



GOVERNMENT OF WEST BENGAL
IRRIGATION & WATERWAYS DIRECTORATE
OFFICE OF THE EXECUTIVE ENGINEER
DURGAPUR MECHANICAL & ELECTRICAL DIVISION
DURGAPUR, PASCHIMBARDHAMAN, PIN-713202
Ph: - (0343) 2559639, e-mail:- eedmed.dgp@gmail.com

Notice Inviting “EXPRESSION OF INTEREST” from reputed Mechanical Firm having vast knowledge of Manufacturing, Erection & Commissioning of Dam /Barrage Gate to execute the following work in EPC mode.

Name of the work :- **“Replacement of Gate No 33 & 34 with new shutters without deponding of Durgapur Barrage & Special repair and maintenance of 02(two) nos emergency floating gates along with necessary replacement of valves including painting over river Damodar at Block & P.S Barjora, District Bankura.”**

(EOI No. WBIW/EE/BUE004/EOI-01/2024-25)

EXECUTIVE ENGINEER
DURGAPUR MECHANICAL & ELECTRICAL DIVISION



GOVERNMENT OF WEST BENGAL
IRRIGATION & WATERWAYS DIRECTORATE
OFFICE OF THE EXECUTIVE ENGINEER
DURGAPUR MECHANICAL & ELECTRICAL DIVISION
DURGAPUR, PASCHIMBARDHAMAN, PIN-713202
Ph: - (0343) 2559639, e-mail:- eedmed.dgp@gmail.com

Memo No. 489/EOI/24-25

Date: 01.08.2024

**NOTICE INVITING e- E.O.I
e-EOI No. WBIW/EE/BUE004/EOI-01/2024-25**

Name of work: - “Replacement of Gate No 33 & 34 with new shutters without depending of Durgapur Barrage & Special repair and maintenance of 02(two) nos emergency floating gates along with necessary replacement of valves including painting over river Damodar at Block & P.S Barjora, District Bankura.”

The Executive Engineer, Durgapur Mechanical & Electrical Division, Durgapur, Paschim Bardhaman (Irrigation & waterways Directorate-West Bengal), on behalf of the Governor of West Bengal, hereby, invites expression of interest proposals from experienced and reputed contractor bidders having desired Prequalification eligibility credential for execution of works of similar nature and requisite financial capability to provide Methodology, specification, quantification and subsequent erection Services for the mentioned work.

Intending consultants/bidders desirous of participating in the e-EOI are may apply **online** via login to the Government of West Bengal e-Procurement website having URL <https://wbtenders.gov.in> and locate this tender by typing **WBIW/EE** in the search engine provided therein, or by logging-in using their assigned user ID and password or via **offline mode** required to submit to the office of the Executive Engineer, Durgapur Mechanical & Electrical Division. They may also visit the official website of Irrigation & Waterways Department, Government of West Bengal www.wbiwd.gov.in and locate the same e-EOI by clicking the “e-Procurement” link.

SECTION-1: BRIEF ABOUT OBJECTIVES AND SCOPE OF WORK

1) Project background: - Durgapur barrage is an integral part of the multipurpose Damodar Valley Project which was constructed in 1955. The barrage is 692 metre in length having 34 nos. of equal bay. It's design flood discharge 15,574 cum. There are two canals off taking from both sides of the barrage to cater the need of irrigation to 3.93 lakh hectare of agricultural area in 4 (four) districts namely Bankura, Purba Bardhaman, Paschim Bardhaman & Hoogly. Durgapur Barrage plays vital role for supply industrial water and drinking water of entire Durgapur town. Barrage acts as reservoir of water for whole year. The Barrage was constructed nearly 69 years ago & most of the skin plate, horizontal lattice girder, arm of the gates are corroded, pitted & rusted. In the last six years we have faced emergency situation twice, where a portion of gate (gate no-1 & 31) failed resulting total discharge of Barrage reservoir water, affected & disrupted the whole region. There are total 34 nos. vertical gates in the Barrage & out of these 34 nos. gates, 18 nos gates have already been replaced and replacement of another 14 nos has also been finalized. But replacement of two nos gates i.e. gate no 33 & 34 is very difficult and challenging job for the following reason-

Floating Gate: There are two nos floating gates at Durgapur Barrage, acts as stop log, for maintenance, repair and replacement of gate in bay no.1 to bay no. 32. But there is no scope for using of floating gate in bay no 33 and 34, due to nonuniformity of pier design than the other bay and also there is silt excluder at gate no.34 which restricts the submergence of the floating gate.

Stop log gates: For gate no 33 & 34, there are arrangement of one set comprising of 06 units stop log gates which is placed at the downstream side having no role of gate maintenance, gate repairing, gate replacement. It acts as a shutter to prevent total discharge during gate failure of gate no 33 & 34. There is no additional groove on pier at the upstream side too. So, Gate maintenance/ repairing/replacement work is not easy task. It may not be carried out by normal procedure. There is no additional space in bay nos 33 and 34 for repositioning the stop log gates in upstream side as the piers were constructed accordingly.

For making cross bundh at the u/s of gate no 33 & 34, the barrage is also needed to be emptied, but emptying/drying up the barrage pond (fully or partially) are almost impossible as industry in Durgapur and various department is fully dependent upon the reservoir water of the barrage.

So, the difficulties and challenges mainly here is that the removing the existing gates and erection of new gates that have to be made in waterlogged condition as there is no stopping of water in u/s side. The stop log gate present in d/s side will act as a barrier in that time and maintain the height of the water that is kept throughout the year.

Repair and maintenance of floating gate of Durgapur Barrage is also very essential work. This structure is very old and major repair work is needed for its longevity. Floating gate is a unique structure acts as a stop log gate when water is inside the gate structure. This huge structure weighted around 60 ton (as per our assessment) with a unique shape which also can float, requires for transferring one bay to another. There are no drawing or design of the floating gate, so during repair work any additional materials added to the structure can cause change of metacentre and metacentric height may result unstable condition. So highly specialized person is needed for such type of work. This two nos floating gates generally kept one of the bays from 01 to 32. For repair or painting work, it has to lift from the water which is also a difficult task due to siltation problem. There are only one structure present in the right bank of the Damodar river where one no floating gate at a time can be repaired.

During repairing of floating gates, main challenges is that added materials in strengthening work and repairing of damaged part may changes centre of gravity. The floating Emergency gate have to be carried to the shore land of Right Bank on river Damodar by special arrangement of mechanical device to keep the gate in lifted condition for inspection of the damaged parts and carrying out the repairing/replacement work. During this transport to shore, the gate may stick in bottom of river, so desiltation work of the path of the carried out of the gates is needed to be done.

As it is a very complicated work & without proper methodology it cannot be done, so specialized devoted engineer with supported technical person is needed who can handle this kind of job. So, agencies having sufficient experience Engineers, technical hands with lot of technical knowledge regarding this field have to be engaged.

2) Deliverables:

Deliverables of the present assignment are:

- i. The interested companies will conduct site visit and followed by discussion with departmental engineers for analyzing actual site condition and identification of difficulties associated with work and assessment of methodology to remove the existing gates & Supply, fabrication, Erection, Installation & Commissioning of new gates, repairing of floating gates considering above mentioned site condition.

- ii. Based on our understanding & technical feasibility, we have prepared a tentative schedule of items, but the companies will suggest a suitable methodology of construction which inter alia **may include specification of any special item which is not covered in the BOQ/Schedule of Rates.** They may also suggest any modification in the construction drawing supplied along with EOI document. Based on the inputs, suggestion received from bidders through EOI, the RFP (Request for Proposal) will be finalized.
- iii. Brief description of the problem and narrative of challenges.
- iv. Typical detailed structural designs, wherever necessary, of various components & the detailed design to be done in accordance with relevant IS code.
- v. Suggesting for specific Quality assurance plan for proper implementation of the project.
- vi. Highlighting risks and safety measures considered during the work.
- vii. Rough cost estimate of the proposed work has to be submitted along with the attached BOQ.

SECTION 2: INSTRUCTION TO BIDDER

1) Submission of EoI:

The intending agencies should submit their most competitive budgetary quotes, as per current market price as per the supplied BOQ FORMAT along with rough cost estimate in the manner deemed applied in an online mode or sealed envelope super scribing on the top EOI for the budgetary quotes for the work “Replacement of Gate No 33 & 34 with new shutters without depending of Durgapur Barrage & Special repair and maintenance of 02(two) nos emergency floating gates along with necessary replacement of valves including painting over river Damodar at Block & P.S Barjora, District Bankura.” in the tender box to be available at-the following offices: The Executive Engineer, Durgapur Mechanical & Electrical Division.

The interested companies will conduct site visit and followed by discussion with departmental engineers for analyzing actual site condition and identification of difficulties associated with the work, a suitable methodology of the work in under water condition have to be suggest with detailed justification along with rough cost involvement.

Since, the Notice Inviting Expression of Interests (EoIs) is being made to assess the value of the work, no work order will be issued in favour of any agency against the EoIs.

- 2) EOI documents: The EOI comprise of Notice inviting “Expression of Interest “, project Background broad scope of work, time schedule, instruction to Bidders and drawing . All the EOI documents can be downloaded from the departmental web portal i.e www.wbiwd.gov.in.

3) Receipt of proposal

All sealed proposals should be submitted to the office of the Executive Engineer Durgapur Mechanical & Electrical Division, Durgapur Paschim Bardhaman within bid submission end date Mentioned in this notification. Mode of bid submission will be **online / offline in two fold system** with technical & financial folder without any EMD.

- 4) For any queries and clarification, interested contenders may visit the site and may contact

Executive Engineer, Durgapur Mechanical & Electrical Division (Irrigation & Waterways Directorate-WB at the address mentioned at para below).

- 5) Address for Communication: Executive Engineer, DVC New Colony, Durgapur Paschim Bardhaman.
- 6) Interested bidders may consult the departmental web portal mentioned above regularly to see Corrigenda/Addenda which may be issued by Notice Inviting Authority from time to time prior to submission of the proposal as given in para 8. As pre-bid of EoI meeting will be conducted to clear any doubt on 13.08.2024 in the office at the office chamber of the Superintending Engineer, South West Mechanical & Electrical Circle.
- 7) Accepting authority reserves the right to accept/reject any or all proposals without assigning any reason thereof.

8) Inspection of site and its premises before submission of EoIs:

Before submitting EoI's, the intending agencies may make themselves acquainted thoroughly with the exact requirement of works and details of existing structures accompanied with the official/representative of the Executive Engineer, Durgapur Mechanical & Electrical Division, having its office at the DVC New Colony, Durgapur, Paschim Bardhaman, PIN-713202, West Bengal during any working day between 11.30 hours and 17.00 hours prior to the date of submission of proposal.

9) Pre Bid Meeting:

Pre bid meeting will be held at the office chamber of the Superintending Engineer, South West Mechanical & Electrical Circle, DVC new colony, Durgapur, PIN-713202 on the following dates and interested agencies may attend the meeting for technical discussions.

Eols so received in sealed covers will be opened in the chamber of the Executive Engineer, Mechanical & Electrical Circle in presence of the intending agencies those who will be present at that time.

Schedule of Dates for EOI:

Sl no	Activity	Date & Time
1.	Publishing Date	05.08.2024 at 11.00 Hrs
2.	Pre Bid Meeting	13.08.2024 at 12.00 Hrs
3.	E.O.I submission end date	21.08.2024 at 15.00 Hrs
4.	Date of E.O.I opening	21.08.2024 at 15.30 Hrs

SECTION 3.PRE-QUALIFICATION CRITERIA

1. **Qualification of the Bidder:**

Only the renowned firms having vast knowledge of Dam /Barrage gate fulfilling the following requirement may apply:-

Satisfactorily completed in the last 7 financial years, as a prime contractor or as joint venture, at least one similar work of value not less than amount of Rs. 1 crore since government / public sector at national level, having the Construction / Rehabilitation /special repair of Gate shutter of Barrage/ Dam (Mechanical Part)

OR

Under water fabrication & erection with rehabilitation Works items in the scope of work.

2. **Documents to be submitted:**

- (a) Completion certificates along with Work Order & BOQ/SoR duly signed by client Stating there in the broad scope of work of similar nature.
- (b) Suitable document determining financial strength of the bidder or the firm may also submit audited balance sheet, profit & loss account and statement of turnover duly certified by the Chartered Accountant for the last 5 (Five) years ending on 31.03.2024.

3.Tender Inviting Authority reserves the right to consider acceptance of qualifying criteria of the proposal having minor deficiency from the prescribed limits if the situations so demands.

4. **No bid fees or security** is required during submission of EOI by the intending firm however the bidder will prepare their EOI at their own cost.

5. The firm shall submit payment terms along with his proposal.

Sd/
Executive Engineer
Durgapur Mechanical & Electrical Division
Durgapur-02, Paschim Bardhaman

Memo No: 489/1(10)/EOI/24-25

Dated: 01.08.2024

Copy submitted for favour of kind information to:

- 1) The Secretary to the Govt. of West Bengal, I&W Department.
- 2) The Chief Engineer, Mechanical & Electrical, I&W Directorate, Govt. of West Bengal.
- 3) The Chief Engineer, West, I&W Directorate, Govt. of West Bengal.
- 4) The Chief Engineer, D & R, I&W Directorate, Govt. of West Bengal.
- 5) The Joint Secretary (Works) to the Govt. of West Bengal, I&W Department.
- 6) The Financial Adviser, Irrigation & Waterways Department.
- 7) The Deputy Secretary (Works) to the Govt. of West Bengal, I&W Department.
- 8) The Superintending Engineer, South West Mechanical & Electrical Circle, I&W Dte., Govt. of West Bengal.
- 9) The Superintending Engineer, Damodar Irrigation Circle, I&W Dte., Govt. of West Bengal.
- 10) The Executive Engineer, Damodar Head Works Division, I&W Dte. Govt. of West Bengal.

Sd/-
Executive Engineer
Durgapur Mechanical & Electrical Division
Durgapur-02, Paschim Bardhaman

Memo No: 489/1(10)/EOI/24-25

Dated: 01.08.2024

Copy forwarded for favour of kind information to:

- 1) The S.D.O/ Assistant Engineer, Damodar Mechanical Sub- Division, Durgapur, Paschim Bardhamam.
- 2) The Director of Information, Department of Information & Cultural Affairs, Nabanna, Shibpur, Mandirtala, Howrah-711102 for wide circulation.
- 3) The Estimating Section, Durgapur Mechanical & Electrical Division.
- 4) The Accounts Section, Durgapur Mechanical & Electrical Division.
- 5) Notice Board.

Sd/-
Executive Engineer
Durgapur Mechanical & Electrical Division
Durgapur-02, Paschim Bardhaman

The Proposed Project has following items to be executed for replacement of Gate No.33 & 34 and repairing of 2(two) nos. emergency floating gate.

Name of Work : “Replacement of Gate No 33 & 34 with new shutters without depending of Durgapur Barrage & Special repair and maintenance of 02(two) nos emergency floating gates along with necessary replacement of valves including painting over river Damodar at Block & P.S Barjora, District Bankura.”

Sl. No	Description of Work	Qty	Unit	Basic Rate	GST (18 %)	Cess(1%)	Rate incl. GST & Cess	Amount
A) FOR GATE NO. 33 & 34 :								
1	Dismantling / taking out the gate shutter completely from civil structure (pier groove) & shifted all dismantled material from Durgapur Barrage site to stockyard under Durgapur Mechanical & Electrical Division, DVC New Colony, Durgapur, Paschim Bardhaman. The cost includes total manpower deployed including safety precaution, all consumables like Oxygen, LPG/Acetylene gas etc. hire charges of machinery, crane, hydra, tools & tackles etc. transportation of all dismantled materials including loading & unloading as per direction of E.I.C.	2	Job					
2	Supply, fabrication, Erection, Installation & Commissioning of gate shutter, roller assembly, replacement of rope, pulley/sheave as per existing drawing. The cost includes material cost, cost of man power deployed including safety precaution, fabrication cost at work shop & site, cost of all consumables like Oxygen, LPG/Acetylene gas etc. hire charges of machinery, crane, hydra, tools & tackles etc. painting, cost transportation of all gate material parts including loading & unloading, erection cost including supply and fitting fixing of rubber seal, shifting and suitable arrangement of stop log gates etc. as per direction of EIC.	2	Job					
OR								
2	Supply, fabrication, Erection, Installation & Commissioning of gate shutter, roller assembly, replacement of rope, pulley/sheave as per drawing, design submitted by the agency due to his view which required modification from erection point of view. The cost includes material cost, cost of man power deployed including safety precaution, fabrication cost at work shop & site, cost of all consumables like Oxygen, LPG/Acetylene gas etc. hire charges of machinery, crane, hydra, tools & tackles etc. painting, cost transportation of all gate material parts including loading & unloading, erection cost including supply and fitting fixing of rubber seal, shifting and suitable arrangement of stop log gates etc. (Agency should submit in brief in case of modification of gate considering gate weight restricted to 33.5 ton)	2	Job					

Sl. No.	Description of Work	Qty	Unit	Basic Rate	GST (18%)	Cess(1 %)	Rate incl. GST & Cess	Amount
3	Cost of methodology /technique used for execution of work under Sl. No. 1 & 2 without depending the Durgapur Barrage i.e. water logged at upstream side. The Cost includes cost of design, technology adopted, cost of all consumables, hire charges of machinery, crane, hydra, tools & tackles etc transportation charges of all required materials including its loading & unloading. You are to submit your methodology (separate page) for justification of your quoted rate arisen.	2	Job					
4	Dismantling of trestle bridge (Partly) & Gantry Crane and refitting the same after erection work and restored its proper functioning. (If Required)	1	Job					
5	Additional work if required you may include with your description in separate sheet which may not covered in this schedule.	1	Job					
B) EMERGENCY FLOATING GATE:								
6	Transportation of emergency floating gate from barrage site to maintenance area and positioning it for repairing work & Special repairing of emergency floating gate by cutting damaged portion, refitting the same by new material by cutting, bending, welding as per existing one without changing its center of buoyancy. The cost includes material cost, cost of man power deployed including safety precaution, fabrication cost at work site, cost of all consumables like Oxygen, LPG/Acetylene gas etc. hire charges of machinery, crane, hydra, tools & tackles etc. painting, replacement of pipe line if required, replacement of MS valve, MS rod, SS spindle with suitable Nut, bolt & washer, SS pin, Dressed wood work in post, plate, battens etc. fitted & fixed complete, transportation of all material parts including loading & unloading, erection cost including etc. & transportation of emergency floating gate from maintenance area to barrage site and positioning it at suitable place, all the works up to satisfaction of EIC.	2	Job					
7	Repairing & special arrangement of existing platform where floating gate will be kept in lifted condition for inspection of the damaged parts and carrying out the repairing/ replacement of the floating gates as per direction of EIC.	1	Job					
8	Additional work if required you may include with your description in separate sheet which may not covered in this schedule.	1	Job					

Sd/-
Executive Engineer
Durgapur Mechanical & Electrical Division