

NOTICE INVITING BIDS

(MODIFIED -15-4-2017)

Name of works:- IITMRP – Phase – 2 – Construction of Ramp between IIT Madras and IIT Madras Research Park

- 1.0. On behalf of IIT Madras Research Park, The Chief Operating Officer (COO) invites Lump sum (Design and Build) bid for the work of “ IITMRP – Phase – 2 – Construction of Ramp between IIT Madras and IIT Madras Research Park”
- 2.0. Agencies who fulfill the following requirement are eligible to take part in the tender process.
 - 2.1. Having successfully completed works of the following magnitude during the past 5 years ending December 2016.
 - a. Three Similar works of each costing not less than Rs 200 Lakhs
 - b. Two similar works of each costing not less than Rs 300 Lakhs
 - c. One similar work cost not less than Rs 400 Lakhs.

Cost of work for the above shall mean completed cost as mentioned in the final bill, carried out under single contract including cost of materials supplied by the clients. The value of works executed shall be brought to current cost level by enhancing the actual value of works at a simple rate of 7% per annum; calculated from the date of completion to the last date of receipt of bid s.

“Similar works” means, works involving RCC column and beam construction.

Necessary documentary proof like completion certificate in case of works carried out for Government Department and TDS in case of works carried out for private parties should be enclosed.
 - 2.2. Should have had an average annual financial turnover of Rs 400 Lakhs on construction work. This should be certified by the Chartered Account of the bidder.
 - 2.3. Should not incurred any loss in more than two years during the last five years ending March 2016.
 - 2.4. Should have a solvency of at least Rs 200 Lakhs for which a copy of certificate issued by the bankers of the bidder duly authenticated should be enclosed.
- 3.0. Agreement shall be drawn with the successful bidder in the standard form a copy of which may be seen in the office of the IITMRP.

- 4.0. The time allowed for completion of the work will be 6 months which will be reckoned from the 10th day after the date of written order to commence the work or from the first day of handing over of the site whichever is later.
- 5.0. Earnest Money deposit (EMD)
- 5.1. Earnest Money for an amount of Rs 5,00,000 (Rupees Five lakhs only) shall be submitted along with the cover 1 of the bid . The earnest money will be in the form of DD drawn in the name of IIT Madras Research Park and payable at Chennai. Only if EMD for the specified amount in the specified format is submitted the bid will be processed further. Otherwise the bid shall be returned without opening the other covers.
- 5.2. The Earnest Money Deposit of the unsuccessful bidders will be returned within 15 days of deciding the bid or bid validity period whichever is earlier.
- 5.3. The Earnest Money Deposit of the successful bidder will become part of the Security Deposit as per the provisions contained in the General Conditions of Contract.
- 5.4. The Earnest Money Deposit is liable to be forfeited;
- 5.4.1 If the bidder withdraws his bid during the period of Bid Validity;
- 5.4.2 Makes modification in the terms and conditions of the Bid after submission of the same, which is not acceptable to the Employer.
- 5.4.3 In case of successful bidder:-
- a) Fails to submit Performance Guarantee as per General Conditions of Contract.
- b) Fails to sign formal Agreement within 30 days from the date of issue of Letter of Acceptance.
- c) Fails to mobilize for the execution of the Work within stipulated period mentioned in Contract Data sheet.
- 6.0 A pre bid meeting is scheduled to be held on 19 -4-2017 at 10.00 AM at the address mentioned below. The bidders may send their queries, if any , on or before 18-4-2017.

Address where pre bid meeting will be held

Office of the Chief Operating Officer,
IIT Madras Research Park
01-FA , 1st Floor, Kanagam Road,
Chennai – 600113.

Contact persons

Ms. Simran Bansal – simran@respark.iitm.ac.in

Mr. K. Balakrishnan – balakrishnan@respark.iitm.ac.in .

The minutes of the Pre bid meeting will be circulated to all those who have attended the meeting. It will also be published in the web site of IITMRP also . Not attending the pre bid meeting will not be a disqualification for processing the bid .

7.0. Submission of the bid

The bid should be submitted in three envelopes namely

- 7.1. Envelope – 1 - marked as Prequalification application – This shall contain
 - a. EMD as detailed in para 5.0 above.
 - b. Data for prequalifying the bidder giving details in the format enclosed as Annexure 1 to 5.
 - 7.2. Envelope – 2 - marked as Technical Bid - This shall contain the technical proposals where in the details of proposed bridge indicating the foundation details, details of super structure, the size of member, the reinforcement details etc will be given. The loads assumed, detailed analysis, design calculations etc will also be enclosed.
 - 7.3. Envelope – 3 - marked as Bid –This shall contain the financial proposal where in a lumpsum amount shall be quoted for the work. The amount shall be quoted in the formal enclosed in Annexure -6
- 8.0. All the three envelopes shall be placed in another envelope and sealed. The name of the work and date of opening shall be super scribed on the envelope and submitted to Mr. Rajendra Mootha, C.O.O., IIT Madras Research Park No. 1FA, 1st Floor, Kanagam Road Taramani, Chennai 600 113 up to 5.00 P.M. on 27-4-2017.
- 9.0 Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil, the form and nature of the site, the means of access to the site, and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no claims / extra charges consequent on any misunderstanding or otherwise shall be allowed. **It may specifically noted that no labour shall be permitted to stay in the site except for watch and ward. No shed shall be erected at site except prefabricated containers.**
- 10.0 Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be carried out, local conditions and other factors having a bearing on the execution of the work.
- 11.0 IITMRP is not bound to accept the lowest or any other bid and reserves the right to reject any or all the bids received without the assignment of any reason. The bidders shall bear all the cost of preparation of the bid and all expenses in connection thereof

and shall not be entitled for any compensation in the event of non-acceptance of the bid including the Employer not proceeding with the Project.

- 12.0 Bids in which any of the prescribed condition(s) is/are not fulfilled or any condition including that of conditional rebate is put forth by the bidder, shall be liable to be summarily rejected.
- 13.0 Canvassing whether directly or indirectly, in connection with bids is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
- 14.0 The bid for the works shall remain open for acceptance for a period of **60 (Sixty)** days from the date of submission of the bid.
- 15.0 Authority to Sign the bid documents
 - 15.1 If the bidder is an individual, he/she should sign above his / her type written name and the current address.
 - 15.2 If the bidder is a proprietary firm, the Proprietor should sign above his type written name and full name of his firm with current address.
 - 15.3 If the bidder is a firm in partnership, the bid document should be signed by all the partners of the firm above their full type written name and current addresses. Alternatively the document should be signed a Partner holding Power of Attorney for the firm and in this case a certified copy of the Power of Attorney should accompany the Documents. In both cases a certified copy of the Partnership Deed and current address of all the partners of the firms should be furnished.
 - 15.4. If the bidder is a limited Company or a Corporation, the bid document shall be signed by a duly authorized person holding Power of Attorney for signing the bid documents accompanied by a copy of the Power of Attorney.
- 16.0 The bidder shall fill up the Lump sum amount for the completion of the entire work. The lump sum amount shall cover all the works necessary for effective completion of the work. While arriving at the lump sum cost the length of the pile may be taken as 10.0 M from the underside of the pile cap. Necessary cost adjustment shall be made for the pile alone considering the actual length of the pile. For this purpose a line has been added for which rate may be quoted.
- 17.0 For lump sum amount and for the line item, if the amount/ rate quoted in figures and words are different, the amount/ rate quoted in words shall be taken as correct for the purpose processing the bid .
- 18.0 The following documents shall be submitted along with the technical bid
 - 18.1 Bidder proposed methodology of construction.
 - 18.2 Resource deployment schedule indicating bidder's proposal for deployment of materials, manpower and other construction equipment
 - 18.3 Proposal for taking up the piling work along with the machinery that will be deployed.

- 18.4 Quality control procedure proposed to be adopted for ensuring the desired quality.
- 19.0 This bid documents will not be shared with others unless the same is required to be done for the purpose of submitting the bid.
- 20.0 This Notice Inviting Bid will form part of the contract.
- 21.0 Last date for receipt of the bid is 10-5-2017

BID DOCUMENT

1. Introduction.

IIT Madras Research Park (IITMRP), which is the first of its kind in India, has been modelled in line with the other successful research parks elsewhere in the world. The Research Park campus is located adjacent to IIT Madras (IITM) with a public road named Kanagam Road between the two campuses. To have better connectivity between the two campuses, it is proposed build a ramp between the two.

2. Type of Contract.

The contract will be a “ Design and Build” contract for which Lump sum amount shall be quoted. The following shall be stages of payment

i.	After completion of pile work	25% of the bid ed amount
ii.	After completion of piers	25 % of the tendered amount
iii.	After completion of superstructure work	40 % of the tendered amount
iv	After handing over the ramp	10 %

From each bill 5% of the gross amount shall be deducted towards security Deposit which will be refunded 12 months after the actual date of completion

1. Selection procedure

- i. First envelope 1 containing the EMD and prequalification documents will be opened. If the EMD is in the acceptable form, for the specified amount and if various details required are furnished in the specified format, the Prequalification documents will be considered for evaluation. The details submitted in the prequalification application will be studied and evaluated to decide the eligibly of the bidders to take part further in the bid process.
- ii. Based on the results of the evaluation of the details given in the pre qualification document, a list of agencies whose technical bids can be opened will be drawn and the technical bids shall be opened. .
- iii. Based on the results of the evaluation of the technical bid, a list of agencies whose price bid can be opened will be drawn.
- iv. The price bids of the agencies whose technical bids are acceptable will be opened and studied.
- v. Finally, the bids will be evaluated considering the technical proposal as well the financial proposal, after allotting suitable weightage to each. .
- vi. IITMRP is not obliged to accept the lowest offer. IITMRP may reject all the offers and terminate the bid process without assigning any reason

PRE QUALIFICATION APPLICATION

1. Preparation and submission of application

Bid requirement

- a. Bidder is required to submit the complete documents in the format enclosed to have uniform structure for all the bids
- b. The pre-qualification requirements are stated in the Notice inviting the bids and the same shall be studied before submission of the bids.
- c. If essential information necessary to evaluate the application are not furnished or if timely clarifications are not furnished the application is liable to be rejected.
- d. The documents shall be signed by the authorized person and stamped on each page.
- e. The General Information of the bidder shall be furnished in the form given in Annexure – 1 .
- f. Experience details of similar works in the last 05 years shall be furnished in the prescribed form given in Annexure - 2. Copies of work orders, completion certificate etc shall also be furnished.
- g. The Financial information of the bidder shall be furnished in the form given in Annexure – 4.
- h. A simple bar chart may be attached as Annexure 7 indicating the various activities and the date by which the same will be achieved. The date of award of work may be treated as zero date for drawing the bar chart.
- i. Time lines specified in the Notice Inviting Bids shall be strictly followed.

BID PROPOSAL FORM

To

Shri. Rajendra Mootha,
IIT Madras Research Park,
No 1FA, 1st Floor,
Kanagam Road, Taramani,
Chennai 600113

Sub:- IITMRP – Phase – 2 - construction of a ramp between IIT Madras and IIT Madras Research Park

Dear Sir

Being duly authorized to represent and act on behalf of -----
(bidder) and having reviewed and fully understood all information provided in this bid document the undersigned hereby submit our proposal as a contractor for execution of the work for which the bid proposals has been invited.

Attached to this letter is the bid proposal comprising of the following

1. Cover 1 containing Annexures 1 to 5 and other details to substantiate the information given there in
2. Cover 2 containing technical details of the proposed bridge with the following documents / drawings
3. Cover 3 containing the tender (Financial bid) for the work

The information submitted may be verified by IIT Madras Research Park.

We understand and acknowledge that employer reserves the right to

1. Reject any or all the bids with out assigning any reason there for and IIT Madras Research Park shall be not be liable for any compensation / claims .
2. The lump sum amount quoted for the work is for the design prepared by us and or accepted by us. In respect of design prepared by us any modifications made by us at the time of execution of the work which may increase the cost, no compensation shall be demanded by us for such deviations. All such modifications shall be got approved from IIT Madras Research Park

The undersigned declares that to the best of knowledge and belief the statements made and the information provided in the bid proposal are complete, true and correct .

Yours faithfully

(Authorized Signatory)
Name and Title
Address
Phone / email address

GENERAL INFORMATION

1	Name of the applicant	
2	Telephone / Fax / email	
3	Legal status of the applicant (a) An individual (b) A proprietary firm (c) A firm in partnership (d) A limited company or corporation	
4	Name of officer of the organization concerned with the work	
5	Name of the authorized person	
6	Was the applicant ever required to suspend construction for a period more than six months continuously? If so given the name of the project and reasons for suspension	
7	Has the applicant been ever been debarred / black listed for tendering in any organization at any time?. If so give details	
8	Has the applicant or any constituent partner in case of partnership firm ever been convicted by any court of law?. If so give details	

Signature of the applicant

ANNEXURE – 2

DETAILS OF WORKS COMPLETD IN THE PAST 5 YEARS ENDING MARCH 2017

S No	Name of work and location	Owner	Cost of work	Date of start	Stipulated date of completion	Actual date of completion	Litigation / Arbitration pending	Address / Telephone number of offer to whom reference can be made

FINANCIAL INFORMATION

i Financial Analysis

		2011 - 12	2012 - 13	2013 - 14	2014 - 15	2015 - 16
a	Gross annual turn over					
b	Profit / Loss					

ii. Financial arrangement for carrying out the work

iii. The following documents are enclosed.

- j. Copy of the PAN
- k. Solvency certificate from Banker's of the applicant.

Signature of the Applicant

Signature of Chartered Accountant
Seal

BANKER'S CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s./ Shri
.....having marginally noted address, a
customer of our bank are / is respectable and can be treated as good for any engagement
up to a limit of Rs..... (Rupees)

This certificate is issued without any guarantee or responsibility on the bank or any of the
officers.

(Signature)

For the Bank

NOTE (1) Bankers certificates should be on letter head of the Bank, sealed in cover
addressed IITMRP

(2) In case of partnership firm, certificate should include names of all partners as recorded
with the bank.

TECHNICAL BID (ENVELOPE – 2)

The technical details of the proposed Ramp, containing the Analysis , Design , Drawings etc of the ramp brining out clearly the loading considered , the materials proposed to be used, the temporary work (centering and shuttering) for the work etc shall be submitted under Technical Bid in envelope - 2

1. Technical features of the proposed ramp.

a. Location of the ramp

- i. The ramp shall take off from inside the IITM campus and terminate in the 2nd floor of the newly constructed Multilevel Car Parking (MLCP) of IITMRP. The location of the proposed ramp is indicated in the enclosed drawing. However this location may be modified as per site requirement. Bidders may evolve a more economical design without affecting the safety requirements
- ii. The ramp will cross the Kanagam road after taking a curve as indicated in the drawing.

b. General Structural Provisions

- i. Necessary structural provision exists in the 2nd floor of MLCP for supporting the proposed ramp.
- ii. The ramp will be supported by single pillar at the middle of the cross section with balanced cantilever beams, as indicated in the general drawings.
- iii. The foundation will be bored cast insitu end bearing piles embedded in bed rock.
- iv. The superstructure shall be RCC and can either be beam and slab construction or slab alone construction whichever is economical. Pre stressed concrete structure may not be proposed.
- v. The minimum diameter of pile shall be 600 MM. Minimum 3 piles shall be provided under each pillar.
- vi. The pile shall be socketed for a depth of 1200 MM in hard rock. If it is soft rock the socket length shall be 2000 MM.
- vii. The depth of piles is expected to be around 10 meters(including socketed length) and the capacity of 600 dia pile will be about 180 tonnes.
- viii. One initial load test shall be conducted to confirm the load.
- ix. One Routine load test shall be conducted on the pile to judge its capacity.
- x. Pile integrity test shall be conducted on two pile selected at random.
- xi. High strain dynamic test shall be conducted on two piles selected at random
- xii. All tests shall be conducted as per relevant Indian standard.

- xiii. The top surface of the ramp shall be provided with necessary concrete wearing course of 100 MM thick with minimum reinforcement of 0.3% of the cross sectional area. The grade of concrete shall be M35. Adequate bond shall be ensured between the structural slab and the wearing course by using necessary bonding chemicals.
 - xiv. Kerbs on either side shall be fair faced concrete with correct line and level.
 - xv. Crash guard / railing shall be provided for the ramp. This will be as per standard of National Highway Authority of India (NHAI) /Ministry of surface transport.
 - xvi. The staircase shall be provided non slippery flooring with stainless steel railing
 - xvii. The ramp and the staircase shall be provided with adequate lighting arrangements. In case ramp the same shall be fixed on aesthetically designed lamp posts.
 - xviii. Cables shall run from IITMRP substation to the required points. Required panels, switches etc shall be provided .Enclosure for panels to be made as per location
 - xix . Necessary rain water out let pipes shall be provided and taken up to the ground level. PVC pipes may be provided for the rainwater pipes.
 - xx. Bearing, if any proposed below the beams shall be as per standards of Ministry of Surface Transport, Government of India/ NHAI . Details of the same shall be furnished in the technical bid.
 - xxi. Earth filling wherever needed shall be carried for proper leveling of the site around the ramp
 - xxii. Connecting road from the existing concrete road to be made up the ramp.
 - xxiii. Concrete path from the existing road to the staircase area to be provided.
 - xxiv. If the existing road is damaged on account of the present work the same shall be made good without any extra cost.
 - xxv. The column can be either a single column at the middle or two columns on either side. Quote may be submitted for both options
- c. Detailed Structural provisions.
- i. Detailed structural design shall be worked out by the bidders and submitted in a separate cover marked “ Technical Bid”. The technical bid shall contain detailed structural design calculations, structural drawings indicating the sizes of various structural members and the reinforcements for them. The design shall be got proof checked from the Structural Engineering Division of IIT Madras, Chennai. The design may be got proof checked before

submission of the bid. However, if the bidder, so desires the design may be got proof checked after the contract is awarded . However any modifications made as a result of the proof check, increases the quantities, the same will not have any impact on the contract and nothing extra more than what has been agreed upon shall be paid.

ii Concrete - minimum M 35 grade

Steel reinforcement - Fe 500 D grade

Cover (clear)

Piles – 75 MM

Column – 50 MM

Beam - 40 MM

Slab – 30 MM

iii . Loading

Dead Load, Seismic Load and Wind load shall be as per the relevant Indian code.

Live load may be taken as 250 Kg per Sqm for ramp and 400 Kg per sqm for staircase.

Secondary effects due to temperature etc may be accounted in the design.

If continuous beams / slab is proposed the effect of settlement may be considered.

vii. Analysis – Any standard method analysis may be adopted to arrive at the forces.

viii. Design – The design may be carried out as per provisions contained in IS 456 – 2000 with its latest revisions.

ix. Specifications applicable for the work

a. Specifications attached to the contract document

b. CPWD specifications for various material, workmanship, temporary works, piling work, Electrical work etc.

c. Relevant Indian Standards.

d. MORTH specifications for roads, signage etc.

e. Best Engineering practice.

- d. Electrical Provisions
 - i. Provision for lighting the ramp with LED lights mounted on suitable poles at suitable intervals. Double arm light to be provided in the walk way area and single arm in other areas.
 - ii. Lighting the staircase area.
 - iii. Lighting outside the staircase area.
- e. Provision for installation of lift
 - i. Structural provision to be made in the staircase to provide a 8 passenger lift at a later date
 - ii. Supply and installation of lift is not part of this contract.

FINANCIAL BID – TENDER (ENVELOPE – 3)

SI No	Description	Amount – Rs
1	<p>Planning , Design, Structural Design, Services design, centering and shuttering design etc of the proposed ramp between IIT Madras and IIT Madras Research Park comprising of but not limited to</p> <p>(a). Pile foundation (b). Pile cap (c). RCC columns (d). RCC super structure – beam and slab (e). RCC staircase (f). Railing for ramp and staircase (g). Flooring for staircase (h). Wearing course for ramp (i). Kerb for the ramp (j). Drainage arrangement for the bridge and staircase structure. (k). Lighting arrangement for the ramp and the staircase and external light around the staircase along with necessary cables, control panels, switches etc using LED lights. (l). Finishing the exposed faces with paint (m).Bearings for the bridge support, if needed. (n) .Details of precast elements across Kanagam Road along with installation proposals, safety measures etc (p). Painting the kerb with special reflective paint. (q). Signage for the ramp and staircase (The structural design and the centering and shuttering design should be got approved from the agencies mentioned above)</p>	
2	<p>Add or deduct for length of piles being more than or less than the specified length of 10.0m (Rate to be quoted per meter of pile length . All the piles to be measure and the cumulative measurement to considered for the addition or subtraction. Measurement shall be made from the bottom of pile cap)</p>	

All the works needed for effective completion of the ramp and putting the same to safe and effective use shall be carried out in the above quoted amount even though the same might not have been explicitly mentioned .

Signature of the Applicant

The following documents shall be submitted along with the technical bid

Bidder's proposed methodology of construction.

Resource deployment schedule indicating bidder's proposal for deployment of materials, manpower and other construction equipment

Proposal for taking up the piling work along with the machinery that will be deployed.

Quality control procedure proposed to be adopted for ensuring the desired quality