### RAMANUJAN COLLEGE

(University of Delhi) Kalkaji, New Delhi-19 Ph. No. 011-26430192, Fax No. 26421826 www.rcdu.in

Ref. No. RC/2017-18/09/717

26th September, 2017

#### TENDER NOTICE

Principal, Ramanujan College invites sealed tender from reputed, technically sound and eligible Porta Cabin manufacturer/contractor in competitive bidding system.

Name of Work:

Construction of Porta Cabins for Library and Administrative Block Near Academic Block-7. Estimated Cost – Rs. 80.00 lakhs Time of Completion – 100 days

Tender document along with terms and conditions may be obtained from the office of the undersigned on cash payment (non-refundable) of Rs. 1000/- for the above mentioned work from 27.09.2017 to 10.10.2017 on all working days between 9.30 a.m. to 4.00 p.m. Prescribed tender document containing Term & Conditions can also be downloaded from the College website-www.rcdu.in and in case of download, a Bank Draft of Rs. 1000/- in favour of Principal, Ramanujan College must be enclosed with tender documents at the time of submission.

Sealed tender will be accepted by the office of the undersigned, **Last date of submission of tender is 13.10.2017 upto 4.00 p.m.** The tenderer should technically qualified and have an experience of executing similar work during the last two year. The college authority reserves the right to reject any/all tenders without assigning any reason thereof.

(Dr.S.P. Aggarwal) Principal

Principal Ramenujan College (University of Delh) Kalkaji, New Dalhi-11001

# RAMANUJAN COLLEGE (UNIVERSITY OF DELHI) KALKAJI, NEW DELHI – 110019

### **TENDER DOCUMENT**

#### **NAME OF WORK: -**

# Construction of Porta Cabins for Library and Administration Block Near Academic Block - 7

LEAD CONSULTANTS:- ARCHITECTS CONSORTIUM

ARCHITECTS, URBAN PLANNERS,

LANDSCAPE & INTERIOR DESIGNERS CONSULTANTS E-49, PANCHSHEEL PARK, NEW DELHI - 110 017

PHONE: 46051406, 26691331

Ph No. – 26430192, 26421826 Email – ramanujancollege2010@gmail.com www.ramanujancollege.ac.in

# **RAMANUJAN COLLEGE**

# (UNIVERSITY OF DELHI) KALKAJI, NEW DELHI-110 019

#### **INVITATION TO TENDER**

	NAME OF WORKS	Construction of Por Block	ta Cabins for Library and Administration
1.	COST OF TENDER		Rs. 1,000/- ( Cash )
2.	DATE OF SUBMISSION OF TENE	DER	On or before $13.10.2017 \ \text{till} \ 4.00 \ \text{p.m.}$
3.	TENDER OFFER VAID FOR		45 days from opening of tender
4.	ESTIMATED COST OF WORK		Rupees eighty lakhs ( 80,00,000 /- )
5.	SIGNING OF AGREEMENT		Within 7 days of issue of Work Order.
6.	QUOTATION BASED ON		Sq. metre / Sq. ft rate for the works mentioned In the tender.
7.	TOTAL TENDER AMOUNT		As per financial bid.
8.	DATE OF COMMENCEMENT		Within 7 days from the award of contract.
9.	PERIOD OF COMPLETION		100 days.
10	LIQUIDATED DAMAGES BEYON OF COMPLETION	ID SCHEDULE DATE	Rupees ten thousand per day to the maximum of 10% of Contract Amount.
11	. PERIOD OF FINAL MEASUREME	ENT	Within one month after completion of work and submission of bill alongwith measurements by the contractor.
12	. EARNEST MONEY		Rs. 1,50,000/- (Rupees One Lakh Fifty Thousand)
13	. INTERIM PAYMENT		Rs. 20,00,000/- (Rupees Twenty Lakhs)
14	. RETENTION AMOUNT		5% of the value of work done + EMD
15	. INCOME TAX DEDUCTION		As per prevailing rates from each Bill
16	. TAX DEDUCTED AT SOURCE ( T	DS)	Deducted and deposited by College
17	. LABOUR CESS		Deducted and deposited by College
18	DEFECTS LIABILITY PERIOD		One year after date of completion
19	. HONOURING CERTIFICATE PER	IOD	Ten days after Consultant Architect's Certificate Issued for payment.
20	. SPECIFICATIONS		CPWD Specifications (Latest with upto date Correction slips) shall be followed.

# NOTICE OF TENDER RAMANUJAN COLLEGE

Name of the work: Construction of Porta Cabins for Library and Administration Block.

List of documents, Specification, conditions of contract etc. Bill of Quantities price bid to be submitted in envelope duly sealed and delivered in the office of Principal Ramanujan College, Kalkaji, New Delhi - 110019.

The following documents shall be submitted, Bid received without any of the following documents shall be rejected.

- 1. Demand Draft towards earnest money. (Rupees 1,50,000/-) in favour of Principal, Ramanujan College Kalkaji, New Delhi-110019.
- 2. Submit certificates of satisfactorily completing at least two similar jobs of superior quality work costing Rs. 80,00,000 /- (Rupees eighty lakhs) each in the preceding three years. The tenderer should give full name, address and telephone number of clients, so that the authenticity can to be confirmed and work can be inspected to evaluate the quality and finish etc. of the works accomplished by the contractor.
- **3.** The above documents and lists must be signed by the tenderers before submitting the tender. All documents shall be submitted in sealed covers mentioning the name of work, name and address of the contractor.
- 4. Sealed tender envelope contained draft of Earnest Money Deposit Draft (EMD)- Client's certificates of good performance and satisfactory completion of works within stipulated time frame If the completion is delayed, stating the reasons for it. Photo copy of the acknowledgement receipt of submission of Income Tax Returns for last 3 years, alongwith company financial accounts, TIN no. Service Tax No., PAN no. of Directors, partnership deed in case of partnership firm, VAT certificate etc. etc.

The sealed tender envelope to be deposited in the office of Principal, Ramanujan College, Kalkaji, New Delhi on or before 4.00 P.M. on 13.10.2017.

- 5. Sealed tender envelope shall be opened on later stage. College will inform to the tenderer or their authorized representative about opening of tender document through phone or e-mail.
- 6. Tenderers whose competency will be as per norms or found technically sound as per norms, shall only be considered for award of work.

#### RAMANUJAN COLLEGE - KALKAJI, NEW DELHI-110 019

#### **NOTICE INVITING TENDER**

#### **Construction of Porta Cabins for Library and Administration Block**

 Sealed tenders are invited on item rate basis on behalf the Principal, Ramanujan College – Kalkaji, New Delhi- 110019, from contractors with adequate financial, technical and manpower resources for the following works,:

For Construction of Porta Cabins for Library and Administration Block, the tenderers must satisfy themselves that they have adequate experience to handle this project within the stipulated time schedule. The tenderer should produce documentary proof of satisfactorily completing at least two jobs of similar nature at least costing of Rs. 80,00,000 /- (Rupees eighty lakhs) each in the last three preceding years.

The stipulated mentioned in invitation of tender.

- 2. The tender document containing terms and conditions can be obtained from the office of the Principal, Ramanujan College (formerly Deshbandhu College Evening), Kalkaji, New Delhi 110019, during office hours. (9.30 AM to 4.00 PM) on all working days from 27.09.2017 to 10.10.2017 against a payment of Rs. 1,000/- by cash.
- 3. The tenderers are advised to inspect the site, examine the drawings and make all investigation regarding the extent of work, its scope and conditions under which the work is to be executed. No claim for any extra payment of any kind on account of lack of information about the site conditions or otherwise shall be entertained after the award of the Contract.

#### 4. THE RATES QUOTED SHALL BE INCLUSIVE OF THE FOLLOWING:

The tenderers are requested to strictly observe the entire following procedure for submission of the duly filled in tender. The quantities are based on rough estimates and the Consultant Architect / employer reserves the rights to vary the same depending upon the contingencies. No claim of whatsoever nature will be entertained on this ground. The tenderer shall indicate the rates in the column provided for inserting the rates, to which he/she proposes to undertake the work described in the respective column. The rate shall include all items of material, fitting, and fixtures pertaining to civil, plumbing, sanitary, electrical works etc. The rates shall include preparation of any shop drawing if required to obtain approvals and all other aspects of cost such as labour, materials, plants, equipment's, transportation, all taxes, VAT, GST etc., duties, royalties & cess etc. All items shall conform to ISI approved makes as specified in the tender. On no ground will the tenderers be allowed to amend, enhance or reduce the rates after submission of the tender. The rate quoted shall correspond to the unit indicated in the schedule of the Quantities and Rates.

- The complete tender document duly filled in as stated above shall be submitted in sealed envelope to the Office of the Principal, Ramanujan College – Kalkaji, New Delhi – 110 019 on or before 4.00 P.M. on 13.10.2017.
- 6. Tenders received later than the stipulated time and date shall not be considered.

- 7. General Conditions relating to Clauses of Contract.
  - 1. Retention Money @ 5% of the billed amount to be deducted from each bill.
  - 2. 1% of the Contractor's billed amount shall be charged / deducted as water charge from the contractor's bill.
  - 3. Actual consumption of electricity shall be charged as per sub meter installed in case electricity is being used from the college electric connection.
  - 4. Deduction of all applicable taxes and labour cess, Tax Deducted at Source shall be deducted from the Contractor's bill and deposited by the college to appropriate agencies.
  - 5. The work shall be executed as per requirements of the Bill of Quantities, Technical Specifications and strictly as per attached drawings.
  - 6. The Rate quoted in BOQ shall include all fittings and fixtures to make the work completely operational regardless if details in BOQ are given or not. Nothing extra shall be payable.
  - 7. Final completion certificate shall be issued after the building and external works are complete as certified by the Engineer with all required connections for main Electric supply, drainage lines, sewerage connection, and water supply. The rates quoted for Porta cabins are inclusive of the cost of above lines and services nothing extra shall be payable for these lines and services.
- 8. The tender documents shall be signed by the authorized signatory. The tender documents shall not be amended, corrected, defaced, altered, except at the places where tenders are stipulated to do so. The tender set corrected or altered as stated above is liable to be rejected.
- 9. Within 7 days of the award of Contract by the Employer the successful tenderer shall be required to enter into a formal agreement. Failure on the part of the Contractor to do so shall make him liable to forfeit his claim to refund of the Earnest Money and under such the subject work through another agency.
- 10. The offer of the tenderer shall remain open upto 45 (forty five ) days from the date of opening of the tender.
- 11. The Employer reserves the right to reject any or all of the tenders, either whole or in part without assigning any reasons.
- 12. Tenders submitted without a valid Earnest Money shall be disqualified.

Principal

Ramanujan College – Kalkaji New Delhi – 110 019

#### LETTER OF ACCEPTANCE

The Principal RAMANUJAN COLLEGE UNIVERSITY OF DELHI KALKAJI, NEW DELHI – 110019.

SUB: CONSTRUCTION OF PORTA CABINS FOR LIBRARY AND ADMINISTRATION BLOCK AT RAMANUJAN COLLEGE, KALKAJI, NEW DELHI – 110 019

#### Dear Sir,

- 1. With reference to the tender invited by you for the work under reference, we hereby offer to perform, provide, execute, complete and maintain the work in conformity with the articles of Agreement, Specification, and Additional Specifications. Bills of Quantities as per directions of the Employer / Consultant from time to time for the Sum of amount submitted in the Bid as detailed in the Master Summary and at the respective rates in the Bills of Quantities within stipulated time frame from 7 days of award of the Contract.
- 2. We have satisfied ourselves as to the locations of the Site and Working Conditions, examined the drawings and specifications and have obtained all the information's necessary for the successful and timely completion of the work.
- 3. We have deposited the earnest money as stipulated in the invitation to tender with you which amount is not to bear any interest. We hereby, agree that shall stand forfeited in the event of your acceptance of our tender and failure on our part to commence the work within seven days from the date of the order. In addition the employer shall be at liberty to execute the work at our risk and cost as per the terms of the Contract.
- 4. We understand that you are not bound to accept the lowest tender or bound to assign any reason, for rejecting our tender.

Dated :	Signature of the Contractor
	Seal

#### **RAMANUJAN COLLEGE**

#### **ITEM RATE TENDER & CONTRACT FOR WORKS**

#### **GENERAL RULES & DIRECTIONS**

- 1. In the event the tender being submitted by partnership firm, it must be signed other separately by each partner thereof or by a person holding power of attorney, authorizing him to do so; such power of attorney shall be submitted along with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act. In the case of Limited Company registered under Companies Act, 1956, it must be signed by person duly authorized by the Company and such authorization shall be furnished along with the tender.
- 2. The rates must be quoted in Rupees and paisa both in words and in figures.
- 3. The tenderer shall sign a declaration for maintaining confidentiality of tender documents, drawings or any other record connected with the work given to them. The unsuccessful tenderers shall return all tender documents given to them.
- 4. The unit rates quoted by the Contractor shall prevail in case of discrepancies if any.
- 5. The rates quoted in words will be considered to be correct and govern and not the rates shown in figures, in case of discrepancy between them.
- 6. If it is found that the tender is not submitted in the proper manner, or contains too many corrections or absurd rates or amount, it would be open for the Employer/Consultants to reject the same.
- 7. Any correction to rates and amounts written by tenderers shall be by clearly tricking out of unwanted writing and initialling the desired writing. Repeated correction on an item shall invite disqualification of the tender.

#### **CONDITIONS OF CONTRACT**

#### 1. EXTENT OF WORK:

The Contractor shall execute/complete the work strictly in accordance with the relevant drawings and specifications prepared as per details, drawings, directions, instructions, specifications and orders that may be given to the Contractor by the Engineer / Employer / Consultant from time to time. The Contractor shall also carry out such changes, alterations, modifications, as may be decided upon by the Employer during the progress of work.

#### 2. QULAITY OF WORKS:

The work shall be executed with materials and workmanship of the respective kind, desired and described in the specifications for the work and as required as to the complete satisfaction of the Consultant Architect / Employer, Wherever a specific material is specified, the Employer may ask the contractor to obtain a certificate to the effect that the material is of the specific manufacturer. All material used at site must be of approved makes. In case any material of approved make is not available, it must have ISI certification and got approved by the Competent Authority.

#### 3. RATES:

The Employer shall pay the Contractor, who shall receive the payment is respect of the work executed as per the schedule of quantities and quoted approved rates in the tender herewith duly accepted by both the parties.

#### 4. TIME / WORKS PROGRAMME:

The Contractor shall begin the work within seven days of the written order to commence the work, which he may receive from the Employer and shall proceed with the work without stoppages or suspension and with all due care, diligence and expedition and complete the same together with all extra and additional work as may be decided upon and orders by the employer and execute/complete the entire work in every respect as per approved works program submitted by the Contractor and latest by the following dates:

**4.1** Date of Commencement of the Works shall be reckoned form the 7<sup>th</sup> day of award of work latter.

### 4.2 Period of completion of the work: 100 days

- 4.3 Time shall be essence of the contract and decision of the employer in the matter of date of starting, progress of execution and completion of the work, shall be final and always binding upon the Contractor.
- **4.4** If the Contractor fails to start the above work as mentioned above or shall stop or suspend the work or fail to complete the work as provided in the works program within the dates specified herein or within extended time (Granted) the contractor shall pay the employer by way of liquidated damages and further damages to the Employer @ Rs.10,000/- per day subject to a max of 10% of the contract amount.
- **4.5** If in the opinion of the Employer the work is delayed.
- (a) By any unforeseen circumstances having no fault on the part of the Contractor.

OR

(b) By delay of work by other Contractors or workmen engaged by the employer.

OR

(c) By reason of authorized extra additional work.

OR

(d) From other causes beyond the control of the contractor.

The employer may give such reasonable extension of time at his sole discretion for the completion of work provided however, that the best of endeavors to prevent the delay has been made by the Contractors.

4.6 Provided always that the Employer shall not be bound to wait beyond 10 days of delay and payment of the prescribed penalty will not entitled the Contractor to delay the work indefinitely. If the completion of the work is delayed beyond reasonable extended, the employer shall be entitled to terminate this contract and get the work done through other agencies, entirely at the risk and cost of the Contractor over and above liquidated damages payable on delay of completion.

#### 5. INTERIM ADVANCDE PAYMENT:

The Employer may pay to the Contractor interim payment amounting not less than Rs. 20,00,000/- (Rupees Twenty Lakhs) for work actually executed at site.

The issue of interim certificate by the Engineer / Consulting Architect and interim payments made by the employer shall not be considered to mean that the work is passed and shall in no way prejudice the right of the Employer to reject the work or any part thereof, being defective on any later date or at the time of final completion.

#### 6. COMPLETION CERTIFICATE AND FINAL PAYMENTS:

After completion of the works under various items, the joint measurements of the actual work done by the contractors will be recorded in presence of the Contractor and Engineer or their representatives and the same will be forwarded to Consultant Architect for verification. After verification, the Contractor will prepare his bill based on the quantities obtained therein. The bill submitted by the Contractor will be recommended to the Employer for payment after due verification and vetting of the Consultant Architect.

In the event, even after receipt of notice in writing, if the Contractor or his representative is not attending the joint measurements, the Engineer or his representative and Engineer will arrange to record the measurements unilaterally and the same will be treated as final and binding on Contractor.

It is further provided that no final or other certificate of payments or of completion acceptance or settlement of the account in any circumstances shall relieve the Contractor from his liability of wilful unauthorized deviation from the drawings, specifications, schedule of rates and quantities, instructions and directions from time being binding upon him.

#### **6.A CANCELLATION OF CONTRACT**

Notwithstanding anything mentioned otherwise in this Agreement and without prejudice to any other rights, the employer may or his own opinion terminate the contract on account of any of the following acts of the Contractor.

- 1. Inefficiency, negligence or dishonesty on the work.
- 2. Liquidation or insolvency of the Contractor.
- 3. Failure to commence the work within seven days from the date of order to commence.

- 4. Deliberate and repeated failures to carry out reasonable instruction and order of the Consultants Engineer/Employer relating to the contract.
- 5. Unsatisfactory progress of work.
- 6. Usage of sub-standard materials or bad workmanship.
- 7. The opinion of the employer shall be final and binding when the contractor has committed any of the aforesaid act.

#### 7. VARIATION AND EXTRAS:

The Employer and the Contractor agree that the Employer reserves to themselves the right to make any alterations or deviations from the plans or specifications which shall not vitiate this contract but that all such variations and deviations shall be measured and valued and paid for as the Employer may decide, except for the extra work executed without authority and / or authorized instruction of the Employer. All such extra work shall be carried out after the written permission of the Employer / Consultant Architect and rates approved prior to execution of the work.

#### 8. DEFECTIVE MATERIALS OR WORKMANSHIP:

Should any materials brought to the site or used, be of interior quality or otherwise unsuited for the work or not in accordance with the specifications or any work executed be found to be defective, unsound or badly finished: the contractor shall. On receipt of 24 hours' notice from the Employer; remove the materials, re-execute the work at his own cost to the entire satisfaction of the Employer.

#### 9. DEFECT LIABILITY PERIOD: -

In the event of the work developing any defect within one year form the virtual completion date, the Contractor shall, on receipt of a written notice from the Employer make good the loss or correct the defect to the satisfaction of the Employer within 15 days of the said notice, failing which the defects shall be got rectified/attended/reconstructed at the risk and cost of the contractor.

- 10. The Contractor shall not deposit materials on the site, which will seriously cause inconvenience to the students/staff/public/guests etc. The Employer direct the contractor to remove any materials which are considered by him to be dangerous or likely to cause inconvenience to students/public/staff etc. and if they fail to do the needful, the same shall be removed at Contractor's risk and cost.
- **11.** While the works are in progress, all the materials used or to be used in the works, the same shall remain at the Contractor's sole risk and shall not be entitled to any compensation for damages destruction of such works or materials arising out of any cause whatsoever.
- 12. The Contractor shall keep the Employer indemnified from any claims, costs, charges or expenses or injury to any persons whether workmen or not and/or property while working at site and the Employer shall not be bound to defend any claim brought under the Government Workmen's Compensation Act. Labour laws of others statutes if any such injury or loss due to any enactment for the time being in force.

- 13. If the Contractor or his workmen whether negligently or otherwise cause any damage or loss to any property, fixtures, of the Employer lying in the premises; the Contractor shall make good the damage or reimburse such losses to the Employer. The Employer shall always be entitled to deduct any amount of such losses from the amount payable to the Contractor.
- **14.** All minor variations in dimensions and specifications due to site conditions and all incidentals thereto relating to work shall be carried out without any extra work cost.
- **15.** The whole contract shall be a Works Contract" and the rates quoted by the Contractor shall include for the complete finishing of all items of work and final cleaning of the site etc. All applicable sales tax, excise duty if any on "works contract" shall be paid and borne by the Contractor.

#### **16. RATES AND REFERENCE:**

Rates quoted for work as per Schedule of Quantities and Rates, Brief Specifications and the drawing annexed shall form basic reference for cost and design. The Employer or his representative shall have the option to alter and modify the design. Detail within the cost reference of relevant items, as equivalent alternative item, before taking up the relevant works.

- 17. The reference drawings, sketched and brief specifications are indicated for various items for which the prices have been quoted. In the event details and brief specifications not becoming clear it shall be left to the discretion of the Employer or his representative to suitably provide detailed clarifications within the concepts of the design and the price factor and no extra cost shall be admissible except for an entirely new extra work.
- 18. The Rate for all additions / extra items will be worked out on the basis of rates quoted for similar items in the contract wherever existing or derived from the latest Delhi Schedule of Rates prepared by Central Public Works Department of the Government of India or on engineering rate analysis based on prevalent fair wage of labour, price of other material components.
- **19.** The Employer shall be at liberty to omit in part/ entirely all such provisional items and works and may get them done from relevant agency directly. The Contractor shall have no claims on account of such omissions, exclusion etc. the necessary detail/concept/selection of provisional items/ works shall be left to the discretion of the Employer within the price factor of the rates and amounts provided in the schedule.
- **20.** The **Contractor shall submit a "Work Schedule along with Bar Chart" and "Procurement Chart" for proper monitoring within a week from award letter** as it is a time bound work. Involving penalty. The Contractor shall endeavourer of complete the work in specified time.

#### 21. SHOP DRAWINGS AND SAMPLES:

Drawings/Designs, standard details provided in the contract are indicative as the basis of Contractor's quoted rates.

Contractor shall submit the roof covering design of the Porta Cabins structure alongwith fabrication and installation details of rain water gutter for collection and disposal of rain water into the rain water harvesting structure. The Porta Cabins contractor will have to bring down rain water from roof to the Gully pit on the ground level. The location of rain water pipes will have to be conveyed to the contractor responsible for construction of Foundation and Plinth who will be constructing these Gully Pits. In case of any discrepancy in the location of gully pits located by the Foundation and Plinth Contractor the Porta Cabins contractor will have to alter the location at his own cost

Contractor shall produce samples and take approval from Consultant Architect / Employer of all materials to be used in all the works, well in advance for maintaining uninterrupted placement of orders and manufacturing activities. Such samples/catalogues may include built — in — items of works, detailing and methodology including general, civil, electrical, plumbing and finishing and miscellaneous items from time to time.

#### 22. TERMS OF PAYMENT:

For a minimum amount of Rs. 20,00,000 /- (Rupees Twenty lakhs) of works actually executed at site, and measured interim payments shall be made to the Contractor against running account bills, which shall be evaluated and duly certified by the Engineer and the Employer shall make the payment within 10 days after the issuance of certificate of payment by the Engineer / Consultant Architect.

#### 23. REFUND OF EARNEST MONEY:

23.1 The "EARNEST MONEY DEPOSIT" will be refunded within 30 days of granting of "COMPLETION CERTIFICATE" for the work, by the Consultant Architect / Engineer / employer provided of course the Contractor has satisfactorily handed over all the executed works and vacated and cleared the work site to the satisfaction of the Employer.

#### **24. RETENTION MONEY:**

- **24.1** 5% of the contractor's each running account bill value shall be retained as "Retention Money". Retention money amount shall be released on successful completion of defect liability period. No interest shall be payable on earnest money / retention money.
- **24.2** If the Contractor fails to rectify the notified detect during the said Defects Liability Period within 15 days of issue of such notice to him, the cost of such defects and losses will be adjusted from the retention money due to him.

#### **ARTICLES OF AGREEMENT**

ARTICLES OF AGREEMENT made at	this day
of between the Principal, Ramanujan College – Kalkaji, New	Delhi- 110 019. (Hereinafter
referred as the "Employer" which expression shall include their he	eirs, Executors, Administrators
& Assigns) of the one part and M/s	the Contractor (which
expression shall include their heirs, executors, administrators and	assigns) of the other part.

WHEREAS the Employer is desirous to carry out the Construction of porta cabins in the Ramanujan College – Kalkaji, New Delhi -110 019, and has caused drawing and specification describing the work to be done, prepared by the Consultant Architects (hereinafter referred to as the Consultant Architect / Engineer ) and WHEREAS the specifications and the Priced Bills. schedules of Quantities have been signed by or behalf of the parties hereto and WHEREAS the contractor has agreed to execute upon the subject to the conditions set forth herein (hereinafter referred to as "The said conditions General or Special") work shown upon "the said drawings and described in the said Specification" the said Bill/Schedule of Quantities, to the respective rates mentioned in the Bills/Schedule of Quantities constituting the tender documents.

#### **NOW IT IS HEREBY AGREED AS FOLLOWS:**

Consideration of the payment to be made to the Contractor as hereinafter provided he shall upon and subject to the said conditions execute and complete the work upon the said drawings and such further drawings as may be furnished to him by the said Employer/Consultant Architect / Engineer and described in the said Specifications and the Said Schedule of Quantities.

The Employer shall pay the contractor such sums as shall become payable hereunder to the time and in the manner specified in the said conditions.

The tender documents shall be read and construed as forming part of that Agreement, and the parties hereto will respectively abide by and submit themselves to the Conditions and Stipulations and perform the Agreement of their parts respectively in the tender contained.

The Employer reserves to himself the right of altering the drawing and nature of the work and adding to or omitting any items of work or of having portion of the same carried out departmentally or otherwise and such alterations or variations shall be carried out without prejudice to the Contract.

As witness our hands that day of 2017

Signed by the Employer in the presence of (Contractor)

WITNESS

Principal

Ramanujan College

Kalkaji, New Delhi-110 019

# **RAMANUJAN COLLEGE**

# (UNIVERSITY OF DELHI) KALKAJI, NEW DELHI – 110019

Tel: 26430192 email: ramanujancollege2010@gmail.com website: www.ramanujancollege.ac.in

#### Name of Work: - Construction of Porta Cabins for Library and Administration Block

Conditions particular to this contract and specifications

Rates are to be quoted on Plinth Area basis for the Porta Cabins and verandahs (inclusive of Drinking Water Area) separately / individually.

#### **GENERAL:-**

The work under this contract shall be carried out in accordance with Schedule of works of various sections, particular specifications drawings forming part of this contract and conditions of this contract.

#### **SAMPLES OF MATERIALS / SOURCE: -**

The materials to be incorporated in the work by the contractor shall conform to or be superior in quality as specified in relevant IS codes.

#### **SOURCES:-**

(a) Coarse Sand - Stone dust / River sand / Badarpur

(b) Fine Sand - From Yamuna

(c) Broken or crushed stone - From Sohna / Ayanagar / Pali

Aggregate

(d) Burnt bricks - From kiln local

#### **SCOPE OF WORK:-**

All work mentioned in schedule of works of various sections and general summary to the extent shown in drawings if any and / or described in particular specifications are included in the scope of this contract.

#### **CEMENT:-**

Cement shall be procured by the contractor from the authorised dealers /main producers of cement as enumerated below: -

- (i) Birla corporation Ltd (Cement division)
- (ii) JK Lakshmi cement
- (iii) Shree Ultra
- (iv) Lakshmi Cement
- (v) Gujrat Ambuja Cement
- (vi) ACC Ltd

The cement shall conform to chemical requirements and physical requirements as specified in respective clauses of IS 269.

#### STORAGE: -

Cement shall be stored over dry platform atleast 20 cm high in such a manner as to prevent deterioration due to moisture. In case of store room the stock should be atleast 20 cm above floors and away from the walls.

#### **DOCUMENTATION: -**

The contractor shall submit original purchase vouchers from the supplier for the total quantity of cement supplied under each consignment to be incorporated in the work. A photocopy to be forwarded to the Principal. The original vouchers shall be defaced by the concerned authority and kept on record. The entire quantity of the cement shall also be suitably recorded in the measurement book for record purposes before incorporation in the work and shall be signed by the concerned authority and the contractor.

### FINE AGGREGATE (SAND): -

Fine aggregate for all concrete works shall be of Badarpur / River sand / stone dust conforming to IS 383.

#### **COARSE AGGREGATE:-**

Coarse aggregate for all cement concrete work shall be broken or crushed stone conforming to IS 383.

FINE SAND - River Yamuna

All mixes of concrete and mortar mentioned in the tender documents shall be by volume.

#### **MIXING AND CONSOLIDATION OF CONCRETE: -**

All cement concrete shall be mixed in mechanical mixers. Hand mixing may be permitted where the quantity of concrete is small.

All reinforced cement concrete shall be consolidated by mechanical vibrator.

#### **EXCAVATION AND EARTH WORK: -**

Excavation in trenches in soft / loose soil.

Earth obtained from excavation and approved by concerned authority shall be used for filling around foundations.

Surplus spoil obtained from excavation shall be used in earth filling under floors.

#### **BRICK WORK: -**

The size of the brick shall be 23 x 11.3 x 7.5 cm of compressive strength 75 kg / sqcm. Permissible tolerance on the dimensions of the bricks shall be  $\pm$  3%. Brick work shall be built in cement mortar (1:4).

### **DAMP PROOF COURSE: -**

Damp proof course shall consist of 40 mm thick layer of cement concrete (1:2:4) as indicated. DPC shall run the full width of the wall just below it. DPC shall be provided in all openings at plinth level.

#### **FOUNDATION CONCRETE: -**

Cement concrete (1:4:8) using 40 mm graded stone aggregate.

The foundation for walls shall be about 450 mm to 750mm below the existing ground level depending on existing ground profile over 75 mm plain cement concrete 1:2:4 (1 Cement: 2 Course Sand: 4 Stone aggregate) as leveling base and 300mm to 700mm brick work as per drawing. (Ground Profile)

The plinth level of porta cabin class rooms shall be about 450 mm and plinth level of verandah shall be about 12mm lower than the rooms i.e. 438mm having 25mm slope towards the outer edge of verandah as per drawing to prevent any puddling of water in the verandah.

The rate quoted shall be inclusive of all Civil Work above Foundation and Plinth work complete. No extra payment shall be made for Civil work done above the plinth area of the Porta Cabins and Verandah.

#### **STRUCTURE:-**

Structure will be made from MS tube of size  $100 \times 100 \times 6$ mm thick pillars for support @ approximately 3750mm centers. The height of the walls of Porta Cabins will be variable to suit the ground profile as per site condition. The minimum height below false ceiling shall be retained as 3300mm within the Porta Cabins. Shop drawing for the proposed structure will have to be submitted to the Architect / Engineer In Charge for approval, prior to execution at site.

#### WALL:-

Providing and fixing of 50mm thick Aerocon Panels (Cement bonded Board) fixed between 50x25x0.63mm G.I. C sections from top & bottom side. 60x60x1.25mm MS tubular pipe fixed after every 10' distance for roof and wall strength. Texture paint coating from both side of the wall super fine make brand etc. (Asian / Jenson & Nicholson / Berger Paint)

#### ROOF:-

Providing and fixing of Roof frame made with MS tubular pipe 70x40x2mm for truss and purling 65x38x1.5mm coated with red oxide primer two coats of Berger paint brand. 60mm thick PUF Panel 40 kg. density sandwiched between 2 nos. 0.5mm thick PPGI sheet, fixed on top of the MS tubular frame with 75x5.5mm self-tapping screws Pata Make etc.

#### **VERANDAH ROOF (INCLUSIVE OF DRINKING WATER AREA): -**

Covered open verandah of approximately 2000mm width with 600mm roof projection shall be provided on front side.

The plinth area of room and verandah shall be paid under their respective rates. No payment shall be made for roof projection beyond built up plinth area of Porta Cabins and verandah floor.

#### **FALSE CEILING: -**

Providing and fixing Armstrong make (Brand) Dune RH99 tiles false ceiling complete with 600x600x16mm (dust free) tiles and grid section of powder coated M.S. sheet and galvanized in accordance with Microlock zinc coating upgrade of Microlock (XL 15mm) of Armstrong Brand shall be provided for entire area except verandah and drinking water area.

#### **DOOR FRAMES: -**

Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment and finishing with synthetic enamel paint complete.

#### **DOOR SHUTTERS:-**

Providing and fixing Flush Door shutter 35mm thick, 2200mm high of varying width of M/s Century plywood / Green Plywood. Inclusive of making rebate and fixing 2<sup>nd</sup> class teak wood edging on all side of flush doors. Also providing and fixing 200 x 600mm high vision panel of 6mm toughened glass. Duly treating flush doors with anti termite solution complete with enamel paint and complete hardware Steel Hinges, L Drop, stainless steel D handles 300mm high, stainless steel 10mm dia Tower Bolt 300mm high, Door King Door Closer and Door Stopper etc.

#### **LOUVERS:-**

Providing and fixing of Aluminium Louver Frame Tubular section of 50 x 25 mm 18 g. with infill 75 mm x 2mm Aluminium Louvers in natural color of Aluminium to be fixed in door frame above the door shutter.

#### WINDOW: -

Providing and fixing of Anodized natural colour aluminium sliding windows fabricated in not less than 2.5mm thick sections of size as per drawing with complete heavy duty fittings and fixtures vis tower bolts, handles, sturdy locking arrangement with M.S. grill to each window. Two track windows with frame and 5mm thick tinted glass of St. Gobain make fixed with rubber gaskets to prevent rattling of glass. Providing and fixing M.S. Grill outside the windows made from square tube section size 12mm x 12mm x 2mm thick complete with Red oxide Primer and approved shade and make of Enamel Paints etc. as per drawing Aluminium Section to be got approved from the Consulting Architect alongwith all fixtures and fittings prior to installing them.

VITRIFIED TILE FLOORING & SKIRTING IN ROOMS AND VERANDAHS OF PORTA CABINS: - Providing and laying vitrified floor tiles  $600 \times 600$ mm (with water absorption less than 0.08 % and conforming to I.S. 15622) of approved make, colors and shade over 20mm thick cement mortar 1:4 (1 Cement: 4 coarse sand) including grouting the joints with white cement and matching pigment etc. complete (Base rate of Tile is Rs.  $60 \setminus Sqft$ .) tile RAK \ SOMANY \ KAJARIA brand. The level of floor finish in verandah shall be variable to suit the finish floor level of Porta Cabins as indicated in the drawings. 100mm high skirting shall be provided on all walls of rooms and verandahs.

#### KOTAH STONE FLOORING IN STACK ROOM OF LIBRARY AND GYMNASIUM: -

Providing and laying Kota stone 25 mm thick slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1:4 (1 cement: 4 coarse sand).

#### **PAINTING OF FOUNDATION / PLINTH WALLS: -**

Foundation Walls will be finished with two or more coats water proofing cement paint of required shade applied at 3.8 kg. / 10 Sqmt. over proper finished base complete.

#### PAINTING OF VERANDAH AND PORTA CABINS WALLS: -

Super structure walls will be finished with Two or more coats of textured exterior paint of required shade applied @ 3.28 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20kg/10 sqm

#### **RAIN WATER PIPES: -**

Upvc pipes of 150 dia 6kg. \ Rmt. and 200 dia 8 kg. \ Rmt. laid on bed of concrete.

#### **ELECTRICAL WORK: -**

Complete Electric fittings and wiring for ceiling and walls inclusive of :

#### 1. Main distribution boards, sub distribution boards & distribution boards:

- a. Supplying and fixing 8 way and 12 way double door SP&N steel sheet MCB distribution board of 240 volts on surface/ recess complete with tinned copper bus bar, neutral link, earth bar, din bar, interconnections, powder painted including earthing etc. as required.
- b. Supplying and fixing of 6 way and 8 way double door prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.
- c. Supplying & fixing 5 amps to 32 amps rating 240 /415 volts C series, Miniature Circuit Breaker single pole in MCB DB complete with connections, testing and commissioning etc. as required.

- d. Supplying & fixing of 32A DP RCBO, 240 volts, 2 Pole in MCB DB complete with connections, testing and commissioning etc. as required.
- e. Supplying & fixing of 63A FP RCBO, 415 volts, Four Pole in MCB DB complete with connections, testing and commissioning etc. as required.
- f. Supplying & fixing of single pole blanking plate in MCB DB complete etc. as required
- g. Providing & fixing of M.V. danger notice plate of 200 mm x 150 mm, made of mild steel, at least 2 mm thick, and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.

#### 2. Circuit cum point wiring:

- a. Wiring for light point/ fan point/ exhaust fan point etc. with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC 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.
- b. Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.
- c. Wiring for circuit/ submain wiring along with earth wire with appropriate sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required
  - i. 2x 2.5 sqmm+ 1x 2.5 sqmm earth wire
  - ii. 2x 4 sqmm+ 1x 4 sqmm earth wire
  - iii. 4x 10 sqmm+ 2x 6 sqmm earth wire
  - iv. 4x 16 sqmm+ 2x 6 sqmm earth wire
- d. Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).
- e. 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.
- f. Supplying and fixing of two module Stepped type electronic fan regulator (one dedicated regulator per fan) on modular plate & switch box including connections as required.
- g. Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.
- h. Supplying and fixing as required 150x150x60mm deep metal box on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc where required.
- Supplying and fixing of 20, 25 and 32mm medium class PVC conduit along with accessories in surface / recess including cutting the wall and making good the same in case of recessed conduit as required.

#### 3. Low current services:

a. Supplying and drawing 2 pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the surface/ recessed steel/ PVC conduit as required.

- b. Supplying and drawing UTP 4 pair CAT 6 LAN cable in surface/ recessed steel/ PVC conduit as required.
- c. Supplying and fixing telephone switch/ socket outlet in modular plate & switch box including connections as required to EPABX.
- d. Supplying, installation, testing and commissioning of 10 pair tag block, krone type enclosed in MS enclosure of suitable size with lockable cover.
- e. Supplying and fixing one or two modules, 75 x 75mm GI box along with modular base & cover plate for modular switches in recess etc as required.
- f. Supplying and drawing of 10 pair cable of 0.61 mm diameter anealed tinned copper conductor (ATC) PVC insulated and PVC sheathed armoured on surface/ cable tray or through existing treanch/pipe etc. complete as required.

#### 4. Fixing of light fixture & fan:

- a. Supplying, installation, testing and commissioning of Fans & Light fittings with Electronic Ballast (THD<10%, HF-P), starter, control gears, lamps holder, transformer etc. as called for and flexible wires including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required for fixing including providing of Lamps as required.
  - a. 1 x 36 watt 600 x 600mm recess mounting type LED light fixture complete with all accessories as required. (Bajaj \ Wipro \ Philips make)
  - b. Circular ceiling recessed 12 way LED light complete with all accessories as required.
     (Bajaj \ Wipro \ Philips make)
  - c. 20 watt LED straight linear batten (Bajaj \ Wipro \ Philips make)
- b. Supplying, Installation, testing and commissioning of ceiling fan, including wiring the down rods with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing circular / hexagonal M.S sheet ceiling fan box with clamp of internal dia 140 mm,73 mm height, 3 mm thick rim, top and bottom lid of 1.5 mm M.S sheet. Lids shall be screwed into M.S box by means of 3 mm round headed screws, clamps shall be made of 12 mm dia M.S bar bent to shape as per standard drawing with overall length as 80 cm. and providing and fixing phenolic laminated sheet cover on the fan box etc. as required.
  - a. Double ball bearing motor, blades, downrod, canopy, capacitor, regulator etc. suitable for operation on 230 volts 50 Hz A.C. supply complete as required. Size 1300mm. (Bajaj \ Crompton make)
- c. Supplying, installation, testing and commissioning of exhaust fan including connections etc. as required.
  - a. Single phase 230 volts, 50 Hz AC supply complete with motor, capacitor, louvers / shutters etc. complete as required. 300mm 1400 RPM (Havells \ Crompton make)

#### 5. Lan system:

Supply, installation, testing & commissioning of Cat. 6 RJ45 information outlets 1 Module in box completed as required. (Legrand  $\ L \ T \ Make)$ 

#### 6. CCTV System

Conduting only for CCTV system as per Architectural Drawings.

#### 7. Speaker System

Conduting only for Speaker System as per Architectural Drawings.

# Ramanujan College, Kalkaji, New Delhi - 110 019 University of Delhi

# **Construction of Porta Cabins for Library and Administration Block**

# **BILL OF QUANTITIES**

### LIST OF DRAWINGS FOR PORTA CABINS

- 1. Part Site Plan
- 2. Layout Plan
- 3. Class Room Plan with Area
- 4. Typical Class Room Furniture Detail
- 5. Typical Class Room Electrical Layout
- 6. Typical Section
- 7. Door & Window with Grill Detail
- 8. Storm Water Layout

# **BILL OF QUANTITIES**

# Ramanujan College - Kalkaji, New Delhi-110 019 University of Delhi

# **Construction of Porta Cabins for Library and Administration Block**

S. No.	Description	Unit	Qty	Rate	Amount
1	Area of Porta Cabins to be constructed as per drawings and specifications complete including all finishing and related electrical work as per drawing complete.				
		Sqft.	10225		
2	Area of Corridor to be constructed alongwith Porta Cabins including Drinking Water Area complete including all finishing and related electrical work as per drawing complete.	Sqft.	2240		
3	Providing and laying uPVC pipe vertical and horizontal for rain water pipe 150mm dia as per IS : 12818, 6kg./Rmt.	Rft.	360		
	Providing and laying uPVC pipe horizontal for rain water pipe 200mm dia as per IS: 12818, 8kg./Rmt.	Rft.	470		
4	Providing and laying Cement concrete 1:5:10 (1 Cement:5 Fine Sand:10 Graded Stone aggregate 40 mm nominal size) alround for uPVC pipe / uPVC pipe including bed concrete as per standard design.				
	110mm dia meter pipe	Rft.	25		
	200mm dia meter pipe	Rft.	470		
5	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings & frames, railings etc.	Kg.	20		
6	Providing and fixing 15 cm wide, 45 cm overall semi- circular plain G.S. sheet gutter Existing with iron brackets 40x3mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes complete.	Rft.	430		
7	Estimate for additional civil work for toilets / plumbing / sewerage fittings and fixtures complete.	Item Rate			
	Total				

# BOQ SUMMARY SHEET FOR CONSTRUCTION OF FOUNDATION AND PORTA CABINS FOR LIBRARY AND ADMINISTRATION BLOCK

S. No.	Description	Amount
Α	BOQ FOR CONSTRUCTION OF FOUNDATION AND PLINTH	
	PLATFORM FOR PORTA CABINS & VERANDAH FOR LIBRARY	
	AND ADMINISTRATION BLOCK	
В	BOQ FOR CONSTRUCTION OF SUPERSTRUCTURE (INCLUSIVE	
	OF TOILETS) FOR PORTA CABINS & VERANDAH FOR LIBRARY	
	AND ADMINISTRATION BLOCK	
С	BOQ FOR ELECTRICAL WORKS IN PORTA CABINS AND	
	VERANDAH FOR LIBRARY AND ADMINISTRATION BLOCK	
	TOTAL (A+B+C)	

#### RAMANUJAN COLLEGE

### UNIVERSITY OF DELHI Kalkaji, New Delhi - 110 019

# BOQ FOR CONSTRUCTION OF FOUNDATION AND PLINTH PLATFORM FOR PORTA CABINS & VERANDAH FOR LIBRARY AND ADMINISTRATION BLOCK

DSR Code	Description	Unit	Qty	Rate	Amount
1	Excavation				
1.1	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 All kinds of soil.		393.33		
2	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 watering, lead up to 50m and lift upto 1.5m.	cum	246.32		
2a	Spreading and levelling earth filling Under floor in layers not exceeding 25cm thick well ramming and watering including bringing good Earth from outside.		155.56		
3	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	cum	91.35		
4	Plain Cement Concrete				
4.1 4.2	Providing and laying in position cement concrete of specified grade including the cost of centering and shuttering - All work up to plinth level: 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) 1:4:8 (1 cement : 4 fine sand : 8 graded stone aggregate 40mm		86.63 32.65		
	nominal size)				
5	Damp Proof Course  Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size).	Sqm	89.02		
6	Brick Work				
	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:		470.00		
6.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	172.29		
7	Finishing Work		50.70		
7.1	12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand)	Sqm	50.72		
8	Providing and laying 60mm thick faciory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved s;ze, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.		30.00		

DSR Code	Description	Unit	Qty	Rate	Amount
9	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	Cum	1.20		
	Total (A)				

# RAMANUJAN COLLEGE UNIVERSITY OF DELHI

Kalkaji, New Delhi - 110 019

# BOQ FOR CONSTRUCTION OF SUPERSTRUCTURE (INCLUSIVE OF TOILETS) FOR PORTA CABINS & VERANDAH FOR LIBRARY AND ADMINISTRATION BLOCK

Note:- Quote rate for complete job item for providing, installing and making fully operational with plumbing and drainage work inclusive of water supply uPVC pipe from Overhead water tank to all fittings and fixtures complete.

DSR Code No.	Description	Unit	Qty	Rate	Amount
1	Area of Porta Cabins to be constructed as per drawings and specifications including all finishing complete excluding electrical works only.		9400		
2	Area of Verandah including Drinking Water Area to be constructed alongwith Porta Cabins as per drawings and specifications including all finishing complete excluding electrical works only.		2250		
3	Providing and laying uPVC pipe vertical and horizontal for rain water pipe 150mm dia as per IS: 12818, 6kg./Rmt.	Sqft. Rft.	360		
	Providing and laying uPVC pipe horizontal for rain water pipe 200mm dia as per IS: 12818, 8kg./Rmt.	Rft.	470		
4	Providing and laying Cement concrete $1:5:10$ ( $1$ Cement $:5$ Fine Sand $:10$ Graded Stone aggregate $40$ mm nominal size ) alround for uPVC pipe / uPVC pipe including bed concrete as per standard design.				
	110mm dia meter pipe 200mm dia meter pipe	Rft	25 470		
5	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings & frames, railings etc.		20		
6	Providing and fixing 15 cm wide, 45 cm overall semi-circular plain G.S. sheet gutter Existing with iron brackets 40x3mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes complete.		430		
7	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 :				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	10		
7a	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.				
	Cement mortar 1:4 (1 cement :4 coarse sand)	Sqm.	174.70		
8	12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand)	Sqm.	500		

DSR Code No.	Description	Unit	Qty	Rate	Amount
8a	Providing and laying Vitrified tiles 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 in dado of toilets with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
	Size of Tile 600x600 mm	Sqm.	273.10		
8b	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in- charge.				
	Size of Tile 600x600 mm	Sqm.	273.10		
8c	Providing and laying 100mm thick RCC Counter (M-25) in toilet and pantry including of Reinforcement and Centering and shuttering etc.	Sqm.	15.51		
8d	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), 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.	Sqm.	21.04		
9.i	Providing and fixing ( IWC - Orissa Pan ( ECO ) 6 Liter Flush 20042, Registered Design No. 190537, Size (L x W) 58 x 44 cm	Each	3		
9.ii	Providing and fixing (EWC – Water Closet Studio 20041, Registered Design No. 188363, Size (HxWxP) 81 x 45.5 x 67.5 Cm. Cistern with lid) complete with all fittings and fixtures of Hindware make. The EWC shall have health faucit, Toilet paper holder.	Each	5		
9.iii	Providing and fixing Water closet Universal Cat. No. 20012, Size ( $H \times W \times P$ ) 81 cm $\times$ 50 cm $\times$ 80 cm with dual flush cistern Cat No. 21029.	Each	2		
9.iv	Providing and fixing Wash basins – Wash basin RHAPSODY (Counter Top) 10045, Registered Design No. 200583, Size (L x W) 63 x 50 cm. over Granite platform as per drawings complete with all fittings and fixtures of Hindware make. Also provide liquid soap dispenser, towel ring etc.	Each	10		
9.v	Providing and fixing Urinal - Dyna 60010, Registered Design 200585, Size ( H x W x P ) 64 x 37 x 31 cm. Complete with ½" water pipe line including fitting, taps and other necessary fittings complete of Hindware make.	Each	7		

DSR Code No.	Description	Unit	Qty	Rate	Amount
9. vi	Providing and fixing Stainless steel sink with drain board – Nirali/Neelkanth Brand approximately size 800 x 400 x 150mm deep. With sink mixer tap 1526 Parko make in their Classic Range Collection.		1		
9. vii	Providing and installing 900mm x 750mm x 6mm thick Modi float glass mirror bevelled 30mm width mounted on 9mm thick waterproof ply of approved brand / Century/ Plywood / Green plywood.				
	1. 750mm x 750mm x 6mm	Each	8		
	2. 900mm x 750mm x 6mm	Each	1		
	3. 1500mm x 750mm x 6mm	Each	1		
9. viii	Providing and installing complete set of handicap toilet with fittings and fixtures.  Matrix EWC Cat. No. 20049				
	Abigali Cistern Cat. No. 21030				
	'P' Trap Distance 18 Cms.	Each	1		
	Matrix Washbasin Cat. No. 10060				
	Size ( L x W ) 45 x 28 Cms.	Each	1		
	With mirrors and necessary grab rails as per attached drawing no. 5 ( $750 \times 750 \times 6 \text{mm}$ )		1		
9. ix	Providing and installing Electric Geyser of Recold / Bajaj / Venus make.	Each	1		
9. x	Providing and installing Eshaust Fan	Each	6		
9. xi	Providing and fixing Janitor Sink	Each	1		
9. xii	Providing and installing Electric Hand Dryer	Each	4		
9. xiii	Providing and Fixing urinal partition including of all releted fitting.	Each	7		
10	Providing and fixing SWR uPVC (Type - B) conforming to IS 13592: 1992 including all fittings e.g. plain or door bends, junctions, cowls, offsets, access pieces etc. jointing with rubber rings and solvent cement including cutting holes in walls, floors excavation, refilling and disposal of surplus earth wherever required and making good.  110 mm diameter	Matan	160.00		
11	Providing and fixing SWR uPVC (Type - B) conforming to IS 13592: 1992 including all fittings e.g. plain or door bends, junctions, cowls, offsets, access pieces etc. jointing with rubber rings and solvent cement including cutting holes in walls, floors excavation, refilling and disposal of surplus earth wherever required and making good.	Meter	90.00		

DSR Code No.	Description	Unit	Qty	Rate	Amount
12	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 40 mm nominal size), inside plastering 12 mm 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 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : 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) :				
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	30.00		
13	Providing and fixing PVC Sintax Water Tank of capacity 2000 Liters	Each	2.00		
	Total (B)				

# BOQ FOR ELECTRICAL WORKS IN PORTA CABINS AND VERANDAH FOR LIBRARY AND ADMINISTRATION BLOCK SUMMARY SHEET

SUB HEAD	DESCRIPTION	AMOUNT (DSR Items) (In Rs.)	AMOUNT (NS Items) (In Rs.)
	MAIN DISTRIBUTION BOARDS, SUB DISTRIBUTION		
1	BOARDS & DISTRIBUTION BOARDS		
2	CIRCUIT CUM POINT WIRING		
	CIRCUIT COM FOINT WIRING		
3	LOW CURRENT SERVICES		
	OURREW & FIVING OF LIGHT FIVE IREQ		
4	SUPPLY & FIXING OF LIGHT FIXTURES		
5	LAN SYSTEM		
	TOTAL		
	TOTAL (C)		

		INT	ERNAL ELECTRICAL BOQ OF PORTA CABINS, R	AMAN	JJAN CC	LLEGE	
			AT NEW DELHI	T			1
S.N.		DSR Item Code	Description	Unit	Total Qty	Rate	Amount
1.0	MAIN DISTRIBUTION BOARDS, SUB OSR-2016 DISTRIBUTION BOARDS & DISTRIBUTION BOARDS (DSR Items)						
1.01		2.3	Supplying and fixing following way SP&N steel sheet MCB distribution board of 240 volts on surface/ recess complete with tinned copper bus bar, neutral link, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/ RCCB/ Isolator)				
	i.	2.7.2	8 Way Double door	Each	1		
	ii	2.7.3	12 Way Double door	Each	2		
1.02		2.10	Supplying & fixing 5 amps to 32 amps rating 240 /415 volts <b>C</b> series, Miniature Circuit Breaker suitable for inductive loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	i.	2.10.1	Single Pole	Each	95		
1.03		2.11	Supplying & fixing of single pole blanking plate in the existing MCB DB complete etc. as required	Each	23		
1.04		2.21	Providing & fixing of M.V. danger notice plate of 200 mm x 150 mm, made of mild steel, at least 2 mm thick, and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	Each	3		
			SUB TOTAL (DSR Items)				
2.0		SR-2014	CIRCUIT CUM POINT WIRING (DSR ITEMS)				
2.01		1.10	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 medium class PVC 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.				
	i	1.10.3	Group C	Point	259		
		-					

S.N.	DSR Item Code		Description			Rate	Amount
2.02		1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.		1250		
2.03		1.14	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required				
	i	1.14.2	2x 2.5 sqmm+ 1x 2.5 sqmm earth wire	Mtr.	145		
	ii	1.14.3	2x 4 sqmm+ 1x 4 sqmm earth wire	Mtr.	120		
	iii	1.14.10	4x 10 sqmm+ 2x 6 sqmm earth wire	Mtr.	75		
	iv	1.14.11	4x 16 sqmm+ 2x 6 sqmm earth wire	Mtr.	75		
2.04		1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).		44		
2.05		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.		35		
2.06		1.25	Supplying and fixing of two module Stepped type electronic fan regulator on the existing modular plate & switch box including connections but excluding modular plate etc. as required.		72		
2.07		2.18	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.		19		
2.08		1.22	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.				
	i.	1.22.4	150 mm X 150 mm X 60 mm deep	Each	19		
			,				

S.N.		DSR Item Code	Description	Unit	Total Qty	Rate	Amount
2.09		1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface / recess including cutting the wall and making good the same in case of recessed conduit as required.				
	i	1.21.1	20 mm	Mtrs.	600		
	ii	1.21.2	25 mm	Mtrs.	600		
	iii	1.21.3	32 mm	Mtrs.	90		
			SUB TOTAL (DSR Items)				
2.0		CD 2044					
3.0		SR-2014	LOW CURRENT SERVICES (DSR Item)				
3.01		1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/recessed steel/ PVC conduit as required.				
	i	1.18.2	2 Pair	Mtrs.	180		
3.02		1.53	Supplying and drawing UTP 4 pair CAT 6 LAN cable in the existing surface/ recessed steel/ PVC conduit as required.		180		
	i	1.53	1 Run of Cable				
3.03		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.				
	i	1.24.6	Telephone socket outlet	Each	28		
3.04		1.27	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.				
		1.27.1	1or 2 module (75mmx 75mm)	Each	56		
			SUB TOTAL (DSR Items)				
			JOB TOTAL (BOK Rems)				
4.0		SR-2014	FIXING OF LIGHT FIXTURE & FAN (DSR Items)				
4.01		1.41	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types,complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.		175		

S.N.	DSR Item Code	Description	Unit	Total Qty	Rate	Amount
4.02	1.45	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (up to 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.		72		
4.03	1.50	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	Each	11		
4.04	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	Each	11		
4.05	10.18 (DSR 2014 Civil)	Providing and fixing circular / hexagonal M.S sheet ceiling fan box with clamp of internal dia 140 mm,73 mm height, 3 mm thick rim, top and bottom lid of 1.5 mm M.S sheet. Lids shall be screwed into M.S box by means of 3 mm round headed screws, clamps shall be made of 12 mm dia M.S bar bent to shape as per standard drawing with over all length as 80 cm.		72		
		SUB TOTAL (DSR Items)				

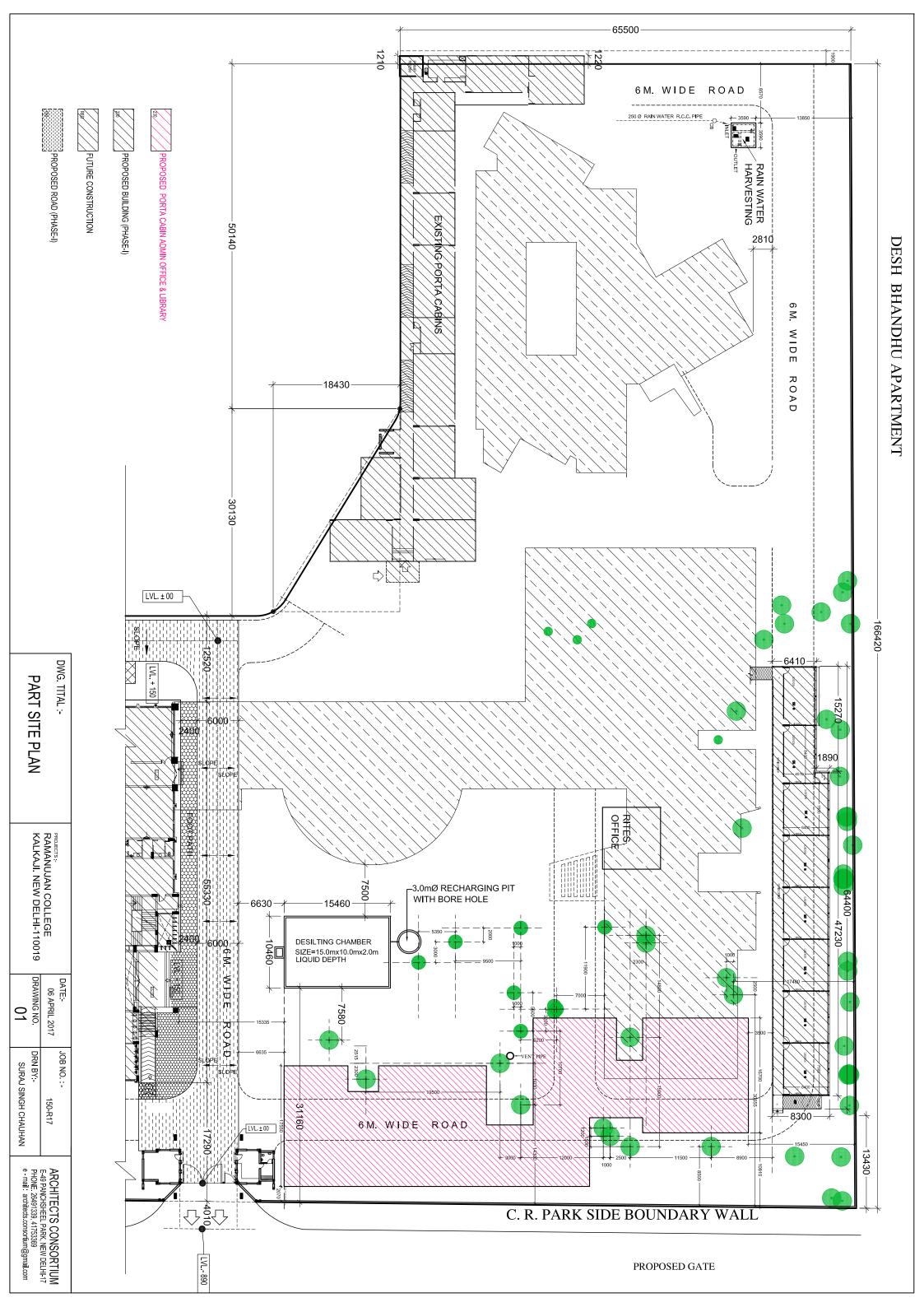
# INTERNAL ELECTRICAL BOQ OF RAMANUJAN COLLEGE

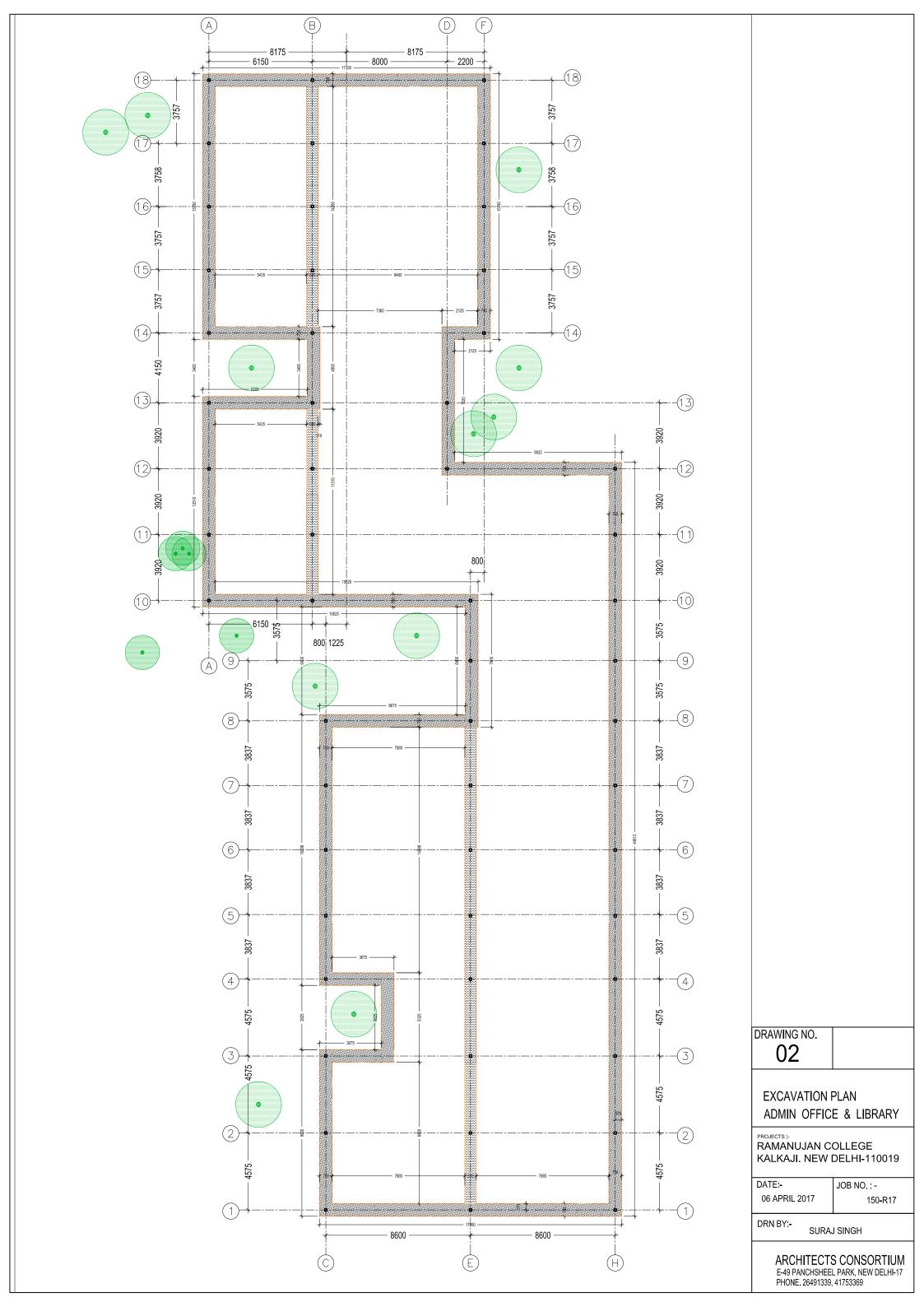
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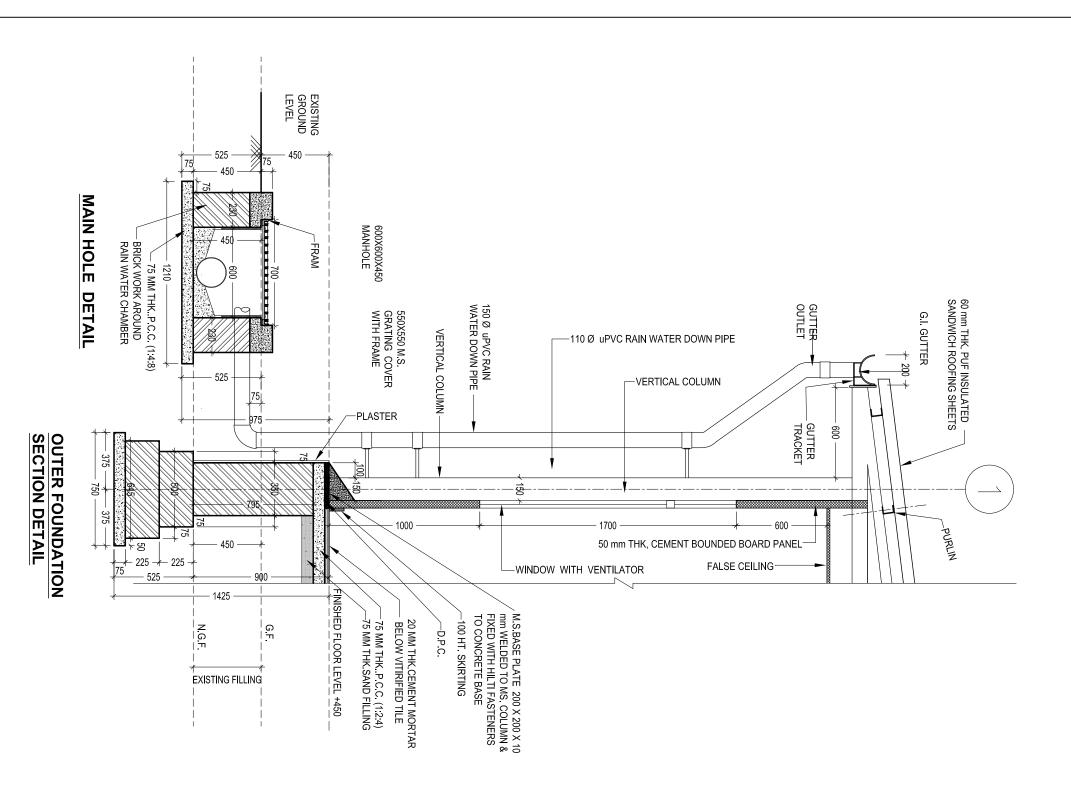
### **NEW DELHI**

S.N.		Description	Unit	Otv	Rate	Amount	Remarks
J.IV.		Description	OTILL	Qty	Nate	Amount	Remarks
1.0		MAIN DISTRIBUTION BOARDS, SUB DISTRIBUTION					
		BOARDS & DISTRIBUTION BOARDS					
1.01		Supplying and fixing following way prewired TP&N MCB					
		distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors					
		for all incoming and outgoing circuits, duly prewired with					
		suitable size FRLS PVC insulated copper conductor up					
		to terminal blocks, tinned copper bus bar, neutral link,					
		earth bar, din bar, detachable gland plate,					
		interconnections, powder painted including earthing etc.					
		as required.(But without MCB/ RCCB/RCBO/ Isolator)					
	:	C.W. (0:40) Double door	0-4				
	i	6 Way (8+18), Double door 8 Way (8+24), Double door	Set Set	1 2			
	"	o way (otz4), Double dool	Set				
		Supplying & fixing following rating 240 volts, 2 Pole					
1.02		RCBO in the existing MCB DB complete with					
		connections, testing and commissioning etc. as required.					
	i.	32A DP RCBO	Each	3			
	1.	32A DF NOBO	Lacii	3			
		Supplying & fixing following rating 415 volts, Four Pole					
1.03		RCBO in the existing MCB DB complete with					
1.00		connections, testing and commissioning etc. as required.					
		COA ED DODO	<b>-</b> 1-				
	i	63A FP RCBO	Each	3			
		SUB TOTAL (NON DSR ITEMS)		<u> </u>			
2.0		CIRCUIT CUM POINT WIRING (NON DSR ITEMS)					
		LOW CURRENT OFFICE (VIOLED OF ITEMS)					
3.0		LOW CURRENT SERVICES (NON DSR ITEMS)					
		Supplying, installation, testing and commissioning of					
3.01		following krone type tag blocks enclosed in MS enclosure					
		of suitable size with lockable cover.					
	ii.	10 pair Tag block	No	3			
3.02		Supplying, and drawing of following sizes of 0.61 mm					
		diameter anealed tinned copper conductor (ATC) PVC insulated and PVC sheathed armoured on suface/ cable					
		tray or through existing treanch/pipe etc. completed as					
		required.					
	i.	10 pair cable	RM	170			
		SUB TOTAL (NON DSR ITEMS)					

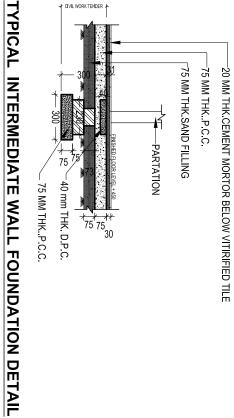
S.N.		Description	Unit	Qty	Rate	Amount	Remarks
4.0		SUPPLY OF LIGHT FIXTURES (NON DSR ITEMS)					
4.01		Supplying of following fans & Light fittings with Electronic Ballast (THD<10%, HF-P), starter, control gears, lamps holder, transformer etc. as called for another flexible wires as required for fixing including providing of Lamps as required.					
	i.	1 x 36 watt recess mounting type LED light fixture complete with all accessories as required.	Each	110			
	ii :::	12 watt recess mounting round LED light fixture.  20 watt LED straight linear batten	Each	54 12			
	iii	20 watt LED straight linear batten	Each	12			
4.02		Supply of following sizes of ceiling fan complete with double ball bearing. motor, blades, downrod, canopy, capacitor, regulator etc. suitable for operation on 230 volts 50 Hz A.C. supply complete as required.	,				
	i	Size 1200mm. (C G -WW HE -WOR 1200 mm sweep)	Each	72			
4.03		Supply of following sizes of heavy duty exhaust far suitable for single phase 230 volts, 50 Hz AC supply complete with motor, capacitor, louvers / shutters etc. complete as required.	1				
	i.	300mm 1400 RPM ( Eq. to Havells Ventil Air - DS)	Each	11			
		SUB TOTAL (NON DSR ITEMS)					
5.0		LAN SYSTEM (Non DSR Items)					
5.03		Supply, installation, testing & commissioning of Cat. 6 RJ45 information outlets 1 Module in existing box completed as required.		28			
		SUB TOTAL (NON DSR ITEMS)					





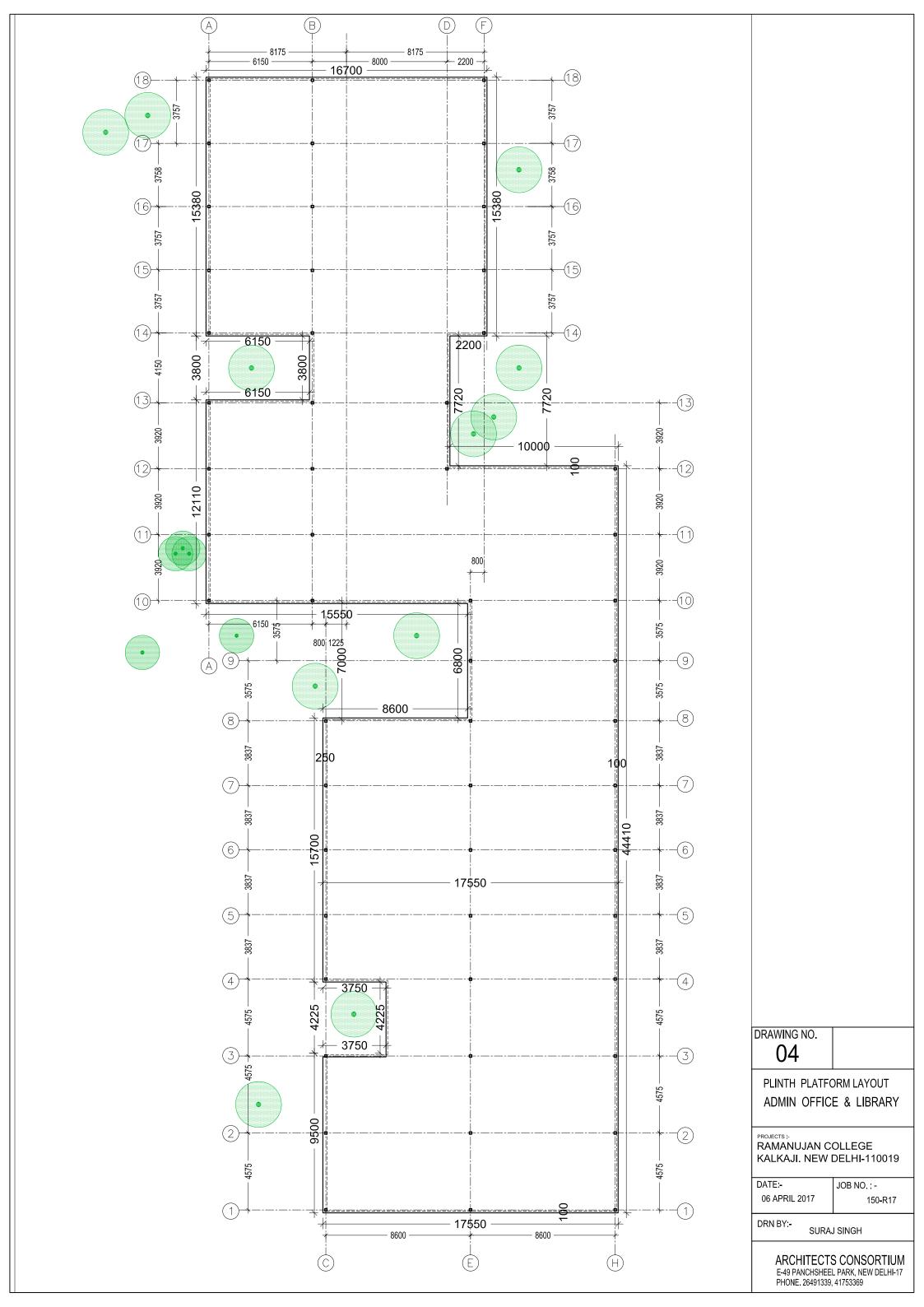


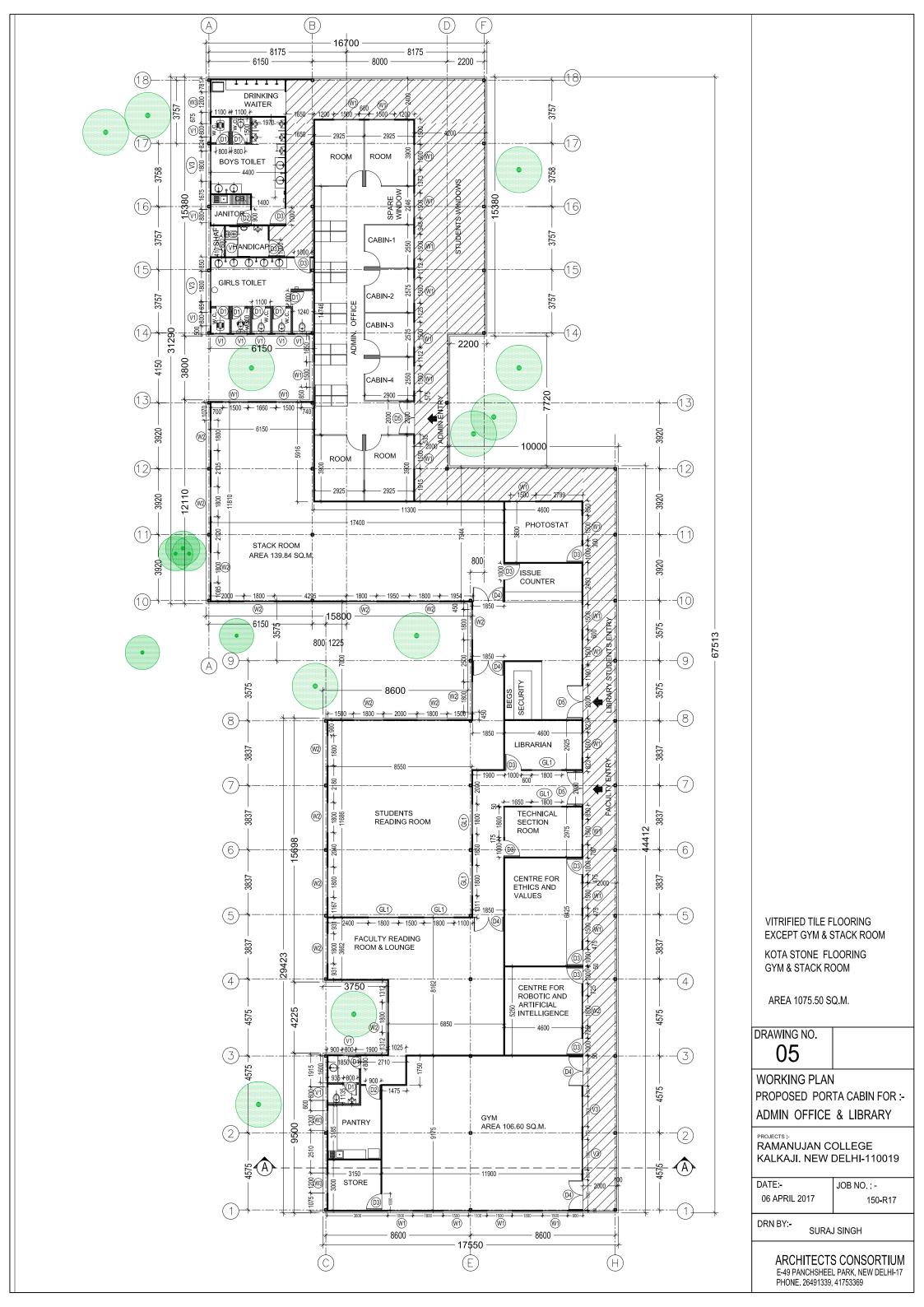


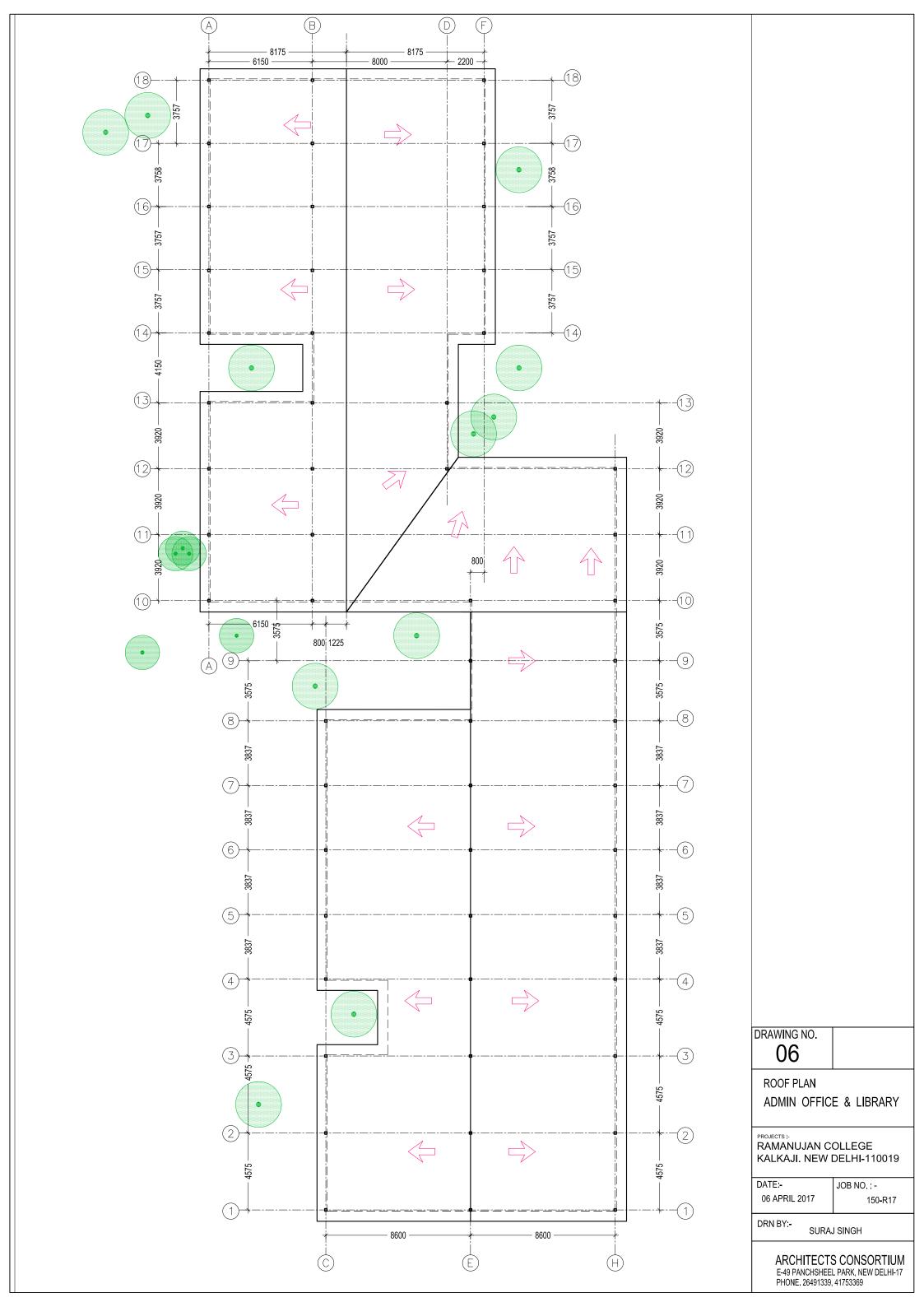


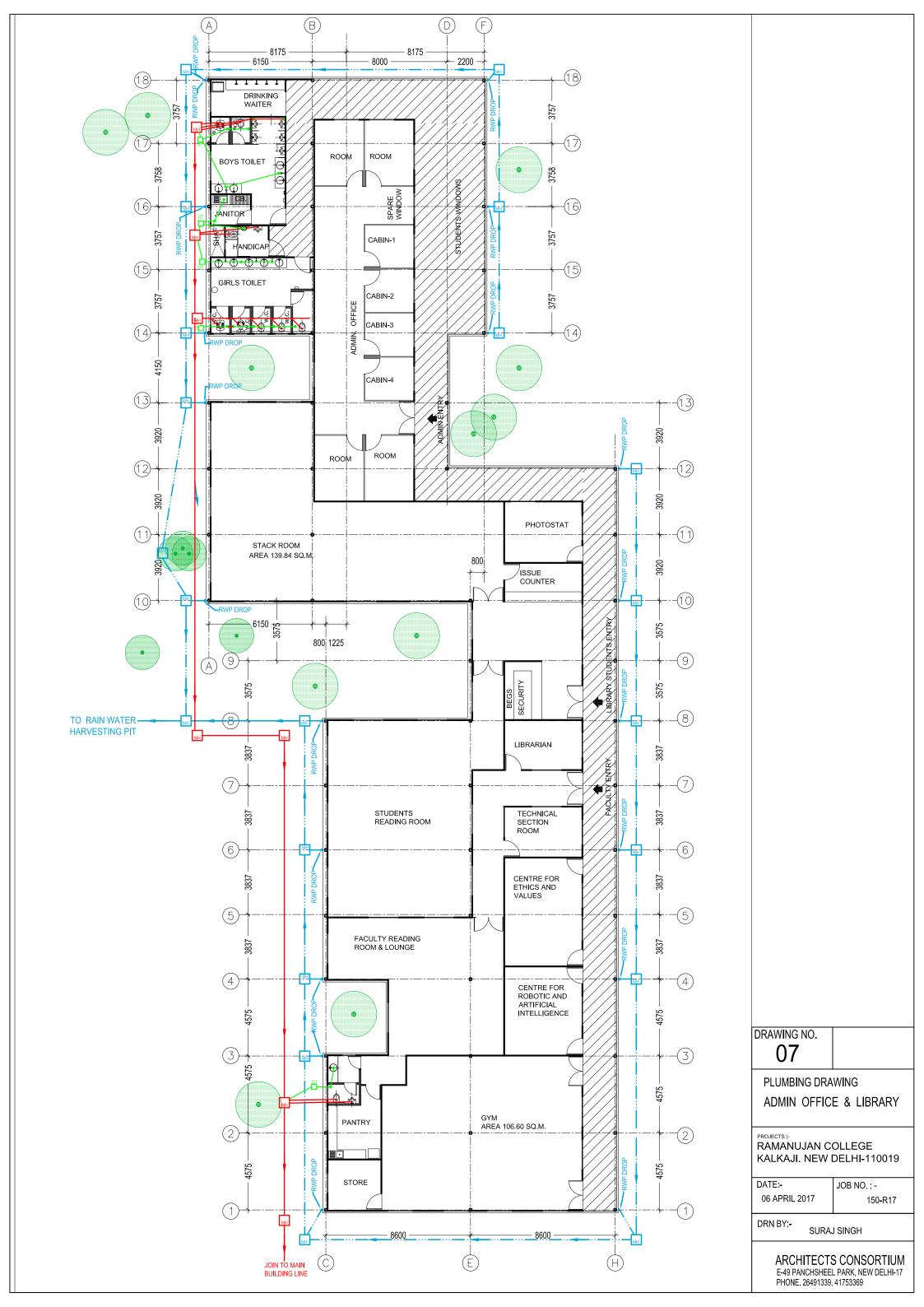
DRN BY:- SURA.	DATE:- 06 APRIL 2017	RAMANUJAN COLLEGE KALKAJI. NEW DELHI-110019	FOOTING DETAIL PROPOSED PORTA CABIN FOR: ADMIN OFFICE & LIBRARY	DRAWING NO.
SURAJ SINGH	JOB NO. : - 150-R17		TA CABIN FOR :- E & LIBRARY	

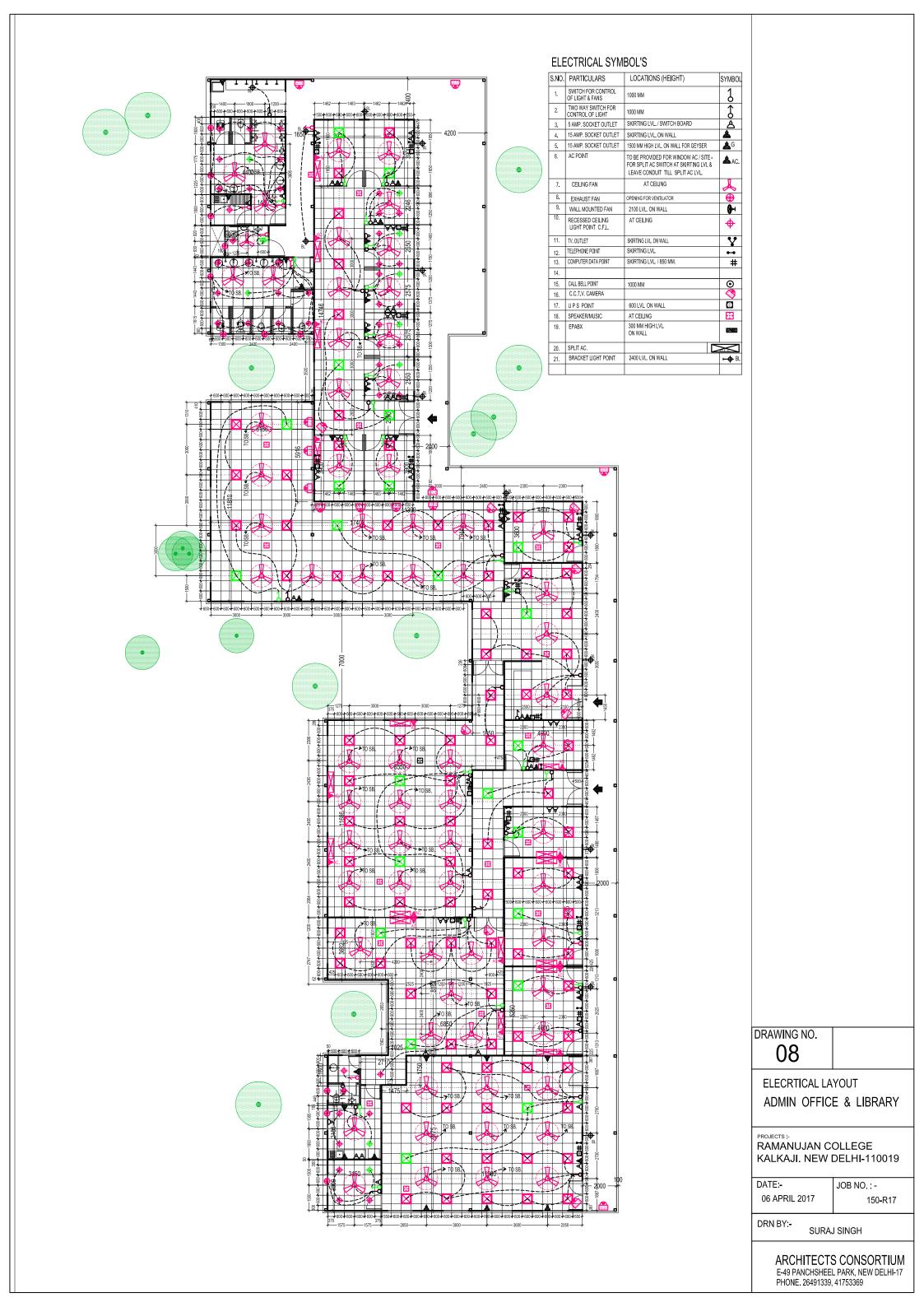
ARCHITECTS CONSORTIUM E-49 PANCHSHEEL PARK, NEW DELHI-17 PHONE. 26491339, 41753369

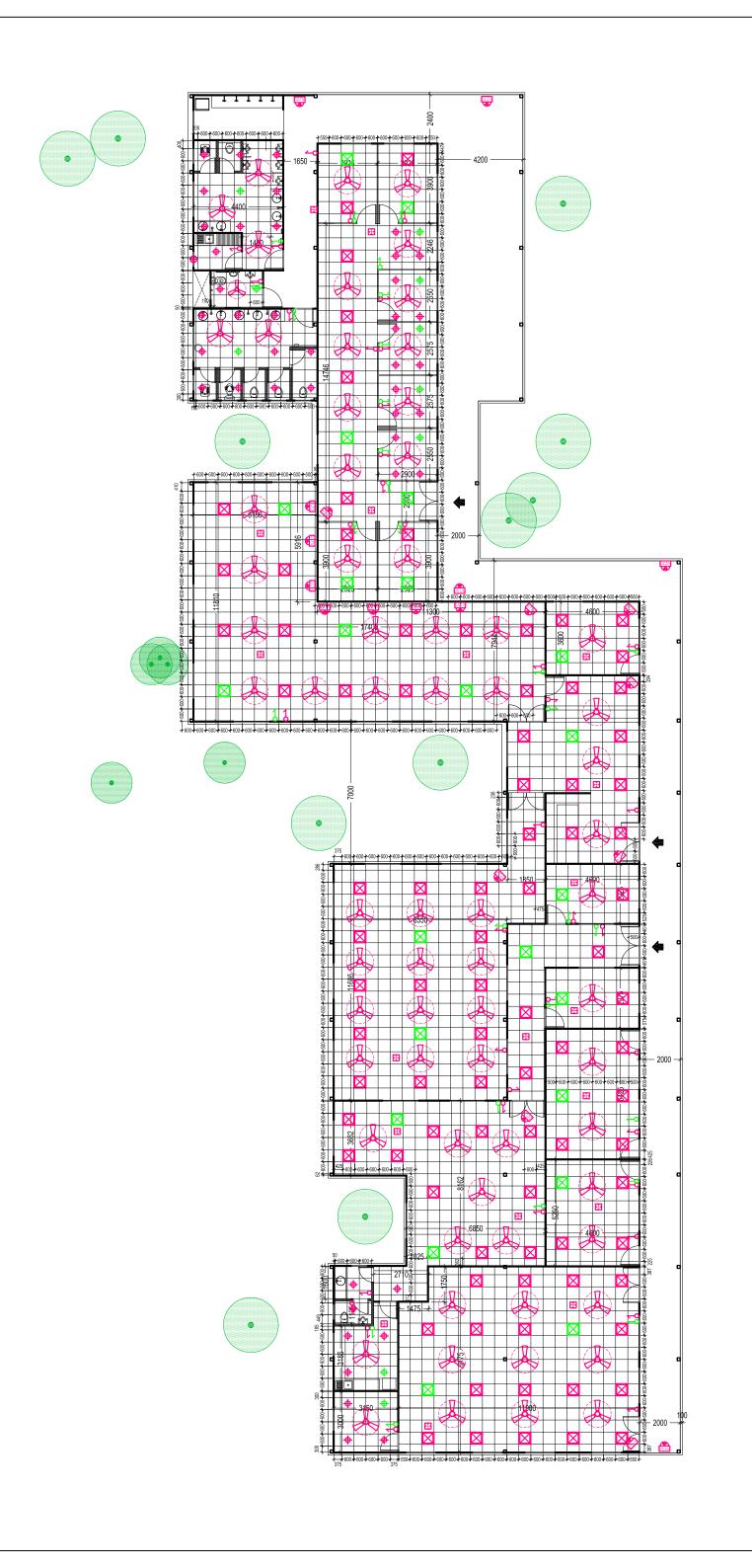












DRAWING NO.

09

**FALSE CEILING LAYOUT** ADMIN OFFICE & LIBRARY

RAMANUJAN COLLEGE KALKAJI. NEW DELHI-110019

DATE:-

JOB NO.: -

06 APRIL 2017

150-R17

DRN BY:-SURAJ SINGH

> ARCHITECTS CONSORTIUM E-49 PANCHSHEEL PARK, NEW DELHI-17 PHONE. 26491339, 41753369

