

Biotechnology Industry Research Assistance Council (BIRAC) (A Govt. Of India Enterprise)

निविदा दस्तावेज़ / Tender Document (एनआईटी, जीसीसी और एससीसी)/ (NIT, GCC and SCC)

कार्य का नाम / Name of Work

"Shifting of office of

Biotechnology Industry Research Assistance Council [BIRAC], 1st Floor & Mezzanine Floor, MTNL Building, 9, CGO Complex, New Delhi-110003

to

5th Floor Business Park, NSIC, Okhla, New Delhi.

"कार्यालय का स्थानांतरण"

जैव प्रौद्योगिकी उद्योग अनुसंधान सहायता परिषद [बाइरैक] पहली मंजिल और मेजेनाइन तल, एमटीएनएल बिल्डिंग, 9, सीजीओ कॉम्प्लेक्स, नई दिल्ली-110003

से

पांचवीं मंजिल बिजनेस पार्क, एनएसआईसी, ओखला, नई दिल्ली ।

[No. BIRAC/HR&A/007/2022/ENQ - 42]

कार्यालय का पता

पहली मंजिल, एमटीएनएल बिल्डिंग, 9, सीजीओ कॉम्प्लेक्स, लोधी रोड, नई दिल्ली -110003 (स्कोप कॉम्प्लेक्स के बगल में, गेट नंबर 13 के सामने, जेएलएन स्टेडियम)

First Floor, MTNL Building, 9, CGO Complex, Lodhi Road, New Delhi-110003 (Next to Scope Complex, In front of Gate no. 13, JLN Stadium) फोन/ Phone: + 91-11-24389600 सीआईएन सं./ CIN No.: U73100DL2012NPL233152 वेबसाइट का पता/ Website address: www.birac.nic.in

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जैव प्रौद्योगिकी उद्योग अनुसंधान सहायता परिषद

(भारत सरकार का उपक्रम)

Biotechnology Industry Research Assistance Council

(A Government of India Enterprise)

Notice Inviting Tender

1.0 Letter of Invitation

Item rate tender are invited on behalf of Biotechnology Industry Research Assistance Council (BIRAC) from firms/Contractors of repute in two bids system for the work "Shifting of office of Biotechnology Industry Research Assistance Council [BIRAC], 1st Floor & Mezzanine Floor, MTNL Building, 9 CGO Complex, New Delhi-110003 to 5th Floor, Business Park, NSIC, Okhla, New Delhi.

Estimated Cost put to tender is for composite work for Addition /alteration for renovation of office space with civil, electrical, HVAC, CCTV, LAN, UPS, Server connectivity, UPS connectivity, Smoke alarm system, EPBAX, A V system at 5th Floor, Business Park, NSIC, Okhla, New Delhi including dismantling of the existing infrastructure and fixtures at the premises at First Floor and Mezzanine floor at 9 CGO Complex, MTNL Building, New Delhi-110003, for reuse at the new premises and Packing, Loading, Shifting, Unloading, Unpacking and Re-Installation of Office furniture, files, equipment and other materials of the Biotechnology Industry Research Assistance Council from 1st Floor, 9 CGO Complex, MTNL Building, New Delhi-110003 to 5th Floor, Business Park, NSIC, Okhla, New Delhi.

Proposed office space is at 5th Floor, Business Park, NSIC, Okhla, New Delhi.

The time allowed for carrying out the total work will be 90 days from the 5th day after the date of written orders to commence the work or from the first day of handing over the site whichever is later, the work is to be taken up and complete in phase wise manner. In first phase which is to be competed in 60 days

- a. Hall number 508
- b. Hall number 509
- c. Hall number 510
- d. Hall number 511

In second phase which is to be start in parallel but the same can be finished in 90 days

- e. Hall number 512
- f. Hall number 507
- g. Hall number 506
- 2. Entire shifting is to be done in 60 days.
- 3. Day /Night permission for construction.
- 4. The site for the work is available.
- 5. Applicant has to deposit Earnest Money of Rs. in the form demand draft of a scheduled bank issued in favour of Biotechnology Industry Research Assistance Council (BIRAC), payable at Delhi/New Delhi along with tender document. The earnest money shall be submitted in sealed cover super scribed "Earnest money". Bids without Earnest Money would be rejected.
 - a. The Bid Document shall be downloaded directly from the website of BIRAC @ <<www.birac.nic.in>> and Central Public Procurement Portal (CPPP)
- 6. The BIRAC reserves the right to accept or reject any prospective application without assigning any reason.

7. The Contractor whose tender is accepted, will be required to furnish performance guarantee @ 3% (Three Percent) of the quoted cost with in the period specified in schedule 'F' This guarantee shall be in the form of Bank Guarantee of any scheduled bank or STATE BANK OF INDIA (SBI) in accordance with the prescribed form.

Bid No:	BIRAC/HR&A/007/2022/ENQ-42
Brief Description:	Shifting of office of Biotechnology Industry Research Assistance Council [BIRAC], 1st Floor & Mezzanine Floor, MTNL Building, 9 CGO Complex, New Delhi-110003 to 5 th Floor, Business Park, NSIC, Okhla, New Delhi
Category:	Work
Approximate Quantity:	Need Based
Contract Period:	Till completion of work as per the terms of Bid
Bid Originating Location:	BIRAC Office, New Delhi
Type of bid:	Notice Inviting Tender (NIT)
Cost of bid document (IN INR):	NIL
Earnest money Deposit (IN INR):	Rs. 9,96,000.00
Performance Bank Guarantee (IN INR):	3% of Quoted cost
Security Deposit (IN INR)	5% of Quoted cost
Issue / Sale of Bid document:	Downloadable from BIRAC Website & Central Public Procurement Portal (CPPP)
Bid Publication Date:	13 th February 2023
Site/s Visit Dates:	In mutual consultation with BIRAC officials & PMC
Bid duration:	21 Days
Pre-bid Meeting Date, time &	21 st February 2023 at 02:30 PM
Venue:	Venue: Biotechnology Industry Research Assistance Council (BIRAC), MTNL Building, 9 CGO Complex, Lodhi Road, New Delhi – 110003
Last Date & Time for Submission of BID:	06 th March 2023 by 2:00PM
Bid Opening Date & Time:	06 th March 2023 at 2:30PM
Place of submission & opening of bid:	Biotechnology Industry Research Assistance Council (BIRAC), 1st Floor, MTNL Building, 9 CGO Complex, Lodhi Road, New Delhi – 110003
Site Location:	 Biotechnology Industry Research Assistance Council (BIRAC), MTNL Building, 9 CGO Complex, Lodhi Road, New Delhi – 110003

No. BIRAC/HR&A/007/2022/ENQ-42

	2. 5 th Floor, Business Park, NSIC, Okhla, New Delhi	
Pre-Qualification Criteria:	As per Clause 3.0 (2.0)	
Bid Validity	90 days from the Bid Closing Date	

Director Operation For and on behalf of BIRAC

Note: BIRAC reserves the right to cancel this Bid and/ or invite afresh with or without amendments, without liability or any obligation for such request for empanelment and without assigning any reason. Information provided at this stage is indicative and BIRAC reserves the right to amend/add further details in the Bid.

This Bid is not an agreement and is neither an offer nor invitation by the Authority to the prospective Applicants or any other person. The purpose of this Bid is to provide interested parties with information that may be useful to them in the formulation of their applications pursuant to this Bid. This Bid includes statements, which reflect various assumptions and assessments arrived at in relation to the Bid that may not be accurate. The Authority may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this Bid.

प्रथम मंजिल, एमटीएनएल बिल्डिंग, ९, सीजीओ कॉम्पलेक्स, लोधी रोड़, नई दिल्ली–110003, भारत 1st Floor, MTNL Building, 9, CGO Complex, Lodhi Road, New Delhi - 110003, India Phone: +91-11-24389600 Fax: +91-11-24389611 Website: www.birac.nic.in E-mail: birac.dbt@nic.in सीआईएन सं./CIN No. : U73100DL2012NPL233152

2.0 SECTION - I [BRIEF PARTICULARS OF THE WORK]

The items covered under the scope of work, not limited to, shall include the following:

Total super built up area 30000 sft (total carpet area 22500 sqft)

- i) Providing New / installing existing Air conditioner units / ducts, AHUs, FCUs after assessment of feasibility, including copper piping wherever required.
- ii) Existing Split ACs unit from present office [MTNL Building] to be used at new location [5th Floor, Business Park, NSIC, Okhla, New Delhi] as per feasibility.
- iii) Installation, Testing of existing air-conditioning ducts and carry out repairs wherever required.
- iv) Installation, Testing & Re termination of all electrical systems.
- v) Installation, testing and commissioning of Firefighting system including new fire Extinguishers as per norms of area.
- vi) Repair and make-sturdy the corridor railing.
- vii) Civil work -revamp the existing structure as per requirement and drawings.
- viii) Replacement and Installation of Electrical penal and servo system.
- ix) Installation of new fibre cable and Commissioning for Computer Networking along with switches.
- x) Audio video system wiring with complete installation and programming.
- xi) Repair and maintenance of work stations existing in the premises.
- xii) Testing, commissioning of all electrical equipment's including wiring including LAN / HVAC / Firefighting sprinklers / server connectivity / electrical sockets.
- xiii) Installation, Testing & Commissioning of Public Address (PA) system. from present office [MTNL Building] to new office at 5th Floor, Business Park, NSIC, Okhla, New Delhi.
- xiv) Sufficient new lights to be provided.
- xv) Sufficient new wall mounted fans to be provided.
- xvi) Complete wiring for electrical / HVAC / UPS / EPBAX / Intercom lines etc. including Penta scanning.
- xvii) Deep cleaning of all three locations.
- xviii) Complete white-wash and paint work.
- xix) Carpentry Work-Repairing/replacement of door, window, false celling, workstation and window films pasting if required.
- xx) Carpentry
- xxi) Installation of online UPS including wiring to workstations.
- xxii) Testing & re termination of all electrical systems including Plumbing work:
- xxiii) Renovation/ new construction of Washrooms at all three location is required.
- xxiv) Providing & fixing aluminium grill / doors (anodized, transparent or dyed) wherever required.
- xxv) Complete shifting of Compactor Room & re-installation from the present office location to 5th Floor, Business Park, NSIC, Okhla, New Delhi or room.
- xxvi) Packing and unpacking of Office furniture, files, equipment and other materials of BIRAC Office as per the instructions.
- xxvii)Transport arrangement with deployment of suitable vehicles/under container trucks during days of Dismantling, Packing, Loading, Shifting, Unloading,

Unpacking and Re- Installation including adequate labour and supervisor as required.

xxviii) Deployment of experiences labourers as required handling sensitive and sophisticated equipment.

3.0 SECTION -II [INFORMATION & INSTRUCTIONS FOR BIDDERS]

1.0 General:

- 1.1 Letter of transmittal and forms for deciding eligibility are given in Section III.
- 1.2 All information called in the enclosed forms should be furnished against the relevant columns in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column, a "nil" or "no such case" entry should be made in that column. If any particulars/query is not applicable in case of the bidder, it should be stated as "not applicable". The bidders are cautioned that not giving complete information called for in the application forms or not giving it in clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the bid being summarily disqualified.
- 1.3 The bid should be type- written. The bidder should sign each page of the application.
- 1.4 Overwriting should be avoided. Correction, if any should be made by neatly crossing out, initialing, dating and rewriting. Pages of the eligibility criteria document are numbered. Additional sheets, if any added by the contractor, should also be numbered by him. They should be submitted as a package with signed letter of transmittal.
- 1.5 References, information and certificates from the respective clients certifying suitability, technical knowledge or capability of the bidder should be signed by an officer not below the rank of Executive Engineer/Deputy Director or equivalent.
- 1.6 The bidder may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is however, advised not to furnish superfluous information. No information shall be entertained after submission of eligibility criteria document.
- 1.7 The bidder is advised to visit the site of work at his own cost and examine it and its surrounding to himself collect all information that he considers necessary for proper assessment of the prospective assignment.
- 1.8 The successful bidder shall enter into the Service and Confidentiality (S&C) Agreement.

2.0 Prequalification Criteria (PQC):

Bidders who fulfill the following Pre-Qualification criteria shall be eligible to apply.

S. No	Pre-qualification criteria	Supporting documents
1	The contractor shall be a legal entity, registered as a Company/ LLP/ Society /partnership firm / proprietorship firm under respective acts in India.	Self-attested copy of Company Incorporation Certificate from ROC/Partnership deed etc.
2	 Should have satisfactorily completed the works as mentioned below during the last five years as on 31-12-2022 i) One similar work costs not less than 80% or two similar works each costing not less than 60%, or three similar works each costing not less than 50% of the total estimated value. ii) Similar work shall mean "Renovation /interior work of office buildings including internal civil, electrical installations, Air conditioning, HVAC work, firefighting, LAN & EPBAX, works of "Dismantling of the existing infrastructure and fixtures for re-use at the new premises with Packing, Loading, Unpacking and Re-Installation of Office furniture, files, equipment and other materials" 	Self-attested Copy of the work orders and letter of successful completion from the client. (Forms "C" and "D")
3	Should have had average annual financial turn over (gross) of Rs. 4.00 Crores on construction works during the last 3 consecutive years ending on 31.3. 2022.	Annual financial statement for the last three financial year in (Form "A") and Net worth certificate in Form "B")
4	Should not have incurred any loss (PAT) during the last three years ending 31 st March 2022.	Certificate from the Chartered Accountant of the Organization/Audited Balance sheets for last three financial years, Income Tax return
5	Should have minimum Net Worth of 40% of the estimated tender value as certified by the CA as of 31 st March 2022.	Certificate of Net worth issued by the CA. (Form B)
6	The bidder should have their established office at Delhi/NCR.	Electricity/Telephone Bill or any other supporting document stating the address duly certified by the Owner/Authorized Representative of the Company
7	The bidder must have registration with GST. Attested copy of registration certificate to be attached.	Self-attested Copy of GST Registration or GST exemption certificate and PAN Card
8	The contractor should not be involved in any major litigation that	An affidavit on stamp paper of Rs. 50/- declaring that the contractor should not

S. No	Pre-qualification criteria	Supporting documents
	may have an impact of affecting or compromising the delivery of services as required under this Tender and in the execution of agreement and Contractor has not been banned, blacklisted or debarred from tendering by any Govt. Department.	be involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this Tender and in the execution of agreement and Contractor has not been banned, blacklisted or debarred from tendering by any Govt. Department.
9.	The bidder should not have pre- exited or terminated any contract with or by BIRAC in last 05 years as on the date of submission.	An affidavit on stamp paper of Rs. 50/- declaring that the bidder has not pre- exited or terminated any contract with or by BIRAC in last 05 years as on the date of submission.

3.0 TECHNICAL EVALUATION

Application supported by prescribed annexures and the financial bid shall be placed in separate **sealed envelopes** each marked" PQC Documents", "Technical Bid" and "Financial bid" respectively. All the envelopes shall be submitted together in another sealed envelope. The bids received up to 2.00PM **on 06th March 2023** shall only be considered for opening. The envelopes marked "**PQC Documents**" shall be opened in BIRAC office on the same day at 2.30 PM. The time and date of opening of financial bid shall be communicated at a later date.

- 3.1 The details submitted by the bidders will be evaluated in the following manner:
 - 3.1.1 The initial Pre-qualification criteria prescribed in **Para 2(1) to 2(9)** of NIT will first be scrutinized and the bidder's eligibility for the work is determined.
 - 3.1.2 The bidders qualifying the Pre-Qualification criteria as set out in **Para 2(1) to (9)** of NIT above will be evaluated for following technical evaluation criteria by scoring method on the basis of details furnished by them.

S. No.	Description	Maximum Marks	Cut Off Marks
1	Personnel and Establishment (Form "E" & "F") The bidder should have sufficient number of Technical and Administrative employees for the proper execution of the Contract. The bidder should submit a list of employees stating their designations, qualifications and number of years of experience.	15	9
2	Experience in similar nature of work during last five years (Form C & D). The bidders performance for each work completed in the	20	12

S. No.	Description	Maximum Marks	Cut Off Marks
	preceding 3 years and in hand should be certified by the		
	officer of client not below the		
	rank of Executive Engineer/Deputy		
	Director/Nodal Officer or equivalent. The certificate		
	issued by the client should be as per "Form E".		
	Documents to be submitted (i) Completion certificate for		
	03 similar projects completed in last 5 years along with the Form E		
3	Financial strength & Net worth (Form 'A' & 'B')	15	9
	Total Marks	50	30

Each bidder shall be assigned scores under each parameter as given in the technical evaluation criteria. The Highest Three Technically Scoring Bids (Upto 3 - H1, H2 & H3) with minimum 60% marks under each parameter and in aggregate will be further considered for opening of Price Bid

The BIRAC however, reserves the right to restrict the list of technically qualified bidders to any number deemed suitable by it.

- 3.2 Even through any bidder may satisfy the above requirements; he would be liable to disqualification if he has:
 - a) made misleading or false representation of deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document,
 - b) record of poor performance such as abandoning work, not properly completing the contract or financial failures/weaknesses etc.

4.0 Section III [Letter of transmittal]

The bidder should submit the letter of transmittal as per the format in section III on the company's letter head duly signed by the authorized official attached with the document.

5.0 Opening of price bid

After evaluation of applications (PQC), a list of short-listed agencies will be prepared. The bidders who qualify the PQC shall be considered for the technical evaluation. Thereafter the financial bids of only the technically acceptable bidders shall be opened at the notified time, date and place in the presence of the qualified bidders or their authorized representatives. The bids shall remain valid for 90 days from the last date of its submission.

6.0 Award criteria

6.1 The bidder who quotes the lowest price shall be awarded the contract.

- 6.2 The BIRAC reserves the right, without being liable for any damages or obligation to reject any or all the bids without assigning any reason.
- 6.3 Any effort on the part of the bidder or his agent to exercise influence or to pressurize the BIRAC would result in rejection of his bid. Canvassing of any kind is prohibited.

7.0 Language of Bid

The bid prepared by the bidders and all correspondence and documents exchanged between the bidders and BIRAC relating to the Bid submitted shall be in English or bilingual (Hindi and English) language. However, printed literature furnished by the bidders may be in any other language as long as it is accompanied by an English translation of all its contents. In such a case for the purposes of the interpretation of bid, English translation shall prevail.

8.0 Bid Rejection Criteria (BRC)

BIRAC reserves the right to reject any bid if:

- 1. Received after the expiry of due date and time.
- 2. Any agency who has pre-exited or terminated any contract with or by BIRAC in last five (05) years as on the date of submission shall not be eligible to apply.
- 3. It is not given in the prescribed format as per clause 3.0(3.0).
- 4. The bid has not been indexed or properly paginated and details provided in PQC & TEC are not submitted.
- 5. Supporting documents to substantiate the PQC & TEC have not been submitted.
- 6. Certificates certified by Chartered Accountants must bear UDIN number, in absence of which, it will be considered as invalid and the bid shall be rejected.
- 7. All Declarations/undertakings/information have not been provided on the Letter Head of the Bidders, duly signed and stamped.
- 8. At any time, a material misrepresentation is made or uncovered
- 9. The agency/ Agency /entity does not respond promptly and thoroughly to requests for supplemental information required for the evaluation of the bid.

9.0 Conflict of Interest

The Bidders shall not receive any remuneration in connection with the assignment except as provided in the "Service and Confidentiality Agreement".

10.0 Amendments and Addendum to Bid

- At any time prior to the deadline for submission of bids, BIRAC may at its own discretion and for any reason whatsoever whether at its own initiative or in response to a clarification requested by a bidders modify the Bid Documents by notifying any such amendment as may be drafted/incorporated to the original bid documents.
- ii) The amendment and addendum, if any will be notified by BIRAC or published on the BIRAC website (<u>www.birac.nic.in</u>) before the last date of submission.
- iii) In order to allow the bidders reasonable time to take the amendment in to account in preparing their bids, the BIRAC may at its discretion, extend the deadline for the submission of Bids and any such extension will be notified by BIRAC.

11.0 Disclaimer

- a. BIRAC shall not be responsible for any late receipt of applications for any reasons whatsoever.
- b. BIRAC reserves the right to reject all applications without assigning any reasons thereof.
- c. To relax or waive any of the conditions stipulated in this document as deemed necessary in the best interest of the BIRAC without assigning any reasons thereof.
- d. To include any other item in the Scope of work at any time after consultation with bidders or otherwise.
- e. BIRAC reserves the right to reject all the Bids without assigning any reasons.

12.0 Abnormal Rate:

The bidder is expected to quote rate after careful analysis of cost involved considering all specifications and conditions of contract. In case it is noticed that the rates quoted by the bidder are unusually high or unusually low, it will be a sufficient ground for rejection of the tender unless the reasonableness of the rates is convincing. For scrutiny, the analysis for such rates is to be furnished by the bidder on demand

SECTION III Letter of Transmittal

From:

То

The Director Operation

Biotechnology Industry Research Assistance Council (BIRAC)

Subject:	Submission	of	bids	for	the	work	of	

Sir,

Having examined the details given in press notice and bid document for the above work, I/We hereby submit the relevant information.

- 1. I/We hereby certify that all the statement made and information supplied in the enclosed forms A to H and accompanying statement are true and correct.
- 2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- 3. I/we submit the requisite certified net worth certificate and authorize the Executive Engineer...... To approach the Bank issuing the Net Worth certificate to confirm the correctness thereof. I/We also authorize Executive Engineer......to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- 4. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following works.

Name of work

Certificate from

Enclosures: Seal of bidder

Date of submission:

Signature(S) of Bidder (S)

FORM 'A'

FINANCIAL INFORMATION

- I. Financial Analysis Details to be furnished duly supported by figures in balance sheets/profit & loss account for the last three years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached)
 - (i) Gross Annual turnover on construction works.
 - (ii) Profit/Loss
- II. Financial arrangements for carrying out the proposed work.
- III. Net Worth from Bankers of the bidder in the prescribed Form "B"

Signature of Bidder (S).

Signature of Chartered Accountant with Seal

UDIN no._____

FORM "B"

'Net Worth' CERTIFICATE FROM Bank/CA

This certificate is issued without any guarantee or responsibility on the bank or any of the officers (in case of Bank)

(Signature)

Authorized Bank official with designation/CA

UDIN no._____

- Note (1) Bankers certificates should be on letter head of the Bank, sealed in cover addressed to tendering authority.
 - (2) In case of partnership firm of C.A., certificate should include names of all partners as recorded with the Bank/Registrar.

FORM 'C'

Details of all works of similar class completed during the last five years ending on 31-03-2022

S. No	Name of work/project and location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of common cement as per contract	Stipulated date of completion	Actual date of completion	Litigation/arbitration cases pending/ in progress with details	Name and address telephone number of officers to whom reference may be made	Remarks
1	2	3	4	5	6	7	8	9	10

Signature of Bidder (S)

FORM 'D'

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "C"

- 1. Name of work/Project & location
- 2. Agreement no.
- 3. Estimated cost
- 4. Tendered cost
- 5. Date of start
- 6. Date of completion
 - i) Stipulated date of completion
 - ii) Actual date of completion
- 7. Amount of compensation levied for delayed completion, if any
- 8. Amount of reduced rate items, if any
- 9. Performance Report.

а	Quality of work	Very Good/Good/Fair/Poor
b	Financial soundness	Very Good/Good/Fair/Poor
с	Technical Proficiency	Very Good/Good/Fair/Poor
d	Resourcefulness	Very Good/Good/Fair/Poor
e	General Behavior	Very Good/Good/Fair/Poor

Dated:

Executive Engineer, Deputy Director or Equivalent

FORM "E" STRUCTURE & ORGANISATION

- 1. Name & address of the bidder
- 2. Telephone no./Telex no./Fax no.
- 3. Legal status of the bidder (attach copies of original document defining the legal status)
 - a) An Individual
 - b) A proprietary firm
 - c) A firm in partnership
 - d) A limited company or Corporation
- 4. Particulars of registration with various Government Bodies (attach attested photocopy) Organization /Place of registration, Registration No.
 - 1.
 - 2.
 - 3.
- 5. Names and titles of Directors & Officers with designation to be concerned with this work.
- 6. Designation of individuals authorized to act for the organization
- 7. Was the bidder ever required to suspend construction for a period of more than six months continuously after he commenced the construction? If so, give the name of the project and reasons of suspension of work.
- 8. Has the bidder or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? IF so, give name of the project and reasons for abandonment.
- 10. Has the bidder or any constituent partner in case of partnership firm, ever been debarred/black listed for tendering in any organization at any time? If so, give details.
- 9. Has the bidder or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
- 10. In which field of Civil Engineering construction, the bidder has specialization and interest?
- 11. Any other information considered necessary but not included above.

Signature of Bidder (S)

FORM 'F'

S. No	Designation	Total Number	Number available for this work	Name	Qualifications	Professional experience and details of work carried out	How these would be involved in this work	Remarks
1	2	3	4	5	6	7	8	9

Details of technical & administrative personnel to be deputed for this work

Tender Declaration

I/We have read and examined the notice Inviting Tender, Schedule A,B,C,D,E& F, Specifications applicable, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in this tender document.

I/We hereby bid for the execution of the work specified for the "**Shifting of office of Biotechnology Industry Research Assistance Council [BIRAC], 1st Floor & Mezzanine Floor , MTNL Building, 9 CGO Complex, New Delhi-110003 to 5th Floor, Business Park, NSIC, Okhla, New Delhi within the time specified in Schedule `F' viz, Performa of schedules and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-I of General Rules and Directions as described in the whole tender document and in accordance to the terms of Service and Confidentiality Agreement.**

A sum of Rs_______hereby forwarded in the form of Bank draft as earnest money. If I/we, fail to furnish the prescribed performance guarantee within the specified period, I/we agree that the "BIRAC" shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, If I/we, fail to commence the work as specified I/we agree that the "BIRAC" or their nominees in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money and the performance guarantee absolutely otherwise the said earnest money and the performance guarantee shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in schedule 'F' and those in excess, of that limit at the rates to be determined in accordance with the provision contained in clause 18 of the S&C Agreement. Further, I/we agree that in case of for forfeiture of earnest money or both earnest money and performance guarantee as aforesaid, I/we shall be debarred for participation in the retendering process of the work.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/ confidential documents and shall not communicate information / derived there from to any person other than a person to whom I/We am/are authorised to communicate the same or use the information in any manner prejudicial to the safety of the state.

Dated		
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Name:

Address:

Occupation:

Signature of Bidder

Name of Bidder: Postal Address:

General Rules & Directions

- 1. In the event of tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act' 1932.
- 2. Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm in which case the receipts must be signed in the name of the firm by one of the partners or by some other person having due authority to give effectual receipts for the firm.
- 3. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates will be summarily rejected. Tender shall have the name and number of the works to which they refer, written on the envelopes.

The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paise and less and considering more than fifty paise as rupee one.

- 4. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
- 5. The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgement or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorised cashier.
- 6. The tenderers shall sign a declaration under the officials Secret Act 1923, for maintaining secrecy of the tender document drawings or other records connected with the work given to them.
- 7. In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below / above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise provided be taken as correct. If the amount of an item is not worked

out by the contractor or it does not correspond with the rates written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In the event no rate has been quoted for any item (s), leaving space both in figure(s), word (s), and amount blank, it will be presumed that the contractor has included the cost of this/these item (s) in other items and rate for such items (s) will be considered as zero and work will be required to be executed accordingly.

- 8. In the case of any tender where unit rate of any item/ items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation such a tender is liable to be disqualified and rejected.
- 9. All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word `Rs' should be written before the figure of rupees and word `P' after the decimal figures, e.g. Rs. 2.15 P and in case of words, the word `Rupees' should precede and the word `Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word `only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word `only' should be written closely following the amount and it should not be written in the next line.
- 10. The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for fulfillment of his contract, an amount equal to 5% of the quoted value of the work. The Security deposit will be collected by deductions from the running bills of the contractor at the prescribed rates and the earnest money if deposited in cash at the time of tenders will be treated as a part of the Security deposit. The Security amount will also be accepted in the form of Bank guarantee.
- 11. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
- 12. GST or any other tax on materials, machinery and T&P, labour or any other item/service in respect of this contract shall be payable by the contractor and BIRAC will not entertain any claim whatsoever in respect of the same.
- 13. The tender for the work shall not be witnessed by a contractor who himself/ themselves has/ have tendered or who may and has/ have tendered for the same work. Failure to observe this condition would render tenders of the

contractors tendering, as well as witnessing the tender, liable to summary rejection

- 14. The contractor shall make his own arrangement for obtaining electric connection required for execution of work and make necessary payments directly to the concerned departments and nothing extra shall be payable on this account.
- 15. The contractor shall make his own arrangement for water suitable for construction work as well as drinking and other purpose for the labour engaged by him for the execution of the work.
- 16. The work will be carried out in the manner complying, in all respects, with the requirements of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra shall be paid on this account.
- 17. The agency should also ensure providing of certificates/ clearances/ warranties from the relevant statutory bodies, vendors wherever required
- 18. The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charges, which may be liable.
- 19. Even ISI marked materials may be subjected to quality test at the discretion of the Engineer-in-charge. Whenever ISI marked materials are brought to the site of work the contractor shall, if required by the Engineer-in-charge, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the materials procured by the contractor, satisfy the provisions of relevant ISI codes. The testing charges shall be borne by the contractor.
- 20. The contractor shall be required to get all the necessary mandatory and other tests as per the specifications/ IS codes, carried out on materials/ work from an approved laboratory as per the direction of the Engineer-in-charge. The testing charges and conveyance from the site shall be borne by the contractor.
- 21. In case any material / work is found sub-standard the same shall be rejected by the Engineer-in-charge/ Architect and the same shall be removed from the site of work within 48 hours, failing which the same shall be got removed by the Engineer-in-charge at the risk and cost of the contractor without giving any further notice and time.
- 22. The work shall be executed and measured in metric system. The metric dimensions given in the schedule of quantities and drawing etc. shall be followed. (The dimension in FPS units wherever indicated, are for guidance only). The figures in the drawings shall be followed.
- 23. The contractor shall be responsible for completing the work and for satisfying all terms and conditions of the Contract without any extra payment over his quoted rates unless otherwise specified. The contractor shall quote his rates for various items of work accordingly and no claim whatsoever shall be entertained for any incidental or extra work involved in the execution of the work as per

nomenclature of the item and the specifications indicated in the tender documents.

- 24. Subject to the nomenclature of the item as per schedule of quantities, the specification indicated in the tender documents, the rates quoted shall include cost of all materials including royalty and taxes if any, labour, sundry inputs, execution of work at all heights, levels, pattern and design for all leads, lifts and depths including overhead charges and contractor's profit. Nothing extra shall be paid on this account.
- 25. The contractor shall give a satisfactory performance test of installations individually and as a whole to ensure their proper functioning before the work is finally declared completed and accepted.
- 26. The contractor shall continue to maintain watch and ward to safeguard the Owner's property in his possession until the same is formally handed over as per directions of the Engineer-in-charge. Nothing extra over agreement rates shall be paid on this account.
- 27. The contractor shall be responsible for all-statutory provisions and deductions towards ESI, PF or any other, as the case may be or any other levies and taxes shall be borne by the contractor. The TDS and Contract Tax or any other statutory levies/ taxes incorporated from time to time shall be deducted progressively from the running account bills, as applicable at the time of payment. No claim in this regard shall be entertained.
- 28. The contractor is supposed to abide the minimum wages act, and shall produce all records to the Engineer-in-charge or any other statutory authority as and when called for. The Engineer-in-Charge does not hold any responsibility, on account of any lapses in this regard.
- 29. It shall be the responsibility of the Contractor to safeguard the site and ensure that no illegal encroachments are made by outside elements within the area allotted to the contractor. Upon completion of the work or earlier as required by Engineer-in-Charge, the contractor shall vacate the land totally without any reservation.
- 30. The contractor shall submit as built drawing of all components after completion of work.
- 31. The Contractor, at his own cost, shall obtain NOC from CFO & completion certificate of the building from the local body for occupation of the building if required. The Architect and Owner will render all assistance. Similarly, the Contractor, at his own cost, shall be responsible for (i) getting the required electricity load sanctioned and obtaining the service connection and (ii) water and sewer connection sanctioned from the concerned Electricity/ Local Authority. For obtaining the above completions/ clearances/ corrections, the contractor shall collect necessary drawings/ documents/ load calculations from the architect/ owner and submit the same to the concerned authorities along with prescribed receipted fee (which shall be paid by the Owner or reimbursed

by the Owner) and do all running about/ persuation for issue of the completion/ clearances/ connections at the earliest. The security deposit of the contractor shall be released only after the completions/ clearances/ connection as above are obtained or the period prescribed for release of Security Deposit in the tender documents whichever is later.

Conditions Of Contract

Definitions:

- 1. The contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the "BIRAC" New Delhi and the Contractor together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-Charge and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.
- 2. In the contract, the following expressions shall, unless the context otherwise requires have the meanings, hereby respectively assigned to them:
 - i). The expression works or work shall, unless there be something either in the subject or context repugnant to such contention, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
 - ii). The site shall mean BIRAC and the 5th Floor, Business Park, NSIC, Okhla, New Delhi
 - iii). The contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
 - iv). The Director Operation, BIRAC means their nominees also.
 - vi) The Engineer-in-Charge means the representative of Project management consultant (PMC) who shall supervise and be in-charge of the work.
 - vii) Project management consultant (PMC) means the agency appointed by the BIRAC viz. M/s. Suresh Goel & Associates, S-83 Panchshila Park, and New Delhi.
 - vii). Architect means the representative of Project management consultant (PMC).
 - ix) Notice refers to a period of seven days from the date of issue unless specified otherwise.
 - x) Government means Govt. of India or Govt. of NCT Delhi as applicable.
 - xi) Accepting authority shall mean the authority who accepts the tender.
 - xii) Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of BIRAC, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by BIRAC of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to faulty design of works.
 - xiii). Market Rate shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule `F' to cover, all overheads and profits.

- xiv). Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates mentioned in Schedule `F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.
- xv). District Specifications means the specifications followed by the State Govt in the area where the work is to be executed.
- xvi). Tendered value means the value of the entire work as stipulated in the letter of award.
- xvii) **BIRAC** the abbreviation of "Biotechnology Industry Research Assistance Council".
- xviii) Communication address means the communication address as provided by the bidder in the tender document.

3. Scope & Performance

Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.

- 4. Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
- 5. The contractor shall be furnished, free of cost one certified copy of the contract documents and standard specifications, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
- 6. **Works to be carried out:** The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and in the full and entire execution and completion of the works. The descriptions given in the Schedule of quantities shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
- 7. **Sufficiency of Tender:** The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and the rates and price quoted in the Schedule of Quantities, which rates and prices shall except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
- 8. **Discrepancies and Adjustment of Errors:** The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General conditions.
- 8.1. In the case of discrepancy between the schedule of Quantities, the Specifications and / or the drawings, the following order of preference shall be observed:
 - (i) Description of schedule of Quantities.
 - (ii) Particular Specification and Special Condition, if any.
 - (iii) Drawings.

- (iv) Indian Standard Specifications of B.IS.
- (v) C.P.W.D. Specifications.
- 9 Any error in description, quantity or rate in Schedule of quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
- 10 Signing of Contract: The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority shall, within 5 days from the stipulated date of award of the work sign the contract consisting of the notice inviting tender, all the documents if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.

SERVICE AND CONFIDENTIALITY AGREEMENT

This Agreement is made on this _____day of_____, 2022 at New Delhi BY and BETWEEN the **Biotechnology Industry Research Assistance Council**, a Government of India Enterprise having its office at **1st Floor, MTNL Building, 9, CGO Complex, Lodhi Road, New Delhi-110003** hereinafter referred to as "BIRAC" (which expression shall wherever the context so admits include its successors and assignees) of the **First Part**

AND

_____a company registered under the Companies Act 2013, having its registered office at_____, hereinafter referred to as the "Agency" (which expression shall wherever the context so admits include its employees, administrators and permitted assignees) of the **Second Part**

WHEREAS all the parts are hereinafter referred to as "Parties";

All Annexure to this Agreement and Tender Document shall be integral part of this Agreement.

WHEREAS BIRAC desires to for engaging a firms/Contractors for Undertaking the work of shifting of office of Biotechnology Industry Research Assistance Council (BIRAC), 9 CGO Complex, MTNL Building, New Delhi-110003 to 5th Floor, Business Park, NSIC, Okhla, New Delhi and the Agency hereby agrees to provide the same governed by below mentioned terms and conditions and as per the BID documents.

NOW THEREFORE, the parties hereby agree to be bound by the provisions set out in this agreement.

1. INTERPRETATION

- i. Confidential Information: "Confidential Information" means all information (whether in oral, written or electronic form) relating to BIRAC, matters related to BIRAC's corporate affairs, minutes of the meeting(s) or other agnate materials including any notes or summaries derived from those materials of the Disclosing Party and confidential information received by the Disclosing Party from third parties, but excludes any information that: (1) was lawfully in the possession of the Recipient before receiving it from the Disclosing Party; (2) is provided in good faith to the Recipient by a third party without breaching any rights of the Disclosing Party or any other party; (3) is or becomes generally available to, or accessible by, the public through no fault of the Recipient; (4) is independently developed by the Recipient without use of the disclosed Confidential Information or (5) is required by public authority, by law or decree.
- ii. Words importing the singular numbers shall include the plural number and vice versa.
- 2. Headings and subheadings are for convenience only and shall not be deemed to be a part of this Agreement.

3. EFFECT OF CONTRACT

- i. The Contract shall be effective from the issuance to Letter of Award (LoA) till the successful completion of the work as per the terms of Tender Document. BIRAC will issue a certificate for Successful completion of Work in this regard in accordance to Clause 13 of this agreement.
- ii. This Contract does not constitute and will not be deemed to constitute and exclusive commitment/ arrangement between BIRAC and the Agency.
- iii. BIRAC will not retain any control for direct supervision of the contracted services and execution of this Contract does not create any liability, explicit or implicit, on BIRAC in respect of the manpower engaged.
- iv. The rights and remedies herein provided are cumulative with, and not exclusive of, any rights or remedies provided by law.

4. **RESPONSIBILITIES OF THE AGENCY**

- i. Discharge the duties, responsibilities and execute activities strictly in furtherance of the BID document, Scope of Work as given in the BID document as annexed as *Annexure*_____
- ii. Completes the entire work and shifting within stipulated period as mentioned in Notice Inviting Tender (NIT) document.
- iii. Ensure compliance with legal provisions related to this Contract. The Agency shall obtain all requisite license and approval at his cost from the appropriate authority for executing this contract work and submit copy of such license and approval to BIRAC.
- iv. Deploy any workforce which will exclusively be on Agency's pay roll.
- v. Ensure proper behavior of the work force provided for the event. The Agency will prevent the work force from taking part in any direct or indirect association with a person or persons engaged in any antisocial activities, demonstrations, riots of agitation, which may in any way be detrimental or prejudicial to the occupants of land / properties in the neighborhood.
- vi. Keep the BIRAC and its employees etc., harmless and indemnified from any consequential claims, actions, suits, proceedings, losses or damages on any ground whatsoever.
- vii. Take disciplinary action against any worker/staff engaged by him.
- viii. Undertake to indemnify the BIRAC against all claims which may arise under the noted acts:
 - a The Shops and Establishment Act.
 - b The Workman's compensation Act.
 - c The payment of Wages Act.

- d The Contract labor (Regulation and Abolition) Act. 1970 and the rules framed thereunder.
- e Family Pension Scheme.
- f Inter-state Migrant Workmen (Regulation of employment and condition of Service) Act, 1979.
- g Any other Statutory Act/Law/Regulation made applicable during the performance of the contract.
- ix. Be solely responsible for determining all matters of detail as to the manner in which a specific assignment is done with an objectively acceptable quality.
- x. Undertake necessary liaison work as may be required from time to time with the officials of the concerned departments.
- xi. Comply to the best of the technical /scientific knowledge, statutory, regulatory and safety guidelines established by the Government of India, any statutory authority and BIRAC while performing the services.
- xii. Take reasonable measures to protect the secrecy and avoid disclosure and unauthorized use of the Confidential Information of the disclosing party including discussion of the Confidential Information in any public forum which includes formal and informal discussions.
- xiii. Comply with all prevailing laws, rules and regulations and shall not indulge in any act, which constitutes an offence or a corrupt practice under the Indian laws.
- xiv. Practice Chinese wall or Firewall policy within to deal with contrary interests or with confidential information.
- xv. Submit any other documentary evidence as & when called by the BIRAC in connection with this Contract.

5. PERFORMANCE GUARANTEE

- i) The agency shall submit an irrevocable Performance Guarantee of 3% (Three Percent) of the quoted cost in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge upto a maximum period as specified in Schedule 'F' on written request of the agency stating the reason for delays in procuring the Bank Guarantee, to the satisfaction of the Engineer-in-Charge. This Guarantee shall be in the form Guarantee Bonds of any scheduled Bank or the State Bank of India in accordance with the form annexed hereto.
- ii) The performance Guarantee shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case the time of completion of work gets extended, the agency shall immediately get the validity of Performance Guarantee extended to cover such extended time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the agency, without any interest.

- iii) The BIRAC shall not make a claim under the Performance guarantee except for amounts to which the "BIRAC" is entitled under the contract (notwithstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - (a) Failure by the agency to extend the validity of the Performance Guarantee as described herein above, in which event the BIRAC may claim the full amount of the Performance Guarantee.
 - (b) Failure by the agency to pay to the BIRAC any amount due, either as agreed by the agency or determined under any of the clauses/conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- iv) In the event of the contract being determined or rescinded or terminated under provision of any of the clause/condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the "BIRAC".
- 6. Recovery of Security Deposit: The person/persons whose tender(s) may be accepted (hereinafter called the agency) shall permit BIRAC at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit @5% of the quoted cost of the work. Earnest money shall be adjusted first in the security deposit and further recovery of security deposit shall commence only when the upto date amount of security deposit starts exceeding earnest money. Such deductions will be made and held by BIRAC by way of Security Deposit.

All compensations or the other sums of money payable by the agency under the terms of this contract may be deducted from, or paid by the part of his security deposit. The security deposit shall be collected from the running bills of the agency at the rates mentioned above.

7. Compensation for Delay :- If the agency fails to maintain the required progress in terms of clause 10 or to complete the work and clear the site on or before the contract or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the BIRAC on account of such breach, pay as agreed compensation the amount calculated at the rate of 1 % (one percent) per day of delay to be computed on per day basis as the "BIRAC" (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed month (as applicable) that the progress remains below that specified in Clause 10 or that the work remains in-complete. This will also apply to items or group of items for which a separate period of completion has been specified.

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work.

The amount of compensation may be adjusted or set-off against any sum payable to the Agency under this or any other contract with the BIRAC. In case, the agency does not achieve a particular milestone mentioned in Schedule 'F', or the re-scheduled milestone (s) in terms of clause 10 (d), the amount shown against that milestone shall be withheld to be adjusted against the compensation levied at the final grant of Extension of Time.

Withholding of this amount on failure to achieve a milestone shall be automatic, without any notice to the agency. However, if the agency catches up with the progress of the work, on the subsequent milestone (s), the withheld amount shall be released. In case the agency fails to make up for the delay in subsequent milestone (s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

- 8. When Contract can be determined: Subject to other provisions contained in this clause the Engineer in charge may, without prejudice to his any other rights or remedy against the agency in respect of any delay, inferior workmanship, any claims for damages and/ or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:
 - I. If the agency having been given by the Engineer in Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workmanlike manner shall omit to comply with the requirement of such notice for a period of three days thereafter.
 - If the agency has, without reasonable cause suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer in- Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of three days from the Engineer in- charge.
- III. If the agency fails to complete the work within the stipulated date or items of work within individual date of completion, if any stipulated, on or before such date (s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer – in – Charge.
- IV. If the agency persistently neglects to carry out his obligations under the contract and / or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 3 days after a notice in writing is given to him in that behalf by the Engineer in- charge
- V. If the agency shall offer or give or agree to give to any person in BIRAC's service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or for bearing to do or for having done or for borne to do any act in relation to the obtaining or execution of this or any other contract for the BIRAC.
- VI. If the agency shall enter into a contract with the BIRAC in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer in- charge.
- VII. If the agency shall obtain a contract with BIRAC as a result of wrong tendering or other non bonafide methods of competitive tendering.

- VIII. If the agency being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.
 - IX. If the agency being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
 - X. If the agency shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
 - XI. If the agency assigns, transfers, sublets (engagement of labour on piece work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer- in – Charge.
- XII. If the work is not started by the agency within $1/8^{th}$ of the stipulated time.

When the agency has made himself liable for action under any of the cases aforesaid, the BIRAC shall have powers:

- a). To determine the contract as aforesaid (of which termination notice in writing to the agency under the hand of the BIRAC shall be conclusive evidence). Upon such determination the Earnest Money Deposit, security deposit already recovered and the performance guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the BIRAC.
- b). After giving notice to the agency to measure up the work of the agency and to take such whole or the balance or part thereof as shall be un-executed out of his hands to give it to another agency to complete the work. The agency whose contract is determined as above shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the Engineer in charge the agency shall have no claim to compensation or any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the agency shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer –in-Charge has

certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

In case, the work cannot be started due to reasons not within the control of the agency within 1/6th of the stipulated time for total completion of the work, either party may close the contract. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the Agency shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

- 9. Agency liable to pay compensation even if action not taken under clause 13: In any case in which any of the powers conferred upon the Engineer in charge by Clause – 8 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the agency and the liability of the agency for compensation shall remain unaffected. In the event of the Engineer in charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the agency, take possession of (or at the sole discretion of the "BIRAC" which shall be final and binding on the agency) use as on hire (the amount of the hire money being also in the final determination of the Engineer in charge) all or any tools plant, materials and stores, in or upon the works, or the site thereof belonging to the agency, or procured by the agency and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final, and binding on the agency otherwise the Engineer in charge by notice in writing may order the agency or his clerk of the works, foreman or other authorised agent to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice) in the event of the agency failing to comply with any such requisition, the Engineer in charge may remove them at the agency's expense or sell them by auction or private sale on account of the agency and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the agency.
- 10. **Time and Extension for delay:** The time allowed for execution of the Works as specified in Schedule `F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from the 5th day or such time period as mentioned in letter of award after the date on which the "BIRAC" issues written orders to commence the work or from the date of handing over of the site whichever is later. If the agency commits default in commencing the execution of the work as aforesaid BIRAC shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money and performance guarantee absolutely.
 - a) As soon as possible after the contract is concluded the agency shall submit a Time and Progress Chart for each milestone and get it approved by the Engineer-in –charge. The chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be

amended as necessary by agreement between the "BIRAC" and the agency within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the agency shall in all cases (save for special jobs for which a separate programme has been agreed upon) complete the work as per milestone given in schedule 'F'.

- b) If the work(s) be delayed by:
 - i). Force majeure or
 - ii). abnormally bad weather, or
 - iii). Serious loss or damage by fire or
 - iv). Civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or.
 - v). delay on the part of other agencies or tradesmen engaged by "BIRAC" sin executing work not forming part of the contract or.
 - vi). Any other cause which, in the absolute discretion of the authority mentioned in schedule `F' is beyond the agency's control.

Then upon the happening of any such event causing delay, the agency shall immediately give notice thereof in writing to the "BIRAC" but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the "BIRAC" to proceed with the works.

- c) Request for rescheduling of milestones and extension of time, to be eligible for consideration, shall be made by the Agency in writing within two days (48 hours) of the happening of the event causing delay on the prescribed form. The agency may also, if practicable, indicate in such a request the period for which extension is desired.
- d) In any such case the "BIRAC" may give a fair and reasonable extension of time and reschedule the milestones for completion of work. Such extension shall be communicated to the agency by the "BIRAC" in writing, within 3 days of the date of receipt of such request. Non-application by the agency for extension of time shall not be a bar for giving a fair and reasonable extension by the "BIRAC" and this shall be binding on the agency.
- **11. Measurements of Work Done:** Engineer- in- Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract of work done.

All measurements of all items having financial value shall be entered in Measurement Book and/ or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Engineer- in- Charge or his authorised representative and by the agency or his authorised representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer- in- Charge or his authorized representative and the agency or his authorised representative in token of their acceptance. If the agency objects to any of the

measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the agency or his authorized representative is not available and the work of recording measurements is suspended by the Engineer – in- Charge or his representative, the Engineer – in- Charge and the BIRAC shall not entertain any claim from agency for any loss or damages on this account. If the agency or his authorized representative does not remain present at the time of such measurements after the agency or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Agency.

The agency shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed.

The agency shall give, not less than two days' notice to the Engineer- in- Charge or his authorized representative in charge of the work, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer – in – Charge or his authorized representative in charge of the work who shall within the aforesaid period of two days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer – in –Charge's consent being obtained in writing, the same shall be uncovered at the Agency's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer – in- Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and / or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the agency form liabilities from any over measurement or defects noticed till completion of the defects liability period.

12. Payment on Intermediate Certificate to be regarded as Advances:

The interim or running account bills shall be submitted by the agency for the work executed on the basis of such recorded measurements on the format of the BIRAC in triplicate duly certified by Engineer-in-Charge on or before the date of every month fixed for the same by the Engineer – in – Charge. The agency shall not be entitled to be paid any such interim payment if the gross work done together with net payment / adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer – in – Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the agency to submit the bills, Engineer-in- Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the agency, Payment on account of amount admissible shall be made by the Engineer in – Charge certifying the sum to which the agency is considered entitled by way of interim payment at such rates as decided by the Engineer – in- Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Agency to the Engineer – in- Charge.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in- Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate (s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not any respect conclude, determine or affect in any way powers of the Engineer – in- Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the BIRAC to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

13. Completion certificate and completion plans: Within ten days of the completion of the work, the agency shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice the Engineer-in-Charge shall inspect the work and if there is no defect in the work shall furnish the agency with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the agency and/or(b) for which payment will be made at reduced rates shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the agency shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/ their work people on the site in connection with the execution of the works as shall have been erected or constructed by the agency(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have

had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the agency shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning of dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the agency remove such scaffolding surplus materials and rubbish etc and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the agency shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

14. (A) Agency to keep site clean: The splashes and droppings from white washing, colour washing, painting etc on walls, floors windows etc shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc where the work is done without waiting for the actual completion of all the other items of work in the contract. In case the agency fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the agency either departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days' notice in writing to the agency.

(B) Completion Plans to be Submitted by the Agency: The agency shall submit completion plan as required vide General Specifications for Electrical works (Part –I internal 2005) and (Part – II External 2007) HVAC and Fire detection & Firefighting as applicable within thirty days of the completion of the work.

In case, the agency fails to submit the completion plans as aforesaid, he shall be liable to pay a sum equivalent to 2.5 % of the value of the work subject to a ceiling of Rs. 1,00,000 (Rs. One lakh only) as may be fixed by the "BIRAC" and in this respect the decision of the "BIRAC" shall be final and binding on the agency.

- **15. Payment of final bill:** The final bill to be duly certified by Engineer-in-Charge shall be submitted by the agency in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the agency after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will as far as possible be made within six months from the date of receipt of the bill by the Engineer-in-Charge or his authorized representative.
- **16. (A) Materials to be provided by the agency:** The agency shall at his own cost provide all materials required for the works.

The agency shall, at his own expense and without delay; supply to Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the agency shall be in conformity with the specifications laid down or referred to in the contract. The agency shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. If samples are not approved the agency shall forthwith arrange to supply to the

Engineer-in-Charge for his approval fresh samples complying with the specifications laid down in the contract.

The Engineer-in-Charge or his authorized representative and Architect shall at all times have access to the work and to all such workshops and places where work is being prepared or from where materials, manufactured articles, or machinery are being obtained for the works and the agency shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default the Engineer-in-Charge shall be at liberty to employ at the expense of the agency, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substitute thereof and in case of default the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the agency.

(B) Mobilization Advance: Mobilization advance upto 10% the estimated cost put to tender or 10% of tender value whichever is less may be given, if requested by the agency in writing within 5 days of the order to commence the work. In such a case the agency shall execute a Bank Guarantee Bond from a Scheduled Nationalized Bank as specified by the Engineer-in-charge for the full amount of such advance is released.

(C) Dismantled material is BIRAC's Property: The agency shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc as BIRAC's property and such materials shall be disposed off to the best advantage of BIRAC according to the instructions in writing issued by the Engineer-in-Charge.

17. Work to be executed in accordance with specifications, drawings, orders etc.: The agency shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with CPWD Specifications 2009 Vol.I to II with upto date correction slips and CPWD general specifications for electrification, Part – I Internal 2005 and Part – II External 2007 with upto date correction slips. The agency shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the agency shall be furnished free of charge one copy of the contract documents together with specifications of Central Public Works Department specified in schedule `F' or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

The agency shall comply with the provisions of the contract and with due care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The agency shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

- **18. Deviations/Variations Extent and Pricing :-** The Engineer-in-Charge shall have power in consultation with BIRAC (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the agency shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the agency may be directed to do in the manner specified above as part of the works, shall be carried out by the agency on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided. If there is no deviation limit prescribed for contract items, the agency shall be bound to execute the deviated quantities of the contract items at the same rates as decided at the time of award of work.
 - 18.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the agency, as follows:
 - i). In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus.
 - ii). 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.
 - 18.2 In the case of extra item(s) the agency may within fifteen days of receipt of order of occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Engineer-in-Charge shall within one month of the receipt of the claims supported by analysis after giving consideration to the analysis of the rates submitted by the agency, determine the rates on the basis of the market rates and the agency shall be paid in accordance with the rates so determined. In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para:
 - a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the agency for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
 - b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the agency for the substituted item shall be the rate for the agreement item (to be substituted) so, decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- **19. Foreclosure of Contract due to Abandonment or Reduction in Scope of Work:** If at any time after acceptance of the tender, BIRAC shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the

works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the agency and the agency shall act accordingly in the matter. The agency shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The agency shall be paid at contract rates full amount for works executed at site and in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure:

- i). Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.
- ii). BIRAC shall have the option to take over agency's materials or any part thereof either brought to site or of which the agency is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however, BIRAC shall be bound to take over the materials or such portions thereof as the agency does not desire to retain. For materials taken over or to be taken over by BIRAC cost of such materials as detailed by Engineer-in-Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the agency.
- iii) If any materials supplied by BIRAC are rendered surplus, the same except normal wastage shall be returned by the agency to BIRAC at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the agency. In addition, cost of transporting such materials from site to BIRAC stores, if so, required by BIRAC, shall be paid.
- iv). Reasonable compensation for transfer of T & P from site to agency's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.
- v). Reasonable compensation for repatriation of agency's site staff and imported labour to the extent necessary.

The agency shall, if required by the Engineer-in-Charge furnish to him books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of agency's materials at site taken over by the BIRAC as per item (ii) above. Provided always that against any payments due to the agency on this account or otherwise, the Engineer-in-Charge shall be entitled to recover or be credited with any outstanding balance due from the agency for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the BIRAC from the agency under the terms of the contract.

20. Carrying out part work at risk & cost of agency

If agency:

- I. At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from the Engineer-in-charge: or
- II. Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remdy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-charge: or
- III. Fails to complete the work (s) or items of work with individual dates of completion, on or before the date (s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-charge.

The Engineer-in-charge without invoking action under clause 8 may, without prejudice to any other right or remedy against the agency which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:

- a) Take possession of the site and any materials, constructional plant, implements, stores, etc, thereon; and/or
- b) Carry out the part work / part incomplete work of any item (s) by any means at the risk and cost of the agency.

The Engineer-in-charge shall determine the amount, if any, is recoverable from the agency for completion of the part work / part incomplete work of any item (s) taken out of his hands and execute at the risk and cost of the agency, the liability of agency on account of loss or damage suffered by Government because of action under this clause shall not exceed 10% of the tendered value of the work.

In determining the amount, credit shall be given to the agency with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original agency under the terms of his contract, the value of agency's materials taken over and incorporated in the work and use of plant and machinery belonging to the agency. The certificate of the Engineer-in-charge as to the value of work done shall be final and conclusive against the agency provided always that action under this clause shall only be taken after giving notice in writing to the agency. Provided also that if the expenses incurred by the department are less than the amount payable to the agency at his agreement rates, the difference shall not be payable to the agency.

Any excess expenditure incurred or to be incurred by "BIRAC" in completing the part work/ part incomplete work of any item (s) or the excess loss or damages suffered or may be suffered by "BIRAC" as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Government in law or as per agreement be recovered from any money due to the agency on any account, and if such money is insufficient, the agency shall be called upon in writing and shall be liable to pay the same within 30 days.

If the agency fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-charge shall have the right to sell any or all of the agencys' unused materials,

constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the agency under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

In the event of above course being adopted by the Engineer-in-charge, the agency shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

- **21.** Action in case work not done as per specification: All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer In- Charge, his authorized subordinates in charge of the work and all the superior officers.
- **22. Defect Liability (Agency Liable for damages , defects during maintenance period):** If the agency or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever of if any defect, shrinkage or other faults appear in the work within twelve months after a certificate final or otherwise its completion shall have been given by the Engineer-in-Charge as aforesaid arising out of defect or improper materials or workmanship the agency shall upon receipt of a notice in writing on that behalf make the same good at his own expense. The security deposit of the agency shall not be refunded before the expiry of twelve months after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.
- **23. Agency to Supply Tools & Plants etc.:** The agency shall provide at his own cost all materials, plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge. The agency shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-Charge at the expense of the agency and the expenses may be deducted, from any money due to the agency, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof.
- **24. (A) Recovery of compensation paid to workman:** In every case in which by virtue of the provisions sub-section (1) of section 12, of the Workmen's Compensation Act, 1923, BIRAC is obliged to pay compensation to a workman employed by the agency, in execution of the works, BIRAC will recover from the agency for the amount of the compensation so paid ; and, without prejudice to the rights of the BIRAC under sub-section (2) of Section 12, of the said Act, BIRAC shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by BIRAC to the agency whether under

this contract or otherwise. BIRAC shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the agency and upon his giving to BIRAC full security for all costs for which BIRAC might become liable in consequence of contesting such claim.

(B) Ensuring Payment and Amenities to Workers if Agency fails :- In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, BIRAC is obliged to pay any amounts of wages to a workman employed by the agency in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act the Rules framed by BIRAC from time to time for the protection of health and sanitary arrangements for workers employed by BIRAC Agencys, BIRAC will recover from the agency the amount of wages so paid or the amount of expenditure so incurred, and without prejudice to the rights of the BIRAC under sub-section (2) of Section 20 and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, BIRAC shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by BIRAC to the agency whether under this contract or otherwise BIRAC shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the agency and upon his giving to the BIRAC full security for all costs for which BIRAC might become liable in contesting such claim.

25. Labour Laws to be complied by the Agency: - The agency shall obtain a valid licence under the Contract Labour (R & A) Act 1970, and the Contract Labour (Regulation and Abolition) Central Rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The agency shall also abide by the Provisions of Child Labour (prohibition and Regulation) Act, 1986.

The agency shall also comply with the provisions of the building and other construction workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Welfare Cess Act, 1996.

Any failure to fulfill this requirement shall attract the penal provisions of this contract arising out of the resultant non-execution of the work. In case, the contract labourers resort to litigation in any court for any reason, the Agency will be solely responsible towards verdict of the court, at his own cost.

The agency shall maintain records giving particulars of contract labour employed, the nature of work performed by the contract labour, the rates of wages paid to the contract labour, etc. as per the Contract Labour (Regulation and Abolition) Central Rules, 1971.

The agency shall provide notices containing particulars about the hours of work, nature of duty, etc. as per the above rules to BIRAC.

- **26.** No labour below the age of fourteen years shall be employed on the work.
- **27. Minimum Wages Act to be complied with:** The Agency shall comply with all the provision of the Minimum Wages Act, 1948, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought from time to time.

The agency shall be responsible for discharge of statutory liabilities such as EPF, ESI, Bonus etc. and no service charges/Admn, overhead will be payable on this contribution.

It will be sole responsibility of the agency to compensate the labor on account of injury, loss of life or limb in accordance with the law in force for time to time.

- **28. Work not to be sublet. Action in case of insolvency:** The Contract shall not be assigned or sublet without the written approval of the BIRAC. And if the agency shall assign or sublet his contract, or attempt to do so or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise shall either directly or indirectly be given, promised or offered by the agency, or any of his servants or agent to any public officer or persons in the employ of BIRAC in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the BIRAC shall have power to adopt any of the courses specified in Clause 8 hereof as he may deem best suited to the interest of the BIRAC and in the event of any of these courses being adopted the consequences specified in the said Clause 8 shall ensue.
- **29.** All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of the BIRAC without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.
- **30. Changes in firm's constitution to be intimated:** Where the Agency is a partnership firm /LLP/Company etc. the previous approval in writing, of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the Agency is an individual or a Hindu undivided family business concern, such approval as aforesaid, shall likewise, be obtained before the Agency enters into any partnership agreement where under the partnership firm would have the right to carry out the work hereby undertaken by the Agency. If previous approval, aforesaid, is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 28 hereof and the same action may be taken and the same consequences shall ensue as provided in the said Clause 28.
- **31. Directions for execution of works:** All works to be executed under the contract shall be executed under the direction and subject to the approval in all respect of the Engineer-in-Charge of the BIRAC who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.
- **32. Lump sum Provision in Tender:** When the estimate on which a tender is made includes lump sum in respect of parts of the work, the Agency shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates, as are payable under this contract for such items, or if the part of the work in question is not in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the Agency with regard to any sum payable to him under the provisions of the clause.
- **33. Action Where no specifications are Specified:** In case of any class of work for which there is no such specifications as referred to in Clause 17, such work shall be carried out in accordance with the Bureau of Indian Standard Specifications. In case there is no such

specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturer's specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

34. With-holding and lien in respect of Sums due from Agency:

i. Whenever any claim, for payment of a sum of money arises out of or under the contract or against the agency, the BIRAC shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the agency and for the purpose aforesaid, the BIRAC shall be entitled to withhold the security deposit, if any furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Agency, the BIRAC shall be entitled to withhold and have lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the agency under the same contract or any other contract with the Engineer-in-Charge pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the BIRAC will be kept withheld or retained as such by the BIRAC till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) by the competent court, as the case may be and that the agency will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the agency. For the purpose of this clause where the agency is a partnership firm or a limited company, the BIRAC shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/ limited company as the case may be, whether in his individual capacity or otherwise.

ii. BIRAC shall have the right to cause an audit and technical examination of the works and the final bills of the agency including all supporting vouchers, abstract etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the agency under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the agency shall be liable to refund the amount of over-payment and it shall be lawful for BIRAC to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible and if it is found that the agency was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by BIRAC to the agency, without any interest thereon whatsoever.

Provided that the BIRAC shall not be entitled to recover any sum overpaid, nor the agency shall be entitled to payment of any sum paid short where such payment has been agreed

upon between the BIRAC on the one hand and the agency on the other under any term of the contract permitting payment for work after assessment by the Engineer-in-Charge.

- **35. Water supply:** The Agency(s) shall make his/ their own arrangements for water required for the work as well as for drinking purpose and nothing extra will be paid for the same. This will be subject to the condition that the water used by the agency(s) shall be fit for construction purposes to the satisfaction of Engineer-in-Charge.
- **36. Electricity:** The Agency(s) shall make his/ their own arrangements for electricity required for the work and nothing extra will be paid for the same.
- **37. Plant & Machinery:** The agency shall arrange at his own expense all tools, plant, machinery and equipment required for the execution of the work.

38. Employment of Technical Staff and employees:

Agencies Superintendence, Supervision, Technical Staff & Employees

The agency shall provide all necessary superintendence during execution of the work and all along thereafter all may be necessary for proper fulfilling of the obligations under the contract.

The agency shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge the name(s), qualifications, experience, age, address and other particulars along with certificates, of the principal technical representative to be in charge of the work and other Engineer (s) / technical representative(s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than as specified in schedule `F'.

The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the agency. Any such approval may at any time be withdrawn and in case of such withdrawal the agency shall appoint another such representative(s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the agency in this respect. Such a principal technical representative and other Engineer (s) / technical representative(s) shall be appointed by the agency soon after receipt of the approval from Engineer-in-Charge and shall be available at site before start of work.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the agency, is convinced that no such technical representative(s) is /are effectively appointed or/ is are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the agency as specified in Schedule `F' and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded checked/ test checked in Measurement Books shall be final and binding on the agency. Further if the agency fails to appoint suitable technical representative and/ or other technical representatives and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date a suitable other technical representative (s) is/ are appointed and the agency shall be held responsible for the delay so caused to the work. The agency shall submit a certificate of employment of the technical representative along with

every on-account bill/ final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

The agency shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The agency shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer-in-Charge shall be at liberty to object to and require the agency to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

39. Levy/Taxes payable by Agency:

- i) All taxes in respect of this contract shall be payable by the Agency and BIRAC shall not entertain any claim whatsoever in this respect.
- ii) If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the BIRAC to the State Government, Local authorities in respect of any material used by the agency in the works then in such a case, it shall be lawful to the BIRAC and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the agency.

40. Condition for reimbursement of levy / taxes if levied after receipt of tender:

- (i) All tendered rates shall be inclusive of all taxes and levies payable under respective statutes. However, pursuant to the Constitution (46th Amendment Act, 1982, if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the agency thereupon necessarily and properly pays such taxes / levies, the agency shall be reimbursed the amount so paid, provided such payments, if any , is not , in the opinion of the "BIRAC" (Whose decision shall be final and binding on the agency) attributable to delay in execution of work within the control of the agency.
- (ii) The agency shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the BIRAC and / or the Engineer – in –Charge and further shall furnish such other information /document as the Engineer – in -Charge may require from time to time.
- (iii) The agency shall, within a period of 30 days of the imposition of any such further tax or levy, pursuant to the Constitution (Forty Sixth Amendment) Act 1982, give a written notice thereof to the Engineer – in- Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.
- **41. Termination of Contract:** Either party can terminate the agreement by giving one month notice in advance to the other party. Moreover, without prejudice to any of the rights or

remedies under this contract if the contractor dies, then "BIRAC" shall have the option of terminating the contract without compensation to the agency.

42. If relative working in BIRAC then the agency not allowed to tender: The agency shall not be permitted to tender for this work if his near relative is posted as an officer in any capacity in BIRAC. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any employee in BIRAC.

NOTE: By the term "near relatives" is meant wife, husband, parents and grandparents, children and grandchildren, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

43. Withholding of payment: BIRAC reserves the right to recover from the bills of the Agency the amount due to BIRAC against any losses and damages including Liquidated Damages or as a result of any claims / compensation or due to any statutory imposition etc. without any notice. BIRAC also reserves the right to withhold any payment to safeguard the interest of BIRAC against any dues for which the decision of the company shall be final. In case of any legal disputes, withheld payments shall not be released till the dispute is settled. No interest shall be payable in case of such withheld amounts.

In order to protect BIRAC, it may withhold the whole or any part of the amount due to agency on account of evidence subsequently discovered in respect of following:

- i. For non-completion of contracted work to BIRAC's satisfaction.
- ii. Agency's indebtedness arising out of execution of contract
- iii. All claims against Agency for Liquidated damages.
- iv. Any failure by the Agency to fully reimburse BIRAC under of indemnification provisions of this Contract. If, during the process of the Agency shall allow any indebtedness to accrue of which BIRAC may be primarily or contingently liable or ultimately responsible and agency shall, within five days after demand is made by the BIRAC, fail to pay and discharge such indebtedness, then BIRAC may during the period for which indebtedness shall remain unpaid, withhold from the amounts due to Agency's a sum equal to the amount such unpaid indebtedness. When all the above grounds for withholding payments shall be removed, payment shall thereafter be made for amounts so withheld.
- v. Garnishee order issued by a Court of Law in India.
- vi. Income-tax deductible at source according to law prevalent from time to time in the country.
- vii. Any obligation of Agency which by any law prevalent from time to time to be discharged by the BIRAC in the event of Agency's failure to adhere to such laws.
- **44. Confidentiality:** The Parties, undertake to maintain strict confidentiality and refrain from disclosure thereof, of all or any part of the Confidential Information and data exchanged/generated from the Process under this Contract for any purpose other than in accordance with this Contract. It shall be the responsibility of both the Parties to ensure maintenance of such confidentiality in respect of their behalf and on behalf of their employees, representatives and associates involved in related activities. Thus, obligation under this Contract will commence on the Effective Date and will subsist till three years

after completion/termination or till such time the confidential information falls into the public domain whichever is earlier.

- **45. Return of materials:** Upon the conclusion of the task the Empanelled Firm undertakes to return or destroy materials containing Confidential Information in physical form handed over by the BIRAC in relation to the services or which was generated by the Empanelled Firm in the course of providing the services.
- **46. Waiver and assignment:** Any waiver by the BIRAC of a breach of any provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach of the same or any other provision hereof. The Empanelled Firm shall not have the right to assign the rights or obligations under this Agreement without the prior written consent of BIRAC.

47. Effect of this agreement:

- i. The duty of secrecy under this agreement will commence on the Effective Date and will subsist till three years after completion of the task.
- ii. The rights and remedies herein provided are cumulative with, and not exclusive of, any rights or remedies provided by law.
- **48. Dispute resolution:** In the event of any dispute or difference between the Parties hereto upon or in relation to or in connection with this Contract, such dispute or difference, shall be resolved amicably and in good faith by mutual consultation.

If such resolution is not possible, then the unresolved dispute or difference whatsoever arising between the Parties out of or relation to the construction, meaning, scope, operation or effect of this Contract or the validity the breach thereof or in respect of any defined legal relationship associated therewith or derived therefrom dispute shall be submitted for arbitration to International Centre for Alternate Dispute Resolution (ICADR), an autonomous organization working under the aegis of the Ministry of Law & Justice, Department of Legal Affairs, Government of India. The Authority to appoint the sole arbitrator shall be the ICADR. The Arbitration under this Clause and provision of administrative services by ICADR shall be in accordance with the ICADR Arbitration Rules, 1996 read with The New Delhi International Arbitration Centre Act, 2019. The award made in pursuance thereof shall be binding on the Parties. The venue/seat of arbitration shall be New Delhi and the arbitration proceedings shall be conducted in English Language. The provision of this Clause shall not become inoperative notwithstanding the Contract expiring or ceasing to exist or being terminated.

- **49. Notice:** Any notices, consents, objections, demands, requests or other communications required or permitted to be given pursuant to this Agreement shall be in writing, and shall be sent by registered post, return receipt requested, to the addresses of the parties set forth in the heading to this Agreement. Either party may designate, by notice, a change of address hereunder.
- **50. Severability:** If any of the provisions of this Agreement are found to be unenforceable, the remainder shall be enforced as fully as possible and the unenforceable provision(s) shall be deemed modified to the limited extent required to permit enforcement of the Agreement as a whole.

- **51. Governing law:** This Agreement shall be construed in accordance with and governed for all purposes by the laws of India applicable to contracts executed and wholly performed within jurisdiction of Delhi Courts.
- **52. Amendments or waiver:** No amendment or waiver of this Agreement is binding unless agreed to in writing by the parties.
- **53. No other relationship:** The Agency agrees that all Services will be rendered as an independent contractor and that this Agreement does not create an employer-employee relationship or business partnership between the parties.

WHEREFORE, the Parties hereto through its duly authorized representatives have signed this

Signed	Signed
On behalf of the Agency	On behalf of the BIRAC
Date	Date
WITNESS	WITNESS
Signed	Signed
Signed	Signed

PROFORMA OF SCHEDULES

SCHEDULE `A '

Schedule of quantities enclosed.

SCHEDULE `B'

Schedule of materials to be issued to the contractor.	- Nil -
SCHEDULE `C' No tools and plants shall be hired to the contractor by the BIRAC.	- Nil -
SCHEDULE `D'	NI:1

Extra schedule for specific requirements/ document for the work, if any. - Nil -

SCHEDULE `E'

Schedule of components of cement, steel & other materials Labour etc. for price escalation.- Nil -

SCHEDULE 'F'

Reference to Conditions and Clauses of Contract.

Name of work: "Shifting of office of Biotechnology Industry Research Assistance Council [BIRAC], 1st Floor & Mezzanine Floor, MTNL Building, 9 CGO Complex, New Delhi-110003 to 5th Floor, Business Park, NSIC, Okhla, New Delhi".

(i) Earnest Money:	Rs. 9,96,000.00 (Rupees Nine Lakh Ninety-Six Thousand Only)
(ii) Performance Guarantee	3% of quoted cost

(iii) Security deposit

5% of quoted cost

General Rules & directions		
Officer inviting tender		Director, Operation, BIRAC,
Definitions:		
2(v)	Engineer-in Charge	The Project Management Consultant (PMC) engaged by BIRAC, New Delhi who shall supervise and be In-charge of the work.
2(viii)	Accepting Authority	Director, Operation, BIRAC,
2(x)	Percentage on cost of materials and labour to cover all overheads and profits	15 %

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2(xi)	Standard Schedule of Rates	 (i). C.P.W.D. Delhi Schedule of Rates 2021 with upto date correction slips issued upto the date of receipt of tenders. (ii) CPWD Delhi Schedule of rates 2022 for electrification with upto date correction slips issued upto the date of receipt of tender.
2(xii)	Department	BIRAC New Delhi
Clause 1	(i) Time allowed for submission of performance guarantee from the date of issue of letter of acceptance, in days	3 days
	(ii) Maximum allowable extension beyond the period provided in (i) above in days	2 days
Clause 2	Authority for fixing compensation under clause 2	"BIRAC" New Delhi.
Clause 5	Number of days from the date of issue of letter of acceptance for reckoning date of start.	5 days

S. No.	Milestones (physical)	Time Allowed (from date of start)	Amount to be with- held in case of non- achievement of milestone
1	 a. Hall number 508 b. Hall number 509 c. Hall number 510 d. Hall number 511 e. Hall number 512 f. Hall number 507 g. Hall number 506 	60 days 90 days	In the event of not achieving the necessary physical milestone as assessed from the running payments / physical progress, 1% of the tendered value of the whole work will be withheld for failure of each milestone per week
	Time allowed for execution of work		90 days
	Authority to give fair & reasonable extension of time for completion of work	Under unavoidable circumstances the contractor will seek extension of time period in writing assigning the reason for the time over run.	Recommended by Project Steering Committee & approved by the competent authority

Table of Milestones

Clause 7	Gross work to be done together with net payment /adjustment of advances for material of collected, if any, since the last such payment for being eligible to interim payment	Minimum Rs 1,25, 00,000/-
Clause 11	Specifications to be followed for execution of work	 (i). CPWD Specifications 2019 volume I &II with upto date correction slips till the date of receipt of tenders. (ii). Central Public Works Department's General Specifications for Electrical Works (Part -I, Internal) - 2013, (Part -II, External) - 2013
Clause 12	Deviation limit for quantities of items.	30%

Clause 16	Component Authority for deciding	Director, Operation BIRAC, New
	reduced rates.	Delhi
Clause 18	List of mandatory machinery, tools &	N.A.
	plants to be deployed by the contractor at	
	site.	
Clause 36	a) Details of minimum technical staff to	i).Principal Technical representative
(i)	be employed with their minimum	(Project Manager) – One
	qualifications and experience.	He must be graduate in Civil
		Engineering having atleast 5 years'
		experience.
		ii). Engineers – Two
		(a) One Engineer must be graduate
		in Civil Engineering with minimum
		2 years' experience or diploma
		holder in Civil Engineering with
		minimum 5 years' experience).
		(b) One Engineer must be graduate
		in Electrical engineering with
		minimum 2 years' experience or
		diploma holder in Electrical
		Engineering with minimum 5 years'
		experience).
	b) Recovery to be effected from the	(i). Rs. 50,000/- per month for
	contractor in the event of not fulfilling	Principal Technical Representative.
	provision of clause 36(I)	(ii). Rs. 25,000/- per month in case
		of Engineer.
	Assistant Engineer retired form Govt.	
	Services that are holding diploma will be	
	treated at par with Graduate Engineers.	

Special Conditions of Contract

- 1. The tenderer shall acquaint himself with the proposed site of work, its sub soil strata, underground water table and its approach roads before quoting his rates. The construction of new approach road or repair of the existing approach and its maintenance during the execution of the work shall all be carried out by the tenderer and nothing extra shall be payable over his quoted rates.
- 2. If for any reasons, any part of the site is not available temporarily for some time for part of the work under the contract, the agreed construction schedule shall be suitably modified and contractor shall diligently divert his men and materials to utilize them appropriately, profitably and no claim of damages whatsoever shall be entertained on this account. However, the contractor shall be allowed extension of time for completing the work as deemed fit by the competent authority. The contractor shall not be entitled to any compensation for any loss suffered by him and revision in the rates quoted by him.
- 3. The contractor shall make his own arrangement for obtaining electric connection required for execution of work and make necessary payments directly to the concerned departments and nothing extra shall be payable on this account. The contractor shall make his own arrangement for water suitable for construction work as well as drinking and other purpose for the labour engaged by him for the execution of the work.
- 4. The contractor shall provide, at his own cost instruments for weighing and measuring purpose at the site of work as may be necessary for execution of the work.
- 5. The contractor shall take care of all safety precautions pertaining to construction of work, such as excavation, trenching, demolition, provision of scaffolding, ladder, working platforms, gangways, mixing asphaltic materials, electric arc/ gas welding, use of hoist and construction machinery. He shall be governed by relevant provisions of safety code and as directed by the Engineer-in-Charge and nothing extra shall be payable on this account.
- 6. On account of security consideration, some restrictions may be imposed by the security staff on the working and/ movement of men and materials etc. The contractor shall be bound to follow all such restrictions/ instructions and he shall organise his work accordingly. No claim on this account, whatsoever, shall be payable.
- 7. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to existing/ new work due to negligence on his part. No hindrance shall be caused to traffic during the execution of the work.
- 8. The contractor shall be responsible for the watch and ward of the building safety of all fittings and fixtures including sanitary and water supply fittings and fixtures against pilferage and breakage during the period of installation and thereafter till the building is physically handed over to the BIRAC.
- 9. The contractor shall take all preventive measures against any damage caused by rain, snowfall, floods or any other natural calamity, whatsoever during the execution of the work. The contractor shall be fully responsible for any damage to the Owners property and to the work for which the payment has been advanced to him under the contract. However, the contractor shall maintain an `All risk policy' from any unit of General Insurance Co. or any

other approved insurance company, for the amount at least equal to the payment received against the work done, at his own cost. This will also cover the defect liability period. This shall be favouring the "BIRAC". Nothing extra on this account shall be payable to the contractor for maintaining such Insurance Policy.

- 10. The work will be carried out in the manner complying, in all respects, with the requirements of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra shall be paid on this account.
- 11. The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per local Municipal Corporation or such local body bye-laws and the contractor shall produce necessary completion certificates, wherever required, from such authorities after completion of work.
- 12. The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rules and regulations and pay all fees and charges which may be liable at his own cost.
- 13. All materials to be incorporated in the work shall be arranged by the contractor and shall be in accordance with the specifications laid down.
- 14. The tenderer shall use materials bearing ISI Certification Mark unless otherwise specified or allowed in writing by the Engineer-in-Charge. Any material banned by the BIRAC shall not be used in the work.
- 15. The contractor shall submit to the Engineer-in-Charge samples of all materials for approval. Such samples of materials which affect aesthetics of the work shall also be got approved from the Engineer-in-Charge of the project before procuring bulk supplies. These approved samples shall be preserved and retained in the custody of the Engineer-in-Charge as standards of materials till the completion of the work. The cost of such samples shall be borne by the Contractor and nothing shall be payable on this account over the Agreement rates.
- 16. In case any material / work is found sub-standard the same shall be rejected by the Engineer-in-Charge and the same shall be removed from the site of work within 48 hours, failing which the same shall be got removed by the Engineer-in-Charge at the risk and cost of the contractor without giving any further notice and time.
- 17. Even ISI marked materials may be subjected to quality test at the discretion of the Engineerin-Charge. Whenever ISI marked, materials are brought to the site of work the contractor shall, if required by the Engineer-in-Charge, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the materials procured by the contractor, satisfy the provisions of relevant ISI codes.
- 18. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein.
- 19. The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of

different sizes and lengths shall be stored separately to facilitate easy counting and checking at any time as and when desired by the Engineer-in-charge.

- 20. The work shall be executed and measured in metric system. The metric dimensions given in the schedule of quantities and drawing etc. shall be followed. (The dimension in FPS units wherever indicated, are for guidance only). The figures in the drawings shall be followed.
- 21. For measurement purpose the floor level shall mean the top surface of main structural RCC slabs of that floor and not the top of sunken floor of toilets or any other depressed floor.
- 22. The contractor shall be responsible for completing the work and for satisfying all terms and conditions of the Contract without any extra payment over his quoted rates unless otherwise specified. The contractor shall quote his rates for various items of work accordingly and no claim whatsoever shall be entertained for any incidental or extra work involved in the execution of the work as per nomenclature of the item and the specifications indicated in the tender documents.
- 23. Subject to the nomenclature of the item as per schedule of quantities, the specification indicated in the tender documents, the rates quoted shall include cost of all materials including royalty and taxes if any, labour, sundry inputs, execution of work at all heights, levels, pattern and design for all leads, lifts and depths including overhead charges and contractor's profit. Nothing extra shall be paid on this account.
- 24. The rate shall be inclusive of making design, pattern and execution of work as per Architectural drawings, at all levels and heights.
- 25. The rates shall be inclusive of making any holes in walls/ RCC work for fixing any fixture/ frame work and making good the structure to its original shape and finish.
- 26. The rate of items of flooring shall be inclusive of work for sunken or depressed floors.
- 27. The contractor shall give a satisfactory performance test of installations individually and as a whole to ensure their proper functioning before the work is finally declared completed and accepted.
- 28. The contractor shall continue to maintain watch and ward to safeguard the Owner's property in his possession until the same is formally handed over as per directions of the Engineer-in-Charge. Nothing extra over agreement rates shall be paid on this account.
- 29. All tools, plants and measuring or weighing equipment shall be arranged by the contractor himself and nothing extra shall be paid to the contractor on this account.
- 30. The quantities of various items incorporated in the tender are approximate. However, the payments shall be made to the contractors on the basis of actual measurements taken at site.
- 31. The contractor shall protect the adjoining buildings or works and the work under execution from fire and shall make adequate arrangements for fire protection and firefighting and if any property is damaged, by fire due to the negligence of the contractor, the same shall be made good by the contractor at his own cost, to the entire satisfaction of Engineer-in-Charge.

- 32. The contractor shall provide adequate lighting arrangements as approved by the Engineerin-Charge for carrying out the work during night time, if so required and also provide all other facilities for the labour employed to carry out the work as per direction of Engineerin-Charge.
- 33. In order to achieve the targeted date of completion the contractor may have to work in multiple shifts, round the clock including public and gazetted holidays and nothing extra shall be paid on this account.
- 34. The contractor shall get the samples of all the materials to be used, in the work approved from Engineer-in-Charge before going for bulk procurement. Bulk procurement shall be taken up only after obtaining approval from the Engineer-in-Charge. Any delay in getting the samples approved shall be contractor's responsibility.
- 35. All materials, articles and workmanship shall be of respective best quality and kind for the class described in the schedule of quantities and specifications. All materials, so used in different items of work shall be subject to the approval of the Engineer-in-Charge.
- 36. The contractor shall be responsible for all statutory provisions and deductions towards ESI, PF or any other, as the case may be or any other levies and taxes shall be borne by the contractor. The TDS and Contract Tax or any other statutory levies/ taxes incorporated from time to time shall be deducted progressively from the running account bills, as applicable at the time of payment. No claim in this regard shall be entertained.
- 37. The contractor is supposed to abide the minimum wages act, and shall produce all records to the Engineer-in-Charge or any other statutory authority as and when called for. The Engineer-in-Charge does not hold any responsibility, on account of any lapses in this regard.
- 38. For any clarification/ doubt, the BIRAC may organize regular meetings with Contractor & Architect. The contractor shall attend such meetings invariably as and when required.
- 39. In respect of the work of other agencies, where the commencement or progress of such work of any other agency is dependent upon the completion of particular portions of the contractor's work or generally upon the contractor maintaining progress in accordance with the approved coordinated construction programme, it shall be the responsibility of the Contractor to complete such portions and maintain such progress.

Should any difference arise between the contractor and the other agencies, these shall immediately be brought to the attention of the Engineer-in-Charge who after reviewing the matters causing the differences will give their decision which shall be final and binding on the contractor.

40. The contractor shall have to do all drilling of holes and cutting of walls, chases or other elements of the building for the complete and proper installation of the pipe lines/ ducts and other equipments by using electrically operated tools such as drills/ chase cutting machine etc. Manual drilling or chiseling or cutting shall be permitted on special request only.

No chiseling or cutting or drilling of RCC columns, beams, girders and other principal structural members shall be done unless prior permission has been granted by the Engineer-in charge in writing.

- 41. All chases and openings made by the contractor for his pipe lines shall be filled/ covered over with cement plaster in reasonable manner. Before rough plastering on the pipe surfaces the concealed pipes shall be secured to the wall by using proper supports/ clamps.
- 42. The Contractor shall employ competent fully licensed/ qualified, plumber for the work of PLUMBING/ SANITARY installations in accordance with the drawings and specifications. The licensed plumber shall be available at all times at site to receive instructions from the Engineer-in-Charge in the day-to-day activities throughout the duration of execution of plumbing/ sanitary work.
- 43. On completion of the PLUMBING/ SANITARY installation a certificate shall be furnished by the contractor countersigned by the licensed plumber, under whose direct supervision the installation was carried out. This certificate shall be in the form as required by the Engineer-in-Charge.
- 44. The security of workmen, materials, equipment stores etc, within the area allotted to the contractor shall be the responsibility of the contractor.
- 45. The quantities shown in Schedule of quantities are tentative and may vary as per the site/NIT requirements to any extent.
- 46. The work shall be executed as per the programme drawn or approved by the Engineer in charge and it shall be so arranged as to have full co-ordination with any other agency employed at site. No claim for idle labour shall be entertained nor shall any claim on account of delay in the completion of the work be tenable except extension of time secured by the contractor on request submitted to Engineer-in-charge.
- 47. All materials used in this work shall be new, conforming to the relevant specifications. The location of the cables, panel board etc., indicated in the drawing is only indicative. The actual route of cables may differ from the plans according to the details of the building construction and the conditions of execution of the installations.
- 48. In order to achieve the milestone and completion dates and to keep pace with the approved construction programme, the contractor shall be permitted to carry out his work beyond the normal working hours or in shifts. The contractor shall be responsible for obtaining any necessary permission from the relevant authorities that may be required for him to carry out the work beyond the normal working hours or in shifts. Also the contractor shall give prior notice to and make arrangements with the Engineer –in-charge for the supervision of work carried out beyond the normal working hours or in shifts. The contractor shall make his own arrangements in respect of the provision of adequate lighting and any other facilities that may be required for carrying out the work beyond the normal working hours or in shifts. No extra payments shall be made to the contractor for or in connection with any such overtime or shift work.
- 49. Nature of work is involved dismantling of existing office inventory/items as per BOQ and inventory given by client, transportation and installation of the same as per client requirement/boq. Contractor has to take signed inventory/items of existing office from designated BIRAC nodal officer and take insurance of all the items for damaging, partially break, completely break/damage etc. due to mishandling, damaged/ completely Break of items during transportation etc. till the final handing over to BIRAC. This is the sole responsibility of contractor for all the items civil, electrical, all services, furniture's etc for

safety and security. If any item damage or break the same comes under the responsibility of contractor and will recover from the account of bill.

- 50. Contractor has to engage professional specialized agency who can do packaging and shifting/transportation of all existing inventory from BIRAC MTNL office to proposed BIRAC Office at 5th Floor, Business Park, NSIC, Okhla, New Delhi. The same needs to be done in professional manner.
- 51. Contractor has to take sign for all the items/inventory which will hand over to him in BIRAC MTNL office by BIRAC nodal officer in running condition the same will be handed over after installation at new BIRAC office at 5th Floor, Business Park, NSIC, Okhla, New Delhi in the same running condition. Status of all items/inventory either running condition or not working condition shall be taken by contractor from BIRAC nodal officer at the time of handing over before dismantling of all the items/inventory at BIRAC MTNL office.
- 52. During transportation and at the time of installation if any item damage/break or required any repairing shall be under the scope of contractor. If there is major repair required the same shall be recovered from contractor account bill and if required the same will be repaired at the risk and cost of contractor.
- 53. Dismantling of different items/inventory shall be done in professional manner and take sufficient precaution for other items which are not to be transferred from existing BIRAC MTNL office

General Specifications

- 1.1 Works shall be carried out in accordance with Specifications as detailed below:
- 1.1(a) For Civil Works

Central Public Works Department's Specifications –2019 Volume – I & II read with correction slips issued upto the date of receipt of tenders and relevant I.S. Codes.

1.1(b) For Electrical Works

Central Public Works Department's General Specifications for Electrical Works (Part –I, Internal) – 2013, (Part –II, External) – 2013, (part –VI, Fire Alarm System) – 2013 & Air conditioning – 2013 with Correction Slips upto the date of receipt of tenders.

All installations shall comply with the requirements of Indian Electricity Rules, 1956 and Indian Electricity Act – 1910 as amended upto date, and byelaws of Uttar Pradesh Electricity Department or any other concerned Department.

- 1.2 Wherever reference to any Indian Standard Specifications occurs in the documents relating to this contract, the same shall be inclusive of all amendments issued thereto or revisions thereof, if any, upto the date of receipt of tenders.
- 1.3 Before commencement of the work, the contractor shall co-relate nomenclature of the items with all the relevant architectural and structural drawings to satisfy himself that the information available therefrom is complete and unambiguous. The figures and written dimensions on the drawings shall be followed. The dimensions shall not be scaled out. The contractor shall submit for approval of Engineer-in-Charge his workshop drawings and the sample of work to be performed under the specified items of work before actually commencing the mass execution of work under the item. Nothing extra shall be payable on this account.
- 1.4 The discrepancy in the drawings issued, if any, shall be brought to the notice of Engineer-in-charge for immediate decision before execution of the work. The contractor, alone, shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and incomplete information and no claim, whatever, shall be entertained on this account.
- 1.5 In the event of any difference or discrepancy in the description of any item or its specifications, the same shall be resolved in the following sequence and decision of the Engineer-in-charge shall be conclusive, final and binding on the contractor.
 - a. The nomenclature of the item shall take precedence over all and anything stated elsewhere.
 - b. The conditions and specifications attached to the tender documents shall take precedence over the provisions of CPWD specifications 2019 Vol. I & II with upto date correction slips and relevant IS Codes for civil work and CPWD's general specifications for electrical works (Part I, Internal) –2013, (Part II, External) –2013 Part –VI Fire Alarm System) –2013 and Air-conditioning –2013 with correction slips upto the date of receipt of tenders.
 - c. The CPWD Specifications shall take precedence over provisions of relevant IS Codes.

- d. In case, it is not possible to resolve the dispute with the help of tender documents, the provisions of relevant IS Codes shall be relied upon.
- e. In case, it is not possible to resolve dispute with the help of any of the above stated documents, the decision and directions of the Engineer-in-charge shall be followed for execution and completion of any item of work.

Form of Performance Security (Guarantee)

Bank Guarantee Bond

In consideration of the "BIRAC" (hereinafter called 'The BIRAC') having offered to accept the terms and conditions of the proposed agreement between and (hereinafter called "the said contractor(s)" for the (hereinafter called" the said Agreement") Work_ having agreed of irrevocable Bank Guarantee to production an for only) as a security / guarantee from the Rs. (Rupees contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

We_____ (hereinafter referred to as "the Bank") hereby undertake to

(Indicate the name of the Bank)

pay to the BIRAC an amount not exceeding Rs. _____ (Rupee ______only) on demand by the BIRAC.

2. We, ______do hereby undertake to pay the amounts due and payable (Indicate the name of the Bank)

under this guarantee without any demure, merely on a demand from the BIRAC stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor (s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ______Rupee______only).

3. We, the said bank further undertake to pay the BIRAC any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor (s) shall have no claim against us for making such payment.

4. We, ______further agree that the guarantee herein contained shall remain in full

(Indicate the name of the Bank)

force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the due of the BIRAC under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the BIRAC certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor (s) and accordingly discharges this guarantee.

5. We______ further agree with the BIRAC that the BIRAC shall have

(Indicate the name of the Bank)

the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or form time to time any of the powers exercisable by the BIRAC against the said contractor (s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor (s) or for any forbearance, act of omission on the part of the BIRAC or any indulgence by the BIRAC to the said Contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

- 6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor (s).
- 7. We_____ lastly undertake not to revoke this guarantee except with the (Indicate the name of the Bank) pervious consent of the BIRAC in writing.
- 8. This guarantee shall be valid upto ______ unless extended on demand by the BIRAC. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. ______ (Rupee ______only) and unless a claim in writing is lodged with us within six months of the date of the expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the ______ day of ______ for _____(Indicate the name of the bank)

Safety Code

- 1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well as suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than ¹/₄ to 1 (1/4 horizontal and 1 vertical)
- 2. Scaffolding of staging more than 3.6m (12 ft) above the ground or floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm (3ft) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent if from swaying from the building or structure.
- 3. Working platform, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 (12ft) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
- 4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90cm (3ft).
- 5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m (30ft) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11 ½") for ladder upto and including 3m (10ft) in length. For longer ladders this width should be increased at least ¼" for each additional 30cm (1foot) of length. Uniform step spacing of not more than 30cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defiance of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
- 6. Demolition Before any demolition work is commenced and also during the progress of the work,
 - i). No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.

- ii). All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- 7. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipments shall invariably be provided:
 - i). Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - ii). Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
 - iii). Those engaged in welding works shall be provided with welder's protective eye shields.
- 8. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
- 9. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place of work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- 10. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge or their representatives.
- 11. Notwithstanding the above clauses from (1) to (10) there is nothing in these to exempt the contractor from the operations of any other Act or Rules in force in the Republic of India.
- 12. Model rules for the protection of the health and sanitary arrangement for the workers employed the contractors as laid down by concern municipal bodies shall be followed by the contractor to the satisfaction of health / sanitary Inspectors.

Bill of Quantities (BOQ)

Proiect Co	ode - 202211	
	of Work-: Shifting of office of Biotechnology Industry Resea	arch Assistance
Counci	I [BIRAC], 1st Floor & Mezzanine Floor, MTNL Building, 9, CG	O Complex, New
	Delhi-110003 to BIRAC, NTSC, Okhla, New Delhi	
SI. No.	Description	
Α	Civil, Plumbing & Fire Fighting Annexure-1	
1	Excavation	
2	Concrete	
3	R.C.C. Work	
4	Brick Work	
5	Marble and Granite Work	
6	Door window & Glass partition	
7	Wooden partition & Paneling work with Steel Work	
8	Flooring	
9	False ceiling	
10	Finishing (paint,wall paper)	
11	Aluminium work	
12	Toilet water proofing	
13	Sanitary Installation	
14	Water Supply	
15	Drainage	
16	Dismantling	
17	Signages	
	Plandeland	
B	Electrical	
1	SUB HEAD - I- Internal Electrification	
2	SUB HEAD - II -PASSIVE & ACTIVE LAN & IP-PBX SYSTEM	
-		
	SUB HEAD - III- Fire Detection & Alarm System	
3	SUB HEAD - IV- CCTV SYSTEM	
4	SUB HEAD-VII-AV SYSTEM (Existing)	
5	AV SYSTEM (New) independent units 2nos	
-	Total of B	
С	HVAC Annexure-3	
	HVAC System	
	Total of C	
	Grand Total A+B+C	

Name of Work-: Shifting of office of Biotechnology Industry Research Assistance Council [BIRAC], 1st Floor & Mezzanine Floor, MTNL Building, 9, CGO Complex, New Delhi-110003 to BIRAC, NTSC, Okhla, New Delhi

			Total				
S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
_	1	ANNEXURE -1 CIVIL, PLUMBING& Fire Fighting PART					
1	2.8	Sub- Head - I, Earth Work Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					
	2.8.1	All kinds of soil	cum	3			
	2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m including getting out the excavated					
	2.10.1	All kinds of soil Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300					
	2.10.1.2	mm dia.	mtr	20			
	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and TOTAL	cum	3			
		DSR items					
		NS items Sub - Head - III , Concrete Work					
2		1:5:10 (1 cement : 5 coarse sand (zone-III): 10 graded stone					
	4.1.10	aggregate 40 mm nominal size)	cum	2			
		TOTAL DSR items					
		NS items					
3		Sub - Head - IV 、RCC Work					
	5	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					
	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size)	cum	1			
	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :					
	5.9.3	Suspended floors, roofs, landings, balconies and access platform	sqm				
1.1 1.2	5.9.5 5.9.16	Lintles, beams, plinth beams, girders, bressumers and cantilevers. Edges of slabs and breaks in floors and walls.	sqm	6			
		Under 20 cm wide	metre	15			
1.3	5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.					
	5.22A.6	Thermo - Mechanically Treated bars	kg	80			
1.4	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge					
		Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately).					
	5.33.1 5.33.1.1	All works above plinth level upto floor V level concrete of M25 grade with minimum cement content of 330 kg /cum	cum	1			
		TOTAL					
		DSR items					
		NS items					
2	6.4	Sub-Head V - Brick Work/Block Work					
	6.1 6.1.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	1			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
2.1	6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level					
	6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	sqm	942			
2.3	6.15	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	sqm	942			
2.4	6.4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in					
	6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum				
		TOTAL					
		DSR items NS items					
3		Sub Head - VII Marble and Granite Work					
3.2	8.2	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. (Full moulding of Granite on exposed face including in this item.)					
а	8.2.2	Granite of any colour and shade					
	8.2.2.2	Area of slab over 0.50 sqm.	sqm	5			
3.3	8.4	Extra for fixing marble /granite stone over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive including cleaning etc. complete.	metre	10			
		7074					
		TOTAL DSR items					
		NS items					
4		Sub- Head - VIII Wood Work & PVC Work					
4.1	9.21	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters :					
	9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	46			
4.2	9.23	Extra for providing lipping with 2nd class teak wood battens25mm minimum depth on all edges of flush door shutters (Total area of the shutter to be measured).	sqm	46			
4.4	NS/MR	Providing & Fixing of Roller Blinds in screen of Classic roller series of Vista or equivalent of 75% Pvc 25% polyester fabric with openness of 5% ; ensure adequate light & darkening with privacy ; Thickness: 0.63mm(+5%) ; Weight of fabric: 465 GSM (+5%) Fire Resistance NFPA 701, BS 5867 Part-2-Type-A ; colour fasteness of light (8) grade ; Hardware of ROLLER TUBE of High Strength extruded Aluminium alloy anodized 32mm OD with a minimum wall thickness of 1.0mm duly. IDLER shall be of high strength fiberglass reinforced pol;yster, consisting of an outside sleeve and centre shaft. Sleeve shall provide bearing surface of roller tube and ratate freely on centre shaft, providing smooth quiet and long wearing operation. Fixing BRACKETS & CLAMPS: racket is made of mild steel and zinc plated, Clamp shall be of spring steel of thickness 0.7mm and zinc plated. BOTTOM RAIL: Extruded aluminium section in a colour matching to the fabric. The fabric shall be enclosed in the suitably created pocket along with the tube. The tube shall be closed from sides with end caps to give a neat look. The BALLCHAIN shall be 2mm diameter cord with 4.5mm diameter acetal balls moulded co-axially to it on 6mm pitch to form an endless ballchain.	sqm	48			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
4.5	NS/MR	Providing and fixing stainless steel (Grade 304) curtain rods Having Weight upto .72 kg/mtr with two ss bracket (Grade 202) and showcap fixed with SS Screw and rawal plug complete as per direction of engineer incharge		-			
		25mm dia	metre	3			
4.7	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISi, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	each	16			
4.8	9.127	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality.					
	9.127.2	1.00 mm thick	sqm	1211			
4.14	NS/MR	Providing and fixing Stainless steel (Grade 316) satin finish sliding door bolts superior quality with necessary SS screws etc. complete:Heavy Duty Make: Dorset KDT 275NI / Equivalent make in Dorma /equivalent					
а		300x16mm	each	42			
4.15	NS/MR	Providing and fixing Stainless steel (Grade 304) tower bolts superior quality with necessary SS screws etc. complete:Heavy Duty, MAKE:Dorset TR1210-12" & TR610-6" /Godrej prduct code 3264 &3261 / Equivalent in Dorma/Equivalent					
b		300x10 mm	each	21			
<u>с</u> 4.16	NS/MR	150 x 10 mm Providing and fixing 25mm dia , 300 mm long in cranked / square shape stainless steel (Grade 316) satin finish pull handle with necessary screws etc. complete Make:Dorset gl'Fl' / Godr product code 7262 / Equivalent in Dorma/ Equivalent	each each	21 21			
4.17	NS/MR	Providing and fixing Stainless steel Grade 304 hanging floor door stopper size 6" of superior quality with necessary stainless steel screws etc. complete (Heavy duty) make: Dorset DSHT HANGING TYPE / Equivalent					
		Single rubber stopper	each	21			
4.19	NS/MR	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-incharge (Door handle, lock and stopper etc.to be paid separately).	sqm	430			
4.19	NS/MR	only fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-incharge (Door handle, lock and stopper etc.to be paid separately).	sqm	150			
	NS/MR	Providing and fixing stainless steel H type handle 'OZONE' make, Model OGH-55 or equivalent make with necessary screws etc complete : (a) Size 25x450mm complete as per the architectural drawings and the directions of engineer-in-charge.	each	40			
	NS/MR	Providing and fixing stainless steel door lock with strike plate without Cutout of 'OZONE', (Model-OPL-4A-N-S) or equivalent make for steel/ glass door & to be fixed at centre of door including necessary cutting and making good the door etc complete: as per the architectural drawings and the directions of engineer-in-charge.	each	30			
	NS/MR	Providing and fixing stainless steel patch fittings of 'OZONE' make model no. OGC-5A STD SSS etc all complete as per direction of Engineer-in-charge.					
	NS/MR	(a) Glass to Glass Connector 180° Providing and fixing stainless steel patch fittings of 'OZONE' make model no. OGC-3A STD SSS etc all complete as per direction of Engineer-in-charge	each	30			
	NS/MR	(a) Glass to Glass Connector 90° Providing and fixing stainless steel patch fittings of OZONE make model no. OSH-1 STD CP etc all complete as per direction of Engineer-in-charge.	each	30			
		(a) Wall to Glass hinge	each	30			
	NS/MR	Providing and fixing stainless steel Cam Action Floor Spring with Closing Force EN3 Double Cylinder (Heavy Duty) of OZONE make model no. FS-8400 STD etc all complete as per direction of Engineer-in-charge.	each	30			
		TOTAL					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
		NS items					
5	9.154	Sub- Head - IX, Steel Work Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6 mm hollow MS tube, placed along the walls, ceiling and floor in a grid pattern with spacing @ 60 cm centre to centre both ways (vertically & horizontally) or at required spacing near opening, with necessary welding at junctions and fixing the frame to wall/ ceiling/ floors with steel dash fasteners of 8 mm dia, 75 mm long bolt, including making provision for opening for doors,	kg	7694			
		windows, electrical conduits, switch boards etc., including providing with two coats of approved steel primer etc. complete, all as per direction of Engineer-in charge.					
	9.126	Providing and fixing 12 mm thick panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick.					
	9.126.2	Fire retardant plywood conforming to IS: 5509	sqm	1119			
5.9	10.27	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm2), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame, concrete/ masonry, etc. as per direction of Engineer-in-charge.					
	10.27.2	10 x80 mm	each	526			
		TOTAL					
		DSR items					
		NS items					
6 6.1	11.3	Sub- Head - X FLOORING Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.					
	11.3.1	40 mm thick with 20 mm nominal size stone aggregate	sqm	2131			
	11.0.1		oqiii	2101			
6.2	11.13	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.					
	11.13.1	40 mm wide and 4 mm thick	metre	5328			
6.6	11.41A	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.					
<u> </u>	11.41A.1	Double charge vitrified tile polished finish of size	0.0777	1707			
6.8	8.31	Size of Tile 600 x 600 mm Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sam	99		1	
		cement mixed with pigment of matching snade complete.					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	NS	Providing and laying at site10mm thick Laminate Floor Pergo or equivalent (conformings to EN 13329, ASTM C 1028, DIN 52185,DIN 54345, EN 717-2, DIN 4102.) matt finish of required shade- with inbuilt 3mm SoundBloc - Class of use 34/23, wear resistance AC -4, impact resistance -IC 3, (as per EN 13329), having 0.6mm MLC (Multi Layer Composite) high pressure laminate, surface treated with (Aluminium Oxide) surface guard + and SRSG2 (Scratch resistance surface second generation) on top of Moisture Resistant High Density Fibre Board substrate specially developed core; of plank size 1196 mm x 196 mm having Pro Loc joints tounge and groove to secure long lasting joint, the tounge and groove having the edges duly pre impregneted with paraffine and laid over underly of 0.2mm thick Alkali Resistant Polyethylene Sheet (Polyethylene sheet- Density 920-935 kg/Cum) complete as per drawing and manufacturers specifications and direction of Engineer-in-Charge.	sqm	309			
	NS	Providing and fixing Pergo or equivalent " skirting profile (minimum 60mm high)" of required shade fixed to wall as per manufacturer's specifications complete as per drawing and direction of Engineer-in-Charge.	metre	85			
	NS	Providing and fixing Pergo or equivalent "Nose Profile" of required shade fixed to wall as per manufacturer's specifications complete as per drawing and direction of Engineer-in-Charge.	metre	85			
	NS	Providing & Fixing Vinyl Flooring , Trendo 2.0mm thick heterogenious anti stain densely Compacted in Roll Form and skirting in pattern and 2mtr width and 15mtr length ,solid ,resilient,fully flexible,glass fibre scrim impregnated for dimensional stability, anti-bacterial,poly urathane surface protecting coating with heavy duty wear layer of 350 microns, in approved shade and texture, installation and considering the wastage after cutting the roll to fit the floor size and also providing thermal welding for a seamless floor providing uniformity and on a smooth and moisture free levelled floor surface using rubber based adhesive fevicol SR 505 or a good water based adhesive , all and as per the instruction of the Engineer in charge	sqm	5			
		TOTAL					
		DSR items NS items					
_							
7	NS	Sub- Head - XI ROOFING Providing & fixing Armstrong Vertical Linear Baffle Ceiling made out of Aluminum Extrusion in Aluminum alloy grade 6063. The baffle blade shall be in size of 100x 50 x 3600mm in WHITE/BLACK/WOOD GRAIN finish – Pradoo & Cabrueava. The baffle blade shall be suspended using Slotted U-profile at on-center spacing . Longer lengths of Baffle to be connected by Baffle Joiner and the ends to be fixed with End caps. Installation of U-Grid: The U profile to be suspended at every 1200mm on-centre using 6mm threaded rod from the structural soffit using U-profile hanger. U-profile splice to be used to join more than one U profiles of length 3.75M. 1st U-Grid Channel must be no more than 400mm from the perimeter.					
		Installation of Armstrong Baffles: Locate the slot for Baffle Hangers in slot of Baffle section at 1200mm centres. Hangers are inserted into the slot, then rotated 90° and fixed into position by tightening the grub screw. Baffle to be lifted into position and hangers engage over lip of U-Grid Channel. Each Hanger to be secured into position by inserting the Locking Clip. Baffles blades to be connected at ends with Baffle Joiner, which are inserted into the top and bottom slots of the Baffle closed profile for alignment only. The bottom Joiner to be located first and fastened on one side only. The top Joiner to be fitted then and secured with grub screws on one side. Then the two Baffle sections shall be joined and the top Joiner is screw fastened on the 2nd Baffle profile. End Caps to be located by pushing the End Cap tongues into Baffle slots. Installation to be carried out by Armstrong Trained Installation team & Installation should be carried out as per Armstrong recommended procedure. Baffle Ceiling 200mm c/c	sqm	98			
	NS	Wooden Linear Planks	sqm	197			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	NS	Providing and Fixing - Acoustical clouds which are 30 mm thick of approved sizes, flat glass fibre panels with Humidity Resistance, come in various shape options and in standard White colour or in the color specified by the Design Consultant/ Engineer in charge in the color specified by the Design Consultant / Engineer in charge. The back of each panel to have embedded square frame bracket system in which provisions are already made for integration of installation system for suspension of individual or grouped panels					
		900mm dia diagonal and 30 mm thick	SQM	272			
	26.23	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on interlocking metal powder coated T-Grid of hot dipped galvanised iron section of 0.40 mm thick on Silhouette profile,rotary stiched double webbed white with 6mm reveal profile (white/black),comprising of main-T runners of size 15x42 mm of length 1200 mm and secondary intermediate cross- T of size 15x42 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mmouter diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 22x19x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40mm long dry wall S.S screws. The work shall be carried out as per					
	26.23.1	With 15 mm thick integral densified micro edge light weight calcium silicate false ceiling tiles	sqm	490			
	12.59	Providing & fixing false ceiling at all height including providing & fixing of framework made of special section, power pressed from M.S. sheets and galvanised with zinc coating of 120 gms/ sqm (both side inclusive) as per IS : 277 and consisting of angle cleat of size 25mm wide x 1.6mm thick with flanges of 27mm and 37mm, at 1200mm c/c, one flange fixed to the ceiling with dash fastener 12.5mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25 x10 x0.50mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I chanels 45 x15 x 0.90mm running at the spacing of 1200 mm c/c, to which the ceiling section 0.5mm thickbottom wedge of 80mm with tapered flanges of 26 mm each having lips of 10.5mm, at 450mm c/c, shall be fixed in a direction perpendicular to G.I intermediate channel with connecting clip made out of 2.64mm dia x 230mm long. It wire at every junction, including fixing perimeter channels 0.50mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/ partitions with the help of Rawl plugs at 450mm centre, with 25mm long dry wall screws @ 230mm interval, including fixing of Calcium Silicate Board to ceiling section and perimeter channels with the help of the board with recommended jointing compounds, jointing tapes,finishing to a flush finish of tapered and square edges of the board with recommended jointing compounds, jointing tapes,finishing with jointing compounds in three layers covering up to 150mm on both sides of joints and two coats of primer suitable for boards, all as per manufacture's specification and also including the cost of making opening for light fittings, grills, diffusers, cut outs made with frame of perimeter channels suitably fixed, all complete as per drawings. 8 mm thick Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process.	sqm	1226			
		TOTAL					
		DSR items					
8		NS items Sub- Head - XII FINISHING					
-	13.2	15 mm cement plaster on the rough side of single or half brick wall					
8.2		of mix:					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	13.78	Providing and applying 12 mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregates as vermiculite/ perlite respectively conforming to IS: 2547 (Part - 1 & II) 1976, applied on hacked / uneven background such as bare brick/ block/ RCC work on walls & ceiling at all floors and locations, finished in smooth line and level etc. complete.	sqm	1576			
	13.45	Finishing walls with textured exterior paint of required shade :					
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	sqm				
8.3	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	396			
8.4	13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.					
8.5	13.83.2 13.61	Two coats Pointing with synthetic enamel point of approved brand and	sqm	2802			
0.0	13.01	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :					
	13.61.1	Two or more coats on new work.	sqm	50			
8.6	13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :					
8.7	13.43.1	Water thinnable cement primer	sqm	2802			
	NS	painting with p U paint of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.					
	NS	Two coats	sqm	100			
8.8	NS	Providing and fixing 3M frosted/etched film of approved texture and pattern to Glass surface as per the detailed drawings and as directed by the Architects.	sqm	580			
8.9	NS/MR	Providing & Fixing decorative Wall Paper sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S including cost of adhesive of approved quality.	sqm	649			
8.10	MR	Providing and fixing GI Gyp steel ultra frame work for wall panelling as per design drawing consisting of floor channel of size 50x32x32 x0.5mm thick at bottom and top fixed with 35 mm nylon sleeves and 35 mm screw. Further fixing GI stud 48x34x36x0.5 mm thick @600mm C/C vertically. The framework to be filled with 50mm 1000GSM non-woven thermal bonded polyester wadding (Make Dupont/ mikasha/vibrant) held in position with 18 mm GI checken mesh of 24SWG with drive all screws and oversize washers. Finally fixing over it horizontally 80x26x51x0.5 mm thick G.I. Gyp ceiling section placed @600mm C/C or wherever required as per design drawings. The frame to be fixed to the walls by means of angle holdfasts or cleats of required size complete with expandable anchor fasteners of 65x10mm dia fixed on each vertical member @1000mm C/C .The work shall be executed as per drawings ,specifications & instructions of engineer in charge.	sqm	233			
8.13	9.40.1.2	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :50 x 20 mm	mtr	156			
8.14	26.9	Providing and fixing factory made solid Foam uPVC profile for cabinet frame (45x20 mm) of approved shade, quality and make.The profile shall be laminated on both sides, made from rigid foam sheets (Single extruded) having density 600 Kg/cum and the exposed edges sealed with PVC edge beading of same shade and colour.The frame shall be fire retardent with necessary screw holding capacity. Frame shall be fixed to wall using Expendable Fastener with necessary stainless steel screws, all complete as per directions of Engineer-in-charge.	metre	42			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
8.15	26.10	Providing and fixing factory made Cabinet Shutter/Partition 20 mm nominal thickness of approved shade, quality and make, made from rigid foam sheets (Single extruded) having density 600 Kg/cum and laminated on both side by laminate Sheet/PVC foil lamination. The exposed edges shall be sealed with PVC edge beading of same shade and colour. The shutter shall be fire retardent having necessary screw holding capacity. Shutter shall be fixed to frame using approved hinges with necessary stainless steel screws, all complete as per direction of Engineer-in-charge.	sq m	8			
8.16	NS	Providing and fixixng of 3 mm thick translucent white acrylic plastic sheet internal wall clading using specially treatedacrylic resins under high pressure and tempressure and hardened into sheets, thus providing all weather protection and UV resistance along with all necessary fixing arrangement complete as per manufacturers specifications and direction of engineer in charge.	sqm	100			
8.17	N.S/MR	Providing and fixing beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	sam	4			
8.18	NS/MR	Wall Hanging Painting Art Work.	LS	1			
		TOTAL DSR items					
		NS items					
<u>9</u> 9.1	21.1	Sub- Head - XVII, Aluminium Work Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :					
а	21.1.1	For fixed portion					
	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	200			
b	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of PVC/ neoprene gasket required (Fittings shall be paid for separately).					
	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kg	150			
9.2	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):					
	21.3.2	With float glass panes of 5 mm thickness (weight notless than	sqm	60			
9.3	9.135	12.50 kg/sqm) Providing and fixing fly proof stainless steel grade 304 wire gauge, to Aluminium windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.					
	9.135.2	With 12 mm Aluminium U beading.	sqm	60			
9.5	21.19	Filling the gap in between aluminium/ stone/ wood frame/M S Structural member and adjacent RCC/ Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete, complying to ASTM C920, DIN 18540-F & ISO 11600					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	21.19.3	Upto 20 mm depth and 20 mm width	mtr	200			
		TOTAL					
		DSR items					
		NS items					
10		Providing and laying water proofing treatment in sunken portion of					
10	22.5	WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :					
	а	First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.					
	b	Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours.					
		The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	35			
		TOTAL DSR itoms				1	
		DSR items NS items					
				1			
11 11.1	15.2	Sub- Head - , Demolishing and Dismantling Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction					
	15.2.1	of Engineer - in - charge.Dis Nominal concrete 1:3:6 or Richer mix (i/c equivalent design mix)	cum	22			
	15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	cum	26			
	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-	cum				
11.2	15.7	charge. Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-					
		charge.					
	15.7.4	In cement mortar	cum	30			
11.3	15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :					
	15.12.1	Of area 3 sq. metres and below	each	10			
	15.12.2	Of area beyond 3 sq. metres	each	32			
11.4	15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	230			
	15.51	Dismantling of road gully chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead including refilling the excavated gap.	each	5			
11.5	15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	sqm	535			
11.6	15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	cum	214			
	NS	Dismantling of wooden work stations / Storage approx size 1800 x600mm x 1100mm ,including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.as per direction of engineer in charge.	each	125			
	NS	Transportation, Repairing & re Installation of wooden work stations / Storage approx size 1800 x600mm x 1100mm ,including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.as per direction of engineer in charge. (Note: Transportation from MTNL Building to Okhla building)	each	115			
	NS	Dismantling of Toilet Cubicle, including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.as per direction of engineer in charge.	sqm	75			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	NS	Transportation, Repairing & Re Installation of Toilet Cubicle,including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.as per direction of engineer in charge. (Note: Transportation from MTNL Building to Okhla building)	sqm	50			
	NS	Packaging & Shifting Material storage Computers, Printers,Office Record Files, Chairs ,Sofa, Glass Partition, air conditioners & all of Serviceable items etc from MTNL Building to Okhla Building including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead. as per direction of engineer in charge. Note: Documents & Record file packaging & Duly Numbering at boxes will be done by BIRAC.	cum	245			
		TOTAL					
		DSR items					
		NS items					
		Signages					
	NS	Acrylic LED Signage					
	NS	Providing and fixing of Electric led signage of acrylic sheet and Fixing with Nescessary SS Screw/chain etc Complete and Sample approved by Engineer Incharge size= Varies Size in 8 mm	sqm	4.46			
	NS	NAME PLATES					
	NS	Providing and Fixing Stainless Steel Name Plate of 304 SS Grade of Thickness 18Guage with digital engraving & colouring and Fixing with Nescessary SS Screw etc Complete and Sample approved by Engineer Incharge Size =Varies size	sqm	1.80			
	NS NS	SIGN PLATES Providing and Fixing Stainless Steel Toilet Sign of 304 SS Grade of Thickness 18Guage with digital engraving & colouring and Fixing with Nescessary SS Screw etc Complete and Sample approved by Engineer Incharge Size =Varies size	sqm	1.20			
	NS	General Luminous Fire Exit Signages : Providing and installing Double sided glow signs- fire exit signage at locations indicated by the architect including all exit points and direction signage. Size of Glow signage to be 300mm X 100mm.	each	10.00			
	NS	Push/ Pull signages for all glass doors - Providing and installing Push / Pull signages made out of colored vinyl . Size of the signage - 150 x 40mm.	each	30.00			
		TOTAL					
		DSR items NS items					
		Sub Head – Sanitary Installation					
16.1	17.81	Providing and fixing floor mounted, white vitreous china single piece, double traps syphonic water closet of approved brand/make, shape, size and pattern including integrated white vitreous china cistern of capacity 10 litres with dual flushing system, including all fittings and fixtures with seat cover, cistern fittings, nuts, bolts and gasket etc including making connection with the existing P/S trap, complete in all respect as per directions of Engineer-in-Charge.	each	5.00			
16.2	17.34	Providing and fixing toilet paper holder :					
10.5	17.34.1	C.P. brass	each	5.00			
16.3	N.S	Providing and fixing white vitreous china wash basin under counter basin, with including 32 mm CP brass waste coupling, including painting of fittings and brackets, cutting and making good the walls wherever required all complete	each	5.00			
16.4	N.S	Providing and fixing CP brass auto closing system basin pillar	each	5.00			
16.5	47.004	tap of as approved by Engineer- In Charge	Cauli	5.00			
16.5	17.22A	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	each	5.00			
16.6	17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	5.00			
16.7	17.1	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS : 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :					
16.8	17.10.2	Kitchen sink with drain board	occ!-	1.00			
16.9	17.10.2.2 17.28	610x460 mm bowl depth 200 mm Providing and fixing P.V.C. waste pipe for sink or wash basin	each	1.00			
	11.20	including P.V.C. waste fittings complete.		1			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	17.28.2.2	40 mm dia	each	1.00			
16.10	N.S	Supplying and fixing of SWR pipe (TYPE B) soil /waste pipes jointed with rubber ring with good quality lubricant with fittings inclussive of all necessary specials like bends, tees, offsets, junctions etc laid under floor/under ceiling/on walls with suitable clamps and specials curing, necessary chasing, jointing and restoring to original conditions, testing etc. including cost of materials, labour, complete for successful completion of work as per specifications, and as directed by Engineer -in- Charge.					
16.11	a) 17.60	110 mm outer dia Supply and fixing of SWR Plain / Multi Floor Trap of `P' , "S" or `Q' type and 110 mm outlet complete, including cost of materials,	meter	189.00			
		labour, HOM of machinery & equipments with all lead and lifts, loading and unloading charges, transportation cost and conveyance, all other incidental charges etc. complete for successful completion of work as per specifications, and as directed by Engineer -in- Charge.					
16.12	N.S	110mm inlet and 110 mm outlet Providing and fixing SWR floor drain consisting of 100x63mm PVC elbow (grating and SWR pipe to be paid separately),	each	6.00 6.00			
16.13	N.S	complete as per instructions. Providing and fixing 125 mm dia S/S grating (with or without	each				
16.13		Providing and fixing C.P soap dispenser with all complete as	each	12.00			
16.15		directed by the Engineer-in-Charge. Providing and fixing of 600mm long towel rail (SS-316 grade),	each	5.00			
16.16	18.7	all complete with required acceessories as directed by the Engineer-in-Charge. Providing and fixing CPVC/Upvc. pipes under floor for soil and	each	5.00			
10.10	10.7	waste water , complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.					
	18.7.4	32 mm dia nominal bore	meter	5.00			
	18.7.5	40 mm dia nominal bore	meter	5.00			
	18.7.7	50 mm dia nominal bore TOTAL	meter	5.00			
		DSR Items					
		NS Sub Head – Water Supply					
17.1	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.					
		Internet work Evenend on well					
	18.7.2	Internal work – Exposed on wall. 20 mm dia	metre	25.00			
	18.7.3	25 mm dia	metre	25.00			
	18.7.4	32 mm dia	metre	25.00			
17.2	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.					
	18.8.1	15 mm nominal outer dia Pipes	metre	25.00			
	18.8.2	20 mm nominal outer dia Pipes	metre	25.00			
17.3	18.2.3 18.17	25 mm nominal outer dia Pipes Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :	metre	25.00			
	18.17.1A	20 mm dia. nominal bore	each	4.00			
	18.17.1	25 mm dia. nominal bore	each	1.00			
17.4	18.17.2 N.S	32 mm dia. nominal bore Providing and fixing Stainless steel braided connection pipe with brass	each	1.00			
		unions : 45 cm length					
		15 mm nominal bore	each	10.00			
17.5	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931					
15	18.53.1	15mm nominal bore	each	10.00			
17.6	N.S	Providing and fixing hand held ablution fitting (health faucet) with one meter long flexible tube and wall hook, all complete approved engineer-in-charge	each	5.00			
17.7	N.S	Supply and fixing of 15mm CP brass 2 -Way Bib Cock with wall flange and suitable length CP brass extension pipe all of approved	each	5.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
17.8	18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.	each	2.00			
17.9	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	per litre	1000.00			
17.10	N.S	Supplying, fixing,testing & Commissioning of drinking water cooler including 60 Liters/h Cooling Capacity ,80 Lts Storage Capacity , 4.8 Amp Rated Current , Stanless Steel Tank , R-22 Refrigerent , Number of Facet -2 following specification and acept make Blue star / Voltas / Usha SS 60120G with complete.	each	1.00			
17.11	N.S	Supply, installation, testing & commissioning Portable RO water system with UV suitable Flow rate (preferably 20 to 25 LPH) with min. water storage shall be proposed in water cooler , interconnecting piping, valves, cartridge filters, diaphragm type pumps, RO membranes, cable, drain pipe & other related accessories.The system shall be suitable for a supply of 240 V AC / 50 Hz.		1.00			
		TOTAL					
		DSR Items NS					
10 1	19.4	SUBHEAD –Drainage Providing and fixing square-mouth S.W. gully trap class SP-1					
18.1	19.4	complete with C.I. grating sigurate-mouth S.W. guily trap class SF-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not lessthan 4.50 kg and frame to be not less than 2.70 kg as per standard design :					
	19.4.3.1	180x150 mm size P type With fly ash bricks (non modular) bricks of class designation 7.5		4.00			
			each	4.00			
18.2	N.S	Supply and fixing HDPE double wall corrugated (DWC) I.S 16098 (Part - 2) 3013 for soil / waste pipe under ground drainage system with jointed with rubber ring with good quality lubricant for fittings, inclusive of all necessary specials like bends, tees, offsets, junctions, etc complete.					
		150 mm diameter	metre	4.00			
10.0	10.2	200 mm diameter	metre	50.00			
18.3	19.3	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :					
	19.3.2	150 mm diameter S.W. pipe	metre	4.00			
18.5	<u>19.3.3</u> 19.7	200 mm diameter S.W. pipe Constructing brick masonry manhole in cement mortar 1:4 (1 cement :4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size),foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :		50.00			
		Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):					
18.6	19.7.1.1	With common burnt clay (non modular) bricks of class designation 7.5	each	4.00			
		TOTAL					
		DSR Items NS					
		SUB HEAD- Fire Fighting					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
19.1	18.25.4	Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stockbar of following sizes complete as required.					
		1200 mm dia	each	202.00			
19.2	18.21.1	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories :					
		Upright sprinkler	each	202.00			
19.3	NS	Making arrangement for connecting one sprinkler and flexible connection in existing socket in existing pipe line	each	202.00			
		TOTAL DSR Items					
		NS					
		Annexure -2 Electrical PART					
Α		SUB HEAD- I - Internal Electrification					
		Wiring for light point/ fan point/ exhaust fan point/ call bell					
		point with 1.5 sq.mm FRLS PVC insulated copper conductor					
		single core cable in surface / recessed heavy duty PVC					
1	1.10	conduit, with modular switch, modular plate, suitable GI box					
		and earthing the point with 1.5 sq.mm FRLS PVC insulated					
		copper conductor single core cable etc. as required.					
а	1.10.3	Group C	Point	420.00			
		Wiring for group controlled (looped) light point/fan					
		point/exhaust fan point/ call bell point (without independent					
2	1 55	switch etc.) with 1.5 sq. mm FRLS PVC insulated copper					
2	1.55	conductor single core cable in surface/ recessed heavy duty					
		PVC conduit, and earthing the point with 1.5 sq. mm FRLS					
		PVC insulated copper conductor single core cable etc. as					
а	1.55.3	required. Group C	Point	364.00			
	1.55.5	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC	1 Onit	001.00			
		insulated copper conductor single core cable in surface/					
3	1.12	recessed heavy duty PVC conduit alongwith 1 No. 4 sq. mm	Metre	4800.00			
		FRLS PVC insulated copper conductor single core cable for					
		loop earthing as required.					
l		loop earthing as required. Wiring for light/ power plug with 4X4 sq. mm FRLS PVC					
L							
4	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC	Metre	1000.00			
4	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/	Metre	1000.00			
4	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Metre	1000.00			
4	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with	Metre	1000.00			
4	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor,	Metre	1000.00			
		Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit	Metre	1000.00			
5	1.14	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit as required.					
5 a	1.14	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	1300.00			
5 a b	1.14 1.14.1 1.14.2	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre Metre	1300.00 200.00			
5 a b c	1.14 1.14.1 1.14.2 1.14.4	 Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/recessed heavy duty PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire 2 X 6 sq. mm + 1 X 6 sq. mm earth wire 	Metre Metre Metre	1300.00 200.00 50.00			
5 a b	1.14 1.14.1 1.14.2	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire 4 X 10 sq. mm + 2 X 6 sq. mm earth wire	Metre Metre	1300.00 200.00			
5 a b c	1.14 1.14.1 1.14.2 1.14.4	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire 4 X 10 sq. mm + 2 X 6 sq. mm earth wire Supplying and fixing suitable size GI box with modular plate	Metre Metre Metre	1300.00 200.00 50.00			
5 a b c d	1.14 1.14.1 1.14.2 1.14.4 1.14.10	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire 2 X 6 sq. mm + 1 X 6 sq. mm earth wire 4 X 10 sq. mm + 2 X 6 sq. mm earth wire Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing	Metre Metre Metre Metre	1300.00 200.00 50.00 50.00			
5 a b c	1.14 1.14.1 1.14.2 1.14.4	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed heavy duty PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed heavy duty PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire 4 X 10 sq. mm + 2 X 6 sq. mm earth wire Supplying and fixing suitable size GI box with modular plate	Metre Metre Metre Metre	1300.00 200.00 50.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
7	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	each	272.00			
8	DSR 1.19	Supplying and drawing co axial Tv Cable RG-6 grade, 0.7mm solid copper conductor PE Insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surafec/recessed steel/ PVC conduit as required.	metre	600.00			
9	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
а	1.24.7	TV antena socket outlet	each	10.00			
b	1.24.8	Bell push	each	8.00			
10	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	each	8.00			
11	MR	ELECTRICAL PANELS Installation, testing and commissioning of floor mounted cubicle panels LT panel having following accessories complete panel:					
a		MDB Incoming: 400 A, TPN MCCB 36 KA - 1 No. 500 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve-1 Set Outgoings:					
		63 A TPN MCCB, 25 KA - 7 Nos.					
		200 A TPN MCCB, 25 KA - 1 Nos. 40 A TPN MCB, - 4 Nos.					
		Instruments:					
		Multi function Meter (MFM) with CTs and MCB					
		Indication lamp RYB with 2A SP MCB etc as req.	each	1.00			
12	MR	Fabrication, supply, installation, testing and commissioning of wall/ floor mounted cubicle panels LT panel PTTA type as per IEC 60439 ,suitable for 415 Volt, 3 phase- 4 wire, 50 Hz. AC supply system made out of 2 mm thick CRCA sheet steel for frame works & covers, 3 mm thick for gland plates, including cleaning & finishing complete with 7 tank process for powder coating in approved shade, all incomngs/ outgoings shall be arranged in suitable size compartments, locking arrangement for each compartments, including interconnection with 1100 V grade PVC insulated aluminium alloy conductor bus bar, control copper wiring, labelling, earthing, brass compression glands for incoming and outgoing cables, powder coated painting etc. as required. All Incomer of distribution board shall be provided with surge protection devices, danger plates. Bottom base channel of MS section not less than 75mm X 50mm X5mm thick. Entire panel shall have a common copper earth bar of size 25mmX5mm at the rear with 2 no. earth studs.					
		Note : The type of the MCCB upto 250 Amp should be Thermal Magnetic type (O/C,S/C) Protection & Rom and above 250 Amp it should be Microprocessor Type (O/C,S/C,E/F) Protection, ST,Ready to close Indication, ZSI in all panels mentioned below. Digital Multifunction Meter With RS-485 CL-0.5S in all below mentioned panels					
	а	MDB					
		Incoming: 500 A, FP MCCB 36 KA - 1 No.					
		600 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve-1 Set					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
		Outgoings:					
		63 A FP MCCB, 25 KA - 6 Nos.					
		250 A FP MCCB, 36 KA - 1 Nos.					
		40 A FP MCCB 25 KA, - 2 Nos.					
		Instruments:					
		Multi function Meter (MFM) with CTs and MCB					
		Indication lamp RYB with 2A SP MCB etc as req.	each	1.00			
		DBs					
		Fixing of following way Horizontal Type three pole & Neutral					
		sheet steel, MCB distribution board415 V on					
13	2.4	surface/recess,complete with tinned copper bus bar, neutral					
		bus bar, earth bar, interconnections powder painted					
		including earthing etc.as required. (but without MCB / RCCB /					
		isolator)					
а	2.4.2	6 way (4 + 18), Double door	each	10.00			
b	2.4.3	8 way (4 + 24), Double door	each	3.00			
		Supplying and fixing following way, horizontal type Single					
		pole and neutral, sheet steel, MCB distribution board, 240 V,					
		on surface / recess, complete with tinned copper bus bar,					
14	2.3	neutral bus bar, earth bar, din bar, interconnections, powder					
		painted including earthing etc. as required. (But without MCB					
		/RCCB / Isolator)					
а	2.3.2	8 way Double door	each	3.00			
b	2.3.3	12 way Double door	each	3.00			
		fixing of 5 amps to 32 amps rating, 240/415 volts, MCB					
15	2.10	suitable for inductive load of following poles in the existing					
12	2.10	MCB DB complete with connections, testing and					
		commissioning etc. as required.					
а	2.10.1	Single pole	each	300.00			
		Fixing of following rating, double pole, (single phase and					
10	MD	neutral), 240 volts, (RCBO), in the existing MCB DB complete					
16	MR	with connections, testing and commissioning etc. as req.					
	а	40 amps	each	5.00			
	b	63 amps	each	1.00			
		Supplying and fixing following rating, four pole, (three phase					
		and neutral), 415 volts, (RCBO), having a sensitivity current					
17	2.15	30 mA in the existing MCB DB complete with connections,					
		testing and commissioning etc. as required.					
	а	40 amps	each	4.00			
	b	63 amps	each	4.00			
		Providing and fixing M.V. danger plate of 200 mm X 150 mm,					
10	2 21	made of mild steel, at least 2 mm thick, and vitreous	aaab	8.00			
18	2.21	enameled white on both sides, and with insciption in single	each	0.00			
		red colour on front side as required.					
		CABLES					
		Supplying, laying of following sizes and core PVC/XLPE					
		insulated PVC sheathed, heavy duty, armoured electrical					
19	MR	cable with aluminium conductor for working voltage upto					
		and including 100 volts. Complying IS-7098.					
	а	3.5 Core, 240 sq.mm. XLPE Aluminium Cable	metre	200.00			
	b	4 x 25 sq mm XLPE Aluminium Cable	metre	500.00			
	с	4 x 16 sq mm XLPE Aluminium Cable	metre	300.00			
		END TERMINATION OF XLPE CABLES					
		Supplying and making end termination with brass					
		compression gland and aluminium lugs for following size of					
20	9.1	PVC insulated and PVC sheathed / XLPE aluminium conductor					
		cable of 1.1 KV grade as required.					
а	9.1.29	3½ X 240 sq. mm (62mm)	each	6.00			
	0124	4x 25 sq mm	each	20.00			
b	9.1.34						

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
21	MR	Supplying, laying with end termination of 4 core 1.5 sq mm XLPE insulated PVC sheathed, heavy duty, armoured electrical cable with copper conductor for working voltage upto and including 100 volts. Complying IS-7098. (for AC indoor Unit Control)	metre	700.00			
22	5.4	Earthing Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	set	2.00			
23	5.11	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	metre	20.00			
24	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	metre	40.00			
25	5.6	Earthing with copper earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	set	4.00			
26	5.10	Providing and fixing 25 mm X 5 mm copper. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	metre	40.00			
27	5.14	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	metre	60.00			
28	5.16	Providing & fixing 6 SWG dia G.I. Wire on surface or recess for loop earthing as required.	metre	100.00			
		Supply, intallation of Light Fitting, Fans and Fixtures All LED fittings shall have LM79 reports and UGR as per NBC					
		space utilization.					
29	1.41	Installation, testing and commissioning of prewired, fluorescent fitting / LED fittings of all types , complete with all accessories and tube etc. directly on ceiling/wall, including connections with 1.5 sq.mm. PVC insulated, copper conductor, single core cable etc. as required.	each	560.00			
30	1.42	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent/LED fitting of all types, complete with all accessories and tube/lamp etc., including supplying and fixing of fasteners arrangement, GI steel chain of required length, painting and wiring the down conductor and connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	each	126.00			
31	1.44	Installation, testing and commissioning of ceiling fan /wall fan including wiring the down rods of standard length (upto 30 cm) with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	each	41.00			
32	1.50	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing,					
33	1.50.1	commissioning etc. as required. Upto 450 mm sweep	each	15.00			
34	1.51	Extra for fixing the louvers / shutters complete with frame for a exhaust fan of all sizes.	each	15.00			
35	MR	Supplying of following Surface / Recessed LED light Fittings of Wattage as specified below and have a rated system lifetime of 50,000 burning hours minimum at L70. The fixture should be complete with driver and suitable mounting accessories etc as required. Approved Make: Wipro / Havells / REGENT/ LIGHTING TECHNOLOGIES.					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	a	Supplying of LED Recessed/surface Downlighter with a nominal system Wattage <= 6-8 W, System Lumen >= 700,system efficacy at System level (Not Chip Level) >110lumens/watt, Life of fixture 50000hrs@L70% Lumen maintenance, CCT Range 5700-6500 K, CRI >80, PF >0.95, THD <9%. The luminaire shall have a rated system lifetime of 50,000 burning hours at L70. The luminaire shall meet IP20 rating. The luminaire housing should made of pressure die cast aluminium and the luminaire optics shall have a high efficiency diffuser with more than 85% transmittance.The fixture should comply with the parameters as per IS10322.	each	9.00			
	b	15W Deep Recessed diffuser Ceiling Recess Mounted downlight luminaires with housing, bottom ring and heat sink made of pressure die-cast aluminium. Luminaire shall deliver excellent illumination & comfort with CRI of >80, Deep- recessed opal diffuser for glare-free symmetric light distribution. Luminaires should be with 100 lm/W System Efficacy and designed Avg. LED Life (L70 B50) 50,000 Burning Hours & with high efficient Photobiologically safe LEDs. Luminaire should be Powered by an independent, isolated output electronic driver offering THD<10%, Output Short- circuit protection, Surge Voltage protection, and other reliability tests as per IS:15885 Part 2/Sec 13. Luminaires and Drivers to be manufactured by the same OEM having an in- house NABL-accredited Laboratory for testing Photometric parameters	each	48.00			
	c	Supplying of LED Batten having length 1150-1250 mm with a nominal system Wattage <= 20 W, System Lumen >= 2000, Fixture efficacy at System level (Not Chip Level) >110lumens/watt, Life of fixture 50000hrs@L70% Lumen maintenance, CCT Range 5700-6500 K, CRI >80, PF >0.95, THD <10%. The luminaire shall have a rated system lifetime of 50,000 burning hours at L70. The luminaire shall meet IP20. The luminaire housing should made of CRCA /extruded Al with diffused optics	each	34.00			
	d	36W Ceiling Recess Mounted 2x2 luminaires with housing made of CRCA powder-coated white after phosphochromate treatment. Luminaire shall deliver excellent illumination & comfort with CRI of >80, High transmittance duel/multi-layer prismatic optics for glare-free symmetric light distribution offering UGR<19 Glare rating. Luminaires should be with 120 lm/W System Efficacy and designed Avg. LED Life (L70 B50) 50,000 Burning Hours & with high efficient Photobiologically safe LEDs. Luminaire should be Powered by an independent electronic constant current driver offering THD<5%, CISPR15 EMC EMI compliance, Low Ripple Flicker Free, Output Short-circuit protection, Surge Voltage protection, and other reliability tests as per IS:15885 Part 2/Sec 13. Luminaires and Drivers to be manufactured by the same OEM having an in-house NABL- accredited Laboratory for testing Photometric parameters.	each	110.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	e	Supply and installation of LED 36W Hexagon shaped decorative, 600MM Dia, corrosion resistant, surface- suspended luminaire.Housing in Aluminum extrusion heat sink for effective thermal management, sturdiness and excellent corrosion resistant fitted in white finish.High transmittance PS diffuser in opal finish for glare free uniform light distribution.High efficiency long life SMD LED module is mounted on FR4 with lumen efficacy of >90lm/W to enhance the lumen output.Powered by an integral isolated low THD electronic LED driver (SMPS based constant current supply) with output short circuit protection, surge protection. Lumen Output of 3200 lumens.CRI >80, Color temperature 4000K, THD <10% and PF >0.90,IP20,IK03.Life class of 50,000 hrs @ L70, Operating Temperature:-10 TO +45 DEG.C; Input Supply Voltage Range:140-270 V, Frequency :50-60 HZ; Internal Surge Protection:3 KV; Protection : Reverse Polarity, Open & Short Circuit. DRIVER SAFETY REQUIREMENT STANDARDS :IS 15885-2-13, TEST REPORT TO BE SUBMITTED; PHOTO BIOLOGICAL SAFETY NORMS: IS 16108, TEST CERTIFICATE TO BE SUBMITTED; CERTIFICATION: LM 79 FOR LUMINAIRE LM 80 FOR LED SOURCE.	each	48.00			
	f	Supply installation and Commissioning of Round donut shape, 1200mm dia suspended LED light 72W decorative, corrosion resistant, surface-suspended luminaire. Housing in Aluminium extrusion heat sink for effective thermal management, sturdiness and excellent corrosion resistant fitted in white finish. High transmittance PS diffuser in opal finish for glare free uniform light distribution. High efficiency long life SMD LED module is mounted on FR4 with lumen efficacy of >60lm/W to enhance the lumen output. Powered by an integral isolated low THD electronic LED driver (SMPS based constant current supply) with output short circuit protection, surge protection. Lumen Output of 4680 lumens. CRI >80, Color temperature 5700K, THD <10% and PF >0.90, IP20, IK03.Life class of 50,000 hrs @ L70, Operating Temperature:-10 TO +45 DEG.C; Input Supply Voltage Range:140-270 V, Frequency :50-60 HZ; Internal Surge Protection:3 KV; Protection : Reverse Polarity, Open & Short Circuit. CERTIFICATION: LM 79 FOR LUMINAIRE LM 80 FOR LED SOURCE	each	8.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	g	Supply, of exterior BIS registered 3000K Linear LED Wall Washer luminaire for graze lighting with extruded aluminium housing, powder-coated finish, Clear toughened glass of 4mm thickness and die casted end caps, of Total System wattage not exceeding 12W with system lumen output >1200lm with all LEDs on, minimum system lumen efficacy >100 lm/w. Luminaire should be complete with dedicated Lens made up of UL/VDE approved PC for each LED, offering beam angle of different types such as narrow, medium, wide or elliptical as per the site requirement. Fixture should have Height 81 mm \pm 5% including surface mount base width 42.8 mm \pm 5% , length 500 mm \pm 5% with constant locking hinges for simple position control from various angles without special tools. The rated voltage of the Luminaire should be 24VDC, Luminaire shall be offered with a BIS Approved Potted Driver of IP 66/67 rating made of extruded aluminium to make it more thermal efficient, Led Driver should have Operating input voltage range: 90-305Vac, PF > 0.90 and must have safety operation range form 90V - 176Vac. Life time of LED driver should be > 80,000 hours and MTBF of LED driver should be \geq 2,00,000 hrs, Led driver must have SELV output and Case temperature i.e. Tc > 90°C. Fixture shall be suitable to operate at an ambient temperature range of -30°C to 50°C and complete luminaire shall be IP66 and IK07 rated. LED Life time shall be at least L70B50 @ 70000 burning hours	each	8.00			
	h	Supply Installation and Comissioning of 5W Spike light made of Grey pure polyester powder coated ,Pressure die-cast spike, snoot and aluminium housing for efficient thermal management, sturdiness, & excellent corrosion resistance. The housing provides IP66 /IK 7protection for high reliability in outdoor applications. High efficiency long life COB LED mounted on MCPCB of fixture. Lumen efficacy of LED >140 Im/W. Operating temperature: -upto +50 °C, Operating voltage range: 140 V - 270 V, Average life L70B50: 35000 hours, Prismatic chrome plated reflector for controlled beam angle of 60°. High quality toughened glass in clear finish for uniform light distribution, CRI>70, THD<15%, PF>0.9, CCT 3000K/Red ,Blue, Green, IP 66, IK 07, Powered by an Built-In potted, electronic driver (SMPS based constant current supply) with lower THD, Output Open/ Short circuit protection, Surge voltage protection upto 4kV & other safety test as per IS:15885 Part 2/Sec 13.	each	10.00			
36	MR	Supply of 400 MM dia wall fan suitable for 230V, 50HZ, single phase AC suplly complete with all standared acessories, regulators etc.	each	17.00			
37	MR	Supplying of Exhaust fans suitable for 230 Volt, 50 Hz, Single phase, A.C. supply and complete with all standard accessories required.					
	а	300 mm dia.	each	3.00			
38	MR	UPS SYSTEM Installation, Testing & Commissioning of microprocessor based UPS System complete with UPS Apparatus, battery bank, interconnections, interconnecting cables complete in all respect of the following rating.					
	а	3/6 KVA-Single Phase	each	4.00			
	b	10 KVA-Three Phase	each	1.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
39	MR	SITC of 15 KVA microprocessor based UPS System, at 0.8 power factor true online double conversion UPS using PWM IGBT technology, 3 Phase input 430 V + 10 % - 15% and input frequency 50 Hertz plus minus 5%, 3 phase output fixed setting at 380, 415 and 430 V, UPS operating in parallel redundancy mode and each comprising of the following.					
	i	125% rated rectifier cum charger unit + 100% rated inverter, integrated in UPS module.					
	ii	Anti harmonic filter at rectifier input for achieving THD < 5% and input power factor of greater than 0.9.					
	iii	100% rated inbuilt galvanic isolation transformer of H-class delta/Zigzag type at the inverter output.					
	iv	100% rated inbuilt static switch at the inverter output.					
	v	100% rated inbuilt static switch at the static bypass line.					
	vi	100% rated inbuilt Maintenance bypass.					
		100% rated MCCB having I Thermal, magnetic and automatic					
	vii	U/V trip mechanics.					
	viii	Web-enabled monitoring and management through SNMP protocols for multi-OS environment.					
	ix	RS232/ RS486 BMS connectivity with software.					
	х	Built in circulating fan.					
	xi	Supply, Installation, Testing & commissioning of sealed valve regulated lead Acid batteries (minimum life 2 years) for UPS system, for providing 30 minutes backup.					
	xii	Supply/ fixing of matching racks to house batteries for the UPS system.					
		SITC of UPS system as above and complete as per specifications.	set	1.00			
40	MR	Dismentalling, packing of the following Electrical items from the office of BIRAC at MTNL building, near JLN stadium by the skilled labours, including shifting to Ground floor from above floors, loading in Goods vehicle & unloading in the store at new BIRAC office at NSIC campus for the installations. Unused material shall be returned to the department in good condition. Material shall be handeled carefully without any damage to the items, if any damage due to mishandeling is occured, a recovery on pro data basis shall be made from the Contractor as decided by the Engineer In Charge.					
	1	VTPN DB					
		4Way-1 Nos.					
	2	8Way-2Nos.					
	2	Horizontal TPN DB 6 Way-3 Nos.					
		8 Way-3 Nos.					
		12 Way-5 Nos.					
	3	Electrical Panel having following Accessories					
	А	Incomer-400A MCCB-1 Nos. Outgoing-200A MCCB-1 No. 63A MCCB - 7 No.					
	В	40 A TP MCB - 4No. Incomer-200A MCCB Outgoing-100A MCCB-1 No.					
	С	63 A TP MCCB-7 Nos. Incomer- 63A TP MCCB-1No.					
	4	Outgoing- 40A TP MCB -4 No. MCCBs					
		125A-3 Nos.					
		100A/63A-3 Nos.					
	5	MCBs					
		TP MCB 14 Nos.					
		DP MCB 45 Nos.					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
		SP MCB-262 Nos.					
	6	Stablizer - 150 KVA-3 Phase-1 Nos.					
	7	UPS SYSTEM					
		3KVA-1Nos.					
		5/6 KVA-2 Nos.					
		10 KVA-1 Nos.					
		1 KVA-1 Nos.					
	8	0.5 KVA- 55 Nos.					
	0	Light Fitting 36 W LED 2X2 -14 Nos.					
		18 W LED 2X2 -14 Nos.					
		3X1W D/L - 12 Nos.					
		6W D/L - 16 Nos.					
		15W D/L - 189 Nos.					
		Mirror light-12 Nos.					
		Fluroscent Fitting -12 Nos.					
		28 W Strip - 22 nos.					
		4X14 W T-5- 83 Nos.					
		2X18W CFL- 79 Nos.					
		1X18 W CFL- 50 Nos.					
		2X18 W CFL Wall Washer-4 Nos.					
		RGB Strip- 30 Mtr					
		35 W Track Light-4 Nos.					
	9	FANs					
		Ceiling Fan- 6 Nos.					
		Wall Mounted Fan- 10 Nos.					
		Exhaust fan- 12 Nos.					
	10	40A, 4P, MCB Isolator - 6 Nos					
		63A, 4P, MCB Isolator - 5 Nos					
		40A, DP, RCCB - 18 Nos					
		63A, DP, RCCB - 15 Nos					
	11	Fire Extinguishers of different sizes-21Nos.					
		Fire Panel-2 Nos.					
		Smoke Detector-36 Nos.					
		fault Isolator-3 Nos. MCP-3 Nos.					
		Sounder-3 Nos.					
		Speakers-33 nos.					
		RJ -45 Sockets with Face plates-143 Nos.					
		RJ-11 Telephone sockets with face plates-116 Nos.					
		Jack panels Loaded - 11 nos.					
		MDF of different Sizes-5 Nos.					
		CCTV cameras & NVR - 25 nos.					
		Complete work as mentioned above including hiring of					
		Goods vehicle.	lah	1.00			
		Note: The above material shall be reused wherever required	Job	1.00			
		at the new office at NSIC Campus, Okhla.					
		Total of Sub Head-I					
		Total of SOR Items					
		Total Of MR Items					
		SUB HEAD - II -PASSIVE CABLING, ACTIVE LAN & IP-PBX					
		SYSTEM					
		Note: Wiring shall include numbering, Ferruling, termination					
		and testing of cables at both ends.					
		Fiber Splicing, Testing with OTDR etc. shall be the part of					
		installation of the fibers.					
		Supplying and fixing of following sizes of steel conduit along					
•		with accessories in surface/recess including painting in case					
41	1.21	of surface conduit, or cutting the wall and making good the					
		same in case of recessed conduit as required					
а	1.21.1	20 mm	metre	400.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
42	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.					
a 43	1.27.1 MR	1 or 2 Module (75mm X 75mm) Supply, laying and installation of following rectangular over lapped Box type mig welded 275 GSM Grade GI duct in 1.5 mm thickness base and cover supplied in 2.5 meters per length with additional accessories of Duct connecting shackle cum fastening Clamp, vertical access box, etc. in line with EN 50085. These ducts must have "L" shaped spot welded partitions or the threaded rod support (for multi compartment ducting) of the same thickness as base and	each	270.00			
		cover and all the spot welded joints and mig welded covers shall have to be galvanized for maintaining the required galvanizing coating thickness referred above					
	а	150 x 38 x 2500mm, 2 compartment 1.5mm thickness	each	150.00			
44	b 1.53.1	300 x 38 x 2500mm, 3 compartment 1.5mm thickness Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit/Raceway as required.	metre metre	100.00 15000.00			
45	MR	Supply, Installation, Testing and Commissioning of Cat 6, 1G Information Outlet, UL Listed, Color Blue /grey /white /other (I/O) for Data, Voice, cctv & Wi-Fi User end.	each	120.00			
46	MR	Installation, Testing and Commissioning of Cat 6, 1G Information Outlet, UL Listed, Color Blue /grey /white /other (I/O) for Data, Voice, cctv & Wi-Fi User end.	each	143.00			
46	MR	Installtion, Testing and comissioning of 15U wall mount rack with fans, 2 cable managers, satationary shelf, 2 Nos of hardware pkts & 5Nos. 6/16A sockets PDU also complete as required.	each	3.00			
47	MR	Installation, Testing, Commissioning of 800 mm x 800 mm 42 U Free standing cabinet with front locable door, side panels, 230 V AC 90 CFM fan 2, three Hardware packet 1 set (containing 20 Nos each of 3), AC power strip. Cantilever Tray 1U 225D, one earthing Strip 150 mm H,1 Cable manager 1U height.	each	2.00			
46	MR	Supply, Installation, Testing and Commissioning of Cat 6, U/UTP Solid Low Smoke Zero Halogen Cordage Modular Patch Cordas per IEC 60332-3-22, IEC 60754-2, IEC 61034-2, Blue/ grey/ white/other Jacket, 3 Feet (Rack end)	each	120.00			
47	MR	Supply, Installation, Testing and Commissioning of Cat 6, U/UTP Solid Low Smoke Zero Halogen Cordage Modular Patch Cord as per IEC 60332-3-22, IEC 60754-2, IEC 61034-2, Blue/ grey/ white /other Jacket, 7 Feet (User end)	each	120.00			
48	MR	Supply, Installation, Testing and Commissioning of Category 6 U/UTP Loaded Patch Panel, 24 port,1U, with rear cable manager for DATA, Voice, CCTV, Wifi etc.	each	4.00			
48	MR	Installation of Cat 6, U/UTP Solid Low Smoke Zero Halogen Cordage Modular Patch Cordas per IEC 60332-3-22, IEC 60754- 2, IEC 61034-2, Blue/ grey/ white/other Jacket, 3 Feet (Rack end)	each	143.00			
49	MR	Installation of Cat 6, U/UTP Solid Low Smoke Zero Halogen Cordage Modular Patch Cord as per IEC 60332-3-22, IEC 60754-2, IEC 61034-2, Blue/ grey/ white /other Jacket, 7 Feet (User end)	each	143.00			
50	MR	Installation, Testing and Commissioning of Category 6 U/UTP Loaded Patch Panel, 24 port,1U, with rear cable manager for DATA, Voice, CCTV, Wifi etc.	each	8.00			
51	MR	Supply, Installation, Testing and Commissioning of 1,2 and 4 port, 3X3, Square faceplate white for I/O fixing at user side.	each	120.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
52	MR	Installation, Testing and Commissioning of 1,2 and 4 port, 3X3, Square faceplate white for I/O fixing at user side.	each	143.00			
52	MR	Supply, Laying, Installation, Testing and Commissioning of 6 core Single Mode, Outside Plant, Bend Insensitive, Stranded Multi Loose Tube, Gel-Free, Metallic Armored, LSZH, OS2, Telcordia GR-20.	metre	400.00			
53	MR	Supply, Installation, Testing and Commissioning of 19" Rack Mount, 12F LIU, 1U Sliding shelf with 4 slots for accepts 4 Nos. of LC Single mode,OS2 Cassette. loaded with LC Single Mode, Bend Insensitive Fiber Pigtails & Splice Tray etc.		6.00			
54	MR	Supply, Installation, Testing and Commissioning of LC to LC, Single Mode Fiber Patch Cord, 1.6 mm Duplex, 10 Feet., OS2	each	12.00			
		Active Items					
55	MR	installation, testing & commissioning of POE/Non PoE base Access Switch with 24 nos. 10/100/1000 Base-T ports shall be with all accessories as required.	each	12.00			
56	MR	Supplying, installation, testing & commissioning for Indoor Access Point, should support 802.11ax and 4x4 MIMO for both 2.4 Ghz and 5 Ghz bands, IEEE 802.bz and should be WiFi6 certified with support of license for central management, policy based authentication/Device should have atleast 5 years of support & shall be with all accessories as required.	each	4.00			
57	MR	installation, testing & commissioning for Indoor Access Point with required all accessories as required.	each	4.00			
57	MR	IP-PBX SYSTEM Installation, testing & commissioning of EPABX system with operator console and voice equipment Along with necessary licenses to support atleast 150 PC and Phones along with necessary licenses to support the system as required.	set	1.00			
58	MR	Installation, testing & commissioning of following pair MDF Box with connection & jumpering complete as required.					
	а	50 Pair MDF Box	each	2.00			
	b	100 Pair MDF Box	each	6.00			
58	MR	Installation, testing & commissioning of RJ-11 Telephone Socket with connections, fixing face plate etc. complete as required.	Metre	104.00			
59	1.18.2	Supplying and drawing 2pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.	Metre	8000.00			
60	MR	Supplying & laying/fixing of following pair, 0.5 sq. mm. FR PVC insulated copper conductor, armoured telephone cable in the existing surface/ recessed steel / PVC conduit as required:-					
	а	50 Pairs	Metre	100.00			
	b	100 Pairs	Metre	250.00			
61	MR	Installation, testing & commissioning of Analog Phones with CLI facility complete as required.	each	104.00			
		Total of Sub Head-II					
		TOTAL OF SOR ITEMS TOTAL OF MR ITEMS					
		SUB HEAD - III- Fire Detection & Alarm System and PA					
62	17.2.4	System Supplying, installation, testing & commissioning of intelligent analog addressable photothermal detector complete with mounting base complete as required.		84.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
63	17.2.9	Supplying, installation, testing & commissioning of intelligent addressable thermal detector with rate of rise cum fixed temperature thermister complete with base as required.	each	2.00			
64	MR	Testing & commissioning of existing intelligent analog addressable photothermal detector complete with mounting base complete as required including reconnection, cleaning of detectors etc	each	30.00			
65	DSR 17.2.10	Supplying, installation, testing & commissioning of addressable fire control module complete as required.	each	4.00			
66	DSR 17.2.15	Supplying, installation, testing & commissioning of addressable horn cum strobe complete as required.	each	2.00			
67	MR	Installation, Testing & commissioning & fixing of existing addressable horn cum strobe including reconnection etc. complete as required.	each	2.00			
68	DSR 17.2.14	Supplying, installation, testing & commissioning of addressable manual call point complete as required.	each	1.00			
69	MR	Installation, Testing & commissioning & fixing of existing addressable manual call point including reconnection etc. complete as required.	each	2.00			
70	MR	Installation, Testing & commissioning & fixing of existing addressable fault isolator including reconnection etc. complete as required.	each	10.00			
71	MR	installation, testing and commissioning of Fire Alaram Panel including connections, loop testing, complete as required for operation of the system.	each	2.00			
72	DSR 1.20.2	Supplying and fixing of 25mm dia size of steel conduit alongwith accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.	metre	900.00			
73	1.17	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/PVC as required.					
а	1.17.2	2 x 1.5 sq. mm	metre	1000.00			
74	NS	Public Address System installation, testing & commissioning of Six zone call station, intended for system pre-amplifier, unidirectional condenser microphone on flexible stem, six zone selection keys, all-call key, and momentary PTT-key for calls, selectable gain, speech filter, and limiter for improved intelligibility, selectable priority levels and different pre and postcall chimes (Bosch/Honeywell/Ateis)	Nos	1.00			
75	NS	installation, testing & commissioning of Six-zone system pre- amplifier, with single or dual channel operation, two input channels for call stations, universal input for microphone/line, with speech optimized tone control, three inputs for BGM selection and music optimized tone control, front panel zone selection for BGM and call station zone selection for calls	Set	1.00			
76	17.3.3	Supplying, installation, testing & commissioning of 1.5/3/6W metal box ceiling/wall speakers complete as required.	each	8.00			
77	MR	installation, testing & commissioning of 1.5/3/6W metal box ceiling/wall speakers including reconnection etc. complete as required.	each	30.00			
78	NS	Installation, testing & commissioning of All in One Amplifier capable of delivering 360W Wattage RMS power output , built-in fan for temperature control, built in line matching transformer distortion typically <3% @1 KHz, S/N> 80 dB complete as required.PLN-2AIO360 PLENA ALL IN ONE AMPLIFIER with USB connectivity and Tuner	each	1.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
79	DSR 1.20.2	Supplying and fixing of 25mm dia size of steel conduit alongwith accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.	metre	400.00			
80	DSR 17.5.3	Supplying and drawing of cable Fire Retardant PVC insulated copper conductor cable in the existing surface / recessed steel conduit of following pairs, cores and size including connections and interconnections etc. as required.					
81	DSR 17.5.3.1	speaker cable Single pair, 2-core, 1.5 sqmm	each	450.00			
		Total of Sub Head-III					
		Total of SOR Items					
		Total Of MR Items					
		SUB HEAD - IV- CCTV SYSTEM					
		1. Proper tagging of good quality should be done for all items in the installation.					
		Installation, Testing & Commissioning of 2Mpx IR Dome					
82	MR	Cameras at site complete as required.	Each	19.00			
83	MR	Installation, Testing & Commissioning of 2Mpx IR Bullet Cameras at site complete as required.	Each	5.00			
84	MR	Installation, Testing & Commissioning of Network Video	Each	1.00			
		Recorder at site complete as required.	20011				
85	MR	Installation, Testing & Commissioning of Professional Work Station i7 or equivalent, 8 GB, 1 TB Hard Disk, 32" Display ,	Each	1.00			
		Windows 10 with all accessories					
		Installation, Testing & Commissioning of 43" professional LED					
86	MR	suitable for 24*7 Live video display of the recording complete	Each	1.00			
00	IVIIX	as required and as per the specifications.	Eddi	1.00			
		Total of Sub Head-IV					
		Total of SOR Items					
		Total Of MR Items					
		SUB HEAD-VII-AV SYSTEM					
		Dismentalling, packing of the following AV system items from the office of BIRAC at MTNL building, near JLN stadium by the skilled labours, including shifting to Ground floor from above floors, loading in Goods vehicle & unloading in the					
		store at new BIRAC office at NSIC campus for the					
		installations. Unused material shall be returned to the department in good condition. Material shall be handeled					
		carefully without any damage to the items, if any damage					
		due to mishandeling is occured, a recovery on pro data basis					
		shall be made from the Contractor as decided by the					
		Engineer In Charge.					
07	Poord Dog						
87	Board Room Sno	Items					
	1	Lifesize Video Conferencing System - 1nos					
	2	Crestron - 1nos					
	3	Barco Clickshare device - 1nos					
	4	Barco Clickshare Connector - 2nos					
	5	Switcher 1nos					
	6	kramer HDMI distributor - 1nos					
	7 8	Converge pro 2 - 1nos					
	<u>8</u> 9	Clear One DSP - 1nos Epson projector - 1nos					
	10	Samsung 65 Inch Monitor - 1nos					
	10	Speaker - 6nos					
	12	Ipad - 1nos					
	13	Panasonic UB-5315 - 1nos			t	1	İ

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	14	EV Table Mic - 8nos					
	15	Electric Flip Socket - 2nos					
	16	Rack - 1nos					
	Conference	Room					
	Sno	Items					
	1	Crestron - 1nos					
	2	Converge Pro -120 - 1nos					
	3	kramer HDMI distributor - 1nos					
	4	Converge Pro -128T - 1nos					
	5	Clear One Converge - 1nos					
	6	Lifesize Video Conferencing System - 1nos					
	7	Switcher - 1nos					
	8	Barco Clickshare - 2nos					
	9	Barco Clickshare Connector - 2nos					
	10	Samsung 85 Inch Monitor - 1nos					
	11	Speaker - 8nos					
	12	Sony Projector - 1nos					
	13 14	Ipad - 1nos Panasonic UB-5315 - 1nos					
	14	Senherizer Table Mic - 14nos					
	15	Electric Flip Socket - 4nos					
	10	Rack - 1nos					
	/						
	Library Roon	n					
	Sno	Items					
	1	Barco Clicksharedevice - 1nos					
	2	Barco Clickshare Connector - 1nos					
	3	Electric Flip Socket - 2nos					
	4	Espon Projector - 1nos					
	Sno	Items					
	1	System preammplifier, 6-Zone - 1nos					
	2	Speaker - 27nos					
	TV						
	Sno	Items					
	1	Reception TV Samsung - 1nos					
	2	MD TV Samsung - 1nos					
	3	Chairperson TV Samsung - 1nos					
	Assess Courts	rel Sustan					
	Access Conti	Installation, testing and commissioning of Access control system,					
		biometric Readerrs, Card Readers etc. complete as required at new					
		site complete as required.					
		Biometric Readers-3 Nos.					
		Card Readers, EM Lock, Controllers etc3 Nos.					
		Software-1 Nos.					
	Audio Confe	rece Devices					
	Sno	Items					
	1	KONFTL - 1nos					
	2	Polycom - 1nos					
	3	Polycom - 1nos					
	S. No	Name of Items					
	1	NEC Projector with Standard accessories					
		Model NEC NP905G - 1set					
	2	Projector NEC NP-905 - 1set					
	3	Ceiling Mount Kit for Project - 1set					
	4	Sony Projector VPL-EX570 - 1set					
	5	Optoma ®Motorised Screen with remote Size: : 6 x 4ft - 1set					
	6	100" Diagonal Motorized Projection Screen - 1set					
	7	Digital Signal Processor Nexia VC - 1set					
	8	Digital Signal Processor Nexia TC - 1set					
		Diama Valuera Cantual 2004					
	9 10	Biamp Volume Control - 2set Sony Projector VPL-CX275 - 1set					

3.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
	12	Table Top Boundry Microphones Shure Mic MX393 - 12set					
	13	AKG Cordless Mic - 1set					
	14	Amplifier Model Crown XLS202 - 1set					
	15	Panasonic Panaboard UB5315 with floor Stand - 1set					
	16	Panasonic Panaboard Model UB - 5315 - 1set					
	17	Touch Screen Remote - 1set					
	18	AV Rack 19"17U - 2set					
	19	ISDN Con Sys Life Size - 1set					
	20	Plasma Panasonic TH65PF10WK-(65 Inches) - 1set					
	21	VGA Vedio Matrix Switcher Kramer - 1set					
	22	Vedio Con Sys Life Size - 1set					
	23	Tannoy Ceiling Speaker CVS8 - 8set					
	23	Kramer Matrix Switcher Model VP64ETH - 1set					
	24	LG 60" Plasma Model LG60PK550 - 1set					
	26	Clearone Wired Dialler for Converge Pro880TA - 1set					
	27	Clearone Converge Package: Clearone Converge					
		Pro880TA + Clearone Pro8i - 1set					
	28	DYMO CardScan 800 - 1set					
		Installation, Configurations of AV system in Conference					
	29	Rooms-2 Nos. from above materials at new site complete as					
		per direction of Engineer incharge.					
ļ		Complete work as mentioned above including hiring of					
		Goods vehicle.	lah	1 00			
ļ		Note: The above material shall be reused wherever required	Job	1.00			
		at the new office at NSIC Campus,Okhla.					
		Total of Sub Head-VI					
		Total of SOR Items					
		Total Of MR Items					
		Annexure -3 HVAC					
		VRV & HVAC System.					
1.1	NS	Dismantaling, re-installation, testing & commissioning of Variable					
		refrigerant volume / Variable refrigerant flow modular type air conditioining system suitable for cooling and heating by inverter					
		driven capacity control compressor complete with indoor and					
		outdoor units with individual controller and with fittings etc., as per					
		quantity given below and outdoor unit having COP at 100% and					
		50% load to be 3.2 and 4.1 respectively. including reinstallation og					
		electric Insulator & Nitrogen Gas Filling /Testing & Pump down of					
		Refrigerent Gas into Machine and top up of required refrigerant gas R-410A.					
a)		Outdoor Units					
i)		18 HP /10HP (112HP)	each	8.00			
.,			each	0.00			
b)		Indoor Units (Nominal capacity)					
/		Hi-Static Ductable Indoor Unit					
i)		4.75TR	each	6.00			
i) ii)		4.125 TR	each	2.00			
••7			Gauli	2.00			
c)		4-way cassette (Round Feed)type indoor unit					
i)		4.125 TR	000 ^k	1.00			
i) ii)		3.3 TR	each	4.00			
iii)			each	4.00			
iv)		2.08 TR	each	2.00			
,		2.64TR	each	7.00			
(v)		1.2TR Wall mounted type indeer unit	each	1.00			
d)		Wall mounted type indoor unit 1.65TR		45.00			
i) ii)		2.08 TR	each	15.00			
ii) f)			each	1.00			
f)		Dismantaling, shifting, installation, testing & commissioning of TFA Units for fresh air provision including corded remote controllers for indicidual unit etc. complete as per specification.					
					1		
i)		8.27TR	each	1 00			
i) h)		8.27TR Centralised Controller capable of controlling iTouch Unit.	each each	1.00 1.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
1.2	DSR 1	Supply Installation, Testing & Commissioning of modular type Variable Refrigerant Flow/Variable Refrigerant Volume air cooled Outdoor units suitable for cooling and heating, having all hermetically sealed inverter type Scroll Compressor(s), minimum two compressors for above 14 HP modules, microprocessor based Controller, top discharge type condensing unit(s), with R 410 A Refrigerant, vibration isolators, with suitable foundation etc. complete as required. The unit shall deliver the rated capacity at AHRI Conditions and work even at 50°C ambient temperature without tripping. The unit shall be suitable to work on 400V +/- 10%, 3 Phase, 50Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5.					
а		ODU Capacity (20+20+20+16+10+10+10)	per HP	106.00			
b.1	2	Supply, installation, testing and commissioning of following minimum capacity 4-way flow VRV/VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre- filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cord less remote control etc., suitable for operation on single phase 230 V ± 10%, 50Hz AC supply, complete, as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature.					
b.1.1	2.7	2.8 TR Each	each	1.00			
b.1.2 b.1.3	2.8 2.10	3.2 TR Each 4 TR Each	each	2.00 7.00			
0.1.5	2.10		each	7.00			
b.2	3	Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V ± 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature.					
b.2.1	3.6	1.65 TR	each	3.00			
b.3	4	Supply, installation, testing and commissioning of following minimum capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, corded remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V \pm 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiveing signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature.					
	1				+		
b.3.1	4.17	5.5 TR	Each	2.00			

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
1.2	NS	Supply, installation, testing & commissioning of refrigerant 'Y' joint required for distribution of refrijgernat in copper piping etc. complete as per specifications.	each	80.00			
		Supplying & installation of interconnecting following size of refrigerant copper pipe work with fitting duly insulated with 19/13 mm thick closed cell elastometric nitrile rubber tubular insulation between each set of indoor & outdoor units as per specification all piping inside the room shall be properly supported with M.S.					
1.3	5	hanger. Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft/hard drawn copper refrigerant piping for VRV/VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc. as required :					
1.3.1	5.1	6.4 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	80.00			
1.3.2	5.2	9.5 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	1400.00			
1.3.3	5.3	12.7 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	160.00			
1.3.4	5.4	15.86 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	1200.00			
1.3.5	5.5	19 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	340.00			
1.3.6	5.6	22.2 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	450.00			
1.3.7	5.7	25.4 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	5.00			
1.3.8	5.8	28.58 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	m	1200.00			
1.3.9	5.9	31.8 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	m	5.00			
1.3.10	5.10	34.9 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	m	5.00			
1.3.11	5.11	38.1 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	m	5.00			
1.3.12	5.12	41.27 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	m	5.00			
1.4	NS	Drain Piping					
		Rigid PVC piping complete with fittings, supports as per specifications and duly insulated with 6mm thick closed cell nitrile rubber insulation.					
i)		25 mmφ	metre	460.00			
ii) iii)		32 mmφ 40 mmφ	metre metre	120.00 50.00			
1.5	DSR	Supply and fixing of GSS Ducting of following thickness including necessary supports, hangers, nut-bolts, gasket, splitter damper, vanes etc. complete as required.					
i)	16.12.2.2	22 Gauge(0.8mm)	sqm	1229.00			
ii) 1.6	16.12.2.1 DSR	24 Gauge(0.63mm) Insulation	sqm	600.00			
1.0	DOK	Insulation Supplying, installation, testing & commissioning of closed cell polyethylene insulation on duct complete as per specifications and drawings.					
i)	16.5.2	19mm thick	sqm	300.00			
1.7	DSR	Duct Acoustic Lining					

S.No.	DSR '21/22	Description	Unit	Qty	Rate in figure	Rate in figure	Amount
		Supplying, installation, testing & commissioning of duct acoustic					
		lining with rasinebond glass wool insulation having 32 Kg/m3 ,					
		covered with reinforced plastic tissue paper and 0,5 mm thick					
		perforated aluminium sheet fixed to inside surface of duct with					
		cadmium plated nuts, bolts,stick pins etc. complete as per					
		specifications and drawings.					
i)	16.21	25 mm	sqm	708.00			
1.8	DSR	Onille / Difference					
1.0	Dok	Grills / Diffusers					
		Supplying, installation, testing & commissioning supply and return air grills / diffusers as per specifications and drawings including					
		fixing frame of G.I. / Wooden in false ceiling / walls.					
		nxing frame of G.I. / wooden in faise centrig / waits.					
i)	16.15	Aluminium supply air grill with damper	sqm	9105.00			
ii)	16.16	Aluminium return air grill without damper	sqm	5910.00			
iii)	16.17	Aluminium supply air diffuser with damper	sqm	12184.00			
iv)	16.18	Aluminium return air diffuser without damper	sqm	8121.00			
1.9	NS	Flexible Duct Connection					
		Supplying, installation, testing & commissioning of fire retardant					
		nonporous double layer flaxible connection between each duct					
		type indoor unit and ducting.		9.00			
			each				
2.0	NS	Control & Transmission Wiring					
		Providing and fixing control cum transmission wiring of 2 core x 1.5					
		sq.mm. copper in suitable conduits between indoor and outdoor		300.00			
		unit.	metre				
		Total					
		DSR					
		NS					

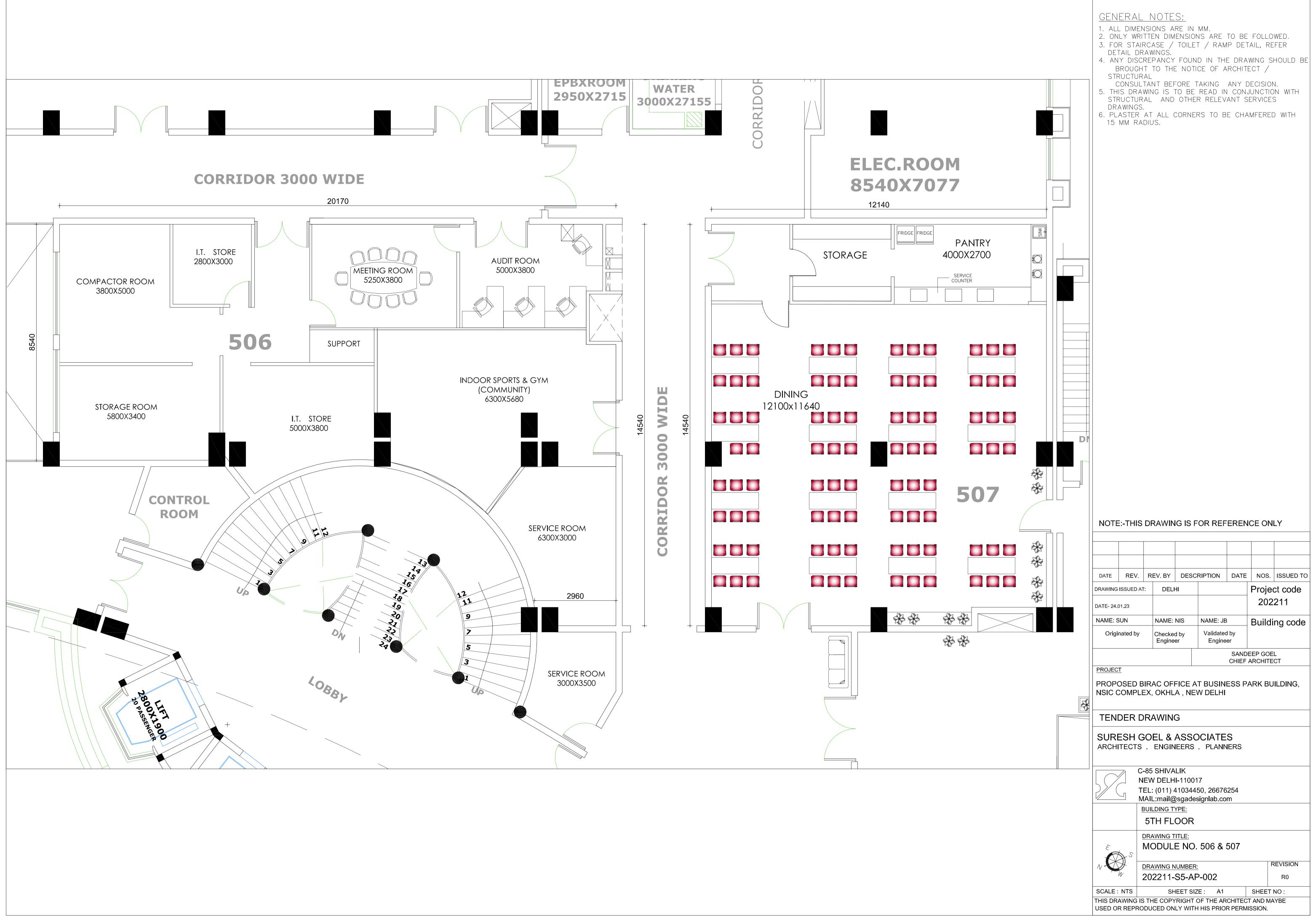
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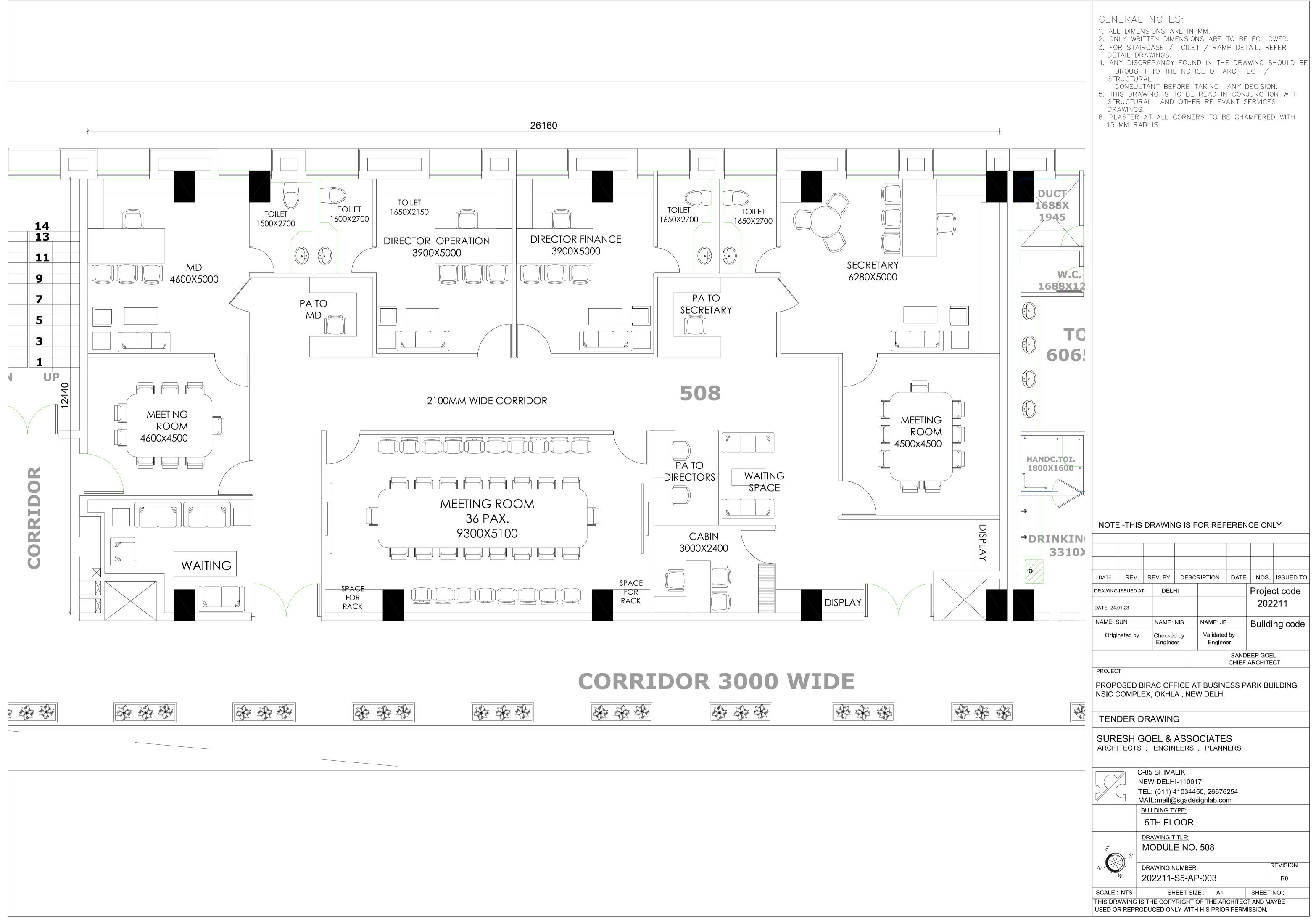


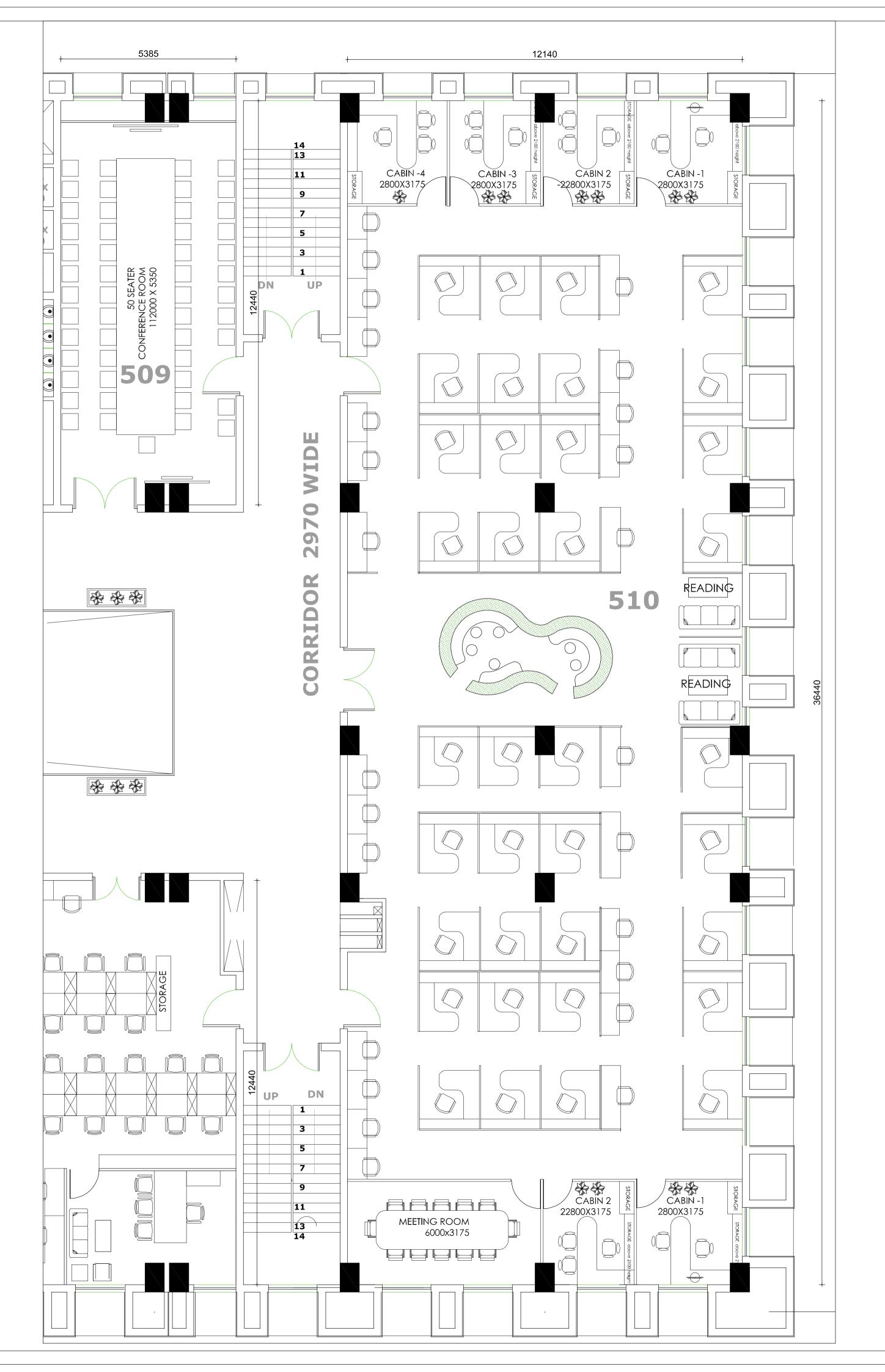
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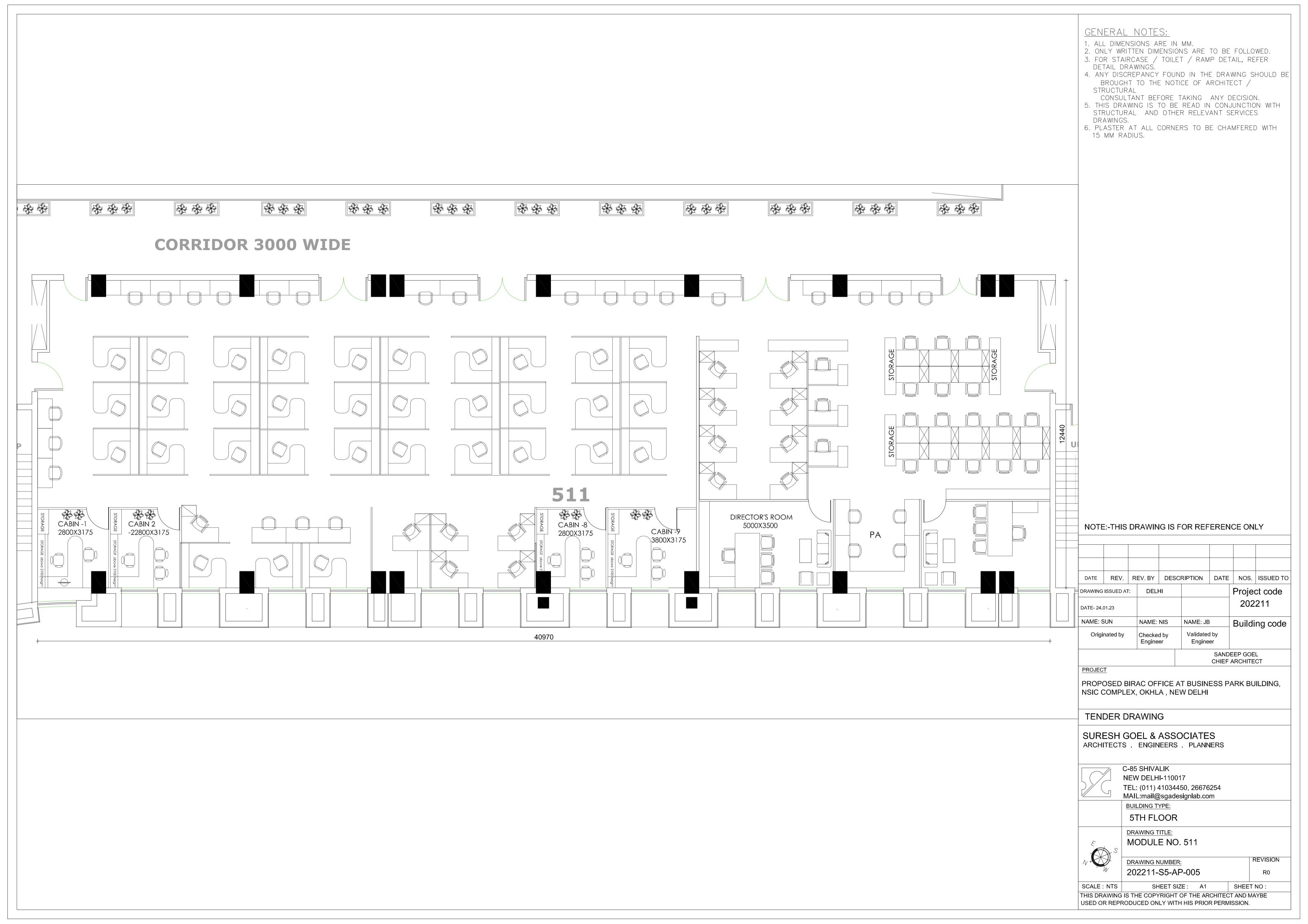
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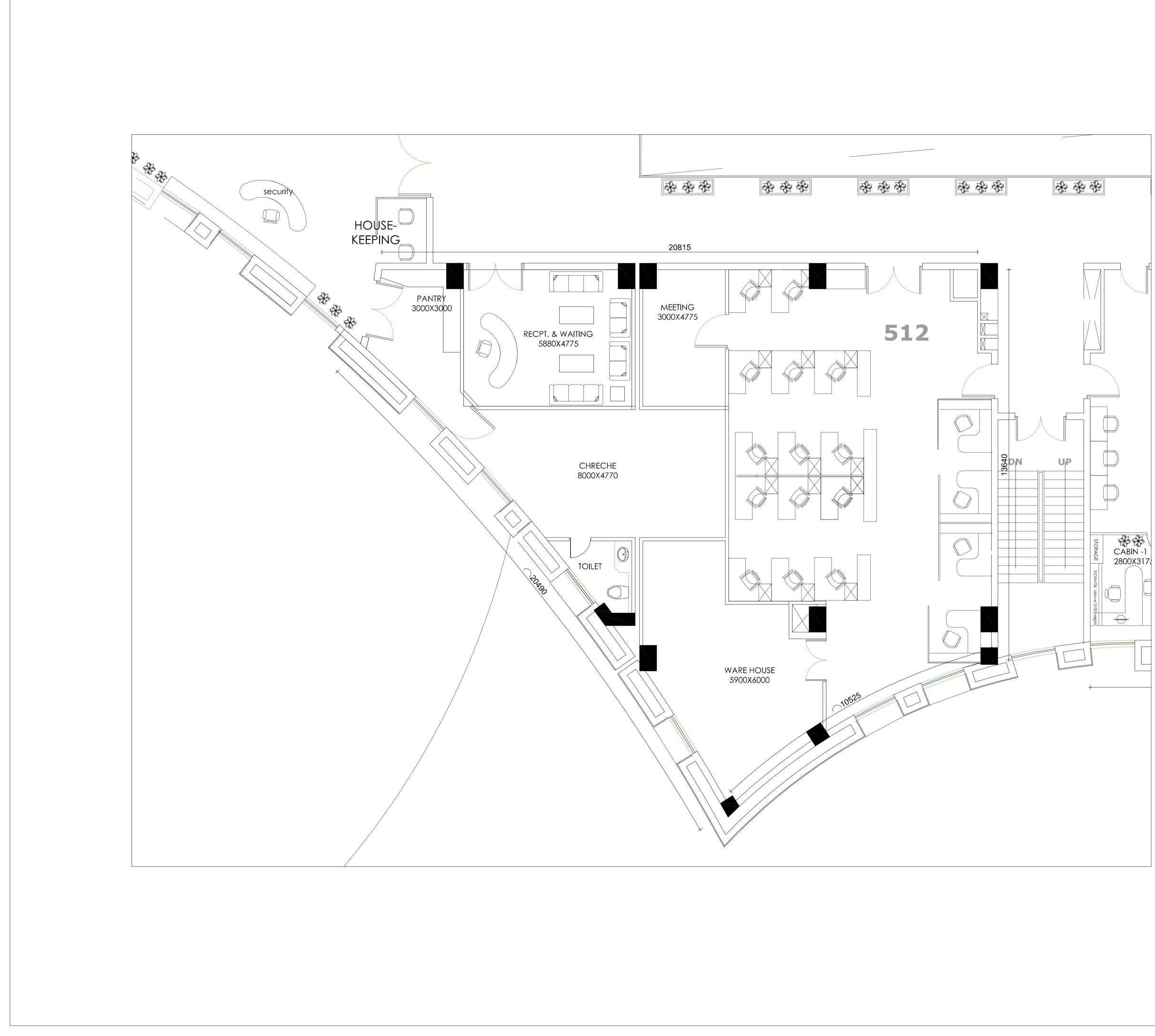


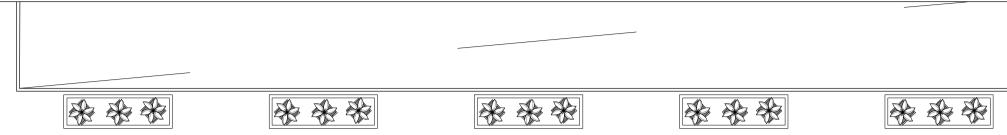




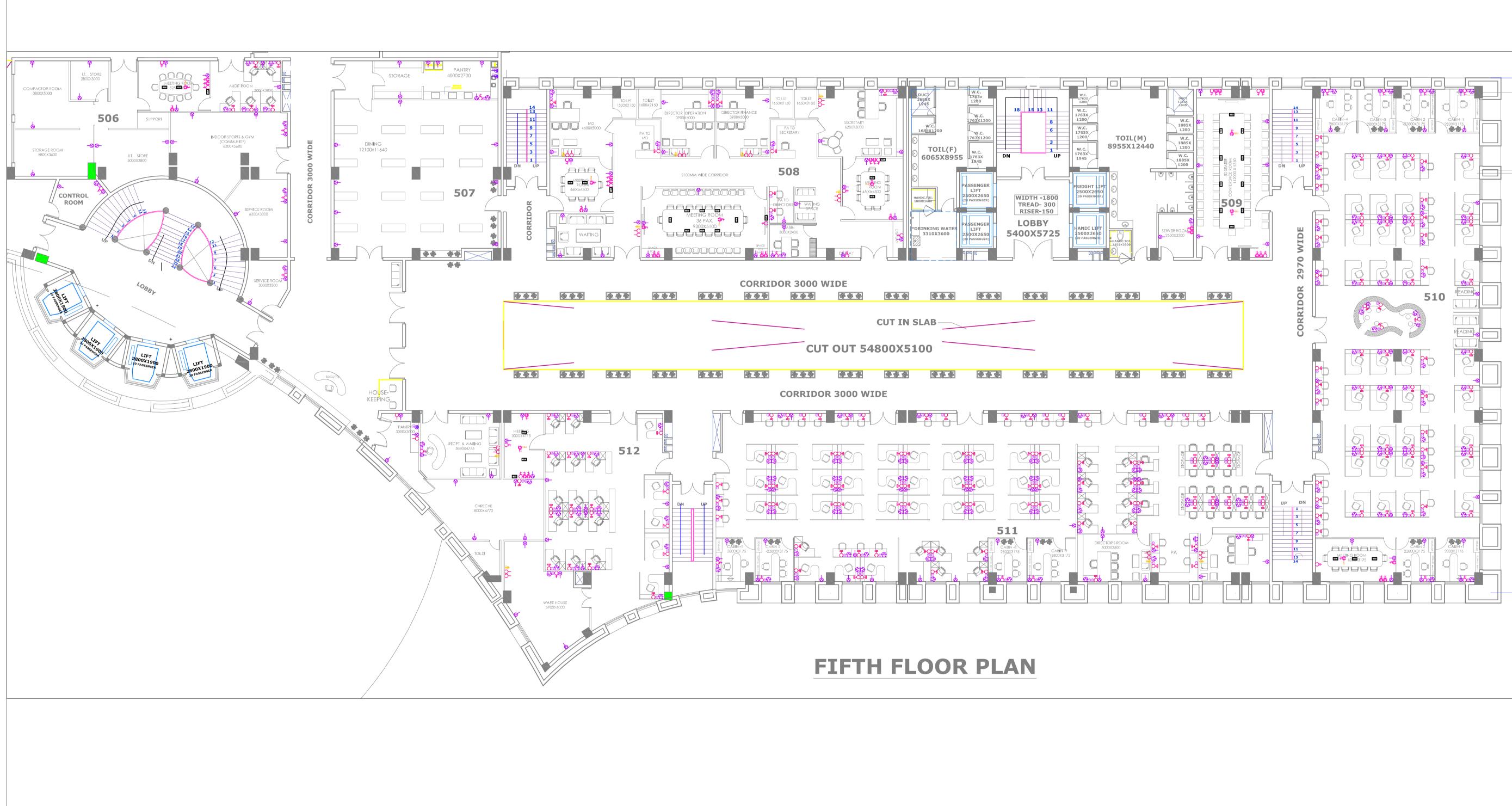
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LEGE	ND :-
	DESCRIPTION
	2 WAY SWITCH BOARD
0	SWITCH BOARD
	15A SWITCH BOARD GEYSER POINT
K •••	15A SWITCH BOARD AC POINT
⊛	EXHAUST FAN 350MM
0	6 W SURFACE / RECESSED LED LIGHT
θ	12W SURFACE / RECESSED MOUNTED LED LIGHT
•	15W SURFACE / RECESSED LED D/L
	36W (600X600)LED LIGHT FITTING 24W (600X600)LED LIGHT FITTING
- <u>-</u>	20W LED BATTEN LIGHT (WALL MOUNTED)
	20W LED BATTEN LIGHT (CEILING MOUNTED) 9W CFL BULKHEAD LIGHT
	3W EXIT LIGHT SIGNAGE
 ©	
	6A SWITCH SOCKET OUTLET (RAW)
 ℃	2X6A LIGHT PLUG UPS
) A	16A UPS POINT
FC	6A UPS LIGHT PLUG (3NOS SWITCH & SOCKET)
9-	16A SWITCH SOCKET OUTLET (RAW)
MDB PANEL (E) MDB PANEL (N)	
(N)	MDB DISTRIBUTION BOARD (N)
	MDB DISTRIBUTION BOARD (AHU) MDB DISTRIBUTION BOARD (UPS)
FDB	
	FDB DISTRIBUTION BOARD (LIGHT) FDB DISTRIBUTION BOARD (POWER)
FDB	FDB DISTRIBUTION BOARD (POWER) FDB DISTRIBUTION BOARD (UPS)
	PDB DISTRIBUTION BOARD
SZ: UPS	UPS DISTRIBUTION BOARD
	LIGHT DISTRIBUTION BOARD
\oplus	18W LED DOWN LIGHTER
0	SMOKE DETECTOR AT CEILING / FALSE CEILING
<u>ş</u>	SMOKE DETECTOR ABOVE / FALSE CEILING
	MANUAL CALL POINT HOOTER
$\overline{\mathbb{R}}$	RESPONCE INDICATOR
	MAIN FIRE ALARM PANEL
FA	FIRE ALARM JUNCTION BOX
SP	CEILING SPEAKER
	MAIN PA PANEL
RACK	DATA RACK
(2)	DOUBLE CIRCLE SENCER
	DOME CAMERA PTZ CAMERA
	BULLET CAMERA
θ	HEAT DETECTOR
F	FAULT ISOLATOR
CM	CONTROL MODULE
⊕=-⊕	FIRE FIGHTER PHONE JACK WITH CONTROL MODULE
WIFI	WIFI POINT
)B	
}	WALL BRACKET FAN BEAM DETECTOR
	TRANSMETER
	15W LED EMERGENCY LIGHT
0	12W SURFACE / RECESSED MOUNTED LED LIGHT (EMERGENCY)
⊕	EMERGENCY SWITCH BOARD
	36W (600X600)LED LIGHT FITTING (EMERGENCY)
	24W (600X600)LED LIGHT FITTING (EMERGENCY)
\bigoplus	18W LED DOWN LIGHTER

NOTE:-THIS DRAWING IS FOR REFERENCE ONLY

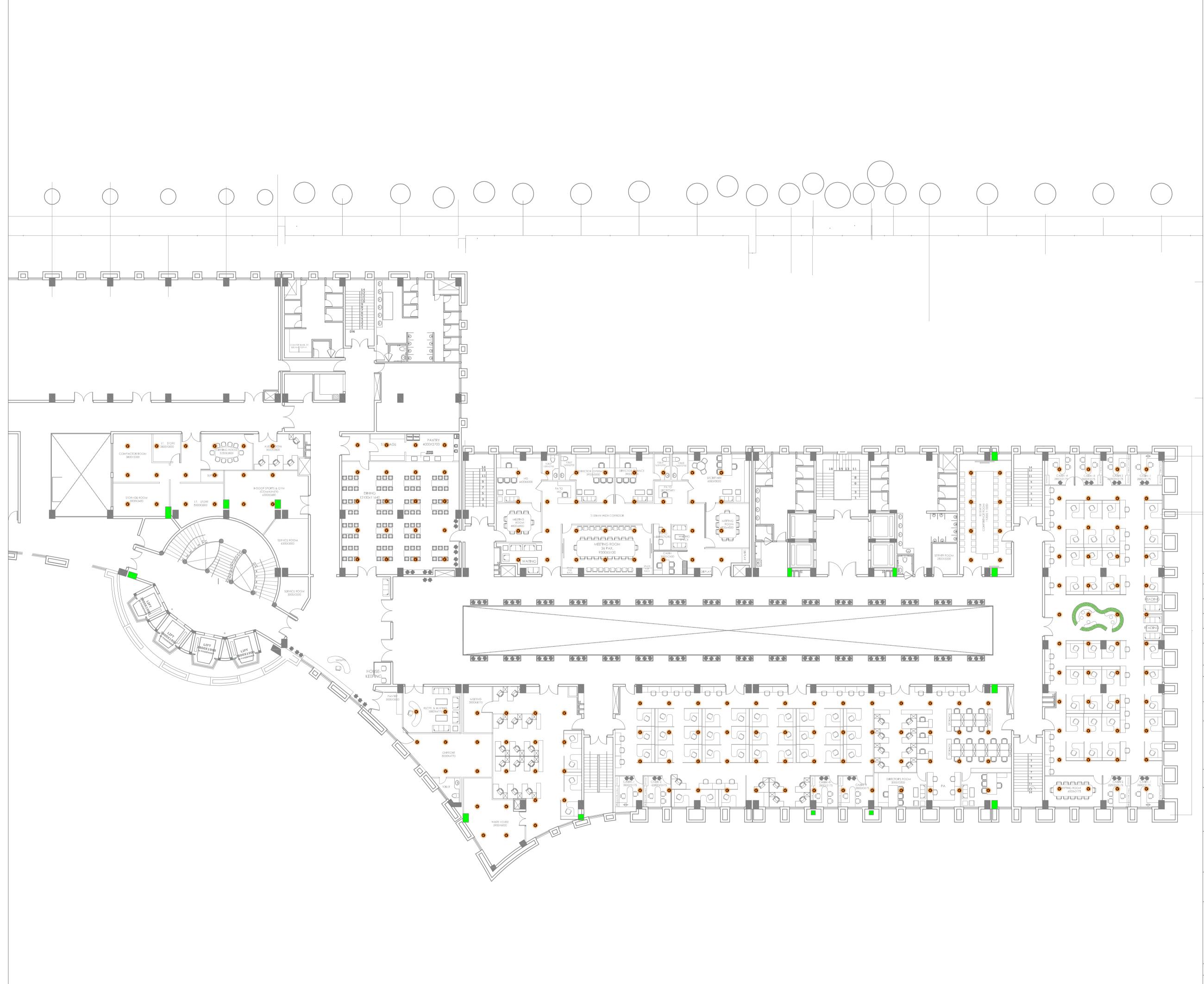
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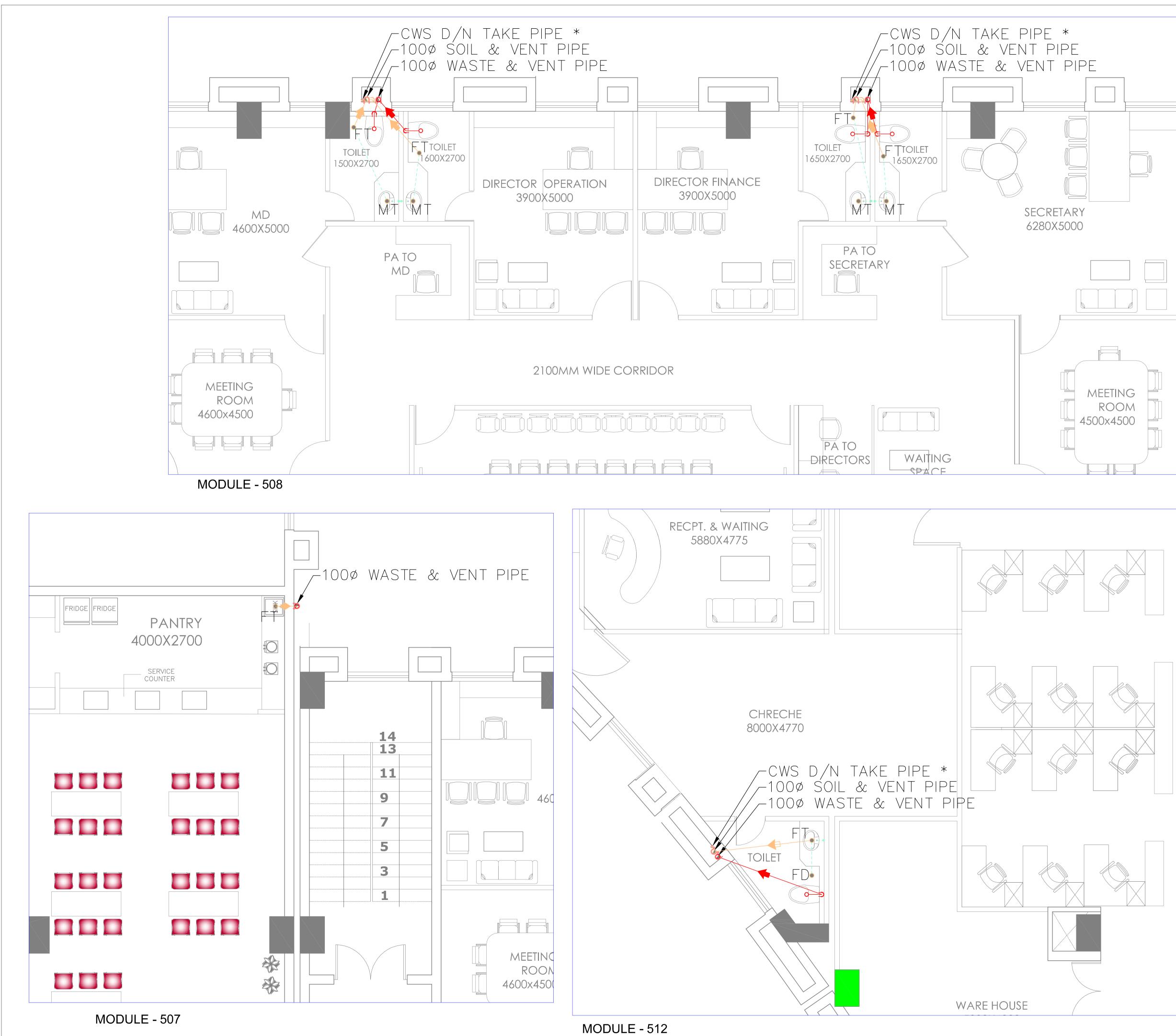
✓ 2 WAY SWITCH BOARD ✓ SWITCH BOARD GEYSER POINT ► 15A SWITCH BOARD AC POINT ● 15A SWITCH BOARD AC POINT ● 15A SWITCH BOARD AC POINT ● 15W SURFACE / RECESSED LED LIGHT ● 15W SURFACE / RECESSED LED DIL ● 16W LED BATTEN LIGHT FILTING ● 20W LED BATTEN LIGHT (WALL MOUNTED) ● 20W LED BATTEN LIGHT (WALL MOUNTED) ● 20W LED BATTEN LIGHT (WALL MOUNTED) ● 30W EXIT LIGHT SIGNAGE ● 15W SURFACE / RECESSED SWITCH & SOCKET ● 16A UPS POINT ● 6A UPS LIGHT PLUG (3NOS SWITCH & SOCKET) ● 16A UPS LIGHT PLUG (3NOS SWITCH & SOCKET) ● 6A CPOINT <t< th=""><th></th><th></th></t<>		
SWITCH BOARD ISA SWITCH BOARD GEYSER POINT ISA SWITCH BOARD AC POINT EXHAUST FAN 350MM ISA SWITCH BOARD AC POINT EXHAUST FAN 350MM ISA SWITCH BOARD AC PRECESSED LIGHT ISA SWITCH BOARD AC PRECESSED LIGHT IW SURFACE / RECESSED LOD DL ISW SURFACE / RECESSED LOD DL ISW SURFACE / RECESSED LOD DL ISW SURFACE / RECESSED LOD DL IW SURFACE / RECESSED LOD LONT IW SURFACE / SUCKET OUTLET (RAW) IW SURFACE / SUCKET OUTLET (RAW) IW SUNTHO SOCKE	LEGE	ND :-
SWITCH BOARD ISA SWITCH BOARD GEYSER POINT ISA SWITCH BOARD AC POINT EXHAUST FAN 350MM O 6W SURFACE / RECESSED LE LIGHT ISW SURFACE / RECESSED LED D/L 35W (600X600)LED LIGHT FITTING IW SURFACE / RECESSED LED D/L 35W (600X600)LED LIGHT FITTING IW LED BATTEN LIGHT WALL MOUNTED) 20W LED BATTEN LIGHT (CELING MOUNTED) W CFL BULKHEAD LIGHT SW CFL BULKHEAD LIGHT (CELING MOUNTED) W CFL BULKHEAD LIGHT SW EXTENDER OUTLET © COMPUTER POINT G ASWITCH SOCKET OUTLET (RAW) A X8A LIGHT PLUG UPS IFA UPS POINT G ASWITCH SOCKET OUTLET (RAW) F AC POINT G ASWITCH SOCKET OUTLET (RAW) G C COMPUTER POINT G ASWITCH SOCKET OUTLET (RAW) G C APOINT G ASWITCH SOCKET OUTLET (RAW) G C APOINT G SOCKE POINT MOB DISTRIBUTION BOARD (N) G EYSER POINT MOB DISTRIBUTION BOARD (LIGHT) G EYSER POINT MDB DISTRIBUTION BOARD (UPS)	YMB.	DESCRIPTION
B> 15A SWITCH BOARD GEYSER POINT IDA SWITCH BOARD AC POINT IDA SWITCH RACE / RECESSED LED DL IDA SWITCH POINT IDW LED BATTEN LIGHT FITTING IDW LED BATTEN LIGHT (WALL MOUNTED) IDW LED BATTEN LIGHT (WALL MOUNTED) IDW LED BATTEN LIGHT SIGNAGE IDW CFL BULKHEAD LIGHT IDW CFL BULKHEAD LIGHT IDW CFL BULKHEAD LIGHT (WALL MOUNTED) IDW CFL BULKHEAD LIGHT SIGNAGE IDE AUTER POINT IDE AUTER POINT IDA UPS P	01	2 WAY SWITCH BOARD
ISA SWITCH BOARD AC POINT ● ISA SWITCH BOARD AC POINT ● EXHAUST FAN 350MM ● 6 W SURFACE / RECESSED LED LIGHT ● 12W SURFACE / RECESSED MOUNTED LED LIGHT ● 15W SURFACE / RECESSED LED D/L ● 16W LED BATTEN LIGHT FILTING ● 000 LED BATTEN LIGHT (CELLING MOUNTED) ● 000 LED BATTEN LIGHT (CELLING MOUNTED) ● 000 LED BATTEN LIGHT CELLING MOUNTED) ● 000 LED MOUTLET ● 000 WCFL BULKHEAD LIGHT ● 16A SWITCH SOCKET OUTLET (RAW) ● 6A UPS DOINT ● 6A UPS LIGHT FLUG (3NOS SWITCH & SOCKET) ● 16A SWITCH SOCKET OUTLET (RAW) ● 6A UPS LIGHT FULG (3NOS SWITCH & SOCKET) ● 16A SWITCH SOCKET OUTLET (RAW)	01	SWITCH BOARD
EXHAUST FAN 350MM Image: Constraint of the state of the s	⊠p	15A SWITCH BOARD GEYSER POINT
● 6 W SURFACE / RECESSED LED LIGHT ● 12W SURFACE / RECESSED LED DL ■ 36W (600X600)LED LIGHT FITTING ■ 24W (600X600)LED LIGHT FITTING ■ 10W LED BATTEN NIRROR LIGHT ■ 10W LED BATTEN NIRROR LIGHT ■ 10W LED BATTEN LIGHT (VALL MOUNTED) ● 9W CFL BULKHEAD LIGHT ■ 9W CFL BULKHEAD LIGHT ● 6A SWITCH SOCKET OUTLET (RAW) ● 16A UPS POINT ● 16A SWITCH SOCKET OUTLET (RAW) ● 16A UPS POINT ● 16A SWITCH SOCKET OUTLET (RAW) ● 16A SWITCH SOCKET OUTLET (RAW) ● 16A SWITCH SOCKET OUTLET (RAW) ● 16A UPS POINT ● 16A SWITCH SOCKET OUTLET (RAW) <	[]=	15A SWITCH BOARD AC POINT
I2W SURFACE / RECESSED MOUNTED LED LIGHT I2W SURFACE / RECESSED LED D/L ISW SURFACE / RECESSED LED D/L ISW (600X600)LED LIGHT FITTING I2W (600X600)LED LIGHT FITTING I2W LED BATTEN MIRROR LIGHT IOW LED BATTEN LIGHT (VALL MOUNTED) IOW LED BATTEN LIGHT (CELLING MOUNTED) IOW LED BATTEN LIGHT (CELLING MOUNTED) IVE COMPUTEN POINT ICC COMPUTER POINT ICC COMPUTER POINT ICA JUPS LIGHT PLUG (JNOS SWITCH & SOCKET) ICA JUPS LIGHT PLUG (JNOS SWITCH & SOCKET) ICA JUPS POINT ICA AL JUPS POINT ICA AL JUPS POINT ICA AL JUPS POINT ICA BOISTRIBUTION BOARD (E) ICA DISTRIBUTION BOARD (E) ICA DISTRIBUTION BOARD (E) ICA DISTRIBUTION BOARD (UPS) ICA DISTRIBUTION BOARD (UPS) ICA DISTRIBUTION BOARD (UPS) ICA DISTRIBUTION BOARD (UPS) ICA DISTRIBUTION BOARD ICA DISTRIBUTION BOARD ICA DOTER ICA DOTER ICA DOTER ICA RA	⊕	EXHAUST FAN 350MM
● 15W SURFACE / RECESSED LED D/L ■ 36W (600X800)LED LIGHT FITTING ■ 24W (600X800)LED LIGHT FITTING ■ 10W LED BATTEN MIRROR LIGHT ■ 10W LED BATTEN LIGHT (VALL MOUNTED) ■ 20W LED BATTEN LIGHT (CEILING MOUNTED) ■ 9W CFL BULKHEAD LIGHT ■ 3W EXIT LIGHT SIGNAGE ■ TELEPHONE OUTLET ● 6A SWITCH SOCKET OUTLET (RAW) ● 6A SWITCH SOCKET OUTLET (RAW) ● 6A UPS LIGHT PLUG (JNOS SWITCH & SOCKET) ● 6A UPS LIGHT PLUG (SNOS SWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS SAWITCH & SOCKET) ● 6A UPS LIGHT PLUG (MOS ADAD (LE) ● 16A SWITCH SOCKET OUTLE	0	6 W SURFACE / RECESSED LED LIGHT
3SW (600X600)LED LIGHT FITTING 24W (600X600)LED LIGHT FITTING 10W LED BATTEN LIGHT (WALL MOUNTED) 20W LED BATTEN LIGHT (WALL MOUNTED) 20W LED BATTEN LIGHT (CEILING MOUNTED) 3W EXIT LIGHT SIGNAGE 20W LED BATTEN LIGHT (CEILING MOUNTED) 3W EXIT LIGHT SIGNAGE 20W LED BATTEN LIGHT (CEILING MOUNTED) 3W EXIT LIGHT SIGNAGE 20W LED BATTEN LIGHT (CEILING MOUNTED) 3W EXIT LIGHT SIGNAGE 20W LED BATTEN LIGHT (CEILING MOUNTED) 3W EXIT LIGHT SIGNAGE 20W LED BATTEN LIGHT (CEILING MOUNTED) 3W EXIT LIGHT SIGNAGE 20W LED BATTEN LIGHT (CEILING MOUNTED) 3W EXIT LIGHT SIGNAGE 20W LED BATTEN LIGHT OUTLET (RAW) 3W EXIGNT SOCKET OUTLET (RAW) 3W EXIT DISTIBUTION BOARD (LIGHT) 3W EXIT DISTRIBUTION BOARD (LIGHT) 3W EXIT DISTRIBUTION BOARD (UPS)		12W SURFACE / RECESSED MOUNTED LED LIGHT
24W (600X600)LED LIGHT FITTING 10W LED BATTEN LIGHT WIRROR LIGHT 20W LED BATTEN LIGHT (VALL MOUNTED) 20W LED BATTEN LIGHT (CELLING MOUNTED) 3W CFL BULKHEAD LIGHT 3W EXIT LIGHT SIGNAGE > 10W LED BATTEN LIGHT (CELLING MOUNTED) 3W EXIT LIGHT SIGNAGE > 10W CFL BULKHEAD LIGHT 3W EXIT LIGHT SIGNAGE > 10M CAL BURKHEAD LIGHT 10M CAL BURKHEAD LIGHT 10M CAL BURKHEAD LIGHT 10M CALL BURKHEAD LIGHT 10M CALL BURKHEAD LIGHT 10M CALL BURKHEAD LIGHT (RAW) 10A LIGHT PLUG (3NOS SWITCH & SOCKET) 10A LIGHT PLUG (3NOS SWITCH & SOCKET) 10A LIGHT PLUG (3NOS SWITCH & SOCKET) 10A LOPS LIGHT PLUG (3NOS SWITCH & SOCKET) 10A DISTRIBUTION BOARD (POWER) 10A DISTRIBUTION BOARD (LIGHT) 10A DISTRIBUTION BOARD (LIGHT) 10AD DISTRIBUTION BOARD (LIGHT) 10AD DISTRIBUTION BOARD (LIGHT) 10AD DISTRIBUTION BOARD 10AD TRIBUTION B	<u> </u>	
10W LED BATTEN MIRROR LIGHT 20W LED BATTEN LIGHT (VALL MOUNTED) 20W LED BATTEN LIGHT (CELLING MOUNTED) 9W CFL BULKHEAD LIGHT 10W CTL BULKHEAD LIGHT 10W CAL BULKHEAD LIGHT 10W CAL BULKHEAD LIGHT (RAW) 10A UPS LIGHT PLUG (3NOS SWITCH & SOCKET) 10A DISTRIBUTION BOARD (UPS) 10A DISTRIBUTION BOARD (LIGHT) 10B DISTRIBUTION BOARD (LIGHT) 10D DISTRIBUTION BOARD (UPS) 10D DISTRIBUTION BOARD (UPS) 10D DISTRIBUTION BOARD (UPS) 10D DISTRIBUTION BOARD (UPS) 10D DISTRIBUTION BOARD 10D DISTRIBUTION BOARD 10D DISTRIBUTION BOARD 10D PS DISTRIBUTION BOARD 10D DISTRIBUTION BOARD 10D DISTRIBUTION BOARD 10D DISTRIBUTION BOARD		
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20W LED BATTEN LIGHT (CEILING MOUNTED) 9W CFL BULKHEAD LIGHT 211 9W CFL BULKHEAD LIGHT 211 9W CFL BULKHEAD LIGHT 20W LED BATTEN LIGHT SIGNAGE 10 11 211 211 211 211 211 211 211 211 212 2264 LIGHT PLUG (3NOS SWITCH & SOCKET) 2164 SWITCH SOCKET OUTLET (RAW) 2165 227 2286 LIGHT PLUG (3NOS SWITCH & SOCKET) 3164 UPS LIGHT PLUG (3NOS SWITCH & SOCKET) 3164 UPS LIGHT PLUG (3NOS SWITCH & SOCKET) 3165 3164 UPS LIGHT PLUG (3NOS SWITCH & SOCKET) 3165 3164 UPS LIGHT PLUG (3NOS SWITCH & SOCKET) 3165 3166 317 3166 317 3161 317 318 318 319 310 3111 3111 3111 3111<		10W LED BATTEN MIRROR LIGHT
9W CFL BULKHEAD LIGHT 3W EXIT LIGHT SIGNAGE >> >> COMPUTER POINT >> AS WITCH SOCKET OUTLET (RAW) >> AS WITCH SOCKET OUTLET (RAW) >> AB UPS LIGHT PLUG (JNOS SWITCH & SOCKET) >> IGA SWITCH SOCKET OUTLET (RAW) >> AC POINT IGA SWITCH SOCKET OUTLET (RAW) >> AC POINT IGA SWITCH SOCKET OUTLET (RAW) >> AC POINT IGA SWITCH SOCKET OUTLET (RAW) >> AC POINT IGA SWITCH SOCKET OUN BOARD (POWER) IDB DISTRIBUTION BOARD (LIGHT) IDB DISTRIBUTION BOARD (UPS) >> PDB DISTRIBUTION BOARD ILIGHT DISTRIBUTION BOARD ILIGHT DISTRIBUTION BOARD IDW DISTRIBUTION BOARD IDW LED DOWN LIGHTER <th></th> <th>20W LED BATTEN LIGHT (WALL MOUNTED)</th>		20W LED BATTEN LIGHT (WALL MOUNTED)
WEXIT LIGHT SIGNAGE WEXIT LIGHT SIGNAGE WITCH SOCKET OUTLET COMPUTER POINT AUSA LIGHT PLUG UPS AUSA LIGHT PLUG (3NOS SWITCH & SOCKET) HA UPS POINT AUSA LIGHT PLUG (3NOS SWITCH & SOCKET) HA UPS POINT AUSA LIGHT PLUG (3NOS SWITCH & SOCKET) HA UPS LIGHT PLUG (3NOS SWITCH & SOCKET) HA UPS POINT AC POINT GEYSER POINT MDB DISTRIBUTION BOARD (E) MDB DISTRIBUTION BOARD (N) MDB DISTRIBUTION BOARD (LIGHT) MDB DISTRIBUTION BOARD (LIGHT) FDB DISTRIBUTION BOARD (POWER) FDB DISTRIBUTION BOARD (POWER) FDB DISTRIBUTION BOARD (UPS) PDB DISTRIBUTION BOARD (UPS) PDB DISTRIBUTION BOARD ILIGHT DISTRIBUTION BOARD		20W LED BATTEN LIGHT (CEILING MOUNTED)
Image: Section 2011 Image: Section 20		9W CFL BULKHEAD LIGHT
COMPUTER POINT GA SWITCH SOCKET OUTLET (RAW) P 2X6A LIGHT PLUG UPS A UPS POINT GA UPS POINT GA UPS POINT GA UPS POINT GA UPS POINT GEYSER POINT GEYSER POINT MDB DISTRIBUTION BOARD (E) MDB DISTRIBUTION BOARD (N) MDB DISTRIBUTION BOARD (AHU) PPME MDB DISTRIBUTION BOARD (UPS) FOB DISTRIBUTION BOARD (UPS) FOB DISTRIBUTION BOARD (UPS) FOB DISTRIBUTION BOARD (UPS) FOB DISTRIBUTION BOARD (UPS) PDB DISTRIBUTION BOARD (UPS) PDB DISTRIBUTION BOARD IGHT DISTRIBUTION	XIIO	3W EXIT LIGHT SIGNAGE
GA SWITCH SOCKET OUTLET (RAW) IF 2X6A LIGHT PLUG UPS IFA UPS POINT IFA UPS LIGHT PLUG (3NOS SWITCH & SOCKET) IFA SWITCH SOCKET OUTLET (RAW) IFA SWITCH SOCKET OUTLET (RAW) IFA SWITCH SOCKET OUTLET (RAW) IFA A SWITCH SOCKET OUTLET (RAW) IFA LAT DISTRIBUTION BOARD IFA LAT DISTRIBUTION BOARD IFA HAACK IFA HEAT DETECTOR IFA HAACK	\triangleright	TELEPHONE OUTLET
→ → 2x6A LIGHT PLUG UPS → 16A UPS POINT → 16A SWITCH SOCKET OUTLET (RAW) → 16A SWITCH SOCKET OUTLET (RAW) → AC POINT → GEYSER POINT → MDB DISTRIBUTION BOARD (E) mbb DISTRIBUTION BOARD (N) MDB DISTRIBUTION BOARD (AHU) mbb DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD FDB DISTRIBUTION BOARD FDB MOVE DETECTOR AT CELLING / FALSE CELLING FOR MANUAL CALL POINT Kasponce INDICATOR MAN PARALE MAIN FIRE ALARM PANEL MAIN FIRE ALARM PANEL MAIN PA PANEL		COMPUTER POINT
→ → 2x6A LIGHT PLUG UPS → 16A UPS POINT → 16A SWITCH SOCKET OUTLET (RAW) → 16A SWITCH SOCKET OUTLET (RAW) → AC POINT → GEYSER POINT → MDB DISTRIBUTION BOARD (E) mbb DISTRIBUTION BOARD (N) MDB DISTRIBUTION BOARD (AHU) mbb DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD FDB DISTRIBUTION BOARD FDB MOVE DETECTOR AT CELLING / FALSE CELLING FOR MANUAL CALL POINT Kasponce INDICATOR MAN PARALE MAIN FIRE ALARM PANEL MAIN FIRE ALARM PANEL MAIN PA PANEL	<u> </u>	6A SWITCH SOCKET OUTLET (RAW)
OH 6A UPS LIGHT PLUG (3NOS SWITCH & SOCKET) O→ 16A SWITCH SOCKET OUTLET (RAW) O→ AC POINT GEYSER POINT GEYSER POINT SFME MDB DISTRIBUTION BOARD (E) MDB DISTRIBUTION BOARD (N) MDB DISTRIBUTION BOARD (AHU) SFME MDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (UPS) PDB DISTRIBUTION BOARD ILIGHT DISTRIBUTION BOARD UPS DISTRIBUTION BOARD ILIGHT DISTRIBUTION BOARD ILIGHT DISTRIBUTION BOARD I SW LED DOWN LIGHTER SMOKE DETECTOR AT CEILING / FALSE CEILING SMOKE DETECTOR AT CEILING / FALSE CEILING SMOKE DETECTOR ABOVE / FALSE CEILING I MANUAL CALL POINT MANUAL CALL POINT I HOOTER MAIN FIRE ALARM PANEL I RESPONCE INDICATOR MAIN PA PANEL I MAIN PA PANEL MAIN PA PANEL I MAIN PA PANEL DATA RACK I DOUBLE CIRCLE SENCER DOME CAMERA I DOUBLE CIRCLE SENCER DOME CAMERA I DOUBLE CIRCLE SENCER OME CAMERA I MAIN PA PANEL FALLT ISOLATOR I HEAT DETECTOR ILIGHT DISTRIAURIN		2X6A LIGHT PLUG UPS
I6A SWITCH SOCKET OUTLET (RAW) ●●● AC POINT ●●● GEYSER POINT ■■■ ■■ <th>9A</th> <th>16A UPS POINT</th>	9A	16A UPS POINT
AC POINT GEYSER POINT Image: Service of the service of th	Э	6A UPS LIGHT PLUG (3NOS SWITCH & SOCKET)
GEYSER POINT MDB DISTRIBUTION BOARD (E) GENAND MDB DISTRIBUTION BOARD (N) MOB DISTRIBUTION BOARD (AHU) FORMU MDB DISTRIBUTION BOARD (UPS) FDB DISTRIBUTION BOARD (LIGHT) FOB DISTRIBUTION BOARD (UPS) FOB DISTRIBUTION BOARD (UPS) FOB DISTRIBUTION BOARD (UPS) PDB DISTRIBUTION BOARD IGHT DISTRIBUTION BOARD		16A SWITCH SOCKET OUTLET (RAW)
Image: Control of Contro		AC POINT
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NOTE:-THIS DRAWING IS FOR REFERENCE ONLY

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PLUMBING NOTES: -

SCHEDULE OF PIPES

PIPE NO.

(1)

(2)

3

1. WASH BASIN TO FLOOR TRAP (FT) 320 GI WASTE PIPE.

4. FLOOR DRAIN (FD) TO FLOOR TRAP 500 GI WASTE PIPE.

2. SINK TO FLOOR TRAP (FT) 40Ø GI WASTE PIPE.

3. URINAL TO URINAL TRAP (UT) 400 GI SOIL PIPE.

6. 110Ø uPVC PIPE USED FOR TERRACE RAIN WATER.

DESCRIPTION

1000 CI SOIL & VENT PIPE

1000 CI WASTE & VENT PIPE

5. 100¢ CI PIPE USED FOR SOIL & WASTE.

List of approved make

List of Approved makes for Civil

S. No.	Description	Approved Makes
1.	(i) Cement (Grey)	ACC/Ultra tech /BIRLA /VIKRAM/
	(ii) White Cement	BIRLA /JK/Jaypee-Rewa/Bangur
2.	T.M.T. Steel	SAIL/TATA/RINL/Jindal(JSW)
3.	Ready Mixed Concrete	ACC/L&T /AHLCON/ JK Cement
		/Unitech /Grasim
4.	Structural steel	SAIL / TATA / RINL/ Jindal(JSW)
5.	Welding rods	Victor / Maruti/AdvaniOerlikon/Essar
6.	Stainless steel	Jindal / SAIL (Salem)
7.	Stainless Steel Dash/Anchoring	HILTI/FISCHER
	Fasteners	
8.	Nuts, Bolts & Screws – Stainless	Hilti/ Fischer/ Conco
	steel	
9.	Expansion hold fasteners	Hilti/Cannon /Chilli
10	Flush Doors	Duraboard / Merino / Green ply
		/Archid Ply
11.	Laminate sheet	Merino/Green ply/Archid Ply
12	Roller Blinds	Deck, Johnsons blind , Vista, D
		Decor
13	Flush Door Fittings Hardware's	Godrej,Hettich,DORMA,Kitch
14	Glass Door Fittings Hardware's	OZONE, Godrej,Hettich,DORMA, Kitch

S. No.	Description	Approved Makes
15.	Wooden Flooring	Green panel,green lam, MIKASA
		,Pergo
16.	Block Board /Ply	Phenol bonded boards of Merino /
		Legend / Kit Ply /Alpro/ Archid ply.
17.	Vinyl Flooring	Wonder floor,Armstrong, marvel
18.	Wood Strips/Slates	ARMSTRONG,GREENLAM,
19.	Pre-laminated particle board –	Novopan/Merino /Anchorlam/Bhutan
	Exterior grade	Board/Archid ply
20.	Aluminium Sections	Hindalco /Jindal / Mahavir
21.	Fire cum smoke check Doors	Navair /Adhunik / Sukri/I clean
22.	Glass	Saint Gobain/Modi Float/Asahi Float
23.	Anodized aluminum fittings for	Crown/ALANS/Classic/Bharat/ Argent
	doors/windows	
24.	Vitrified Ceramic Tiles	Kajaria /Orient/Johnson/ Somany
25.	Ceramic Tiles (For walls & floors)	Kajaria /Somany/Orient/Bell/Johnson/
		Euro
26.	Polycarbonate Sheet	Danpalon/Sunpal /Polygal
27.	Interlocking Cement Concrete	Hindustan Tiles/Nimco Prefab/K.K.
	precast paver blocks	Manholes/ Nitco
28.	Calcium silicate false ceiling	Aerolite/Everest / NCL
29.	Mineral Fiber Ceiling	Lloyd/ / Armstrong /Rockfon
		/Decosonic
30.	Metal False ceiling	Aura , Armstrong, Hunter Douglas

S. No.	Description	Approved Makes
31.	Insulation	UP Twiga/Lloyd's India Ltd. /Supreme
32.	WALL PAPER	Asian paint, BERGER,NEROLAC
33.	Friction Stay	GODREJ, DORMA, HETTICH
34.	Paint/primer/oil bound distemper Acrylic emulsion paint/Putty/texture paint/ Synthetic enamel paint	1 st Quality paints of Asian/ Berger / Nerolac / ICI
35	Water Proof cement paint	Snowcem/Asian Paints/Berger

ſ	S. No.	Description	Approved Makes

List of Approved makes for Electrical

1	PVC/MS Conduit	Atul/AKG/Steel
•		craft/Polycab/Precision
2	Cable Tray/ Race ways/ Floor	MEM/ OBO Betterman/ SLOTCO/
-	trunking / wall channels	INDIANA/ Legrand / Airef
3	Ceiling /Exhaust/Wall fans	Crompton/ Usha/
Ũ		Havells/Panasonic (Anchor)
4	GI/Cu/Chemical Earthing material	JMVLPSLtd./Protech/JEF
		Techno/OBO /MEM
5	Coaxial Wires	Finolex/ Delton/ Bonton/ L&T/
		KEI/ Finolex/ Gloster
6	DB's / Pre-wiredDB's	Hager/ Havells/ Legrand/
		C&S/Panasonic (Anchor)
7	PVCinsulatedFRLS-	Gloster/ Havells/ Panasonic
	Aluminium/ Copper 1.1KV	(Anchor)/ Finolex/ RR Kable/ KEI /
	grade flexible wires	Paramount /Bonton / Rallision
8	Indoor LED Light Fixtures	Havells /Philips / Lighting
-	andLamps	Technologies/Trilux
9	MCBs / RCCB/SPDs/ RCBO/	Havells/ Legrand / Schneider/
	Change over switch	C&S/LS Electric
10	MCCB with Variable	L&T (D-sine)/ Siemens(3 VL)/
	Microprocessorbased(O/C, S/C,	Schneider(NSX) / Legrand / LS
	E/F) / Thermalmagnetic	Electric
	releases	
11	OccupancySensors/ Lighting	Schneider/ Legrand/ Wipro
	Control System	
12	Fire Alarm System – Items &	As the same make of existing
	Accessories	items available at site/Available
		with Client Inventory in
		compatibility of existing system
13	(Passive Solution) CAT	Commscope/ Simone
	6/6AWire/Accessories- Jack	/Belden /R&M/Panduit
	panel / FacePlate / Optical fiber	
	cable & all Accessories	
14	Active switches/Wifi Routers etc.	Cisco/Ruckus/Aruba/Same make
		as available with Clients
4.5		inventory
15	Cctv, and PA System	As the same make of existing
		items available at site/Available
		with Client Inventory in
16	A)/ avatam	compatibility of existing system
10	AV system	As the same make of existing items available at site/Available
		-
		with Client Inventory in

S.nos	Materials	Approve Make
1	Vitreous china Sanitary ware	Hindware / Cera /Jaquar
2	PVC Flushing cistern	Hindware / Cera /Jaquar
3	WC sheets	Hindware / Cera /Jaquar
4	Stainless steel kitchen sink	Jayan / Neelkant / Nirali
5	Stainless steel Grating	Jayan / Chilly / Kitch
5	Mirror	Modi / Atul / Golden fish
6	Automatic photoelectric cell urinal Sensor	Agash/U-tech / Euronics
8	C.P.Brass fittings	Cera /Jaquar
9	Stainless Steel Bath Room Acessories	Kitch / Euoronics / Cera
10	Hand Dryer	Eouronics / Angesh / U-tech
11	Brass stop cock	Zoloto / Castle / Sant
12	RO System	Oasis WFS/ Culigan/ eurekaforbes
13	Water Cooler Fontain	Oasis/Filtrin/sunrock/Murdock
14	PVC Storage Tank	Sintex / Sheetal / Duraplast
15	Stainless Steel Pipe	J-Press/ Jindal / Tata
16	G.I.Fittings	R-Brand / Zoloto / Unik
17	G.I.Fittings	R-Brand / Zoloto / Unik
18	Brass Gate valve / Ball Valve	Zoloto / Castle / Sant
19	Butterfly Valve	Zoloto / Castle / Sant
20	RCC Pipe	I.H.P / Akshay / ISI Marked
21	DWC Pipe	SFMC / APL APOLLO / Ashirwad
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List of Approved makes for Plumbing & Sanitary

22	C.I Pipe and Fittings	BIC / RIF / NECO
23	CPVC and fittings	SFMC / flow Guard /APL APOLLO / Ashirwad
24	C.I. Manhole cover and frame	BIC / RIF / NECO
25	Gully Traps	Hind / Burn / RK
26	Foot Rest	K.K.Manhole / KGM / Equivalent