

ORIGINAL

**DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
MINISTRY OF POWER AND ENERGY**

LANKA ELECTRICITY COMPANY (PVT) LIMITED

**CONSTRUCTION OF PROPOSED INJECTION MOULDING
FACTORY FOR ANTE LECO METERING COMPANY**

AT

GONAPOLA ROAD

GAMMANPILA, BANDARAGAMA

BIDDING DOCUMENT

Volume 1

- Section 1 - Instructions to Bidders
- Section 2 - Standard Forms (Contract)
- Section 3 - Conditions of Contract

Volume 2

- Invitation for Bids
- Section 4- Form of Bid & Qualification Information
- Section 5- Bidding Data & Contract Data
- Section 6- Specification
- Section 7- Bill of Quantities
- Section 8- Drawings
- Section 9- Standard Forms (Bid)

Contract No: ERD/SDD/PROC/2016/135/T11

Date: April 2016

Engineer:

ARCHITREND CONSULTANTS.
Chartered Architects, Engineers,
Quantity Surveyors & Interior Designers,
35, Vihara Mawatha,
Pepiliyana.
Tel/ fax : 0112724755
Tel: 0114337787
e-mail : architrendlsp@gmail.com

Employer:

Lanka Electricity Company (Pvt) Limited
E.H.Cooray Building,
Galle Road,
Colombo 03.

Name & Address of the Bidder :

.....
.....

	Documents	Page No
--	------------------	----------------

CONTENTS

01 - 01

Volume 1

Section 1	Instructions To Bidders	02 - 03
Section 2	Standard Forms (Contract)	04 - 10
Section 3	Conditions of Contract	11 - 12

Volume 2

	Invitation For Bids	13 - 15
Section 4	Form of Bid and Qualification Information	16 - 19
Section 5	Bidding Data & Contract Data	20 - 26
Section 6	Specifications & Pricing Preambles	27 - 50
Section 7	Bills of Quantities	51 - 77
Section 8	Drawings	78 79
Section 9	Standard Form (Bid)	80 81
	Check List For Bidders	82

VOLUME - 01

Section - 1

Instructions To Bidders (ITB)

Instructions to Bidders (ITB)

Please Refer Section 1 In ICTAD Publication No.ICTAD/SBD/01.

STANDARD BIDDING DOCUMENT

PROCUREMENT OF WORKS

Second Edition – January 2007 including

Addendum 01 issued in October 2009 and Addendum 02 issued in February 2011.

Bidders are advised to purchase the above Document from "ICTAD".

Instructions to Bidders shall be read in conjunction with the Bidding Data provided under section- 5 Of the Bidding document

Instructions to Bidders will not be part of contract

Section - 2

Standard Forms (Contract)

Please Refer Section 2 In ICTAD Publication No.ICTAD/SBD/01

- **LETTER OF ACCEPTANCE**
- **AGREEMENT**
- **PERFORMANCE SECURITY**
- **ADVANCE PAYMENT SECURITY**
- **RETENTION MONEY GUARANTEE**

Second Edition– January 2007 including Addendum 01 issued in October 2009 and Addendum 02 issued in February 2011.

Notes on Standard Forms

Bidders shall submit the completed Form of Bid security in compliance the requirements of the bidding documents

Bidders should not complete the Form of Agreement at the time of preparation of Bid.

Successful bidder will be required to sign the Form of Agreement after the award of contract.

Any corrections or modifications to accepted bid resulting from arithmetic corrections, acceptable deviations,

or quantity variations in accordance with the requirements of the bidding document should be incorporated in to agreement

The Form of Performance Security, Form of Advance Payment Security and Form of Retention Money Guarantee should not be completed by the bidders at the time of submission of bids.

The successful bidder will be required to provide these securities in compliance with the requirements herein or as acceptable to the Employer.

FORM OF LETTER OF ACCEPTANCE

[Letter heading paper of the procuring entity]

----- *[date]*

To: -----

[Name and address of the Contractor]

This is to notify you that your bid dated ----- *[insert date]* for the construction and remedying defects of the ----- *[name of the Contract and identification number]* for the Contract price of ----- *[name of currency]* ----- *[amount in figures and words]* as corrected in accordance with Instructions to Bidders and / or modified by a Memorandum of Understanding, is hereby accepted.

The adjudicator shall be ----- *[name and address of the Adjudicator, if agreed] /* shall be appointed by the Institute for Construction Training and Development (ICTAD).

You are hereby instructed to proceed with the execution of the said Works in accordance with the ----- *Contract documents.*

The Start Date shall be: ----- *(fill the date as per Conditions of Contract).*

The amount of Performance Security is: ----- *(fill the amount as per Conditions of Contract).*

The Performance Security shall be submitted on or before ----- (fill the date as per Conditions of Contract).

Authorized Signature : -----

Name and title of Signatory: -----

Name of Agency: -----

STANDARD FORM: AGREEMENT

This AGREEMENT, made the ----- [day] day of ----- [month] 20----- [year] between General Manager, Lanka Electricity Company (Pvt) Limited, No.411, E.H. Cooray Building, Galle Road, Colombo - 3 [name and address of Employer] (hereinafter called "the Employer") of the one part, and ----- [name and address of Contractor] (hereinafter called "the Contractor") of the other part.

WHEREAS the Employer desires that the Contractor execute ----- [name and identification number of Contract] (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

In Witness whereof the parties thereto have caused this Agreement to be executed the day and year aforementioned, in accordance with laws of Sri Lanka.

.....

Authorized signature of Contractor

Authorized signature of Employer

COMMON SEAL

COMMON SEAL

In the presence of:

Witnesses:

1. Name and NIC No.
Signature
Address
2. Name and NIC No.
Signature
Address

**FORM OF PERFORMANCE SECURITY
(Unconditional)**

----- *[Issuing Agency's Name, and
Address of Issuing Branch or Office]*

Beneficiary: General Manager, Lanka Electricity Company (Pvt) Limited, No.411, E.H. Cooray Building, Galle Road,
Colombo – 3 *[Name and Address of Employer]*

Date: -----

PERFORMANCE GUARANTEE No.: -----

We have been informed that ----- *[name of Contractor]* (hereinafter called "the Contractor") has entered into Contract No. ----- *[Reference number of the contract]* dated ----- with you, for the ----- *[insert "construction"]* of ----- *[name of contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we -----*[name of Agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ----- *[amount in figures]* (-----) *[amount in words]*, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the ----- day of ----- 20--- *[insert date, 28 days beyond end of defects liability period]* and any demand for payment under it must be received by us at this office on or before that date.

[signature(s)]

FORM OF ADVANCE PAYMENT SECURITY

----- *[Name and address of Agency, and Address of Issuing Branch or Office]*

Beneficiary: General Manager, Lanka Electricity Company (Pvt) Limited, No.411, E.H. Cooray Building, Galle Road, Colombo – 3 *[Name and Address of Employer]*

Date: -----

ADVANCE PAYMENT GUARANTEE No.: -----

We have been informed that ----- *[name of Contractor]* (hereinafter called "the Contractor") has entered into Contract No. ----- *[reference number of the contract]* dated ----- with you, for the ----- *construction of* ----- *[name of contract and brief description]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum----- *[amount in figures]* (-----) *[amount in words]* is to be made against an advance payment guarantee.

At the request of the Contractor, we -----*[name of issuing Agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ----- *[amount in figures]* (-----) *[amount in words]*⁴, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation in repayment of the Advance payment under the Contract.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor.

This guarantee shall expire on ----- *[insert date, 28 days beyond the intended completion date]*

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

[Signature]

⁴ The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency (ies) of the advance payment as specified in the Contract.

FORM OF RETENTION MONEY GUARANTEE

----- *[Issuing Agency's Name, and Address of Issuing Branch or Office]*

Beneficiary: General Manager, Lanka Electricity Company (Pvt) Limited, No.411, E.H. Cooray Building, Galle Road, Colombo – 3 *[Name and Address of Employer]*

Date: -----

RETENTION MONEY GUARANTEE No.: -----

We have been informed that ----- *[name of Contractor]* (hereinafter called "the Contractor") has entered into Contract No. ----- *[reference number of the contract]* dated ----- with you, for the execution of ----- *[name of contract and brief description of Works]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, when the works have being taken over and the first half of the Retention Money has been certified for payment, payment of the second half of the Retention Money may be made against a Retention Money guarantee.

At the request of the Contractor, we -----*[name of agency]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ----- *[amount in figures]* (-----) *[amount in words]*⁵, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor has not attended to the defects in accordance with the Contract.

This guarantee shall expire, at the latest, ----- *[insert date, 28 days beyond the Defects Liability Period]*. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

[Signature]

⁵ Insert amount equivalent to the second half of the Retention Money.

Section - 3

Conditions of Contract

Conditions of Contract

Please Refer Section 3 In ICTAD Publication No.ICTAD/SBD/01

STANDARD BIDDING DOCUMENT

PROCUREMENT OF WORKS

Second Edition – January 2007

Including Addendum 01 issued in October 2009 and

Addendum 02 issued in February 2011

Bidder is advised to purchase the above Document from ICTAD

Conditions of Contract shall be read in conjunction with the Contract Data provided under section- 5 Of the Bidding document

VOLUME - 02

Invitation For Bids (IFB)

Invitation For Bids (IFB)

LANKA ELECTRICITY COMPANY (PVT) LIMITED
No.411, E.H.Cooray Building, Galle Road,
Colombo - 03

Contract No: ERD/SDD/PROC/2016/135/T11

Construction of Proposed Injection Moulding Factory for Ante Leco Metering Company at Gonapola Road, Gammanpila, Bandaragama

01. The General Manager Lanka Electricity Company (Pvt) Limited, No. 411, E.H.Cooray Building, Galle Road, Colombo-3, invites sealed bids from eligible & qualified bidders for Construction of Proposed Injection Moulding Factory for Ante Leco Metering Company at Gonapola Road, Bandaragama as described below.

The Works consist of construction of Two Storied Factory Building at Bandaragama Meter Factory Site having total gross floor area of 1154 sq.m (approx.), which comprise of site preparation, Fabrication and fixing of Steel structure with concrete pad footings, plastered & painted 6" & 4" block masonry walls, Zn/Al roof covering on steel frame work, Mineral fiber ceiling, Aluminium doors & windows, sandwich monowall cladding work, tiled / concrete floors including internal cold water supply, drainage, electrical services and Air Conditioning works.

Location of Project : At Meter Factory Site Gonapola Road, Gammanpila, Bandaragama

The construction period is **60 days**.

02. Bidding will be conducted through National Competitive Bidding Procedure.
03. To be eligible for the contract award the successful bidder shall not have been blacklisted and need the following requirements.
ICTAD registration required.
Specialty : **Steel Building Construction**
Grade : **C4 and above** or **EM2 and above**
04. **Qualification requirements to qualify for contract award includes.**
- a Average of the annual value of Turnover of construction work performed in the last five years shall be at least **Rs. 420 Million**
- b Successful completion of one building construction project of similar nature and complexity of proposed building and costing not less than SLR. Seventy Million (70Million) completed with in 60 days or higher value project with in proportionate time period as the main contractor during last 5 years.

- c 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 23 Million**
- d A Technical Officer with NDT(Civil) qualifications with minimum 5 years of experience
05. Interested bidders may obtain further information from Systems Development Manager, Lanka Electricity Company (Pvt) Limited, No. 411, E.H.Coaray Building, Galle Road, Colombo-3 , (Tel: 0112371600/0112371640 , Fax: 0112371680), and inspect the document during normal working hours at the address given above from 28th April 2016 until 10th May 2016.
06. A complete set of Bidding Documents in English Language may be purchased by interested bidders on the submission of a written application to the General Manager,Lanka Electricity Company (Pvt) Limited at the above address from 28th April 2016 until **10th May 2016** from 0900hrs to 1500 hrs upon payment of non refundable fee of **Rs.1,000.00**. The method of payment will be in cash.
07. Sealed Bids in duplicate shall be sent by registered post addressed to the General Manager No. 411, E.H.Coaray Building, 3rd Floor, Galle Road, Colombo-3 or deposited in the tender box at the office of Systems Development Manager, at the above address on or before 1400 hrs on 11th May 2016. Bids shall be enclosed in two separate inner envelopes & one outer envelope and should include name of bidder with the narration " Construction of Proposed Injection Moulding Factory for Ante Leco Metering Company at Gonapola Road, Gammanpila, Bandaragama" on left hand top corner of envelope, duly marking the inner envelopes as "ORIGINAL" and "COPY". Late bids will be rejected. Bids will be opened soon after closing of bid in the presence of the bidders' representatives who choose to attend.
08. Bids shall be valid up to 91 days from the Bid closing date.
09. All bids shall be accompanied by a bid security of Rs. **Seven Hundred Thousand** (SLR. 700,000.00) issued by a recognized commercial bank operating in Sri Lanka approved by the Central Bank of Sri Lanka shall be accepted. The specimen forms given in section 9 Standard Forms shall be used for the purpose. Bid security shall be valid up to 119 days from the bid closing date.
- 10 Pre Bid Meeting will be held at 1000 hrs on 05th May 2016 at the Auditorium at Lanka Electricity Company (Pvt) Limited, No. 411, E.H.Coaray Building, Galle Road, Colombo-3

**General Manager,
Lanka Electricity Company (Pvt) Limited,
No. 411, E.H.Coaray Building,
Galle Road,
Colombo-3.**

Section - 4

Form of Bid and Qualification Information.

Form of Bid

Name of Contract: Construction of Proposed Injection Moulding Factory for Ante Leco Metering Company at Gonapola Road, Gammanpila, Bandaragama

**To: The General Manager,
Lanka Electricity Company (Pvt) Limited
No. 411, E.H.Cooray Building, Galle Road,
Colombo-3**

Gentleman,

01. Having examined the Standard Bidding Document – Procurement of Works [ICTAD/SBD/01 – Second Edition, January 2007], including Addendum 01 issued in October 2009 and Addendum 02 issued in February 2011. 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 Nos. for the sum of Sri Lankan Rupees
.....
.....(LKR) or such other sums as may be ascertained in accordance with the
02. We acknowledge that the Contract Data will form part of our Bid.
03. We undertake, if our Bid is accepted, to commence the Works as stipulated in the Contract Data, and to complete the whole of the Works comprised in the Contract within the time stated in the Contract Data.
04. We agree to abide by this Bid for the period of 91 days from the date fixed for receiving or any extended period , and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
05. 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.
06. We accept/ We do not accept the adjudicator.
07. We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated thisday of2016

in the capacity ofduly authorized to sign

tenders for and on behalf of.....
(IN BLOCK LETTERS)

Signature :.....

Name:.....

Designation :.....

Address :

Witness 1 :

Signature :.....

Name :.....

Address :.....

Witness 2 :.....

Signature :.....

Name :.....

Address :.....

Qualification information

(To be completed and submitted by the bidder, with the Bid)

ICTAD Registration	
Registration number	(attached copies of relevant pages from the registration book)
Grade	
Specialty	
Expiry Date	
Blacklisted Contractors	
Have you been declared as a defaulted contractor by NPA or any other Agency? (Yes/No)	
IF yes provide details	
VAT Registration Number	
Legal Status	(attach certified copies of Memorandum of Articles/Association and details of Company Registration/Incorporation of the Company/Business Registration for Sole Proprietor or partnership).
	Authorization to sign/Commit the Bid) Attach power of Attorney or Board Resolution.
Value of Construction works performed in last 5 years	(attach copies of Certificate of Completion etc. and other documents such as profit-loss and income expenditure statement)
Year	
Year	
Year	
Year	
Year	
Value of similar works completed in last 10 years (indicate only the three largest projects)	1. Value _____ Year _____ 2. Value _____ Year _____ 3. Value _____ Year _____ (attach copies of Certificate of Completion etc., as annex)
Qualification and experience of key staff- Site & Head Office (Permanent, Contract basis & Consultants)	Technical : 1 2 3
	Managerial: 1 2 3
Other information requested under ITB Clause 4.1	Amount of Liquid Assets and/or credit facilities
Details of Credit Facilities.	Details of work in hand attested in the form of an affidavit (including value of balance work of each contract). Documentary proof of establish availability of working capital for work in hand. Rs.

Section - 5

Bidding Data and Contract Data

G. Bidding Data

Instructions to Bidders Clause Reference	
(1.1)	<p>The Employer is</p> <p>Name : The General Manager, Lanka Electricity Company (Pvt) Limited,</p> <p>Address : No. 411, E.H.Coaray Building, Galle Road, Colombo-3</p>
	<p>The Works consist of construction of Two Storied Factory Building at Bandaragama Meter Factory Site having total gross floor area of 1154 sq.m (approx.),which comprise of site preparation, Fabrication and fixing of Steel structure with concrete pad footings, plastered & painted 6" & 4" block masonry walls, Zn/Al roof covering on steel frame work, Mineral fiber ceiling, Aluminium doors & windows,sandwich monowall cladding work, tiled / concrete floors including internal cold water supply, drainage, electrical services and Air Conditioning works.</p> <p>Located at : Meter Factory Site, Gonapola Road, Gammanpila, Bandaragama</p>
(1.2)	Intended Completion Date for the project is 60days from the Start Date.
(1.3)	<p>The office for collection of bid forms is the office of System Development Manager, Lanka Electricity Company (Pvt) Limited, No. 411, E.H.Coaray Building,3rd Floor, Galle Road, Colombo-3</p> <p>The non-refundable Tender fee is Rupees One Thousand. (RS 1000.00).</p> <p>The Bid forms will be issued until 10th May 2016</p>
(2.1) (4.2)	<p>The source of funds is ; Lanka Electricity Company (Pvt) Limited,</p> <p>The registration required ICTAD</p> <p>Specialty ; Steel Building Construction Grade ; Grade C4 or above or, Grade EM2 or above registration with ICTAD shall be valid until the date of closing of the bid. Further registration should be valid at the date of award.</p>
(4.3)	<p>The following information shall be provided in Section 4:</p> <ul style="list-style-type: none"> · ICTAD Registration; Registration number Grade Specialty Expiry Date

	<ul style="list-style-type: none"> · VAT Registration number · Legal Status (Attach certified copies of Memorandum of Articles/Association, Details of company Registration/ Incorporation of the company/Business Registration for Sole proprietor or Partnership) Attach Documents (Power of Attorney or Board Resolution) authorizing the signatory of the Bid to commit the Bidder. · Total monetary value of construction work performed for each of the last five years; to be confirmed by submission of audited financial reports as proof for item 4.4b below · Experience in works of a similar nature and size for the last five years, as a documentary proof for item 4.4c below · Qualifications and experience of key site management, project management and technical personnel proposed for the contract; As per 4.4d below · Details of credit facilities as per 4.4e below · Documentary proof for item 4.4f below · Documentary proof for item 4.4g below · Documentary proof for item 4.4h below
(4.4)	Qualification criteria
4.4a	Bidder must be registered with the Institution for Construction Training And Development (ICTAD) for Steel Building Construction for Grade C4 or above or, Grade EM2 or above
4.4b	· Average of the annual value of Turnover of construction work performed in the last five years shall be at least Rs 420 Million
4.4c	· Successful completion of one building construction project of similar nature and complexity of proposed building and costing not less than SLR.Seventy (70Million) completed with in 60 days or higher value project with in proportionate time period as the main contractor during last 05 years. Recent documentary evidence obtained from client should be attach as a proof for the above which should include project cost, time duration taken to complete the project, Number of storeys and date of completion.
4.4d	Following technical and Managerial Staff: <ul style="list-style-type: none"> · Resident Technical Officer with NDT(Civil) with 5 years relevant construction experience should be assigned to the project. · Managerial-Civil Engineer with B.Sc(Eng) with 5 years relevant construction experience and a Quantity Surveyor with NCT at least 5 years experience should be assigned to the project in addition to the other technical staff needed by Bidder for satisfactory execution of the project.
4.4e	· 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 exclusively under the contract shall be not less than Rs 23 Million
4.4f	· Details of work in hand of the bidder duly attested in the form of an affidavit shall be provided with separate statements showing the contract value, percentage of work completed ,value of balance work to be done and the target date of the completion for each of the works listed and shall be countersigned by the Engineer/ Employer or consultant.
4.4g	· Documentary proof to establish the availability of working capital requirement for the work in hand shall be furnished.(Generally working capital required for the work in hand shall be considered as 20% of value of work in hand)

4.4h	· The total value of work in hand at the time of closing of the bid including the contract price of this contract should not exceed the ICTAD registration value of the bidder
4.4i	· Even though the bidder meets the above qualifying criteria they are subject to be disqualified if they have made misleading or false statements in proof of qualification requirements.
4.4j	· Nun submission or partial submission of the documents listed above shall lead to rejection of the bid.
(9.1)	Employer's address for the purpose of clarification is; Name : Systems Development Manager, Lanka Electricity Company (Pvt) Limited, Address : No. 411, 3rd floor, E.H.Cooray Building, Galle Road, Colombo-3 Tel/Fax : Tel: 0112371600/0112371640 , Fax: 0112371680
(11.1)	The Language of the bidding document shall be English
(12.0)	Any other information: None
(13.3)	VAT component shall not be included in the rates. The amount written in the Form of Bid shall be without VAT. However VAT component shall be shown separately at the end of the BOQ Summary.
(13.4)	The contract is not subjected to price adjustment in accordance with Clause 47 of the Conditions of Contract.
(15.1)	The Bid shall be valid up to 91 days from the Bid closing date.
(16.1)	Bid shall include a Bid security using the form included in section 9.
(16.2)	Bid Security shall be: · for an amount of Rupees Seven Hundred Thousand (Rs 700,000.00) · Valid until 119 days from the bid closing date.
	· issued by a recognized commercial bank operating in sri lanka using the form of Bid Security (un conditional guarantee) included in section 9 Standard Forms(Bid) shall be accepted.

(17.0)	Pre-Bid meeting : Venue : Auditorium Lanka Electricity Company (Pvt) Limited, No. 411, E.H.Coaray Building, Galle Road, Colombo 03. Date : 05th May 2016 Time : 10.00 am
(19.2) a	The Employer's address for the purpose of Bid submission is Office of Systems Development Manager, Lanka Electricity Company (Pvt) Limited, No. 411, 3rd Floor, E.H.Coaray Building, Galle Road, Colombo 03. Sealed bids shall be sent by registered post to the above address or deposited in the tender box provided for, in above address before the dead line for submission of bids.
(19.2) b	Contract name: Construction of Two Storied Injection Moulding Factory for Ante Leco Metering Company at Gonapola Road, Gammanpila, Bandaragama
	Contract No: ERD/SDD/PROC/2016/135/T11
(20.1)	The deadline for submission of Bids shall be on or before 1400 hrs on 11th May 2016.
(34.0)	The amount of Performance Security is 5% of the Initial Contract Price and obtained only from a reputed commercial bank operating in srilanka.
(36.0)	Appointing authority for Adjudicator shall be Institute of Construction Training And Development (ICTAD) Fees and types of reimbursable expenses to be paid to the Adjudicator shall be on a case to case basis and shall be shared by the Contractor and the Employer.

Contract Data

(Please note that the Clause nos. given hereunder are that of Conditions of Contract)

(1.1) The Employer is

Name : Lanka Electricity Company (Pvt) Limited,
Address : No. 411, E.H.Cooray Building, Galle Road, Colombo-3

Name of Authorized Representative: **General Manager**

(1.1) The Engineer is

Name : **Architrend Consultants**

Address : **No. 35, Vihara Mawatha, Pepiliyana**

(1.1) The Works consist of construction of Factory Building (two storied) having total gross floor area of 1154 sq.m (approx.).

(1.1) The Site is located at **Meter Factory Site, Gonapola Road, Gammanpila, Bandaragama**

(1.1) The Start Date shall be within **14 Days** from the issue of Letter of Acceptance.

(8.1) Schedule of other contractors: **None**

(9.1) Schedule of Key Personnel :

Minimum persons with qualifications and experience ,

(a) Technical

• Resident Technical Officer with NDT (Civil) with 5 years relevant construction experience to be assigned to the project and employed full time at site.

(b) Manager

• Managerial-Civil Engineer with B.Sc(Eng) with 5 years relevant construction experience should be assigned to the project in addition to the other technical staff needed by Bidder for satisfactory execution of the project.

(13.1) The minimum insurance covers shall be:

(a) • The minimum cover for insurance of the Works and Plant and Materials is **110% of initial Contract Price.**

•The maximum deductible for insurance of the works and of Plant and Materials is **5% of initial Contract Price.**

(b) •The minimum cover for loss or damage to Equipment is **The replacement cost**

•The maximum deductible for insurance of Equipment is **5% of the minimum cover for Equipment.**

(c) •The minimum cover for insurance of other property (other than The Site but including property belongs to the employer) is **Rupees 5,000,000.00**

- (d) The minimum cover for personal injury or death,
 • for third party and employees of the Employer and other persons engaged by the Employer in the Works is **Rupees1,500,000.00** per event
- (13.2) (a) The minimum cover for personal injury or death,
 for the Contractor's Workmen is **Rs. 1,500,000.00** per event.
- Contractor's employees other than workmen is **Rs.1,500,000.00** per event
- (17.1) The Intended Completion Date for the whole of Works shall be **60 Days** from the Start Date
- (21.1) The Site Possession Date shall be within **14 Days** from Letter of Acceptance.
- (27.1) The Contractor shall submit a Program for the Works within **14 Days** of delivery of the Letter of Acceptance.
- (27.3) The period between Program update is **one month**.
- (27.4) The amount to be withheld for late submission of an updated program is **1% of Initial Contract Price**
- (35.1) The Defects Liability Period is **365 Days**.
- (39.2) Engineer may order variations up to cumulative value of not exceeding Rs. 6,000,000.00 with the prior approval of the employer.
- (47.1) The contract price is not subjected to price adjustment.
- (48.1) The retention from each payment shall be **10 %** of the certified work done.
 The limit of retention shall be **5 %** of the **Initial Contract Price**.
- (49.1) The liquidated damages for the whole of the Works shall be **0.05% of the Initial Contract Price** per Day.
- (50.1) The maximum amount of liquidated damages for the whole of the Works shall be **10 % of the Initial Contract Price**.
- (51.1) Advance Payment- maximum of **20%** of contract sum on an unconditional on demand Bank Guarantee issued from a reputed commercial bank operating in Sri Lanka (excluding contingencies & provisional sums)
- (51.3) Recovery of advance shall be at the rate of 25 % value of work done commencing from first Interim valuation after advance payment.
- (52.1) The performance security shall be **5 %** of the Initial Contract Price issued from a reputed commercial bank operating in Sri Lanka.
- (60.1) The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is **25%**.
- (63.7) The attendance fee payable to contractor on nominated sub- contract work shall not exceed 5%

Section - 6

Specifications & Pricing Preambles

GENERAL SPECIFICATIONS.

1. Specifications for Building works - Volume I - ICTAD Publication No. SCA/4 /I
3rd Edition (Revised) – 2004 July
2. Specifications for Building works - Volume II Sanitary Installations.
ICTAD Publication No. SCA/4/II
2nd Edition (Revised) –2001 October
3. Specifications for Water Supply & Sewerage and Storm Water Drainage works
ICTAD Publication No. SCA/3/2.
2nd Edition (Revised) –2002 April
4. Specification for Electrical and Mechanical Works associated with Building & Civil Engineering .
ICTAD Publication No. SCA/8.
2nd Edition (Revised) –2000 August

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 the Institute for Construction Training And Development (ICTAD) , "Sawsiripaya" , Wijerama Mawatha, Col 07

PARTICULAR SPECIFICATIONS

The Particular Specification shall be read in conjunction with the General Specification where applicable. In the event the Particular Specification is in conflict with the General Specification, the Particular Specification shall prevail.

Note:

SPECIFICATION FOR CONCRETE WORKS

IN-SITU CONCRETE

mixes are follows:

Grade 30 - 20mm aggr. (suggested mix 1:1:2)

Grade 25 - 20mm aggr. (suggested mix 1:1 1/2:3)

Grade 20 - 20mm aggr. (suggested mix 1:2:4)

Grade 15 - 25mm aggr. (suggested mix 1:2:5)

Grade 10 - 25mm aggr. (suggested mix 1:3:6)

REINFORCEMENT IN INSITU CONCRETE

Reinforcing steel shall conform to the following;

Grade $f_y = 460 \text{ N/mm}^2$ - Deformed high yield steel bar reinforcement conforming to BS 4449: 1997

Grade $f_y = 250 \text{ N/mm}^2$ - Plain round steel bar reinforcement conforming to BS 4449: 1997

Contractor shall produce a certificate of origin from the manufacture and a test certificate of compliance with the relevant Sri Lanka and British Standard from an approved Laboratory at the Contractor's own cost.

READY MIXED CONCRETE

Reinforced Cement Concrete Requirements Of Ready Mixed Concrete

Specification of Concrete mix.

The Concrete used shall be ready mixed concrete in accordance with the Requirements of BS 5328 and also conform to the following.

- (a) It shall be a designed mix.
- (b) Cement used shall be ordinary Portland cement conforming to BS 12:1989
- (c.) Coarse and fine aggregates used shall conform to BS 882:1983.
- (d) Nominal maximum size of aggregate shall be 20mm.
- (e) Concrete shall be of grade 25 or grade 30 as specified.
- (f) Minimum cement content 275 kg/m^3
for every 50m^3 of concrete placed.
- (h) Slump shall be not less than 100mm and not to exceed 160mm.
- (I) Maximum free water / cement ratio 0.60
- (j) Maximum cement content 450 kg/m^3
- (k) Any admixture used shall be with prior approval.

The contractor shall submit the designed mix specification to the Engineer for prior approval.

TESTING CONCRETE WORK

Samples

Concrete for the works shall be sampled in accordance with BS 1881.

Workability

The workability of concrete shall be determined by the slump test as described in BS 1881 or by an alternative approved method.

Tests for Strength

Sampling and testing of works concrete shall be carried out in accordance with BS 1881. Compliance of the concrete with the specified characteristic compressive strength shall be determined in accordance with Clause 3.16 and 3.17 of BS 5328 part 4:1990.

Records of Tests

The contractor shall keep a detailed record of the results off all tests on concrete and concrete materials. Each test shall be identified with the work to which it relates.

Batching Concrete

Tolerance in Weights

The weights of the quantities of each size of aggregate and of cement shall be within a tolerance of 2% of the respective weights per batch after due allowance has been made for the presence of free water in the aggregates which shall be determined by the contractor by an approved method.

Moisture content of aggregates

The moisture content of aggregates shall be measured immediately before mixing and as frequently thereafter as in necessary to maintain consistency of mix.

Mixing Concrete

Type of Mixer

The mixer shall be of the batch type, unless otherwise approved, and shall have either been manufactured in accordance with BS 1305 or shown by tests in accordance with BS 3963 to have mixing performance within the limits of Table 6 of BS 1305.

Tolerance of Mixer Blades

Mixing blades of pan mixer shall be maintained within the tolerance specified by the manufactures of mixer, and the blades shall be replaced when it is no longer possible to maintain the tolerance by adjustment.

Cleaning of Mixers

Mixer which have been out of use for more than 30 minutes shall be thoroughly cleaned before another batch of concrete is mixed. Unless otherwise specified by the Engineer, the first batch of concrete though a mixer shall contain the normal batch quantity of cement and sand, but only two thirds of the normal quantity of coarse aggregate. Mixing plant shall be thoroughly cleaned between the mixing of different type of cement.

Transporting Concrete

The method of transporting concrete shall be submitted for approval. Concrete shall be transported in uncontaminated water-tight containers in such a manner that loss of material and segregation are prevented.

Pumping Concrete

The use of pumped concrete and the methods employed in its use shall be subjected to approval.

SPECIFICATION FOR EXCAVATION AND EARTHWORK

Earth Filling

Borrow Material

Borrow material shall comply with the following specifications:

- a) It shall be tested for its suitability by a recognized testing organization acceptable to the Engineer. It shall be well graded soil mixture with gravel and sand – not less than 70% silt and clay – not more than 30%
- b) The Contractor shall forward from each borrow pit at different levels, the test results of particle size distribution and Proctor compaction tests by a recognized testing organization to the Engineer for approval.
- c) It shall be free of vegetation, roots and such other deleterious material.
- d) Maximum dry density at optimum moisture content (Standard Proctor Density) shall not be less than 1.6 gm/cm³.
- e) Maximum size of particles shall not exceed 120 mm.

Placing of Fill Material

The distribution and gradation of the material throughout the fill shall be carried out as directed by the Engineer, so as to ensure that the fill will be free from lenses, pockets, streaks, or layers of material differing substantially in texture or gradation from the surrounding material. The borrow excavation and placing operation shall be such that the materials when compacted will blend sufficiently to secure the best practicable degree of compaction and stability. Successive loads of material shall be dumped and spread so as to produce the best practicable distribution of material and for this purpose the Engineer may designate the locations in the fill areas where individual loads shall be deposited.

The fill material shall be placed in layers not exceeding 225-mm thickness in loose state. The fill shall be compacted at each lift to not less than 90% of the Standard Proctor Density for the building area. For the earth filling along the road way and access roads, the fill shall be compacted at each lift to not less than 100% of the standard Proctor density. The thickness of the 1st layer may be increased to facilitate compaction with the approval of the Engineer.

The method of compaction shall be approved by the Engineer.

Moisture Control

The moisture content of the fill material prior to and during compaction shall be maintained and distributed uniformly through each layer. The allowable placement moisture content will be determined by the Contractor on Engineer's approval so that fill placement can be made under optimum moisture content of the fill material.

Density Control

To determine the dry density requirements of the compacted fill, field and laboratory tests shall be made on samples of compacted material taken on a 10-m grid.

Method of Measurement

The quantity of fill material shall be determined by measuring the depth by auguring and multiplying by the area each auger hole represents. All such quantities shall be added to determine the total quantity. Interim payments shall be made on quantities estimated by the Engineer.

General Construction Methods

The Engineer shall have complete control over the excavation, moving, filling and disposition of all material and shall determine the suitability of material to be placed in fill areas. All material determined unsuitable shall be placed in spoil area and / or removed from site as directed by the Engineer.

The Contractor shall inform and satisfy as to the character, quality and distribution of all materials to be excavated filled, spoiled and borrowed.

Should the Contractor through negligence or other fault excavate or fill beyond the designated lines, he shall replace/remove such excavation/fill in an approved manner and conditioned at his own expense.

SPECIFICATION FOR ALUMINIUM DOORS AND WINDOWS

General

Aluminium glazed units shall be supplied with all hardware furniture and fittings.

The Contractor shall submit to the Engineer the shop drawings and technical data and other relevant information for approval of the Engineer.

The Contractor shall include in his rates the cost of tests generally required for ascertaining the suitability of aluminium extrusions, anodizing, strength of joints, gaskets and weather stripping, strength of joints and air and water infiltration.

Materials

Aluminium sections for mullions, frames, transoms, heads and the sills and the other members should strictly comply with the requirements laid down in the following British Standard..

B.S. 1161: 1977 (1991) – Specification for aluminium alloy sections for structural purposes

B.S. 1470 : (1987) - Wrought aluminium and aluminium alloys plate, sheet and strip.

B.S. 1474 :(1987) – Wrought aluminium and aluminium alloys for general engineering purpose and external architectural application bars, extruded down tubes and sections.

Powder Coating

Powder coating shall conform to BS 6496:1984(1991). The powder coating shall be of thickness 60-80 microns and of approved colour. The Contractor shall submit a ten (10) year guarantee for the powder coated finish. The Contractor shall allow for cost of required tests for checking the coating as directed.

Wind Loading

The fabricated aluminium doors and windows shall be capable of withstanding a wind pressure load not less than 1500 Pascal's (75 M.P.H.)

Weather Stripping

The weather stripping shall be vinyl or other plastic materials which are dimensionally stable and are resistant to ultra violet rays, water absorption and are suitable to be used in marine atmosphere.

Screws Nuts etc.

All screws, nuts, washers, bolts, rivets and other fastening devices should be of stainless steel.. Aluminium alloy fasteners may be used in lieu of stainless steel fasteners with the written approval of the Engineer.

Ironmongery

Ironmongery used shall satisfactorily perform the function for which it is intended. They shall be of aluminium die cast alloy, stainless steel or other non-corrosive materials compatible with aluminium. The Engineer shall duly approve all items of ironmongery before fixing in position.

Glass

Glass shall be clear glass and Bronze colour lightly tinted float glass suitable for single glazing and having a thickness (5 mm & 6 mm) as specified. Glass shall conform to the relevant British Standard including following:

B.S. 952 Part I: 1995 – The classification of glass for glazing and terminology for work and B.S. 952 Part 2 of 1980.

Tempered glass partition

All glass work shall be manufactured and meet the specifications as stated under the relevant American Society of Testing Materials (ASTM). The design shall duly take into consideration dead and live loads such as wind, seismic, thermal, creep and other building movement, the effects of wind loads both positive pressure and negative suction pressures, and its applied stresses on all the components of the Glass Façade.

The materials used shall consist of fully tempered clear glass Grade A (as per AS2208 or equivalent with smooth raised and flat polished edges free from any defects of fully tempered clear glass of specified thickness. Use of annealed glass from Pilkington or Guardian Glass for tempering is highly recommended and use of any other sources would have to be recommended complete with their manufacturing, and quality control processes to be of equivalent standard to either of these two sources. All tempered glass lites shall carry the tempering logo of the tempering facility and also state the standards.

All fittings, tension rods, steel brackets as shown in the shop drawings shall be of Stainless steel Grade AISI 316 or 316L. All stainless steel finishes shall have a satin, matt or hairline finish to the approval of the consultants.

The sealant used shall be non acidic and with joint movement as per the designers recommendation. The recommended weather seal silicone being DC 795 or DC 995. All silicone shall be applied strictly in accordance with the Silicone Manufacturer's recommendations. The Silicone Manufacturer to certify the Design Engineers silicone jointing and silicone selection as being suitable for the stated design, after a drawing review, and come with the Silicone manufacturer's 5 year warranty. The installer shall provide proof of the validity of the shelf life of the silicone prior to application, and silicone with expired shelf life shall not be used.

All glass performance shall be tested and warranted by the respective manufacturers/processing facilities. Test certificates shall be supplied as pre-shipment certificates prior to shipment and also have manufacturer's mill certificates or quality certification. Mill certificate from the manufacturer will also be accepted, where the manufacturer is ISO 9000 certified and has complete laboratory testing facilities to establish the material composition, and strength.

Assembly

The design of windows should permit free movement of air from exterior environment to the immediate spaces between the window frame and ventilator to achieve pressure equalization. The windows should have snap on reusable extruded aluminium glazing beads and easily removable bottom rails.

The glazing beads should not extend underneath the glass. The design of windows should permit re-glazing without disassembly all ventilator extrusions from the frame.

All open able window sash corners should be mitered angle reinforced or mechanically staked and Epoxy painted. If frames with incompatible extrusions are used, then these extrusions should be mortised and tenoned. A permanent watertight joint should be made to the junctions of the side frame members with all horizontal members. Window panels must be provided with minimum three weep holes, one at the center and one each between the jamb and the setting block. Fixing of aluminium units to concrete shall be done with high quality Rawl Plugs with stainless steel sections and other approved fixing devices. Where friction stays are used the shop drawings shall clearly indicate the size of such stays. The joint between window frames, external door frames and concrete or masonry work shall be adequately caulked with a suitable caulking compound. Polysulphide or Silicon sealant may be used for this purpose. The Contractor shall furnish all literature and instructions published by the manufacture of the sealant along with the Tender. Only caulking compound approved by the Engineer in writing shall be used.

Air and Water Infiltration

The Contractor shall submit test certificates from the manufacturer of aluminium extrusions guaranteeing that the products comply with standards applicable to the country of origin of these materials.

Fabrication and installation of aluminium units shall be thoroughly watertight.

The degree of resistance to air leakage shall be Grade A (Superior resistance) recommended for air-conditioned buildings.

SPECIFICATIONS FOR ROOF COVERING

1.0 SHEETING FOR ROOFING AND FASCIA

Sheeting material be Zinc Aluminium coated corrugated roll – formed high tensile steel sheet to AS 1397 – G 550 – AZ 150. Finish of sheeting shall be factory pre-painted with an oven baked Silicone/Polyester finish of an approved colour. Total coated **thickness of the sheeting shall be not less than 0.47 mm.** Type of profile shall be suitable for internal support spacing of approximately 1200 mm. Contractor is required to cut sheets to suit purlin centers (already fixed) and supply sheets accordingly.

The design installation of sheeting shall conform to AS 1562 and the Manufacturer's specifications.

12 x 45 mm Zinc coated self-tapping fasteners with neoprene washers shall be fixed on each rib on purlins at top, bottom and laps of sheets, and on every other rib on intermediate purlins.

The rates for corrugated sheet roofing and fascia shall include for the following.

Hoisting and fixing complete with all nails, spikes, screws, clips etc. and all straight and square cutting and waste.

Bending sheets around angles, forming roll edges at barges and the like.

Mitered hips and angles.

2.0 FLASHING, FASCIA CAPPING AND RIDGE CAPPING

Standard and /or non standard Flashing, Fascia capping and ridge capping shall be provided in materials and finish to match sheeting specifications stated in 1.0. However, the total coated thickness of flashing and capping material shall be not less than 0.60mm.

3.0 ALUMINIUM FOIL BUBBLE REFLECTIVE INSULATION

Roof insulation shall be of 4.5mm thick Fire Retardant, single extrusion, Double sided Aluminium foil insulation of properties equivalent to “McFoil Ultra” to approval of the Engineer.

The foil insulation shall be supported on the 75mm x 75mm square type approved G.I mesh supplied by Metroof or equivalent to Engineer’s approval .

SPECIFICATION FOR ELECTRICAL INSTALLATION.

1.0 GENERAL

1.1

The electrical installation shall be for 400V, 3 phase / 230V single phase 50 Hz. A.C. Supply all accessories used in the installation shall be for the appropriate working voltage.

1.2

Execution of work in very respect shall be to the satisfaction of the client / consultant and conform to the 17th edition of IEE (London) regulations. Any deviation shall have to be approved by the consultant.

1.3

The position of electrical fittings etc. shown in the drawings are approximate and exact position to be decided at site.

1.4

When procuring main cable Contractor shall take in to account the actual physical measurement to avoid joints. Special orders shall be placed with the manufacturers for cable length more than 100 meters.

1.5

Before conduits pipes are laid on ceilings a conduit layout drawing shall be prepared by the Contractor for the approval of the consultant.

1.6

It is the responsibility of the Contractor to repair all walls, slabs, etc. to the satisfaction of the client.

1.7

All items shall be of reputed makes and samples shall be forwarded to the consultant for approval. In case of main switch board reputed manufacturer approved by the consultant shall make boards.

1.8

All imported materials and fittings shall have the country of origin and the British Standard number marked.

1.9 The complete electrical installation shall be fully re-wirable type in concealed rigid PVC systems unless otherwise specified

1.10 Fixing Heights

Fixing heights from floor levels, unless directed otherwise shall be as follows:

· MCCBs	1.5m
· Distribution Boards	1.7m
· Main Distribution Boards	1.7m
· Lamp fittings	2.4m
· Ceiling fans	2.5m
· Switches and fan regulators	1.4m
· Socket outlets for general use	0.45m

2.0 EQUIPMENTS SPECIFICATIONS

2.1 MDCs / DBs

Shall be metal clad or plastic flush mounted type and be of a reputed make conforming to BS 5486 or equivalent. It shall be with a Hinged door; bus bars neutral bar and earth bar shall be of hard drawn copper.

2.2 Miniature Circuit Breakers (MCB)

MCB shall be of a reputed make having thermal over load and magnetic short circuit protections and shall conform to BS 3871 DIN rail type. The breaking capacity shall be more than 6KA and type 2 shall be used for the lighting circuits and motor circuit type 3 shall be used.

2.3 Residual Current Devices (RCDs) (RCCBs)

RCDs's shall be current balance type complying with BS 4293 sensitivity shall be 30mA. Or as specified in the drawings.

2.4 Switch Fuses

Switch shall be of reputed make conforming to BS 5419 molded case type for single phase and iron clad type for 3 phase having re-wirable conforming to BS 3036

2.5 Molded Case Circuit Breakers (MCCB)

MCCB's shall be of reputed makes conforming to BS 4752. It shall have on breaking capacity more than 25KA and shall have adjustable thermal over load and magnetic circuit protection. Individual MCCB's shall be enclosed in a metal enclosure with a suitable neutral link. Operating handles shall be project outside the enclosure. It shall be of fixed type having bus bar connecting type terminals to fix cables with crimped cable end sockets.

RECOMMENDED MAKES

Main Distribution board - KIK, Magline, Roche, Electro

MCCBs - Merlin Gerin, Terasaki, ABB, Siemens

MCBs - ABB, Hager, Merlin Gerin, Siemens.

ELCBs - ABB, Hager, Merlin Gerin, Siemens.

MCB Boards - KIK, Magline, Roche, Electro serve

Switches and socket outlets - Legrand, ABB, Clipsal,

Fluorescent tubes - Thorn, Phillips, Osram, National

Fluorescent chokes - Optima, ATCO, Phillips, BG

Fluorescent capacitors - British, German or Italian Make

PVC cables - ACL, Kelani

Indicator Lamps - Telemecanique or equivalent

Ceiling Fans - K D K, National

High Bay Lamps - Philips, Thorn, Osram or equivalent

CFL bulbs - Philips, Osram

PRICING PREAMBLES

GENERALLY

Provision has been made for the total of each page to be collected at the end of each bill of these Bills of Quantities.

The Contractor should allow against the items or in the prices for everything contained in these Bills of Quantities which has a monetary value.

Lump sums shall not be given where unit rates are applicable.

Payment against any item in the Bill of Quantities will be made only if such item has actually been carried out by the contractor. If the Contractor intends to execute any alternative method of construction, the Engineer's prior approval thereof shall be obtained prior to execution of such work in order to ensure payment against the relevant item.

Unit rates may be used reciprocally in the settlement of accounts unless conflict between them occurs. The Contractor is, therefore, to ensure that identical items occurring in separate bills are not priced at different rates unless this is his deliberate intention.

The Contractor shall check against the summaries that each copy of the Bills of Quantities is complete in the number of pages and in the reproduction of each page.

The Contractor's prices and extension shall be entered in waterproof ink.

Unit rates and extensions shall be given in Sri Lankan Rupees to a maximum of two significant places of decimals.

The various documents collectively referred to herein as the Bills of Quantities jointly constitute the Bill of Quantities referred to in the Conditions of Contract.

These Bills of Quantities have been measured generally in accordance with the principles laid down in the Method of Measurement of Building Works and rates shall include for everything required for complete sections of work in accordance with the specifications and drawings.

In the Bills of Quantities, if any materials/ fittings are described by using a trade name, it is only for the purpose of indicating the minimum level of quality and standard required. The Bidder may use any other material/ fittings, which are considered as equivalent in quality and standard to those specified therein subject to the approval of the "Engineer"

Items in the preambles section of these Bills of Quantities are deemed to qualify and to form part of every description of measured work to which they refer including composite descriptions.

No amendment which has not been authorized in writing by the Engineer shall be made to these Bills of Quantities.

The Contractor shall not use these Bills of Quantities as a construction program or for the purposes of ordering materials or arranging sub-contracts. The references for these activities shall be the drawings, specification and instructions issued by the Engineer.

These pricing preambles are a standard and comprehensive set and hence may exceed the requirements of this particular project.

Format for Descriptions

In addition to common abbreviations the following have been adopted:

m	–	meter	m ²	–	square meter
m ³	–	cubic meter	mm	–	mille meter
nr	–	number	t	–	tone
kg	–	kilograms	h	–	hour
CP	–	Code of Practice	BS	–	British Standard
BOQ	–	Bills of Quantities			

Every description shall read as if the phrase “and the like” were incorporated into it.

Where specific classifications have been given but are deemed to include other categories of work only the classified item shall be given in descriptions.

“Prices also to include”; items under this heading fall into two categories :

- a) Those which are deemed to be included in descriptions and therefore, in prices.
- b) Those for which the Contractor shall allow in his prices.

“Approved”, “Directed”, “Selected” and similar expressions shall relate to the Engineer’s decision.

“Falls”, “Slopes”, “Weathered” : inclined from the horizontal in one plane.

“Cross Falls”, “Cross Slopes”, “Cross weathered” : inclination from the horizontal in more than one plane.

Prices also deemed to include

Rates shall be comprehensive and include for the following:

All obligations imposed by the Contract.

Complying in every respect with the requirements and the considerations of the specifications and drawings.

All considerations arising from the definitions incorporated into each preamble section.

Labour for fixing and all associated costs.

Materials and goods and all associated costs.

Fitting and / or fixing materials and goods in any position, hoisting to any height.

Use of scaffolding, plant, equipment and tools.

Allow for protection of finished surfaces/fittings etc. of all work sections.

Any additional labours usually associated with measured items.

All measurements are net and the rates shall include for all laps(except for steel reinforcement where the quantity of laps is included in the BOQ quantity), waste, working space and trade or traditional allowances.

The pricing of materials shall take account of the following :

Pricing Preambles, Drawings and Specifications shall apply reciprocally between sections of the works unless otherwise described.

Materials shall be of the best quality available unless otherwise described.

All materials shall be transported, handled, stored and fixed in accordance with the printed instructions or recommendations of their manufacture or suppliers.

Protection of completed work, all casings and temporary coverings and making good and clearing away upon completion.

Building paper, damp proof membrane, quilts and all non-rigid sheet materials shall include cutting or forming holes and notching and the extra labour of turning up at edges and the like.

Duct shall include draw wires.

Holes, mortises, pockets, grooves, chases and the like and items described as “built in” and “cast in” shall include making in its fullest sense and through, around, into over and up to the items concerned.

Items described as “cut” shall include general making good similarly.

Where the word “allow” is used the cost of the items shall be the responsibility of the Contractor.

The Contractor shall obtain from all sub-contractors (weather nominated or otherwise) their requirements for all recesses, chases, holes and the like in order that they may be built in or formed as the work proceeds. No additional charges shall be allowed for cutting recesses, chases and holes and the like after the construction of the works.

In the event of their being any discrepancies between details on drawings, descriptions in specifications and descriptions in the Bills of Quantities then the rates and pricing shall be deemed to relate to the documents order of precedence set out in the Form of Agreement.

The amounts set against any Provisional Sums for supply of materials shall be the net CIF amount adjusted for all discounts and customs duties. The amounts set against any items of profit shall include for all costs in connection with letters of credit, bank charges, interest charges and insurance after the materials come under the control of the Contractor.

The Contractor should leave the whole of the works ready for immediate occupation to the satisfaction of the Engineer including the following :

- a) Cleaning and touching the buildings both inside and out, leaving all surfaces free of cracks, blemishes or splashes.
- b) Easing, oiling and adjusting and making good of finishes to all fittings, doors, windows, ironmongery and the like.
- c) Cleaning and polishing all marble glass, anodized aluminium and sanitary ware, including the removal of all protective coverings, paint splashes and the like. Replacements of all or any chipped, cracked or broken items.
- d) Balancing of air conditioning installations where applicable.
- e) Removal of rubbish, debris or excess spoil from the site area and raking over and cleaning all unused parts of the site area.

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 and 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 items 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.

Sub – Contractors

Sub-contractors, whether nominated or not, are to be let on a current form of sub-contract designed for use in conjunction with the General Conditions of Contract amended as necessary to incorporate the appropriate provisions of the main Conditions of Contract.

The Contractor should ascertain from sub-contractors and suppliers before the work is put in hand particulars of positions in which chases, holes, mortises and the like will be required to be formed or left. No claim for the extra costs of cutting away work already built due to the Contractor’s failure to ascertain these particulars will be admitted.

Any local sub-contractors which the Contractor proposes to use for the works are subject to the approval of the Engineer and Employer.

The Contractor shall provide for approval a list of sub-contractors who will be employed on the works.

If the Contractor is refused permission to use any of his proposed sub-contractors then the work shall be sub-let at no extra cost to an approved sub-contractor.

Any sub-contractor who has not been approved by the Engineer shall not be used in connection with the carrying out of the works.

Nominated Sub-Contractors

At the time of every valuation of the works for certificate purposes the Contractor shall submit to the Engineer a statement from each of the nominated sub-contractors showing:

- a) The gross amount (including cash discount and retention) claimed in the current certificate.
- b) The net amount received from the Contractor to date excluding agreed contra charges.

Amounts in respect of nominated sub-contractors will not be included in valuations unless these statements are received.

These statements will be accepted as reasonable proof of payment to nominated sub-contractors under the Conditions of the Contract but otherwise the received invoices of nominated sub-contractors are to be submitted to the Engineer as proof of such payments.

At the time of the settlement of accounts and as one of the documents referred to in the Conditions of Contract the Contractor is to obtain a statement from each of the nominated sub-contractors that the sums and / or credits to be included in the settlement of accounts in respect of such nominated sub-contractors are accepted in full and final settlement of their sub-contracts.

The word “attendance” means that Contractor shall provide the following attendances and facilities :

- a) Use of Contractor’s administrative arrangements.
- b) Use of Contractor’s constructional plant at site.
- c) Use of Contractor’s facilities at site.
- d) Use of temporary works at site.
- e) Clearing away rubbish from the central point of collection.
- f) Use of Contractor’s scaffolding at site.
- g) Unloading, distributing, hoisting and placing in position items of plant and machinery.
- h) Supplying full size setting out templates and giving and marking dimensions and taking responsibility for their accuracy.
- i) Providing working space and stores.
- j) Other necessary and usual facilities, documentation, general inter-trades attendance, labour and assistance.

The Contractor shall allow for any additional costs incurred due to sub-contractors working different hours from and extended hours to those worked by the Contractor.

Prime Cost Sums in Unit Rates

Certain rates within the Bills of Quantities will include Prime Cost Sums. The material specification and fixing details will be specified. The Contractor is to include against each heading the necessary uplifts and additions required to give his final rate. This rate will then be carried to the relative places within the Bills of Quantities.

These prime cost sums are subject to alteration and no additional claim will be allowed for the varying of these items.

SECTION: EXCAVATION AND EARTH WORK

Definitions

Rock is defined as any material met with which is of such size or position that, in the opinion of the Engineer it can only be removed by means of wedges, special plants or explosives.

Method of Measurement

The method of measurement and remeasurement will be entirely at the discretion of the Engineer but generally will be as follows :

- a) Where there is no reduced level excavation, other excavations will be measured from natural ground level.
- b) In instances where there is excavation to reduce levels other excavations will be measured from the reduced level.

Should the Contractor be able to use any excavated material arising from the works as general filling then it shall be measured as material back filled in making up levels with a deduction of items for filling and for material removed from site.

Prices also to include

Rates for excavation shall be deemed to include for the following.

- a) Excavating by whatever means are necessary including hand excavation in any kind of ground, except rock .
- b) Over break including filling with mass concrete to the levels required by the Engineer.

c) Trimming or grading ground to produce level surfaces or surfaces to falls or slopes.

Ramming and compacting sides and bottoms of excavations.

Additional excavation for working space arising out of any cause, as excavation measured net unless otherwise specified in item description.

Any hand excavation required around existing services or the like.

Compliance with relevant acts, by laws and regulations relating to excavations and earth work supports.

Inspection of Site.

Hard Rock

The tenderer at the time of preparing the tender shall ascertain the prevailing laws and regulation as to the legal requirements of blasting rock and shall allow in his prices accordingly.

Hard rock requiring blasting

Rates for excavation in rock requiring blasting shall include for:-

Obtaining all necessary permits and taking precautionary measures during blasting operation.

Complying with all regulations and instructions issued by relevant government or local government authorities.

Additional Insurance cover; if necessary.

Sledding and stock piling excavated rock etc. as directed by the Engineer. (Maximum distance of stock pile 100 meter from the point of excavation).

Note:-

For the purpose of measurements, percentage of voids in stock pile shall be taken as 20% the volume considered for payment shall be the gross volume of stock pile X 0.80

Earth work support

Provisional quantities of earth work support (planking and strutting) are given in the BOQ.

Payment for earth work supports will only be considered if physically carried out at the site.

The Contractor shall obtain the prior approval of the Engineer before carrying out any alternative method of earth work supports than specified in the Contract.

Termite Protection/Applying Insecticides.

The quantity measured in the BOQ is the plinth area of the building in square meters.

The bidder shall assess the actual quantity of area to be treated and shall allow in the unit rate accordingly.

Rate shall include for providing guarantee as per contract.

SECTION : CONCRETE WORKS

Prices also to include

The Contractor should ascertain from the Engineer the total number of locations of items to be formed in and cast into in-situ and precast concrete including those which are not specifically shown on the drawings. No cutting away of concrete shall be carried out without the approval of the Engineer. All remedial works shall be carried out at the Contractor's expense.

The rates for all Insitu concrete work shall include for the following :

- a) Concrete test cubes and testing costs.
- b) Mixing, hoisting (local) and placing and compacting on the surfaces of any material or on formwork.
- c) Forming any construction joints or the like.
- d) Vibrating, Curing and protecting concrete surfaces from harmful weather conditions.
- e) All necessary keys to concrete surfaces to receive in-situ finishes.
- f) All costs in connection with the construction of “kickers”.

The rates for plain concrete foundations and concrete blinding shall include for the following.

All necessary shuttering to edges or extra volume of concrete used in lieu of shuttering.

Forming sloping upper surfaces where required.

The rates for reinforced concrete shall include for working concrete around reinforcement.

The rates for bar reinforcement shall include for the following :

- a) Positioning and protecting starter bars.
- b) Straightening (if required) cutting to length and bending reinforcement to required shapes.
- c) Waste and rolling margin of steel reinforcement.
- d) Cleaning and wire brushing.

Supporting in position during concreting :

Provision of supports (excluding links and stirrups) steel binding wire and approved / proprietary distance pieces.

Additional cutting and bonding in connection with holes, mortises, packets, grooves, chases and the like.

Preparation of detailed reinforcement drawings and bar bending schedules for all steel work to be submitted to the Engineer or his representative for approval before starting the work.

The rates for fabric reinforcement shall include for the following :

Straight raking curved and circular cutting and waste, bending to profiles, laps of one full square / rectangular module or as noted.

Supporting in position during concreting : provision of supports (excluding special chairs) steel binding wire and approved / proprietary distance pieces.

Cutting, bending and notching around all obstructions.

The rates for Form work as appropriate shall include for the following.

- a) Small quantities.
- b) All cutting and waste including raking curved or circular cutting and cutting and notching around pipes, ducting and fittings.
- c) Setting up, strutting and supporting at any height above the structure subject to any limitations imposed by the Employer’s representative including all props, stays struts, wedges and bolts etc.

- d) Carefully coating with shutter oil ensuring that no shutter oil is applied to surfaces of reinforcement.
- e) Easing, striking, removing and cleaning and preparing for re-use and removal when no longer required.
- f) Overlaps and passings at angles and labours at intersections.
- g) Shortening struts or shapes and re-strutting or re-shoring where required.
- h) Rubbing down, filling and making good the surface of concrete after removal of shuttering.
- j) Cutting or notching shutters or moulds to in-situ or pre cast concrete around projecting reinforcement.

The rates for wrought shuttering / shuttering to produce a special finish shall include for the following:

- a) Any necessary rubbing down or filling allowed by the specification to produce the finish required.
- b) Cutting out and re-casting unsatisfactory work or work not fulfilling the requirements of the specification or carrying out remedial or any other work required by the Engineer as an alternative to cutting out substandard work.

The rates for pre cast concrete shall include for the following:

- a) The provision of moulds.
- b) Forming a fair face in accordance with the specification to all exposed surfaces.
- c) Hacking or forming keys to all other surfaces.
- d) Lifting hooks or other devices approved by the Employer's representative for positioning.
- e) Bedding joining in mortar as specified.
- f) All necessary temporary struts or supports.
- g) Sills and copings, etc., shall include for plain ends and mitered angles where necessary.

Reinforcement to Masonry

The concrete of this section equally apply to reinforcement included within the Masonry section of the Bills of Quantities, unless otherwise stated.

SECTION : MASONRY WORKS

Prices also to include

The rates for masonry walls shall include for the following:

- a) Material testing at a recognized laboratory, provision of certificates.
- b) Small quantities and any extra labour in forming kerbs.
- c) Straight, raking, curved and circular rough or fair cutting, plumbing at angles, cutting and bonding at angles, openings and intersections, building into and / or against adjacent work, wedging and pinning up to soffits.
- d) All necessary keys for in-situ finishing.
- e) Grouting up at back of walls built against other construction.

- f) All necessary cast in wall ties at any junctions between different types of constructions such as brickwork + block work, brick work + concrete work, block work + concrete work and the like.
- g) All necessary expansion, construction, contraction joints, slip strip or the like.

The rates for pre cast concrete shall include for the following:

- a) The provision of moulds.
- b) Forming a fair face in accordance with the specification to all exposed surfaces.
- c) Hacking or forming keys to all other surfaces.
- d) Lifting hooks or other devices approved by the Employer's representative for positioning.
- e) Bedding joining in mortar as specified.
- f) All necessary temporary struts or supports.
- g) Sills and copings, etc., shall include for plain ends and mitered angles where necessary.

Reinforcement to Masonry

The concrete of this section equally apply to reinforcement included within the Masonry section of the Bills of Quantities, unless otherwise stated.

SECTION: METAL WORK

Generally

Sizes given in the description of items are nominal sizes. The Contractor shall visit the site and take all necessary spot measurements to determine the actual sizes of opening before fabricating the units.

Definitions

“Welded” or “welding” unless otherwise stated shall be continuous butt or fillet welding left as laid.

The rates for metal work shall include for the following:

- a) All fabrication work, handling, delivery, unloading, hoisting, (local) fitting and fixing in position.
- b) Joints in the running length.
- c) Angles in the running length.

Holes, notches, slots and the like.

Fixing with appropriate non-corroding countersunk screws including holes unless otherwise described.

Riveted and bolted work shall include rivets, bolts and holes.

Approved protection to cut ends or holes in galvanized work or other applied finish.

Metal door frames shall include for assembling, fixing with clamps, filling with mortar, temporary supports and removal of base ties.

Floor plates, duct covers and the like shall include narrow widths laying in position and for all holes, slots and the like making good.

SECTION: ROOF COVERING AND ROOF PLUMBING

The rates for Roof covering and roof plumbing shall include for the following:

- a) Hoisting (local) and placing roofing materials in position.

- b) Laps, straight cutting and waste.
- c) Nails, screws, clips, rivets, straps and the like.
- d) Fixing nuts, limpets etc..
- e) Any Guarantee for finished work as per contract
- f) Apply paint to all exposed faces of roof plumbing as directed.

SECTION: PLUMBING / SANITARY INSTALLATIONS

The rates for plumbing / sanitary installations shall include for the following:

- a) Complying with the relevant Sri Lanka or British Standard and with the regulations of the local authorities and other controlling bodies.
- b) Pipes where diameter is less than or equal 50mm diameter, fittings are included in the pipe work items.
- c) Cutting and waste of pipe etc. and jointing pipes.
- d) Solder, rivets, screws, nails, clips, brackets, running sockets, straps etc.
- e) Connecting pipes to sanitary fixtures and appliances,
- f) Laying, chasing, burying and fixing pipes and fittings making good all worked disturbed.
- g) All laps, straight cutting and waste.
- h) Chipping concrete/ masonry work where necessary.
- j) Testing installation as required.
- k) Applying painting to all exposed faces of pipe work as directed.

The rates for sanitary fittings and the like shall, 'unless otherwise described or implied, include for the following:

- a) Assembling component parts including suitable bedding compounds.
- b) All necessary plugging and brass screwing.
- c) Joints to water services with straight or bent proprietary connectors
- d) Joints to waste soils or drain pipes 'with approved proprietary connectors.
- e) Cleaning off all protective wrappers and leaving ready for use.
- f) Leaving taps and valves greased, clean and in full working order.
- g) The Contractor shall include for the supply of manufacturers recommended spares for one years operation for all mechanical engineering installations.

SECTION : FLOOR/ WALL/CEILING FINISHES

Generally

- a) Thickness of plaster work, bedding, backing etc. given in the description of items are the optimum thickness required.
- b) Finished work must conform in all respect to the approved samples.
- c) Pointed edges special tiles or the like to ceramic or clay tiles, marble work and the like shall be deemed to be included.
- d) Brushing and cleaning off and damping down all backgrounds
- e) Square and rounded edges coving at wall, floor and ceiling junctions, quirks, wee-joints and making good to frames and the like.
- f) Dubbing out as necessary to take up tolerances in the structure and cambers in floors and the like

Rates for floor finishes shall include for:

- a) Straight raking curved and circular cuttings and all consequent wastage
- b) All setting out temporary rules, screeds, template and supports.
- c) Curing and cleaning off / down upon completion.
- d) Spacers, cover guards, etc. to tiling or the like.

- e) All labours and making good around pipes, ducting and fittings and the like.
- f) Joints between different surfaces.
- g) Finishing to slopes and cross falls.
- h) All normal cutting arises, rounded edges, bedding and pointing.

Preparation of sample panels of different finishes for the approval of the engineer. Each panel shall not less than 0.5m² in area.

SECTION : GLAZING / INFILL PANELS

Glazing

This section shall be read particularly in conjunction with the woodwork section.

Prices also to include

The rates for glazing shall include for the following:

- a) Panes of any size.
- b) All straight raking curved and circular cutting and all consequent wastage.
- c) Patterned and wired glass shall include aligning adjacent panes.
- d) Wash leather bedding strips in conjunction with timber beads.
- e) Glazing fillets shall include pinning to wood or clipping to metal unless otherwise stated.
- f) Patent glazing shall include accessories and shall be fixed with screws or by the method required by the system used hardwood framing to either be inclusive of the window unless measured separately

- g) Glazing shall include blocks, setting blocks, locating blocks, distance pieces and the like accessories for fixing.
- h) Cleaning off protective wax coating in rebates prior to glazing aluminium windows, screens and doors.
- j) Glazing to aluminium shall include setting in continuous PVC gaskets and retaining by snap-fit glazing beads.

SECTION : PAINTING

Generally

All paint materials shall be best quality and shall be prepared products of manufacturers approved by the Engineer in writing.

All surfaces to be painted shall be prepared as directed and the prepared surfaces shall be approved by the Engineer before painting.

Unevenness and fillings in plastered surfaces shall be filled with gypsum and allowed to set and sanded to give a smooth and even surface.

The rates for painting shall include for the following

Rates for Painting shall include for:

- a) Preparation of surfaces, cleaning down
- b) Smoothing, knotting, stopping etc.
- c) Protecting floors, and fittings etc.
- d) Removing and replacing doors furniture and cleaning upon completion.
- e) Providing samples and specification of all paints to be used in the works.
- f) Providing painting to an approved colour scheme and design.

g) Preparation sample panels of different finishes for the approval of the Engineer. Each panel shall not less than 0.5m² in area.

Note:-

Painting and similar work to timber surface, metal surfaces, PVC surfaces and any other surfaces requiring painting have been measured with the relevant items.

SECTION : DRAINAGE SYSTEM (surface/below ground/agricultural)

Generally

The preceding and following clauses of all sections shall apply equally to relevant items within this section.

DRAINAGE

The rates for underground drainage shall include for the following :

- a) Short lengths, joints and cutting at manholes.
- b) Cutting and fixing pipe work to fittings.
- c) Testing.

The rates for excavation of trenches for services, pipes or drain pipes shall include for deepening and widening as necessary to enable the barrels of pipes, ducts, etc., to rest on firm ground and to facilitate jointing.

The rates for items of imported fillings, graded gravel fillings, etc., shall include for :
Leveling and compacting as required by the specification.

Grading to slopes and falls.

Special compacting to form vertical or battering faces, and

Forming sinkings.

The rates for excavating trenches deem to include for following;

- a) Earth work support
- b) Back filling
- c) Disposal of surplus excavated materials
- d) Special protection of pipe

Drains

a) The rates for trench excavation for pipes are to include for deepening / widening the trench as necessary to enable the barrels of pipes to rest on firm ground and to facilitate jointing.

b) The rates for pipes are to include for all short lengths, joints and couplers as necessary and for all cutting at manholes and the like.

c) The rates for fittings on pipes are to include for jointing to pipes with all necessary additional couplings flanges, etc. and any necessary cutting of pipe work.

SECTION : ELECTRICAL INSTALLATIONS

Prices also to include

The rates in general shall include for the following

- a) All cutting, short lengths and small quantities.
 - b) All joints in the running length and all connections
 - c) All considerations arising from the specification.
 - d) All necessary conduits, cables, fittings, screws, nails, clips, brackets, junction boxes, straps, 3 core flexible cables, ceiling roses, GI chains, fan hooks and the like.
 - e) Pipe sleeves through walls.
 - f) Assembling component parts.
 - g) Cleaning off all protective wrappers and leaving ready for use.
 - h) Leaving all equipment, etc., clean and in full working order.
 - j) Draw wires 'in empty conduits
 - k) Consulting and co-operating with other trades.
 - l) Giving notices, obtaining permits, paying fees etc.
 - m) Provision of shop drawings and circuit diagrams including conduit layout drawings etc.
 - n) Labeling switch and distribution boards and other equipment.
 - p) Providing samples of switches and other fittings.
 - q) Earthing the installation.
 - r) Testing installations as required by the Engineer and submission of certificate of conformance of Electrical Installations to IEE regulations by a Chartered Electrical Engineer registered with the Ceylon Electricity Board.
 - s) Submitting charts/ lists indicating the country of origin and performance of all equipment offered.
- Cabling and conduiting shall be inclusive of all sleeves, joints, etc., as required to connect the incoming supply to the Main Distribution Board.

Section – 7

Bills of Quantities

**Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at
Gonapola Road, Gammanpila, Bandaragama.**

CONTENTS FOR BOQ

Bill No	Documents	Page No		
Bill No 01	1A - PRELIMINARIES	53	-	54
Bill No 02	2A - EXCAVATION AND EARTH WORKS	55	-	55
Bill No 02	2B - CONCRETE WORKS	56	-	57
Bill No 02	2C - MASONRY WORKS	58	-	58
Bill No 02	2D - WATER PROOFING WORKS	59	-	59
Bill No 02	2E - STRUCTURAL METAL WORKS	60	-	61
Bill No 02	2F - METAL WORKS	62	-	62
Bill No 02	2G - PARTITION WORKS	63	-	63
Bill No 02	2G - ELECTRICAL INSTALLATIONS	64	-	68
Bill No 02	2J - FLOOR/ WALL/ CEILING FINISHES	69	-	70
Bill No 02	2K - PAINTING	71	-	71
Bill No 02	2L- ROOF COVERING/ROOF PLUMBING	72	-	72
Bill No 02	2M - AIR CONDITIONING SYSTEM	73	-	73
	COLLECTION	74	-	74
Bill No 03	3A - EXTERNAL WORKS	75	-	75
Bill No 04	4A - PROVISIONAL SUM	76	-	76
	BILL OF QUANTITIES - MAIN SUMMARY	77	-	77

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
1A/-	BILL NO. 01 <u>PRELIMINARIES</u> <u>Please refer Specifications & Pricing Preambles</u> This Bill provides for the typical general items complimentary to the works which are required to be provided by the Contractor in compliance with the Conditions of Contract and Contract Data in the execution of the works according to the Contract.				
1A/01	Allow provisional sum for providing performance guarantee.		pro.sum		
1A/02	Allow provisional sum for advance payment guarantee.		pro.sum		
1A/03	Allow lump sum for mobilization to site.		Item		
1A/04	Allow lump sum for insurance of works, plant & machinery, materials, third party and workmen (All the insurances should be submitted for the end of defect liability period).		Item		
1A/05	Allow for construct, maintain and removal at end of contract temporary buildings for protection & storage of materials & plant and for workshops.		Item		
1A/06	Allow for construct furnish, maintain & removal at end of contract Contractor's office and Engineers office separately including sanitary facilities.		Item		
1A/07	Allow for construct furnish, maintain & removal at end of contract Contractor's staff accommodation.		Item		
1A/08	Allow for providing safety, health and sanitary facilities for Contractor's staff.		Item		
1A/09	Allow for setting-out of work by a government registered licensed surveyor in accordance with drawings.		Item		
1A/10	Allow lump sum for providing temporary water supply connection for the use of work.		Item		
1A/11	Allow Lump sum for providing water supply for the use of work during contract period		Item		
1A/12	Allow lump sum for temporary electricity service connection for the use of work.		Item		
1A/13	Allow Lump sum for temporary electricity service for the use of work during contract period		Item		
1A/14	Allow Lump sum for necessary protective fencing, hoarding and temporary dust screen.		Item		
1A/15	Allow lump sum for erection of 2 x1.5 m name board.		Item		
1A/16	Allow lump sum for demobilization, removal of all rubbish & debris and clearing up site on completion, leaving all in good order and handing over.		Item		
1A/17	Allow lump sum for obtaining test reports including lab reports for structural works, CEB registered Chartered Electrical Engineer's Certificate for Electrical installation works and A/c Engineer's Certificate for Air conditioning fixing and installation work.		Item		
1A/18	Provide construction management services for resident engineer (vol-2- sec-2-(4.2e) employed at site.		Item		
1A/19	Provide construction management services for Technical officer (vol-2- sec-2-(4.2e) employed full time at site		Item		
1A/20	Allow Lump Sum for providing progress charts, Construction Programs, progress photos (minimum 5 photos every month) bar schedules, shop/ working drawings etc.		Item		
TOTAL CARRIED TO COLLECTION				Rs.	

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
1A/21	Allow Lump Sum for providing three (03) copies of As Built" drawings (including sevice) with Operation manual.		Item		
TOTAL CARRIED TO COLLECTION				Rs.	
<u>1A/- PRELIMINARIES COLLECTION</u>					
Page No. 53					
Page No. 54					
TOTAL OF PRELIMINARIES CARRIED MAIN SUMMARY - Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 02					
2A/-	EXCAVATION AND EARTH WORKS				
	<p>Notes:</p> <p>a]. For the full description of materials and workmanship refer to "Specification of works", "Pricing Preambles" and "Drawings".</p> <p>Excavation</p> <p>b]. All excavations are measured net. No allowance made for working space.</p> <p>c]. Excavation in any material other than in rock requiring blasting and disposal of surplus excavated material off site (if any) commencing from existing ground level.</p> <p>d]. Excavation for foundation commencing from top soil reduced ground level.</p> <p>Filling</p> <p>e]. Compaction test need to be done by contractor.</p> <p>f]. Filling material should well rammed and consolidated with mechanical compactor in 150 mm compacted thickness, compacted to a density not less than 95% of the maximum 1.65 g/cm³ dry density as determined by the standard proctor compaction test.</p> <p>Earthwork Support</p> <p>g]. Earthwork support shall be carried out only if specifically instructed to do so by the Engineer.</p>				
	<p>Surface treatment</p> <p>h]. Payment for earthwork support will only be considered on actual quantities of work executed.</p> <p>i]. Work shall be entrusted to a reputed pest control service sub-contractor.</p> <p>j]. Particulars of chemicals used and the other details shall be forwarded to the Engineer for approval.</p> <p>k]. The contractor shall furnish a joint warranty binding with specialized sub-contractor and the contractor as to the effectiveness of the anti-termites treatment for a minimum period of 10 years after completion and rate to include for precautionary measures to be taken against chemicals being infiltrated into outside area.</p>				
2A/01	Excavation Remove top soil upto 100mm thk.	1,000.00	m ²		
2A/02	Excavating in foundation for column pits, wall trenches and staircase footings, not exceeding 1500mm .	120.00	m ³		
	Disposal of water				
2A/03	Allow for keeping excavation free from surface or ground water from rain and percolating by motor pumping or dewatering.	100.00	Hrs.		
	Earth Work Support				
2A/04	Earth work supports, in trenches total depth up to 5'-0", distance between opposing faces not exceeding 1500mm.	150.00	m ²		
	Filling				
2A/05	Earth filling to formation levels with excavated material in 150mm thk. layers in well rammed and consolidated.	50.00	m ³		
2A/06	Earth filling to formation levels with approved imported material in 150mm thk. layers in well rammed and consolidated.	250.00	m ³		
	Surface treatment				
2A/07	Supply and apply insecticides, Bifenthrin (Biflex) or approved equivalent diluted chemicals 1:200 ratio with water after supplying the sealed bottle to the site and should be followed the manufacture standards and approved specialist contractor's specification and technical literature to the building perimeter line and entire surface treatment works of the building with 10 yrs. warranty.	1,150.00	m ²		
TOTAL OF EXCAVATION & EARTH WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2B/-	BILL NO. 02 CONCRETE WORKS Notes: a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings". Rates shall include for; Concrete b]. Reinforced concrete mix: b.1]. Grade 40 - 20 mm aggre. (Suggested 1 : 1 : 1) b.2]. Grade 30 - 20 mm aggre. (Suggested 1 : 1 : 2) b.3]. Grade 25 - 20 mm aggre. (Suggested 1 : 1½ : 3) b.4]. Grade 20 - 20 mm aggre. (Suggested 1 : 2 : 4) b.5]. Grade 15 - 20/25 mm aggre. (Suggested 1 : 3 : 6) b.6]. Grade 10 - 20/25 mm aggre. (Suggested 1 : 4 : 8) c]. Batching, Mixing, depositing, handling, hoisting and pouring in position and packing around reinforcement. d]. Mechanical vibrating, curing as directed along the period. e]. Finishing to slopes and falls for prepare surface ready for screed or paving where necessary. Formwork f]. Formwork shall be properly designed formwork as described in specification and it should be sufficiently strong and rigid and should have an even smooth surface and grout tight and should provide a basic finish for plastering. g]. Rates include for all necessary boarding, supports, framing, cutting angles etc. h]. Formwork to beam, column and casings is deemed to include ends.				
					i]. Cleaning, mould oiling treatment and wetting before pouring concrete and making good after removal of formwork. j]. Erecting, striking off and cleaning of formwork. Reinforcement k]. Cleaning, cutting, bending, fabricating and rolling margin of steel reinforcement. l]. All splicing laps etc., in reinforced steel other than design laps. m]. Mild steel round bar reinforcement to BLS 26 and strength (FY=250 N/mm ²) including bends, hooks, laps, tying wires, distance blocks, steel chairs and ordinary spacers. n]. High yield tor steel bar reinforcement to BS 4449 and strength (FY=460 N/mm ²) including bends, hooks, laps, tying wires, distance blocks, steel chairs and ordinary spacers.
2B/01	INSITU CONCRETE upto DPC Mass concrete (Grade 10) 50 mm thk. lean concrete to column and wall foundation	140.00	m ²		
2B/02	RCC concrete (Grade 20) 150mm thk. Concrete in ground floor with power travelled finish by using mechanical power floater and master top 100 or equalant with manufactures specifications.	770.00	m ²		
2B/03	150mm thk. floor concrete in ground floor concrete	230.00	m ²		
2B/04	Reinforced concrete (Grade 25) Column bases, column shafts, plinth beams, concealed beams, staircase base and upto DPC level shaft.	48.00	m ³		
CARRIED TO COLLECTION				Rs.	

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
FORMWORK					
Use 20mm thick swan timber formwork and including dismantling charges.					
2B/05	For Column bases, column shafts, plinth beams, concealed beams and staircase	300.00	m ²		
REINFORCEMENT IN INSITU CONCRETE					
2B/06	Tor Steel bars in Column bases, column shafts, plinth beams and concealed beams	3,200.00	kg		
2B/07	10mm dia. Tor steel in Ground Floor slabs	6,000.00	kg		
2B/08	6mm dia. Stirrups for Column bases, column shafts, plinth beams and concealed beams	550.00	kg		
DPC to First Floor Level					
RCC concrete (Grade 25)					
2B/09	First floor slab	37.00	m ³		
2B/10	-do- to stifner columns and coping beams.	8.00	m ³		
2B/11	-do- lintols	1.00	m ³		
FORMWORK					
Use 20mm thick plyboard formwork and including dismantling charges.					
2B/12	Plyboard formwork for first floor slab	265.00	m ²		
2B/13	-do- -do- in stifner columns and coping beams.	170.00	m ²		
2B/14	-do- in lintols	15.00	m ²		
REINFORCEMENT					
2B/15	10mm dia. Tor steel for first floor slab	2,500.00	Kg		
2B/16	Tor steel for stifner columns and coping beam	525.00	Kg		
2B/17	Tor steel for lintols	60.00	Kg		
2B/18	6mm dia. Mild steel for stifner columns, coping beams and lintols.	150.00	Kg		
EXPANSION JOINTS					
2B/19	3/4" wide and 3" high Master Flex 700 poly sulphate sealing compound in expansion joint between slabs and plinth beam.	450	m		
CARRIED TO COLLECTION				Rs.	
<u>2B/- CONCRETE WORKS COLLECTION</u>					
Page No. 56					
Page No. 57					
TOTAL OF CONCRETE WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2C/-	<p align="center">BILL NO. 02</p> <p><u>MASONRY WORKS</u></p> <p>Notes:</p> <p>a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings".</p> <p>Rates shall include for;</p> <p>b]. Plumbing angles, forming rebated reveals.</p> <p>c]. Square cutting and raking of joints for plastering.</p> <p>d]. Protecting finished surfaces in masonry facings.</p> <p>e]. Tying masonry works to concrete works and stone works with approved devices.</p> <p>f]. Use random rubbles 9"x 6" in (1:5) cement and sand mortar.</p>				
	<p><u>SUPERSTRUCTURE</u></p> <p><u>RUBBLE WORK</u></p> <p>Random rubbles 225x150mm laid and joint vertically and finish even face with (1:5) cement and sand mortar.</p>				
2C/01	Rubble stone work upto DPC level and entrances.	40.00	m ³		
	<p><u>SOLID CEMENT BLOCK WORK</u></p> <p><u>GROUND FLOOR</u></p>				
2C/02	150 mm thk. in solid walls. (1:5)	400.00	m ²		
2C/03	100 mm thk. in solid wall. (1:5)	100.00	m ²		
	<p><u>FIRST FLOOR</u></p>				
2C/04	150 mm thk. in solid walls.(1:5)	80.00	m ²		
2C/05	100 mm thk. in solid wall.(1:5)	150.00	m ²		
TOTAL OF MASONRY WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2D/-	BILL NO. 02 <u>WATER PROOFING WORKS</u> Notes: a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings". b]. If the work executed by Approved Sub-contractor(s)' water-proofing shall be applied by a franchised applicator of the water-proofing membrane manufacturer, having not less then 05 years of proven experience in this type of work and climatic condition and who has the necessary equipment and skilled labour to carry out the work satisfactorily. c]. All water-proofing works and related protection shall be done by the same approved applicator. d]. Sub-contractor's representative: Have sub-contractor's technical representative present during the performance of the work as necessary to ensure proper preparation of substrate and installation of water-proofing. e]. Substrate condition: Have sub-contractors representative conditions of substrates prior to the application of water-proofing. Rectify conditions as necessary to obtain sub-contractor's representative's approval. f]. Rates shall include for ponding test for a 1'-0" water height kept for a period of 48 hours & minimum total dry film thickness of 1.0mm [±0.1mm] in two coatings.				
					<p>g]. Should submit the following documents to the Client through the Consultant before executing the work:</p> <p align="center">Water-proofing sub-contractor qualifications indicating related experience and equipment and manpower available.</p> <p>g.1].</p> <p>g.2]. If sub-contractor, manufacturer's certification/ approval for the installer of water-proofing system. Furnish written warranty of materials and workmanship for the complete water tightness of the treated area for at least ten (10) years.</p> <p>g.3].</p> <p>g.4]. Manufacturer's certification stating materials supplied are compatible with each other.</p>
2D/01	DPC Work (1:3) 20mm thk. Hot tar blinding. Width ≤ 300mm horizontal , comprising with two coats of hot tar blinded with river sand including 20mm thk. Cement and sand (1:3) screed on rubble / concrete wall.	40.00	m ²		
2D/02	Gauge 1000 polythene sheet damp proof membrane and lay horizontally beneath ground floor slab. Rate shall include for up turns and plinth and provding 225mm wide (minimum) effectively sealed joints at laps (measured horizontally)	885.00	m ²		
TOTAL OF WATER PROOFING WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.:					

**Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company
at Gonapola Road, Gammanpila, Bandaragama.**

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 02					
2E/-	<u>STRUCTURAL METAL WORKS</u>				
	Note:				
	a). For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings".				
	b). Rate shall include for;				
	b.1). All shop fabrication work, marking, delivery, unloading, hoisting, erecting and fixing as per detail drawings.				
	b.2). All welds are 6mm thick fillet weld & allowance for rolling margin.				
	b.3). Members of any length.				
	b.4). Machine drilled bolt holes, bolts, nuts and washers, cleats, shoe and gusset plates and all other connections.				
	b.5). Cutting to size and shape and joints in the running length.				
	Definitions:				
	"Welding" is deemed to be in accordance with the specification and for the material to which it is to be used. Gusset plates, shoe plates, ends, caps, cleats, brackets, stiffeners, bolts, etc., have been included to the rate of the associated steel works.				
	b.6). The weight of weld metal in welded constructions.				
	b.7). Grinding to a smooth finish, unless otherwise required.				
	b.8). After fabrication wire brushed, sand blast to clean the all steel surfaces and spray painted with 02 coats of quick drying metal primer Zinc phosphate and 02 coats of enamel paint (spray finished) to structural structure and all others with 01 coat of anti-corrosive and 02 coats of enamel paint to all steel surface.				
2E/01	Supplying, fabricating and fixing of 200x100x21.7 Kg/m "I" section Type TB/UB2 with using 220 x 100 x 10mm thk. M.S plate, 04 nos G.I 8.8 16mm dia. And other associated items as per detail drawing.	140	m		
2E/02	-do- 300x150x37.2 Kg/m type RB1 cut to shape "I" section beam using with 20mm dia. bolts, 10mm thk. M.S plate, M.S Stiffener plate and other associated items as per detail drawing.	216	m		
2E/03	-do- 150x65x20x2.3 mm lip "C" channel purlin with all other associated items as per the drawings including cleats, nuts and and other associated items as per detail drawing.	950	m		
2E/04	-do- 350 x 175 x 41.1 kg / m "I" section steel column type c1 6.0 M high fixed to RCC stub column "measured" using 20mm thk. M.S base plate, 4 Nos. 20mm dia. 450mm long; (GR8.8) holding down bolts, 10mm thk. column stiffner, 25mm thk. non shrink grout -do-	20.00	nr.		
2E/05	-do- -do- Type C1 3.0M high -do- -do-	7.00	nr.		
2E/06	-do- 300 x 150 x 32 kg. / m "I" section type C2 1750m high (approx) -do-	4.00	nr.		
2E/07	-do- -do- 200 x 200 x 46.2 kg. / M "I" section type C3 6.0m high (approx) -do-	7.00	nr.		
2E/08	Supply and fixing sandwich monowall cladding 40mm thk. With framework (measured separately) including Zn/Al corner capping, eave trim, head trim, drip trim, cap flashing, window top capping window sill, edge trim and other special all required air tight beeding at joints and other accessories etc. manufactured by the supplier, as per detail drawing.	410.00	m ²		
2E/09	Supply and fixing 150 x 65 x 20 x 2.0 GI purlins for fixing above cladding with other associated items as per detailed drawings.	675.00	m		
2E/10	-do- 150 x75 x14 Kg/m "I" section universal beam type UB1 with all fixing arrangement and other associated items as per detail drawing.	30	m		
2E/11	-do- 50 x 50 x 5.0mm angle iron bracing, type BR with specified painting work	110	m		
2E/12	-do- -do- 200 x200 x46.2 Kg/m "I" section universal beam -do- -do-	50	m		
2E/13	Supply, fabricating and fixing 230 x 80 x 08 mm thk. M.S channel for staircase fixed to grade 25 concrete pad with 10mm thk. M.S plate, 6 Nos. 20mm dia. bolts (GR 8.8) with other associated items as per detailed drawings.	45.00	m		
CARRIED TO COLLECTION					
				Rs.	

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2E/14	Supply, fabricating and fixing 6mm thk. chequered plate fixed to 230 x 80 x 08 mm thk. M.S channel (measured separately) with 40 x 40 x 05 "L" angle and 5.0 mm thk. bolt and with other associated items as per detailed drawings	10.00	m ²		
2E/15	Supply, fabricating and fixing 460 x 190 x 82.0 kg /m "T" section beam type MB1 fixed to C1 "T" section steel column (measure separately) cut to shape with using 10 mm thk. M.S plates, stiffner plates, 20mm dia. bolts (GR8.8) and and other other associated items with 2 coats of anticorrosive and 2 coats of enamel paint as per detailed drawings.	70.00	m		
2E/16	Supply, fabricating and fixing 300 x 150 x 32.0 kg /m "T" section beam type SB1, MB2, LB1 fixed to C1 "T" section steel column and "T" section beams (measure separately) cut to shape with using 10 mm thk. M.S plates, stiffner plates, 20mm dia. bolts (GR8.8) and and other other associated items as per detailed drawings.	150.00	m		
2E/17	-do- -do- 250 x124 x25.7 Kg/m "T" section universal beam -do- -do-	30	m		
<u>2E/- STRUCTURAL METAL WORKS COLLECTION</u>					
Page No. 60					
Page No. 61					
TOTAL OF STRUCTURAL METAL WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 02					
2F/-	METAL WORKS note: a). For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings". b). All frames, mullions and transoms are out of specified powder coated aluminum extrusions. c). All glass as specified. d). Submit shop drawings for approval. e). After fabrication wire brushed, sand blast to clean the all steel surfaces and 01 coats of quick drying metal primer Zinc phosphate and 02 coats of enamel paint to all steel surface. f) The powder coating shall be of thickness 60-80 microns.				
	g). Given sizes in description of items are nominal sizes. The contractor shall visit the site and take all necessary spot measurements to determine the actual sizes of openings before fabricating the units and inform the Engineer to proceed. h). Kick plates and push plates shall provide to doors. i). Weather stripping and hardware shall provide as specified.				
DOORS, WINDOWS AND FANLIGHTS					
Doors					
2F/01	Supplying and fixing powder coated aluminium frame door type D1 overall size of 2050x2400mm consisting with 900mm high 4.00mm thk. pvc laminated plywood board at bottom and 1200mm high 5.00mm thk. clear glass panel at top, with aluminium fittings, door handles, good quality local and other associated item, fixing arrangement on per detail drawings.	2.00	nr.		
2F/02	-do- type D2 size of 1200x2550mm -do- in ground floor	6.00	nr.		
2F/03	Supply and fixing Type TG size of 5750x2540mm consisting with Temperd glass door with with S/S "U" chanel frame work and other associated items as per detailed drawings.	1.00	nr.		
2F/04	-do- type D2 size of 1200x2550mm -do- in first floor	3.00	nr.		
2F/05	Supply and fixing 12mm thk. Temperd glass panels for porch area with other associated items as per detailed drawings.	45.00	m ²		
Windows					
2F/06	Supplying and fixing of powder coated aluminium window type W1 size 2000x1500 mm window with approved quality Aluminium hinges and other associated items as per detail drawings in ground floor.	33.00	nr.		
2F/07	-do- type W1 size 2000x1500 mm window fix to sandwich panel board (measured) with air tight beading, cosner flashing; all including as per detail drawings in first floor.	12.00	nr.		
Fix Glass					
2F/08	-do- Type FG size of 2000x1500mm consisting with powder coated aluminium frame work, louver panel and 5mm thk. Clear glass panel fix to sandwich panel board (measured) with air tight beading, flashing as per detail drawings in first floor.	23.00	nr.		
Handrail					
2F/09	Supply, fabricate and fix of 1050 mm high GI handrail consisting with 50 mm dia. heavy gauge G.I. top rail 50 mm dia. heavy duty G.I. box bar verticals 900 mm C/C, fixed to covering clip and 20mm dia, 3 rows of 8.0 mm dia. steel rod 225mm c/c horizontally, 50 x 50 box bar fixed to RCC floor with 100 x 100 mm steel plate all fixing arrangement as per detail drawing including one coat of anticorrosive and 02 coats of black enamel paint.	42.00	m		
2F/10	-do- -do- to steel staircase	10.00	m		
TOTAL OF METAL WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No	Description	Qty	Unit	Rate	Amount
2G/-	<p align="center">BILL NO. 02</p> <p><u>PARTITION/ CEILING WORKS</u></p> <p>Note: a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings".</p>				
2G/01	<p>PARTITIONS</p> <p>Supplying and fixing of partition 9.0mm thk. Gypsum board (Dry wall partition) with G.I frame minimum thickness 0.4mm, 75mm high aluminium skirting at bottom with and including necessary fixing arrangement and all other associated items as per detail drawing</p>	40	m ²		
TOTAL OF PARTITION WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 02					
2H/-	<u>ELECTRICAL INSTALLATIONS</u> Note: a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings". b]. Rates to include all accessories such as junction boxes, clips, screws, PVC conduit pipes, switch boxes, 3 plate ceiling roses, 3 core flex etc. c]. All switches, socket outlets, distribution boards etc. shall be flush mounted.				
	d]. Supply, install and commission the following items as per latest IEE regulations. Wiring to be done in concealed PVC conduit. e]. The rates quoted shall also include for supply, installation, testing and commissioning. f]. All the electrical fittings should have maintain minimum two (02) years warranty.				
	Prime Cost for fittings; 3/18W fluorescent 600x600 single lamp fitting - Rs. 2,750.00 - 3,250.00 36W fluorescent 1200x100 lamp fitting - Rs. 4,700.00 - 5,700.00 15W CFL pendent lamp fitting - Rs. 2,000.00 - 2,750.00 15W CFL circular batten lamp fitting - Rs. 2,00.00 - 2,750.00 25W LED cast-iron complete fitting (IP65) - Rs.3,800.00 - 4,800.00 11W CFL clear glass cast-iron bulk head fitting (IP65) - Rs. 2,000.00 - 2,500.00 21W CFL 200mm glass globe wall bracketed metal fitting (IP65) - Rs. 1,750.00 - 2,000.00 10W LED rechargeable exit lamp fitting - Rs. 4,500.00 - 5,500.00 5W LED rechargeable emergency lamp fitting - Rs. 4,500.00 - 5,500.00				
	Lamp and Fan Point Wiring				
2H/01	LED Panel Lamp point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC Cables	30.00	Nos		
2H/02	Wall Bracket Lamp point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC Cables	24.00	Nos		
2H/03	Flourcent Lamp point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC Cables	10.00	Nos		
2H/04	Pendent Lamp point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC Cables	30.00	Nos		
2H/05	Emergency Lamp point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC Cables	16.00	Nos		
2H/06	Exit Lamp point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC Cables	6.00	Nos		
2H/07	Two way Lamp point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC/PVC Cables	8.00	Nos		
2H/08	Ceiling fan point wiring (1.0sqmm + 1.5sqmm) with electronic regulator	5.00	Nos		
2H/09	High bay lamp point wiring with 1.5sqmm + 1.5sqmm X 1E Cu/PVC/PVC Cables	20.00	Nos		
2H/10	Industril call bell point wiring with 1sqmm + 1.5sqmm X 1E Cu/PVC/PVC Cables	1	Nos		
CARRIED TO COLLECTION				Rs.	

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
Power Point Wiring					
2H/11	15A Switched Socket outlet with Indicator Lamp(2.5sqmm x 2 + 2.5sqmm x 1E)	11	Nos		-
2H/12	5A Switched Socket outlet with Indicator Lamp(1sqmm x 2 + 2.5sqmm x 1E)	1	Nos		
2H/13	13A twin Switched Socket outlet with Indicator Lamp(2.5sqmm x 2 + 2.5sqmm x 1E) [Radial CCT]	12	Nos		
2H/14	13A twin Switched Socket outlet with Indicator Lamp(2.5sqmm x 2 + 2.5sqmm x 1E) [Radial CCT]	12	Nos		
2H/15	16A - 5pin industrial socket outlet(IP65) (2.5sqmm X 4 + 2.5sqmm X 1E) with plug top	3	Nos		
2H/16	15A Switched Socket outlet with 10A 2 pole switch(2.5sqmm x 2 + 2.5sqmm x 1E)	8	Nos		
<u>Supply and fixing cable management system</u>					
2H/17	Horizontal 100(w) X 50mm(h)x1mm-two compartment - white epoxy power coated steel trunking with (span 1000mm) wall bracket to the steel frame by contractor	12	Lm		
2H/18	Vertical 100 X 50mm - 01mm white epoxy power coated steel trunking with (span 1000mm) wall bracket to the steel frame by contractor	10	Lm		
<u>Supply & Installation of Power Panels</u>					
2H/19	Free floor standing type (IP54) epoxy powder coated metal Enclosure (MDB) completed with switch gears, instruments & wiring as per the Drawing No:AT/LE/MPDS/SLD/01/RO	1	No		
2H/20	flush wall mounted type (IP54) epoxy powder coated metal Enclosure (DB-1F) completed with switch gears, instruments & wiring as per the Drawing No:AT/LE/PDS/1F/SLD/01/RO	1	No		
2H/21	Surface wall mounted type (IP54) epoxy powder coated metal Enclosure (DB-WS) completed with switch gears, instruments & wiring as per the Drawing No:AT/LE/PDS/WS/SLD/01/RO	1	No		
2H/22	Surface wall mounted type (IP65) epoxy powder coated metal Enclosure (DB-CT) completed with switch gears, instruments & wiring as per the Drawing No:AT/LE/PDS/CT/SLD/01/RO	1	No		
2H/23	Surface wall mounted type (IP54) epoxy powder coated metal Enclosure (DB-LR) completed with switch gears, instruments & wiring as per the Drawing No:AT/LE/PDS/LR/SLD/01/RO	1	No		
Supply Lay and Connecting Power & Earth Cables					
2H/24	3 X 4C - 240sqmm Cu/XLPE/PVC/SWA/PVC/UG cable lay directly a per the CEB standard (100mm cable space and sand covering) from MDB to MASTER POWER PANEL	30	Lm		
CARRIED TO COLLECTION				Rs.	

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2H/25	4C - 25sqmm Cu/XLPE/PVC/SWA/PVC/UG cable under the floor concrete (depth 450mm) from MDB to DB-1F	42	Lm		
2H/26	2C - 10sqmm Cu/xlpe/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to DB-LR	12	Lm		
2H/27	4C - 16sqmm Cu/xlpe/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to DB-WS	22	Lm		
2H/28	4C - 16sqmm Cu/PVC/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to DB-CT	20	Lm		
2H/29	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB1 to MP-NO1	37	Lm		
2H/30	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO2	33	Lm		
2H/31	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO3	30	Lm		
2H/32	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO4	26	Lm		
2H/33	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO5	22	Lm		
2H/34	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO6	20	Lm		
2H/35	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO7	16	Lm		
2H/36	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO8	14	Lm		
2H/37	4C - 35sqmm Cu/XLPE/PVC/SWA/PVC UG cable under the floor concrete (depth 450mm) from MDB to MP-NO9	12	Lm		
2H/38	2x1E X 185sqmm Cu/PVC earth cable under the concrete floor (300mm depth) and PVC (type 1000) water pipes from MDB to main earth point	12	Lm		
2H/39	1E X 50sqmm Cu/PVC earth cable through PVC (type 1000) water pipe (400mm depth) with 50mm concrete covering from DB-CT to earth electrode	6	Lm		
2H/40	1E X 10sqmm Cu/PVC earth cable through PVC (type 1000) water pipe (400mm depth) under concrete floor from DB-1F to MDB	43	Lm		
2H/41	1E X 10sqmm Cu/PVC earth cable through PVC (type 1000) water pipe (400mm depth) under concrete floor from DB-WS to MDB	22	Lm		
CARRIED TO COLLECTION				Rs.	

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2H/42	1E X 10sqmm Cu/PVC earth cable through PVC (type 1000) water pipe (400mm depth) under concrete floor from DB-LR to MDB	12	Lm		
2H/43	1E X 16sqmm Cu/PVC earth cable through PVC (type 1000) water pipe (400mm depth) under concrete floor from DB-CT to MP - NO1	14	Lm		
2H/44	1E X 16sqmm Cu/PVC earth cable through PVC (type 1000) water pipe (400mm depth) under concrete floor from MDB to MP - NO9	12	Lm		
2H/45	1E X 16sqmm Cu/PVC earth cable through PVC (type 1000) water pipe (400mm depth) under concrete floor from MP - 1 to 2,3,4,5,6,7,8,9	26	Lm		
<u>Supply & Erection of Main Earthing System</u>					
2H/46	Solid Pure Copper Plate (600X600X3mm) (Depth 2100mm)	2	No		
2H/47	Solid Copper Tape for main earthing Terminal (25 x 6mm) to Cu Plate	6	Lm		
2H/48	Concrete (300 x 300mm) manholes with cast Iron removable slotted coverplates	2	No		
2H/49	Supplimentary earthing rod 16mm X 1200mm solid copper	4	Nos		
2H/50	Inter-connecting tape 3mm X 50mm copper	8	Lm		
2H/51	12mm Stainless steel nut & bolt & clamp exothermic joints etc for connection	2	Item		
2H/52	Grounding enhancement material-gel type	5	Kg		
Supply, delivery and fixing of complete electrical fittings including necessary fixing materials					
2H/53	Surface mounted milky white (18W) LED panel lamp (2year warrenty)	10	Nos		
2H/54	Surface mounted milky white (12W) LED panel lamp (2year warrenty)	15	Nos		
2H/55	Surface mounted milky white (6W) LED mirror lamp (2year warrenty)	5	Nos		
2H/56	Pendent lamp 1200x100mm POLISHED aluminium shade with 2X 18W LED TUBE (2year warrenty)	1	Nos		
2H/57	Wall bracketed lamp (IP65) alluminium cast (square) universal mounting fitting with LED (10W) (2 year warrenty)	24	Nos		
2H/58	Slim double side exit lamp (3W LED) (1 year warrenty)	6	Nos		
2H/59	Auto rechargeble emergency lamp (9W LED) (1 year warrenty)	16	Nos		
CARRIED TO COLLECTION				Rs.	

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2H/60	Ceiling fan (1400mm) with alluminium (3blade) and electronic fan regulator	5	Nos		
2H/61	Wall Batton 1200 X 100mm - 2 x 36W - T10 Flaourecent lamp polycarbonate (IP54) fitting with electronic ballest	10	Nos		
2H/62	230V industrial call bell unit	1	Nos		
2H/63	230V - 700mm blade steel wall mounted ossylation fan	5	Nos		
2H/64	230V - 600mm blade steel exhaust fan with guard mesh and louver blade	3	Nos		
	Submission of Technical Document				
	UG cable layout drawing.				
	Cable management system drawing				
	Shop drawings of power panels				
	Certificates for warrenty and guarantee for power panels				
	Catalouges for bulbs, lamp fitting and fixtures, switch gears				
	Certificates of warranty and gurantee for main components				
	Certificates of regulation and standards for switch gears				
	Certificates of standards and completion and compliance				
	As built drawings				
	if any other works to complete the job ,pl specefy in detail				
CARRIED TO COLLECTION				Rs.	
<u>2H/- METAL WORKS COLLECTION</u>					
	Page No. 64				
	Page No. 65				
	Page No. 66				
	Page No. 67				
	Page No. 68				
TOTAL OF ELECTRICAL INSTALLATIONS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 02					
2J/-	<u>FLOOR/ WALL/ CEILING FINISHES</u> Note : a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings". b]. Rates shall include for forming arises and for cutting tiles into required sizes and shape at edges and corners.				c]. Rates shall include for plaster reveals, not measured separately.
	Price range per m ² ; SEMI-GLAZED HOMOGENOUS PORCELAIN TILES Floor Tile Rs. 3,000.00 - 3,500.00			NON-SLIP CERAMIC TILES Floor Tile Rs. 1,500.00 - 1,900.00 GLAZED CERAMIC WALL TILES Wall Tile Rs. 1,300.00 - 1,600.00	
	<u>FLOOR FINISHES</u>				
	TILES				
	Ground Floor				
2J/01	Supplying, and fixing 600x600 mm semi glazed homogenous porcelain tiles on 20 mm thk. 1:3 cement and sand screed bedding and greater than 5.0 mm thk. tile adhesive bonding layer to porch steps, and stair case lobby in ground floor.	85.00	m ²		
2J/02	Supplying and fixing semi glazed ceramic floor tiles on 20 mm thk. 1:3 cement and sand screed bedding and greater than 5.0 mm thk. tile adhesive bonding layer in ground floor.	150.00	m ²		
2J/03	Supplying, laying and fixing of 8.0 mm thk. 100 mm high approved colour homogenous porcelain floor tiles on 16 mm thk. 1:3 cement and sand screed backing and greater than 5.0 mm thk. tile adhesive bonding layer with beadings, joints and point with tile grout to match and forming neat uniform joint between tiles for floor skirting	25.00	m		
2J/04	-do- -do- ceramic tile skirting 100mm high -do-	100.00	m		
	First Floor				
2J/05	Supplying and fixing 600x600 mm semi glazed homogenous porcelain tiles on 20 mm thk. 1:3 cement and sand screed bedding and greater than 5.0 mm thk. tile adhesive bonding layer to porch steps, and stair case lobby in first floor.	280.00	m ²		
2J/06	Supplying, laying and fixing of 8.0 mm thk. 100 mm high approved colour homogenous porcelain floor tiles on 16 mm thk. 1:3 cement and sand screed backing and greater than 5.0 mm thk. tile adhesive bonding layer with beadings, joints and point with tile grout to match and forming neat uniform joint between tiles for floor skirting	110.00	m		
	<u>WALL AND CEILING FINISHES</u>				
	WALL FINISHES (Rate to include reveals)				
	Ground Floor				
2J/07	1:3 cement and sand 16 mm thk. rough wall plaster. Surfaces shall be finished smooth neatly with skim coat to internal walls.	740.00	m ²		
CARRIED TO COLLECTION					Rs.

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2J/08	1:3 cement and sand 16 thk. semi rough wall plaster in external walls in ground floor.	310.00	m ²		
2J/09	Perparing and apply 02 coats of skim coat to soffit area	300.00	m ²		
First Floor					
2J/10	1:3 cement and sand 16 mm thk. rough wall plaster. Surfaces shall be finished smooth neatly with skim coat to internal walls.	380.00	m ²		
CEILING FINISHES					
2J/11	Mineral fibber ceiling system with 12.5 mm thick panels size: 600x600 mm. Rate shall be included for main Aluminium cross tees, down clips, hanging wires, cover strips and all necessary trimming at wall ends forming & trimming around opening in floors.	215.00	m ²		
FLOOR RENDERING					
2J/12	1:3 cement and sand 20 mm thk. rendering plaster finished smooth with neat cement floating to plinth.	85.00	m ²		
CARRIED TO COLLECTION				Rs.	
<u>2K/- FLOOR/ WALL/ CEILING FINISHES COLLECTION</u>					
Page No. 69					
Page No. 70					
TOTAL OF FLOOR/ WALL/ CEILING FINISHES CARRIED TO BILL NO. 02 COLLECTION-					
Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
2K/-	BILL NO. 02 <u>PAINING WORKS</u> Note: a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings". b]. All surfaces to be painted shall be prepared as specified and the prepared surface shall be approved by the Engineer before painting. c]. Only alkali resistant emulsion paint shall be used on plastered surfaces.				
	d]. All paint materials shall be best quality and shall be prepared products of manufacture's approval by the Engineer in writing. e]. Unevenness and fillings in plastered surfaces shall be filled with gypsum and allowed to set, and sand papered to give a smooth and even surface. f]. Rates shall include scaffolding.				
2K/01	Internal Paint Supplying, preparing and applying of 02 coats of emulsion paint to internal walls and soffit of slab in ground floor.	1040	m ²		
2K/02	Supplying, preparing and applying of 02 coats of emulsion paint to internal walls and soffit of slab in first floor.	380	m ²		
2K/03	External Paint Supplying, preparing and applying of 01 coat of Acrylic filler and 02 coats of CIC weather shield Max or equivalent emulsion paint to external walls and columns in ground floor.	310	m ²		
TOTAL OF PAINTING WORKS CARRIED TO BILL NO. 02 COLLECTION-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 02					
2L/-	ROOF COVERING/ ROOF PLUMBING				
	Note :				
	a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings".				
	b]. Rates shall include for necessary scaffolding works.				
	Roof Covering				
2L/01	Supplying and fixing of 0.47 mm thk. (minimum thickness) zinalume approved colour bonded profiled sheet roofing with an including anchoring steel members all necessary extras (Ridge caps, trims, tenting screws, limpets etc..) (No allowance made for laps) to main building.	1100	m ²		
2L/02	Supplying and laying heat proofing insulation including glass wool fiber, 16kg, 50mm thick plain blanket double sided reinforced foil insulation and supported by BHP roof safe mesh (75x75mm), measured net. No allowance made for laps include for necessary scaffolding works (without eaves and fix to edges with suitable members).	1100.0	m ²		
2L/03	-do- 300 mm high approved colour bonded zinalume plain fascia board and bardge board sheets fix to end of "C" purlins (measured separately) with an including necessary all extras and fixing arrangement.	160	m		
	Roof Plumbing				
	Gutters				
2L/04	Supplying and fixing of 0.47mm thick (minimum thickness) 914mm girth approved colour bonded zinalume straight gutter fix to fascia board (measured separately) with necessary gutter brackets at 300 mm C/C and with an including necessary all extras and fixing arrangement.	110	m		
2L/05	Supplying and fixing color bonderd Zinik aluminium sheet velly guetter width 450mm including timber boarding.	15	m		
	Down Pipes				
2L/06	Supplying and fixing of 0.47 mm thk. (minimum thickness) 150x100 mm approved colour bonded zinalume straight square type rain water down pipe, fix to walls/ columns with standard down pipe clips at 1200 mm C/C and with an including necessary all extras and fixing arrangement.	90	m		
TOTAL OF ROOF COVERING/ ROOF PLUMBING WORK CARRIED TO BILL NO.02					
COLLECTION- Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 02					
2M/-	<u>AIR CONDITIONING SYSTEM</u>				
	<p>Note :</p> <p>a]. For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings".</p> <p>b]. Split type wall/Ceiling cassette mounted inventor type AC plant shall be suited for 230V up to 24000 and above capacity 3P - 400v 50Hz AC power supply and all motors shall be AC induction type. The plant (One Year Warrenty) and Compressor (Five Year Warrenty) shall be manufactured complying to standard of AR1. BS, JIS, etc.Relevant original technical litreture to be attached with the offer.</p> <p>c]. Quoted price should include the necessary material & labor chargers for supply, installation, testing & one year free maintenance of split type wall ceiling cassette mounted AC plants. All installations to be done according to the ASHARE air conditioning standards (GI Brackets, insulated drain water pipes, insulated Cu tubes, in PVC box casing, etc.</p> <p>d]. Recommended A/C manufactures/ brands of equipment are PANASONIC, TOSHIBA, MITSUBISHI, DAIKIN, HITACHI or equivalent.</p>				
2M/01	24000 BTU/h split wall mounted inventor type air conditioning plant	nos	6		
2M/02	If any other charges to complete the job	1	Item		
TOTAL OF AIR CONDITIONING SYSTEM CARRIED TO BILL NO. 02 COLLECTION-Rs.:					

**Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at
Gonapola Road, Gammanpila, Bandaragama.**

COLLECTION

Bill No	Description	Amount
Bill No 02	2A - EXCAVATION AND EARTH WORKS	
Bill No 02	2B - CONCRETE WORKS	
Bill No 02	2C - MASONRY WORKS	
Bill No 02	2D - WATER PROOFING WORKS	
Bill No 02	2E - STRUCTURAL METAL WORKS	
Bill No 02	2F - METAL WORKS	
Bill No 02	2G - PARTITION WORKS	
Bill No 02	2H - ELECTRICAL INSTALLATIONS	
Bill No 02	2J - FLOOR/ WALL/ CEILING FINISHES	
Bill No 02	2K - PAINTING WORKS	
Bill No 02	2L - ROOF COVERING/ ROOF PLUMBING	
Bill No 02	2M - AIR CONDITIONING SYSTEM	
TOTAL OF COLLECTION CARRIED TO MAIN SUMMARY-Rs.		

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 03					
3A/-	<u>EXTERNAL WORKS</u> Note: For the full description of materials and workmanship refer "Specification of works", "Pricing Preambles" and "Drawings".				
	<u>Tar Road</u> <u>Approved Hard Earth Filling</u>				
3A/01	Filling with imported material including control filling in layers, levelling and compacting, with 95% compaction and with 1.65 grams per cm ³ dry density.	200.00	m ³		
3A/02	Earth cutting and levelling	150.00	m ³		
	<u>AGGREGATE BASE COURSE FILLING</u>				
3A/03	Filled and well compacted with A.B.C. layer minimum thickness 150mm using roller	150.00	m ³		
3A/04	Priming and surfacing with Triple Bitumen surface Treatment (TBST) (3/4",1/2",1/4" mixture of blended metal) rate to include for river sand blinding and using roller.	675.00	m ²		
	<u>Kerbs</u>				
3A/05	Pre-cast concrete upstand kerbs (as manufactured by SEC or equivalent) size 150 x 300mm high 915 mm long (Grade 30) joint and point in 10mm thk. Cement and sand 1:3 mortar including excavation	100.00	m		
TOTAL OF EXTERNAL WORKS CARRIED TO MAIN SUMMARY-Rs.					

Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at Gonapola Road, Gammanpila, Bandaragama.

Item No.	Description	Qty	Unit	Rate	Amount
BILL NO. 04					
4A/-	<u>PROVISIONAL SUM</u>				
4A/01	Allow provisional sum of two hundred thousand rupees for providing landscape and turfing work.		sum	500,000.00	500,000.00
4A/02	Allow provisional sum of two hundred thousand rupees for providing Fire fighting work.		sum	1,000,000.00	1,000,000.00
4A/03	Allow provisional sum of two hundred thousand rupees for providing plumbing work and associated civil works.		sum	1,000,000.00	1,000,000.00
4A/04	Allow provisional sum of one million two hundred thousand rupees for supply and installation of Lightning conductor for the building.		sum	700,000.00	700,000.00
4A/05	Allow provisional sum of Six hundred thousand rupees for Repair work for external drains.		sum	500,000.00	500,000.00
TOTAL OF PROVISIONAL SUM CARRIED TO MAIN SUMMARY-Rs.					3,700,000.00

**Construction of Proposed Injection Moulding Factory for Ante LECO Meetering Company at
Gonapola Road, Gammanpila, Bandaragama.**

BILL OF QUANTITIES - MAIN SUMMARY

BILL NO	DESCRIPTION	AMOUNT	
		Rs.	Cts.
BILL NO. 01	PRELIMINARIES		
BILL NO. 02	COLLECTION		
BILL NO. 03	EXTERNAL WORKS		
Sub Total 1			
Less: Discounts (if any)			
Sub Total 2			
Add: Contingencies (10 %)			
Sub Total 3			
BILL NO. 04	PROVISIONAL SUM		3,700,000.00
Sub Total 4			
Total Bid Amount excluding Value Added Tax (VAT) carried to 'Form of Bid' page no. 17			
Add: Value Added Tax (VAT) 15%			
Total Bid Amount Including Value Added Tax (VAT)			

Bidder's VAT Registration No :

Total Bid Amount (excluding VAT) In Words ; Sri Lanka Rupees

.....

Signature & seal of the Bidder:

Date :

Witness :

Signature :.....

Signature :.....

Name :.....

Name :.....

Address :.....

Address :.....

.....

.....

Section – 8

Drawings

DRAWING NOS.

AT/LECO/BAN/441/TEND/AR/01 - 07

AT/LECO/BAN/441/TEND/ST/01 - 09

AT/LECO/BAN/441/TEND/ELE/01 - 05

Section – 9

STANDARD FORMS (BID)

Bid Security

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: **Lanka Electricity Company (Pvt) Limited, No. 411, E.H.Cooray Building, Galle Road, Colombo-3**

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 execution of [*insert name of contract*] under invitation for Bids No. [*insert IFB number*] ("the IFB").

Further more, 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 IBT") of the IFB; or
- (c) having been notified of the acceptance of its Bid by the Employer/Purchaser 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 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

Bidders are advised to fill the following table

ITEM	ITB Clause	YES (tick)	REFERENCE
Form of Bid			
Addressed to the Employer ?	18		
Completed ?	18		
Signed ?	18		
Bid Securing Declaration Form (if required)			
Properly filled and signed	16		
Bid Security (if required)			
Addressed to the Employer ?	16		
Format as required ?	16		
Issuing Agency as specified ?	16		
Amount as requested ?	16		
Validity 28 days beyond the validity of Bid ?	16		
Qualification Information			
All relevant information completed ?	4		
Signed ?	4		
Addendum			
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		