

# **HEALTH SYSTEM ENHANCEMENT PROJECT**

Funded by

ASIAN DEVELOPMENT BANK

FIELD HEALTH CENTERS – Nuwaraeliya District

## **BILLS OF QUANTITIES**

### **ADDITIONS & IMPROVEMENTS TO HOPE ESTATE FHC**

BOQ REF NO: HSEP/RDC/CP/NE/FHC/03 (27.09.2022)

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES**

**ADDITIONS AND IMPROVEMENTS TO HOPE ESTATE FHC**

**GRAND SUMMARY**

<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT (LKR)</b>
1	PRELIMINARIES	
2	EXTERNAL WORKS	
3	DAY WORKS	
	<b>SUB TOTAL 01</b>	
4	DDT - PROVISIONAL SUM ITEMS	35,000.00
	<b>SUB TOTAL 02 (WITHOUT PROVISIONAL SUM ITEMS)</b>	
5	DISCOUNT (IF ANY)	
	<b>SUB TOTAL 03</b>	
6	ADD - PROVISIONAL SUM ITEMS	35,000.00
	<b>SUB TOTAL 04</b>	
7	ADD - PHYSICAL CONTINGENCIES 10%	
	<b>SUB TOTAL 05</b>	
8	VAT 15%	
	<b>GRAND TOTAL</b>	

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 1: Preliminaries**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Preliminaries</b>				
	<b>Note : Following items to be priced as appropriate.</b>				
<b>1.1</b>	<b>Insurance and Securities</b>				
1.1.1	Allow lump sum for Providing a Performance Security	Item	1		
1.1.2	Allow lump sum for providing an Advance Payment Security	Item	1		
1.1.3	Allow lump sum for insurance of Works, Machinery & Equipment, Plant, Materials, third party persons & property and Employer's personnel & property at site as per the Contract.	Item	1		
1.1.4	Allow lump sum for workmen's compensation insurance	Item	1		
<b>1.2</b>	<b>Management of the works</b>				
1.2.1	Allow lump sum for providing Project Management services	Item	1		
<b>1.3</b>	<b>Engineer's /Contractor's Facilities</b>				
1.3.1	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the works, a temporary building for Contractor's site office and workers' accommodation including necessary furniture, sanitary facilities, electricity and other facilities and providing services throughout the period of construction.	Item	1		
1.3.2	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the works, buildings to be used as workshops and stores for materials.	Item	1		

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ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 1: Preliminaries**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Preliminaries (Cont'd)</b>				
<b>1.4</b>	<b>Quality, Standards and Progress</b>				
1.4.1	Allow lump sum for provision of progress reports including photographs, progress charts, progress records, schedules as directed by the Engineer.	Item	1		
1.4.2	Allow lump sum for all cost in connection with testing materials/works, preparing samples for testing, making arrangements for testing of Materials, Goods etc., as stipulated in the specification, obtaining test reports and submitting the same to the Engineer.	Item	1		
1.4.3	Allow lump sum for provision of 3 sets of ( A1 size hard copies and soft copies) as-built drawings of all services, as directed by the Engineer.	Item	1		
1.4.4	Allow lump sum for submission of shop drawings in triplicate with an electronic copy as directed by the Engineer.	Item	1		
<b>1.5</b>	<b>Health, Safety and Environment</b>				
1.5.1	Allow lump sum for providing and maintaining first aid box and regular supply of medicine, linen etc.	Item	1		
1.5.2	Allow lump sum for providing all necessary safety measures to workmen at site conforming to the latest industrial safety regulations and as directed by the Engineer.	Item	1		
1.5.3	Allow lump sum for making adequate provision against air and noise pollution of surrounding areas. Hoarding and dust screens shall be provided to control dust escaping to surrounding areas.	Item	1		

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**Bill No. 1: Preliminaries**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Preliminaries (Cont'd)</b>				
	<b>Health, Safety and Environment (Cont'd)</b>				
1.5.4	Allow lump sum for maintaining the site in a clean and orderly manner at all times and during the entire contract period. The Contractor shall take due care to prevent water stagnation, element mosquitos breeding places at the site and this is to be ensured through internal monitoring mechanism.	Item	1		
1.5.5	Allow lump sum for demobilization, removal of all rubbish & debris and clearing up site on completion, leaving all in good order and handing over.	Item	1		
	<b>1.6 Security and Protection</b>				
1.6.1	Allow lump sum for providing and maintaining necessary fencing, hoarding and gates for safeguarding the Works, Materials and Plant, as directed by the Engineer.	Item	1		
	<b>1.7 Services and Facilities</b>				
1.7.1	Allow lump sum for supply of water for the Works and paying all charges and other expenses in connection with the supply from water mains or any other alternative method of water supply, storage and reticulation.	Item	1		
1.7.2	Allow lump sum for supplying temporary electricity for the Works including connection, distribution system for the Works, internal arrangements and all payments to the authorities for consumption.	Item	1		

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**Bill No. 1: Preliminaries**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
	<b>Preliminaries (Cont'd)</b>				
<b>1.8</b>	<b>Miscellaneous</b>				
1.8.1	Allow lump sum for providing and maintaining a name board to the specifications and / or as directed by the Engineer.	Item	1		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES**

**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**SUMMARY -1**

<b>BILL NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT (LKR)</b>
2	DEMOLITION	
3	EARTH WORK	
4	CONCRETE WORK	
5	WATER PROOFING WORK	
6	ROOF COVERING AND ROOF PLUMBING	
7	ALUMINIUM WORK	
8	PLUMBING AND SANITARY INSTALLATION	
9	ELECTRICAL INSTALLATION	
10	FLOOR/ WALL/ CEILING FINISHES	
11	PAINTING WORK	
12	DRAINAGE WORK	
13	MISCELLANEOUS WORK	
14	PROVISIONAL SUMS	35,000.00
	<b>SUB TOTAL (carried to grand summary)</b>	

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
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**Bill No. 2: Demolition**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>2.0</b>	<b>Demolition, Alteration, Repair and Maintenance works</b>				
	The bidders are advised to visit site and make careful study of all conditions and the nature of work to be done under this contract, as no extras will be allowed on the plea of want of information due to negligence of on their part in this regard.	note			
	All demolished materials, except those required to be stacked shall be carted away during the demolition operation.	note			
	Obtain confirmation from the Employer and Engineer that all power cables and power lines within the site have been disconnected and removed.	note			
	Obtain in writing clear from the Employer and Engineer as to of demolition and provide adequate protection to other parts of the building which is requires to be protected.	note			
	Rate shall include necessary supporting works which required to complete the works.	note			
	<b>OWNERSHIP OF RECOVERED MATERIAL</b>				
	Demolished material which are not usable shall be the property of the Contractor	note			
	Usable materials arising from demolitions shall be the property of Employer.	note			
<b>2.1</b>	<b>Doors and Windows</b>				
2.1.1	Carefully remove and store the existing Door sash with frame & window sash with frame of size not exceeding to 4.0 m2. Rate to include preparation of window revels to fixing new aluminum joinery	nr	16		



**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
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**Bill No. 2: Demolition**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Demolition, Alteration, Repair and Maintenance works (Cont'd)</b>				
2.1.2	Carefully remove and store the existing Door sash with frame & window sash with frame of size over 4.0 m2. Rate to include preparation of window reveals to fixing new aluminum joinery	nr	1		
<b>2.2</b>	<b>Sanitary fittings and Accessories</b>				
2.2.1	Carefully remove existing squatting pan with connected pipe lines carefully	nr	1		
2.2.2	Carefully remove existing water closet with connected pipe lines carefully	nr	1		
2.2.3	Carefully remove existing wash basin/sink with connected pipe lines carefully	nr	2		
<b>2.3</b>	<b>Services</b>				
2.3.1	Disconnect & removing the existing electrical system including DB unit, wiring, fittings, socket outlet, gang switch and earth rod etc.	Item	1		
2.3.2	Disconnect & removing the existing water supply & sewerage disposal system	Item	1		
<b>2.4</b>	<b>Flooring and Ceiling</b>				
2.4.1	Breaking & Removing the existing cement rendered floor area as directed by the Engineer	m <sup>2</sup>	93		
2.4.2	Breaking & Removing the existing tiled floor area including cement mortar bed as directed by the Engineer	m <sup>2</sup>	2.3		
2.4.3	Removing existing ceiling including framework, stacking serviceable materials and clearing debris away	m <sup>2</sup>	92		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
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**Bill No. 2: Demolition**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
	<b>Section C - Demolition, Alteration, Repair and Maintenance works (Cont'd)</b>				
<b>2.5</b>	<b>Walls</b>				
2.5.1	Chipping, removing and clearing debris away from wall plaster as directed by the Engineer	m <sup>2</sup>	85		
<b>2.6</b>	<b>Pavement area including drain</b>				
2.6.1	Demolition and cleaning debris of existing pavement area including drain as directed by the engineer	m <sup>2</sup>	54		
<b>TOTAL CARRIED TO SUMMARY</b>					

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**Bill No. 3: Excavation and Earthwork**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>3.0</b>	<b>Section D - Excavation and Earth Work</b>				
	The Tenderer is requested to refer the General Note, Pricing Preambles, Drawings, Specification, Condition of Contract and other relevant documents prior to pricing of the following items.	note			
<b>3.1</b>	<b>Anti termite Treatment</b>				
3.1.1	Anti termite treatment for ground floor area of the building according to the manufacturers specifications (Biflex or equilent) by a specialist pest control service provider approved by the engineer. 10 year warranty for material and workmanship from the date of handing over the work shall be provided.	m <sup>2</sup>	142		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
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**Bill No. 4: Concrete work**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>4.0</b>	<b>Concrete Work</b>				
	The Bidder shall refer the followings prior to pricing the items in this trade.	note			
	a. All relevant drawings				
	b. Specifications				
	c. Pricing preambles				
	d. Location				
	All concrete shall be made dense with a vibrator. Rate shall include for plant for mixing , handling, hoisting, depositing, compacting ,vibrating, curing, making good after removal of form work and for any tests when necessary.	note			
	Ordinary Portland cement (OPC) cement complied with relevant Sri Lanka standards and approved by Engineer shall be used.	note			
	Rates shall include for forming expansion joints, construction joints, isolation joints with existing structures and the like including necessary sealant and other accessories, unless otherwise separately measured.	note			
	Rates shall include for forming holes in concrete, cutting chases and the like as necessary.	note			
<b>4.1</b>	<b>Grade 20 mass concrete as per the detail drawings and specifications.</b>				
4.1.1	75 mm Thick Floor concrete	m <sup>3</sup>	7.1		
<b>4.2</b>	<b>RCC pavement with drain</b>				
4.2.1	750mm wide pavement and 225x150mm(Average depth) drain in 1:2:4 (20mm) concrete 75mm thick (pavement, Drain wall and bottom) with 1:3 smooth cement rendering, including necessary excavation, form work, reinforcement (Y10 @150mm c/c both ways) and laying polythene membrane under concrete and laid to required slope.	Lm	60		

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BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 4: Concrete work**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
	<b>Concrete Work (Cont'd)</b>				
4.3	<b>Kitchen work top</b>				
4.3.1	75mm RCC slab with necessary form work and reinforcement (Doweling to existing walls, T10 @150mm c/c both ways). Rate to include necessary brick walls, plastering and painting work etc. as directed by the Engineer - Size 1.0mx0.6m ( Tilling work, Sink, tap and water supply measured separately)	Item	1		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 5: Water Proofing Work**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>5.0</b>	<b>Water Proofing Work</b>				
	The tenderers are requested to refer Bills of Quantities, Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Work shall be carried out strictly according to manufacture's specification and to the engineer's approval.	Note			
	Contractor shall give a warranty of 10 years in respect of workmanship and materials with effective from the date of completion of water proofing.	Note			
	The bidder shall submit the following technical details for approval before commencing of the work.	Note			
	(a) Type of waterproofing.				
	(b) Brand name.				
	(c) Country of origin.				
	(d) Method of application.				
	(e) Detail of guarantee (format)				
	(f) Suitability to the nature of the surfaces.				
	(g) Technical literature				
	Rate shall include for forming 25 x 25mm angle fillets in 1:3 cement and sand at all right angled edges.	Note			
	Rates shall include for preparation of surfaces, cutting, notching, bending, curing and extra material for lapping, working into recesses, inserts, pipes and the like and for working to falls and cross falls and protecting as per manufacturer's instruct.	Note			
	Rate shall include for ponding tests as per specifications and to the approval of the Engineer.	Note			

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
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**Bill No. 5: Water Proofing Work**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Water Proofing Work (Cont'd)</b>				
<b>5.1</b>	<b>Damp proof membrane</b>				
5.1.1	Supplying and laying 1000 gauge polythene under screeds, floor slabs	m <sup>2</sup>	95		
<b>5.2</b>	<b>Toilet areas</b>				
	<u>Water proofing treatment with Baralastic or equivalent application to toilets including preparation of the surface and application as per the manufacture's instructions &amp; specifications, including levelling screed and protective screed</u>				
5.2.1	In floors	m <sup>2</sup>	5.3		
5.2.2	In walls	m <sup>2</sup>	25		
<b>TOTAL CARRIED TO SUMMARY</b>					

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**Bill No. 6: Roof Covering and Roof Plumbing**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>6.0</b>	<b>Section P - Roof Covering and Roof Plumbing</b>				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	work shall be carried out strictly according to manufacture's specification and approval to the engineer.	Note			
	Contractor shall give a warranty of 10 years in respect of workmanship and materials with effective from the date of completion of work.	Note			
	The bidder shall submit the following technical details for approval before commencing of the work. a)Brand name b)Country of origin c)Technical specifications d)Detail of guarantee	Note			
	Rates shall include for the cost of following:	Note			
	1. Scaffoldings and arrangements in erections.				
	2. All necessary cuttings, drillings, bolting, reverting, welding, grinding, delivering, unloading, hoisting, erecting and fixing in position, levelling, plumbing and preparation, submission and getting approval of all shop drawings.				
	3. All necessary laps, seams, ends, up stands and down stands, aprons, sills etc.				
	4. Method of fixing, work to falls and cross falls, underlay in contact with the covering, forming voids $\leq 0.1m^2$ dressing/welding into grooves, hollows, recesses cutting laps and the like.				
	5. All necessary roofing nuts and bolts, washers, brackets, welding rods & paint etc.				



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BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 6: Roof Covering and Roof Plumbing**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
	<b>Section P - Roof Covering and Roof Plumbing (Cont'd)</b>				
<b>6.1</b>	<b>Tile roof covering</b>				
6.1.1	Laying Calicut pattern ridge tile bedded in cement, lime and sand mortar 1:1:5 coloured to match tile	m	15		
<b>TOTAL CARRIED TO SUMMARY</b>					

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 BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
 ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 7: Aluminum Work**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
<b>7.0</b>	<b>Aluminum Work</b>				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	All Aluminum sections shall present clear, straight and sharply defined lines. They shall be free from defects impairing strength, appearance and durability.	Note			
	All Aluminum sections shall be fully treated extruded Aluminum alloy sections manufactured in accordance with specifications attached herewith.	Note			
	All Aluminum sections to be locally manufactured and should be of "Alumex" or similar products of equivalent technical parameters and approved by the engineer.	Note			
	The contractor shall submit samples of materials and shop drawings for prior approval	Note			
	<b>Doors &amp; Windows</b>				
	All doors, windows & partitions items described here under shall be fabricated with powder coated aluminum extrusions conforming in all respects to the specification and detail drawings unless otherwise specified. The powder coating thickness of aluminum extrusions shall be 60-80 micron and in a color approved by the engineer.	Note			
	The Contractor shall submit certificates from the Aluminum manufacture and/or an approved testing laboratory which attest that the coating thickness offered is as specified.	Note			

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
 BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
 ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 7: Aluminum Work**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Aluminum Work (Cont'd)</b>				
	<b>Doors &amp; Windows (Cont'd)</b>				
	Aluminum extrusions of Doors, windows & Partitions, should be with correct sizes and thickness and fabricated as specified by the manufacturer to suit with the actual dimensions of openings and strength enough to stand for wind pressure of the environment in the building area.	Note			
	Rates shall include for all necessary fixings, fittings, ironmongery of approved quality and manufacture.	Note			
	Glazing for all glazed aluminum doors & windows shall be 6mm thick clear float glass and for fanlights shall be 5 mm thick "Pinheaded" or frosted glass.	Note			
	All glass shall be approved make.	Note			
	Glass shall be secured at all edges with compression gaskets and glazing beads. When fixing glass, all glazing sealant shall be carefully applied and cleaned off properly.	Note			
	Concealed screws, nuts, bolts, rivets and other fastening devices shall be of Aluminum, Non-magnetic stainless steel or other approved corrosive resistant materials. If visible, they shall blend with the finish of the framing Aluminum sections.	Note			
	Hinges, Handles, Catches, fixtures etc., shall be minimum of grade 304 stainless steel and approved make.	Note			
	10 year warranty shall be provided for material and workmanship.				

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BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
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**Bill No. 7: Aluminum Work**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Aluminum Work (Cont'd)</b>				
	Rate for aluminum doors shall include for "Yale" or equivalent S/S Rim locks with 3 keys & Stainless steel door handles.	Note			
<b>7.1</b>	<b>Doors &amp; Windows (Cont'd)</b>				
	<b>Doors</b>				
7.1.1	Supplying, fabricating and fixing double sash swing, Glazed and composite Aluminum panel door type D1, 1500 x 2100 mm sized overall, with aluminum frame fabricated with 100 x 45 mm extrusions all complete as per drawing. and Engineers approval. ( 01 nr)	m <sup>2</sup>	3.3		
7.1.2	Supplying, fabricating and fixing single sash swing, Glazed and composite Aluminum panel door type D2, 1000 x 2100 mm sized overall, with aluminum frame fabricated with 100 x 45 mm extrusions all complete as per drawing. and Engineers approval. ( 07 nr)	m <sup>2</sup>	15.5		
7.1.3	Supplying, fabricating and fixing single sash swing, Glazed and composite Aluminum panel door type D3, 900 x 2100 mm sized overall, with aluminum frame fabricated with 100 x 45 mm extrusions all complete as per drawing. and Engineers approval. ( 02 nr)	m <sup>2</sup>	4.0		
	<b>Windows</b>				
7.1.4	Supplying, fabricating and fixing of Aluminum glazed casement window type W1, 3000 x 2100mm sized overall, with aluminum frame fabricated with 70 x 30 mm extrusions, consisting of 04 nos of glazed aluminum window sashes, 02 nos aluminum louvers & 02 nos fixed glass on top, all complete as per drawing and Engineers approval. ( 01 Nr)	m <sup>2</sup>	6.6		

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ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 7: Aluminum Work**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
	<b>Aluminum Work (Cont'd)</b>				
	<b>Doors &amp; Windows (Cont'd)</b>				
7.1.5	Supplying, fabricating and fixing of Aluminum glazed casement window type W2, 1500 x 1800mm sized overall, with aluminum frame fabricated with 70 x 30 mm extrusions, consisting of 02 nos of glazed aluminum window sashes all complete as per drawing and Engineers approval. ( 02 Nr)	m <sup>2</sup>	5.7		
	<b>Fanlight</b>				
7.1.6	Supplying, fabricating and fixing of fanlight type F1, 900 x 600 mm sized overall, with aluminum frame fabricated with 70 x 30 mm extrusions, consisting of 01 no top hung fanlight sash, all complete as per Drawing and Engineers approval.( 03 Nr)	m <sup>2</sup>	1.7		
7.1.7	Supplying, fabricating and fixing of fanlight type F2, 600 x 300 mm sized overall, with aluminum frame fabricated with 70 x 30 mm extrusions, consisting of 01 no top hung fanlight sash, all complete as per Drawing and Engineers approval.( 01 Nr)	m <sup>2</sup>	0.2		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 8: Plumbing and Sanitary Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>8.0</b>	<b>Plumbing and Sanitary Installations</b>				
	All unplasticized polyvinyl chloride (uPVC) pipes used in the plumbing installation must conform in every respect to the requirements of the SLS 147:1993 or BS 4514 and PVC fittings to SLS 659:1993.	Note			
	Full installation shall comply with the relevant Sri Lankan, British or any other standard as given under the specifications and with the regulations of relevant authorities.	Note			
	All fittings and specials used in the plumbing installation shall be suitable in all respects to the pipe line to which fittings and specials are fixed.	Note			
	Rates shall include for submitting samples, protecting works and getting shop drawings approved from the Architect/Engineer.	Note			
	<b>Plumbing Work</b>				
	Rates for plumbing work shall include for the cost of following:	Note			
	1. Cutting and waste of pipes etc. and joining pipes.				
	2. Irrespective of the pipe diameter, all specials such as elbows, bends, tees, junctions, plugs, reducers and similar pipe fittings except for valves which will be measured separately.				
	3. Necessary screws, nails, sockets, connection back nuts standard pipe fixing or supporting clips, saddles, brackets, holder bats, straps etc.				
	4. Connecting pipes to sanitary fixtures, appliances and different types of pipes.				
	5. Laying in ducts, trenches, chases, floor screeds and insitu concrete.				
	6. Excavation, backfilling, disposal of surplus soil.				

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 8: Plumbing and Sanitary Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Plumbing and Sanitary Installations (Cont'd)</b>				
	7. Chasing to brick, cement block or concrete walls, columns, beams etc. and making good all works disturbed.				
	8. Obtaining necessary approvals from Local Authorities, CEA etc.				
	9. Testing, commissioning and disinfection after completion.				
<b>8.1</b>	<b>Cold Water Supply</b>				
	<u>Supplying and laying of uPVC pipes of Type 1,000 for cold water supply under slabs and along walls as described below: Rate shall include for necessary fittings.</u>				
8.1.1	20mm dia. PVC pipe including all specials	m	27		
8.1.2	25mm dia. PVC pipe including all specials	m	19		
8.1.3	32mm dia. PVC pipe including all specials	m	12		
<b>8.2</b>	<b>Waste water pipes</b>				
	All underground drainage pipe work shall be in UPVC (Type 600) to BS 4660	Note			
	Rate shall include for necessary fittings.	Note			
8.2.1	50mm dia. waste water pipe laid in under ground & buried in floor screed or chased to wall or laid as directed by the Engineer.	m	8		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 8: Plumbing and Sanitary Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Plumbing and Sanitary Installations (Cont'd)</b>				
<b>8.3</b>	<b>Sanitary Fittings and Fixtures</b>				
	Unless otherwise stated all sanitary fittings and fixtures shall be of Rocell Bath ware or equivalent or Imported product, such as American standard, or equivalent makes. prior written approval to be granted by the engineer for quality & performance of fittings. ( Specification & samples to be produced by the contractor, whenever requested )	Note			
	Color of all sanitary fittings shall be white.	Note			
	Contractor shall give a warranty of 10 years in respect of workmanship and materials with effective from the date of completion of the work.	Note			
	The bidder shall submit the following technical details for approval before commencing of the work. a)Brand name b)Technical specifications c)Detail of guarantee	Note			
	Supply and installation of sanitary appliances include pipe specials, fittings and connection to water supply and waste and soil pipes lines and commissioning.	Note			
	Rates for sanitary fittings shall include for the cost of following:	Note			
	1. Waste water outlet, internal overflows etc., supporting brackets and incidental materials for fixing.				
	2. Assembling, jointing together fixing components parts and jointing to pipes including necessary coupling and for leaving perfectly clean and in perfect working order as on completion.				
	3. Jointing and connection pipes to sanitary fittings.				
	4. Making good the work disturbed.				



**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 8: Plumbing and Sanitary Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Plumbing and Sanitary Installations (Cont'd)</b>				
	<b>Sanitary Fittings and Fixtures (Cont'd)</b>				
8.3.1	Ceramic wash basin, pedestal type, 22" x 16" (Prime Cost: Rs. 16,800/-) fixed with chromium plated waste outlet, magic hose, screws, plug & silicone, all completed to working order.	nr	1		
8.3.2	Ceramic water closet (commode) with close couple flush tank and double plastic seat cover (Prime Cost: Rs. 33,600/-) installed on tiled floor including flexible hose & thread seal, commode screws, plug and silicone. Connected to water supply, all completed to working order.	nr	1		
8.3.3	Supply and fixing approved new closet squatting foot rest type (Prime Cost: Rs. 6,500/-) with trap, supplied and fixed to working order including connection to sewer line	nr	1		
8.3.4	Supplying & fixing chromium plated basing tap with long handle for disabled's wash basin as approved by Engineer. (Prime cost: Rs. 6,900/-)	nr	1		
8.3.5	Bidet shower (Prime cost: 2,350/-) fixed to wall, completed with thread seal, silicone, connect to water supply, all completed to working order.	nr	1		
8.3.6	Supply and fixing 20mm dia Approved heavy quality chromium plated bib tap (Prime cost: 1,750/-) with 20mm bib tap with 1 No PVC faucet socket	nr	2		
8.3.7	Floor clean outlet including connection to pipework	nr	3		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 8: Plumbing and Sanitary Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Plumbing and Sanitary Installations (Cont'd)</b>				
	<b>Sanitary Fittings and Fixtures (Cont'd)</b>				
8.3.8	Supplying and fixing chromium plated brass angle valve (Prime cost: 1,350/-), connected to water supply, all complete to working order.	nr	5		
8.3.9	Supply and fixing approved sink stainless steel with single drain board with chromium plated wastewater chain, stay & waste plug (tap, bracket, water, wastewater connection measured separately)	nr	1		
8.3.10	Supply and fixing 20mm dia Approved heavy quality chromium plated swan neck type pillar tap 1 No PVC faucet socket	nr	1		
<b>8.4</b>	<b>Valves</b>				
8.4.1	Supply and fixing gate valve brass, 32mm dia heavy quality	nr	2		
8.4.2	Supply and fixing gate valve brass, 20mm dia heavy quality	nr	4		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 9: Electrical Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>9.0</b>	<b>Electrical Installation</b>				
	The tenderers shall refer Drawings, Specifications, Pricing preambles, and other relevant documents prior to pricing of this section of work.	Note			
	Contractor shall propose shop drawings/conduit layout drawings and shall obtain approval from consultant engineer before commencing work.	Note			
	Contractor shall obtain sample approval for all items before commencing the work.	Note			
	Rates shall include for all necessary materials, cables, conduits, PVC sunk box, bulbs, holders, ceiling rose, switches etc. to complete the electrical installation in good order.	Note			
	Electrical items are to be of the following makes:	Note			
	(a) Electrical switches and socket outlets: MK, Crabtree, PDL Tenby, Clipsal, Kevilton, Orange or equivalent				
	(b) Distribution boards: Consumer unit flush mount type or as specified				
	(c) Fans: K.D.K., National-Japanese origins				
	(d) Exhaust Fans: K.D.K., National-Japanese origins				
	(e) Switch Gear - MCCB'S Schneider, Siemens, ABB, Hager, Moeller, Terasaki, Meta-MEC of LS Brand or equivalent				
	[f] RCCB , MCB'S Schneider, Siemens, Crabtree, Hager, Moeller, Legrand Eaton, Meta-MEC of LS Brand or equivalent				

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 9: Electrical Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Electrical Installation (Cont'd)</b>				
	[g] Fluorescent Fittings :				
	The Choke, Starter & Capacitor should be of good quality, British, French, Australia, German or equivalent & the tube should be preferably, Thorn, Philips, osram, National or equivalent. The fluorescent fittings should be fabricated in gauge Not smaller than 24 SWG Zinc coated metal. Finished with powder coating (white in color.)				
	[h] Distribution sub panels: Shall be in surface mount plastic enclosure or metal enclosure fabricated with zinc coated sheet metal of gauge Not less than 1.8mm total enclosed, with hinged door with protective cover plate for terminals. Finished with powder coating of approval color and components as specified in the BOQ				
	[i] Cable : ACL , Kelani or equivalent.				
	[j] Energy saving bulbs : 4 Star rated.				
	Wiring type in concealed conduit ,floor conduit, metal or PVC trunking	Note			
	All panel boards and consumer units should have wire numbering and a laminated circuit diagram should be pasted on the inside surface of the door.	Note			
	All types of fittings, materials, painting and finishes shall be approved by the Electrical Engineer prior to installation.	Note			
<b>9.1</b>	<b>Power cables</b>				
	<u>Supply and lay of wiring cables &amp; earth cables in PVC Conduit.</u>				
9.1.1	2 x 6 mm <sup>2</sup> PVC/PVC/Cu cable to CEB Meter	m	5		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 9: Electrical Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Electrical Installation (Cont'd)</b>				
<b>9.2</b>	<b>Point wiring</b>				
9.2.1	Wiring for light points (including lamp switch) , from respective switch using 2x1.0mm <sup>2</sup> , PVC/ PVC/CU drawn through securely fixed with PVC casing on wall and soffit.	nr	26		
9.2.2	Wiring for Fan points (including supply of all material, earth wire, fan hook & Regulator) from the switch point of the ceiling fans using 2x1.0mm <sup>2</sup> PVC/ PVC/CU+ 2.5mm <sup>2</sup> PVC/PVC/CU drawn through securely fixed with PVC casing on wall and soffit	nr	4		
9.2.3	Wiring for 2x13A Socket outlets (Including socket outlet) using 2 x 2.5 mm <sup>2</sup> PVC/PVC/Cu & 2.5 mm <sup>2</sup> earth cable drawn through securely fixed with PVC casing on wall and soffit	nr	10		
<b>9.3</b>	<b>Luminaires and fixtures</b>				
	<b>Luminaires</b>				
9.3.1	Supply and installation of 7W LED bulb in (Globe or equilenet) working order	nr	4		
9.3.2	Supply & installation of 18 W LED lamp fitting with all necessary accessories	nr	12		
9.3.3	Supply & installation of 12W LED light fitting with all necessary accessories	nr	10		
	<b>Fans</b>				
9.3.4	Supply & installation of type 01 ceiling fan 1400mm dia. Complete with 5 speed hum free with regulator. Safety switch and safety wire in working order	nr	4		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 9: Electrical Installation**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Electrical Installation (Cont'd)</b>				
<b>9.4</b>	<b>Distribution boards</b>				
9.4.1	DB 12 way Comprised with 1 No. 32A 2P MCB 1 No. 40A 2P RCD (30mA) 8 Nos. SP MCB	nr	1		
<b>9.5</b>	<b>Earthing System</b>				
	Supply and install earthing system according to IEE wiring regulation and to achieve less than 10 Ohm Earth resistance.	Note			
9.5.1	Earth electrode complete with 1.2m long, 16mm dia. Copper rod firmly driven in the earth near the building room and purpose made earth pit. suitable copper cable solidly connected with earth electrode. Supply and installation of all other accessories deemed to be required the proper operation of the system. Rate shall include the construction of specified size of earth pit with a removable cover.	Item	1		
<b>9.6</b>	<b>Inspection &amp; Testing</b>				
9.6.1	Testing the installation & rectify any defect & submit a certificate by a chartered Electrical Engineer.	Item	1		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 10: Floor, Wall and Ceiling Finishes**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>10.0</b>	<b>Floor, Walls and Ceiling Finishes</b>				
	The Contractor is advised to refer the Drawings, Specification, pricing preambles and the finishes schedule prior to pricing of this section of work.	Note			
	Rates shall include for temporary rules, screeds, ground etc., all normal cutting arises, raking out knots of brick work, hacking knots of concrete, rounded angles and the like, bedding, pointing, forming joints making good between different surfaces, around pipes, sanitary fittings and other fixtures and cleaning down upon completion.	Note			
	Extra over provision for narrow widths such as door/window reveals have not been measured separately for all types of finishes. Rates shall include for narrow widths unless otherwise included in the BOQ.	Note			
	Rates shall include for builders work in connection with electrical/mechanical installation and plumbing unless measured otherwise.	Note			
	Ensure that all floor finishes are laid to falls as indicated or towards external sides so as to prevent stagnation of water.	Note			
	Tile samples shall be provided for approval by the Engineer prior to purchase of materials.	Note			
	Rate for tiles shall include for preparation of sub-surface, setting out, sub-screeds, bedding, protection of tiles etc. as per specification.	Note			

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 10: Floor, Wall and Ceiling Finishes**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Floor, Walls and Ceiling Finishes (Cont'd)</b>				
	Rates for plaster work shall include for reinforcing joints between different types of construction material (e.g. Brick work and concrete work) with 150mm wide galvanized steel mesh as directed by the Engineer.	Note			
	Rates shall include for covering and protection of finishes from weather and construction operation.	Note			
	Rates for ceiling finishes shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.	Note			
<b>10.1</b>	<b>Floor Finishes</b>				
	<u>Floor tilling</u>				
10.1.1	300 x 300 mm homogeneous matt porcelain tiles (Prime cost: 3800/- per m <sup>2</sup> ) laid to design - Toilet area	m <sup>2</sup>	5.2		
10.1.2	400 x 400 mm homogeneous rustic porcelain tile (Prime cost: 3800/- per m <sup>2</sup> ) laid to design - Other area	m <sup>2</sup>	90		
10.1.3	100mm high skirting to match above.	m	88		
10.1.4	600 x 300 mm homogeneous rustic porcelain tile (Prime cost: 3900/- per m <sup>2</sup> ) laid to design - Pantry top & wall	m <sup>2</sup>	4.3		



**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 10: Floor, Wall and Ceiling Finishes**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Floor, Walls and Ceiling Finishes (Cont'd)</b>				
<b>10.2</b>	<b>Wall Finishes</b>				
	<b>Wall Plastering</b>				
10.2.1	16mm thick cement and sand 1:5 plaster finish semi rough with wooden float	m <sup>2</sup>	85		
10.2.2	16mm thick cement & sand plaster reveals 35mm to 150mm wide finished semi rough	m	182		
	<b>Plinth Plastering</b>				
10.2.3	12mm thick cement and sand 1:3 plaster finish smooth with coloured cement floating	m <sup>2</sup>	36		
10.2.4	Cement and sand 1:3 plaster finished smooth with lime putty on exposed faces of concrete surface and soffit, 10mm thick	m <sup>2</sup>	5.5		
	<b>Wall Tiling</b>				
	Locally manufactured glazed wall tiles of approved quality, color and variety with all specials in specified areas as per the BOQ straight joints in both ways including all shapes, corner and angles set in 12mm thick cement and sand (1:3) screed backing on walls to specified height with beveled edge from floor level and all joints shall be pointed with colored tile grout to match with tiles.	Note			
10.2.5	600 x 300 mm glazed ceramic tiles (Prime cost: 3800/- per m <sup>2</sup> ) of approved color laid to design - Toilet area	m <sup>2</sup>	26		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 10: Floor, Wall and Ceiling Finishes**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Floor, Walls and Ceiling Finishes (Cont'd)</b>				
<b>10.3</b>	<b>Ceiling Finishes</b>				
	Rates shall include for the cost for scaffoldings, supplying arrangement in erections.	Note			
	Rate shall include for all necessary cuttings, drillings, bolting, reverting, welding, grinding, delivering, unloading, hoisting, erecting and fixing in position, leveling, plumbing, painting and preparation, submission and getting approval of all shop drawings.				
	Rate shall include for applying one coat of primer & two coats of emulsion paint to ceiling panels				
10.3.1	Non Asbestos cement fiber suspended ceiling with 600 x 600 mm Ceiling panels fixed on aluminium Frame including 25x25mm "L" angle, 25x40mm main bars and 25x30mm cross bars including all necessary screws, rivets & R - plugs etc.	m <sup>2</sup>	92		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 11: Painting Work**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>11.00</b>	<b>Painting Works</b>				
	Rate shall include for preparation of surfaces, cleaning down, smoothing, knotting, stopping, patching up cracks, etc., protection of floors and fittings, removing and replacing door and window fittings, if required, and cleaning upon completion.	Note			
	Rate shall include for painting of reveals etc.	Note			
	Rates shall include for protection of floors, fittings and cleaning upon completion.	Note			
	Paint brand should be CIC or equivalent and the approval for brand and colour should be obtained by the Engineer	Note			
<b>11.1</b>	<b>Internal Faces</b>				
11.1.1	Apply 2 coats of skim coats on cement plastered surfaces, smoothed with sand paper to receive the paint.	m <sup>2</sup>	355		
11.1.2	Internal painting on internal walls; general surfaces/plain surfaces on walls/ Isolated column / reveal including prepare & apply one coat of filler/primer & two coats of emulsion paint as directed.	m <sup>2</sup>	355		
11.1.3	Apply 2 coats of skim coats on soffit surfaces, smoothed with sand paper to receive the paint.	m <sup>2</sup>	5.5		
11.1.4	Internal painting on soffit of slab including prepare & apply one coat of filler/primer & two coats of emulsion paint as directed.	m <sup>2</sup>	5.5		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 11: Painting Work**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
	<b>Painting Works (Cont'd)</b>				
	<b>Ceiling Paint</b>				
11.1.5	Existing Ceiling painting; general surfaces/plain surfaces on Ceiling/ soffit /prepare & apply one coat of filler/primer & two coats of emulsion paint as directed.	m <sup>2</sup>	68		
<b>11.2</b>	<b>External Faces</b>				
11.2.1	External Painting on Plastered work ; general surfaces/ plain surfaces on walls/ Isolated column /isolated beam/ reveal including prepare and apply one coat of primer and two coats of weather shield paint as directed.	m <sup>2</sup>	218		
<b>11.3</b>	<b>Valance/barge board painting</b>				
11.3.1	Paint enamel, applying two coat after cleaning and preparing surface	m2	25		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 12: Drainage Work**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>12.0</b>	<b>Drainage</b>				
	<b>Sewage &amp; Drainage Work</b>				
	Rates for Drainage Work shall include for the cost of following:	Note			
	1. All pipe specials such as bends, junctions, elbows, tees etc. unless separately shown in the BOQ.	Note			
	2. Laying of pipes to falls.	Note			
	3. Connection to sides of manholes etc.	Note			
	4. Providing sleeves etc., when pipes pass through walls, foundations etc.	Note			
	5. Giving notices, obtaining necessary approvals from Local Authorities, paying fees etc.	Note			
	6. Testing, commissioning and disinfection after completion.	Note			
<b>12.1</b>	<b>Piping</b>				
	<u>Sewer and Waste Water PVC Pipe, type 600, including all fittings, sleeves, accessories, supports, etc. complete as specified</u>				
12.1.1	63mm diameter uPVC pipe	m	19.0		
12.1.2	110mm diameter uPVC pipe	m	19.0		
<b>12.2</b>	<b>Manholes and catch pits</b>				
	<u>Manhole for drainage network including excavation, disposal, concrete work, shuttering, 225 mm brick wall etc. and all builders work include trenching, channels and prepared opening for pipe connection and internal and external protection for concrete, frame &amp; cover complete as specified</u>				
12.2.1	Catch pit, 300 x 300 mm sized	nr	2		
12.2.2	Manhole, Size 600x600, depth 600-900 mm	nr	2		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 13: Miscellaneous Work**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
<b>13.0</b>	<b>Miscellaneous Work</b>				
<b>13.1</b>	<b>Water tank with steel structure</b>				
	Supply and installation of 1000L water tank with approved height and design steel structure as directed by the engineer. Rate to include supplying required ball valve and other items to proper working order. Rate also include for necessary excavation, approved material back filling, all piping connection with valves etc.	item	1		
<b>13.2</b>	<b>Cladding wall covering</b>				
	Supply and fixing 4mm aluminum composite panel cladding partition on top of the wall between adjoining building and FHC. Structure should be steel box bar frame work with necessary painting as directed by the Engineer.	item	1		
<b>13.3</b>	<b>Zn/Al Roof ( Approx. area 15m2)</b>				
	Supply and fixing 0.47 Zn/Al between adjoining building . Structure should be steel box bar truss fixed to wall and box bar purling frame work with necessary painting as directed by the Engineer. Rate to include necessary barge capping, gutter and down pipe as required	item	1		
<b>13.4</b>	<b>Eve ceiling repairing</b>				
	Repairing of existing eve ceiling as directed by the Engineer. Rate to include supply all required material ceiling sheet, beading & timber etc. Contractor should be visited the site and make assessment before the pricing the item.(Ceiling painting measured separately)	item	1		
<b>TOTAL CARRIED TO SUMMARY</b>					

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill No. 14: Provisional Sum**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
<b>14.0</b>	<b>Provisional Sum</b>				
14.1	Provisional sum for fabricating and fixing of FHC name board	PS	1	35,000.00	35,000.00
<b>TOTAL CARRIED TO SUMMARY</b>					<b>35,000.00</b>

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill: Day Works**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Day Work Definition</b>				
	The Day Work is defined as being additional or extra work not envisaged at the time of Bidding, which is carried out pursuant to instructions given by the Engineer under the Contract and further, in the opinion of the Engineer, cannot be adequately measured or valued in any other way. The definition applies solely to Day Work carried out under and incidental to the Contractor. It does not cover				
	Any work carried out as a separate contract.				
	Day Work ordered to be carried out after the date of commencement of the period of maintenance.				
	<b>Schedule of Daywork Rates: 1. Labor</b>				
<b>D.1</b>	<b>Labour</b>				
	The Day work rates quoted for labor are to be inclusive NET amounts payable including for use and waste of hand tools and of all ordinary non-mechanical plant, stagings, scaffoldings, tarpaulins, use of electric light and water for the Works, etc., and all special inducements for working in Sri Lanka. The rates shall also be deemed to include the extra cost for Public Holidays, other holidays with pay, medical costs, bonus, sick leave, termination, indemnity pay and the like. Unless specifically authorized in writing by the Engineer, non-productive overtime or special rates for overtime will not be admissible. The cost of all supervisory staff including engineer's, foremen, clerks, store men, etc., is to be included in the percentage addition for profit and overhead.				
D.1.1	Labour	hour	15		
D.1.2	Concreter / Mason	hour	15		



**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP  
BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER  
ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill: Day Works**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Labor (Cont'd)</b>				
D.1.3	Tiller	hour	5		
D.1.4	Carpenter	hour	5		
D.1.5	Steel Fixer and Bar Bender	hour	5		
D.1.6	Painter	hour	5		
D.1.7	Welder	hour	5		
D.1.8	Plumber	hour	5		
D.1.9	Electrician	hour	5		
	<b>Schedule of Daywork Rates: 2. Materials</b>				
<b>D.2</b>	<b>Material</b>				
	Materials used on Day works shall be as specified for the Works. The rates are to include delivery to the Site. Should any materials be required for use on Day works which are not included in the Schedule, the lowest current NET market price shall apply, plus a reasonable allowance for collecting, loading and transporting to the Works.				
D.2.1	Ordinary Portland cement	kg	250		
D.2.2	Concrete (Grade 25)	m <sup>3</sup>	0.5		
D.2.3	Metal 20 mm	m <sup>3</sup>	1.0		
D.2.4	Metal 25 mm	m <sup>3</sup>	1.0		
D.2.5	Metal 40 mm	m <sup>3</sup>	1.0		
D.2.6	Building sand	m <sup>3</sup>	1.5		

**HEALTH SYSTEM ENHANCEMENT PROJECT - HSEP**  
**BILLS OF QUANTITIES FOR HOPE ESTATE FIELD HEALTH CENTER**  
**ADDITIONS AND IMPROVEMENTS TO EXISTING FHC BUILDING**

**Bill: Day Works**

Item No.	Description	Unit	Quantity	Rate (LKR)	Amount (LKR)
	<b>Material (Cont'd)</b>				
D.2.7	Engineering bricks	nr	200		
D.2.8	225 x 150 mm Rubble	m <sup>3</sup>	2		
D.2.9	1" thick planks (class 1 timber)	m <sup>2</sup>	2		
D.2.10	High yield steel reinforcement bars (any sizes)	t	0.1		
D.2.11	Structural steel members	t	0.1		
D.2.12	12 mm plywood sheets	nr	2		
D.2.13	Emulsion paint	ltr	4		
D.2.14	Enamel paint	ltr	4		
D.2.15	PVC Pipe 110mm diameter(gauge 600)	m	6		
D.2.16	PVC Pipe 75mm diameter(gauge 600)	m	6		
D.2.17	PVC Pipe 50mm diameter(gauge 1000)	m	8		
D.2.18	PVC Pipe 40mm diameter(gauge 1000)	m	8		
D.2.19	PVC Pipe 32mm diameter(gauge 1000)	m	8		
D.2.20	PVC Pipe 25mm diameter(gauge 1000)	m	8		
D.2.21	PVC Pipe 20mm diameter(gauge 1000)	m	15		
D.2.22	5 mm thick clear glass	m <sup>2</sup>	1		

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**Bill: Day Works**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (LKR)</b>	<b>Amount (LKR)</b>
<b>D.3</b>	<b>Schedule of Daywork Rates: 3. Contractor's Equipment</b>				
D.3.1	Concrete mixer, 10 /7	hrs	5		
D.3.2	Electric water Pump	hrs	5		
	<b>Contractor's Equipment (Cont'd)</b>				
D.3.3	Concrete vibrator & Poker	hrs	5		
D.3.4	Welding plant	hrs	5		
<b>TOTAL CARRIED TO GRAND SUMMARY</b>					