

DUPLICATE

Note:

It is the responsibility of the bidders to comply with all the requirements given in the bidding document. Failure to non compliance with any of them may be a reason for rejection of the bid.

Notes on Standard Forms:

- Bidders shall submit the completed Form of Bid Security/Bid Securing Declaration as appropriate in compliance with the requirements of bidding documents.
- Bidders should not complete the Form of Agreement at the time of preparation of bids.
- The successful bidder will be required to sign the Form of Agreement, after the award of contract.
- Any corrections or modifications to the accepted bid resulting from arithmetic corrections, acceptable deviations, or quantity variations in accordance with the requirements of the bidding documents should be incorporated into the 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.

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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 Bidders 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 as per Conditions of Contract).

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

Authorizes Signature :-----

Name and title of Signatory :-----

Name of Agency :-----

STANDARD FORM: AGREEMENT

This AGREEMENT, made the ----- [day] day of -----[month] 20 -----
[year] between the one part, and ----- [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 expression 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 to 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 Sir 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.

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FORM OF ADVANCE PAYMENT SECURITY

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

Beneficiary: Municipal Commissioner, Colombo Municipal Council, Town Hall, Colombo 7

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 -----
----- (Name of contract) (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] 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 the 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(s)]

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FORM OF PERFORMANCE SECURITY

(Unconditional)

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

Beneficiary: Municipal Commissioner, Colombo Municipal Council, Town Hall, Colombo 7

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 -----
----- (name of contract) (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 the Intended Completion Date] and any demand for payment under it must be
received by us at this office on or before that date.

[signature (s)]

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FORM OF RETENTION MONEY GUARANTEE

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

Beneficiary: Municipal Commissioner, Colombo Municipal Council, Town Hall, Colombo 7.

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 contract) dated ----- with you, for the execution of -----
----- (name of contract) (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]
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 28 Days after the end of
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(s)]

Section-3

CONDITIONS OF CONTRACT

**Conditions of contract shall be read in conjunction with Section 5-
Contract Data, which shall take precedence over the Conditions of
Contract**

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CONDITIONS OF CONTRACT : Conditions of Contract that will be applicable for this Contract is that given in Section – 03 of the Standard Bidding Document – Procurement of Works (ICTAD/SBD/01-2nd Edition , January 2007) & Addendum 01 issued in January 2009 & addendum 02 issued in February 2011 to the ICTAD Publication published by the Institute for Construction Training and Development (ICTAD / CIDA – Construction Industry Development Authority , “Savsiripaya”, 123 , Wijerama Mawatha , Colombo 07.

Section 3, Volume 1 of this publication will not be issued with the Bidding Document and the Bidder is advised to purchase it from ICTAD. (Now CIDA – Construction Industry Development Authority)

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Section - 4

**FORM OF BID AND QUALIFICATION
INFORMATION**

Form of Bid

Name of Contract: Alteration to Fire Station and Training Centre at Roxy Garden,
Wellawaththa

To: Municipal Commissioner, Colombo Municipal Council, Town Hall, Colombo 7.

Gentleman,

1. Having examined the Standard Bidding Document - Procurement of Works [ICTAD/SBD/01 - Second Edition, January 2007], Specifications, Drawings and Bills of Quantities and Addenda for the execution of the above-named works, we the undersigned, offer to execute and complete such Works and remedy any defect therein in conformity with the aforesaid Conditions of Contract, Specifications, Drawings, Bills of Quantities and addenda nosfor the sum of Sri Lankan Rupees
.....(LKR) or such other sums as may be ascertained in accordance with the said conditions.
2. I/We acknowledge that the Contract Data forms part of our Bid.
3. I/We undertake, if my/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.
4. I/We agree to abide by this Bid **till 23/05/2022** or for any extended period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
5. Unless and until a formal agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
6. I/We accept I/we do not accept the Adjudicator.
7. I/We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated thisday of20.....in the capacity ofduly authorized to sign tenders for and on behalf of (IN BLOCK CAPITALS)

Signature : Name:

Designation : Address :

.....

Witness Signature: Name, Address, NIC number:

.....

Qualification Information

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

ICTAD REGISTRATION	
Registration number	<i>(attach copies of relevant pages from the registration book)</i>
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	
Construction Program	<i>(attach as annex)</i>
Legal status	<i>(attach relevant status copies, as annex)</i>
Value of Construction works performed in last 5 years	
<i>(attach copies of Certificate of Completion etc and other documents such as profit-loss and income expenditure statement)</i>	
Year	
Year	
Year	
Year	
Year	
Value of similar works completed in last 5 year (indicate only the three largest projects)	
1. Value _____ Year 2. Value _____ Year 3. Value _____ Year <i>(attach copies of certificate of completion etc., as annex)</i>	
Qualification and experience of Technical Staff at site	
Technical: 1. A qualified Civil Engineer 2. A qualified Technical Officer in the relevant field (attach educational, professional, experience certificates of each person)	

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Section - 5

BIDDING DATA AND CONTRACT DATA

G. Bidding Data

Instructions to Bidders

Clause Reference

(1.1) The Employer is

Name : Colombo Municipal Council
Address : Town Hall, Colombo 7.

The Work consists of: Alteration to Fire Station and Training Centre for Bid number: ME/FS/BN/297/2021 (Contract number ME/FS/BN/297/2021) located at : at Roxy Garden, Wellawaththa

(1.2) Intended Completion Date is **300 Days** from the start Date.

(1.3) The office for collection of bid form is:

Projects Management Division, Town Hall, Colombo 7.

The non-refundable fee is Rs.5400.00 (including VAT)

The Bid forms will be issued **till 10.00 hours 23/11/2021**

(2.1) The source of funds is: **Colombo Municipal Council**

(4.2) The registration required

Specialty: **Building Construction**

Grade: **CIDA grade C3 & C4**

(4.3) The following information shall be provided in section 4:

- ❖ CIDA Registration;
Registration number
Grade
Specialty
Expiry Date
- ❖ VAT Registration number
- ❖ Construction Programme
- ❖ Legal Status (Sole Proprietor, Partnership, Company etc.)
- ❖ Qualifications and experience of key site management and technical personnel proposed for the Contract;

(4.4) * Average annual volume of construction work performed Within last 5 years shall be Rs. 142.2Million.

Experience in the construction of contracts of similar nature (Structural Repair Work) over the last 5 years shall be 10 months.

* Following technical & managerial Staff:

1. A qualified Civil Engineer with IESL membership and have at least 5 years experience on structural and water proofing project in similar nature of work.

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2. A qualified Technical Officer in a related field with experience of similar nature work.

* 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.23.7 Million.

(9.1) Employer's address for the purpose of clarification is;

Name: Director Engineering (Projects)
Address: Projects Management Division, Colombo
Municipal Council, Town Hall, Colombo 07.
Fax: 0112692403
E-mail: dirproj@colombo.mc.gov.lk

(11.1) The language of the bidding document shall be English.

(12.0) Any other information required to be completed and submitted with the bid.

Proof documents pertained with invitation for bids and with above 4.3, 4.4

(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.

(13.4) The Contract is not subjected to price adjustment in accordance with Claus 47 of the Conditions of Contract.

(15.1) **The Bid shall be valid till 23/05/2022.**

(16.1) Bid shall include a Bid Security using the form included in Section 9.

(16.2) **Bid Security shall be:**

- For an amount **Rs 1,564,000.00**
- **Valid until -22/06/2022**
- Issued by a reputed Bank or Insurance Company registered to undertake businesses in Sri Lanka using the form for bid security (unconditional on demand guarantee) included in Section 9, Standard Forms.

(19.2) a. The Employer's address for the purpose of Bid submission is
Municipal Commissioner, Colombo Municipal Council,
Town Hall, Colombo 7.

(19.2) b. Contract name: Alteration to Fire Station and Training Centre at Roxy Garden,
Wellawaththa
Contract no: ME/FS/BN/297/2021

(20.1) **The deadline for submission of Bids shall be till 10.00 hours on 24/11/2021**

- (34.0) The performance security shall be 5% of the Initial Contract Price mentioned in the Letter of Acceptance or as per the Public Finance Circular 03/2020(i) v. dated 11.01.2021
- (36.0) The process of appointment of the Adjudicator shall be executed in accordance with the conditions of contract at a date during the contract when parties agree such an appointment is worthwhile.

Fees and types of reimbursable expenses to be paid to the Adjudicator shall be on a case to case 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)

(1.0) The Employer is

Name: Colombo Municipal Council

Address: Town Hall, Colombo 7.

Name of Authorized Representative: Municipal Commissioner, Colombo
Municipal Council.

(1.0) The Engineer is

Name : Deputy Municipal Commissioner (Engineering Services)

Address : Municipal Engineers' Department, Colombo Municipal Council,
Town Hall, Colombo 7.

Name of Engineer's Representative: Director Engineering (Projects),
Colombo Municipal Council.

(1.0) The works consists of Alteration to Fire Station and Training Centre, Contract number is ME/FS/BN/297/2021
The Site is Located at Fire Station and Training Centre at Roxy Garden, Wellawaththa

(1.0) The Start Date shall be **21 days** from the Letter of Acceptance

(2.2) Sectional Completion of work is specified as follows.
Not applicable

(2.3) The following documents also form part of the Contract: **Not applicable**

(7.1) The contractor may subcontract with approval of Engineer for the work of structural protection and water proofing by an ICTAD registered sub-contractor category.

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

(9.1) Schedule of key personnel:

Minimum persons with qualifications and experience to be defined,

- 1. A qualified Civil Engineer with IESL membership and have at least 5years experience on structural and water proofing project in similar nature of work.**
- 2. A qualified Technical Officer in a related field with experience of similar nature work.**

(13.1) The minimum insurance covers shall be (shall be valid till the end of defect liability period of the contract. It is the responsibility of the contractor to extend the validities of insurance covers for any extended time of defect liability period without any notification by the employer):

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Section - 6

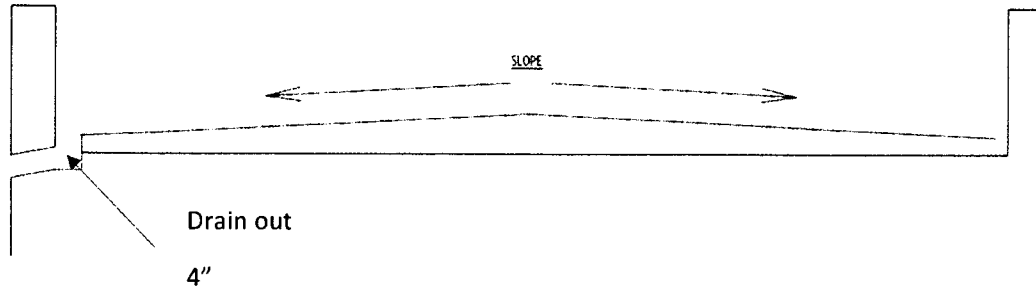
SPECIFICATIONS

**(General specifications have been mentioned in drawings
and Bills of Quantities)**

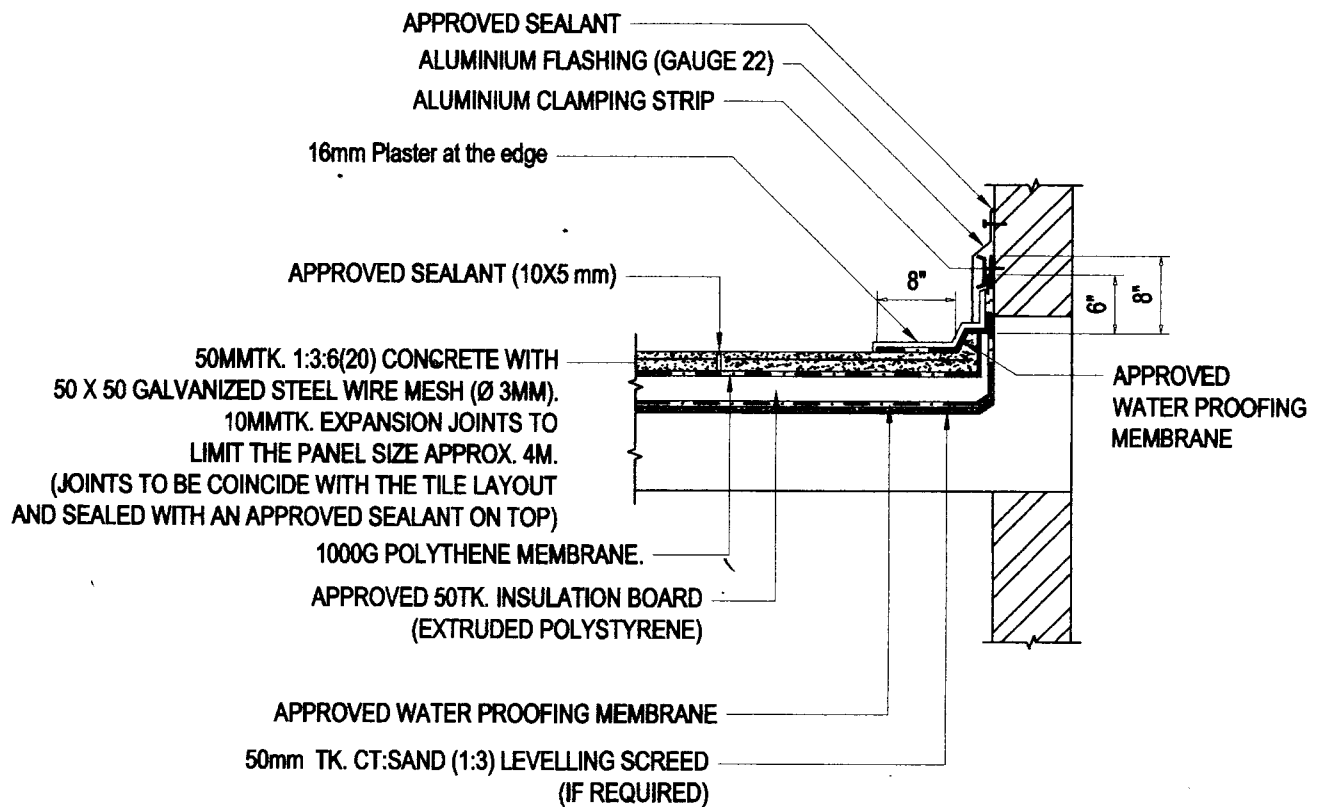
Water proofing of roof top

General instructions

- 1- Concrete surface needs to be levelled with a screed and make slope to water outlets



- 2- Make Drain outlets at every 3m interval.
Seal around the gullies, water outlets pipe protrusions with general purpose non-shrink grout MAPEFILL GP/ MASTERFLOW 96 or approved equivalent as per manufacturer's specifications
- 3- Apply waterproofing system according to following detail
- 4- Heat proofing layer and 1000 G polyethene layer.



TYPICAL ROOF INSULATION & WATER PROOFING DETAIL

Specification for Electrical Installation

General

If not specifically mentioned in the BOQ items following specifications would apply to the Electrical Installation
Work shall be done in accordance with specifications for electrical and mechanical works - ICTAD Publication No.SCA/8 of Aug.2000 (2nd Edition -Revised)

The whole installation shall be carried out according to CEB/IEE wiring regulations.

All electrical constructions should be according to IEE regulations (18th edition or later) and subject to the instructions of the electrical officer concerned. Jobs attend beyond condition will not be approved please.

All the equipment shall be prior approved by the Engineer.

All switches and socket outlets shall be plated type make "Clipsal", "Orange", "Krypton" or any other approved equivalent complying with SLS1000:1993 for switches & SLS 1998: 1991 for socket outlets.

MCCB:- Schneider, ABB, Siemens, Hager, LS or approved equivalent.

MCB'S & RCCB'S:- Schneider, Siemens, Hager, ETN or approved equivalent.

Cable :- ACL, Kelanj or approved equivalent.

Ceiling Fan:- K.D.K. or Japanese origins

Exhaust Fan:- K.D.K. or Japanese origins

LED Fittings/ Tube:-

LED luminaires shall be Philips or equivalent and the other lamps and fittings shall be orange or equivalent if not specifically mentioned at the BOQ item

If not specifically mentioned at the BOQ item; LED Luminaires Minimum efficacy at scotopic condition should be above 100 lumen/W Corelate colour temperature (CCT) should be above 4000K, (Cool White). Colour rendering index (CRI) should be above 70. Rated life time should be above 50,000 hrs.

All Fluorescent fittings shall be zinc coated steel sheet finished with powder coated to 0.45mm thickness complete with electronic choke (Make:-"Atco", "BG" original or -Equivalent) starter and the tube should be Thron, Philips, or Osram.

Rate to include switch boxes, Rowl plugs, square pin plug base, Chromium plated M.S. chains, brass hooks, ceiling roses, holders and any other item necessary.

Distribution Board:- Shall be in surface mount metal enclosure fabricated With Zinc coated sheet metal of gauge not less than 1.5 mm total enclosed, with hinged door with protective cover plate for terminals, finished with powder coating of approved colour and components

All the M.C.C.B.'s, MCB's and RCCB's for the distribution boards should be purchased from the authorized agents or from their dealers and a certificate or invoice along with their Company seal and Part No., numbers and warranty should be produced at the time of payment.

Recommended Fabricators of Switch boards and Enclosures;

Elsteel, K.I.K. Lanka (Pvt) Ltd, Pubudu Engineering (pvt) Ltd, Richardsons Projects (pvt) Ltd, OS Project (Pvt) Ltd. (Orange), Or similar product

Warranty

If in case not specified separately Minimum 2 year warranty from the building handed over date shall be given for all electrical equipment. Warranty cards shall be submitted by the contractor to the Projects Engineer.

All light fittings shall be approved by the project architect/ electrical engineer prior to the installation

Cabling

Internal light wiring shall comply with the drawings and shall be in 230/440 volt single core PVC insulated copper cables

The 2 compartment trunking shall be used in the cases where both data and power lines are routed and the cost shall be distributed and included in the relevant point wiring item.

The contractor is also responsible for the coordination work for ELV installation with different parties when required.

The cable paths/trunking/conduits/casing shall be well matched to the interior arrangement and shall be hidden. The all metal surfaces shall be bonded and earthed

Underground cabling

"Minimum depth of underground cable trenches shall be 600mm. Cable inside trench shall be covered with LT cable tiles of size 450mm x 200mm x 50mm (should be of grade 25)

50mm quarry dust layer should be laid inside the bottom of the trench and the cable should be placed over the top of it.

Another 50mm of quarry dust has to be laid covering the cable before placing the concrete tile.

Warning tape should be placed after filling the excavated soil layer on top of the concrete tile."

Earthing

Number of rods required to obtain the necessary earth resistance shall be determined by the contractor. Testing of earth resistance after installation shall be done by the contractor in the presence of the project Electrical Engineer/Technical officer. All costs for testing shall be borne by the contractor.

CEB supply

The contractor shall coordinate with the CEB throughout the work to avoid the delays in getting the power connection.

Air conditioning system specifications

Country of origin of the AC system shall be Japan, European. York or equivalent brand shall be provided.

The AC supplier shall be the authorized local agent in sri lanka and shall have 10 years or more in HVAC industry (Evidence shall be submitted).

The bidder shall include the copper and drain piping total cost (**not the 5 meter standard cost**) to the AC unit item cost and it shall cover the total supply and installation cost.

Inverter type shall be installed

Warranty

Warranty for the Compressor shall be Five years comprehensive or more and other equipment shall have one year comprehensive warranty

Maintenance

Free services in the first year and Service agreement after the first year shall be submitted

• **Section - 7**

• **BILLS OF QUANTITIES**

- 1. Include Preliminary Bill items as Bill No. 1**
- 2. VAT Component shall be filled in Bills of Quantities and it shall not be carried to Form of Bid.**
- 3. Any discount offered will not be considered for Provisional Sum Items**

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COLOMBO MUNICIPAL COUNCIL

MUNICIPAL ENGINEERS' DEPARTMENT

Issued to:

Form fee: Form fee receipt No:

BILL OF QUANTITIES AND SCHEDULE OF RATES

Description of work : PROPOSED RENOVATION TO FIRE STATION &
TRAINING CENTER, ROXY GARDEN, WELLAWATTA, COLOMBO - 11

Drawing No:

Bill NO 1 - Preliminaries

Note :

The pricing of this bill is optional. But omission to price this bill will not exempt the bidder from complying with the Conditions of Contract and the cost of executing these items shall be deemed covered by the other rates and prices in the Bill of Quantities. This will be paid pro-rata according to the work done on each of the bills tendered for.

This bill provides for the typical general items complementary to the works which are required to be provided by the Contractor in compliance with the General Conditions of Contract (General obligations).

The Contractor should price item 15 for the minimum personnel stipulated in the Bid document for providing Construction Management Services above the supervisory grade.

The Bidder in pricing the provisional item 15 shall furnish the names and qualifications of such personnel and indicate whether they are in house or on contract, and if on contract accompany a firm commitment from the individual or the firm. Payment against provisional items will be certified by the Engineer on compliance by the Contractor in the manner listed in Clause 63 of Conditions of Contract.

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Alteration to Fire Station and Training Centre at Roxy Garden, Wellawaththa
Bid number: ME/FS/BN/297/2021

Bill Number 01 - Preliminaries

Serial No	Description	Unit	Amount in Rs.
1	Provincial sum for providing a Performance security.	Provisional sum	108,000.00
2	Provincial sum for providing a Advance Payment security.	Provisional sum	430,000.00
3	Provincial sum for insurance of works, Machinery & Equipment, Plant, Material, third party persons & property and Employer's personnel & property at site as per the Contract.	Provisional sum	156,000.00
4	Provincial sum for insurance against accidents and injury to Contract's personnel as per the contract.	Provisional sum	156,000.00
	Contract's Facilities		
5	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the Works, a temporary site office of adequate size including staff rest room and toilets and other facilities for the Contractor's site management staff in accordance with the plans prepared by the contractor and concurred by the Engineer.	Item	
6	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the Works, building to be used as workshops and stores for perishable materials. Buildings shall be constructed in accordance with the drawings prepared by the contractor and concurred by the Engineer. The Lump sum shall also include for altering, modifying, or dismantling and re-erecting within the site all temporary buildings/structures if required.	Item	
7	Allow lump sum for constructing, maintaining, dismantling and removal on completion of the Works, temporary building in accordance with the plans prepared by the contractor and concurred by the Engineer to accommodate the following: 1. Worker's rest room, canteen facilities, kitchen 2. Toilet and wash areas. 3. Sick/First - Aid room 4. Accommodation for contractor's staff and workmen including sanitary facilities on site of applicable. facilities to workman shall conform to the latest public health and industrial regulations.	Item	
8	Allow lump sum for providing accommodation including sanitary facilities and transport for contractor's staff and workmen off site.	Item	

**BILL OF QUANTITIES FOR PROPOSED RENOVATION TO FIRE STATION &
TRAINING CENTER ROXY GARDEN WELLAWATTA, COLOMBO 06.**

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>Note: Prior to do pricing the Contractor is adviced to do a detail inspection of the site related to all items mentioned under this Bill.</p> <p>BILL NO. C</p> <p>DEMOLITION</p> <p>Note: 1. Rates for Demolition shall include demolishing, dismantling and removing etc. with the minimum damage to the material in the process of dismantling, temporary supporting and protecting existing work and adjacent properties against damage, dust and weather and stacking and transport to specified location all serviceable materials as directed and disposal of debris from site including spraying water periodically to reduce the amount of dust.</p> <p>2. Precautions should be taken during piling up of debris so as not to disrupt existing drainage pathways, pavements walkways etc</p> <p>3. Rate shaa include for Disconnection or plugging water , sewer connection</p> <p>4. Visit the site and check the existing building before pricing.</p> <p>5. Contractor should take necessary precautions to avoid damages to existing floor finishes during removing of columns & making supports to the new roofing slab.</p>				
C1.1	Allow for Demolishing Existing Toilet wall tiles and clearing debris away as per Engineer's Instructions.	97.00	m ²		
C1.2	Allow for Demolishing Existing floor tiles and clearing debris away as per Engineer's Instructions.	29.00	m ²		
C1.3	Removing existing 225 tk. Gable wall in parking bay .	17.00	m ²		
C1.4	Removing existing 225 tk. Gable wall and cut and pin walls in 3 rd floor .	55.00	m ²		
	Allow for Removing existing Toilet fittings in following items.				
C1.5	Water closet	07	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
C1.6	Wash basing	07	nr		
C1.7	Bidet spray	07	nr		
C1.8	Soap tray.	03	nr		
C1.9	Gully grating.	07	nr		
C1.10	Shower rose	02	nr		
C1.11	Allow for Removing existing 3 rd floor roof .	424.00	m ²		
C1.12	Allow for Removing existing garage roof .	250.00	m ²		
C1.13	Allow for Removing all existing doors .	38	nr		
C1.14	Allow for Removing all existing windows .	52	nr		
C1.15	Allow for Removing all existing fanlight .	06	nr		
	Removing all existing rear side internal wall plastering .				
C1.16	Ground floor	46.00	m ²		
C1.17	Frist floor	48.00	m ²		
C1.18	2 nd floor	67.00	m ²		
C1.19	3 rd floor	60.00	m ²		
C1.20	Demolish and remove existing R/F concrete columns at 3rd floor and vehicle shed	1.00	m3		
C1.21	Demolish Vanity top and (RF concrete)	0.50	m3		
C1.22	Demolish Brick Wall	1.00	m3		
C1.23	Demolish reinforced concrete beams , columns , stair or any other member or location in the building when required, and carting away debris. Rate should include for necessary scaffolding and laying rimber or plywood layer on existing tile floor to prevent damages.	6.00	m3		
	Removing all existing rear side external wall plastering .				
C1.24	Ground floor	46.00	m ²		
C1.25	Frist floor	48.00	m ²		
C1.26	2 nd floor	67.00	m ²		
C1.27	3 rd floor	60.00	m ²		
C1.28	Remove existing roof with roof trussess ,perlings and hading over them to CMC workshop. Trusses should be lowered to ground with care and may required a crane.	1.00	Item		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
C1.29	Purchasing of reusable items by the contractor (except steel trusses).(Contractor has to offer a price for this marked as negative) .	1.00	Item		
C1.30	Demolishing existing tile floor with concrete bed and carting away debris. Rate should include for cutting existing floor with concrete cutter for new column base.	2.00	m ²		
C1.31	Demolishing existing Brick or Block work walls and carting away debris	2.00	m ³		
	Total carried over to summary				
	BILL NO. D				
	EXCAVATION AND EARTH WORK				
	Note:				
	Rates shall be included for				
	1. All necessary boarding supports and erection.				
	2. Striking or removal clearing, wetting etc.				
	3. Disposal of excess material and backfill.				
	4. Contractor should excavate a trial pit for 3m depth and submit for Structural Engineer's approval before commencing foundation work to decide the depth of excavation.				
	5. Rate shall included dewatering up to the required depth to facilitate excavation work, earth work & quarry dust filling.				
D.1	Excavating trenches for column & wall foundations, depth n.e 1.5m. Rate Should include necessary shoring and dewatering when ever necessary.	40.00	m ³		
D.2	Filling new earth of approved quality cleaned, spread, watered and well ramed in 150mm layers.	61.50	m ³		
	Total carried over to summary				
	BILL NO.F				
	CONCRETE WORK				
	F1 - INSITU CONCRETE				
	Note:				
	Rates shall be included for				
	1. Mixing, handling, hoisting and depositing into position.				
	2. Packing around reinforcement and vibrating.				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	3. Curing and clearing as specified.				
	4. Contractor should take necessary precautions to avoid damages to existing tile flooring when preparing shuttering system for new slab.				
	Cement concrete grade 15 for the following item				
F1.1	In 50mm thick under wall foundation, column footings.	20.25	m ²		
F1.2	In floor thickness n.e. 150mm,	25.00	m ³		
F1.3	Cement concrete drains of internal size 225mm wide and depth varies from 150mm to 225mm consist of 75 mm tk. Base and side walls in grade 20 concrete including 12 mm tk. 1:3 rendering with 75 mm tk. 1.5 m wide concrete pavement including necessary formwork.	100.00	m		
	RCC concrete grade 20 for the following				
F1.4	In ground floor lintols	0.90	m ³		
	RCC concrete grade 25 for the following items.				
F1.5	In stair case on parking up to 3 m level.	2.00	m ³		
F1.6	In stair case on parking bay from 3m to 6.9m	2.00	m ³		
F1.7	50mm thick sloping concrete bed.	415.00	m ²		
F1.8	50mm thick protective concrete layer with 50mmx50mm GI mesh.	244.00	m ²		
F1.9	Column, sectional area not exceeding 0.1m ² up to finished floor level.	6.00	m ³		
F1.10	Column, sectional area n.e. 0.1m ² up to 7 m. level.	2.50	m ³		
F1.11	Extending existing Column, sectional area n.e. 0.25m ² from existing roof level to new roof slab level	3.00	m ³		
F1.12	Plinth beam	4.50	m ³		
F1.13	Tie beam at 3m level in parking bay.	4.50	m ³		
F1.14	100mm thick sun shed	2.00	m ³		
F1.15	In stiffner columns on parking bay roof slab	1.00	m ³		
F1.16	In stiffner columns on 3 rd floor roof slab	1.25	m ³		
	Ready mix concrete				
	Ready mix concrete of grade 25(25 N/mm²) confirming to SLS 1144-1997 for the following items.				
F1.17	Column footings.	6.30	m ³		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
F1.18	In 150mm thick parking bay roof slab in parking bay.	62.00	m ³		
F1.19	In 150mm thick upper roof slab in third floor.	72.00	m ³		
F1.20	In 150mm thick upper roof whether shade slab in third floor.	9.00	m ³		
F1.21	In 150mm thick parking bay whether shade slab in parking bay.	9.00	m ³		
F1.22	In beams parking bay slab	23.00	m ³		
F1.23	In beams 3 rd floor roof slab	24.00	m ³		
	Cement concrete grade 20 for the following items.				
F1.24	In 100mm thick vanity top.	1.00	m ³		
F1.25	Lintols in ground floor	1.00	m ³		
	F2 - FORM WORK				
	Note: Quality of the form work should be approved by the engineer prior to erection.				
	a. Rates shall include for				
	· All necessary boarding, supports, applications of mould oil as necessary, erecting, framing, cutting angles, cleaning, wetting and treatment before placing concrete and striking or removal etc.				
	· Formwork to be measured net contact surface between concrete & formwork.				
	· Formwork to beams, columns, and casings deemed to include ends.				
	b. The contractor shall provide sufficient formwork and moulds to ensure the adequate progress of the work and the Engineer may direct the contractor to provide at Contractor's expense such additional formwork and moulds as they may deem necessary if in his opinion the proper progress of the work is retarded by their absence.				
	c. Rate to be included erecting and dismantling of scaffolding and formwork.				
	d. Formwork for footing, column, beams, lintel, walls, and slabs are of 15mm thick ply-boards.				
F2.1	In stair case on parking bay up to 3 m level.	15.00	m ²		
F2.2	In stair case on parking bay from 3m to 6.9m	15.00	m ²		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
F2.3	Column footings.	24.30	m ²		
F2.4	Column, sectional area not exceeding 0.1m ² up to finished floor level.	33.00	m ²		
F2.5	Column, sectional area not exceeding 0.1m ² up to 3m level.	33.00	m ²		
F2.6	Plinth beam	45.00	m ²		
F2.7	Tie beam at 3m level.	45.00	m ²		
F2.8	Sides and soffit of the parking bay roof slab. Rate should include for scaffolding considering the height from the ground to slab is max 9m	375.00	m ²		
F2.9	Sides and soffit of the third floor roof slab	270.00	m ²		
F2.10	Sides and soffit of the roof slab eve (1m projection). Rate should include for scaffolding considering the height from the ground to slab is max 15m	70.00	m ²		
F2.11	Sides and soffit of parking bay roof slab beam beams Rate should include for scaffolding considering the height from the ground to slab is max 9m	240.00	m ²		
F2.12	Sides and soffit of upper roof slab beams	145.00	m ²		
F2.13	Sides and soffit of lintols in ground floor	15.00	m ²		
F2.14	Sides and soffit of vanity top	3.00	m ²		
F2.15	Sides and soffit of 100mm thick sun shed	20.00	m ²		
F2.16	In stiffner columns on parking bay roof slab	10.00	m ²		
F2.17	In stiffner columns on 3 rd foof slab	12.00	m ²		
	F3 - REINFORCEMENT IN INSITU CONCRETE				
	Note:				
	Rates shall be included for				
	1. Cleaning, cutting, bending, fabricating with gauge 18 binding wire and placing in position.				
	2. Holding and supporting including temporary fixing supports, hingers, binding wire spaces & tor steel stools.which is required for the proper completion of the work.				
	3. Providing all necessary laps.				
	4.Precast cement distance blocks should be same grade of concrete with 5mm aggregate.				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	5. Plain rounded Mild steel of characteristic strength 250 N/mm² to BS4449				
	6. High Yield steel of characteristic strength 460 N/mm² to BS4449 & 4461				
	Mild steel round bar diameter n.e. 10mm for the following items				
F3.1	Plinth beam	200.00	kg		
F3.2	Column, sectional area n.e. 0.1m ²	150.00	kg		
F3.3	In parking bay roof beam	700.00	kg		
F3.4	In third floor roof beam	720.00	kg		
F3.5	Lintols	18.00	kg		
	High-yield tor steel bars diameter n.e. 10mm for the following items.				
F3.6	In parking bay roof slab	10,650.00	kg		
F3.7	In third floor roof slab	12,150.00	kg		
F3.8	Lintols	90.00	kg		
F3.9	In 100mm thick vanity top.	60.00	kg		
F3.10	100mm thick sun shed	180.00	kg		
	High-yield tor steel bars diameter 10-16mm for the following items.				
F3.11	In stair case on parking bay up to 3 m level.	600.00	kg		
F3.12	In stair case on parking bay from 3m to 6.9m	600.00	kg		
F3.13	In column footings	675.00	kg		
F3.14	Plinth beam	520.00	kg		
F3.15	In parking bay roof beam	5,400.00	kg		
F3.16	In third floor roof beam	6,000.00	kg		
	High-yield tor steel bars diameter e. 16mm for the following items.				
F3.17	In parking bay roof beam	150.00	kg		
F3.18	In third floor roof beam	100.00	kg		
F3.19	Column, sectional area n.e. 0.1m ²	3,500.00	kg		
F3.20	Supply and drive Chemical Anchoring 20mm steel reinforcements to existing columns , Beams (max 1000mm long bars . Prior approval shall take from the engineer for Anchoring length & chemical type specification of anchoring length should be according to chemical suppliers specified length.)	110.00	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
F3.21	Supply and drive Chemical Anchoring 12mm steel reinforcements to existing columns or beams (max 1000mm long bars . Prior approval shall take from the engineer for Anchoring length & chemical type specification of anchoring length should be according to chemical suppliers specified length.)	25.00	nr		
	Total carried over to summary				
	BILL NO G				
	MASONRY WORKS				
	G1 - BRICK WORK				
	225mm thick brick work in cement and sand mortar 1:5 for the following items				
G1.1	In parking bay up to 3m	116.00	m ²		
G1.2	In parking bay from 3m to 6.9m	195.00	m ²		
	115 mm thick brick work in cement and sand mortar 1:5 for the following items				
G1.3	In roof slab over 3rd floor	100.00	m ²		
G1.4	In roof slab over parking bay	95.00	m ²		
G1.5	In stair case side walls on parking bay roof slab up to 3 m level.	15.00	m ²		
G1.6	In stair case side walls on parking bay roof slab from 3m to 6.9m	15.00	m ²		
	G2 - RUBBLE WORK				
G2.1	Random rubble masonry in cement & sand mortar 1:5 in foundations.	13.50	m ³		
	Total carried over to summary				
	BILL NO H				
	WATER PROOFING				
	Note:				
	The water proofing contractor (or sub contractor) should be a registered specialist contractor at the ICTAD in the category of water proofing.				
	The contractor shall submit a written warranty of at least 10 year to cover on the quality of the material, suitability of the material for the situation and the workmanship including water tightness.				
	The water proofing material shall confirm to relevant British, Euro or ASTM specifications.				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
H.1	Applying Apply the First layer with two coats of cementitious water proof membran, waterproofing system such as MASTERSEAL 540 or equivalent apply strictly according to manufacture's specifications on the floor . Reinforce all Horizontal/Vertical intersections with Alkali Resistant Glass Fiber Mesh such as GLASCOTE 60 or equivalent in a strip 200mm wide . Item shall deemed to include seal around the pipe protrusions and gullies with high strength non shrink grout such as MAPEFILL GP or equivalent. The application shall be subjected to ponding for three days and testing. All products should be marketed/installed by specialist contractor registered at ICTAD In floor toilet, bath rooms, floor and wall. Rate should include for suitable thickness plaster layer for walls.	126.00	m ²		
H.2	Apply the second layer with two coats of cementitious water proof membran, waterproofing system such as MASTERSEAL 540 or equivalent apply strictly according to manufacture's specifications on the floor and up to a 600mm height in the walls , 1500 mm height in toilets area walls and 2100mm height in shower area walls . Reinforce all Horizontal/Vertical intersections with Alkali Resistant Glass Fiber Mesh such as GLASCOTE 60 or equivalent in a strip 200mm wide . Item shall deemed to include seal around the pipe protrusions and gullies with high strength non shrink grout such as MAPEFILL GP or equivalent. The application shall be subjected to ponding for three days and testing	126.00	m2		
H.3	Supply and laying of Gr20 chip concrete in bathroom floors in all 3 floors.	3.25	m3		
H.4	Supply and laying of maximum 40mm thick leveling screed with 1:3 cement mortar in bathroom floors in all 3 floors.				
H.5	Water proofing with Toarchon membrane and lay 50mm chip concrete with 50x50 GI mesh (2mm) , 1000 gauge polytheen layer and 50mm heat insulation layer over 3rd floor roof salb. Rate should include for 50mm 1:3 screed to level the slab surface.	350.00	m ²		
H.6	Water proofing with Toarchon membrane and lay 50mm chip concrete with 50x50 GI mesh (2mm) over Vehicle shed roof salb	310.00	m ²		
H.7	Chip concrete panel cutting into 3x3m squares into 25 mm depth and 5mm wide.and provide high performance elastrometric concrete joint sealent.	467.00	m		
	Apply single component hybrid polyurethane liquid applied water proofing membrane (Pruf PU1 plus or equivalent) in all heights of external walls of the building Rate should include for scaffolding and other items.	725.00	m2		
Total carried over to summary					

DUPLICATE

65

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	BILL NO K METAL WORK Note: The work shall include supplying, fabricating and installation of doors and windows etc. made of powder coated aluminium sections having a minimum powder coating of 60 ± 5 microns thickness & colour bonded .Rate shall be included for 5mm thick clear glass, rubber beadings, stainless steel screws, rawl plugs, neoprene gaskets, locks, aluminium hinges, bar hinges and push plates etc. (Extrusions to be of 1.6mm for minimum thickness for doors and 1.5mm for window frame) .Samples shall be submitted for the approved of Engineer before use. The Aluminium alloy EN AW-6063 to be used shall conform to the requirements of BS EN 515:1993, Part 01 to 04 of BS EN 573, Part 01 to 09 of BS 755 and Part 01 to 02 of EN 12020				
K-01	Fabricated and erected powder coated Al. frame work and horizontal box bars (100 x50) with 50mm spacing. as per detail to the front wall to cover the drainage pipes area. All brackets, nails and accessories should be brass or stainless steel. Total carried over to summary	23.00	m ²		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>L2 - JOINERY</p> <p>TIMBER PARTITIONS & DOORS</p> <p>a. Timber usage The purpose of timber shall be structural and furniture use.</p> <p>b. Quality grades and compliance with structural adequacy The timber shall be recognized based on the modules of elasticity and density at the specified moisture content at the service environment.</p> <p>c. Service environment Service environment and final exposure of timber shall be at a temperature of around 24°C and plus or minus 5°C and the relative humidity of the surrounding air between 55% to 60% and as such timber will attain an average moisture content not exceeding 12%</p> <p>d. Standards Timber shall be supplied in accordance with the standards grading rules applicable to the country of origin. The applicable standard shall be furnished by the contractor in writing along the sample submission for testing</p> <p>e. General requirement Timber for the structural purpose shall be in the density range of 800 to 900kg/m³ and the same applicable to timber for furniture is 600 to 750 kg/m³ at moisture content at service condition.</p> <p>f. Seasoning by preservative treatment The timber should be made durable by preservative treatment. Thus lowhazard and non poisonous timber protection shall be adopted to achieve the moisture content under service environment. Timber shall be seasoned to achieve the specified moisture content under service environment with a suitable drying method.</p> <p>g. Rates shall include the Brass hinges, locks, handles & all necessary accessories which should equal to exiting accessories and prior approval to be taken from the project Architect to finished the work.</p>				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>Painting system shall consist of application of water based stain and two coats of water based sealant and clear polyurethane top coats (Sayerlack or equivalent) as per manufacturer's specification with matt finish for all timber work.</p> <p>Rate shall include all necessary accessories including Brass Hinges and Brass Scrows ,door locks Handles to work in order. Brass hinges with steel pins should not be used.</p> <p>Rate shall include with all ironmongery and locks for new timber works and shall be in high quality Brass or equivalent. (All accessories should be corrosion resistant)</p>				
L2.1	Supply and fix timber/glaze paneled double sash door as per detail. (D- 1500mm x 2550mm)	01	nr.		
L2.2	Supply and fix timber flush paneled single sash door as per detail. (D1 - 900mm x 2100mm)	16	nr.		
L2.3	Supply and fix timber flush paneled single sash door as per detail. (D2 - 750mm x 2100mm)	09	nr.		
L2.4	Supply and fix timber/glazed paneled double sash door as per detail. (D3 - 1200mm x 1500mm)	03	nr.		
L2.5	Supply and fix timber frame glazed window as per detail plan. (W1 - 1200mm X 1500mm)	68	nr.		
L2.6	Supply and fix timber framed glazed fanlight as per detail plan. F1 - 600mm x 450mm)	06	nr.		
L2.7	Supply and fix pantry cupboard with timber frame and timber sash under work top & 25mm thick timber plank for internal shelves. Rates to be included for fixing necessary fittings and spray paint as per detail plan.	5.00	m		
L2.8	Supply and fix wall cupboard with timber frame and timber sash above work top. Rates to be included for fixing necessary fittings and spray paint as per detail plan.	5.00	m		
L2.9	Supply and fixing of Timber Canopy With 50x100 supports and perlins of structural Timber and PVC type roof sheets and fixing of Al Flashing (canopy width 2850). Rate Should include all Stainless steel nails and anchor bolts , two coat of Water base external paint of timber members	55	nr.		
	Total carried over to summary				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	BILL NO. P				
	ROOF AND ROOF PLUMBING				
P.1	Supply and fix Type 600 PVC 110mm dia. Down pipes Including necessary brackets at 1200mm C/C.	110.00	m		
P.2	Supply and fix PVC Down spout with water proofing selent.	09	nr		
	Total carried over to summary				
	BILL NO. Q				
	PLUMBING AND SANITARY INSTALLATIONS				
	<p>Note:</p> <p>Any other make/brand that has equivalent performance characteristics are considered as equivalent provided such fittings met with following criteria</p> <p>(a) Has an authorized local agent in Sri Lanka</p> <p>(b) The local agent has been in the trade of the offered make for not less than 5 years</p> <p>(c) The offered sanitary fittings has a 10 Year manufacturer's warranty issued by the agent.</p> <p>(d) The cistern mechanism shall have an assurance for the availability of spares for the next 3 years.</p> <p>(e) The fittings are manufactured in conformity to BS, JIS, A.S.T.M., A.S. or S.L.S. standards</p> <p>(f) The dimensions are and performance characteristics are in par with the stated model.</p> <p>(g)The brands that may be considered as equivalent are "Rocell/American standered" or any other approved make which prior approval to be obtained</p> <p>(h) Plumbing work should be carried out by a plumber licensed by the CMC and executed in accordance with the specifications and requirement of the Water Supply & Drainage Division of C.M.C.</p> <p>(i) Provisions should be made by the tenderers to submit the necessary plans and the payment of service connection fee to the National Water Supply & Drainage Board.</p>				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>(j) All water conduits shall be of standard quality PVC tubes of approved quality and approved by the National Water Supply & Drainage Board gauge to be 1000 UPVC quality.</p> <p>K. All control valves shall be genuine Pegler or equivalent and make to the approval of the Engineer.</p> <p>L. Rate for Sanitary Plumbing shall include:</p> <p style="padding-left: 40px;">Screws, nails, pipe hooks, saddles, brackets, sockets, connections, short lengths, back nuts, nipples, all laps, straight cutting and waste.</p> <p>(k) Rates shall be inclusive of bends, valves, reduces joints, end caps etc. Necessary for the installation of service including excavation, laying, testing, refilling of trench & making good surface complete.</p>				
Q.1	Supply & fix 20 mm PVC pipes with necessary fitting.	50.00	m		
Q.2	Supply & fix 25 mm PVC pipes with necessary fitting.	250.00	m		
Q.3	Supply & fix 32 mm PVC pipes with necessary fitting.	150.00	m		
Q.4	Supply & fix 40 mm PVC pipes with necessary fitting.	250.00	m		
Q.5	Supplying , laying and/or fixing 20mm dia. CPVC - SDR pipes. Including all necessary specials.(Hot water pipes)	25.00	m		
Q.6	Supplying , laying and/or fixing 25mm dia. CPVC - SDR pipes. Including all necessary specials.(Hot water pipes)	25.00	m		
Q.7	Supplying and fixing 25mm wheel valve "Pegler" Brand or approved equivalent.	10	nr		
Q.8	Supplying and fix 20mm dia. chromium plated Angle valve "Pegler" Brand or approved equivalent..	25	nr		
Q.9	Supplying and fixing 32mm wheel valve "Pegler" Brand or approved equivalent.	05	nr		
Q.10	Catch pit - 100mmx100mmx100mm fixed complete.	15	nr		
Q.11	Supply and fix ceramic wall hung wash basin of "American Stander" brand & model TF 0955 Active with A-8006 waste & plug, A-7007 C AMM Pillar tap or approved equivalent for disabled toilet. Rate to be included flexible hose 45cm .	07	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
Q.12	Supply and fix close couple dual flush ceramic water closet of "American Standard" brand & model TF 2793HW new sible "P" or approved equivalent. Rate to include Bracket , Soft closing seat cover, Riviera concealed cistern ,and flexible connection.	07	nr		
Q.13	Supply and fix Chromium plated hand Bidet Spray of "American standered /Rocell" brand or approved equivalent complete to working order	07	nr		
Q.14	Supply and fix 12mm Chromium plated Bib tap	07	nr		
Q.15	Supply and fix stainless steel gully grating.	08	nr		
Q.16	Supply and fix 5mm thick mirror of size 600mm x 800mm double coated with pencilage back strecher.	02	nr		
Q.17	Supply and fix chromium plated 600mm long Single Towel Bar of "American standered /Rocell" or approved equivalent.	02	nr		
Q.18	Supply and fix Chromium plated shower level built-in-shower mixer with auto diverter shower arm jointed shower head .	02	nr		
Q.19	Supply and fix stainless steel soap tray.	03	nr		
	Total carried over to summary				
	BILL NO.S				
	BILL NO.S				
	ELECTRICITY				
	Note:				
	All electrical constructions should be according to IEE regulations (18th edition or later) and subject to the instructions of the electrical officer concerned. Jobs attend beyond condition will not be approved please.				
	All switches & socket outlets shall be plated type "Clipsal","Orange" or Cabtree (make:- "Atco","BG" original or equivalent) starter and the tube should be Thron, Philips or Osram.				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>All Distribution Boadrs should be incorporated with genuine Merlin Gerin, A.B.B., Hager,F & G, Clipsal make MCB's (Miniature Circuit Breakers) and Cabtree,F & G, Clipsal ,Merlin Gerin make RCD's (Residual Current Devices) and Terrasaki,Merlin Gerin, Dormans Smith,Biticano, Clockner moeller make MCCB's (Moulded Case Circuit Breakers). A certificate or invoice along with their Company seal and part No./Numbers should be produced at the time of payment.</p> <p>All CFL bulbs shall be "Energy star 3 " or above, with minimum 1 year warranty, purchased from authorised dealer.</p> <p>Minimum 2 year warranty from the building handed over date shall be given for all electrical equipment including light fittings, CFL bulbs, etc. Warranty cards shall be submitted by the contractor to the Projects Engineer.</p> <p>All light fittings shall be approved by the project architect/ electrical engineer prior to the installation</p> <p>Minimum depth of underground cable trenches shall be 600mm. Cable inside trench shall be covered with LT cable tiles of size 450mmx 200mm x 50mm (should be of grade 25)</p> <p>50mm quarry dust layer should be laid inside the bottom of the trench and the cable should be placed over the top of it.</p> <p>Another 50mm of quarry dust has to be laid covering the cable before placing the concrete tile.</p> <p>Warning tape should be placed after filling the excavated soil layer on top of the concrete tile. Lay the cable in a duct when crossing a vehicle path</p> <p>Number of rods required to obtain the necessary earth resistance shall be determined by the contractor. Testing of earth resistance after installation shall be done by the contractor in the presence of the project Electrical Engineer/Technical officer.</p> <p>All costs for testing shall be borne by the contractor</p>				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	<p>Sufficient length shall remain in all wires after connecting operations are completed so that they may be re-skinned and reconnected if necessary.</p> <p>power connections shall use a non-interrupted conductor with connecting lugs at each end.</p> <p>All necessary precautions shall be taken to prevent damage and ingress of moisture and impurities due to the</p> <p>All fans, Lamp fitting and the lamp shall be with two year warranty and shall be suitable for outdoor use close to the sea shore</p> <p>Supply & install approved type minimum 9" x 9" , 18W COB LED , minimum 1500lumen light output ceiling surface mounted light fitting (cool white) as shown in the electrical layout & complete wiring by using items as round blocks, ceiling roses, 1.5 mm² Cu/PVC/PVC cable, flexible cable, sunk switches, sunk nut boxes and plastic casings etc. where necessary -2 year warranty. Philips, Osram, NVC or equivalent</p>				
S.01	Ground floor	20	nr		
S.02	First Floor	28	nr		
S.03	Second Floor	48	nr		
S.04	Third Floor	38	nr		
	<p>Supply & install approved 2'-0" x 4'-0" Recessed mounted fluorescent lamp fittings with full parabolic polished aluminium mirror louvered diffuser and 3 nos of 18W LED tube light (T8). (no wiring only light fitting). 2 year comprehensive warranty</p>				
S.05	Ground floor	2	nr		
S.06	First Floor	1	nr		
S.07	Second Floor	1	nr		
S.08	Third Floor	2	nr		
	<p>Supply & install approved type wall bracket outdoor weather proof inner dia. 4" cylindrical IP65 rated complete lamp fittings with approved type LED 18W (cool white) as shown in the electrical layout & complete wiring by using same items as in No.01 above. 2 year comprehensive warranty</p>				
S.09	Ground floor	6	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	Supply & install approved type wall bracket indoor Inner diameter of 4" wall mounted cylindrical shaped upward light fitting with 18 Watt LED bulb. as shown in the electrical layout & complete wiring by using same as S.01. All wall bracket lights near stair case shall be controlable via two way switches. 2 year comprehensive warranty				
S.10	Ground floor	06	nr		
S.11	First Floor	04	nr		
S.12	Second Floor	4	nr		
S.13	Third Floor	4	nr		
S.14	Supply & install approved type wall bracket IP65 weatherproof 50 Watt LED Flood light 6500K as shown in the electrical layout & complete wiring by using same as S.01. Flood lights to be fixed to the column surface and wiring should be properly covered and passed through the parking bay floor with conduits or casing. 2 year comprehensive warranty	4	nr		
S.15	Supply & install approved type wall bracket IP65 weatherproof 20 Watt LED Flood light 6500K as shown in the electrical layout & complete wiring by using same as S.01. Flood lights to be fixed to the wall and wiring should be properly covered and passed with conduits or casing. 2 year comprehensive warranty	3	nr		
	wiring lamp points.				
S.16	Ground floor	3	nr		
S.17	First Floor	3	nr		
S.18	Second Floor	2	nr		
S.19	Third Floor	2	nr		
	Supply & install approved type tubular mirror				
S.20	First Floor	3	nr		
S.21	Second Floor	2	nr		
S.22	Third Floor	2	nr		
	wiring fan points. (wiring with regulator)				
S.23	Ground floor	7	nr		
S.24	First Floor	10	nr		
S.25	Second Floor	11	nr		
S.26	Third Floor	13	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	Supply & install approved type 56" sweep ceiling fans, fan rod as per the specification. Fans shall not disturb the lights and aligned Air flow rate shall be 225 cu.m/min @ RPM 270 with tolerance as per SLS 814 and three star energy label as per SLS 1600. KDK- MRG model				
S.27	Ground floor	7	nr		
S.28	First Floor	10	nr		
S.29	Second Floor	11	nr		
S.30	Third Floor	13	nr		
	Supply & install approved type 13A sunk plug bases with switches & complete wiring by using 2.5mm ² Cu/PVC/PVC cable + 2.5mm ² Cu/PVC earth cable, sunk nut boxes & casing etc. where necessary.				
S.31	Ground floor	23	nr		
S.32	First Floor	17	nr		
S.33	Second Floor	28	nr		
S.34	Third Floor	16	nr		
S.35	Supply and replace the existing MDB to an approved similar type Distribution Board fabricated in zinc coated sheet not less than 1.5 mm thickness with indicator lights 03 nos. for three phases and all other necessary accessories surface finish should be powder coated textured finish R.A.L.7032 and rewire the circuits using new breakers.	1	nr		
	Supply and installation of electrical panel board three (3) phase, neutral and earth complete with powder coated steel sheet enclosure, hinged and lockable door as per specification and drawings Electrical Panel shall include MCCB, Isolator, MCBs, RCDs, Surge protectors, bus bars, terminals and all required accessories. Quantity and current rating of equipment to be installed in Panel boards shall be as given in the drawings. The doors of the MSB shall be lockable Surface Finish : Polyester Powder Coated Colour : Grey RAL 7032/35				
S.36	Main Switch Board (MDB)	1	nr		
	FEEDER CABLES (SUPPLY AND				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	All underground cables to be run in type uPVC pipes in standard trenches filled with sand, warning tapes and covering tiles. restore the ground after the installation				
S.37	1x4C-70sqmm Cu/SWA/XLPE/PVC + E	20	m		
S.38	Supply and install an approved type three phase Distribution Board fabricated in zinc coated sheet not less than 1.5 mm thickness with indicator lights 03 nos. for three phases and all other necessary accessories, surface finish should be powder coated textured finish R.A.L.7032 and consists of following of approved types. Connect supply from MDB.(cable rated separately) -Ground floor 40A 4P MCB 01 Nr. 40A (30mA) 4P RCD 01 Nr. 6A 1P MCB 03Nr.(for roof floor lights) 20A 1P MCB 03 Nr. (for socket outlets) 10A 1P MCB 03 Nrs.(outdoor lights) 20A 1P MCB 01 Nr. (for AC) 25A 4P MCB 01 Nr. (for AC) 1 spare for 1P MCB	1	nr		
S.39	Supply and install an approved type ABC distribution board with all accessories as railings and consists following connect supply from the closest floor DB using 10mm ² cable(cable rated separately) -ground floor 32A 2P MCB 01 Nr. 40A 2P RCCB 01 Nr.(30mA) 6A 1P MCB 03 Nrs. 20A 1P MCB 03 Nrs. spare for 2Nrs of 1P MCB	2	nr		
S.40	Supply and install an approved type three phase Distribution Board fabricated in zinc coated sheet not less than 1.5 mm thickness with indicator lights 03 nos. for three phases and all other necessary accessories, surface finish should be powder coated textured finish R.A.L.7032 and consists of following of approved types. Connect supply from MDB.(cable rated separately) -first floor 40A 4P MCB 01 Nr. 40A (30mA) 2P RCD 03 Nrs 6A 1P MCB 03 Nrs. 20A 1P MCB 03 Nr. (for socket outlets) 20A 1P MCB 01 Nr. (for AC) 25A 4P MCB 01 Nr. (for AC) 1 spare for 1P MCB	1	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
S.41	Supply and install an approved type ABC distribution board with all accessories as railings and consists following connect supply from the closest floor DB using 10mm ² cable(cable rated seperately) -first floor 32A 2P MCB 01 Nr. 40A 2P RCCB 01 Nr.(30mA) 6A 1P MCB 03 Nrs. 20A 1P MCB 03 Nrs. spare for 1Nrs of 1P MCB	1	nr		
S.42	Supply and install an approved type distribution board in fabricated in zinc coated sheet not less than 1.5 mm thickness and all other necessary accesories surface finish should be powder coated texured finish R.A.L.7032 and consists following and connect supply from MDB(cable rated seperately)-second floor 63A 4P MCCB 01 Nr. 63A 4P RCCB 01 Nr.(30mA) 40A 4P MCB 01 Nrs.(existing DB) 25A 2P MCB 01 Nr. 40A 4P RCCB 01 Nr.(30mA) 20A 4P MCB 02 Nr.(AC) 20A 1P MCB 02 Nr.(AC) 1 spare for 4P MCB	1	nr		
S.43	Supply and install an approved type ABC distribution board with all accessories as railings and consists following connect supply from the closest floor DB using 10mm ² cable(cable rated seperately)- second floor 25A 2P MCB 01 Nr. 40A 2P RCCB 01 Nr.(30mA) 6A 1P MCB 03 Nrs. 20A 1P MCB 03 Nrs.(s/o) spare for 1Nrs of 1P MCB	1	nr		
S.44	Supply and install an approved type distribut on board in fabricated in zinc coated sheet not less than 1.5 mm thickness and all other necessary accesories surface finish should be powder coated texured finish R.A.L.7032 and consists following and connect supply from MDB(cable rated seperately)-third floor 63A 4P MCCB 01 Nr. 63A 4P RCCB 01 Nr.(30mA) 40A 4P MCB 01 Nrs.(existing DB) 25A 2P MCB 01 Nr. 40A 4P RCCB 01 Nr.(30mA) 20A 4P MCB 04 Nr.(AC) 20A 4P MCB 01Nrs. 1 spare for 4P MCB	1	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
S.45	<p>Supply and install an approved type ABC distribution board with all accessories as railings and consists following connect supply from the closest floor DB third floor 25A 2P MCB 01 Nr. 40A 2P RCCB 01 Nr.(30mA) 6A 1P MCB 03 Nrs. 20A 1P MCB 03 Nrs.(AC and s/o) spare for 1Nrs of 1P MCB</p> <p>Supply and install an approved type three phase Distribution Board fabricated in zinc coated sheet not less than 1.5 mm thickness with indicator lights 03 nos. for three phases and all other necessary accesories, surface finish should be powder coated texured finish R.A.L.7032 and consists of following of approved types. Connect supply from MDB.(cable rated seperately) 40A 4P MCB 01 Nr. 40A (30mA) 4P RCD 01 Nr. 6A 1P MCB 06 Nr. 20A 1P MCB 03 Nr. (for socket outlets) 1 spare for 1P MCB</p>	1	nr		
S.46	Ground floor	1	nr		
S.47	First Floor	1	nr		
S.48	Second Floor	1	nr		
S.49	Third Floor	1	nr		
S.50	Supply and install 2x10mm ² Cu/PVC/PVC +10mm ² cu/pvc earth wire in conduits/flexible conduits and all other necessary accesories. All conduits/casing shall be camouflaged	30	m		
S.51	Supplying and wiring 4 x 10 mm ² (7/052") PVC/PVC/ Cu cable complete to working order including all accessories	15	m		
S.52	Supplying and wiring 10 mm ² (7/052") earth wire complete to working order including all accessories	15	m		
S.53	Supplying and wiring 4 x 16 mm ² (7/064") PVC/PVC/ Cu cable complete to working order including all accessories	30	m		
S.54	Supplying and wiring 16 mm ² (7/064") earth wire complete to working order including all accessories	30	m		
S.55	Supply and installation of RJ45 single data socket outlets. Rate shall include wiring for same using Cat6 cables drawn in PVC conduits embedded in the walls/concrete slab and in the cable trunking provided	6	nr		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	Special care shall be taken against the corrosion of the outdoor units. Shall be factory treated for the corrosion				
	Supply and install wall mounted split type inverter type AC machine approved by the engineer of 18000Btu/hr capacity with all other necessary requirements including copper and drain piping (include the rate per one AC unit) with one year warranty and five years for the compressor as per the drawing and specifications				
S.56.a	Ground Floor	1	nr.		
	Supply and install wall mounted split type inverter type AC machine approved by the engineer of 18000Btu/hr capacity with all other necessary requirements including copper and drain piping (include the rate per one AC unit) with one year warranty and five years for the compressor as per the drawing and specifications				
S.56.b	First Floor	3	nr.		
S.57	Third Floor	1	nr.		
	Supply and install wall mounted split type inverter type AC machine approved by the engineer of 24000Btu/hr capacity with all other necessary requirements including copper and drain piping (include the rate per one AC unit) with one year warranty and five years for the compressor as per the drawing and specifications				
S.58	Ground floor	1	nr.		
S.59	Second Floor	2	nr.		
	Supply and install wall mounted split type inverter type AC machine approved by the engineer of 36000Btu/hr capacity with all other necessary requirements including copper and drain piping (include the rate per one AC unit) with one year warranty and five years for the compressor as per the drawing and specifications				
S.60	Ground floor	1	nr.		
S.61	Second Floor	2	nr.		
S.62	Third Floor	4	nr.		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	Supply & install power supply points for single phase Air conditioner units with switches & complete wiring by using 2 x 2.5mm ² Cu/PVC/PVC cable + 2.5mm ² Cu/PVC earth cable with conduits or casing etc. where necessary. Use single pole dedicated MCB for each air conditioner				
S.63	Ground floor	1	nr.		
S.64	First Floor	3	nr.		
S.65	Second Floor	2	nr.		
S.66	Third Floor	1	nr.		
	Supply & install power supply points for three phase Air conditioner units with switches & complete wiring by using 4 x 2.5mm ² Cu/PVC/PVC cable + 2.5mm ² Cu/PVC earth cable with conduits or casing etc. where necessary. Use single pole dedicated MCB for each air conditioner				
S.67	Ground floor	1	nr.		
S.68	Second Floor	2	nr.		
S.69	Third Floor	4	nr.		
S.70	Provide an earth electrode copper plate 2'-0" x 2'-0" x 3mm thick at 2.0m depth including excavation and backfilling. Rate shall include connection to the main panel, sub main, earth clips & etc. with 1'-0" x 1'-0" x 1'-0" earth pit consist of 4 1/2" brick work , 3" thick Grade 20 concrete cover slab .(Earth wire paid separately)	1	nr		
S.71	Provide an earth electrode 6'-0" long , 2" dia. x 2.3 mm thick GI pipe. Rate shall include connection to the main panel, sub main, earth clips & etc. with 1'-0" x 1'-0" x 1'-0" earth pit consist of 4 1/2" brick work , 3" thick Grade 20 concrete cover slab (Earth wire paid separately)	1	nr		
S.72	Chartered Engineer's certificate for the installation. Shall be done in presence of the Engineer	1	nr		
Total carried over to summary					

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	T1 - FLOOR FINISHES Note ; Floor tile samples shall be submitted for the approved of Architect before use 2.the brandesthat may be considered as equivalent are Rocell/Lanka Tile or any other approved make. 3.Homogenous porcelain floor tilling Water absorption to weight should be <0.5%,Modulus of Rupture (min)>25N/mm².				
T1.1	300mmx300mm approved quality non slip homogeneous semi rough Rocell/Lanka Tile or equelant floor tiling bedded in cement and sand 1:3 and joints finished with coloured grout to match with coloure of tiles.(Rate to be included the cost of 1:3 mortar levelling bed) . (1 st floor)	10.00	m²		
T1.2	300mmx300mm approved quality non slip homogeneous semi rough Rocell/Lanka Tile or equelant floor tiling bedded in cement and sand 1:3 and joints finished with coloured grout to match with coloure of tiles.(Rate to be included the cost of 1:3 mortar levelling bed) . (2 nd floor)	13.00	m²		
T1.3	300mmx600mm approved quality non slip homogeneous semi rough Rocell/Lanka Tile or equelant floor tiling bedded in cement and sand 1:3 and joints finished with coloured grout to match with coloure of tiles.(Rate to be included the cost of 1:3 mortar levelling bed) . (3 rd floor)	6.00	m²		
	T2 - WALL FINISHES Note ; Wall tile samples shall be submitted for the approved of Architect before use 1.Water absorption to weight should be 10%-20%,Modulus of Rupture (min)>25N/mm². 16mm thick rear side & new wall external plastering with cement and sand mortar 1:5 to a semi rough finish for the following items.				
T2.1	Ground floor Walls	156.00	m²		
T2.2	1 st floor Walls	240.00	m²		
T2.3	2 nd floor Walls	67.00	m²		
T2.4	3 rd floor Walls	60.00	m²		
T2.5	In Guard wall parking bay roof slab.	205.00	m²		
T2.6	In Guard wall 3 rd floor roof slab.	210.00	m²		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
T2.7	In stair way hand rail on parking bay roof slab Width n.e 300mm in reveals including preperation of sloping sill.	25.00	m ²		
T2.8	Ground floor Walls	121.00	m		
T2.9	1 st floor Walls	43.00	m		
T2.10	2 nd floor Walls	20.00	m		
T2.11	3 rd floor Walls 16mm thick internal plastering in diffected and new area with cement and sand mortar 1:5 to a semi rough finish with skim coat for the following items.	31.00	m		
T2.12	Ground floor Walls	172.00	m ²		
T2.13	1 st floor Walls	246.00	m ²		
T2.14	2 nd floor Walls	67.00	m ²		
T2.15	3 rd floor Walls Width n.e 300mm in reveals including preperation of sloping sill.	60.00	m ²		
T2.16	Ground floor Walls	99.00	m		
T2.17	1 st floor Walls	21.00	m		
T2.18	2 nd floor Walls	20.00	m		
T2.19	3 rd floor Walls	31.00	m		
T2.20	600mm x 300mm approved quality polished porcelain Rocell/Lanka Tile or equvelant wall tiling on plaster surface of walls and joints finished with coloured grout to match with tiles in toilet area. (1 st floor)	31.00	m ²		
T2.21	600mm x 300mm approved quality polished porcelain Rocell/Lanka Tile or equvelant wall tiling on plaster surface of walls and joints finished with coloured grout to match with tiles in toilet area. (2 nd floor)	43.00	m ²		
T2.22	600mm x 300mm approved quality polished porcelain Rocell/Lanka Tile or equvelant wall tiling on plaster surface of walls and joints finished with coloured grout to match with tiles in toilet area. (3 rd floor)	23.00	m ²		
	T3 -CEILING FINISHES 10mm thk. 1:3 cement and sand plaster to soffit of slab and beams finished semi rough in following items.				
T3.1	In ground floor	550.00	m ²		
T3.2	In third floor	425.00	m ²		
	Total carried over to summary				

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
	BILL NO: U				
	GLAZING				
U-01	Supply and fix 200mm x 200mm Glazed box to the wall opening 1200 x 1500 mm in Parking bay Walls above 3m.(14 Openings)	26.00	m ²		
	Total carried over to summary				
	BILL NO V				
	PAINTING				
	Note All painting work rates should include scaffolding when necessary.				
	Painting rear side external wall with two coats of water proofing paint after preparing surface				
V.1	Ground floor	184.00	m ²		
V.2	Frist floor	186.00	m ²		
V.3	2 nd floor	67.00	m ²		
V.4	3 rd floor	63.00	m ²		
	Painting all external walls with two coats of approved quality and colour weathershield paint after preparing surface in following items.				
V.5	In Ground floor Columns and walls	622.00	m ²		
V.6	In Frist floor Columns and walls	562.00	m ²		
V.7	In 2 nd floor Columns and walls	518.00	m ²		
V.8	In 3 rd floor Columns and walls	307.00	m ²		
	Application of plaster coatings of thickness not less than 2mm using "Joint compound powder / Skimcoat ", or approved equivalent.Rate shall include for sand papering and surface preparation for the following items.				
V.9	In soffit and side of the slab and beams of the parking bay.	550.00	m ²		
V.10	In soffit and side of the slab and beams of the 3 rd floor.	425.00	m ²		
	Painting all internal walls with two coats of approved quality and colour emulsion paint after preparing surface in following items.				
V.11	In ground floor walls, columns,sides & soffit of slab , beams & staircase.	916.00	m ²		
V.12	In 1 st floor walls, columns,sides & soffit of slab , beams & staircase.	805.00	m ²		

Item	Description	Qty.	Unit	Rate Rs.	Amount Rs.
V.13	In 2 nd floor walls, columns,sides & soffit of slab , beams & staircase.	1145.00	m ²		
V.14	In 3 rd floor walls, columns,sides & soffit of slab , beams & staircase.	1175.00	m ²		
	Total carried over to summary				
	BILL NO W				
	DRAINAGE SYSTEMS				
	Note:				
	1.The work should be carried out by a contractor licensed by the CMC and in accordance with the regulations of the CMC for soil drainage.				
	2. Backfilling of excavations in trenches and pits for drains and manholes must be compacted and excess to be disposed as directed at expenses of the contractor. Rate to be included for dewatering, pumping,shoring and cleaning the site on completion.				
	3.The gauge of pipes to be 600 UPVC.				
	4. Rates shall be inclusive of bends, valves, reduces joints,end caps etc. necessary for the installation of service.				
W.1	110mm dia.UPVC. sewer pipes (type 600) Including cement concrete hunching Grade 15(aggregate 25mm) including bends and fixing to manholes. Rate to include excavation, backfilling and removing excess earth from site. (approx.) In ground floor	50.00	m		
W.2	Supply & fix/lay 40 mm dia. PVC Type 600 waste pipes.	50.00	m		
W.3	Supply & fix/lay 63 mm dia. PVC Type 600 waste pipes.	50.00	m		
W.4	Construction of gully internal size of 300mm x300mm & depth up to 450mm as per detail drawing. Rate to include for excavation, necessary formwork, lifting hooks, supplying P.V.C.gully trap in fill with grade 20 concrete and 20mm thick cement & sand rendering in 1:2 mix trowel smooth with neat grey cement to all internal surfaces , exposed external surfaces and forming channel with 1:6 benching. Including 75mm thick RCC cover slab reinforced wth 6mm dia mild steel at 100mm c/c both ways.	1.00	nr.		