



No. JVM/OT-10 /2021-22

Date: 10-03-2022

INVITATION TO TENDER

Principal, JVM invites tender for the subject given below. Salient feature are given in the table and detail of scope of work and tender conditions are given in " invitation to tender " dated 10-03-2022 enclosed herewith. (Total pages ~~38~~ 38)

Sub: Construction of Indoor Sports Hall in the premises of Jawahar Vidya Mandir School.

Salient Features of the Invitation to Tender

1	Tender Enquiry No. & Date	No. JVM/OT-10 /2021-22 Date: 10-03-2022
2	Project Description	Tender for Construction of Indoor Sports Hall in the premises of Jawahar Vidya Mandir School.
3	Floating of on-line Tender	10-03-2022
4	Last date & time of submission of tender document	24-03-2022 by 01.00 PM
5	Date & Time of Opening of Tender	On 24-03-2022 at 17.00 hours. The representatives from the tenderer may be present while opening of the tender.
6	Validity of tender	01 (one) month from the due date of opening of Techno-Commercial part of the tender document.
7	Completion Time	Four month from the date of issue of work order.
8	Earnest Money Deposit	Rs. 03,50,000/- (Three lakh fifty thousand only)
9	Cost of the tender document	Rs. 2000/- (Two thousand) only

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10/03/2022
(SAMARJIT JANA)
PRINCIPAL

Principal
Jawahar Vidya Mandir
Shyamali, Ranchi



Dated: 10.03.2022

INVITATION TO TENDER

Sub: Construction of Indoor Sports Hall in the premises of Jawahar Vidya Mandir School.

Sealed tenders are invited for award of Construction of Indoor Sports Hall in the premises of Jawahar Vidya Mandir Shyamali School Ranchi, as per the Technical Specification attached as Annexure – I from registered, reputed, experienced and eligible firms who have executed similar nature of work in Schools/ Institutions/Organizations and satisfying all the terms and conditions in this tender document.

Instructions to Tenderer

1.1 Tenderer are advised to go through the entire documents completely before quoting for the tender.

1.2 Tenders are invited in two bid system (i) Techno-commercial Bid & (ii) Price Bid. The 'Techno-commercial Bid' will be made and put in the first envelope containing the title '**Techno-commercial Bid**'. It should contain full information as required in Techno Commercial Bid Declaration by the Bidder. (see Annexure-II). The 'Price Bid' will be made and put in the second envelope containing the title '**Price Bid**'. It could include full information as required in Annexure I. Both bids should be put in the third envelope which should be prominently super-scribed as "Construction of Indoor Sports Hall in the premises of Jawahar Vidya Mandir School Shyamali ." and addressed to "The Principal, Jawahar Vidya Mandir, Shyamali colony, Ranchi – 834002" on or before 24-03-2022 till **1.00 PM**. The tenders will be opened on at **5.00 PM** on **24.03.2022**.

1.3 Tenders received after due date and time mentioned above, as well as those received without separate sealed envelopes as specified above will not be accepted.

1.4 It may be noted that incomplete in any respect or conditional tender will not be accepted.

2.0 Eligibility Criteria

A: TECHNICAL

2.1 The tenderer should have successfully completed similar work (as defined below) during last seven years preceding the month in which the tender is published and the value of work should be:

At least one project costing not less than Rs. 60.0 lakhs.

OR

At least two project costing not less than rs. 50.0 lakhs.

OR

At least three project costing not less than Rs. 40.0 lakhs.

Definition of Similar work

The tenderer should have successfully executed civil works in infrastructure in industrial / Institutions projects.

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- i) Cover letter of Tender detailing list of contents in the bid document being submitted by the Bidder.
- ii) Documents as per technical eligibility criteria.
- iii) Copy of Technical specification & BOQ (un-priced) duly signed & stamped on each page and confirming acceptance of the specification.
- iv) Any other technical information/ document the Bidder wishes to furnish along with the offer.

2.2 Documents to be submitted

- The bidder shall submit self-attested copy of following documentary evidence issued by client to the bidder as proof of meeting the above stipulated eligibility criteria, with specific mention of information required.

a- copy of work order / LOA.

b- completion certificate including value of work from client.

B- Financial Eligibility Criteria

The average annual financial turnover of the Bidder during last (3) three consecutive financial years ending 31st March 2021 shall not be less than Rs 1.00 Crore.

Bidder shall submit copy of Audited Annual Financial Reports for last 3 (three) consecutive financial years ending 31st March 2021 (Balance Sheet and Profit & Loss Account). Chartered Accountant's certificate with UDIN no. , in Original, may be submitted to substantiate the above financial eligibility.

The documents furnished by Bidders for establishing their financial eligibility should clearly indicate the details of the Membership No. & Firm No. of the Chartered Accountant.

Copies of valid labour license, PF registration, ESI registration etc.

C. Commercial:

- i) Cover letter of Tender detailing list of contents in the bid document being submitted by the Bidder.
- ii) Un-priced Price schedule as per format enclosed with tender document indicating quoted/not quoted as applicable.
- iii) Signed & Stamped terms and conditions.
- iv) All the attachments enclosed shall be duly signed, stamped and filled (wherever necessary)

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- v) Copy of GST Registration Certificate with valid GST registration no.
- vi) Bidder must be registered in PF and ESIC, and also to submit proof of remittance proceedings last financial year.
- vii) The Bidder should have the GST and PAN (*Copies of GST Regn. and PAN*).

Note: Bidders shall also take notice of the following points during preparation and submission of price format:

- a) Bidder shall submit their Price bid strictly as per the Price Format provided along-with bid document. Price submitted by Bidder in any other format shall render their offer invalid and shall not be considered for evaluation.
- b) There shall be no change or addition/ deletion except for filling-up of the actual price/ rate in the Price part submitted in Part – B

PART - B : Price Part

- i) Price part shall contain rate and cost against all items of BOQ and total cost indicating incidence of tax (rates), if any, as per enclosed price format without any terms & conditions.

Bidders should note that any change in Price Schedule format shall be notified through corrigendum/addendum and the same shall be considered for submission of price bid. In case Bidders have already submitted their bid before publishing of corrigendum/addendum related to change in price schedule format, the bidders are requested to re-submit price bid as per the changed Price Schedule format. Failure to re-submit the bid in such case may lead to auto rejection of the bid by the system.

- 3.0 Earnest Money Deposit:** All the tenderers shall be accompanied by EMD (Earnest money deposit) of Rs. 3,50,000/- (Rupees Three lakh fifty thousands only) payable to "JawaharVidyaMandir, Shyamali Ranchi " in the form of "demand draft". Tenders received without EMD are liable to be rejected. EMD shall be refunded to successful bidder after execution of order and to unsuccessful bidder after finalization of work order.

- 4.0 Cost of the Tender :** The cost of the tender will be Rs.2000/- (Two thousand only) non-refundable in the form of a Demand draft drawn on any Nationalized/ Schedule Bank in favour of Jawahar Vidya Mandir.

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IF A FIRM FILING TENDER DOES NOT FULFILS ALL OR ANY OF THE ABOVE ELIGIBILITY CRITERIA MENTIONED ABOVE, THE TENDER OF THE FIRM WILL NOT BE CONSIDERED.

5.0 SCOPE OF WORK:

Sl. No.	Description	Make /Model No.	Quantity
1.	Construction of Indoor Sports Hall in the premises of Jawahar Vidya Mandir School.	-	Indicated in annexure-I

6.0 PRICE: The Tenderer shall quote for the items indicated above on for JVM, Shyamali, Ranchi basis. The quoted price shall be firm and binding and shall not be subject to any variation whatsoever on any account till completion of supply. All applicable taxes & duties shall be indicated separately. ***(Un-priced copy of Price Bid indicating "quoted" against each item should be submitted along with Techno-commercial bid).***

7.0 TAXES & DUTIES: Except as otherwise specifically provided in the order, the Tenderer shall bear and pay all taxes, duties, levies as charges for the subject work.

8.0 VALIDITY OF RATES: The rate quoted by the Tenderer shall remain valid for a period of 4 (Four) months from the date of opening of quotation.

9.0 TIME SCHEDULE:

9.1 The successful Tenderer shall be required to complete the job within 4 (Four) month from the date of receipt of order.

9.2 In the event the supplied material is not conforming to the ordering specification and approved make/brand, the material so supplied will be rejected without paying any price/ compensation. The decision of JVM in this regard will be final.

10.0 PAYMENT TERMS:

10.1 The payment shall be released as R.A Bill against submission of bill with measurement basis Certified by Supervisor / Engineer in-charge of JVM Shyamali.

11.0 INSPECTION: The inspection of materials shall be carried out by JVM after receipt of materials at construction site.

12.0 LIQUIDATED DAMAGES: Time and date stipulated in the Contract for completion of delivery shall be deemed to be the important activity of the Contract. If, however, the Tenderer fails to fulfill the completion within the time schedule, or within such extended time schedule as may be further granted, the Tenderer shall be liable to pay as Liquidated Damages (LD) and by way of penalty a sum of 0.5% of the contract price per week of delay or part thereof, and such liquidated damages shall be limited to a maximum ceiling of 5% of the Contract Price

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- 13.0 ACCEPTANCE OF ORDER:** JVM is not bound to accept lowest or any Tender or to assign reasons whatsoever for non-acceptance. JVM also reserves the right to cancel the tender without assigning any reason whatsoever.
- 14.0 EVALUATION OF TENDER:** Tenderer should quote for all the items as per enclosed price bid format (Annexure-I). Part offer or incomplete offer shall be liable to be rejected. Price of the techno-commercially eligible tenderer shall be evaluated on overall basis.
- 15.0 NO CLAIM OR COMPENSATION FOR SUBMISSION OF TENDER:** The Tenderer whose Tender is not accepted shall not be entitled to claim any costs, charges, expenses of and incidental to or incurred by him through or in connection with his submission of Tender, even though JVM may elect to withdraw the Invitation of Tender
- 16.0 TRANSIT INSURANCE:** Tenderer shall arrange transit insurance on his own and at his own cost for transportation of equipment to JVM, Ranchi.
- 17.0 NEGLIGENCE, DEFAULT AND RISK PURCHASE**
- 17.1** If the Tenderer fails to execute the work with due diligence or expedition or shall refuse or neglect to comply with any order given to him in writing by JVM in Contract, JVM may give notice in writing to the Tenderer calling upon him to make good the failure, neglect or contravention within such time as may be deemed reasonable and in default of the compliance with the said notice, JVM without prejudice to its rights under the Contract, may rescind or cancel the Contract holding the Tenderer liable for the damages that JVM may sustain in this regard.
- 18.0 SUSPENSION AND TERMINATION**
- 18.1** JVM may at any time temporarily stop the work under the Contract or any part thereof by serving notice in writing to the Tenderer. Work so suspended shall be resumed by the Tenderer on receipt of instructions from JVM in writing. JVM will not be liable to the Tenderer for any damage or loss caused by such period of suspension of work.
- 18.2** JVM will be at liberty to terminate the Contract without prejudicing its right and affecting the obligations of the Tenderer by giving 15 days' notice in writing in the following events:
- a) If the Tenderer fails to comply with the provision/provisions of the Contract.
- b) If the Tenderer is involved in any action involving moral turpitude.
- 19.0 ARBITRATION:**
- 19.1** Any disputes, differences, whatsoever, arising between the parties, the arbitration shall be governed and regulated in all respect according to Laws of India.
- 19.2** The Arbitration proceedings in case of other Indian companies shall be regulated and governed by Indian Arbitration and Conciliation Act 1996, or such modification thereof.

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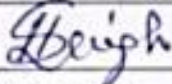
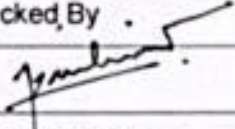
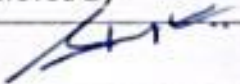
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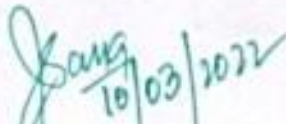


19.3 The venue of arbitration proceeding shall be Ranchi.

19.4 Work under this Order shall be continued by the Tenderer during the arbitration proceedings, unless otherwise directed in writing by PURCHASER or unless matter is such that the work cannot possibly be continued until the decision of the arbitrator is obtained.

The tenderers are requested to confirm acceptance of all terms & conditions as per tender enquiry.

Prepared By	Checked By	Approved By
		
(H P Singh) Supervisor JVM Shyamali	(P Singh) Member , Infra Committee JVM Shyamali	(R S Raman) Chairman, Infra, Committee JVM Shyamali


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General Condition of Contract (G.C.C.)

1. Your scope of work shall include all workers, suppliers and services for completion of entire work as directed through site order.
2. The contractor shall have own site office, stores, godown as may required for carrying out the subject work.
3. Provision of all labours, skilled, semi skilled, as may be required to complete the work.
4. Providing adequate tools, instruments, tackles, scaffolding etc. for completion of entire work.
5. Procurement of all the materials, as may be required for carrying out the work.
Abide by statutory regulations, labours rules, safety codes during execution of work.
6. Abiding by all statutory obligations including ESI, EPF etc . during execution of work and shall submit all evidence in this respect such as ESI, EPF certificates and minimum wage certificate along with each and every bill.
7. Contractor shall make arrangement at his own cost for drawing and distributing water and power from single point each where water and power will be provided by JVM free of cost.
8. Undertaking all works including repairs and renovation work for completion to the satisfaction of JVM.
9. Agency and/or the worker engaged by agency will not have any claim for payment employment in JVM. The age limit of worker shall be between 19 yrs. and 60 yrs.
10. Rate of wage shall not be less than the minimum wages plus prevailing percentage of EPF, FP, ESI, EDLI, Bonus etc. as required under the law.
11. Agency shall ensure fulfillment of all labour regulations/rules under the Labour Act and all other statutory requirement of Government of India and Government of Jharkhand.
12. Monthly bill based on actual deployment of worker shall be submitted by Agency statutory payment) viz. EPF, FP, ESI,EDLI, bonus etc.) including taxes payable if any.
13. Unit rates of all the items shall remain firm, fixed and binding on the contractor during entire period of execution of work and shall not be subjected to any variation whatsoever on any account.
14. This being a unit rate contract, the payment shall however be released against actual quotations of work however be released against actual quantities of work executed duly certified by the JVM.
15. Unless other wise specified, measurement of work shall be carried out at site jointly by JVM & Contractor.
16. **Liquidated damages for non-fulfillment of completion schedule.** If the completion of work is delayed beyond the scheduled date for any reason other than due to force major condition or for those attributable to the contractor, then the contractor shall pay 1% per month of delay on total value of work up to a maximum of 5% of the final contract price.
17. The contractor shall not sublet/sub contract the whole or any part of work failing which the contract may be terminated.
18. No completion certificate shall be issued or shall be work be considered to be complete until the contractor removes from the site all scaffolding, surplus materials, rubbish etc.
19. **Maintenance Guarantee Period (defect liability period):** The contractor guarantees that for a period of 6 (six) months commencing from the date of completion of contract. He shall undertake reconstruction rectification, replacement of all regular schedule work and any other work to make good the faulty work as stated under completion certificate for period of 06 (six) months from the date of issue of commissioning certificate.

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19. **Maintenance Guarantee Period (defect liability period):** The contractor guarantees that for a period of 6 (six) months commencing from the date of completion of contract. He shall undertake reconstruction rectification, replacement of all regular schedule work and any other work to make good the faulty work as stated under completion certificate for period of 06 (six) months from the date of issue of commissioning certificate.
20. The contractor shall have a valid labour license and shall also maintain al records/register/return/cards under state contract labour (R&A) rules act such as :-
 - i) Register of workmen employed by contractor : Form - 9
 - ii) Employment card : Form – 10
 - iii) Muster roll : Form - 12
 - iv) Register of wages-cum-muster roll : Form - 13
 - v) Wage slip : Form – 15
 - vi) Register of over time : Form – 19
 - iii) Submission of Return in Form – 20
21. All materials supplied to the site shall be of good quality as per latest revision of CPWD specification. Any material not approved by the Engineer shall be removed from the site at his own cost by the Contractor.
22. The work carried at site as per latest edition of CPWD specification.
23. **Time schedule of contract :** Total time schedule of contract will be Four month from the date of placement of work order.
23. Any items not mentions in the BOQ but required for the completion of work shall be provided by the bidder on mutually agreed terms and conditions.
24. Further, JVM also reserves the right to cancel the tender without assigning any reasons for the same. In such event JVM shall return the Earnest money deposit.

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Special condition of contract (S.C.C.)

1. The changes in quantity may increase or decrease as given in BOQ and contractor should do the work as per direction/ requirement of site engineer/supervisor.
2. The work will be executed on firm item rates basis as quoted. The contractor will be issued with site order indicating various works to be taken up by the contractor.
3. Any defect found within the guarantee period shall have to be attended by the contractor at their own cost and risk.
4. The institutional building regulations of the safety code shall have to be strictly followed by the contractors.
5. The work is to be executed as per specifications mentioned in BOQ and direction of site engineer. **The quantity mention in BOQ is tentative, it may increase or decrease. The payment will be on actual measurement and consumption of items.**
6. Terms of payment : 95% value bill/tax invoice shall be paid within (15) fifteen days after completion of work. Contractor shall submit Bill in triplicate alongwith measurement sheet/abstract of the quantity being executed by the contractor at site, Income Tax Registration no. (PAN) and Service tax registration no.
8. Work measurement sheet should be on printed form/letter head of the contractor duly signed and stamped by the contractor and certified by JVM site engineer.
9. T.D.S. will be affected from all payments as per prevailing rules.
10. 5 % (five percent) work value shall be paid after completion of warranty period/ maintenance guarantee period (6 months)and submission of pre-receipted invoice and completion of all his contractual certified by JVM along with submission of following documents :-
 - a) Completion certificate issued by JVM – original
 - b) No dues certificate from JVM
 - c) No claim/no demand certificate by the contractor – original
 - d) Copies of all statutory documents to be provided by the contractor as required by JVM
11. JVM shall deduct taxes at source as per prevailing status from the payment to be made to the contractor. JVM shall deposit amount thus deducted with the concerned authorities and issue necessary certificates to the contractor to this effect.
12. General schematic tender drawings showing general arrangement of the building is enclosed, any further engineering drawings required for the execution of the work shall be prepared by the bidder and submitted for prior approval.
13. For electrical works : data sheet of light fittings, junction box , Power distribution box wires etc. shall be submitted for prior approval. switch board ,junction box

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ANNEXURE- II

CHECK LIST

Sub: techno-commercial

Sl.no.	Description	Submitted	Not submitted	Remarks
1	EMD (Earnest money deposit) By Demand Draft			
2	Tender paper cost by demand Draft			
3	GST registration certificate with previous month return file			
4	PF registration number .with previous month return file document			
5	ESI registration no. with previous month challan			
6	PAN number (copy)			
7	Audited report for the year 2018-19, 2019-20, & 2020-21 with UID no.			
8	Work order of civil and structural work and completion certificates with BOQ			
9	Audited report for the year 2018-19, 2019-20, 2020-21			
10	Affidavit for deployment of plant and machines as per requirement			
11	I T R for last 3 (three)years			
12	Audited accounts statement for last three years.			

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LIST OF APPROVED MAKES

The makes and manufacturers shall be from the following list, In case, the same is not available in the market or in case of a change in trade name, equivalent makes/ re-designated manufacturer shall be used with prior approval of Engineer In charge.

1. For Architecture Items

Sl. No.	MATERIALS	MANUFACTURERS
A	Anti Termite Treatment	
1.	Anti Termite Treatment	Pest Control India Ltd., Mysodet Limited or approved equivalent make
B.	Concrete & Masonry works	
1	Cement	: ACC, Ultratech, JK, Grasim, L&T (Ultra Tech Cement), lafarge,
2	Reinforcement Steel/Structural Steel	: SAIL, RINL, TISCO, IISCO, JINDAL
3	Admixtures for concrete (Plasticisers and Water proofing compounds)	: Cico, Jubliant Organosys, Roffe, Pidilite, Krishna Conchem, Fosroc, Sika, MBT, HSW
4	White Cement	: Birla White, J.K. or approved equivalent make
5	PVC Water Stops	: Pidilite, Supreme, Fixopan, Omai Plastics
6	Autoclaved aerated Blocks (AEROCON)	: Hyderabad Industries Ltd. or approved equivalent make
7	Film faced plywood	: Anchor, Associate or approved equivalent make
C	Flooring	
1	Vitrified Tiles	: Restile, Euro, Johnson, RAK. CENGRES, Kajaria, Orient bell, AGL
2.	Cement Concrete tiles	: Nitco, BasantBeton, Tile Italia, Ultra, Stone Crate, Duracrut, Eurocone
3	Acid Alkali Proof lining / tiles	: Coromandel Prodorite, Kothari Corrossion Controllers, Rstile, Jhonson
4.	Concrete Paver Blocks	: BasantBeton, Pavestone Marketing, Designers Pavings and Tiles Pvt. Ltd.
5.	Metallic Floor Hardener	: M/s. Triveni Color Industries (Floornate) M/s. Heatly & Gresham (India) Ltd M/s. De-Rust Chemical Corporation of inida (Ferronite) MIs. Cement Research Corporation Pvt Ltd. (Stilonite)
6.	Non Metallic Floor Hardener	: Fosroc, Sika, Pidilite, Cryso or approved equivalent make
7.	Ceramic Tiles	: Johnson, Somany, Kajaria, AGL, NITCO, orient bell
8.	Cavity flooring	: Unitile, Cani-Microtac, Hyderabad Industries Ltd.
9.	Sunken Portion Treatment	: Choksey, Roffe, Krytone, Sika, Pidilite, HSW
10.	PVC Flooring	: Premier Vinyl Flooring, Responsive Flooring Bhor, Armstrong, Polyfloor, Wonderfloor.
11.	Glass Mosaic Tiles	: Italica, Bisazza. Palladio or approved equivalent make
12.	Antistatic Epoxy Floor	: Pidilite, Fosroc, Beck, STP, Degussa, Huntsman, Sika, HSW
13.	Epoxy Coating	: Pidilite, Fosroc, Asian Paints, Huntsman, Degussa, Sika, HSW
D.	Wood Works	

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Sl. No.	MATERIALS	MANUFACTURERS
1.	Laminates	Formica, Decolam, Century, Marino, National, Green Ply, Durian
2.	Pre-Laminated Particle Board/ Particle Board / Wooden Doors	Novopan, Greenlam, Kitlam, Bhutan Board, Indian Plywood Mfg. Co. Ltd., Indian Wood and Wood Products, Mangalore, Mysore Plywood Limited, Mis Western India Plywood, Orchid Ply
3.	Flush Door Shutters	: Kitply, Navapan, Green Ply, Kutty Flush Doors, Anchor, Anand
4.	Ply Board	: Greenply, Kitply, Century or approved equivalent make
5.	Prelaminated MDF Board	: Mangalam Timber (Dura Tuff), Century, Green Ply or approved equivalent make
6.	35mm thick exterior grade panel door (both side laminated door)	: -do-
7.	35mm thick exterior grade flush door	: -do-
8.	Dry wall partition	: Saint gobain, USG or approved equivalent make
E.	Steel Works	
1.	M.S. Pipe	Jindal Hisar, Kalinga, TATA
2.	Steel Doors, Windows, MS rolling Shutters, Pressed Steel Door Frames	: SenHarvic; AGEW; Deccan Structural System, Multiwyn, NCL Seccolor Ltd., Madhu Industries, Swastic Rolling Shutters & Engineering Works, Basic Arch Products, Perfect Industrial Products.
3.	Metal Fire Check Doors	: Shakti hammon, Ahlada Engineer pvt. Ltd., Godrej or approved equivalent make
4.	Stainless Steel Bolts, Screws, Washers, Nuts	: Kundan, Puja, Atul or approved equivalent make
5.	Stainless Steel Pipes/Flats	: Jindal, Salem Steel or approved equivalent make
6.	Dash Fasteners/Anchor bolts	: Hilti, Fischer, Bosch, WORTH
F.	Aluminium Works	
1.	Aluminium Sections	: Indal, Bhoruka, Hindalco, Jindal
2.	Fabricator for aluminium Doors, Windows, Curtain Walls, Structural Glazing	: AjitIndia, Alumilite, ECIE, Alufit, Alfab, Aveey Associates, Hubli, Allied Aluminium, SinghviAluminium.
3.	Aluminium Cleat arrangement for Glazings	: Deco Indalco, Jindal, hindalco or approved equivalent make
4.	Aluminium Composite Panel	: Alstrong, Alpolic, Alucobond, or approved equivalent make
5.	Door Seal – Woolpile Weather Strip	: Anand – Reddiplex or approved equivalent make
6.	E.P.D.M. Gaskets	: AnandReddiplex, Enviro Seals or approved equivalent make
G.	Fittings & Fixtures	
1.	Doors & Windows Fixtures / Fittings	: Everite, Hardwyn, Earl Bihari, Garnish, Crown, Jyothi, Godrej & Boyce, Secur Industries, Hafele
2.	Stainless Steel Door handles, butt hinges (with and without ball bearings), Floor stoppers, Cabinet handles, knobs	: KICH, ARCH, NEKI, DORMA or approved equivalent make
3.	StainlessSteelTower bolts, Sliding Bolts	: GARG, ARCH, KICH, DORMA or approved equivalent make
4.	Door Closer / Floor spring	: Everite, Hardwyn, Garnish, Dorma, Hafele, ARCH, KICH
5.	Door Locks	: ACME, Godrej, Harrison, PAG, Hafele
6.	Stainless Steel Friction Stay	: Securistyle, Hafele, Dorma, Hetich, ARCH, KICH or approved equivalent make
7.	Aluminium Die-cast handles & two point	: Giesse, Securistyle, Alu-alpha or approved equivalent

Sl. No.

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Sl. No.	MATERIALS	MANUFACTURERS
	locking kit.	make
8.	Stainless Steel -handles	: KICH, Hafele or approved equivalent make
9.	Stainless Steel Handrails, Balustrade	: KICH, Ozone, ARCH, DIVINE or approved equivalent make
II	PVC/FRP Doors	
1.	PVC Doors	: ACCUCEL, Thermodeck, Rajshree, Sintex or approved equivalent make
2.	FRP Doors	: Omega Fibres, Rajshree, Sintex or approved equivalent make
I.	Painting Works	
1.	Acrylic Enamel Paints	: Berger, Asian Paints, Kansai Nerolac, Johnson & Nicholson, Shalimar, AkzoNobel
2.	Oil Bound Distemper	: Asian paints, Berger, Kansai Nerolac, Johnson & Nicholson, Shalimar, AkzoNobel
3.	Cement Paint	: Snowcem Plus, Berger, Nerolac, Johnson & Nicholson, Shalimar, ICI Dulex(AkzoNobel)
4.	Exterior Emulsion Paint	: Dulux(AkzoNobel), Asian, Berger, Johnson & Nicholson, Shalimar, Snowcem Plus
5.	Exterior Emulsion Paint	: Dulux(AkzoNobel), Asian, Berger, Johnson & Nicholson, Shalimar, Snowcem Plus
6.	Epoxy Paint	: Nerolac, Shalimar, Asian Paints, Roto Polymer and Chemicals, Avcon Technics Pvt. Ltd., Huntsman
7.	Wall Putty	: Birla, JK or approved equivalent make
8.	Other Paints / Primers, Textured Finish	: Dulux (AkzoNobel), Asian, Berger, Kansai Nerolac, Bakelite Hylam
J.	Glass Works / Polycarbonate Sheet Works	
1.	Clear Float Glass / Toughened Glass	: Modi (GG), AIS (Tata), Saint Gobain (SG), Hindustan Pilkington, Asahi
2.	Reflective Glass	: Glaverbel, Glavermas, Saint Gobain, Asahi, Pilkington
3.	Polycarbonate Sheets	: GE Plastics, Everest, Sunlite or approved equivalent make
K.	False Ceiling Works	
1.	False ceiling – Gypsum Board System	: India Gypsum, Laffarge, Boral, saint gobain, USG
2.	False ceiling – Aluminium Panel System	: Hunter Douglas (Luxalon), Armstrong or approved equivalent make
L.	Sealants	
1.	Polysulphide sealant	: Pidilite, FosrocChoksey, Degussa Sikka
2.	False ceiling – Aluminium panel system	: GE-Silicon, Pidilite, Choksey, Wacker, Fosroc, Dow Corning, Bostik, INTERARCH
M.	Expansion Joint Treatment	
1.	Expansion Joint Treatment	: VSIL (SanfieldIndia) Ltd., Pidilite, Sika, Crysil or approved equivalent make
N.	Water Proofing Treatment	
1.	Water modified Bitumen water proofing membrane	: STP, Bitumat, Sika, Texsa
2.	App modified bitumen water proofing membrane	: STP, Bitumat, Sika, Texsa
O.	Sanitary & Plumbing Works	
1.	Vitreous China Sanitary ware	: Hindware, Parryware, Kohler, Gabriel
2.	White Glazed Fire Clay Sink	: Sanfire, Cera, Neycer, Hindware
3.	Stainless Steel Sink	: AMC, Orient, Nirali, Suhag, Dayana, Commander

Sl. No.

Page

Sl. No.	MATERIALS	MANUFACTURERS
4	Plastic Seat Cover of E. W.C.	Commander, Bestolite, Diplomat, Jaguar, Sona, Gabriet
5	C.P. Fittings mixer / pillar taps, washers, C.P. Brass accessories	Jaguar, EssEss, MARC, Kohler, Gabriet
6	Centrifugally / Sand Cast iron pipes & fittings & fixtures (IS 3989/1729)	R.I.F., J. NECO, B.C., B.I.C., ISP, SKF
7	G.I. Pipes	Tata, Jindal or approved equivalent make
8	G.I. Fittings	Unik, K.S., Zoloto or approved equivalent make
9	Gunmetal Valves	Zoloto, Leader, Sant, Kilburn, Neta
10	CP Brass stop & Bib Cock	Jaguar, EssEss, MARC, Kohler
11	Ball valve with floats	Zoloto, Leader, Sant, Jayco
12	Stoneware pipes & Gully Traps	Tassel, Indo Pipes, South India Corporation, PerfecrKashmira or any BIS Marked Pipes
13	R.C.C. Pipes	Indian Hime Pipes, Canera Cement Pipes, Karnataka Cement Pipes or any BIS Marked Pipes
14	C.I. Manhole Covers	Rif, NECO, B.C., B.I.C.
15	PVC Water Tank	Sintex, Polycon, Infra or approved equivalent make
16	Mirror	Atul, Modi Guard, Saint Gobain or approved equivalent make
17	Hand Drier	Kopal, Automat, Euronics or approved equivalent make
18	PVC flushing cistern	Commander, Parryware, Duralite, Hindware
19	PVC Rain Water Pipes	Supreme, Prince, Finolex, Oriplast, Kisan
20	C.I. Pipes Class LA and fittings	Keso-spun, supra, Electrosteel or approved equivalent make
21	UPVC/HDPE Pipes & fittings	Finolex, prince, supreme, kitec, oriplast, Polyfab
22	C.P. Flush Valves	Jaguar, Roca, MARC
23	C.P. Angle Valves (Ball valve type)	ITAP : Italy, Bugatti
24	Gratings, Strainers, Cleanouts etc.	Near Brand (Sage Metals) or approved equivalent make
25	GI Plaster mesh	M/s Arpitha Exports or approved equivalent make
26	CP liquid soap container (tilting type)	OMCO, Jaguar or approved equivalent make

2. For Electrical Items:

Sl No.	Items	Preferred Makes
1	Cable & Wires	Finolex, KEC, Polycab, KEI, Havells, V Guard
2	MCB	Legrand, Siemens, Havells, L & T, ABB
3	MCCB	Legrand, Siemens, Havells, L & T, ABB
4	MCB DB	Legrand, L&T, Havells, C & S, ABB
5	Switches, sockets (modular type)	Legrand (Mylinec or equivalent from Havells, L&T, ABB)
6	Light Fittings	Philips, Crompton, Bajaj, Havells
7	Polycarbonate Junction Box	Hensel, Siemens, Heinsburg, Rittal
8	Terminals-	Elemex, Connectwell, Wago
9	Conduits	BEC, AKG
10	Ceiling Fan	Usha, Bajaj, Havells, CGL, Khaitan, Orient

In case of items not covered in the above list, the material shall be procured after approval of Client as per the standard material available in the market and having BIS certification mark.

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Engel

Bill of Quantities:

Construction of Indoor Sports Hall in the premises of Jawahar Vidya

A. CIVIL					
Item no.	Description	Unit	Qty.	Rate	Amount
1	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material in mud mortar within 50 metres lead as per direction of Engineer-in-charge.				
	In cement mortar	cum	15		
2	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.	Cum	300		
3	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete. cum 1953.05	Cum	80		
4	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.	sqm	500		
5	4.1.8 1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	cum	15		
6	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 : (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size)	cum	70		
7	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :				
	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	40		
8	Centering and shuttering including strutting, propping etc. and removal of form for				
	Foundations, footings, bases of columns, etc. for mass concrete	Sqm.	100		

	Suspended floors, roofs, landings, balconies and access platform	Sqm.	100		
	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm.	120		
	Columns, Pillars, Piers, Abutments, Posts and Struts	Sqm.	150		
	Stairs, (excluding landings) except spiral-staircases	Sqm.	50		
9	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg.	10000		
10	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), including the cost of required centering, shuttering complete. 4.6.1 1:1½:3 (1 Cement: 1½ coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size).	Cum	7		
11	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: 6.1.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	25		
12	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	170		
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.	Sqm.	100		
14	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	Sqm.	20		
15	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, guard bar, ladder, railings, brackets, gates and similar works	Kg.	100		
16	Providing and fixing bolts including nuts and washers complete.	Kg.	400		

17	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				
	40 mm thick with 20 mm nominal size stone aggregate	Sqm.	500		
18	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement				
	18 mm thick	Sqm.	50		
19	Supplying chemical emulsion in sealed containers including delivery as specified.				
	Chlorpyrifos/ Lindane emulsifiable concentrate of 20%	litre	15		
20	Diluting and injecting chemical emulsion for POST-CONSTRUCTION Anti-termite treatment (excluding the cost of chemical emulsion) :		LS		
	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300mm including excavation channel along the wall & rodding etc. complete:				
	With Chlorpyrifos/ Lindane E.C. 20% with 1% concentration	metre	150		
Civil -Total A					

B. ARCHITECTURE

Item no.	Description	Unit	Qty.	DSR Rate	Amount
	FINISHING				
FN-1	12 mm cement plaster of mix 1 : 4 (1 cement : 4 fine sand)	sqm	750		
FN-2	6 mm cement plaster of mix 1 : 3 (1 cement : 3 fine sand)	sqm	131		
FN-3	15 mm cement plaster on the rough side of single or half brick wall of mix :1:6 (1 cement: 6 fine sand)	sqm	690		
FN-4	Finishing walls with Acrylic Smooth exterior paint of required shade ; New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm).	sqm	690		
FN-5	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	881		

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FN-6	Wall painting with acrylic emulsion paint , 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.				
	Two coats.	sqm	881		
FN-7	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	Two or more coats on new work	sqm	100		
FN-8	Applying priming coats with primer of approved brand and manufacture, having low VOC((Volatile Organic Compound) content.				
	(a) With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams / litre	sqm	25		
	c) With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre.	sqm	881		
FN-9	Applying priming coat:				
	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works	sqm	100		
FN-10	Distempering with 1st quality acrylic distemper, 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.				
	Two coats.	sqm	85		
	FLOORING				
FL-1	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.				
	Double charge vitrified tile polished finish of size 600 x 600 mm	sqm	110		

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Bojal

FL-2	Kota stone 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)				
	25 mm thick.	sqm	50		
	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete	sqm	15		
FL-3	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including pointing the joints with white cement and matching pigments etc., complete.	sqm	0		
FL-4	Providing and fixing 1st quality ceramic glazed wall tiles conforming IS:15622(thickness to be specified by manufacturer), of appvd. Make, in all colours, shades except burgundy, bottle green, black of any size as approved by engineer-in charge, in skirting, riser 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 @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	63		
FL-5	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.				
	40 mm thick with 20 mm nominal size stone aggregate	sqm	422		
	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1cement : 3 coarse sand), finished with a floating coat of neat cement.				
	18 mm thick.	sqm	50		

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FL-6	Providing and fixing 18 mm 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, 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 at all levels				
	Granite of any colour and shade				
	Area of slab upto 0.50 sqm	sqm	25		
FL-7	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		
FL-8	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	each	4		
FL-9	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.				
	Granite Stone of approved shade	sqm	2		
FL-10	Supply And Installation of Maple wood flooring as per following aspecifications: a) 10/19 mm air crush rubber pad, b) 70X45 pine runner random length anti termite treated sleepers, c) top surface finish shall be of 21 mm thick- sports standard- imported maple wood.	sqm	180		
FL-11	Supply And Installation of sports grade cushioned- synthetic vinyl flooring system including markings of court borders as per standards. overall thickness shall be min. 6.5 mm.	sqm	180		

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FL-12	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, 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.	sqm	200		
FL-13	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	5		
WOOD AND PVC WORK					
WW-1	Providing and fixing factory made P.V.C. door frame of approved make of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specification and directed by engineer.	metre	20		
WW-2	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail.				

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Height

	Top,bottom and lock rails shall be provided both side of the panel. 10 mm (5mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing.				
	30 mm thick Pre- laminated PVC door shutters.	sqm	6.72		
WW-3	Providing and fixing ISI marked flush door shutters conforming to IS :2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	16.1		
WW-4	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.				
	1.5 mm thick	sqm	32.2		
WW-5	Providing and fixing aluminium sliding door bolts ISI marked anodized (anodic coating not less than grade AC10 as per IS:1868) transparent or dyed to required colour or shade with nuts and screws etc. complete.				
	300x16 mm	each	10		
	250x16 mm	each	4		
WW-6	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc. complete.				
	300 x 10 mm	each	10		
	250 x 10 mm	each	5		
	150 x 10 mm	each	5		

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WW-7	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc. complete.				
	a) 125 mm	each	20		
WW-8	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws etc., complete				
	a) single rubber stopper	each	6		
WW-9	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	4		
WW-10	Extra for providing vision panel not exceeding 0.1 sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):				
	Rectangular or square	sqm	4		
STEEL WORKS					
ST-1	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 of the surface as directed by Engineer-in-charge;				
	Profile B				
	Fixing with adjustable lugs with split end tail to each jamb	metre	31.2		
ST-2	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
	Fixed to openings/wooden frames with rawl plug screws etc.	kg	100		

SL *Page 9*

Page 9

ST-3	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge.(for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts,fasteners etc.).	kg	90		
ALUMINIUM WORKS					
AL-1	Providing and fixing Aluminium work for doors, windows, ventilators and partitions with extruded built-up standard tubular sections/appropriate Z sections and othe sections of approved make conforming to IS:733 nad IS:1285, fixing with dash fasteners of reqd. dia and size, including necessary filling up the gaps at junctions, i.e. at top ,bottom and sides with reqd. EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rustfree straight mitred and jointed mechanically wherever reqd. including cleat angle.Aluminium snap beading for glazing/paneling, C.P. brass/stainless steel screws , all complete as per architectural drgs. and the directions of Engineer in charge.(glazing , paneling and dash fastener to be paid separately)				
	For Fixed Portion				
	Anodised aluminium (anodised alu. dyed to reqd. shade according to IS:1868, Minimum anodic coating of grade AC 15)	Kg	140		
	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 EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
	Anodised aluminium (anodised transparent or dyed to required shade according to IS:1868,Minimum anodic coating of grade AC 15)	Kg	375		
AL-2	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.				
	With float glass panes of 4.0 mm thickness (wt. not less than 10 kg/sqm	sqm	5		

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	With float glass panes of 5 mm thickness (wt. not less than 12.50 kg/sqm)	sqm	80		
	With float glass panes of 8 mm thickness (wt. not less than 20 kg/sqm)	sqm	20		
AL-3	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge, including Door handle, lock and stopper etc.	sqm	8		
AL-4	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings, the aluminium quality as per grade 6063 T5 or T6 as per BS 1474, including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account).	kg	240		
ROOFING					
RF-1	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross 'T' of size				
	24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main 'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum)				

By *[Signature]*

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	sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including cutting/ making opening*for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T', bottom exposed with 24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge.				
	Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, non- combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/mk.	sqm	35		
RF-2	Providing and fixing on wall face unplasticised rigid PVC rain water pipes conforming to IS:13592 Type-A, including jointing with seal ring conforming to IS:5382, leaving 10 mm gap for thermal expansion, i) Single socketed pipes				
	110mm dia	metre	24		
Sanitary & Plumbing					
Item no	Description	Unit	Qty		
SW-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 :				
	Kitchen sink with drain board				
	510x1040 mm bowl depth 200 mm	each	0		
	Kitchen sink without drain board				
	610x510 mm bowl depth 200 mm	each	1		

A. Singh

Singh

SW-2	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	8		
SW-3	Providing and fixing PTMT liquid soap container 109 mm wide, 125mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	each	4		
SW-4	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	each	4		
SW-5	Providing and fixing CP brass Robe hook of Jaquar (Cont.-cat. No-1191) or approved equivalent fixed with CP brass screws with all bye-works complete as per specifications and direction of the Engineer.	each	4		
SW-6	Providing and fixing toilet paper holder. Vitreous china	each	4		
SW-7	Providing and fixing 125 mm. dia. C.P Brass floor jali (with / without waste hole) of approved quality and make complete with all bye-works as per specification and direction of the Engineer	each	9		
SW-8	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer- in-charge.	each	4		
SW-9	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required: a) Health Faucet (hand jet) with flexible connection pipe for WC.	each	4		
SW-10	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 15 mm nominal bore	each	4		
SW-11	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm nominal bore	each	9		
SW-12	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15 mm nominal bore	each	14		
SW-13	Providing and fixing PTMT pillar cock of approved quality and colour 15 mm nominal bore, 107 mm long weighing not less than 110 gms	each	4		

SL Janga

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SW-14	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS :2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required ;				
	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	each	2		
SW-15	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required ;				
	W.C. pan with ISI marked white solid plastic seat and lid	each	4		
SW-16	Providing and fixing wash basin with C.I. brackets, 15 mm PTMT pillar cock , 32 mm PTMT waste coupling of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required. White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm PTMT pillar cock .	each	4		
SW-17	Supply, fitting and fixing white glazed vitreous china oval shaped under counter wash basin of size 560x450 mm without tap holes- (Zen - cat no. 10049) of Hindware or approved equivalent make- installation under counter with 15 mm.	each	4		
SW-18	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.				
	External Work				
	25 mm nominal outer dia Pipes	Metre	25		
	32 mm nominal outer dia Pipes	Metre	18		
	40 mm nominal outer dia Pipes	Metre	14		

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SW-19	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. Concealed work , including cutting chases and making good the walls etc.				
	15 mm dia nominal outer dia pipes	Metre	25		
	20 mm dia nominal outer dia pipes.	Metre	45		
	25 mm dia nominal outer dia pipes.	Metre	30		
SW-20	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
	Semi rigid pipe				
	40 mm dia	each	5		
SW-21	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	25 mm nominal bore	each	2		
	32 mm nominal bore.	each	2		
	40 mm nominal bore.	each	2		
SW-22	Providing, Laying and Fixing in position, under floor, against wall in chases sand cast Iron pipes and specials conforming to IS:1729 including cutting the pipes to the required lengths making joints to CI soil pipes and specials in CM 1:1, including cost of all required fittings, accessories, bends, Y joints, spun yarn, cement, sand, labour for packing, curing, painting and testing joints to be required pressure and rectifying the leakages if any etc complete in all respect (Specials at junction of lateral pipe and and vertical stack shall have access door for inspection)				
	100 mm dia.	RM	20		
	75 mm dia.	RM	15		
SW-23	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI : 12701, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support i/c fittings & fixtures for tank shall be paid separately.	per litre	2000		
Architecture -Total B					

C. STRUCTURAL WORKS

Item no	Description	Unit	Qty.	approx rate	Amount
STR-1	Supply of fabricated steel structures including transportation, storing and stacking , fabrication, loading, transportation, delivery at site including unloading of all steel structures , consisting of Roof structures, sheeting posts, purlins and runners with application of one coat of primer paint inclusive of supply of paint, bolts, nuts, washers, electrodes, jigs, fixtures and other consumables including all tools, tackles & labours complete in accordance with TS and Drawings	T	30		
STR-2	Erection of steel structures including transportation, storing, handling and site assembly of all steel structures, consisting of Roof structures, sheeting posts, purlins and runners with inclusive of supply of bolts, nuts, washers, electrodes, jigs, fixtures and other consumables including all tools, tackles & labour complete in accordance with TS and Drawings and application of second coat of primer and finishing paints as per TS and drawings.	T	30		
STR-3	Procurement, supply and fixing of 0.45mm thk Color coated Galvalume troughed steel sheets, for roof & sides including necessary flashings, corners, ridges, fittings and fixtures as per technical specification, including cutting of sheets/ glass to required shapes and sizes, and fixing them in position using self tapping screws, nuts washers, other fixtures and fasteners, glass putty etc with all labour and materials etc. complete as per drawings and specifications.	sqm	465		
Structural - Total C					

D. ELECTRICAL WORKS					
S.NO.	Description	Unit	Qty	Unit Rate	Amount

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1	Supply, handling (loading & unloading), storage, shifting from store to equipment foundation, erection, testing, commissioning of Distribution Board. This board shall be provided with 63A 4P MCCB (Microprocessor based with S/C, O/C & E/F Protection suitable for a Short circuit capacity of 36KA as incomer) and 18 nos. of 16 A SP MCB Type C Curve with complete wiring. This board shall conform to IS 8623 -1 & 3 ,IEC 61439 -1 & 3 ,IK 09 with double door, IP 43, 1.6MM CRCA sheet, RAL 7003, powder coated complete with 100A insulated phase bus-bars , neutral bars with shrouds, earth bars , sticking saddles, cement spill protector, color-coded interconnecting wire set , cable ties , blanking plates and circuit identification labels.	Set	1		
2	Supply, laying and termination of 4CX16 Sq.mm Al, XLPE insulated, armoured power Cable, with ST2 inner sheath and outer sheath as per Applicable IS Standards. The cables shall be laid buried at a minimum depth of 1 meter from the ground level with sand and brick.	Meters	200		
3	Supply and laying of heavy duty conduits of size 25mm concealed in walls. Necessary accessories as required e.g. bend, couplers, etc shall be provided as per the requirements.	Meters	300		
For Badminton court area					
4	Supply, installation testing and commissioning of Light Fitting with Philips Model No. Tango BVP483 LED235 CW AMB PSU GR or equivalent from Crompton, Bajaj, Havells. All the mounting accessories as required for installation of light fitting is included in scope of the Bidder.	Set	24		
5	Supply, installation testing and commissioning of Modular switchboards each with 5 nos. of 20A modular switches (each of 2M size) and 1 no. of multi pin 6A/10A/13A socket).	Set	2		
6	Supply, installation testing and commissioning of polycarbonate junction box suitable for loop in loop out arrangement of 3X 4 Sq.mm Cu Wire.	Set	24		
7	Supply, laying and termination of 3x4 Sq.mm Cu FRLSH wires	Meters	255		
For Periphery lighting					

CS Jang

Bajaj

8	Supply, installation testing and commissioning of Light Fitting with Philips Model No. BRP062 LED 84 CW SLC S1 PSU with SPD or equivalent from Crompton, Bajaj, Havells. All the mounting accessories as required for installation of light fitting is included in scope of the Bidder.	Set	8		
9	Supply, installation testing and commissioning of polycarbonate junction box suitable for loop in loop out arrangement of 3X 2.5 Sq.mm Cu Wire.	Set	8		
10	Supply, installation testing and commissioning of Modular switchboards each with 2 nos. of 20A modular switches (each of 2M size) and 1 no 6A/10A/13A combi socket)	Set	1		
11	Supply, laying and termination of 3x 2.5 Sq.mm Cu FRLSH wires concealed in walls in suitable heavy duty conduits.	Meters	80		
	For Dressing rooms, offices ,TT Room corridors, staircase				
12	Supply ,installation testing and commissioning of Light Fitting with Philips SM251C LED20S-6500 PSU WH or equivalent from Crompton, Bajaj, Havells. All the mounting accessories as required for installation of light fitting is included in scope of the Bidder.	Set	33		
13	Supply, installation testing and commissioning of 1200mm Ceiling Fan. All the mounting accessories as required for installation of ceiling Fan is included in scope of the Bidder. Model-SS390 (havells)	Set	4		
14	Supply, installation testing and commissioning of Modular switchboards each with 6 nos. of 10A modular switches (each of 1M size) and one regulator and 2 nos. 6A/10A/13A combi socket)	Set	5		
15	Supply, installation testing and commissioning of Modular switchboards each with 2 nos. of 10A modular switches (each of 2M size) and 2 nos. 6A/10A/13A combi socket)	Set	2		
16	Supply, laying and termination of 3x 2.5 Sq.mm Cu FRLSH wires	Meters	100		
17	Supply, laying and termination of 3x 1.5 Sq.mm Cu FRLSH wires	Meters	165		
18	Supply, installation testing and commissioning of Light Fitting with Philips Model No. BN100C LED40S-6500 PSU L120 GR or equivalent from Crompton, Bajaj, Havells. All the mounting accessories as required for installation of light fitting is included in scope of the Bidder.	Set	12		
19	Supply, laying and termination of 3x 2.5 Sq.mm Cu FRLSH wires	Meters	100		

20	Supply, installation testing and commissioning of Modular switchboards each with 2 nos. of 10A modular switches (each of 2M size) and 1 nos. 6A/10A/13A combi socket)	Set	3		
21	Construction of Earth pits with necessary excavation, providing and fixing of earth electrode with GI pipe and funnel, providing and filling of soil enhancement material, construction of earth pit chambers, Providing earth pit cover, painting of earth pit covers, measurement of earth pit resistance and connecting the earth pit to earth grid/equipments conforming to IS- 3043. The job includes providing of 50 mm diameter NB class B, GI pipe of 3 meters length. GI Earthing strip of 300 mm (Length) x 6 mm (Thickness) x50 mm (Width) bent to the shape of the pipe and welded at 75 mm from top portion of GI earth electrode. Tapped holes of 10 mm diameter shall be provided on the GI earthing strip for connecting earthing strips to the earth electrode. Funnel with a mesh shall be provided on the top portion of the earth electrode for watering purpose. GI earthing strip welded to the earth electrode at the top shall have hot dip galvanized coating of not less than 10 microns thickness.	Set	2		
	The job includes filling up of the earth pit with earth enhancement materials after placing the earth electrode in the excavated earth pit. Earth enhancement materials shall be watered and rammed as tight as possible for shall be carried out proper bonding of the electrode with the adjacent soil. Earth enhancement material shall be filled 300 mm in diameter, around electrode The job includes providing RCC covers on the top portion of the earth pit chamber with suitable handle for lifting arrangement. A base frame of suitable dimensions shall be fixed to the top portion of the earth pit chamber to accommodate earth pit cover. Complete arrangement shall be at ground level. The RCC cover shall be inscribed with "JVM Earth Pit -PSI". All hardware (nut, bolt & washer etc.), used for connection/joints except where welding is done,				

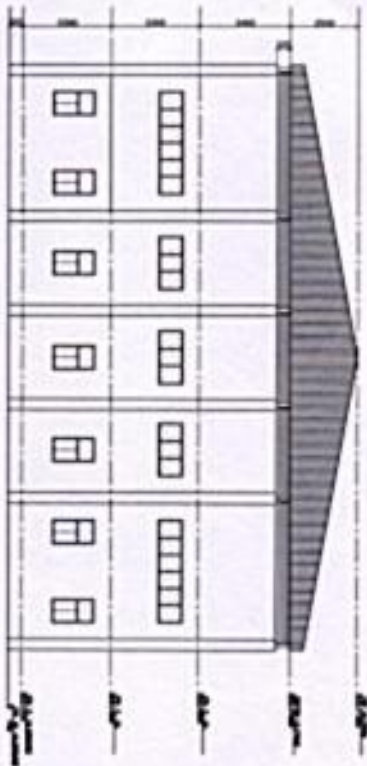
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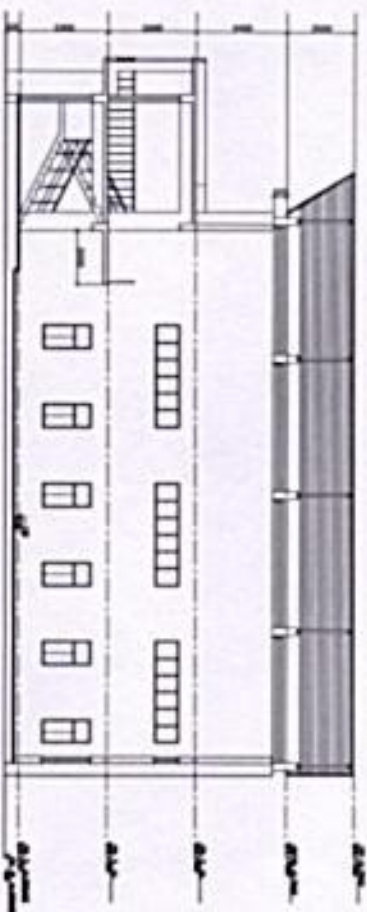
	shall be made of stainless steel (SS). Joints and tapings in the main earth loop shall be made in such a way that reliable and good electrical connections are permanently ensured. All welded joints shall be suitably protected by applying red oxide paint and bitumen. The earth strip should be laid in at about depth of 300 mm from ground level and to be connected to equipments and earth grid at the installations.				
22	Supply and fixing of 25X 3 GI flat for earthing	Meters	50		
23	Erection accessories like, nut, bolts, steel, angle, channel lug, ferule, glands, tapes, bend, M-seal etc. or any other materials required to complete the work in all respect.	Lot	1		
Electrical - Total D					
Grand Total (A+B+C+D)					

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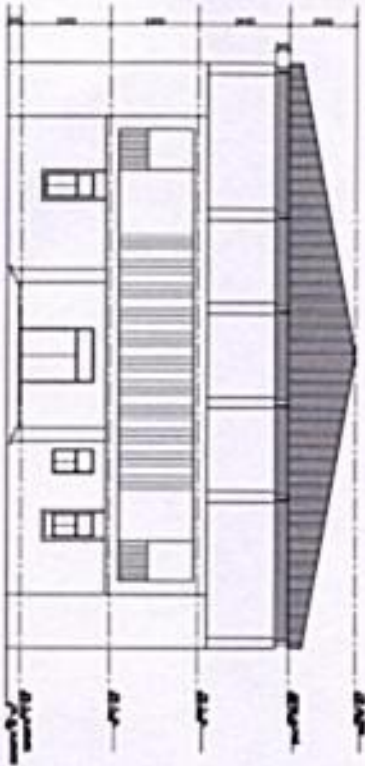
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ELEVATION - C



SECTION - AA



ELEVATION - B

OPENING SCHEDULE

Sl. No.	Item	Quantity	Unit	Description
1	1	1	Sqm	ROOF TOP OPENING (CONCRETE SLAB) AREA
2	2	1	Sqm	ROOF TOP OPENING (SLAB) AREA
3	3	1	Sqm	ROOF TOP OPENING (SLAB) AREA
4	4	1	Sqm	ROOF TOP OPENING (SLAB) AREA
5	5	1	Sqm	ROOF TOP OPENING (SLAB) AREA
6	6	1	Sqm	ROOF TOP OPENING (SLAB) AREA
7	7	1	Sqm	ROOF TOP OPENING (SLAB) AREA
8	8	1	Sqm	ROOF TOP OPENING (SLAB) AREA
9	9	1	Sqm	ROOF TOP OPENING (SLAB) AREA
10	10	1	Sqm	ROOF TOP OPENING (SLAB) AREA
11	11	1	Sqm	ROOF TOP OPENING (SLAB) AREA
12	12	1	Sqm	ROOF TOP OPENING (SLAB) AREA
13	13	1	Sqm	ROOF TOP OPENING (SLAB) AREA
14	14	1	Sqm	ROOF TOP OPENING (SLAB) AREA
15	15	1	Sqm	ROOF TOP OPENING (SLAB) AREA
16	16	1	Sqm	ROOF TOP OPENING (SLAB) AREA
17	17	1	Sqm	ROOF TOP OPENING (SLAB) AREA
18	18	1	Sqm	ROOF TOP OPENING (SLAB) AREA
19	19	1	Sqm	ROOF TOP OPENING (SLAB) AREA
20	20	1	Sqm	ROOF TOP OPENING (SLAB) AREA

FOR TENDER PURPOSE ONLY



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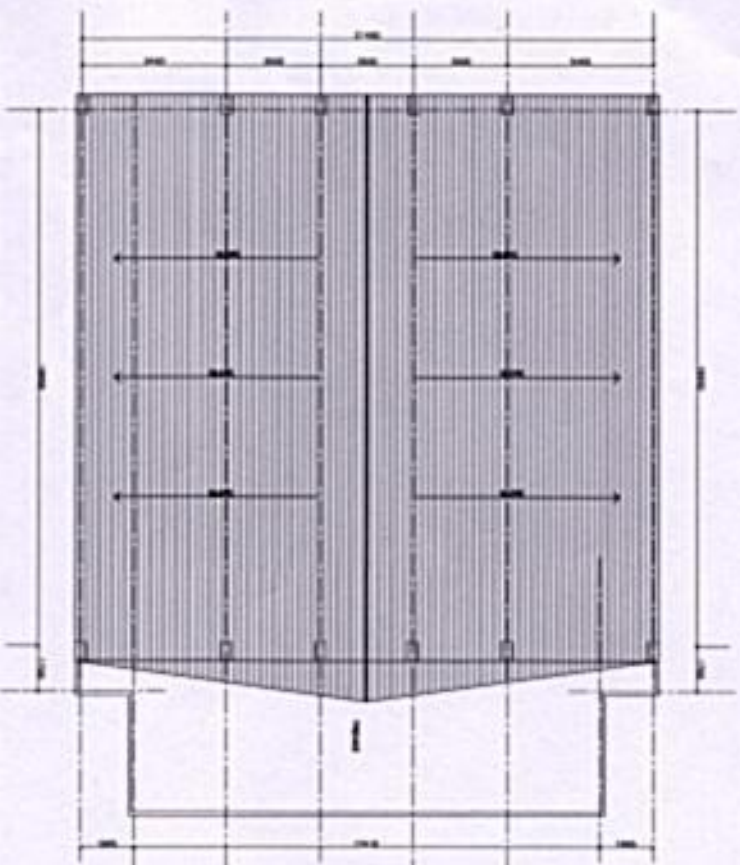
INDOOR SPORTS HALL
JYM SCHOOL, SHYAMALI

ELEVATION - C, D SECTION - AA
OPENING SCHEDULE

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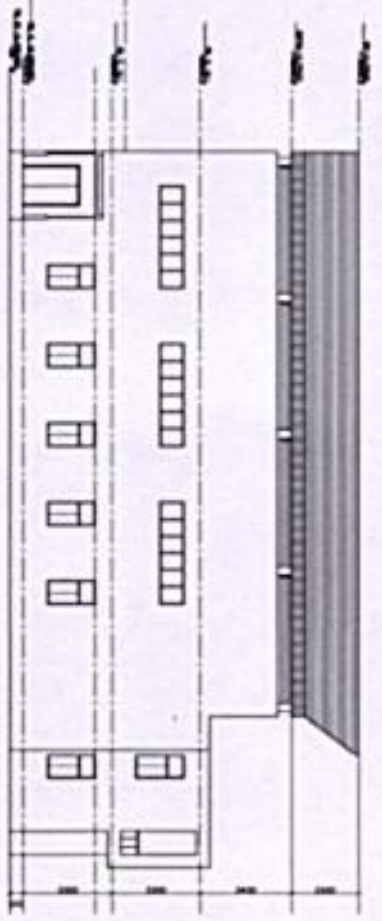
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1. ALL DIMENSIONS ARE IN METERS
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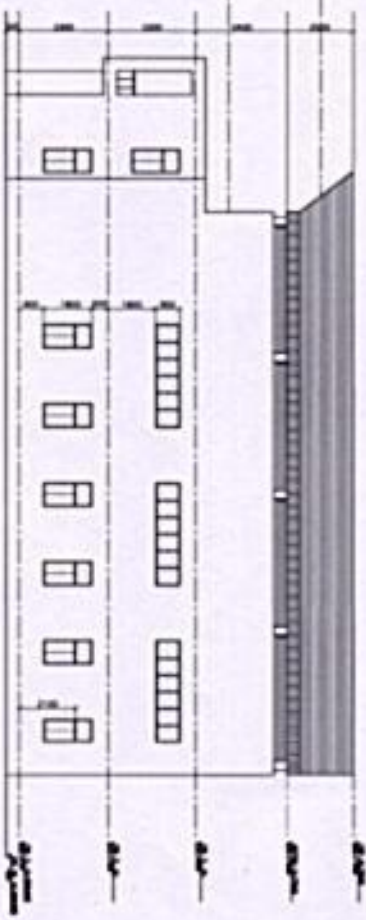
ROOF PLAN

GROUND FLOOR PLAN

NOTES:
1. All dimensions are in feet and inches.
2. All dimensions are to the center line.



ELEVATION - A



ELEVATION - B

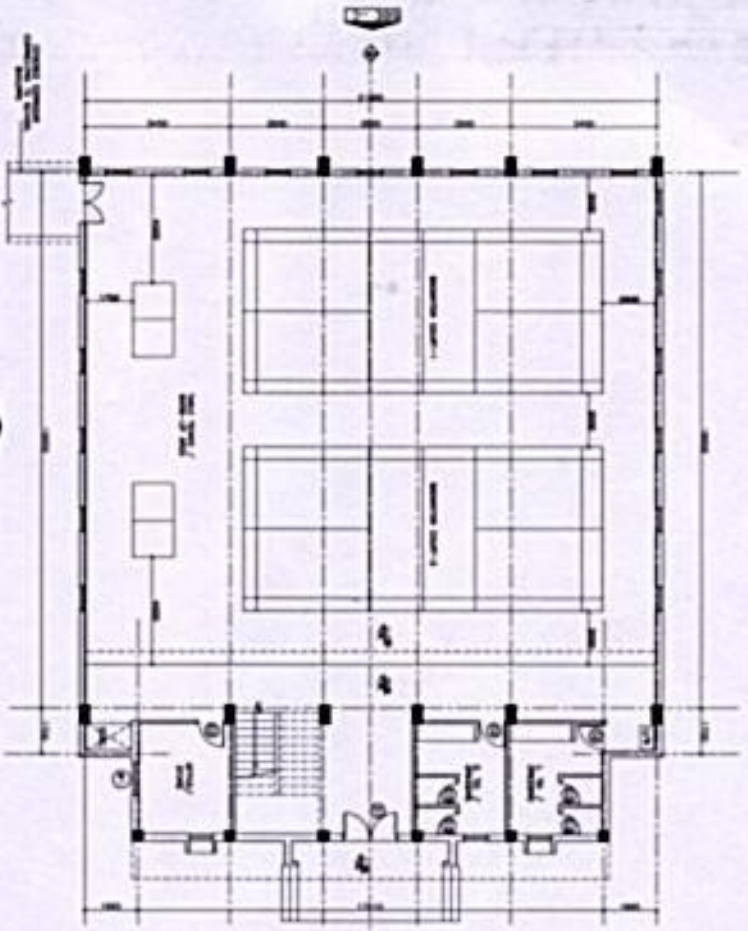
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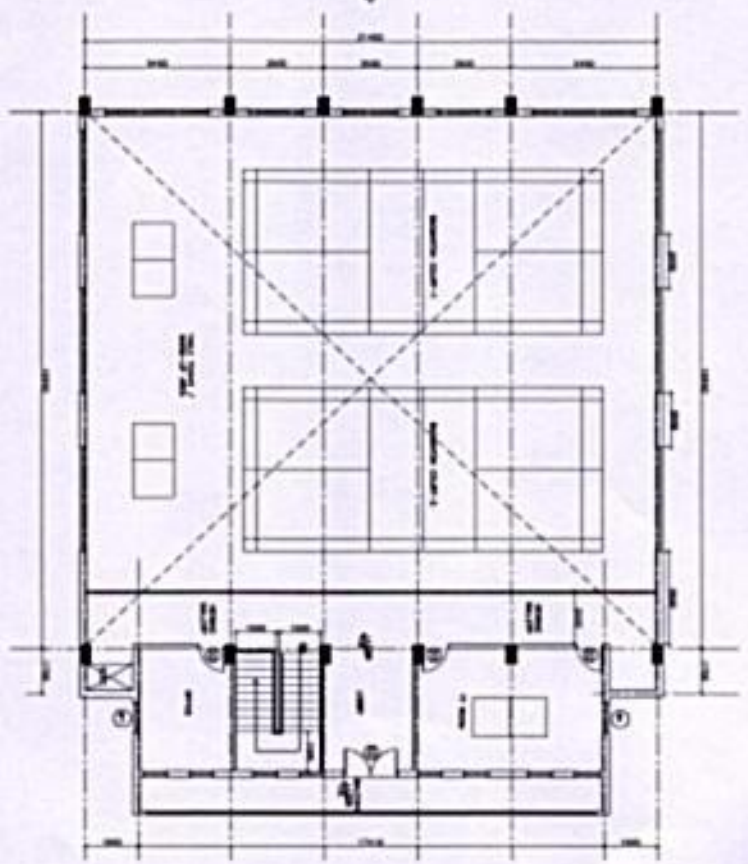
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MECCON LIMITED

INDOOR SPORTS HALL
JWA SCHOOL, SHYAMALI

DATE	REVISION	BY	CHKD
18/11/18	1	MECCON	MECCON
18/11/18	2	MECCON	MECCON
18/11/18	3	MECCON	MECCON
18/11/18	4	MECCON	MECCON
18/11/18	5	MECCON	MECCON
18/11/18	6	MECCON	MECCON
18/11/18	7	MECCON	MECCON
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18/11/18	98	MECCON	MECCON
18/11/18	99	MECCON	MECCON
18/11/18	100	MECCON	MECCON



GROUND FLOOR PLAN



FIRST FLOOR PLAN

FOR TENDER PURPOSE ONLY



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MECON LIMITED

INDOOR SPORTS HALL
JWA SCHOOL, SHYAMALI

GROUND FLOOR PLAN
FIRST FLOOR PLAN

Sl. No.	Particulars	Unit	Quantity	Rate	Amount
1	GROUND FLOOR PLAN	Sq. Ft.	1000	100	100000
2	FIRST FLOOR PLAN	Sq. Ft.	1000	100	100000
3	TOTAL				200000