

TENDER NO. SSSCT/PROC/24-25/E&P/029

Date: 25-11-2024

TENDER DOCUMENT

SRI SATHYA SAI CENTRAL TRUST
PRASANTHI NILAYAM, PUTTAPARTHI



WORKS TENDER NOTIFICATION

ELECTRICAL (INSTALLATION), WORKS W.R.T DORMITORIES CUM
ROOMS BLOCK PRASANTHI NILAYAM

Address for communication:

SRI SATHYA SAI CENTRAL TRUST

PRASANTHI NILAYAM,
PUTTAPARTHI

SRI SATHYA SAI DISTRICT

ANDHRA PRADESH – 515134.

Website: www.srisathyasai.org

Email: ce@mail.sssct.org

Aum Sri Sairam

**Sri Sathya Sai Central Trust, Prasanthi Nilayam Puttaparthi, Sri Sathya Sai District, A.P.
- 515134**

TENDER DOCUMENT

Tender Notice Number: SSSCT/PROC/24-25/E&P/029

**Name of work: Electrical (Installation), Works w.r.t Dormitories Cum
Rooms Block Prasanthi Nilayam– Estimated cost Rs.93 Lakhs**

On behalf of Sri Sathya Sai Central Trust, Prasanthi Nilayam Sri Sathya Sai District here-in-after mentioned as the Owner, you are hereby invited to bid Electrical Works W.R.T for Dormitories Cum Rooms Block Prasanthi Nilayam.

1. Scope of work: Electrical (Installation) works of the above mentioned work as per BOQ and the specification provided along with this tender document.
2. The documents comprising the tender, are
 - A) Notice inviting tender
 - B) General conditions of contract (GCC)
 - C) Special conditions of contract (SCC)
 - D) List of materials to be used.
 - E) Site visit declaration.
 - F) Bill of quantities (BOQ)
3. The Bidder shall furnish the following documents soft copy through mail i,e tenders@mail.sssct.org and hard copy need to be sent to the following address i.e. Chief Engineer, Sri Sathya Sai Central Trust, Prasanthi Nilayam A.P. 515134 on or before 09-Decemebr-2024
 - i) Covering letter
 - ii) BOQ duly filled and signed by the bidder
 - iii) Declaration of site inspection by the bidder before quoting the tender.
 - iv) Acceptance of general conditions of the contract, duly signed.
4. The last date of submission of the tender is 09-December-2024 at 11.00 AM

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I-WORKS BID

INVITATION OF BIDS FOR THE ELECTRICAL (INSTALLATION), WORK w.r.t DORMITORIES CUM ROOMS BLOCK PRASANTHI NILAYAM

The Sri Sathya Sai Central Trust, Prasanthi Nilayam, Puttaparthi, Andhra Pradesh hereby invites tender from for the said work as per the specifications. "Interested parties who wishes to participants may submit their bids as per process mentioned here under"

To:

**The Chief Engineer,
Sri Sathya Sai Central Trust, Prasanthi Nilayam
Puttaparthi, Sri Sathya Sai District,
Andhra Pradesh. Pin: 515134**

Sl. No	Bid issue	Description
1	Tender Inviting Authority	Chief Engineer, Sri Sathya Sai Central Trust
2	Name of the Work	Electrical (Installation) Works w.r.t Dormitories Cum Rooms Block Prasanthi Nilayam
3.	Place at which Tender documen tavailable	Tender Document can be downloaded from Website: http://tenders.sssct.org/Electrical_works_at_DCRB_PSN.pdf
4.	Earnest Money Deposit (EMD)	<p>Estimated Value of the Bid Rs. 93Lakhs EMD: 93,000/- (Rupees Ninety Three thousand only) To be paid by all the Bidders by bank Transfer as per the details below, at the time of submission of tender bid.</p> <p>SSSCT PROJECTS-INDIAN FUNDS UTILIZATION</p> <p>A/C No: 39117267217. IFSCODE:SBIN0010480</p> <p>STATE BANK OF INDIA, PRASANTHI NILAYAM</p>

	PARTS	BID value	EMD 1%
	PART-A	26L	26,000/-
	PART-B	22L	22,000/-
	PART-C	45L	45,000/-
	TOTAL	93L	93,000/-

5.	Security Deposit	Further Security Deposit of 1.5% is to be paid by the selected Bidder
6.	Last Date for Submission of Bid	09.12.2024 (Until 11.00 AM)

1. PROCEDURE FOR BID SUBMISSION:

The Bidder shall submit the Bids on or before 09.12.2024 (Until 11:00 AM) To the Tender Inviting Authority as per the procedure detailed below:

- a. The Bidders shall submit their Bid in a sealed cover along with all the documents as per the Works Bid Invitation along with the Bid.
- b. The Bidder shall sign on all the statements, documents, certificates, and sent by the, owning responsibility for their correctness / authenticity.

2. TENDER DOCUMENT:

The Bidder is requested to download the Tender Document and read all the terms and conditions mentioned in the Tender Document and seek clarification if any, from the Tender Inviting Authority through e mail: ce@mail.sssct.org

- 3. LATE BIDS:** Sri Sathya Sai Central Trust will not accept any bid after the deadline for submission of bids.

II. GENERAL CONDITIONS OF CONTRACT

1. DEFINITIONS

In this Contract, the following terms shall be interpreted as indicated:

A .“The Contract” means the agreement entered into between the Sri Sathya Sai Central Trust and Contractor as recorded in the contract form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;

B .“The Contact Price” means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligation;

C .“Services” means services ancillary to the work, such as transportation and insurance, and all other incidental services, such as commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract;

D “GCC” means the General Conditions of Contract contained in this section;

E “SCC” means the Special Conditions of Contract;

F. “The Contractor” means the Bidder selected for and services under this Contract.

G. “The Trust” means the Sri Sathya Sai Central Trust, the tender Inviting Authority for the work.

2. CHANGE OF ORDERS:

The Trust may, at any point of time, by written order given to the Contractor make changes modifications within the general scope of the contract in any one or more of the following:

A .The scope of work;

B .The specifications of work; and / or

c. The services to be provided by the Contractor

3. APPLICABLE LAWS:

The contract shall be interpreted in accordance with the prevailing laws of the Government of Andhra Pradesh and Union of India.

4. NOTICES:

Any notice given by the Trust to the Contractor pursuant to this Contract shall be sent in writing or by e-mail and/or confirmed in writing to the Contractor's address specified in Contract.

A notice shall be effective when delivered or on the notice's effective date, whichever is later.

5. AGREEMENT:

The successful Bidder(s) shall execute an agreement for the fulfilment of the contract on **Rs.100/-** non-judicial stamp paper in the prescribed format provided, within seven days from the date of acceptance of the Bid and intimation of the award of Contract.

The incidental expenses of execution of agreement shall be borne by the successful Bidder(s).

The conditions stipulated in the agreement should be strictly adhered to and violation of any of the conditions in full or in part will entail termination of the Contract without prejudice to the rights of The Trust towards Contractor and recovery of any consequential loss from the Contractor.

6. CHANGE OF SPECIFICATIONS:

No change of specifications after the placement of Order shall be entertained unless the alternate model offered is equivalent or higher in specifications and approval of the Competent Authority has been obtained in writing for such a change of model before execution of the work. Execution of work without such an approval shall not be accepted.

7. CONFLICT OF INTEREST.

Any Bidder having a conflict of interest, which substantially affects fair competition, shall not be eligible to bid in this tender. Bids found to have a conflict of interest shall be rejected as non-responsive. Bidder shall be required to declare the absence of such conflict of interest. A Bidder in this Tender Process shall be considered to have a conflict of interest if the Bidder:

- i. Directly or indirectly controls and/is controlled by or is under common control with another Bidder; or
- ii .Receives or have received any direct or indirect subsidy/ financial stake from another Bidder; or
- iii. Has the same legal representative/ agent as another Bidder for purposes of this bid. A Principal can authorize only one agent, and an agent also should not represent or quote on behalf of more than one Principal or
- iv. Has a relationship with another bidder, directly or through common third parties, that puts it in a position to have access to information about or influence the bid of another Bidder or influence the decisions of the Procuring Entity regarding this Tender process; or
- v. Participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as sub-contractor in another bid or vice-versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of a non-bidder firm as a sub-contractor in more than one bid; or
- vi. Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services that it provided (or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm), for the procurement planning (inter-alia preparation of feasibility/ cost estimates/ Detailed Project Report (DPR), design/ technical specifications, terms of reference (ToR)/ Activity Schedule/ schedule of requirements or the Tender Document etc) of this Tender process; or
- vii. Has a close business or family relationship with a staff of the Procuring Organisation who: (i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Tender Process, and/or the evaluation of bids; or (ii) would be involved in the implementation or supervision of

resulting Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the Tender process and execution of the Contract.

The Bidder shall go through instructions, terms and conditions given in this tender document. Failure to furnish all the requisite information called for in this Tender will be at the Bidders' risk and may result in rejection of the tender. The Bidder shall download the tender document, sign and send again by e-mail confirming that the Bidder has gone through all the terms and conditions of the tender.

8. AMENDMENT OF BIDDING DOCUMENTS

At any time prior to the deadline for submission of bids, the Sri Sathya Sai Central Trust may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the bidding documents by amendment.

Any such amendment/ corrigendum shall be posted on the Sri Sathya Sai Central Trust website only and no other communication shall be made to any firm in this regard.

In order to allow prospective Bidders reasonable time, in which to take the amendment into account in preparing their bids, the Sri Sathya Sai Central Trust, at its discretion, may extend the deadline for the submission of bids.

9. LANGUAGE OF BID

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Sri Sathya Sai Central Trust shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the translation shall govern.

10. FORUM FOR LEGAL PROCEEDINGS:

In all cases of disputes, the decision of the Tender Inviting Authority shall be final. Any dispute or difference or any matter arising out of contract or incidentals thereto under this enquiry shall be subjected to jurisdiction of a competent Court of Law in Puttaparthi in Andhra Pradesh alone and not in any other place.

11. ACCEPTANCE or REJECTION OF BIDS:

A .The Tender Inviting Authority reserves the right to accept or reject any or all bids and to annul the bidding process at any time prior to award of contract, without thereby incurring any liability or any obligation to inform the affected Bidder or Bidders of the grounds for the said action.

B .Any Bid with incomplete information is liable for rejection.

C .For each category of pre-qualification criteria, the documentary evidence is to be produced duly attested by the Bidder, serially numbered and enclosed with the bids. If the documentary proof is not

enclosed for any/all criteria the Bid is liable for rejection.

If any information given by the Bidder is found to be false / fictitious, the Bidder will be debarred for 2 years from participating in any other tenders and will be blacklisted.

12. OTHER IMPORTANT CONDITIONS:

1. Validity of offer: The prices quoted must be FIRM and the offers made must remain open for acceptance for 90 days from the date of opening of Tender.
2. Payment Terms: Payment will be released within 15 days after receipt of the certified bill.
3. The Trust will not issue any statutory forms like, Form C, Form D, Way bill etc., and this should be taken into account by the Contractor while quoting the rates.
4. The Tender Quantity is Tentative. It can be increased or decreased at the discretion of the Trust.
5. After finalization of Tender, a work completion schedule shall be submitted by the Contractor which can be revised by the Trust.
6. Penal clauses of the Contractor whatsoever like payment of interest on late payment of bills etc. shall not be acceptable to Sri Sathya Sai Central Trust.
7. Impermissible variations to specifications of work will be viewed seriously and will lead to black-listing.
8. The Trust reserves the right to override all the terms and conditions of the tender at any moment. It may reject any tender without assigning any reasons thereof and the same shall not be questioned in any court of law on any ground, whatsoever.
9. TAXES: TDS as applicable under the Income Tax Act will be deducted from all payments made to the contractor.

10. DISCIPLINE AND BEHAVIOUR OF WORKMEN: The Contractor shall ensure proper decorum, discipline and decency within the premises of the Institution. Smoking, consumption or possession of alcoholic drinks, and non-vegetarian food items within the premises are prohibited.

11. STATUTORY REQUIREMENTS: All necessary permits, licenses, registration and other Environment / Planning-related clearance needed for the works will be arranged by the Trust, assisted by the Contractor in respect of provision of the required data.
- 12 ASSIGNMENT AND SUBLETTING: The Contractor shall not assign or sub-contract any part of the work to another agency without prior written approval of the Trust.

13. LIQUIDATED DAMAGES: The Contractor undertakes to complete the work within the stipulated period. In case there are delays not attributable to Force Majeure, and without acceptable justification, the Trust can issue a notice of 15 days to the Contractor to make up the delay, and if there is still a delay, the Trust reserves the right to levy Liquidated Damages to the extent of 2% of the contract value per week of delay. If and when the Liquidated Damages reach a limit 10%, the Trust shall be entitled to determine the Contract and get the work carried out by another agency, with any relevant costs in excess of the contracted value accruing to the Contractor's account

14. LABOUR LAWS:

The Contractor shall be responsible for full compliance with all laws and regulations relating to labour, employment, compensation, wages, working conditions, environment, insurance, safety, etc., and the Trust stands fully indemnified against any claim in this regard.

III.SPECIAL CONDITIONS OF CONTRACT

1. **SCOPE OF WORK:** Electrical (Installation), work Dormitories cum rooms block at Prasanthi Nilayam
2. **EMD (Earnest Money Deposit)**
 - A. EMD of 1% value of work shall be enclosed along with the Bid. Without EMD, the Bid will not be accepted. This will be refunded to the unsuccessful bidders after awarding the work.**
 - B. The successful bidder shall deposit a further amount of 1.5% towards FSD (Further Security Deposit) before signing of the Agreement.**
 - C. The total EMD/FSD of 2.5% of successful contractor will be released after Defect liability period of 24 months after completion of the work.**
3. **DURATION OF THE CONTRACT:** 8 Months from the date of issuing the letter of Intent. Time is the essence of the contract. Contractor shall submit a work schedule highlighting the various milestones immediately after award of work.
4. **CONTRACT AGREEMENT:** Will be executed between the Contractor and SSSCT, Prasanthi Nilayam on a Rs. 100/- stamp paper.
5. **MACHINERY:** All the required machineries should be brought by the contractor. Contractor will be responsible for its maintenance and supply of fuel.
6. **MATERIAL:** All the material required for this construction should be brought by the Contractor. List of approved material Brands is attached separately.
7. **MANPOWER:** All the required manpower both skilled and unskilled should be arranged by the Contractor. The accommodation, safety of the work force is Contractor's responsibility.
8. **SUPERVISION:** A full time experienced supervisor/ Engineer shall be engaged by the Contractor to supervise the work.
9. **TYPE OF CONTRACT:** Item rate Contract. The rates quoted for different items should cover the cost of labour, transport, Tools & plants materials, Lead, Lift, over heads, incidental charges etc.
10. **MODE OF PAYMENT:** Intermediate/Part Payments will be made based on bills containing detailed measurements to be submitted by the contractor duly certified by the engineer-in-charge and processed through Finance department after effecting Tax Deduction at Source (TDS) as per IT Act.
11. **DEFECT LIABILITY PERIOD:** 24 months from the date of handing over. The work completed in all respects as per BOQ and conditions of Contract.
12. **RETENTION AMOUNT:** 5% of the bill value will be deducted from each R.A. Bill. And same will be released to the contractor along with Final bill after satisfactory completion work.

13. MODE OF MEASUREMENT: As per IS Codes.

14. REPORTING THE PROGRESS OF THE WORK

A. The Contractor shall maintain a Site Order Book, where in inspecting Engineers will write day to day observations, instructions and progress of work. This book shall accompany the bills submitted from time to time.

B. The contractor shall send the pictures of the work progress to the whatsapp group, (which will be formed). From time to time.

15. STATUTORY REQUIREMENTS: Contractors shall arrange to pay the WCP Insurance, on mining material and all other necessary formalities required to execute the work.

16. QUALITY OF WORK: Certificate issued by the local site-in-charge appointed by the SSSCT shall be final. Any defective material/ work found by these authorities during their inspection shall be replaced by the contractor at his cost immediately.

SSSCT reserve the right to terminate the contract if it is found that the work is not up to the mark as for the quality and speed of the progress is concerned, without giving prior notice.

17. The tender related queries mail ID: ce@mail.sssct.org

18. → All Technical queries Cell no-8317508775 (“Lokesh”).

a. Location link for Tender submission:

<https://maps.app.goo.gl/8wErz5WksHFKF7PX8>

IV.ANNEXURE -I

RefNo:Date:

To

Sri Sathya Sai Central Trust

Prasanthi Nilayam, Puttaparthi

Sri Sathya Sai District,

Andhra Pradesh – 515134.

Sir/Madam,

Having examined the Bidding Documents including Addenda Nos. (insert numbers) the receipt of which is hereby duly acknowledged, we, the undersigned, offer to execute the work in conformity with the said bidding documents for the sum of Rs._____ (total bid amount in words and figures) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith as part of this bid.

Conditions:

1. We undertake that if our Bid is accepted, for execution of work in accordance with the terms and conditions in the Bidding document.
2. If our bid is accepted, we will obtain the guarantee of a bank for the sum, specified under Tender Conditions in the form prescribed by the Trust.
3. Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.
4. We understand that you are not bound to accept the lowest or any bid you may receive.
5. We confirm that we comply with the eligibility Criteria as per Sl 20 of Special Conditions of Contract of the Tender document.

Dated this

Signature:

(In the Capacity of):

Duly authorized to sign bid for and on behalf of

Place:

(In the case of a Partnership Firm, all the partners of the firm should authorize the concerned person for signing the Bid Form. In the case of a Company a copy of the resolution authorizing the concerned person to sign the Bid Form. Copies to be enclosed)

V.ANNEXURE – III**DETAILS OF THE BIDDER/CONTRACTOR**

S.No.	Particulars		
1	Name of the Firm/ Organization/ Society:		
2	Year of Establishment:		
	Registration No. & Date :		
3	Complete Address: Pin Code Phone No. Fax No. e-mail:		
4	Authorized person Name, Address: Designation Phone No. e-mail id		
5	If Partnership Firm a) Name & Address of all Partners b) If Registered under Companies Act, Name of the Chairman and Managing Director with full address c) Name & Address of Proprietor If Proprietor concern.		
6	PAN No. & Date:		
7	GST No.		
8	Branches:		
9	Annual Turn-Over For 20-21		

	For 2021-22:		
	For 2022-23:		
10	Key personnel experience		
11	Details of men & machinery available for execution of work		
12	Business Background/History:		
13	Special Accreditations or Awards, if any:		
14	Customer Testimonials:		
15	Details of man power and equipment		

PLACE

DATE :

SIGNATURE OF THE BIDDER

VI. ANNEXURE -IV**SRI SATHYA SAI CENTRAL TRUST, PRASANTHI NILAYAM****List of Documents to be submitted by the Bidder along with Technical Bid in a sealed cover****NAME OF THE BIDDER:**

1. Name:
2. Address:
3. Email:
4. Name of Authorised Person
5. Contact Phone Number

Sl No	List of the Documents (Duly attested by the Authorized person on all the documents)
1	Tender Document duly signed & with seal on all pages by the Authorized Signatory.
2	Status of the Bidder - Proprietary / Partnership Firm / etc. submit documentary evidence.
3	Copy of Resolution authorizing the Bidder to Sign the Bid Documents.
4	PAN of the Establishment.
5	GST Registration Certificate.
6	Authorized Person PAN And AADHAAR*
7	Details of the Key Person and experience*
8	Copies of Income Tax returns filed and Assessment orders for the last three financial years. Financial statements for last three financial years.
9	Bidder's Bank Details.
10	Site visit Declaration.

All the above documents are must for the bid to be considered as valid

VII. LIST OF APPROVED MAKES / BRAND OF MATERIALS

LIST OF BRAND/MAKE TO BE USED

Cement - Ultratech, ACC, Dalmia, JSW ,RAMCO- OPC 43/53 grade

Steel reinforcement bars/Rods - TATA/ Jindal Neo FE500-FE550 /Vizag steel/SAIL

CPVC /UPVC/PVC-pipes & its accessories - Astral, Supreme, Ashirwad

PHE items & accessories/fittings - Cera, Parryware, Hindware , Jaguar, JAL (Havay duty) & watertec ,Slimline

Valves- Zolotto, Kartar / Astral, Watertec(PVC, GI,SS)

Electrical items – Crompton Greaves, Polycab, Finolex, Havells, Legrand, Gloster(cables), C&S, ABB, Philips, Schneider, HPL. Wires should be FRLSH. KEI (Cable),Atom berg,Roma Anchor, Anchor Penta ,L&T indo asian andAkarui.

Tiles - Kajaria, Somany, Johnson, AGL, RAK.

Paints - Asian, Berger , Nerolac, JSW.

Pumps- Kirloskar, KSB.(CRI Wilo for hot water)

Extinguishers - Safex, Ceasefire, Kanex.

Any materials to be used/purchased at site should be from approved vendor & duly certified by SSSCT Engineer & the same to be mentioned in the bills for payment.

VIII. SITE VISIT DECLARATION

To

Sri Sathya Sai Central Trust,

Prasanthi Nilayam,

Puttaparthi (A.P)

NIT No. TND/ / / - Dated / /

Dear Sir,

I/We _____ Undersigned visited the project site on _____ and collected all the required information and data regarding availability of material and noted the environmental condition. I have also signed the attendance register maintained at site in presence of Site-In-charge.

Yours faithfully,

(Signature of the Tenderer)

Seal of Tenderer

Dated

Bill of Quantities

BOQ for Electrical works at Dormitories cum rooms block Prasanthi Nilayam

	Part-A							
	A B S T R A C T							
A	MV PANELS							
B	MV CABLES.							
C	DISTRIBUTION BOARDS.							
D	SUBMAINS / CIRCUIT MAINS.							
E	POINT WIRING.							
F	DOMESTIC AND INDUSTRIAL SWITCH AND SOCKETS.							
G	TV,TEL,CCTV							
H	EARTHING.							
I	SAFETY ITEMS.							
J	CABLETRAY.							
K	LIGHT FIXTURES.							
L	DRAWINGS& LOCAL APPROVALS:							
M	UPS/INVERTOR 5KVA 3PH/3PH-15MIN BACKUP							
	Part-B							
	A B S T R A C T							
1	MV CABLES.							
2	Distribution Boards							
3	Light Fixtures;							
4	Street poles Installation.							
	Total A+B+C							
	GST 18% A+B+C							
	Sub Total A+B+C							
	Grand Total A+B+C							

SL.NO.	DESCRIPTION	UNIT	Intallation	Block A		Block B		Block C	
				QTY.	Installation	QTY.	Installation	QTY.	Installation
A	M V Panels :								
	Design, Engineering, Manufacture, Site Storage ,Testing (FAT/SAT), Commisioning, Documentation of following LT Switchgears with Form 3B, IP 54 for indoor and IP65 for outdoor.RAL 7035, base frame including submission of relevant data, inspection and testing at factory works, packing, transportation from MANUFACTURER works to site, including transportation from store/yard to site at the place of installation, handling equipment , unpacking, assembly, including mounting and wiring of loose parts supplied by equipment vendor, interconnection of shipping sections and requisite inter-panel wiring between shipping sections, including supply of wiring material, testing, and calibration of relays and meters etc., including all labour and materials, as per approved drawings,SLD, specification of this tender and directions of Engineer-in-charge..The scope shall include relay coordination study , Relay Settings , Descrimination studies, ON / OFF / TRIP status for all the breakers								
	MAIN ELECTRICAL ROOM-SUBSTATION AREA.								
1	EB&DG-MLTP	Nos.		1					
2	ACCP 335KVAR	Nos.		1					
	BLOCK-A								
1	MLTP-A BLOCK	Nos.		1					
2	LIFT PANELS	Nos.		2		2		3	
	BLOCK-B								
1	MLTP-B BLOCK	Nos.				1			
2	LIFT PANELS	Nos.		2		2		3	
3	LAUNDRY PANEL	Nos.				1			
4	PUMP PANEL.	Nos.				1			
	BLOCK-C								
1	MLTP-C BLOCK	Nos.						1	
2	LIFT PANELS	Nos.		2		2		3	
3	AC-PANEL(C BLOCK)	Nos.						1	
4	LIFT PANELS	Nos.		2		2		3	
	Sub - Total of NEW PLANT MV PANEL.								
B	MV CABLES.								
B1	ALUMINIUM CABLES.								
	Laying, testing and commissioning of XLPE insulated PVC FRLS sheathed, Al. conductor steel armoured 1100V grade cable. The cable shall be laid under ground / on wall / in pipe / trench as required. For cables laid underground -1) the rate shall exclude earth excavation, providing brick and sand protection, refilling, compacting etc. 2) For cables laid on wall / on tray / in pipe / trench - the rate shall including necessary clamping arrangements. Miscellaneous items such as clamp, cleat cable tags, cable marker etc. is included in the scope.								
	Standards applicable For below cable.								
	A2XFY/2XFY - IS 7098 PART II								
	YY/YFY/AFYF - IS 1554 PART I								
1	3.5c x 400 sqmm A2XFY cable.	Rmt.							
1	3.5c x 300 sqmm A2XFY cable.	Rmt.						500	
2	3.5c x 240 sqmm A2XFY cable.	Rmt.		500		250			
3	3.5c x 185 sqmm A2XFY cable.	Rmt.		100		420		300	
4	3.5c x 150 sqmm A2XFY cable.	Rmt.							
5	3.5c x 120 sqmm A2XFY cable.	Rmt.							
6	3.5c x 95 sqmm A2XFY cable.	Rmt.							
7	3.5c x 70 sqmm A2XFY cable.	Rmt.							
8	3.5c x 50 sqmm A2XFY cable.	Rmt.				170			

9	3.5c x 35 sqmm A2XFY cable.	Rmt.			150			
10	4c x 25 sqmm A2XFY cable.	Rmt.	175		520		264	
11	4c x 16sqmm A2XFY cable.	Rmt.						
12	4c x 10 sqmm A2XFY cable.	Rmt.			660			
B2	COPPER CABLES.							
	Laying, testing and commissioning of XLPE insulated PVC FRLS sheathed, Al. conductor steel armoured 1100V grade cable. The cable shall be laid under ground / on wall / in pipe / trench as required. For cables laid underground -1) the rate shall exclude earth excavation, providing brick and sand protection, refilling, compacting etc. 2) For cables laid on wall / on tray / in pipe / trench - the rate shall including necessary clamping arrangements. Miscellaneous items such as clamp, cleat cable tags, cable marker etc. is included in the scope.							
	Standards applicable For below cable.							
	A2XFY/2XFY - IS 7098 PART II							
	YY/YFY/AFY - IS694 / IS 1554 PART I							
1	4c x 16 sqmm XFY CU cable .	Rmt.						
2	4c x 10 sqmm XFY CU cable .	Rmt.						
3	4c x 6 sqmm XFY CU cable .	Rmt.						
4	3c x 6 sqmm XFY CU cable .	Rmt.						
5	4c x 4 sqmm XFY CU cable .	Rmt.						
6	3c x 4 sqmm XFY CU cable.	Rmt.	100		3120		132	
7	4c x 2.5sqmm XFY CU cable .	Rmt.						
8	3c x 2.5 sqmm XFY CU cable .	Rmt.	175		175		264	
B3	UNARMOURED CU CABLE							
	Laying, testing and commissioning of 1100 Voltage grade, stranded Aluminium/ Copper conductor, PVC sheathed and outer extruded HFFR pvc insulated, UNARMOURED Power cables of following sizes to be buried in ground / laid in trays. Miscellaneous items such as clamp, cleat cable tags, cable marker etc. is included in the scope.							
	Flexible cable as Per IS 694							
1	4c x 6 sqmm CU cable.	Rmt.						
2	5c x 4 sqmm CU cable.	Rmt.						
3	4c x 4 sqmm CU cable.	Rmt.						
4	3c x 6 sqmm CU cable.	Rmt.						
5	3c x 4 sqmm CU cable.	Rmt.						
6	3c x 2.5 sqmm CU cable.	Rmt.						
B4	XLPE CABLE END TERMINATION.							
	Termination for the below listed cross section cable with Double compression brass glands, solderless tinned long barrel Cu crimping type lugs, gland earthing to be carried out by earth tag of gland, etc., complete.							
	ALUMINIUM CABLES A2XFY.							
1	3.5c x 400 sqmm A2XFY cable.	Nos						
1	3.5c x 300 sqmm A2XFY cable.	Nos						
2	3.5c x 240 sqmm A2XFY cable.	Nos	6		2		4	
3	3.5c x 185 sqmm A2XFY cable.	Nos	6		8			
4	3.5c x 150 sqmm A2XFY cable.	Nos					4	
5	3.5c x 120 sqmm A2XFY cable.	Nos						
6	3.5c x 95 sqmm A2XFY cable.	Nos						
7	3.5c x 70 sqmm A2XFY cable.	Nos						
8	3.5c x 50 sqmm A2XFY cable.	Nos			2			
9	3.5c x 35 sqmm A2XFY cable.	Nos			6			
10	4c x 25 sqmm A2XFY cable.	Nos	8		22		12	
11	4c x 16sqmm A2XFY cable.	Nos						
12	4c x 10sqmm A2XFY cable.	Nos			10			

B5	XLPE Armoured Cu. Conductor cable XFY Type.						
1	4c x 16 sqmm XFY CU cable .	Nos					
2	4c x 10 sqmm XFY CU cable .	Nos					
3	4c x 6 sqmm XFY CU cable.	Nos					
4	3c x 6 sqmm XFY CU cable.	Nos					
5	4c x 4 sqmm XFY CU cable .	Nos					
6	3c x 4 sqmm XFY CU cable .	Nos	4	8		4	
7	4c x 2.5 sqmm XFY CU cable .	Nos					
8	3c x 2.5 sqmm XFY CU cable .	Nos	8	90		12	
B6	UNARMOURED CU CABLE						
1	4c x 6 sqmm CU cable.	Nos					
2	5c x 4 sqmm CU cable.	Nos					
3	4c x 4 sqmm CU cable.	Nos					
4	3c x 6 sqmm CU cable.	Nos					
5	3c x 4 sqmm CU cable.	Nos					
6	3c x 2.5 sqmm CU cable.	Nos					
B	Sub - Total of MV Cables.						
C	DISTRIBUTION BOARDS.						
	Installation and commissioning of surface mounting / flush mounting 9 kA phase segregated TPN MCB distribution boards (MCBDB). The DB shall be IP43 Double Door made out of 1.2 mm CRCA sheet steel enclosure and powder coated complete with cable gland plate with knock out at the top/Bottom and lockable external door. The DB's shall be phase segregated type and shall have 4P MCB / MCB isolator as incomer, DP RCBO as phase incomer and SP MCB as outgoing with the rating as specified. The bus bar shall be tinned copper; Insulated fork type for phases, Independent neutral bus for each phase including inter connecting wiring and earth bus on insulation mount. The RCCB / RCBO shall be Hpi / Si series and MCBs shall be 'D' Curve for UPS DBs (UDB) and motor applications and 'C' Curve for other application. All DB to have provision of Adding auxiliary module at incomer level for status monitoring.						
1	4way TPN MCB DB type 7 segment with 63A 4P MCB as incomer, 32A 30mA DP RCBO as phase incomer and 12nos.16/20A SP MCB as outgoings. (For FLOOR ACDBs)	Nos.			-		
2	6way TPN MCB DB type 7 segment with 40A 4P MCB as incomer, 32A 30mA DP RCBO as phase incomer and 18nos.16/20A SP MCB as outgoings. (For FLOOR ACDBs)	Nos.				14	
3	18way SPN MCB DB with Metal door, 40A DP RCBO 30A mA as incomer with 14Nos 10/16A SP MCBs as outgoings.(dormitory DBs)	Nos.					
4	16way SPN MCB DB with Metal door, 40A DP RCBO 30A mA as incomer with 14Nos 10/16A SP MCBs as outgoings.(dormitory DBs,Dining, Stilt dbs)	Nos.	10	12		23	
5	12way SPN MCB DB with Metal door, 40A DP RCBO 30A mA as incomer with 10Nos 10/16A SP MCBs as outgoings.(Dormitory3,Stilt floor CA,Terrace DBs)	Nos.	3	5		2	
6	8way SPN MCB DB with Metal door, 32A DP RCBO 30mA as incomer and 6nos 10A SP MCB as outgoings.(Toilet Dbs)	Nos.	10				
7	6way SPN MCB DB with Metal door, 32A DP RCBO 30mA as incomer and 4nos 10/16A SP MCB as outgoings.	Nos.					
8	6way VTPN MCB DB vertical sleek module with 1 no 63A 4P MCB type as incomer, and 4Nos 32A TP MCB's and 6 nos 10/16A SP MCB's as outgoings.	Nos.					
9	4way VTPN MCB DB vertical sleek module with with 1 no 63A 4P MCB type as incomer, and	Nos.					

C	Sub Total of DBs.				17		39
D	SUB MAINS / CIRCUIT MAINS :						
	Laying of sub / circuit mains inside 2mm thick FRLS conduit & accessories like bends, junction boxes, GI cleat and saddles etc., 1100V grade HFFR flexible copper wires and wiring accessories, terminating wires on either ends by providing copper lugs, ferrules and carrying out surface / concealed wiring. Most of the area have open ceiling and conduits shall run exposed . Emergency lighting conduit shall have a different colour code compared to normal lighting. The rate shall include grooving of walls, floors chipping, rough plastering, providing MS brackets for conduit suspension. Circuit mains shall be measured from DB to switch board/end feed unit of lighting trunk and looping from switch board to switch board.						
1	2R x 4 + 2R x 2.5 sqmm with 25mm conduit	Rmt.					
2	2R x 4 + 1R x 2.5 sqmm with 25mm conduit	Rmt.	4,500	3,500		26,800	
3	2R x 2.5+ 1R x 1.5 sqmm with 25mm conduit	Rmt.	4,500	4,750		600	
4	20mm dia MS conduit with all accessories and supports	Rmt.					
5	25mm dia MS conduit with all accessories and supports	Rmt.					
6	25mm dia PVC reinforced flexible conduit.	Rmt.					
7	25mm dia PVC conduit.	Nos					
8	20mm dia PVC conduit.	Nos					
9	2RX6Sqmm+2RX4Sqmm CU WIRE IN 25MM PVC CONDUIT with all accessories and supports		600	500		1,120	
10	Termination of 2RX6Sqmm+2RX4Sqmm CU WIRE at panel& DB side		32	22		48	
11	4RX6Sqmm+2RX4Sqmm CU WIRE IN 32MM PVC CONDUIT with all accessories and supports					1,000	
12	Termination of 4RX6Sqmm+2RX4Sqmm CU WIRE at panel& DB side					44	
D	Sub Total for SUB MAINS / CIRCUIT MAINS :						
E	POINT WIRING.						
	Laying of wire for light, fan points by using 2mm thick 25mmPVC FRLS conduit of required dia as per IS732, with conduit accessories, GI flexible conduit with couplers for drops with accessories, 2 x 2.5 +1 x1.5 sqmm. 660/1100V grade HFFR flexible copper wires, control wires for sensor controlled light fixtures, approved 6A modular type switches and sockets,Zinc coated MS boxes, and other point wiring accessories and carrying outsurface / concealed conduit system of wiring. The rate shall include grooving of walls, floors chipping, rough plastering, providing MS brackets for conduit suspension. And painting for the conduits in exposed ceiling of Approved colour by Client / Architect						
1	1 light point controlled by a 6A switch	Nos.	9	5		1,238	
2	2 light points controlled by a 6A switch	Nos.	413	54		12	
3	3 light points controlled by a 6A switch	Nos.	125	83		60	
4	4 light points controlled by a 6A switch	Nos.	59	18		10	
5	5 light points controlled by a 6A switch	Nos.	20	10		15	
6	Two way light point with two way 6A switch	Nos.	18	12		21	
7	Ceiling fan point controlled by a 6A switch, fan hook box and 100W, 2 module fan with step	Nos.	330	288		357	
8	Single Exhaust fan point controlled 6A a switch and with socket With Plug top near Exh-fan	Nos.	-	-		327	
9	2nos Exhaust fan point controlled 16A a switch and with socket With Plug top near Exh-fan	Nos.	60	-		-	
10	3nos Exhaust fan point controlled 16A a switch and with socket With Plug top near Exh-fan	Nos.		-		-	

	FACTORY LIGHTING BY MCB CONTROLLED : The price shall not include MCB cost.						
	Control of lighting,fan points by 3CX2.5 sqmm. 660/1100V grade HFFR flexible copper cables with accessories,include grooving of walls, floors chipping, rough plastering. The cost shall include cable supply,laying and fixing of MS suspension supports for light & fans-Approved by Client / Architect (Note MS supports, cable terminations can be claimed in respective items)						
1	3c x 2.5 sqmm CU cable. (FOR LTG&ELTG) controls.--between elemax box & fitting.	Rmt.					
2	3c x 4 sqmm CU cable. (FOR LTG&ELTG) controls.--between elemax box & fitting.	Rmt.					
3	Elemax Junction Box- for 3cx2.5sqmm YFY CAB termination for ltg.	Nos.					
	Terminations;						
1	3c x 2.5 sqmm CU cable. (FOR LTG&ELTG) controls.	Nos					
2	3c x 4 sqmm CU cable (FOR LTG&ELTG) controls.	Nos					
3	SIT&C Lift shaft wiring with 16G MS conduit, 25mm dia. with 2 x 4 + 1 x 2.5 sqmm cu. Wire	Nos.	2	2			
4	SIT&C Lift shaft wiring with 16G MS conduit, 25mm dia. with 2 x 4 + 1 x 2.5 sqmm cu. Wire	Nos.				3	
E	Sub Total of wiring for Lighting.						
F	DOMESTIC AND INDUSTRIAL SWITCH AND SOCKETS.						
	MODULAR SWITCH AND SOCKETS.						
F1	Installation and commissioning of the following indoor type components like approved plate type modular switches, socket etc., All the switch sockets are with front plate.						
1	1 no 16A 6 pin socket mounted at independent location (for AC) with front plates, cover	Nos.	-	-		115	
2	1 no 16/20A DP switch with indicator mounted at independent location(for AC) with with front plates, cover plate, GI box etc complete.-No socket	Nos.	-	-		115	
3	Bank of 2Nx 6A round 5 pin socket controlled by 16A SP Switch with front plates, cover plate, GI box etc complete	Nos.	300	212		321	
4	1no. 6A 5 pin universal socket controlled by 6A SP Switch with front plates, cover plate, GI box etc complete.	Nos.	60	78		320	
5	1no. 6/16A 6 pin universal socket controlled by 16A SP Switch with front plates, cover plate, GI box etc complete.	Nos.	122	78		281	
6	1 no 6/16A 6 pin socket mounted at independent location (for Gysen) with front plates, cover plate, GI box etc complete.	Nos.	20	-		307	
7	1 no 16A SP switch with indicator mounted at independent location(for Gysen) with with front plates, cover plate, GI box etc complete.-No socket	Nos.	20	-		307	
8	6/16A, industrial single phase 3pin plug and socket	Nos.					
9	32A, industrial single phase 3pin plug and socket	Nos.					
10	32A, industrial 3 phase 5pin plug and socket	Nos.					
11	63A, industrial 3 phase 5pin plug and socket	Nos.					
F	Sub total Of DOMESTIC AND INDUSTRIAL SWITCH AND SOCKETS.						
G	TV,TEL,CCTV System:						
G1	Telephone System						
1	Installation and commissioning of RJ 11 (4 Pair)Telephone outlet with Front Plate & GI Box.	Nos.					
2	Installation and commissioning of 4 pair Tel. wire 0.5 mm dia. Copper, PVC / PVC tel wire with 20mm 2mm thick PVC FRLS Conduit.	M					
G2	Television System						
1	Installation and commissioning of Co axial TV outlets with Front Plate & GI Box.	Nos.					
2	Installation and commissioning RG6 Co axial cable as per TV vendor with 25mm dia 2mm	M					
G3	Computer System						
1	Installation and commissioning of RJ 45 data outlet with Front Plate & GI Box.	Nos.					
2	Installation and commissioning Cat5E DATA cable in 20mm dia in 2mm thick FRLS PVC Conduit.	M					

G4	Accessories in Indoor type enclosure : with all fixing accessories to mount in ceiling or wall.				
1	16A./25A/32A DP MCB Isolator in MS enclosure.	Nos.			
2	40/63A. DP MCB Isolator in MS enclosure.	Nos.			
3	16A./25A/32A 4P MCB Isolator in MS enclosure.	Nos.			
4	40/63A. 4P MCB Isolator in MS enclosure.	Nos.			
G5	CCTV - Installation of the following.				
1	1/3' C Mount Colour Camera (Corridor Area) covering 15-20mtr distance	Nos.	14.00	14.00	14.00
2	3 Axis Dome Camera - 500 TVL (Workstation Area) axs make	Nos.			
3	1/3 in CCD, IR Bullet Camera, 3.8-9.5mm, D/N, 520TVL,- applicable in darkness	Nos.			
4	1/3-inch CCD, Day/Night Dome Camera, 3.8mm fixed lens, 540TVL-covering 15-20mtr	Nos.	20.00	20.00	20.00
5	C mount Camera Auto Iris lens- corridor area more than 15-20mtr coverage	Nos.			
6	IR camera with Auto lens.	Nos.			
7	Stand alone DVR (8channel) with remote viewing facility capable of 2TB Storage.	Nos.	1.00	1.00	1.00
8	Stand alone DVR (8 channel) with remote viewing facility capable of 500GB Storage.	Mts.	800.00	800.00	1,000.00
9	Laying of RG11 Coaxial Cable	Mtrs.			
10	Laying of 2 core x 0.5 Sq mm Power cable.	Mtrs.			
11	Power Supply adopter for Cameras	Nos.	34.00	20.00	31.00
12	19" TFT CCTV Monitor .	Nos.	1.00	1.00	1.00
13	25MM PVC Conduit	Mtrs.	800.00	800.00	1,000.00
G	Sub total of TV,TEL,CCTV				
H	EARTHING SYSTEM::				
H1	EARTH PITS:				
1	Installation and commissioning 100mm dia, 13mm tk. 3M long C I pipe of earth station generally as per IS 3043, with proper earth lead connection arrangements and electrode as below. The rate shall include all materials, excavation, refilling and 'compacting providing 450x450x600 mm brick masonry chamber, GI funnel and charcoal, 25 x 6 mm 'angle iron frame, 40mm RCC cover with holes etc., complete. The GI funnel and tapping connection shall not be greater than 250 mm from the bottom of chamber.	Each	R.O	R.O	R.O
2	Installation and commissioning of Maintenance Free Special earthing system consisting of Copper-bonded Tripolar 6" dia deep drilled Earthing termination for a lower resistance value and better current dissipation. It shall be made of 3 copper - bonded steel earth rods of below sizes interconnected with 3nos of copper bonded flanges. Minimum copper bonding shall 250 microns Rod-to-Conductor connector also be supplied. System should be CPRI Tested, supply Natural Grounding Enhancing Filling compound made of neutral components and totally ECO - Friendly should be added to replace the excavated soil, retain the moisture and provide a stable environments for the earthing system and shall be 'provided including CI/RCC Chamber and Civil finishing ' including paintingand permanent Earth Marker of 'non rustable type. (Natural Ground Enhancing compound 50kG).The cost shall include drilling/boring of depth as mentioned, with 450X450X450 constructions of 40mm RCC cover with holes etc.Chamber box. including plaster complete				
1	3.0mtrs minimum, 17.2mm dia 3-nos	Nos	R.O	R.O	R.O
2	3.0mtrs minimum, 25 mm dia 3-nos	Nos	6	6	4
3	12.0mtrs minimum, 17.2mm dia 3-nos	Nos	R.O	R.O	R.O
4	12.0mtrs minimum, 25 mm dia 3-nos	Nos	R.O	R.O	R.O
H2	EARTH STRIPS.				
	Laying earth strips 0.3M below ground/ exposed including PVC sleeves of 2mm thick,bonding of Cu flat by				
1	40 X 6 mm Cu flat with suitable sleeve.	Rmt.			
2	25 X 6 mm Cu flat with suitable sleeve.	Rmt.			
3	25 X 3 mm Cu flat with suitable sleeve.	Rmt.			
4	65 X 10mm GI flat	Rmt.			
5	50 X 8mm GI flat	Rmt.			

6	50 X 6mm GI flat	Rmt.						
7	40 X 6mm GI flat	Rmt.	100		100		100	
8	25 X 6mm GI flat	Rmt.	100		100		100	
9	25 X 3mm GI flat	Rmt.	100		100		100	
10	8 SWG GI Wire	Rmt.						
11	8 SWG Cu Wire	Rmt.						
12	12 SWG Cu. Wire	Rmt.						
13	2 x 6sqmm (LDB/RPDB/ELDB/Rack earth).	Rmt.						
14	2 x 4sqmm (LDB/RPDB/ELDB/Rack earth).	Rmt.						
15	2 x 2.5sqmm (LDB/RPDB/ELDB/Rack earth).	Rmt.						
16	1 core x 35 Sqmm FRLS Cu Flexible Cable.	Rmt.						
17	1 core x 25 Sqmm FRLS Cu Flexible Cable.	Rmt.						
18	1 core x 16 Sqmm FRLS Cu Flexible Cable.	Rmt.						
19	1 core x 6 Sqmm FRLS Cu Flexible Cable.	Rmt.						
Sub Total of Earthing.								
I	SAFETY ITEMS.							
	Laying / fixing the below mentioned safety items							
1	Rubber mat of 2mm thick Class A with 1.1KV voltage tested of (1mtr x 2mtr) size . ISI 15652 approved with test certificates.	Nos.	4		4		4	
2	Shock and First charts in english & Hindi in T/W frame.	Nos.	2		2		2	
3	Danger Board 4" X 6" 415vgrade .	Nos.	2		2		2	
4	No Admission board 4" X 6".	Nos.	2		2		2	
5	Rubber Gloves 1.1kV rated .	Nos.	2		2		2	
6	Sand filled fire marked buckets with stand.	Nos.	R.O		R.O		R.O	
7	CO2,4.5kg Fire extinguishers with stand and signages.	Nos.	2		2		2	
8	Drawing Display board suitable for A1 size with Lamination.	Sets	2		2		2	
9	First aid box complete with all standard first aid materials.	Sets	2		2		2	
Sub total - SAFETY ITEMS.								
J	CABLE TRAY.							
J1	Installation of pre fabricated factory made power coated ladder type cable tray . The tray shall be fabricated out of 2mm thick Hot dip galvanised as per IS1079:1973 and IS513: 1994. The ladder type tray shall comprise of 'C' type side runners, bolted slotted rungs at 300mm interval. The tray shall be in standard length of 2.5m. The rate quoted shall include Tray accessories like Tees, bend, reducers, anchor fastners.Tray supports shall be MS to be considered and claimed in MS items.& upto 300mm hi - tech rod's, anchor fastner to be considered in cost.							
1	150mm W x 50mm D ladder type	Rmt.						
2	200mm W x 50mm D ladder type	Rmt.						
3	300mm W x 75mm D ladder type	Rmt.						
4	450mm W x 75mm D ladder type	Rmt.						
5	600mm W x 75mm D ladder type	Rmt.						
6	750mm W x 75mm D ladder type	Rmt.						
7	1000mm W x 75mm D ladder type	Rmt.						

J2	Installation of pre fabricated factory made Powder coated perforated folded type cable tray . The tray shall be fabricated out of 2mm thick, Hot dip galvanised as per IS1079:1973 and IS513: 1994. The tray shall be in standard length of 2.5m. The rate quoted shall include Tray accessories like Tees, bend, reducers, anchor fastners. Tray supports shall be MS to be considered and claimed in MS items. & upto 300mm hi - tech rod's, anchor fastner to be considered in cost.							
1	150mm W x 50mm Perforated type	Rmt.						
2	300mm W x 50mm Perforated type	Rmt.						
3	450mm W x 50mm Perforated type	Rmt.			30			
4	150mm W x 75mm Perforated type	Rmt.						
5	300mm W x 75mm Perforated type	Rmt.	20		20		20	
6	450mm W x 75mm Perforated type	Rmt.						
7	600mm W x 75mm Perforated type	Rmt.	100		100		150	
8	750mm W x 75mm Perforated type	Rmt.						
9	1000mm W x 75mm Perforated type	Rmt.						
J3	MS angle / MS C /I channel/ MS FLAT							
	Fabrication and installation of structural supports on walls, slab, in trenches etc for exhaust piping, fuel piping,pumps etc as required comprising of channels, angles, flats etc along with all the hardware required for fixing, grouting,one coat of red red oxide and two coats of synthetic paint.Material shall be as per IS: 2062	Kg		2,000		2,500		2,000
J	Sub-total of Cable tray.							
K	LIGHT FIXTURES :							
K1	LIGHT FIXTURES.							
	Installation and commissioning of Light fixtures including necessary supports, mounting brackets as per GFC dwg and site condition .							
	<i>NOTE: LIGHT FIXTURES SHALL TO BE QUOTED EQUIVALENT TO BELOW MODEL NUMBERS GIVEN FOR REFERENCES.</i>							
1	LL24-541-XXX-57-XX 40w -Suspended LED Light Luminaire	Nos						
2	LL24-741-XXX-57-HE 20w -Suspended LED Light Luminaire	Nos						
3	LL 22-511-XXX-65-G2 -36W - Suspended LED Light Luminaire	Nos	550		681		562	
4	LL 20-221-XXX-65-NE3-28WSuspended LED Light Luminaire	Nos	35		32		45	
5	LL 20-221-XXX-65-NE3-20WSuspended LED Light Luminaire	Nos	688		32		45	
6	WI0921208 -1X18/20W - BOX type T8- LED Light Luminaire	Nos						
7	WI0922208 -2X18/20W - BOX type T8- LED Light Luminaire	Nos						
8	3W-LD38-200-XXX-40 round Surface mounted LED Downlighter 6000K.(Night light Ceiling	Nos					274	
7	6W-LD80-350-XXX-60-SM round/square Surface mounted LED Downlighter 6000K.	Nos					274	
8	9W-LD80-530-XXX-60-SM round/square Surface mounted LED Downlighter 6000K.	Nos						
9	12W-LD80-101-XXX-60-SM round/square Surface mounted LED Downlighter 6000K.	Nos					294	
10	15W-LD80-131-XXX-60-SM round/square Surface mounted LED Downlighter 6000K.	Nos						
11	18W-LD80-171-XXX-60-SM round/square Surface mounted LED Downlighter 6000K.	Nos					18	
12	Round _24W-LD80-281-XXX-60-SM _round/square Surface mounted LED Downlighter	Nos						
13	BULK HEAD-LW07-141-XXX-57-G1, 10W, 5700K.	Nos	100		50		75	
14	CRCO 10S 038 HP57 GL1 36W 5700K-Surface mounted Square type LED Luminaire for Office area.	Nos						
15	CRCO 10R/S 038 HP57 G1 L1 36W 5700K-Recess mounted Square type LED Luminaire for	Nos						
16	CRCO 10S024 HP57 HEG2 24W 5700K-Surface mounted Square type LED Luminaire for	Nos						
17	CRCO10R024 HP57 HEG2 24W 5700K-Recess mounted Square type LED Luminaire for	Nos						
K2	Installation and commissioning of Fan / Ex.Fans including necessary supports as required. Fan shall be BEE 5 Star rated. BLDC fans Supports shall be as per Approval from Client.							
1	96" (2400mm) Ceiling Fan with mounting accessories.	Nos						
2	48" (1200mm) Ceiling Fan with mounting accessories.	Nos	360		344		322	

3	52" (1400mm) Ceiling Fan with mounting accessories.	Nos						
4	Wall mounted Fan Industrial type heavy duty.	Nos						
5	225mm dia, 900rpm Light duty Exhaust fans.	Nos						
6	300mm dia, 900rpm heavy duty Exhaust fans.	Nos						
7	450mm dia, 900rpm heavy duty Exhaust fans.	Nos	120	-		292		
K	Sub Total of Light fixtures.							
L	DRAWINGS& APPROVALS:							
1	Preparing As Built drawings of the entire work executed : MV cable laying, MV panels erection, earthing, external lighting in ACAD 14 and submitting six sets of blue prints along with CD.	Set	1	1		1		
2	Suitable A3/A4 size laminations for DB SLD to be enclosed in each DB .	Set	12	12		14		
3	Obtaining approval from Local Elec Inspectorate for power sanction around 600KVA, filing of application for all	LS	-	-		-		
	Sub-total of Miscellaneous.							
M	UPS/INVERTOR 5KVA 1PH/1PH-15MIN BACKUP	Set	R.O	R.O		R.O		
N	LIGHTENING PROTECTION FARADAY CAGE AS per IEC 62305 -3 ,IS 2309 & IS 3043							
A1	EMISSION LIGHTNING CONDUCTOR							
1	Installation of Control Streamer Emission Lightning Conductor suitable for protection of 100Mts radius.The ESE conductor shall be in accordance with international standards NFC 17102 .The rate shall include Lighting Protector Accessories like Mast AL,3 Mtrs base welded	Each			-		-	
2	Installation of Control Streamer Emission Lightning Conductor suitable for protection of 75Mts radius.The ESE conductor shall be in accordance with international standards NFC 17102 .The rate shall include Lighting Protector Accessories like Mast AL,3 Mtrs base welded	Each	2		-			
3	Installation of Lightning event counter with mounting accessories.	Each	2	-				
A2	AVIATION LIGHTNING							
1	WIPRO MAKE WAN 20001 OR EQUIVALENT Aviation Obstruction light fixture suitable for 70VA Neon Spiral lamp with clear glass dome, 70VA Neon Spiral lamp, in built Transformer and all other necessary accessories complete as required.	Set	-	-		-		
A3	EARTH STATIONS							
3	Installation of Maintenance Free Special earthing system consisting of Copper-bonded Tripolar 6" dia deep							
1	3.0mtrs minimum, 17.2mm dia 3-nos	Nos	R.O	R.O		R.O		
2	3.0mtrs minimum, 25 mm dia 3-nos	Nos	2	2		R.O		
3	12.0mtrs minimum, 17.2mm dia 3-nos	Nos	R.O	R.O		R.O		
4	12.0mtrs minimum, 25 mm dia 3-nos	Nos	R.O	R.O		R.O		
	Installation and commissioning 600x600x3mm tk. Copper plate earth station generally as per IS 3043, with proper earth lead connection arrangements. The rate shall include all materials, excavation, refilling and compacting providing 450x450x600 mm brick masonry chamber, GI funnel and charcoal, 25 x 6 mm angle iron frame, 40mm RCC cover with holes etc., complete. The GI funnel and tapping connection shall not be greater than 250 mm from the bottom of chamber.	Nos	R.O	R.O		R.O		
A4	HORIZONTAL / DOWN CONDUCTORS							
1	Erection of 70Sqmm flexible Copper cable for down conductors as per specification.	Mtr	100	100				
A5	TEST LINKS							

1	Test links as per specification grouted to wall at 1200mm above ground level complete with all fixing accessories etc., complete	Set		2		-		
10	50x 6mm GI flat earth strips .	M		R.O		R.O		R.O
	Sub-total of LPS							
N	LPS (tentative cost approximately will be finalized after Vendor coordination)							
	EXTERNAL & LANDSCAPE LTG A+B+C							
SL.NO.	DESCRIPTION	UNIT	Intallation RATE	Qty	Installation AMOUNT	QTY.	Installation AMOUNT	QTY.
	NOTE :							
1)	All materials & work shall be as per IS standards, EB and Inspectorate rules & local practice							
2)	Final shop floor drawings to be prepared by the vendor before execution of the work & approval to be taken from the consultant / client							
	NOTE :							
	Clients reserve the right to supply items such as light fittings, etc. for which the Contractor shall under take erection at the rates quoted by him in the tender below.							
1	MV CABLES							
	Installation, laying, testing and commissioning of XLPE insulated PVC FRLS sheathed, Al. conductor steel armoured 1100V grade cable. The cable shall be laid under ground / on wall / in pipe / trench as required. For cables laid underground -1) the rate shall exclude earth excavation, providing brick and sand protection. refilling, compacting etc. 2) For cables laid on wall / on tray / in pipe / trench - the rate shall including necessary clamping arrangements. Miscellaneous items such as clamp, cleat cable tags, cable marker etc. is included in the scope.							
	All the works shall be carried out IS 7098 (part 1) 1988.							
	Standards applicable For below cable							
	A2XFY/2XFY/2XWY - IS 6098 PART II							
	YY/YFY/AYFY/YWY - IS 1554 PART I							
1.1.1	3.5c x 35 sqmm A2XFY .	M						
1.1.2	4c x 25sqmm Al. Ar. cable. (1W+1S)	M						
1.1.3	4c x 16sqmm Al. Ar. cable.	M		500				
1.1.4	4c x 10sqmm Al. Ar. cable.	M						
1.1.5	3c x 6.0 sqmm AL Ar. cable.	M						
	COPPER CABLES SUPPLY							
1.1.5	4C x 6.0 sqmm Cu Ar. cable.	M						
1.1.6	3c x 6.0 sqmm Cu Ar. cable.	M						
1.1.7	3c x 4.0 sqmm Cu Ar. cable.	M		200				
1.1.8	3c x 2.5 sqmm Cu Ar. cable.	M		200				

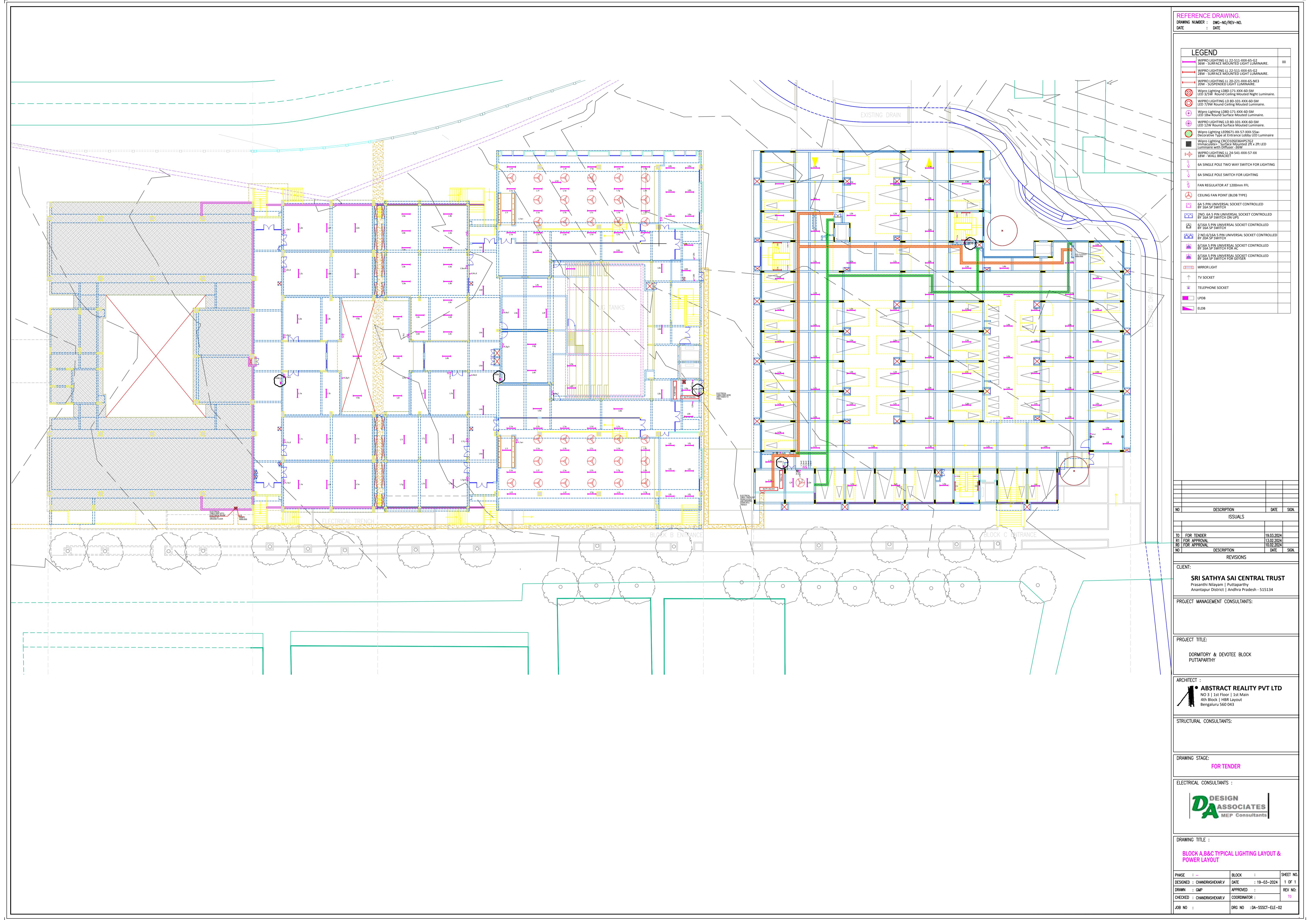
1.2	3C , Flexible Copper FRLS Cable in 2mm thick 32 mm rigid conduit with all necessary accessories like shadles ,Flexible Hose Pipe , gatta , screws from Loop in loop out box to light fixtures							
1.2.1	6 Sqmm	M						
1.2.2	4 Sqmm	M						
1.2.3	2.5 Sqmm	M						
1.2.4	1.5 Sqmm	M						
1.3	PVCA CABLE END TERMINATION (Supply & Installation) S I T & C , Providing and termination for the below listed cross section cable with single compression brass glands, solderless tinned long barrel Cu crimping type lugs, gland earthing, etc., complete.							
	ALUMINIUM CABLE TERMIAINTIONS							
1.3.0	Standards applicable For below cable A2XFY/2XFY/2XWY - IS 6098 PART II YY/YFY/AYFY/YWY - IS 1554 PART I							
1.3.1	3.5c x 35sqmm A2XFY.	Nos.						
1.3.2	4c x 25sqmm Al. Ar. cable.	Nos						
1.3.3	4c x 16sqmm A2XFY cable.	Nos	28					
1.3.4	4c x 10sqmm A2XFY cable.	Nos						
1.3.5	3c x 6.0 sqmm AL Ar. cable.	Nos						
	COPPER CABLES TERMIAINTIONS							
1.3.5	4C x 6.0 sqmm Cu Ar. cable.	Nos						
1.3.5	3c x 6.0 sqmm Cu Ar. cable.	Nos						
1.3.6	3c x 4.0 sqmm Cu Ar. cable.	Nos	20					
1.3.7	3c x 2.5 sqmm Cu Ar. cable.	Nos	30					
1.4.0	3C , Flexible Copper Cable							
1.4.1	6 Sqmm	Nos						
1.4.2	4 Sqmm	Nos						
1.4.3	2.5 mmsq	Nos						
1.4.4	1.5 Sqmm	Nos						
	Sub - Total of MV Cables							
2	Distribution Boards							

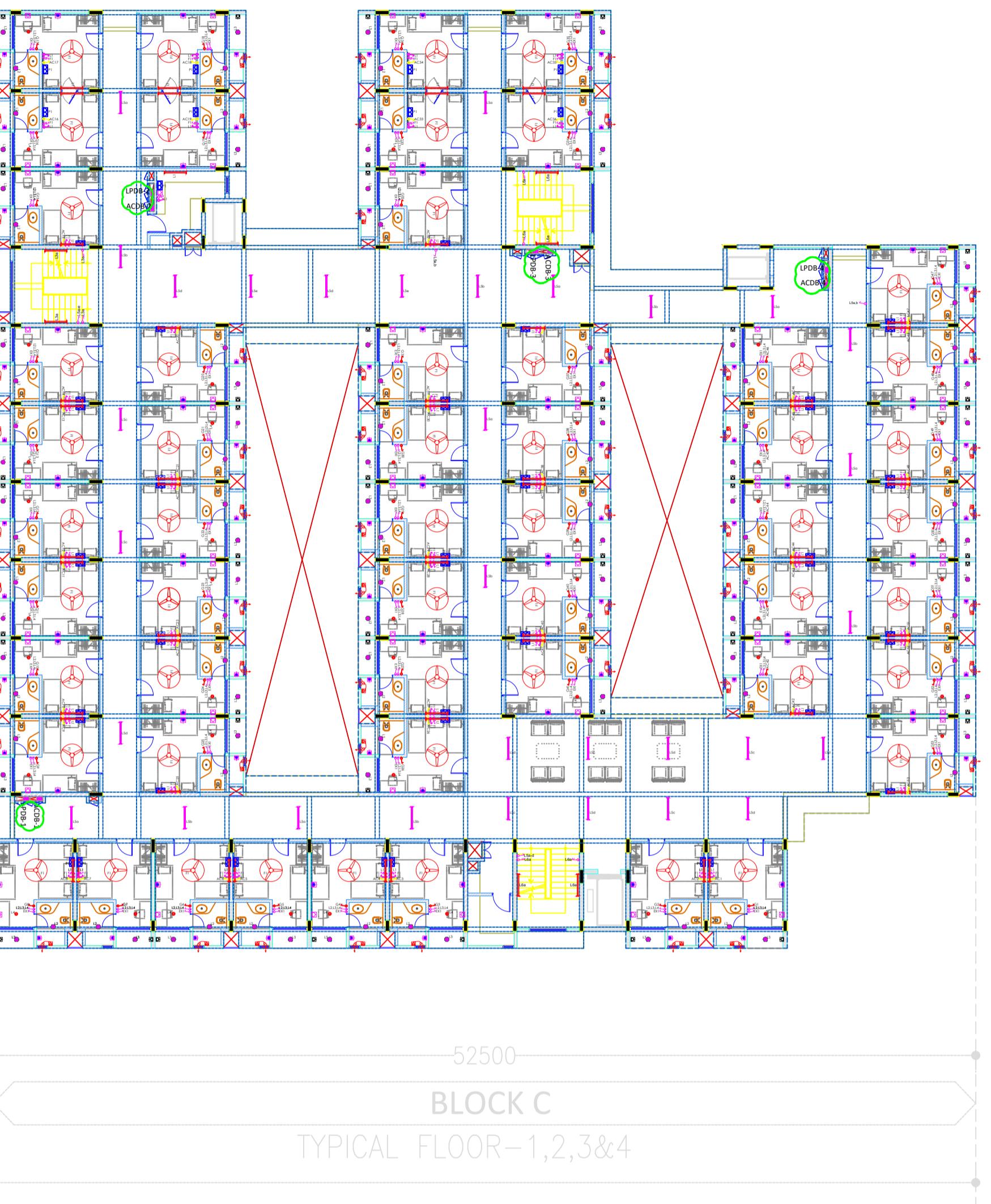
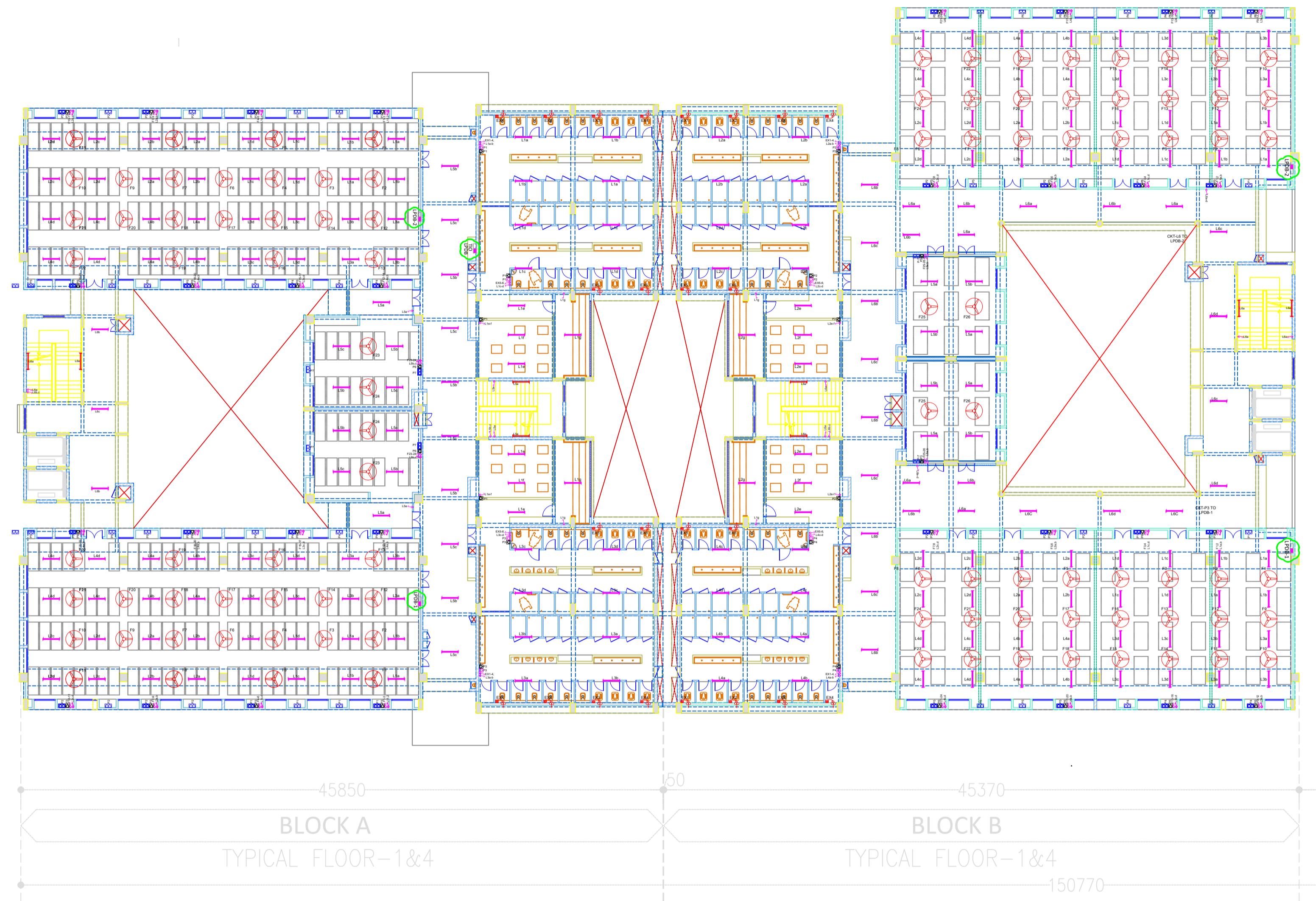
	Installation & Testing of surface mounting / flush mounting 9 kA phase segregated TPN MCB distribution boards (MCBDB). The DB shall be made out of 1.2 mm CRCA sheet steel enclosure and powder coated complete with cable gland plate with knock out at the top/Bottom and lockable external door. The DB's shall be phase segregated type and shall have 4P MCB / MCB isolator as incomer, DP RCBO as phase incomer and SP MCB as outgoing with the rating as specified. The bus bar shall be tinned copper; Insulated fork type for phases, Independent neutral bus for each phase including inter connecting wiring and earth bus on insulation mount. The RCCB / RCBO shall be Hpi / Si series and MCBs shall be 'D' Curve for UPS DBs (UDB) and motor applications and 'C' Curve for other application. All DB to have provision of Adding auxiliary module at incomer level for status monitoring.							
2.1	External Lighting DB :							
1	MAIN EXTERNAL STREET LIGHTING TIMER BASED CONTROL PANEL -1 located near XLPE road. Outdoor type mounting with all fixing neccessaries	Nos.	1					
3	8way SPN MCB DB Type Incomer 25A DP MCB , 25A DP 24hours Timer and 3 Nos. 16 A SP MCB as outgoings	Nos.						
2.1.3	Loop In / Loop OUT box with Connectors : Outdoor type IP 67 rated.							
1	6 Way Junction Box suitable for Loop IN/Loop OUT with glands for 4Cx 16/ 10 Sqmm Ar AL cable and 3 outgoing single phase connectors 10/16A with Poly carbonate,enclosure outdoor type with earth,terminal as required and with all mounting accessories Similar to Hensel make.	Nos.						

2	5 Way Junction Box suitable for Loop IN/Loop OUT with glands for 3Cx 16/ 10 Sqmm Ar AL cable and 3 outgoing single phase connectors 10/16A with Poly carbonate, enclosure outdoor type with earth, terminal as required and with all mounting accessories Similar to Hensel make.	Nos.		4				
3	8 Gauge GI wire for earthing landscape fittings.	Nos.		100				
4	10 Gauge GI wire for earthing landscape fittings.	Nos.						
	Sub Total of DBs							
3	Light Fixtures;							
	Handling , shifting , testing and commissioning of light fixture complete with Electronic ballast , control gears, holders, Mirror optic reflectors, louvers, inter connecting wires, terminals, lamps, etc., complete. Rate shall include necessary Accessories and Integral Parts as complete with all fixing accessories							
1	ON GROUND TREE UP LIGHTER, 7W LED . Mounting On finished Surface-Trioscape - Spike 7052/53	Nos		10				
2	ON GROUND SHURB UP LIGHTER, 3 W LED . Mounting On finished Surface--Trioscpe - Spike 6998/99	Nos		5				
3	IN GROUND DRIVEOVER LIGHT 3 W LED . Mounting On finished Surface--Inground Four way- 4135	Nos						
4	BOLLARD LIGHTS 8 W LED . Mounting On finished Surface--Sleek Ajna Crescent - 7062	Nos		10				
5	WALL MOUNTED LED LF .50W LED on mlcp wall MODEL NO NAVIRA 4921	Nos						
6	WALL MOUNTED LED LF .50W LED on mlcp wall MODEL NO NAVIRA 4939	Nos						
7	FLOOD LIGHTS 60W LED ON above 7.5M POLE, Mounting on finished surface	Nos						
8	FOCUS LIGHTS 7052 7W	Nos						
9	Under water up lighter Mounting on finished surface 6740	Nos						
10	Under water Luminaire lighter Mounting on finished surface 6762	Nos						
11	24V SERIES WATERPROOF POWER SUPPLY	Nos						
12	30W LED CIRCULAR LIGHTS AT MAGIC BOX- OUT DOOR TPYE	Nos						
	Sub Total of Light Fixtures installation							
4	Street / Post top poles with Fixtures. ; SIT&C of swaged type tubular pole as per sketch. The Pole shall be provided with 10mm thick MS base plate, weather proof polycarbonate box housing 5A MCB, 8way 6A terminal, etc, Concrete foundation & pedestal upto 450 mm above ground, PCC plinth, internal wiring from marshalling box upto the lamp using 2Cx2.5 sqmm PVC flexible Cu cable. The rate shall include earth excavation, civil foundation, 2 nos. 50mm dia 1 Mtr. Long GI pipe with bend for							

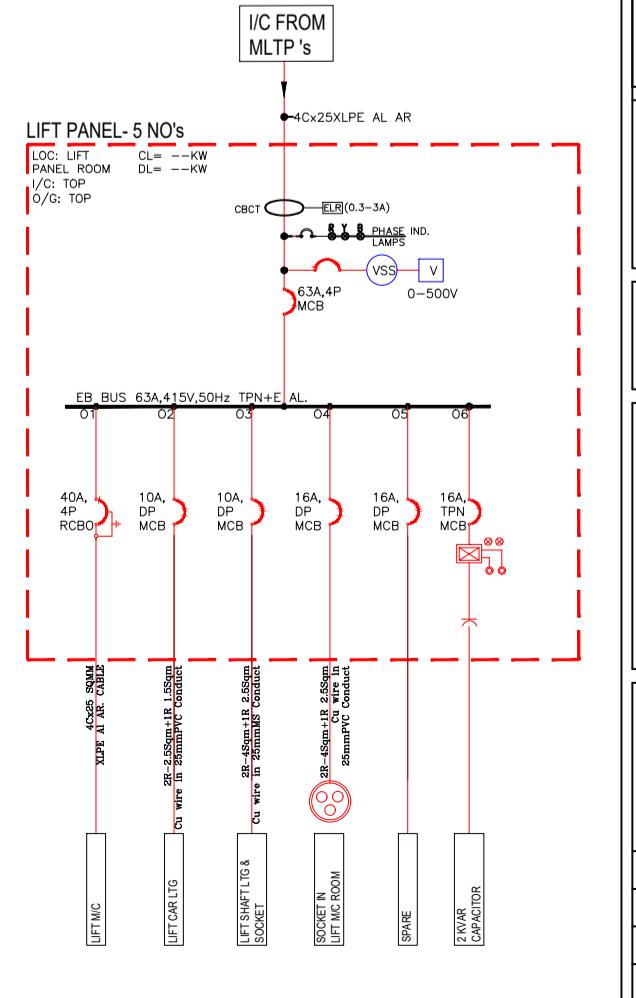
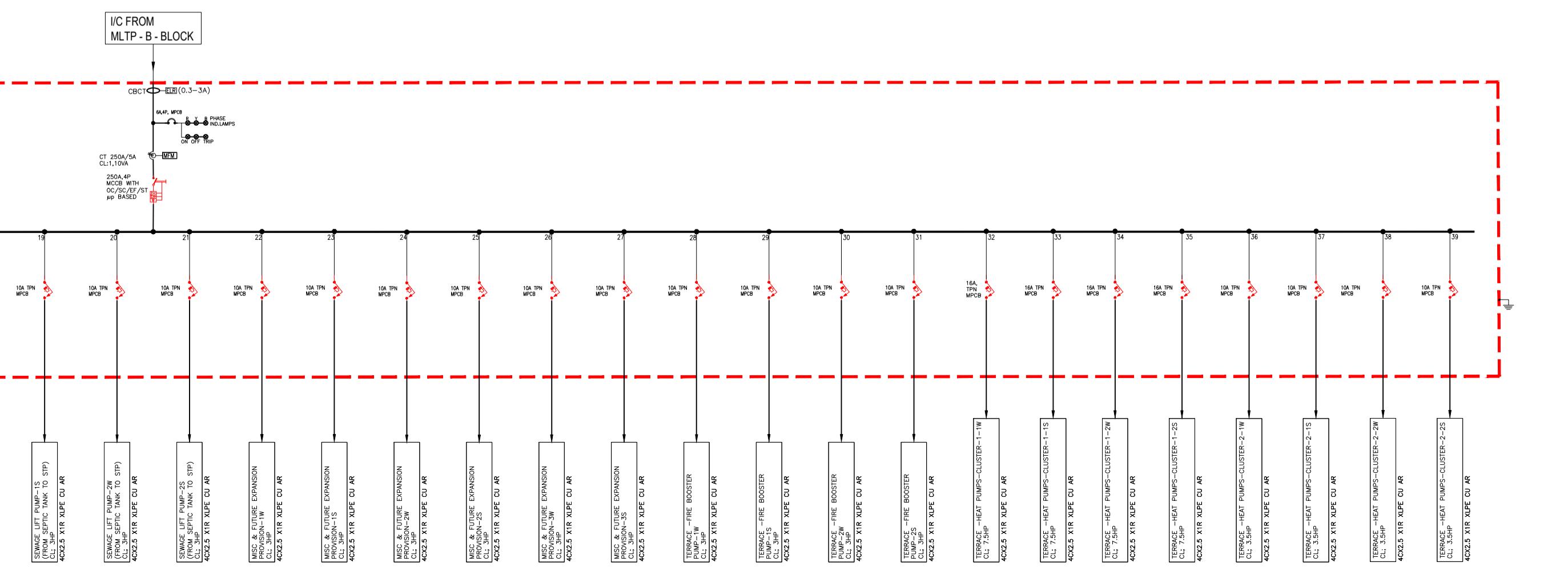
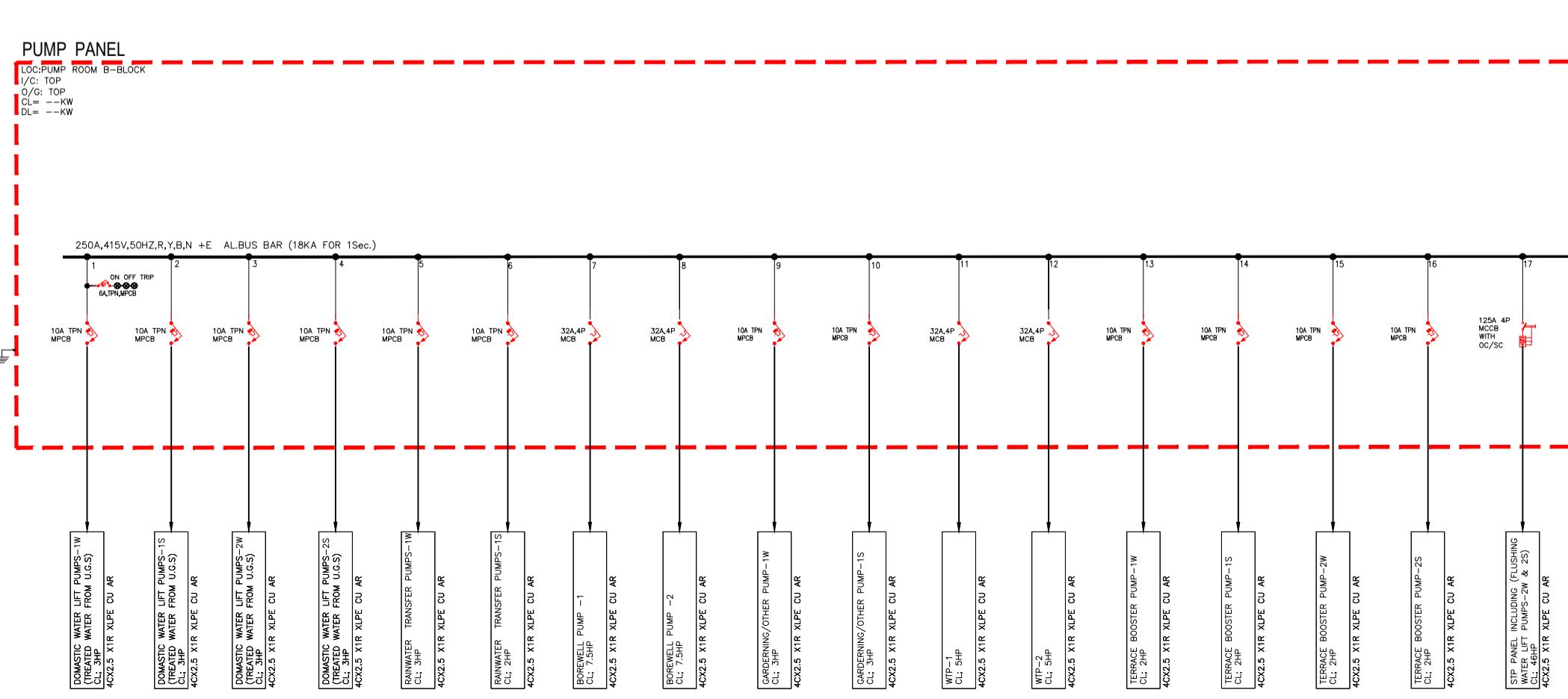
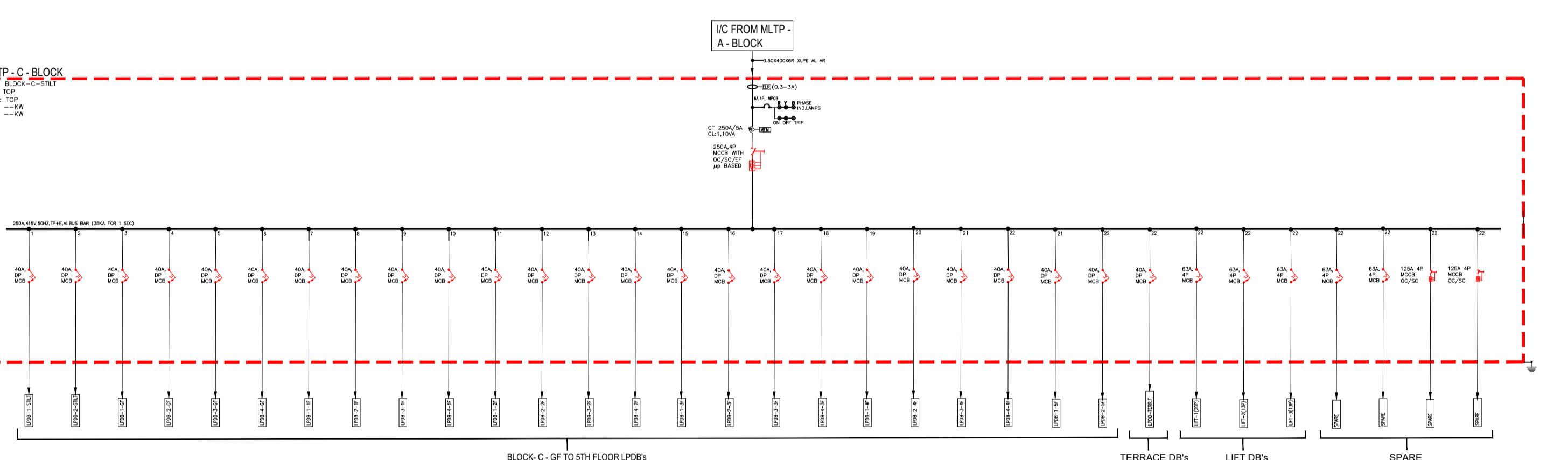
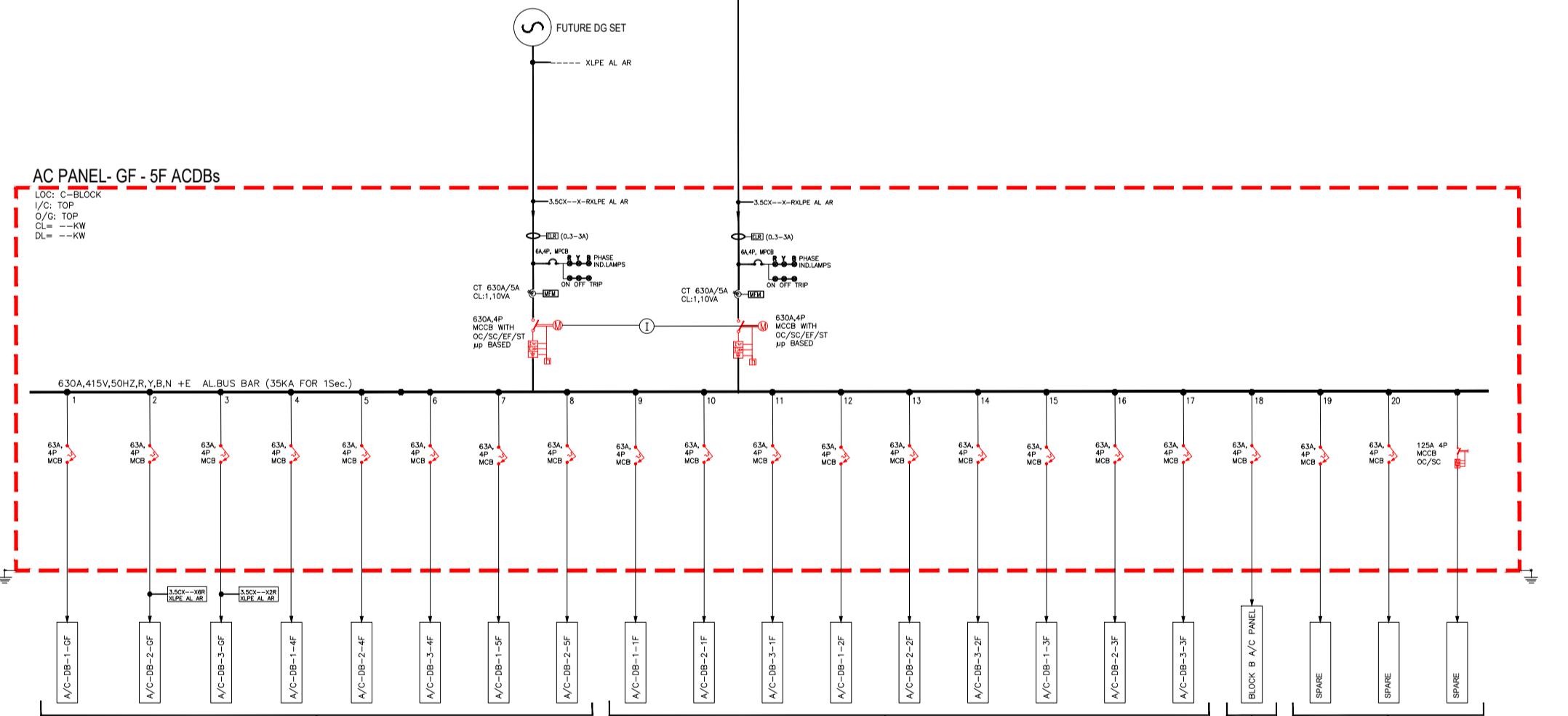
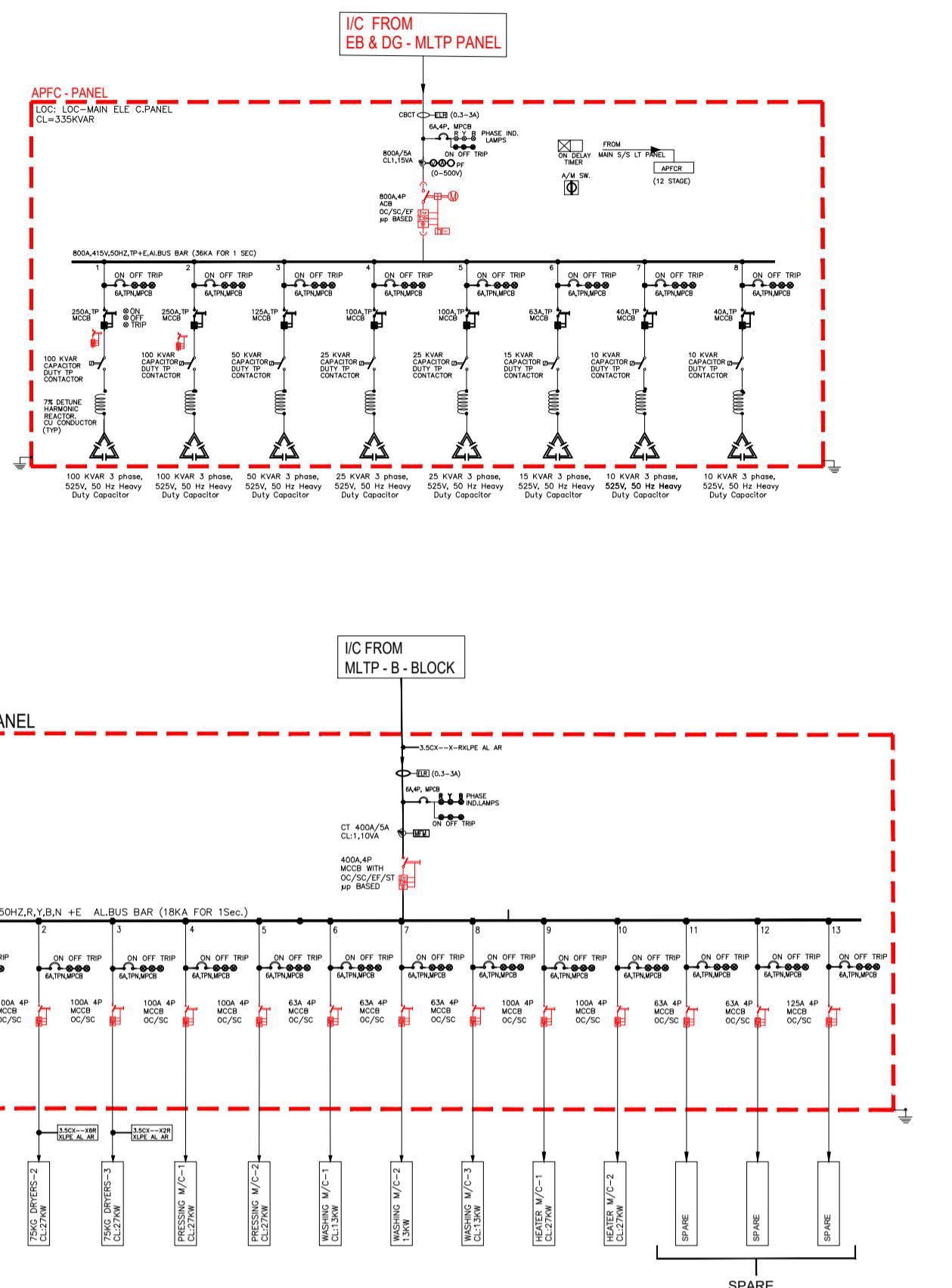
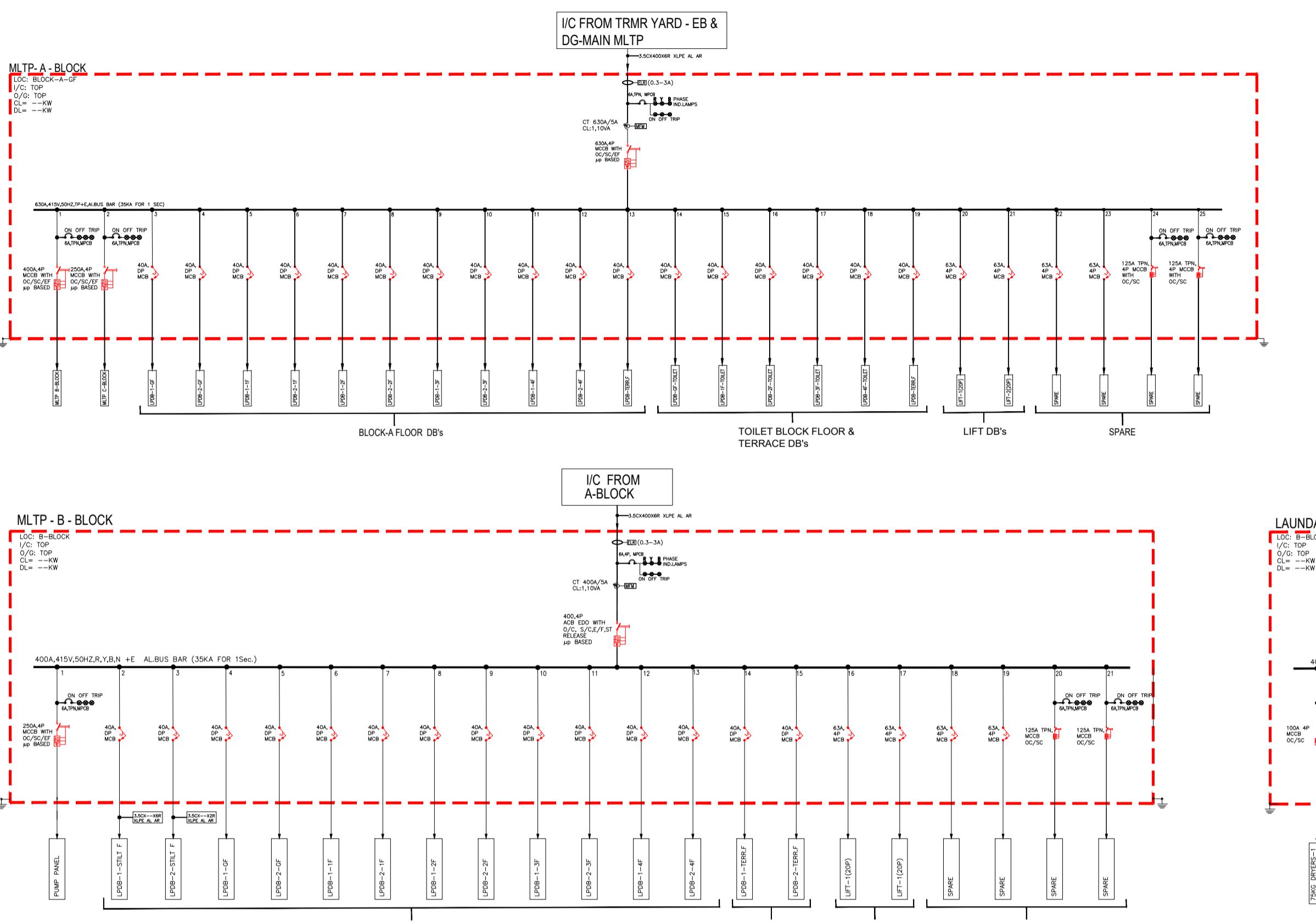
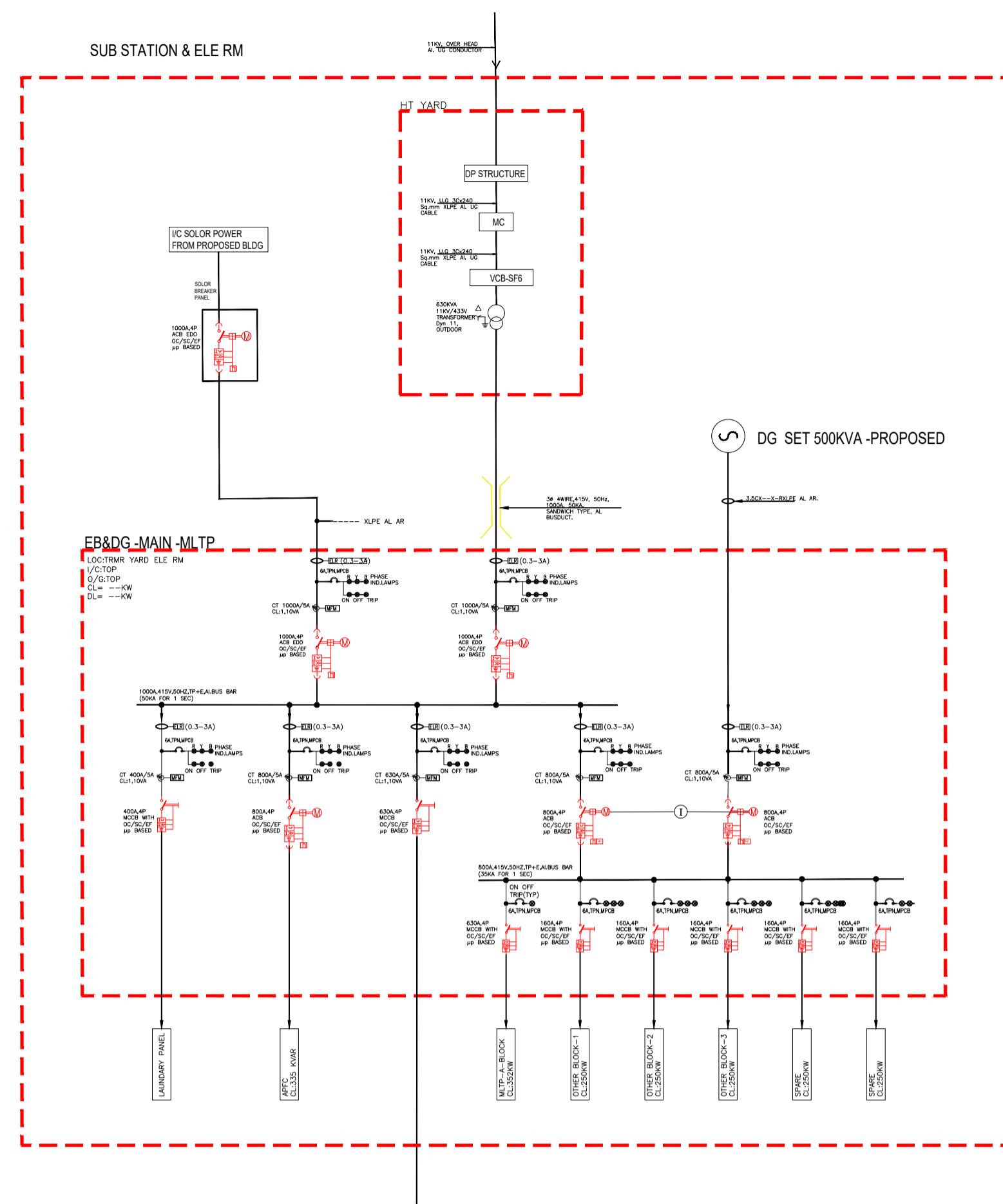
	cable entry / exit and GI Spiral earthing Light Fixtures will be supplied by Client) Qty as per Landscape consultant drawing							
4.1	9(L1) Mtrs. Long Double arm Pole light suitable for LED light fixture of 2 x 120W , with pressure die cast Aluminium housing toughned curved glass, including 3 phase loop-in loop-out box with all Accessories. The rate shall include earth excavation upto 1.2 mtrs deep and concrete pedestal,suitable plate with nut bolts complete (as per drawing) IP Rating - IP66-- Pole Model No- KP-7256 , Light fixture Double arm fixture Model No-KP-5284)	Nos		R.O				
	9(L1 A) Mtrs. Long Single arm Pole light suitable for LED light fixture of 1 x 120W , with pressure die cast Aluminium housing toughned curved glass, including 3 phase loop-in loop-out box with all Accessories. The rate shall include earth excavation upto 1.2 mtrs deep and concrete pedestal,suitable plate with nut bolts complete (as per drawing) IP Rating - IP66-- Pole Model No- KP-7256 , Light fixture Double arm fixture Model No-KP- 5281 1X120W)			14				
4.2	9(L1 B) Mtrs. Long upper Single arm Pole light suitable for LED light fixture of 2 x 60W and lower Single arm Pole light suitable for LED light fixture of 1 x 60W , with pressure die cast Aluminium housing toughned curved glass, including 3 phase loop-in loop-out box with all Accessories. The rate shall include earth excavation upto 1.2 mtrs deep and concrete pedestal,suitable plate with nut bolts complete (as per drawing) IP Rating - IP66--Light fixture Double arm fixture upper arm at 9m & lower arm at 6m- Model No-KP- 7230 2X60W)	Nos		R.O				
4.5	POST TOP (L3) -4.2 Mtrs suitable for LED light fixture of 1 x 90W , with pressure die cast Aluminium housing toughned curved glass, including 3 phase loop-in loop-out box with all Accessories. The rate shall include earth excavation upto 0.5 mtrs deep and concrete pedestal IP Rating - IP66-- 7018	Nos		R.O				
	Sub Total of Street poles							
	Total A+B+C							
	GST 18% A+B+C							
	Sub Total Total A+B+C							
	Grand Total A+B+C							







REFERENCE DRAWING.		
IG NUMBER : DWG-NO/REV-NO. : DATE		
LEGEND		
WIPRO LIGHTING LL 22-511-XXX-65-G2 36W - SURFACE MOUNTED LIGHT LUMINAIRE.	00	
WIPRO LIGHTING LL 22-511-XXX-65-G2 28W - SURFACE MOUNTED LIGHT LUMINAIRE.		
WIPRO LIGHTING LL 20-221-XXX-65-NE3 20W - SUSPENDED LIGHT LUMINAIRE.		
Wipro Lighting LD80-171-XXX-60-SM LED 3/5W Round Ceiling Mouted Night Luminaire.		
WIPRO LIGHTING LD 80-101-XXX-60-SM LED 7/9W Round Ceiling Mouted Luminaire.		
Wipro Lighting LD80-171-XXX-60-SM LED 18w Round Surface Mouted Luminaire.		
Wipro Lighting LD 80-101-XXX-60-SM LED 12W Round Surface Mouted Luminaire.		
Wipro Lighting LE09671-XX-57-XXX-55w- Decorative Type at Entrance Lobby LED Luminaire		
Wipro Lighting CRCO10S036HP57G2 Immaculate+ Surface Mounted 2ft x 2ft LED Luminaire with Diffuser -36W		
WIPRO LIGHTING LL 24-541-XXX-57-XX 18W - WALL BRACKET		
6A SINGLE POLE TWO WAY SWITCH FOR LIGHTING		
6A SINGLE POLE SWITCH FOR LIGHTING		
FAN REGULATOR AT 1200mm FFL		
CEILING FAN POINT (BLDB TYPE)		
6A 5 PIN UNIVERSAL SOCKET CONTROLLED BY 16A SP SWITCH		
2NO. 6A 5 PIN UNIVERSAL SOCKET CONTROLLED BY 16A SP SWITCH ON UPS		
6/16A 5 PIN UNIVERSAL SOCKET CONTROLLED BY 16A SP SWITCH		
2 NO.6/16A 5 PIN UNIVERSAL SOCKET CONTROLLED BY 20A SP SWITCH		
6/16A 5 PIN UNIVERSAL SOCKET CONTROLLED BY 16A SP SWITCH FOR AC		
6/16A 5 PIN UNIVERSAL SOCKET CONTROLLED BY 16A SP SWITCH FOR GEYSER		
MIRROR LIGHT		
TV SOCKET		
TELEPHONE SOCKET		
LPDB		
ELDB		
DESCRIPTION		DATE
ISSUALS		SIGN.
FOR TENDER		19.03.2024
FOR APPROVAL		13.02.2024
FOR APPROVAL		10.02.2024
DESCRIPTION		DATE
REVISIONS		SIGN.
T:		
SRI SATHYA SAI CENTRAL TRUST		
Prasanthi Nilayam Puttaparthi Anantapur District Andhra Pradesh - 515134		
PROJECT MANAGEMENT CONSULTANTS:		
PROJECT TITLE:		
DORMITORY & DEVOTEE BLOCK PUTTAPARTHY		
PROJECT :		
• ABSTRACT REALITY PVT LTD NO 3 1st Floor 1st Main 4th Block HBR Layout Bengaluru 560 043		
STRUCTURAL CONSULTANTS:		
DESIGN STAGE:		
FOR TENDER		
ELECTRICAL CONSULTANTS :		
DA DESIGN ASSOCIATES MEP Consultants		
DRAWING TITLE :		
BLOCK A,B&C TYPICAL LIGHTING & POWER LAYOUT		
: --	BLOCK :	SHEET NO.
ID : CHANDRASHEKAR.V	DATE : 19-03-2024	1 OF 1
: GMP	APPROVED :	REV NO:
ID : CHANDRASHEKAR.V	COORDINATOR :	TO
:	DRG NO : DA-SSCT-ELE-04	



TECHNICAL NOTES:-

- . THE CONTRACTOR/PROJECT MANAGER MUST CHECK ALL DIMENSIONS AND DETAIL.BE RESPONSIBLE FOR THE SAME. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF THE ARCHITECT/CONSULTANTS.
 - . ALL BREAKERS TO BE OF Icu = Ics RATING.
 - . ALL CIRCUIT BREAKER TO BE PROVIDED WITH PROPER CABLE TERMINAL BUSBARS FOR RATING 63A & ABOVE AND LESS THAN 63A SUITABLE CABLE TERMINAL CONNECTORS WITH SEPERATE CABLE ALLEY FOR TERMINATING CABLES.
 - . MCCB OF 250A AND ABOVE SHALL BE WITH MICROPROCESSOR BASED RELEASES.
 - . CONTRACTOR TO OBTAIN WRITTEN APPROVAL FROM THE CONSULTANTS/CLIENTS/RESPECTIVE STATUTORY AUTHORITIES BEFORE TAKING UP THE FABRICATION OF PANELS/EQUIPMENTS.
 - . ALL STARTERS SHALL BE AS PER TYPE-2 CO-ORDINATION. CHART AS PER RECOMMENDED BY SWITCHGEAR MANUFACTURER.
 - . MCCB SHORT CIRCUIT BREAKING CAPACITY(ka) SHALL BE AS PER MENTIONED BUSBAR FAULT LEVEL RATINGS
 - . INDIVIDUAL BREAKER KA RATING SHALL BE SAME AS BUSBAR KA RATING.
 - . ACB'S INCOMER SHALL BE WITH μ p BASED 0/C,S/C,E/F & ST RELEASES.
 - . ACB'S OUTGOING SHALL BE WITH μ p BASED 0/C,S/C,E/F RELEASES.
 - . MCCB INCOMER OF 250A & ABOVE SHALL BE WITH μ p BASED 0/C,S/C,E/F & ST RELEASES, below 250A SHALL BE TMA BASED.
 - . MPCB SHALL BE WITH SINGLE PHASE PREVENTION AND OL'R SETTINGS.
 - . ALL MDM SHALL BE SUITABLE FOR DUAL ENERGY.
 - 14) ALL GA/SHOP DRAWINGS TO BE SUBMITTED FOR APPROVAL.
 - 15) LABELING ALL EQUIPMENT, CABLES SWITCHES, POWER OUTLETS, CKTS ETC. DISTRIBUTION BOARD NUMBERS TO BE DONE.

END:-

30L	DESCRIPTION
10	MOTORISED DRAWOUT TYPE VACUUM CIRCUIT BREAKER (VCB)
10	ELECTRICAL OPERATED AIR CIRCUIT BREAKER (ACB) WITH O/C,S,C/E/F RELEASES & S/T, U/V COIL (DRAW OUT TYPE)
10	ELECTRICALLY OPERATED AIR CIRCUIT BREAKER (ACB) WITH O/C,S,C/E/F RELEASES & S/T COIL (FIXED TYPE)
10	ELECTRICALLY OPERATED AIR CIRCUIT BREAKER (ACB) WITH O/C,S,C/E/F RELEASES & S/T COIL (DRAW OUT TYPE)
10	MANUALLY OPERATED AIR CIRCUIT BREAKER (ACB) WITH O/C,S,C/E/F RELEASES & U/V COIL (DRAW OUT TYPE)
10	MANUALLY OPERATED AIR CIRCUIT BREAKER (ACB) WITH O/C,S,C RELEASES & S/T COIL (FIXED TYPE)
10	ELECTRICALLY OPERATED MOULDED CASE CIRCUIT BREAKER WITH O/C, S/C,E/F RELEASES & S/T COIL (MCCB)
10	MANUALLY OPERATED MOULDED CASE CIRCUIT BREAKER WITH O/C, S/C RELEASES.
10	MANUALLY OPERATED MOULDED CASE CIRCUIT BREAKER WITH O/C, S/C & E/F RELEASES
>	MINIATURE CIRCUIT BREAKER (MCB)
>	MOTOR PROTECTION CIRCUIT BREAKER (MPCB)
	ISOLATER
	CHANGER OVER SWITCH (COS)
	POTENTIAL TRANSFORMER
B	PHASE INDICATING LAMPS
	TRIP CKT SUPERVISION RELAY
	REVERSE POWER RELAY
A	MASTER TRIP RELAY FOR ALTERNATOR FAULTS
E	MASTER TRIP RELAY FOR ENGINE FAULTS
	INSTANTANEOUS OVER CURRENT RELAY
	AC INVERSE TIME EARTH OVER CURRENT RELAY
	TRAFO.FAIL/ALARM AUXILIARY RELAY
	UNDER VOLTAGE RELAY
	OVER VOLTAGE RELAY
CR	AUTOMATIC PF CORRECTION RELAY
TROU	PROGRAMMABLE LOGIC CONTROLLER
	LOW VOLTAGE MONITORING
30K	ELECTRICAL INTERLOCK
	EARTH FAULT RELEASE
	KILOWATTHOUR METER
SE	HT FUSE
	OVER CURRENT RELEASE
	SHORT CIRCUIT RELEASE
3	INTELLIGENT MULTIFUNCTION MANAGER WITH COMM. PORT RS485 BASIC PARAMETERS : V & I, HZ, PHASE-NEUTRAL & PHASE -PHASE AVERAGE, NEUTRAL CURRENT, GROUND VOLTAGE POWER PARAMETERS KW, KVA, PF, KVAR PHASEWISE & AVERAGE ENERGY PARAMETERS : KWH, KVArh, KVAh PHASEWISE & TOTAL MAXIMUM DEMAND 3MD KVA & KW HARMONICS THD : V & I THD--SELECTABLE FUNDAMENTAL OR RMS HARMONICS INDIVIDUAL-V & I UP TO 50TH, BUILT IN 2 D/I : TARIFF/ENERGY COST 2 R/O : CONTROLLING/ALARM FOR ANY DESIRED PARAMETERS.
3	MULTI FUNCTION METER WITH COMM. PORT RS485 BASIC PARAMETERS : V & I, HZ, PHASE-NEUTRAL & PHASE -PHASE AVERAGE, NEUTRAL CURRENT, GROUND VOLTAGE POWER PARAMETERS KW, KVA, PF, KVAR PHASEWISE & AVERAGE, INDIVIDUAL HARMONICS UPTO 31 st ENERGY PARAMETERS : KWH, KVArh, KVAh PHASEWISE & TOTAL
M	DUAL LOAD & DEMAND RANGE WITH COMM. PORT RS485 BASIC PARAMETERS : V & I, HZ, PHASE-NEUTRAL & PHASE -PHASE AVERAGE, NEUTRAL CURRENT, % UNBALANCED-I, VL-NVL-L POWER PARAMETERS : KW, KVA, PF, KVAR PHASEWISE & AVERAGE, INDIVIDUAL HARMONICS UPTO 31 st ENERGY PARAMETERS : KWH, KVArh, KVAh PHASEWISE & TOTAL
	AL. BUSDUCT
	AUTO / MANUAL SELECTOR SWITCH
	CHANGEOVER SWITCH
	UNDER VOLTAGE RELAY
	OVER VOLTAGE RELAY
	MASTER TRIP RELAY
	TRIP CKT SUPERVISION RELAY,
	DIGITAL AMMETER
	DIGITAL VOLTMETER
	ELECTRONIC HOOTER
	INDICATING LAMP
ELR	CORE BALANCE CT WITH ELR
	CURRENT TRANSFORMER (CT) RESIN CAST
	POTENTIAL TRANSFORMER
	TRANSFORMER
	SELECTOR SWITCH
	ILLUMINATED PUSH BUTTON
	EMERGENCY PUSH BUTTON
	RESTRICTED EARTH FAULT RELAY
	CONTACTOR
	CAPACITOR
50N	3 POLE IDMT WITH INST

DESCRIPTION	DATE	SIG
ISSUALS		
	09.08.2024	
	04.03.2024	
	29.02.2024	
	28.02.2024	
	16.02.2024	

REVISIONS

MENT CONSULTANTS

Y & DEVOTEE BLOCK
HY

TRACT REALITY PVT LTD
| 1st Floor | 1st Main
Block | HBR Layout
Mysuru 560 043

CONSULTANTS:

—
—
—

ISSUED FOR TENDER

SULTANTS :

**DESIGN
ASSOCIATES**

Subjetto Consultores

LINE DIAGRAM OF ELECTRICAL

	BLOCK :	SHEET
SHEKAR.V	DATE : 9-08-2024	1 0
	APPROVED :	REV
SHEKAR.V	COORDINATOR :	TO
	DRG NO : SSSCT-ELE-01	