SPECIFICATION AND BILL OF QUANTITIES

(WITH ENGINEERS' ESTIMATE)

PROJECT:

BUILDING FOR GURED HOUSE

CLIENT: SHASHAMANEE CITY (POLISE OFFICE)

CONSULTANT:

TEL-
e-mail:

LOCATION:

SHASHAMANEE
ETHIOPIA

Prepared by:S J (NOV-2015)

SUMMARY

A-SUB STRUCTURE

1 EXCAVATION AND EARTH WORK..... BIRR

2 CONCRETE WORK.....BIRR

3 MASONARY WORK..... BIRR

SUB TOTAL A..... BIRR

B-SUPER STRUCTURE

1 CONCRETE WORK..... BIRR

2 BLOCK WORK..... BIRR

3 ROOFING WORK..... BIRR

4 CARPENTRY WORK..... BIRR

5 METAL WORK..... BIRR

7 FINISHING WORK..... BIRR

8 GLAZING WORK.....BIRR

9 PAINTING WORK.....BIRR

10 SANITARY INSTALLATION WORK..... BIRR

11 ELECTRICAL INSTALLATION..... BIRR

SUB TOTAL B..... BIRR

TOTAL A+B..... BIRR

	32,263.02
	0.00
	19,654.32
	51,917.34
	768,401.53
	161,525.62
	97,910.04
	186,805.07
	555,499.50
	880,111.73
	123,000.00
	129,931.20
	218,632.00
	166,485.00
	3,288,301.69
	3,340,219.03

Projec Kafteria — **Block:Fance Work**

Client:

S.Contractor: DAGNACHEW

Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches
			A - SUBSTRUCTURE				*C/Around Footing Pad*
			1. EXCAVATION & EARTHWORKS			337.5	Total Volume of Exc 2.5*2.5*3*18=337.5
			1.1/ Site Clerance				deduct volume concrete
0.00	0.00		average depth d=0.20m			-5.1	Volume of Pad=2*2*0.4*18=28.80
	0.00	**0.00**	**m²**			-3.04	Volum of column=0.25*0.25*2.6*18=3.038
1.00	0.00		1.2/ Bulck Excavation			**0.00**	**m³**
	0.00					**0.00**	**m³,TOTAL**
	0.00	0.00					1.6 Cart away
		0.00	**m³**				Total Volume of Excavation
			1.3/ Trench excavation in ordinary			**0.00**	Iteam 1.1
4.00	27.00		soil to average depth d=1.50m			**0.00**	Iteam 1.2
	0.70		length =50.9			**0.00**	Iteam 1.3
	1.50	113.40	width=0.5+2*.1=0.70m, Depth=1.5m			**0.00**	Iteam 1.4
4.00	11.00					**0.00**	**m³**
	0.70					-893.96	deduct back fill
	1.50	46.20				**-893.96**	**m³**
1.00	0.00						
	0.70			1.00	26.00		1.6 Hard Core
	1.50	0.00			10.00	**260.00**	**m²**
		159.60	**m³**				**2. CONCRETE WORKS**
18.00	2.50		1.4 Pit excavation				2.1 50mm thick lean concrete under
	2.50		to average depth d=3.00m	18.00	2.00		A/Footing Pad
	3.00	337.50	L=2+2*0.25=2.50m		2.00	**72.00**	**m²**
		337.50	**m³**	2.00	27.00		B/Masonary & Gread beam
			1.5 Back Fill		0.50	27.00	
1.00	26.00		**a/Under Hard Core*	2.00	11.00		
	10.00				0.50	11.00	
	0.75	195.00		1.00	67.00		
		195.00	**m³**		0.50	33.50	
2.00	27.00		*B/Around Masonary Treanchl*			**71.50**	**m²**
	0.20			1.00	26.50		*C/Under Hard Core*
	1.50	16.20	m³		10.50	**278.25**	**m²**
2.00	11.00						2.2/ C-25 Reinforced concret:
	1.50			18.00	2.00		a) In Footing Pad
	0.20	6.60	m³		2.00		
1.00	31.00				0.40	**28.80**	**m³**
	1.50			18.00	0.25		b) In elevation column
	0.20	9.30	m³		0.25		
		32.10	**m³**		2.60	**2.93**	**m³**

Projec Market Center (G+2) — **Block:-G+2 Building**

Client: Micro Interpirize

S.Contractor:

Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches

			c) In grade beam				3.2/ 50cm thick masonry Above NGL
1	223.00		Width=0.3 m, Depth=0.50 m	1	152.00		Total length=152m
	0.30		Total length=27*5+11*8=223 m		0.5		Avge depth=0.50m
	0.50	33.45			0.5	38.00	width= 0.50m
		33.45	**m³**			**38.00**	**m³**
			D)10cm Ground Floor Slab			**21.00**	3.3/ Stone masonary for steps
1.00	26.50						
	10.50	**278.25**	**m²**				**B - SUPPER STRUCTURE**
							1. CONCRETE WORKS
							1.1 C-25 Reinforced concret:
			2.3/Form Work for:				a) In elevation column
			A/Footing Pad	18	3.20		Small Column
18.00	8.00		permeter=4*2=8		0.25		
	0.40	**57.60**	**m²**		0.25	**3.60**	
			B/Elevation Column				
18.00	2.60		permeter=4*0.25=1				b) In Intermdet & Top Tie beam
	1.00	**46.80**	**m²**	2	149.00		Total length=27.5*3 +11*6=149 m
			C/Gread Beam		0.3		Width=0.25 m, Depth=0.25m
5.00	27.50		permeter=2*0.3=0.6		0.25	22.35	
	0.60	82.50	m²			**22.35**	**m³**
8.00	11.00			1	27.50		c) In 15cm thick solid slab
	0.60	52.80	m²		11		
1.00	0.00				0.15	45.38	
	0.60	0.00	m²			**45.38**	**m³**
		135.30	**m²**				d) In stair case & Landing
			2.3/ Steel Reinforcement	4	3.00		Flight
			a) Dia. 6mm plain bar		1.5		
	0	0.00	See annexed rebar schedule sheet		0.15	2.70	
			b) Dia. 12 mm deformed bar				Steps 9 going & 9 riser
	0.00	0.00	See annexed rebar schedule sheet	36	**0.03**	**1.22**	A=0.5*0.3*0.15*1.5=0.03375
			c) Dia. 14 mm deformed bar	2	2.25		Landing
	0.00	0.00	See annexed rebar schedule sheet		2.75		
		0.00	**kg**		0.15	1.86	
						5.77	**m³**
							1.2 Form Work For
			3. MASONRY WORKS		0.3		a) elevation column
			3.1/ 50cm thick masonry Below NGL	18.00	3.20		permeter=4*0.25=1
1	0.00		Total length=27*4+11*4=152 m	2.00	4.00	**138.24**	**m²**
	0.5		Avge depth=1.50m				b) In Top Tie beam
	0.00	0.00	width= 0.50m				permeter=2*0.3+0.25=0.85
		0.00	**m³**	2.00	149.00		Total length=149 m
					0.85	**253.30**	**m²**
				1.00	27.50		c) In 15cm thick solid slab
					11.00	**302.50**	**m²**

Projec Kafteria **Block Building**
Client:
S.Contractor: -

Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches
	11.00		d) In stair case & Landing				
	0.60	0.00		36.00	3.90		
					3.00	421.20	m²
						784.80	**m² Total**

							3. Roof Work
				1.00	28.00		3.1/ G-30 CIS roof cover
					12.00	336.00	m²
						336.00	**m²**
				2	28.00	56.00	3.2/ G-30 Gutter
			2. Block Work			**56.00**	**ml**
			2.1/ 20 cm thick HCB wall :				3.3/ down pipe
6.00	2.63			12	9.00	108.00	
	3.00	47.34	m²			**108.00**	**ml**
24.00	2.70						
	3.00	194.40	m²				
12.00	2.75						**4. Eculuptus Truss**
	3.00	99.00	m²				a/ 12cm upper & Lower
6.00	1.30						no of truss=28/0.9+1=33
	3.00	23.40	m²				L=(6+6.3)*2*33=811.8
		364.14	**m²**			**811.80**	**ml**
			diduct door & Window				b/ 10cm Vertical & Diag
-48.00	0.90						15x1.5x33=742
	3.00	-129.60	m²			**742.00**	**ml**
-48.00	1.63						c/ 5x7cm zigba purlin
	2.00	-156.48	m²	16	29	**464.00**	**ml**
-6.00	0.60						4. 2 .2.5x20 facial board
	0.60	-2.16	m²	2	29	**58.00**	**ml**
		-288.24	**m²**				**5. Metal Work**
		75.90	**m² Total**				main post 40x40x2.5mm RHS Section
			2.2/ 15 cm thick HCB wall :				h=1m c/c 150cm
12.00	5.15						no=(27.5/1.5+1)*2=39
	3.00	185.40	m²				no=(11/1.5+1)*2=17
12.00	3.75						total=56x1=56
	3.00	135.00	m²				weight/m=2.92
				56	2.92	163.52	**Kg**
							horizontal frame 30x30x2.5mm RHS Section
6.00	1.20						no=1/0.4+1=4 c/c 40cm
	3.00	21.60	m²				weight/m=2.14
12.00	0.60						
	3.00	21.60	m²				vertical fram c/c 40cm
		363.60	**m² Total**				
							weight/m=1.43

Projec Kafteria **Block** **Building**
Client:
S.Contractor: -

Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches
							3.7/ 3cm thick cement concrete window
			3. Plastering Work				sill
			3.1/ Three coats of plastering to all internal surface:	48	1.63	**78.24**	**ml**
24.00	5.15						3.8/ apply ceramic tile ff
	3.00	370.80	m²	6.00	2.63		
48.00	1.63				3.90	61.54	m²
	1.00	78.24	m²	24.00	2.70		
6.00	1.30				3.90	252.72	m²
	3.00	23.40	m²	12.00	2.75		
96.00	3.90				3.90	128.70	m²
	3.00	1,123.20	m²	12.00	2.65		
		1,595.64	**m² Total**		3.90	124.02	m²
			3.2/ ditto but to external surface:	6.00	11.00		
48.00	1.63				1.50	99.00	m²
	1.00	78.24	m²	6.00	28.00		
6.00	1.30				1.50	252.00	m²
	3.00	23.40	m²			**917.98**	**m² Total**
1	11.00						3.9/ 10cm hight terrazo tile skirting

	3.00	33.00	m²
		134.64	**m² Total**
			3.3/ ditto but to solid slab
2	12.00		
	28.00	672.00	m²
		672.00	**m² Total**
			3.4/ apply 3 coat of rendering
2	11.00		
	3.00	66.00	m²
2	28.00		
	3.00	168.00	m²
		234.00	**m² Total**
			3.5/ apply 8mm thick plastic ceiling
1	12.00		
	28.00	336.00	m²
		336.00	**m² Total**
			3.6/ ditto but to eave
2	11.00		
	1.50	33.00	m²
2	27.50		
	1.50	82.50	m²
		115.50	**m² Total**

96	3.9	374.40	ml
48	1.63	78.24	ml
48	1.63	78.24	ml
		530.88	**ml**
			3.10/ lay 110cm wide & 15cm thick pavement around building
2.00	11.00		
	1.20	26.40	m²
2.00	27.50		
	1.20	66.00	m²
		92.40	**m² Total**
2	11	22.00	3.11/ half open ditch
2	28	56.00	ml
		170.40	**ml**

Projec Kafteria **Block** **Building**
Client:

S.Contractor: -

Qty	L/W/D	Product	Description & Sketches	Qty	L/W/D	Product	Description & Sketches
			1.3/ Steel Reinforcement				**2. Block Work**
			a) Dia. 6mm plain bar				2.01/ 20 cm thick HCB wall around the fance:
	0	0.00	See annexed rebar schedule sheet	1	608.22		Total length=608.22 m, height=1.20 m
			b) Dia. 12 mm deformed bar		1.20	729.86	**m²**
	0.00	0.00	See annexed rebar schedule sheet				**3. Plastering Work**
			c) Dia. 14 mm deformed bar				3.01/ Three coats of plastering for elevation columns:
	0.00	0.00	See annexed rebar schedule sheet				
		0.00	**kg**	186	2.80		a) To elevation column-Small
					0.20	104.16	**m², Height of col.=2.8m,Width=0.20m**
			2. Block Work	186	1.60		Height=2.80m-1.20m =1.60m
			2.01/ 20 cm thick HCB wall around the fance:		0.20	59.52	**m²**
				8	2.80		b) To elevation column-Big Col.
					0.40	8.96	**m²,** Height of col.=2.8m,Width=0.20m
				8	1.60		Height=2.80m-1.20m =1.60m
					0.40	5.12	**m²**
						177.76	**m² Total**
							c) Making Sharp Corners to elev. Columns
				388	2.80	1,086.40	**ML,** Numbers of Col.=97 pcs,H=2.80m
						1,086.40	**ML**
							4. Metal Work
							4.01/ RHS Giril work b/n elev. Columns as per the Drawings:
			2.04/Reinforcement Work:				
			a) Dia. 6mm plain bar				Number of Girills=93 pcs
	0	0.00	See annexed rebar schedule sheet	1	93.00	**93.00**	**Pcs**
			b) Dia. 12 mm deformed bar			**93.00**	**Pcs**
	0.00	0.00	See annexed rebar schedule sheet				
		0.00	**kg**				HC
				4	1.35		
					1.35	7.29	m²
				4	1.35		
					3.70	19.98	m²
				8	1.35		
					5.10	55.08	m²
				2	1.35		
					2.60	7.02	m²
				8	3.75		
					5.10	153.00	m²
				2	3.70		
					2.60	19.24	m²
						261.61	**m² Total**

BAR SCHEDULE

PROJECT Building G+2 *1*

Client Micro Inter Prize Office

A SUB STRUCTURE

Location	Ø	Length (m)	# of bar	# of meber	Total Length(m)	Ø6	Ø8	Ø10	Ø12	Ø14
Footing Pad										
Main Bar	20	2.6	22	18	1029.6					
Foundation Colu										
Main Bar	16	4.54	8	18	653.76					
Stirrups for Col	8	0.9	16	18	259.2		259.2			
c/c 200										
For Ground Floor										
c/c 250	8	11	109	1	1199		1199			
	8	27	45	1	1215		1215			
Stirrups										
For Gread Beam	8	1.5	20	5	150		150			
on axis 1,2 & 3	8	1.5	124	5	930		930			
	8	1.5	18	5	135		135			
on axis A,B,C,D,E & F										
c/c 180	8	1.5	20	8	240		240			
	8	1.5	48	8	576		576			
Gread Beam										
on axis 1,2 & 3	14	10.2	2	5	102					102
Main Bar	14	8.86	2	5	88.6					88.6
	14	10.28	2	5	102.8					102.8
	14	12	3	5	180					180
	14	8.86	3	5	132.9					132.9
	14	8.3	3	5	124.5					124.5
Negative Bar	14	3.3	1	3	9.9					9.9
	14	3.6	2	3	21.6					21.6
	14	2.75	2	3	16.5					16.5
on axis A,B,C,D,E & F	14	11.4	2	8	182.4					182.4
Main Bar	14	11.4	3	8	273.6					273.6
Negative Bar	14	1.8	2	6	21.6					21.6
	14	1.6	1	6	9.6					9.6

Total length in meter----------	**0**	**4,704.20**	**-**	**0**	1,266.00
Weight per unit length in meter----------	0.222	0.395		0.888	1.208
Total Weight in Kg----------	***0***	***1,858.16***	**-**	***0***	**1,529.33**

BAR SCHEDULE

PROJECT Building G+2 *1*

Client Micro Inter Prize Office

B SUPER STRUCTURE

Location	Ø	Length (m)	# of bar	# of meber	Total Length(m)	Ø6	Ø8	Ø10	Ø12	Ø14
Intermideat Beam										
on axis 1,2 & 3	14	10.2	2	6	122.4					122.4
Main Bar	14	8.86	2	6	106.32					106.32
	14	10.28	2	6	123.36					123.36
	14	12	3	6	216					216
	14	8.86	3	6	159.48					159.48
	14	8.3	3	6	149.4					149.4
Negative Bar	14	3.3	1	6	19.8					19.8
	14	3.6	2	6	43.2					43.2
	14	2.75	2	6	33					33
on axis A,B,C,D,E & F										
Main Bar	14	11.4	2	12	273.6					273.6
	14	11.4	3	12	410.4					410.4
Negative Bar	14	1.8	2	12	43.2					43.2
	14	1.6	1	12	19.2					19.2
top tie Beam										
on axis 1,2 & 3	14	10.2	2	3	61.2					61.2
Main Bar	14	8.86	2	3	53.16					53.16
	14	10.28	2	3	61.68					61.68
	14	12	3	3	108					108
	14	8.86	3	3	79.74					79.74
	14	8.3	3	3	74.7					74.7
Negative Bar	14	3.3	1	3	9.9					9.9
	14	3.6	2	3	21.6					21.6
	14	2.75	2	3	16.5					16.5
on axis A,B,C,D,E & F										
Main Bar	14	11.4	2	3	68.4					68.4
	14	11.4	3	3	102.6					102.6
Negative Bar	14	1.8	2	3	10.8					10.8
	14	1.6	1	3	4.8					4.8
Elevation Column										
	14	4.02	12	18	868.32					868.32
	14	3.8	6	18	410.4					410.4
Strrup										
For Inter & top Beam	8	0.9	20	9	162		162			
on axis 1,2 & 3	8	0.9	124	9	1004.4		1004.4			
	8	0.9	18	9	145.8		145.8			
on axis A,B,C,D,E & F										
c/c 180	8	0.9	20	9	162		162			
	8	0.9	48	9	388.8		388.8			
For Elev.Column										
c/c 200	8	0.9	48	18	777.6		777.6			
Slab	c/c 200									
Negative Bar	8	2.67	139	2	742.26		742.26			
	8	2.83	139	4	1573.48		1573.48			
	8	3.3	56	4	739.2		739.2			
	8	3.6	56	4	806.4		806.4			
	8	2.77	56	4	620.48		620.48			
Bottom Rein	c/c 200									
	8	11	56	2	1232		1232			
top Rein	8	29	139	2	8062		8062			
Total length in meter----------						0	**16,416.42**	**-**	0	3,671.16
Weight per unit length in meter----------						0.222	0.395		0.888	1.208
Total Weight in Kg----------						***0***	***6,484.49***	**-**	***0***	**4,434.76**

BAR SCHEDULE

PROJECT Building G+2 *1*

GRADE BEAMS AND ELEVATION COLUMNS BAR SCHEDULE

A SUPER STRUCTURE

Location	Ø	Length (m)	# of bar	# of meber	Total Length(m)	Ø6	Ø8	Ø10	Ø12	Ø14
			Total length in meter---------------------------------			0	-	-	0	-
			Weight per unit length in meter---------------------------------			0.222	0.395		0.888	1.208
			Total Weight in Kg----------------------------------			***0***	**-**	**-**	***0***	**-**

Ø16	Ø20
	1029.6
653.76	
653.76	**1,029.60**
1.579	2.467
1,032.29	**2,540.02**

Ø16	Ø20
-	**-**
1.579	2.467
-	-

Ø16	Ø20
-	**-**
1.579	2.467
-	-

BOQ G+2 Micro Cluster Main Building

ITEM	DESCRIPTION	UNIT	QTY.	RATE
	A. SUB STRUCTURE			
	1. EXCAVATION & EARTH WORK			
1.1	Excavate over site to remove all objectionable			
	materials to an average depth of 20cm. Area			
	of excavation includes pavement around			
	building.	M^2	0.00	-
1.2	Bulk excavation in ordinary soil from the reduce			
	level to an average depth of 50cm below	M^3	0.00	-
1.3	50cm thick Trench excavation in ordinary			
	soil for stone masonry foundation wall to depth			
	of 250cm starting from reduced level.	M^3	0.00	-
1.4	pit Excavation for Isolated footing Foundation.			
	in ordinary soil to depthof 300cm starting			
	from reduced level	M^3	0.00	-
1.5	Back fill under hared core & around masonary			
	tench & around isolated footing with good dry			
	selected material not exceeding 25cm.	M^3	0.00	-
1.6	Cart away surplus excavated material and			
	deposit at a suitable distance.	M^3	893.96	36.09
1.7	25cm thick basaltic or equvalent stone hared core			
	well rolled consolidated & blined with			
	crushed stone.	M^2	0.00	-
	Total to Summary.....			
	2. CONCRETE WORK			
2.1	5cm thick lean concrete in C-5 with minimum			
	cement content of 150Kg/m^3			
	a/under footing pad.	M^2	0.00	-
	b/under Masonary & gread beam.	M^2	0.00	-
	c/under Hard Core.	M^2	0.00	-
2.2	Reinforced concrete quality C-25 with 360kg			
	cement/M^3 of concrete filled in to formwork			
	and vibrated around rod reinforcement bars.			
	(Steel and form work measured separately)			
	A/ Footing Pad	M^3	0.00	-
	B) In foundation column	M^3	0.00	-
	C) In Grade beam	M3	0.00	-
	D) In 10cm thick Grouned Floor Slab	M^2	0.00	-
2.4	Provide, cut and fix in position sawn Zigba			
	wood or metal panel form work:			
	A/ Footing Pad	M2	0.00	-

	B) In foundation column	M^2	0.00	-
	C) In Grade beam	M2	0.00	-
2.5	Reinforcement bar according to structural			
	drawings. Price includes cutting, bending,			
	placing in position & tying wires.			
	a/Diameter 8mm deformed bars	Kg	0	-
	b/Diameter 14mm deformed bars	Kg	0	-
	c/Diameter 16mm deformed bars	Kg	0	-
	d/Diameter 20mm deformed bars	Kg	0	-
Total to Summary.....		**Bir**		

	3. MASONRY WORK			
3.1	50 cm thick hard trachitic or equivalent stone			
	masonry foundation wall bedded in cement			
	mortar (1:4) below natural ground level.	M^3	0.00	-
3.2	ditto (1:4) above natural ground level.	M^3	0.00	-
3.3	ditto (1:4) but for steps	M^3	21.00	935.92
	Total to Summary.....			
	B. SUPER STRUCTURE			
	1. CONCRETE WORK			
	Particular attention is to be given to the			
	following remarks along with the technical			
	specification and method of measurement.			
	Ingredients for concrete work :			
	The quality of materials and workman ship must			
	fulfill the requirements and concrete			
	Concrete :			
	Reinforcement bar :			
	The specified yield strength and other			
	related properties of reinforcement bar			
	must be confirmed either by manufacturer's			
	catalogue/manual or / and by laboratory test.			
1.1	Reinforced concrete quality C-25 with 360kg			
	cement/M^3 of concrete filled in to formwork			
	and vibrated around rod reinforcement bars.			
	(Steel and form work measured separately)			
	a. In elevation column	M^3	4.00	1,871.07
	b) Intermideate & top tie beam	M^3	23.00	1,871.07
	c) 15cm thick solid slab	M^3	45.38	1,872.07
	d) Stair Case & Landing	M^3	5.77	1,871.07
1.2	Provide, cut and fix in position metal panel or			
	sawn Zigba wood form work			
	a. In elevation column	M^2	138.24	118.11
	b) Intermideate & top tie beam	M^2	270.00	118.11
	c) 15cm thick solid slab	M^2	302.50	118.11
	d) Stair Case & Landing	M^2	80.00	118.11
1.3	Reinforcement bar according to structural			
	drawings. Price includes cutting, bending,			
	placing in position & tying wires.			
	a/Diameter 8mm deformed bars	Kg	6,485.00	40.69
	b/Diameter 10mm deformed bars	Kg	65	42.79
	c/Diameter 12mm deformed bars	Kg	720	42.79
	d/Diameter 14mm deformed bars	Kg	4435	42.79
	e/Diameter 16mm deformed bars	Kg	970	42.79
	Total to Summary	**Birr**		
	2. BLOCK WORK			
	In addition to strength, size, and other specified			

	requirements HCB blocks must satisfy the weight			
	requirements specified in EBCS - 1, 1995.			
2.1	20cm thick class-B H.C.B wall bedded and			
	Joined in cement mortar mix 1:3 both sides			
	left for plaster.	m^2	75.90	174.98
2.2	ditto but 15cm thick class-B H.C.B wall bedded	m^2	996.00	148.84
	Total to Summary.....			
	3.ROOFIG WORKIG			
3.1	C-30 Roof cover in corrigated galvanized iron sheet (CIS)), fixed to wooden purlins with dome headed nails. Price shall include ridge cap. (Purlins measured and roof measured in horizontal projection with all acceessory).	m^2	336.00	226.20
3.2	Supply and fix G-30 galvanized flat metal sheet gutter as per the detail drawing. Price shall include all necessary accessories, metal bracket suspenders, one coat of antirust paint and two coat of synthetic enamel paint.	ml	56.00	120.75
3.3	down pipe fixed to RC column with metal strap			
	c/c 100cm	ml	108.00	140.23
	Total to Summary.....Birr			
	4. CARPENTERY & JOINRY WORK			
	All structural members shall be paint 2 coats of			
	anti termite paint well seasoned and each truss			
	shall be fixed to RC beam with 0.6mm plain bar.			
	Truss spacing is shown in the drawing.			
4.1	**EUCALYPTUS TRUSS**			
	a/12cm upper & lower chord.	ml	811.80	47.57
	b/ø10cm diagonal & vertical members.	ml	742.00	46.89
	c/ø5x7cm zigba wood purlin.	ml	464.00	37.49
4.2	Supply & fix flash wooden door with tid wood			
	frames & both side coverd with best quality 4mm			
	thick plywood price includes all the nessasary			
	accessories			
	D1 Size 70cmx210cm	pcs	12	8,000.00
Total	**to Summary.....Birr**			
	5. METAL WORK			
5.1	supply & fix metal door & window made of emitation			
	profile with Grill shall be fabricated from			
	manufactured tabular steel profile and aproved,			
	quality of cylindarical lock as per drawing			
	price includes all the necessary work.			
	DOORS			
	D1 Size 90cmx300cm	pcs	6	2,288.68
	DW1 Size 253cmx300cm (door & Window in one)	pcs	48	6,433.73
	FD1 Size 375cmx300cm	pcs	6	9,536.17

	FD2 Size 165cmx300cm	pcs	6	4,195.91
5.2	supply & fix metal window made of emitation			
	profile with Grill complete worke with all			
	accessories as shown. This work includes			
	1 coat of anti rust & 2 coat of synthetic paint			
	WINDOWS			
	Type W-1,size 60x 60cm	pss	6.00	305.15
5.3	supply & fix metal blustrade for corridor to fit the			
	schedule the main post shall be 40x 40x2.5mm			
	RHS section fixed to slab by cement grouting at			
	every 1.5m c/c and the main horizontal frame shall			
	be 30x 30x2.5mm RHS section fixed			
	to column by cement grouting by vertical stand			
	every 40cm c/c.the centeral panel			
	fixed with RHS 25x 25x2mm price can include			
	cutting,welding the joints proprily & paint 3 coat			
	of synthtic paint on an anti rust coat primer.			
	a/ RHS 40x 40x2.5mm	kg	530.00	45.00
	b/ RHS 30x 30x2.5mm	kg	1320.00	45.00
	c/ RHS 25x 25x2mm	kg	800.00	45.00
5.4	supply & fix metal blustrade with kararo wood			
	handrail for stair case			
	a/ RHS 40x 40x2.5mm	kg	120.00	45.00
	b/ RHS 30x 30x2.5mm	kg	260.00	45.00
	c/ Kararo wooden handrail size 40x60mm screwed			
	every 30cm c/c to RHS section.	ml	155.00	45.00
	d/15x 2.5cm nicely planed & polished kararo			
	wood strings	ml	108.00	50.00
	Total to Summary…… Birr			
	6. FINISHING WORK			
	Finishing work shall include all surface			
	pre-cleaning preparation application of finish,			
	polishing and cleaning at the end of finishing			
	work.			
6.10	Apply three coats of plaster in cement mortar			
	mix 1:3 up to fine finish.to all internal surface,			
	exposed concret column and beam.	m^2	1595.64	105.91
6.20	ditto but to external wall surface.	m^2	134.64	105.91
6.30	ditto but to solid slab.	m^2	672.00	105.91
6.40	Apply three coats of tyrolline rendearing to exteri			
	or surface **(Use Machine rendering)**	m^2	234.00	20.11
6.50	supply & fix plastic ceiling to 4x5cm			
	zigba wood buttons placed at c/c 60cm in both way.			
	price includes includes celling button & angulare.	m^2	336.00	337.46
6.60	30cm treade and 20cm riser Marble for stair case	Ml	115.50	120.00

6.70	3cm thick marble window sill 30cm			
	wide bedded in cement and sand morter mix (1:3)	ml	78.24	75.00
6.80	Supply and Fix 30x30cm Ceramic tile floor finish bedded &			
	joints grunted in cement and sand morter mix (1:3)			
	morter beddeding.for varrandaha,stair & Lobby non slipery	m^2	917.98	300.00
6.9	ditto but Ceramic wall for shawor Room 15x15cm	m^2	106.00	300.00
6.10	ditto but cement concret terrazo tile floor finish	m^2	475.00	200.00
6.11	10cm high Ceramic tile skirting stuck down with			
	cement and sand morter mix (1:3)	ml	530.88	70.00
6.12	Supply & lay 110cm wide & 10cm thick mass			
	concret C-15 pavement around the building including			
	creshed &10cm thick compacted red ash.	m^2	92.40	295.40
6.13	Supply & fix open ditch & half cement concret pipe			
	d=40cm bedded & joint in 1:3 morter			
	,price includes selected material fill	ml	170.40	124.50
	Total to Summary.....	**Birr**		
	7. Glazing Work			
7.1	Supply & fix 6mm thick ordinary glass quality clear			
	sheet glass & glazing to metal casment with putty	m^2	410.00	300.00
	Total to Summary.....	**Birr**		
	8. Painting			
	Prepare the surface and apply three coats			
	of plastic emulsion paint of chosen type			
	and clour to:			
8.1	Internal plastered surface and exposed	m^2	1595.64	40.00
	concret column and beam.			
8.2	ditto but to external plastered wall surface.	m^2	134.64	40.00
8.3	ditto but to rendearing wall	m^2	156	40.00
8.4	ditto but to Qaurtize paint to external wall	m^2	336	40.00
8.5	ditto but to sold slab	m^2	616.00	40.00
8.6	ditto but synthtic paint to metal door & windaw.	m^2	410	40.00
	Total to Summary.....	**Birr**		
	9.SANITARY INSTALLATION			
	A. Interior Installation			
	Water Supply Pipes & fittings			
9.1	Supply and install galvanized steel pipes			
	from elevatedwater tank to cold and hot water			
	distibution to all santitary fixtures as shown on .			
	the drawing			
	Diameter 15 mm	ml	60	50.00
	Diameter 20 mm	ml	40	60.00

9.2	Supply and install gate valves made of brass			
	completewith rubber gaskets, hand wheels and			
	connecting pieces such as unions etc, for all fixtures			
	Diameter 15 mm	Pcs	14	25.00
	Diameter 20 mm	Pcs	10	27.00
	Elevated water tank			
9.3	Supply and mount 8m³ fibre glass water tank on			
	roof complete with all the necessary accessories			
	a) Size of water tank = 4 x 2 m	Pc	1	15,000.00
	b)Diameter 32mm brass gate valve for outlet pipe	Pcs	1	200.00
	c)Diameter 32mm brass gate valve for drain pipe	Pcs	1	200.00
	d)Diameter 32mm brass gate valve for inlet pipe	Pcs	1	150.00
	e)Diameter 40mm PVC float valve	Pcs	1	200.00
	f)Diameter 50 mm PVC vent pipe with vent cap			
	length of pipe 30 cm	Pcs	1	250.00
	g)Diameter 32mm drain and over flow galvanized			
	steel pipe	Ml	45	70.00
	h)Roto Stand made of Concrete pole & Slab	Lump	1	10,000.00
	Sanitary Fixtures			
9.4	Supply and install low level water closet			
	white glazed vitreous China WC pan of approved			
	quality complete with all the necessary accessori	Pcs	12	2,000.00
9.5	Supply and install hand wash basins made			
	of white vitreous China with two tap holes			
	complete with all the necessary accessories			
	Size :- 500 x 405 mm	Pcs	12	3,500.00
9.6	Supply & install white glazed steel cast-iron shawor			
	tray with slip resistance base,15mm chrome plated			
	shower mixer with cold & hot taps,concealed riser tube			
	chrome plated shower arm tube & swivel spray head,			
	38mm brass shower tray waste drain hole with chrome			
	plated grated,dia 38mm uPVC trap.			
	size 900x900mm	Pcs	12	3,500.00
9.7	Supply and install single tubular chrome plated swing			
	towel hanger,with chrome plated fastening screws			
	completed with all the necessary accessories	Pcs	2	200.00
9.8	Supply and fix toilet paper holder in white vitreous			
	China complete with all the necessary accessorie	Pcs	12	150.00
9.9	Supply and fix crystal glass mirror 500 x 400 mm			
	including chrome plated brass clips and screws	Pcs	6	1,500.00
	Waste water & Ventilation Pipe			

9.1	Supply and fix water heater complete with all			
	neccessories.			
	a/Capacity 25 litters	Pcs	6	4,500.00
9.1	Supply and install , waste and vent pipe in			
	horizontal branches and vertical stacks made			
	of PVC including the necessary fittings such as			
	bends, branches tees, elbow etc. All horizontal			
	branches should be laid at a slope of 2% .			
	Diameter 50 mm	ml	106	52.00
9.1	Supply and install vent caps made of PVC			
	at vent pipes fitted with PVC pipe roof weathering			
	slate at roof level.			
	Diameter 50 mm	Pc	25	50.00
	B. Site Sanitary Work			
9.1	Construct sanitary manholes on a domestic sewer			
	lines in double brick wall on a base of mass			
	concrete slab 150mm thick with proper slope for			
	smooth flow and with 80 mm R.C slab cover and			
	steel bar handle as shown on the detaildrawing.			
	Size:- 60 x 60 cm	Pc	2	2,000.00
	Avg. depth =60 cm			
9.14	Supply and lay hard plastic pipe for sewerage			
	according to the drawing			
	Diameter 150 mm	Ml	210	120.00
9.15	Supply and install galvanized steel pipe from main			
	line to roof fibre glass water tank complete with			
	all the necessary accessories.			
	Diameter 32mm	Ml	20	65.00
	Total to Summary…….	**Birr**		
	10. ELECTRICAL INSTALLATION			
	1.Power Intake			
	1.1 Under Ground Ducts/pipes			
	A/PVC pipe of 50mm diameter	ml	15	500.00
	1.2. Manhole			
	A/Construct manhole in brick & with concrete			
	base internally of 600x600x600mm including concret			
	cover with lifting hole	Nº	1	2,500.00
	2. Low Voltage System Earthing			
2.1	2400x16mm coper clad earthing rod inside			
	600x600x600mm pit measured elsewhere)	Nº	1	2,000.00
2.2.	1x16 sq.mm bare copper bonding conductor			
	from earth bar to MLPP-TP3 earthing terminal	ml	15	500.00
	3. Distribution Board			
3.1	Flush Mounted distribution board LPP-TF (the boar			
	name shall be identified using plastic engrayed			
	tags screw fastened) in sheet steel structure with			
	locable door & including bus bars of 63Amp 3phase			

	with all accessaries fixing & connecting accessaries			
	2pcs 10A MCB,1phase 6KA			
	10pcs 16A MCB,1phase 10KA			
	1pcs main 32A MCB,3phase 10KA			
	and with 25% reserve pitch.	Nº	1	6,000.00
3.2	Flush mounted sub distribution board MDB with lockable door, phase-bar rating of 400A/3ph and with all its accessories consisting of :-			
	1pc m.c.c.b. of 320A/3ph Icu=16ka			
	5 pcs m.c.b. of 63A/3ph Icu=10ka			
	8 pcs m.c.b. of 25A/3ph Icu=10ka			
	and with 20% reserve space.	Nº	3	4,000.00
	4. Feeder Cable & PVC pipe			
	Installed PVC power cable type NYY0.6/1kv or			
	equvalent to be drawn inside riser shaft or PVC			
	conduit			
	Cables			
4.1	5x10 sq.mm from MLPP-TP3 to Lpp-LF	ml	2300	15.00
	PVC pipes			
4.2	32 diameter	ml	54	500.00
	5.LIGHT POINTS			
5.1	Light points fed through PVC insulated conductor			
	of.2 x 2.5 sq.mm.in thermoplastic conduit of diam			
	16mm in/under surface including junction boxes			
	screw type connectors with insulating caps and			
	cover including all accessories	Nº	111	300.00
	6.SWITCH			
6.1	Flush mounted Legrand Suno range switch or			
	equivalent with non circular corresponding box:-			
	a. Single pole	Nº	111	60.00
	b. Double pole	Nº	111	75.00
	7.SOCKET OUTLET POINT			
7.1	Socket outlets points for flush mounting fed			
	through PVC conductor of 3 x 2.5 sq.mm			
	in thermoplastic conduit of diameter 16mm			
	in/under surface including junction boxes,screw			
	type connectors and cover all complete			
	Ditto but fed through PVC coductor of 3x4			
	sq.mm in diameter 21 mm.	Nº	48	200.00
10.4	**TELEPHONE POINT:-**			
	Telephone point:- Only conduit of diameter 19 -			
	29mm, outlet box, pull wire and tele terminal			
	box as per ETC rules and regulations	Nº	48	200.00
	Total to Summary		**Birr**	
	GRAND TOTAL			

AMOUNT
-
-
-

-
-
32,263.02
-
32,263.02
-
-
-
-
-
-
-
-

	-
	-
	-
	-
	-
	-
	-

-
-
19,654.32
19,654.32
7,484.28
43,034.61
84,945.18
10,798.41
16,327.53
31,889.70
35,728.28
9,448.80
263,874.65
2,781.35
30,808.80
189,773.65
41,506.30
768,401.53

13,280.98
148,244.64
161,525.62
76,003.20
6,762.00
15,144.84
97,910.04
38,617.33
34,792.38
17,395.36
96,000.00
186,805.07
13,732.08
308,819.04
57,217.02

25,175.46
1,830.90
23,850.00
59,400.00
36,000.00
5,400.00
11,700.00
6,975.00
5,400.00
555,499.50
168,994.23
14,259.72
71,171.52
4,705.74
113,386.56
13,860.00

5,868.00
275,394.60
31,800.00
95,000.00
37,161.60
27,294.96
21,214.80
880,111.73
123,000.00
123,000.00
63,825.60
5,385.60
6,240.00
13,440.00
24,640.00
16,400.00
129,931.20
3,000.00
2,400.00

350.00
270.00
15,000.00
200.00
200.00
150.00
200.00
250.00
3,150.00
10,000.00
24,000.00
42,000.00
42,000.00
400.00
1,800.00
9,000.00

27,000.00
5,512.00
1,250.00
4,000.00
25,200.00
1,300.00
218,632.00
7,500.00
2,500.00
2,000.00
7,500.00

6,000.00
12,000.00
34,500.00
27,000.00
33,300.00
6,660.00
8,325.00
9,600.00
9,600.00
166,485.00
3,340,219.03

GRAND SUMMARY

Project : G+2 MICRO CLUSTER
Location : SHASHEMENE BURKA GUDINA
Client : SHASHEMENE JOB CREATION & FOOD SECURITY OFFICE
Contractor :
Consultant :

ITEM NO	DESCRIPTIONS	AMOUNT (BIRR)
	Main building	*3,340,219.03*
	Septic tank & manhole	*205,979.37*
	Total	*3,546,198.40*
	Profit	*248,233.89*
	Overhead	*248,233.89*
	Toal sum	*4,042,666.17*
	VAT 15%	*606,399.93*
	Grand total with VAT15%	***4,649,066.10***