all complete (L= 3.20m, B= 3.20m, H= 1.50m)	15.36	CU.M.			
F.3	Flat Brick soling work (L= 3.05m, B= 3.05m)	9.30	SQ.M.			
F.4	Providing and laying plain cement concrete (PCC1:3:6) for base coarse bedding underneath footing pads (no.=1, A= 3.05*3.05m ² , H= 0.10m)	0.93	CU.M.			
F.5	Providing , mixing placing , vibrating, finishing of M20 grade (1:1.5:3) RCC for Raft footing (A= 3.05m*3.05m ² , H= 0.45m), RCC column M20 grade (1:1.5:3) (4 no.s, A=14"*14", H= 1.52m), Plinth beam M20 grade (1:1.5:3) (6 no. of beams, 12"*12", L= 2.35m) all complete	6.21	CU.M.			
F.6	Supplying cutting ,bending and placing TMT steel Reinforcement 12mm both way slab ,rebars inside RCC footing for wind load and anchoring stability (88 no.s, L= 3.35m), RCC Column (4 no. 16mm dia main bars, 4 no. 12mm dia main bars, 8mm dia stirrups @5"c/c); Plinth Beam Reinforcement steel (6 no. of beams with 6 no. 12mm dia main bars, 8mm dia stirrups @5"c/c)	618.12	KG			
F.7	Formworks (for footing: 4 sides, L= 3.05m, H= 0.45m; for column: 4 columns, A= 14"*14", H= 1.52m); for plinth beam: 6 no. , 12"*12", L= 2.35m all complete	26.93	SQ.M.			
F.8	Earthworks in back filling around foundation in 15cm layers including watering and ramming	6.98	CU.M.			
	TOTAL FOR F.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
G.0	TAPSTAND AND DRAINAGE WORKS					
G.1	Flat brick soling for tap stand apron complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.2	50mm thick cement concere (1:2:4) floor casting and finishing by rubbing complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.3	Brick masonry in 1:4 c/s mortar (L= 9.00m, B= 0.25m, H= 0.15m)	0.34	CU.M.			
G.4	First class Brick masonary work for Tap, dhara stand in 1:4 ratio including finishing work (5 no., L=0.25m. B= 0.25m, H= 1.00m)	0.31	CU.M.			
G.5	Plastering 20mm th., C:S=1:4, finishing and curing complete (L= 3.00m, H= 5.00m)	15.00	SQ.M.			
G.6	Testing and commissioning of tap stand complete.	1.00	JOB			
	TOTAL FOR G.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
H.0	FENCING AND SITE PROTECTION WORKS					
H.1	Excavation for poles for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.2	Providing & laying PCC (1:3:6) for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.3	Metal Works (Chain Link Fence)					
	Providing and installation in position MS angles of required sizes as shown in drawings (Top and Bottom Chord- ISA 35*35*4mm, 2 no.s, L= 18.70m, Total L= 37.39 @ 2.09 kg/m, Vertical Post- ISA 40*40*4mm, no.= 9, L= 2.40m, Total L= 21.60m @ 2.42 kg/m, Bracing at corner- ISA 40*40*4mm, no.= 8, L= .75m,, Total L= 6m @ 2.42kg/m, add 10% for wastage, nut, bolt and plate) for line, corner, end, bracing post, top and bottom rail including applying one coat Zinc Rich Primer and painting with two coat of zinc paint, etc., all complete as per drawings, specification and instruction of the Engineer.	159.43	KG			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
H.4	Chain Link Fence (50*50 Mesh)					
	Providing 1.8 meter high chain link fence (undeground length= 0.6m) having mesh size 50mm x 50mm woven with SWG 10 heavy GI coated wire with 40x40x4 mm ISA line post spaced at 2.34 meter center to center, 40x40x4 mm corner and end post , 40x40x4 mm ISA bracing post at every 15 meter straight run and at every change in direction more than 15 degree and at end and corner post, 35x35x4 mm ISA top and bottom rail including installation of all post by excavating hole and filling with concrete 1:3:6 (1 cement : 3 sand : 6 stone aggregate 20 mm and down grade), rails, stretching chain link fabric, fixing chain link fabric securely in all post, top and bottom rail, etc., all complete as per drawings, specification and instruction of the Engineer. MS work, excavation for foundation and concreting shall be paid separately.					
	Fencing Area including gate (L= 18.70m, H= 1.80m)	33.65	SQ.M.			
	TOTAL FOR H.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
I.0	GENERAL AND ANCILLARY WORKS					
I.1	Electrical works including electrical metre box with all accessories; 50 m metre connection wire 8mm th., MCB (8A) 415V-615V; RCCB 8A; Main Switch: 32A 240V; connection wire 15m 4mm; 2 no. high power boards (Brand Anchor); Flood Light- 2 no. 50W, 4 no. 15 W LED bulb with holder, connection plate, switch, indicator, fuse, 5-pin power socket, 1 coil 1.5mm wire for connection; water metre- 1 no.	1.00	P.S			
I.2	Transportation of materials (tank, pipe, fencing materials, etc), equipment and tools to site including loading, unloading and handling complete.	1.00	JOB			
	TOTAL FOR I.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
J.0	PIPELINE WORKS					
J.1	Earthwork Excavation for Pipeline Trench: Excavation in all types of soil for pipeline trench to the required width, depth and alignment, including dressing, trimming, dewatering where required, stacking of excavated materials and disposal of surplus materials as directed by the Engineer. (no.=1, L= 123.57m, B= 0.5m, Depth= 1.0m)	61.79	CU.M.			
J.2	Excavation for Rising Main Pipeline to Elevated Water Tank: Excavation for rising main pipeline from source to elevated water tank, including all necessary earthwork, dressing of trench bed, dewatering and disposal of excess excavated materials, complete. (no.=1, L= 239.56m, B= 0.5m, Depth= 1.0m)	119.78	CU.M.			
J.3	Backfilling and Compaction: Backfilling of pipeline trenches with approved excavated material in layers, including watering, compaction and dressing to original ground level, complete (no.= 1, L= 363.13m, B= 0.5m, Depth= 1.0m)	181.57	CU.M.			
J.4	2" HDPE Rising Main (PN10): Supply, transportation, laying, joining, testing and commissioning of 2" diameter HDPE pipe PN10 for rising main from submersible pump installed inside the borehole to the overhead water tank, complete with all fittings, accessories and jointing materials (no.=1, L= 277.0m)	277.00	R.M			
J.5	3" HDPE Distribution/Main Pipeline (4 kg/cm ² Pressure Rating): Supply, transportation, laying, jointing, testing and commissioning of 3" diameter HDPE pipeline of minimum 4 kg/cm ² pressure rating, including all fittings and accessories required for complete installation (no.=1, L= 17.07m)	17.07	R.M			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
J.6	2" HDPE Distribution/Main Pipeline (4 kg/cm ² Pressure Rating): Supply, transportation, laying, jointing, testing and commissioning of 2" diameter HDPE pipeline of minimum 4 kg/cm ² pressure rating, including all fittings and accessories required for complete installation (no.= 1, L= 106.5m)	106.50	R.M			
	FITTINGS AND ACCESSORIES					
J.7	3" Ball Valve: Supply and installation of 3" diameter heavy-duty ball valve complete with all accessories and fittings.	1.00	NO.S			
J.8	3" Union: Supply and installation of 3" diameter union complete with all accessories.	1.00	NO.S			
J.9	3" × 2" Reducer: Supply and installation of HDPE/PVC reducer, size 3" × 2", complete with jointing materials and accessories.	1.00	NO.S			
J.10	3" × 1" Tee: Supply and installation of 3" × 1" tee fitting complete with all accessories.	2.00	NO.S			
J.11	2" × 1" Tee: Supply and installation of 2" × 1" tee fitting complete with all accessories.	2.00	NO.S			
J.12	1" Ball Valve: Supply and installation of 1" diameter ball valve complete with fittings and accessories.	4.00	NO.S			
J.13	1" Bib Cock: Supply and installation of 1" diameter brass/approved quality bib cock complete with fittings and accessories.	4.00	NO.S			
J.14	1" Socket: Supply and installation of 1" diameter socket complete with accessories and jointing materials.	4.00	NO.S			
J.15	1" Elbow: Supply and installation of 1" diameter elbow complete with accessories and jointing materials.	4.00	NO.S			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
J.16	2" End Cap: Supply and installation of 2" diameter end cap complete with all accessories.	1.00	NO.S			
J.17	PTFE Thread Seal Tape (Water Tape): Supply of PTFE thread seal tape for pipe jointing complete.	10.00	NO.S			
J.18	3" Tank Outlet Adapter: Supply and installation of 3" diameter tank outlet adapter complete with fittings and sealing materials.	1.00	NO.S			
J.19	Tank Connector/Nipple: Supply and installation of approved quality tank connector/nipple complete with all accessories.	1.00	NO.S			
J.20	3" Gate Valve: Supply and installation of 3" diameter gate valve complete with all accessories and fittings.	1.00	NO.S			
J.21	Solvent Cement (5 packets of 500 g Pack): Supply of approved quality solvent cement, 500 g pack, for pipe jointing works.	5.00	NO.S			
J.22	3" Metal Body Valve: Supply and installation of 3" diameter metal-body valve complete with fittings and accessories.	1.00	NO.S			
J.23	1" HDPE Connection Pipe (PN16): Supply, laying and jointing of 1" diameter HDPE pipe PN16 for connection works, complete with all fittings and accessories.	10.00	R.M			
J.24	Pipeline Installation Works: Pipeline installation works including cutting, threading (where applicable), fitting, fixing, alignment, jointing, testing, commissioning and all labour, tools and equipment required for complete installation of the pipeline system.	400.57	R.M			
	TOTAL FOR J.0					
	TOTAL FOR D.0+ E.0+ F.0+ G.0+ H.0+ I.0+ J.0					

NAME OF PROJECT: Community Based Family Strengthening Program: WASH Construction Component, Karjahna

PROJECT COMPONENTS: Deep Borehole Construction, Submersible Pumping System, Elevated Water Storage Tank with Steel Staging, Public Tapstand and Site Fencing

CLIENT: SOS Children 's Villages Nepal

LOCATION: Mahuwatole, Bastipur, Ward No.4, Karjahna Municipality, Siraha District

MONTH/YEAR: September/2026

<u>DETAILED QUANTITY AND COST ESTIMATE- MAHUWATOLE, BASTIPUR</u>						
S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
B.0	DEEP BOREHOLE CONSTRUCTION WORKS					
B.1	BOREHOLE MATERIALS AND COMPLETION WORKS					
B.1.1	Supply and installation of 114 mm dia threaded UPVC casing pipe, Class-E BS 3505 6kg/cm2 or approved equivalent.	25.00	R.M.			
B.1.2	Supply and installation of 114 mm dia ribbed screen pipe with approximately 1 mm slot opening, Class-E BS 3505 or equivalent.	7.00	R.M.			
B.1.3	Supply and installation of 4" dia UPVC bottom plug/cone.	1.00	NO.			
B.1.4	Solvent cement and jointing materials for UPVC pipe installation.	0.20	LTR.			
B.1.5	Supply and installation of 4"dia GI top pipe including threading and fabrication complete matching with upvc pipe.	1.00	R.M.			
B.1.6	Supply and installation of GI nipples, bends, reducers and accessories complete.	1.00	NO.			
B.1.7	Supply and installation of 4-inch check valve complete.	1.00	NO.			
B.1.8	Supply and delivery of G.I bottle, tee - reducer (4"*3*1.5"), medium class CI cap 1.5 " and 3" with all accessories complete	1.00	NO.			
B.1.9	Supply and placement of washed pea gravel (4-6 mm) for gravel packing.	0.45	CU.M.			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
B.1.10	Supply and installation of borehole head arrangement with all fittings and accessories complete.	1.00	SET			
B.1.11	Miscellaneous materials required for borehole completion and commissioning.	1.00	L.S.			
	TOTAL FOR B.1					
B.2	BOREHOLE DRILLING, DEVELOPMENT AND TESTING WORKS					
B.2.1	Drilling, reaming and construction of borehole suitable for installation of 114 mm dia casing and submersible pump, including disposal of spoil materials.	95.00	R.FT.			
B.2.2	Well development through air lifting/pumping until clear water is obtained and required yield is achieved.	5.00	HR.			
B.2.3	Pumping test and performance verification of completed borehole.	1.00	L.S.			
B.2.4	Collection and laboratory testing of water quality samples including bacteriological and basic physicochemical parameters.	1.00	L.S.			
	TOTAL FOR B.2					
	TOTAL FOR B.0 (B.1+ B.2)					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
C.0	SUBMERSIBLE PUMP INSTALLATION AND RISING MAIN WORKS					
C.1	Supply, installation, testing and commissioning of 2 HP single-phase 230V submersible pump set suitable for 4 inch borehole with 2" dia delivery outlet, 99% copper winding of indian origin suitable to operate with fluctuating (low) voltage of Madhesh pradesh (IS Certified) 60m total head, complete with motor, cable, starter and all necessary accessories	1.00	SET			
C.2	Supply and installation of HDPE rising main pipe PN10/PN16 from borehole to overhead tank including fittings and jointing complete.	38.27	R.M			
C.3	Supply and installation of gate valves, non-return valves, unions, reducers, adaptors and specials complete (3" dia bend, 3" dia GI nipple, 3" dia section pipe).	1.00	SET			
C.4	Miscellaneous construction material as Nylon jali, tape, rope, Mseal, etc items for installation of one bore well all complete	1.00	JOB			
	TOTAL FOR C.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
D.0	ELEVATED WATER STORAGE AND DISTRIBUTION SYSTEM WORKS					
D.1	Supply, laying , jointing testing of 2" dia of hdpe main pipe pn10, pn16 and Conection pipe 1.1/2 ", 1", 3/4 " from 15' high O/H tank to 5 Tap points, 5 number of taps, interconnection of tank inlet, outlet, overflow, washout and vent pipe arrangements and accessories, fitting and fixing items all complete, as per specification and Site Engineer's instruction.	1.00	PS			
D.2	Supply and installation of 10,000 L HDPE water storage tank conforming to Nepal Standard 353 or approved equivalent.	10,000.00	LTR			
	TOTAL FOR D.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.0	STRUCTURAL STEEL STAGING FOR ELEVATED WATER TANK WORKS					
E.1	Fabrication, supply and erection of structural steel tower for elevated water tank including ISMC sections, angle bracing, platform members, base plates, connection plates, welding and erection complete according to approved structural design, consisting of the following: Main vertical post/legs (ISMC150, D= 150mm, B= 75mm, t= 5.7mm, T= 9.0mm), no.= 4, L= 4.57m each @16.80 kg/m; Horizontal Tie-beam (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 8, L= 3.05m each @9.56 kg/m; Diagonal cross x - bracings (ISA 65*65*6), no.= 16, L= 4.30m each @5.80 kg/m; Top platform grid beams (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 9, L= 3.05m each @9.56 kg/m; Base floor of 4mm chequered plate (no.=1, A= 3.05*3.05 sq.m. @32.20 kg/m²); Top platform safety railings: Horizontal safety Top Rail 32 NB MS pipe (no.=4, L= 3.05m each @3.09 kg/m); Horizontal safety Bottom Rail 25 NB MS pipe (no.= 4, L= 3.05m each @2.12 kg/m); Vertical safety railing ISA 50*50*5 @1.5m c/c, (no.= 8, L= 1.00m @3.80 kg/m); Fabricating portable MS monkey ladder, 1'-6" wide and 15'-6" long, including 40*40*3 ISA, 4.73m long as Stringers (2 no.s, L=4.73m each @1.80 kg/m); 20mm dia 2.35 mm th. MS round bar steps @300mm c/c as Rungs (15 no.s, L= 0.45m @1.42 kg/m); Knee brace ISA 50*50*5mm, (no.= 4, L= 0.80m, Total L= 3.20m @3.80 kg/m	1,634.24	KG			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.2	High strength anchor pre fab plate 300*300*20 and j-bolts (20mm - 22 mm dia) embedded 2' inside concrete column blocks properly secured with bolts on base plate	16.00	NO.			
E.3	Supplying and applying 1 coat anti-rust red-oxide primier and 2 coats industrial enamel weather paint over steel sections. 1 kg steel =0.035m2	57.20	SQ.M.			
E.4	10MM gusset plate (connection plate)	8.00	NO.			
	TOTAL FOR E.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
F.0	RCC FOUNDATION AND SUBSTRUCTURE WORKS					
F.1	Site clearance, setting out and preparation of construction area.	1.00	L.S.			
F.2	Earthwork in Excavation in ordinary soil for foundation pits including lifting dewatering, dressing and leveling all complete (L= 3.20m, B= 3.20m, H= 1.50m)	15.36	CU.M.			
F.3	Flat Brick soling work (L= 3.05m, B= 3.05m)	9.30	SQ.M.			
F.4	Providing and laying plain cement concrete (PCC1:3:6) for base coarse bedding underneath footing pads (no.=1, A= 3.05*3.05m ² , H= 0.10m)	0.93	CU.M.			
F.5	Providing , mixing placing , vibrating, finishing of M20 grade (1:1.5:3) RCC for Raft footing (A= 3.05m*3.05m ² , H= 0.45m), RCC column M20 grade (1:1.5:3) (4 no.s, A=14"*14", H= 1.52m), Plinth beam M20 grade (1:1.5:3) (6 no. of beams, 12"*12", L= 2.35m) all complete	6.21	CU.M.			
F.6	Supplying cutting ,bending and placing TMT steel Reinforcement 12mm both way slab ,rebars inside RCC footing for wind load and anchoring stability (88 no.s, L= 3.35m), RCC Column (4 no. 16mm dia main bars, 4 no. 12mm dia main bars, 8mm dia stirrups @5"c/c); Plinth Beam Reinforcement steel (6 no. of beams with 6 no. 12mm dia main bars, 8mm dia stirrups @5"c/c)	618.12	KG			
F.7	Formworks (for footing: 4 sides, L= 3.05m, H= 0.45m; for column: 4 columns, A= 14"*14", H= 1.52m); for plinth beam: 6 no. , 12"*12", L= 2.35m all complete	26.93	SQ.M.			
F.8	Earthworks in back filling around foundation in 15cm layers including watering and ramming	6.98	CU.M.			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
	TOTAL FOR F.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
G.0	TAPSTAND AND DRAINAGE WORKS					
G.1	Flat brick soling for tap stand apron complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.2	50mm thick cement concere (1:2:4) floor casting and finishing by rubbing complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.3	Brick masonry in 1:4 c/s mortar (L= 9.00m, B= 0.25m, H= 0.15m)	0.34	CU.M.			
G.4	First class Brick masonary work for Tap, dhara stand in 1:4 ratio including finishing work (5 no., L=0.25m. B= 0.25m, H= 1.00m)	0.31	CU.M.			
G.5	Plastering 20mm th., C:S=1:4, finishing and curing complete (L= 3.00m, H= 5.00m)	15.00	SQ.M.			
G.6	Testing and commissioning of tap stand complete.	1.00	JOB			
	TOTAL FOR G.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
H.0	FENCING AND SITE PROTECTION WORKS					
H.1	Excavation for poles for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.2	Providing & laying PCC (1:3:6) for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.3	Metal Works (Chain Link Fence)					
	Providing and installation in position MS angles of required sizes as shown in drawings (Top and Bottom Chord- ISA 35*35*4mm, 2 no.s, L= 18.70m, Total L= 37.39 @ 2.09 kg/m, Vertical Post- ISA 40*40*4mm, no.= 9, L= 2.40m, Total L= 21.60m @ 2.42 kg/m, Bracing at corner- ISA 40*40*4mm, no.= 8, L= .75m,, Total L= 6m @ 2.42kg/m, add 10% for wastage, nut, bolt and plate) for line, corner, end, bracing post, top and bottom rail including applying one coat Zinc Rich Primer and painting with two coat of zinc paint, etc., all complete as per drawings, specification and instruction of the Engineer.	159.43	KG			
H.4	Chain Link Fence (50*50 Mesh)					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
	Providing 1.8 meter high chain link fence (undeground length= 0.6m) having mesh size 50mm x 50mm woven with SWG 10 heavy GI coated wire with 40x40x4 mm ISA line post spaced at 2.34 meter center to center, 40x40x4 mm corner and end post , 40x40x4 mm ISA bracing post at every 15 meter straight run and at every change in direction more than 15 degree and at end and corner post, 35x35x4 mm ISA top and bottom rail including installation of all post by excavating hole and filling with concrete 1:3:6 (1 cement : 3 sand : 6 stone aggregate 20 mm and down grade), rails, stretching chain link fabric, fixing chain link fabric securely in all post, top and bottom rail, etc., all complete as per drawings, specification and instruction of the Engineer. MS work, excavation for foundation and concreting shall be paid separately.					
	Fencing Area including gate (L= 18.70m, H= 1.80m)	33.65	SQ.M.			
	TOTAL FOR H.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
I.0	ELECTRICAL AND ANCILLARY WORKS					
I.1	Electrical works including electrical metre box with all accessories; 50 m metre connection wire 8mm th., MCB (8A) 415V-615V; RCCB 8A; Main Switch: 32A 240V; connection wire 15m 4mm; 2 no. high power boards (Brand Anchor); Flood Light- 2 no. 50W, 4 no. 15 W LED bulb with holder, connection plate, switch, indicator, fuse, 5-pin power socket, 1 coil 1.5mm wire for connection; water metre- 1 no.	1.00	P.S			
I.2	Transportation of materials (tank, pipe, fencing materials, etc), equipment and tools to site including loading, unloading and handling complete.	1.00	JOB			
	TOTAL FOR I.0					
	TOTAL FOR B.0+ C.0+ D.0+ E.0+ F.0+ G.0+ H.0+ I.0					

NAME OF PROJECT: Community Based Family Strengthening Program: WASH Construction Component, Karjahna

PROJECT COMPONENTS: Deep Borehole Construction, Submersible Pumping System, Elevated Water Storage Tank with Steel Staging, Public Tapstand and Site Fencing

CLIENT: SOS Children 's Villages Nepal

LOCATION: Khanepanitole, Bastipur, Ward No.4, Karjahna Municipality, Siraha District

MONTH/YEAR: September/2026

DETAILED QUANTITY AND COST ESTIMATE- KHANEPANI TOLE, BASTIPUR						
S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
B.0	DEEP BOREHOLE CONSTRUCTION WORKS					
B.1	BOREHOLE MATERIALS AND COMPLETION WORKS					
B.1.1	Supply and installation of 114 mm dia threaded UPVC casing pipe, Class-E BS 3505 6kg/cm2 or approved equivalent.	25.00	R.M.			
B.1.2	Supply and installation of 114 mm dia ribbed screen pipe with approximately 1 mm slot opening, Class-E BS 3505 or equivalent.	7.00	R.M.			
B.1.3	Supply and installation of 4" dia UPVC bottom plug/cone.	1.00	NO.			
B.1.4	Solvent cement and jointing materials for UPVC pipe installation.	0.20	LTR.			
B.1.5	Supply and installation of 4"dia GI top pipe including threading and fabrication complete matching with upvc pipe.	1.00	R.M.			
B.1.6	Supply and installation of GI nipples, bends, reducers and accessories complete.	1.00	NO.			
B.1.7	Supply and installation of 4-inch check valve complete.	1.00	NO.			
B.1.8	Supply and delivery of G.I bottle, tee - reducer (4"*3*1.5"), medium class CI cap 1.5 " and 3" with all accessories complete	1.00	NO.			
B.1.9	Supply and placement of washed pea gravel (4-6 mm) for gravel packing.	0.45	CU.M.			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
B.1.10	Supply and installation of borehole head arrangement with all fittings and accessories complete.	1.00	SET			
B.1.11	Miscellaneous materials required for borehole completion and commissioning.	1.00	L.S.			
	TOTAL FOR B.1					
B.2	BOREHOLE DRILLING, DEVELOPMENT AND TESTING WORKS					
B.2.1	Drilling, reaming and construction of borehole suitable for installation of 114 mm dia casing and submersible pump, including disposal of spoil materials.	95.00	R.FT.			
B.2.2	Well development through air lifting/pumping until clear water is obtained and required yield is achieved.	5.00	HR.			
B.2.3	Pumping test and performance verification of completed borehole.	1.00	L.S.			
B.2.4	Collection and laboratory testing of water quality samples including bacteriological and basic physicochemical parameters.	1.00	L.S.			
	TOTAL FOR B.2					
	TOTAL FOR B.0 (B.1+ B.2)					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
C.0	SUBMERSIBLE PUMP INSTALLATION AND RISING MAIN WORKS					
C.1	Supply, installation, testing and commissioning of 2 HP single-phase 230V submersible pump set suitable for 4 inch borehole with 2" dia delivery outlet, 99% copper winding of indian origin suitable to operate with fluctuating (low) voltage of Madhesh pradesh (IS Certified) 60m total head, complete with motor, cable, starter and all necessary accessories	1.00	SET			
C.2	Supply and installation of HDPE rising main pipe PN10/PN16 from borehole to overhead tank including fittings and jointing complete.	38.27	R.M			
C.3	Supply and installation of gate valves, non-return valves, unions, reducers, adaptors and specials complete (3" dia bend, 3" dia GI nipple, 3" dia section pipe).	1.00	SET			
C.4	Miscellaneous construction material as Nylon jali, tape, rope, Mseal, etc items for installation of one bore well all complete	1.00	JOB			
	TOTAL FOR C.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
D.0	ELEVATED WATER STORAGE AND DISTRIBUTION SYSTEM WORKS					
D.1	Supply, laying , jointing testing of 2" dia of hdpe main pipe pn10, pn16 and Conection pipe 1.1/2 ", 1", 3/4 " from 15' high O/H tank to 5 Tap points, 5 number of taps, interconnection of tank inlet, outlet, overflow, washout and vent pipe arrangements and accessories, fitting and fixing items all complete, as per specification and Site Engineer's instruction.	1.00	PS			
D.2	Supply and installation of 10,000 L HDPE water storage tank conforming to Nepal Standard 353 or approved equivalent.	10,000.00	LTR			
	TOTAL FOR D.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.0	STRUCTURAL STEEL STAGING FOR ELEVATED WATER TANK WORKS					
E.1	Fabrication, supply and erection of structural steel tower for elevated water tank including ISMC sections, angle bracing, platform members, base plates, connection plates, welding and erection complete according to approved structural design, consisting of the following: Main vertical post/legs (ISMC150, D= 150mm, B= 75mm, t= 5.7mm, T= 9.0mm), no.= 4, L= 4.57m each @16.80 kg/m; Horizontal Tie-beam (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 8, L= 3.05m each @9.56 kg/m; Diagonal cross x - bracings (ISA 65*65*6), no.= 16, L= 4.30m each @5.80 kg/m; Top platform grid beams (ISMC 100, D= 100mm, B= 50mm, t= 5.0mm, T= 7.7mm), no.= 9, L= 3.05m each @9.56 kg/m; Base floor of 4mm chequered plate (no.=1, A= 3.05*3.05 sq.m. @32.20 kg/m²); Top platform safety railings: Horizontal safety Top Rail 32 NB MS pipe (no.=4, L= 3.05m each @3.09 kg/m); Horizontal safety Bottom Rail 25 NB MS pipe (no.= 4, L= 3.05m each @2.12 kg/m); Vertical safety railing ISA 50*50*5 @1.5m c/c, (no.= 8, L= 1.00m @3.80 kg/m); Fabricating portable MS monkey ladder, 1'-6" wide and 15'-6" long, including 40*40*3 ISA, 4.73m long as Stringers (2 no.s, L=4.73m each @1.80 kg/m); 20mm dia 2.35 mm th. MS round bar steps @300mm c/c as Rungs (15 no.s, L= 0.45m @1.42 kg/m); Knee brace ISA 50*50*5mm, (no.= 4, L= 0.80m, Total L= 3.20m @3.80 kg/m)	1,634.24	KG			
E.2	High strength anchor pre fab plate 300*300*20 and j-bolts (20mm - 22 mm dia) embedded 2' inside concrete column blocks properly secured with bolts on base plate	16.00	NO.			

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
E.3	Supplying and applying 1 coat anti-rust red-oxide primier and 2 coats industrial enamel weather paint over steel sections. 1 kg steel =0.035m2	57.20	SQ.M.			
E.4	10MM gusset plate (connection plate)	8.00	NO.			
	TOTAL FOR E.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
F.0	RCC FOUNDATION AND SUBSTRUCTURE WORKS					
F.1	Site clearance, setting out and preparation of construction area.	1.00	L.S.			
F.2	Earthwork in Excavation in ordinary soil for foundation pits including lifting dewatering, dressing and leveling all complete (L= 3.20m, B= 3.20m, H= 1.50m)	15.36	CU.M.			
F.3	Flat Brick soling work (L= 3.05m, B= 3.05m)	9.30	SQ.M.			
F.4	Providing and laying plain cement concrete (PCC1:3:6) for base coarse bedding underneath footing pads (no.=1, A= 3.05*3.05m ² , H= 0.10m)	0.93	CU.M.			
F.5	Providing , mixing placing , vibrating, finishing of M20 grade (1:1.5:3) RCC for Raft footing (A= 3.05m*3.05m ² , H= 0.45m), RCC column M20 grade (1:1.5:3) (4 no.s, A=14"*14", H= 1.52m), Plinth beam M20 grade (1:1.5:3) (6 no. of beams, 12"*12", L= 2.35m) all complete	6.21	CU.M.			
F.6	Supplying cutting ,bending and placing TMT steel Reinforcement 12mm both way slab ,rebars inside RCC footing for wind load and anchoring stability (88 no.s, L= 3.35m), RCC Column (4 no. 16mm dia main bars, 4 no. 12mm dia main bars, 8mm dia stirrups @5"c/c); Plinth Beam Reinforcement steel (6 no. of beams with 6 no. 12mm dia main bars, 8mm dia stirrups @5"c/c)	618.12	KG			
F.7	Formworks (for footing: 4 sides, L= 3.05m, H= 0.45m; for column: 4 columns, A= 14"*14", H= 1.52m); for plinth beam: 6 no. , 12"*12", L= 2.35m all complete	26.93	SQ.M.			
F.8	Earthworks in back filling around foundation in 15cm layers including watering and ramming	6.98	CU.M.			
	TOTAL FOR F.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
G.0	TAPSTAND AND DRAINAGE WORKS					
G.1	Flat brick soling for tap stand apron complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.2	50mm thick cement concere (1:2:4) floor casting and finishing by rubbing complete (L= 3.00m, B= 1.50m)	4.50	SQ.M.			
G.3	Brick masonry in 1:4 c/s mortar (L= 9.00m, B= 0.25m, H= 0.15m)	0.34	CU.M.			
G.4	First class Brick masonary work for Tap, dhara stand in 1:4 ratio including finishing work (5 no., L=0.25m. B= 0.25m, H= 1.00m)	0.31	CU.M.			
G.5	Plastering 20mm th., C:S=1:4, finishing and curing complete (L= 3.00m, H= 5.00m)	15.00	SQ.M.			
G.6	Testing and commissioning of tap stand complete.	1.00	JOB			
	TOTAL FOR G.0					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
H.0	FENCING AND SITE PROTECTION WORKS					
H.1	Excavation for poles for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.2	Providing & laying PCC (1:3:6) for Posts of Chain Link Fence (9 no., L= 0.15m, B= 0.15m, H= 0.60m)	0.12	CU.M.			
H.3	Metal Works (Chain Link Fence)					
	Providing and installation in position MS angles of required sizes as shown in drawings (Top and Bottom Chord- ISA 35*35*4mm, 2 no.s, L= 18.70m, Total L= 37.39 @ 2.09 kg/m, Vertical Post- ISA 40*40*4mm, no.= 9, L= 2.40m, Total L= 21.60m @ 2.42 kg/m, Bracing at corner- ISA 40*40*4mm, no.= 8, L= .75m,, Total L= 6m @ 2.42kg/m, add 10% for wastage, nut, bolt and plate) for line, corner, end, bracing post, top and bottom rail including applying one coat Zinc Rich Primer and painting with two coat of zinc paint, etc., all complete as per drawings, specification and instruction of the Engineer.	159.43	KG			
H.4	Chain Link Fence (50*50 Mesh)					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
	Providing 1.8 meter high chain link fence (undeground length= 0.6m) having mesh size 50mm x 50mm woven with SWG 10 heavy GI coated wire with 40x40x4 mm ISA line post spaced at 2.34 meter center to center, 40x40x4 mm corner and end post , 40x40x4 mm ISA bracing post at every 15 meter straight run and at every change in direction more than 15 degree and at end and corner post, 35x35x4 mm ISA top and bottom rail including installation of all post by excavating hole and filling with concrete 1:3:6 (1 cement : 3 sand : 6 stone aggregate 20 mm and down grade), rails, stretching chain link fabric, fixing chain link fabric securely in all post, top and bottom rail, etc., all complete as per drawings, specification and instruction of the Engineer. MS work, excavation for foundation and concreting shall be paid separately.					
	Fencing Area including gate (L= 18.70m, H= 1.80m)	33.65	SQ.M.			
	TOTAL FOR H.O					

S.N	DESCRIPTION OF WORKS	QTY	UNIT	RATE (NPR)	AMOUNT IN FIGURES (NPR)	AMOUNT IN WORDS (NPR)
I.0	ELECTRICAL AND ANCILLARY WORKS					
I.1	Electrical works including electrical metre box with all accessories; 50 m metre connection wire 8mm th., MCB (8A) 415V-615V; RCCB 8A; Main Switch: 32A 240V; connection wire 15m 4mm; 2 no. high power boards (Brand Anchor); Flood Light- 2 no. 50W, 4 no. 15 W LED bulb with holder, connection plate, switch, indicator, fuse, 5-pin power socket, 1 coil 1.5mm wire for connection; water metre- 1 no.	1.00	P.S			
I.2	Transportation of materials (tank, pipe, fencing materials, etc), equipment and tools to site including loading, unloading and handling complete.	1.00	JOB			
	TOTAL FOR I.0					
	TOTAL FOR B.0+ C.0+ D.0+ E.0+ F.0+ G.0+ H.0+ I.0					