



भारतीय प्रबंध संस्थान इंदौर

INDIAN INSTITUTE OF MANAGEMENT INDORE

प्रबंध शिखर, राउ-पीथमपुर रोड, इंदौर- ४५३५५६ (म.प्र.), भारत

दूरभाष: ०७३१-२४३९ ६२० / ४४७

Prabandh Shikhar, Rau-Pithampur Road, Indore - 453556 (M.P.), India
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Tender Notice No.: IIMI/Project/01/2017/35
File No. 335 (II)

Technical cum Commercial Bid

Name of Work:

Construction of Structural Steel Elevator Hoist Shaft at SR-16 hostel at IIM Indore

Certified that the NIT Document contains 23 pages

INDIAN INSTITUTE OF MANAGEMENT INDORE

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सिद्धिमूलं प्रबन्धनम्
भा. प्र. सं. इन्दौर
IIM INDORE

भारतीय प्रबंध संस्थान इन्दौर

प्रबंध शिखर, राऊ-पीथमपुर रोड, इन्दौर – 453 556 (म.प्र.), भारत

INDIAN INSTITUTE OF MANAGEMENT INDORE

Prabandh Shikhar, Rau-Pithampur Road, Indore - 453 556 (M.P.), India

Dated: March 1, 2017

NOTICE INVITING TENDER

Ref: Tender Notice No. IIMI/Project/01/2017/35 File No. 335 (II)

IIM Indore invites item rate tender under two bid system (Part-I Earnest Money and Technical bid & Part-II Financial bid) for the under mentioned work. Schedule of item & quantity is attached as annexure -1 to this notice.

The tender is also e-published on Central Public Procurement Portal under url: <https://eprocure.gov.in/epublish/app>

Part “A” : NIT Details

1	NIT No.: IIMI/Project/01/2017/35 File No. 335 (II)	
2	Name of Work	“Construction of Structural Steel Elevator Hoist Shaft at SR-16 hostel at IIM Indore”
3	Estimated Cost Put to Tender	Rs. 6,01,397/-
4	Earnest Money Deposit (Rs.)	Rs. 12,000/- by e-payment through electronic mode or DD or bankers cheque.
5	Tender Processing Fee (Rs.)	Rs. 1,000/- by e-payment through electronic mode or DD or bankers cheque. (Non-Refundable)
6	Completion period	THREE (03) Calendar Months including monsoon period
7	Last date & time of receipt of tender	Upto 03:00 PM on March 9, 2017
8	Date & Time of opening of technical bid	3:30 PM on March 9, 2017 in the Office of the Chief Engineer, Administrative Block, IIM Indore M.P. -453556
9	Date and Time of opening of financial bid of qualified bidders	Will be notified at a later date
10	Security Deposit	2.5% of tendered value from bills
11	Performance Guarantee	5% of tendered value on acceptance of bid

Part “B”: Tender Requirements

1. Criteria of eligibility for submission of bid documents:

In order to fulfill eligibility for acceptance, the following criteria will be followed. Bidders are required to submit relevant verifiable and self-attested documents.

- i) PAN Card
- ii) Experience/ work completion certificate from the client for whom similar work of highest value (not less than 5 lakhs) has been executed. The certificate should not be older than Five years.
- iii) Latest IT returns

2. Mode of payment of Tender processing fee and EMD:

- i) Bidders may deposit the Tender Processing Fee and EMD through NEFT or RTGS. Details for the same are as below:

Name of beneficiary : Indian Institute of Management Indore
Address : Rau-Pithampur Road, Indore -453556, M.P.
Account No. : 53018623445
Name of the Bank : State Bank of India
Address of the bank : IIM Indore Campus
IFSC Code : SBIN0030525

- ii) EMD can also be furnished in DD / Bankers cheque etc. drawn in favor of ‘Indian Institute of Management Indore’ payable at ‘Indore’.
Bidders will have to attach Payment details towards cost of tender processing fee & EMD during the submission of tender and the same will be accepted only on verification & confirmation by the Institute. Any delay in credit will not be entertained by the Institute.

3. The Tenderer is required to prepare two sealed cover comprising of the following:

Cover-I: Technical Bid

- i) EMD & Tender Fee details
- ii) PAN Card
- iii) Experience/ work completion certificate issued from the clients
- iv) Latest IT Returns

Cover-II: Financial Bid

- i) Financial Bid (in the format given at Annexure-1)

Both covers should be kept in one main sealed cover super scribed as “IIMI/Project/01/2017/35 File No. 335 (II): Construction of Structural Steel Elevator Hoist Shaft at SR-16 hostel at IIM Indore”

4. The tenderer has to drop the cover sealed in above manner in the Tender Box kept at the ‘Project Department, IIM Indore, Administrative Block, Rau-Pithampur

Road, Indore -453556 M.P.’ on or before the due date & time positively. The tender shall not be accepted beyond the stipulated date and time under any circumstances whatsoever. Any delay happened in the transition is at the risk of the tenderer and IIM Indore will not be responsible.

5. EMD of unsuccessful bidders will be refunded.

Part “C”: Other Terms & Conditions

1. The bid submitted shall become invalid and tender processing fee shall not be refunded if:
 - (i) If the bidder is found ineligible.
 - (ii) If the documents submitted by the successful bidder does not match with the originals before the award of work.
2. The competent authority on behalf of the Director IIM Indore does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
3. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
4. The competent authority on behalf of the Director, IIM Indore reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
5. *The bid for the works shall remain open for acceptance for a period of ninety (90) days.* If any bidders withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the IIM Indore shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.
6. IF ANY INFORMATION FURNISHED by the applicant is found to be incorrect at a later stage, they shall be liable to be debarred from tendering/ taking up works in IIM INDORE.
7. TAXES :
 - i) This works comes under Works contract. Works contract Tax/MPVAT as applicable shall be deducted from each bill paid to the contractor.

- ii) Sales tax or any other tax on material in respect of this contract shall be payable by the contractor and IIM Indore will not entertain any claim whatsoever in this respect.
 - iii) Tenderer need not include service tax element in the rate as the actual service tax paid will be reimbursed if:
 - a) Original receipt of remittance is produced & verified.
 - b) Prevailing rule with regard to service taxes on work contract is applicable.
 - iv) Labour Welfare cess @ 1 % of gross value of work done shall be recovered from each bill paid to the contractor.
 - v) Income Tax and cess as applicable shall be deducted from each bill paid to the contractor.
 - vi) Contractor, should be registered under EPF & ESIC and as per law, shall pay EPF & ESIC of contract workers to concerned Department from time to time.
 - vii) Any other taxes/cess as per government directives shall be deducted from each bill paid to the contractor from time to time.
8. The specifications, Terms & Conditions, other regulations which are not herein mentioned will be guided by relevant CPWD / IS /Other Central Govt./state Govt. norms, OEM standards applicable for IIM Indore & the decision in this regard will be guided by the decision of the respective authority of IIM Indore which shall be final and binding to the contractor.
9. The party whose tender has been accepted has to execute an agreement on non-judicial stamp paper immediately after work order is issued.
10. Performance guarantee in the form BG or FDR or DD @ 5% of tendered amount has to be furnished within 10 days of issue of LOA.
11. If called for, originals of the document submitted shall be produced.
12. General condition of contract (GCC) of CPWD will be applicable.
13. IIM Indore reserves the full rights to increase/decrease the quantity of items in the tender as per requirement upto 50% upwards / downwards.
14. Any dispute is subject to the jurisdiction of Civil Court Indore.
15. This work covers construction of structural steel elevator lift hoist-way/shaft & structural glazing and other associated works as per the schedule of quantity provided in the financial bid.
16. Location: The structural steel elevator shaft hoist is to be prepared at Student Residence-16 (SR-16) at IIM Indore campus.

17. The work shall be executed as per CPWD general specifications for Civil & electrical works with upto date amendments as per relevant IS and as per directions of Engineer-in-Charge. These additional specifications are to be read in conjunction with above. However, nothing extra shall be paid on account of these additional specifications & conditions as the same are to be read along with schedule of quantities for the work.
18. The Tenderer should in his own interest visit the site and familiarize himself with the site conditions before tendering.
19. No T&P shall be issued by the IIM Indore and nothing extra shall be paid on account of this.
20. Employer reserves the right to alter the mode of selection, accept or reject any or all bids without assigning any reason thereof.
21. Necessary clarification required by the IIM Indore shall have to be furnished by the Tenderer within the time given by the IIM Indore for the same. The Tenderer will have to depute his representative to discuss with the officer(s) of the IIM Indore as and when so desired. In case, in the opinion of the IIM Indore a Tenderer is taking undue long time in furnishing the desired clarifications, his bid will be rejected without making any reference.
22. The Tenderer will have to fill up their rates only in the price bid in BoQ format. Tenders in which the price bids are given in any other format are liable to be rejected.
23. A tenderer will also not be allowed to withdraw or modify any condition at a time after the technical bids have been accepted and the decision to open the price bid has been taken by the IIM Indore.
24. The IIM Indore reserves the right to reject any or all the price bids and call for fresh prices/ tenders as the case may be without assigning any reason.
25. **Shop drawings:** The shop drawing of the structure to be erected is attached with this tender notice.

26. **Terms of Payment:**

Payments shall be released as per General Conditions of contract and the following conditions. All interim payments shall have deductions towards advances and other contract conditions.

- **50 %** of material cost of the item indicated against each item of work shall be made after delivery at site in good condition on pro-rata basis subject to deductions to be made against advances and security deposit.
- **Balance on completion** of entire work and handing over to the IIM Indore for beneficiary use.

27. Security deposit:

The security deposit will be collected by deductions from the running bill of the contractor at the rate mentioned below. The security deposit can also be deposited in cash or in the form of Government Securities, Fixed Deposit Receipts etc.

A sum @ 2.5% of the gross amount of the bill will be deducted from each running bill *as well as final bill* of the contractor. Such deductions will be made unless the contractor has deposited the amount of security at the rate mentioned in cash or Government securities or Fixed Deposit Receipts.

This is in addition to the performance guarantee that the contractor is required to deposit as per clause mentioned in the tender document.

Security deposit can be released against bank guarantee issued by a schedule bank on its accumulation to a minimum amount of Rs. 5 lakhs subject to the condition that amount of any bank guarantee except last one, shall not be less than Rs. 5 lakhs.

The Bank Guarantee submitted against Security Deposit shall initially be valid up to the stipulated date of completion of the work plus two month minimum.

Refund of security deposit: The Security Deposit will be released after completion of defect liability period of one year.

28. Performance Guarantee:

The tender shall guarantee among other things, the following:

- (a) Quality, strength and performance of the materials used.
- (b) Safe mechanical and stress on all parts under all specified conditions of operation.
- (c) Satisfactory operation & stability during the DLP period.

The contractor whose bid is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the bid amount within Ten days of issue of LOI. This guarantee may be in the form of Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/ Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form in CPWD manual. In case the contractor fails to deposit the said performance guarantee within the period as indicated above, including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.

Refund of performance guarantee: The performance guarantee shall be refunded to the contractor soon after the completion of the work and recording of the completion certificate as above.

29. Rates:

a. Subject to the nomenclature of the item as per schedule of quantities, the specification indicated in the tender documents, the rates quoted shall include charges for forwarding, insurance, freight and delivery, installation, testing, commissioning at site, cost of all materials including royalty & taxes if any, labor, sundry inputs, execution of work at all heights, levels, pattern and design for all leads, lifts and depths including overhead charges and contractor's profit. Nothing extra shall be paid on this account.

b. The Defect Liability Period (DLP) will be of 12 months from the date of handing over. Nothing extra for this period shall be paid.

30. Completeness of tender:

All sundry equipment, fittings, units assemblies, accessories, hardware items, foundation bolts, etc. and all other items which are useful and necessary for efficient assembly and installation of the structure and components of the work shall be deemed to have been included in the tender irrespectively of the whether such items are specifically mentioned in the tender document or not.

31. The Institute may on request of the contractor make available the room / proper storage space for storage of material and erection equipments as per the availability. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over of the installation by the IIM Indore.

32. **Completion Period:** The completion period of 03 (THREE) months indicated in the tender document is for the entire work of Construction of Structural Steel Elevator Hoist Shaft at SR-16 hostel at IIM Indore and handing over of the entire system to the satisfaction of the Engineer-in-Charge.

33. **Guarantee:** The structure shall be guaranteed for a period of 12 months from the date of taking over by the institute against unsatisfactory performance and/or stability due to defective design, workmanship of material. The material or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in-Charge. In case it is felt by the institute that undue delay is being caused by the contractor in doing this, the same will be got done by the IIM Indore at the risk and cost of the contractor. The decision of the Engineer-in-Charge in this regard shall be final.

34. **Power Supply:** Electric service connection of 415V ($\pm 10\%$), 3 Phase, 4 wires, 50 Hz, AC supply shall be provided by the institute for installation purpose and the

utility charges derived as per actual consumption will be recovered from the bills. Or else, the contractor may arrange his own source of electricity.

35. **Water Supply:** Water supply required for civil work etc shall be arranged by the contractor.
36. **Extent of work:**
 - a. The work shall comprise of entire labor including supervision and all materials necessary to make a complete installation as required. The term complete installation shall not only mean major items of the structure covered by specifications but all incidental sundry components necessary for complete execution and satisfactory installation whether or not those have been mentioned in details in the tender document in connation with this contract.
 - b. Minor building works necessary for access to the lift shaft, foundation, making of opening in walls or in floors and restoring to their original condition, finish and necessary grouting etc. as required.
 - c. Defect Liability Period of one year from date of completion and handing over.
37. **COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS:** All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by these specifications.
38. **INDEMNITY:** The successful tenderer/bidder shall at all times indemnify the IIM Indore, consequent on this works contract. The successful tenderer/bidder shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the IIM Indore shall not be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the structure and ancillary system under the supervision of the successful tenderer/bidder in so far as the latter is responsible. The successful tenderer/bidder shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer/bidder due to the above.
39. **Cooperation with other agencies:** The successful tender shall co-ordinate with other contractor who is assigned to install the lift at the shaft (which will be constructed under this work) and shall exchange freely all technical information so as to make the execution of this works contract smooth. No remuneration should be claimed from the IIM Indore for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the successful tenderer during the course of work, such expenditure incurred will be recovered from the successful

tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the successful tenderer himself.

40. **Mobilization advance:** No mobilization advance shall be paid for this work.
41. **Care of the Building:** Care shall be taken by the contractor while handling and installing the various equipments and components of the work to avoid damage to the building. He shall be responsible for repairing all damages *and* restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.
42. **Milestones:** The milestones will be as below:

Sl. No.	Description of Milestone (Physical)	Time Allowed in months (from date of reckoning start)	Amount to be with-held in case of non achievement of milestone
1	Delivery / stocking of complete structural steel section at site, quantity as per BoQ.	1 st month	Rs. 50,000/-
2	Erection of structure upto 4 th floor level	2 nd month	Rs. 50,000/-
3	Fixing of glasses & other items, painting and completion.	3 rd month	Rs. 50,000/-
4	Delay beyond three months: 1.5 % of the tender value per week as compensation for delay.		

43. **Requirement of Technical Representative(s) and recovery Rate**

Sl no	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical /Technical representative)	Minimum Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling of this provision	
						Figures	Words
1	Graduate Engineer /Diploma Engineer	Civil	Site Engineer	Graduate Engineer with minimum 3 years/ Diploma Engineer with 5 year.	1	Rs. 25,000/-	Rupees Twenty five thousand only

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

44. LIST OF APPROVED MAKE/MATERIALS

S.No.	Material	Manufacturer/Brand Name
1	Paint & Primer etc.	Asian Paints, ICI, Berger, Nerolac, Dulux
2	Structural steel	TISCO / SAIL/JINDAL/TATA
3	Structural glazing glass	Saint Gobain, Modiguard, Aasahi
4	Cement (OPC-43 Grade)	Ultratech / JK / Birla
5	Reinforcement Steel	TATA / SAIL / VAIZAG
6	Aluminium sections	Jindal, Hindalco,

Dated: March 1, 2017
Place: Indore (M.P.)

Sd/-
(V.P. Thomas)
Chief Engineer

AGREEMENT

THIS AGREEMENT made at Indore on the _____ day of _____ 2017 between Indian Institute of Management Indore Rau- Pithampur Road, Indore (hereinafter called "The IIM INDORE" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of the one _____ part AND _____ (herein after called "The Contractor" which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the other part.

WHEREAS

The IIM INDORE is desirous of carrying out the "NIT No. IIMI/Project/01/2017/35 File No. 335 (II) for the work of "Construction of Structural Steel Elevator Hoist Shaft at SR-16 hostel at IIM Indore".

The Works are to be executed as per the schedules mentioned in tender document drawings and specifications describing the works to be done.

The Contractor has agreed to execute the said works subject to the provisions hereinafter contained and subject also to General Conditions of Contract, Special conditions of contract, Safety Code, Model Rules for the protection of health and Sanitary arrangements for workers, Specifications, Preambles and Schedule of Quantities and installation schedule (all of which are hereinafter collectively referred to as the 'said tender conditions') and strictly in accordance with the Scope of work annexed hereto at or for the respective rates set out in the Schedule of Quantities amounting to the sum as there under arrived at or such other sums as shall become payable there under (hereinafter referred to as the said tendered amount).

NOW IT IS HEREBY AGREED AS FOLLOWS: -

1. In consideration of the said tendered amount to be paid by The IIM INDORE to the Contractor at the time and in the manner set forth in the said tender conditions and in accordance with the Schedule of Payments to execute and complete the work shown upon the said Drawings strictly in accordance with the specifications and Schedule of Quantities.
2. The said tender conditions, scope of work and the annexures hereto shall be read

and considered as forming part of this contract and the parties hereto shall respectfully abide by to the said conditions and perform the agreement on their part respectively contained in the said conditions.

3. The approved drawings if any, notice inviting tenders technical specification etc. shall also form the basis of this contract.
4. This contract is neither a Lump sum Contract, nor a piece work contract, but is a contract on item rate basis to be carried out and to be paid for according to the Schedule of Payments at the rates contained in the Schedule of Quantities.
5. The contract herein contained shall comprise not only the works mentioned above but all subsidiary works connected therewith within the same site as may be ordered to be done from time to time by the said Engineer In charge for the time being, even if such work may not be shown on the said Drawings or described in the said Specifications and Schedule of Quantities.
6. The IIM INDORE reserves to themselves the right of altering the drawings and the nature of the work by adding to or omitting from the scope of work any item of work or portions of the same without prejudice to this contract.
7. Time shall be considered as the essence of this contract and the Contractor hereby agrees to commence the work within 10 days from the date of work order or from the date of handing over of the site, as provided for in the said terms and conditions, whichever is later, and shall complete the entire work within the specified period, subject nevertheless the provisions for extension of time as may be agreed to by the IIM INDORE and as contained in the said conditions.
8. All payments by the IIM INDORE under this contract shall be made only at Indore.
9. All disputes arising out of or in any way connected with this contract shall be deemed to have arisen at Indore and courts in Indore only shall have jurisdiction to determine the same.
10. That the contract and several parts of this contract have been read by the contractor and fully understood by him. The contractor shall not be entitled for payment beyond tendered quantities unless ordered specifically by written instructions of Director IIM INDORE.
11. This contract shall be signed in duplicate, the original whereof shall be kept in

the custody of the IIM INDORE, and the duplicate with the Contractor.

IN WITNESS WHEREOF the IIM INDORE has set his hands hereunto and two duplicates hereof through his duly authorized official and the Contractor has caused these presents and two duplicates hereof under his common seal by his duly authorized representative at the place and on the date month and year first herein above written.

SIGNED, SEALED AND DELIVERED by IIM INDORE, by the hand of

Signature:
Name:
Designation:

IN THE PRESENCE OF

(1) Signature:
Name:
Address:

(2) Signature:
Name:
Address:

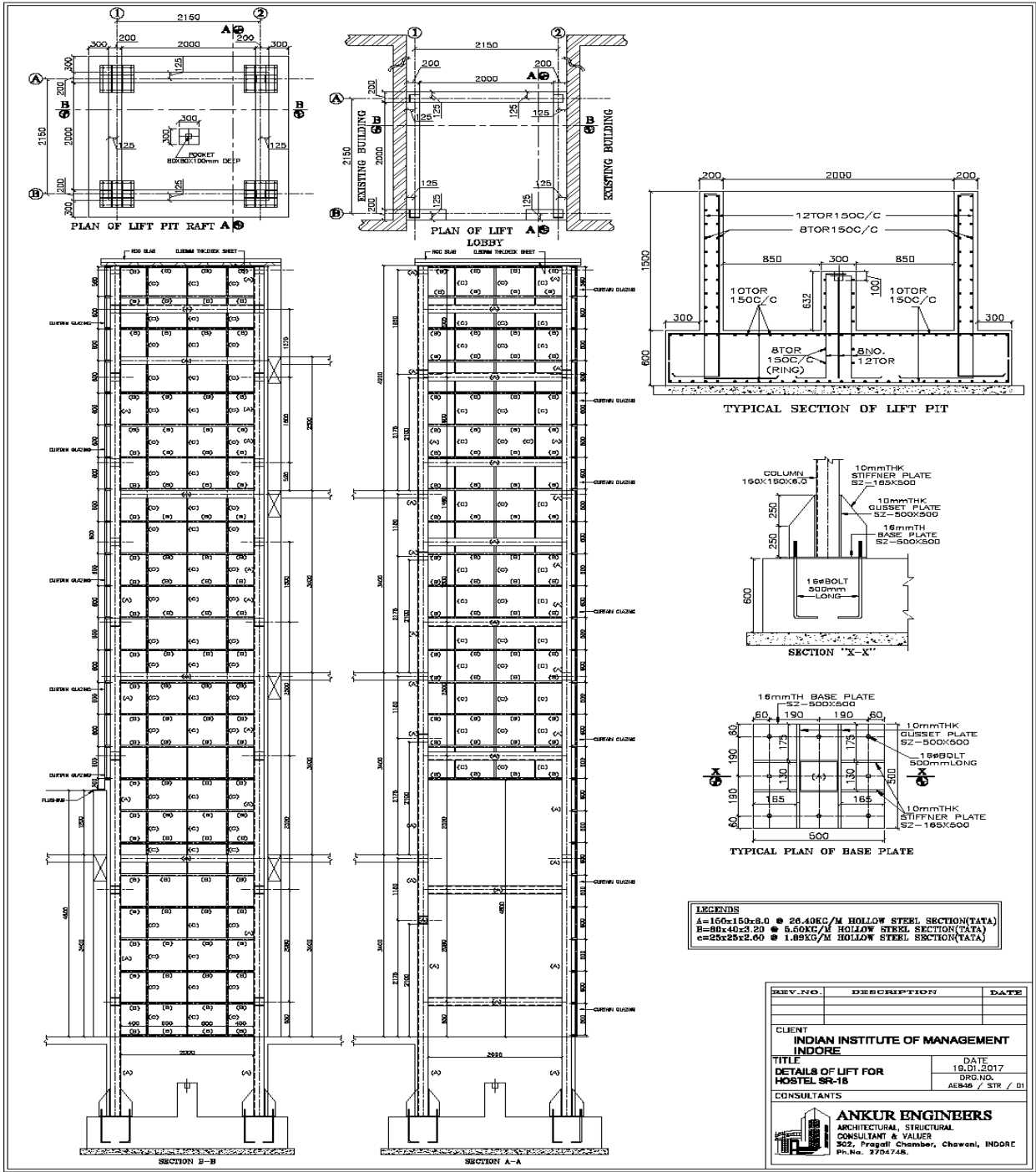
SIGNED, SEALED AND DELIVERED BY the Contractor M/s. _____
_____.

Signature:
Name:
Designation:

IN THE PRESENCE OF

(1) Signature:
Name:
Address:

(2) Signature:
Name:
Address:



Indian Institute of Management Indore

Part- II: Financial Bid

Ref: Tender Notice No. IIMI/Project/01/2017/35 File No. 335 (II)

Name of Work: “Construction of Structural Steel Elevator Hoist Shaft at SR-16 hostel at IIM Indore”

Sl. No.	Item Description	Units	Quantity	Unit Rate	Total Amount	Total Amount in Words
1	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 disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed. In ordinary, soil	Cum	29.00			
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 50 m and lift upto 1.5 m.	Cum	19.00			
3	Carriage of earth incl. loading, unloading transporting, stacking as specified & directed. (measurement shall be along the shortest permissible route) Lead upto 1 km.	Cum	10.00			

Sl. No.	Item Description	Units	Quantity	Unit Rate	Total Amount	Total Amount in Words
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	Cum	1.05			
5	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. up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : 1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20	Cum	11.70			
6	Centering and shuttering including strutting, propping etc. and removal of form for :					
6.1	5.9.1 Foundations, footings, bases of columns, etc for mass concrete	Sqm	8.50			
6.2	Walls (any thickness) including attached pilasters, buttere plinth and string courses etc.	Sqm	27.50			
7	Steel reinforcement for R.C.C. work including straightening, cutting, Thermo-Mechanically Treated bars etc. complete including cost of binding wire	Kg	850.00			

Sl. No.	Item Description	Units	Quantity	Unit Rate	Total Amount	Total Amount in Words
8	6 mm cement plaster 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C. slabs and beams.	Sqm	27.50			
9	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete	Kg	3800.00			
10	Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as including: curvilinear portions of the building for all Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminum sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier)-cum-smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalization & drainage and protection against fire hazard including Fabricating and supplying serrated M.S. hot dip galvanized / Aluminium alloy of 6005 T5 brackets	Sqm	47.28			

Sl. No.	Item Description	Units	Quantity	Unit Rate	Total Amount	Total Amount in Words
	<p>of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon separator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.</p> <p>Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment, including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.</p> <p>Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.</p> <p>Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at</p>					

Sl. No.	Item Description	Units	Quantity	Unit Rate	Total Amount	Total Amount in Words
	<p>bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, SUB HEAD : 26 - STRUCTURAL GLASING AND ALUMINIUM COMPOSITE PANEL 393 installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, including wastages etc., enabling temporary structures and services, including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified. The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. Note: - 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for</p>					

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	<p>fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this subhead. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm. up to two decimal places. Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL(National Accreditation Board for Testing and Technologies, India. Cost of testing is payable separately. The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NBL Certified laboratories</p> <ol style="list-style-type: none"> 1. Performance Laboratory Test for Air Leakage Test (- 50pa to - 300pa) & (+50pa to +300pa) as per ASTM E- 283-04 testing method for a range of testing limit 1 to 200 mVhr” 2. Static Water Penetration Test. (50pa to 1500pa) as per ASTM E- 331-09 testing method for a range up to 2000 ml.” 3. Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing method for a range upto 2000 ml” 4. Structural Performance Deflection and deformation by static air pressure test (1.5 times 					

Sl. No.	Item Description	Units	Quantity	Unit Rate	Total Amount	Total Amount in Words
	design wind pressure without any failure) as per ASTM E- 330-10 testing method for a range upto 50 mm” 5. Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test” Tests to be conducted on site 6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000ml”					
11	P/F of deck sheet of 0.6.mm thick 51mm grith profile for deck slab	Sqm	6.00			
Total Amount (in Rs.) :						
Total Amount in words :						

Name, Signature, Designation
& Seal

Date

Name of Bidder Firm

Contact Person

Contact Number

Email Address
