

West Bengal Industrial Infrastructure Development Corporation
(Established under W.B. Act XXV of 1974)
Plot No.-10, Block-DJ, Sector-II, Salt Lake City, Kolkata-700 091

Memo No : Infra/Eng/1W-17/87/Pt.-V/ 1788

Dated.17.08.2018

NOTICE INVITING e-TENDER

No. IIDC_54C_2017_2018_3rd_Call OF THE SUPERINTENDING ENGINEER, WBIIDC

TENDER ID NO: 2018_IIDC_186956_1

(Through Pre-qualification)

For viewing Tender : <https://wbtenders.gov.in/nicgep/app>

The Superintending Engineer, West Bengal Industrial Infrastructure Development Corporation, invites e-tender for the work detailed in the table below. (Submission of Bid through **online**)

Sl. No.	Name of Work	Estimated Amount (in Rs.)	Amount of Earnest Money (in Rs)	Cost of Tender Document (in Rs)	Period of completion	Name of concerned Division	Eligibility of Bidder
1	Sinking of one no. deep Tube well (250 mm X 200 mm) of depth 150 meter at Cooch Behar Industrial Growth Centre of WBIIDC , Phase -II, Chakchaka , District Cooch Behar. 736156	659973.00	13,199.00	590.00 (Per Set)	45 Days	Coochbehar Division.	Bonafied, reputed, reliable, experienced and resourceful contractor having requisite credential in similar type of work as stated in the NIT.

In the event of e-filling, intending bidder may download the tender documents from the website:<https://wbtenders.gov.in>. directly with the help of Digital Signature Certificate. **Necessary cost of Tender Document (tender fees) and Earnest Money have to be deposited within the stipulated period by the bidder through the following payment mode as per Memorandum of Finance Department , Govt. of West Bengal vide No. 3975-F(Y) dated 28th July, 2016 (Refer: "Annexure-I in Bidders guide line") :-**

- Payment by Net Banking (any listed bank) through ICICI Bank Payment Gateway.**
- Payment through RTGS/NEFT.**

The original documents should be submitted physically for verification to the Estimating Section of the Superintending Engineer, within the stipulated period as stated in NIT. However the Department (Tender Inviting Authority) will not be held responsible for late delivery or loss of the documents so mailed through post/courier. **Bidder should note that non-submission of documents for physical verification to the Estimating Section of the Superintending Engineer, as mentioned in Sl. No. 18 - Important Information, will lead to rejection of Bid, without any reference.** Technical Bid and Financial Bid both will be submitted concurrently duly digitally signed in the <https://wbtenders.gov.in> . Tender document may be downloaded from website & Submission of Technical Bid/Financial Bid as per tender time schedule stated in Sl. No.18. The documents submitted by the bidders should be properly indexed & digitally signed.

In terms of Finance Department , Audit Branch, Govt. of West Bengal's Notification No. 4374-F(Y) dated 13th July, 2017, the Bidder has to upload valid 15-digit Goods and Services Taxpayer Identification Number (GSTIN) under GST Act, 2017, along with his bid. The Bidder should note that bid submitted without GSTIN will be summarily rejected.

1. Both Technical document and Financial Bid are to be submitted in technical (Statutory & Non.-Statutory Folder) and financial folder concurrently duly digitally signed in the website <http://wbtenders.gov.in>. **Bidder should note that when cost of work exceeds Rs.1.00 Crore, bidder should provide declaration with requisite details that in his establishment there is at least 1(one) Degree holder Civil Engineer and 2(two) Diploma holder Civil Engineers who will be posted in work site. Bidder should furnish necessary undertakings.**
2. The Technical document and Financial Bid be submitted online on or before **10.09.2018 up to 05.00 p.m.** The Financial Offer of the prospective tenderer will be considered only if the TECHNICAL Document (both statutory and non-statutory) of the tenderer found qualified by the Superintending Engineer/ Tender Committee, WBIIDC. The decision of the Superintending Engineer/ Tender Committee, WBIIDC will be final and absolute in this respect. The list of both Responsive and Non-Responsive Bidders will be displayed in the website and also in the Notice Board of the office of WBIIDC, on the scheduled date and time.
3. **Eligibility criteria for participation in the tender, who has completed/ under process of work under Central Govts. or State Govts./ Govt. undertakings/ Statutory Bodies:-**
 - i) Intending tenderers should produce credentials of **a similar** nature of completed work **Govt./ Govt. Undertaking/ Statutory Body** of the minimum value of **20% (Twenty percent)** [price updated @ 10% per annum compoundable from the date of completion of work] of the estimated amount put to tender during 5 (five) years prior to the date of issue of the tender notice ; or,

- ii) Intending tenderers should produce credentials of **one single running work Govt./ Govt. Undertaking/ Statutory Body** of similar nature which has been completed to the extent of **70%** (Seventy percent) or more and value of which not less than the value (i) above ;

In case of running works, only those tenderers who will submit the certificates of satisfactory running work from the concerned Executive Engineer, or equivalent competent authority will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily running work from the concerned Executive Engineer, or equivalent competent authority will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily and also that no penal action has been initiated against the executed agency, i.e., the tenderer.

N.B.:- Completion certificate should contain a) Name of work, (b) Name and address of Client, (c) Amount put to tender, (d) Date of commencement of work (e) Date of completion of work, (f) Final Bill Value. Completion certificate must be attached with respective work order and work schedule. This completion certificate be issued by engineering officer not below the rank of Executive Engineer or for non-engineering organization by Drawing and Disbursement Officer of concerned Accounts Office. Payment Certificate will not be treated as credential.

- iii) A bidder is not permitted to participate , if he has been debarred or penalized for any reasons out of work, by any Government department. During the bidding process if it is found that the firm has been debarred or penalized by any Govt. Department, the bid will be rejected out right.
- iv) Current Income Tax Acknowledgement Receipt, valid P.T. Deposit Challan, Pan Card, **Goods and Service Tax (GSTIN) Registration Certificate along with Identification Number GST Act, 2017** are to be accompanied with the Technical Bid Documents. [non-statutory documents].
- Tax Invoices(s) needs to be issued by the supplier for raising claim under the contract showing separately the tax charged in accordance with the provisions of GST Act, 2017.
- v) In terms of Finance Deptt., Govt. of West Bengal G.O.No.4608-F(Y), dt.18.07.18, **when Bid rate is 80% or less of Estimated Amount put to Tender**, the bidder shall submit Additional Performance Security @ 10% of the Tendered Amount from any Schedule Bank, before issuance of work order

- vi) In case of Proprietorship and Partnership Firms and Company the Tax Audited Report is to be furnished along with Balance Sheet & Profit and Loss A/c. for the Assessment Year **2017-2018**. [Non statutory Documents]
 - vii) Declaration regarding Structure and Organization duly digitally signed by the applicant to be submitted along with application.
 - viii) Registered Unemployed Engineers' Co-operative Societies are required to furnish valid Bye Law, Current Audit Report, Current N.O.C. from A.R.C.S., Minutes of last AGM. And also submit documents of the society consists at least 10 (ten) members out of which at least 60% should hold degree or diploma in any branch in Engineering. (Non-Statutory documents)
 - ix) Joint venture will not be allowed to participate in the above NIT. A prospective bidder shall be allowed to participate in a single job either in the capacity of individual or as a partner of a firm. If found to have applied severally in a single job, all his applications will be rejected for that job.
 - x) An undertaking shall be given stating thereby that the Firm has not been debarred or penalized for any reasons out of work, by any Government Department during last five (5) years.
 - xi) Where there is a discrepancy between the unit rate and corresponding total amount resulting from multiplying the unit rate by the quantity in the BOQ, the unit rate quoted shall govern.
 - xii) Prevailing safety norms has to be followed so that LTI (Loss of time due to injury) is zero.
 - xiii) The Partnership Firm shall furnish the registered partnership deed and the company shall furnish the Article of Association and Memorandum. [Non statutory Documents]
 - xiv) No mobilization/secured advance will be allowed. No price preference will be allowed to any category of bidder.
 - xv) The executing agency (successful bidder) may not get a running payment unless the gross amount of running bill will reach 30% of the tendered amount. Provisions in Clause(s) 7, 8 & 9 contained in W.B. Form No.2911 (ii) so far as they relate to quantum and frequencies of payment are to be treated as superseded.
4. Intending bidder if desires may attend pre-bid meeting.
5. Where an individual person holds a digital certificate in his own name duly issued to him against the company or the firm of which he happens to be a director or partner, such individual person shall, while uploading any tender for and on behalf of such company or firm, invariably upload a copy of registered power of attorney showing clear authorization in his favour, by the rest of the directors of such company or the partners of such firm, to upload such tender. The power of attorney shall have to be registered in accordance with the provisions of the **Registration Act, 1908**.

6. The prospective tenderer shall establish field testing laboratory equipped with requisite instruments and technical staff according to the requirements of works to be executed at his own cost.
7. **Apropos Finance Department, Audit Branch, GoWB's Memorandum No.4905-F(Y) dt.17.09.2014, it has now become mandatory to make payment through Electronic Mode (e-Payment) directly to Contractor's account. All Bank details are to be submitted by the Executing Agency so that payment can be made online to his Bank Account.**
8. **No mobilization / secured advance** will be allowed.
9. All materials such as cement, steel which are required for the proposed scheme as mentioned including cement, steel shall be of specified grade and approved brand in conformity with relevant code of practice (latest revision) and manufactured accordingly and **shall be procured and supplied by the agency at their own cost including all taxes.** Authenticated evidence for purchase of cement and steel are to be submitted alongwith challan and test certificates. In the event of further testing opted by the E-I-C then such testing from any Govt. approved testing laboratory shall have to be conducted by the agency at their own cost.
10. Steel materials procure & supply by the contractor shall be of TOR steel rod / HYSD / TMT Bar of Fe415, Fe500, Fe550/550D grade (The grade to be decided by the E-I-C or as per instruction reflected on the approved drawing of this department or as stipulated in the departmental priced schedule of rates.
11. Cement procurement and supply by the contractor shall be of Ordinary Portland Cement 53 grade, 43 grade conforming (IS 8112) or PPC/PSC (The grade to be decided by the E-I-C or as per instruction reflected on the approved drawing of this department or as stipulated in the departmental priced schedule of rates.
12. The Contractor shall also abide by the provision of the child labour (Prohibition and regulation Act.1986). No labour below the specified age (as per G.O.) shall be employed on the work.
13. **Intending bidder may submit/ produce original documents as specified in Sl. No.18 "Important Information , Date and Time Schedule" Sub No. 6, either at "West Bengal Industrial Infrastructure Corporation, Plot No.-10, Block-DJ, Sector-II, Salt Lake City, Kolkata-700091" or "Office of the Executive Engineer (Civil) , Cooch Behar Division, WBIIDC,Cooch Behar Industrial Growth Centre, Chak Chaka, Dist. Cooch Behar,Pin-736156" or "Office of the Executive Engineer (Civil) , Jalpaiguri Division, WBIIDC, Raninagar Industrial Growth Centre, Raninagar, Dist.-Jalpaiguri, Pin-735133"**
14. **Constructional Labour Welfare Cess @ 1(one) %** of cost of construction will be deducted from every Bill of the selected agency, Vat, Royalty & all other statutory

Levy/Cess will have to be borne by the contractor & the rate in the schedule of rates is inclusive of all such taxes and cess as stated above.

15. In connection with the work of value up to Rs.100 lakh Arbitration will not be allowed. The Clause No. 25 of WBIIDC Form No. 1 is to be considered in this regard.

16. In no case permission will be accorded to any firm for more than 1 (one) job.

17. Bids shall remain valid for a period not less than **120 (One hundred twenty) days** after the dead line date for Financial Bid / Sealed Bid submission. Bid valid for a shorter period shall be rejected by the Superintending Engineer, WBIIDC as non-responsive. If the bidder withdraws the bid during the period of bid validity the earnest money as deposited will be forfeited forthwith without assigning any reason thereof.

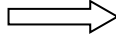
18. Important information

Date & Time Schedule

Sl. No.	Particulars	Date & Time
1.	Date of uploading of N.I.T. Documents (online) (Publishing Date)	17.08.2018
2.	Date of Pre-Bid Meeting	20.08.07.2018 up to 5.00 p.m.
3.	Documents download / sell start date (Online)	17.08.2018 at 05.00 p.m.
4.	Documents download / sell end date (Online)	10.09.2018 at 05.00 p.m.
5.	Bid submission start date (Online)	20.08.2018 at 05.00 p.m.
6.	Bid Submission closing date (Online)	10.09.2018 at 05.00 p.m.
7.	Date of submission of intimation of deposition of the cost of Tender Documents and Earnest Money deposit and verification from original copies for i) Completion certificate with work order ,ii) P.Tax registration certificate and current P. Tax deposit challan, iii) PAN Card, iv) Income Tax Return for assessment year 2016-2017, v) Tax Audited Report for assessment year 2016-2017, vi) VAT registration certificate, vii) partnership deed/ company's article of association and memorandum, viii) for registered unemployed engineers' co-operative society- bye law, current audit report, current N.O.C. from A.R.C.S. etc., ix) prequalification application(sec-B, form-I), x) structure & organization (section-B, form-III) and experience profile (section-B, form-V) (Off line)	11.09.2018 and 12.09.2018 (From 10.30 a.m. to 05.00 p.m.) AT :- a) West Bengal Industrial Infrastructure Development Corporation, Plot No.-10, Block-DJ, Sector-II, Salt Lake City, Kolkata-700 091. OR b)) Office of the Executive Engineer (Civil) , Cooch Behar Division, WBIIDC,Cooch Behar Industrial Growth Centre, Chak Chaka, Dist. Cooch Behar,Pin-736156 OR c) Office of the Executive Engineer (Civil) , Jalpaiguri Division, WBIIDC, Raninagar Industrial Growth Centre, Raninagar, Dist.-Jalpaiguri, Pin-735133
8.	Bid opening date for Technical Proposals (Online)	13.09.2018 after 10.00 a.m.
9.	Date & Place for opening of Financial Proposal (Online)	To be notified during uploading of Technical Evaluation Sheet of Bidders
10.	Date of uploading of list of bidders along with the offer rates through (online)	Within 5 (Five) working days after opening of Financial Proposal
	Also if necessary for further negotiation through offline for final rate	If required, will be notified within 3 (Three) working days after uploading the offered rates of Bidders

LOCATION OF CRITICAL EVENTT

**Bid opening Place
(including Pre-Bid Meeting)**



West Bengal Industrial Infrastructure
Development Corporation
Plot No.-10, Block-DJ, Sector-II, Salt
Lake City,Kolkata-700 091

19. Viii) PLANTS AND MACHINERIES ;

- a) Plant Machineries and equipments should be owned or arranged through lease hold agreement by the bidders.
- b) Conclusive proof of ownership in favour of Bidder in case of own machineries/equipment or in favour of Lessor in case of leased machineries/equipments **(in the form of Tax invoice, Way Bill, Delivery Challan)**, for each plant and machineries in working condition shall have to be submitted. In case of Hot Mix Plant both in batch type and Drum Type, Paver finisher, Concrete batching and mixing Plant, DMC/Hydraulic Piling Rig, concrete paver, vibratory roller (if such machineries/equipments are required as per Section-B, Form-IV), maximum age of the plants, machineries will be 5 years as on the date of publication of NIT. **It may be extended upto 7 years** after getting fit certificate from the manufacturer and this certificate should be produced at the time of submission of bid. All other machineries and equipments should be in running condition.
All plants, machineries and equipment will be verified by the competent authority before execution of the work.
- c) In case of Batch type Mixing plant, proof of advance payment receipt (receipt alongwith proforma Invoice from manufacturer with details address and telephone no., Scan copy of Bank Draft in support of payment, Bank Statement) from the manufacturer should be produced and in such case 25% payment against the total cost of the plant/machineries have to be made by the bidders, if required.
- d) If the machineries have been engaged in other works then name of client along with his contract number and Email address should be furnished in the declaration by the intended tenderer and the present location (working place) should also be given with tentative date of release of plant & machineries.
- e) In this connection self declaration (proforma enclosed in Section-B, Form-VI) shall also have to be submitted alongwith the tender and it should be declared that statement of fact related to the mode of ownership of machineries are true and it also to be clearly

stated that required specified machineries shall be installed at the working site within 45(forty five) days (Maximum) from the date of L.O.A./LOI/work order.

- f) In case where used/old Plant and Machineries are purchased registered sale deed has to be submitted with Tax invoice, Way Bill, Delivery Challan of the owner(s), alongwith Bank Statement & incorporation in the Balance Sheet as fixed asset of the bidder as a proof of ownership.
20. **Price preference** will not be allowed in this Nle-T.
21. The Agency will be liable to maintain the work at working portion at the appropriate service level to the satisfaction of the Engineer-in-Charge at his own cost from the date of completion of the work. If any defect/ damage is found during the period as mentioned above contractor shall make the same good at his own cost expense to the specification at par with instant project work. Failure to do so, penal action against the Agency will be imposed by the Department as deem fit. The Agency will have to quote his rate considering the above aspect.
22. All Bidders are requested to present in the Office of the West Bengal Industrial Infrastructure Development Corporation during pre-bid meeting , opening the financial bid and provide signature with seal. The Superintending Engineer, West Bengal Industrial Infrastructure Development Corporation, may call Open Bid / Seal Bid after opening of the said bid or at any later date to obtain the suitable rate further, if it is required. No objection in this respect will be entertained raised by any Bidder who will present during opening of bid, or from any Bidder who will absent at the time of opening of Financial Bid. No informal tenderer will be entertained in the Bid further.
23. Site of work and necessary drawings may be handed over to the agency phase wise. No claim in this regards will be entertained.
24. **Earnest Money:** The Bidder has to compulsorily deposit amount of Earnest Money being **Rs.13,199.00** (Rupees Thirteen Thousand One Hundred Ninety Nine) only for the work. This clause is also applicable for all categories of applicants. Bid submitted without earnest money be summarily rejected. This earnest money will be converted to security deposit for successful bidder. From progressive bill/s balance amount will be deducted, so that total security deposit amount will be 10% of value of work executed. Combined SOR 2017 of PWD (WB) { Vol.I, II & III} w.e.f. 01.11.2017 and latest edition of the book of name "specification for Road and Bridge Works' of the M.O.R.T. & H., Surface Transport (Roads Wing), Government of India, published by Indian Roads Congress, New Delhi, for the specification of various works shall deem to constitute a part of contract under this NIT.
25. The Bidder, at his own responsibility and risk is encouraged to visit and examine the site of works and its Surroundings and obtain all information that may be necessary for

- preparing the Bid and entering into a contract for the work as mentioned in the Notice Inviting e-Tender, before submitting offer with full satisfaction. The cost of visiting the site shall be at his/her own expense.
26. The Bidder has to compulsorily deposit cost of Tender Document (Tender Fee). The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids no cost of tender documents shall be reimbursable by the West Bengal Industrial Infrastructure Development Corporation. The Superintending Engineer/ Tender Committee, West Bengal Industrial Infrastructure Development Corporation reserves the right to reject any application for purchasing Bid Documents and to accept or reject any offer without assigning any reason whatsoever and is not liable for any cost that might have incurred by any bidder at the stage of Bidding.
27. **Refund of EMD** : The Earnest Money of all the unsuccessful Tenderers, deposited online, shall be refunded in accordance with the **Memorandum of Finance Department vide No. 3975-F(Y) dated 28th July, 2016 (Refer: "Annexure-I in Bidders guide line")**.
28. **Prospective applicants are advised to note carefully the minimum qualification criteria as mentioned in 'Instructions to Bidders' before tendering the bids.**
29. **Defect Liability Period (DLP)** : Prospective bidders shall have to execute the work in such a manner so that appropriate service level of the building is to be maintained during stipulated contractual period till completion and an appropriate period as the case may be as per provision of G.O.No.5784-PW/L & A/2M-175/2017 dt.12.9.17 of the Pr. Sec., P.W.D. If any defect/damage is found during the period as mentioned above the contractor shall make the same good at his own expense to the specification at part with instant project work, or in default, the Engineer-in-charge may cause the same to be made good by other agency and deduct the expenses (of which the certificate the Engineer-in-charge shall be final) from any sums that may be then, or at any time thereafter become due to contractor, or from his security deposit, or the proceeds of the sale thereof, or of sufficient portion thereof. Refund of Security Deposit will only be made as per provision of G.O.no.5784-PW/L & A/2M-175/2017 dt.12.09.2017 of the Pr. Sec., P.W.D.
- A. For **Building works** :- Defect Liability Period will be 3 (Three) Months and Full Security Deposit will be refunded to the contractor on expiry of Three months from the actual date of completion of the work.
- B. For **Road works**:- Defect Liability Period will be 1 (One) Year and Full Security Deposit will be refunded to the contractor on expiry of One Year from the actual date of completion of the work.
30. **Conditional/ Incomplete tender will not be accepted under any circumstances.**
31. The intending tenderers are required to quote the rate on line.

32. Contractor shall have to comply with the provisions of (a) the Contract Labour (Regulation Abolition) Act. 1970 (b) Apprentice Act. 1961 and (c) Minimum Wages Act. 1948 of the notification thereof or any other laws relating there to and the rules made and order issued there under from time to time.
33. Rates: As stated in priced schedule of work in the tender document.
34. In case of ascertaining authority of intending bidders at any stage of tender process or execution of work, necessary registered irrevocable power of attorney is to be produced as and when asked for by the Tender Inviting & Accepting Authority / Engineer -in-Charge.
35. During the scrutiny, if it comes to the notice to tender inviting authority that the credential or any other paper found incorrect/ manufactured/ fabricated, that bidder would not allowed to participate in the tender and that application will be out rightly rejected without any prejudice. The Superintending Engineer, West Bengal Industrial Infrastructure Corporation reserves the right to cancel the N.I.T. due to unavoidable circumstances without assigning any reason, whatsoever, to the bidders and no claim in this respect will be entertained
36. In case if there be any objection regarding pre qualifying the Agency that should be lodged to the Superintending Engineer , West Bengal Industrial Infrastructure Corporation. within 2 days (48 Hours) from the date of publication of list of qualified agencies and beyond that time schedule no objection will be entertained by the .Superintending Engineer, West Bengal Industrial Infrastructure Corporation.
37. Before issuance of the WORK ORDER, the tender inviting authority may verify the credential and other documents of the lowest tenderer (L1) if necessary. After verification if it is found that the documents submitted by the lowest tenderer is either manufactured or false in that case work order will not be issued in favour of the said Tenderer under any circumstances and the Earnest Money deposited by the bidder will be forfeited by the Tender Inviting Authority without assigning any reason thereof.
38. If any discrepancy arises between two similar clauses on different notification, the clause as stated in later notification will supersede former one in following sequence.
 - NIT
 - WBII DC Form No.1
 - General Conditions of Contract
 - EMD Details
 - BOQ
 - Special Terms and Conditions and Specifications.
 - Instruction to the bidders
 - Annexure-1
 - Technical Bid
 - Financial Bid
39. Qualification criteria

The tender inviting & Accepting Authority will determine the eligibility of each bidder, the bidders shall have to meet all the minimum criteria regarding.

- a. Financial Capacity
- b. Technical Capability comprising of personnel & equipment capability
- c. Experience / Credential

The eligibility of a bidder will be ascertained on the basis of the digitally signed documents in support of the minimum criteria as mentioned in a, b, c above. If any document submitted by a bidder, is either manufactured or false, in such cases the eligibility of the bidder/tenderer will be out rightly rejected at any stage without any prejudice.

40. The successful bidder has to submit the detailed work programme i.e. Bar Chart to the Engineer-in-Charge.
41. The contractor undertakes to have the site clean, free from all surplus materials, rubbish etc. up to the satisfaction of the Engineer-in-Charge. All surplus materials, rubbish, etc. will have to be removed to the places fixed by the Engineer-in-Charge and nothing extra will be paid in this score.
42. If any documents/Formats/B.O.Q. are found in altered/Tempered shape other than the shape uploaded in the web portal of P.W.D. their participation in the tender will be treated as cancelled and participation in other tender in future may not be considered too.

43. Debarment of Contractor, Supplier and Consultant participating for works under WBIIDC

Penal measures of suspension and debarment will be imposed upon the suppliers, contractors and consultants who are participating in the tender process as well as selected for execution of public works for their false declaration of forgery or falsification of records submitted or failure to execute committed contract or for their failure to perform contractual obligations and thereby resulting delay in execution of the public works or execution of faulty works. Action will be taken as per Memorandum No.547-W(C)/1M-387/15 dt.16.11.2015 of the Joint Secretary to the Govt. of west Bengal, Public Works Department.

Superintending Engineer
West Bengal Industrial Infrastructure Development Corporation