

Ethiopian Center for Disability and Development (ECDD)**Engineering Department**

Project Name: HUDEPE AID 12279

Project Location: Bambasi R.Camp, Assosa

SUMMARY OF BOQ

No	ConstructionLists	Amount	Unit
1	Accessible Toilet		Birr
2	Septic Tank		Birr
3	Water Tanker With Elevation Column		Birr
4	Accessible Ramp		Birr
5	Signage		Birr
	Total Amount		Birr
	Rebate		Birr
	Total Amount after rebate		Birr
	Vat (15%)		Birr
	Grand Total		Birr



Summery of Ramp, Bambasi R.Camp, Assosa			
No	Description	Unit	Amount
1	Five Ramps 1 RRS Health Center: Admission, Emergency,OPD , Prenatal & Reception (15cmX187.5X120cm)	Birr	
2	Ramp 2: RRS Health Center Toilet Room (15cmX187.5X120cm)	Birr	
3	Walkway at RRS Health Center from Ward to Emergency Room (19mX1.5m)	Birr	
4	Ramp 3: RRS Health Center: Nutrition Center/Food Distribution (50cmX625cmX150cm)	Birr	
5	Ramp 4 RRS Health Center NCD (30cmX375cmX150cm)	Birr	
6	Ramp 5: RRS Health Center, NRC Building (67cmX840cmX200cm)	Birr	
7	Ramp at RRS Office: Logistic office (83cmX1037.5cmX120cm)	Birr	
8	Ramp at RRS Office: PWD & Youth Association (25cmX312.5cmX165cm)	Birr	
9	Walkway 2 at Youth Education and Training Program compound (900cmX150cm)	Birr	
10	Ramp at ICT Workshop	Birr	
11	Ramp at Day Care (32cmX400cmX120cm)	Birr	
12	Ramp at Youth Center C, Meeting Hall (26cmX325cmX145cm)	Birr	
13	Ramp at Child Friendly Service Zone B, Adminstration office (60cmX750cmX150cm)	Birr	
14	Ramp at Child Friendly Zone A, Class Room (75cmX940cmX150cm)	Birr	
15	Ramp at Child Friendly, Zone B, Admin Office (40cmX500cmX150cm)	Birr	
16	Ramp at Child Friendly Zone B, Class Room (75cmX940cmX150cm)	Birr	
17	Ramp at Child Friendly Zone B, Class Room (75cmX940cmX150cm)	Birr	
18	Ramp at Food Distribution Center (75cmX940cmX150cm)	Birr	
	Total Summery of Ramp	Birr	



Ethiopian Center for Disability and Development (ECDD)
Engineering Department

Project Name: HUPEPE - AID 12279

Project Location: Bambasi R.Camp, Assosa

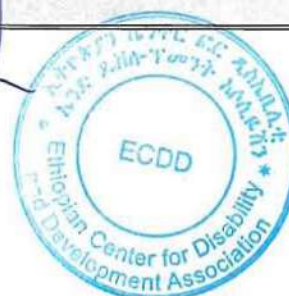
Specification & Bill of quantities for Bambasi R.Camp, Assosa					
Five Ramps: RRS Health Center: Admission, Emergency, OPD , Prenatal & Reception (15cmX187.5X120cm)					
Item	Discription	Unit	Qty.	Rate	Amount
	<u>1.Exacavation & earth work</u>				
1.1	Demolution of existing mini ramp	m ²	13.16		
1.2	Clear the site an average depth of 200mm.	m ²	13.16		
1.3	Trench excavation for 40cm thick stone masonry with working space	m ³	3.47		
1.4	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.74		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	1.38		
1.5	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.14		
1.6	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	43.65		
	Total Carried to Summary				
	<u>2. Concrete work</u>				
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concrete	m ²	9.90		
	In 100mm thick ramp slab with curb stone (12cm*12cm) apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	11.28		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Ø8mm deformed bar	Kg	65.49		
	Total Carried to Summary				
	<u>3. Form Work</u>				
3.1	200mm form work for Ramp and landing, price includes all necessary work	m ²	4.14		
	Total Carried to Summary				
	<u>4. Stone Masonry</u>				
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	3.94		
	Total Carried to Summary				
	<u>5. Metal work</u>				
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and coated with antirust and green metallic paint	ml	0.00		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m, 0.15 hook length in each post and it has to be mounted on the ramp with 0.9m spacing along the ramp length and coated with antirust and green metallic paint	ml	0.00		
	Total Carried to Summary				
Total Summary For Ramp					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp: RRS Health Center Toilet Room (15cmX187.5X120cm)

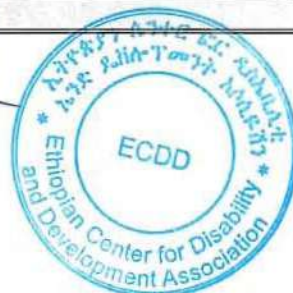
Item	Discription	Unit	Qty.	Rate	Amount
<u>1. Excavation & earth work</u>					
1.1	Clear the site an average depth of 200mm.	m ²	2.63		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	0.69		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	0.35		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	0.28		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.03		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	1.22		
Total Carried to Summary					
<u>2. Concrete work</u>					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	1.98		
	In 150mm thick ramp slab with curb stone (12cm*12cm) apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	2.26		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	13.10		
Total Carried to Summary					
<u>2. Form Work</u>					
3.1	300mm form work for Ramp and landing	m ²	0.83		
Total Carried to Summary					
<u>4. Stone Masonry</u>					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	0.79		
Total Carried to Summary					
<u>5. Metal work</u>					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color.	ml	0.00		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color.	ml	0.00		
Total Carried to Summary					
Total Summary For Ramp					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Walkway at RRS Health Center from Ward to Emergency Room (19mX1.5m)

Item	Discription	Unit	Qty.	Rate	Amount
1.Excavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	36.10		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	6.74		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	2.77		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	9.25		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.93		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	13.96		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	19.25		
	In 150mm thick ramp slab with curb stone (12cm*12cm) apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	28.50		
	15cm X 30cm curbstone along both sides of the walkway	m3	1.71		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Ø8mm deformed bar	Kg	158.20		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work with all necessary works forwalkway slab and curbstone	m ²	28.50		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	10.59		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	0.00		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	0.00		
Total Carried to Summary					
Total Summary For Ramp					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp: RRS Health Center: Nutrition Center/Food Distribution (50cmX625cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
1. Excavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	10.63		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	2.28		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	0.98		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	2.88		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 100mm.	m ³	0.29		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	4.40		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	6.50		
	In 150mm thick ramp slab with curb stone (12cm*12cm) apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	8.75		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	52.44		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	3.13		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to line finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	3.53		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	38.70		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	18.27		
Total Carried to Summary					
Total Summary For Ramp 4 Library					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp: RRS Health Center NCD (30cmX375cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
1. Excavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	6.38		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	1.84		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	0.81		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	1.63		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.16		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	3.11		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	4.00		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	5.63		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Ø8mm deformed bar	Kg	31.70		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	1.88		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	2.15		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	23.70		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	11.88		
Total Carried to Summary					
Total Summary For Ramp					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp: RRS Health Center, NRC Building (67cmX840cmX200cm)

Item	Discription	Unit	Qty.	Rate	Amount
1. Excavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	18.48		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.12		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.32		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	7.90		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.79		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	6.81		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	8.90		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	16.80		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Ø8mm deformed bar	Kg	81.33		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	5.04		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	4.80		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	51.60		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	23.77		
Total Carried to Summary					
Total Summary For Ramp					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at RRS Office: Logistic office (83cmX1037.5cmX120cm)

Item	Discription	Unit	Qty.	Rate	Amount
<u>1. Excavation & earth work</u>					
1.1	Clear the site an average depth of 200mm.	m ²	17.63		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.72		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.56		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	4.94		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.49		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	7.24		
Total Carried to Summary					
<u>2. Concrete work</u>					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	10.62		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	15.56		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	86.61		
Total Carried to Summary					
<u>2. Form Work</u>					
3.1	300mm form work for Ramp and landing	m ²	4.45		
Total Carried to Summary					
<u>4. Stone Masonry</u>					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	5.79		
Total Carried to Summary					
<u>5. Metal work</u>					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	63.42		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	28.80		
Total Carried to Summary					
Total Summary For Ramp					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at RRS Office: PWD & Youth Association (25cmX312.5cmX165cm)

Item	Discription	Unit	Qty.	Rate	Amount
<u>1.Exacavation & earth work</u>					
1.1	Clear the site an average depth of 200mm.	m ²	5.77		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	1.21		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	0.55		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	1.70		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.17		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	2.36		
Total Carried to Summary					
<u>2. Concrete work</u>					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	3.45		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	5.15		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	29.00		
Total Carried to Summary					
<u>2. Form Work</u>					
3.1	300mm form work for Ramp and landing	m ²	1.58		
Total Carried to Summary					
<u>4. Stone Masonry</u>					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	1.44		
Total Carried to Summary					
<u>5. Metal work</u>					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	19.92		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	10.27		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Walkway 2 at Youth Education and Training Program compound (900cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
1.Exacavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	15.30		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.24		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.37		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	4.25		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.43		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	6.30		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 25mm thick lean concret	m ²	9.25		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	13.95		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Ø8mm deformed bar	Kg	75.25		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	3.90		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	4.59		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	0.00		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	0.00		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at ICT Workshop

Item	Discription	Unit	Qty.	Rate	Amount
1.Exacavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	15.30		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.24		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.37		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	4.25		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.43		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	6.30		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately).				
	In 25mm thick lean concret	m ²	9.25		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	13.95		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	75.25		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	3.90		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	4.59		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	0.00		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	0.00		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Day Care (32cmX400cmX120cm)

Item	Description	Unit	Qty.	Rate	Amount
1. Excavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	6.38		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	1.84		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	0.81		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	1.63		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.16		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	3.11		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	4.00		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	5.63		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	31.70		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	1.88		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	2.15		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	23.70		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	11.88		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Youth Center C, Meeting Hall (26cmX325cmX145cm)

Item	Discription	Unit	Qty.	Rate	Amount
1.Exacavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	5.77		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	1.21		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	0.55		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	1.70		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.17		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	2.36		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	3.45		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	5.15		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	29.00		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	1.58		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	1.44		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	19.92		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	10.27		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Child Friendly Service Zone B, Administration office (60cmX750cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
<u>1. Excavation & earth work</u>					
1.1	Clear the site an average depth of 200mm.	m ²	12.75		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	2.71		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.16		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	3.50		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.35		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	5.26		
Total Carried to Summary					
<u>2. Concrete work</u>					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	7.75		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	11.25		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	62.81		
Total Carried to Summary					
<u>2. Form Work</u>					
3.1	300mm form work for Ramp and landing	m ²	3.30		
Total Carried to Summary					
<u>4. Stone Masonry</u>					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	3.28		
Total Carried to Summary					
<u>5. Metal work</u>					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	19.92		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	10.27		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Child Friendly Zone A, Class Room (75cmX940cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
1.Exacavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	15.98		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.38		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.42		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	4.45		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.45		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	6.57		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	9.65		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	14.10		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Ø8mm deformed bar	Kg	78.57		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	4.06		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to line finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	6.43		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	57.60		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	26.32		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Child Friendly, Zone B, Admin Office (40cmX500cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
1. Excavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	8.50		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	1.84		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	0.81		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	2.25		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.23		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	3.54		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	5.25		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	7.50		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	42.07		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	2.30		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	2.59		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	31.20		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	15.08		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Child Friendly Zone B, Class Room (75cmX940cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
1.Exacavation & earth work					
1.1	Clear the site an average depth of 200mm.	m ²	15.98		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.38		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.42		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	4.45		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.45		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	6.57		
Total Carried to Summary					
2. Concrete work					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	9.65		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	14.10		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	78.57		
Total Carried to Summary					
2. Form Work					
3.1	300mm form work for Ramp and landing	m ²	4.06		
Total Carried to Summary					
4. Stone Masonry					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to line finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	6.43		
Total Carried to Summary					
5. Metal work					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	57.60		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	26.22		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Child Friendly Zone B, Class Room (75cmX940cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
<u>1. Excavation & earth work</u>					
1.1	Clear the site an average depth of 200mm.	m ²	15.98		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.38		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.42		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	4.45		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.45		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	6.57		
Total Carried to Summary					
<u>2. Concrete work</u>					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m ³ of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	9.65		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	14.10		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ8mm deformed bar	Kg	78.57		
Total Carried to Summary					
<u>2. Form Work</u>					
3.1	300mm form work for Ramp and landing	m ²	4.06		
Total Carried to Summary					
<u>4. Stone Masonry</u>					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	6.43		
Total Carried to Summary					
<u>5. Metal work</u>					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and painted with green metallic color	ml	57.60		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and painted with green metallic color	ml	26.32		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Specification & Bill of quantities for Bambasi R.Camp, Assosa

Ramp at Food Distribution Center (75cmX940cmX150cm)

Item	Discription	Unit	Qty.	Rate	Amount
<u>1.Exacavation & earth work</u>					
1.1	Clear the site an average depth of 200mm.	m ²	15.98		
1.2	Trench Excavation for 40cm thick stone masonry with working space	m ³	3.38		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	1.42		
1.4	250mm thick basaltic or sound approved stone Hard core and blinded with 20mm crushed aggregate.	m ²	4.45		
1.07	Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	0.45		
1.5	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	6.57		
Total Carried to Summary					
<u>2. Concrete work</u>					
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.)				
	In 25mm thick lean concret	m ²	9.65		
	In 150mm thick ramp slab apply grooved texture at the bottom and top landing with three coats of approved type yellow metallic emulsion paint to all exposed surface of rc	m ²	14.10		
2.2	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Ø8mm deformed bar	Kg	78.57		
Total Carried to Summary					
<u>2. Form Work</u>					
3.1	300mm form work for Ramp and landing	m ²	4.06		
Total Carried to Summary					
<u>4. Stone Masonry</u>					
4.1	500mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	6.43		
Total Carried to Summary					
<u>5. Metal work</u>					
5.1	Supply & fix dia. 50mm 2.5mm thick circular horizontal metal pipe/rail with the height of 0.3m, 0.7m and 0.9m mounted on the ramp edge and the garb bar secured to vertical post and Coated with antirust and green metallic paint	ml	57.60		
5.2	Supply & fix dia. 50mm, 2.5mm thick circular Vertical metal pipe/rail with the height of 0.9m hook length and it has to be mounted on the ramp with 0.9m spacing along the ramp length and coated with antirust and green metallic paint	ml	26.32		
Total Carried to Summary					
Total Summary For Ramp at Hall					



Ethiopian Center for Disability and Development (ECDD)
Engineering Department

Project Name: HUDEPE

Project Location: Specification & Bill of quantities for Bambasi R.Camp, Assosa

<u>SUMMARY OF SIGNAGE for Specification & Bill of quantities for Bambasi</u> <u>R.Camp, Assosa</u>			
	SUB-STRUCTURE	Unit	Amount
1	EXCAVATION & EARTH WORKS	Birr	
2	CONCRETE WORKS	"	
	SUB-TOTAL (A)		
	SUPER-STRUCTURE		
1	METAL WORK	Birr	
2	SIGNAGE PLATE	"	
	SUB-TOTAL(B)		
	TOTAL		



BILL OF QUANTITY					
Signage (Bambasi R.Camp, Assosa)					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A. SUB-STRUCTURE					
1.EXCAVATION & EARTH WORKS					
1.01	Excavate for site clearing to a depth of 20cm to remove to soil	m ²	2.00		
1.02	Bulk excavation in ordinary soil not exceeding 1000mm from NGL.	m ³	1.50		
1.03	Selected Fill under the concrete to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	1.00		
1.04	Cart away surplus excavated material to a distance not exceeding 2kms.	m ³	1.90		
TOTAL CARRIED TO SUMMARY					
2.CONCRETE WORKS					
2.01	50mm thick lean concrete in C-5 with minimum cement content of 150kg/m ³ of concrete under:				
	a) footing pad	m ²	1.50		
2.02	Reinforced concrete in class C-25 (with a 28-day 150mm cube crushing strength of 25MPa), cast into formworks and vibrated around rod reinforcement bars.(formwork & reinforcement bars are measured separately.) in: "Type of cement to be ordinary Portland cement (OPC)"				
	a) footing pad	m ³	1.00		
2.03	Sawn zigba wood form work for:				
	a) footing pad	m ²	2.00		
TOTAL CARRIED TO SUMMARY					
B. SUPER-STRUCTURE					
1. METAL WORK(signage pole)					
1.01	Supply & fix 5 poles with dia. 50mm with 3mm thick metal pipe mounted on anchor coated with antirust and green metallic paint	No	15.00		
TOTAL CARRIED TO SUMMARY					
2.SIGNAGE PLATE					
2.1	Supply and fix 3 mm thick Aluminium Cladding signage plate on which each letter should be 7cm, letters should be printed on both sides and on one pole at least five plates are mounted on each signage pole and the plates has organization's logo. And each plate is contrasted with blue surface and yellow letters. The price includes all accessories used for installing Aluminium cladding signage (mounting accessories approved by the client), Logo of donor in each signage plate will be printed	No	75.00		
TOTAL CARRIED TO SUMMARY					



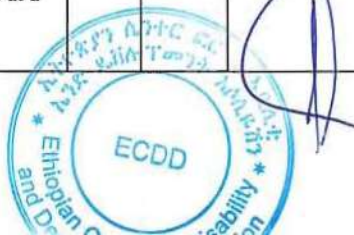
Summery of Toilet (Bambasi R.Camp, Assosa)			
No	Sub-Structure	Unit	Amount
1	Excavation and Earth Work	Birr	
2	Concrete Work	"	
3	Masonry Work	"	
No	Super-Structure	Unit	
1	Concrete Work	Birr	
2	Roofing	"	
3	Metal Work	"	
4	Flooring	"	
5	Plastering Work	"	
6	Painting Work	"	
7	Ccramic Work	"	
8	Sanitary Installation	"	
9	Ceiling Work	"	
10	Electrical Installations	"	
11	Ramp Work	"	
12.1	Signage (Signage Metal work)	"	
12.2	Signage (Signage Plate)	"	
	Total		



BILL OF QUANTITY					
Toilet (Bambasi R.Camp, Assosa) 5mX3m Size					
ITEM	DESCRIPTION	UNIT	QTY	Rate	Amount
A. SUB-STRUCTURE					
1.EXCAVATION & EARTH WORKS					
1.1	Excavate for site clearing to a depth of 20cm to remove to soil	m ²	19.25		
1.2	Trench Excavation up to depth of 0.75m below NGL	m ³	6.92		
1.3	Selected Fill under hard-core to maintain the desired level with selected borrowed material and compact in layers not exceeding 200mm.	m ³	5.30		
1.4	300mm. thick sound basaltic or equivalent stone hard-core finished and blinded with crushed stone.	m ²	10.34		
1.5	Cart away surplus excavated material to a distance not exceeding 2kms.	m ³	10.77		
TOTAL CARRIED TO SUMMARY					
2.CONCRETE WORKS					
2.0	50mm thick lean concrete in C-5 with minimum cement content of 150kg/m ³ of concrete under:				
	a) footing pad	m ²	0.00		
	b)grade beam	m ²	0.00		
	c)Trench Masonary wall	m ²	6.64		
	d)150mm thick ground floor slab	m ²	15.00		
2.1	Reinforced concrete in class C-25 (with a 28-day 150mm cube crushing strength of 25MPa), cast into formworks and vibrated around rod reinforcement bars.(formwork & reinforcement bars are measured separately.) in: "Type of cement to be ordinary Portland cement (OPC)"				
	a) footing pad	m ³	0.00		
	b) foundation column	m ³	0.00		
	c) grade beam	m ³	1.25		
	d)150mm thick ground floor slab	m ²	15.00		
2.2	Sawn zigba wood form work for:				
	a) footing pad	m ²	0.00		
	b) foundation column	m ²	0.00		
	c) grade beam (3cm thick, 40cm wide)	m ²	13.28		
	d) ground floor slab	m ²	0.00		
2.3	Reinforcement steel bars according to structural drawing. Price includes cutting, bending, placing in position and tying wires.				
	a) dia. 8mm deformed bar	kg	128.60		
	b) dia. 12mm deformed bar	kg	67.49		
TOTAL CARRIED TO SUMMARY					
3. MASONRY WORKS					
3.0	400mm thick hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	6.36		
TOTAL CARRIED TO SUMMARY					



	B. SUPER-STRUCTURE				
	1. CONCRETE WORKS				
1.0	Reinforced concrete in class C-25 (with a 28-day 150mm cube crushing strength of 25MPa), cast into formworks and vibrated around rod reinforcement bars.(formwork & reinforcement bars are measured separately.) in: "Type of cement to be ordinary Portland cement (OPC)"				
	a) Elevation column	m ³	1.39		
	b) Top tie beam	m ³	0.70		
	c) Lintel Beam	m ³	0.12		
1.2	Sawn zigba wood form work for:				
1.3	a) Elevation column	m ²	8.14		
	b) Top tie beam	m ²	16.02		
	c) Lintel Beam	m ²	1.26		
1.4	Reinforcement steel bars according to structural drawing. Price includes cutting, bending, placing in position and tying wires.		83.77		
	a) dia. 8mm deformed bar	kg	54.19		
	b) dia. 10mm deformed bar	kg	82.00		
	c) dia. 12mm deformed bar	kg	85.25		
1.5	HCB wall bedded with 1:4 cement sand mortar				
	20cm thick external HCB wall	m ²	37.29		
	15cm thick internal HCB wall	m ²	7.00		
	TOTAL CARRIED TO SUMMARY				
	2. ROOFING				
2.1	Supply and fix C-28 CIS sheet including 5cm.x7cm.Zigba wood purline placed c/c 90 cm. spacing including washers and roof ridge cover and truss. Truss members made of wood at c/c spacing 90cm.	m ²	17.50		
2.2	110mm dia.UPVC down pipe attached to external wall surface with leader straps c/c 120 cm. and finally painted with two coats of synthetic paint.	ml	8.80		
2.3	Ditto but to gutter of size 25cm x 20cm with development length of 60 cm and painted with antirest and two coats of synthetic paint.	ml.	5.00		
2.4	provide and supply 0.25 mm thick 25cm width Australian fascia board painted	ml.	5.00		
2.5	Copping on Parapet	ml	12.00		
	TOTAL CARRIED TO SUMMARY				
	3. METAL WORK				
	All doors are manufactured from LTZ 38mm profile frames. All works should be cut and assembled to sizes and shapes of the door schedule upon submitting workshop drawing by the contractor. Unit price includes the necessary iron monger anchorbolts cover plates approved lock, doors stoppers, other necessary accessories for completing the work and one coat of primer and two coats of synthetic paint. All according to door and window schedule as specified and it must be approved by the employer				
3.1	METAL DOOR				
	MD1) Size 1000 x 2300mm (2.1m ²).	pcs.	2.00		
3.2	Supply and Install 100mm diameter wire mesh in window section where the mesh opening must be minimum to prevent entrance of flies to the toilet room				
	Window opening Size 300 x 800mm (0.24m ²).	pc.	2.00		
3.3	Supply & fix dia. 50mm with 3mm thick, 650mm long and 700mm high from finished floor surface CHS steel pipe fixed garb bar secured to floor by means of anchoring pieces from same material.	LS	2.00		
	TOTAL CARRIED TO SUMMARY				
	4. FLOORING				
	48mm thick cement sand mortar mix (1:3) screed finished fine smooth to receive ceramic tile flooring. The levelness of the screed should be at a level of perfection to avoid visual wave on the finished surface.				



4.1	Supply and fix 300x300x20mm approved none slippery ceramic tile flooring glued with approved type adhesive to cement screed. Price shall include 48mm thick cement screed (1;3). Colour and quality to be approved by the Engineer.	m ²	11.18		
4.2	Supply and fix 100mm pvc skirting .Price shall including all the necessary works.	ml	19.30		
<i>TOTAL CARRIED TO SUMMARY</i>					




5. PLASTERING WORKS					
5.1	Apply three coats of plaster in cement mortar (1:3) up to fine finish to all internal and external wall surfaces. Plastering work shall include all surface pre-cleaning preparation, chiseling, polishing and cleaning at the end of finishing work.	m ²	119.25		
5.2	Rendering	m ²	32.42		
TOTAL CARRIED TO SUMMARY					
6. PAINTING WORK					
6.1	Apply in three coats of plastic emulsion paint to all internal and external plastered wall surfaces. The work shall include all surface pre-cleaning preparation, chiseling, polishing and cleaning at the end of painting work. Color shall be decided by the consultant in discussion with the client	m ²	119.25		
TOTAL CARRIED TO SUMMARY					
7. CERAMIC WORK					
7.1	Supply and lay 3 mm thick ceramic wall tiles of approved type bedded and jointed with ceramic approved adhesive as approved by the consultant or with cement sand mortar (1:3) grouted at joints with white cement wash. Price shall include 3 cm thick cement mortar backing or approved adhesive application before laying of the ceramic, polishing, cleaning and all other related necessary works. Color and Size Subject to engineers approval.	m ²	30.24		
TOTAL CARRIED TO SUMMARY					
8. SANITARY INSTALLATION					
SANITARY EQUIPMENT (FIXTURES)					
All fixtures which differs from that specified below is subject to the owner's approval, based on samples, catalogues and brochures presented by the Contractor. Unit Price shall include all the necessary fixing brackets or hooks and all the necessary assistance civil works such as chiseling of walls, floors, beams and etc...					
ALL FIXTURES ARE APPROVED EUROPEAN BRAND					
8.1	Supply and fix RAK or equivalent hand wash basins with stainless steel cold water mixer tap made of white vitreous china, complete with pedestal stand, mixing battery plug, chrome plated chain holder, P-smell trap with connection pipe and with all other necessary accessories.				
	Size :- 500 x 400 mm	No	2.00		
8.2	Supply and fix RAK or equivalent wash down water closets made of white vitreous china with plastic seat and cover including all accessories.	No	2.00		
8.3	Supply and fix flexible water Hose pipe with all necessary accessories.	No	2.00		
8.4	Supply and fix RAK or equivalent toilet paper holder with chrome plated brass wall flanged roll with chrome plated fastening screws and other accessories.	No	0.00		
8.5	Supply and fix crystal glass mirrors for toilets and wash basins with copper back protection, size: 500/400 mm including chrome plated brass mirror clips with chrome plated screws and etc... for hand wash basins.	No	2.00		
8.6	Supply and fix RAK or equivalent soap holder in white vitreous china of size 150 x 150 mm complete with the necessary fixing and other accessories for hand wash basins.	No	0.00		
WATER SUPPLY PIPE LINE AND VALVES					
Cold and hot water pipes shall be PPR pipes for cold and hot water respectively, and be fixed to slabs, walls, beams or etc... with metal straps or similar material. Unit price shall include all assistance civil works and necessary fittings such as T, bends etc. according to where shown on the drawing. All water pipes shall be tested two times the working pressure or 50 meters head, which ever is greater at the expense of the contractor.					



8.7	Supply and install PPR, PN-10 pipes to internal cold water distribution system as shown on the drawing. Complete with all the necessary fittings and accessories.				
	Dia. 15 mm	ml	20.00		
8.8	Supply and fix chrome service angle valves of approved standard before hand wash basins, water closets and other fixtures. Complete with unions, elastic water proofing, hand wheels of normal quality and with all other necessary accessories.				
	Dia. 15 mm	No	10.00		



	WASTE, VENT AND RAIN WATER PIPES AND				
	ACCESSORIES				
	All domestic waste, vent and storm water pipe lines shall be comply to BS45/4:1983 and DIN 19531 uPVC, PN-4 pipes and shall be provided with a minimum slope of 1.5%. Pipes and necessary fittings shall be standard quality and be free from damage during storage, construction and etc. Unit price shall include all the necessary assistance civil works, such as excavation cartaway, fixing or hanging to walls, beams or slabs. etc., necessary fittings such as bends, Y, T, etc. Storm water PVC pipes shall resist the external temperature and the quality shall meet the purpose.				
8.90	Supply and lay internal & External uPVC, PN-4 waste pipes according to where shown on the drawings. Complete with all the necessary fittings.				
	Dia. 110 mm	ml	10.00		
8.91	Supply and fix dia 50mm vent caps made of uPVC at the roof terminal of vent pips. complete with all accessories and water proofing works.				
	Dia. 50 mm	No.	0.00		
8.10	Fix floor drain 80mm brass plated necessary accessories all of approved standard. Price shall include all the necessary civil works.	No.	2.00		
	TOTAL CARRIED TO SUMMARY				
	9. Ceiling				
9.1	3000mm X 200mm and 7mm thick Plastic ceiling with all necessary fittings	m ²	13.68		
	TOTAL CARRIED TO SUMMARY				



	10. Electrical Installation Works -				
	All fixtures which differs from that specified below is subject to the owner's approval, based on samples, catalogues and brochures presented by the Contractor. Unit Price shall include all the necessary fixing brackets or hooks and all the necessary assistance civil works such as chiseling of walls, floors, beams and etc...				
10.1	Supply and Install Distribution Board Panels, Power Outlets, HD Conduits and Pipes and Light Switch Points and also bulbs	LS	2.00		
	TOTAL CARRIED TO SUMMARY				
	11. Ramp Works -				
11.1	The ramp shall be constructed with 8.0% slope with the width of 3 m and 0.70m and 0.90m height hand rail on both sides. The color of the hand rail should be contrast visually with the wall or the ramp.	LS	1.00		
	TOTAL CARRIED TO SUMMARY				
	12. SIGNAGE				
	12.1 METAL WORK (signage pole)				
12.11	Supply & fix dia. 50mm with 3mm thick and 3m height metal pipe mounted on anchor with 150mm high rectangular box curbs at its bottom (all metallic surfaces should be coated with antirust and metallic paint)	ml	1.00		
	TOTAL CARRIED TO SUMMARY				
	12.2 SIGNAGE PLATE				
12.21	Supply and fix 2 mm thick aluminium cladding sign board plate on which each letters should be 7cm in UV print and mounted on signage plate. And the plate is contrasted with blue background surface and white letters.	No	1.00		
12.22	Supply and fix 2 mm thick aluminium cladding sign board plate on which each letter should be 7cm written in UV print and each plate is mounted on the side of the door. And each plate is contrasted with blue background surface and white letters. sex and international disability symbol is printed on it (UV print). As per Engineer's approval	No	2.00		
12.23	Supply and fix 2 mm thick aluminium cladding sign board plate on which each letters should be 5cm and each plate is mounted on the middle front side of the toilet as per the engineer's order. And each plate is contrasted with blue background surface and white letters. And the sign of donor's logo with proper word is printed on it. All letters and logo has to be printed in UV print. As per the Engineer's approval	No	1.00		
	TOTAL CARRIED TO SUMMARY				
	TOTAL CARRIED TO SUMMARY for signage				



Specification & Bill of quantities for Bambasi R.Camp, Assosa

4X4X3m size Septic Tank

Item	Discription	Unit	Qty.	Rate	Amount
	<u>1.Exacavation & earth work</u>				
1.1	Clear the site an average depth of 200mm.	m ²	20.25		
1.2	Excavate Bulk for 305cm depth for the tank and 85cm thick stone masonry with working space	m ³	48.80		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	10.75		
1.4	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	52.85		
	Total Carried to Summary				
	<u>2. Concrete work</u>				
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.				
	In 50mm thick lean concret	m ²	12.71		
	10cm thick rc manhole (50cmX50cm)	m2	1.00		
	Concrete Pipe for sludge removal from Toilet room to Septic tank based on engineers approval	ml	10.00		
2.2	150mm thick RC slab	m2	16.00		
2.3	300X250mm Rc grade beam	m3	1.20		
2.4	Three coats of plastering to all internal masonry surfaces	m2	28.80		
2.5	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ12mm deformed bar	Kg	396.85		
	Φ8mm deformed bar	Kg	12.57		
	Total Carried to Summary				
	<u>3. Form Work</u>				
3.1	350mm height & 12 mm thick form work and soffit for masonry wall, grade beam and slab with eucalyptus and all other necessary fittings.	m ²	21.44		
	Total Carried to Summary				
	<u>4. Stone Masonry</u>				
4.1	85cm thick at the bottom and 50cm thick at the top hard trachytic or equivalent masonry stone foundation wall bedded on cement & sand mortar mix (1:3) ratio below ground level and apply three coats of plaster in cement mortar (1:3) up to fine finish to all masonry surfaces. Plastering work shall include all surface pre-cleaning, preparation, chiseling, polishing and cleaning at the end of finishing work.	m ³	25.50		
	Total Carried to Summary				
	Total Carried to Summary for septic tank				



Specification & Bill of quantities for Bambasi R.Camp, Assosa					
1.2*1.2m size elevated water tank slab at 3.5m height above NGL					
Item	Discription	Unit	Qty.	Rate	Amount
	<u>1.Exacavation & earth work</u>				
1.1	Clear the site an average depth of 200mm.	m ²	2.56		
1.2	Excavate Bulk for 150cm depth for footing pad and footing column	m ³	3.84		
1.3	Back fill with non expansive material & compact in layers not exceeding 20cm thickness.	m ³	5.48		
1.4	Cart away surplus excavated material to a distance not exceeding 5km from the site.	m ³	4.35		
	Total Carried to Summary				
	<u>2. Concrete work</u>				
2.1	Reinforced Concrete class C-25, 400kgs of cement /m3 of concrete filled into form work and vibrated around steel reinforcement (Form work and Rebar measured separately.) Rebar Grade -40				
	In 50mm thick lean concrete under 1x1m footing pad				
	for 1.2X1.2m wide footing pad	m ²	1.44		
2.2	30cmX30cm rc column with 120cmX120cm rc footing pad. class C-25, in 1.2m by 1.2m and 0.3m depth footing pad, 3.5m hight tanker column (0.3X0.3 size) above NGL and 1.5 below NGL	m3	0.88		
2.3	RC class C-25, in 1.2mx1.2m and 0.15m thick slab for the tanker	m3	0.22		
2.4	10cm thick rc manhole (50cmX50cm)	m2	0.25		
2.5	Concrete Pipe for sludge removal from Toilet room to Septic tank based on engineers approval	ml	10.00		
2.6	Steel reinforcement according to structural drawings including cutting, bending, tying wires & placing in position.				
	Φ12mm deformed bar	Kg	42.67		
	Φ14mm deformed bar	Kg	58.08		
	Φ8mm deformed bar	Kg	18.96		
	Total Carried to Summary				
	<u>3. Form Work</u>				
3.1	350mm height & 12 mm thick form work and soffit for masonry wall, grade beam and slab with eucalyptus and all other necessary fittings.	m ²	9.78		
	Total Carried to Summary				
	<u>4. Water Tanker</u>				
	Supply and fix a 2m3 (2000Lt) water tank in fiberglass to be mounted on extended concrete columns with all the necessary pumps, pipes for the water supply line, fittings, and accessories all of the approved standard and connect to the toilet water line and also with the compound water supply system	Ls	1		
	Total Carried to Summary				

