



# NEW TOWN KOLKATA DEVELOPMENT AUTHORITY

(A Statutory Authority Under Government of West Bengal)  
3, Major Arterial Road, New Town, Kolkata - 700 156

Memo. No. 1599 /EE(E)/NKDA/Elect/2020-21

Date: 30-04-2020

## NOTICE INVITING e-QUOTATION

### Notice Inviting e-Quotation No.01/EE(E)/NKDA/2020-21

New Town Kolkata Development Authority has planned to install some solar powered road studs on the on the parking lane and service lane of Biswa Bangla Sarani, in front of Senior Citizen Park and New Town Mela Ground in New Town, Kolkata to enhance the safety of the vehicles as well as pedestrians.

Executive Engineer Electrical , New Town Kolkata Development Authority invites quotations from resourceful, reliable, bona-fide and experienced contractors of Govt. and semi Govt. organizations having experience in similar nature of work.

#### List of Schemes :-

Name of work	Earnest Money	Quantity	Period of completion of installation
Supply, delivery installation, commissioning and testing followed by maintenance for two years of solar road studs of given specifications, to be installed on the parking lane and service lane of Biswa Bangla Sarani, in front of Senior Citizen Park and New Town Mela Ground.	Earnest money <b>Rs. 20,000/ (Rupees twenty Thousand)</b> only to submit through Online payments/RTGS/NEFT from ICICI Bank. “ <b>Newtown Kolkata Development Authority</b> ” payable at Kolkata balance amount covering 2% of the quoted amount to be submitted in bank draft / pay order at the time of making agreement by the successful tendered.	<ol style="list-style-type: none"><li>1. Number of solar studs emitting yellow light = 1069</li><li>2. Number of solar stud emitting red light= 271</li><li>3. Total number of solar stud = 1069 + 271 = 1340</li></ol>	2(two) Months

1. In the event of e-filing, intending bidder should download the tender documents from the website <http://wbtenders.gov.in> directly with the help of Digital Signature Certificate. All the bidder shall have to submit earnest money & necessary earnest money will be deposited by the bidder through the following payment mode as finance dept. order no-3975-F (Y) dated 28<sup>th</sup> July 2016
  - i) Net banking (any of the banks listed in the ICICI Bank payment gateway in case of payment through ICICI payment gateway).
  - ii) RTGS/NEFT through bank account in any bank. The EMD shall be deposited in favour of %New Town Kolkata Development Authority+payable at Kolkata.
2. Both Technical bid and financial offer are to be submitted concurrently duly digitally signed in the website <https://wbtenders.gov.in>. The acceptance of lowest bid is not obligatory.
3. Corrigendum, further notices and responses to queries if any will be published in the website <https://wbtenders.gov.in> at the appropriate section.
4. Tender documents may be downloaded from website and submission of Technical Bid and Financial Bid will be done as per Time Schedule stated in this NleQ.
5. The FINANCIAL OFFER of the prospective qualified tenderer(s) will be considered only if the TECHNICAL BID of the tenderer(s) is found qualified by competent authority of New Town Kolkata Development Authority. The decision of the competent authority of New Town Kolkata Development Authority will be final and absolute in this respect. The list of Qualified Bidders will be displayed in the website.
6. In term 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 service Taxpayer Identification Number (GSTN) under GST Act, 2017, along with his bid. The bidder should note that bid submitted without GSTIN will be summarily rejected
7. **Eligibility criteria for participation in the tender.**
  - a) Registered Companies, Partnership Firms, Registered Start Up organizations registered in India and with office in Kolkata
  - b) Original Equipment Manufacturers (OEM) or authorized vendors of OEMs with proven experience in installation and maintenance of road studs within last three years.
  - c) Payment certificate or work order will not be treated as credential.
  - d) Credential certificate issued by the Client towards satisfactory installation, Operation and Maintenance by Executive Engineer or equivalent or competent authority of a state/central Government, state/ central Government undertaking statutory/ Autonomous

bodies constituted under the central/ state statute Or the Director of a reputed Public Limited Company .

- e) Intending Tenderer must be financially sound with a minimum average turnover of Rs.50 lakh, (Rupees fifty lakh only) during the last three financial years and having a trade license, G.S.T Registration certificate and Profession Tax certificate.
- f) PAN Card, Income Tax Return Acknowledgement Receipt for the last 03 (Three) Assessment years, P.T.Deposit Challan for the year 2018-2019.
  - i. Registered Partnership Deed for Partnership Firms only along with Power of Attorney since executed under any Judicial Magistrate/First Class Magistrate is to be submitted. The company shall furnish the Article of Association and Memorandum as on-statutory documents.
  - ii. Joint Ventures/MOU will not be allowed.
  - iii. Sub vendors may be engaged on getting their credentials vetted by NKDA in the post tender phase.
  - iv. Three consecutive yearssqAudit report to be submitted along with Tender documents.

8. Similar work means

Supply, Installation, operation and maintenance of luminous road studs on motor driveways.

9. Fund for this project has been made available from the Smart City Mission by the New Town Kolkata Green Smart City Corporation Limited.

10. On-going payments or part payment for work may be allowed to the executing agency as per existing rules. Subject to deduction of security deposit, progressive payment may be made against the completed or partly completed item of works. Such interim payments, shall be made as running account bill (s), however, shall not constructed to mean that the respective items / components have finally been approved and accepted by NKDA and the contractor shall not be absolved of his responsibility to set right any deficiency of such paid items / components at his/ their own cost, for rectifying all defects which are subsequently being noted or found.

11. No claim for interest or compensation will be entertained in respect to any money or balance of payment which may be due or alleged to be due to the contractor owing to any dispute between the contractor and NKDA or in respect to any delay in making payment of progressive or final bill of the work, to the contractor.

12. Payment for the works done by the contractor will be based on recorded and accepted measurement at various stages of work. Acceptance of measurements put for payment to be invariably made by putting signature (with seal) of the contractor (or his/ their authorized representative). The contractor or his / their authorized representatives are advised to take measurements jointly with the officials of NKDA. In case of failure on his/their part either to take measurement jointly and /or acceptance of the recorded measurement, within a reasonable time, measurement taken by the

department shall be considered as final for making payment. Similar acceptance is also essential for level records and survey data, field books etc.

13. The payment for the Maintenance and Operation shall be made on a yearly basis at the end of each completed year of operation and maintenance during the two years of operation and maintenance on satisfactory completion of each year of operation and maintenance post supply, installation, commissioning and testing of the solar powered studs of desired specifications emitting yellow light and solar powered studs of desired specifications emitting red light. This payment will be made subject to all statutory deductions on raising of invoice for each completed year separately at the completion of the year invoiced.

14. **No advance and secured advance will be allowed.**

15. **Idle labour, idle rent and hire charges etc.:**

No claim of any category and type, on this ground shall be entertained. The contractor and NKDA shall make every effort that such situation does not arise.

16. **Testing and Testing Equipment:** Testing of materials, to be used in work and the quality of finished work on quality control aspect, is to be undertaken by the contractor at their own cost, with facilities provided at site and / or through approved (by NKDA) Test Houses / Laboratories. All materials and workmanship shall be in accordance with the specifications laid down in the contract and also as per P.W.D.( Buildings& Road Scheduled) and IS Codes . The Engineer-in-Charge reserves the right to test, examine and measure the material / workmanship direct at the place of manufacture, fabrication or at the site of works or any suitable place. The contractor shall provide such assistance, instrument machine, labour and materials as the Engineer-in- Charge may require for examining, measuring and testing the works and quality, weight or quantity of materials used and shall supply samples for testing as may be selected and required by the Engineer-in-Charge without any extra cost. Beside this, he/they will carry out tests from outside Laboratory as per instruction of Engineer-in-Charge. The cost of all such tests would be borne by the agency.

Should the Chief Engineer or his representative consider it necessary to satisfy himself/themselves as to quality of work, the contractor shall offer sample of work done as necessary, pull down reasonable part of the work required for inspection and testing. The contractor shall bear the cost of pulling down and shall make good the same at their own cost and to the full satisfaction of E-I-C without any claim for payment.

17. **Security Deposit:**

Retention money towards performance Security amounting to 8% (eight percent) of the value of the work shall be deducted from the running account bill of the tenderer as per prevailing order. No interest will be paid on the money retained for Security Deposit.

**18. Date and Time Schedule:**

Sl. No.	Particulars	Date & Time
1	Date of uploading of NleT and other documents (online )	30.04.2020
2	Date and venue of pre bid meeting	15-05-2020 at 2:00PM
3	Documents download start date (Online)	30.04.2020 at 4:00 P.M
4	Documents download end date (Online)	21.05.2020 from 6:55P.M.
5	Bid submission start date (On line)	30.04.2020
6	Bid Submission closing (On line)	22.05.2020 at 6:55 P.M.
7	Bid opening date for Technical Proposals (Online)	27.05.2020 at 12:00 P.M.
8	Last date of uploading list for Technically qualified Bidder(online)	Will be intimated in due course
9	Date of opening of Financial Proposal(online)	Will be intimated in due course
10	Last date of intimation to the successful bidder	Will be intimated in due course

19. Earnest Money for the successful tenderer will be retained and converted as Initial Security deposit. The Balance security deposit @ 8% will be deducted from on-going bills to cover the total value of work done.

a) The security deposit of the successful tenderer will be refunded after defect liability period as per rules

20. Income Tax & G.S.T will be deducted as per Govt. orders issued from time to time and would be applicable on the date of making payment of the bills.

21. 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 Tender, before submitting offer with full satisfaction. The cost of visiting the site, shall be at his own expenses.

22. The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids, no cost of Bidding shall be reimbursable by the Department. New Town Kolkata Development Authority reserves the right to accept or reject any offer without assigning any reason whatsoever and is not liable for any reimbursement of any cost that might have been incurred by any Tenderer at any stage of Bidding.

23. Prospective applicants are advised to note carefully the minimum qualification criteria before tendering the bids.

24. **Conditional / Incomplete tender will not be accepted under any circumstances.**
25. **The intending tenderers are required to quote the rate online. The rate should be inclusive of all components and taxes.**
26. 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 and the notification (s) thereof or any other laws relating thereto and the rules made and order issued there under from time to time.
27. During scrutiny, if it comes to the notice of the tender inviting authority that the credential or any other paper found incorrect / manufactured / fabricated, that bidder would not be allowed to participate in the tender and that application will be rejected without any prejudice.
28. If there be any objection regarding prequalification of any Agency the same should be lodged on line to Executive Engineer II, New Town Kolkata Development Authority within 2 (two) days from the date of publication of list of qualified agencies and beyond the said time schedule no objection will be entertained
29. Before issuance of WORK ORDER, the Tender Inviting Authority may verify the credential and other documents of the lowest tenderer if found 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 his/their offer will be treated as cancelled.
30. If any discrepancy arises between two similar clauses on different notification, the clause superseding others will be solely as per the discretion of the Tender inviting authority
31. **Qualification criteria:**  
The tender inviting and Accepting Authority will determine the eligibility of each bidder. The bidders shall have to meet all the minimum criteria as stipulated in relevant clauses of this NIEQ.
32. The eligibility of a bidder will be ascertained on the basis of the document(s) submitted in support of the minimum criteria. If any document submitted by a bidder is either manufactured or false, in such **cases the eligibility of the bidder / tenderer will be rejected at any stage** without any prejudice to take any penal action against him/them as may be deemed fit by the Tender Accepting Authority.
33. The agency should supply the materials as per confirming to IS mark and specification laid down in schedule and also to be taken approval from EIC / his representatives before utilize in work.
34. **No. price preference and other concession as per order no. 1110F dated: 10/02/2006 will be allowed.**
35. In case of any inadvertent typographical mistake in the specific price schedule of rates, the same will be treated to be so corrected as to confirm with the prevailing relevant schedule of rates and/or technically sanctioned estimate.
36. Intending tenderer should note that he may have to work

simultaneously with other contractors already entrusted with other work or with contractors to be entrusted with other work in future in the same site. The contractor will have to work in close co-operation and harmony with all the contractors engaged in the project. Any claim for idle labour, for any reason whatsoever, will not be entertained under any circumstances.

37. NKDA will not be held responsible for making payment against any anticipated profit and/or compensation for any losses or price escalation whatsoever for the supply and operation works as stated in this NleQ. Rates should be quoted accordingly.
38. The address as furnished by the contractor shall be deemed as the postal address of this office. Any notice or instruction to be given to the contractor under the terms of contract shall be deemed to have been served if it has been delivered to his authorized agent (on the strength of authorization) or representative or sent by registered letter to his official address as furnished.
39. New Town Kolkata Development Authority reserves the right to increase or decrease the quantum of work or deliverables for which no change of rate will be allowed.
40. Participation in this tender deems that the applicant is fully agreeable to abide all terms and conditions as stated in this Notice Inviting e tender.
41. Mobilization advance, time / cost overrun and consequent cost escalation for any material, labour, etc. will not be allowed.
42. All materials are to be procured and supplied at site of work by the tendered / firm at his / their own cost from approved reputed dealer / manufacturer. Departmental materials will not be issued under any circumstances unless any such provision is made and accepted latter by both the parties. Department unless otherwise stated means New Town Kolkata Development Authority.
43. The offer shall remain valid for 180 days from the date of opening of the tender.
44. Brief Scope of work:

Completion of the following work as per specification and as per design and guidance of the Engineer in Charge (EIC) to the satisfaction of the EIC on the parking lane and service lane of Biswa Bangla Sarani, in front of Senior Citizen Park and New Town Mela Ground in New Town, Kolkata.:

  - i. Joint visit to and detail measurement of the site with representatives of the EIC and preparation of the detail lay out plan and work plan as well as working drawings for implementation of the project and getting it vetted by the EIC before starting the work.
  - ii. Prepare the Operation and Maintenance plan (including replacement schedule) for 2 years post installation and testing for the stud lights and getting the same approved by the EIC.
  - iii. Preparation of the site with appropriate traffic block for installation of the solar stud lights.
  - iv. Supply, Installation, commissioning and testing of 1069 of solar studs emitting yellow light and 271 solar stud emitting red light of

desired specifications at the specified road space as per plan approved by EIC, as directed by and to the satisfaction of the EIC.

- v. Completion of the entire work within planned time and as per specification to the satisfaction of the EIC
- vi. Maintenance of the solar studs for two years post implementation.

#### 45. Financial Bid

The Financial bid will have two parts

- i. In the first part, the bidder will have to quote the total all-inclusive cost of Supply, Installation, commissioning and testing of 1069 of solar powered studs of desired specifications emitting yellow light and 271 solar powered studs of desired specifications emitting red light including all taxes and levies as applicable and cost of warranty for the operation period of two years at the specified road space as per plan approved by EIC.
- ii. In the second part the bidder will have to quote the total cost of Maintenance of the 1069 of solar powered studs of desired specifications emitting yellow light and 271 solar powered studs of desired specifications emitting red light for two years including all taxes and levies as applicable for maintenance in situ the specified road space including consumables for the entire maintenance and operation period of two years post supply, installation and successful testing of the solar powered studs.

#### 46. Evaluation Method:

Evaluation of the bids will be made on the basis of submitted credentials the opinion of the tender inviting authority will be final on this matter.

The bidder quoting the least total cost (Sum of cost as described at 44.i above and 44.ii. above) will be treated as the least cost bidder.

#### 47. Payment method:

- i. Payment for the Installation of the studs will be released against proper invoice raised by the selected agency on successful supply, installation and test run of the studs within the stipulated time frame and at approved locations to the satisfaction of the EIC with applicable statutory deductions.
- ii. The payment for the Maintenance and Operation shall be made on a monthly basis during the two years of operation and maintenance on satisfactory completion of each month of operation and maintenance post supply, installation and testing of the studs. This payment will be made subject to all statutory deductions on raising of invoice for every completed month separately at the completion of the month invoiced.

#### 48. Enclosure:

- i. Technical specification

**Executive Engineer (E)**  
**New Town Kolkata Development Authority**



Copy forwarded for information to:-

1. The Chief Executive Officer, New Town Kolkata Development Authority.
2. The Chief Engineer, New Town Kolkata Development Authority
3. The Chief Executive Officer, New Town Kolkata Green Smart City Corporation Limited
4. Administrative Officer I & II New Town Kolkata Development Authority
5. Chief Finance officer, NKGSCCL
6. Chief Technical Officer, NKGSCCL
7. Technical Officer, NKGSCCL
8. The Finance Officer, New Town Kolkata Development Authority
9. Executive Engineer-II, Executive Engineer III, Executive Engineer Electrical, New Town Kolkata Development Authority
10. The Estimator/ Sr. Accountant / Cashier, New Town Kolkata Development Authority.
11. Office Notice Board.
12. Official Website of New Town Kolkata Development Authority ([www.nkdamar.org](http://www.nkdamar.org))

**Executive Engineer (E)  
New Town Kolkata Development Authority**

## Technical Specifications

### 1. Description

Solar powered road stud is a road safety device to be fixed on the road surface for marking and delineation of the traffic lanes and junctions. This helps in improving the visibility during night time thereby enabling a safe drive. These simply installed studs convert solar energy using on board solar panels, into stored energy. It is a self-contained device with a solar module, battery, LED & electronics, designed to switch-on automatically at dusk and flash throughout the night. Unlike passive reflector type road studs, effectiveness of solar road stud does not depend on the luminous intensity and reach of vehicle head light but works on solar energy to operate LEDs, providing long range visibility and more effectiveness. A combination of solar studs emitting yellow and red light indicating the lane boundaries and crossings/ junctions respectively, makes the arrangement more effective.

### 2. Quantity

- a. Number of solar studs emitting yellow light = 1069
- b. Number of solar stud emitting red light= 271
- c. Total number of solar stud =  $1069 + 271 = 1340$

### 3. Design and Material Specifications

- a. PV module: Solar PV module, to be used for the solar stud, should be made of high efficiency mono-crystalline PV cells of conversion efficiency not less than 15%.
- b. Body: The solar road stud should have matte finish (sand blasted) Aluminum Die cast body casing with anti- twist ribs for additional grip and resist twisting. Body top (head) should have embossed raised surface to prevent vehicle from falling on the central poly carbonate cover over the PV module. Water draining channels to be provided on top casing. The head i.e. the part of the stud which is above the road surface when road stud is fixed, shall be of square shape with rounded edges. The anchorage i.e. the part of the road stud which is below the road surface, should have a minimum depth of 50 mm and a diameter of minimum 33 mm. It should have minimum 6 nos. external anti- twist ribs. The dimensions and the weight of the stud should not be less 122mmx132mmx75mm and 650 gm respectively. Minimum compression capacity should be 175 KN.
- c. Top Cover: The PV module is to be covered with a top cover made of clear, transparent, anti-static poly carbonate material of minimum 4.5mm thickness.
- d. Battery: Battery is to be supplied as a separate component and to be fixed according to the timing of the installation of the studs. Battery should be Ni-MH type with minimum capacity of 2000 milliamp Hour. It should have 350 cycle @ 100 percent depth of discharge (DOD). Battery casing should have removable cap for installation of Ni-MH battery, to prevent self- discharge during storage.

- e. LED: Ultra bright Light Emitting Diode (LED) should be used for the studs. LED with minimum 5mm Dia having luminous intensity greater than 2000 mcd (with 23° viewing angle) should be used. All LEDs should be covered with poly carbonate covers on the sides. Gradient on LED sides should be 30°. Minimum three (3) LEDs should be there on one tapering side for uni-directional solar studs and on two opposite tapering sides of bi-directional solar stud, as and where shall be applicable. LEDs emitting yellow light are to be used for demarcating the lanes whereas LEDs emitting red light are to be used for indicating the junctions/cross-overs. If required, there might be double row of LEDs (red) at one or two small stretches e.g. the two diversion points from the MAR/ Biswa Bangla Sarani carriageway into the service lane. The same shall be confirmed by the EIC before execution or as and when required.
- f. Reflector: Additionally, high intensity reflective grade polymer sticker with back adhesive, is to be fixed on the stud, around the LED and without disturbing the light emitting from the LED.
- g. Protection: Solar road stud should have minimum IP 66 protection.
- h. Operating temperature: -20°C to +55°C
- i. Visibility: It should be minimum 500 meter at clear night conditions (straight line)
- j. Operating duration: Automatic dusk to dawn solar switching
- k. Back-up: Battery back-up should be for minimum three (3) no-sun days
- l. Flashing rate: Typically 1 Hz
- m. Fixing details: The solar road stud shall be fixed to the road surface using the vertical shanks/ adhesives and procedure recommended by the manufacturer. Fixing locations should be shadow free and preferably water logged areas should be avoided.
- n. No supply/installation/etc. shall be carried out without prior approval from the EIC/NKDA, on material, design or any other specification. All necessary documents should be mandatorily submitted to the EIC for the same, prior to supply/installation or as shall be applicable. Devices, not meeting the technical specifications shall be summarily rejected at the sole discretion of the concerned authority.

#### **4. Tests**

- a. Rapid Thermal Cycling Tests as per IEC 1215 (between -40 and +85 °C): The studs should be in working condition even after 100 hrs
- b. Charge- Discharge Test: The studs should be in working conditions after 10 cycle (10 days)
- c. Vibration test as per QM333: The stud should pass vibration test as specified by QM333
- d. Ingress Protection/Weather proof test conforming to IP 66 stipulations

## **5. Work Schedule**

The work schedule shall include the following stages:

- a. A site survey and site preparation study is to be conducted by the selected bidder.
- b. A site survey report to be submitted by the selected bidder post completion of SI. (a). The report should provide all information including the length of the road to be covered by the solar stud, number of studs required for the same, their type in terms of colour and other specifications, etc. and any other information necessary for executing the entire scope of work.
- c. A joint survey may be conducted between the selected bidder and NKDA, as a part of review process of the abovementioned site survey report. If required, the cost for factory visit by NKDA concerned officials for review/test of a sample device or a third party review, shall be borne by the selected bidder.
- d. All necessary drawings/document/etc. shall be submitted by the selected bidder after obtaining approval on the site survey report by NKDA concerned official/ EIC, as shall be applicable; and prior to any supply/delivery/ installation/commissioning/etc. work.
- e. No installation work shall be executed without prior approval of NKDA/ EIC, as shall be applicable.
- f. An installation & commissioning report is to be submitted by the selected bidder post completion of the entire installation work.
- g. A status review report should be submitted quarterly during the operation & maintenance period.