

**DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**  
**MINISTRY OF HEALTH, NUTRITION & INDIGENOUS MEDICINE**

**TEACHING HOSPITAL, PERADENIYA**

**EXPANSION OF WARD NO.07 & 08 AT TEACHING HOSPITAL, PERADENIYA**

**BIDDING DOCUMENT**

**CONTRACT NO: .....**

**Volume I - (Retain by the Bidder)**

- Section 01 – Instructions to Bidders
- Section 02 – Bidding Data
- Section 03 – Conditions of Contract
- Section 04 – Contract Data
- Section 05 – Standard Forms (Contract)

**Volume II – (For the use as “Original” document to submit)**

- Invitation for Bid**
- Section 02 – Bidding Data**
- Section 04 – Contract Data**
- Section 06 – Specifications**
- Section 07 – Form of Bid**
- Section 08 – Bills of Quantities**
- Section 09 – Schedules**
- Section 10 – List of Drawings**
- Section 11 – Standard Forms (Bid)**

**Volume III – (For the use as “Duplicate Copy” to submit)**

- Section 07 – Form of Bid
- Section 08 – Bills of Quantities
- Section 09 – Schedules

**CONSULTANT**

CENTRAL ENGINEERING CONSULTANCY BUREAU  
No. 415,  
BAUDDHALOKA MAWATHA  
COLOMBO 07

**CLIENT**

MINISTRY OF HEALTH, NUTRITION & INDIGENOUS  
MEDICINE  
“ SUWASIRIPAYA “,  
385, REV BADDEGAMA WIMLAWANSA THERO  
MAWATHA  
COLOMBO 10

**FEBRUARY 2025**

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# INVITATION FOR BIDS (IFB)

## MINISTRY OF HEALTH, NUTRITION & INDIGENOUS MEDICINE

### EXPANSION OF WARD NO.07 & 08 AT TEACHING HOSPITAL, PERADENIYA

CONTRACT NO. ....

1. The Chairman, Regional Procurement Committee on behalf of the Teaching Hospital, Peradeniya now invites sealed bids from eligible and qualified bidders for Expansion of Ward No.07 & 08 at Teaching Hospital, Peradeniya as described below and estimated basic cost ~ **Rs. 101.7 Million** (excluding Contingencies & VAT)
  - Scope of the project is **Expansion of Ward No.07 & 08**
  - Work mainly consists of :  
Reinforced Concrete super structure, Brick works, Roof works, water proofing, Wall & Floor finishing works, Electrical & Plumbing works (refer BOQ for more detail)
  - The construction period is 360 days
2. Bidding will be conducted through National Competitive Bidding Procedure (NCB).
3. The successful bidder shall not have been blacklisted and shall meet the following requirements.

ICTAD/CIDA Registration: -

Grade : **C4 or above**

Specialty: **Building Construction**

4. Qualification requirements for awarding the contract as follows:
  - (a) The Bidder should have experience in construction of at least one similar nature project during past 5 years. The minimum amount of Contract value of each project shall be **Rs. 70 Million**. At least 75% of each project should have been completed within the original contract period
  - (b) Average annual volume of construction work performed in the last 5 years shall be at least **Rs.155 Million**.
  - (c) The minimum amount of working capital or available credit facilities for utilizing at the time of bidding exclusive of any advance payments shall be not less than **Rs. 25 Million**. as per clause 4.2 (f) in bidding data. Confirmation letter of credit facility should be addressed to **Director, Teaching Hospital, Peradeniya** .

The minimum amount of liquid assets available is calculated as follows.

$$X = (A - L) - AR + C - 0.2W$$

Where,

**X** = Minimum amount of liquid assets available

**A**= Current assets as given in the latest audited financial statements (Excluding balances in Directors Current A/C)

**L**= Current Liabilities as given in the latest audited financial statements (Excluding balances in Directors Current A/C)

**AR** = Advance Payments received for other projects  
**C** = Revolving Line of credit given by Bank  
**W** = Work in Hand

Any Bidder who does not have the minimum amount of liquid assets calculated on the above basis, required under Sub - Clause 4 of the instructions to bidder (ITB) shall be treated as non-responsive bidder.

- (d) As the estimate cost for the procurement exceeds the Rs.5 million the bidder shall register at the registrar of Public Contract Sri Lanka (Act No. 03 of 1987) at the time of submission of bids (PCA 3) and forward the certificate

Provision of Technical Staff **should be as specified with qualified Degree in BSc (Civil) Engineers & Staff.**

5. Interested bidders may obtain further information from the **Director, Teaching Hospital, Peradeniya, Tel. No. 081 - 3990312** from **09.00 hrs. to 15.00 hrs** during normal working days.
6. A complete set of Bidding Documents in English language may download from [www.peradeniya-hospital.health.gov.lk](http://www.peradeniya-hospital.health.gov.lk) web site by interested bidders from **2025.02.14 until 2025.03.07** from **09.00 hrs. to 14.00 hrs** upon payment of a non-refundable fee of **Rs. 20,000.00** cash to the Shroff in Teaching Hospital, Peradeniya or by depositing to the bank account of secretary, health ministry, account No. 057100129025207, People's Bank, Peradeniya Branch and the bank slip should submit with the bidding document.
7. Original Bid with duplicate shall be delivered to the Chairman, Regional Procurement Committee, Teaching Hospital, Peradeniya on or before 14.00 hours on **2025.03.07**. Late bids will be rejected. Bids will be opened soon after closing in the presence of the Bidders or Bidder's representatives who choose to attend.
8. Bid validity shall be **91 days** from the date for closing of Bids.
9. All bids shall be accompanied by a "Bid security" (as per the format given in the Bidding Document) of **Rupees One Million fifty thousand Only (Rs. 1,050,000.00)**. Bid Security validity shall be **119 days** from the date for closing of Bids (**03<sup>rd</sup> July 2025**). Any bid not accompanied by a valid bid Security will be rejected. Bid Security shall be address to the **Director, Teaching Hospital, Peradeniya.**
10. Pre-bid meeting will be arranged at 10.30hrs on 2025.02.21 at the **Lecture Hall No.02 at Teaching Hospital, Peradeniya.** All the bidders are welcome for this meeting.
11. Procurement committee reserves the right to accept a suitable bid out of the bids received or reject. All bids and the decision of the Procurement Committee is final.

Chairman,  
Regional Procurement Committee,  
Teaching Hospital,  
Peradeniya.

Tel 081 – 3990312

**SECTION – 2**  
**BIDDING DATA**

**Note:**

This section shall be read in conjunction with Section I – Instructions to Bidders, and is intended to provide specific information in relation to corresponding clauses in Section I. Whenever there is a discrepancy, the provisions in Section 2 – Bidding Data shall supersede those provided in the Section I – Instructions to Bidders.

## BIDDING DATA

### Instructions to Bidders

#### Clause

#### Reference

#### 1.1 Employer's Name and Address:

Name : Secreatry,

Address : Ministry of Health, Nutrition & Indigenous Medicine  
"SUWASIRIPAYA",  
385, Rev Baddegama Wimlawansa Thero Mawatha  
Colombo 10 .

#### 1.1 **Scope of Works**

Expansion of Ward No.07 & 08.

Work mainly consists of :

Reinforced Concrete super structure, Brick works, Roof works, water proofing, Wall & Floor finishing works, Electrical & Plumbing works (refer BOQ for more detail) .

#### 1.2 **Time for Completion**

The Time for Completion for the whole of works shall be **360 days**

#### 2.1 **Source of funds**

**The Source of Fund is GOSL.**

#### 4.1 **Qualification Information**

The following information shall be provided in Section 9 - Schedules:

- CIDA registration
  - Registration number .....
  - Grade .....
  - Specialty .....
  - Expiry date .....
- VAT registration number .....
- Attach construction program
- Attach legal status (Sole proprietor, Partnership, Company etc.)
- Attach authentication for signatory
  - Total monetary value of construction work performed for each of the last five years
  - Experience in works of a similar nature and size for each of the last five years
  - Construction equipment

- Staffing
- Attach Work plan and methods
- Authentication letter/ Power of Attorney
- Proofs for work in hand
- PCA 3 Certificate

**4.1 (c)** Not applicable

**4.2(a)** ICTAD/CIDA registration required  
Specialty: **Building Construction**  
Grade: **C4 and above**

**4.2(b) Average annual volume of construction work performed in last 5 years**

Average annual volume of construction work performed in last five years shall be at least LKR. 155,000,000.00

**4.2(c) Experience in the Construction works**

The Bidder should have experience in construction of one similar nature projects during past 5 years. The minimum amount of Contract value of each project shall **Rs:70.0 Million**. At least 75% of each project should have been completed within the original contract period

**4.2(d) Essential equipment**

Proposals for the timely acquisition (own, lease, hire, etc.) of the following minimum required essential equipment shall be entered in Schedule 5 of Section 9 “Schedules”. Concrete Mixers, Pocker Vibrator, tippers, scaffoldings, and surveying Equipments.

**4.2(e) Qualification and Experience of the Staff of Contract Manager**

- Technical Assistant I (01 nos)– QS (Full time at site) – NVQ4 or equivalent with minimum 3 years' experience.
- Technical Assistant II- (02 no)– Civil (Full time at site)– NVQ4 or equivalent with minimum 5 years' experience
- Site Engineer– Civil (Full Time) – Degree in BSc Engineering (Associate member of the Institute of Engineers in Sri Lanka with 10year Experience) or NDT/ NDES with 15year experience.

This is the minimum requirement and the successful bidder shall assign all other necessary staff in compliance with all other contractual stipulations.

**4.2(f) Liquid assets and /or credit facilities required**

- (e) The minimum amount of liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, shall be not less than **Rs: 25,000,000.00**

**4.2 (g)** As the estimate cost for the procurement exceeds the Rs.5 million the bidder shall register at the registrar of Public Contract Sri Lanka (Act No. 03 of 1987) at the time of submission of bids (PCA 3) and forward the certificate

**10.1 Clarification of Bidding Documents**

Employer's address for clarification in bidding document is as below.

Name : Director,

Address : Director,  
Teaching Hospital,  
Peradeniya

**13.1(A) (j),** Documents comprising the Bid  
(as per the ITB Clause No. 13.1)

**13.1(B) (d)**

No Additional information required

**14.3** VAT component shall not be included in the rates. The amount written in the Form of Bid shall be without VAT.

If bidder is registered for VAT, the bidder shall indicate the amount of VAT claimed separately at the end of the Bill of Quantities, in addition to the net value of the bid, along with VAT registration number. The amount written on the Form of bid shall be without VAT. Any bidder who does not declare his VAT registration number will be liable for rejection of his bid.

If any bidder is not registered for VAT, the bidder shall indicate the net value of the bid. Under this category bidder shall produce a letter from the Commissioner of Inland Revenue Department, certifying that the Company has not been registered for VAT, and should be attached to the bid. Any bidder who does not comply with this requirement will be liable for rejection of the bid.

**14.4 Adjustments for change in cost**

The Contract is subjected to price adjustment.

**15.1 Currency of Bid**

The Bidder shall be quoted only in Sri Lankan Currency (LKR)

**16.1 Period of Bid validity:**

The Bid shall be valid upto **91** days from date of closing of bid. (valid upto 6<sup>th</sup> June, 2025)

**17.1 The amount of Bid Security**



The Amount of Bid Security **LKR 1,050,000.00**

**17.2 Validity of Bid Security**

The Bid Security shall be valid up to **minimum of 28 days beyond the validity of Bid** as per attached specified format. (valid up to 03<sup>rd</sup> July 2025)

Securities and Guarantees shall be on demand guarantees issued by

- A bank operating in Sri Lanka approved by Central Bank of Sri Lanka
- A reputed Insurance Company operating in Sri Lanka accepted by the Treasury for acceptance of Guarantees
- Construction Guarantee fund.

**19.1 Pre-Bid meeting**

Pre-bid meeting will be arranged at 10.30 hrs on 2025.02.21 at the **Lecture Hall No.02 at Teaching Hospital, Peradeniya.**

**21.2 (a) Employer's Address for Bid submission**

Chairman  
Regional Procurement committee,  
Teaching Hospital,  
Peradeniya

**21.2 (b) Identification number of Contract**

Identification Number of the Contract is: .....

**22.1 Deadline for submission of Bids**

Deadline for submission of Bids. 14.00 hrs on 2025.03.07.

**25.1. Bid opening**

Venue:  
**Teaching Hospital, Peradeniya.**  
Time: 14.00hrs  
Date: 2025.03.07

**31.1 Preference for Domestic Bidders**

**NOT APPLICABLE.**

**35.1 Amount of Performance Security**

Performance Security acceptable to the Employer shall be from,

- A bank operating in Sri Lanka approved by Central Bank of Sri Lanka
- A reputed Insurance Company operating in Sri Lanka accepted by the Treasury for acceptance of Guarantees

- Construction Guarantee fund.

The amount of Performance Security is **5 %** of the Initial Contract Prices.

The Performance Security shall be valid until 28 days beyond the expected completion date of Defects Liability Period.

**37.** Dispute Adjudicator Board (DAB)

Within 28 days from the commencement date each of the parties shall appoint one member to serve on the Dispute Adjudicator Board (DAB). The parties shall consult both these members and shall agree upon the third member, who shall be appointed to act as the Chairman.

If either party fails to nominate a member to the DAB or the parties fails to agree upon the third member or the parties fail to agree on the appointment of a replacement person to the DAB, then upon the request of either or both parties the Construction Industry Development Authority (CIDA) shall appoint the relevant member to the DAB.

Adjudicator fee should be borne by Employer and Contractor equally.

**SECTION – 4**  
**CONTRACT DATA**

Note:

This section shall be read in conjunction with Section 3 – Condition of Contract, and is intended to provide specific information in relation to corresponding clauses in Section 3. Whenever there is a discrepancy, the provisions in Section 4 – Contact Data shall supersede these provided in the Section 3 – Condition of Contract.

## CONTRACT DATA

### Conditions of Contract Clause Number/s

1.1.2.2 & 1.3

#### **Employer's Name and Address**

Name : Secretary,

Address : Ministry of Health, Nutrition & Indigenous Medicine  
"SUWASIRIPAYA",  
385, Rev Baddegama Wimlawansa Thero Mawatha  
Colombo 10

#### **Employer's Representative**

Name : Director,

Address : Teaching Hospital, Peradeniya

1.3

#### **Contractor's Name & Address:**

Name: .....

Address : .....

1.1.2.4 & 1.3

#### **Engineer's Name & Address**

Name: General Manager

Address: Central Engineering Consultancy Bureau  
No. 415,  
Buddhaloka Mawatha  
Colombo 07

#### **Engineer's Representative**

Name: Project Manager (Hospital Consultancy Works)

Address: Central Engineering Consultancy Bureau  
Digana Village  
Rajawella.

1.1. 3.3

Time for Completion of the Works                      Time for completion of the whole works shall be  
**360 days**

- 1.1.3.7 Defects Notification Period is **365 days**  
Defects Notification Period
- 2.1 Right of access to the Site: 14 days after Letter of Acceptance
- 3.1 Engineer's Duties Authority the Engineer shall obtain the specific approval of the Employer before taking action under the following Sub-Clauses of these Conditions
- (a) Clause 13, where the final effect of the variation increases the contract price

4.2 **Amount of Performance Security**

The amount of Performance Security is **5 %** of the Initial Contract Price. The Performance Security shall be valid until 28 days beyond the expected completion date of Defects Liability Period. The acceptable form is **Unconditional Guarantee.**

- 8.7 Liquidated damages for Works **0.05%** of the Initial Contract Price per day

- 8.7 Maximum amount of Price liquidated damages **10%** of the Initial Contract

- 12.2 (b) Method of Measurement Sri Lanka Standard 573: 1999 UDC 69 (083.74)

- 13.3 In fixing the appropriate new rates, mark up for overheads & profits shall be limited to maximum of 16% of the "Basic Cost" of such items. The Basic cost means cost of materials, labour and equipments. In fixing such "Basic cost" the Engineer shall use the rates for labour as given below and prices for materials and equipments shall be used the prevailing market prices."

Category	Rate (Rs)
Special Skilled Labour	4,000.00
Skilled Labour	3,500.00
Semi Skilled Labour	2,600.00
Un Skilled Labour	2,500.00

- 13.4(b) Percentage for Adjustment of Provisional Sums 10%

- 13.7 Weightings of Inputs Refer Schedule **09**
- Month of base indices applicable is one month prior to the submission of bid.

14.2	Total Advance Payment	20% of the Initial Contract Price excluding Provisional Sums & Contingencies on submission of unconditional bank guarantee for advance payment issued by a recognized bank operating in Sri Lanka, approved by the Central bank of Sri Lanka.
14.2	Number of timing of installment for Advance Payment	<p><b>Stage I-</b> Two equal instalments. The first ten percent (10%) of advance payment will be paid within 14 days from receipt of both Performance and Advance Payment Guarantee as required under clause 4.2 and 14.2 respectively.</p> <p><b>Stage II</b> Balance ten percent (10%) will be paid on successful completion of mobilization at the site.</p>
14.3(c)	Percentage of Retention	<b>10%</b> of certified work done
14.3(c)	Limit of Retention Money	<b>5%</b> of the Initial Contract Value
14.5	Minimum amount of interim payment Certificates	<b>LKR 4,500,000.00</b>
14.8	Alternative method for Payment of Retention	<p>On reaching the limit of retention, stated in the Contract Data under Sub-Clause 14.3, the Contractor may substitute full retention money with an unconditional guarantee acceptable to the Employer to a value equal to the full retention money, and valid up to 28 Days beyond the end of Defect Notification Period. On receipt of such guarantee the Employer shall repay the full retention money. The guarantee will be released to the Contractor upon the certification of the Engineer that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.</p>
18.2	Third Party Insurance	<p>The Amount of insurance per occurrence is: <b>LKR 500,000.00</b></p>

**SECTION – 6**  
**SPECIFICATIONS**

# GENERAL SPECIFICATIONS

The works under this contract shall be executed in accordance with the specifications given in the following documents issued by the Institute for Construction Training and Development (ICTAD), “Savsiripaya”, Wijerama Mawatha, Colombo-07, as applicable. The specifications given in this document, if any, shall take precedence over the ICTAD documents wherever relevant.

1. Specification for Building Work - Sri Lanka (Vol. I) 3<sup>rd</sup> Edition (Revised July 2004). ICTAD Publication No. SCA/4 (Vol. I)
2. Specification for Building Work - Sri Lanka (Vol. 2) Sanitary Installation. 2<sup>nd</sup> Edition (Revised October 2001). ICTAD Publication No. SCA/4 (Vol. II).
3. Specification for Irrigation and Land Drainage Works - Sri Lanka 2<sup>nd</sup> Edition (Revised Nov 1999). ICTAD Publication No. SCA/3/1
4. Specification for Water Supply & Sewerage and Storm Water Drainage Works - Sri Lanka 2<sup>nd</sup> Edition (Revised April 2002). ICTAD Publication No. SCA/3/2.
5. Specification for Reclamation Works - Sri Lanka 2<sup>nd</sup> Edition (Revised December 1999). ICTAD Publication No. SCA/3/3.
6. Specification for Ground Water Exploration and Exploitation Works - Sri Lanka 2<sup>nd</sup> Edition (Revised May 1999). ICTAD Publication No. SCA/3/4
7. Specification for Electrical and Mechanical Works associated with Building & Civil Engineering - Sri Lanka. ICTAD Publication No. SCA/8 2<sup>nd</sup> Edition (Revised August 2000).
8. Specification for Site Investigation for Building Works and Sample Bill of Quantities – 1<sup>st</sup> Edition (April 1997). ICTAD Publication No. ICTAD/DEV/17

And any other standard specifications approved by the Government.

Eligible bidders are expected to be fully acquainted with the above documents and hence these will not be issued to the bidders with this document.

Bidders may purchase same, if necessary, from ICTAD, “Savsiripaya”, WijeramaMawatha, Colombo 07.



**SECTION -07**

**FORM OF BID**

## FORM OF BID

**NAME OF CONTRACT: EXPANSION OF WARD NO.07 & 08 AT TEACHING HOSPITAL, PERADENIYA**

**CONTRACT NO :** .....

To: Director,  
Teaching Hospital  
Peradeniya

Gentlemen:

1. Having examined the Standard Bidding Document – Procurement of Works – Major Contracts [ICTAD/SBD/02 – Second Edition, January 2007], Specifications, Drawings and Bills of Quantities and Addenda for the execution of the above-named Works, we the undersigned, offer to execute and complete such Works and remedy any defect therein in conformity with the aforesaid Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda for the sum of Sri Lankan Rupees .....  
(LKR .....) or such other sums as may be ascertained in accordance with the said Conditions.
2. We acknowledge that the Contract Data forms part of our Bid.
3. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer’s notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.
4. We agree to abide by this Bid until the date specified in ITB Clause 16 , 2025.06.05 and it shall remain binding upon us and may be accepted at any time before that date.
5. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding Contract between us.
6. We understand that you are not bound to accept the lowest or any bid you may receive.
7. We certify/confirm that we comply with the eligibility requirements as per ITB Clause 3 of the bidding documents.

Dated this ..... day of.....

Signature ..... in the capacity of .....

duly authorized to sign bids for and on behalf of .....

*[in block capitals or typed]*

Address: .....

**SECTION – 8**  
**BILL OF QUANTITIES**

## **PRICING PREAMBLES**

### **A - GENERAL NOTES**

This is a compilation of general Pricing Preamble Notes and the bidder shall refer to only the relevant sections of these preambles.

Bidders are requested to see that no page is missing, nor duplicating and that all TRADES are carried to the SUMMARY of the Bill of Quantities.

The bill of quantities shall be read in conjunction with the Conditions of Contract, Technical Specifications, Drawings and the method of measurement described in this document. General directions, descriptions and specifications of work and materials are not necessarily repeated nor summarized in the bill of quantities. References to the drawings and relevant sections of the Technical Specifications shall be made before entering prices against each item in the bill of quantities.

Drawings, Specifications and Bill of Quantities and all other documents are complementary and if any item is included in any of them, it shall deem to be included in all.

Amendments shall not be made to the Bill of Quantities with the bid without the authority, in writing, of the Engineer's Representative.

#### Extent of Work

The extent of work as provided in this Bills of Quantities shall consist of the following:

Construction and completion of the works as specified in the Drawings, Specifications, Bills of Quantities and other documents part and partial of the Contract Agreement.

#### Estimated Quantities in the Bill of Quantities

Quantities in the Bill of Quantities are estimated and shall not be considered as accurate for the purpose of procurement of materials and for the quantity of work to be carried out as per the drawings.

#### Materials

All materials, equipment supplied shall be new, unused without any defects.

All materials, equipment and accessories stated herein shall be the best of their respective kind and shall comply with the requirements of the relevant Standards, Specifications or equivalent where such exists. In all cases of permanent work specifications, model nos., makes etc., and other technical data shall be approved by the Engineer before an order is placed, and all materials, equipment, accessories and spares etc., supplied shall correspond in quality with the approved samples. The Engineer will exercise the right to reject all such items not complying in quality with the standard of the approved items and all costs incurred by this rejection shall be borne by the Contractor. All such rejected items shall be removed from the site. The Contractor shall provide the necessary details to the Engineer regarding the dates and sources of obtaining such items.

### Method of Measurement

The principles as given in the Sri Lanka Standard 573 (1st Revision 1999) Method of Measurement of building works shall be generally applicable.

The quantities given in the BOQ are estimated quantities only and are not to be taken as actual and correct quantities of the works as per the Contract. The final quantities shall be computed net using dimensions from the drawings, relative to Existing Ground Levels as per the agreed drawings persuading to the Conditions of Contract, except where clearly stated otherwise under individual items in the drawings and the BOQ. No allowance shall be made for bulking, shrinkage or waste.

If geometric tolerances on the Contractor's work, whether they are within or without the specified tolerances, cause any increase in quantities relative to the computed net quantities from the drawings then such increases shall deem to be included in the rates and such additional quantities shall not be included in the measurement for payment. No deduction shall be made for tolerances within the specified limits.

Quantities shall be measured with the same place of decimal as stated in the bills.

### Inspection of Site

Bidder is requested to visit the site to acquaint themselves with all existing conditions, and with the nature and extent of work to be done under this contract as no extras will be allowed on the plea of want of information due to neglect of their part in this regard.

### Trade Name

Where reference is made to certain manufactures' products and items identified by registered trademarks, this has been done for the sole purpose of defining and establishing standards of quality and performance and not with the intention of restricting the procurement of material or fitting to a particular manufacturer. Any other materials equipment and accessories or equivalent may be used provided that the characteristics of type, quality, and appearance finish, method of construction and/or performance is not less than specified and provided also that the approval is first obtained, by the Engineer.

### Rates

The rate for each item must be comprehensive and must include for complying in all respects with the requirements of the aforesaid Specifications, these Pricing Preambles, and cover all obligations under the Contract, and all matters and things necessary for the proper construction, completion and maintenance of the Works. No claim for additional payment will be entertained due to any error or misunderstanding by the Contractor of the work involved.

The rates and prices entered in the Bills of Quantities shall be the all-inclusive value of the completed work and shall have taken full account of all requirements and obligations, covered by all parts of the contract, including the following - unless expressly stated otherwise:

- i. All setting out and survey works including in - survey and out - surveys
- ii. Preparation and submission of detailed shop drawings, as built drawings, working drawings, Operations and Maintenance Instructions as and when required by the Engineer.
- iii. Temporary works
- iv. Complying with any limitations and constrains on the use of the site

- v. Dealing with the existing flow of water from any source including ground water, sewage and the like.
- vi. The effect on the phasing of the Works or any element of the Works to the extent set forth or reasonably implied in the documents on which the Bid is based.
- vii. Locating and taking measures for the support and full protection of pipes, cables and other apparatus during the progress of the Works, obtaining written consent of appropriate authority to interrupt the service or supply and for keeping the Engineer informed of all arrangements he makes with the owners of privately owned services or supplies and Public Authorities as appropriate.
- viii. General obligations, liabilities and risk involved in the execution of the Works set forth or reasonably implied in the documents on which the Bid is based.
- ix. Land required for tips and stockpiles including all costs for obtaining any necessary licenses and approvals.
- x. Allowance for phasing requirements of works, effect on programming of the works of all traffic diversions and construction activity associated with diversion or installation of services.
- xi. For all restrictions on working due to inclement weather-or weather related conditions, shipping movements and working operations within the site.
- xii. For working alongside and liaising with other Contractors working on the same site.
- xiii. Attendance and transport for surveys, sampling and testing, carried out by the Engineer.
- xiv. Performing all sampling and testing which are required to be carried out by the Contractor, and supplying results of such tests.
- xv. Providing required material delivery certificates.
- xvi. Complying with environment statutory requirements, obtaining necessary permissions, licenses etc. from relevant Municipal Council and/or any other relevant authority under which particular item of work is to be executed, and providing relevant documentation for the same, unless otherwise included in the Preliminaries;
- xvii. Labour and all connected costs;
- xviii. The supply of materials, goods, storage and all costs connected therewith including haulage, taking over of materials and goods supplied by others, storage, carriage, freightage, returning packing, hoisting or lowering, placing and compacting of materials and goods in position, including usual auxiliary material etc., replacing work, goods or materials damaged, broken, lost or stolen until the issue of a Certificate of Completion;
- xix. Preparatory works and setting out of particular item;
- xx. Plant and equipment unless otherwise included in Preliminaries;
- xxi. Handling of materials and working in situation where there is very restricted working space or no working space;
- xxii. Square cutting and waste of materials;
- xxiii. Forming of ends, angles, mitres and junctions between straight and raking or curved work;

xxiv. Protecting and cleaning;

xxv. All other incidental works and necessary works which are not described in the BOQ, but described in the aforesaid specifications and or shown in the drawings for the proper completion of the relevant items of work;

xxvi. Establishment charges, overheads and profit.

xxvii. All necessary scaffolding work including supply, erection and dismantling.

If the Bidder fails to price any items in the Bill of Quantities then the cost of the work under such items shall be held to be spread over and included in the prices given against other items of work.

#### Analysis of Rate

Bidders shall submit an analysis of rates for any item or items if called upon to do so by the Engineer in the event of a dispute. The Engineer's assessment shall be the final.

#### Samples

Rates of all items shall be inclusive of providing specifications, model nos., maintenance manual, makes, technical information, catalogue and literature, when requested by the Engineer for approval. No extra payments will be allowed for submission of the same.

#### Nature of the Work

Bidders are strictly advised to inspect the site and acquaint themselves regarding:

1. Extent and nature of the work to be done.
2. Site conditions.
3. Storage facilities etc.,
4. Transport facilities etc.,
5. Weather conditions in the area.
6. Limitation of working time
7. Transport and handling materials etc., and
8. Security and limitation due to security conditions
9. Status of areas adjoining to work.
10. Access to the site.
11. Status of existing structures

#### Dimensions

All the dimensions for the items stated in this Bills of Quantities, drawings or specifications should be checked at the site by the Contractor prior to commencing all such work. In the event of any discrepancies, the Contractor is advised to inform the Engineer for necessary instructions.

#### Value Added Tax (VAT)

Unit rates shall not include Value Added Tax. (VAT) The Bidder shall provide his estimated VAT component separately together with the detail calculation at the Grand summary as shown. The Employer shall pay VAT to the Contractor on submission of his invoice based on the payment certificates issued by

the Engineer.

#### Discount

If the bidder is anticipating to give any discounts, it shall be mentioned separately in the space allocated in the summary of Bill of Quantities. Provisional Sums shall not be considered when calculating discount.

#### Rate only

Items in the Bill of Quantities where "Rate only" is specified shall be priced as required for a unit quantity of that item and shall not be carried to the total of Bill of Quantities.

#### Fix only

The expression "fix only" used in these Bills of Quantities means that the Contractor shall provide the following facilities:

- a) Fixing with all necessary accessories and the like.
- b) Supplying full size templates, giving and marking dimensions and taking responsibility for their accuracy.
- c) Getting in, protecting, handling, distribution, placing in position and assembling as required.
- d) Casing up and protection, including clearing away protection on completion of the works including Sub- Contractor works.
- e) Full cost of replacement of any item which are damaged, broken, lost or stolen after the acceptance of the items from the supplier or Employer and until handing over the complete Works.
- f) Other necessary and usual facilities and documentation.

#### Supply only

The expression "supply only" used in these Bills of Quantities means that the Contractor is to provide for everything in connection with such Items except fixing in position.

#### Provisional Sum

Payments for all provisional items shall be as per actual measurements of work done at site. The contractor is advised to keep proper records for such items with the approval of the Engineer. Provisional Sums have been allowed in the Bills of Quantities, which have to be spent wholly or in part as requested by the Engineer.

#### Prime Cost

With the items in the Bills of Quantities where "Prime Cost" sum indicated, that provides an indication of price range of the quality of materials expected by the Employer. It shall be given for the estimation purpose only. Escalation cost is not included with the prime cost indicated in the BOQ and it represents the market price relevant to that material during the bidding period.

#### The unit and lump sum prices

The unit and lump sum prices of the Bill of Quantities (referred to as the Contract Rates) shall, except in so far as is otherwise provided for under the Contract, be deemed to cover all obligations set out in the Contract, and all matters or things necessary for the proper completion and maintenance of the Works,



and shall be fixed and binding upon the Contractor.

Unit prices when applied to the quantity of work performed under the Contract shall, and other sums specifically determined under the provisions of the Contract, constitute full remuneration to the Contractor under the Contract.

#### Metric and Imperial Conversion

Wherever imperial and /or metric units has been referred, it shall be considered with correct conversion from one to other as relevant

Metric units are used throughout the Bill of Quantities for measurement purposes unless otherwise indicated. Abbreviations used in the Contract are as follows:-

#### Abbreviations

m	=	metre
m <sup>2</sup>	=	square metre
m <sup>3</sup>	=	cubic metre
mm	=	millimetre
nr	=	number
kg	=	kilogram
t	=	tonne
h	=	hour
pc sum	=	Prime cost sum
pro.sum, PS	=	Provisional sum
Rs, LKR	=	Sri Lankan Rupees
Cts	=	cents
Ltr	=	litres
CP	=	Code of Practice
BS	=	British Standard
BOQ	=	Bill of Quantities
>	=	exceeding
≥	=	equal to or exceeding
≤	=	not exceeding
<	=	less than
%	=	Percentage

#### Day Works

A Day-Works bill is included in the Bill of Quantities for use when a work is executed on a day-work basis in accordance with the General Conditions of Contract. Work shall not be executed as day-works except by the written order of the Engineer. Please also refer to the Notes under the Day Works Bill.

- Materials and Goods

Payment in respect of materials or goods used in the execution of work on a day-work basis shall be net cost of materials or goods plus the required percentage addition stated in the Appendix to tender.

The “net cost of materials” means the net cost of such materials or goods delivered by the supplier to store or stockpile on the Site.

The stated rate shall cover the costs of taking delivery and putting into the store or stockpile, usage of any minor tools/equipment not listed under plant and equipment, storage, overheads and all other charges and costs in respect of or incidental to the procurements and handling of such materials or goods.

The costs of taking the materials from the store or stock pile on site to the place where they are used shall be paid for at the appropriate day-work rates for labour and Constructional Plant.

- Constructional Plant

The inserted rate for Constructional Plant shall be paid for the plant when actually employed directly in the execution of the work on a day-work basis, excluding any travelling time, associated movement on the site with a prime mover or idling hours. The rate shall include the following:

- a) The cost of Constructional Plant including maintenance and spares, fuel and fuel distribution, oil grease, and any other consumables.
- b) The cost of crews, operators/drivers and attendants.
- c) All overheads, profits and other costs associated with the plant being required to work on a day-work basis.

## **B – TRADEPREAMBLES**

### **1. PRELIMINARIES**

A list of general preliminary items is given in this Bills of Quantities. The Bidder shall include their prices for total preliminary work in their quote.

#### **1.1 TEMPORARY SERVICES**

The Contractor shall provide and maintain temporary services necessary for the execution of the Works under the Contract. The Contractor shall make applications and install such services in accordance with the regulations and requirements of the relevant authorities.

The Contractor shall be responsible for all costs and charges in connection with the installation, alteration, shifting, adapting use and maintenance of such services. On completion of the Works, the Contractor shall disconnect such services, which are no longer required by him and or the Employer and clear away all traces.

#### **Power**

The Contractor shall apply and pay for the required power and install temporary electrical installation for the Works, site office, Engineer's and Consultant's Offices, Stores, labour huts, yards and site lighting and testing for mechanical and electrical services done by others.

A stand-by Generator, with adequate capacity, should be made available by the Contractor at the site for use in an emergency and or during power failures. The cost of supplying, installing running and maintaining of the stand-by generator shall be borne by the Contractor.

#### **Water**

The Contractor shall apply and pay for the continuation of temporary water supply connection to the site and construct storage tanks with adequate capacity, together with the necessary internal temporary PVC distribution system including an overhead tank at an adequate elevation, water pumps as may be required and providing taps, valves, etc. in order to provide water for the Works, for drinking purposes, and also for washing, bathing and sanitary facilities required by the Contractor's workmen, the Employer, and the Engineer's staff.

#### **1.2 SAFETY MEASURES AND HEALTH**

The Contractor shall provide and maintain the following safety measures in accordance with the regulations and requirements stipulated by the relevant Statutory Authorities.

- i. Safe working conditions.
- ii. Safe means of access and exit.

- iii. Safety systems for Plant, Machinery and Equipment.
- iv. Appropriate safety equipment required at the site and yards such as Helmets, Gum Boots, Masks, Welding Masks, Safety Belts, etc to the workmen and others engaged in the Works.
- v. Safety nets, safety canopies, safety signs, handrails, guardrail, platforms and other measures ensuring safety of workmen and other engaged in the Works.
- vi. Training, instructions, information and supervision as may be required to enable employees to avoid any potential dangers and hazards.
- vii. All measures ensuring the health and workmen including satisfactory welfare facilities, working conditions and environment.

Safety signs should be in the Sinhala, Tamil and English languages.

Services of a suitably qualified and experienced safety officer shall be available at the site on a full time basis.

A comprehensive first aid box shall be made available at the site office by the Contractor and he shall ensure that at least three of his staffs are trained in first air measures.

A vehicle suitable for transporting injured workmen should be made available at the site by the Contractor.

All costs in connection with safety and health shall be borne by the Contractor.

### **1.3 ACCESS TO SITE**

The Contractor shall acquaint himself with the traffic flow on main roads leading to the site and the restrictions imposed by the Authorities in respect of certain types of vehicles permitted to use such roadways. The Contractor shall organize and plan movement of materials and equipment to the site take into consideration the factors effecting such movements in order to minimize delays and disruptions to work caused by traffic congestion, restriction etc.

The Contractor shall be responsible for maintaining, keeping clean, repairing and rectifying damaged roads, footpath and pavements.

If damages are caused to existing roadways due to the Contractor's operations, they shall be made good to the approval of the Engineer or the Authorities concerned. All costs in connection therewith shall be borne by the Contractor.

### **1.5 SITE SECURITY**

The Contractor shall provide all necessary fencing, hoardings, watching and lighting for the security of site and safeguarding the Works. The shelters, guard house and other facilities to be provided for the watchmen to do their duty in an efficient manner. Altering shifting and adapting same from time to time shall also be the responsibility of the Contractor. All costs in connection with this shall be borne by the Contractor.

### **1.6 UNDERGROUND SERVICE LINES, ETC.**

The Contractor shall obtain relevant information about the underground drainage lines, telecommunication and electrical services lines, etc. from the relevant authorities. However, it is the responsibility of the Contractor to examine, investigate and satisfy himself as to the actual location and correct levels of the said existing service lines. Neither the Employer nor the Engineer shall be responsible for the reliability and acceptability of records and information obtained by the Contractor from the said Authorities.

### **1.7 SITE NAME BOARD AND WARNING SIGNS**

The Contractor shall prepare and erect a site name board and warning signs as designed by the Engineer. The site name board shall be 4.0x2.5 m. The height of the board above ground level and the supporting structure shall be as directed by the Engineer. The warning signs shall be erected along both access roads as directed by the Engineer.

### **1.8 TEMPORARY WORKS**

The Contractor shall submit to the Engineer details, particulars, drawings, etc. of all temporary works necessary for the Works for letters information. The Engineer reserves the right to call for technical justification of the Contractor's proposals and to order any necessary modifications. But the Contractor shall be solely responsible for the stability and safety of all temporary works and for the quality of the permanent works resulting from the Temporary Works eventually adopted.

### **1.9 INSPECTION OF SITE**

#### **Particular Attention**

All the dimensions given in the drawing should be checked at the site by the Contractor prior to commencing all work. In the event of any discrepancies, the Contractor shall inform the Engineer and request instructions well in advance and prior to commencing work.

### **1.10 PROGRAMMING OF THE WORKS**

The Contractor shall furnish in duplicate to the Engineer the Programme and particulars called for in the General Conditions of Contract. The Programme shall be in the form of a critical path network with explanatory notes, capable of being monitored and updated continuously during the progress of the Contract. The Programme shall show inter alia:

- The dates of possession and the completion named in the Appendix to the Conditions of Contract.
- The dates as determined or proposed for procurement, delivery to site of materials, commencement and completion of erection or installation of work in all trades and the labour force involved.
- The dates by which the Contractor requires information from the Engineer.

The following shall be considered in preparing the Programme and Master Programme and revisions there to mainly due to reasons when the site at a constrained location and security requirements.

- Inadequate storage facilities on site.
- The eventual necessity of multi-shift working and/or working during week-ends or Public holidays to overcome the above restraining circumstances.

Failure to consider the above implications, which are neither necessarily in the given order of priority nor to be considered as complete shall not entitle the Contractor to claim for additional time or extra costs whatsoever.

The critical path network or other similar network shall describe major plant allocations and requirements and major site operations.

Each month throughout the construction period the Contractor shall submit to the Engineer further copies of the Programme marked up to show the progress to date together with any revision of the Programmes. These shall be submitted one week before the monthly site progress meetings.

In the event of the Contractor failing to prepare and complete the Critical Path Network and Works Programme as described above within four weeks of the award of this Contract or such extended time as approved by the Engineer.

### **Monthly Progress Report**

The Contractor shall submit to the Engineer not later than the 5<sup>th</sup> working day of every month a Progress Report for the previous month which shall include the following items and information:

- The marked Programme submitted at the previous Monthly Site Progress Meeting amended (if necessary) to indicate agreed revisions
- Weather conditions (daily rainfall, temperature, humidity etc.)
- Summary of construction Plant on-site and off-site including dates of arrival and departure of items.
- Summary of principal materials and manufacturers items placed on order and delivered to the sites.

### **1.11 SECURITY REQUIREMENTS**

The Contractor shall allow for ascertaining and complying with Police requirements and for all costs as necessary incurred in connection therewith.

The Contractor shall also allow for requirements of the security departments of the Employer.

### **1.12 DRAWINGS OF TEMPORARY WORKS AND METHOD OF ERECTION**

As early as possible after acceptance and in accordance with the approved Programme the Contractor shall furnish to the Engineer complete drawings of that part of the temporary work and staging.

### **1.13 AS BUILT DRAWINGS**

Unless otherwise specified the Contractor shall deliver to the Engineer two sets of hard copies to appropriate scale and on appropriate size paper, and one set of AutoCAD compatible soft copy in a compact disk.

Drawings of the buildings site work such as, paving, fencing, drainage, electrical ducts, water sewerage system and all other services.

All drawings, documents and manuals shall be to a standard format. All drawings shall be to the size required by Engineer.

The Bid shall be deemed to include the cost of the preparation, supply and delivery of all drawings, instruction manuals, transparent copies on polyester and information and copies thereof which the Contractor is required to provide under the terms of the Contract.

### **1.14 ANNOYANCE TO NEIGHBOURS**

No work in any trade shall be carried out in such a manner as to cause any nuisance to adjacent owner's tenants or the public.

### **DEMOLITION WORK**

- 2.1 The Bidder is advised to visit the site and inspect the type and extent of demolishing work to be done prior to pricing these items. It is the contractor's responsibility to do all demolishing, dismantling and removing etc., without any damages to any existing work to be retained. Any damages to such structures are to be rectified with no extra cost to the Employer.
- 2.2 All useable materials in demolished parts shall be a property of the Contractor and all debris to be disposed away.
- 2.3 Necessary approvals to be obtained from relevant authorities prior to disposal of demolished parts and debris.
- 2.4 Prior approval to be obtained from the Engineer regarding the type and capacities of the equipment to be used in each type of demolishing. Only the selected, approved equipment will be allowed to use for this project to minimize vibration, noise and any structural effect to existing work within the site and surround.
- 2.5 The Contractor shall take all precautions to avoid dust, sound and any nuisance to neighbours and carry out all demolishing with the approval of the requirements of the relevant authorities.
- 2.6 Rates for demolishing shall include for carrying out all work with equipment suitable to the nature of this work on an approved method. All precautionary measures to be done to the approval of the Engineer prior to commencement of any demolishing work to avoid damage to workers, outsiders, existing services, adjoining properties, public services and to minimize dust, noise and disturbance to others etc.

Unless otherwise measured separately rates for demolition shall include for:

- a. Removing debris
- b. Providing temporary shoring
- c. Grubbing up existing foundation
- d. Disconnecting and shifting of existing services. e.  
Making good to work disturbed

## **2. CONCRETE, FORMWORK AND REINFORCEMENT**

### **2.1 Concrete**

1. The concrete used throughout this construction shall conform to the requirements stated in the Specifications. Unless otherwise approved by the engineer ready mixed concrete from an approved manufacturer shall be used in the work.
2. Ready mixed concrete used shall conform to relevant specification provisions.
3. Formwork and necessary reinforcement shall be priced with concrete if separate items are not provided for such in the Bills of Quantities.

Rates for concrete shall include for the following unless expressly specified otherwise:-

- a. Obtaining ready mix concrete, where necessary, as per specifications, and obtaining test report from the manufacturer.
- b. Transporting, admixtures, handling, pumping / hoisting and placing at any height or depth. c.  
Packing and tamping around reinforcement, including vibrating.
- d. Mixing, hoisting / lowering, placing in position and packing around reinforcements, site mixed concrete.
- e. Vibrating and curing as specified.
- f. All necessary stop boards, construction joints etc.
- g. Finishing to slopes and falls and cross falls prepare surface ready for screed or paving where necessary including cutting to sizes and temporary supports to form necessary grooves.
- h. Water bars / water stops where necessary. i.  
Making good after removal of form work.
- j. Making provisions, in concrete to fix any fixtures required under the work.
- k. Making provisions, leaving openings, sleeves for all pipe work and making good around openings.
- l. Rates for plain concrete blinding beds shall include for any necessary formwork at edges for the extra width of concrete which may be required in lieu.
- m. Concrete strength testing as specified.
- n. Expansion joints as required or as shown in the drawings / as per the specifications.



## 2.2 Reinforcement

1. It is the responsibility of the Contactor to calculate the actual requirement of reinforcement based on Construction Drawings, before placing the purchasing order.
2. Where high-yield steel is specified, steel conforming to specifications may be used. The Contractor shall, if required, submit a certificate of origin and compliance with the requirement of related standards to the satisfaction of the Engineer. Such certificate shall be obtained from an Independent laboratory at the contractor's own cost.
3. Mesh reinforcement or other steel shall conform to the relevant standards and the Contractor shall obtain prior approval from the Engineer.
4. Standard length of reinforcing bar for the purpose of measurement shall be 6.0 m.
5. Payment for bar reinforcement shall be to the nearest second decimal places of a ton (t).

Rates for reinforcement shall include for the following unless expressly specified otherwise:

- a. Rolling margin ;

**Note :-** Rolling margin is the difference in weight between the theoretical and actual weights of bar reinforcement of respective diameter. The minimum weight of steel stated below is considered as the theoretical weight.

Diameter (mm)	Minimum weight (kg/m)
6	0.222
8	0.394
10	0.616
12	0.888
16	1.577
20	2.464
32	6.308

- b. Preparation of bar bending schedules and obtaining the Engineer's approval ;
- c. Straightening, cutting, bending, cleaning, hoisting, and tying in position of steel reinforcement at any height or depth;
- d. Cutting waste and rolling margin of steel reinforcement;
- e. Tying wire, spacer blocks, chairs, hangers etc.;
- f. All splicing, laps and passing at angles etc. in steel reinforcements other than designed laps;
- g. Where Fabric reinforcement is used the cost of placing in position for all cutting, distance pieces, bending, holes, notching, tying wire, distance blocks, chairs, hangers, tying at laps and for the cost of

materials in laps. (Laps will not be measured separately);

- h. Aligning and supporting in position during concreting;

### **2.3 Formwork**

Formwork shall be capable of achieving the specified finish.

1. Formwork shall include for all temporary or permanent forms moulds required for casting the concrete in-situ and all the temporary construction required for supports.
2. Formwork for the structural works shall be of approved quality timber, Plywood, or steel or any other approved materials.
3. Refer relevant specification provision for the full description of formed finishes.
4. Formwork shall be properly designed and strictly as described in the specifications for the particular type of concrete surface finish and it should be sufficiently strong and grout tight.

Rate for Formwork shall include for the following unless expressly specified otherwise:-

- a. Fabricating, setting up and erection at any height or depth and striking off and cleaning, preparing for reuse and removing of formwork;
- b. All necessary props, joists, struts etc., incidental items and materials such as nails, screws anchors hooks etc for formwork at any level, including additional propping, strutting and supporting decks;
- c. Formwork in narrow widths and small quantities; for setting up, strutting and supporting at any height;
- d. Unrecoverable formwork;
- e. Coating with form oil, sprayed plastics or lining;
- f. Rubbing down and making concrete surface good after removal of formwork;
- g. Sealing of joints to avoid leaking of cement grouting;
- h. Cleaning the surface before concreting (removing dirt, saw dust etc.)

### **2.4 Precast Concrete**

Where Pre-cast Concrete elements are used, rates for same shall include for the following unless expressly specified otherwise: -

- a. Casting with all necessary concrete, Formwork and reinforcements including forming pockets and the like and filling of such pockets, providing lifting hooks or other devices to the approval of the Engineer;
- b. Loading, transporting to site, unloading, handling and stacking;

- c. Hoisting to any height or depth including providing any lifting holes or other devices to the approval of the Engineer, erecting and fixing in position as specified, building in, including bedding and jointing in mortar / concrete as required, and any necessary strutting and supporting;
- d. Complying with requirements of the relevant Preamble clauses;
- e. High tensile wires, wedges, spacers, grill plates, etc. in case of pre-stressed concrete units and labour in connection therewith;
- f. Testing pre-cast units, if required.

### **3. MASONRY WORKS**

- 3.1 Where masonry walls are unsupported laterally and the panel area is greater than 12 m<sup>2</sup>, then stiffener beams and columns shall be introduced as per specifications and typical details to the approval of the Engineer. Concrete, form work and reinforcement in stiffener columns and beams will be measured separately.

Rates for Masonry work shall include for the following unless expressly specified otherwise:-

- a. Straight cutting and wastage;
- b. For providing sleeves where necessary and making good;
- c. Bonding ends of new walls or existing walls and bonding of different types of walls together;
- d. Providing suitable flexible sealants to joints at masonry walls to RC structure;
- e. Providing GI or stainless steel anchors netting to fix with RC work;
- f. Concrete and Form work in stiffener columns and beams (these will not be measured and paid separately but will be deemed to be included in the brick work rates);
- g. Building at any level or height, additional labour required, transporting, hoisting all cutting, bonding at angles and intersections, building into or against adjacent work, wedging and pinning up;
- h. Necessary cutting required in walls which are not multiples of brick size ;
- i. Sampling and testing of bricks and brick work as per specifications and or relevant standards;
- j. Filling cavities with cement sand mortar where necessary.
- k. All necessary scaffolding work including supply, erection and dismantling.

#### **4. STRUCTURAL STEEL, METAL WORK**

- 4.1 Contractor shall refer to and comply with the notes given on the relevant structural drawings. In case of any discrepancy between the information given in the drawings, specifications these pricing preambles or the bills of quantities, the drawings shall prevail.
- 4.2 All steel / metal / GI sections should comply with the relevant standards and should possess the required thicknesses and grades as determined by the Engineer.
- 4.3 Metal work shall be fabricated carefully and accurately to ensure compliance with design and performance requirements using types and grades of metal as specified for the purpose. The finished work must be free from distortion and cracks.
- 4.4 All ferrous metals shall be free from rust scales and other defects and the various shapes shall be clearly rolled or otherwise formed to uniform section.
- 4.5 All non ferrous metal shall have uniform finished surfaces machined and buffed free from defects and section shall conform accurately to the sizes and shapes required.
- 4.6 All welds shall be properly made by experienced tradesman and shall be cleaned off and buffed smooth and even where visible in the finished work.
- 4.7 The Contractor shall submit detailed shop drawings of metal work components to the Engineer prior to fabrication of same.
- 4.8 The Contractor must ensure that all necessary inserts lugs etc, required for fixing metal work units, are embedded in accordance with the approved Shop Drawings.
- 4.9 The inserts etc, already placed in position shall not be shifted or removed without the written approval of the Engineer.
- 4.10 Where dissimilar metals are in contact, approved separators shall be used.
- 4.11 No allowance is made for the mass of weld fillets, black bolts, nuts, washers, rivets and protective coating.

Rates for metal work shall include for the following unless expressly specified otherwise:-

- a. All fabrication work, notching drilling for bolts etc.;
- b. All welds and bolts;
- c. Cutting and wastage;
- d. Delivery, unloading, handling, hoisting, fitting and fixing in position at any height or depth and grinding of all exposed welds flush and smooth;
- e. Providing separate strips etc, between dissimilar metals to prevent galvanic action;
- f. Fixing all bolts and building in lugs etc.;
- g. Submitting shop drawings for the approval of the Engineer;
- h. Making good the works disturbed;
- i. Cleaning and applying two coats of rust inhibitive paint or the application of spray on fire proofing as per specifications to the unprotected steel trusses, beams and steel members to achieve a three hour fire rating;
- j. Supplying samples of materials and composite units to the engineer for the approval;
- k. All necessary scaffolding work including supply, erection and dismantling.

## **5. WALL FINISHES**

Rates for Wall finishes shall include for the following unless expressly specified otherwise:-

- a. Temporary rules, screeds grounds etc. for racking out joints of brick/block work and hacking concrete surface for forming key;
- b. Forming joints between different surfaces and expansion joints;
- c. Forming arises and stopping against joinery work, metal work etc.;
- d. Making good or tile cutting to any required shape or size around pipes, sanitary fittings and fixtures;
- e. Cutting and waste of tiles or other wall finishing materials;
- f. Pointing to match tiles as approved;
- g. Preparing surfaces for finishing or bed/backings;
- h. Moulded and chamfered edges, rebated edges, splayed edges, round edges, grooves etc.;
- i. All moulding work, plaster bands, decorative work in connection with plastering and finishing;
- j. All necessary scaffolding work including supply, erection and dismantling;
- k. Cleaning and polishing of tiles after completion;
- l. Providing samples and obtaining necessary approvals as and when required by the Engineer.
- m. Provide and obtain necessary approvals for the expansion joints if any
- n. Protection of the completed work until the work is properly handed over to the Employer.

All narrow widths, small areas, columns, vertical surfaces of beams, edges of slab, lintels etc if not measured separately, will be measured with the main items.

## **6. FLOOR FINISHES**

Rates for Floor Finishes shall include for the following unless expressly specified otherwise:-

- a. Preparing surface for finishing or screed/backing;
- b. Forming joints between different surfaces, and expansion joints;
- c. Finishing to slopes, falls and cross falls;
- d. Making good or tile cutting to any required shape or size around pipes, sanitary fittings and fixtures;
- e. Cutting and wastage of tiles and other floor finishes;
- f. Pointing to match tiles as approved;
- g. Moulded and chamfered edges, rebated edges, splayed edges, round edges, grooves etc.;

- h. All ends and angles of risers and edges of landings;
- i. Cleaning and polishing of tiles after completion;
- j. Providing samples and obtaining necessary approvals as and when required by the Engineer. k. Provide and obtain necessary approvals for the expansion joints if any
- l. Protection of the completed work until the work is properly handed over to the Employer.

All narrow widths and small areas if not measured separately, will be measured with the main items.

## **7. ROOFING WORK**

- 7.1. Sheet roof coverings are deemed to include work to falls and cross falls, underlay in contact with the covering, work in forming voids other than holes, dressing/wedging in to grooves, hollows, recesses, cutting laps and the like, aprons, sills and ridges.
- 7.2. Work for flashings deemed to include laps, seams and ends, angles and intersections, rolls, up stands and down stands, dressing/wedging in to grooves, hollows, recesses and the like.

Rates for roofing work shall include for the following unless expressly specified otherwise:-

- a. Sandwich panel roof covering with specified thickness, colour, profile and quality, installed with all necessary self tapping screws, washers, clips, rivets, straps, nuts, bolts and the like,
- b. Necessary flashing, thermal insulation work including GI wire mesh, unless measured separately. c. Laps, raking, straight and circular cutting and waste on roof covering materials;
- d. All cutting, notching, drilling, trimming, framing, jointing, splayed edges and the like;
- e. Cutting and other waste of all materials;
- f. All necessary scaffolding work including supply, erection and dismantling;
- g. All structural steel work shall be sand blasted and painted with two coats of quick drying metal primer zinc phosphate & two coats of enamel paint as specified and to the approval by the Engineer, unless expressly specified otherwise;
- h. Members of any length;
- i. All shop fabrication work, making, delivery, unloading, hoisting, elevating and fixing in position as per detail drawings;
- j. Ridge capping, gable capping and flashing unless otherwise measured separately.
- k. Junction boxes, reducers of any size, mitre ends, running heads etc for roof plumbing installation system. (For rain water gutters and down pipes.)

### **Roof Plumbing**

Unless otherwise measured separately rates for all rain water pipes shall include for a.

All necessary fittings such as bends inspection openings, tees etc.

- b. Gutters are deemed to include joints in the running length and brackets c. Cutting and jointing gutters to fittings is deemed to be included
- d. Down pipes are deemed to include brackets joints and cuttings and the like

## **8. PAINTING**

- 8.1. All paint material shall be of quality acceptable to the Architect and shall be from a manufacturer approved by the Engineer.
- 8.2. All surfaces to receive paint shall be well cleaned and smoothened as specified and the prepared surface shall be approved by the Engineer before applying paint.
- 8.3. Cavities and uneven surfaces in plastered areas shall be filled with gypsum or other suitable approved filler material and allowed to set, and sand papered to give a smooth and even surface.

Rates for painting shall include for the following unless expressly specified otherwise:-

- a. Applying specified number of coats of approved type and quality primer and finishing coats of paint;
- b. All necessary scaffolding work including supply, erection and dismantling;
- c. Preparation of surfaces, cleaning down;
- d. Smoothing, knotting, stopping etc.;
- e. Protecting floors, fittings etc.;
- f. Removing and replacing door and window furniture and cleaning upon completion;
- g. Providing samples and specification of all paints to be used in the works;
- h. Preparation of approved plastered wall surfaces before applying paint;

All narrow widths and small areas if not measured separately will be measured with the main items.

## **9. ALUMINIUM AND METAL WORK INSTALLATION**

### General

- 9.1. Aluminium work shall be carried out by a specialist Sub Contractor who can provide the performance guarantee for aluminium components and shall be in an approved system with all standard fixings, sub frame etc.,
- 9.2. All glasses in partition, doors, windows etc., shall be as shown in relevant drawings
- 9.3. The Bidder is requested to provide the details of his aluminium sub-contractor, country of origin, micronage, thickness, type and make of glasses etc., along with his Bid. Samples of all items required in aluminium work shall be submitted for prior approval without any additional cost.
- 9.4. All necessary ironmongery such as hinges, lock, hooks etc., shall be approved quality and

compatible with the system proposed.

- 9.5. All locks, hinges, floor springs, handles, push and pull plates and other necessary ironmongery shall be imported of best quality manufacture approved by the Engineer
- 9.6. All units shall be complete with all necessary glazing inserts, sealing strips, gaskets, skids, weather strips, glazing beads and all necessary ironmongery.
- 9.7. All aluminium units shall be designed to resist penetration of external moisture to the inside of the building. Fixing of frames for all units to the building shall be such as to ensure solid, void free, waterproof joints. The joints shall be caulked with a building mastic which does not sag or run, non hardening, non-staining and can be painted.
- 9.8. All imported aluminium extrusions shall be in approved colour powder coated sections.



Rates for Aluminium and Metal Doors, Windows, Shop Fronts, Fire Doors and Sky Lights shall include for the following unless expressly specified otherwise:

- a. Measuring the sizes of openings at site and preparing Shop Drawings / Working Drawings before fabrication commences.
- b. All necessary welding materials, cutting to length bending and shaping as required buffing all visible welds smooth and even for fabricating work delivery, handling, hoisting, jointing, polishing and fixing in position.
- c. Form exposed connections with hairline joints, which are flush, and smooth using concealed fasteners wherever possible. If exposed fasteners are unavoidable use counter sunk flat head screws or bolts.
- d. Raking and curved cutting where necessary.
- e. Normal edges are deemed to include with the glazing.
- f. Sub frames in aluminium
- g. all necessary ironmongery such as hinges, lock, hooks etc., of approved quality
- h. All glasses in partition, doors, windows etc.
- i. Supply and fixing of the system to masonry / concrete wall, floor or ceiling inclusive of all approved materials, components fasteners, fixtures, locks and hardware.
- j. Lifting, hoisting of materials / components to the required floors, levels by any means acceptable to the Engineer.
- k. Providing all necessary scaffolding.
- l. Maintaining an approved protective coating until practical completion.
- m. Removing protective coating, Cleaning down both sides and making good all damages.
- n. Testing of all Aluminium units for water infiltration after and during installation.
- o. Measuring the sizes of openings at site and preparing Shop Drawings before fabrication commences.
- p. Coordinating with other trades.
- q. Supplying necessary documents certifying the Aluminium components and the glass with respect to:
  - i. Source and country of manufacture.
  - ii. Country of Origin.
  - iii. Conformity to Specifications.
  - iv. Conformity to System offered.
  - v. Conformity to the product offered.
- r. Furnishing an acceptable guarantee for the system and the installation for a period of ten years from the date of practical completion and hand over. The format of the guarantee should be submitted with Bid.
- s. Appropriate beadings, sealant, screws, nails, washers etc.
- t. Protection of the completed work until proper handing over to the Employer.

## 10. ELECTRICAL INSTALLATION

- 10.1. Work shall be carried out by an experienced electrical contractor who has had previous experience in similar projects and shall have necessary tools, equipment and experienced staff for Electrical installation and Testing.
- 10.2. When procuring main cables the Bidder shall take into account actual physical measurements to avoid joints. Special orders shall be placed with manufacturers for cable lengths more than 100 meters.
- 10.3. All imported products and fittings shall have the country of manufacture and the specification number marked distinctly.

Rates for Electrical works shall include for the following unless expressly specified otherwise :-

- a. Assembling and jointing together and for any jointing material; for fixings and supports to each and any background inclusive of all fixing materials, components and special mountings; for cutting and pinning or building in all fixings and supports, including subsequently making good; and for disconnecting and re fixing equipment and fittings to enable other trades to proceed.
- b. All wall, ceiling or floor sleeves and plates as required including any necessary packing and water tight cable entries at locations with risks of water leaks.
- c. All identification plates, discs, labels, type of service indicators, warning notices, circuit schedules, instruction charts and the like.
- d. Marking the position of all holes, mortises, chases, sinking and the like in both the structure and its coverings and for forming or cutting away same as required and for building in and all making good in connection therewith.
- e. Switchboards, switchgear, distribution boards, control gear, fittings, equipment and the like shall include for all fuses, MCBs, RCCBs, isolators, relays, contactors, instrumentation, indicators, interlocks, metering, cable entry boxes, gland plates earthing connection and the like and levelling.
- f. Bus way systems where applicable shall include fire barriers, bends, joints, end boxes, end covers, fuses, hangers, expansion joints and all other installation material.
- g. Cables shall include for all fixings as necessary, cable terminations and glands, joint boxes, earthing lugs, bus bar clamps and the like; for drawing cable into conduit or ducts, laying into trunking or trenches, or fixing to cable tray or the fabric of the building; for bonding to earthing points and the like; and for all identification labels, markers and tags as required. Installation of under ground cables shall include cutting trenches, laying cables as required by regulations, filling with sand, supplying and laying protecting tiles, warning tapes and compacting.
- h. All PVC conduits shall be embedded, unless otherwise specified. Raceways and accessories shall be of galvanized steel and shall include bends, tees, covers, joints, brackets, hangers and all other required installation material.
- i. Conduiting, (rigid and flexible) cable trays, trunking, ladders and any other means of support and/or mechanical protection to cables, forming openings in trunking; for bushing materials, pin racks and fire barriers; for suspension sets; and for all fittings, accessories, boxes and the like.
- j. Lamp fittings shall include for all associated lamps, control gear ballasts, starters, capacitors, diffuses, suspension sets and fixings including boxes, conduit boxes, wooden blocks, moulded pattresses, break-joint rings, ceiling roses, connector blocks, compression glands, flexible cords, all wiring and the like as required.

- k. Lighting and small power (or socket outlet) wiring circuits shall include PVC insulated copper cables including earth cable of required cross section drawn in PVC or other conduits as per Specifications including junction boxes, ceiling boxes, wall boxes and electrical and other accessories.
- l. Accessories shall include all necessary back plates, boxes, screws, nuts and bolts, iron / G.I. brackets, rods, clips as per specification and all other necessary materials to complete the installation.
- m. Transporting of all electrical equipment shall include the use of cranes, folk lifts and all other methods of transport.
- n. Protective painting to plant, equipment, conduit and the like shall include for all preparatory work and painting with rust inhibitive or other protective paint or coating.
- o. Decorative painting to all exposed plant, equipment, conduit and the like shall include for all preparatory work, primers, undercoats and finishing coats of paint to approved colours.
- p. Coordination of work with other services / subcontractors.

## **11. WATER SUPPLY, SEWERAGE AND DRAINAGE WORKS**

### **11.1 General**

The work comprises of labour and materials necessary to all appliances and fittings and joining them to the respective mains in a manner directed by the Engineer.

The Contractor shall;

- a. Supply a certificate stating that each item supplied has been subjected to the tests laid down in the specifications and conforms to the specifications and regulations of all the statutory authorities, in all respects.
- b. Obtain approval and compliance from the Local (Municipal) and other Regulating Authorities before commencement of the installation, during and after completion of the installation.
- c. Comply with the relevant standard as given under the specifications and with the regulations of the Local Authorities.
- d. Ensure that all fittings and accessories indicated in the drawings and specifications include all pipe fittings and attachments, valves, gauges, switches, pumps and all such accessories as per the relevant standards for the proper functioning of the system and should not be limited to those given and indicated in the Plumbing Drawings.
- e. Supply and fix sanitary appliances as shown on drawings completed with suitable traps and other fixtures viz.: seat covers, cisterns, etc.
- f. Fix sanitary fixtures complete in position and connect to cisterns, taps, vents, waste and soil pipes.
- g. Ensure that accessories and fittings identified in this Bills of Quantities shall be from one manufacturer wherever possible, similar design range and matched. The fittings and specials shall also be suitable in all respects to the pipe line to which these fittings and specials are fixed.
- h. Prepare three sets of “as built drawings” and “preparation and maintenance manuals of equipment” with two sets for the client and one set for the Engineer.
- i. The above items should all be accommodated in the quoted rates and no additional payments would be made for the same.

### **11.2 Sanitary Fittings and Plumbing.**

The whole of the sanitary works shall be carried out by a licensed sanitary plumber according to the layout and as specified and as directed at site. It should be noted that the positions shown on plans are approximate. Exact positions would be indicated at site.

Rates for sanitary fittings shall include for the following unless expressly specified otherwise:

- a. Fittings such as taps, waste water outlets, flushing cisterns, flush valves, internal overflows etc., the supporting brackets and incidental materials for fixing.
  - b. Assembling, jointing together, fixing components and jointing to pipes inclusive of necessary couplings and for leaving perfectly clean undamaged and in perfect working order as on completion.
  - c. Jointing and connecting pipes to sanitary fittings d.
- Testing and commissioning of installation
- e. Making good the work disturbed

Rates for Drainage Work shall include for the following unless expressly specified otherwise:

- a. All pipe specials such as bends, tees, junctions, elbows, etc. d.  
Connection to sides of manholes etc.
- b. Providing sleeves etc., when pipes pass through walls, foundations etc. f.  
Giving notices, obtaining permits, paying fees etc.
- c. Necessary scaffolding work including supply, erection and dismantling. h.  
Painting of all surfaces of exposed pipe work.
- d. Testing installation as specified in specifications, and/or to American, relevant standards

### **11.3 Water Supply**

1. The Contractor is to pressure test pipes after fixing taps and stop cocks and fittings prior to concealing, under the supervision of the Engineer.
2. The Contractor shall provide the Engineer with the manufacturers' certificates of the standards, quality of the materials before commencing the works.
4. Where pipes pass through walls or slabs these shall be wrapped with a layer of inert material. For pipes exceeding 50mm dia., sleeve pipes shall be used for the full thickness of the slab walls, beams, retaining walls through which the pipe passes.

Rates for Water Supply Plumbing Work shall include for the following unless expressly specified otherwise:

- a. Cutting and waste of pipes etc., and jointing of pipes
- b. All specials such as elbows, bends, tees, junctions, plugs, reducers and similar pipe fittings except for valves which would be measured separately (Separate rates should be indicated for valves inclusive of the associated pipe fittings)
- c. Connecting pipes to sanitary fixtures and appliances
- d. Chasing to brick or concrete walls, columns, beams etc., and necessary racks, hangers and clips, for fixing to soffits etc., and making good all works disturbed
- e. Necessary screws, nails, sockets, connection back nuts, standard pipe fixing or supporting clips, saddles, brackets, racks, straps etc.
- f. Necessary scaffolding work including supply, erection and dismantling. g.  
Painting of all surfaces of exposed pipe work.
- h. Connecting different types of pipes
- i. Testing and disinfecting after completion

All Cold Water Piping shall be provided with flexible connections in pipe work and provided with the required pipe supports and anchoring as per the manufacturer's specifications.

## 6. WATERPROOFING

- 6.1 Refer particular specification for waterproofing over RCC slab and other concrete structures. The Bidder shall submit with his Bid, a complete set of specifications and other technical information relevant to the products he intends to incorporate in the works, for water proofing purposes.
- 6.2 Waterproofing treatment over slab shall be of membrane type unless specified otherwise in the drawings or specifications, and shall be strictly in accordance with the Manufacturer's Specifications.
- 6.3 The Contractor is obliged to furnish the Employer with a warranty valid for a period of ten (10) years after handing over the Works in the form required by the Employer.

Rates for waterproofing work shall include for the following unless expressly specified otherwise:-

- a. Executing water proofing work strictly as per manufacturer's instructions and for carrying out work through manufacturer's accredited agents or licensed specialist contractors.
- b. Cleaning and preparing surface to be water proofed where necessary and application of water proofing materials as per specifications/manufacturer's instructions and to the best practice.
- c. Providing product samples, finished specimen areas etc., if required by the Engineer.
- d. Fair edges, rounded edges, drips, arises and angle fillets etc., forming internal and external angles, additional layers of reinforcing fabric and or flexible membrane at expansion joints and at junctions between horizontal and vertical surfaces.
- e. Working around parapets and other vertical surfaces rising from the slab, pipes and pipe fittings, rain water outlets etc.,
- f. Complying with industrial regulations and requirements of relevant authorities.
- g. Forming or chasing grooves rebates etc., where necessary and turning waterproofing materials into chases and pointing as specified.
- h. Forming internal and external angles, bonding bricks and the like.
- i. Lining to rain water outlets, cesspools, brackets, collars around existing structures and the like. j. Cutting to line and jointing new to old asphalt.
- k. Temporary screeds, ground and rules.
- l. All necessary scaffolding work including supply, erection and dismantling.
- m. Testing after completion, rectification (if any), and providing guarantees as specified.

EXPANSION OF WARD 7 AND 8  
**GENERAL HOSPITAL (TEACHING) - PERADENIYA**  
**BILL OF QUANTITY**  
**MAIN SUMMARY**

BILL NO.	DESCRIPTION	AMOUNT	
		Rs	Cts
1	Preliminaries		
2	Stage I		
3	Stage II		
4	Electrical Works		
(a)	<b>Sub Total I</b>		
(b)	Ddt: Provisional Sum from (a)		7,305,000.00
(c)	<b>Sub Total II (a+b)</b>		
(d)	Ddt : .....% Discount from ( c)		
(e)	<b>Sub Total III (c-d)</b>		
(f)	Add: Provisional Sum		7,305,000.00
(g)	<b>Total amount carried to form of Bid (Excluding VAT) (e+f)</b>		
(h)	Add : 18% VAT		
(j)	<b>Total Amount with VAT</b>		

Total amount carried to Form of bid in words Rupees (without VAT) .....

.....

Signature of the Contractor

Witness :-

Address :-

Address :-

Date :-

Date :-

**EXPANSION OF WARD 7 AND 8  
GENERAL HOSPITAL (TEACHING) - PERADENIYA**

**BILL OF QUANTITY**

**BILL NO 01- PRELIMINARIES**

**Note:**

- 1 **The Engineer/ Consultant may modify or amended any item , or delete inappropriate item/s or add new item/s , depending on the nature of the proposed work.**
- 2 **Mode of payment are as below.**

Mode of Payment	Category
Reimbursement of actual cost on submission of the relevant document acceptable to the Engineer plus 5% of the actual cost of obtaining the insurance policies and securities.	A
60% on completion of temporary buildings or structures. 30% in equal installments over the contract period and balance 10% on dismantling and removal on completion.	C
Paid on satisfactory completion of the item	D
In equal installments over the contract period.	E
Mode of payment to be mutually agreed between contractor and the employer at the commencement of contract in relation to the program of work.	F
On the completion of work	G

- 3 **The above recommended percentage may be adjusted by the Employer/Consultant to suit the particular project.**
- 4 **The tenderer is advised to visit the site of the proposed work, as it is his responsibility to ascertain the conditions, space governing access to the site, external working space, storage area, status of the adjoining properties etc.**

Item	Description	Mode of payment Category	Unit	Amount Rs. Cts.
	<b><u>A - PRELIMINARIES</u></b> <b>Insurance &amp; Securities</b>			
1A1	Provisional Sum for providing a Performance Security	A	P.S	160,000.00
1A2	Provisional Sum for providing an Advance Payment Security	A	P.S	630,000.00
1A3	Provisional Sum for insurance of Works, Machinery & Equipment, Plant, Materials, third party persons & property at site as per the Contract. ( All Risk Policy)	A	P.S	210,000.00
1A4	Provisional Sum for insurance against accidents and injury to Contractor's personel as per the Contract. ( Workmen Compensation)	A	P.S	105,000.00

Item	Description	Mode of payment Category	Unit	Amount Rs. Cts.
1A5	<p><b>Contractor's Facilities</b></p> <p>Allow lump sum for constructing, maintaining, dismantling and removal on completion of the Works, a <u>temporary site office</u> of adequate size including staff rest room and toilets and other facilities for the Contractor's site management staff in accordance with the plans prepared by the Contractor and concurred by the Engineer.</p>	C	Item	
1A6	<p><b>Setting Out</b></p> <p>Setting out of Works in accordance with drawings and other written information given by the Engineer</p>	F	Item	
1A7	<p><b>Quality, Standars and Progress</b></p> <p>Allow lump sum for provision of progress reports including photographic records and other schedules included in the ICTAD publication - Guidelines for Effective Constrution Management. (ICTAD/CM/01), relevant to contract administration as directed by the Engineer.</p>	E	Item	
1A8	<p>Allow lump sum for all cost in connection with 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.</p>	E	Item	
1A9	<p>Allow lump sum for provision of shop drawings, bar schedules etc. for Engineer's approval.</p>	E	Item	
1A10	<p>Allow lump sum for provision of 3 sets of (Hard copies and soft copies) as built drawings of all services, for Engineer's approval.</p>	D	Item	
1A11	<p><b>Health, Safety &amp; Environment</b></p> <p>Allow lump sum for providing and maintaining a first aid box and regular supply of medicine, linen etc.</p>	E	Item	
1A12	<p>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.</p>	E	Item	



Item	Description	Mode of payment Category	Unit	Amount Rs. Cts.
1A13	Allow lump sum for demobilization, removal of all rubbish, debris and clearing up site on completion, leaving all in good order and handing over.	G	Item	
1A14	<p><b>Security and Protection</b></p> <p>Allow lump sum for employing an adequate number of security personnel and security systems on full time basis throughout the period of construction, and provide for necessary security lighting and warning system</p> <p><b>Services &amp; Facilities</b></p>	E	Item	
1A15	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.	E	L. Sum	
	<b>Sub Total Bill No 01 carried to Grand Summary</b>			<b>1,105,000.00</b>

EXPANSION OF WARD 7 AND 8  
GENERAL HOSPITAL (TEACHING) - PERADENIYA  
SUB SUMMARY  
BILL 02 : STAGE I

ITEM	DESCRIPTION	AMOUNT	
		Rs.	Cts.
A	Demolisher		
B	Concreter		
C	Brick & Block Work		
D	Plasterer		
E	Painter & Decorator		
F	Pavior		
G	Aluminium Works		
H	Plumber		
J	Miscellaneous		
	<b>Sub Total Bill No 02 carried to Grand Summary</b>		

**EXPANSION OF WARD 7 AND 8  
GENERAL HOSPITAL (TEACHING) - PERADENIYA**

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
<b>1A</b>	<b><u>DEMOLISHER</u></b>				
1A1	Removing eaves gutter from roof of two storied buildings and stacking as directed.	m	100.00		
1A2	Removal of old or decayed, 100mm to 150mm dia. GI down pipes, from existing buildings and clearing debris away.	m	200.00		
1A3	Removing valance/ barge boarding, stacking materials and clearing debris as directed in two storied buildings. Includes scaffolding and safety measures... etc.	m	300.00		
1A4	Removal of corrugated asbestos sheets from roof of two storied buildings and stacked. (Removal of frame work paid separately.)	m <sup>2</sup>	1,500.00		
1A5	Removal of Timber from roof and stacking serviceable material at ground handing over to client and clearing debris in two storied building. Rate to include for scaffoldings and required safety precautions.	m <sup>2</sup>	1,500.00		
1A6	Demolition and removing of reinforced concrete (100mm thick) in roof or floor slabs and debris cleared away (first floor level)	m <sup>3</sup>	3.00		
1A7	Cutting and removing of reinforced concrete (100mm thick) in roof or floor slabs and debris cleared away (second floor level)	m <sup>3</sup>	3.00		
1A8	Allow for clearing away debris from the hospital premises and unforeseen works.	P/S			200,000.00
	<b>Sub Total carried to Summary</b>				
<b>1B</b>	<b><u>CONCRETER</u></b>				
	<i>Unless otherwise stated all concrete shall be of grade as per Specifications/Drawings.</i>	Note			
	<i>Rates for concrete shall include for forming construction joints, expansion joints or contraction joints as necessary.</i>	Note			
	<i>Concrete will be measured as the net area/volume, as shown on the drawings.</i>	Note			

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
	<p><i>Rate for concrete shall include for :</i></p> <p><i>supply, handling at site, mixing, depositing, compacting, vibrating, curing and making good after removal of formwork.</i></p> <p><i>preparation of surfaces, roughening/chipping to the approval of the Engineer.</i></p> <p><i>Reinforcement and Formwork paid separately unless specified in the Item.</i></p> <p><i>Rate shall include for necessary tests including cube tests as per the BS 1881 and SCA/4/1.</i></p> <p><i>Rate for formwork shall include for all necessary boarding, supports, erecting, framing, cutting angles, cleaning, apply approved foam oil, wetting before placing concrete, removal etc.</i></p> <p><i>Formwork is measured as the net contact surface measurement between formwork and concrete.</i></p> <p><i>Film coated Plywood or other equivalent quality approved type of shuttering should be used. Mould oil should be applied to formwork surfaces before using.</i></p> <p><i>Rate for form work shall include for all necessary measures to provide fair face finish.</i></p> <p><i>All reinforcement shall be as per relevant British Standards having minimum characteristic strength of 460 N/mm<sup>2</sup> for High Yield steel and 250 N/mm<sup>2</sup> for mild steel.</i></p> <p><i>All reinforcement shall be free from mill scale, dirt, oil, paint, grease or loose rust before fixing in position and shall be brushed with a stiff wire brush as directed.</i></p> <p><i>All cement type to be Ordinary Portland Cement (OPC)</i></p> <p><i>Rate for reinforcement shall include for supplying, cleaning, cutting, bending, fabricating, binding, placing in position, binding wires, ties, supporting bars, spaces, chairs, wastage etc.</i></p>	<p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p>			
	<b>Grade 25(20mm) cement concrete</b>				
1B1	Column shafts in second floor	m <sup>3</sup>	30		
1B2	Beams in second floor	m <sup>3</sup>	75		
1B3	For Staircase including steps, waist, beams and landing.	m <sup>3</sup>	7.5		
	<b><u>Formwork</u></b>				
1B4	Shuttering by using 12mm thick plywood for column, beams and Staircase including steps, waist, beams and landing. .	m <sup>2</sup>	800		

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
	<b><u>Reinforcement</u></b>				
	<b><u>High Yield steel</u></b>				
1B5	Supplying and BS 4449 high Yield steel bars and laid in positing as reinforcement in beams, columns and staircase with binding wire.	kg	9500		
1B6	Mild steel for Column Shaft and beams	kg	3350		
1B7	225mmX150mm size lintol of 1:2:4 (20mm) cement concrete including formwork and reinforcement	m	100		
1B8	112mmX150mm size lintol of 1:2:4 (20mm) cement concrete including form work and reinforcement	m	75		
	<b>Sub Total carried to Summary</b>				
<b>1C</b>	<b><u>BRICK &amp; BLOCK WORK</u></b>				
	<i>Rate shall include for lifting, handling, reveals, raking out all joints for pointing plastering, making good at the completion.</i>	Note			
	<i>Rate shall include for erecting scaffolding and dismantling after completion of work</i>	Note			
1C1	100mm thick Block masonry using Hollow blocks in 1:5 cement and sand mortar.	m <sup>2</sup>	320		
1C2	112.5mm thick brick work in 1:5 cement sand mortar.	m <sup>2</sup>	100		
	<b>Sub Total carried to Summary</b>				
<b>1D</b>	<b><u>PLASTERER</u></b>				
	<i>Rate shall include to</i>				
	<i>(a) Fair joints</i>				
	<i>(b) Outlets, working over and around obstructions, pipes, and the like into recesses and shaped inserts.</i>				
	<i>(c) Bonding agents where included with the work.</i>				
	<i>(d) Patterned work is deemed to included all extra work involved.</i>				
	<i>(e) Bedding mortars</i>				
	<i>(f) Grouting</i>				
	<i>(g) Working over and polishing</i>				
	<i>(h) Plastic corner beadings</i>				
	<i>(j) Supplying and Fixing</i>				

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
	<i>Samples shall be forwarded by the contractor for prior approval of the Engineer.</i>	Note			
	<i>If Contractor proposed to use sea sand for the work, Cost for the following test shall be include for the rates of respective work items;</i>	Note			
	<i>1. tested for Chlorine content in each batch of sea sand brought to site.</i>				
	<i>2. tested for Gradation for each batch of sea sand brought to site</i>				
	<i>3. submit Mix design according to the gradation for our approval (sample is selected by Engineer)</i>				
	<i>Rate to include for scaffolding.</i>	Note			
1D1	15mm thick 1:5 cement and sand plastering finished semi rough for walls.	m <sup>2</sup>	325		
1D2	15mm thick 1:5 cement and sand plastering finished smooth with cement based putty (skim coat or equivalent)	m <sup>2</sup>	325		
1D3	Ext/Int plastering for 75mm wide reveals and Jams with 15 mm thick 1:1:5 Lime plastering and Finished smooth with lime putty.	m	500		
<b>Sub Total carried to Summary</b>					
1E	<b><u>PAINTER AND DECORATOR</u></b>				
	<i>Rate to include for scaffolding.</i>	Note			
1E1	Applying two coats of filler using brush or roller.	m <sup>2</sup>	650		
1E2	Leveling the wall surface by using filler & trawl.	m <sup>2</sup>	250		
1E3	Preparing surface and applying two coats of emulsion paint to internal walls.	m <sup>2</sup>	325		
1E4	Preparing surface and applying two coats weather shield paint.	m <sup>2</sup>	325		
1E5	Polyurethane varnish, applying two coats after sandpapering and cleaning surface .	m <sup>2</sup>	50		
1E6	Water proofing treatment with Liquid applied single component elastomeric water proofing membrane (Nit proof 600 or equivalent) material should be carried out strictly in accordance with the manufactures' instruction to suit with the type of structure and the location for roof slab and gutters. Protective rendering/concreting paid separately. barralastic. 10 years warranty certificate should be submitted	m <sup>2</sup>	1500		
<b>Sub Total carried to Summary</b>					

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1F	<p><b>PAVIOR</b>  <i>Rate shall include to,</i>                      (a) All extra work involved to patterned work.                      (b) Fair edges, internal angles for Treads and risers                      (c) Ends angles, ramped and wreathed covers for strings and aprons.                      (d) Fair edges, rounded edges, covered junctions, angles, and the like for skirting curbs and edges or floors                      (e) Plastic corner beadings                      (f) Supplying and Fixing of materials</p> <p><b>Floor Tiling</b>  <i>At the beginning Contractor shall lay floor and wall tiles section by sections for Engineers inspection and checking neatness, quality and for approval to continue tiling. Rate shall include for such costs.</i>  <i>cut pieces of tiles smaller than half of a tile shall not be used.</i>  <i>Floor tiles shall be homogeneous, locally manufactured, non skid ceramic type and approved colour by the Engineer.</i>  <i>Water absorption of floor tiles should be less than 0.5% and Modulus of rupture to be over 27N/mm<sup>2</sup>.</i></p>	<p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p>			
1F1	Supplying and fixing 600mm x 600mm locally manufactured Homogeneous Vitreous Porcelain matt finished floor tiles to floors including 20mm thick 1:3 cement sand bedding and finished with tile grout to match the tile. (thickness of tile not less than 10mm)	m <sup>2</sup>	920		
1F2	100mm high skirting by supplying and fixing 600mm x 600mm locally manufactured Homogeneous Vitreous Porcelain matt finished floor tiles including 20mm thick 1:3 cement sand bedding and finished with tile grout to match the tile.	m	260		
1F3	Supplying and fixing of 300mm x 600mm size, locally manufactured glazed tiles white with all specials to walls including raking plaster and bedding in 12mm thick 1:3 cement mortar joints shall be filled with tile grout.(thickness of tile not less than 10mm)	m <sup>2</sup>	200		

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1F4	Supplying and laying of locally manufactured matt homogeneous porcelain step edge floor tiles size 300mm x 600mm bedding on 12mm thick, 1:3 cement rendering finished with colour grout to match to staircase.	m <sup>2</sup>	15		
<b>Sub Total carried to Summary</b>					
1G	<p><b><u>ALUMINIUM WORKS</u></b></p> <p><i>Aluminium extrusion should be manufactured under the certification of ISO 9001:2008</i></p> <p><i>The work shall include supply, fabricate and installation of doors, windows out of Aluminium Sections. All extrusion shall be of AlMgSi Alloy designation <b>6060 or 6063</b> with <b>powder coated</b> surface finish coating thickness <b>60-80 microns</b> as per the respective drawings and specifications .</i></p> <p><i>Concealed screws, nuts, bolts, rivets and other fastening devices shall be of Aluminium, non magnetic stainless steel or other approved corrosive resistant materials. If visible, they shall blend with the finish of the framing Aluminium Sections.</i></p> <p><i>For each fabrications, a shop drawing shall be furnished to the Engineer, One month prior to the installation commencement and should get the approval for the same.</i></p> <p><i>Samples of hinges , Aluminium sections, Al composite boards etc shall be forwarded by the contractor for prior approval of the Engineer.</i></p> <p><i>The fabrication and installation of all aluminium work must be carried out by specialist tradesman.</i></p> <p><i>It shall be bidder's responsibility to check the sizes of all openings on site, prior to fabrication.</i></p> <p><i>Supply, assemble and fix in position aluminium framed glazed aluminium sash door, window, fanlight, partition units complete with sealant glazing screwed beadings, locks, fasteners, gasket, hardware and fittings all complete as per detail drawing.</i></p>	<p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p> <p>Note</p>			
1G1	Supply all material, fabricate & fixing fully paneled door (for toilets) 25mmX75mm Box Bars Sections, "U" Bars & Paneling with 4mm thick both side coated Aluminium Composite Boards. Rate include of fixing of indicator type keyless door lock.	m <sup>2</sup>	35		



**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1G2	Supplying all materials, fabricating and fixing <b>powder coated coloured glazed and paneled, single swing type single sash door</b> , framed with 76mm wide, 1.2mm thick shop front section and door sash with top bar-80mm, middle-100mm, bottom-120mm and glazing with 6mm thick clear glasses and paneling of 4mm thick composite sheets. Rate to include for necessary rubber beadings, wool felts, mortice type door lock with duplicate keys, Stainless Steel hinges, Door handle, door locks and other necessary accessories. Shop drawing should be provided prior to fabrication.	m <sup>2</sup>	25		
1G3	Supplying all materials, fabricating and fixing of <b>powder coated fully paneled, single swing type double sash door</b> , framed with 76mm wide, 1.2mm thick shop front section and door sash with top bar-80mm, middle-100mm, bottom-120mm and paneling with 4mm thick Aluminium Composite sheets for both sides. Rate to include for necessary rubber beadings, wool felts, mortice type door lock with duplicate keys, Stainless Steel hinges, door handle and other necessary accessories. Shop drawing should be provided prior to fabrication.	m <sup>2</sup>	10		
1G4	Supplying all materials, fabricating and fixing of 41 mm wide powder coated Aluminium framed side hung type glazed window, glazing with 5mm thick clear glasses. Rate to include for necessary 304 Stainless Steel hinges, stays, window locks, rubber beadings and other necessary accessories. Shop drawing should be provided prior to fabrication.	m <sup>2</sup>	200		
1G5	Fabrication and fixing of Welded Diamond shaped Iron grill consisting 6mmX20mm flat iron or 25mmX25mmX3mm angle iron frame, 6mm mild steel rods at 75mm centers to form 75mm 150mm diamond shaped grill. Rate includes screws and application of one coat of anticorrosive paint and two coat of enamel paint. (Based on 580mmX1000mm area)	m <sup>2</sup>	200		
<b>Sub Total carried to Summary</b>					

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
<b>1H</b>	<b><u>PLUMBER</u></b> <i>Supply and installation of approved quality sanitary appliances with pipe specials, fittings, and special connecting to water supply, sewage and wastewater disposal pipes.</i>	Note			
	<b><i>Unless otherwise measured separately, Rates shall include for:</i></b>				
	<i>(a) Fittings such as taps, wastewater outlets, internal overflows etc. and supporting brackets, incidental materials for fixing.</i>	Note			
	<i>(b) 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.</i>	Note			
	<i>(c) all necessary fixtures for sanitary fittings and special connection to water supply, wastewater and sewer lines</i>	Note			
	<i>(d) Jointing and connection pipes to sanitary fittings.</i>	Note			
	<i>(e) Testing and commissioning of the installation.</i>	Note			
	<i>(f) Making good the work disturbed.</i>	Note			
	<i>(g) Protecting the works</i>	Note			
	<i>(h) All Samples should be approved by the Engineer</i>	Note			
	<b><i>(j) Sanitary fitting should be American standard or approved equivalent</i></b>				
	<i>(k) Magic bend / flexible conduits for waste water line is not allowed.</i>				
1H1	Supplying and fixing Brass, Chromium Plated 12mm Dia <b>Bib tap</b> - (European or Equivalent Quality)	nr	20		
1H2	Supplying & fixing pedestal type wash basin with waste plug, bottle trap, flexible hose & other accessories (American/European Standard or approved equivalent as approved by the Engineer).	nr	8		
1H3	Supply and fixing Pedestal type Closed Couple Water Closet with dual flush 6/4.5 liter capacity cistern with PVC flexible hose in all toilets. Rate to include for necessary fixtures and special connection to water supply line and sewer lines.. (American/European Standard ).	nr	8		

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1H4	Supply and fixing Ceramic <b>squatting pan</b> , inbuilt foot rest Water Closet with 6 liter capacity plastic high level cistern. (1800mm height) and trap - (European or Equivalent Quality)	nr	10		
1H5	Supply and fixing Stainless steel Chromium Plated high quality hand Bidet set with hand spray 1.2m shower hose and wall bracket.(European Standard or equivalent quality as approved by the Engineer).	nr	20		
1H6	Supply and fixing Stainless steel hand shower with stainless steel flexible hose. (Medium Quality (Malaysian, Indian or Equivalent Quality)	nr	8		
1H7	Supply and fixing of plain glass mirror approximate size of 650*450mm with clips, plugs or relevant fixing materials. (Medium Quality - Malaysian, Indian or Equivalent Quality)	nr	8		
1H8	Supply and fixing 20mm dia. Brass, Chromium Plated overhead shower rose (Approx.. 150mm dia.) with Brass, Chromium Plated arm (Approx.. 400mm length), (European or Equivalent Quality)	nr	8		
1H9	Supply and fixing of stainless steel wired Soap dish. (medium Quality -Malaysian, Indian or Equivalent Quality)	nr	20		
1H10	Supply and fixing Stainless steel towel rail Approx.. 600mm long. (European or Equivalent Quality)	nr	24		
1H11	Supply and fixing Brass, Chromium Plated 12mm Dia Pillar tap - (European or Equivalent Quality)	nr	15		
1H12	Supplying and Fixing of Stainless steel sink (450x325x200mm size) with waste ,waste cap & all necessary materials to complete satisfaction.	nr	4		
1H13	Supplying and fixing Plastic - 12mm Dia Angle valve.	nr	36		
1H14	Supply and fix concealed valve-Brass Chromium Plated 12mm Dia (European or Equivalent )	nr	10		
1H15	Supplying and fixing of Type 1000 uPVC 20mm Pipes including specials and fittings.	m	75		

**Bill No. 02 : Stage I**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1H16	Supplying and fixing of Type 600 uPVC 40mm Pipes including specials and fittings.	m	25		
1H17	Supplying and fixing of Type 600 uPVC 50mm Pipes including specials and fittings.	m	40		
1H18	Supplying and fixing of Type 600 uPVC 63mm Pipes including specials and fittings.	m	25		
1H19	Supplying and fixing of Type 600 uPVC 110mm Pipes including specials and fittings.	m	70		
1H20	1000mm x 700mm manhole 600mm to 1200mm deep, constructed with 225mm brick in 1:3 cement mortar and 12mm cement rendered walls and 150mm thick 1:3:6(25mm)concrete foundation. Rate to include forming of channels.	nr	4		
1H21	Supplying and fixing of gully box with stainless steel cover.	nr	20		
1H22	Supplying and fixing of 600mmX600mm rectangular C.I. Manhole cover.	nr	4		
	<b>Sub Total carried to Summary</b>				
1J	<b><u>MISCELLANEOUS</u></b>				
1J1	225mmX20mm thick timber wall guard using Mahogany or Kempus (more than 7m)	m	170		
1J3	Chemical Anchoring to existing columns by 4T16 and 4T12 for one column. (52 nr of Column)	nr	416		
1J4	Supply, fabricating and fixing of stainless steel hand rail.	m	40		
1J5	Supplying and fixing of safety net, scaffolding works.	P.S.			5,000,000.00
1J6	Allow for fixing temporary dust cover, and other unforeseen work during estimating phase witch may occure during construction period.	P.S			500,000.00
	<b>Sub Total carried to Summary</b>				

**EXPANSION OF WARD 7 AND 8  
GENERAL HOSPITAL (TEACHING) - PERADENIYA**

**SUB SUMMARY**

**BILL 03 : STAGE II**

ITEM	DESCRIPTION	AMOUNT	
		Rs.	Cts.
A	Structural Steel		
B	Roofer & Roof Plumber		
	<b>Sub Total Bill No 03 carried to Grand Summary</b>		

EXPANSION OF WARD 7 AND 8  
GENERAL HOSPITAL (TEACHING) - PERADENIYA

**Bill No. 03 : Stage II**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
2A	<p><b><u>STRUCTURAL STEEL</u></b></p> <p>"Welding " is deemed to be in accordance with the specification and for the material to which it is to be use.Gusset plates, shoe plates, ends, caps, cleats, brackets, stiffeners, bolts, etc., have been included to the rate of the associated steel works.</p> <p>For the description of materials and workmanship refer to "Specification of works", "Preambles" and " Drawings"</p> <p><u>Rate shall include for</u></p> <p>All shop fabrication work, marking, delivery, unloading, hoisting, erecting and fixing as per detail drawings.</p> <p>All welds are 6mm thick fillet weld &amp; allowance for rolling margin</p> <p>The weight of weld metal in welded constructions</p> <p>Cutting to size and shape and joints in the running length</p> <p>Grinding to a smooth finish, unless otherwise required</p> <p>Machine drilled bolt holes, bolts, nut and washers, cleats, shoe and gusset plates and all other connections.</p> <p>After fabrication wire brushed to clean the all steel surfaces and spray painted with two coats of quick drying metal primer zinc phosphate &amp; two coats of enamel paint</p>				
2A1	Supply, fixing of 200x 100x 22.4 kg/m sized "I " sectioned steel rafters ,ridge complete with all the required paint works and all necessary supports.	t	11.50		
2A2	supply, fixing of 150 x 65 x 2mm thick lipped channel and complete with all the required paint works and all necessary supports including cleat.	m	1300		
	<b>Sub Total carried to Summary</b>				

**Bill No. 03 : Stage II**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
2B	<p><b><u>ROOFER AND ROOF PLUMBER</u></b>  <b><u>Zinc Aluminium coated profiled steel sheets (Roofing Sheets, Valance board, gutters, down pipe, ...and all other Zn/Al profiled material)</u></b>  <u>Material shall be done in accordance with ASTM A792M</u>  <u>Coating mass is AZ150 (Minimum 150 gms/sq.m total on both sides) Zinc Alum profile roofing sheet.</u>  <u>The nominal base metal thickness (BMT) should be 0.42 mm and total coated thickness (TCT) not less than 0.47 mm. HI-Tensile steel with minimum 550 Mpa yield strength, metallic hot dip coated Aluminium-Zinc Alloy (55% Aluminium, 43.5% Zinc, 1.5% Silicon)</u>  <u>The minimum rib size is 28 mm</u></p>	Note			
	<p><u>Fasteners must comply with Australian Standard AS 3566 Class 4 for outdoor use. For maximum water tightness, always position roof screws through the crests. For walling, you may use Either crest or valley fixing.</u></p>				
2B1	Supply and Fixing 50mm thick sandwich pannel roofing sheets with self drilling screws (fastners) on existing frame work(frame work measured seperately)hip roof (sheet thikness top -0.4mm bottom - 0.35).	m <sup>2</sup>	1450		
2B2	Supplying & Fixing Zn / Al Valance board of nominal girth 300mm. (The nominal base metal thickness (BMT) should be 0.42 mm and the total coated thickness (TCT) not less than 0.47 mm) including Screws. The coating mass of the Zn/Al sheet is AZ150 (Minimum 150 gms/sq.m total on both sides).	m	150		
2B3	Supplying and fixing Gutters colour Zn /Al (The nominal base metal thickness (BMT) should be 0.42 mm and total coated thickness (TCT) not less than 0.47 mm) 457mm girth with brackets not exceeding 0.6m crs. rate includes for specials. The coating mass of the Zn/Al sheet is AZ150 (Minimum 150 gms/sq.m total on both sides)	m	150		
2B4	Supplying & fixing 0.47mm thick colour Zn /Al. ridge cap/ bottom ridge cap with self drilling screws (Fasteners) minimum girth 470mm.	m	76		

**Bill No. 03 : Stage II**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
2B5	Supplying and fixing down pipes colour Zn/Al 100mm X 100mm (The nominal base metal thickness (BMT) should be 0.42 mm and total coated thickness (TCT) not less than 0.47 mm) with brackets not exceeding 1.2m crs. of the pipe, rate includes for specials. The coating mass of the Zn/Al sheet is AZ150 (Minimum 150 gms/sq.m total on both sides)	m	260		
	<b>Sub Total Bill No 03 carried to Grand Summary</b>				



**EXPANSION OF WARD 7 AND 8  
GENERAL HOSPITAL (TEACHING) - PERADENIYA**

**BILL NO.04 - ELECTRICAL WORKS**

<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate</b>	<b>Amount</b>
<b>I</b>	Rates in Bill of Quantities shall include all necessary materials (Cables, conduits, PVC sunk box, bulbs, switches etc.) and labour required to complete the electrical installation to good working order.				
<b>II</b>	Except where specifically stated, all costs associated with provision of all holes, openings, chases, ducts and other builders' work required for installation and make them good, shall be included in the rates.				
<b>III</b>	Where reference is made to certain manufactures' products and items identified by registered trade marks, has been done for the sole purpose of defining and establishing standards of quality and performance and not with the intention of restricting the procurement of material or fitting to a particular manufacturer. However all equipment and material should meet the BS or an equivalent standard.				
<b>IV</b>	Testing and commissioning of the electrical installation is to be carried out by the contractor and inspection report submitted according to the requirements of the power supply Authority.				
<b>V</b>	Electrical Items (MCB,RCCB etc.) should be of European/Japanese origin or to the BS or equivalent and items without an accredited agent in Sri Lanka shall not be accepted. Guarantee cards(Fans etc.) should be provided from accredited agent before installation.				
<b>VI</b>	All the quantities given here are approximated values and Quantities may change with the actual installation at the site.				
<b>VII</b>	All types of fittings, materials, painting and finishes shall be approved by the Engineer prior to installation.				
<b>VIII</b>	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.				

**BILL NO.04 - ELECTRICAL WORKS**

Item	Description	Unit	Qty.	Rate	Amount
	<b>Note:-</b>				
	<b><u>Recommended Brands for Electrical Items</u></b>				
A	<b><u>Protective items (MCCBs, MCBs, RCCBs &amp; ISOs</u></b> Schneider,ABB,Hager,Eaton (Moeller) ,Terasaki or Eq.				
B	<b><u>Surge protective Device ( SPDs )</u></b> obo-bettermann,j.propster,Schneider or Eq.				
C	<b><u>Fans</u></b> KDK Original or brands approved by the Engineer.				
D	<b><u>Electrical Switches &amp; Socket Outlets</u></b> Orange,ACL,Clipsal(schneider) or Eq.				
E	<b><u>Light Fittings</u></b> Japanes, malayasian made or brands approved by the Engineer.				
F	<b><u>Bulbs ( LED )</u></b> Green,Philips,Osram or Eq.				
G	<b><u>Cables</u></b> Kelani,Sierra,ACL or Eq.				
H	<b><u>PVC Trunking</u></b> KTK or brands approved by the Engineer.				
	<b><u>Electrical Distribution System</u></b>				
1.00	<b><u>CEB Connection</u></b> Associated work for the getting CEB Electricity connection -Client pay for the connections.( 01 No of 60A Three phase Connections.)				
			Pro. sum.		100,000.00
2.00	<b><u>Three phase consumer units (TCU)</u></b> Supply and installation of switch gear cubicle made out of (1.5mm thickness) sheet steel (IP54) stove enameled or powder coated for the finish with one coat of primer to the approval of the engineer with following equipment. (Surface type)				

**BILL NO.04 - ELECTRICAL WORKS**

Item	Description	Unit	Qty.	Rate	Amount
2.01	<p><b><u>TCU-1</u></b>                      01 No 63A, 4P MCB,10 kA Breaking capacity complete with all other accessories.                      01 Nos. 32A, 4P MCB,10kA                      03 Nos. 32A, 2P MCB,6kA                      09 Nos. 40A 2P RCCB, 30mA sensitivity                      30 Nos. 6-32A, 1P MCB,6kA                      01 Set of 100A Cu Bus bars for L1,L2,L3 &amp; N                      Supply and installation of <b>Class II</b> Surge diveter with <b>40 kA max. maximum discharge current</b>, 20 kA nominal discharge current(8/20), respond time &lt;= 25ns, Uc &gt;= 280V and prtction level &lt;= 1.5kV <b>(including 40kA HRC fuses)</b>                      Earth Bar                      01 Set of indicators with protection                      All internal connections.  <b>Equipment to be to the BS/IEC</b></p>	No.	1		
2.02	<p><b><u>TCU-2</u></b>                      01 No. 40A, 4P Isolator                      03 Nos. 32A, 2P MCB,6kA                      09 Nos. 40A 2P RCCB, 30mA sensitivity                      30 Nos. 6-32A, 1P MCB,6kA                      01 Set of 50A Cu Bus bars for L1,L2,L3 &amp; N                      Supply and installation of <b>Class II</b> Surge diveter with <b>40 kA max. maximum discharge current</b>, 20 kA nominal discharge current(8/20), respond time &lt;= 25ns, Uc &gt;= 280V and prtction level &lt;= 1.5kV <b>(including 40kA HRC fuses)</b>                      Earth Bar                      01 Set of indicators with protection                      All internal connections.  <b>Equipment to be to the BS/IEC</b></p>	No.	1		
3.00	<b><u>Cable management system</u></b>				
3.01	<p><b><u>PVC Trunking</u></b>                      Supplying and installation of 100 × 50mm PVC Trunking as necessary.</p>	m	10		
4.00	<p><b><u>Cables</u></b>                      Supply and installation (with all materials required including conduits and termination) of following cables.</p>				
4.01	<p>16mm<sup>2</sup>, 1C × 4, Cu/PVC/PVC cable <b>from CEB meter to TCU-1.</b></p>	m	15		
4.02	<p>16 mm<sup>2</sup> CU/PVC Earth cable <b>from TCU-1 to Main Earth Electrode.</b></p>	m	15		

**BILL NO.04 - ELECTRICAL WORKS**

Item	Description	Unit	Qty.	Rate	Amount
4.03	6mm <sup>2</sup> Cu/PVC/PVC 1C×4 cable + 6mm <sup>2</sup> Green & Yellow Earth cable <b>From TCU-1 to TCU-2</b>	m	40		
<b>5.00</b>	<b><u>Light Fittings</u></b> <b>Note :-</b> <b>Warranty of all LED bulbs must be minimum two years.</b>				
5.01	Supply and installation of Sunk type/ surface type White, Square shape <b>6W LED panel light fitting, minimum flux 390 lumens</b> with accessories.	Nos	20		
5.02	Supply and installation of Sunk type/ surface type White, Square shape <b>12W LED panel light fitting, minimum flux 780 lumens</b> with accessories.	Nos	10		
5.03	Supply and installation of Sunk type/ surface type White, Square shape <b>40W LED panel light fitting, minimum flux 3400 lumens</b> with accessories.	Nos	110		
5.04	<b><u>Light Point Wiring</u></b> Wiring (including supply of all materials) of the above light points using approved type PVC insulated PVC sheathed 1 mm <sup>2</sup> copper cable drawn through securely fixed concealed PVC conduit.	Nos	140		
<b>6.00</b>	<b><u>Socket Outlets</u></b>				
6.01	<b><u>13A Socket outlets</u></b> Supply & installation of 13A shuttered switched single socket outlet to comply with BS .	Nos	10		
6.02	<b><u>Wiring of 13A Socket outlets (radial circuit)</u></b> Wiring (including supply of all material required ) of 13A socket outlets using approved type 2.5mm <sup>2</sup> Cu/PVC/PVC, 2C cable & 2.5mm <sup>2</sup> earth cable drawn through securely fixed concealed PVC conduit.	Nos	10		
6.03	<b><u>Supply &amp; Wiring of 13A Socket outlets (Ring Circuit)</u></b> Supply & Wiring (including supply of all material required ) of <b>10 Nos of 13A socket outlets</b> using approved type 2.5mm <sup>2</sup> Cu/PVC/PVC, 2C cable & 2.5mm <sup>2</sup> earth cable drawn through securely fixed concealed PVC conduit. <b>(including cost of 10 nos of 13A Socket Outlets)</b>	No.	30		
<b>7.00</b>	<b><u>Fans</u></b>				
7.01	<b><u>Ceiling Fans</u></b> Supply & installation of <b>1400mm (56") , 80W</b> sweep ceiling fan , complete with regulator, fan hook, extension rod & attachment.	Nos	75		

**BILL NO.04 - ELECTRICAL WORKS**

<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate</b>	<b>Amount</b>
7.02	<b>Ceiling Fan point wiring</b> Wiring (including supply of all material, earth wire & switch) of the above ceiling fans using approved type 1 mm <sup>2</sup> , Cu/PVC/PVC cable & 2.5 mm <sup>2</sup> earth wire drawn through securely fixed concealed PVC conduits.	Nos	75		
7.03	<b>Exhaust Fans</b> Supply & installation of exhaust fan, <b>300mm (12")</b> , <b>31W, 706 CFM, 39 dB(A)</b> with PVC blade & accessories. <b>(including civil works)</b>	Nos	4		
7.04	<b>Exhaust Fan point wiring</b> Wiring (including supply of all materials) of the above exhaust fan points using approved type PVC insulated PVC sheathed 1 mm <sup>2</sup> copper cable drawn through securely fixed concealed PVC conduit with 2.5 mm <sup>2</sup> earth cable and 13 Amp single switch socket outlet in radial circuit.	Nos	4		
8.00	<b>Main Earthing System</b> Supply and Installation of an earth electrode of minimum 16mm dia. copper Bonded rod of length 1.2m or more with a clamp connection to earth conductor. Earth resistance shall be <b>less than 10 Ohms</b> tested on a dry day. An earth pit of size 300mm x 300mm x 300mm is to be prepared and covered by concrete plate to protect the earth electrode.	Item			
9.00	<b>Inspection and Testing - Electrical installation</b> Testing the installation and rectify any defects and submit a certificate by a Chartered Electrical Engineer.	Item			
10.00	<b>Drawings</b> Provide three sets of 'As Built Drawings' (A3 size) to cover electrical distribution system binded as books.	Item			
11.00	<b>Unforeseen work</b> Allow Provisional sum for unforeseen work which may occur during installation.			PS	400,000.00
<b>Sub Total Bill No 04 carried to Grand Summary</b>					

**SECTION – 9**  
**SCHEDULES**

**SECTION – 9 SCHEDULES**

<b>Schedule 1 – General Information</b>			
<p>(i) If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.</p> <p>(ii) For joint ventures, each joint venture partner shall furnish information separately.</p>			
<b>ITB Clause reference</b>	<b>Description</b>	<b>Information (to be filled by the bidder)</b>	<b>Remarks</b>
3.1	<b>ICTAD Registration</b>		Provide certified copies and label as attachment to clause 3.1
	Registration Number		
	Grade		
	Specialty		
	Expiry Date		
3.2	<b>NCASL Membership</b>		Provide certified copies and label as attachment to clause 3.2
	Number		
	Expiry Date		
3.3	<b>Registration at the registrar of Public Contract Sri Lanka – PCA 3 Certificate</b>		Provide certified copies of Registration (PCA 3 Certificate)
4.1(a)	<b>Legal Status</b>		Provide certified copies of Registration
	Written Power of attorney of the signatory to the Bid		Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)
	If a Joint Venture, names and addresses of Joint Venture Partner	1. .... 2. .... 3. ....	Provide a draft copy of the Joint Venture Agreement or alternatively the memorandum of understanding
	If a Joint Venture, Name of Lead Partner		
	For joint ventures, each joint venture partner shall furnish Legal Status separately		
	<b>Name (Lead Partner)</b>		Provide certified copies and label as attachment to clause 4.1(a)
	Legal Status		
	Place of registration		
	Principal place of business		

Schedule 1 – General Information continued .....

	Written Power of attorney of the signatory to the Bid	Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)	
	If a Joint Venture, names and addresses of Joint Venture Partner	1. .... 2. .... 3. ....	Provide a draft copy of the Joint Venture Agreement or alternatively the memorandum of understanding
	If a Joint Venture, Name of Lead Partner		
	For joint ventures, each joint venture partner shall furnish Legal Status separately		
	<b>Name (Partner 2)</b>		Provide certified copies and label as attachment to clause 4.1(a)
	Legal Status		
	Place of registration		
	Principal place of business		
	Written Power of attorney of the signatory to the Bid	Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)	
	VAT Registration Number		
	<b>Name (Partner 3)</b>		Provide certified copies and label as attachment to clause 4.1(a)
	Legal Status		
	Place of registration		
	Principal place of business		
	Written Power of attorney of the signatory to the Bid	Provide original or certified copy of the power of attorney attested by a Notary and label as attachment to clause 4.1(a)	
	VAT Registration Number		



**Schedule 2 – Annual Turn-over Information**

- (i) If pre-qualification is done the bidders are required to include information Subsequent to that submitted with the pre-qualification application.
- (ii) For joint ventures, each joint venture partner shall furnish information separately.

Year	Turn-over	Remarks
1		Attach audited reports and label as attachment to clause 4.2
2		
3		
4		
5		

**Schedule 3 – Adequacy of Working Capital**

If pre-qualification is done the bidders are required to include information subsequent to that submitted with the pre-qualification application.

Source of credit line	Amount	Remarks
		Provide documentary evidence and label as attachment to clause 4.2
	Total	
<b>Qualify for Contract</b>		(b) (a) The Bidder should have experience in construction of at least one similar nature projects during past 5 years. The minimum amount of Contract value of each project shall be Rs. <b>70.00 Million</b> . At least 75% of each project should have been completed within the original contract period

(c) Average annual volume of construction work performed in the last five years shall be at least Rs.155 Million.

(c) The minimum amount of working capital or available credit facilities for utilizing at the time of bidding exclusive of any advance payments shall not less than **Rs. 25 Million**. as per clause 4.4 in bidding data. Confirmation letter of credit facility should be addressed to : Director, Teaching Hospital, **Peradeniya**

The minimum amount of liquid assets available is calculated as follows.

$$X = (A - L) - AR + C - 0.2W$$

Where,

**X** = Minimum amount of liquid assets available

**A**= Current assets as given in the latest audited financial statements (Excluding balances in Directors Current A/c)

**L**= Current Liabilities as given in the latest audited financial statements (Excluding balances in Directors Current A/c)

**AR** = Advance Payments received for other projects

**C** = Revolving Line of credit given by Bank

**W** = Work in Hand

Any Bidder who does not have the minimum amount of liquid assets calculated on the above basis, required under Sub - Clause 4 of the instructions to bidder (ITB) shall be treated as non- responsive bid.

**Schedule 4 – Construction Experience in Last five years**

- (i) If pre-qualification is done the bidders are required to include information Subsequent to that submitted with the pre-qualification application.
- (ii) For joint ventures, each joint venture partner shall furnish information separately.

<b>Year</b>	<b>Employer</b>	<b>Description of Works</b>	<b>Amount</b>	<b>Construction period as per the approved programme</b>	<b>Actual construction period</b>	<b>Reasons for delays</b>	<b>Contractor's Responsibility (%)</b>
		<b>Total</b>					

- Provide documentary evidence and label as attachment to clause 4.2

<b>Schedule 5 – Major Items of Construction Equipment Proposed</b>	
<b>Type</b>	<b>Capacity</b>

**Schedule 6 – Construction Management Staff**

**A. Key Professionals**

<b>Name</b>	<b>Position</b>	<b>Task</b>

**B. Support Staff**

<b>Name</b>	<b>Position</b>	<b>Task</b>

**Schedule 7 - Time Schedule for Key Staff**

Name	Position	Activities	Months (in the form of a Bar Chart)												Number of Months
			1	2	3	4	5	6	7	8	9	10	11	12	

Full Time: \_\_\_\_\_

Part Time: -----

**Schedule 8 - Work Program**

	(1st, 2nd, etc. months from the start date.)											
Construction Activity	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th

<b>Schedule 9 – Input Percentages for Price Adjustment Formula</b>		
<b>Input Name</b>	<b>ICTAD Reference for Indices</b>	<b>Percentage %</b>
Zink aluminium Sheet	M46	22.26
Skilled Labour	L1	20.21
Unskilled Labour	L3	10.46
Aluminium	M36	9.27
Reinforcement Steel	M13	6.92
Electrical Fittings	M38	6.36
Structural Steel	M14	5.57
Cement	M4	3.36
Floor Tile	M32	3.03
Electrical wiring	M26	2.55
<b>Total</b>		<b>90.00%</b>

Non-Adjustable Elements: All Preliminary Items & Provisional Sum Items



## SCHEDULE FOR DAY WORKS

### SCHEDULE 1- LABOUR

Any labour engaged on Day work shall be paid at the rates given below. Contractor's profit and overheads should not be included in the rates.

Category	Gross Daily Wages Rs.    Cts.
1. Skilled labour	.....
2. Semi skilled labour	.....
3. Unskilled labour	.....
4. Electrician	.....
5. Welder	.....
6. Plumber	.....

Add: Overhead & Profits ..... % to above

### SCHEDULE 2 – PLANT

Any Plant engaged on Day works shall be paid at the rates given below. The rates are for wet hire. These rates shall include for all inputs for running of the plant, transport to site, operators, attendants, insurance and other overheads associated with such plant.

	Description of Plant	Hourly Rate Rs.    Cts.
1	Farm Tractor with Trailer	.....
4	Concrete Mixer (10/7 Cu. ft.)	.....
5	Poker Vibrator ( 50mm size) - with operator	.....
6	Poker Vibrator ( 35mm size) - with operator	.....
7	Lorry/Tipper ( 5 Ton ) with driver	.....
8	Welding Plant	.....

Add: Overhead & Profits ..... % to above

**SECTION – 10**  
**DRAWINGS**

**SECTION – 11**  
**STANDARD FORMS (BID)**

## FORM OF BID SECURITY

*[this Guarantee form shall be filled in accordance with the instructions indicated in brackets]*  
----- *[insert issuing agency's name, and address of issuing branch or office]*

Beneficiary: :            Director,  
                                 Teaching Hospital,  
                                 Peradeniya

**Date:** ----- *[insert (by issuing agency) date]*

**BID GUARANTEE No.:** ----- *[insert (by issuing agency) number]*

We have been informed that ----- *[insert (by issuing agency) name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated - -----*[insert (by issuing agency) date]* (hereinafter called "the Bid") for the Expansion of Ward No.07 & 08 of under Invitation for Bids No. ----- *[insert IFB number]* ("the IFB").

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

At the request of the Bidder, we ----- *[insert name of issuing agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of -----  
----- *[insert amount in figures]* ----- *[insert amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Employer during the period of bid validity,
  - (i) fails or refuses to execute the Contract Form, if required, or
  - (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) the successful bidder furnishing the performance security, otherwise it will remain in force up to ----- *(insert date)*

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

\_\_\_\_\_  
*[signature(s) of authorized representative(s)]*

## **CHECK LIST FOR BIDDERS**

## CHECK LIST FOR BIDDERS

Bidders are advised to fill the following table.

ITEM	ITB Clause	YES (tick)	REFERENCE
Form of Bid			
Addressed to the <b>Employer?</b>	18		
Completed?	18		
Signed?	18		
<b>Bid Securing Declaration Form (if required)</b>			
Properly filled and signed	16		
<b>Bid Security (if required)</b>			
Address to the <b>Employer?</b>	16		
Format as required?	16		
Issuing Agency as specified?	16		
Amount as requested?	16		
Validity <b>28 days beyond</b> the validity of Bid?	16		
<b>Qualification Information</b>			
All relevant information completed?	4		
Signed?	4		
<b>Addendum</b>			
Contents of the addendum (if any) taken in to account?	10		
Bid package			
All the documents given in ITB Clause 12 enclosed in the original and copy?	12		
ITB Clause 19 followed before sealing the Bid package?	19		

