

**ELECTRICAL INSTALLATIONS
DETAILED SPECIFICATIONS**

INDEX

PAGE NO.

NOTICE TO TENDERERS1
DETAILED SPECIFICATION FOR ELECTRICAL WORK2
PART 1 - GENERAL4
PART 2: INSTALLATION DETAILS.....12
PART 3: SCHEDULE OF MATERIAL.....25
PART 4: BILLS OF QUANTITIES27
PARTICULARS OF ELECTRICAL CONTRACTOR.....28
PART 5: DRAWINGS29

PART B: DETAILED ELECTRICAL WORK

NOTICE TO TENDERERS

1. The tenderer for the principal contract shall submit additional information regarding the installer of the Electrical Installation together with the returnables enclosed with the tender enquiry documents
2. The Contractor, on acceptance of his tender for the principal contract shall submit within the period stated, the information indicated on the forms following immediately after the Summary of the bills of quantities for this installation.

DETAILED SPECIFICATION FOR ELECTRICAL WORK

PART 1 - GENERAL

CONTENTS

1	TESTS	4
2	MAINTENANCE OF INSTALLATIONS	4
3	REGULATIONS	4
4	NOTICES AND FEES	4
5	SCHEDULE OF FITTINGS	4
6	QUALITY OF MATERIALS	4
7	CONDUIT AND ACCESSORIES	5
8	CONDUIT IN ROOF SPACES	6
9	SURFACE MOUNTED CONDUIT.....	6
10	CONDUIT IN CONCRETE SLABS.....	6
11	FLEXIBLE CONNECTIONS FOR CONNECTING UP OF STOVES, MACHINES, ETC. 7	
12	WIRING:.....	7
13	SWITCHES AND SOCKET OUTLETS	8
14	SWITCHGEAR.....	8
15	SWITCHBOARDS.....	8
16	WORKMANSHIP AND STAFF	8
17	CERTIFICATE OF COMPLIANCE	8
18	EARTHING OF INSTALLATION	9
19	MOUNTING AND POSITIONING OF LUMINAIRES.....	10

PART 1 - GENERAL

1 TESTS

After completion of the works and before first delivery is taken, a full test will be carried out on the installation for a period of sufficient duration to determine the satisfactory working thereof. During this period the installations will be inspected and the Contractor shall make good at his cost, to the satisfaction of the Representative/Agent/Engineer, any defects which may arise. Contractor to provide a list of all equipment he used together with serial numbers for COC

The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installations at completion.

2 MAINTENANCE OF INSTALLATIONS

With effect from the date of the First Delivery Certificate the Contractor shall at his own expense undertake the regular servicing of the installation during the maintenance period and shall make all adjustments necessary for the correct operation thereof.

If during the said period the installations is not in working order for any reason for which the Contractor is responsible, or if the installations develops defects, he shall immediately upon being notified thereof take steps to remedy the defects and make any necessary adjustments.

Should such stoppages however be so frequent as to become troublesome, or should the installations otherwise prove unsatisfactory during the said period the Contractor shall, if called upon by the Representative/Agent/Engineer or the Director-General, at his own expense replace the whole of the installations or such parts thereof as the Representative/Agent/Engineer or the Director-General may deem necessary with apparatus specified by the Representative/Agent/Engineer or the Director-General.

3 REGULATIONS

The installation shall be erected and tested in accordance with the Acts and Regulations as indicated in the scope of works.

4 NOTICES AND FEES

The Contractor shall give all notices required by and pay all necessary fees, including any inspection fees, which may be due to the local Supply Authority.

On production of the official account, only the net amount of the fee charged by the Supply Authority for connection of the installation to the supply mains, will be refunded to the Contractor by the Department.

5 SCHEDULE OF FITTINGS

In all instances where schedule of light, socket outlet and power points are attached to or included on the drawings, these schedules are to be regarded as forming part of the specification.

6 QUALITY OF MATERIALS

Only materials of first class quality shall be used and all materials shall be subject to the approval of the Department. Departmental specifications for various materials to be used on this Contract are attached to and form part of this specification.

Wherever applicable the material is to comply with the relevant South African Bureau of Standards, specifications, or to British Standard Specifications, where no SABS Specifications exist.

Materials wherever possible, must be of South African manufacture.

7 CONDUIT AND ACCESSORIES

The type of conduit and accessories required for the service, i.e. whether the conduit and accessories shall be of the screwed type, plain-end type or of the non-metallic type and whether metallic conduit shall be black enamelled or galvanised, is specified in Part 2 of this specification.

Unless other methods of installation are specified for certain circuits, the installation shall be in conduit throughout. No open wiring in roof spaces or elsewhere will be permitted.

The conduit and conduit accessories shall comply fully with the applicable SABS specifications as set out below and the conduit shall bear the mark of approval of the South African Bureau of Standards.

- a) Screwed metallic conduit and accessories: SANS 61386, parts 1, 21 and 23.
- b) Plain-end metallic conduit and accessories: SANS 61386, parts 1, 21 and 23.
- c) Non-metallic conduit and accessories: SANS 950

All conduit fittings except couplings, shall be of the inspection type. Where cast metal conduit accessories are used, these shall be of malleable iron. Zinc base fittings will not be allowed.

Bushes used for metallic conduit shall be brass and shall be provided in addition to locknuts at all points where the conduit terminates at switchboards, switch-boxes, draw-boxes, etc.

Draw-boxes are to be provided in accordance with SANS 10142-1 and wherever necessary to facilitate easy wiring.

For light and socket outlet circuits, the conduit used shall have an external diameter of 20mm. In all other instances the sizes of conduit shall be in accordance with SANS 10142-1 for the specified number and size of conductors, unless otherwise directed in part 2 of this specification or indicated on the drawings.

Only one manufactured type of conduit and conduit accessories will be permitted throughout the installation.

Running joints in screwed conduit are to be avoided as far as possible and all conduit systems shall be set or bent to the required angles. The use of normal bends must be kept to a minimum with exception of larger diameter conduits where the use of such bends is essential.

All metallic conduit shall be manufactured of mild steel with a minimum thickness of 1,2mm for plain-end conduit and 1,6mm in respect of screwed conduit.

Under no circumstances will conduit having a wall thickness of less than 1,6mm be allowed in screeding laid on top of concrete slabs.

Bending and setting of conduit must be done with special bending apparatus manufactured for the purpose and which are obtainable from the manufacturers of the conduit systems. Damage to conduit resulting from the use of incorrect bending apparatus or methods applied must on indication by the Department's inspectorate staff, be completely removed and rectified and any wiring already drawn into such damaged conduits must be completely renewed at the Contractor's expense.

Conduit and conduit accessories used for flame-proof or explosion proof installations and for the suspension of luminaires as well as all load bearing conduit shall in all instances be of the metallic type.

All metallic conduit and accessories used in areas within 50 km of the coast shall be galvanised to SANS 14713-2.

Tenderers must ensure that general approval of the proposed conduit system to be used is obtained from the local electricity supply authority prior to the submission of their tender. Under no circumstances will consideration be given by the Department to any claim submitted by the Contractor, which may result from a lack of knowledge in regard to the supply authority's requirements.

8 CONDUIT IN ROOF SPACES

Conduit in roof spaces shall be installed parallel or at right angles to the roof members and shall be secured at intervals not exceeding 1,5m by means of saddles screwed to the roof timbers.

Nail or crampets will not be allowed.

Where non-metallic conduit has been specified for a particular service, the conduit shall be supported and fixed with saddles with a maximum spacing of 450 mm. The Contractor shall supply and install all additional supporting timbers in the roof space as required.

Under flat roofs, in false ceilings or where there is less than 0,9m of clearance, or should the ceilings be insulated with glass wool or other insulating material, the conduit shall be installed in such a manner as to allow for all wiring to be executed from below the ceilings.

Conduit runs from distribution boards shall, where possible terminate in fabricated sheet steel draw-boxes installed directly above or in close proximity to the boards.

9 SURFACE MOUNTED CONDUIT

Wherever possible, the conduit installation is to be concealed in the building work; however, where unavoidable or otherwise specified under Part 2 of the specification, conduit installed on the surface must be plumbed or levelled and only straight lengths shall be used.

The use of inspection bends is to be avoided and instead the conduit shall be set uniformly and inspection coupling used where necessary.

No threads will be permitted to show when the conduit installation is complete, except where running couplings have been employed.

Running couplings are only to be used where unavoidable, and shall be fitted with sliced couplings as a lock nut.

Conduit is to be run on approved spaced saddles rigidly secured to the walls.

Alternatively, fittings, tees, boxes, couplings etc., are to be cut into the surface to allow the conduit to fit flush against the surface. Conduit is to be bedded into any wall irregularities to avoid gaps between the surface and the conduit.

Crossing of conduits is to be avoided. However, should it be necessary purpose-made boxes are to be provided at the junction. The finish of the boxes and positioning shall be in keeping with the general layout.

Where several conduits are installed side by side, they shall be evenly spaced and grouped under one purpose-made saddle.

Distribution boards, draw-boxes, industrial switches and socket outlets etc., shall be neatly recessed into the surface to avoid double sets.

In situations where there are no ceilings the conduits are to be run along the wall plates and the beams.

Painting of surface conduit shall match the colour of the adjacent wall finishes.

Only approved plugging materials such as aluminium inserts, fibre plugs, plastic plugs, etc., and round-head screws shall be used for fixing saddles, switches, socket outlets, etc., to walls, wood plugs and the plugging in joints in brick walls are not acceptable.

10 CONDUIT IN CONCRETE SLABS

In order not to delay building operations the Contractor must ensure that all conduits and other electrical equipment which are to be cast in the concrete columns and slabs are installed in good time.

The Contractor shall have a representative in attendance at all times when the casting of concrete takes place.

Draw-boxes, expansion joint boxes and round conduit boxes are to be provided where necessary. Sharp bends of any nature will not be allowed in concrete slabs.

Draw and/or inspection boxes shall be grouped under one common cover plate, and must preferably be installed in passages or male toilets.

All boxes, etc., are to be securely fixed to the shuttering to prevent displacement when concrete is cast. The conduit shall be supported and secured at regular intervals and installed as close as possible to the neutral axis of concrete slabs and/or beams.

Before any concrete slabs are cast, all conduit droppers to switchboards shall be neatly spaced and rigidly fixed.

11 FLEXIBLE CONNECTIONS FOR CONNECTING UP OF STOVES, MACHINES, ETC.

Flexible tubing connections shall be of galvanised steel construction, and in damp situations of the plastic sheathed galvanised steel type. Other types may only be used subject to the prior approval of the Department's site electrical representative.

Connectors for coupling onto the flexible tubing shall be of the gland or screw-in types, manufactured of either brass or cadmium or zinc plated mild steel, and the connectors after having been fixed onto the tubing, shall be durable and mechanically sound.

Aluminium and zinc alloy connectors will not be acceptable.

12 WIRING:

Except where otherwise specified in Part 2 of this specification, wiring shall be carried out in conduit throughout. Only one circuit per conduit will be permitted.

No wiring shall be drawn into conduit until the conduit installation has been completed and all conduit ends provided with bushes. All conduits to be clear of moisture and debris before wiring is commenced.

Unless otherwise specified in Part 2 of this specification or indicated on the service drawings, the wiring of the installation shall be carried out in accordance with SANS 10142-1. Further to the requirements concerning the installation of earth conductors to certain light points as set out in SANS 10142-1, it is a specific requirement of this document that where plain-end metallic conduit or non-metallic conduit has been used, earth conductors must be provided and drawn into the conduit with the main conductors to all points, including all luminaires and switches throughout the installation.

Wiring for lighting circuits is to be carried out with 1,5mm² conductors and a 1,5mm²-earth conductor. For socket outlet circuits the wiring shall comprise 4mm² conductors and a 2,5mm²-earth conductor. In certain instances, as will be directed in Part 2 of this specification, the sizes of the aforementioned conductors may be increased for specified circuits. Sizes of conductors to be drawn into conduit in all other instances, such as feeders to distribution boards, power points etc., shall be as specified elsewhere in this specification or indicated on the drawings. Sizes of conductors not specified must be determined in accordance with SANS 10142-1.

The loop-in system shall be followed throughout, and no joints of any description will be permitted.

The wiring shall be done in PVC insulated 600/1000 V grade cable to SABS 1507 and 1574.

Where cable ends connect onto switches, luminaires etc., the end strands must be neatly and tightly twisted together and firmly secured. Cutting away of wire strands of any cable will not be allowed.

13 SWITCHES AND SOCKET OUTLETS

All switches and switch-socket outlet combination units shall conform to the Department Quality Specifications, which form part of this specification.

No other than 16 A 3 pin sockets complying to SANS 164-1 and SANS 164-2 are to be used, unless other special purpose types are distinctly specified or shown on the drawings.

All light switches shall be installed at 1,4m above finished floor level and all socket outlets as directed in the Schedule of Fittings which forms part of this specification or alternatively the height of socket outlets may be indicated on the drawings.

14 SWITCHGEAR

Switchgear, which includes circuit breakers, iron-clad switches, interlocked switch-socket outlet units, contactors, time switches, etc., is to be in accordance with the Departmental Quality Specifications which form part of this specification and shall be equal and similar in quality to such brands as may be specified.

For uniform appearance of switchboards, only one approved make of each of the different classes of switchgear mentioned in the Quality Specifications shall be used throughout the installations.

15 SWITCHBOARDS

All boards shall be in accordance with the types as specified, be constructed according to the detail or type drawings and must be approved by the Department before installation.

In all instances where provision is to be made on boards for the supply authority's main switch and/or metering equipment the contractor must ensure that all requirements of the authorities concerned in this respect are met.

Any construction or standard type aboard proposed, as an alternative to that specified must have the prior approval of the Department.

All busbars, wiring, terminals, etc., are to be adequately insulated and all wiring is to enter the switchgear from the back of the board. The switchgear shall be mounted within the boards to give a flush front panel. Cable and boxes and other ancillary equipment must be provided where required.

Clearly engraved labels are to be mounted on or below every switch. The working of the labels in English and Afrikaans, is to be according to the lay-out drawings or as directed by the Department's representative and must be confirmed on site. Flush mounted boards to be installed with the top of the board 2,0m above the finished floor level.

16 WORKMANSHIP AND STAFF

Except in the case of electrical installations supplied by a single-phase electricity supply at the point of supply, an accredited person shall exercise general control over all electrical installation work being carried out.

The workmanship shall be of the highest grade and to the satisfaction of the Department.

All inferior work shall, on indication by the Department's inspecting officers, immediately be removed and rectified by and at the expense of the Contractor.

17 CERTIFICATE OF COMPLIANCE

On completion of the service, a certificate of compliance must be issued to the Department's Representative/Agent in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

18 EARTHING OF INSTALLATION

Main earthing

The type of main earthing must be as required by the supply authority if other than the Departments, and in any event as directed by the Department's representative, who may require additional earthing to meet test standards.

Where required an earth mat shall be provided, the minimum size, unless otherwise specified, being 1,0m x 1,0m and consisting of 4mm diameter hard-drawn bare copper wires at 250mm centres, brazed at all intersections.

Alternatively, or additionally earth rods or trench earths may be required as specified or directed by the Department's authorised representative.

Installations shall be effectively earthed in accordance with SANS 10142-1 and to the requirements of the supply authority. All earth conductors shall be stranded copper with or without green PVC installation.

Connection from the main earth bar on the main board must be made to the cold water main, the incoming service earth conductor, if any and the earth mat or other local electrode by means of 12mm x 1,60 mm solid copper strapping or 16 mm² stranded (not solid) bare copper wire or such conductor as the Department's representative may direct. Main earth copper strapping where installed below 3m from ground level, must be run in 20 mm diameter conduit securely fixed to the walls.

All other hot and cold water pipes shall be connected with 12mm x 0,8mm perforated for solid copper strapping (not conductors) to the nearest switchboard. The strapping shall be fixed to the pipework with brass nuts and bolts and against walls with brass screws at 150-mm centres. In all cases where metal water pipes, down pipes, flues, etc., are positioned within 1,6m of switchboards an earth connection consisting of copper strapping shall be installed between the pipework and the board. In vertical building ducts accommodating both metal water pipes and electrical cables, all the pipes shall be earthed at each distribution board.

Roofs, gutters and down pipes

Where service connections consist of overhead conductors, all metal parts of roofs, gutters and down pipes shall be earthed. One bare 10mm² copper conductor shall be installed over the full length of the ceiling void, fixed to the top purlin and connected to the main earth conductor and each switchboard. The roof and gutters shall be connected at 15m intervals to this conductor by means of 12mm X 0,8mm copper strapping (not conductors) and galvanised bolts and nuts. Self-tapping screws are not acceptable. Where service connections consist of underground supplies, the above requirements are not applicable.

Sub-distribution boards

A separate earth connection shall be supplied between the earth busbar in each sub-distribution board and the earth busbar in the Main Switchboard. These connections shall consist of a bare or insulated stranded copper conductors installed along the same routes as the supply cables or in the same conduit as the supply conductors. Alternatively, armoured cables with earth continuity conductors included in the armouring may be utilised where specified or approved. All sub-DBs to be labelled where they are fed from, together with cable sizes to the distribution board.

Sub-circuits

The earth conductors of all sub-circuits shall be connected to the earth busbar in the supply board in accordance with SANS 190142-1.

Ring Mains

Common earth conductors may be used where various circuits are installed in the same wire way in accordance with SANS 10142-1. In such instances the sizes of earth conductors shall be equivalent to that of the largest current carrying conductor installed in the wire way, alternatively the size of the conductor shall be as directed by the Engineer. Earth conductors for individual circuits branching from the ring main shall be connected to the common earth conductor with T-ferrules or soldered. The common

earth shall not be broken.

Non-metallic Conduit

Where non-metallic conduit is specified or allowed, the installation shall comply with the Department's standard quality specification for "conduit and conduit accessories".

Standard copper earth conductors shall be installed in the conduits and fixed securely to all metal appliances and equipment, including metal switch boxes, socket-outlet boxes, draw-boxes, switchboards, luminaires, etc. The securing of earth conductors by means of self-threading screws will not be permitted.

Flexible Conduit

An earth conductor shall be installed in all non-metal flexible conduit. This earth conductor shall not be installed externally to the flexible conduit but within the conduit with the other conductors. The earth conductor shall be connected to the earth terminals at both ends of the circuit.

Connection

Under no circumstances shall any connection points, bolts, screws, etc., used for earthing be utilised for any other purpose. It will be the responsibility of the Contractor to supply and fit earth terminals or clamps on equipment and materials that must be earthed where these are not provided.

Unless earth conductors are connected to proper terminals, the end shall be tinned and lugged.

19 MOUNTING AND POSITIONING OF LUMINAIRES

The Contractor is to note that in the case of board and acoustic tile ceilings, i.e. as opposed to concrete slabs, close co-operation with the building contractor is necessary to ensure that as far as possible the luminaires are symmetrically positioned with regard to the ceiling pattern.

The layout of the luminaires as indicated on the drawings must be adhered to as far as possible and must be confirmed with the Department's representative.

Fluorescent luminaires installed against concrete ceilings shall be screwed to the outlet boxes and in addition 2 x 6mm expansion or other approved type fixing bolts are to be provided. The bolts are to be $\frac{3}{4}$ of the length of the luminaires apart.

Fluorescent luminaires to be mounted on board ceilings shall be secured by means of two 40mm x No. 10 round head screws and washers. The luminaires shall also be bonded to the circuit conduit by means of locknuts and brass bushes. The fixing screws are to be placed $\frac{3}{4}$ of the length of the fitting apart.

Earth conductors must be drawn in with the circuit wiring and connected to the earthing terminal of all fluorescent luminaires as well as other luminaires exposed to the weather in accordance with the "Wiring Code".

Incandescent luminaires are to be screwed directly to outlet boxes in concrete slabs. Against board ceilings the luminaires shall be secured to the bracing or joists by means of two 40mm x No. 8 round head screws.

PART 2: INSTALLATION DETAILS

[Omit which is not applicable. Clauses 1 to 10 of Part 2 are standard clauses (which should not be altered) and must be inserted in the document in the order as set out.]

CONTENTS

1.	CABLE SLEEVE PIPES.....	12
2.	NOTICES.....	12
3.	ELECTRICAL EQUIPMENT	12
4.	DRAWINGS	12
5.	BALANCING OF LOAD	13
6.	SERVICE CONDITIONS.....	13
7.	SWITCHES AND SOCKET OUTLETS	13
8.	LIGHT FITTINGS AND LAMPS	13
9.	EARTHING AND BONDING	13
10.	MAINTENANCE OF ELECTRICAL SUPPLY.....	14
11.	EXTENT OF WORK.....	14
12.	SUPPLY AND CONNECTION	14
13.	CONDUIT AND WIRING.....	14
14.	CABLES.....	15
15.	DISTRIBUTION BOARDS	18
16.	SCHEDULE OF LIGHT FITINGS.....	19
17.	SCHEDULE OF CABLES, CONDUIT AND WIRING	20
18.	SCHEDULE OF DISTRIBUTION BOARDS	21
19.	SUPPLY AND INSTALLATION OF GENERATOR	22
20.	UNINTERRUPTIBLE POWER SUPPLY	23

PART 2: INSTALLATION DETAILS

1. CABLE SLEEVE PIPES

Where cables cross under roadways, other services and where cables enter buildings, the cables shall be installed in asbestos-cement pipes, earthenware or high-density polyethylene pipes.

The ends of all sleeves shall be sealed with a non-hardening watertight compound after the installation of cables. All sleeves intended for future use shall likewise be sealed.

2. NOTICES

The Contractor shall issue all notices and make the necessary arrangements with Supply Authorities, Telkom, Liquid Telecom & DFA, S.A. Transport Services, Provincial or National Road Authorities and other authorities as may be required with respect to the installation.

3. ELECTRICAL EQUIPMENT

All equipment and fittings supplied must be in accordance with the attached quality specification (Part 3 of this document), suitable for the relevant supply voltage, and frequency and must be approved by the Department's representative.

4. DRAWINGS

The drawings generally show the scope and extent of the proposed work and shall not be held as showing every minute detail of the work to be executed.

The position of power points, switches and light points that may be influenced by built-in furniture or existing position and must be established on site, prior to these items being built in.

SCHEDULE OF DRAWINGS

Drawing Title	Dwg. No.	Size	Revision
Electrical Site Plan - Master Plan	1011-E-001	A1	C
Electrical Site Reticulation (Sheet 1 of 3)	1011-E-002	A1	C
Electrical Site Reticulation (Sheet 2 of 3)	1011-E-003	A1	C
Electrical Site Reticulation (Sheet 3 of 3)	1011-E-004	A1	C
Site Reticulation Plan Single Line Diagram	1011-E-101	A1	A
Typical Type 1 Hostel DB Single Line Diagram	1011-E-102	A1	A
Typical Type 2 Hostel DB Single Line Diagram	1011-E-103	A1	A
Typical TV Room DB Single Line Diagram	1011-E-104	A1	A
Typical Hostel Master DB Single Line Diagram	1011-E-105	A1	A
Hostel Administration DB Single Line Diagram	1011-E-106	A1	A
Typical Staff House DB Single Line Diagram	1011-E-107	A1	A
Change Room DB Single Line Diagram	1011-E-108	A1	A
Pump House DB Diagram	1011-E-109	A1	A
Typical Type 1 Hostel Lighting Layout	1011-E-201	A1	B
Typical Type 1 Hostel Power Layout	1011-E-301	A1	B
Typical Type 2 Hostel Lighting Layout	1011-E-202	A1	B
Typical Type 2 Hostel Power Layout	1011-E-302	A1	B
Typical TV & Entertainment Block Lighting Layout	1011-E-203	A1	B
Typical TV & Entertainment Block Power Layout	1011-E-303	A1	B

Typical Hostel Master Lighting Layout	1011-E-204	A1	B
Typical Hostel Master Power Layout	1011-E-304	A1	B
Typical Staff House Lighting Layout	1011-E-205	A1	B
Typical Staff House Power Layout	1011-E-305	A1	B
Hostel Administration Block Lighting Layout	1011-E-206	A1	B
Hostel Administration Block Power Layout	1011-E-306	A1	B
Typical Guard House Lighting Layout	1011-E-207	A1	B
Typical Guard House Power Layout	1011-E-307	A1	B
Pump House Lighting Layout	1011-E-208	A1	B
Pump House Power Layout	1011-E-308	A1	B

5. BALANCING OF LOAD

The Contractor is required to balance the load as equally as possible over the multiphase supply.

6. SERVICE CONDITIONS

All plant shall be designed for the climatic conditions appertaining to the service.

7. SWITCHES AND SOCKET OUTLETS

The installation of switches and socket outlets must conform to clause 13 of Part 1 of this specification.

8. LIGHT FITTINGS AND LAMPS

The installation and mounting of luminaires must conform with clause 19 of Part 1 of this specification.

All fittings to be supplied by the Contractor shall have the approval of the Department. Incandescent lamps shall bear the approved mark of the S.A.B.S. and shall have the British light centre length.

The light fittings must be of the type specified in the Schedule of Light Fittings.

9. EARTHING AND BONDING

The Contractor will be responsible for all earthing and bonding of the building and installation. The earthing and bonding is to be carried out strictly as described in clause 18 of Part 1 of this specification and to the satisfaction of the Department's representative.

10. MAINTENANCE OF ELECTRICAL SUPPLY

All interruptions of the electrical supply that may be necessary for the execution of the work, will be subject to prior arrangement between the Contractor and the user Department and the Department's representative.

11. EXTENT OF WORK

The work covered by this contract comprises the complete electrical installation, in working order, as shown on the drawings and as per this specification, including the supply and installation of all fittings and also the installation of such equipment as specified but not limited to the following scope.

1. Installation of distribution boards
2. Installation of generator
3. Wiring of the building electrical installation
4. Installation of lightning protection system
5. Commissioning of all systems and issue Certificate of compliance
6. Installation of access control

12. SUPPLY AND CONNECTION

Existing power supply and connection to be retained and all HT switches, LV switches, Transformers to be serviced and tested.

EXISTING SUPPLY

Existing power supply is 11000/400 Volt 50Hz supplied from Eskom via overhead line. This is terminated inside substation building located on site with three compartments (HT Section with RMU, Transformer room, LT Section). A 200kVA, 11kV/400V oil cooled transformer installed to provide power to the building.

Existing 200kVA transformer will be serviced and oil samples should be taken for testing. This transformer will be retained to supply power to the secondary school. Power feed from current LT board to existing hostels via overhead line will be relocated to new 500kVA minisub which will be relocated at new hostels.

SUBSTATION WORK

Existing substation building will be utilized to house new RMU by replacing existing equipment. New signage should be installed on all doors and must be compliant to signage specifications as per general specification.

Sub-station earthing - Substation shall be completed by the contractor compliant to SANS 0142

Contractor's responsibility - Complete all installations as per specification. Allow for any material necessary to complete work if not listed in bill of quantities

Cleaning and service – The contractor shall ensure that all equipment is serviced and cleaned. Necessary precaution and measures shall be taken to ensure safety of works. Only qualified persons are allowed to complete work in restricted areas.

13. CONDUIT AND WIRING

Conduit and conduit accessories shall be black enameled/galvanised screwed conduit or black enameled/galvanised plain end conduit in accordance with SANS 61386-1, -21 and -23 respectively, or non metallic in accordance with SANS 950 where allowed.

All conduits, regardless of the system employed, shall be installed strictly as described in the applicable paragraphs of clauses 4 to 8 of Part 1 of the specification. Wiring of the installation shall be carried out as directed in clause 9 part 1 of this specification.

Where plain end conduit is offered all switches and light fittings must be supplied with a permanent earth

terminal for the connection of the earth wire.

Lugs held by switch fixing screws or self tapping screws will not be acceptable.

13.1. Power Trunking

The Contractor shall be responsible for the supply and installation of all power trunking complete with corner pieces, end pieces, junction pieces, supply conduits, cover plates and power outlets as specified and indicated on the drawings.

Busbar trunking is installed inside the raiser shaft on the office tower building

The power trunking must comply with SABS 1197. The Contractor must ensure that the power trunking is installed to satisfaction of the Department's representative before commencing with the wiring of the power trunking.

[The method of installing and wiring of the power trunking must be bolted on the slab using steel rods screwed on the slab using steel screw anchor.]

14. CABLES

The Contractor shall supply and completely install all distribution cables as indicated on the drawings, and listed in the Schedule of Cables.

The storage, transportation, handling and laying of the cables shall be according to first class practice, and the contractor shall have adequate and suitable equipment and labour to ensure that no damage is done to cables during such operations.

The cable-trenches shall be excavated to a depth of 0,9m deep below ground level and shall be 450mm wide for one to three cables, and the width shall be increased where more than three cables are laid together so that the cables may be placed at least two cable diameters apart throughout the run. The bottom of the trench shall be level and clean and the bottom and sites free from rocks or stones liable to cause damage to the cable.

The Contractor must take all necessary precautions to prevent the trenching work being in any way a hazard to the personnel and public and to safeguard all structures, roads, sewage works or other property on the site from any risk of subsidence and damage.

In the trenches the cables shall be laid on a 75mm thick bed of earth and be covered with a 150-mm layer of earth before the trench is filled in.

Cable markers shall be provided along all HV cable routes but need only be provided along LV cable routes where specified. These should preferably be engraved Travolite.

All joints in underground cables and terminations shall be made either by means of compound filled boxes according to the best established practice by competent cable jointers using first class materials or by means of approved epoxy-resin pressure type jointing kits such as "Scotchcast". Epoxy-resin joints must be made entirely in accordance with the manufacturer's instructions and with materials stipulated in such instructions. Low tension PVCA cables are to be made off with sealing glands and materials designed for this purpose which must be of an approved make. Where cables are cut and not immediately made off, the ends are to be sealed without delay.

The laying of cables shall not be commenced until the trenches have been inspected and approved. The cable shall be removed from the drum in such a way that no twisting, tension or mechanical damage is caused and must be adequately supported at intervals during the whole operation. Particular care must be exercised where it is necessary to draw cables through pipes and ducts to avoid abrasion, elongation or distortion of any kind. The ends of such pipes and ducts shall be sealed to approval after drawing in of the cables.

Backfilling (after bedding) of the trenches is to be carried out with a proper grading of the material to ensure settling without voids, and the material is to be tamped down after the addition of every 150mm. The surface is to be made good as required.

On each completed section of the laid and jointed cable, the insulation resistance shall be tested to approval with an approved "Megger" type instrument of not less than 500 V for low tension cables.

Earth continuity conductors are to be run with all underground cables constituting part of a low tension distribution system. Such continuity conductors are to be stranded bare copper of a cross-sectional area equal to at least half that of one live conductor of the cable, but shall not be less than 4mm² or more than 70mm². A single earth wire may be used as earth continuity conductor for two or more cables run together, branch earth wires being brazed on where required.

14.1. Laying, Jointing and Making Off of Electrical Cables

The requirements specified hereafter, are aimed essentially at high tension cable but are also valid for low tension cable, where applicable.]

1. The use of the term "Inspector", includes the engineer or inspector of the Department or an empowered person of the concerned supervising consulting engineer's firm.
2. No cable is to be laid before the cable trench is approved and the soil qualification of the excavation is agreed upon by the Contractor and inspector.
3. After the cable has been laid and before the cable trench is back-filled the inspector must ensure that the cable is properly bedded and that there is no undesirable material included in the bedding layer.
4. All cable jointing and the making off of the cables must only be carried out by qualified experienced cable jointers. Helpers of the jointers may not saw, strip, cut, solder, etc. The cable and other work undertaken by them must be carried out under the strict and constant supervision of the jointer.
5. Before the Contractor allows the jointer to commence with the jointing work or making off of the cable (making off is recognized as half a joint) he must take care and ensure:
 - 5.1 That he has adequate and suitable material available to complete the joint properly and efficiently. Special attention must be given to ensure the cable ferrules and cable lugs are of tinned copper and of sufficient size. The length of the jointing lugs must be at least six times the diameter of the conductor,
 - 5.2 That the joint pit is dry and that all loose stones and material are removed,
 - 5.3 That the walls and banks of the joint pit are reasonable firm and free from loose material which can fall into the pit,
 - 5.4 That the necessary coffer-dams or retaining walls are made to stop the flow of water into the joint pit,
 - 5.5 That the joint pit is provided with suitable groundsheets so that the jointing work is carried out in clean conditions,
 - 5.6 That the necessary tents or sails are installed over the joint pit to effectively avert unexpected rainfall and that sufficient light or lighting is provided,
 - 5.7 that the necessary means are available to efficiently seal the jointing or cable end when an unexpected storm or cloudburst occurs, regardless of how far the work has progressed,
 - 5.8 That the cables and other materials are dry, undamaged and in all respects are suitable for the

joint work or making off,

- 5.9 That the heating of cable oil, cable compound, plumbers metal and solder is arranged that they are at the correct temperature when required so that the cable is not unnecessarily exposed to the atmosphere and consequently the ingress of moisture (care must be taken of overheating)

Flow temperatures of cable oil and compound must be determined with suitable thermometers. Cable oil and compound must not be heated to exceed the temperatures given on the containers and precaution must be taken to ensure that the tin is not overheated in one position. The whole mass must be evenly and proportionally heated.

(Temperatures of solder and plumbers metal may be tested with brown paper (testing time: 3 seconds). The paper must colour slightly - not black or burnt).

In the case where non-compound type of joints or terminations are allowed, the manufacturers requirements and instructions shall be followed by the letter.

6. Before the paper-insulated cables are joined, they must be tested for the presence of moisture by the cable jointers test. This consists of the insertion of a piece of unhandled insulated impregnated paper tape in warm cable oil heated to a temperature of $130 \pm 5^{\circ}\text{C}$.

Froth on the surface of the oil is an indication that moisture is present in the impregnated insulation and the amount of the froth gives an indication of the moisture present.

7. If the cable contains moisture or is found to be otherwise unsuitable for jointing or making of the inspector is to be notified immediately and he will issue the necessary instruction to cope with the situation.
8. The joint or making off of paper insulated cables must not be commenced during rainy weather.
9. Once a joint is in progress the jointer must proceed with the joint until it is complete and before he leaves the site.
10. The jointer must ensure that the material and his tools are dry at all times, reasonably clean and absolutely free from soil.
11. Relating to the jointing of the cable the following requirements apply:
- 11.1 All jointing must be carried out in accordance with recognized and tried techniques and comply strictly with the instructions given by the supplier of the jointing kit.
- 11.2 The cables must be twisted by hand so that the cores can be joined according to the core numbers. If necessary, the cable is to be exposed for a short distance to accomplish this. Under no circumstances may the cores in a joint be crossed so as to enable cores to be joined according to the core numbers. If it is not possible to twist the cables so that the preceding requirements can be met, then cores are to be joined in the normal way without any consideration of the core numbers.
- 11.3 Normally the cables will have profile conductors. The conductors shall be pinched with gas pliers to form a circular section, bound with binding wire so that they do not spread, and then tinned before jointing.
- 11.4 Jointing ferrules, the length of which are at least 6 times the diameter of the conductors, must be slid over the conductor ends to be joined and pinched tightly. Then they are soldered by means of the ladle process whilst being pinched further closed.

Use resin only as a flux. The slot opening in the ferrule must be completely filled, including all depressions.

Remove all superfluous metal with a cloth dipped in tallow. Work during the soldering process must be from top to bottom. Rub the ferrule smooth and clean with aluminium oxide tape after it

has cooled down to ensure that there are not any sharp points or edges.

NB: The spaces between the conductor strands must be completely filled by soldering process and must be carried out quick enough to prevent the paper insulation from burning or drying out unnecessarily.

- 11.5 After the ferrules have been rubbed smooth and clean, they and the exposed cores must be treated with hot cable oil (110°C) to remove all dust and moisture. These parts are to be thoroughly basted with the oil.
- 11.6 The joiner must take care that his hands are dry and clean before the joint is insulated. Also the insulating tape which is to be used must first be immersed in warm cable oil (110°C) for a sufficient period to ensure that no moisture is present.
- 11.7 After the individual cores have been installed they must be well basted with hot cable oil and again after the applicable separator and/or belt insulation tape is applied before the lead joint sleeve is placed in position.
- 11.8 The lead joint sleeve must be thoroughly cleaned and prepared before it is placed on the cable and must be kept clean during the whole jointing process. Seal the filling apertures of the sleeve with tape until the sleeve is ready for compound filling.
- 11.9 The plumbing joints employed to solder the joint sleeve to the cable sheath, must be cooled off with tallow and the joint sleeve is to be filled with compound while it is still warm. Top up continuously until the joint is completely filled to compensate for the compound shrinkage.
- 11.10 The outer joint box must be clean and free from corrosion. After it has been placed in position it must be slightly heated before being filled with compound. Top up until completely full.
12. As far as cable end boxes are concerned the requirements as set out above are valid where applicable.

In the case where non-compound type of joints or terminations are allowed, the manufacturer's requirements and instructions shall be followed by the letter. Ferrules are to be crimped with suitable crimping pliers/equipment ensuring a proper connection between the conductors.

15. DISTRIBUTION BOARDS

In addition to clause 14 and clause 15 of Part 1 of this specification the following shall also be applicable to switchboards required for this service.

The Contractor shall supply and install the distribution boards as indicated on the drawings and listed in the distribution Board Schedule DRAWING NUMBER.

Site Reticulation Plan Single Line Diagram	1011-E-101
Typical Type 1 Hostel DB Single Line Diagram	1011-E-102
Typical Type 2 Hostel DB Single Line Diagram	1011-E-103
Typical TV Room DB Single Line Diagram	1011-E-104
Typical Hostel Master DB Single Line Diagram	1011-E-105
Hostel Administration DB Single Line Diagram	1011-E-106
Typical Staff House DB Single Line Diagram	1011-E-107
Change Room DB Single Line Diagram	1011-E-108
Pump House DB Diagram	1011-E-109

All distribution boards shall comply with the quality specification in Part 3 of this specification, and be approved by the Department's representative.

16. SCHEDULE OF LIGHT FITTINGS

The Departmental Quality Specification for the relevant luminaires must be included in Part 3 of the specification.

The light fittings and accessories are to be according to the quality specifications in Part 3 and shall be approved by the Department.

Type C1	83mm diameter, 8w, LED downlight, die- cast aluminium body with acrylic lens	
Type F01	1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	
Type F02	1200mm, surface mounted, 30W LED vapor proof light fitting with polycarbonate body	
Type P1	127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	
Type P2	Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	
Type W1	Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	

Area Lighting	55W LED traditional postop, mounted on 6m pole	
----------------------	--	---

17. SCHEDULE OF CABLES, CONDUIT AND WIRING

Supply, install and connect the following cable, conduit and wiring:

TO DB	FED FROM	SIZE AND TYPE
Kiosk A	Minisub A	120mm ² 4-core PVCA cable and 70mm ² earth wire
DB-6	Kiosk A	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-7	Kiosk A	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-8	Kiosk A	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-9	Kiosk A	16 mm ² 2-core PVCA cable and 10mm ² earth wire
DB-10	Kiosk A	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-11	Kiosk A	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-12	Kiosk A	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-32	Kiosk A	6 mm ² 2-core PVCA cable and 4mm ² earth wire
DB-36	Kiosk B	16 mm ² 2-core PVCA cable and 10mm ² earth wire
DB-N	Kiosk A	16 mm ² 2-core PVCA cable and 10mm ² earth wire
Kiosk B	Minisub A	120 mm ² 4-core PVCA cable and 70mm ² earth wire
DB-1	Kiosk B	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-2	Kiosk B	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-3	Kiosk B	6 mm ² 2-core PVCA cable and 4mm ² earth wire
DB-4	Kiosk B	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-5	Kiosk B	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-14	Kiosk B	16 mm ² 2-core PVCA cable and 10mm ² earth wire
DB-15	Kiosk B	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-16	Kiosk B	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-33	Kiosk B	6 mm ² 2-core PVCA cable and 4mm ² earth wire
Kiosk C	Minisub B	120 mm ² 4-core PVCA cable and 70mm ² earth wire
DB-21	Kiosk C	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-22	Kiosk C	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-23	Kiosk C	16 mm ² 2-core PVCA cable and 10mm ² earth wire
DB-24	Kiosk C	6 mm ² 2-core PVCA cable and 4mm ² earth wire

Kiosk D	Minisub B	120 mm ² 4-core PVCA cable and 70mm ² earth wire
DB-17A	Kiosk D	25 mm ² 2-core PVCA cable and 16mm ² earth wire
DB-17B	Kiosk D	25 mm ² 2-core PVCA cable and 16mm ² earth wire
DB-18A	Kiosk D	25 mm ² 2-core PVCA cable and 16mm ² earth wire
DB-18B	Kiosk D	25 mm ² 2-core PVCA cable and 16mm ² earth wire
DB-19A	Kiosk D	25 mm ² 2-core PVCA cable and 16mm ² earth wire
DB-19B	Kiosk D	25 mm ² 2-core PVCA cable and 16mm ² earth wire
DB-20	Kiosk D	6 mm ² 2-core PVCA cable and 4mm ² earth wire
DB-25	Kiosk D	16 mm ² 4-core PVCA cable and 10mm ² earth wire
DB-26	Kiosk D	16 mm ² 4-core PVCA cable and 10mm ² earth wire
Kiosk E	Minisub B	120 mm ² 4-core PVCA cable and 70mm ² earth wire
DB-27	Kiosk E	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-28	Kiosk E	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-29	Kiosk E	10 mm ² 2-core PVCA cable and 6mm ² earth wire
DB-30	Kiosk E	25 mm ² 4-core PVCA cable and 16mm ² earth wire
DB-31	Kiosk E	25 mm ² 4-core PVCA cable and 16mm ² earth wire

18. SCHEDULE OF DISTRIBUTION BOARDS

The front panels of normal supply, standby power and no-break supply sections shall be painted in distinctive colours as follows:

Normal supply : Light Orange, colour B26 of SANS 1091.
Standby power : Signal Red, colour A11 of SANS 1091.
No-break supply: Dark Violet, colour F06 or Olive Green,
Colour H05 of SANS 1091.

Indicated is the probable fault level rating (kA) of the busbars. Refer to the Summary of Switchgear and Circuits for the minimum fault level rating of specified equipment.

DB	FED From	TYPE	Fault Current at DB (in kA)
DB-1	Kiosk B	Wall Mounted	3 kA
DB-2	Kiosk B	Wall Mounted	3 kA
DB-3	Kiosk B	Wall Mounted	3 kA
DB-4	Kiosk B	Wall Mounted	3 kA
DB-5	Kiosk B	Wall Mounted	3 kA
DB-6	Kiosk A	Wall Mounted	3 kA
DB-7	Kiosk A	Wall Mounted	3 kA
DB-8	Kiosk A	Wall Mounted	3 kA
DB-9	Kiosk A	Wall Mounted	3 kA
DB-10	Kiosk A	Wall Mounted	3 kA
DB-11	Kiosk A	Wall Mounted	3 kA
DB-12	Kiosk A	Wall Mounted	3 kA

DB-14	Kiosk B	Wall Mounted	3 kA
DB-15	Kiosk B	Wall Mounted	3 kA
DB-16	Kiosk B	Wall Mounted	3 kA
DB-17A	Kiosk D	Wall Mounted	3 kA
DB-17B	Kiosk D	Wall Mounted	3 kA
DB-18A	Kiosk D	Wall Mounted	3 kA
DB-18B	Kiosk D	Wall Mounted	3 kA
DB-19A	Kiosk D	Wall Mounted	3 kA
DB-19B	Kiosk D	Wall Mounted	3 kA
DB-20	Kiosk D	Wall Mounted	3 kA
DB-21	Kiosk C	Wall Mounted	3 kA
DB-22	Kiosk C	Wall Mounted	3 kA
DB-23	Kiosk C	Wall Mounted	3 kA
DB-24	Kiosk C	Wall Mounted	3 kA
DB-25	Kiosk D	Wall Mounted	3 kA
DB-26	Kiosk D	Wall Mounted	3 kA
DB-27	Kiosk E	Wall Mounted	3 kA
DB-28	Kiosk E	Wall Mounted	3 kA
DB-29	Kiosk E	Wall Mounted	3 kA
DB-30	Kiosk E	Wall Mounted	3 kA
DB-31	Kiosk E	Wall Mounted	3 kA
DB-32	Kiosk A	Wall Mounted	3 kA
DB-33	Kiosk B	Wall Mounted	3 kA
DB-36	Kiosk A	Wall Mounted	3 kA
DB-N	Kiosk A	Wall Mounted	3 kA

19. SUPPLY AND INSTALLATION OF GENERATOR

Generator to be supplied and installed according to specification as stated in the bill of quantities and/or separate specification, but its parts shall comply at least to the following requirements:

- a. Size: 500kVA
- b. Controller: Deep Sea Electronics or Lovato, to be able to communicate via SMS or similar approved
- c. Engine: TAD734GE, Volvo or similar approved by engineer
- d. Alternator: Marathon MP-200-4, or other approved by the engineer
- e. Auto changeover switch: Socomec, ABB or Schneider Electrical (Merlin Gerin)
- f. Attenuation: Noise 75~78dB (1m radius); 72~74dB (7m radius). The required silencer and silencing material to be included and installed
- g. Rating: 100% at altitude of location
- h. Power factor: 80% (suitable for Prime operation)
- i. Fuel tank: 600L tank built in underneath the set
- j. Delivery, commissioning, first tank of diesel and maintenance for 12 months shall be listed separately but included in the total cost.

20. UNINTERRUPTIBLE POWER SUPPLY

SPECIFICATION FOR		10kVA UPS System	20kVA UPS System
Item	Description	Requirement	
1	General Specification		
1.1	UPS Topology	On-line double conversion	On-line double conversion
1.2	In/Out phase configuration	Three phase / Three Phase	Three phase / Three Phase
1.3	Neutral	Neutral passing through	Neutral passing through
1.4	Output waveform on mains run	Sinusoidal	Sinusoidal
1.5	Output waveform on battery run	Sinusoidal	Sinusoidal
1.6	Bypass type	Static and electromechanic	Static and electromechanic
1.7	Transfer Time	Zero	Zero
2	Input Parameters		
2.1	Nominal Voltage	400V Three Phase	400V Three Phase
2.2	Voltage Range	-20% +15%	-20% +15%
2.3	Input Frequency	50Hz to 60Hz (autosensing)	50Hz to 60Hz (autosensing)
2.4	Input Current THD at nominal voltage	<3% at full load	<3% at full load
2.5	Input Power Factor at Nominal Voltage	>0.98 from 50% to 100% of nominal load	>0.98 from 50% to 100% of nominal load
3	Output Parameters with Mains (AC – DC)		
3.1	Nominal Voltage	400V Three Phase	400V Three Phase
3.2	Nominal Power	10kVA	20kVA
3.3	Active Power	8.5kW	17kW
3.4	Voltage Variation (Static)	±1%	±1%
3.5	Voltage Variation (Dynamic 0-100%; 100-0%)	1%	1%
3.6	THDv on nominal power (linear load)	<0.5%	<0.5%
3.7	THDv on nominal power (not linear load P.F. = 0.7)	<1%	<1%
3.8	Frequency	50Hz to 60Hz (autosensing or selectable)	50Hz to 60Hz (autosensing or selectable)
3.9	Frequency Tolerance	Synchronised with input frequency	Synchronised with input frequency
3.10	Overload Capability		
	5min	125% load rate with no bypass intervention	125% load rate with no bypass intervention
4	Output Parameters in Battery Run (DC –AC)		
4.1	Nominal Voltage	400V Three Phase	400V Three Phase
4.2	Nominal Power	10kVA	20kVA
4.3	Active Power	8.5kW	17kW
4.4	Voltage Variation (Static)	±1%	±1%
4.5	Voltage Variation (Dynamic 0-100%; 100-0%)	1%	1%
4.6	THDv on nominal power (linear load)	<0.5%	<0.5%
4.7	THDv on nominal power (not linear load P.F. = 0.7)	<1%	<1%
4.8	Frequency	50Hz to 60Hz (autosensing or selectable)	50Hz to 60Hz (autosensing or selectable)
4.9	Frequency Tolerance	Synchronised with input frequency	Synchronised with input frequency
4.10	Overload Capability		
	1min	150% load rate with no bypass intervention	150% load rate with no bypass intervention
	10min	125% load rate with no bypass intervention	125% load rate with no bypass intervention

5	Battery		
5.1	Battery Type	Lithium Ion Batteries	Lithium Ion Batteries
5.2	Unit Capacity	7.2 or 9Ah (12V)	7.2 or 9Ah (12V)
5.3	Nominal UPS Battery Voltage	240V DC	240V DC
5.4	Battery Charger Type	PWM hi-efficiency, one in each power module	PWM hi-efficiency, one in each power module
5.5	Charging Cycle	Intelligent with boost charge and advanced management	Intelligent with boost charge and advanced management
5.6	Maximum Charging Current	6-50A each power module	6-50A each power module
6	Static Bypass		
6.1	Type	Thyristor Bridge	Thyristor Bridge
6.2	Rated Current	1.5In	1.5In
6.3	Overload Capacity in kVA	200% - 1 min / 1000% - 10ms	200% - 1 min / 1000% - 10ms
7	Physical Parameters		
7.1	Protection	IP21	IP21
	Standards		
8	Environment		
8.1	Operating Temperature	0 to 40 degrees Celsius	0 to 40 degrees Celsius
8.2	Humidity	0 - 90% non-condensing	0 - 90% non-condensing
8.3	Maximum Altitude	0 - 2000m without de-rating	0 - 2000m without de-rating

= END OF SPECIFICATION

PART 3: SCHEDULE OF MATERIAL

Contractors shall complete the following schedule of materials and equipment offered for verification by the Employer’s Agent as being acceptable in terms of the specification applicable, before any such materials are procured for incorporation into the works. The contractor undertakes that the actual materials and equipment supplied installed shall be in accordance with this schedule for items that are approved.

Where items are not approved alternative items shall be presented that do meet the specifications. This process shall be repeated until all items are approved.

Item	Material	Make & Trade Name	Country of Origin	Is Material to Specification (Yes / No)	SABS Mark (Yes / No)
5.1	Distribution Boards				
5.2	Isolators				
5.3	Moulded Case Circuit Breakers				
5.4	Earth Leakage Relays				
5.5	Light Switches				
5.6	Switched Sockets				
5.7	Armoured Cables				
5.8	PVC Insulted Conductors				
5.9	Cable Glands				
5.10	Sleeves				
5.11	Conduits: PVC				

5.12	Conduits: Steel				
5.13	Daylight Switches				
5.14	Luminaires				
5.14.1	Type D				
5.14.2	Type E				
5.14.3	Type F				
5.14.4	Type F02				
5.14.5	Type H				
5.14.6	Type D2				
5.15	Generator				
5.16	UPS				

PART 4: BILLS OF QUANTITIES

PREAMBLE

TYPICAL ITEMS/PREAMBLES TO BE INSERTED IN THE BILLS OF QUANTITIES

1. The conditions of contract and the application of the Contract Price Adjustment Provisions (if applicable) shall be as set out in Part A: Section 1: Preliminaries.
2. The descriptions in these bills of quantities shall be read in conjunction with the specification.
3. The unit rate for each item in the Bills of Quantities shall include for all materials, labour, profit, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description.
4. The Bills of Quantities shall not be used for ordering purposes. The Contractor shall check the lengths of cables and overhead conductors on site before ordering any of the cables. Any allowance for off-cuts shall be made in the unit rates.
5. The rates shall exclude Value-Added Tax and the total carried over to the final summary in PART A.
6. All material covered by this **Specification** shall, wherever possible, be of South African manufacture.

{NB: The supply and installation of material and equipment must be measured separately}.

PARTICULARS OF ELECTRICAL CONTRACTOR

(To be completed by tenderers and submitted together with the tender form).

TENDER NO: _____ REFERENCE: _____

SERVICE: _____

NAME OF ELECTRICAL CONTRACTOR: _____

ADDRESS _____

ELECTRICAL CONTRACTOR'S REGISTRATION NUMBER AT THE ELECTRICAL CONTRACTING BOARD OF S.A. _____

DATE

SIGNATURE OF TENDERER

PART 5: DRAWINGS

NOTE TO CONSULTANTS

Refer to Clause 13.1 (Working Drawings) of Manual for Electrical/Electronically and Mechanical Consulting Engineers for guidance.

Moedwill Combined School

BILL OF QUANTITIES

UNPRICED

MOEDWIL COMBINED SCHOOL
SUBJECT : BILL OF QUANTITIES
BILL No.1 - PRELIMINARIES

Item no.		UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
1.1	Preliminaries and General Compling with insuarance's, statutory contributions, etc. The Contractor shall provide for the delivery and erection within the fenced area, a temporary site office where all drawings and specifications shall be kept. Suitable ablution, water and electricity connections shall be provided by the contractors for their own use, as well as provision of safe and adequate storage space for all material. Adequate signage, first aid and fire fighting facilities shall also be provided. Allow for the removal of such on completion.	Item	1		
1.2	The Contractor shall allow for collection of the project signboard, erect on site and maintain throughout the construction duration. Allow for removal of such upon completion of construction, and return to main Provincial Distribution Centres/Stores. (exclude transport cost - this will be paid separately in terms of the transport rate applicable)	Item	1		
1.3	The Contractor shall supply the project signboard, erect on site and maintain throughout the construction duration. Allow for removal of such upon completion of construction.	Item	1		
1.4	<u>Staff food and accomodation</u>	Item	1		
1.5	Security on site - 24 Hour Armed Security	Item	1		
1.6	Allow for site supervision	Item	1		
1.7	Allow for site security as per works information (Night Shift Security)	Item	1		
1.8	Site supervisor or site foreman	Item	1		
1.9	Full time SHE officer	Item	1		
1.10	PPE, i.e. hard hat, overalls, safety shoes, safety glasses, dust ask, hand gloves, ear plugs etc.	Item	1		
1.11	Chemical toilets	Item	1		
1.12	Waste management and disposal on site	Item	1		
1.13	Completion and submission of the Expanded Public Works Programme report	Item	1		
1.14	The implementation and maintenance of a Materials Management System for the duration of the contract.	Item	1		
TOTAL BILL 1 CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL

SUBJECT : BILL OF QUANTITIES

BILL No. 2 - MEDIUM VOLTAGE DISTRIBUTION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
2.1	<u>Install, connect, test and commission an 11kV T Switch</u>	No	1		
2.2	<u>Supply, deliver, install, connect, test and commission a 500kVA miniature sub-station, c/w the switchgear indicated on the drawing 1011-E-101</u>	No	2		
2.3	<u>Supply and install overheadline with 70mm² SWA conductor 11kV cable complete with 7m wooded poles to Eskom Specification.</u>				
2.3.1	Supply and install 60A,11kV circuit breaker on the pole	No	Rate		
2.3.2	Supply and install 7m pole, stuggard type complete insulators and fittings	No	Rate		
2.3.3	Supply and install FOX cable 35mm ² overhead complete with accessories and fittings	No	Rate		
2.3.4	Install Terminations	No	Rate		
2.3.5	Install joints	No	Rate		
2.4	<u>Supply, deliver, install, connect, test and commission a Metering Kiosk, c/w switchgear & metering equipment complete with CT</u>	No	1		
2,5LI	Supply and install 35mm ² 3-core SWA PVC 11kV cable	m	1160		
2.6	Supply and install 35mm ² 11kV terminations	No	8		
2,7LI	Dig trench 600mm wide and 1m deep, with 100mm fine sand base and cover, and fill and compact to Aasthto 93	m	580		
2.8	Eskom Upgrade Connection Fee	Sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL

SUBJECT : BILL OF QUANTITIES

BILL No.3 - LOW VOLTAGE DISTRIBUTION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
3.1	Supply, deliver, install and terminate Cu PVC SWA PVC 600/1000V Cable, in trenches, sleeves or on cable trays				
3.1.1	150mm ² x 4 core				
3.1.1.1	Supply and delivery	Meter	Rate		Rate Only
3.1.1.2LI	Installation	Meter	Rate		Rate Only
3.1.1.3	Termination, c/w glands, shrouds, lugs and connection	No	Rate		Rate Only
3.1.2	120mm ² x 4 core				
3.1.2.1	Supply and delivery	Meter	700		
3.1.2.2	Installation	Meter	700		
3.1.2.3	Termination, c/w glands, shrouds, lugs and connection	No	64		
3.1.3	50mm ² x 4 core				
3.1.3.1	Supply and delivery	Meter	Rate		Rate Only
3.1.3.2	Installation	Meter	Rate		Rate Only
3.1.3.3	Termination, c/w glands, shrouds, lugs and connection	No	Rate		Rate Only
3.1.4	35mm ² x 4 core				
3.1.4.1	Supply and delivery	Meter	Rate		Rate Only
3.1.4.2	Installation	Meter	Rate		Rate Only
3.1.4.3	Termination, c/w glands, shrouds, lugs and connection	No	Rate		Rate Only
3.1.5	25mm ² x 4 core				
3.1.5.1	Supply and delivery	Meter	1000		
3.1.5.2	Installation	Meter	1000		
3.1.5.3	Termination, c/w glands, shrouds, lugs and connection	No	80		
3.1.6	25mm ² x 2 core				
3.1.6.1	Supply and delivery	Meter	650		
3.1.6.2	Installation	Meter	650		
3.1.6.3	Termination, c/w glands, shrouds, lugs and connection	No	16		
3.1.7	16mm ² x 4 core				
3.1.7.1	Supply and delivery	Meter	950		
3.1.7.2	Installation	Meter	950		
3.1.7.3	Termination, c/w glands, shrouds, lugs and connection	No	80		
3.1.8	16mm ² x 2 core				
3.1.8.1	Supply and delivery	Meter	350		
3.1.8.2	Installation	Meter	350		
3.1.8.3	Termination, c/w glands, shrouds, lugs and connection	No	28		
3.1.9	10mm ² x 2 core				
3.1.9.1	Supply and delivery	Meter	40		
3.1.9.2	Installation	Meter	40		
3.1.9.3	Termination, c/w glands, shrouds, lugs and connection	No	4		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.20 - LOW VOLTAGE DISTRIBUTION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
3.1.9	6mm ² x 2 core				
3.1.9.1	Supply and delivery	Meter	400		
3.1.9.2	Installation	Meter	400		
3.1.9.3	Termination, c/w glands, shrouds, lugs and connection	No	20		
3.1.12	4mm ² x 2 core				
3.1.12.1	Supply and delivery	Meter	Rate		Rate Only
3.1.12.2	Installation	Meter	Rate		Rate Only
3.1.12.3	Termination, c/w glands, shrouds, lugs and connection	No	Rate		Rate Only
3.1.13	2,5mm ² x 2 core				
3.1.13.1	Supply and delivery	Meter	Rate		Rate Only
3.1.13.2	Installation	Meter	Rate		Rate Only
3.1.13.3	Termination, c/w glands, shrouds, lugs and connection	No	Rate		Rate Only
3.2	<u>Supply, install and terminate Earth Continuity Conductor fixed to cables with cable ties spaced at 750mm:</u>				
3.2.1	90mm ²	Meter	Rate		Rate Only
3.2.2	70mm ²	Meter	700		
3.2.3	25mm ²	Meter	Rate		Rate Only
3.2.4	16mm ²	Meter	1500		
3.2.5	10mm ²	Meter	13500		
3.2.6	6mm ²	Meter	40		
3.2.7	4mm ²	Meter	300		
3.3	<u>Supply, deliver, install, connect, test and commission floor standing weather resistant external kiosks, c/w all switchgear and circuit breakers indicated on the drawings (1011-E-101)</u>				
3.3.1	Kiosk A	No	1		
3.3.2	Kiosk B	No	1		
3.3.3	Kiosk C	No	1		
3.3.4	Kiosk D	No	1		
3.3.5	Kiosk E	No	1		
3.3.6	External metering kiosk	No	1		
3.4	CABLE MANHOLES <u>Supply, deliver and fully install cable manholes including all accessories as per drawings and specification</u>				
3.4.1	Cable Manhole with 600x600mm cover	No	22		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL

SUBJECT : BILL OF QUANTITIES

BILL No.4 - EXTERNAL LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
4.1	<u>Supply, Deliver and installation Cu PVC SWA PVC 600/1000V Cable, installed in trenches or sleeves</u>				
4.1.1	4mm ² x 3 core				
4.1.1.1	Supply and Delivery	Meter	1200		
4.1.1.2LI	Installation	Meter	1200		
4.1.1.3	Termination, c/w glands, shrouds, lugs and connection	No	8		
4.2	<u>Supply, install and terminate Earth Continuity Conductor fixed to cables with cable ties spaced at 750mm:</u>				
4.2.1	2.5mm ²				
4.2.1.1LI	Supply and Delivery	Meter	1200		
4.2.1.2	Installation and Termination	Meter	1200		
4.3	<u>Supply, install, connect, test and commission of external light fittings</u>				
4.3.1	Pole mounted luminaire with 4x50W LED Floodlight lamp c/w 8m mounting height galanised steel pole with access cover	No	49		
4.3.2	Replace existing floodlight on existing poles with 4 x 50W LED floodlights	No	12		
4.4	<u>Supply, install & seal watertight junction boxes c/w o-rings, glands etc.</u>				
4.4.1	3 way, equal to CCG or Pratley	No	15		
4.5	<u>Supply, install, connect, test and commission of external light fittings for covered walkway. Light fitting installed every 5 meters</u>				
4.5.1	380x180mm Surface mounted 13W LED light fitting, with LM6 die cast aluminium housing and UV stabilised high impact opal acrylic difuser. IP65	No	270		
4.6	<u>Supply, install, connect, test and commission of external light fittings for covered carports</u>				
4.6.1	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body, IP65	No	32		
4.7	<u>Supply, install, connect, test and commission of external light fittings for refuse bin blocks</u>				
4.7.1	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	3		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BILL NO. 5

BLOCK 1 - TYPE 2A HOSTEL

BLOCK 1 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.5.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
5.1.1	DB-1	No	1		
5.1.2	Lable all circuits and install signage to the panels	sum	1		
5.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 1 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.5.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
5.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
5.2.1.1	Supply and delivery	Meter	150		
5.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
5.2.2	20mm diameter				
5.2.2.1	Supply and delivery	Meter	200		
5.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
5.2.3	100 x 50 x 50 mm				
5.2.3.1	Supply and delivery	No	20		
5.2.3.2	Installation	No	20		
5.2.4	65mm round box				
5.2.4.1	Supply and delivery	No	30		
5.2.4.2	Installation	No	30		
ACCESSORIES					
5.2.5	Supply and Install accessories to boxes				
5.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
5.2.5.2	16Amp one lever one way light switch	No	61		
5.2.5.3	16Amp one lever two way light switch	No	2		
5.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
5.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
5.2.5.6	Photocell	No	1		
5.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
5.2.6	4mm ² PVC insulated conductor				
5.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
5.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
5.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
5.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
5.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.5.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
5.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
5.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
5.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
5.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
5.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
5.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
5.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
5.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 1 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.5.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
5.3.1	20mm diameter				
5.3.1.1	Supply and delivery	Meter	220		
5.3.1.2	Installation	Meter	220		
5.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
5.3.3	100 x 100 x 50 mm				
5.3.3.1	Supply and delivery	No	60		
5.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
5.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
5.3.4.1	Flush Mounted in wall box	No	56		
5.3.4.2	Mounted in floorbox	No	Rate		Rate Only
5.3.4.3	Surface mounted	No	Rate		Rate Only
5.3.4.4	Power skirting mounted	No	Rate		Rate Only
5.3.5	16 A, 3-pin double white SSO				
5.3.5.1	Flush Mounted	No	Rate		Rate Only
5.3.5.2	Surface mounted	No	Rate		Rate Only
5.3.5	16 A, 3-pin dedicated red SSO				
5.3.5.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
5.3.8.2	Mounted in floorbox	No	Rate		Rate Only
5.3.8.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
5.3.12	<u>Supply, Deliver and installation of Cu Conductors:</u>				
5.3.12.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
5.3.12.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
5.3.12.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
5.3.12.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
5.3.12.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 1 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.5.1 - DISTRIBUTION BOARDS	
2	BILL No.5.2 - LIGHTING INSTALLATION	
3	BILL No.5.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 6

BLOCK 2 - TYPE 2A HOSTEL

BLOCK 2 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.6.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
6.1.1	DB-2	No	1		
6.1.2	Lable all circuits and install signage to the panels	sum	1		
6.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 2 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.6.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
6.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
6.2.1.1	Supply and delivery	Meter	150		
6.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
6.2.2	20mm diameter				
6.2.2.1	Supply and delivery	Meter	200		
6.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
6.2.3	100 x 50 x 50 mm				
6.2.3.1	Supply and delivery	No	20		
6.2.3.2	Installation	No	20		
6.2.4	65mm round box				
6.2.4.1	Supply and delivery	No	30		
6.2.4.2	Installation	No	30		
ACCESSORIES					
6.2.5	Supply and Install accessories to boxes				
6.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
6.2.5.2	16Amp one lever one way light switch	No	61		
6.2.5.3	16Amp one lever two way light switch	No	2		
6.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
6.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
6.2.5.6	Photocell	No	1		
6.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
6.2.6	4mm ² PVC insulated conductor				
6.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
6.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
6.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
6.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
6.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.6.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
6.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
6.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
6.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
6.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
6.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
6.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
6.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
6.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 2 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.6.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
6.3.1	20mm diameter				
6.3.1.1	Supply and delivery	Meter	220		
6.3.1.2	Installation	Meter	220		
6.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
6.3.3	100 x 100 x 50 mm				
6.3.3.1	Supply and delivery	No	60		
6.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
6.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
6.3.4.1	Flush Mounted in wall box	No	56		
6.3.4.2	Mounted in floorbox	No	Rate		Rate Only
6.3.4.3	Surface mounted	No	Rate		Rate Only
6.3.4.4	Power skirting mounted	No	Rate		Rate Only
6.3.5	16 A, 3-pin double white SSO				
6.3.5.1	Flush Mounted	No	Rate		Rate Only
6.3.5.2	Surface mounted	No	Rate		Rate Only
6.3.6	16 A, 3-pin dedicated red SSO				
6.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
6.3.6.2	Mounted in floorbox	No	Rate		Rate Only
6.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
6.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
6.3.17.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
6.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
6.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
6.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
6.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 2 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.6.1 - DISTRIBUTION BOARDS	
2	BILL No.6.2 - LIGHTING INSTALLATION	
3	BILL No.6.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 7

BLOCK 3 - TV ROOM

BLOCK 3 - TV ROOM BLOCK

SUBJECT : BILL OF QUANTITIES

BILL No.7.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
7.1.1	DB-3	No	1		
7.1.2	Lable all circuits and install signage to the panels	sum	1		
7.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 3 - TV ROOM BLOCK

SUBJECT : BILL OF QUANTITIES

BILL No.7.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
7.2.1	<u>Supply and Install Trunking</u>				
7.2.1.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	20		
7.2.1.2	Supply and delivery Installation	Meter Meter	20 20		
	<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>				
7.2.2	20mm diameter				
7.2.2.1	Supply and delivery	Meter	60		
7.2.2.2	Installation	Meter	60		
	<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>				
7.2.3	100 x 50 x 50 mm				
7.2.3.1	Supply and delivery	No	4		
7.2.3.2	Installation	No	4		
7.2.4	65mm round box				
7.2.4.1	Supply and delivery	No	16		
7.2.4.2	Installation	No	16		
ACCESSORIES					
7.2.5	Supply and Install accessories to boxes				
7.2.5.1	5A, 3-pin socket outlets to trunking	No			
7.2.5.2	16Amp one lever one way light switch	No	2		
7.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
7.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
7.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
7.2.5.6	Photocell	No	1		
7.2.5.7	Ceiling mounted occupancy sensor	No	2		
WIRING AND TERMINALS					
7.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
7.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
7.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
7.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
7.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
7.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	60		
	Installation	Meter	60		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.7.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
7.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
7.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	4		
7.2.7.2	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	24		
7.2.7.3	TYPE P2 -Wall mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	2		
7.2.7.4	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	6		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 3 - TV ROOM BLOCK

SUBJECT : BILL OF QUANTITIES

BILL No.7.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
7.3.1	20mm diameter				
7.3.1.1	Supply and delivery	Meter	Rate		Rate Only
7.3.1.2	Installation	Meter	Rate		Rate Only
7.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	10		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
7.3.3	100 x 100 x 50 mm				
7.3.3.1	Supply and delivery	No	80		
7.3.3.2	Installation	No	80		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
7.3.4					
7.3.4.1	Flush Mounted in wall box	No	10		
7.3.4.2	Mounted in floorbox	No	Rate		Rate Only
7.3.4.3	Surface mounted	No	Rate		Rate Only
7.3.4.4	Power skirting mounted	No	Rate		Rate Only
7.3.5	16 A, 3-pin double white SSO				
7.3.5.1	Flush Mounted	No	Rate		Rate Only
7.3.5.2	Surface mounted	No	Rate		Rate Only
7.3.6	16 A, 3-pin dedicated red SSO				
7.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
7.3.6.2	Mounted in floorbox	No	Rate		Rate Only
7.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
7.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
7.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	120		
	Installation	Meter	120		
7.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
7.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
7.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
7.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	60		
	Installation	Meter	60		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 3 - TV ROOM BLOCK

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.7.1 - DISTRIBUTION BOARDS	
2	BILL No.7.2 - LIGHTING INSTALLATION	
3	BILL No.7.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 8

BLOCK 4 - TYPE 2A HOSTEL

BLOCK 4 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.8.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
8.1.1	DB-4	No	1		
8.1.2	Lable all circuits and install signage to the panels	sum	1		
8.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 4 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.8.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
8.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
8.2.1.1	Supply and delivery	Meter	150		
8.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
8.2.2	20mm diameter				
8.2.2.1	Supply and delivery	Meter	200		
8.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
8.2.3	100 x 50 x 50 mm				
8.2.3.1	Supply and delivery	No	20		
8.2.3.2	Installation	No	20		
8.2.4	65mm round box				
8.2.4.1	Supply and delivery	No	30		
8.2.4.2	Installation	No	30		
ACCESSORIES					
8.2.5	Supply and Install accessories to boxes				
8.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
8.2.5.2	16Amp one lever one way light switch	No	61		
8.2.5.3	16Amp one lever two way light switch	No	2		
8.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
8.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
8.2.5.6	Photocell	No	1		
8.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
8.2.6	4mm ² PVC insulated conductor				
8.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
8.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
8.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
8.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
8.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.8.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
LIGHT FITTINGS					
8.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
8.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
8.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
8.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
8.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
8.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
8.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
8.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 4 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.5.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
8.3.1	20mm diameter				
8.3.1.1	Supply and delivery	Meter	220		
8.3.1.2	Installation	Meter	220		
8.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
8.3.3	100 x 100 x 50 mm				
8.3.3.1	Supply and delivery	No	60		
8.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
8.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
8.3.4.1	Flush Mounted in wall box	No	56		
8.3.4.2	Mounted in floorbox	No	Rate		Rate Only
8.3.4.3	Surface mounted	No	Rate		Rate Only
8.3.4.4	Power skirting mounted	No	Rate		Rate Only
8.3.5	16 A, 3-pin double white SSO				
8.3.5.1	Flush Mounted	No	Rate		Rate Only
8.3.5.2	Surface mounted	No	Rate		Rate Only
8.3.6	16 A, 3-pin dedicated red SSO				
8.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
8.3.6.2	Mounted in floorbox	No	Rate		Rate Only
8.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
8.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
8.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
8.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
8.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
8.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
8.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 4 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.8.1 - DISTRIBUTION BOARDS	
2	BILL No.8.2 - LIGHTING INSTALLATION	
3	BILL No.5.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 9

BLOCK 5 - TYPE 2A HOSTEL

BLOCK 5 - TYPE 2A HOSTEL**SUBJECT : BILL OF QUANTITIES****BILL No.9.1 - DISTRIBUTION BOARDS**

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
9.1.1	DB-5	No	1		
9.1.2	Lable all circuits and install signage to the panels	sum	1		
9.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 5 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.9.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
9.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
9.2.1.1	Supply and delivery	Meter	150		
9.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
9.2.2	20mm diameter				
9.2.2.1	Supply and delivery	Meter	200		
9.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
9.2.3	100 x 50 x 50 mm				
9.2.3.1	Supply and delivery	No	20		
9.2.3.2	Installation	No	20		
9.2.4	65mm round box				
9.2.4.1	Supply and delivery	No	30		
9.2.4.2	Installation	No	30		
ACCESSORIES					
9.2.5	Supply and Install accessories to boxes				
9.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
9.2.5.2	16Amp one lever one way light switch	No	61		
9.2.5.3	16Amp one lever two way light switch	No	2		
9.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
9.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
9.2.5.6	Photocell	No	1		
9.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
9.2.6	4mm ² PVC insulated conductor				
9.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
9.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
9.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
9.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
9.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.9.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
9.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
9.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
9.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
9.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
9.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
9.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
9.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
9.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 5 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.9.3 - SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
9.3.1	20mm diameter				
9.3.1.1	Supply and delivery	Meter	220		
9.3.1.2	Installation	Meter	220		
9.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
9.3.3	100 x 100 x 50 mm				
9.3.3.1	Supply and delivery	No	60		
9.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
9.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
9.3.4.1	Flush Mounted in wall box	No	56		
9.3.4.2	Mounted in floorbox	No	Rate		Rate Only
9.3.4.3	Surface mounted	No	Rate		Rate Only
9.3.4.4	Power skirting mounted	No	Rate		Rate Only
9.3.5	16 A, 3-pin double white SSO				
9.3.5.1	Flush Mounted	No	Rate		Rate Only
9.3.5.2	Surface mounted	No	Rate		Rate Only
9.3.6	16 A, 3-pin dedicated red SSO				
9.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
9.3.6.2	Mounted in floorbox	No	Rate		Rate Only
9.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
9.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
9.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
9.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
9.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
9.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
9.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 5 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.9.1 - DISTRIBUTION BOARDS	
2	BILL No.9.2 - LIGHTING INSTALLATION	
3	BILL No.9.3 - SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 10

BLOCK 6 - TYPE 1 HOSTEL

BLOCK 6 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.10.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
10.1.1	DB--6	No	1		
10.1.2	Lable all circuits and install signage to the panels	sum	1		
10.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 6 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.10.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
10.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
10.2.1.1	Supply and delivery	Meter	120		
10.2.1.2	Installation	Meter	120		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
20mm diameter					
10.2.2					
10.2.2.1	Supply and delivery	Meter	200		
10.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
100 x 50 x 50 mm					
10.2.3					
10.2.3.1	Supply and delivery	No	18		
10.2.3.2	Installation	No	18		
10.2.4	65mm round box				
10.2.4.1	Supply and delivery	No	28		
10.2.4.2	Installation	No	28		
ACCESSORIES					
Supply and Install accessories to boxes					
10.2.5					
10.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
10.2.5.2	16Amp one lever one way light switch	No	16		
10.2.5.3	16Amp one lever two way light switch	No	2		
10.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
10.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
10.2.5.6	Photocell	No	1		
10.2.5.7	Ceiling mounted occupancy sensor	No	6		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
10.2.6					
10.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
10.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
10.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
10.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
10.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	230		
	Installation	Meter	230		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.10.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
10.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
10.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
10.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
10.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
10.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
10.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
10.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
10.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 6 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.10.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
10.3.1	20mm diameter				
10.3.1.1	Supply and delivery	Meter	220		
10.3.1.2	Installation	Meter	220		
10.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
10.3.3	100 x 100 x 50 mm				
10.3.3.1	Supply and delivery	No	25		
10.3.3.2	Installation	No	25		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
10.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
10.3.4.1	Flush Mounted in wall box	No	20		
10.3.4.2	Mounted in floorbox	No	Rate		Rate Only
10.3.4.3	Surface mounted	No	Rate		Rate Only
10.3.4.4	Power skirting mounted	No	Rate		Rate Only
10.3.5	16 A, 3-pin double white SSO				
10.3.5.1	Flush Mounted	No	Rate		Rate Only
10.3.5.2	Surface mounted	No	Rate		Rate Only
10.3.6	16 A, 3-pin dedicated red SSO				
10.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
10.3.6.2	Mounted in floorbox	No	Rate		Rate Only
10.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
10.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
10.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
10.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
10.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
10.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
10.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 6 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.10.1 - DISTRIBUTION BOARDS	
2	BILL No.10.2 - LIGHTING INSTALLATION	
3	BILL No.10.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 11

BLOCK 7 - TYPE 2A HOSTEL

BLOCK 7 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.11.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
11.1.1	DB-7	No	1		
11.1.2	Lable all circuits and install signage to the panels	sum	1		
11.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 7 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.11.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
11.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	150		
11.2.1.1	Supply and delivery	Meter	150		
11.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
20mm diameter					
11.2.2	20mm diameter	Meter	200		
11.2.2.1	Supply and delivery	Meter	200		
11.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
100 x 50 x 50 mm					
11.2.3	100 x 50 x 50 mm	No	20		
11.2.3.1	Supply and delivery	No	20		
11.2.3.2	Installation	No	20		
65mm round box					
11.2.4	65mm round box	No	30		
11.2.4.1	Supply and delivery	No	30		
11.2.4.2	Installation	No	30		
ACCESSORIES					
Supply and Install accessories to boxes					
11.2.5	Supply and Install accessories to boxes	No	10		
11.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
11.2.5.2	16Amp one lever one way light switch	No	61		
11.2.5.3	16Amp one lever two way light switch	No	2		
11.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
11.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
11.2.5.6	Photocell	No	1		
11.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
4mm ² PVC insulated conductor					
11.2.6	4mm ² PVC insulated conductor	Meter	Rate		Rate Only
11.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² PVC insulated conductor					
11.2.6.2	2,5mm ² PVC insulated conductor	Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² Heat resistant conductor					
11.2.6.3	2,5mm ² Heat resistant conductor	Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² bare copper earth wire					
11.2.6.4	2,5mm ² bare copper earth wire	Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
1.5mm ² surfix twin and earth					
11.2.6.5	1.5mm ² surfix twin and earth	Meter	250		
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.11.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
11.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
11.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
11.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
11.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
11.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
11.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
11.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
11.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 7 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.11.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
11.3.1	20mm diameter				
11.3.1.1	Supply and delivery	Meter	220		
11.3.1.2	Installation	Meter	220		
11.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
11.3.3	100 x 100 x 50 mm				
11.3.3.1	Supply and delivery	No	60		
11.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
11.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
11.3.4.1	Flush Mounted in wall box	No	56		
11.3.4.2	Mounted in floorbox	No	Rate		Rate Only
11.3.4.3	Surface mounted	No	Rate		Rate Only
11.3.4.4	Power skirting mounted	No	Rate		Rate Only
11.3.5	16 A, 3-pin double white SSO				
11.3.5.1	Flush Mounted	No	Rate		Rate Only
11.3.5.2	Surface mounted	No	Rate		Rate Only
11.3.6	16 A, 3-pin dedicated red SSO				
11.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
11.3.6.2	Mounted in floorbox	No	Rate		Rate Only
11.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
11.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
11.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
11.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
11.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
11.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
11.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.11.1 - DISTRIBUTION BOARDS	
2	BILL No.11.2 - LIGHTING INSTALLATION	
3	BILL No.11.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 12

BLOCK 8 - TYPE 2A HOSTEL

BLOCK 8 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.12.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
12.1.1	DB-8	No	1		
12.1.2	Lable all circuits and install signage to the panels	sum	1		
12.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 8 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.12.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
12.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
12.2.1.1	Supply and delivery	Meter	150		
12.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
12.2.2	20mm diameter				
12.2.2.1	Supply and delivery	Meter	200		
12.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
12.2.3	100 x 50 x 50 mm				
12.2.3.1	Supply and delivery	No	20		
12.2.3.2	Installation	No	20		
12.2.4	65mm round box				
12.2.4.1	Supply and delivery	No	30		
12.2.4.2	Installation	No	30		
ACCESSORIES					
12.2.5	Supply and Install accessories to boxes				
12.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
12.2.5.2	16Amp one lever one way light switch	No	61		
12.2.5.3	16Amp one lever two way light switch	No	2		
12.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
12.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
12.2.5.6	Photocell	No	1		
12.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
12.2.6	4mm ² PVC insulated conductor				
12.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
12.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
12.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
12.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
12.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.12.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
12.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
12.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
12.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
12.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
12.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
12.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
12.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
12.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 8 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.12.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
12.3.1	20mm diameter				
12.3.1.1	Supply and delivery	Meter	220		
12.3.1.2	Installation	Meter	220		
12.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
12.3.3	100 x 100 x 50 mm				
12.3.3.1	Supply and delivery	No	60		
12.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
11.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
11.3.4.1	Flush Mounted in wall box	No	56		
11.3.4.2	Mounted in floorbox	No	Rate		Rate Only
11.3.4.3	Surface mounted	No	Rate		Rate Only
11.3.4.4	Power skirting mounted	No	Rate		Rate Only
11.3.5	16 A, 3-pin double white SSO				
11.3.5.1	Flush Mounted	No	Rate		Rate Only
11.3.5.2	Surface mounted	No	Rate		Rate Only
11.3.6	16 A, 3-pin dedicated red SSO				
11.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
11.3.6.2	Mounted in floorbox	No	Rate		Rate Only
11.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
11.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
11.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
11.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
11.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
11.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
11.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 8 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.12.1 - DISTRIBUTION BOARDS	
2	BILL No.12.2 - LIGHTING INSTALLATION	
3	BILL No.12.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 13

BLOCK 9 - TV ROOM

BLOCK 9 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.13.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
13.1.1	DB-9	No	1		
13.1.2	Lable all circuits and install signage to the panels	sum	1		
13.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 9 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.13.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
13.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
13.2.1.1	Supply and delivery	Meter	20		
13.2.1.2	Installation	Meter	20		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
13.2.2	20mm diameter				
13.2.2.1	Supply and delivery	Meter	60		
13.2.2.2	Installation	Meter	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
13.2.3	100 x 50 x 50 mm				
13.2.3.1	Supply and delivery	No	4		
13.2.3.2	Installation	No	4		
13.2.4	65mm round box				
13.2.4.1	Supply and delivery	No	16		
13.2.4.2	Installation	No	16		
ACCESSORIES					
13.2.5	Supply and Install accessories to boxes				
13.2.5.1	5A, 3-pin socket outlets to trunking	No			
13.2.5.2	16Amp one lever one way light switch	No	2		
13.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
13.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
13.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
13.2.5.6	Photocell	No	1		
13.2.5.7	Ceiling mounted occupancy sensor	No	2		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
13.2.6	4mm ² PVC insulated conductor				
13.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
13.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
13.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
13.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
13.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	60		Rate Only
	Installation	Meter	60		Rate Only
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.13.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
13.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
13.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	4		
13.2.7.2	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	24		
13.2.7.3	TYPE P2 -Wall mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	2		
13.2.7.4	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	6		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 9 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.13.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
13.3.1	20mm diameter				
13.3.1.1	Supply and delivery	Meter	Rate		Rate Only
13.3.1.2	Installation	Meter	Rate		Rate Only
13.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	10		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
13.3.3	100 x 100 x 50 mm				
13.3.3.1	Supply and delivery	No	80		
13.3.3.2	Installation	No	80		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
13.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
13.3.4.1	Flush Mounted in wall box	No	10		
13.3.4.2	Mounted in floorbox	No	Rate		Rate Only
13.3.4.3	Surface mounted	No	Rate		Rate Only
13.3.4.4	Power skirting mounted	No	Rate		Rate Only
13.3.5	16 A, 3-pin double white SSO				
13.3.5.1	Flush Mounted	No	Rate		Rate Only
13.3.5.2	Surface mounted	No	Rate		Rate Only
13.3.6	16 A, 3-pin dedicated red SSO				
13.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
13.3.6.2	Mounted in floorbox	No	Rate		Rate Only
13.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
13.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
13.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	120		
	Installation	Meter	120		
13.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
13.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
13.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
13.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	60		
	Installation	Meter	60		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 9 - TV ROOM

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.13.1 - DISTRIBUTION BOARDS	
2	BILL No.13.2 - LIGHTING INSTALLATION	
3	BILL No.13.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 14

BLOCK 10 - TYPE 1 HOSTEL

BLOCK10 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.14.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
14.1.1	DB-10	No	1		
14.1.2	Lable all circuits and install signage to the panels	sum	1		
14.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK10 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.14.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
14.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
14.2.1.1	Supply and delivery	Meter	120		
14.2.1.2	Installation	Meter	120		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
14.2.2	20mm diameter				
14.2.2.1	Supply and delivery	Meter	200		
14.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
14.2.3	100 x 50 x 50 mm				
14.2.3.1	Supply and delivery	No	18		
14.2.3.2	Installation	No	18		
14.2.4	65mm round box				
14.2.4.1	Supply and delivery	No	28		
14.2.4.2	Installation	No	28		
ACCESSORIES					
14.2.5	Supply and Install accessories to boxes				
14.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
14.2.5.2	16Amp one lever one way light switch	No	16		
14.2.5.3	16Amp one lever two way light switch	No	2		
14.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
14.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
14.2.5.6	Photocell	No	1		
14.2.5.7	Ceiling mounted occupancy sensor	No	6		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
14.2.6	4mm ² PVC insulated conductor				
14.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
14.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
14.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
14.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
14.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	230		
	Installation	Meter	230		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.14.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
14.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
14.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
14.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
14.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
14.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
14.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
14.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
14.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 10 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.14.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
14.3.1	20mm diameter				
14.3.1.1	Supply and delivery	Meter	220		
14.3.1.2	Installation	Meter	220		
14.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
14.3.3	100 x 100 x 50 mm				
14.3.3.1	Supply and delivery	No	25		
14.3.3.2	Installation	No	25		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
14.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
14.3.4.1	Flush Mounted in wall box	No	20		
14.3.4.2	Mounted in floorbox	No	Rate		Rate Only
14.3.4.3	Surface mounted	No	Rate		Rate Only
14.3.4.4	Power skirting mounted	No	Rate		Rate Only
14.3.4.5					
14.3.5	16 A, 3-pin double white SSO				
14.3.5.1	Flush Mounted	No	Rate		Rate Only
14.3.5.2	Surface mounted	No	Rate		Rate Only
14.3.6	16 A, 3-pin dedicated red SSO				
14.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
14.3.6.2	Mounted in floorbox	No	Rate		Rate Only
14.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
14.3.7	2.5mm ² PVC insulated conductor				
14.3.7.1	Supply and delivery	Meter	250		
	Installation	Meter	250		
14.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
14.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
14.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
14.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK10 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.14.1 - DISTRIBUTION BOARDS	
2	BILL No.14.2 - LIGHTING INSTALLATION	
3	BILL No.14.3: SMALL POWER INSTALLATION	
4	TOTAL	

BILL NO. 15

BLOCK 11 - TYPE 1 HOSTEL

BLOCK 11- TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.15.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
15.1.1	DB-11	No	1		
15.1.2	Lable all circuits and install signage to the panels	sum	1		
15.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 11 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.15.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
15.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
15.2.1.1	Supply and delivery	Meter	120		
15.2.1.2	Installation	Meter	120		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
15.2.2	20mm diameter				
15.2.2.1	Supply and delivery	Meter	200		
15.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
15.2.3	100 x 50 x 50 mm				
15.2.3.1	Supply and delivery	No	18		
15.2.3.2	Installation	No	18		
15.2.4	65mm round box				
15.2.4.1	Supply and delivery	No	28		
15.2.4.2	Installation	No	28		
ACCESSORIES					
15.2.5	Supply and Install accessories to boxes				
15.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
15.2.5.2	16Amp one lever one way light switch	No	16		
15.2.5.3	16Amp one lever two way light switch	No	2		
15.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
15.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
15.2.5.6	Photocell	No	1		
15.2.5.7	Ceiling mounted occupancy sensor	No	6		
WIRING AND TERMINALS					
15.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
15.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
15.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
15.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
15.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
15.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	230		
	Installation	Meter	230		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.15.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
15.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
15.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
15.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
15.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
15.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
15.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
15.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
15.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 11 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.15.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
15.3.1	20mm diameter				
15.3.1.1	Supply and delivery	Meter	220		
15.3.1.2	Installation	Meter	220		
15.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
15.3.3	100 x 100 x 50 mm				
15.3.3.1	Supply and delivery	No	25		
15.3.3.2	Installation	No	25		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
15.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
15.3.4.1	Flush Mounted in wall box	No	20		
15.3.4.2	Mounted in floorbox	No	Rate		Rate Only
15.3.4.3	Surface mounted	No	Rate		Rate Only
15.3.4.4	Power skirting mounted	No	Rate		Rate Only
15.3.5	16 A, 3-pin double white SSO				
15.3.5.1	Flush Mounted	No	Rate		Rate Only
15.3.5.2	Surface mounted	No	Rate		Rate Only
15.3.6	16 A, 3-pin dedicated red SSO				
15.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
15.3.6.2	Mounted in floorbox	No	Rate		Rate Only
15.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
15.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
15.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
15.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
15.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
15.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
15.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 11 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.15.1 - DISTRIBUTION BOARDS	
2	BILL No.15.2 - LIGHTING INSTALLATION	
3	BILL No.15.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.15	

BILL NO. 16

BLOCK 12 - TYPE 1 HOSTEL

BLOCK 12 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.16.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
16.1.1	DB-12	No	1		
16.1.2	Lable all circuits and install signage to the panels	sum	1		
16.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 12 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.16.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
16.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
16.2.1.1	Supply and delivery	Meter	120		
16.2.2.2	Installation	Meter	120		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
20mm diameter					
16.2.2.1	Supply and delivery	Meter	200		
16.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
100 x 50 x 50 mm					
16.2.3.1	Supply and delivery	No	18		
16.2.3.2	Installation	No	18		
65mm round box					
16.2.4.1	Supply and delivery	No	28		
16.2.4.2	Installation	No	28		
ACCESSORIES					
Supply and Install accessories to boxes					
16.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
16.2.5.2	16Amp one lever one way light switch	No	16		
16.2.5.3	16Amp one lever two way light switch	No	2		
16.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
16.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
16.2.5.6	Photocell	No	1		
16.2.5.7	Ceiling mounted occupancy sensor	No	6		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
4mm ² PVC insulated conductor					
16.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² PVC insulated conductor					
16.2.6.2	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² Heat resistant conductor					
16.2.6.3	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² bare copper earth wire					
16.2.6.4	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
1.5mm ² surfix twin and earth					
16.2.6.5	Supply and delivery	Meter	230		
	Installation	Meter	230		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.16.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
16.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
16.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
16.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
16.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
16.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
16.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
16.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
16.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 12 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.16.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
16.3.1	20mm diameter				
16.3.1.1	Supply and delivery	Meter	220		
16.3.1.2	Installation	Meter	220		
16.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
16.3.3	100 x 100 x 50 mm				
16.3.3.1	Supply and delivery	No	25		
16.3.3.2	Installation	No	25		
ACCESSORIES					
16.3.4	<u>Supply, delivery and installation of socket outlets</u> 16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
16.3.4.1	Flush Mounted in wall box	No	20		
16.3.4.2	Mounted in floorbox	No	Rate		Rate Only
16.3.4.3	Surface mounted	No	Rate		Rate Only
16.3.4.4	Power skirting mounted	No	Rate		Rate Only
16.3.5	16 A, 3-pin double white SSO				
16.3.5.1	Flush Mounted	No	Rate		Rate Only
16.3.5.2	Surface mounted	No	Rate		Rate Only
16.3.6	16 A, 3-pin dedicated red SSO				
16.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
16.3.6.2	Mounted in floorbox	No	Rate		Rate Only
16.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
16.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
16.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
16.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
16.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
16.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
16.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 12 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.16.1 - DISTRIBUTION BOARDS	
2	BILL No.16.2 - LIGHTING INSTALLATION	
3	BILL No.16.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.16	

BILL NO. 17

BLOCK 14 - HOSTEL MASTER

BLOCK 14 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

BILL No.17.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
17.1.1	DB-14	No	1		
17.1.2	Lable all circuits and install signage to the panels	sum	1		
17.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 14 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

BILL No.17.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
17.2.1	<u>Supply and Install Trunking</u>				
17.2.1.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	Rate		Rate Only
17.2.1.2	Supply and delivery Installation	Meter Meter	Rate Rate		Rate Only Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
17.2.2	20mm diameter				
17.2.2.1	Supply and delivery	Meter	150		
17.2.2.2	Installation	Meter	150		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
17.2.3	100 x 50 x 50 mm				
17.2.3.1	Supply and delivery	No	4		
17.2.3.2	Installation	No	4		
17.2.4	65mm round box				
17.2.4.1	Supply and delivery	No	16		
17.2.4.2	Installation	No	16		
ACCESSORIES					
17.2.5	Supply and Install accessories to boxes				
17.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
17.2.5.2	16Amp one lever one way light switch	No	8		
17.2.5.3	16Amp one lever two way light switch	No	2		
17.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
17.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
17.2.5.6	16Amp three lever one way light switch	No	1		
17.2.5.7	Photocell	No	1		
17.2.5.8	Ceiling mounted occupancy sensor	No	1		
WIRING AND TERMINALS					
17.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
17.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
17.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
17.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
17.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
17.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	150		
	Installation	Meter	150		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.17.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-					
	LIGHT FITTINGS				
17.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
17.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	3		
17.2.7.2	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	13		
17.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	2		
17.2.7.4	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	3		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 14 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

BILL No.17.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
17.3.1	20mm diameter				
17.3.1.1	Supply and delivery	Meter	160		
17.3.1.2	Installation	Meter	160		
17.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	10		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
17.3.3	100 x 100 x 50 mm				
17.3.3.1	Supply and delivery	No	12		
17.3.3.2	Installation	No	12		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
17.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
17.3.4.1	Flush Mounted in wall box	No	14		
17.3.4.2	Mounted in floorbox	No	Rate		Rate Only
17.3.4.3	Surface mounted	No	Rate		Rate Only
17.3.4.4	Power skirting mounted	No	Rate		Rate Only
17.3.5	16 A, 3-pin double white SSO				
17.3.5.1	Flush Mounted	No	Rate		Rate Only
17.3.5.2	Surface mounted	No	Rate		Rate Only
17.3.6	16 A, 3-pin dedicated red SSO				
17.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
17.3.6.2	Mounted in floorbox	No	Rate		Rate Only
17.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
17.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
17.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	180		
	Installation	Meter	180		
17.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
17.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
17.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
17.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	90		
	Installation	Meter	90		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 14 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.17.1 - DISTRIBUTION BOARDS	
2	BILL No.17.2 - LIGHTING INSTALLATION	
3	BILL No.17.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.17	

BILL NO. 18

BLOCK 15 - HOSTEL ADMINISTRATION

BLOCK 15 - HOSTEL ADMIN

SUBJECT : BILL OF QUANTITIES

BILL No.18.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
18.1.1	DB-15	No	1		
18.1.2	Lable all circuits and install signage to the panels	sum	1		
18.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 15 - HOSTEL ADMIN

SUBJECT : BILL OF QUANTITIES

BILL No.18.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
18.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
18.2.1.1	Supply and delivery	Meter	150		
18.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
18.2.2	20mm diameter				
18.2.2.1	Supply and delivery	Meter	200		
18.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
18.2.3	100 x 50 x 50 mm				
18.2.3.1	Supply and delivery	No	16	35.00	560.00
18.2.3.2	Installation	No	16	17.00	272.00
18.2.4	65mm round box				
18.2.4.1	Supply and delivery	No	20	26.00	520.00
18.2.4.2	Installation	No	20	17.00	340.00
ACCESSORIES					
18.2.5	Supply and Install accessories to boxes				
18.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
18.2.5.2	16Amp one lever one way light switch	No	Rate		Rate Only
18.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
18.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
18.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
18.2.5.6	Photocell	No	1		
18.2.5.7	Ceiling mounted occupancy sensor	No	11		
WIRING AND TERMINALS					
18.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
18.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
18.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
18.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
18.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
18.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	220		
	Installation	Meter	220		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.18.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-					
	LIGHT FITTINGS				
18.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
18.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	32		
18.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	4		
18.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	20		
18.2.7.4	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	3		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 15 - HOSTEL ADMIN

SUBJECT : BILL OF QUANTITIES

BILL No.18.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
18.3.1	20mm diameter				
18.3.1.1	Supply and delivery	Meter	200		
18.3.1.2	Installation	Meter	200		
18.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	30		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
18.3.3	100 x 100 x 50 mm				
18.3.3.1	Supply and delivery	No	15		
18.3.3.2	Installation	No	15		
18.3.4	<u>Re-Arrange the 3 compartment, two cover Midland power skirting complete with all accessories including internal/external bends, end caps etc. as per first floor drawing</u>	Meter	40		
18.3.5	<u>Supply, delivery and installation of 3UA type floorbox outlets (Cabstrut or similar), c/w carpet frame and lid, including the removal of the polystyrene from concrete.</u>	No	Rate		Rate Only
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
18.3.6	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
18.3.6.1	Flush Mounted in wall box	No	15		
18.3.6.2	Mounted in floorbox	No	Rate		Rate Only
18.3.6.3	Surface mounted	No	Rate		Rate Only
18.3.6.4	Power skirting mounted	No	11		
18.3.7	16 A, 3-pin double white SSO				
18.3.7.1	Flush Mounted	No	Rate		Rate Only
18.3.7.2	Surface mounted	No	Rate		Rate Only
18.3.8	16 A, 3-pin dedicated red SSO				
18.3.8.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
18.3.8.2	Mounted in floorbox	No	Rate		Rate Only
18.3.8.3	Power skirting mounted, 45 degree (including plug top)	No	11		
WIRING AND TERMINALS					
18.3.9	<u>Supply, Deliver and installation of Cu Conductors:</u>				
18.3.9.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	220		
	Installation	Meter	220		
18.3.9.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
18.3.9.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
18.3.9.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
18.3.9.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	110		
	Installation	Meter	100		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 15 - HOSTEL ADMIN

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.18.1 - DISTRIBUTION BOARDS	
2	BILL No.18.2 - LIGHTING INSTALLATION	
3	BILL No.18.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.18	

BILL NO. 19

BLOCK 16 - STAFF HOUSE

BLOCK 16 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.19.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
19.1.1	DB-16	No	1		
19.1.2	Lable all circuits and install signage to the panels	sum	1		
19.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 16 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.19.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
19.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
19.2.1.1	Supply and delivery	Meter	Rate		Rate Only
19.2.1.2	Installation	Meter	Rate		Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
19.2.2	20mm diameter				
19.2.2.1	Supply and delivery	Meter	200		
19.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
19.2.3	100 x 50 x 50 mm				
19.2.3.1	Supply and delivery	No	26		
19.2.3.2	Installation	No	26		
19.2.4	65mm round box				
19.2.4.1	Supply and delivery	No	40		
19.2.4.2	Installation	No	40		
ACCESSORIES					
19.2.5	Supply and Install accessories to boxes				
19.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
19.2.5.2	16Amp one lever one way light switch	No	18		
19.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
19.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
19.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
19.2.5.6	16Amp three lever one way light switch	No	2		
19.2.5.7	Photocell	No	1		
WIRING AND TERMINALS					
19.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
19.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
19.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
19.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
19.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
19.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.19.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
19.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
19.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	6		
19.2.7.2	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	2		
19.2.7.3	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	28		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 16 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.19.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
19.3.1	20mm diameter				
19.3.1.1	Supply and delivery	Meter	200		
19.3.1.2	Installation	Meter	200		
19.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	26		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
19.3.3	100 x 100 x 50 mm				
19.3.3.1	Supply and delivery	No	26		
19.3.3.2	Installation	No	26		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
19.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
19.3.4.1	Flush Mounted in wall box	No	28		
19.3.4.2	Mounted in floorbox	No	Rate		Rate Only
19.3.4.3	Surface mounted	No	Rate		Rate Only
19.3.4.4	Power skirting mounted	No	Rate		Rate Only
19.3.5	16 A, 3-pin double white SSO				
19.3.5.1	Flush Mounted	No	Rate		Rate Only
19.3.5.2	Surface mounted	No	Rate		Rate Only
19.3.6	16 A, 3-pin dedicated red SSO				
19.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
19.3.6.2	Mounted in floorbox	No	Rate		Rate Only
19.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
19.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
19.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
19.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
19.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
19.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
19.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	100		
	Installation	Meter	100		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 16 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.19.1 - DISTRIBUTION BOARDS	
2	BILL No.19.2 - LIGHTING INSTALLATION	
3	BILL No.19.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.19	

BILL NO. 20

BLOCK 17 - STAFF HOUSE

BLOCK 17 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.20.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
20.1.1	DB-17	No	2		
20.1.2	Lable all circuits and install signage to the panels	sum	1		
20.1.3	Certificate of Compliance	No	2		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 17 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.20.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
20.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
20.2.1.1	Supply and delivery	Meter	Rate		Rate Only
20.2.1.2	Installation	Meter	Rate		Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
20.2.2	20mm diameter				
20.2.2.1	Supply and delivery	Meter	200		
20.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
20.2.3	100 x 50 x 50 mm				
20.2.3.1	Supply and delivery	No	26		
20.2.3.2	Installation	No	26		
20.2.4	65mm round box				
20.2.4.1	Supply and delivery	No	40		
20.2.4.2	Installation	No	40		
ACCESSORIES					
20.2.5	Supply and Install accessories to boxes				
20.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
20.2.5.2	16Amp one lever one way light switch	No	18		
20.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
20.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
20.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
20.2.5.6	16Amp three lever one way light switch	No	2		
20.2.5.7	Photocell	No	1		
WIRING AND TERMINALS					
20.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
20.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
20.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
20.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
20.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
20.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.20.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
20.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
20.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	6		
20.2.7.2	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	2		
20.2.7.3	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	28		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 17 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.20.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
20.3.1	20mm diameter				
20.3.1.1	Supply and delivery	Meter	200		
20.3.1.2	Installation	Meter	200		
20.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	26		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
20.3.3	100 x 100 x 50 mm				
20.3.3.1	Supply and delivery	No	26		
20.3.3.2	Installation	No	26		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
20.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
20.3.4.1	Flush Mounted in wall box	No	28		
20.3.4.2	Mounted in floorbox	No	Rate		Rate Only
20.3.4.3	Surface mounted	No	Rate		Rate Only
20.3.4.4	Power skirting mounted	No	Rate		Rate Only
20.3.5	16 A, 3-pin double white SSO				
20.3.5.1	Flush Mounted	No	Rate		Rate Only
20.3.5.2	Surface mounted	No	Rate		Rate Only
20.3.6	16 A, 3-pin dedicated red SSO				
20.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
20.3.6.2	Mounted in floorbox	No	Rate		Rate Only
20.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
20.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
20.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
20.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
20.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
20.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
20.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	100		
	Installation	Meter	100		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 17 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.20.1 - DISTRIBUTION BOARDS	
2	BILL No.20.2 - LIGHTING INSTALLATION	
3	BILL No.20.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.20	

BILL NO. 21

BLOCK 18 - STAFF HOUSE

BLOCK 18 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.21.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
21.1.1	DB-18	No	2		
21.1.2	Lable all circuits and install signage to the panels	sum	1		
21.1.3	Certificate of Compliance	No	2		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 18 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.21.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
21.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
21.2.1.1	Supply and delivery	Meter	Rate		Rate Only
21.2.1.2	Installation	Meter	Rate		Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
21.2.2	20mm diameter				
21.2.2.1	Supply and delivery	Meter	200		
21.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
21.2.3	100 x 50 x 50 mm				
21.2.3.1	Supply and delivery	No	26		
21.2.3.2	Installation	No	26		
21.2.4	65mm round box				
21.2.4.1	Supply and delivery	No	40		
21.2.4.2	Installation	No	40		
ACCESSORIES					
21.2.5	Supply and Install accessories to boxes				
21.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
21.2.5.2	16Amp one lever one way light switch	No	18		
21.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
21.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
21.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
21.2.5.6	16Amp three lever one way light switch	No	2		
21.2.5.7	Photocell	No	1		
WIRING AND TERMINALS					
21.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
21.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
21.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
21.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
21.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
21.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.21.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
21.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
21.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	6		
21.2.7.2	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	2		
21.2.7.3	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	28		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 18 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.21.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
21.3.1	20mm diameter				
21.3.2.1	Supply and delivery	Meter	200		
21.3.2.2	Installation	Meter	200		
21.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	26		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
21.3.3	100 x 100 x 50 mm				
21.3.3.1	Supply and delivery	No	26		
21.3.3.2	Installation	No	26		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
21.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
21.3.4.1	Flush Mounted in wall box	No	28		
21.3.4.2	Mounted in floorbox	No	Rate		Ratet Only
21.3.4.3	Surface mounted	No	Rate		Ratet Only
21.3.4.4	Power skirting mounted	No	Rate		Ratet Only
21.3.5	16 A, 3-pin double white SSO				
21.3.5.1	Flush Mounted	No	Rate		Ratet Only
21.3.5.2	Surface mounted	No	Rate		Ratet Only
21.3.6	16 A, 3-pin dedicated red SSO				
21.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Ratet Only
21.3.6.2	Mounted in floorbox	No	Rate		Ratet Only
21.3.8.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Ratet Only
WIRING AND TERMINALS					
21.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
21.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
21.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Ratet Only
	Installation	Meter	Rate		Ratet Only
21.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Ratet Only
	Installation	Meter	Rate		Ratet Only
21.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Ratet Only
	Installation	Meter	Rate		Ratet Only
21.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	100		
	Installation	Meter	100		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

MOEDWIL COMBINED SCHOOL - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.21.1 - DISTRIBUTION BOARDS	
2	BILL No.21.2 - LIGHTING INSTALLATION	
3	BILL No.21.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.21	

BILL NO. 22

BLOCK 19 - STAFF HOUSE

BLOCK 19 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.22.2 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
22.1.1	DB-19	No	2		
22.1.2	Lable all circuits and install signage to the panels	sum	1		
22.1.3	Certificate of Compliance	No	2		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 19 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.22.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
22.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
22.2.1.1	Supply and delivery	Meter	Rate		Rate Only
22.2.1.2	Installation	Meter	Rate		Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
22.2.2	20mm diameter				
22.2.2.1	Supply and delivery	Meter	200		
22.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
22.2.3	100 x 50 x 50 mm				
22.2.3.1	Supply and delivery	No	26		
22.2.3.2	Installation	No	26		
22.2.4	65mm round box				
22.2.4.1	Supply and delivery	No	40		
22.2.4.2	Installation	No	40		
ACCESSORIES					
22.2.5	Supply and Install accessories to boxes				
22.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
22.2.5.2	16Amp one lever one way light switch	No	18		
22.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
22.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
22.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
22.2.5.6	16Amp three lever one way light switch	No	2		
22.2.5.7	Photocell	No	1		
WIRING AND TERMINALS					
22.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
22.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
22.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
22.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
22.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
22.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.22.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
22.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
22.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	6		
22.2.7.2	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	2		
22.2.7.3	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	28		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 19 - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.23.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
22.3.1	20mm diameter				
22.3.2.1	Supply and delivery	Meter	200		
22.3.2.2	Installation	Meter	200		
22.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	26		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
22.3.3	100 x 100 x 50 mm				
22.3.3.1	Supply and delivery	No	26		
22.3.3.2	Installation	No	26		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
22.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
22.3.4.1	Flush Mounted in wall box	No	28		
22.3.4.2	Mounted in floorbox	No	Rate		Rate Only
22.3.4.3	Surface mounted	No	Rate		Rate Only
22.3.4.4	Power skirting mounted	No	Rate		Rate Only
22.3.5	16 A, 3-pin double white SSO				
22.3.5.1	Flush Mounted	No	Rate		Rate Only
22.3.5.2	Surface mounted	No	Rate		Rate Only
22.3.6	16 A, 3-pin dedicated red SSO				
22.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
22.3.6.2	Mounted in floorbox	No	Rate		Rate Only
22.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
22.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
22.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	200		
	Installation	Meter	200		
22.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
22.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
22.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
22.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	100		
	Installation	Meter	100		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

MOEDWIL COMBINED SCHOOL - STAFF HOUSE

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.22.2 - DISTRIBUTION BOARDS	
2	BILL No.22.2 - LIGHTING INSTALLATION	
3	BILL No.23.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.22	

BILL NO. 23

BLOCK 20 - TV ROOM

BLOCK 20 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.23.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
23.1.1	DB-20	No	1		
23.1.2	Lable all circuits and install signage to the panels	sum	1		
23.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 20 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.23.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
23.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
23.2.1.1	Supply and delivery	Meter	20		
23.2.1.2	Installation	Meter	20		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
23.2.2	20mm diameter				
23.2.2.1	Supply and delivery	Meter	60		
23.2.2.2	Installation	Meter	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
23.2.3	100 x 50 x 50 mm				
23.2.3.1	Supply and delivery	No	4		
23.2.3.2	Installation	No	4		
23.2.3.3	65mm round box				
23.2.3.4	Supply and delivery	No	16		
23.2.3.5	Installation	No	16		
ACCESSORIES					
23.2.5	Supply and Install accessories to boxes				
23.2.5.1	5A, 3-pin socket outlets to trunking	No			
23.2.5.2	16Amp one lever one way light switch	No	2		
23.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
23.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
23.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
23.2.5.6	Photocell	No	1		
23.2.5.7	Ceiling mounted occupancy sensor	No	2		
WIRING AND TERMINALS					
23.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
23.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
23.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
23.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
23.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
23.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	60		
	Installation	Meter	60		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.23.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
23.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
23.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	4		
23.2.7.2	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	24		
23.2.7.3	TYPE P2 -Wall mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	2		
23.2.7.4	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	6		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 20 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.23.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
23.3.1	20mm diameter				
23.3.2.1	Supply and delivery	Meter	Rate		Rate Only
23.3.2.2	Installation	Meter	Rate		Rate Only
23.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	10		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
23.3.3	100 x 100 x 50 mm				
23.3.3.1	Supply and delivery	No	80		
23.3.3.2	Installation	No	80		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
23.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
23.3.4.1	Flush Mounted in wall box	No	10		
23.3.4.2	Mounted in floorbox	No	Rate		Rate Only
23.3.4.3	Surface mounted	No	Rate		Rate Only
23.3.4.4	Power skirting mounted	No	Rate		Rate Only
23.3.5	16 A, 3-pin double white SSO				
23.3.5.1	Flush Mounted	No	Rate		Rate Only
23.3.5.2	Surface mounted	No	Rate		Rate Only
23.3.6	16 A, 3-pin dedicated red SSO				
23.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
23.3.6.2	Mounted in floorbox	No	Rate		Rate Only
23.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
23.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
23.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	120		
	Installation	Meter	120		
23.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
23.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
23.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
23.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	60		
	Installation	Meter	60		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 20 - TV ROOM

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.23.1 - DISTRIBUTION BOARDS	
2	BILL No.23.2 - LIGHTING INSTALLATION	
3	BILL No.23.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.23	

BILL NO. 24

BLOCK 21 - TYPE 1 HOSTEL

BLOCK 21 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.24.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
24.1.1	DB-21	No	1		
24.1.2	Lable all circuits and install signage to the panels	sum	1		
24.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 21 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.24.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
24.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	120		
24.2.1.1	Supply and delivery	Meter	120		
24.2.1.2	Installation	Meter	120		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
20mm diameter					
24.2.2		Meter	200		
24.2.2.1	Supply and delivery	Meter	200		
24.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
100 x 50 x 50 mm					
24.2.3		No	18		
24.2.3.1	Supply and delivery	No	18		
24.2.3.2	Installation	No	18		
65mm round box					
24.2.4		No	28		
24.2.4.1	Supply and delivery	No	28		
24.2.4.2	Installation	No	28		
ACCESSORIES					
Supply and Install accessories to boxes					
24.2.5		No	10		
24.2.5.1	5A, 3-pin socket outlets to trunking	No	16		
24.2.5.2	16Amp one lever one way light switch	No	2		
24.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
24.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
24.2.5.5	16Amp two lever two way light switch	No	1		
24.2.5.6	Photocell	No	6		
24.2.5.7	Ceiling mounted occupancy sensor	No			
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
4mm ² PVC insulated conductor					
24.2.6		Meter	Rate		Rate Only
24.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² PVC insulated conductor					
24.2.6.2		Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² Heat resistant conductor					
24.2.6.3		Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
2,5mm ² bare copper earth wire					
24.2.6.4		Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
1.5mm ² surfix twin and earth					
24.2.6.5		Meter	230		
	Supply and delivery	Meter	230		
	Installation	Meter	230		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.24.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
24.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
24.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
24.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
24.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
24.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
24.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
24.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
24.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 21 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.24.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
24.3.1	20mm diameter				
24.3.1.1	Supply and delivery	Meter	220		
24.3.1.2	Installation	Meter	220		
24.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
24.3.3	100 x 100 x 50 mm				
24.3.3.1	Supply and delivery	No	25		
24.3.3.2	Installation	No	25		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
24.3.6	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
24.3.6.1	Flush Mounted in wall box	No	20		
24.3.6.2	Mounted in floorbox	No	Rate		Rate Only
24.3.6.3	Surface mounted	No	Rate		Rate Only
24.3.6.4	Power skirting mounted	No	Rate		Rate Only
24.3.7	16 A, 3-pin double white SSO				
24.3.7.1	Flush Mounted	No	Rate		Rate Only
24.3.7.2	Surface mounted	No	Rate		Rate Only
24.3.8	16 A, 3-pin dedicated red SSO				
24.3.8.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
24.3.8.2	Mounted in floorbox	No	Rate		Rate Only
24.3.8.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
24.3.9	<u>Supply, Deliver and installation of Cu Conductors:</u>				
24.3.9.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
24.3.9.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
24.3.9.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
24.3.9.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
24.3.9.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 21 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.24.1 - DISTRIBUTION BOARDS	
2	BILL No.24.2 - LIGHTING INSTALLATION	
3	BILL No.24.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.24	

BILL NO. 25

BLOCK 22 - TYPE 1 HOSTEL

BLOCK 22 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.25.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
25.1.1	DB-22	No	1		
25.1.2	Lable all circuits and install signage to the panels	sum	1		
25.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 22 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.25.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
25.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
25.2.1.1	Supply and delivery	Meter	120		
25.2.1.2	Installation	Meter	120		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
25.2.2	20mm diameter				
25.2.2.1	Supply and delivery	Meter	200		
25.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
25.2.3	100 x 50 x 50 mm				
25.2.3.1	Supply and delivery	No	18		
25.2.3.2	Installation	No	18		
25.2.4	65mm round box				
25.2.4.1	Supply and delivery	No	28		
25.2.4.2	Installation	No	28		
ACCESSORIES					
25.2.5	Supply and Install accessories to boxes				
25.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
25.2.5.2	16Amp one lever one way light switch	No	16		
25.2.5.3	16Amp one lever two way light switch	No	2		
25.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
25.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
25.2.5.6	Photocell	No	1		
25.2.5.7	Ceiling mounted occupancy sensor	No	6		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
25.2.6	4mm ² PVC insulated conductor				
25.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
25.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
25.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
25.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
25.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	230		
	Installation	Meter	230		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.25.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
25.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
25.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
25.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
25.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
25.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
25.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
25.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
25.2.7.6	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 22 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.25.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
25.3.1	20mm diameter				
25.3.1.1	Supply and delivery	Meter	220		
25.3.1.2	Installation	Meter	220		
25.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
25.3.3	100 x 100 x 50 mm				
25.3.3.1	Supply and delivery	No	25		
25.3.3.2	Installation	No	25		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
25.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
25.3.4.1	Flush Mounted in wall box	No	20		
25.3.4.2	Mounted in floorbox	No	Rate		Rate Only
25.3.4.3	Surface mounted	No	Rate		Rate Only
25.3.4.4	Power skirting mounted	No	Rate		Rate Only
25.3.5	16 A, 3-pin double white SSO				
25.3.5.1	Flush Mounted	No	Rate		Rate Only
25.3.5.2	Surface mounted	No	Rate		Rate Only
25.3.6	16 A, 3-pin dedicated red SSO				
25.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
25.3.6.2	Mounted in floorbox	No	Rate		Rate Only
25.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
25.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
25.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
25.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
25.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
25.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
25.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 22 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.25.1 - DISTRIBUTION BOARDS	
2	BILL No.25.2 - LIGHTING INSTALLATION	
3	BILL No.25.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.25	

BILL NO. 26

BLOCK 23 - HOSTEL MASTER

BLOCK 23 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

BILL No.26.1- DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
26.1.1	DB-23	No	1		
26.1.2	Lable all circuits and install signage to the panels	sum	1		
26.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 23 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

BILL No.26.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
26.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
26.2.1.1	Supply and delivery	Meter	Rate		Rate Only
26.2.1.2	Installation	Meter	Rate		Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
26.2.2	20mm diameter				
26.2.2.1	Supply and delivery	Meter	150		
26.2.2.2	Installation	Meter	150		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
26.2.3	100 x 50 x 50 mm				
26.2.3.1	Supply and delivery	No	4		
26.2.3.2	Installation	No	4		
26.2.4	65mm round box				
26.2.4.1	Supply and delivery	No	16		
26.2.4.2	Installation	No	16		
ACCESSORIES					
26.2.5	Supply and Install accessories to boxes				
26.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
26.2.5.2	16Amp one lever one way light switch	No	8		
26.2.5.3	16Amp one lever two way light switch	No	2		
26.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
26.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
26.2.5.6	16Amp three lever one way light switch	No	1		
26.2.5.7	Photocell	No	1		
26.2.5.8	Ceiling mounted occupancy sensor	No	1		
26.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
26.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
26.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
26.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
26.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
26.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	150		
	Installation	Meter	150		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.26.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
26.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
26.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	3		
26.2.7.2	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	13		
26.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	2		
26.2.7.4	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	3		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 23 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

BILL No.26.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIRES					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
26.3.1	20mm diameter				
26.3.2.1	Supply and delivery	Meter	160		
26.3.2.2	Installation	Meter	160		
26.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	10		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
26.3.3	100 x 100 x 50 mm				
26.3.3.1	Supply and delivery	No	12		
26.3.3.2	Installation	No	12		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
26.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
26.3.4.1	Flush Mounted in wall box	No	14		
26.3.4.2	Mounted in floorbox	No	Rate		Rate Only
26.3.4.3	Surface mounted	No	Rate		Rate Only
26.3.4.4	Power skirting mounted	No	Rate		Rate Only
26.3.5	16 A, 3-pin double white SSO				
26.3.5.1	Flush Mounted	No	Rate		Rate Only
26.3.5.2	Surface mounted	No	Rate		Rate Only
26.3.6	16 A, 3-pin dedicated red SSO				
26.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
26.3.6.2	Mounted in floorbox	No	Rate		Rate Only
26.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
26.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
26.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	180		
	Installation	Meter	180		
26.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
26.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
26.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
26.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	90		
	Installation	Meter	90		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 23 - HOSTEL MASTER

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.26.1- DISTRIBUTION BOARDS	
2	BILL No.26.2 - LIGHTING INSTALLATION	
3	BILL No.26.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.26	

BILL NO. 27

BLOCK 24 - GUARD HOUSE

BLOCK 24 - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.27.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
27.1.1	DB-24	No	1		
27.1.2	Lable all circuits and install signage to the panels	sum	1		
27.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 24 - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.27.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
27.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
27.2.1.1	Supply and delivery	Meter	Rate		Rate Only
27.2.1.2	Installation	Meter	Rate		Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
27.2.2	20mm diameter				
27.2.2.1	Supply and delivery	Meter	20		
27.2.2.2	Installation	Meter	20		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
27.2.3	100 x 50 x 50 mm				
27.2.3.1	Supply and delivery	No	2		
27.2.3.2	Installation	No	2		
27.2.4	65mm round box				
27.2.4.1	Supply and delivery	No	8		
27.2.4.2	Installation	No	8		
ACCESSORIES					
27.2.5	Supply and Install accessories to boxes				
27.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
27.2.5.2	16Amp one lever one way light switch	No	2		
27.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
27.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
27.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
27.2.5.7	Photocell	No	1		
27.2.5.8	Ceiling mounted occupancy sensor	No	1		
WIRING AND TERMINALS					
27.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
27.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
27.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
27.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
27.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
27.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	20		
	Installation	Meter	20		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.27.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
27.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
27.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	1		
27.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	1		
27.2.7.3	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 24 - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.27.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
27.3.1	20mm diameter				
27.3.2.1	Supply and delivery	Meter	Rate		Rate Only
27.3.2.2	Installation	Meter	Rate		Rate Only
27.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	5		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
27.3.3	100 x 100 x 50 mm				
27.3.3.1	Supply and delivery	No	20		
27.3.3.2	Installation	No	20		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
27.3.6	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
27.3.6.1	Flush Mounted in wall box	No	3		
27.3.6.2	Mounted in floorbox	No	Rate		Rate Only
27.3.6.3	Surface mounted	No	Rate		Rate Only
27.3.6.4	Power skirting mounted	No	Rate		Rate Only
27.3.7	16 A, 3-pin double white SSO				
27.3.7.1	Flush Mounted	No	Rate		Rate Only
27.3.7.2	Surface mounted	No	Rate		Rate Only
27.3.8	16 A, 3-pin dedicated red SSO				
27.3.8.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
27.3.8.2	Mounted in floorbox	No	Rate		Rate Only
27.3.8.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
27.3.9	<u>Supply, Deliver and installation of Cu Conductors:</u>				
27.3.9.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	20		
	Installation	Meter	20		
27.3.9.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
27.3.9.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
27.3.9.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
27.3.9.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	10		
	Installation	Meter	10		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

MOEDWIL COMBINED SCHOOL - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.27.1 - DISTRIBUTION BOARDS	
2	BILL No.27.2 - LIGHTING INSTALLATION	
3	BILL No.27.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.27	

BILL NO. 28

BLOCK 25 - TYPE 1 HOSTEL

BLOCK 25 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.28.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
28.1.1	DB-25	No	1		
28.1.2	Lable all circuits and install signage to the panels	sum	1		
28.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 25 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.28.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
28.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	120		
28.2.1.1	Supply and delivery	Meter	120		
28.2.1.2	Installation				
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
20mm diameter					
28.2.2		Meter	200		
28.2.2.1	Supply and delivery	Meter	200		
28.2.2.2	Installation				
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
100 x 50 x 50 mm					
28.2.3		No	18		
28.2.3.1	Supply and delivery	No	18		
28.2.3.2	Installation				
65mm round box					
28.2.4		No	28		
28.2.4.1	Supply and delivery	No	28		
28.2.4.2	Installation	No	28		
ACCESSORIES					
Supply and Install accessories to boxes					
28.2.5		No	10		
28.2.5.1	5A, 3-pin socket outlets to trunking	No	16		
28.2.5.2	16Amp one lever one way light switch	No	2		
28.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
28.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
28.2.5.5	16Amp two lever two way light switch	No	1		
28.2.5.6	Photocell	No	6		
28.2.5.7	Ceiling mounted occupancy sensor				
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
4mm ² PVC insulated conductor					
28.2.6		Meter	Rate		Rate Only
28.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation				
2,5mm ² PVC insulated conductor					
28.2.6.2		Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation				
2,5mm ² Heat resistant conductor					
28.2.6.3		Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation				
2,5mm ² bare copper earth wire					
28.2.6.4		Meter	Rate		Rate Only
	Supply and delivery	Meter	Rate		Rate Only
	Installation				
1.5mm ² surfix twin and earth					
28.2.6.5		Meter	230		
	Supply and delivery	Meter	230		
	Installation				
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.28.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
28.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
28.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
28.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
28.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
28.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
28.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
28.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
28.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 25 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.28.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
28.3.1	20mm diameter				
28.3.1.1	Supply and delivery	Meter	220		
28.3.1.2	Installation	Meter	220		
28.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
28.3.3	100 x 100 x 50 mm				
28.3.3.1	Supply and delivery	No	25		
28.3.3.2	Installation	No	25		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
28.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
28.3.4.1	Flush Mounted in wall box	No	20		
28.3.4.2	Mounted in floorbox	No	Rate		Rate Only
28.3.4.3	Surface mounted	No	Rate		Rate Only
28.3.4.4	Power skirting mounted	No	Rate		Rate Only
28.3.5	16 A, 3-pin double white SSO				
28.3.5.1	Flush Mounted	No	Rate		Rate Only
28.3.5.2	Surface mounted	No	Rate		Rate Only
28.3.6	16 A, 3-pin dedicated red SSO				
28.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
28.3.6.2	Mounted in floorbox	No	Rate		Rate Only
28.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
28.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
28.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
28.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
28.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
28.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
28.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BLOCK 25 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.28.1 - DISTRIBUTION BOARDS	
2	BILL No.28.2 - LIGHTING INSTALLATION	
3	BILL No.28.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.28	

BILL NO. 29

BLOCK 26 - TYPE 1 HOSTEL

BLOCK 26 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.29.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commission Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
29.1.1	DB-26	No	1		
29.1.2	Lable all circuits and install signage to the panels	sum	1		
29.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 26 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.29.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
29.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	120		
29.2.1.1	Supply and delivery	Meter	120		
29.2.1.2	Installation	Meter	120		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
29.2.2	20mm diameter				
29.2.2.1	Supply and delivery	Meter	200		
29.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
29.2.3	100 x 50 x 50 mm				
29.2.3.1	Supply and delivery	No	18		
29.2.3.2	Installation	No	18		
29.2.4	65mm round box				
29.2.4.1	Supply and delivery	No	28		
29.2.4.2	Installation	No	28		
ACCESSORIES					
29.2.5	Supply and Install accessories to boxes				
29.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
29.2.5.2	16Amp one lever one way light switch	No	16		
29.2.5.3	16Amp one lever two way light switch	No	2		
29.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
29.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
29.2.5.6	Photocell	No	1		
29.2.5.7	Ceiling mounted occupancy sensor	No	6		
WIRING AND TERMINALS					
29.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
29.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
29.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
29.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
29.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
29.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	230		
	Installation	Meter	230		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.29.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
29.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
29.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
29.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	30		
29.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	12		
29.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	10		
29.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	4		
29.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	4		
29.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	8		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 26 - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.29.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
29.3.1	20mm diameter				
29.3.2.1	Supply and delivery	Meter	220		
29.3.2.2	Installation	Meter	220		
29.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	25		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
29.3.3	100 x 100 x 50 mm				
29.3.3.1	Supply and delivery	No	25		
29.3.3.2	Installation	No	25		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
29.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
29.3.4.1	Flush Mounted in wall box	No	20		
29.3.4.2	Mounted in floorbox	No	Rate		Rate Only
29.3.4.3	Surface mounted	No	Rate		Rate Only
29.3.4.4	Power skirting mounted	No	Rate		Rate Only
29.3.5	16 A, 3-pin double white SSO				
29.3.5.1	Flush Mounted	No	Rate		Rate Only
29.3.5.2	Surface mounted	No	Rate		Rate Only
29.3.6	16 A, 3-pin dedicated red SSO				
29.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
29.3.6.2	Mounted in floorbox	No	Rate		Rate Only
29.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
29.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
29.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
29.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
29.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
29.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
29.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL - TYPE 1A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.29.1 - DISTRIBUTION BOARDS	
2	BILL No.29.2 - LIGHTING INSTALLATION	
3	BILL No.29.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.29	

BILL NO. 30

BLOCK 27 - TYPE 2A HOSTEL

BLOCK 27 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.30.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
30.1.1	DB-27	No	1		
30.1.2	Lable all circuits and install signage to the panels	sum	1		
30.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 27 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.30.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
30.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
30.2.1.1	Supply and delivery	Meter	150		
30.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
30.2.2	20mm diameter				
30.2.2.1	Supply and delivery	Meter	200		
30.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
30.2.3	100 x 50 x 50 mm				
30.2.3.1	Supply and delivery	No	20		
30.2.3.2	Installation	No	20		
30.2.4	65mm round box				
30.2.4.1	Supply and delivery	No	30		
30.2.4.2	Installation	No	30		
ACCESSORIES					
30.2.5	Supply and Install accessories to boxes				
30.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
30.2.5.2	16Amp one lever one way light switch	No	61		
30.2.5.3	16Amp one lever two way light switch	No	2		
30.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
30.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
30.2.5.6	Photocell	No	1		
30.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
30.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
30.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
30.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
30.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
30.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
30.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.30.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
30.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
30.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
30.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
30.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
30.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
30.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
30.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
30.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 27 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.30.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
30.3.1	20mm diameter				
30.3.1.1	Supply and delivery	Meter	220		
30.3.1.2	Installation	Meter	220		
30.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
30.3.3	100 x 100 x 50 mm				
30.3.3.1	Supply and delivery	No	60		
30.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
30.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
30.3.4.1	Flush Mounted in wall box	No	56		
30.3.4.2	Mounted in floorbox	No	Rate		Rate Only
30.3.4.3	Surface mounted	No	Rate		Rate Only
30.3.4.4	Power skirting mounted	No	Rate		Rate Only
30.3.5	16 A, 3-pin double white SSO				
30.3.5.1	Flush Mounted	No	Rate		Rate Only
30.3.5.2	Surface mounted	No	Rate		Rate Only
30.3.6	16 A, 3-pin dedicated red SSO				
30.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
30.3.6.2	Mounted in floorbox	No	Rate		Rate Only
30.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
30.3.7	2.5mm ² PVC insulated conductor				
30.3.7.1	Supply and delivery	Meter	250		
	Installation	Meter	250		
30.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
30.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
30.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
30.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.30.1 - DISTRIBUTION BOARDS	
2	BILL No.30.2 - LIGHTING INSTALLATION	
3	BILL No.30.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.30	

BILL NO. 31

BLOCK 28 - TYPE 2A HOSTEL

BLOCK 28 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.31.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
31.1.1	DB-28	No	1		
31.1.2	Lable all circuits and install signage to the panels	sum	1		
31.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 28 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.31.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
31.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
31.2.1.1	Supply and delivery	Meter	150		
31.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
31.2.2	20mm diameter				
31.2.2.1	Supply and delivery	Meter	200		
31.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
31.2.3	100 x 50 x 50 mm				
31.2.3.1	Supply and delivery	No	20		
31.2.3.2	Installation	No	20		
31.2.4	65mm round box				
31.2.4.1	Supply and delivery	No	30		
31.2.4.2	Installation	No	30		
ACCESSORIES					
31.2.5	Supply and Install accessories to boxes				
31.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
31.2.5.2	16Amp one lever one way light switch	No	61		
31.2.5.3	16Amp one lever two way light switch	No	2		
31.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
31.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
31.2.5.6	Photocell	No	1		
31.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
31.2.6	4mm ² PVC insulated conductor				
31.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
31.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
31.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
31.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
31.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.31.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
LIGHT FITTINGS					
31.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
31.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
31.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
31.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
31.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
31.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
31.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
31.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 28 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.31.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
31.3.1	20mm diameter				
31.3.1.1	Supply and delivery	Meter	220		
31.3.1.2	Installation	Meter	220		
31.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
31.3.3	100 x 100 x 50 mm				
31.3.3.1	Supply and delivery	No	60		
31.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
31.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
31.3.4.1	Flush Mounted in wall box	No	56		
31.3.4.2	Mounted in floorbox	No	Rate		Rate Only
31.3.4.3	Surface mounted	No	Rate		Rate Only
31.3.4.4	Power skirting mounted	No	Rate		Rate Only
31.3.5	16 A, 3-pin double white SSO				
31.3.5.1	Flush Mounted	No	Rate		Rate Only
31.3.5.2	Surface mounted	No	Rate		Rate Only
31.3.6	16 A, 3-pin dedicated red SSO				
31.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
31.3.6.2	Mounted in floorbox	No	Rate		Rate Only
31.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
31.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
31.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
31.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
31.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
31.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
31.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 28 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER AMOUNT
1	BILL No.31.1 - DISTRIBUTION BOARDS	
2	BILL No.31.2 - LIGHTING INSTALLATION	
3	BILL No.31.3: SMALL POWER INSTALLATION	
4	TOTAL FRO BILL No.31	

BILL NO. 32

BLOCK 29 - TV ROOM

BLOCK 29 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.32.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
32.1.1	DB-29	No	1		
32.1.2	Lable all circuits and install signage to the panels	sum	1		
32.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 29 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.32.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
32.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
32.2.1.1	Supply and delivery	Meter	20		
32.2.1.2	Installation	Meter	20		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
32.2.2	20mm diameter				
32.2.2.1	Supply and delivery	Meter	60		
32.2.2.2	Installation	Meter	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
32.2.3	100 x 50 x 50 mm				
32.2.3.1	Supply and delivery	No	4		
32.2.3.2	Installation	No	4		
32.2.4	65mm round box				
32.2.4.1	Supply and delivery	No	16		
32.2.4.2	Installation	No	16		
ACCESSORIES					
32.2.5	Supply and Install accessories to boxes				
32.2.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
32.2.5.2	16Amp one lever one way light switch	No	2		
32.2.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
32.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
32.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
32.2.5.6	Photocell	No	1		
32.2.5.7	Ceiling mounted occupancy sensor	No	2		
WIRING AND TERMINALS					
32.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
32.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
32.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
32.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
32.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
32.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	60		
	Installation	Meter	60		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.32.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
32.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
32.2.7.1	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	4		
32.2.7.2	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	24		
32.2.7.3	TYPE P2 -Wall mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	2		
32.2.7.4	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	6		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 29 - TV ROOM

SUBJECT : BILL OF QUANTITIES

BILL No.32.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREFWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
32.3.1	20mm diameter				
32.3.1.1	Supply and delivery	Meter	Rate		Rate Only
32.3.1.2	Installation	Meter	Rate		Rate Only
32.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	10		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
32.3.3	100 x 100 x 50 mm				
32.3.3.1	Supply and delivery	No	80		
32.3.3.2	Installation	No	80		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
32.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
32.3.4.1	Flush Mounted in wall box	No	10		
32.3.4.2	Mounted in floorbox	No	Rate		Rate Only
32.3.4.3	Surface mounted	No	Rate		Rate Only
32.3.4.4	Power skirting mounted	No	Rate		Rate Only
32.3.5	16 A, 3-pin double white SSO				
32.3.5.1	Flush Mounted	No	Rate		Rate Only
32.3.5.2	Surface mounted	No	Rate		Rate Only
32.3.6	16 A, 3-pin dedicated red SSO				
32.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
32.3.6.2	Mounted in floorbox	No	Rate		Rate Only
32.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
32.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
32.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	120		
	Installation	Meter	120		
32.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
32.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
32.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
32.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	60		
	Installation	Meter	60		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 29 - TV ROOM

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.32.1 - DISTRIBUTION BOARDS	
2	BILL No.32.2 - LIGHTING INSTALLATION	
3	BILL No.32.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.32	

BILL NO. 33

BLOCK 30 - TYPE 2A HOSTEL

BLOCK 30 - TYPE 2A HOSTEL**SUBJECT : BILL OF QUANTITIES****BILL No.33.1 - DISTRIBUTION BOARDS**

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
33.1.1	DB-30	No	1		
33.1.2	Lable all circuits and install signage to the panels	sum	1		
33.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 30 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.33.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
33.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	150		
33.2.1.1	Supply and delivery	Meter	150		
33.2.1.2	Installation				
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
33.2.2	20mm diameter				
33.2.2.1	Supply and delivery	Meter	200		
33.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
33.2.3	100 x 50 x 50 mm				
33.2.3.1	Supply and delivery	No	20		
33.2.3.2	Installation	No	20		
33.2.4	65mm round box				
33.2.4.1	Supply and delivery	No	30		
33.2.4.2	Installation	No	30		
ACCESSORIES					
33.2.5	Supply and Install accessories to boxes				
33.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
33.2.5.2	16Amp one lever one way light switch	No	61		
33.2.5.3	16Amp one lever two way light switch	No	2		
33.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
33.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
33.2.5.6	Photocell	No	1		
33.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
33.2.6	4mm ² PVC insulated conductor				
33.2.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
33.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
33.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
33.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
33.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.33.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
33.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
33.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
33.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
33.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
33.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
33.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
33.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
33.2.7.6	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 30 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.33.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
33.3.1	20mm diameter				
33.3.1.1	Supply and delivery	Meter	220		
33.3.1.2	Installation	Meter	220		
33.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
33.3.3	100 x 100 x 50 mm				
33.3.3.1	Supply and delivery	No	60		
33.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
33.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
33.3.4.1	Flush Mounted in wall box	No	56		
33.3.4.2	Mounted in floorbox	No	Rate		Rate Only
33.3.4.3	Surface mounted	No	Rate		Rate Only
33.3.4.4	Power skirting mounted	No	Rate		Rate Only
33.3.5	16 A, 3-pin double white SSO				
33.3.5.1	Flush Mounted	No	Rate		Rate Only
33.3.5.2	Surface mounted	No	Rate		Rate Only
33.3.6	16 A, 3-pin dedicated red SSO				
33.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
33.3.6.2	Mounted in floorbox	No	Rate		Rate Only
33.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
33.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
33.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
33.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
33.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
33.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
33.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 30 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.33.1 - DISTRIBUTION BOARDS	
2	BILL No.33.2 - LIGHTING INSTALLATION	
3	BILL No.33.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.33	

BILL NO. 34

BLOCK 31 - TYPE 2A HOSTEL

BLOCK 31 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.34.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
34.1.1	DB-31	No	1		
34.1.2	Lable all circuits and install signage to the panels	sum	1		
34.1.3	Certificate of Compliance	sum	1		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 31 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.34.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
34.2.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
34.2.1.1	Supply and delivery	Meter	150		
34.2.1.2	Installation	Meter	150		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
34.2.2	20mm diameter				
34.2.2.1	Supply and delivery	Meter	200		
34.2.2.2	Installation	Meter	200		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
34.2.3	100 x 50 x 50 mm				
34.2.3.1	Supply and delivery	No	20		
34.2.3.2	Installation	No	20		
34.2.4	65mm round box				
34.2.4.1	Supply and delivery	No	30		
34.2.4.2	Installation	No	30		
ACCESSORIES					
34.2.5	Supply and Install accessories to boxes				
34.2.5.1	5A, 3-pin socket outlets to trunking	No	10		
34.2.5.2	16Amp one lever one way light switch	No	61		
34.2.5.3	16Amp one lever two way light switch	No	2		
34.2.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
34.2.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
34.2.5.6	Photocell	No	1		
34.2.5.7	Ceiling mounted occupancy sensor	No	8		
WIRING AND TERMINALS					
34.2.6	<u>Supply, Deliver and installation of Cu Conductors:</u>				
34.2.6.1	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
34.2.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
34.2.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
34.2.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
34.2.6.5	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.34.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
34.2.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
34.2.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	2		
34.2.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	15		
34.2.7.3	TYPE F02 - 1200mm, 30W surface mounted LED vapor proof light fitting with self-extinguishing polycarbonate body	No	30		
34.2.7.4	TYPE P1 - 127mm diameter ,21W Adjustable-angle LED downlight fitting with die-cast aluminium bod	No	5		
34.2.7.5	TYPE P2 - Ceiling mounted LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp - Emergency type with backup power	No	8		
34.2.7.6	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	7		
34.2.7.7	TYPE D1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens, 6W warm white	No	44		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

BLOCK 31 - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

BILL No.34.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
34.3.1	20mm diameter				
34.3.1.1	Supply and delivery	Meter	220		
34.3.1.2	Installation	Meter	220		
34.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	60		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
34.3.3	100 x 100 x 50 mm				
34.3.3.1	Supply and delivery	No	60		
34.3.3.2	Installation	No	60		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
34.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
34.3.4.1	Flush Mounted in wall box	No	56		
34.3.4.2	Mounted in floorbox	No	Rate		Rate Only
34.3.4.3	Surface mounted	No	Rate		Rate Only
34.3.4.4	Power skirting mounted	No	Rate		Rate Only
34.3.5	16 A, 3-pin double white SSO				
34.3.5.1	Flush Mounted	No	Rate		Rate Only
34.3.5.2	Surface mounted	No	Rate		Rate Only
34.3.6	16 A, 3-pin dedicated red SSO				
34.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
34.3.6.2	Mounted in floorbox	No	Rate		Rate Only
34.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
34.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
34.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	250		
	Installation	Meter	250		
34.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
34.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
34.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
34.3.7.5	2.5mm ² bare copper earth wire				
	Supply and delivery	Meter	125		
	Installation	Meter	125		
TOTAL BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL - TYPE 2A HOSTEL

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.34.1 - DISTRIBUTION BOARDS	
2	BILL No.34.2 - LIGHTING INSTALLATION	
3	BILL No.34.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.34	

BILL NO. 35

BLOCK 33 - GUARD HOUSE

BLOCK 33 - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.35.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
35.1.1	DB-33	No	1		
35.1.2	Lable all circuits and install signage to the panels	sum	1		
35.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 33 - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.35.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
35.3.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.				
35.3.1.1	Supply and delivery	Meter	Rate		
35.3.1.2	Installation	Meter	Rate		
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
35.3.2	20mm diameter				
35.3.2.1	Supply and delivery	Meter	20		
35.3.2.2	Installation	Meter	20		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
35.3.3	100 x 50 x 50 mm				
35.3.3.1	Supply and delivery	No	2		
35.3.3.2	Installation	No	2		
35.3.4	65mm round box				
35.3.4.1	Supply and delivery	No	8		
35.3.4.2	Installation	No	8		
ACCESSORIES					
35.3.5	Supply and Install accessories to boxes				
35.3.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
35.3.5.2	16Amp one lever one way light switch	No	2		
35.3.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
35.3.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
35.3.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
35.2.5.7	Photocell	No	1		
35.2.5.8	Ceiling mounted occupancy sensor	No	1		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
35.3.6	4mm ² PVC insulated conductor				
35.3.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
35.3.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
35.3.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
35.3.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
35.3.6.4	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	20		
	Installation	Meter	20		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.35.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
35.3.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
35.3.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	1		
35.3.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	1		
35.3.7.3	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 33 - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.35.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
35.3.1	20mm diameter				
35.3.1.1	Supply and delivery	Meter	Rate		Rate Only
35.3.1.2	Installation	Meter	Rate		Rate Only
35.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	5		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
35.3.3	100 x 100 x 50 mm				
35.3.3.1	Supply and delivery	No	20		
35.3.3.2	Installation	No	20		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
35.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
35.3.4.1	Flush Mounted in wall box	No	3		
35.3.4.2	Mounted in floorbox	No	Rate		Rate Only
35.3.4.3	Surface mounted	No	Rate		Rate Only
35.3.4.4	Power skirting mounted	No	Rate		Rate Only
35.3.5	16 A, 3-pin double white SSO				
35.3.5.1	Flush Mounted	No	Rate		Rate Only
35.3.5.2	Surface mounted	No	Rate		Rate Only
35.3.6	16 A, 3-pin dedicated red SSO				
35.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
35.3.6.2	Mounted in floorbox	No	Rate		Rate Only
35.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
35.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
35.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	20		
	Installation	Meter	20		
35.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
35.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
35.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
35.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	10		
	Installation	Meter	10		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK 33 - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.35.1 - DISTRIBUTION BOARDS	
2	BILL No.35.2 - LIGHTING INSTALLATION	
3	BILL No.35.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.35	

BILL NO. 36

BLOCK M - GUARD HOUSE

BLOCK M - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.35.1 - DISTRIBUTION BOARDS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
	Supply, Install, test and commision Sub-distribution boards - surface mounted distribution board cupboards, c/w all switchgear and breakers indicated on the drawings				
36.1.1	DB-M	No	1		
36.1.2	Lable all circuits and install signage to the panels	sum	1		
36.1.3	Certificate of Compliance	sum	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK M - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.35.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply and Install Trunking</u>					
36.3.1	Supply and install P8300 trunking suspended from slab and trusses in ceiling void.	Meter	Rate		Rate Only
36.3.1.1	Supply and delivery	Meter	Rate		Rate Only
36.3.1.2	Installation	Meter	Rate		Rate Only
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
36.3.2	20mm diameter				
36.3.2.1	Supply and delivery	Meter	20		
36.3.2.2	Installation	Meter	20		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted</u>					
36.3.3	100 x 50 x 50 mm				
36.3.3.1	Supply and delivery	No	2		
36.3.3.2	Installation	No	2		
36.3.4	65mm round box				
36.3.4.1	Supply and delivery	No	8		
36.3.4.2	Installation	No	8		
ACCESSORIES					
36.3.5	Supply and Install accessories to boxes				
36.3.5.1	5A, 3-pin socket outlets to trunking	No	Rate		Rate Only
36.3.5.2	16Amp one lever one way light switch	No	2		
36.3.5.3	16Amp one lever two way light switch	No	Rate		Rate Only
36.3.5.4	16Amp two lever one way light switch	No	Rate		Rate Only
36.3.5.5	16Amp two lever two way light switch	No	Rate		Rate Only
36.3.5.6	Photocell	No	1		
36.3.5.7	Ceiling mounted occupancy sensor	No	1		
WIRING AND TERMINALS					
<u>Supply, Deliver and installation of Cu Conductors:</u>					
36.3.6	4mm ² PVC insulated conductor				
36.3.6.1	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
36.3.6.2	2,5mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
36.3.6.3	2,5mm ² Heat resistant conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
36.3.6.4	2,5mm ² bare copper earth wire				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
36.3.6.4	1.5mm ² surfix twin and earth				
	Supply and delivery	Meter	20		
	Installation	Meter	20		
SUB-TOTAL FOR THIS PAGE CARRIED FORWARD					

BILL No.35.2 - LIGHTING INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
SUB-TOTAL FROM PREVIOUS PAGE					
	LIGHT FITTINGS				
36.3.7	<u>Supply, deliver, install, connect, test and commissioning the following light fittings</u>				
36.3.7.1	TYPE F01 - 1200mm, 20W surface mounted LED batten light fitting with rolled mild steel body and a white epoxy powder coated finish	No	1		
36.3.7.2	TYPE C1 - 83mm diameter LED downlight ceiling recessed Die-cast aluminium body with acrylic lens(8w cool white)	No	1		
36.3.7.3	TYPE W1 - Wall mounted bulkhead LED light fitting with LM6 die cast and extruded aluminium body and opal acrylic diffuser fitted with 17W LED lamp	No	1		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK M - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

BILL No.35.3: SMALL POWER INSTALLATION

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
WIREWAYS					
<u>Supply, delivery and installation of PVC conduits, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>					
36.3.1	20mm diameter				
36.3.1.1	Supply and delivery	Meter	Rate		Rate Only
36.3.1.2	Installation	Meter	Rate		Rate Only
36.3.2	<u>Supply and install conduit droppers chased or built into wall, consisting of 3 x 25mm dia & 2 x 20mm dia from wire basket & trunking in ceiling void to power skirting c/w 1.6mm draw wires</u>	No	5		
<u>Supply, delivery and installation of Conduit outlets boxes c/w locknuts and bushes built into brick or cast into concrete or surface mounted, c/w applicable cover</u>					
36.3.3	100 x 100 x 50 mm				
36.3.3.1	Supply and delivery	No	20		
36.3.3.2	Installation	No	20		
ACCESSORIES					
<u>Supply, delivery and installation of socket outlets</u>					
36.3.4	16 A, 3-pin standard white SSO plus triple slimline 16A type 164-2				
36.3.4.1	Flush Mounted in wall box	No	3		
36.3.4.2	Mounted in floorbox	No	Rate		Rate Only
36.3.4.3	Surface mounted	No	Rate		Rate Only
36.3.4.4	Power skirting mounted	No	Rate		Rate Only
36.3.5	16 A, 3-pin double white SSO				
36.3.5.1	Flush Mounted	No	Rate		Rate Only
36.3.5.2	Surface mounted	No	Rate		Rate Only
36.3.6	16 A, 3-pin dedicated red SSO				
36.3.6.1	Flush Mounted in 100 X 100 (HVAC)	No	Rate		Rate Only
36.3.6.2	Mounted in floorbox	No	Rate		Rate Only
36.3.6.3	Power skirting mounted, 45 degree (including plug top)	No	Rate		Rate Only
WIRING AND TERMINALS					
36.3.7	<u>Supply, Deliver and installation of Cu Conductors:</u>				
36.3.7.1	2.5mm ² PVC insulated conductor				
	Supply and delivery	Meter	20		
	Installation	Meter	20		
36.3.7.2	4mm ² PVC insulated conductor				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
36.3.7.3	4mm ² 4 core Surfex (For HVAC)				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
36.3.7.4	2.5mm ² PVC insulated earth				
	Supply and delivery	Meter	Rate		Rate Only
	Installation	Meter	Rate		Rate Only
36.3.7.5	1.5mm ² bare copper earth wire				
	Supply and delivery	Meter	10		
	Installation	Meter	10		
TOTAL FOR BILL CARRIED FORWARD TO SUMMARY					

BLOCK M - GUARD HOUSE

SUBJECT : BILL OF QUANTITIES

SUMMARY OF SCHEDULE OF QUANTITIES

ITEM	DESCRIPTION	TENDER
1	BILL No.35.1 - DISTRIBUTION BOARDS	
2	BILL No.35.2 - LIGHTING INSTALLATION	
3	BILL No.35.3: SMALL POWER INSTALLATION	
4	TOTAL FOR BILL No.35	

MOEDWIL COMBINED SCHOOL

SUBJECT : BILL OF QUANTITIES

BILL No.37 - SECURITY

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
37.1	<u>Supply, delivery and installation of PVC conduit, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>				
37.1.1	32mm diameter				
37.1.1.1	Supply and delivery	Meter	220		
37.1.1.2	Installation	Meter	680		
37.1.2	25mm diameter				
37.1.2.1	Supply and delivery	Meter	240		
37.1.2.2	Installation	Meter	240		
37.2	<u>Supply, installation and delivery of P2000 trunking in ceiling void</u>				
37.2.1	Supply and delivery	Meter	80		
37.2.2	Installation	Meter	80		
37.3	<u>Supply, delivery and installation of Conduit outlets boxes</u>				
37.3.1	50mm Round box				
37.3.1.1	Supply and delivery	No	50		
37.3.1.2	Installation	No	50		
37.3.2	100 x 100 x 50 mm				
37.3.2.1	Supply and delivery	No	40		
37.3.2.2	Installation	No	40		
37.3	Fingerprint reader				
37.3.1.1	Supply and delivery		25		
37.3.1.2	Installation		25		
37.4	Magnetic Lock				
37.4.1	Supply and delivery		22		
37.4.2	Installation		22		
37.5	Access Control Management system				
37.5.1	Supply and delivery		2		
37.5.2	Installation		2		
37.6	Access Gates				
37.6.1	Supply and delivery		3		
37.6.2	Installation		3		
TOTAL FOR BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL

SUBJECT : BILL OF QUANTITIES

BILL No.38 - VOICE/DATA

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
38.1	<u>Supply, delivery and installation of PVC conduit, surface mounted in ceiling voids and fixed to walls or cast-in or built into walls, including all fixing materials, bends, terminations, draw boxes, etc.</u>				
38.1.1	32mm diameter				
38.1.1.1	Supply and delivery	Meter	580		
38.1.1.2	Installation	Meter	580		
38.1.2	25mm diameter				
38.1.2.1	Supply and delivery	Meter	950		
38.1.2.2	Installation	Meter	950		
38.2	<u>Supply, installation and delivery of 300mm wire basket in ceiling void c/w offsets, bends etc.</u>				
38.2.1	Supply and delivery	Meter	440		
38.2.2	Installation	Meter	440		
38.3	<u>Supply, delivery and installation of Conduit outlets boxes</u>				
38.3.1	50mm Round box				
38.3.1.1	Supply and delivery	No	165		
38.3.1.2	Installation	No	165		
38.3.2	100 x 100 x 50 mm				
38.3.2.1	Supply and delivery	No	232		
38.3.2.2	Installation	No	232		
38.4	<u>Supply and installation of power skirting mounted voice / data accessories</u>				
38.4.1	Blank cover plate suitable for RJ 11 telephone outlet	No	50		
38.4.2	Blank cover plate suitable for RJ 45 data outlet	No	40		
38.5	Supply and installation of full PA system by specialist	Set	1		
TOTAL FOR BILL CARRIED FORWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL

SUBJECT : BILL OF QUANTITIES

BILL No.39 - STANDBY POWER & UPS

ITEM	DESCRIPTION	UNIT	QTY	TENDER VALUE	
				RATE	AMOUNT
39.1	Supply, Delivery, Installation and Commissioning of 550kVA Standby generator including standby 1000litre diesel fuel tank and sound attenuated canopy. Installation must include Automatic Changeover Panel as indicated in the SLD 1011-E-101	Sum	2		
39.2	Supply and install UPS 20kVA	Sum	1		
TOTAL FOR BILL CARRIED FROWARD TO TENDER SUMMARY					

MOEDWIL COMBINED SCHOOL**SUBJECT : BILL OF QUANTITIES****SUMMARY OF SCHEDULE OF QUANTITIES**

DESCRIPTION		TENDER AMOUNT
1	PRELIMINARIES	
2	MEDIUM VOLTAGE DISTRIBUTION	
3	LOW VOLTAGE DISTRIBUTION	
4	EXTERNAL LIGHTING	
5	BLOCK 1 - TYPE 2 HOSTEL	
6	BLOCK 2 - TYPE 2 HOSTEL	
7	BLOCK 3 - TV ROOM	
8	BLOCK 4 - TYPE 2 HOSTEL	
9	BLOCK 5 - TYPE 2 HOSTEL	
10	BLOCK 6 - TYPE 1 HOSTEL	
11	BLOCK 7 - TYPE 2 HOSTEL	
12	BLOCK 8 - TYPE 2 HOSTEL	
13	BLOCK 9 - TV ROOM	
14	BLOCK 10 - TYPE 1 HOSTEL	
15	BLOCK 11 - TYPE 1 HOSTEL	
16	BLOCK 12 - TYPE 1 HOSTEL	
17	BLOCK 14 - HOSTEL MASTER	
18	BLOCK 15 - HOSTEL ADMINISTRATION	
19	BLOCK 16 - STAFF HOUSE	
20	BLOCK 17 - STAFF HOUSE	
21	BLOCK 18 - STAFF HOUSE	
22	BLOCK 19 - STAFF HOUSE	
23	BLOCK 20 - TV ROOM	
24	BLOCK 21 - TYPE 1 HOSTEL	
25	BLOCK 22 - TYPE 1 HOSTEL	
26	BLOCK 23 - HOSTEL MASTER	

27	BLOCK 24 - GUARD HOUSE	
28	BLOCK 25 - TYPE 1 HOSTEL	
29	BLOCK 26 - TYPE 1 HOSTEL	
30	BLOCK 27 - TYPE 2 HOSTEL	
31	BLOCK 28 - TYPE 2 HOSTEL	
32	BLOCK 29 - TV ROOM	
33	BLOCK 30 - TYPE 2 HOSTEL	
34	BLOCK 31 - TYPE 2 HOSTEL	
35	BLOCK 33 - GUARD HOUSE	
36	BLOCK M - GUARD HOUSE	
37	SECURITY	
38	VOICE/DATA	
39	STANDBY POWER	
39	Sub Total 1	
40	CONTINGENCY @ 10%	
41	Sub Total 2	
42	Add 15% VAT	
43	TOTAL FIXED AND FIRM PRICE	

TENDER :

NAME :

ADDRESS :

.....

TELEPHONE No :

.....
DATE

.....
SIGNATURE