



**Wayamba Development Authority  
North Western Provincial Council**

**INVITATION FOR BIDS (IFB)  
CONSTRUCTION, SUPPLY, INSTALLATION AND COMMISSIONING OF  
TRAINING KITCHEN (HOT RANGE & PASTRY BAKERY UNIT) AT  
VOCATIONAL INSTITUTE OF TOURISM & HOSPITALITY  
(Expansions of Existing Kitchen)**

Chairman  
Procurement Committee  
Wayamba Development Authority  
New Malkaduwwa  
Boyagane

**WAYAMBA DEVELOPMENT AUTHORITY  
NORTH WESTERN PROVINCIAL COUNCIL**

**INVITATION FOR BIDDERS (IFB)**

**CONSTRUCTION,SUPPLY, INSTALLATION AND COMMISSIONING OF TRAINING KITCHEN AT  
VOCATIONAL TRAINING INSTITUTE OF TOURISM & HOSPITALITY (HOT RAGE & PASTRY KITCHEN)**

Chairman, of Procurement Commtee Wayamba Development Authority – North Western Provincial Council now invites sealed bids from eligible and qualified bidders for Construction, Supply, Installation & Commissioning of Training Kitchen at Vocational Training Institute of Tourism & Hospitality, New Malkaduwwa, Boyagane, Kurunegala.

1. Interested eligible bidders may be obtain further information from **Director General, Wayamba Development Authority, Maguruoyawaththa, New Malkaduwwa, Boyagane. (Phone 037-2225210)** & inspect the bidding documents from head office of mention above the during the working days **04.03.2024 until 25.03.2024 from 9.00 a.m. to 3.00 p.m.**
2. A Complete set of Bidding Documents in English Language can be purchased by Interested bidders on the submission of a letter of request to **Director General, Wayamba Development Authority, Maguruoyawaththa, New Malkaduwwa, Boyagane** during the working days from 04.03.2024 until 24.03.2024 from 9.00 a.m to 3.00 p.m. upon payment of a non – refundable fee of Rupees One Thousand (Rs.1000.00) **The method of payment will be cash** or can be downloaded from **<https://www.wayambatourism.lk>**
3. **Pre Bid Meeting** will be held on **11<sup>th</sup> March 2024 at 11.30 a.m** at **Wayamba Development Authority, New Malkaduwwa, Boyagane.**
4. Properly sealed bids in duplicate may be sent through the post under registered cover maked the Procurement title on the top left-hand corner of the envelop, addressed to The Chairman, Procurement Committee, New Malkauwawa, Boyagane. Or deposited in the Tender box kept at the address given above on or before at **2.00 p.m. on 25<sup>th</sup> of March 2024.** Late bids will be rejected. Bids will be closed at the above mentioned time and opened immediately in the presence of the bidders authorized representatives who choose to attend by the bidder.

Chairman  
Procurement Committee  
Wayamba Development Authority  
New Malkaduwwa  
Boyagan

## 01.Instruction to Bidders (ITB)

### 01. Preparation of Bids;

- i. **Cost of Bidding**– The bidder shall bear all costs associated with the preparation and submission of its bid, Procurement entry or purchaser shall not responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- ii. **Language of Bid** - The Bid as well as all correspondence and document relating to the Bid (including supporting documents and printed literature) exchange by the Bidder and the purchaser, shall be written in English Language.
- iii. **Documents Comprising the Bid** - The bid shall comprise the following :
  - (a) Bid submission form and applicable price schedule
  - (b) Technical Evaluation form
  - (c) Required drawings & layouts
  - (d) Field experience records form
  - (e) Bid Security
- iv. **Alternative Bids** - Alternative Bids shall not be considered
- v. **Bid price and Discount**- The Bidder shall indicate on the price schedule the unit prices and total bid prices of the goods. Any Discount offered against any single item or total amount in the price schedule shall be included in the unit price of the item. VAT and other taxes shall not be included in the price and shall be indicated separately.
- vi. **Period of Validity of bids** - Bids shall remain valid at least 90 days from the date of bid opening (04<sup>th</sup> June 2024)
- vii. **Bid Security** - Bid Security shall be furnished as a part of its Bid, qualified bidder shall keep bid security as a Bank guarantee of a bank operating in Sri Lanka and value is 100,000.00 along with the bid Submission and it comprises 120 dates from the date of the bid opening. (Valid until 04<sup>th</sup> July 2024 )
- viii. **Quote for all Items**- Bidder shall quote for all items. If any bidder shall not submit bid for all, bidder shall not eligible for detail evaluation and caused to Refuse the bids.

## **02. Submission and opening of Bids**

- i. **Submission, sealing and marking of bids** – Bidders shall be submitted bids by registered post or by hand to reached herein above address and shall enclose and original the duplicate of the in separate sealed envelopes, duly marking the envelops as “ORIGINAL” and “DUPLICATE” these envelops containing the original and the duplicate shall then be enclosed in one single envelop.
- ii. **Deadline for Submission** – Bids shall be received by bidder at the address given and not later than the date and time specified in the Advertisement and the bidding document
- iii. **Late Bids** – The late bidder shall not be considered any bids that arrive after the deadline for the submission of bids.
- iv. **Bid Opening** – The bidder shall be conducted the bid opening in the public at the address, date and time specified in the advertisement and the bidding document
- v. **Supporting Document** – Under this, bidder shall be enclosed along with the bids any catalogues that are regarding bidding items, technical staff availability for after-sales services, and evidence document for parts availability if there is any case for repairing bidding items. Those supportive documents shall be considered in the process of evaluating.

## **3. Evaluation & Qualification Criteria**

### **i. Document required**

If the bidder is qualified to evaluate, the bid mission shall consist of the document indicated below.

- a. Price Schedule – Annexure i
- b. Technical Specification form – Anneture ii
- c. Bid Submission form – Annexure iii
- d. Required Drawings, Kitchen drawings (Plumbing, Electrical & Equipment)
- e. Experience Requirement document (Annexure iv)
- f. Business Registration
- g. Bid Security
- h. Confirmation on part availability for bidding items
- i. After sales conformity & technical staff availability

ii. **Price evaluation**

The bidder shall bid for all items separately and evaluated as a whole/Total value submitted/ Total bid value. If the any bidder shall not quote for each / for all items, bidder shall not be eligible for evaluation.

iii. **Evaluation Criteria**

1. **Experience and Technical Capacity**

- a. Certificate of Business Registration
  - b. More than five years' experience in supplying, delivery & installation of training kitchen equipment after the registration. (please attach copies of purchase orders and completion certificates)
  - c. The bidder shall have completed at least one contract of supply & installation of equipment of similar nature within 03 years.
  - d. Technical experience and the certification of staff to carry out to necessary after sales services
2. The Bidder shall furnish documentary evidence to demonstrate that the equipmet it offers meet the following usage requirements
- a. 01-year warranty period for each item shall be required, from the date of acceptance by the purchaser
  - b. Bidder shall be in a position to confirm the availability of accessories for the next six years.

4. **Award of Contract**

- i. **Award Criteria** – The purchaser shall award the contract to the bidder whose offer has been determined to be the substantially lowest evaluated bid and whose quality with the required technical specification is substantially responsive to the bidding documents, provided further that the bidder is determined to be qualified to perform the contract satisfactorily.
  - ii. **Performance Bond** – Selected bidder shall have kept the performance bond covering the valued 10% of contract amount before signing the agreement.
- ii. **Signing of Contract** - Within seven days (07) after the notification (Letter of Acceptance) the purchaser shall be commence works prior to that inform the successful bidder to sign the agreement

## 5. Payment Procedure

- i. **Advance Payment** – The qualified bidder shall not be right to receive any advance payment for the contract
- ii. **Final payment** - The final payment shall be made after the completion of work

### **Completion and handing over**

- i. **Completion of Work** – Selected contractor shall complete all assigning works as required by bidding document & agreed layout (hot range – plumbing, electric & drainage and pastry bakery unit)
- ii. **Warranty** – Supplier shall offer at least 01 year warranty for all necessary items in a single item or as a whole
- iii. **After service** – Repairs or after sales services if any are needed, the supplier shall be provided under the contract

## Bid Submission Form

**(The Bidder shall fill in this form in accordance with the instructions indicated No 01 alterations to its format shall be permitted and no substitutions shall be accepted)**

Date :[ insert date ( as day, month and year) of Bid submission]  
No,: [insert number of bidding process]

To:  
Chairman,  
Procurement Committee,  
Wayamba Development Authority,  
Maguruoya Waththa,  
Nawa Malkaduwawa,  
Boyagane.

We, the undersigned, declarer that:

01. We have examined and have no reservations to the Bidding Documents, including Addenda  
No: *[insert the number and issuing date of each addenda]*
02. We offer to supply in conformity with the Bidding documents and in accordance with the Delivery Schedules specified in the schedule of Requirements the following Good and related services (*CONSTRUCTION,SUPPLY, INSTALLATION AND COMMISSIONING OF TRAINING KITCHEN AT VOCATIONAL TRAINING INSTITUTE OF TOURISM & HOSPITALITY (HOT RAGE & PASTRY KITCHEN)*)
03. The total price of our Bids without VAT, including any discounts offered is :*[insert the total bid price in words and figures]*

(a)

| Lot # | Total price of our bid without VAT, including any discounts offered in figure (LKR) | Total price of our bid without VAT, including any discounts offered in Words (LKR) |
|-------|---|--|
|       |   |  |

(b) The total price of our Bid including VAT, and any discounts offered is:*[ insert the total bid price in words and figures];*

(c)

| Lot # | Total price of our bid with VAT, including any discounts offered in figure (LKR) | Total price of our bid with VAT, including any discounts offered in Words (LKR) |
|-------|--|---|
|       |  |   |

(d) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: *[insert signature of person whose name and capacity are shown]*

In the capacity of [ *insert legal capacity of person signing the Bid Submission Form*]

Duly authorized to sign the bid for and on behalf of : *[insert complete name of Bidder]*

Date on ..... day of .....*(insert date of signing)*



### 03.Price Schedule

Construction, Supply, Installation and Commissioning of Training Kitchen & Pastry Kitchen the Wayamba Institute of Tourism & Hospitality, Wayamba Development Authority, Chief Ministry, North Western Provincial Council.

| NO  | DESCRIPTION  | QTY | Price Schedule                       |                                       |
|-----|--|-----|--------------------------------------|---------------------------------------|
|     |  |     | Unit Price<br>Excluding<br>Tax (Rs.) | Total Price<br>Excluding<br>Tax (Rs.) |
| 01  | Training Kitchen – Hot range   |     |                                      |                                       |
| 1.1 | Stainless Steel Table Unit Size :<br>1100×700×850mm <ul style="list-style-type: none"><li>With Under Shelf</li><li>With Backplash</li><li>1 ½” Round Pipe Legs</li></ul> S/S 304 Material  | 01  |                                      |                                       |
| 1.2 | S/S working station with Sink (Sink Table)<br>Unit Size:1100x700cx850<br>Sink Bowl Size; 500x500x300mm<br>With under shelf<br>With Backsplash<br>1½’ Round pipe legs<br>S/S 304 Material<br>3 Side Covered<br>Single tap<br>Locally fabricated | 10  |                                      |                                       |
| 1.3 | Gas Range With 6 – Burner without oven <ul style="list-style-type: none"><li>Unit Size : 1050x700x920mm</li><li>With Safety Valves</li><li>One Year Warrantee For The Gas Valve &amp; Body</li><li>Locally or Asian Origin</li></ul>           | 03  |                                      |                                       |
| 1.4 | Gas Range With 4– Burner without oven <ul style="list-style-type: none"><li>Unit Size : 1050x700x920mm</li><li>With Safety Valves</li><li>One Year Warrantee For The Gas Valve &amp; Body</li></ul> Locally or Asian Origin                    | 01  |                                      |                                       |
| 1.5 | Electric Convection Oven (Bakery) <ul style="list-style-type: none"><li>External Dimension<br/>920×840×865mm WxDxH</li><li>Total Electric Power : 10.8 kw</li></ul>  | 01  |                                      |                                       |

|      |  |    |  |  |
|------|--|----|--|--|
|      | <ul style="list-style-type: none"> <li>Power Supply Voltage :<br/>AC- 230v -50Hz</li> <li>Load Capacity – 6 Trays 600x400</li> <li>One Year Warranty Electric Heating System</li> <li>European Origin</li> </ul>   |    |  |  |
| 1.6  | <p>Gas Line</p> <ul style="list-style-type: none"> <li>Total Length : 20 feet (maximum)</li> <li>L/P 12Kg Regulator</li> <li>With Pigtail Hose &amp; Adaptors</li> <li>4 Bottle Connection</li> <li>Other Pipe Fitting</li> </ul>  | 01 |  |  |
| 1.7  | <p>Fraying Killer</p> <p>Linear range of action: 15 mtrs</p> <p>Lamp UV-A Actinic lamp: 2 x 40W</p> <p>Ext. Dim. : 600 (W) x 250 (D) x 400 (H) mm</p> <p>Power : 95 W - 230/1/50 Hz</p>  | 01 |  |  |
| 1.8  | <p>Ice Cube Machine</p> <p>850mm x 531mm</p> <p>Daily ice cube production 110 Ibs (Up to 50 kg</p> <p>Up to 23 kg (50lbs) ice storage capacity, S/S exterior</p> <p>Front access condenser air filter, removable &amp; washable</p> <p>CFC -free R-13 4a Refrigerant, Door-closing movement dampening system</p> | 01 |  |  |
| 1.9  | <p>Exhausting Hood (for Lecturer Demonstration Unit)</p> <p>S/S Box type Exhaust Hood with one side Filters and Bulk Head Light</p> <p>Dim: 2000 x 1000 x 500mm</p>  | 01 |  |  |
| 1.9  | <p>Electric Wiring For Internal (Suit to Kitchen Equipment Proposed by the Bidders Layout Plan)</p>  | 01 |  |  |
| 1.10 | <p>Plumbing Arrangement with drainage line ( Plumbing should be suit to kitchen equipment, as at the Drawing</p>   | 01 |  |  |
| 1.11 | <p>Partition (Chef office &amp; dry store) as at the drawing</p>   |    |  |  |

|  |  |    |  |  |
|--|--|----|--|--|
|  | Supply & fixing of cladding & glass partition  |    |  |  |
| 02   | <b>Pastry Kitchen</b>  |    |  |  |
| 2.1  | S/S working station with Sink (Sink Table)<br>Unit Size:1100x700cx850<br>Sink Bowl Size; 500x500x300mm<br>With under shelf<br>With Backsplash<br>1½' Round pipe legs<br>S/S 304 Material<br>3 Side Covered<br>Single tap<br>Locally fabricated | 02 |  |  |
| 2.2  | Cylindrical cased Axial Flow Fans<br>Aluminum Impellers<br>Corrosion resistance, Single phase mortar<br>230V-50Hz<br>Working temperature from - 40°C to +40°C  | 01 |  |  |
| 2.3  | Gas line <ul style="list-style-type: none"> <li>• Total Length : 20 feet (maximum)</li> <li>• L/P 12Kg Regulator</li> <li>• With Pigtail Hose &amp; Adaptors</li> <li>• 2 Bottle Connection</li> <li>• Other Pipe Fitting</li> </ul>           |    |  |  |
| 2.4  | Partition (separation from pastry unit and teaching area) as at the drawing<br>Supply & fixing of cladding & glass partition   |    |  |  |
| Sub Total ( <i>Excluding Tax</i> – Rs.)  |  |    |  |  |
| Installation & Transport Chargers  |  |    |  |  |
| Grand Total (With Transport , Installation Chargers & any other project expenses - Rs. )<br><i>Excluding Taxex</i> |  |    |  |  |

.....  
Signature of the Bidder

.....  
Date of Signing

.....  
Official Seal / Company Seal

## 04. Technical Specifications

Construction, Supply, Installation and Commissioning of Training Kitchen & Pastry Kitchen the Wayamba Institute of Tourism & Hospitality Wayamba Development Authority, Chief Ministry North Western Provincial Council

### TECHNICAL SPECIFICATIONS

| NO  | Minimum requirement given by entity<br>(Wayamba Development Authority)   | QTY | Bidder's Offer |                         |
|-----|--|-----|----------------|-------------------------|
|     |  |     | Yes ( Y )      | If “N” then,<br>Remarks |
| 01  | Training Kitchen – Hot Range   |     |                |                         |
| 1.1 | Stainless Steel Table Unit Size :<br>1100×700×850mm <ul style="list-style-type: none"><li>With Under Shelf</li><li>With Backplash</li><li>1 ½” Round Pipe Legs</li></ul> S/S 304 Material  | 01  |                |                         |
| 1.2 | S/S working station with Sink (Sink Table)<br>Unit Size:1100x700cx850<br>Sink Bowl Size; 500x500x300mm<br>With under shelf<br>With Backsplash<br>1½’ Round pipe legs<br>S/S 304 Material<br>3 Side Covered<br>Single tap<br>Locally fabricated | 10  |                |                         |
| 1.3 | Gas Range With 6 – Burner without oven <ul style="list-style-type: none"><li>Unit Size : 1050x700x920mm</li><li>With Safety Valves</li><li>One Year Warrantee For The Gas Valve &amp; Body</li><li>Locally or Asian Origin</li></ul>           | 03  |                |                         |
| 1.4 | Gas Range With 4– Burner without oven <ul style="list-style-type: none"><li>Unit Size : 1050x700x920mm</li><li>With Safety Valves</li><li>One Year Warrantee For The Gas Valve &amp; Body</li></ul> Locally or Asian Origin                    | 01  |                |                         |

|     |   |    |  |  |
|-----|---|----|--|--|
| 1.5 | <p>Electric Convection Oven (Bakery)</p> <ul style="list-style-type: none"> <li>• External Dimension<br/>920×840×865mm WxDxH</li> <li>• Total Electric Power : 10.8 kw</li> <li>• Power Supply Voltage :<br/>AC- 230v -50Hz</li> <li>• Load Capacity – 6 Trays 600x400</li> <li>• One Year Warranty Electric Heating System</li> <li>• European Origin</li> </ul> | 01 |  |  |
| 1.6 | <p>Gas Line</p> <ul style="list-style-type: none"> <li>• Total Length : 20 feet (maximum)</li> <li>• L/P 12Kg Regulator</li> <li>• With Pigtail Hose &amp; Adaptors</li> <li>• 4 Bottle Connection</li> <li>• Other Pipe Fitting</li> </ul>   | 01 |  |  |
| 1.7 | <p>Fraying Killer</p> <p>Linear range of action: 15 mtrs</p> <p>Lamp UV-A Actinic lamp: 2 x 40W</p> <p>Ext. Dim. : 600 (W) x 250 (D) x 400 (H) mm</p> <p>Power : 95 W - 230/1/50 Hz</p>   | 01 |  |  |
| 1.8 | <p>Ice Cube Machine</p> <p>850mm x 531mm</p> <p>Daily ice cube production 110 Ibs (Up to 50 kg</p> <p>Up to 23 kg (50Ibs) ice storage capacity, S/S exterior</p> <p>Front access condenser air filter, removable &amp; washable</p> <p>CFC -free R-13 4a Refrigerant, Door-closing movement dampening system</p>  | 01 |  |  |
| 1.9 | <p>Exhausting Hood (for Lecturer Demonstration Unit)</p> <p>S/S Box type Exhaust Hood with one side Filters and Bulk Head Light</p> <p>Dim: 2000 x 1000 x 500mm</p>   | 01 |  |  |
| 1.9 | <p>Electric Wiring For Internal (Suit to Kitchen Equipment Proposed by the Bidders Layout Plan)</p>   | 01 |  |  |

|  |  |    |  |  |
|--|--|----|--|--|
| 1.10   | Plumbing Arrangement with drainage line<br>( Plumbing should be suit to kitchen equipment, as at the Drawing)  | 01 |  |  |
| 1.11   | Partition (Chef office & dry store) as at the drawing  |    |  |  |
| 02   | <b>Pastry Kitchen</b>  |    |  |  |
| 2.1  | S/S working station with Sink (Sink Table)<br>Unit Size:1100x700cx850<br>Sink Bowl Size; 500x500x300mm<br>With under shelf<br>With Backsplash<br>1½' Round pipe legs<br>S/S 304 Material<br>3 Side Covered<br>Single tap<br>Locally fabricated | 02 |  |  |
| 2.2  | Cylindrical cased Axial Flow Fans<br>Aluminum Impellers<br>Corrosion resistance, Single phase mortar<br>230V-50Hz<br>Working temperature from - 40°C to +40°C  | 01 |  |  |
| 2.3  | Gas line <ul style="list-style-type: none"> <li>• Total Length : 20 feet (maximum)</li> <li>• L/P 12Kg Regulator</li> <li>• With Pigtail Hose &amp; Adaptors</li> <li>• 2 Bottle Connection</li> <li>• Other Pipe Fitting</li> </ul>           |    |  |  |
| 2.4  | Partition (separation from pastry unit and teaching area) as at the drawing<br>Supply & fixing of cladding & glass partition   |    |  |  |
| Sub Total ( <i>Excluding Tax</i> – Rs.)  |  |    |  |  |
| Installation & Transport Chargers  |  |    |  |  |
| Grand Total (With Transport , Installation Chargers & any other project expenses - Rs. )<br><i>Excluding Tax</i> |  |    |  |  |

## 05.Past Experience

The bidder shall complete at least 05 year experience in similar capacity and the same scope of work in relatively immediate last 10 year. Proofed documents shall be attached with bid submission.

The Bidder Fill the Experience Schedule format as given below,  
Experience of relevant field

| No. | Name of the Client | Type Contract | Scope of the Contract |
|-----|--------------------|---------------|-----------------------|
|     |                    |               |                       |
|     |                    |               |                       |
|     |                    |               |                       |
|     |                    |               |                       |
|     |                    |               |                       |
|     |                    |               |                       |
|     |                    |               |                       |
|     |                    |               |                       |
|     |                    |               |                       |

.....

Signature of the Bidder

.....

Date of Signing

.....

Official Seal / Company Sea

## 06. Declaration of followings

- Official letter declaring the one-year warranty for all items
- Technical staff availability
- Confirm the availability of accessories for next six years
- Drawings you proposing to the kitchen and catalogs of equipment to be installed
- Proof Document for Experiences on similar projects & Completion Reports
- Business registration

## 07. Bid Security Guarantee

( This blank Guarantee form shall be filled in accordance with the instructions indicate in brackets)

.....[ insert issuing agency's name, and address of issuing branch of office]

Beneficiary : .....[insert (by PE) name, and address of employer/purchaser]

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; if a joint venture, list complete legal name of partners ] (here in after called the “Bidder”) has submitted to you its bid dated .....[insert (by issuing agency date] (hereinafter called the “The Bid”)for the execution /supply [select appropriately of [insert name of the contact].....

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

All the request of the Bidder, we ..... [insert (by 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 obligations 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 Instruction to Bidder (hereinafter “ the ITB” ) 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 refuse to execute the contract From .if required, or (ii) fails or refuse to furnish the performance Security , in accordance with the ITB.



This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the contract signed by the Bidder and of the Performance Security issued to you by the Bidder: or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder that the Bidder was unsuccessful , 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 of authorized representative]

### **Basic Drawings – Hot Range & Pastry Bakery Unit of the Training Kitchen**

- i. Kitchen Layout
- ii. Electric Drawing
- iii. Plumbing & Drainage
- iv. Partition

**SUPPLY, INSTALLATION , TESTING AND COMMISSIONING OF ELECTRICAL, PLUMBING, GAS INSTALLATION SYSTEMS**

| NO | DESCRIPTION  | UNIT | QYT   | RATE (Rs) | AMOUNT (Rs) |
|----|--|------|-------|-----------|-------------|
|    | <b><u>ELECTRICAL INSTALLATION</u></b>  |      |       |           |             |
|    | The bidders are requested to refer the general notes, pricing preambles,   |      |       |           |             |
| 1  | drawings, conditions of contract, special conditions of contract and all other relevant documents prior to pricing of the following items.   | Note |       |           |             |
| 2  | All materials, equipment's, wiring and workmanship shall confirm to local authority requirements, BS Standards, latest I.E.E regulations (18th edition).   | Note |       |           |             |
| 3  | Contractor shall obtain sample approvals for all the items used in electrical Installation before commencing installation.   | Note |       |           |             |
| 4  | Contractor shall propose shop drawings/conduit layouts drawings and shall obtain approval from Consultant Engineer before commencing   | Note |       |           |             |
| 5  | Rates in Bill of Quantities shall include all necessary materials Cables, conduits, PVC sunk box, bulbs, switches, etc.) and labor required to complete the electrical installation to good working order.   | Note |       |           |             |
| 6  | Except where specifically stated, all costs associated with provision of all holes, openings, chases, ducts and other builders' work required for installation and make them good, shall be included in the rates.   | Note |       |           |             |
| 7  | Where reference is made to certain manufactures' products and items identified by registered trade marks, this has been done for the sole purpose of defining and establishing standards of quality and performance and not with the intention of restricting the procurement of material or fitting to a particular manufacturer. | Note |       |           |             |
| 8  | Electrical Items (MCB,RCCB etc.) without and accredited agent in Sri Lanka shall not be accepted and guarantee cards (Fans etc.) should be provided from Accredited agent when necessary.  | Note |       |           |             |
| 9  | All the main feeder cables quoted below shall be on measure and pay basis.   | Note |       |           |             |
|    | <b>MAIN , SUB MAIN &amp; DB PANELS</b>   |      |       |           |             |
| 10 | Supply and Installation of Sub Main Distribution Boards complete with all connections, termination with necessary accessories as per project specifications and drawings   | Note |       |           |             |
| 11 | Distribution Boards shall be complete with necessary protection with integral isolating main switch and cable connections including all trunking and perforated tray etc as per the project specifications and drawings  | Note |       |           |             |
|    | <b>FEEDER CABLES</b>   |      |       |           |             |
| 12 | Supply and installation of LV cables including necessary cable trays, ladders(Hot dipped GI or Zn/Al), hot dipped GI brackets, final termination works at both ends lugs, & any other accessories. All horizontal and vertical Cable trays should be adequately sized to provide 40% spare space.                                  | Note |       |           |             |
| 13 | 1x4Cx06mm2 Cu/PVC/PVC+06mm2 Earth cable from SDB-Upper floor to SDB-Kitchen  | m    | 10.00 |           |             |
|    | <b>GENERAL POWER</b>   |      |       |           |             |
| 14 | Conduits, Cables up to the socket outlet point through the outlet, sun boxes and socket outlet in concealed or inside the ceiling including termination at the distribution boards with necessary accessories.   | Note |       |           |             |
| 15 | Supply and installation of Power point wiring from 2x1Cx 2.5mm2 PVC/PVC/Cu+2.5mm2 Earth Cable as per the drawings, and specifications.(Including surface casing & socket outlet)   | Note |       |           |             |

| NO | DESCRIPTION  | UNIT | QTY   | RATE (Rs) | AMOUNT (Rs) |
|----|--|------|-------|-----------|-------------|
| 16 | Supply, installation and cable termination of 40A 4P isolator at the SDB-G (Connection to SDB-upper floor & SDB-Kitchen)   | No   | 1.00  |           |             |
| 17 | 13A - socket outlet point wiring - Bain Marie  | No   | 1.00  |           |             |
| 18 | 32A - Isolator point wiring - Isolator Oven  | No   | 1.00  |           |             |
| 19 | 13A - socket outlet point wiring - Exhaust Fan   | No   | 1.00  |           |             |
| 20 | 13A - socket outlet point wiring - Hob   | No   | 1.00  |           |             |
| 21 | 13A - socket outlet point wiring - Hood  | No   | 1.00  |           |             |
| 22 | 13A - socket outlet point wiring - Chiller 1   | No   | 1.00  |           |             |
| 23 | 13A - socket outlet point wiring Chiller 2   | No   | 1.00  |           |             |
|    | <b>TESTING AND COMMISSIONING</b>   |      |       |           |             |
| 24 | Contractors responsibility is untill handing over all the electrical equipment, accesosorce fixed by the contractor.   | Note |       |           |             |
| 25 | Allow for testing and commissioning of the system including electrical, lighting protection, earthing system to the entire satisfaction of the Engineer including submission of technical literature and maintenance manual.   | Item | 1.00  |           |             |
|    | <b>Plumbing installation</b>   |      |       |           |             |
|    | <b>General Notes</b>   |      |       |           |             |
| 26 | The tenderer is requested to refer the drawings and notes prior to pricing the following items   | Note |       |           |             |
| 27 | The tenderer shall submit all the information, make, model No., Technical data, country of manufacture on the items, equipments, fittings quoted with the tender   | Note |       |           |             |
| 28 | All uPVC pipes and fittings to confirm BS EN 1401-1:1998, BS EN 12200-1:2000, BS EN 1462:2004, BS EN 607:2004, BS EN 274-1:2002, BS EN 274-3:2002, BS EN 274-2:2002, BS4514, BS EN 1329-1:2000, BS EN 1455-1:2000, BS EN 1519-1:2000, BS EN 1565-1:2000, BS EN 1566-1:2000, BS EN 1451-1:2000                                    | Note |       |           |             |
| 29 | All pipe connation line of water supply, waster and sewer laid into and laid out of the building shall be fix with flexible joints allowing possibility for moments due to structural settlements.   | Note |       |           |             |
| 30 | Rates for pipes shall include all pipe fittings, cleaning eyes, inspection openings, caps etc. bracketing, suitable pipe supports, saddles, clips, screws, nails, hardware fixing and jointing materials, cutting holes, chasing in brick work of the pipes and other fixing accessories etc., to the approval of the consultant | Note |       |           |             |
| 31 | All sewer and waste pipes on above ground shall be PNT-7 from an approved manufacture  | Note |       |           |             |
| 32 | All sewer and waste pipes buried in ground shall be PNT-11   | Note |       |           |             |
| 33 | Rates for all under ground pipes shall include for all excavation, laid to gradient, filling with suitable material and encasing the pipe with concrete as required  | Note |       |           |             |
| 34 | All tap fittings and the sanitary fittings to be supplied and installatin by the contractor  | Note |       |           |             |
|    | <b>WATER DISTRIBUTION SYSTEM</b>   |      |       |           |             |
| 35 | Supply and laying of 50mm UPVC PNT-11 incoming water supply pipe to sinks 1-10   | m    | 4.00  |           |             |
| 36 | Supply and laying of 50mm UPVC PNT-11 incoming water supply pipe to sinks 11-20  | m    | 10.00 |           |             |



| NO | DESCRIPTION   | UNIT | QYT   | RATE (Rs) | AMOUNT (Rs) |
|----|---|------|-------|-----------|-------------|
| 37 | Supply and Installation of 50mm valve   | No.  | 2.00  |           |             |
| 38 | Supply and installation of the approved quality 25mm angle valves(Prime cost - 2,400.00)  | No   | 11.00 |           |             |
|    | <b>Waste Water Disposal System</b>  |      |       |           |             |
| 39 | Supply and installation of 110mm/PNT-7 sink waste water pipe riser as per the drawing.  | m    | 15.00 |           |             |
| 40 | Supply and installation of 63mm/PNT-7 waste water pipe as per the drawing.  | m    | 12.00 |           |             |
|    | <b>Manhole</b>  |      |       |           |             |
| 41 | Construction of 300x150mm catch pit on the existing floor as per the drawing  | No   | 4.00  |           |             |
| 42 | Supply and installation of 300x150mm SS grating with SS insects screen  | No   | 4.00  |           |             |
|    | <b>LP GAS SYSTEM</b>  |      |       |           |             |
| 43 | "Supply, installation testing and commissioning of central gas distribution system " to be carried out by a specialist subcontractor .  | Note |       |           |             |
| 44 | Rates shall include for supply, installation, testing and commissioning of equipment, together with related builder's work in connection with (unless otherwise measured separately) as per specifications and complete to working order with all low voltage and other connections, operating panels etc to entire satisfaction of the consultant.                   | Note |       |           |             |
| 45 | Rate shall include for necessary chasings, conduits, cables, fittings and clips, cutting holes and chases in brick work / block work / concrete work complete with all necessary accessories such as sockets, connections, cable glands and boxes hardware clips, soldering and jointing materials etc., for proper installation.                                     | Note |       |           |             |
| 46 | The contractor shall submit all necessary design detail, shop drawings, line diagrams, technical information's etc., to the Consultant for prior approval.  | Note |       |           |             |
| 47 | The rate shall include for providing insurance for during handling, re handling, transport, store until ready for installation, delivery for equipment up to the point of installation, until handing over and extended maintenance cover.  | Note |       |           |             |
| 48 | The tenderer shall provide all dimensions and technical information and necessary builders work to the engineer in advance in relation with the program of work.  | Note |       |           |             |
| 49 | All equipment's shall be guaranteed for a period requested by the consultant from the date of commissioning.  | Note |       |           |             |
| 50 | Contractor is responsible to provide samples of relevant equipment and other fittings for approval of Engineer.   | Note |       |           |             |
| 51 | The works included under this section shall comprise fittings & accessories from an approved manufacturer including engineering, supply, installation, testing, commissioning of the complete LP Gas Installation system according to the requirements of The Colombo Fire Department & ICTAD/UDA Fire regulations and as outlined in the Specification and Drawings. | Note |       |           |             |
| 52 | Tenderer shall provide necessary protection for all materials.  | Note |       |           |             |
|    | <b>PIPE WORKS</b>   |      |       |           |             |
| 53 | Approved galvanized steel to comply with ASTM A 53 schedule 40 to comply with BS 5482-1:2005 including all hangers, anchors, expansion devices, sleeves, plates, brackets, covering, clips, weather shading where required, supports as specified.  |      |       |           |             |

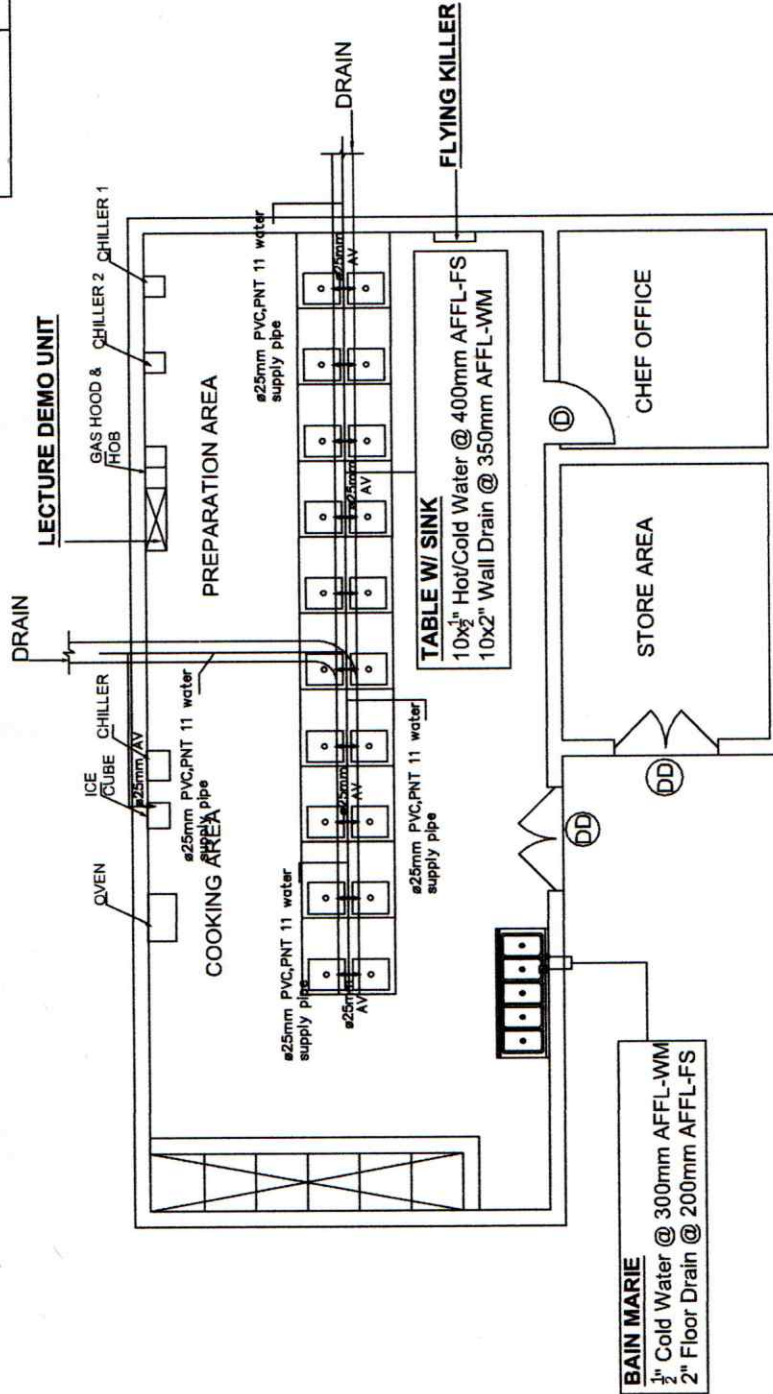
| NO              | DESCRIPTION  | UNIT | QYT | RATE (Rs) | AMOUNT (Rs) |
|-----------------|--|------|-----|-----------|-------------|
| 54              | Supply and installation of 25mm diameter pipe to at lecture demo area including protective painting  | m    | 15  |           |             |
| 55              | Supply and installation of 2nd stage automatic pressure regulator(15PSI to 0.4PSI) with isolation valve on 25mm diameter pipework.   | No   | 1   |           |             |
| 56              | Supply and installation of 25mm gate valve   | No   | 1   |           |             |
|                 | <b><u>LPG Cylinder Bank</u></b>  |      |     |           |             |
| 57              | Supply and installation of 37.5kg capacity ,LPG Cylinders from an approved manufacturer and complete fixing to the manifold with necessary accessories   | Nos  | 4   |           |             |
| 58              | Supply and installation of 25mm diameter pipe to at class room area including protective painting  | m    | 20  |           |             |
| 59              | Supply and installation of 2nd stage automatic pressure regulator(15PSI to 0.4PSI) with isolation valve on 25mm diameter pipework at class room  | No   | 1   |           |             |
|                 | <b><u>Builders work</u></b>  |      |     |           |             |
| 60              | Allow for marking the position of holes, coring, chasing , providing pipe sleeves as required.   | Item | 1   |           |             |
|                 | <b><u>Testing and Commissioning</u></b>  |      |     |           |             |
| 61              | Allow for testing and commissioning of all above and submission of commissioning report in triplicate. Submission of full set of operation and maintenance manuals and circuit wiring diagram in triplicate for the elevators. | Item | 1   |           |             |
|                 | <b><u>Sundries</u></b>   |      |     |           |             |
| 62              | Allow for providing samples, technical catalogs, as built drawings (3 hard copies and a soft in CAD) operation and maintenance manuals all warranties/ guaranties as per project specification, identification labels, etc.    | Item | 1   |           |             |
| Total(Rs)       |  |      |     |           | -           |
| VAT(18%)        |  |      |     |           | -           |
| Grand Total(Rs) |  |      |     |           | -           |

#### **Technical Detail**

| No | Item                         | Brand / Model | Contry of origin / Manufacture |
|----|------------------------------|---------------|--------------------------------|
| 1  | Conduits                     |               |                                |
| 2  | Junction box                 |               |                                |
| 3  | Electrical Cable             |               |                                |
| 4  | Switch/Socket outlet         |               |                                |
| 5  | Switchgears                  |               |                                |
| 6  | DB Enclosure                 |               |                                |
| 7  | Gate valves                  |               |                                |
| 8  | PVC Pipe                     |               |                                |
| 9  | Pipe brackets                |               |                                |
| 10 | Sink tap                     |               |                                |
| 11 | Angle valves                 |               |                                |
| 12 | GAS pipe                     |               |                                |
| 13 | Automatic pressure regulator |               |                                |
| 14 | Gate valves                  |               |                                |

# LEGEND




|           |                        |
|-----------|------------------------|
| — — — — — | Cold water supply pipe |
| H         | Sink tap               |
| ∞         | Angle Valve            |

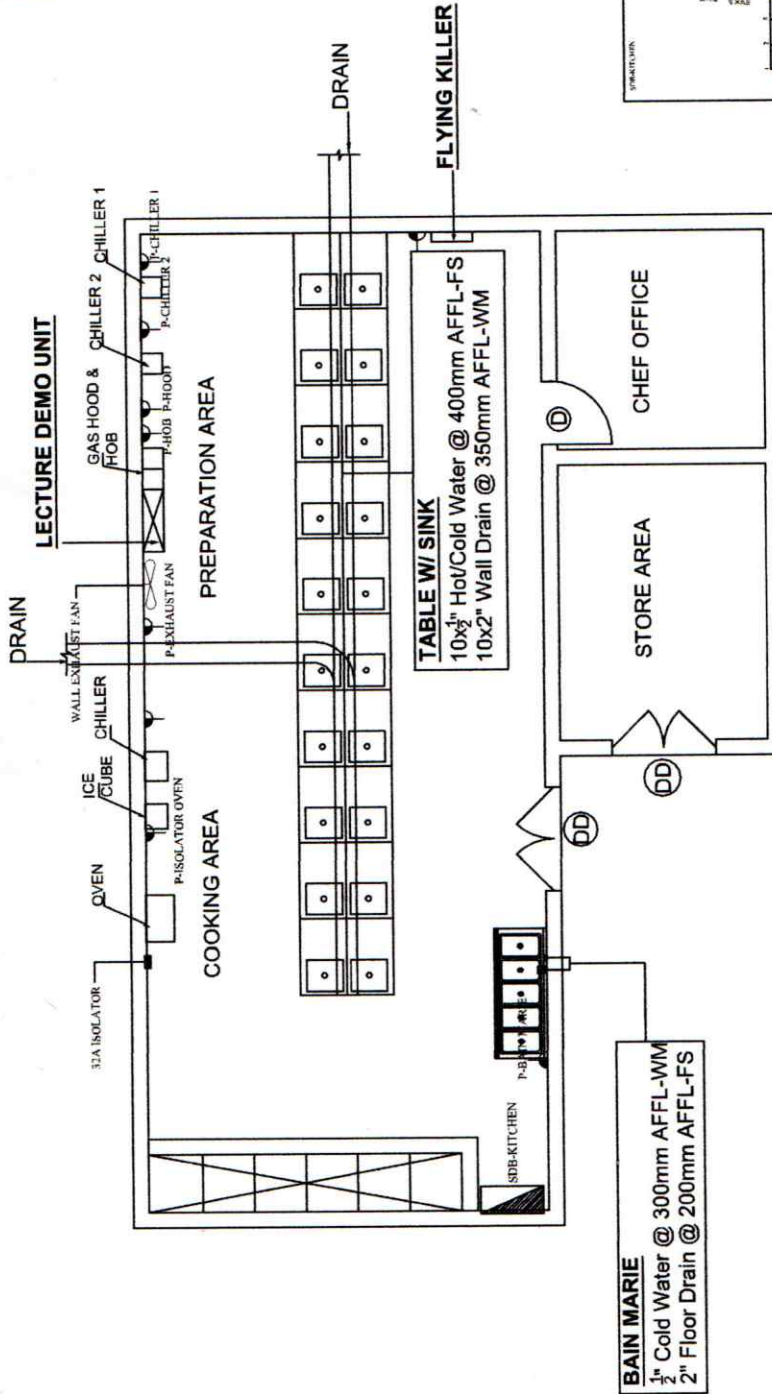


## LAYOUT OF THE EXPANSION THE KITCHEN

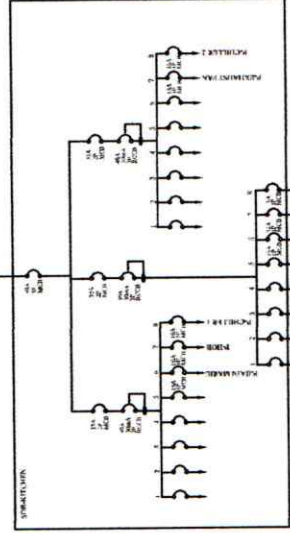
|         |           |     |   |   |            |                   |
|---------|-----------|-----|---|---|------------|-------------------|
| PROJECT | ARCHITECT | MEP | AKNIT CONSULTANTS (PVT)LTD<br>Chartered Engineers, Design Consultants   | TITLE<br>COLD WATER DISTRIBUTION LAYOUT |            |                   |
|         |           |     |   | DESIGNED : JT                           | DRAWN : PH | DATE : 11.02.2024 |
|         |           |     | 15/3 Samindu Mawatha<br>Kohalvile Road<br>Kilibathgoda.<br>e-mail: jayampathy037@yahoo.com<br>Tel.: 0718 68 34 98 | SCALE : NTS                             | REV.       | 00                |
|         |           |     |   | DRAWING NO. 2402/MDA-KI/NS/CON/02       |            |                   |



| LEGEND  | NAME & DESCRIPTION |
|---|--------------------|
|  | CEILING FAN        |
|  | SOCKET OUTLET      |
|  | DISTRIBUTION BOARD |





ADDITIONS TO THE  
SDB-KITCHEN

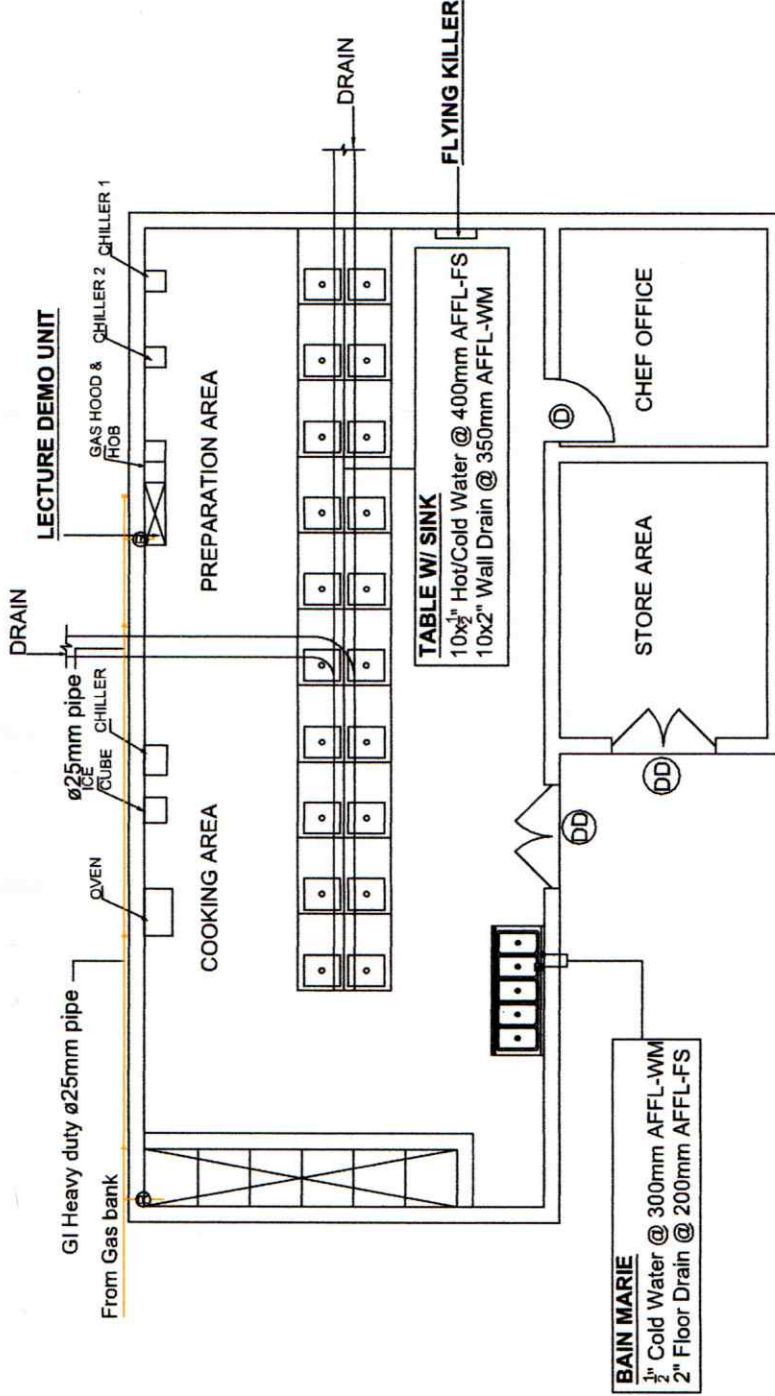


## LAYOUT OF THE EXPANSION THE KITCHEN

|         |           |  |                         |       |       |              |
|---------|-----------|--|-------------------------|-------|-------|--------------|
| PROJECT | ARCHITECT | MEP  | TITLE                   |       |       |              |
|         |           | AKNIT CONSULTANTS (PVT)LTD<br>Chartered Engineers,Design<br>Consultants  | LIGHTING & POWER LAYOUT |       |       |              |
|         |           | 15/3 Samindu Mawatha<br>Kohalviya Road<br>Kiribathigoda.<br>e-mail: jayampathy037@yahoo.com<br>Tel.: 0718 88 34 98 | DESIGNED                | : JT  | DRAWN | : PH         |
|         |           |  | SCALE                   | : NTS | DATE  | : 11.02.2004 |
|         |           |  | DRAWING NO.             | REV.  |       |              |
|         |           |  | 2402/WDA-KI/ELE/CON/02  | 00    |       |              |

# LEGEND

|   |           |
|---|-----------|
|  | Gas pipe  |
|  | Regulator |



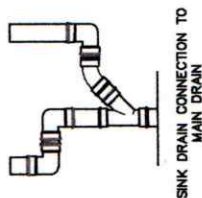
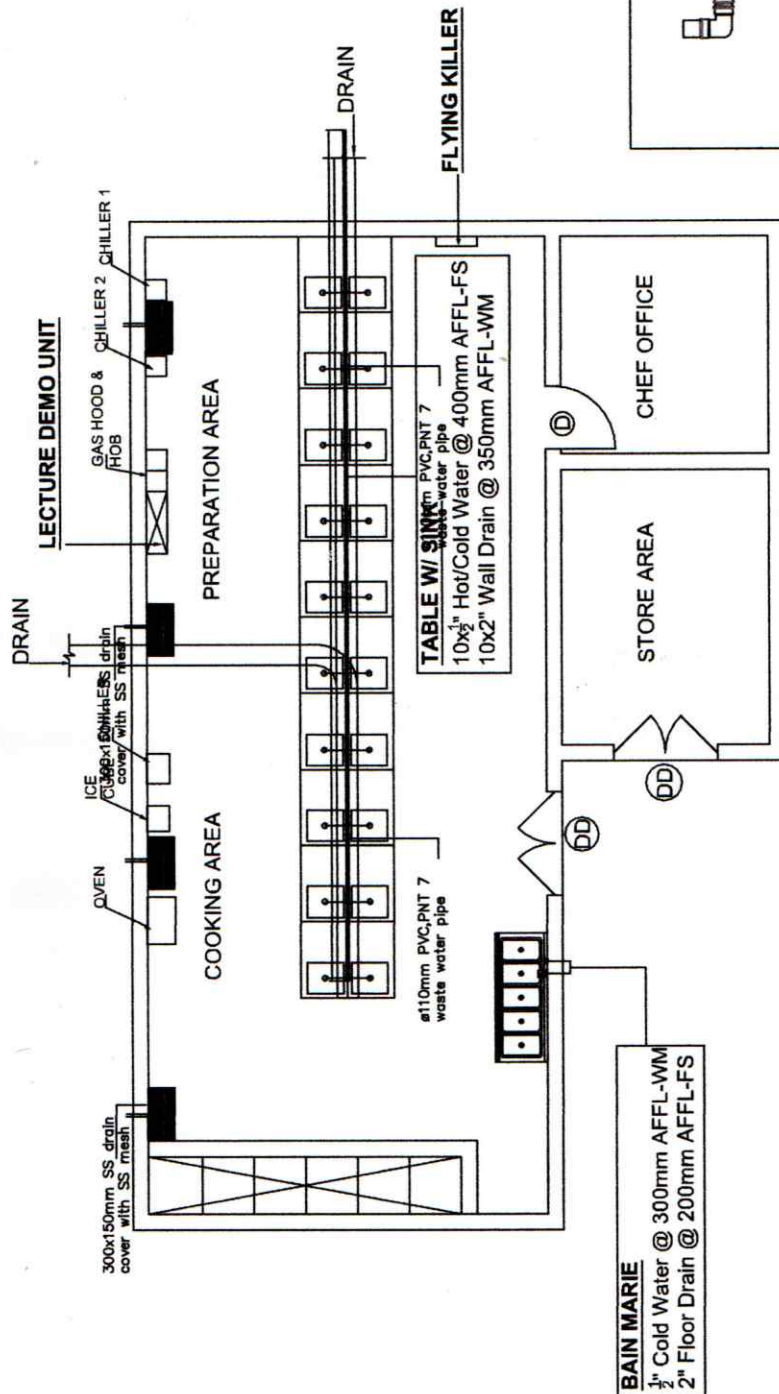
## LAYOUT OF THE EXPANSION THE KITCHEN

| PROJECT | ARCHITECT | MEP   | TITLE  |
|---------|-----------|---|--|
|         |           | AKNIT CONSULTANTS (PVT)LTD<br>Chartered Engineers, Design Consultants   | GAS DISTRIBUTION LAYOUT  |
|         |           | 15/3 Samindu Mawatha<br>Kohalviya Road<br>Kiribathgoda.<br>e-mail: jeyampathy037@yahoo.com<br>Tel.: 0718 68 34 98 |  |
|         |           |   | DESIGNED : JT<br>SCALE : NTS<br>DRAWING NO. : 2402/WDA-KI/GAS/CON/01 |
|         |           |   | DRAWN : PH<br>DATE : 11.02.2024<br>REV. : 00                         |



# LEGEND

WASTE WATER PIPE



## LAYOUT OF THE EXPANSION THE KITCHEN

PROJECT

ARCHITECT

MEP

**AKNIT CONSULTANTS (PVT)LTD**  
Chartered Engineers, Design Consultants

15/3 Samindu Mawatha  
Kahavala Road  
Kiribathigoda.  
e-mail: jayampathy037@yahoo.com  
Tel.: 0718 68 34 98

372/23, Negombo Road,  
Kurunagala.

TITLE

WASTE WATER DISPOSAL LAYOUT

DESIGNED : JT  
SCALE : NTS  
DRAWING NO : 2402/MDA-KJ/SW/CON/02  
DATE : 11.02.2024  
REV. : 00

# SEWER & WASTE WATER

## GENERAL NOTES

01. UNLESS OTHERWISE STATED THE MINIMUM SIZE OF THE BRANCH PIPE SHALL BE AS FOLLOWS:
  - WASTE BRANCH FOR EACH WASH BASIN Ø 40mm
  - WASTE BRANCH FOR EACH SHOWER TRAY Ø 40mm
  - WASTE BRANCH FOR EACH FLOOR DRAIN IN TOILETS Ø 50mm
  - WASTE BRANCH FOR EACH KITCHEN SINK Ø 50mm
  - WASTE BRANCH FOR EACH WATER CLOSET Ø 100mm
  - VENT BRANCH FOR EACH WATER CLOSET Ø 50mm
02. SIZE OF TRAPS FOR FITMENTS SHALL BE THE SAME AS THE PIPE SIZE NOTED FOR FITMENTS.
03. WHETHER SHOWN ON THE DRAWINGS OR NOT, SUFFICIENT ACCESS SHALL BE PROVIDED BY MEANS OF CLEANING EYES OR OTHER APPROVED METHOD TO ENABLE ALL DRAINAGE PIPES TO BE CLEANED OF EASY OBSTRUCTION. SUCH ACCESS POINTS SHALL BE SITED SO AS TO ALLOW CLEARANCE FOR THE EASY ENTRY OF CLEANING ROD.
04. ALL BENDS IN SOIL PIPES AND WASTE PIPES SHALL HAVE AN OUTSIDE ANGLE AND HAVE THE LARGEST PRACTICABLE RADIUS OF CURVATURE. THE BENDS SHALL NOT CHANGE IN ANY WAY OF THE SECTION OF THE PIPE AND A CLEANING EYE SHALL BE PROVIDED AT OR NEAR THE BEND.
05. EVERY ANTI-SYPHONAGE PIPE SHALL BE CONNECTED WITH THE TRAP IF THE CONNECTION FOR THE ANTI-SYPHONAGE PIPES IS AN INTEGRAL PART OF THE TRAP OR SHALL BE CONNECTED WITH THE BRANCH SOIL PIPE OR BRANCH WASTE PIPE, AT A POINT NOT MORE THAN 300mm FROM THE TRAP OUTLET.
06. WHERE THE WASTE PIPE FROM A WASTE FITMENT IS CONNECTED TO A SOIL PIPE, THE TRAP PROVIDED FOR THE WASTE FITMENT SHALL HAVE A WATER SEAL OF 80mm AND BE VENTILATED BY MEANS OF ANTI-SYPHONAGE PIPE.
08. ALL SOIL VENTILATING PIPES AND WASTE VENTILATING PIPES ARE TO BE TERMINATED AT THE HIGHEST POINT OF THE EACH STACK WITH AIR ADMITTANCE VALVES UNLESS OTHERWISE STATED.
09. HORIZONTAL VENT PIPES SHALL BE SLIGHTLY INCLINED UPWARD CONNECTED TO VENT STACK.
10. ALL LEVELS ARE REFERRED TO PRINCIPAL LATHE IN METRE.
11. EVERY DRAIN OR SEWER SHALL BE LAID WITH A MINIMUM FALL OF 1:100 OR AS INDICATED ON THE DRAWING.
  - Ø 100mm AND BELOW AT 1 TO 80
  - Ø 150mm AT 1 TO 100
  - Ø 225mm AT 1 TO 125
12. ENDS OF EVERY MANHOLE SHALL BE RENDRED WITH CEMENT MORTAR SO AS TO PROVIDE A SMOOTH AND IMPERVIOUS SURFACE.
13. EVERY DRAINAGE CHANNEL IN A MANHOLE SHALL NOT BE LESS THAN HALF ROUND OF GLAZED EARTHENWARE OR CEMENT RENDERED AND SHALL HAVE A DIAMETER NOT LESS THAN THAT OF THE LARGEST DRAINAGE INLET INTO AND NOT MORE THAN THAT OF THE OUTLET FROM THE MANHOLE.
14. EVERY DRAINAGE INLET TO A MANHOLE SHALL DISCHARGE INTO THE DRAINAGE CHANNEL THEREIN WITH PROPERLY MADE BENDS CONSTRUCTED WITH THE BENCHING OF THE MANHOLE.
15. EVERY MANHOLE SHALL BE FITTED AT A LEVEL FLUSHED WITH GROUND LEVEL WITH A CAST IRON AIRTIGHT COVER OF ADEQUATE STRENGTH AND APPROVED DESIGN. EVERY MANHOLE OR GREASE TRAP INSIDE OR UNDER A BUILDING SHALL BE FITTED WITH A DOUBLE SEALED CAST IRON AIRTIGHT COVER.
16. ALL MANHOLE FRAMES AND COVERS SHALL BE OF AN APPROVED DESIGN CONFORMING TO THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE INDICATED:
  - A OPEN AREA - MEDIUM DUTY TYPE SINGLE SEAL (HEAVY DUTY TYPE DOUBLE SEAL FOR CARPARK AREA AND DRIVEWAY)
  - B INSIDE BUILDING - LIGHT DUTY TYPE DOUBLE SEAL (HEAVY DUTY TYPE DOUBLE SEAL FOR CARPARK AND PLANT ROOM AREA)
17. ALL DRAINS ARE TO BE LAID ON A CONCRETE (1:3:6) BED NOT LESS THAN 100mm THICK AND AT LEAST 150mm WIDER THAN THE PIPE BORE AND FINISHED UP BOTH SIDES WITH CONCRETE TO MEET THE PIPE BOREL FRAGMENTARILY.
18. ALL INVERT LEVELS SHOWN ON MANHOLES ARE THE INVERT LEVEL OF THE MAIN CHANNEL IN THE CENTER OF MANHOLES.
19. ALL UNDERGROUND DRAINS SHALL BE DUTY TESTED PRIOR TO THE BACKFILLING OF TRENCHES.
20. SUPPORTS SHALL BE PROVIDED FOR ALL UNDERGROUND DRAINAGE AT AN INTERVAL OF NOT MORE THAN 1500mm.
21. POSITION OF MANHOLES AND PITS SHALL BE COORDINATED WITH OTHER TRENCHES/SERVICES. EXACT POSITION AND SET OUT TO BE DETERMINED ON SITE.
22. ALL PIPES PASSING THROUGH FIRE PROTECTED AREAS SHALL BE ENCLOSED BY FIRE RATED PROTECTIVE MATERIAL OF APPROPRIATE FIRE RATING REQUIRED BY RELEVANT STANDARDS.
23. ALL CHANNEL GRATING SHOULD BE AN APPROVED DESIGN CONFORMING TO THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE INDICATED:
  - A NON-CARPARK AREA AND NON-VEHICULAR ACCESS AREA - MEDIUM DUTY TYPE
  - B CARPARK AREA AND VEHICULAR ACCESS AREA - HEAVY DUTY TYPE
24. UNLESS OTHERWISE STATED, ALL SURFACE CHANNEL SHOULD BE STARTED AT 10mm DEPTH AND LAID ON 1:100 FALL.
25. UNLESS OTHERWISE STATED, ALL SURFACE CHANNEL WITH GRATING SHOULD BE STARTED AT 40mm DEPTH AND LAID ON 1:100 FALL.
26. AC CONDENSATE DRAIN SHOULD BE DISCHARGED/CONNECTED TO STORM WATER SYSTEM, WITH NECESSARY BACK FLOW PREVENTORS.
27. NO MATTER THE CONDENSATE DRAIN TEE-OFF CONNECTION SHOWN ON THE DRAWING OR NOT, THIS CONTRACTOR SHOULD RESERVE SUFFICIENT TEE-OFF POINTS. THE EXACT LOCATION OF TEE-OFF POINTS, SHOULD BE COORDINATED WITH HVAC AND PLUMBING CONTRACTOR.
28. UNLESS OTHERWISE STATED, ALL PLANTER DRAIN SHOULD BE DISCHARGED/CONNECTED TO STORM WATER SYSTEM.
29. UNLESS OTHERWISE STATED, ALL VENT PIPE WHICH IS SERVED FOR FOUR FIT OR GREASE TRAP SHOULD BE SIZED AS Ø 100mm.
30. WHETHER SHOWN ON THE DRAWINGS OR NOT, ALL DIMENSIONS FOR GREASE TRAP AND RETROL INTERCEPTOR SHOULD REFER TO APPROVED STANDARD.
31. EVERY OPENING FOR THE PASSAGE OF PIPES, CONDUITS, WIRES THROUGH A COMPARTMENT WALL OR FLOOR, AND EVERY HOLE IN SUCH A WALL OR FLOOR LEFT AFTER CONSTRUCTION SHOULD BE PROTECTED WITH SUITABLE FORM OF FIRE STOP TO MAINTAIN THE REQUIRED FIRE RATING OF THAT WALL OR FLOOR, WHERE THE PIPES AND WIRES PASSING THROUGH SUCH A WALL OR FLOOR IS OF COMBUSTIBLE MATERIAL, SUCH MATERIAL SHOULD BE CONTAINED WITHIN AN ENCLOSURE HAVING AN FIRE RATING OF NOT LESS THAN THAT OF THE WALL OR FLOOR. THOSE SEALING SYSTEM SHOULD COMPLY WITH THE FOLLOWING CRITERIA:
  - A THE SEALING SYSTEM SHOULD BE TESTED OR ASSESSED IN ACCORDANCE WITH THE GENERAL PRINCIPLES FOR FIRE RESISTANCE GIVEN IN BS 476 : PART 20: 1987
  - B THE PERFORMANCE OF THE SEALING SYSTEM SHOULD NOT BE AFFECTED BY MOISTURE OR DRYNESS.
  - C THE LIFE OF THE SEALING SYSTEM SHOULD NOT BE SHORTER THAN THAT OF THE DUCT, PIPE OR WIRE, AND
  - D THE SEALING SYSTEM SHOULD BE EASILY FIXED.
32. CONTRACTOR SHALL SELECT THE CLOSEST POSSIBLE SIZES FOR THE SEWAGE AND WASTE WATER PIPES ACCORDING TO THE SIZES AVAILABLE WITH THE MANUFACTURER TO SUIT WITH THE SIZES SHOWN ON THE DRAWINGS.
33. ALL PIPE SUPPORTS BRACKETS AND HANGERS ETC. SHALL BE OF HOT DIP GALVANISED FINISH WITH MINIMUM THICKNESS OF 100 MICRONS WITH SIGDA PAINT FOR INDOOR APPLICATION 170 MICRONS FOR OUTDOOR APPLICATION WITH SIGDA PAINT OR STAINLESS STEEL CONSTRUCTION.

## PROJECT

## ARCHITECT

## MEP

**AKNIT CONSULTANTS (PVT) LTD**  
Chartered Engineers, Design Consultants

## TITLE

### WASTE WATER DISPOSAL LAYOUT

15/3 Samindu Mawatha  
Korakula Road  
Kiribathgoda.  
e-mail: jayampathya37@yahoo.com  
Tel: 0718 68 34 98

| DESIGNED   | BY                    | DATE | PH         |
|------------|-----------------------|------|------------|
| SCALE      | 1:100                 | DATE | 18.02.2024 |
| DRAWING NO | 2402/MAA-KI/SW/CON/01 | REV. | 00         |



## NOTES

01. ALL ELECTRICAL WORKS CARRIED OUT SHALL COMPLY WITH THE LATEST LOCAL AUTHORITY STANDARD CODE OF PRACTICE AND 16th EDITION OF IEE WIRING REGULATION.
02. ELECTRICAL INSTALLATION SYSTEM SHALL COMPLY WITH THE LATEST IEE WIRING REGULATION(17th EDITIONS/ 16th EDITIONS) FOR ELECTRICAL INSTALLATIONS.
03. MINIMUM CONDUIT SIZE SHALL BE 25mm
04. THE ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL AND SPECIALIST DRAWINGS AND SPECIFICATIONS.
05. ALL OUTLETS SWITCHES AND FITTINGS IN PLANT ROOMS AND CAR PARK AREAS SHALL BE TOTALLY ENCLOSED TYPE.
06. ALL OUTLETS SWITCHES AND FITTINGS EXPOSED TO EXTERNAL ENVIRONMENT SHALL BE WEATHER PROOF EXACT LOCATION OF ALL MECHANICAL EQUIPMENT AND ASSOCIATED DISCONNECTING SWITCHES AND OUTLETS SHALL BE COORDINATED WITH THE MECHANICAL DRAWINGS AND VERIFIED AND SITE.
07. LOCATION OF EARTH ELECTRODES AND DOWN CONDUCTORS SHALL BE COORDINATED WITH MANHOLES SERVICES AND SERVICES OF OTHER TRADES.
08. LIGHTING FIXTURES IN MECHANICAL ROOMS, SUBSTATION, GENERATOR ROOMS ETC SHALL BE INSTALLED IN FULL COORDINATION WITH CABLE TRAYS, HVAC DUCTS, CONDUITS ETC.
09. CABLE TRAYS SHALL HAVE EARTH CONTINUITY BARS.
10. THE SIZE OF CABLE TRAYS TO BE CALCULATED AND COORDINATED WITH ALL THE OTHER TRADES AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ERECTION. THE RESERVE SPACE FACTOR SHALL NOT BE LESS THAN 20% THE TRAYS SHOULD BE HOT DIPPED GALVANIZED FINISH WITH MAIN COATING THICKNESS WITH 100 MICRON AND 2MM SHEET THICKNESS
11. ALL THE SPARE WAYS IN MSBS & SDBS SHALL BE EQUIPPED.
12. THE POSITIONING OF ALL LIGHT FITTINGS, SWITCH SOCKET OUTLETS, DISTRIBUTION BOARDS ETC. AS SHOWN IN THE DRAWINGS ARE APPROXIMATE ONLY. THE EXACT POSITION SHALL BE DETERMINE AT SITE TO ENGINEERS & ARCHITECTS APPROVAL.
13. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ELECTRICAL LOAD BALANCING AND LABELING OF ALL EQUIPMENTS AND SWITCHBOARDS THROUGHOUT THE INSTALLATION.
14. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO LAISE WITH C.E.B. FOR ALL CLEARANCE, CABLE JOINTING, TESTING AND ELECTRICAL METERING FOR THE INSTALLATION.
15. ALL DISCHARGE LIGHT FITTINGS SHALL BE COMPLETE WITH CONTROL GEAR, LAMP, LOW-LOSS BALLAST, ETC.
16. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING OF ALL CABLE PENETRATION OPENINGS BETWEEN FLOOR SLAB AND WALLS ETC. WITH APPROVED FIRE RATING MATERIAL/ SEALANT TO ENGINEERS APPROVAL.
17. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING OF ALL CABLE PENETRATION OPENINGS THROUGH ROOF WALL WITH APPROVED WATERPROOF MATERIALS AFTER THE INSTALLATION OF CABLES.

20. ALL FLUORESCENT LIGHT FITTINGS SHALL BE COMPLETE WITH LOW LOSS ELECTRONIC BALLAST, STARTER AND POWER FACTOR IMPROVEMENT CAPACITOR.
21. ALL CABLES TO BE LAID IN HEAVY GRADE UPVC PIPES ENCASED IN CONCRETE WHEN LAID ACROSS DRIVEWAY.
22. ALL UNDER GROUND WIRING SHALL BE OF XLPE/SWA/CABLE (IN HEAVY GRADE UPVC FOR HARD GROUND/PAVEMENTS)
23. ALL ELECTRIC MOTORS SHALL BE PROVIDED WITH CONTROL EQUIPMENT INCORPORATING REQUIRED DEVICES SUCH AS SUITABLY RATED STARTERS ETC. TO PROTECT THE MOTORS AGAINST OVERLOADING AND ISOLATING DEVICES ALSO TO BE PROVIDED CLOSER TO THE MOTORS.
24. MAIN LT PANEL, MCCB MAXIMUM BREAKING CAPACITY (ICu) SHALL BE 35KA OR BETTER
25. SUB MAIN PANEL, INCOMING CIRCUIT BREAKER (ICB) SHALL BE AS FOLLOWS  
160 <= I <= 630A 35KA  
63 <= I <= 160A 25KA  
I <= 63 10KA
26. 10A, 20A DP MCB BREAKING CAPACITY SHALL BE (Icu=10KA OR BETTER
27. EVERY OPENING FOR THE PASSAGE OF PIPES, CONDUITS, WIRES THROUGH A COMPARTMENT WALL OR FLOOR, AND EVERY HOLE IN SUCH A WALL OR FLOOR LEFT AFTER CONSTRUCTION SHOULD BE PROTECTED WITH SUITABLE FORM OF FIRE STOP TO MAINTAIN THE REQUIRED FIRE RATING OF THAT WALL OR FLOOR, WHERE THE PIPES AND WIRES PASSING THROUGH SUCH A WALL OR FLOOR IS OF COMBUSTIBLE MATERIAL, SUCH MATERIAL SHOULD BE CONTAINED WITHIN AN ENCLOSURE HAVING AN FIRE RATING OF NOT LESS THAN THAT OF THE WALL OR FLOOR THOSE SEALING SYSTEM SHOULD COMPLY WITH THE FOLLOWING CRITERIA:  
A. THE SEALING SYSTEM SHOULD BE TESTED OR ASSESSED IN ACCORDANCE WITH THE GENERAL PRINCIPLES FOR FIRE RESISTANCE GIVEN IN BS476: PART 20: 1987;  
B. THE PERFORMANCE OF THE SEALING SYSTEM SHOULD NOT BE AFFECTED BY MOISTURE OR DAMPNESS.  
C. THE LIFE OF THE SEALING SYSTEM SHOULD NOT BE SHORTER THAN THAT OF THE DUCT, PIPE OR WIRE AND  
D. THE SEALING SYSTEM SHOULD BE FIRMLY FIXED.
28. THE MINIMUM SIZE OF THE EARTH CABLE SHALL NOT LESS THAN 2.5 mm
29. EXACT LOCATION OF EXTERNAL LIGHTING SHALL BE COORDINATED WITH LANDSCAPE WORKS.
30. PARKING AREA SOCKET OUTLETS SHALL BE METAL CLAD
31. ALL AC SOCKET OUTLET WILL BE AT SOTT LEVEL.

### MINIMUM CABLE SIZES TO BE USED FOR POINT WIRING

|                   |  |
|-------------------|--|
| LAMP POINTS       | 2x1C/1.5mm <sup>2</sup> +2.5mm <sup>2</sup> E<br>CU/PVC/CVVC CABLE |
| 13A RING CIRCUITS | 2x1C/3.5mm <sup>2</sup> +2.5mm <sup>2</sup> E<br>CU/PVC/CVVC CABLE |
| 20A ISOLATORS     | 2x1C/3.5mm <sup>2</sup> +2.5mm <sup>2</sup> E<br>CU/PVC/CVVC CABLE |

## PROJECT

## ARCHITECT

## MEP

**AKNIT CONSULTANTS (PVT)LTD**  
Chartered Engineers, Design Consultants

15/3 Sanjindu Mawatha 372/23, Nagoombo Road,  
Korolwila Road Kurunegala.  
Kiribathigoda.  
e-mail: jayampathy037@yahoo.com  
Tel.: 0718 68 34 98

## TITLE

**LIGHTING & POWER LAYOUT**

|                                    |                   |
|------------------------------------|-------------------|
| DESIGNED : JT                      | DRAWN : PH        |
| SCALE : 1/10                       | DATE : 11/02/2024 |
| DRAWING NO: 2402/MDA-KI/ELE/CON/01 | REV: 00           |

# COLD/HOT/HARVESTED WATER

## GENERAL NOTES

01. THE ENTIRE INSTALLATION SHALL BE INSTALLED IN FULL COMPLIANCE WITH THE ACCEPTABLE LOCAL & INTERNATIONAL STANDARDS, DRAWINGS & TENDER SPECIFICATIONS.
02. THE EXACT LOCATION AND SIZE OF UNDERGROUND WATER MAINS SHOULD BE VERIFIED BY THIS CONTRACTOR ON SITE PRIOR TO SUBMISSION OF WORKING DRAWINGS.
03. ALL PIPES PASSING THROUGH THE PROTECTED AREAS SHALL BE ENCLOSED BY FIRE RATED PROTECTING MATERIALS OF APPROPRIATE FIRE RATED MATERIAL.
04. THE POWER TERMINATION RATING SHOWN ON THE DRAWING ARE FOR GUIDANCE ONLY, THE POWER RATING IS SUBJECTED TO FINAL EQUIPMENT SELECTION.
05. NO WATER SHOWN ON THE DRAWING OR NOT, EXPANSION LOOP SHALL BE PROVIDED FOR STAINLESS STEEL AND OTHER METALLIC PIPEWORK WHEREVER IS NECESSARY.
06. FIRE COLLARS SHALL BE PROVIDED FOR ALL UPVC PIPES PASSING THROUGH FIRE COMPARTMENTS.
07. THE INVERT LEVEL OF AN OUTLET PIPE FROM A WATER STORAGE TANK WITH CAPACITY LESS THAN 5000 LITRES SHALL BE AT LEAST 300mm ABOVE THE BOTTOM OF THE TANK. THIS DISTANCE SHOULD BE INCREASED TO 1000mm IF THE STORAGE TANK CAPACITY IS 5000 LITRES OR MORE. THE OUTLET SHOULD BEAT THE SIDE OF THE TANK.
08. EVERY OPENING FOR THE PASSAGE OF PIPES, CONDUITS, WIRES THROUGH A COMPARTMENT WALL OR FLOOR, AND EVERY HOLE IN SUCH A WALL OR FLOOR LEFT AFTER CONSTRUCTION SHOULD BE PROTECTED WITH SUITABLE FORM OF FIRE STOP TO MAINTAIN THE REQUIRED FIRE RATING OF THAT WALL OR FLOOR. WHERE THE PIPES AND WIRES PASSING THROUGH SUCH A WALL OR FLOOR IS OF COMBUSTIBLE MATERIAL SUCH MATERIAL SHOULD BE CONTAINED WITHIN AN ENCLOSURE HAVING AN FIRE RATING OF NOT LESS THAN THAT OF THE WALL OR FLOOR THOSE SEALING SYSTEM SHOULD COMPLY WITH THE FOLLOWING CRITERIA:
  - A. THE SEALING SYSTEM SHOULD BE TESTED OR ASSESSED IN ACCORDANCE WITH THE GENERAL PRINCIPLES FOR FIRE RESISTANCE GIVEN IN BS476: PART 20: 1987;
  - B. THE PERFORMANCE OF THE SEALING SYSTEM SHOULD NOT BE AFFECTED BY MOISTURE OR DAMPENESS.
  - C. THE LIFE OF THE SEALING SYSTEM SHOULD NOT BE SHORTER THAN THAT OF THE DUCT, PIPE OR WIRE, AND
  - D. THE SEALING SYSTEM SHOULD BE FINELY FIXED.
09. THE INTERFACING WORKS BETWEEN THIS CONTRACTOR AND OTHER TRADES SHOULD BE IN ACCORDING WITH TENDER DRAWING AND TECHNICAL SPECIFICATION.
10. UNLESS OTHERWISE STATED, THE MINIMUM SIZE OF PUMPING PIPEWORK SHOULD BE SIZED AS 20mm FOR COLD WATER DISTRIBUTION PIPE Ø25mm FOR FLUSHING DISTRIBUTION PIPE.
11. NO WATER SHOWN ON THE DRAWING OR NOT EXPANSION JOINT SHOULD BE PROVIDED FOR THOSE PIPEWORK PASSING THROUGH ANY MOVABLE JOINT OR BUILDING JOINT OR STRUCTURE JOINT.
12. ALL WATER STORAGE TANKS SHALL BE EQUIPPED WITH OVERFLOW PIPES SO ROUTED AS TO PERMIT DISCHARGE AT CONSPICUOUS LOCATION AS INDICATED ON DRAWINGS OR DETERMINED ON SITE.
13. UNLESS OTHERWISE STATED, ALL PLUMBING PIPES SHALL BE CONCEALED IN FALSE CEILING, PIPE DUCTS, NON-STRUCTURAL WALLS DRY WALL PARTITIONING WALLS OR INSIDE THE LEGGE IN ALL AREAS.
14. ALL DIMENSIONS AND PIPE SIZE SHOWN ON THE DRAWING ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
15. ALL WATER TANK COVERS TO BE DOUBLE SEALED AND MEDIAN DUTY FOR PORTABLE WATER OTHER THAN UPVC.
16. ALL PIPES OTHER THAN UPVC WHICH WILL COME INTO DIRECT CONTACT WITH CONCRETE OR RUM UNDERGROUND SHALL BE BITUMEN COATED AND WRAPPED WITH DEMCO TAPE OR OTHER SUITABLE MATERIAL ALL PLUMBING PIPEWORK SHALL BE INSPECTED BY THE ENGINEER BEFORE IT IS BACKFILLED OR COVERED OVER.
17. ALL WATER METERS SHALL BE OF APPROVED TYPE BY NATIONAL WATER SUPPLY AND DRAINAGE BOARD (NWSDB) AND INSTALLED BY QUALIFIED PLUMBER.
18. ALL UNDERGROUND PLUMBING PIPE SHALL BE LAID AT LEAST 900mm DEPTH FROM THE SURFACE OF ROAD TO THE TOP OF PIPE AND 600mm DEPTH FROM THE SURFACE OF PAVEMENT TO THE TOP OF PIPE.
19. ALL FIRE SUPPORTS BRACKETS AND HANGERS ETC., SHALL BE OF HOT DIP GALVANISED FINISH WITH MIN THICKNESS OF 100 MICRONS FOR INDOOR APPLICATION AND 210 MICRONS FOR OUTDOOR APPLICATION OR STAINLESS STEEL CONSTRUCTION.
20. COLD AND HOT WATER SUPPLY PIPES TO ALL APPLIANCES SHALL BE PROVIDED WITH APPROVED QUALITY ANGLE VALVES AND STAINLESS STEEL FINISH FLEXIBLE HOSE.
21. CONTRACTOR SHALL SELECT THE CLOSEST POSIBLE SIZES OF WATER SUPPLY PIPES AVAILABLE WITH THE MANUFACTURER TO SUIT WITH THE SIZED SHOWN ON THE DRAWINGS.

| COLD & HOT WATER PIPEWORK MATERIAL SCHEDULE |                                       |                           |          |
|---|---------------------------------------|---------------------------|----------|
| SYSTEM                                      | DESCRIPTION                           | SIZE                      | MATERIAL |
| COLD WATER                                  | INGRESSING MAIN TO STORES.            | 32mm (UNDER/ABOVE GROUND) | u.p.v.c. |
|   | PUMP SUCTION AND DISCHARGE MANIFOLDS. | 50mm                      | u.p.v.c. |
|   | UP FEED PIPES                         | 40mm                      | u.p.v.c. |
|   | DOWN FEED DISTRIBUTION PIPES          | Ø25mm ABOVE GROUND        | u.p.v.c. |

## PROJECT

## ARCHITECT

## MEP

**AKNIT CONSULTANTS (PVT) LTD**  
Chartered Engineers, Design Consultants

15/3 Samindu Mawatha  
Koraniya Road  
Koraniya  
e-mail: jayapathya037@yahoo.com  
Tel: 0716 68 34 98

372/23, Negombo Road,  
Kurunegoda.



## TITLE

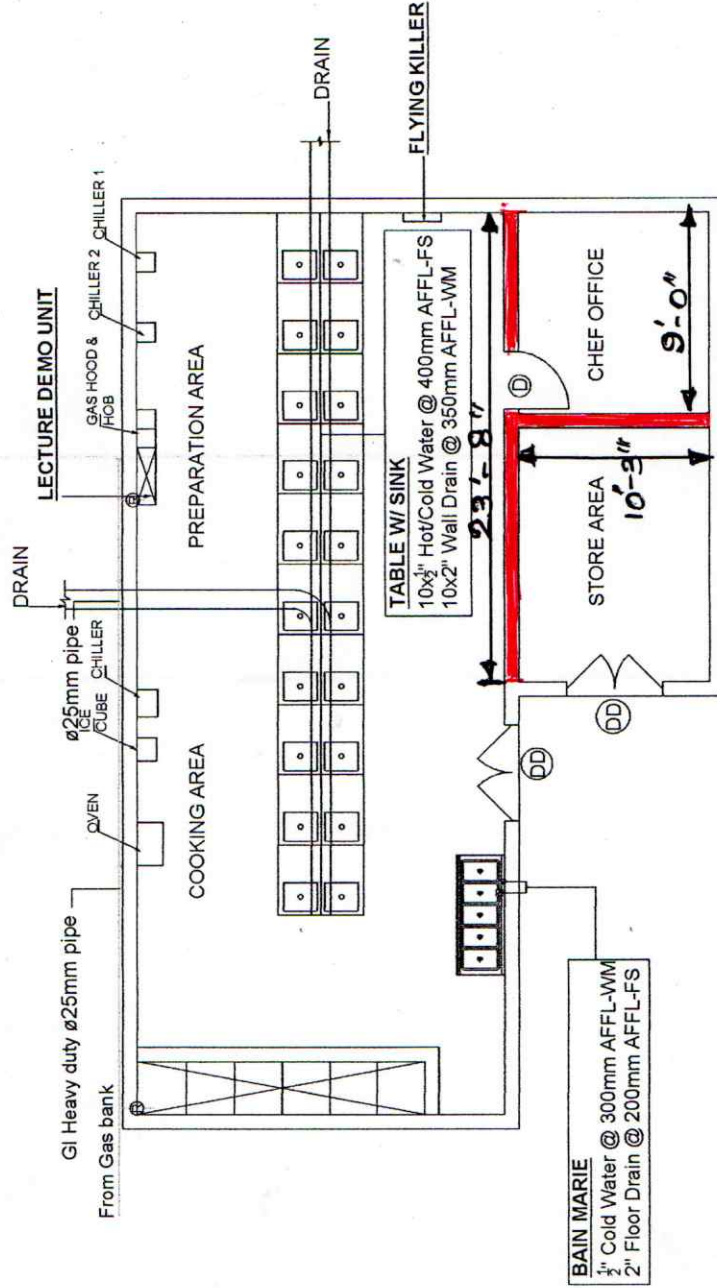
COLD WATER DISTRIBUTION LAYOUT

|                                   |                   |
|-----------------------------------|-------------------|
| DESIGNED : JT                     | DRAWN : JM        |
| SCALE : NTS                       | DATE : 19.02.2024 |
| DRAWING NO. 2402/MDA-KI/MS/CON/01 | REV. 00           |



# LEGEND

|   |           |
|---|-----------|
|  | Gas pipe  |
|  | Regulator |

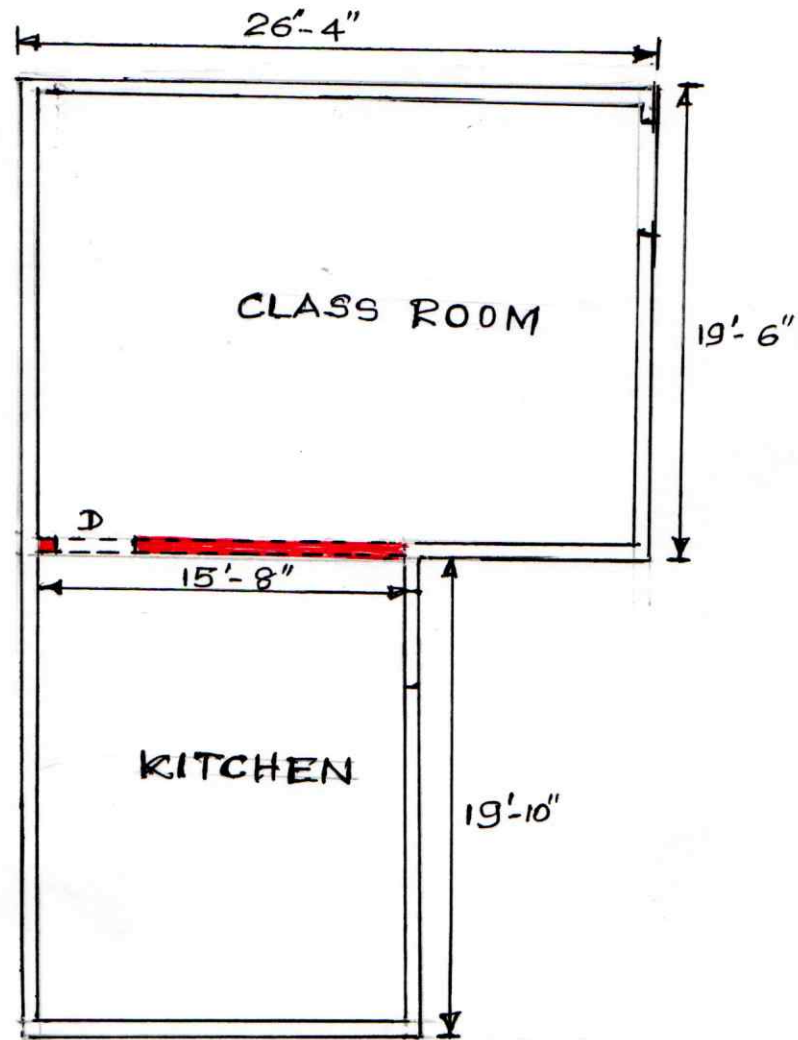


## LAYOUT OF THE EXPANSION THE KITCHEN



| PROJECT | ARCHITECT | MEP  | TITLE                           |
|---------|-----------|--|---------------------------------|
|         |           | AKNIT CONSULTANTS (PVT)LTD<br>Chartered Engineers, Design Consultants  | GAS DISTRIBUTION LAYOUT         |
|         |           | 15/3 Samindu Mawatha<br>Kohalva Road<br>Kiribathgoda.<br>e-mail: jayampathy037@yahoo.com<br>Tel: 0718 68 34 98 |                                 |
|         |           | DESIGNED : JT<br>SCALE : 1/8" = 1'-0"  | DRAWN : PH<br>DATE : 19.02.2004 |
|         |           | DRAWING NO: 2402/WDA-KI/GAS/CON/01   | REV. 00                         |

|   |  |       |        |
|---|--|-------|--------|
| 1 | Supplying and fixing 76 mm powder coated Aluminum framed partietion , 4 mmthick double side Cladding sheet with all accessories to the manufacture's detail and to the Engineer's Approval'  | Sq.ft | 475.00 |
| 2 | Supplying and fixing powder coated aluminum framed 100mm Single door sash with 4mm thick double side Cladding 04 of 4' X3" ss Hinges 01 Nr or Door Lock and 1 pair of 300 mm long Stainles steel door Handle for each sash and powder coated stainless steel fittings including 76 mm door frame and other accessories to manufacturer's details and to the engineer's approval (Door lock , with lever KINGLONG or Equivalent') | Sq.ft | 42.00  |
| 3 | Supplying and fixing a heavy duty door closer Newstar or equivalent branded with all accessories to the manufacturer's detail and to the Engineer's approval (Prime cost of Door Closer is 9,380.00 without vat)   | Nr    | 2.00   |

DRAWING OF PARTITION FOR THE  
PASTRY KITCHEN



PLAN

-  PARTITION
-  ALUMINUM SINGLE DOOR

|   |  |       |        |
|---|--|-------|--------|
| 1 | Supplying and fixing 76 mm powder coated Aluminum framed partietion , 4 mmthick double side Cladding sheet with all accessories to the manufacture's detail and to the Engineer's Approval'  | Sq.ft | 475.00 |
| 2 | Supplying and fixing powder coated aluminum framed 100mm Single door sash with 4mm thick double side Cladding 04 of 4' X3" ss Hinges 01 Nr or Door Lock and 1 pair of 300 mm long Stainles steel door Handle for each sash and powder coated stainless steel fittings including 76 mm door frame and other accessories to manufacturer's details and to the engineer's approval (Door lock , with lever KINGLONG or Equivalent') | Sq.ft | 42.00  |
| 3 | Supplying and fixing a heavy duty door closer Newstar or equivalent branded with all accessories to the manufacturer's detail and to the Engineer's approval (Prime cost of Door Closer is 9,380.00 without vat)   | Nr    | 2.00   |